2008
NYC BRIDGES AND TUNNELS ANNUAL CONDITION REPORT

New York City
Michael R. Bloomberg, Mayor

New York City
Department of Transportation
Janette Sadik-Khan, Commissioner

NEW YORK CITY DEPARTMENT OF TRANSPORTATION
DIVISION OF BRIDGES
2008 BRIDGES AND TUNNELS ANNUAL CONDITION REPORT

Renovated Manhattan Bridge Tower Canopy With New Decorative Lights in February 2008.

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Janette Sadik-Khan, Commissioner
Lori A. Ardito, First Deputy Commissioner

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Brooklyn Bridge Quasquicentennial in May 2008. (Credit: Julienne Schaer)

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A Message from the Commissioner

Dear Friends,

On behalf of the many dedicated professionals who staff the Division of Bridges, it is my pleasure to present the 2008 Edition of the New York City Department of Transportation's Annual Bridges and Tunnels Condition Report, as mandated under New York City's Charter. This report provides DOT with an opportunity to display the many achievements, innovations and improvements that were realized by the Division of Bridges during the 2008 calendar year.

The City's bridges are safe and in their best condition in generations. Our bridges are extremely well managed, they are being rebuilt and upgraded by experts and are subject to one of the strongest inspection systems in the United States. We have a very strong bridge capital investment program, which has turned overall City bridge conditions around and will continue to bring more bridges into good repair. DOT has been an early adopter of high-tech bridge monitoring equipment and techniques, and DOT's Division of Bridges is now further enhancing its inspection capabilities with additional technology and expertise.

The Division of Bridges includes 809 DOT employees who manage the City's capital bridge program and conduct bridge inspections, monitoring and maintenance. Our bridges include, among many others, the notable East River and Harlem River Bridges, the Belt Parkway Bridges, and pedestrian bridges and elevated roadways located City-wide.

Since 2000, the City has invested about $3 billion in bridge capital reconstruction projects which has included a number of projects to rehabilitate the East River Bridges, namely the Brooklyn, Manhattan, Williamsburg and Queensboro Bridges. Over the last few years DOT has also completely replaced other major bridges, including the Third Avenue, Macombs Dam and 145th Street spans over the Harlem River.

Looking forward over the next two years we will be investing more than $2 billion in additional capital reconstruction projects on our bridges, including the replacement of the Willis Avenue Bridge, the Brooklyn Bridge ramps and painting, the Manhattan Bridge, the Belt Parkway bridges, and the ramps at the St. George Ferry Terminal. Over the next ten years, DOT has $5.1 billion in the Ten Year Capital Strategy plan to spend on bridge reconstruction projects.

The City has been at the forefront of utilizing new technology to assist us in the monitoring of our bridges. For example, utilizing strain gauges to monitor the orthotropic deck of the Williamsburg Bridge and crack propagation on the Manhattan and Brooklyn Bridges and X-ray diffraction to test stresses in critical steel members on the East River bridges. We are also using fiber optic sensors to monitor the forces in suspenders on the Manhattan Bridge and stresses in girders on the Paerdegat Bridge. Ultrasonic testing is another technology that we are applying on the eyebars of the Queensboro Bridge to examine the condition of the critical details in the top chord of the truss. Lastly, a new package of technologies will be tested for effectiveness on monitoring the condition of the high-strength wires in the Manhattan Bridge cables.

Preventive maintenance is essential to preserve the City's multi-billion dollar investment in its bridges. These steel and concrete structures must be protected from the stresses of weather, traffic, deterioration and neglect. In the last year alone, 30,771 square feet of concrete were used to renew sidewalks, curbs, and road decks; some 10,497 cubic yards of debris were removed; 1,820 bridge drains were cleaned; and crews eliminated 6,722,630 square feet of graffiti. DOT

crews also eliminated 527 safety flag conditions that presented clear vehicle or pedestrian traffic hazards. Also, in the Department's ongoing attempts to minimize construction disruptions, we consistently used incentive and disincentive clauses in contracts to reward contractors who finish work early and penalize contractors who finish work late.

The Division's proud tradition of design and engineering excellence was recognized with awards from various entities, including:

- The American Council of Engineering Companies of New York's Platinum Award for the Design-Build re-decking project on the Belt Parkway Bridge over Mill Basin; the Platinum Award for the structural health monitoring of the Belt Parkway Bridge over Paerdegat Basin; the Diamond Award for the construction management of the reconstruction of the Third Avenue Bridge over Harlem River; and the Gold Award for the protective coating of the Washington Bridge over Harlem River.
- The Construction Innovation Forum's nomination of the Design-Build reconstruction of the Belt Parkway Bridge over Ocean Parkway as one of 35 world-wide finalists for the prestigious NOVA award, the highest honor a construction innovation can receive.
- *New York Construction Magazine* selected the reconstruction of the Hamilton Avenue over the Gowanus Canal as the Best Bridge Project of 2008. The award recognizes design and construction excellence, the contribution of key team members and the innovative solutions to a project's challenges.

New York City has a rich tradition of bridge design, construction, maintenance and administration. The Department of Transportation appreciates the importance of its duties and responsibilities, and the Division of Bridges is proud to shoulder the task of maintaining and rehabilitating our city's vital bridge infrastructure.

Sincerely,

Janette Sadik-Khan
Commissioner

Inventory

In calendar year 2008, the inventory of bridges under the jurisdiction of the Division decreased to 788. NYCDOT owns, operates, and/or maintains 757 non-movable bridges, 25 movable bridges, and six tunnels. Over the past 10 years, there has been a mostly steady decline in the number of bridges rated "Poor," and a somewhat steady increase in the number of bridges rated "Very Good," as shown below.

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Poor	***16***	***13***	***9***	***8***	***4***	***6***	***4***	***3***	***3***	***3***
Fair	507	481	459	451	429	456	458	456	459	455
Good	160	180	196	202	209	212	210	210	215	213
Vgood	***81***	***85***	***88***	***94***	***111***	***116***	***118***	***118***	***111***	***116***
Closed									1	1
	764	**759**	**752**	**755**	**753**	***790**	**790**	**787**	**789**	**788**

* In 2004, 32 Department of Parks and Recreation structures, 1 Department of Education structure, and 7 Division of Ferries structures were absorbed into the inventory. 30 of these additions (22 from Parks, 6 from Ferries, and the 1 from Education) are rated "Fair," which accounts for the increase in Fair rated bridges. 1 of the Parks additions is rated "Poor."

The City has three bridges that were rated "poor" after their last inspections. A poor rating means that there are components of the bridge that must be rehabilitated; it does not mean that the bridge is unsafe. If a bridge was deemed unsafe, it would be closed. The term "structural deficiency" is an engineering term-of-art used by the Federal government to indicate a defect requiring corrective action. According to the FHWA, "'structurally deficient' means there are elements of the bridge that need to be monitored and/or repaired. The fact that a bridge is "deficient" does not imply that it is likely to collapse or that it is unsafe. It means they must be monitored, inspected, and maintained." Because we use the New York State rating system, we do not use that term and instead use the terms "very good", "good", "fair" and "poor". As with the Federal term, the terms "fair" and "poor" describe the condition of bridge elements and whether they are functioning as designed. Although these elements are not considered hazardous, the ratings are used to determine whether the elements require repair or rehabilitation. Again, any bridge deemed unsafe would be shut to the public.

The three City bridges that are rated "poor" include the movable Belt Parkway Bridge over Mill Basin, which is scheduled to be replaced with a fixed structure with a 60-foot clearance over Mean High Water, obviating the need for opening and closing the structure to accommodate tall vessels. This bridge is part of the seven-bridge Belt Parkway Program. Group 2 (Gerritsen Inlet and Mill Basin Bridges) is expected to start in summer 2010, and to be complete in summer 2014.

The second is a pedestrian bridge at 78th Street over the FDR Drive. The columns on this bridge have been shored and there is shielding under the concrete to protect against spalling. As a result, the bridge remains safe until its reconstruction which is expected to begin this summer.

The third bridge is the Brooklyn Bridge. It was given a "poor" rating during its last inspection because there are certain elements of the bridge that need to be rehabilitated. While the main spans are in good condition, the decks on both the Manhattan and Brooklyn ramps to the bridge are aging and will be replaced during a rehabilitation project beginning in 2009. It should be noted that of the 75 spans of the bridge, only 6 spans contribute to the low condition rating. None of them are among the three suspended spans (i.e. between the anchorages).

Contract Acceleration

Acceleration measures are a contract provision used in some reconstruction projects that is implemented through a contract pay item. This contract provision provides a mechanism to implement measures to accelerate the contractor's work to maintain critical path milestones. This provision does not apply to measures undertaken by the contractor to make up for time it lost in the progress schedule. Only the NYCDOT representative invokes this provision when the contract schedule is compromised due to unforeseen conditions during construction that are out of the contractor's control, and when it is deemed in the City's interests to accelerate.

Incentive and disincentive clauses are another contract provision used in some reconstruction projects that is implemented through a contract pay item. Under this provision, the contractor is compensated a certain amount of money for each day if the identified work in a critical milestone is completed ahead of schedule and is assessed a deduction for each day the contract overruns the allocated time. The amounts for the I/D clauses are based upon such items as traffic safety, maintenance and road user delay costs, Resident Engineering & Inspection (REI) expenses and cost of traffic enforcement agents. These amounts are implemented in accordance with guidelines established by Federal Highway Administration (FHWA).

2008 was a year in which the use of incentives/disincentives resulted in the early completion of two bridge projects:

The reconstruction of Grand Concourse over East 161st Street project was declared substantially complete on November 1, 2008 with the following 3 key project milestones completed on time. Milestone 1, the reconstruction and reopening of the East 161st Street underpass, was completed on May 31, 2007, and the contractor received an incentive of $600,000. Milestone 2, the reconstruction and reopening of the East 161st Street south service roadway from Gerard to Sheridan Avenue to traffic, which began on November 10, 2007 was completed on March 14, 2008, 25 days ahead of schedule, and the contractor received an incentive of $300, 000. Milestone 3, the reconstruction and reopening of the Grand Concourse between East 161st and East 166th Streets to traffic, was completed on May 15, 2008, 27 days ahead of schedule, and the contractor received an incentive of $540,000. The contractor also received an incentive of $1.8 million for the early completion of the contract.

The reconstruction of Hamilton Avenue Bridge over the Gowanus Canal - The contractor will be paid the maximum incentive of $216,000 for early completion of the work relating to early opening of the west bridge to traffic.

East River Bridges Anti-Icing Program

The Division's Anti-Icing Program uses the liquid chemical potassium acetate and aggregate chemical sodium acetate. The anti-icing fleet consists of twenty-two spray trucks, six plow trucks and several smaller plows. Ten of the spray trucks are combination spray/plow trucks with a 1,000 gallon tank capacity, and five are spray-spreader/plow trucks with a 360 gallon spray capacity, and a nine cubic yard spreader capacity. There are twenty chemical storage tanks, with a total storage capacity of 114,250 gallons.

In the winter of 2007-2008, a total of 51,000 gallons of potassium acetate and 92 tons of sodium acetate were applied on the roadways of all four East River Bridges.

Hamilton Avenue Asphalt Plant Emergency Repairs

In late 2007, the existing support system for the conveyor platform of the Roadway Repair and Maintenance Division's Hamilton Avenue Asphalt Plant exhibited some settlement. This rendered the plant inoperable. Our staff was requested to perform the urgent total design of a new support system. The Surveying Unit conducted field measurements of the damaged structure on December 7, 11, 20, and 21, 2007. Within two weeks, the In-House Design staff designed the system and prepared fabrication drawings for the Bridge Maintenance, Inspections and Operations Bureau. The Division's In-House Repair personnel then fabricated and installed the side frames, bracings, and I-beams necessary to restore operations at the facility. Additional emergency repairs were also made to the drum, conveyor belt, and hopper. Upon completion, Division bridge painters painted the new steel. The plant is now operational and 400 tons of asphalt were processed on January 21, 2008.

Marine Borer Remediation

In October 1999, the Department began a study to assess the present damage caused by marine borers as well as the potential for future damage at several waterfront DOT structures, including the supporting structures of the relieving platforms along the FDR and Harlem River Drives, and the timber piles and structures of the Carroll Street and Ocean Avenue bridges in Brooklyn. The underwater inspection of timber piles supporting the FDR Drive began on May 8, 2000. Inspection of the Brooklyn sites was conducted during the week of October 23, 2000. The inspections were completed in October 2000, and the Marine Borer Evaluation Report was published in June 2001. Using the results of the underwater inspections, preliminary plans were developed for the implementation of repairs and remediation measures to protect the structures from attack. These preliminary plans were completed in December 2001. The final design is complete. Mitigation work for the impact of the construction on the bodies of water will be done under a separate contract. The construction work is expected to commence in summer 2009, and to be complete in 2013.

2008 Awards

In 2008, the outstanding work of the Division was recognized by the receipt of several awards. In March 2008, the American Council of Engineering Companies of New York conferred awards on four projects in its 2008 Engineering Excellence Awards. The Design-Build re-decking project on the Belt Parkway Bridge over Mill Basin won a Platinum Award in the structural systems category; the structural health monitoring of the Belt Parkway Bridge over Paerdegat Basin won a Platinum Award in the structural systems category; the construction management of the reconstruction of the Third Avenue Bridge over Harlem River won a Diamond Award in the special projects category; and the protective coating of the Washington Bridge over Harlem River won a Gold Award in the special projects category.

Also in March 2008, the Construction Innovation Forum selected the Design-Build reconstruction of the Belt Parkway Bridge over Ocean Parkway as one of 35 world-wide finalists to be nominated for the prestigious NOVA award, the highest honor a construction innovation can receive.

In December 2008, *New York Construction Magazine* selected the reconstruction of the Hamilton Avenue over the Gowanus Canal as the Best Bridge Project of 2008. The award recognizes design and construction excellence, the contribution of key team members and the innovative solutions to a project's challenges.

The dedication and hard work of all members of the Division ensures that the Department is stronger than ever and more capable than ever to meet the challenges of maintaining a diverse and impressive bridge infrastructure.

The New York City Department of Transportation's Division of Bridges is comprised of six major bureaus. The **Chief Bridge Officer** is responsible for formulating policy and providing executive direction. He oversees all aspects of the design, construction, rehabilitation and reconstruction, maintenance, operation and administration of the 788 bridges (including 6 tunnels), and 61 culverts presently under the jurisdiction of the New York City Department of Transportation (NYCDOT). In addition to broad supervision, the Chief Bridge Officer also provides overall executive and administrative direction for the Division of Bridges, and ensures that all contractors are promptly paid.

Reporting to the Chief Bridge Officer, the **Community Affairs Unit** maintains liaison with elected officials, community boards, community groups, and civic/neighborhood associations. The Unit takes a pro-active approach in addressing roadway closures and detours by reaching out to communities prior to the onset of construction. This enables the Division to proceed with its rehabilitation program with community input, and allows the Agency and its contractors to co-exist in a more harmonious manner with the community surrounding the project. Issues and problems of concern to the communities are brought to the attention of the appropriate Division personnel and addressed.

The **Bureau of Bridge Maintenance, Inspections and Operations** employs almost 500 engineering, professional, administrative, and skilled trades employees in the maintenance and smooth operation of New York City's elevated infrastructure; it is composed of five major sections:

The ***Flag Engineering*** section is an engineering group that reviews, routes, and tracks hazardous or potentially hazardous safety and structural conditions ("flags") in or on the city's 788 bridges (including 6 tunnels). The Flags staff is on call 24 hours a day to respond to bridge emergencies. The section can be alerted to flag conditions by city and state inspectors and other sources, such as the Communications Center. All conditions undergo an evaluation involving review of the flag report, photographs of condition, and, if necessary, a visit to the site. Subsequently, a "flag packet" describing the type of repair or response that is required is created and routed to an appropriate group, in-house or contractor, for elimination. Flags engineers supervise repair work performed by contractors. The section monitors the status of each flag, and reports on all activities on a monthly basis.

The in-house engineers and skilled trades personnel of the ***Bridge Repair Section*** perform repairs to address flagged conditions. Flag repairs include structural and safety work, such as the repair of steel members damaged by corrosion or accident impact, the replacement of box beams and bridge railings, the replacement of roadway gratings, repairs to traffic control devices, and the rebuilding of wooden walkways. Much of this work is performed in the off-hours, either to accommodate traffic or in response to emergencies.

This section also rehabilitates and replaces damaged, worn, or defective components whose failure can affect service. This type of work, known as *Corrective Repair*, primarily involves the electrical, mechanical and operational control systems for the twenty-five movable bridges, as well as the travelers (movable underdeck access platforms) on the four East River bridges. The Bridge Repair Section is also responsible for the lubrication of the movable bridges as well as the mechanical components and the main cables of the East River bridges. In addition, this section administers federally funded contracts for the preventive maintenance of the four East River Bridges.

The ***Inspections and Bridge Management*** section performs three essential functions: *Bridge Inspections, Bridge Management,* and *Research and Development*.

The *Inspections Unit* inspects the city's bridges in accordance with state and federal standards; monitors bridge conditions with a high hazard potential, such as temporary repairs, outstanding flags, and fire hazards; responds to emergency inspection requests from NYCDOT and external

sources; recommends repairs and remedial measures for hazardous conditions; generates flag and inspection reports for the Division; engages in special programs such as non-destructive monitoring of sensitive bridge components by advanced techniques; supervises inspections by consultants working for the Division; conducts inspections and inventories of expansion joints; conducts acoustic emission monitoring; and inspects non-structural cladding.

The *Bridge Management Unit* develops and maintains the database for the City's bridge inventory, condition ratings, and inspection information. The unit is also responsible for maintaining records of privately-owned bridges in the City. The database is the source of information used in a variety of reports, including the present Bridges and Tunnels Annual Condition Report. This unit uses the bridge and span condition database to determine current and future needs for bridge rehabilitation, bridge component rehabilitation, flag forecasting, inspections and monitorings.

This Section is also responsible for investigating new materials and methods to improve existing bridge conditions. It sponsors a series of lectures by experts on subjects relevant to design, construction, and maintenance, such as seismic retrofitting of bridges, salt substitutes, cathodic protection against corrosion, concrete patching materials, new paint strategies, non-destructive bridge testing, and deck resurfacing. The unit also participates in research programs with interested transportation and infrastructure entities. The unit contributed to the 1999 update of the Preventive Maintenance Manual for NYC bridges. In conjunction with the Port, MTA Bridges and Tunnels, and NYS Bridge Authorities, it sponsored a report on suspension bridge cables that led to a federal project for the entire United States. A number of articles on bridge management are published by the unit in technical journals in the United States, Japan, France, and elsewhere. This section created the system for generating bridge inspection reports with portable computers; a similar system is now being adopted by the NYSDOT.

Preventive Maintenance is a vital part of the overall bridge program. This section is responsible for functions including debris removal; mechanical sweeping; pointing of masonry brick and block; and emergency response, such as snow removal, oil/cargo spills, and overpass hits. The section also performs some corrective repair work such as asphalt and concrete deck repairs, sidewalk patching, fence repair, and brick and masonry repairs. Preventive Maintenance is responsible for conducting the Department's anti-icing operations on the four East River bridges.

Bridge and Tunnel Operations is responsible for operating the 25 City-owned movable bridges that span city waterways. This section operates under a variety of federal mandates that call for 24-hour coverage at many locations; its mission is to provide safe and expedient passage to all marine and vehicular traffic under and on movable bridges. In calendar year 2008 Bridge Operations effected a total of 5,030 openings, 3,873 of which allowed 6,647 vessels to pass beneath the bridges. The remaining 1157 openings were for operational and maintenance testing. The section also operates the city's six mechanically-ventilated tunnels, performing electrical maintenance and arranging for roadway cleaning.

The overall mission of the Bureau of Bridge Maintenance, Inspections and Operations is to maintain the structural integrity of elevated structures and tunnels and to prolong their life by slowing the rate of deterioration. While our objective may be seen as "maintaining the status quo" of the infrastructure, we continue to take a new look at our methods, procedures, and general focus as we formulate our operational plans for the next several years.

As more bridges are rehabilitated, it becomes incumbent upon us to protect the government's investment in the infrastructure by developing and implementing a more ***substantive preventive maintenance program*** to keep these bridges in good condition.

The Deputy Chief Engineer for Bridge Maintenance, Inspections and Operations also acts as the **Deputy Chief Bridge Officer**, assuming the responsibilities of the Chief Bridge Officer in that person's absence.

The **East River and Movable Bridges Bureau** is responsible for all design and construction activities for all rehabilitation/reconstruction work that is planned, or currently taking place on the four East River Bridges, as well as all City-owned movable bridges and tunnels. This involves overseeing and supervising design consultants who prepare plans and specifications for bridge rehabilitation/reconstruction projects on the four East River Bridges and all Movable Bridges, as well as overseeing and supervising contractors, Resident Engineers and Inspection Consultants, and Construction Support Services Consultants during the construction phase.

This Bureau consists of two major areas: ***East River Bridges***, and ***Movable Bridges***. Each of these areas is headed by a Director to whom Section Heads or Engineers-in-Charge (E.I.C.'s) report. Each is assigned a specific bridge, or bridges, where they are responsible for all design and construction activities. The Directors, in turn, report to the Deputy Chief Engineer of the Bureau.

The **Bureau of Roadway Bridges** is responsible for both design and construction activities for all rehabilitation/reconstruction work that is planned, or currently taking place on all City-owned, non-movable bridges, with the exception of the four East River Bridges. This involves overseeing and supervising design consultants who prepare plans and specifications for bridge rehabilitation/reconstruction projects, as well as overseeing and supervising contractors, Resident Engineers and Inspection Consultants, and Construction Support Services Consultants during the construction phase.

This Bureau covers two major geographic areas; ***Brooklyn and Manhattan Bridges***, and ***Bronx, Queens and Staten Island Bridges***. In each geographic area, the workload is divided by Community Board. Engineers-In-Charge report to the Directors of each major area, who, in turn, report to the Deputy Chief Engineer of the Bureau.

The **Engineering Review and Support Bureau** is responsible for providing Division-wide engineering support services. The following areas make up this Bureau: ***In-House Design, Engineering Support, Engineering Review, and Quality Assurance***.

In-House Design staff prepare plans and specifications for bridge rehabilitation/replacement projects that enable the Division to restore bridges considered "structurally deficient," to a "very good" condition rating. This unit also handles urgent Division projects, as well as special projects under construction by the **Bureau of Bridge Maintenance, Inspections and Operations**. The Electrical Group reviews and/or prepares contract documents for the electrical and street lighting work for all projects in the Division's capital program. They further review plans and specifications prepared by consultants.

The ***Engineering Support Section*** is comprised of three units: *Specifications, Surveying and Load Rating,* and *Records Management*.

The *Specifications Unit* prepares and reviews specifications for all City-let in-house and consultant-designed bridge construction projects, processes the contracts for bidding, prepares and transmits addenda, maintains and updates City bridge construction boiler plates, and maintains an inventory of all NYC and NYS special specifications used in City-let bridge projects.

The *Surveying and Load Rating Unit* performs the survey, inspection and load rating of bridges, monitoring of cracks and movements in bridge structures and settlement of foundations. This unit also performs corrosion potential testing in all bridge resurfacing projects.

The *Records Management Unit* establishes drafting, microfilming, and digital media standards for the archiving of bridge records. It reviews design, as-built and shop drawings prepared by consulting firms, as well as digital CDs, microfilm and indexes. This unit maintains original plan

files, upgrades the records database and converts original drawings into electronic media formats. It also answers requests for information regarding records of City-owned bridges.

The ***Engineering Review Section*** consists of five units: *Engineering Review and Estimates, Utilities, Land Acquisition, Geotechnical Engineering,* and *Scope Development*.

The *Engineering Review and Estimates Unit* reviews all City-let bridge construction contract drawings; reviews drawings from other Agencies and entities, as well as State and private companies; and ensures that the work to be performed conforms to NYCDOT requirements. This unit establishes design standards, including seismic requirements, and oversees estimates prepared by consultants. It is involved in the preparation of Total Design Packages for the rehabilitation/reconstruction of poorly rated bridges. This unit also reviews superload truck permit applications, performs load analyses for the City's bridges, reviews load postings for City owned bridges and provides architectural review of various projects. It is also responsible for inspecting City-owned retaining walls, identifying walls in poor condition, and creating an inventory of all City-owned retaining walls. Retaining walls in poor condition requiring immediate attention are referred to in-house repair staff or When and Where contractors. Information on poorly rated retaining walls is also forwarded to the New York City Department of Design and Construction (DDC) for permanent rehabilitation. Walls of questionable ownership are researched for ownership and jurisdiction. Thus far, 633 City owned retaining walls (along major streets) have been inspected and inventoried; 27 of which have been found to be in poor condition. DDC has been requested to accelerate the rehabilitation of these walls. A consultant has been assisting the unit in the inspection, condition assessment, temporary repair design, inventorying and budgeting for the permanent rehabilitation of the retaining walls.

The unit currently provides engineering review supervision of private developers' projects supervision such as the Atlantic Yards Project, the Eastside Access Project, the Riverside South Project, and the Yankee Development Project. In addition, the unit conducts other, non-bridge engineering projects, such as the annual balloon wind study for the Macy's Thanksgiving Day Parade.

The *Utilities Unit* coordinates all issues related to utility design as they affect City-owned bridge projects and related projects.

The *Land Acquisition Unit* reviews and maintains a database of easement issues, right-of-way, and Uniform Land Use Review Procedures (ULURP). This unit also reviews Design reports and Environmental Impact Statement (EIS) of various other Agency projects with respect to their impact on City-owned bridges.

The *Geotechnical Engineering Unit* provides geotechnical-engineering services and oversees seismic design requirements for City-let contracts for bridge projects.

The *Scope Development Unit* reviews inspection reports and structural condition ratings to develop the scope of work for the rehabilitation of deficient bridges, and initiates the procurement of Design Consultant contracts.

The ***Quality Assurance Section*** ensures that materials installed for the Bridge Rehabilitation Program meet contractual requirements and are incorporated in strict compliance with plans and specifications. This section operates under its own formulated Quality Assurance Plan that is based on NYSDOT requirements and procedures. Quality Assurance has contractually retained the services of private inspection/testing firms. The provision of services required for various projects is better coordinated through this centralized method, which is also timely and cost effective.

Off-site Quality Assurance services relative to a wide variety of basic and manufactured construction materials including concrete, asphalt, soils, reinforcing steel, bridge bearings, timber, structural steel and precast/prestressed structural components for all bridge projects, irrespective of the funding source, are handled by this section. Through its engineers at bridge construction sites, Quality Assurance ensures that only acceptable materials are incorporated into rehabilitation/reconstruction work in strict accordance with plans, specifications and acceptable

construction practice. Current major projects include the Manhattan, Williamsburg, 145th Street, Willis Avenue, Roosevelt Island, 20th Avenue, Hamilton Avenue, Grand Concourse, Annadale Road, Shore Road Circle, and Yankee Stadium Parking Garages Connector Bridges, as well as the Brooklyn Bridge travelers.

Through its *Environmental Engineering Unit*, Quality Assurance also oversees the implementation of the Final Environmental Impact Statement on bridge construction projects involving the removal and disposal of lead-based paint. The unit's active involvement in training the supervisors and overseeing the abrasive blasting operations has resulted in the successful completion of various paint removal projects. This unit also oversees the proper and safe disposal of other hazardous waste and regulated waste encountered during construction activities.

In addition to enforcing the lead paint removal protocols, the unit handles other environmental concerns. Typically, the unit participates in the design stage to ensure that any environmental issues are addressed during the construction phase of the project. These issues include, but are not limited to, asbestos abatement, soil sampling, groundwater sampling, remediation of contaminated soils and groundwater, worker exposure to environmental contaminants, management of waste oil, storage of hazardous waste, site safety, and OSHA compliance. The role of this unit in ensuring public safety has been recognized and commended by the community.

The unit continues to monitor waste water discharge for numerous projects involving the generation and disposal of waste water, such as the Willis Avenue and Roosevelt Island bridges. The unit is responsible for discharge monitoring in conjunction with the NYS SPDES Discharge Permits for discharges at the Eastern Boulevard Bridge, Hunters Point Avenue Bridge, Greenpoint Avenue Bridge, Cropsey Avenue Bridge, Hamilton Avenue Bridge, Manhattan Plaza Underpass, Battery Park Underpass, and the Metropolitan Avenue Bridge. The unit continues to provide environmental oversight and compliance on major capital projects such as the Willis Avenue Bridge, Hamilton Avenue Bridge, Roosevelt Island Bridge, Manhattan Bridge, Williamsburg Bridge, Belt Parkway Bridges, Borden Avenue Bridge, and the Queensboro Bridge, as well as Component Rehabilitation, Roadway Bridge, and Design/Build projects.

The **Specialty Engineering and Construction Bureau** is responsible for all ***Component Rehabilitation*** activities, ***Emergency Declarations/Specialty Engineering Services***, ***Bridge Painting***, and the ***When and Where Unit***.

Component Rehabilitation is the revamping or replacement of damaged, worn or defective bridge components. This type of work is performed primarily on those structures not classified as being "deficient," but which contain specific components that have low condition ratings. By rehabilitating these components, the Division can ensure that these bridges remain in "good" or "very good" condition; usually extending the bridge's useful life by up to 10 years. Section Heads or Engineers-in-Charge (E.I.C.'s) report to the Director of Component Rehabilitation. Each is assigned a specific bridge, or bridges, for which they are responsible for all component rehabilitation activities. In addition, the Component Rehabilitation Unit will be administering a new capital When and Where contract. The When and Where Unit will be responsible for the active construction and daily monitoring and supervision of the contract.

The ***Emergency Declarations/Specialty Engineering Group*** provides technical and procurement expertise related to the following areas: preparing Emergency Declarations for unsafe conditions that require immediate remediation; assisting the Chief Bridge Officer in the contractor selection process for declared emergency situations; providing technical expertise related to the development, procurement and administration of Design-Build contracts throughout the various areas of the Division; preparing and administering Design-Build agreements; and supervision of Design-Build project design, construction, and inspection services.

The ***Bridge Painting*** section's function is to maintain the protective coating of the City's bridges. The section is divided into two programs, the in-house (expense) program and the capital program. The capital program oversees total paint removal and repainting, performed by contractors; this is done at twelve-year intervals on bridges measuring more than 100,000 square feet of painted area, and bridges over railroads. In-house personnel provide the inspection services on East River Bridge preventive maintenance contracts for quality control purposes. The in-house program is responsible for full steel painting of bridges measuring less than 100,000 square feet, and bridges that are not over railroads. This includes local surface preparation of deteriorated areas and overcoating of the entire bridge. In addition, the in-house program is responsible for salt splash/spot painting.

Salt splash/spot painting is performed four years after full steel painting, and again four years later. After another four years, we once again perform full steel painting. The interval between full steel applications remains twelve years.

Members of the in-house program respond to emergency flag repairs alongside the in-house repair forces, to perform surface preparation prior to, and painting upon completion of, the steel work. In-house painting personnel also perform environmental clean-up after the iron workers finish their repair work.

The engineers and inspectors of the ***When and Where Unit*** supervise the contractors' repairs of structural and safety flags citywide under both marine and general repair contracts, as well as a new capital contract. The use of these contracts allows the unit greater flexibility in deploying the contractors' resources as necessary, and in obtaining a variety of construction equipment and materials that are not readily available to in-house forces. In addition, the unit responds to bridge emergencies, providing on-site inspection to verify field conditions, taking measurements for repairs and providing emergency lane closures. The section also supervises the repair work performed during night hours to reduce the impact on traffic and on public safety.

The **Bureau of Management and Support Services** provides essential administrative and analytic services to each of the operational bureaus of the Division of Bridges. The Bureau is divided into five primary sections: ***Office of the Executive Director, Administration and Finance, Capital Procurement, Capital Coordination, and the Truck Permit Unit.*** Each highly-specialized section is designed to address those issues and requirements that are critical to the operation of the respective Bureaus within the Division.

In addition to the Division-wide responsibility for conflict resolution, Equal Employment Opportunity enforcement, confidential investigations, Bridges' Engineering Service Agreements, space allocation, and special projects, the ***Executive Director*** oversees, on an executive level, the following areas and functions:

The ***Senior Director of the Administration and Finance Section*** oversees and administers all administrative/personnel-related functions for the Division, acting as a liaison with the Central Personnel Coordinator in NYCDOT Personnel including, but not limited to, recruiting for vacancies (this includes reviewing for completeness and submitting the necessary paperwork, and reviewing and distributing candidates' resumes); maintaining all Managerial Position Descriptions; maintaining all Division organization charts; scheduling training; confidential investigations; maintaining records of IFA-funded positions; initiating and assisting in resolving disciplinary/grievance actions; serving as Conflicts of Interest and Financial Disclosure Officer; collecting and reviewing managerial and non-managerial performance evaluations; absence control; providing interpretive advice to Division management regarding City and Agency policy and procedures; and overseeing telephone and facility-related issues for personnel located at Two Rector Street and 59 Maiden Lane in Manhattan.

The Senior Director of the Administration and Finance Section also oversees the following three units:

The *Analytic Unit* prepares comprehensive bi-weekly and monthly reports that address major issues confronting the Division; compiles statistical data detailing the Division's productivity; processes and monitors all FOIL requests; frames issues in which oversight assistance is required for use by the Division, NYCDOT Executive Management and the Mayor's Office; and prepares the City Charter-mandated ***Bridges and Tunnels Annual Condition Report.***

The *Vehicle Coordination Unit* tracks the placement and condition of all vehicles under the jurisdiction of Bridges. It maintains a database and prepares reports containing this information; provides information and reports to appropriate inquiring Divisions and Agencies such as the Auditor General's Office, NYCDOT Legal Department and NYCDOT Litigation Support Services; coordinates the assignments of vehicles and their movement throughout various borough field locations and job sites; prepares reports on Vehicle Status and replacement; prepares reports for the purpose of tracking Overnight Vehicle Assignments for all Division vehicles; receives and routes vehicle Accident Reports, Police Reports and Security Incident Reports relating to vehicle accident, theft and/or vandalism; coordinates priorities for vehicle and equipment repair with Fleet Services; prepares reports and memoranda regarding vehicle safety issues and communication procedures for the NYCDOT Communication Center; and collects required documentation from field personnel for checking Driver Certifications with the Department of Motor Vehicles and EZ Pass.

The *Finance Unit* oversees the Division's entire expense budget process including, but not limited to, base-line preparation, spending plans, overtime control, financial plan changes, and budget modifications. The unit further oversees all Division-wide fiscal activities, including the establishment and monitoring of all IFA-related project budgets, while simultaneously ensuring that the budget and plans represent the Division's priorities.

The ***Capital Procurement Section*** serves as a liaison between the Division of Bridges and the Office of the Agency Chief Contracting Officer. The duties of this unit include: overseeing the Division's capital consultant contract procurement from scope to registration; acting as liaison between engineers and the consultant programs unit, handling all engineering questions and answers; preparing status reports; and coordinating Railroad Force Account Agreements for Division construction projects.

Railroad Force Account Agreements are a vital component in the rehabilitation/reconstruction program since train traffic affects 326 (41%) of City-owned bridges. Careful cooperation between the NYCDOT and the various railroad agencies that service the metropolitan area is required. The Railroad Coordinator provides a single point of contact for all railroad issues. This coordination includes the use of railroad personnel for track safety, approval of reconstruction design drawings, track shutdowns and reductions in train service for bridge construction work. The coordinator informs managers of "typical" railroad problems and attempts to avoid them through proactive measures.

NYCDOT bridge designers make every effort to prepare accurate and complete contract documents. Unfortunately, in many instances, the original design drawings for the deteriorating bridges no longer exist, and previous records of modifications and repairs are not available. When the contract documents for the bridge reconstruction projects do not accurately address conditions found in the field, Contract Change Requests (CCR) are needed. Change order work can not proceed until the CCR is registered. Due to the nature of bridge construction projects, change order work is often on the critical path. Any delay in the issuance of a change order affects the overall project, and adds substantial overruns to the final cost. A tracking process for change orders has been implemented that significantly reduces the time for the approval process.

The ***Capital Coordination Section*** is responsible for preparing, coordinating and updating the capital budget and capital program initiative within the Division of Bridges. Currently, the Division's Ten Year Capital Plan is worth approximately $6 billion. This plan is designed to rehabilitate the City's bridges. Responsibilities include: administering and participating in the development and implementation of planning capital projects; acting as liaison with oversight

agencies, DOT Administration and all responsibility centers within Bridges; coordinating the submission of New and Revised Certificates to Proceed for submission to Capital Budget; reviewing and processing transfer of fund requests in an attempt to resolve funding issues; and maintaining the Division's registration report for all current year capital contracts.

The ***Truck Permit Section*** issues approximately 1,500 Annual Overweight Load Permits (renewals only), 100 Annual Self-Propelled Crane Permits, and in excess of 35,000 Daily Oversize/Overdimensional/Supersize Truck Permits annually; all in accordance with the New York City Department of Transportation Policy and Procedures and the New York City Traffic Rules and Regulations section 4-15.

In October 2008, a Permit Was Issued for the Move of a Wheat Combine to the South Street Seaport. The Wheat Foods Council's "Urban Wheat Field Experience," Which Ran From October 6 Through 8, 2008, Brought the Farm-to-Fork Journey of America's Most-Consumed Gain to Life with a ¼ Acre Wheat Field, Full-Size Combine, Functioning Mill, Bread-Baking Station, and Nutrition Lab. (Credit: Earl Coomes)

JANUARY

Brooklyn Bridge

On January 3, 2008, Division engineers hosted students and teachers from the Astor Collegiate Academy on a tour of the bridge.

Grade 11 Creative Mathematics Students with Math Teacher Lorelie Racelis (Wearing White Parka) and Deputy Chief Engineer George Klein (Wearing Green Parka). Social Studies Teacher Mr. Novak (Wearing Black Hat) Learning About the Bridge. (Credit: Peter Basich)

Willis Avenue Bridge over Harlem River (Bronx/Manhattan)

On January 3, 2008, the East 125th Street exit ramp off the northbound FDR Drive was closed. This closure was necessary so that work on the construction of a temporary ramp, as well as construction of the new north-bound FDR Drive ramp to the Willis Avenue Bridge, could begin. The East 125th Street exit ramp, which typically carries only a low volume of traffic, will not reopen until the temporary ramp is removed in June 2011.

Fire Lieutenant John H. Martinson Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on January 4, 2008, in tribute to Fire Lieutenant John H. Martinson of Engine Company 249 of Brooklyn. Fire Lieutenant Martinson, 40, a 14 year veteran of the Department (who had previously served for 4 years as a police officer), died in the line of duty while battling a blaze in an apartment building in Brooklyn at the site of the former Ebbets Field on January 3. Fire Lieutenant Martinson was the 1,138th member of the New York City Fire Department to make the supreme sacrifice in the Department's 144-year history. The flags remained at half-mast through January 8, 2008.

Fire Lieutenant
John H. Martinson

Anti-Icing

Anti-icing crews were deployed on the East River bridges from 3:00 PM on January 17, 2008 until 3:00 AM the following morning, and from 2:00 PM to 8:00 PM on January 19, 2008. No application of chemicals was necessary. Icicle patrols monitored the Brooklyn-Queens Expressway, the FDR Drive, the Cross Bronx Expressway, and the Battery Park Underpass.

Hamilton Avenue Asphalt Plant Emergency Repairs (Brooklyn)

In late 2007, the existing support system for the conveyor platform of the Roadway Repair and Maintenance Division's Hamilton Avenue Asphalt Plant exhibited some settlement. This rendered the plant inoperable. Our staff was requested to perform the urgent total design of a new support system. The Surveying Unit conducted field measurements of the damaged structure on December 7, 11, 20, and 21, 2007. Within two weeks, the In-House Design staff designed the system and prepared fabrication drawings for the Bridge Maintenance, Inspections and Operations Bureau. The Division's In-House Repair personnel then fabricated and installed the side frames, bracings, and I-beams necessary to restore operations at the facility. Additional emergency repairs were also made to the drum, conveyor belt, and hopper. Upon completion, Division bridge painters painted the new steel. The plant was then once again operational and 400 tons of asphalt were processed on January 21, 2008.

The Completed Project. (Credit: Earlene Powell)

Anti-Icing

Anti-icing crews were deployed on the East River bridges from 6:30 AM to 7:00 PM on January 24, 2008, and from 8:30 PM on January 26, 2008 until 8:00 AM the following morning. No application of chemicals was necessary. Icicle patrols were active on the Brooklyn-Queens Expressway, the FDR Drive, the Cross Bronx Expressway, and the Battery Park Underpass.

FEBRUARY

DUMBO Art Piece

The "Nature Matching System" art piece of painted plywood panels was installed on February 21, 2008 on the existing fence of the Division's Front Street Yard near the Manhattan Bridge. On February 25, 2008, Commissioner Janette Sadik-Khan, accompanied by senior executive staff, the artist Tattfoo Tan, the local school principal and children, and the DUMBO BID unveiled the art piece created by the children and installed by in-house forces.

This was the first mural of the Agency's Temporary Art Program. It stood eight feet tall by 70 feet wide. The program is a new initiative of the Commissioner to install artwork for up to eleven months on DOT properties across the City. DOT and partner organizations, such as Business Improvement districts and other not-for-profit organizations, select artists through a competitive process to install artwork on public sites. The two main goals of the program are to enhance the social and civic vitality of a community through contemporary art, and to establish community partnerships by encouraging community participation in the process.

Each of the 64 colors found in the mural represented a commonly known fruit or vegetable. Forty students between the ages of five and seven from P.S. 307 and 25 children from the community assisted the artist in painting some of the mural tiles.

Artist Tattfoo Tan and Teachers Assisting the Students of P.S. 307 in Painting the Mural Panels.

Installing the Mural Panels on February 21, 2008. Celebrating the Installation of the Temporary Art Program Mural in DUMBO are, From Left to Right: DUMBO Improvement District Executive Director Tucker Reed, Supervisor Bridge Repairer and Riveter John Jones, Assistant Commissioner of Urban Design and Art Wendy Feuer, Bridge Repairer and Riveter David Collins, Mural Artist Tattfoo Tan, Carpenter Joseph Moschella, Commissioner Janette Sadik-Khan, Carpenter Stephen Buckley, Carpenter William Sic, and Supervisor Carpenter Joseph Vaccarro.

Anti-Icing

Anti-icing crews were deployed on the East River bridges and were on standby on February 10, 2008 from 8:00 AM until 5:30 PM. No application of chemicals was necessary. Crews were mobilized again from 1:00 PM on February 12, 2008 until 5:00 AM the following morning, and made 15 applications of ant-icing chemicals. Priority overpasses were cleared, and icicle patrols monitored the Brooklyn-Queens Expressway, the FDR Drive, the Cross Bronx Expressway, and the Battery Park Underpass.

Anti-Icing

On February 22, 2008, 6 inches of snow fell in Central Park, 6.4 inches at La Guardia Airport, and 6.9 inches at JFK Airport, setting new records for this date. Anti-icing crews were deployed on the East River bridges from 1:30 AM on February 22, 2008 until 8:00 AM the following morning; 28 applications of chemicals were made. Priority overpasses were cleared, and icicle patrols monitored the Brooklyn-Queens Expressway, the FDR Drive, the Cross Bronx Expressway, and the Battery Park Underpass.

Anti-Icing

Anti-icing crews were deployed on the East River bridges from 4:00 PM on February 29, 2008 until 4:30 AM the following morning; two applications of chemicals were made. Icicle patrols monitored the Brooklyn-Queens Expressway, the FDR Drive, the Cross Bronx Expressway, and the Battery Park Underpass.

MARCH

Award

In March 2008, the American Council of Engineering Companies of New York selected the Design-Build re-decking project on the Belt Parkway Bridge over Mill Basin for a Platinum Award in the structural systems category in its 2008 Engineering Excellence Awards. Founded in 1921, ACEC New York is the oldest continuing organization of professional consulting engineering firms in the United States. The Engineering Excellence Awards Program recognizes engineering achievements that demonstrate the highest degree of skill and ingenuity.

A Notice to Proceed for the project to replace the rapidly deteriorating bridge grid deck was issued to the contractor with a start date of October 25, 2005. The design was completed, and grid panel fabrication was underway at the end of 2005. Panel replacement began in spring 2006, and was completed on November 10, 2006. The project work expanded to address safety flags involving fender system work, as well as steel repair work. The replacement of the bridge grid deck was substantially completed on December 22, 2006. The new deck will serve traffic needs until April 2012. At that time, a new bridge carrying the Belt Parkway over Mill Basin will have been built and the existing one will be demolished.

Aerial View of the Belt Parkway Over Mill Basin Bridge.

Work Zone Protection Barrier. Below Deck Access For Panel Replacement. Removing Rivets.

Landing Panel On The Span. Welding New Panel At Toe Joint.

Award

In March 2008, the American Council of Engineering Companies of New York selected the structural health monitoring of the Belt Parkway Bridge over Paerdegat Basin for a Platinum Award in the structural systems category in its 2008 Engineering Excellence Awards. This

remote deck condition monitoring system was installed as part of an emergency contract, which was substantially completed on February 17, 2004.

Award

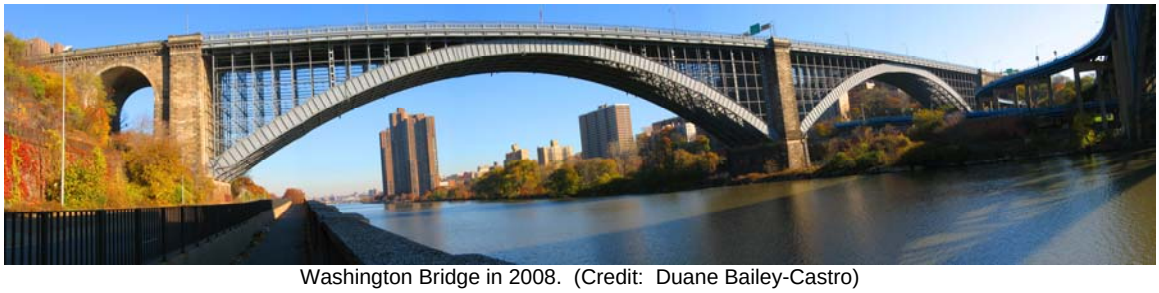
In March 2008, the American Council of Engineering Companies of New York selected the construction management of the reconstruction of the Third Avenue Bridge over Harlem River for a Diamond Award in the special projects category in its 2008 Engineering Excellence Awards.

The design of the approximately $120 million reconstruction project of this rim bearing swing bridge was completed in October 2000. Construction began in July 2001. Reconstruction included complete replacement of the approaches and the swing span. Elimination of the center median on the main span greatly improved the traffic flow on the bridge. The new bridge uses a center spherical roller thrust bearing for supporting the span and for seismic loads. The bearing is the largest of this type made for this purpose. The existing pivot pier was also reinforced for seismic loads. A temporary bridge, adjacent to the current one, was in place for five months to maintain two lanes of traffic into Manhattan while the swing span was being replaced.

The bridge was opened to five lanes of traffic at 5 AM on February 10, 2005. The new 18 span bridge supports five traffic lanes (one more than the old one), and the horizontal clearance of each of the navigation channels was increased from 100 feet to 116 feet. In addition, the sidewalks on the new bridge are 8 feet wide rather than the old 6 feet. The reconstruction of this bridge was substantially completed on November 14, 2006.

Award

In March 2008, the American Council of Engineering Companies of New York selected the protective coating of the Washington Bridge over Harlem River for a Gold Award in the special projects category in its 2008 Engineering Excellence Awards. This project was substantially completed in November 2004.



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

Nomination

In March 2008, the Construction Innovation Forum selected the Design-Build reconstruction of the Belt Parkway Bridge over Ocean Parkway as one of 35 world-wide finalists to be nominated for the prestigious NOVA award, the highest honor a construction innovation can receive. The NOVA Award was first awarded in 1990 to recognize the innovative techniques and methods, proven on actual projects, that improve the quality and reduce the cost of construction.

The Belt Parkway is a significant corridor of the Regional Transportation System with daily volumes of 166,000 vehicles. Coupled with the rapid deterioration of the bridge, the possibility of closure, and our concern for public safety, the New York State Department of Transportation (NYSDOT) requested that NYCDOT procure this project using Design-Build. The project secured 80% federal funding since it involves this significant corridor of the Belt Parkway, as well as the Historic Ocean Parkway, which was the first parkway of its kind in the United States. It was part of the Special Experimental Project No. 14 Program, a Federal Program that allows innovative contracting practices to be used.

The Ocean Parkway project also involved the reconfiguration of the interchange, roadway work on approximately a mile of the Belt Parkway, and roadway and associated landscaping work on Ocean Parkway from approximately Avenue Z to West End Avenue. The new bridge utilized

many precast elements, including deck units, t-wall abutments, cap beams, parapets, and approach slabs.

The new bridge has shoulders and an increased width of 40.5 meters (133 ft.). In addition to carrying three lanes each way, the added width allows for an acceleration and deceleration lane at the ends of the bridge to ease vehicle access and departure, as well as the introduction of shoulder lanes, a feature that was previously missing from the Belt Parkway. The new interchange configuration eliminates the old geometric deficiencies and enhances traffic flow. As part of the project, a mile of the Belt Parkway (half a mile on each side of the bridge) received new pavement; Ocean Parkway was widened and its mainline was separated from its service road by two malls (one landscaped and the other for pedestrian and bicycle use); new watermains were provided; all sewers within the project limits were cleaned; and new lighting was provided, as well as new signals at the Ocean Parkway intersection with the Belt Parkway service roads. In addition, extensive landscaping was done on Ocean Parkway, both where the old interchange loop ramps used to be, and along both Belt Parkway service roads. The new bridge itself is aesthetically pleasing with architectural details at the abutments and parapets, and decorative lighting at the abutments. Other architectural work included the placement of historic type lampposts on Ocean Parkway. In addition, a pigeon deterrent system was installed on the new bridge.

The reconstruction of this bridge, which began on September 12, 2002, was substantially completed on December 3, 2004. This early completion resulted to the contractor collecting the maximum incentive of $2 million. This project brought this segment of the Belt Parkway up to current design standards and will provide a minimum 50-year useful service life.

Precast Pier Capbeam Section Prior to Setting it on the Cast-in-Place Columns. Installing T-Walls. Precast Panels and Joints Awaiting Cast-in-Place Concrete Placement.

Belt Parkway Bridge in Spring 2005.

Hamilton Avenue Asphalt Plant (Brooklyn)

On March 1, 2008, Division ironworkers repaired the plant's chute, drum, and rap bins.

Brooklyn Bridge

On March 20, 2008, Deputy Chief Engineer George Klein escorted local public school students on a tour of the Brooklyn Bridge. The trip was organized by "Into the Outside,"a non-profit

organization that promotes the integration of interdisciplinary and field-based learning into the standard classroom curriculum.

Deputy Chief Engineer George Klein (in Blue Jacket) Leading the Tour. Examining the Plaques. Students Displaying Their Bridge Drawings. (Credit: Peter Basich)

Department of Transportation Garage in College Point (Queens)

Cleaning and painting of this structure, which began on January 2, 2008, was completed on March 21, 2008.

Houston Street Bridge over FDR Drive (Manhattan)

Cleaning and painting of the bridge railings, which began on March 14, 2008, was completed on March 26, 2008.

Queensboro Bridge

March 30, 2008 marked the 99th anniversary of the opening of the bridge.

Queensboro Bridge.
(Credit: Bernard Ente)

APRIL

Hamilton Avenue Asphalt Plant (Brooklyn)

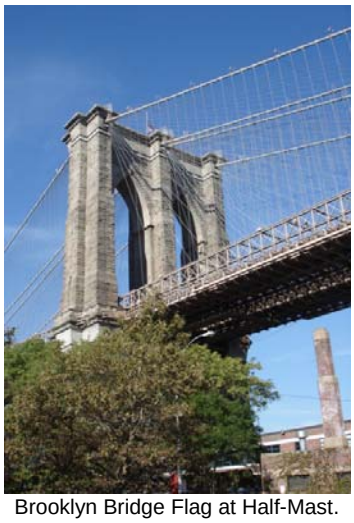
On April 5, 2008, Division ironworkers repaired the plant's cyclones, chutes, and silo.

Eagle Avenue Bridge over East 161st Street (Bronx)

Cleaning and painting of the bridge, which began on March 27, 2008, was completed on April 11, 2008.

Stationary Engineer Henry Chang Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on April 23, 2008, in tribute to Stationary Engineer Henry Chang of DCAS. Mr. Chang, 58, a seven year veteran of the Department, died in the line of duty while working in a maintenance room at the Long Island City Courthouse. The flags remained at half-mast through Saturday May 3, 2008.



Brooklyn Bridge Flag at Half-Mast.

Seventh Annual "Take Our Children to Work Day"

On April 24, 2008, as part of the Agency's seventh annual "Take Our Children to Work Day," Division personnel hosted children at the West 207th Street (University Heights) Bridge.

Bridge Operator in Charge Anthony Small (Back to Camera) Explaining How the West 207th Street Bridge Opens. Children on the Bridge. Bridge Operator Steven Lopez Explaining the Equipment. (Credit: Reza Taheri)

Manhattan Bridge

Contract #11 was substantially completed on April 29, 2008.

NYC Bridge Centennial Commission Day

In cooperation with the Office of the Mayor, the Offices of the Borough Presidents of Manhattan, Queens, Brooklyn and the Bronx, the Department of Transportation, the Department of Parks and Recreation, the Landmarks Preservation Commission, the Department of Records and Information Services, Hunter College, La Guardia Community College and non-profit groups and private citizens, the aim of the NYC Bridge Centennial Commission is to promote the 100th year anniversary of six historic New York City bridges, to educate the public about the bridges' role in the life of the city, to encourage respect for the history of New York City; to heighten the public's awareness of the City's infrastructure and the need to maintain it; and to stimulate the interest of the public in celebrating the centennial of these six bridges.

The six structures are the Borden Avenue, University Heights, Pelham Bay, Queensboro, Manhattan, and Madison Avenue bridges. April 30, 2008 was declared "NYC Bridge Centennial Commission Day."

The Proclamation. Queens Borough President Helen M. Marshall, NYC Bridge Centennial Commission President Sam Schwartz, and Commissioner Janette Sadik-Khan. Manhattan Borough President Scott M. Stringer. Councilmember Jessica Lappin. (Credit: Judith Berdy)

Parks and Recreation Commissioner Adrian Benape. Records and Information Services Commissioner Brian G. Andersson. (Credit: Judith Berdy) Director of Community Affairs Fred Herschkowitz and Commissioner Janette Sadik-Khan (Credit: Peter Basich)

Deputy Chief Engineers Larry King, Jay Patel, and Russ Holcomb, Queens Borough Commissioner Maura McCarthy, and Deputy Chief Engineer George Klein. Executive Director of Bridge Preventive Maintenance and Repair Thomas Whitehouse (Credit: Peter Basich)

MAY

Macombs Dam Bridge over the Harlem River (Bronx/Manhattan)

May 1, 2008 marked the 113th anniversary of the opening of the bridge.

Macombs Dam Bridge. (Elevation Credit: Michele N. Vulcan

Hamilton Avenue Asphalt Plant (Brooklyn)

On May 4, 2008, Division ironworkers repaired the plant's silo, chutes, and bins. On May 24, they repaired the drum and chutes.

31st Annual Five Borough Bike Tour

In preparation for the 42-mile Five Borough Bike Tour on May 4, 2008, Division personnel repaired potholes on the Madison Avenue, Queensboro, Pulaski, and Third Avenue Bridges, and swept all of the bridges on the route. Carpenters installed temporary plywood covers over the finger joints of the Pulaski Bridge, which were removed after the tour concluded that day.

The Five Borough Bike Tour is produced by Bike New York and the New York City Department of Transportation. Bike New York is a non-profit organization that promotes and encourages bicycling and bicycle safety through education, public events, and collaboration with community and government organizations. Best known for the Five Borough Bike Tour, Bike New York also organizes smaller rides and runs a Bicycle Education Program offering free classes and workshops for adults and children.

Assistant Civil Engineer Yousef Demis, and Carpenters John Green, Michael Short III, Mark Pavia, and Andrew Myjer After Preparing the Pulaski Bridge for the Tour. Cyclists on the Bridge. Deputy Chief Engineer George Klein (on right) Observing the Cyclists. (Credit: Russell Holcomb)

Brooklyn-Queens Expressway Westbound & Eastbound over Cadman Plaza (Brooklyn)

Cleaning and painting of the bridges, which began on April 3, 2008, was completed on May 7, 2008.

Merrick Boulevard Bridges over Laurelton Parkway (NB & SB) (Queens), 149th Street Bridge over LIRR (Queens), 130th Avenue Bridges over Laurelton Parkway (EB & WB) (Queens), Queensboro Bridge Ramp over 21st & 22nd Streets (Queens), Queensboro Bridge Ramp over 11th Street & Terrain (Queens), United Nations

Plaza – 1st Avenue Tunnel (Manhattan), Belt Parkway Bridge over Ocean Avenue (Brooklyn*), *and Ocean Avenue Bridge over LIRR Bay Ridge (Brooklyn)
A Notice to Proceed for the component rehabilitation of these bridges was issued to the contractor with a start date of May 12, 2008.

Merrick Boulevard Bridges over Laurelton Parkway (NB and SB), 149th Street Bridge over LIRR. (Credit: NYSDOT)

130th Avenue Bridges over Laurelton Parkway (EB and WB), Queensboro Bridge Ramp over 21st & 22nd Streets. (Credit: NYSDOT)

Queensboro Bridge Ramp over 11th Street & Terrain, Approach to United Nations Plaza – 1st Avenue Tunnel, Belt Parkway Bridge over Ocean Avenue. (Credit: NYSDOT)

Ocean Avenue Bridge over LIRR Bay Ridge. (Credit: NYSDOT)

Peace Officer Memorial Day Tribute
The Brooklyn Bridge flags flew at half-mast on May 15, 2008 to commemorate Peace Officer Memorial Day. This day honors police officers who died in the line of duty.

Department of Transportation Facilities at 59th Street, Kent Avenue, and Maspeth
Cleaning and painting of these structures, which began on January 2, 2008, was completed on May 17, 2008.

Shore Road Circle Bridge over Amtrak (Bronx)

A Notice to Proceed for the reconstruction of this bridge was issued to the contractor with a start date of May 19, 2008.

Brooklyn Bridge

As part of the five-day celebration of the 125th birthday of the bridge, Commissioner Janette Sadik-Khan announced the completion of the Washington Street way-finding project on May 21, 2008. The permanent improvements feature wayfinding signage, and a public art lighting installation entitled "This Way."

"The beauty of Brooklyn doesn't have to end with the Bridge," said the Commissioner. "A single sign can mean the difference between finding your way and continuing on your Brooklyn adventure. Today, that adventure continues as we better connect the historic bridge's walkway with Brooklyn's equally historic neighborhoods."

Unveiling the Upgrades to the Brooklyn Bridge Brooklyn Side Pedestrian Entrance. From Left: Lisa Kim, Director, Percent Art, NYC Department of Cultural Affairs; Tucker Reed, Executive Director, Dumbo Improvement District; Commissioner Janette Sadik-Khan; Brooklyn Borough President Marty Markowitz. (Credit: Kathryn Kirk)

Brooklyn Bridge

May 24, 2008 marked the 125th birthday of the bridge. The celebration, which took place from May 22 through May 26, featured an array of fun and family-friendly cultural events in both Brooklyn and Manhattan, commemorating the historic structure and highlighting the cultural diversity of the boroughs it unites. The celebration featured concerts, a film series, lectures, children's readings, dance performances and a bike tour. An unprecedented light installation featuring a colorful array spanning the length of the bridge, illuminated the New York City skyline each evening from 9:00 PM to 11:00 PM from May 22 through Memorial Day.

Supervisor Electrician Ben Cipriano, Administrative Engineer Bala Nair, Deputy Chief Engineer George Klein, Deputy Chief Engineer Jay Patel and Director of Bridge Preventive Maintenance Paul Schwartz at the Celebration. Mayor Michael R. Bloomberg and Brooklyn Borough President Marty Markowitz. Electricians Thomas Cipriano and Robert Stackpole Assisted Event Organizers by Providing Power for the Lights. (Credit: Russell Holcomb)

Fireworks Celebration. Searchlights Illuminating the Bridge. Coast Guard and Fire Boats. (Credit: Jason Bax)

Fireworks and Arch Lighting. (Credit: David Paul Gerber)
Three Searchlights Under the Bridge. (Credit: Peter Basich)

In addition, volunteers with the American Society of Civil Engineers and the Roebling Chapter of the Society for Industrial Archaeology staffed the bridge during the birthday weekend to provide information. They handed out thousands of free informational brochures about the bridge's design and construction as well as special newspapers for the event celebration and ceremonial "Deed to the Brooklyn Bridge" certificates signed by Brooklyn Borough President Marty Markowitz.

ASCE Booth. Birthday Banner. Civil Engineer Jagtar Khinda and Bridge Facts Poster.

On Sunday, May 25, Paul Giroux, chairman of the ASCE's 125th Brooklyn Bridge Anniversary Committee, gave two formal presentations entitled "Building the Brooklyn Bridge" at the Brooklyn Historical Society and Surrogate's Court in Manhattan. Each presentation detailed the history of John Roebling, Washington Roebling, and Emily Roebling and their part in the bridge's construction. The presentation also described how the bridge was constructed, including explanations of the caissons for the tower foundations and the cable spinning operations.

Memorial Day Tribute
The Brooklyn Bridge flags flew at half-mast until noon on May 26, 2008 in honor of those who died serving the nation during war.

Annadale Road Bridge over SIRT South Shore (Staten Island)
A Notice to Proceed for the reconstruction of this bridge was issued to the contractor with a start date of May 27, 2008.

Gun Hill Road Bridge over Metro North (Bronx)
The reconstruction of this bridge was substantially completed on May 30, 2008.

JUNE

Westchester Avenue over Hutchinson River Parkway (Bronx)
Cleaning and painting of the bridge, which began on April 11, 2008, was completed on June 2, 2008.

Department of Environmental Protection Plants at Bowery Bay, Astoria, and Wards Island
Cleaning and painting of these structures, which began on January 2, 2008, was completed on June 7, 2008.

West 207th Street/West Fordham Road over Harlem River (Bronx/Manhattan) (a.k.a. University Heights Bridge)
Division representatives participated in the 100th anniversary celebration of this bridge on June 12, 2008.

Councilmember Miguel Martinez (2nd From Left), Bronx Borough President Adolfo Carrión Jr. (3rd From Left), and Manhattan Borough President Scott M. Stringer. NYC Bridge Centennial Commission President Sam Schwartz (on Left), Chief Bridge Officer Henry Perahia (Center). (Credit: Joshua Orzeck)

At the Centennial Celebration. Director of Bridge Preventive Maintenance Paul Schwartz, Bridge Operator Dennis Aquino, Administrative Engineer Pinakin Patel, Bridge Operators Jorge Rodriguez and Jose Rincon, Supervisor Electrician Rasheed Salim, Executive Director of Bridge Preventive Maintenance and Repair Thomas Whitehouse, Administrative Superintendent Bridge Operations George Kern, Supervisor Bridge Repairer and Riveter Sze Ming "Simon" Liu, Bridge Operator Steven Lopez, Bridge Operator in Charge Anthony Small, Area Supervisor Highway Maintenance Loius Garzia, Supervisor Carpenter Joseph Diblasi, Assistant Civil Engineer Reza Taheri, Bridge Repairer and Riveters William Caputo and Joe Sanders, Deputy Chief Engineer George Klein, Bridge Repairer and Riveter David Fontanez, and Electrician Donald White. Supervisor Bridge Operator Mohamed Adel Tork, Bridge Repairer and Riveter Christopher Pillai, Electrician Kevin Costello, Bridge Repairer and Riveter Michael Collins, Electrician Rafael Bonnelly, Bridge Repairer and Riveters Chris Mauldin, Scott Mahaffey, and Dennis Sullivan. (Credit: Joshua Orzeck)

Jamaica Avenue Bridge over the Cross Island Parkway (Queens)

Cleaning and painting of the bridge, which began on June 7, 2008, was completed on June 14, 2008.

Hamilton Avenue Asphalt Plant (Brooklyn)

On June 21, 2008, Division ironworkers repaired the plant's paddles, and installed crossbeams and angles to support the scale plates. On June 28, 2008, they repaired the paddles, chute and grid.

Union Street Bridge over Gowanus Canal (Brooklyn)
Due to heat expansion, the bridge was closed to marine traffic beginning at 1:10 PM on June 24, 2008. It was returned to service at 3:10 PM that afternoon.

Belt Parkway Bridge over Nostrand Avenue (Brooklyn)
Cleaning and painting of the bridge, which began on April 4, 2008, was completed on June 25, 2008.

Braddock Avenue Bridge over Cross Island Parkway (Queens)
Cleaning and painting of the bridge, which began on June 14, 2008, was completed on June 30, 2008.

DOT Employee Recognition Ceremony
Division personnel were among the DOT employees honored on June 30, 2008 for their years of service to the City. First Deputy Commissioner Lori Ardito led the ceremony, which took place at DC 37's headquarters at 125 Barclay Street in Manhattan.

50 Years of Service
Supervisor Highway Repairer Willie E. Tucker Sr.

35 Years of Service
Staff Analyst Valerie Kemp, and Administrative Engineer Lawrence King.

30 Years of Service
Principal Administrative Associate Patricia Foster, and Associate Staff Analyst Alice Todd.

25 Years of Service
Principal Administrative Associate Rona Brown, Electrician Gary Emmanuel, Oiler Rene Francis, Assistant City Highway Repairer Roosevelt Gee Jr., Administrative Engineer Eugenia Katsnelson, Bridge Operator David Leifer, Tractor Operator Robert Noordzy, Bridge Operator In Charge Domingo Porrata, Principal Administrative Associate Marija Raborg, and Electrician Robert Stackpole.

Metropolitan Avenue Bridge over Conrail (Queens)
The component rehabilitation of this bridge was substantially completed on June 30, 2008.

Inspecting Conditions at the Metropolitan Avenue Bridge in November 2006. Working Under the bridge in December 2006. Underdeck Repair Work in June 2007.

JULY

Manhattan Bridge Brooklyn Plaza

The Brooklyn Plaza of the Manhattan Bridge was opened to the public on July 1, 2008. The 20,000 square foot plaza bounded by the bridge, Jay Street, and Sands Street in Brooklyn was used for staging during reconstruction projects and had been closed to the public since 1982.

Looking South From the Pedestrian Entrance. Arial View of the Plaza.
Evening View Looking South.

East 149th Street Bridge over Metro North (Bronx)

The component rehabilitation of this bridge was substantially completed on July 8, 2008.

Belt Parkway Bridge over Mill Basin (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 4:55 PM on July 18, 2008. It was returned to service at 10:00 PM that night.

Hamilton Avenue Asphalt Plant (Brooklyn)

On July 12, 2008, Division ironworkers repaired the plant's dryer, cyclone, and bin. On July 26, 2008, they repaired the drum and hopper.

81st Street Pedestrian Bridge over Belt Parkway (Brooklyn)

Cleaning and painting of the bridge, which began on May 16, 2008, was completed on July 25, 2008.

East 156th Street Bridge over Access to Housing (Bronx)

Cleaning and painting of the bridge, which began on May June 9, 2008, was completed on July 29, 2008.

AUGUST

Stanley Michels Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on August 1, 2008, in tribute to former City Councilmember Stanley Michels, who died on that day. Mr. Michels, 75, served on the city council from 1978 to 2001, when he was forced to leave because of term limits. As councilmember for District Six, which covers much of northern Manhattan, he was active on environmental issues, particularly water quality, and tenants' rights. In 1987, Mr. Michels was the prime sponsor of the Clean Indoor Air Act, the city's first law regulating smoking in public places. The flags remained at half-mast through Sunday August 3, 2008.

Waterbury Avenue Pedestrian Bridge over Bruckner Expressway (Bronx)

At about 2:50 AM on August 8, 2008, the Communications Center reported that a truck traveling south in the center lane of the expressway struck this State-owned bridge. The responding engineer found that the span over the southbound expressway had collapsed, blocking the expressway in both directions. The Police Department, Office of Emergency Management, and Con Edison personnel were on site. NYSDOT was notified and representatives observed as Bridge Division and Roadway Repair and Maintenance crews cut and removed the collapsed span and installed concrete barriers and chain-link fence to block access to the bridge. Traffic was restored at about 2:40 PM.

Waterbury Avenue Bridge Damage.

Sanitation Worker Nelson Diaz and Traffic Agent Donnette Sanz Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on August 12, 2008, in tribute to Sanitation Worker Nelson Diaz, 60, a 23 year veteran of the Department, who died in the line of duty on August 11.

The flags continued to be flown at half-staff in tribute to Traffic Agent Donnette Sanz, 33, a 2 year veteran of the Department, who died in the line of duty on August 14. The flags remained at half-mast through August 25, 2008.

Riverside Drive Bridge over West 96th Street (Manhattan)

Cleaning and painting of the bridge, which began on May 8, 2008, was completed on August 14, 2008.

Riverside Drive Bridge in Spring 2008.
(Credit: Russell Holcomb)

Hamilton Avenue Bridge over Gowanus Canal (Brooklyn)
The Brooklyn-bound span reopened to vehicular traffic on, August 16, 2008, 15 days ahead of schedule.

Bulova Avenue Bridge over the BQE West Leg (Queens)
Cleaning and painting of the bridge, which began on August 8, 2008, was completed on August 28, 2008.

SEPTEMBER

Hamilton Avenue Asphalt Plant (Brooklyn)
On September 2, 2008, Division ironworkers performed emergency repairs to a broken motor anchor base. On September 13, 2008, they repaired the plant's dryer drum blades and recycling bin.

Coney Island Avenue Bridge over Belt Parkway (Brooklyn)
Cleaning and painting of the bridge, which resumed on August 21, 2008, was completed on September 5, 2008.

92nd Street Pedestrian Bridge over Belt Parkway (Brooklyn)
Cleaning and painting of the bridge, which resumed on June 17, 2008, was completed on September 5, 2008.

Manhattan Bridge Water Street Arch
On September 8, 2008, the 45-foot high, 152-foot long, 46-foot wide arch was partially reopened to the public after almost two decades. By moving the Division's bridge metal storage materials out, we were able to re-connect Water Street between Adams Street and Anchorage Place.

But moving the materials out and re-opening the archway is just the first step. The Agency will work with the DUMBO Improvement District to remove the asphalt to reveal the passageway's historic cobblestone, and to add lighting and benches to the archway where users can linger and relax. The archway will completely open in 2009 where its rehabilitation is scheduled to coincide with the Manhattan Bridge's 100th birthday.

Park Road (204th Street) Bridge over Bronx River (Bronx)
Cleaning and painting of the bridge, which began on September 4, 2008, was completed on September 9, 2008.

49th Street Bridge over the BQE West Leg (Queens)
Cleaning and painting of the bridge, which began on August 9, 2008, was completed on September 10, 2008.

Patriot Day Tribute
The Brooklyn Bridge flags flew at half-mast on September 11, 2007 to commemorate Patriot Day.

Brooklyn Bridge Flag at Half-Mast at Dusk.
(Flag Credit: Michele N. Vulcan)

17th Avenue Pedestrian Bridge over Belt Parkway (Brooklyn)
Cleaning and painting of the bridge, which resumed on June 17, 2008, was completed on September 5, 2008.

Mosholu Parkway Bridge over Webster Avenue (Bronx)
Cleaning and painting of the bridge, which began on December 12, 2007, was completed on September 15, 2008.

Brooklyn and Manhattan Bridges
On September 22, 2008, at the request of the American Society of Civil Engineers, Division engineers hosted a group of bridge engineers from Moscow in a tour of the Brooklyn and Manhattan Bridges.

Russian Engineers and ASCE Representative on the Brooklyn Bridge Walkway With (in Back Row) Executive Director of Bridge Preventive Maintenance and Repair Thomas Whitehouse (Wearing Black Jacket), Deputy Chief Engineer Russell Holcomb (Wearing Safety Vest), and Inspections Engineer Lev Gold (Wearing Safety Vest).

Osborn Elliott and Elinor Guggenheimer Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on September 29, 2008, in tribute to former Deputy Mayor for Economic Development Osborn Elliott, and former Commissioner of the NYC Department of Consumer Affairs Elinor Guggenheimer.

Mr. Osborn, 83, died on September 28, 2008. He was the editor of Newsweek magazine from 1961 to 1976. In 1975, with New York Senator Jacob K. Javits, he led the formation of the Citizens Committee for New York City, which sought to elevate the standard of living with a wave of voluntarism. Today, it still offers grants and training to community volunteer groups.

When New York's economic development administrator resigned in June 1976, with the city about to topple into bankruptcy, Mayor Abraham D. Beame asked him to join his administration and restructure the city's economic development agency. Given the title of deputy mayor, he waived his city salary and worked for a dollar a year. He stayed in his city post until 1977. He then served eight years as dean of the Columbia University Graduate School of Journalism.

Ms. Guggenheimer, an advocate for children's and women's rights, 96, died on September 29, 2008. In 1948, she founded the Day Care Council of New York, which fought for state-funded day care and protested high milk prices. Active in many other charitable causes, including the Community Service Society, she was named the first female member of the City Planning Commission in 1961.

Boasting "ten immediate goals" when she took office as Commissioner of the Department of Consumer Affairs in 1974, she was fueled by an estimated 14 cups of java a day. The guzzling ended when high prices inspired her to lead a national coffee boycott in 1977, but Guggenheimer never lost her edge. She founded new crusades into the 1980's. She served as Commissioner until 1978.

She had organized the New York Women's Forum, a mentorship and networking group, in 1973. She expanded it in 1981 with the National Women's Forum, then in 1983 the International Women's Forum, and in 1992 the New York Women's Agenda. The flags remained at half-mast through Friday, October 3, 2008.

OCTOBER

Cross Bay Boulevard over Belt Parkway (Queens)

Cleaning and painting of the bridge, which began on September 2, 2008, was completed on October 8, 2008.

Brooklyn-Queens Expressway under the Middagh Street Bridge (Brooklyn)

In the early afternoon of October 6, 2008, a gasoline truck exploded on the eastbound Brooklyn-Queens Expressway, under the Middagh Street Bridge, closed the expressway in both directions for several hours until the fire was extinguished and the bridge was inspected. A Division inspection team, headed by Team Leader Omar Makki, arrived immediately and stayed until late in the night, in order to ascertain that there was no significant structural damage. Westbound traffic was restored at approximately 3:30 PM. Two eastbound lanes opened at approximately 6:30 PM. Traffic was fully restored by 7:00 PM. The left and center lanes of the eastbound Brooklyn-Queens Expressway were closed overnight to replace fire-damaged timber shielding.

Middagh Street Bridge. (Credit: Omar Makki)

Annadale Road over SIRT South Shore (Staten Island)
The western half of the bridge was closed for reconstruction on October 22, 2008.

Grand Concourse Bridge over East 167th Street (Bronx)
Cleaning and painting of the bridge, which began on September 23, 2008, was completed on October 22, 2008.

East 14th Street Pedestrian Bridge over Belt Parkway (Brooklyn
Cleaning and painting of the bridge, which began on September 8, 2008, was completed on October 24, 2008.

NOVEMBER

Grand Concourse Bridge over East 161st Street (Bronx)
The reconstruction of this bridge was substantially completed on November 1, 2008.

Hamilton Avenue Asphalt Plant (Brooklyn)
On November 1, 2008, Division ironworkers repaired the plant's bins and drum. On November 8, and 15, 2008, they repaired the chutes, drums, bins, and baffle plates.

New York City Marathon
In preparation for the Marathon on November 2, 2008, Division personnel inspected and cleaned the Queensboro, Pulaski, and Madison Avenue Bridges, and repaired potholes along the route. The bridge reconstruction contractor prepared the Willis Avenue Bridge for the event. In addition, they re-configured the Jersey barriers and placed hay bales at the Queensboro Bridge. An ironworker crew was on standby to install plates if needed. Standard traffic configurations were restored before the next morning rush hour.

Male and Female Wheelchair Racers at Mile 16, On the 59th Street Ramp of the Queensboro Bridge.
(Credit: Paul Schwartz)

Female Racers on the 59th Street Ramp of the Queensboro Bridge: Great Britain's Paula Radcliffe (Wearing Black Shorts, Winner). Male Racers on the Ramp: Brazil's Marilson Gomes dos Santos (Wearing Yellow Top, Winner), and Morocco's Abderrahime Bouramdane (On Right, 5th Place).
(Credit: Paul Schwartz)

Carpeted Willis Avenue Bridge. Female Racers on the Willis Avenue Bridge Approach: Great Britain's Paula Radcliffe (Winner), Russia's Ludmila Petrova (2nd Place), and Ethiopia's Dire Tune (7th Place). Kenya's Rita Jeptoo (4th Place). (Credit: Edgardo Montanez)

Male Racers on the Willis Avenue Bridge Approach: Brazil's Marilson Gomes dos Santos (Winner), and Morocco's Abderrahim Goumri (2nd Place). Kenya's Daniel Rono (3rd Place). Bridge Operator-in-Charge Anthony Small, and Bridge Operators Kamaludeen Kahn and Jose Rincon Observing the Racers' Progress.
(Credit: Edgardo Montanez)

Bagpipers on the Off-Going Side of the Willis Avenue Bridge. 20-Mile Marker.
(Credit: Edgardo Montanez)

Terence D. Tolbert, Daniel DeFrancesco, Philip Reed, Veterans Day, and Probationary Firefighter Jamel M. Sears Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on November 8, 2008 in tribute to Terence D. Tolbert, Daniel DeFrancesco, and Philip Reed.

Mr. Tolbert, 44, died on November 2, 2008. As the Executive Director of Inter-Governmental Relations for the New York City Department of Education, he was its chief lobbyist in Albany and Washington. In August 2008, he took a leave to serve as state director of President Obama's Nevada campaign. During his almost two decades in New York City and State politics, Mr. Tolbert worked on many political campaigns, including John Edwards' presidential campaign in 2003-2004, Mayor Bloomberg's 2005 re-election effort, and the campaigns of Senator Charles Schumer and former Governor Eliot Spitzer.

Mr. DeFrancesco, 68, died on November 5, 2008. His tenure with the New York City Board of Elections began in 1967 as a driver to its president. He was appointed Executive Director in 1988. Even after his 2002 retirement, he continued to serve as an advisor to elections administrators throughout New York State.

Mr. Reed, 59, died on November 6, 2008. He served as the first openly gay black member of the City Council from 1998 to 2005, representing District 8, comprised East Harlem and Manhattan Valley, and parts of the Upper West Side and the South Bronx. Mr. Reed was a champion of asthma prevention legislation and an outspoken critic of random searches of black men known as racial profiling.

The flags flew at half-mast on November 11, 2008 to commemorate Veterans Day.
The flags remained at half-mast on November 12, 2008 in tribute to Probationary Firefighter Jamel M. Sears, 33, who died in the line of duty November 11, 2008. He collapsed on November 10 following completion of a training exercise at the Department's training academy located at Randall's Island. Mr. Sears was appointed to the FDNY on July 1, 2008, and was enrolled in the 23-week Probationary Firefighters Training Program. He was also a four-year U.S. Navy veteran. The flags were raised on November 19, 2008. In December 2008, Mr. Sears was posthumously assigned to Engine 218 in Brooklyn.


Probationary Firefighter
Jamel M. Sears

Brooklyn Bridge

On November 8, 2008, Division engineers hosted the University of Notre Dame civil engineering students and faculty on a tour of the bridge.

University of Notre Dame Students with Computational Hydraulics Laboratory Coordinator Diane Westerink (Wearing Brown Jacket) and Associate Project Manager Maria Mikolajczyk (Wearing Blue Jacket). (Credit: Paul Schwartz)

Queensboro Bridge

On the evening of November 19, 2008, the Where and When contractor, supported by Division personnel, completed a four night process to prepare and install a waterproofing membrane on the Manhattan approach of the inner roadway. This was in preparation for the maintenance resurfacing operation, which was completed by personnel from both the Bridges and Roadway Repair and Maintenance Divisions on the night of November 22, 2008.

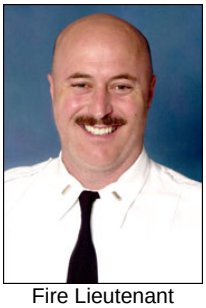
Waterproof Membrane on the Approach. Executive Director of Bridge Preventive Maintenance and Repair Thomas Whitehouse Inspecting the Work. (Credit: Clara Medina)

20th Avenue Bridge over NYCT (Brooklyn)

The reconstruction of this bridge was substantially completed on November 20, 2008.

Fire Lieutenant Robert J. Ryan Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on November 23, 2008, in tribute to Fire Lieutenant Robert J. Ryan of Engine Company 155 of Staten Island. Fire Lieutenant Ryan, 46, a 17 year veteran of the Department, died in the line of duty while battling a two-alarm blaze in a two-story private residence in the New Brighton neighborhood of Staten Island on November 23. He was assigned to Engine 155 for over two years, having previously served with Engines 228, 280 and 282 in Brooklyn, Engine 6 in Manhattan, the 4th Battalion in Manhattan and the 22nd Battalion in Staten Island. He was promoted to the rank of Fire Lieutenant in March 2001. Fire Lieutenant Ryan was the 1,139th member of the New York City Fire Department to make the supreme sacrifice in the Department's 144-year history. The flags remained at half-mast through November 26, 2008.



Fire Lieutenant
Robert J. Ryan

Woodhaven Boulevard Bridge over Queens Boulevard (Queens)
Cleaning and painting of the bridge, which began on November 6, 2008, was completed on November 24, 2008.

Elliot Avenue Bridge over Queens Boulevard (Queens)
Cleaning and painting of the bridge, which began on November 14, 2008, was completed on November 24, 2008.

Third Avenue Bridge over Gowanus Canal (Brooklyn)
The component rehabilitation of this bridge was substantially completed on November 24, 2008.

Third Avenue Bridge Under Rehabilitation in September 2007 and February 2008.

Deck Slab Concrete Pour at the Third Avenue Bridge in April 2008.

Project Engineer Ashraf Anis, Director of Component Rehabilitation Krishan Baweja, and Project Manager Rezaul Karim at the site in April 2008. North Sidewalk Looking West After Rehabilitation.

Linden Boulevard Bridge over Cross Island Parkway (Queens)

Cleaning and painting of the bridge, which began on June 23, 2008, was completed on November 26, 2008.

82nd Annual Macy's Thanksgiving Day Parade

Division engineers reviewed and approved the design specifications of four new large balloons to be introduced in the parade, as follows: Horton, Buzz Lightyear, Smurf, and Beethoven. A balloon is classified as large if it is larger than 5,000 cubic feet. However, the balloons in the parade cannot be taller than 70 feet, wider than 40 feet, or longer than 78 feet.

In November 2008, Division representatives participated in the walk-through of the parade route with NYPD and other agencies. They also attended the test flights of the balloons at Flushing Meadows Park on November 8, 2008.

On November 27, 2008, wind speeds were relatively low and the balloons flew in the parade without incident. The average wind speed was light (between 5 and 10 miles per hour) during the parade, but gusts as high as 19.5 miles per hour were also experienced. Chief Bridge Officer Henry Perahia, Director of Engineering Review Abul Hossain, Director of Engineering Support Mahabal Shah, and George Jarvis were positioned at various locations along the parade route to observe compliance with the approved procedures.

New Horton. (Credit: Abul Hossain) New Buzz Lightyear, New Smurf, and New Beethoven. (Credit: George Jarvis)

Commissioner Janette Sadik-Khan, Chief Bridge Officer Henry Perahia, and Director of Engineering Review Abul Hossain. John Daza, Nicholas Spaventa, Assistant Civil Engineer George Jarvis, Director of Engineering Review Abul Hossain, Vlad Koyfman, Chief Bridge Officer Henry Perahia, Philip Yartey, Administrative Engineer Udayakumar Dommaraju, Leslie Hodelin, and Director of Engineering Support Mahabal Shah.

236th Street Bridge over Henry Hudson Parkway (Bronx)

Cleaning and painting of the bridge, which began on October 22, 2008, was completed on November 28, 2008.

DECEMBER

Award

In December 2008, *New York Construction Magazine* selected the reconstruction of the Hamilton Avenue over the Gowanus Canal as the Best Bridge Project of 2008. The award recognizes design and construction excellence, the contribution of key team members and the innovative solutions to a project's challenges.

Roosevelt Island Bridge over East River/East Channel (Manhattan/Queens)

The roadway was returned to full service on December 2, 2008 after the complete re-decking of the main bridge and approaches.

Open Queens Approach Roadway of the Roosevelt Island Bridge in December 2008.

Carroll Street Bridge over the Gowanus Canal (Brooklyn)

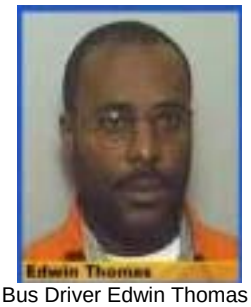
On December 4, 20028, Bridge Operations personnel hosted first grade children from PS 321 on class trips to the bridge. Students, teachers, and parents enjoyed their visit.

Supervisor Bridge Operator Mohamed Adel Tork With the Children on the Carroll Street Bridge. Observing an Opening of the Union Street Bridge. Supervisor Tork Explaining the Machinery. (Credit: Antonio Morales)

National Pearl Harbor Remembrance Day and Bus Driver Edwin Thomas Tribute

The Brooklyn Bridge flags flew at half-mast on December 7, 2008 to commemorate National Pearl Harbor Remembrance Day, in honor of those who died as a result of their service at Pearl Harbor and to pay special tribute to veterans of World War II.

The flags remained at half-mast on December 8, 2008 in tribute to MTA Bus Driver Edwin Thomas, 46, died in the line of duty on December 1, 2008 while driving the B46 route in Brooklyn. Mr. Thomas worked as a bus driver for the MTA for seven years. He died after being stabbed by a passenger. This was the first killing of an on-duty New York City bus driver since 1981.



Bus Driver Edwin Thomas

Manhattan Bridge

In the early morning of December 10, 2008, a hit and run driver damaged a traffic reversal gate on the Brooklyn approach of the bridge. In-house forces repaired seven caution lights before the evening rush hour.

Electricians Thomas Cipriano and Robert Stackpole Inspecting the Repaired Lights. (Credit: Hany Soliman)

East 238th Street (Nereid Avenue) Bridge over Bronx River Parkway and Metro North (Bronx)

The component rehabilitation of this bridge was substantially completed on December 12, 2008.

East 238th Street: Coring at Pier #9 in 2006. Underdeck at Span #3 in 2006.

East 238th Street: North Sidewalk Repairs in 2007. Sidewalk Repairs in 2008.

East 238th Street: Completed Sidewalk and Bridge View in December 2008.

Hamilton Avenue Asphalt Plant (Brooklyn)

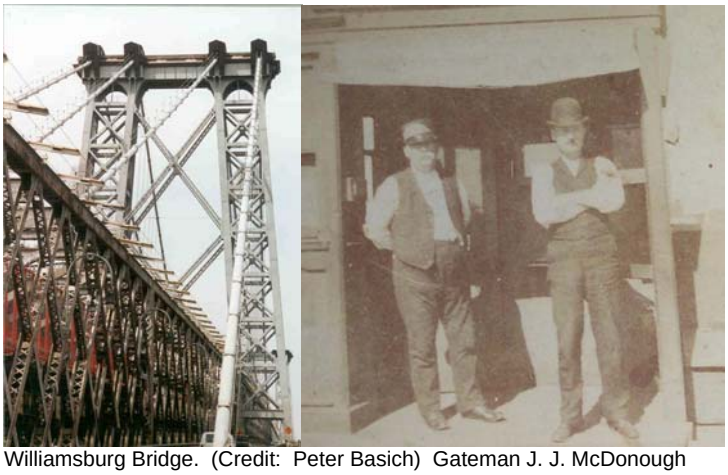
On December 13, 2008, Division ironworkers repaired the plant's bins and drum.

Anti-Icing

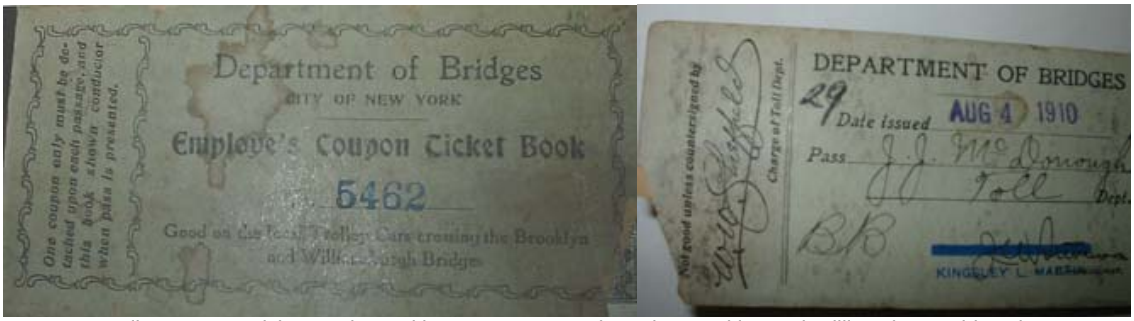
Anti-icing crews were deployed on the East River bridges from 11:00 PM on December 16, 2008 until 4:00 AM the following morning; nine applications of chemicals were made. Icicle patrols monitored the FDR Drive, the Brooklyn Queens and Cross Bronx Expressways, and the Battery Park Underpass.

Williamsburg Bridge

December 19, 2008 marked the 105th anniversary of the opening of the bridge.



Williamsburg Bridge. (Credit: Peter Basich) Gateman J. J. McDonough (on left), Great-Grandfather of Deputy Chief Engineer Russell Holcomb



Trolley Coupon Ticket Book Used by J. J. McDonough on the Brooklyn and Williamsburg Bridges in the Early 1900's (Credit: Russell Holcomb)

Anti-Icing

On December 19, 2008, 4 inches of snow fell in Central Park, 4.4 inches at La Guardia Airport, and 2.6 inches at JFK Airport. Anti-icing crews were deployed on the East River bridges from 6:00 AM on December 19, 2008 until 9:00 AM on December 20, 2008; 16 applications of chemicals were made. Crews were deployed again from midnight on December 21, 2008 until 4:00 AM on December 22, 2008; 13 applications of chemicals were made. Icicle patrols monitored the FDR Drive, the Brooklyn Queens and Cross Bronx Expressways, and the Battery Park Underpass.

New Year's Eve

On the night of December 29, 2008, at the request of the Mayor's Office of Special Events and the NYPD, Division ironworkers temporarily welded shut all manholes in the Times Square area in preparation for New Year's Eve. Celebrating the arrival of the New Year in Times Square was started in 1904 by Adolph Ochs, owner of the *New York Times*. The ball dropping tradition began three years later.

Anti-Icing

Anti-icing crews were deployed on the East River bridges on December 23 and 24, and again on December 31, 2008. No application of chemicals was necessary. Priority overpasses were cleared of snow and ice, and icicle patrols monitored the Cross-Bronx Expressway, the Brooklyn-Queens Expressway, the FDR Drive, and the Battery Park Underpass.

Borden Avenue Bridge over Dutch Kills (Queens)

The bridge was closed at noon on December 31, 2008 through July 2009 for an emergency reconstruction project. The decision was made after studies of one of the bridge's abutment walls showed a need for expedited repair. In 2007, the bridge carried approximately 15,747 vehicles per day.

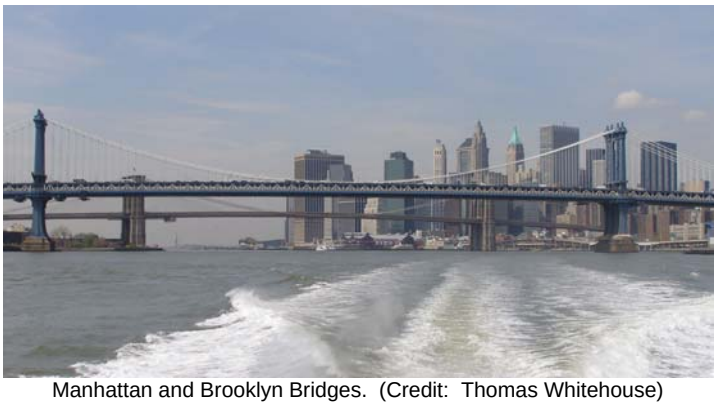
Manhattan Bridge

December 31, 2008 marked the 99th anniversary of the opening of the bridge.

Manhattan Bridge. (Credit: Bojidar Yanev) Bridge at Night in May 2008. (Credit: Jason Bax)

East River Bridges

A $3.47 billion reconstruction program is underway to rehabilitate all four East River crossings. In 2007, these bridges carried some 496,666 vehicles per day. In 2002, working in coordination with the NYPD and other law enforcement agencies, the Division implemented enhanced security measures on these bridges. This work is ongoing.



Manhattan and Brooklyn Bridges. (Credit: Thomas Whitehouse)

BROOKLYN BRIDGE

Arguably the most influential bridge in American history, the Brooklyn Bridge remains one of New York City's most celebrated architectural wonders. Designed by the brilliant engineer John Augustus Roebling, and completed by his equally ingenious son Washington Roebling, this elegant structure was, at the time of its completion in 1883, the longest suspension bridge in the world. It was declared a National Historic Landmark in 1967.

Engineering Landmark Plaque. (Credit: Michele N. Vulcan) 1899 Plaque Near the Franklin Truss of the Bridge, Marking the Site of George Washington's First Presidential Mansion, Franklin House. (Credit: Hany Soliman) 1991 New York City Landmark Plaque. (Credit: Peter Basich)

Historic Landmark, 1954 Reconstruction, Two Cities, and Roebling Memorial Plaques.
(1954, Cities & Memorial Credit: Michele N. Vulcan)

The Brooklyn Bridge carried some 131,551 vehicles per day in 2007. The $695 million reconstruction commenced in 1980 with Contract #1, and will continue with Contract #6, currently in the design phase and scheduled for completion in 2013. This contract will include the rehabilitation of both approaches and ramps, the painting of the entire bridge, as well as the seismic retrofitting of the structural elements that are within the Contract #6 project limits.

Brooklyn Bridge Ramps and Arches. (Credit: Maria Mikolajczyk)

Seismic retrofitting of the remaining bridge elements requiring strengthening will be carried out under a separate contract by the end of 2017. Work completed on the bridge to date includes reconditioning of the main cables, replacement of the suspenders and cable stays, rehabilitation of the stiffening trusses, and the replacement of the suspended spans deck.

The $21 million current construction contract will replace the four existing travelers with a new state-of-the-art technology system including motors, reducers, braking systems, electrical controls, programmable logic controller system, and trouble shooting devices, as well as AC motors that provide enhanced operational performance and gear boxes that increase life cycle and reliability of the new travelers. A Notice to Proceed was issued to the contractor with a start date of November 22, 2006. During 2007, the existing track beams, supports and electrical equipment (including conductor bars, transformers, conduits, wires and breaker boxes) were

removed. All four travelers were removed in November 2007. The fabrication work for the new travelers to be installed was underway at the end of 2007.

2007: Brooklyn Side Traveler. (Credit: Michele N. Vulcan)
2007: Working on a Traveler. (Peter Basich)

Removing the Brooklyn Bridge Main Span Travelers in 2007.

During 2008, approximately 2,500 feet of new track beams, their supports and new electrical equipment were installed. The first new traveler was installed in June 2008, and the remaining three were installed in November and December of 2008. By the end of 2008, approximately 80% of the contract work was complete.

Scheduled work in 2009 includes the field testing of the travelers and the electrical system, the installation of the remaining approximately 250 feet of track beams, their supports and conductor bars, painting, and finally, removal of the temporary platform and demobilization. Construction is scheduled to conclude in June 2009.

Track Beam Removal in January 2008. First Platform Lift in June 2008.

Lifting Traveler #4 in June 2008. Lifting the New Manhattan Main Span Traveler to the Underside of the Bridge on November. 20, 2008. (Main Span Credit: Bojidar Yanev)

In the fall of 2008, to compare options for energy efficiency, we replaced 20 100-watt mercury vapor lamps of the necklace lights on the Brooklyn and Manhattan Bridges with 10 LED fixtures and 10 induction fixtures. We will test them through the spring of 2009, and will choose a technology in time to purchase fixtures before the end of fiscal year 2010.

Supervisor Electrician Ben Cipriano With Both Mild and Bright Induction Light Fixtures for Testing. For Comparison Purposes, There is a Mix of Clear and Frosted Globes. (Credit: Russell Holcomb)

MANHATTAN BRIDGE

The youngest of the three NYCDOT suspension bridges that traverse the East River, the Manhattan Bridge carries some 398,705 commuters – 73,205 vehicles and 325,500 mass transit riders - between Manhattan and Brooklyn daily. It was designed by Leon Moisseiff and

completed in 1909. The bridge supports seven lanes of vehicular traffic, a bikeway and walkway, as well as a subway transit line upon which four different train lines operate.

Water Taxi Approaching the Bridge. (Credit: Peter Basich) Manhattan Bridge. (Credit: Michele N. Vulcan) Construction Plaque. (Credit: Peter Basich)

The $885 million reconstruction commenced in 1982 with Contract #1, progressed with Contract #10, and continued with Contract #11, substantially completed on April 29, 2008. This work will be followed by the upcoming Contract #14 to rewrap the cables and replace the suspenders and necklace lighting. Completion is expected in 2012. The reconstruction will end with a seismic retrofit of the bridge, slated to begin in 2017. Work completed on the bridge to date includes reconstruction of the south and north upper roadways, reconstruction of the north and south subway lines, installation of a truss stiffening system to reduce twisting, restoration of the Manhattan Plaza, including the historic arch and colonnades, reconstruction of the south walkway, installation of a new north bikeway, replacement of the lower roadway, and rehabilitation of the Brooklyn Plaza.

"The Spirit of Commerce" Sculpture and the Underside of the Arch. Part of the Colonnades. The "Native American Buffalo Hunt" Sculpture Panel. (Credit: Peter Basich)

Contract #11

A Notice to Proceed for this $148 million project was issued to the contractor with a start date of January 14, 2005. **Contract #11** included the following improvements: reconstruction of the lower roadway; rehabilitation of the anchorages; rehabilitation of the travelers; installation of new lighting on the north upper roadway and lower roadway; upgrading of the lower roadway lane control signals, installation of a fire protection system, rehabilitation of the tower canopies and balconies, and rehabilitation of the Brooklyn Plaza. The work on the lower roadway began in October 2006. The roadway was reopened on October 1, 2007. The contractor will be paid the maximum incentive of $3.9 million for early completion of the work related to the opening of the lower roadway.

Contract #11 in 2005: Masonry Cleaning of the Brooklyn Granite Pier and of the North Face of the Brooklyn Anchorage. Installing Conduit for the New North Upper Roadway Street Lighting.

Contract #11 in 2005: Waterblasting to Remove Existing Microsurfacing From the South Upper Roadway. Manually Removing the Microsurfacing.

Contract #11 in 2005: Preparing the Deck for New Microsurfacing on the South Upper Roadway.

Contract #11 in 2005: Placing the New Microsurfacing on the South Upper Roadway. Newly Resurfaced Roadway.

Contract #11 in 2005: The Brooklyn Tower Canopy. Removing the Canopy.

In 2005 and 2006, the rehabilitation of the interior of the anchorages proceeded with the contractor repairing and replacing concrete slabs, patching spalled concrete areas, and performing vacuum-injected epoxy crack repairs to mitigate the problem of moisture seeping into the anchorage chambers. In addition, masonry cleaning work was performed on the exterior of the anchorages, piers, and abutments, as well as on the retaining walls on the approach spans. This cleaning was followed by masonry joint pointing and repairs to the damaged granite stones of these structures. Other significant tasks underway in 2006 were the installation of new street lighting on the lower and north upper roadways, and the rehabilitation of the canopy and balcony areas at both towers.

Contract #11 in 2006: Pointing Joints on East Face of Brooklyn Anchorage. Masonry Cleaning Inside Archway of Brooklyn Anchorage. Installing Conduit and Wire for New Lower Roadway Lighting.

Contract #11 in 2006: Ironworkers Removing Existing Rivets in Preparation for Replacement of Lower Roadway. Installing Steel-Faced Curb for Sands Street Realignment. Erecting Scaffold to Build Painting Containment at Base of Brooklyn Tower.

Contract #11 in 2006: Removal of Existing Suspender Rope From Cable Band on Main Span. Sawcutting Lower Roadway Deck on Manhattan Approach Span.

In preparation for the major steel removal and replacement work on the lower roadway, which began in October of 2006, the contractor fabricated steel (floorbeam, stringers, grid deck, and barrier), completed the installation of a temporary underdeck platform, and performed abrasive blasting operations to remove the paint from the existing steel connection areas. Effective October 15, 2006, the lower roadway was closed to traffic for one year. The first floorbeam was removed on October 17, 2006 at the Manhattan approach.

Contract #11 in 2006: Removal of First Floorbeam for Lower Roadway Reconstruction. The Fabricated Steel, Complete With Bearings, In The Contractor's Storage Yard.

Contract #11 in 2006: Sequence of Removing Existing Floorbeam at Brooklyn Tower.

Contract #11 in 2006: Sequence of Installing New Double Floorbeam at Brooklyn Tower.

Contract #11 in 2006: Installation of Full Width Grid Deck Panels.
Lower Roadway Grid Deck Concrete Pour in December 2006.

The work plan developed by the contractor maximized access to the work zones by providing access for equipment and materials from both the Manhattan and Brooklyn approaches. The construction began with two crews at the Manhattan Anchorage, with one crew proceeding west toward the Manhattan abutment and one crew proceeding east toward the Brooklyn abutment. As a time savings measure, the existing deck and stringers were removed in panels.

The new stringers were preassembled in groups of two in the shop to speed erection. In addition, the floorbeams came to the site with the elastomeric pads pre-installed. This preassembly allowed for quick erection of the structural steel.

The complete closure of the lower roadway eliminated the need for construction joints in the grid deck and concrete placements were made from deck joint to deck joint – no cold joints were required. The grid deck panels run the complete width of the roadway with no need for splicing of the main bars.

Contract #11 in 2007: Installation of a New Modular Joint on the Lower Roadway at the Brooklyn Tower. Installation of New Lower Roadway Grid Deck Panels on the Brooklyn Side Span. Removal of the Existing Roadway at the Manhattan Transition.

Contract #11 in 2007: Bending a Reinforcing Bar for the New Lower Roadway Grid Deck. Welding of the New Lower Roadway Grid Deck. Removal of the Existing Lower Roadway Grid Deck and Stringers on the Brooklyn Approach Span.

Contract #11 in 2007: Concrete Placement in the New Lower Roadway Grid Deck on the Main Span. New Lower Roadway Floorbeams, Stringers and Grid Deck on the Brooklyn Approach Span.

The final existing floorbeam of the lower roadway was removed and replaced on April 18, 2007.

2007: Removal and Replacement of the Final Existing Manhattan Bridge Lower Roadway Floorbeam.

2007: Placing the Final Floorbeam Into Position. Engineer-In-Charge Brian Gill (in Center) and Inspection Staff on the Lower Roadway.

Contract #11 in 2007: The New Lower Roadway Grid Deck on the Brooklyn Approach Span. The New Lower Roadway on the Brooklyn Side Span After Concrete Placement. New Lower Roadway Concrete Placement on the Brooklyn Main Span, and at the Brooklyn Anchorage.

Contract #11 in 2007: Masonry Cleaning of the Upper Section of the South Face of the Manhattan Anchorage. Milling of the Existing Lower Roadway Pavement at the Manhattan Plaza. Masonry Cleaning of the Lower Roadway Wall at the Brooklyn Transition. Concrete Placement in Manhattan Plaza at the Entrance to the Lower Roadway.

The north bikeway, which was closed since October 9, 2006 to enable the rehabilitation of the tower canopies and balconies over the bikeway, was reopened on August 6, 2007. The south walkway then reverted to pedestrian use only.

The Department, the DUMBO Improvement District, and local artists worked together to transform a barren parking island on Pearl Street at the side of the Manhattan Bridge into a vibrant pedestrian space. The plaza opened on August 9, 2007. The asphalt triangle was transformed with a green-painted floor, café tables and chairs, umbrellas and planters filled with flowers and trees. Great granite blocks from the Williamsburg Bridge now delineate the space, which also showcases a large abstract sculpture.

Pearl Street Triangle Plaza. (Credit: Peter Basich)

The lower roadway, closed on October 15, 2006, reopened on Monday October 1, 2007, earlier than the scheduled completion date of October 14, 2007. The bridge was then fully opened for all modes of transportation - buses, carpoolers, motorists, bicycles, pedestrians and subway service.

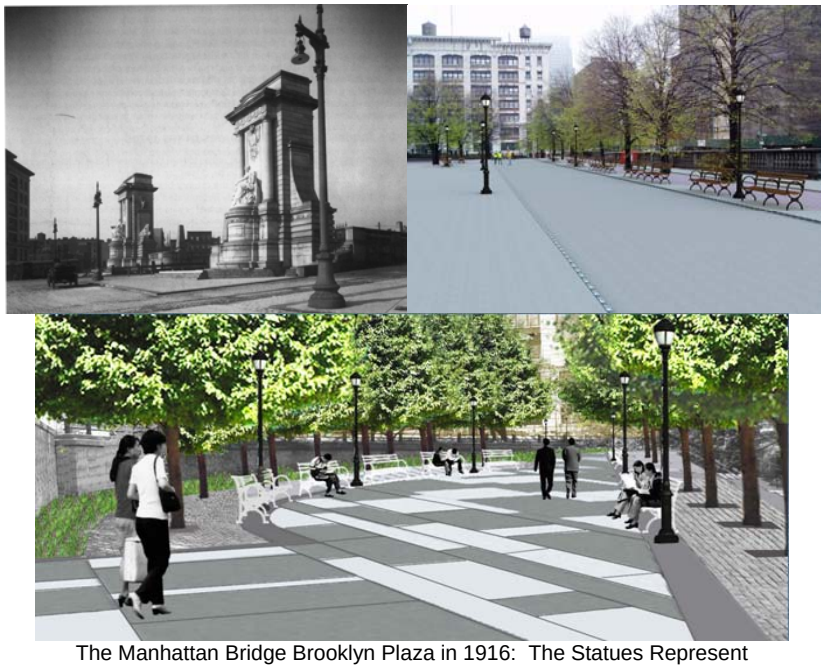
The reopening of the lower roadway of the Manhattan Bridge provided the City with an opportunity to optimize the use of this important interborough connection – by opening a new HOV 2+ lane on the upper roadway. The first regular HOV access into Lower Manhattan over an East River Bridge, the lane is in effect Monday – Friday 6 AM to 10 AM. Operation of this lane continues under a maintenance contract. Traffic changes also included limiting truck access on the north upper roadway and preventing north upper roadway traffic from entering Canal Street westbound when the lower roadway is Manhattan-bound. These traffic modifications resulted in a 25% or more Manhattan-bound travel time savings across the bridge when compared to preconstruction usage.

Contract #11 in 2007: Placement of New Asphalt on the Lower Roadway at the Brooklyn Approach Span. Placement of New Microsurfacing on the Lower Roadway at the Manhattan Side Span. Quality Assurance Engineers Yuliy Zak and Javed Sarwar Inspecting the Asphalt and Concrete on the Manhattan Approach of the Manhattan Bridge. (QA Credit: Masroor Mahmood)

Contract #11 in 2007: The Completed Lower Roadway on the Brooklyn Side And Near the Manhattan Colonnade.

Other significant Contract #11 work performed in 2007 included the cleaning of the masonry structures in Manhattan and Brooklyn, installation of the anchorage dehumidification exhaust system, installation of a fire protection system, replacement of the truss wind pin assemblies, replacement of the tower anchor bolts, rehabilitation of the canopies and plaques on the bikeway and walkway, and installation of the lower roadway lighting system. In December 2007, the contractor re-started the rehabilitation of the 20,000 square foot Brooklyn Plaza.

Contract #11 in 2007: View of the Restored Canopy at the Brooklyn Tower. Manhattan Bridge North Upper Roadway With HOV Lane Delineators.



The Manhattan Bridge Brooklyn Plaza in 1916: The Statues Represent Manhattan and Brooklyn. Rendering of the New Plaza.

Contract #11 work performed in 2008 included the replacement of the north upper roadway lighting, the reinstallation of the traffic radar sensors, the removal of the temporary under-deck work platforms, the rehabilitation of the main bridge travelers, the completion of the new fire standpipe system, and the completion of the rehabilitation of the Brooklyn Plaza. Manhattan Bridge Contract #11 was substantially completed on April 29, 2008.

Contract #11 in 2008: Renovated Sands Street Bicycle Path in Brooklyn. New Railing at Base of Tower. Working on the Roadway. (Roadway Credit: Peter Basich)

Contract #11 in 2008: Renovated Tower Canopy. (Credit: Peter Basich) Rehabilitating the Maintenance Traveler Platforms. Striping for the New Traffic Pattern in Manhattan Plaza.

At the Final Inspection on May 2, 2008: Engineer-in-Charge Brian Gill (Top) and Civil Engineer Sunil Desai (Bottom). Deputy Chief Engineer Russell Holcomb, Chief Bridge Officer Henry Perahia, and Administrative Engineer Mohammed Sharif (Credit: Hasan Ahmed). Director of East River Bridges Hasan Ahmed and Mohammed Sharif on the Bridge Walkway.

The Brooklyn Plaza, at the terminus of the south walkway of the Manhattan Bridge, had been used since 1985 as a staging area for contractors, when it was closed to the public. As part of Contract #11, the plaza was reconstructed following plans submitted to and approved by the Public Design Commission, which included new benches, trees, ground cover, decorative lighting, granite block, and decorative concrete. The Plaza was opened in July 2008, and marks ADA compliance of the south walkway on the Manhattan Bridge connecting the DUMBO neighborhood in Brooklyn with Chinatown in Manhattan.

Installation of New Granite Blocks for the Plaza. Renovating the Plaza.

Installation of New Concrete at the Plaza.

Installing New Plants. Completed Renovations. Evening View of the Plaza Looking Southeast With Benches, Lights, and Granite Pavers in Foreground.

For nearly two decades, DUMBO was split in two. The Division of Bridges had long used the 46-foot-wide archway beneath the Manhattan Bridge as bridge metal storage space, which worked well enough when DUMBO was more of an industrial zone. Now, one of the City's hottest neighborhoods, where new developments are springing up daily, DUMBO's denizens are clamoring for more public space.

With our demonstrated commitment to creating public space citywide, the Agency moved quickly to answer the call and "bridge" this long-standing divide. By moving the Division of Bridges' storage materials out of the Water Street archway, we were able to re-open the archway and connect the two parts of the neighborhood that were separated for 17 years. The space, along Water Street between Adams Street and Anchorage Place, is now a unique destination for residents, public space aficionados, and one day will be a key link in the Brooklyn Waterfront Greenway route. It was partially reopened on September 8, 2008.

But moving the materials out and re-opening the archway is just the first step. The Agency will work with the DUMBO Improvement District to remove the asphalt to reveal the passageway's historic cobblestone, and to add lighting and benches to the archway where users can linger and relax. Opening the DUMBO archway builds on the public plaza built last year at Pearl Street triangle, adjacent to the archway. The archway will completely open in 2009 where its rehabilitation is scheduled to coincide with the Manhattan Bridge's 100th birthday.

New York City will launch this 100th birthday bash in October 2009 in a celebration organized by the NYC Centennial Commission. Visit www.nycbridges100.org for a schedule of events including art shows, lectures and possible light show and fireworks.

Manhattan Bridge Water Street Arch.
(Credit: DUMBO NYC)

QUEENSBORO BRIDGE

At the time of its completion in March 1909, the Queensboro Bridge (popularly referred to as the 59th Street Bridge), was the longest continuous cantilever-truss bridge in the world. While its starring role in the hierarchy of bridges has since been eclipsed by longer and larger structures, the Queensboro Bridge's importance to the mobility and unity of New York City remains undimmed. The bridge was designated as a national landmark on November 23, 1973. The $745 million reconstruction commenced in April 1981 with Contract #1, and continued with Contract #6, which began on October 31, 2003, and was substantially completed on September 30, 2007, and will end with a seismic retrofit of the bridge, slated to begin in 2017. Work completed on the bridge to date includes the rehabilitation of the lower inner roadways, the lower outer roadways, and the restoration of the Guastavino arches and Bridgemarket area. The south outer roadway is open to automobile vehicular traffic, and the north outer roadway is open to pedestrians and bicyclists. The work on this vital link between Manhattan and the outer boroughs will enable this 75,000-ton workhorse to better provide the citizens and commerce of New York City with a second century of reliable, prosperous transport. The Queensboro Bridge carried 181,365 vehicles per day in 2007.

Queensboro Bridge in 2005. (Credit: Michele N. Vulcan)
Close-up of the 1909 Dedication Plaque. (Credit: Peter Basich)

Contract #6

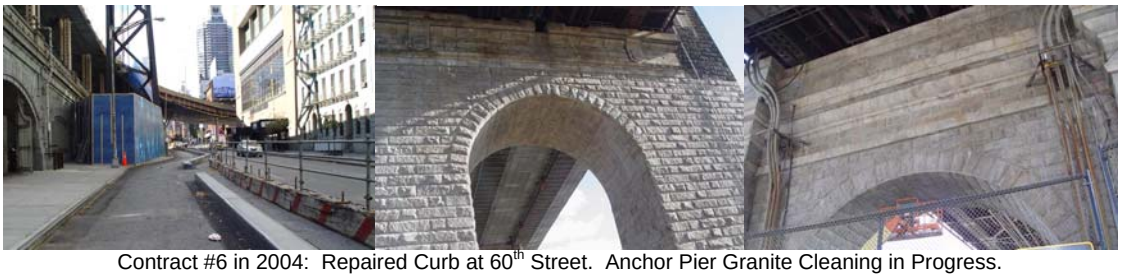
Contract #6, which began on October 31, 2003, included the following: condition investigation of the eyebar heads and pins, replacement of the protective screening and the aviation warning lights, drainage improvements, rehabilitation of the overhead sign structures in Manhattan, the

upgrading of roadway lighting (by replacing all low-pressure sodium lights on the bridge and ramps with high-pressure sodium lights), cleaning and miscellaneous repairs of the anchor piers, the geometric improvement of Crescent Street, bikeway and walkway improvement, and repair of the south upper roadway concrete overfill and overlay, the promenade platform, the traveler platform, the sidewalk between 61st and 62nd Streets, and the underside of the 59th Street overpass. The work also included the rehabilitation of the Sanitation Department area's arch infill, and modifications to the maintenance facility beneath the Manhattan approach plaza. In addition, the kiosk in the plaza on the Manhattan side of the bridge was restored. This small historical structure was in an advanced state of disrepair and had been damaged by repeated vehicular impacts. This $43 million project was complete by the end of December 2008.

Views of the Queensboro Plaza Kiosk in 2003. Proposed Rehabilitation of the Arch Infill for the Sanitation Department.

Contract #6 in 2004: Repairing the Steel of the 59th Street Arch Ceiling. Starting Curb Replacement at 60th Street. Improving the Drains at the Vehicle Storage Area.

Contract #6 in 2004: Repairing Spalled Concrete at the 59th Street Overpass. Sanitation Arch Infill Work Progressing at 60th Street. Repaired Sidewalk Between 61st & 62nd Streets.



Contract #6 in 2004: Repaired Curb at 60th Street. Anchor Pier Granite Cleaning in Progress.

In 2004, work was completed at the retaining wall at York Avenue. In 2005, work was completed on the kiosk bollards on the Manhattan plaza, the sidewalk between 61st and 62nd Streets, the rehabilitation of the Sanitation Department area arch infill, and the modifications to the maintenance facility beneath the Manhattan approach plaza.

Contract #6 in 2005: Bent Column Ready for Jacking. Decorative Fence.
Repairing the Drainage Pipes.

Contract #6 in 2005: Manhattan Plaza Bollards. Full Width Deck Repair on South Inner Roadway.
New Luminaire on North Upper Roadway.

Contract #6 in 2005: Rehabilitated Sanitation Department Arch Infill.

Contract #6 in 2005: Traveler Platform. New Window.

In 2006, work was completed on the protective screening, the aviation warning lights, the drainage improvements, the repair of the south upper roadway concrete overfill and overlay, the underside of the 59th Street overpass, and the condition inspection of the eyebar heads and pins.

Contract #6 in 2006: Microsurfacing the North Upper Roadway. Repairing the 59th Street Overpass.

The kiosk in the plaza on the Manhattan side of the bridge was originally built in 1908 and is constructed primarily of terracotta panels set between ornate cast iron columns, with copper roofs and cast iron fascias. The interior walls and Guastavino timbrel arch ceiling are covered with glazed tile. The open front (now glassed in) originally served as the entrance and exit to the old subway station. There is no floor in the kiosk, as it served only to shelter the stairways leading to the station below. The restoration of the kiosk was completed in September 2006.

Contract #6 in 2006: Restored Queensboro Kiosk Ceiling and Other Elements.

Contract #6 in 2006: Restored Queensboro Bridge Kiosk.

In 2007, work was completed on the geometric improvements at Crescent Street and Queens Plaza South, the installation of concrete barriers and protective screening at the Queens approach on the north outer roadway, and the repair of the north and south upper roadway overlay. The upgrading of the roadway lighting was substantially completed by the end of 2007.

Contract #6 in 2007: Rendering of Bridge Flag Site. Protective Screening at the Queens Approach. Protective Screening and Roadway Lighting Upgrade on the North Outer Roadway. (Screening Credit: Adam Caplan)

Contract #6 in 2007: Rendering Geometric Improvements at Crescent Street (Credit: Adam Caplan)

Contract #6 was substantially completed on September 30, 2007, and all remaining punch list work was completed during 2008.

September 2008: Deputy Chief Engineer Russell Holcomb. Looking West From Tower 1. (Tower Credit: Russell Holcomb) Commissioner Janette Sadik-Khan. (Credit: Bojidar Yanev) Bridge Repairer and Riveters James Philip and Patrick Clowe, Executive Director of Inspections and Bridge Management Dr. Bojidar Yanev, Commissioner Sadik-Khan, Bridge Repairer and Riveters David Collins and Ignazio Trapani, Chief Bridge Officer Henry Perahia, and Deputy Chief Engineer Russell Holcomb.

Protective Coating

The $168 million Queensboro Bridge painting contract commenced in January 2004. The Department and its contractor strictly adhere to the safety requirements regarding lead paint removal as approved by the United States Environmental Protection Agency and the Occupational Safety and Health Administration, New York City Departments of Health and Environmental Protection, and the New York State Departments of Health and Environmental Conservation.

Bridge Painting in Progress: July 2007.

The work is performed within an entirely sealed Class 1A containment system (under negative pressure) which acts as an added safety measure to prevent any materials from escaping into the air. Filtration of the enclosed air prevents paint waste dust from being released. The Department has placed several air monitoring stations in the area around the bridge. The Department performs continuous monitoring and testing of the soil and air quality as well as noise levels in the area surrounding the containment enclosure to minimize impacts and ensure the safety and quality of life for workers and residents nearby.

Platform Installed for Painting of the Queensboro Bridge. (Credit: Vadim Sokolovsky)
Working Inside the Containment. Protected Roadway.

View of Roadway Platform. Painted Area.

By the end of 2005, the contractor completed cleaning and painting the Manhattan and Queens anchor piers; the Manhattan approach; ramp A; the off ramp and ramp B over the Silver Cup Studio parking lot; the off ramp over Queens Plaza South towards 13th Street; approaches B and C from 23rd Street to Thompson Avenue (except over the railroad tracks); the Queens approach underside of the lower roadways (from 21st Street to Vernon Boulevard); the main bridge underside of the lower and upper roadways from PP123 to PP68; and the main bridge above the upper roadway from PP77 to PP109.

Protective Coating in 2005: Newly Painted Section Along the Upper Roadway. Containment on the Queens Side Tower. (Credit: Peter Basich) Queensboro Bridge Work Platform. Painters Arriving at the Platform. (Credit: Michele N. Vulcan)

By the end of 2006, the contractor completed cleaning and painting the Queens approach at the inner roadways from PP0 to PP39; at the main span's inner and under upper roadways above Roosevelt Island and one half of span #2 from PP75 to PP37; the main span trusses above the upper roadway from the Manhattan anchor pier to the Roosevelt Island west tower has been completed from PP0-PP15, PP30-PP47, and PP109-PP123; and the ramps on the Queens side over the LIRR tracks. Installation of cables and platform, on the main span under the lower roadway from PP17 to PP37, was also underway.

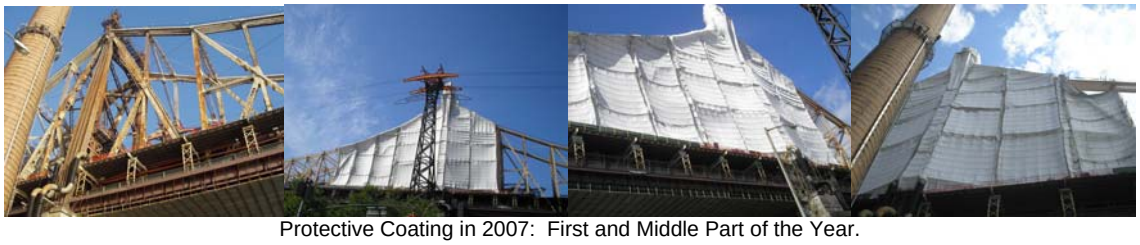
Protective Coating in 2006: Upper Roadway in Progress. (Credit: Peter Basich) Inside the Containment on the North Side of the Inner Roadway. Installed Platform Above South Outer Roadway.

Protective Coating in 2006: Inside the Containment Rigging at Span #1. Finish Coat on the Trusses at Span #5 on the Upper Roadway. Class 1A Containment Installed on the Trusses at Span #2, And the Working Platform Above the South Outer Roadway.

By the end of 2007, the contractor completed cleaning and painting the Queens approach at the inner roadways from PP90 to PP39; at the main span's inner and upper roadways from PP1 to PP37; and the main span trusses above the upper roadway from PP30-PP15 and PP47-PP55. The installation of containment rigging along the upper roadway on Span 3 was also underway.

Protective Coating in 2007: First Part of the Year.

Protective Coating in 2007: Spans 1 and 2 Upper Level.



Protective Coating in 2007: First and Middle Part of the Year.

Protective Coating in 2007: Middle and Last Part of the Year.

Bridge Detail in 2008. (Credit: Bernard Ente)

By the end of 2008, the contractor completed cleaning and painting the upper roadway trusses on Span 3, the entire Queens approach the entire structure at the main span's inner and upper roadways; and the main span trusses above the upper roadway.

2008: Executive Director of Design-Build and Bridge Painting Chris Sklavounakis at the Top of the Tower. Contractor and Division Personnel at the Tower, Including Director of Bridge Painting Ronald Rauch (2nd From Left), Executive Director Sklavounakis (Center), and Engineer-in-Charge Queensboro Bridge Painting Lev Mezhbued (on Right).

Scheduled work for winter 2008 and spring 2009 includes completion of the touch-up work areas and punch list items including the towers' interiors, the travelers, and the curbs on the outer roadways.

Active measures are taken to reduce noise at its source, such as the use of mufflers, sound screens, low noise producing equipment, and noise blankets. Light shields are utilized to reduce

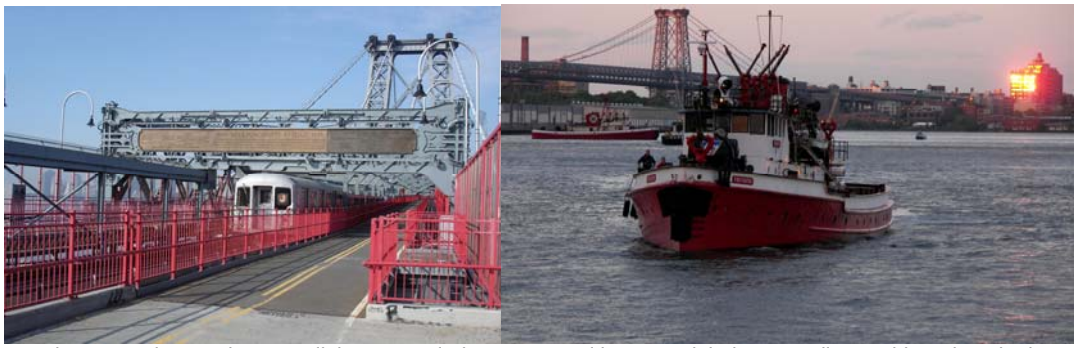
glare from work lights. By the end of 2008, approximately 98% of the contract work was complete. All staging areas are behind a screened fencing. This project is expected to be substantially completed in January 2009, and will result in the total re-painting of the bridge. Due to the weather-sensitive nature of painting operations, the final touch-ups after removal of the temporary structures will be performed in April and May of 2009.

WILLIAMSBURG BRIDGE

The largest of the three suspension bridges that traverse the East River, the Williamsburg Bridge carries some 210,545 daily commuters – 110,545 in vehicles and 100,000 via mass transit - on eight traffic lanes, two heavy rail transit tracks, and a pedestrian footwalk, between Manhattan and Brooklyn. The bridge supports a subway transit line upon which three different train lines operate (J, M, and Z). The $1.1 billion reconstruction commenced in 1983 with Contract #1, and continues with Contract #8, which began in March 2003 and is scheduled for completion by the end of 2009.

Williamsburg Bridge. Bridge Subway Structure. (Credit: Peter Basich).
Contract #8 in 2004: Looking South at a Cable Band Retensioning Crew.

In order to minimize disruption to the riding public and ensure that traffic is maintained across the bridge, the rehabilitation of the Williamsburg Bridge was divided into several contracts. In the contracts completed to date, all four main cables have been completely rehabilitated, the south and north roadways of the bridge have been replaced and the BMT subway structure across the bridge was completely reconstructed.



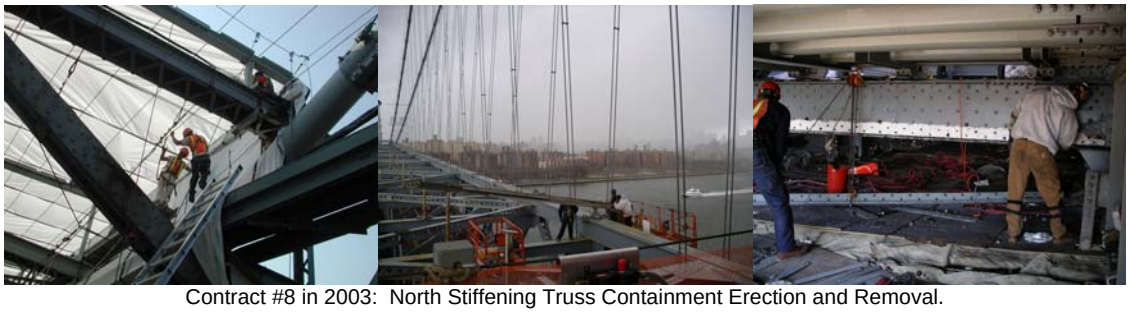
View From the South Footwalk in 2006. Fireboat on Patrol in 2008. (Fireboat Credit: David Paul Gerber)

Contract #8

Contract #8 began on March 3, 2003, and is scheduled to finish by the end of 2009. This $255 million project will see the rehabilitation of the tower bearings, the truss system, the steel structure of all eight towers, and the north comfort station houses, the replacement and/or

adjustment of the cable suspenders, the installation of maintenance travelers (inspection platforms) under the main span, as well as painting of the stiffening trusses. Architectural work will include the restoration of decorative lights on the main towers and in the Manhattan Plaza. Work inside the anchorage houses on both the Manhattan and Brooklyn sides will include the construction of new stairs, a hoisting system, ventilation and lighting, and oiling platforms. The project will also include the installation of several Intelligent Transportation System components, including variable message signs and closed circuit television cameras.

Painting of the south side stiffening trusses, which began on June 1, 2003, was completed on September 6, 2003. Painting of the north side stiffening trusses, which began on September 6, 2003, was completed on November 25, 2003. Steel replacement on both main towers began in 2003 and was completed by the end of 2004. Steel replacement on both the intermediate towers and the upper and lower chords of the stiffening trusses began in 2003 and was completed in 2005.



Contract #8 in 2003: North Stiffening Truss Containment Erection and Removal.
South Truss Bottom Chord Rehabilitation.

Contract #8 in 2004: Looking East at the Brooklyn Main Tower Temporary Work Platforms. Manhattan Main Tower Temporary Platform Erection. Strengthening Plate Operation on Brooklyn Main Tower.

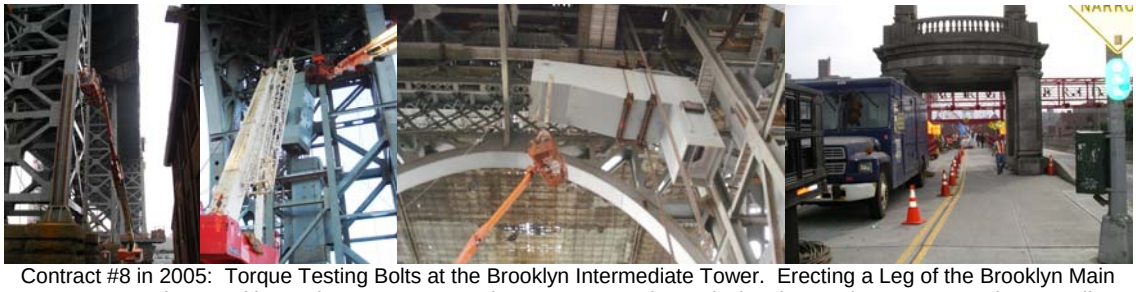
Contract #8 in 2004: Pier Stationed & Barge Mounted Cranes at Brooklyn Main Tower Pier.
Steel Arch Replacement. Looking West at the North Truss Top Chord Steel Rehabilitation.

Contract #8 in 2005: Preassembling and Erecting Brooklyn Intermediate Tower Arch Steel.

Contract #8 in 2005: Rehabilitation of the Brooklyn Main Tower Steel. Torch Cutting on the Tower.

Contract #8 in 2005: Removing the Existing Steel of the Brooklyn Main Tower. Inspecting a Rebar Cage at the Manhattan Main Tower. Installing a Column at the Brooklyn Main Tower.

Installation of the strengthening plates on the four river-side column legs of each of the main towers was completed in 2004. This operation began with the hoisting of the plates from the roadway to the highest level of each tower and was completed during weekends on which the transit tracks were removed from service. This work included over 800,000 pounds of steel attached through over 30,000 individual bolt holes drilled into the existing steel.



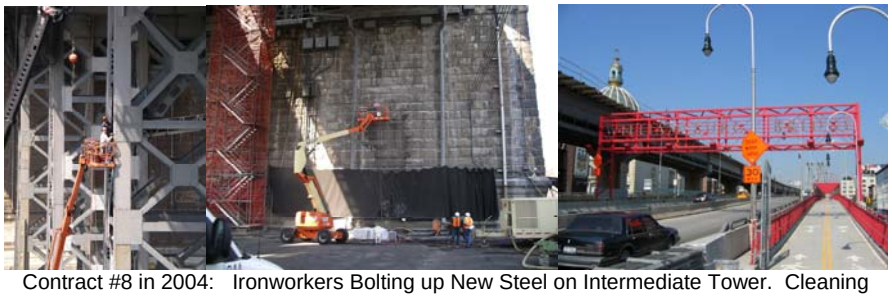
Contract #8 in 2005: Torque Testing Bolts at the Brooklyn Intermediate Tower. Erecting a Leg of the Brooklyn Main Tower. Erecting Brooklyn Main Tower Leg Bearing Support Steel. Replacing the Manhattan Approach Footwalk Expansion Joint Covers.

During the fall of 2005 the work of replacing the footwalk expansion joint cover plates began and the 24 joints on the Manhattan approach and south foot walk were completed. The work on the seven joints on the north foot walk was completed in early 2006.

Twenty-eight wire rope cable suspenders and 56 tension rods were replaced during 2004 on the suspended main span. All of the suspenders were systematically adjusted in 2005 to optimize

the profile of the bridge. In addition, the truss bearings at the anchorages were replaced in 2005.

Contract #8 in 2004: High Strength Bolt Torque Inspection. Cable Band Bolt Retensioning. Steel Bracing Replacement Operation at the Brooklyn Intermediate Towers.



Contract #8 in 2004: Ironworkers Bolting up New Steel on Intermediate Tower. Cleaning the Brooklyn Anchorage Exterior Granite Surface. Entrance to North Walkway. (Walkway Credit: Peter Basich)

Contract #8 in 2005: Cable Band Bolt Retensioning. (Credit: Bojidar Yanev) Demolition of the Brooklyn South Comfort Station Balcony. Installing Brooklyn Main Tower Aviation Lights. FHWA Engineering Intern River Hwang Inspecting the Cable Wrapping.

Rehabilitation of the north comfort stations began on February 21, 2006. The south outer roadway of the bridge was closed on June 1, 2006 for the removal and replacement of the asphalt overlay. Work was completed on the Manhattan side on June 6, 2006, and on the Brooklyn side on June 14, 2006. Installation of the balconies on both main towers began on June 22, 2006. The first traveler platform for the bridge was brought to the contractor's facility in Carteret, New Jersey on December 05, 2006.

Contract #8 in 2006: North Comfort Station. Manhattan Anchorage Joint Cleaning and Painting. Pointing of Comfort Station Roof.

Contract #8 in 2006: Truss A Removal, Manhattan and Brooklyn Towers.

Contract #8 in 2006: Priming Application and Asphalt Paving Operation on the South Outer Roadway.

Contract #8 in 2006: Water Blasting. Curb Angle Cleanup and Tack Coat. Core Drilling The Brooklyn North Comfort Station.

Contract #8 in 2006: Touchup Painting on the North Truss. First Traveler Platform. Bearing Survey.

The seismic retrofitting of the steel portions of the intermediate towers was completed on July 20, 2007. The Brooklyn and Manhattan maintenance travelers were delivered on barges and raised into position in August and October 2007. The maintenance travelers are currently undergoing pre-operational testing and inspection and are expected to be completed in spring 2009. Installation of the top chord transverse bearings at the main towers was completed in October 2007. Installation of the Brooklyn anchorage maintenance platforms, the Manhattan anchorage hoist and new staircases for both anchorages were also completed in 2007.

Contract #8 in 2007: Survey Work in Brooklyn. Excavation for Concrete Encasement. Brooklyn Tower.

Contract #8 in 2007: Checking the Progress of the Brooklyn North Comfort Station. Seismic Retrofit Concrete Work in Brooklyn. Brooklyn Tower Balcony (South).

Contract #8 in 2007: Seismic Retrofit Concrete Work at the Intermediate Piers in the Kent Avenue Yard.

Contract #8 in 2007: Modifying the South Footwalk Drainage. Repairing the Navigation Lights. Seismic Retrofit Concrete Work in Manhattan.

Contract #8 in 2007: Brooklyn South Comfort Station Rehabilitation. Raising the Manhattan Side Traveler at the Manhattan Tower. Manhattan Tower North.

Work completed in 2008 includes the installation of the Brooklyn anchorage hoist, the bridge indentification system, the barrier transfer machine, the removal of the main bridge flexible shield system, the top chord transverse truss bearings, the erection of the new Manhattan entry electroliers and rehabilitated main tower electroliers, and the seismic retrofit of the intermediate tower bases.

Contract #8 in 2008: East River Park Piers. Manhattan Approach. Aviation Light on the Manhattan Main Tower.

Contract #8 in 2008: Installation of Luminares at the Manhattan Plaza Bridge Entrance. Installing a Video Camera at the Manhattan Approach of the South Outer Roadway. Painting the South Upper Truss on the South Outer Roadway.

Contract #8 in 2008: Continuing the Installation of Luminares at the Manhattan Plaza Bridge Entrance. New Bearing Replacement Preparatory Work. New Granite Cladding at Pier 15W.

Contract #8 in 2008: Erection of the Manhattan Entry Electrolier. Installation of Electrolier Luminares at the Brooklyn South Main Tower. South Outer Roadway Overlay Repairs.

Contract #8 in 2008: Striping at the Southside Brooklyn Plaza. Installation of the Spiral Staircase at the Manhattan South Comfort Station. New Granite Cladding at Pier 20E.

Contract #8 in 2008: Biennial Inspection of the South Roadway Under the Deck Using a Snooper Boom Truck. Brooklyn Tower in October 2008.
(Tower Credit: Russell Holcomb)

Work anticipated to be completed in 2009 includes the installation of the intermediate tower truss bearings, maintenance traveler installation, main tower pier fender system, aviation light lightning protection system, wind tongue pin rehabilitation, dry fire standpipe system testing, and the implementation of a contraflow of the south inner roadway with local control of movable barriers.

Movable Bridges

As NYCDOT completes reconstruction work on the East River Bridges, more attention is being devoted to other key City-owned bridges, such as the movable bridges. Building on the success of the East River Bridge projects, the Department is implementing many of the innovative concepts originated during the rehabilitation of East River Bridges on these other major reconstruction projects.

BELT PARKWAY BRIDGE OVER MILL BASIN (BROOKLYN)

Opened on June 29, 1940, the Mill Basin Bridge is adjacent to the Jamaica Bay Wildlife Refuge and the Gateway National Recreation Area. It is the only movable bridge on the Belt Parkway. The current clearance over Mean High Water is 35-feet. When the Mill Basin Bridge was constructed during the first half of the 20th century, New York City's inland waterways were among the most heavily navigated thoroughfares in the country. However, as maritime traffic in New York City steadily decreased since the mid-1960s, the need for movable bridges lessened as well. In 1941, during its first full year of operation, the Mill Basin Bridge was opened 3,100 times; by 1953, that figure decreased to 2,173; by 2008, the number of openings declined further to a total of only 190 openings.

In addition, significant and costly traffic congestion results from the operation of this outmoded drawbridge. In 2007, the Mill Basin Bridge carried 148,802 vehicles per day. The average opening and closing time for the bridge (and others like it) is ten minutes. Thus, this structure's operation has a negative and significant effect on the efficiency of New York City's vehicular traffic flow.

In 2008, on a New York State-mandated scale from 1 to 7, this bridge had a condition rating of 2.955, or "poor." While the bridge is not in any immediate danger of structural failure, its reconstruction is required in order to maintain mobility and public safety on this vital artery.

The existing Mill Basin Bridge is 864-feet long and 14 spans, including double movable leaf bascule spans and a steel superstructure, supported on reinforced concrete pier on timber piles, and abutments supported on pre-cast concrete piles. The existing structure and immediate approaches will be demolished and replaced.

Belt Parkway Bridge Over Mill Basin.

The replacement will be a 1,757-foot, 11 span fixed bridge, north of the existing structure. The bridge will have a 36-foot wide roadway with a 12-foot wide right shoulder and a 4-foot wide left shoulder in each direction. The eastbound side will carry a dedicated pedestrian/bike path along

the south fascia. The new bridge will be a fixed structure with a 60-foot clearance over Mean High Water, obviating the need for opening and closing the structure to accommodate tall vessels. The new design of the bridge will result in increased sight distances, an increase in lane width from 11-feet 4-inches to 12-feet, and the inclusion of safety shoulders in both directions. The channel will remain navigable during construction, and the clear channel width will remain the same after the new structure is in place. A new fender system will be installed to protect the bridge substructure from marine traffic. Currently in its final design phase, the reconstruction of the Mill Basin Bridge (part of the second Belt Parkway Group) is scheduled to start in 2010, and to last approximately 4 years.

BORDEN AVENUE BRIDGE OVER DUTCH KILLS (QUEENS)

The Borden Avenue Bridge over Dutch Kills is located just south of the Long Island Expressway between 27th Street and Review Avenue in the Sunnyside section of Queens. It is a retractile-type movable bridge. The original bridge construction was completed in 1908 and was opened to traffic on May 25, 1908.

1908 Borden Avenue Bridge Plaque. Waterside View. (Credit: Bernard Ente)

The bridge structure carries two lanes of vehicular traffic with sidewalks on either side. The roadway is 34 feet wide and the sidewalks are 8 feet wide. In 2007, the bridge carried approximately 15,747 vehicles per day.

In the spring of 2008, the Department determined that an existing crack in the west abutment's wingwall had opened up further. Following a series of subsequent inspections, it was determined that there is continuing movement of the west abutment wall. In an effort to mitigate this condition, two pressure relief joints were installed in the roadway, and the speed limit for eastbound traffic was posted at 15 miles per hour. Unfortunately, these measures did not stop or slow the abutment wall's movement.

On September 11, 2008, the Department and its consultant met to discuss the problem, and it was determined that there were two possible solutions: either to install a tieback-supported anchoring system, which would restrain the west abutment wall's movement, or, to fully replace the bridge's west abutment wall and its wingwalls. The Department would not be able to determine which solution would be the best long-term solution until detailed inspections of the abutment wall and wingwalls were performed.

In early 2009, based on the findings of the underwater inspection, the consultant provided its recommendation to the Department to proceed with the second option, and the Department concurred.

The movement of the wall is undermining the stability of the bridge. Due to the potentially serious danger to life, public safety and property posed by the current condition, it is critical that the repair work be performed as expeditiously as possible.

On October 16, 2008, in the interest of public safety, pursuant to Section 103(4) of the General Municipal Law and Section 315 of the New York City Charter, the Department declared that an emergency exists relative to the movable bridge carrying the Borden Ave. over the Dutch Kills in Queens.

The repairs will include the following: removal of the fill material under the roadway and sidewalks from behind the west abutment and between the wingwalls; relocation of the existing utilities; digging of a test pit to inspect the supporting piles; inspection of the condition and the taking of measurements; and the implementation of the appropriate repair solution based on the inspection findings.

The bridge was closed at noon on December 31, 2008. A Letter of Intent for the emergency repair of this bridge was issued to the contractor with a start date of January 6, 2009. Construction is expected be complete by June 2009.

A project to replace the existing steel bridge and repair the west abutment is scheduled to begin in May 2013. The work will also include upgrades to the mechanical and electrical components of the bridge. Construction is expected to be completed in December 2014.

BROADWAY BRIDGE OVER THE HARLEM RIVER (BRONX/MANHATTAN)

Broadway extends from the southern tip of Manhattan, through the Bronx and terminates in Westchester County. The Broadway Bridge, a lift type movable bridge crossing the Harlem River, is located between West 220th Street in Manhattan and West 225th Street in the Bronx. In 2007, the bridge carried 35,523 vehicles per day, and three tracks of the IRT subway are carried on its upper deck and a five-lane two-way roadway with sidewalks on either side is carried on its lower deck. The two roadways each measure 34 feet and the sidewalks are 7 feet wide.

The vertical lift bridge is the third movable steel structure at this location. The original steam powered single-deck swing span built in 1895 carried only highway and pedestrian traffic. The second structure was built in 1905 to accommodate the extension of IRT subway into the Bronx from Manhattan. The second bridge was again a double deck swing span to carry the subway line on the upper deck and highway traffic on the lower deck. The current structure, a double deck vertical lift bridge to carry the subway and vehicular traffic, was built in 1960.

Broadway Bridge in December 2008.
(Credit: Sergey Parayev)

The bridge recently underwent a protective coating project to protect the steel components of the bridge against the effects of corrosion. This project was completed in October 2003 at a cost of approximately $8.7 million.

The bridge also underwent recent component rehabilitation, including miscellaneous steel repairs,

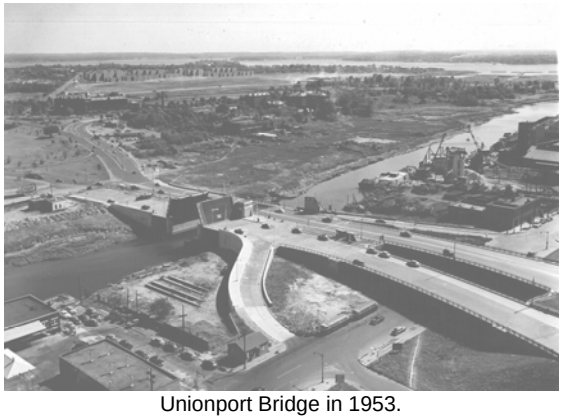
grating replacement, sealing and waterproofing of its deck, repair of spalled concrete pavement, new expansion joints and new median barrier at an approximate cost of $2.14 million. This project was completed in May 2004.

Currently in its preliminary design phase, the reconstruction of the bridge is scheduled to start in August 2013. The project's scope of work includes a major rehabilitation of the roadway deck, superstructure steel and substructure elements of the vertical lift span, as well as the approach spans. It will also include the replacement and rehabilitation of the electrical and mechanical components of the vertical lift span. Construction is expected to be complete in July 2016.

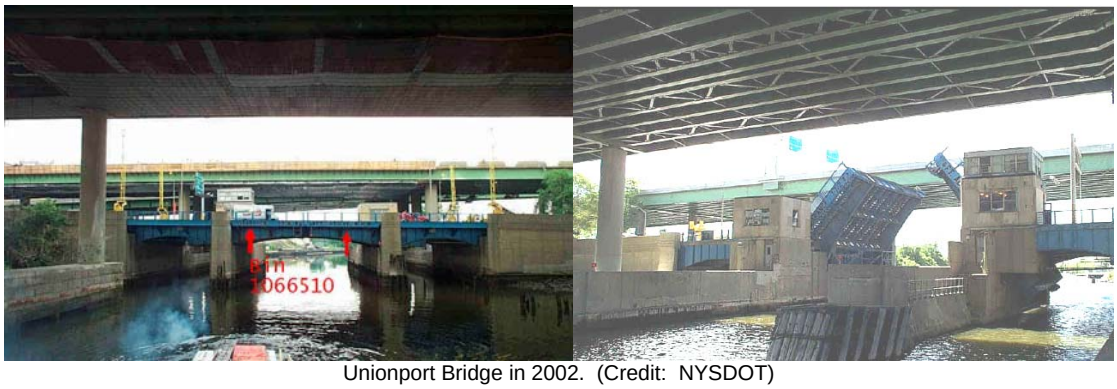
BRUCKNER EXPRESSWAY (NB & SB SERVICE ROAD) OVER WESTCHESTER CREEK (UNIONPORT BRIDGE) (BRONX)

This double leaf bascule bridge opened in 1953. In 2007, the bridge carried 59,906 vehicles per day. The 17 span structure (three waterway and fourteen concrete approach) carries five lanes of the Bruckner Boulevard Expressway service road traffic over Westchester Creek. Currently in its final design phase, the reconstruction of the bridge underwent a Value Engineering Study by the Office of Management and Budget which recommended several changes to the design that are being incorporated. The reconstruction is scheduled to start in October 2012. The project will now incorporate temporary movable bridges to maintain a better flow of traffic during the bridge construction.

The estimated construction duration will be a total of 36 months with approximately 18 months lead time. The project's scope of work includes replacement of the bascule, flanking, and approach superstructures, rehabilitation of the substructures, replacement of the existing mechanical and electrical systems for the bascule span, reconstruction of the bridge operator and control houses, and replacement of the existing fender system, drainage system, street lighting, traffic signal facilities, and gates. The "float out the old/float in the new" technique may be incorporated into the replacement scheme for the bascule span. Construction is expected to be completed in January 2016.



Unionport Bridge in 1953.



Unionport Bridge in 2002. (Credit: NYSDOT)

HAMILTON AVENUE BRIDGE OVER THE GOWANUS CANAL (BROOKLYN)

The Hamilton Avenue Bridge opened in 1942. In 2007, the bridge carried 54,632 vehicles per day. As part of the $55 million reconstruction of this bridge, the new bascule spans with trunnion towers were shop-assembled and tested off-site, then shipped to the site and erected on the rehabilitated piers. This reduced the roadway closure time for the construction of each span from 14 months to only 2 months. In addition, the project team devised a system of hydraulic cylinders and a temporary hydraulic power unit to permit operation of the bridge while the existing electro-mechanical systems were disassembled. In order to maintain safety on-site, the team also opted for hydraulic shears and lances in lieu of torches.

Other reconstruction work included: the rehabilitation and seismic retrofitting of the existing piers; the replacement of all electrical and mechanical and control equipment; the removal and replacement of the approach slabs of both sides of the bridge; the rehabilitation of the backwalls and abutments; and the renovation and extension of the bridge operator house.

While each of the spans only spanned 47 feet between fenders and measured 42 feet wide (which had to be enlarged to 44 feet as part of the replacement), each new span would still weigh 660 tons. Overall, the materials included 380 tons of structural steel, 1,960 cubic yards of concrete, and 51,000 pounds of reinforcing steel. The heavy-duty lifting and scope of the replacement was met with scalpel-precision demands of the site: Just 90 feet above the Hamilton Bridge runs the Brooklyn-Queens Expressway, which complicated placement of the 300-ton and the 550-ton cranes necessary for the removal and reinstallation of the spans via barge.

A Notice to Proceed for the reconstruction of this bridge was issued to the contractor with a start date of August 4, 2005. The contract includes an incentive of $25,500 per day for early completion of Milestone B and $13,500 per day for early completion of Milestone D.

Hamilton Avenue Bridge. (Credit: NYSDOT)

The bridge's appearance will also be enhanced artistically. A permanent new lighting art structure will be installed on the bridge buildings that will be viewable by pedestrians, motorists, mariners and the general public as part of the Percent For Art Program administered by the Department of Cultural Affairs. The supports for this art work were installed and the art work itself will be installed in 2009.

Mock-up of the Hamilton Avenue Light Sculpture. (Credit: Gholamali Mozaffari) Open Bridge. (Credit: NYSDOT)

In Stage I, the Manhattan-bound span was closed from June 29, 2007 to August 31, 2007, and it was replaced. The Manhattan-bound bascule span was removed in halves on July 2 and July 6, 2007. Due to the contractor's chosen means and methods, the new east leaf of the Hamilton Avenue Bridge was not "floated-in" as originally proposed, but was trucked-in, and assembled at the site. The Manhattan-bound span reopened three days earlier than scheduled on the morning of August 31, 2007. The contractor will earn an incentive for early completion of this milestone.

Removing the East Span in July 2007.

2007: Hamilton Avenue Bridge Construction.

Open Manhattan-Bound Span in August 2007. Traffic on New Span.

Construction work completed in 2007 included lead and asbestos abatement work in the control and gate tender houses and the replacement of the Manhattan-bound bascule span and all related tasks, including the installation of new submarine cables, the reopening of all roadways and sidewalks, the replacement of the fender system, and the installation of new dolphin clusters. At the end of 2007, fabrication of structural steel and machinery for the Brooklyn-bound span was in progress.

Open Hamilton Avenue Bridge in August 2007.

In Stage 2, the Brooklyn-bound span was closed from June 29, 2008 to August 16, 2008, and it was replaced. The Gowanus Canal was reopened to navigable vessels on August 12. Utilizing the lessons learned from the Manhattan-bound span, the contractor was able to complete the work 16 days early and will earn the maximum incentive of $216,000 for early completion of the work relating to early opening of the west bridge to traffic.

Removing the Existing Hamilton Avenue West Bridge Structural Steel in June 2008. Removing the Existing Southwest Toe Joint and Installing New Reinforcement of the Southwest Approach Slab in July 2008.

Placement of New Concrete on the Hamilton Avenue Southwest Approach Slab, Installation of New West Bridge Structural Steel, and Installation of New West Bridge Deck and Counterweight in July 2008.

Installation of New Hamilton Avenue West Bridge Structural Steel, and Placement of Concrete for the New Northwest Sleeper Slab in July 2008. Installation of New Southwest Sidewalk in August 2008.

Completion of the New Hamilton Avenue West Bridge Installation in August 2008. Construction of the New Back Up Generator Building in September 2008. New Granite Pavers at the South Median Area in October 2008.

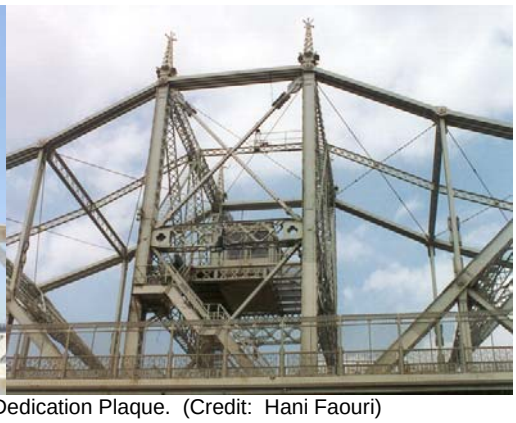
At the end of 2008 the project was in its final testing and acceptance phase, which will be followed by training of the Division operations and maintenance forces in preparation for their takeover of the bridge in the spring of 2009. The project is expected to be complete in the spring of 2009.

Installation of New Hamilton Avenue Parking Fence at the North Median Area in November 2008. Painting the Existing Control House Staircase in December 2008.

MACOMBS DAM BRIDGE OVER THE HARLEM RIVER (BRONX/MANHATTAN)

The Macombs Dam Bridge, which has one of the longest swing spans in the world, was opened in 1895. In 2007, the bridge carried 40,749 vehicles per day. The $145 million reconstruction of this landmark bridge, which was completed in May 2007, included the West 155th Street viaduct, the west approach plaza over the Harlem River Drive and Seventh Avenue, the swing span over the Harlem River, the deck and camelback trusses over Metro-North Railroad and Conrail, the Major Deegan interchange (consisting of the east approach and four ramps), and the Jerome Avenue viaduct. The rehabilitation work not only strengthened the structure, it returned the bridge's appearance to its turn of the century grandeur.

2004: East View of Macombs Dam Bridge Swing Span and Camelback Truss. (Credit: Peter Basich) Architectural Detail of the Bridge. (Credit: Michele N. Vulcan) Close-up of a Gate House. (Credit: Peter Basich)



Close-up of the 1894 Dedication Plaque. (Credit: Hani Faouri)
View of the Swing Span Control House. (Credit: Michele N. Vulcan)

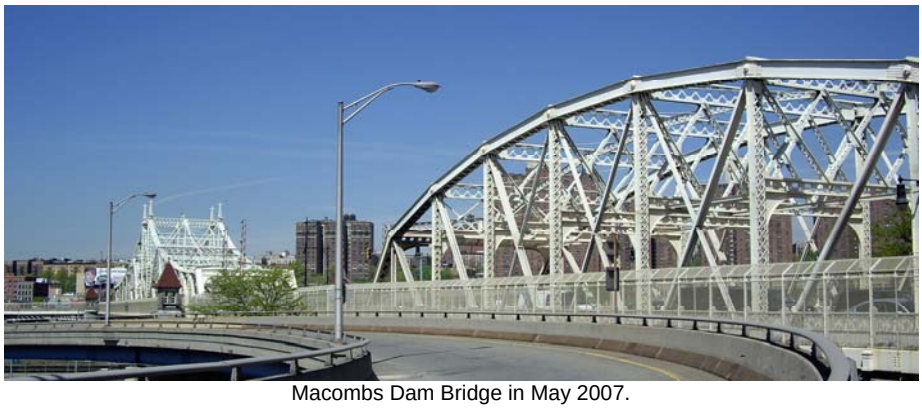
As part of this project, the historic John Hooper Fountain, which dates from 1894, was fully rehabilitated in 2000. After studying detailed old photographs, the globe and weather vane were recast and replicated. Cast aluminum was used with high impact glazing similar to the lanterns installed in Central Park in the 1980's. Just east of the fountain, a garden of rose bushes was added for the community's pleasure. Other additions included a new paved island, new curbs, and a steel fence. Bollards were installed at the western end of the island to protect the fountain from vehicular traffic.



2000 – 2002: John Hooper Fountain Globe. New Trusses at the Jerome Avenue Approach to the Bridge. View of the Roadway in 2004 From Above the Control House – Old Yankee Stadium is on the Right.
(Roadway Credit: Peter Basich)



Bridge Protective Fencing and Staircase. (Credit: Michele N. Vulcan) Detail of the Bridge – Old Yankee Stadium Banner is Visible on the Right.

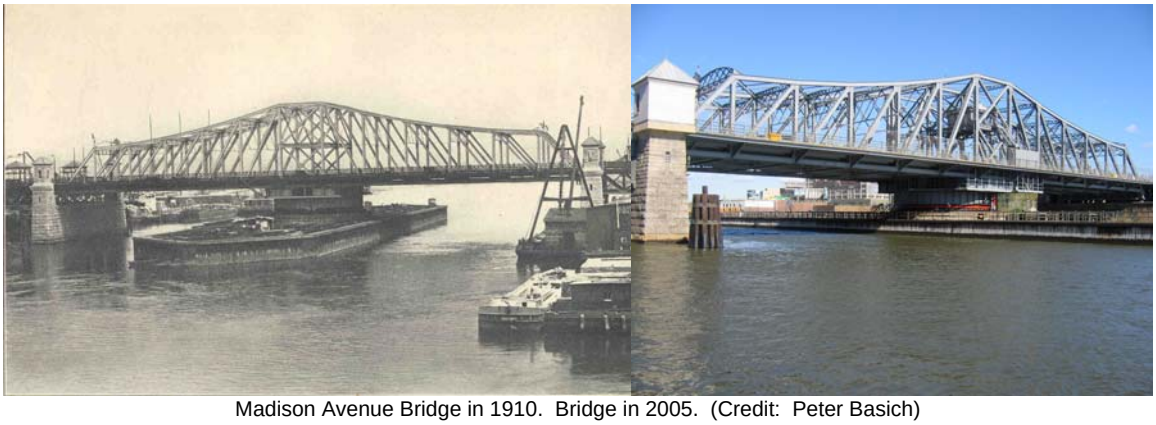


Macombs Dam Bridge in May 2007.

The bridge is also being assessed for seismic vulnerabilities. A seismic retrofit of this bridge will include strengthening the existing foundations and superstructure steel members. Retrofitting work will be completed throughout the length of the structure from the 155th Street Viaduct to the Jerome Avenue Approach. This will include installation of mini-piles in the existing piers that support the swing span, strengthening of the steel columns and floor beams of the 155th Street Viaduct and installation of lock-up devices to disseminate loads during a seismic event. The contract will also include replacement of the existing fender system protecting the center pivot pier and structural steel repairs identified by ongoing regular inspections. The seismic retrofit project is currently scheduled to start in July 2014 and end in January 2017.

MADISON AVENUE BRIDGE OVER HARLEM RIVER (BRONX/MANHATTAN)

A project for seismic retrofit, electrical, mechanical, masonry and miscellaneous work is scheduled to be performed between March 2017 and September 2018. A preliminary seismic assessment indicates that a new center pivot pier may need to be constructed to support the swing span to meet seismic demands. If this assessment is confirmed by a further detailed analysis, the construction duration will be longer since it will require construction of new foundations for the swing span located in the Harlem River. The final design phase of this project is expected to begin in winter 2009. In 2007, the bridge carried 44,663 vehicles per day.



Madison Avenue Bridge in 1910. Bridge in 2005. (Credit: Peter Basich)

Bridge in 2007. (Credit: Duane Bailey-Castro)

PARK AVENUE TUNNEL OVER 34TH STREET (MANHATTAN)

The Park Avenue Tunnel was originally built as an open cut in 1836 to accommodate horse drawn trolley cars between East 33rd Street and East 42nd Street. In 1854, a five course brick arch roof was constructed and the underground tunnel was used by the New York and Harlem River Railroad steam engine trains from East 42nd Street to its terminal then located at East 30th Street and Park Avenue. In 1870 the rail road was converted to electric powered trolleys.

The tunnel in its present form was converted to vehicular traffic only in 1917, when trolley tracks were covered with fill and roadway pavement was built. In its present form, the tunnel is located under the center mall of Park Avenue South. The roadway width inside the tunnel varies from 19'-2" to 22'-5" and carries single lane of traffic in each direction. On August 3, 2008, the tunnel was converted to single lane one-way (northbound).

Some rehabilitation work was completed on the tunnel in November 2005. That contract included the rehabilitation of the fans and the ventilation system. The new project is currently in its preliminary engineering phase. The scope of work includes complete rehabilitation of civil and structural components of the tunnel as well as upgrading of fire detection and ventilation system of the tunnel. Construction is expected to start in July 2012 and be complete in January 2015.

ROOSEVELT ISLAND BRIDGE OVER EAST RIVER/EAST CHANNEL (MANHATTAN/QUEENS)

This lift bridge opened in 1955. In 2007, the bridge carried 9,895 vehicles per day. The 8 span structure carries two lanes of traffic over the East Channel of the East River. It is the only vehicular access to Roosevelt Island from the Borough of Queens.

Roosevelt Island Bridge Under Construction in 1952.

A Notice to Proceed for the $86.5 million reconstruction of this bridge was issued to the contractor with a start date of March 12, 2007. The estimated construction duration will be a total of 45 months with approximately 8 months' lead time. The project's scope of work includes rehabilitation of the existing bridge superstructure, substructure and approaches, replacement of some of the existing mechanical and all of the electrical systems for the lift span, rehabilitation of the bridge operator house, installation of safety fences on the sidewalk, replacement of the street lighting, resurfacing of the approach roadways, installation of pigeon proofing systems and re-painting the entire structure. The project will also include the installation of a dedicated right-hand turn lane onto the southbound Vernon Boulevard in Queens, and the construction of a new back-up generator building under the Queens approach to provide power to allow operation of the bridge in an emergency. Fabrication and testing of mechanical and structural components was in progress by the end of 2007.

Roosevelt Island Bridge in 2005. (Credit: Peter Basich) Bridge Tower and View From Deck in 2005. (Credit: Michele N. Vulcan)

2007: Construction of the Below Deck Shield for the Queens Approach of the Roosevelt Island Bridge. Above Deck Containment on the Lift Span. The Lift Span Shield Looking Northeast.

By the end of 2008, the rehabilitation of the existing bridge superstructure, substructure and approaches was nearly complete. The roadway was returned to full service on December 2, 2008 after the complete re-decking of the main bridge and approaches. The replacement of some of the existing mechanical and all of the electrical systems for the lift span, and the rehabilitation of the bridge operator house will be performed during a Navigation Channel closure

between October 2009 and August 2010. The installation of safety fences on the sidewalk, replacement of the street lighting, resurfacing of the approach roadways, and installation of pigeon proofing systems will be completed in 2009.

Concrete Filled Grid Deck of the Queens Approach in April and May 2008. Stage I Roadway Construction of the Queens Approach in July 2008.

Open Lift Span During United Nations General Assembly Week in September 2008. Stage II Roadway Construction of the Queens Approach in October 2008. Asphalt Placement on the Queens Approach in November 2008.

The cleaning and repainting of the bridge began in January 2008. By the end of 2008, the bulk of the main bridge was complete. The only areas that remain to be painted in 2009 are the steel supporting the approach spans and local areas where repairs are being made. The Department and its contractor strictly adhere to the safety requirements regarding lead paint removal as approved by the United States Environmental Protection Agency and the Occupational Safety and Health Administration, New York City Departments of Health and Environmental Protection, and the New York State Departments of Health and Environmental Conservation.

Lead Paint Removal Containment on the Lift Span in January 2008. Scaffolding Erection on the East Tower in July 2008.

Tower Containment in August 2008. (Credit: Bernard Ente) Lift Span and West Tower in September 2008.

The work is performed within an entirely sealed Class 1A containment system (under negative pressure) which acts as an added safety measure to prevent any materials from escaping into the air. Filtration of the enclosed air prevents paint waste dust from being released. The Department has placed several air monitoring stations in the area around the bridge. The Department performs continuous monitoring and testing of the soil and air quality as well as noise levels in the area surrounding the containment enclosure to minimize impacts and ensure the safety and quality of life for workers and residents nearby.

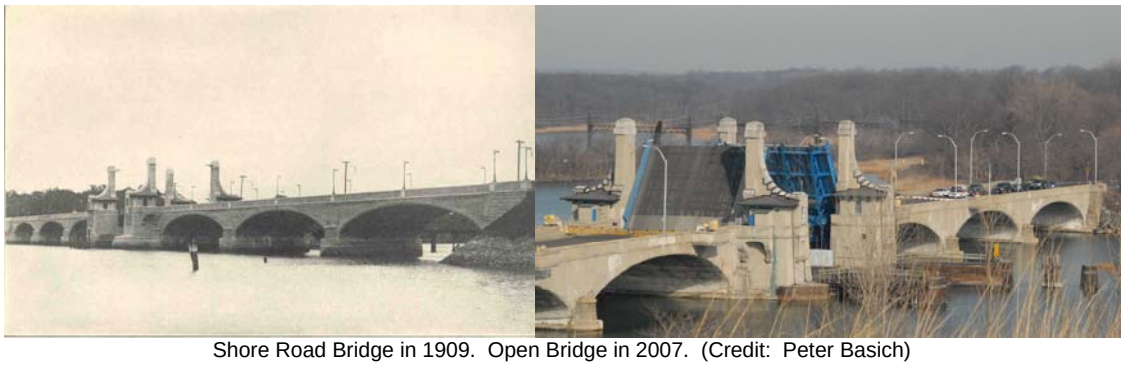
Construction is expected to be completed in November 2010.

SHORE ROAD BRIDGE OVER THE HUTCHINSON RIVER (BRONX)

This bridge, built in 1908, was originally called the Pelham Parkway Bridge over Eastchester Bay. In 2007, the bridge carried 19,041 vehicles per day. The recent $5 million interim rehabilitation of the existing bridge superstructure and substructure enables the Department to keep it operational while a new bridge is being designed and built adjacent to the existing bridge. The existing bridge will be demolished once the new bridge is in service. The rehabilitation project began in April 2001, and all traffic lanes were reopened to traffic on April 24, 2002, three days earlier than scheduled. The interim rehabilitation of this bridge was substantially completed on June 17, 2002.

Shore Bridge in 2007. (Credit: Peter Basich)

As of the end of 2008, a mid-level, single leaf bascule movable bridge was in design. It will be constructed to the south of and parallel to the existing bridge, with a wider navigation channel. An environmental impact study, co-sponsored by the Federal Highway Administration, is expected to begin in March 2009. The project to construct a new Shore Road Bridge is scheduled for construction between October 2018 and January 2023.



Shore Road Bridge in 1909. Open Bridge in 2007. (Credit: Peter Basich)

WARDS ISLAND PEDESTRIAN BRIDGE OVER HARLEM RIVER (MANHATTAN)

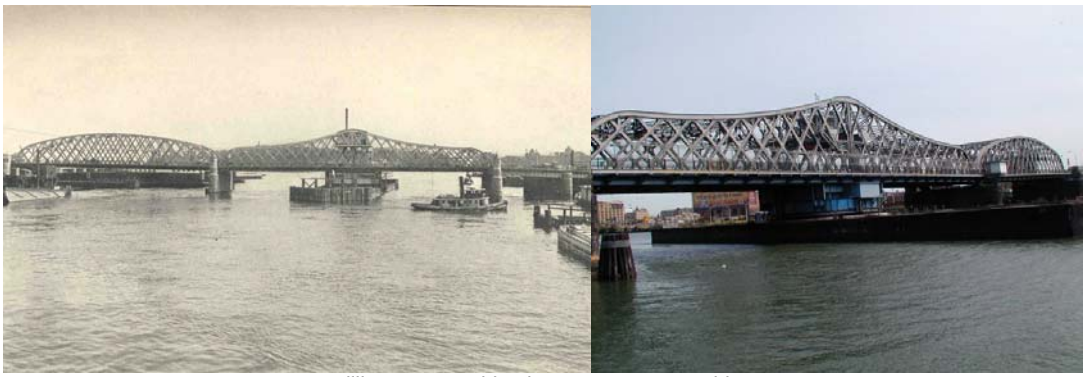
The Wards Island Bridge is a pedestrian bridge connecting the East River Housing Project at East 103rd Street in Manhattan to Wards Island. Located along the East River, the bridge is located between exits 14 and 15 of the FDR Drive. This vertical-lift bridge has a total of twelve spans. Spans one through four are located on the Manhattan side of the bridge and are oriented from south to north. At span five the bridge turns from west to east. The curb-to-curb width of the lift span is 3.66 meters, the clear width of the Manhattan approach ramp is 3.66 meters and the clear width of the Wards Island approach ramp measures about 3.76 meters.

A protective coating project was completed in May 2003 at an approximate cost of $1.2 million. Currently in its final design phase, the reconstruction of the bridge is scheduled to start in July 2017. The project's scope of work includes the replacement of the electrical and mechanical components along with a new control system, the replacement of the walkway deck, the rehabilitation of the steel superstructure members, and restoring the control and tender houses to their original condition. Construction is expected to be completed in July 2019.

Wards Island Pedestrian Bridge After Completion of Painting in 2003.
FDNY Rescue Boat Near the Bridge in 2008. (2008 Credit: Bernard Ente)

WILLIS AVENUE BRIDGE OVER THE HARLEM RIVER (BRONX/MANHATTAN)

Measuring 3,212 feet in length and opened to traffic on August 23, 1901, the Willis Avenue Bridge remains one of New York City's most heavily traveled bridges. The bridge is a bowstring truss swing bridge which spans the Harlem River, and connects Manhattan's First Avenue and 125th Street to Willis Avenue and 132nd Street in the Bronx. Engineered by Thomas C. Clarke, the bridge was designed to relieve traffic congestion on the Third Avenue Bridge.



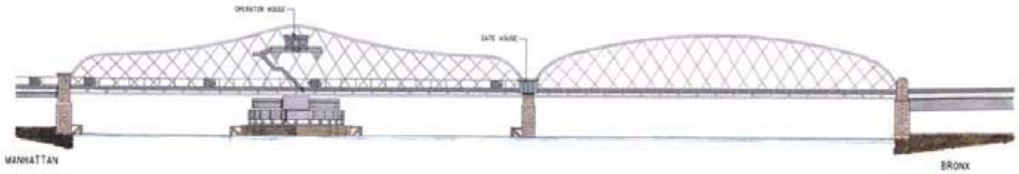
Willis Avenue Bridge in 1909. Current Bridge.

A major hub between the FDR Drive in Manhattan, the Major Deegan Expressway and the Bruckner Expressway in the Bronx, the Willis Avenue Bridge carried approximately 65,113 vehicles per day in 2007. Ten local and interstate bus lines use the bridge as a principal route from New York City to points throughout the northeastern United States.

Open Willis Avenue Bridge.

Because of substandard curves which are present on the structure's approaches, the Willis Avenue Bridge has been one of the City's most accident-prone crossings. Between 1992 and 1994, there were 809 vehicular accidents on the bridge, for an average of 269 per year. Under the Department's proposed reconstruction program, these substandard curves will be eliminated.

Because of the advanced age and condition of the Willis Avenue Bridge, the City of New York will replace the existing bowstring truss swing bridge with a new swing span bridge constructed just to the south of the existing bridge. Elimination of the center median on the main span will greatly improve the traffic flow on the bridge.



Existing Willis Avenue Bridge Swing Span.

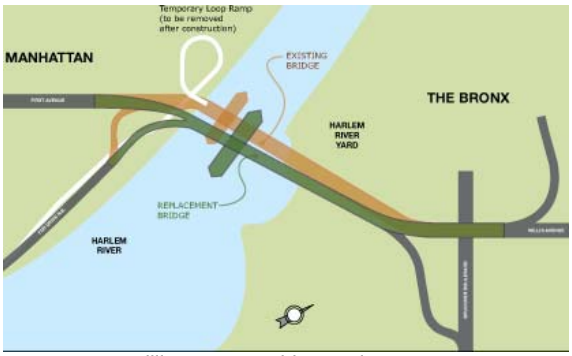
New Willis Avenue Bridge Span.

A direct connection to the northbound Major Deegan Expressway in the Bronx will be constructed. There will be wider travel lanes with shoulders, and a broader, combined pedestrian/bicycle pathway along the north side of the bridge.

New, tested and inspected materials will be used including placement of a solid riding surface on the swing span instead of the open grating deck currently in use. In addition, modern electrical, mechanical and communications systems will be installed.

Traffic will continue to use the current bridge until the new bridge opens, resulting in limited impact to motorists and nearby communities. The NYC Marathon will not be impacted: runners will continue to use the current bridge each year until the new bridge is completed.

Throughout the project, little impact to marine traffic will be experienced. The new swing span is being fabricated and assembled off site, and will be floated into place once the foundations, center pier and rest piers are ready to receive it. A symbolic portion of the historic original Willis Avenue Bridge will be retained in place as a monument to the bridge in Harlem River Park.



Willis Avenue Bridge Project Map.

The project will also replace the FDR Drive approach ramp and the ramp onto Bruckner Boulevard. NYCDOT will also reconstruct Willis Avenue over the Major Deegan Expressway for the New York State Department of Transportation.

A Notice to Proceed for the replacement of this bridge was issued to the contractor with a start date of August 27, 2007. Foundation construction work was in progress by the end of 2007.

Rendering of the New Willis Avenue Bridge.

On January 3, 2008, the East 125th Street exit ramp off the northbound FDR Drive was closed. This closure was necessary so that work on the construction of a temporary ramp, as well as construction of the new north-bound FDR Drive ramp to the Willis Avenue Bridge, could begin. The East 125th Street exit ramp, which typically carries only a low volume of traffic, will not reopen until the temporary ramp is removed in June 2011.

Shield Removal in September 2008 as Seen From the RFK Bridge.

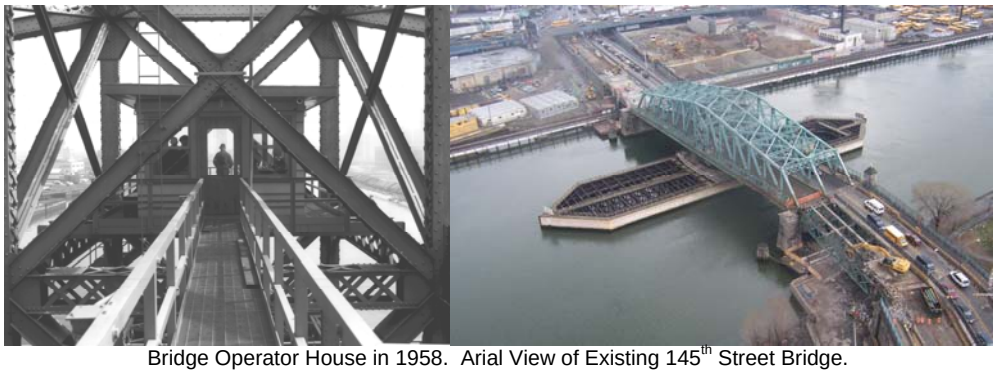
The First River Pier in November 2008.

In 2008, the project focused on foundation construction work, along with construction of a temporary ramp from the north-bound FDR Drive onto the bridge. At the end of 2008 the loop ramp was nearing completion. It went into service on January 24, 2009. This will allow the removal of the existing ramp and the construction of the new ramp to proceed. One half of the foundations for the new FDR Ramp were installed. Additionally one of the four piers in the river is in place, and work on a second has begun. The foundations in the Harlem River Rail Yard are more than 50 percent complete, and work has begun on the footings for the new Bruckner Boulevard Ramp.

The project is slated for completion in December 2012.

145TH STREET BRIDGE OVER THE HARLEM RIVER (BRONX/MANHATTAN)

The existing 145th Street Bridge is a swing type bridge with two throughtrusses. An eight-span structure, it carries four lanes of vehicular traffic over the Harlem River Drive, the Harlem River and Oak Point Link Railroad. Spans one and two were constructed in 1957 when the bridge was extended to span the Harlem River Drive. Spans six, seven and eight were reconstructed in 1990 in place of the original Bronx flanking span to provide a right-of-way for the Oak Point Link. In 2007, the 145th Street Bridge carried approximately 21,147 vehicles per day. This makes it one of the most essential routes for vehicles and pedestrians traveling between Manhattan and the Bronx. Vehicles, which cross this rim bearing swing bridge each day between the two boroughs, include buses, trucks and cars.



Bridge Operator House in 1958. Arial View of Existing 145th Street Bridge.

A Notice to Proceed for the $69.4 million reconstruction of this bridge was issued to the contractor with a start date of July 15, 2004. Fabrication of steel components for the approach and new swing span occurred in Pennsylvania. Fabrication and assembly of mechanical and electrical components began in 2005. Installation of mini-piles at the rest and center piers of the bridge began in November 2004, and was completed in March 2005. In 2005, the contractor also completed the survey and the tieback borings. In 2006, the contractor replaced most of the north half of the bridge in the approaches as well as on spans 1, 2, 3, 6, 7, and 8. The new swing span was assembled in Albany, New York in late 2005, and was floated-in on February 9, 2007.

2005: Replacing Span #3of the 145th Street Bridge. Swing Span Truss Assembly.

2005: Precast Deck Units for the 145th Street Bridge at the Fabrication Facility. Placing the Bottom Chord of the Swing Span on the Supporting Towers.

2006: Assembling the New 145th Street Bridge Swing Span in Albany.

Stage I reconstruction of the bridge began on March 16, 2006. The Manhattan-bound roadway and sidewalk were closed and one lane of traffic in each direction, as well as pedestrian access, were maintained on the south half of the bridge.

2006: Continued Assembly of the New 145th Street Bridge Swing Span. Removing Steel Girders Over the Harlem River Drive.

2006: Testing the Concrete for Pier 3 - FHWA Summer Intern Keisha Esprit on Left, and Assistant Civil Engineer Khalid Mohammed on Right. Ms.Esprit Taking Notes on the Concrete Placement.

2006: Demolition of 145th Street Bridge Manhattan Approach. Aerial View of Construction.

The transfer barge carrying the new swing span arrived at the Third Avenue Bridge site on October 31, 2006. Effective November 1, 2006, the bridge was fully closed for four months. Demolition activities began started around 2:00 a.m. on November 8. A sound barrier was erected prior to the start of the demolition.

2006: New 145th Street Bridge Swing Span Leaving Albany. Passing the Statue of Liberty.

2006: Passing Lower Manhattan. Approaching the Brooklyn Bridge.

2006: NYPD Launch Monitoring the Barge Passing Under the Manhattan Bridge. (Manhattan Credit: Bojidar Yanev) Passing Under the Williamsburg Bridge.

2006: New 145th Street Bridge Swing Span Passing Under the Queensboro Bridge. (Credit: Peter Basich) Third Avenue Bridge Site. (Site Credit: Russell Holcomb)

The contractor completed the removal of the swing span in December 2006, and it was transferred off site.

2006: Barge Carrying Crane Passing The Open Madison Avenue Bridge on the Way to Dismantle the Old 145th Street Swing Span. Dismantling the Truss.

The project included the complete replacement of the swing span and six approach spans, seismic retrofitting, partial reconstruction of substructures and the reconstruction of the approach roadways, sidewalks, and bridge railing. The design for the bridge utilizes elements pre-fabricated off-site so as to allow a very quick replacement of the existing bridge in 3 stages totaling 18 months. Traffic was only impacted for the 15-month period of March 16, 2006 to June 18, 2007.

Various construction activities, including the installation of the grid deck, took place while the swing span truss was moored south of the Third Avenue Bridge. The float-in of the swing span was successfully performed on February 9, 2007.

Moving the New 145th Street Swing Span From South of the Third Avenue Bridge to the Site in January 2007. Passing Under a Metro-North Railroad Bridge.

Floating In the New 145th Street Span in February 2007. (Close-up Credit: Bojidar Yanev)

Stage II was completed when two lanes of the bridge were opened to vehicular traffic at 12:20 AM on March 22, 2007. The north sidewalk was opened to pedestrians as well, while demolition

work for stage III of the South side continued. The Manhattan and Bronx approaches as well as the Bronx bound lanes of spans 1, 2, 3, 6, 7 and 8 were demolished and rebuilt.

2007: New 145th Street Bridge Swing Span Wrapped in Plastic During the Lightweight Concrete Curing Period. Preparing for the Concrete Deck Placement. Night View of the Encapsulated Deck.

All four lanes of the bridge were opened to vehicular traffic at 7:00 AM on June 16, 2007.

Division and Contractor Personnel at the Reopening of the 145th Street Bridge, Including: Civil Engineer Rafeek Shaker (2nd From Left), Chief Bridge Officer Henry Perahia (4th From Left), Deputy Chief Engineer Jay Patel (7th From Left), Administrative Engineer Robert Collyer (5th From Right), Civil Engineer Hani Faouri (2nd From Right), and Assistant Civil Engineer Khalid Mohammed (On Right). New Bridge Ready for Traffic.

June 2007: New 145th Street Bridge Ready and Opening for Marine Traffic.

Bridge Sign. June 2007: New 145th Bridge at Night.

The south sidewalk was re-opened on September 12, 2008 after the bridge was hooked into the permanent electrical feed and the generator supplying power was removed from the sidewalk area.

Other work performed in 2008 included touch up painting, installation of mechanical equipment, connection of the gate house plumbing to the city system, centering device alignment checks, pointing of the stone walls, and switching the bridge systems on to the permanent electrical feeders.

These upgrades will restore the structural integrity and extend the useful life of the 145th Street Bridge. The bridge is in the final mechanical electrical testing and commissioning phase. This phase will be followed by training of Division employees to maintain and operate the new equipment installed on the bridge. The project is slated for completion in September 2009.

FLOAT OUT/FLOAT IN

A technique referred to as “float out the old/float in the new” is being incorporated into replacement schemes for many movable bridges. Under this scheme, the old spans are floated out in their entirety and the new spans are floated in. Having the new spans constructed off-site and barged to the project allows for quick and efficient replacement of the removed span. Current projects that will incorporate this technique are: Borden Avenue Bridge, and Grand Street Bridge. The float-in of the new swing span of the Third Avenue Bridge was successfully performed in October 2004, as was the float-in of the 145th Street Bridge in February 2007. The float-in of the new swing span of the Willis Avenue Bridge is currently in the planning stages and is expected to take place in 2010. The float-out of the existing swing span will follow by a few months once traffic is running on the new bridge.

Roadway Bridges

INNOVATIONS

Innovations in the design and construction of Roadway Bridges continued in 2008. The continued use of weathered steel for bridges over railroads eliminates expensive costs involved in maintenance painting. Where feasible, the continued use of precast elements in bridge reconstruction reduces construction duration and the resulting negative impacts on the traveling public. In addition, the implementation of applicable Environmentally Preferable Purchasing (EPP) standards on bridge projects will ease the impact of the increased demands on resources and surrounding environment, and Best Management Practices (BMP) in all applicable projects will mitigate the impact of the project on the surrounding environment.

TEN CULVERTS: GALLOWAY AVENUE OVER MARIANNE STREET, FOREST AVENUE OVER CRYSTAL AVENUE, NAUGHTON AVENUE OVER PATTERSON AVENUE, MIDLAND AVENUE OVER HYLAN BOULVARD, ROCKLAND AVENUE OVER BRIELLE AVENUE, FOREST AVENUE OVER RANDALL AVENUE, GREGG PLACE OVER RANDALL AVENUE, ARTHUR KILL ROAD OVER MULDOON AVENUE, RICHMOND HILL ROAD OVER RICHMOND ROAD, AND ARTHUR KILL ROAD OVER RIDGEWOOD AVENUE (STATEN ISLAND)

The Galloway Avenue culvert is a single span timber pedestrian bridge supported on a concrete abutment. The reconstruction project is still in the design stage.

The Forest Avenue culvert over Crystal Avenue is a single span reinforced concrete box culvert. The reconstruction will consist of the demolition of the existing culvert, clearance of debris from the channel, replacement of the culvert with a concrete deck slab supported on steel beams on reinforced concrete abutment and wingwalls. The work will be performed in two stages with two traffic lanes maintained in each direction during construction.

The Naughton Avenue culvert consists of three parallel reinforced concrete pipes at the north and south ends separated by a twin barrel box culvert. The rehabilitation will include repairing the concrete cracks and spalls, cleaning the debris, and replacing the missing anchor bolts for the retractable steel grates.

The Midland Avenue culvert consists of a single span reinforced concrete box, which will be replaced with a new pre-cast box culvert. The work will be performed in two stages, with one lane of traffic maintained in each direction.

The Rockland Avenue reinforced concrete culvert project will include concrete repair and a lined and stabilized north embankment.

The Forest Avenue culvert over Randall Avenue is a single span concrete box culvert. It will be replaced with a new precast concrete box culver with new sidewalks and asphalt pavement. The work will take place in three stages while maintaining one traffic lane in each direction during construction.

The Gregg Place culvert is a single span reinforced concrete box culver. It will be replaced at the southern portion with a new precast box culvert with new pavement. The north side of the road will remain open to through traffic.

The Arthur Kill Road culvert over over Muldoon Avenue consists of a reinforced concrete pipe at north and a reinforced box culvert at south. The box culvert will be replaced with a new box culvert, and a structural lining will be installed in the pipe culvert. The construction will be performed in one stage with one lane of traffic maintained in each direction.

The Richmond Hill Road culvert consists of a single span stone masonry arch. The rehabilitation work will include removing and re-pointing the stone masonry, removing and replacing the fill and asphalt wearing surface above the arch, and cleaning the vegetation and sedimentation. A temporary access bridge will be built over one lane so that one lane will remain open to traffic at all times.

The Arthur Kill Road culvert over Ridgewood Avenue consists of a non-reinforced concrete pipe at south and a corrugated metal pipe at north. The rehabilitation work will include installing a structural lining inside the concrete pipe and repairing the concrete at the head walls and catch basins. There will be two stages of construction and one lane of traffic will be maintained in each direction.

This project to rehabilitate and/or replace the ten culverts is expected to begin in November 2012, and is expected to be complete in 2013.

ANNADALE ROAD BRIDGE OVER SIRT SOUTH SHORE (STATEN ISLAND)

This project will replace the existing two span bridge with a single span bridge, including the removal of the existing pier, the replacement of the existing north abutment and the rehabilitation of the existing south abutment. In addition, the work will include removal and replacement of the existing concrete deck, sidewalks and curbs, and the replacement of the existing bridge railing system. The bridge will be replaced in two stages. One lane in each direction will be open to traffic at all times during construction. Pedestrian access will be provided by constructing a platform attached to the east fascia in Stage II. A Notice To Proceed was issued with a deferred date of May 27, 2008, the date when the portion of an ongoing DDC area-wide sewer and water main installation project within the bridge limits was completed.

Construction began in May 2008 and is expected to be completed in September 2010.

Annadale Road Bridge in 2001. (Credit: NYSDOT)

The contractor completed Stage I deck removal on November 26, 2008.

Annadale Road: Stage I Construction. Saw Cutting the Diaphragms, Removing the Stringers, And Placing a Temporary Truss to Support Utility Conduits.

BELT PARKWAY BRIDGES OVER PAERDEGAT BASIN, FRESH CREEK, ROCKAWAY PARKWAY, GERRITSEN INLET, MILL BASIN, BAY RIDGE AVENUE, AND NOSTRAND AVENUE (BROOKLYN)

On a New York State-mandated scale from 1 to 7, six of these seven bridges possess a condition rating of "fair" (3.001 – 4.999), and the seventh is rated "poor" (1.000 – 3.000). In 2008, the Paerdegat Basin Bridge was 3.222; the Fresh Creek Bridge was 3.333; the Rockaway Parkway Bridge was 4.000; the Gerritsen Inlet Bridge was 3.597; the Mill Basin Bridge was 2.955; the Bay Ridge Avenue Bridge was 3.313; and the Nostrand Avenue Bridge was 4.097. All are original structures, which were built beginning in 1939. While none of the bridges are in any immediate danger of structural failure, their reconstruction is required in order to maintain mobility and public safety on this vital artery.

The Seven Belt Parkway Bridges.

Reconstruction of the seven bridges and their approaches on the Belt Parkway (over three local streets and four waterways) is scheduled to start in the summer of 2009. Group 1 (Paerdegat,

Fresh Creek, and Rockaway Bridges) is expected to be complete in spring 2014. Group 2 (Gerritsen Inlet and Mill Basin Bridges) is expected to start in summer 2010, and to be complete in summer 2014. Group 3 (Bay Ridge Avenue and Nostrand Avenue) is expected to start in fall 2013, and to be complete in late 2016.

During the past 60 years traffic demand along the Belt Parkway corridor has increased dramatically. The opening of New York International Airport (now JFK Airport) in 1948, the development of suburban communities on Long Island post World War II, and the opening of the Verrazano-Narrows Bridge in 1964 have dramatically increased demand on the Belt Parkway. When the parkway first opened the two-way average daily traffic was about 20,000 vehicles per day. Presently it is about 150,000 per day.

Reconstruction of these bridges and their approach roadways is necessary to alleviate substandard conditions and bring these areas into compliance with current state and federal standards. These standards require wider lanes, 12-foot safety shoulders, median barriers, super-elevation of the roadway around curves, and realignment of the approach roadways resulting in improved sight distances. The Department anticipates that these improvements will reduce the current accident rate on this section of the Belt Parkway by approximately 45%.

NYCDOT conducted research to provide recommendations and design guidelines for the treatment of the parkway corridor. The goals of the analysis were threefold: first, to propose improvements to the parkway to satisfy safety and accessibility standards; second, to preserve and re-establish the historic character of the parkway; and third, to retain and improve public access for all parkway users. The recommendations also include complementary designs of the seven bridges.

The research provided detailed recommendations on how common elements should be incorporated to achieve a consistent and historical character to the corridor. Items considered included trees and vegetation, lighting fixtures, railings and fences, design of bicycle and pedestrian paths across the bridges, as well as stonework detailing on bridge abutments with relief detailing on bridge parapets.

On July 18, 2006, the Art Commission selected the Seven Belt Parkway Bridge reconstruction project for a Design Award in its 24th annual Excellence in Design Awards.

Belt Parkway Bridge Design Renderings.

All of the bridges except for the Bay Ridge Avenue and Nostrand Avenue Bridges are either located within, or adjacent to, the Gateway National Recreation Area, (GNRA) a division of the US Parks Service. This bridge and highway program will be in full compliance with New York City Department of Environmental Protection (NYCDEP) requirements for the initiation of a long-term plan that will increase wetlands, decrease pollution into the bay, and decrease the highway's footprint around the rim of Jamaica Bay. NYCDOT is also working closely with New York City

Department of Parks and Recreation (NYCDPR), New York State Department of Environmental Conservation (NYSDEC), GNRA, the US Coast Guard (USCG), and the US Army Corps of Engineers (USACE) to ensure compliance with all environmental protocols. In addition to mitigating environmental impacts along the Belt Parkway corridor, an off-site Wetland Mitigation Plan has been approved. This plan focuses on compensating for wetland losses by increasing and improving the quality of habitats. Approximately 2.3 acres of land at Floyd Bennett Field will be cleaned of rubbish and debris and converted to wetland area.

The existing Paerdegat Basin Bridge is a 692-foot long, 13 span, multi-girder, simple supported steel superstructure, supported on reinforced concrete pier cap beams and abutments supported on reinforced concrete piles. The bridge has two 34-foot wide roadways carrying three lanes of traffic in each direction; with a 3-foot safety walk on the north side, a 4-foot wide center median/barrier, and an 8-foot wide south pedestrian/bicycle sidewalk. The existing structure and immediate approaches will be demolished and replaced by two new bridges and new approach roadways on split alignments.

The existing bridge consists of 12 cast-in-place concrete bents. Two navigation channels cross under the bridge. At one of these channels (bent number 7) a concrete pier has been damaged. Because of this damage and other structural concerns, the Paerdegat Basin Bridge has been under continuous monitoring since September of 2004.

The replacement bridges will consist of two angled trapezoidal steel box girder structures: the 825-foot, 3 span westbound bridge, north of the existing structure, and the 1,227-foot, 5 span eastbound bridge, south of the existing structure, remaining at 28 feet over the navigable channel. Both bridges will have a 36-foot wide roadway with a 12-foot wide right shoulder. The eastbound bridge will have a 4-foot wide left shoulder, while the westbound bridge will have a 10-foot wide left shoulder. The southern structure will carry eastbound traffic while the northern structure will accommodate westbound traffic. Both the horizontal and vertical alignments will change resulting in improved sight distances on the bridge and its approach roadways. The bridge carrying eastbound traffic will also have a dedicated pedestrian/ bicycle path along the south side. The pedestrian/bicycle path will be separated from traffic lanes by a concrete barrier on the bridge, and by a 15-foot wide grass mall on the approach roadways.

Paerdegat Basin Bridge.

Proposed Paerdegat Basin Bridge.

The existing Fresh Creek Bridge is a 264.5 foot, 5 span, multi-girder, simple supported steel superstructure, supported on pre-cast concrete columns founded on four reinforced concrete piers on concrete piles with concrete gravity abutment walls on timber piles. The bridge has two 34'-2" wide roadways, a 5-foot wide center median/barrier, and a 10-foot wide south sidewalk. The parkway east and west of the bridge has a 10-foot wide bike footpath on the south side. The existing structure and immediate approaches will be demolished and replaced.

The replacement bridge will be a 309-foot, 3 span structure; the new structure will have only two support piers, resulting in a wider channel. The proposed construction will result in improved landscaping on the bridge approaches. The bridge deck and approaches will be widened to 120 feet from the existing 86 feet to accommodate three 12-foot lanes in each direction, 12-foot wide shoulders, and a 12-foot wide bike path, separated from the traffic lanes by a barrier system. The pedestrian and bicycle pathway will be maintained at all times.

Fresh Creek Bridge in 2002. (Credit: NYSDOT) Proposed Fresh Creek Bridge.

The existing Rockaway Parkway Bridge is a 150-foot, 4 span, multi-stringer, simple supported steel superstructure, supported on steel cap beams on concrete filled steel pipe columns, and reinforced concrete abutment walls supported by concrete pile foundations. The bridge has two 34'-2" wide roadways, a 5-foot wide center median/barrier, and a 10-foot wide south sidewalk. The existing structure and immediate approaches will be demolished and replaced.

The replacement bridge will be a single span structure to improve visibility along Rockaway Parkway. The new structure will be built in the same alignment as the existing bridge. The bridge deck will be widened to 109 ½ feet from the existing 84 feet to accommodate three 12-foot lanes with a 12-foot wide right shoulder and 4-foot left shoulder in each direction, including 5 ½ feet for median and parapet width. The right shoulder lane on each approach will be 10 feet (while the width of the right shoulders on the bridge structure will be 12 feet), with the other dimensions the same width as those on the bridge. In addition to reconstruction of the bridge, four access ramps will also be reconstructed as will Rockaway Parkway in the vicinity of the Belt Parkway.

Rockaway Parkway Bridge in 2002. (Credit: NYSDOT) Proposed Rockaway Parkway Bridge.

Milestone A consists of all work required to complete the reconstruction of the Paerdegat, Fresh Creek, and Rockaway Bridges, including all roadway sections and ramps, within the limits of the construction, adjacent to and between the bridge structures. The contract provides for an incentive of $35,000 per day for each day that milestone A is early, with a maximum incentive of $14.98 million. There is a similar disincentive if the milestone is exceeded, with no maximum.

The existing Gerritsen Inlet Bridge is a 520-foot long, 9 span, steel girder and reinforced concrete beam superstructure, supported on reinforced concrete piers, and abutments supported on timber piles. The existing structure and immediate approaches will be demolished and replaced.

The replacement bridge will be a consist of a 496-foot, 3 span bridge, aligned 10'-6" north of the centerline of the existing structure, and remaining 35 feet over the navigable channel. The bridge will have a 36-foot wide roadway with a 12-foot wide right shoulder and a 4-foot wide left shoulder in each direction. The eastbound side will carry a dedicated pedestrian/bike path along the south fascia.

Gerritsen Inlet Bridge in 2002. (Credit: NYSDOT) Proposed Gerritsen Inlet Bridge.

Opened on June 29, 1940, the Mill Basin Bridge is adjacent to the Jamaica Bay Wildlife Refuge and the Gateway National Recreation Area. It is the only movable bridge on the Belt Parkway. The current clearance over Mean High Water is 35-feet. When the Mill Basin Bridge was constructed during the first half of the 20th century, New York City's inland waterways were among the most heavily navigated thoroughfares in the country. However, as maritime traffic in New York City steadily decreased since the mid-1960s, the need for movable bridges lessened as well. In 1941, during its first full year of operation, the Mill Basin Bridge was opened 3,100 times; by 1953, that figure decreased to 2,173; by 2008, the number of openings declined further to a total of only 190 openings.

In addition, significant and costly traffic congestion results from the operation of this outmoded drawbridge. In 2007, the Mill Basin Bridge carried 148,802 vehicles per day. The average opening and closing time for the bridge (and others like it) is ten minutes. Thus, this structure's operation has a negative and significant effect on the efficiency of New York City's vehicular traffic flow.

The existing Mill Basin Bridge is 864-feet long and 14 spans, including double movable leaf bascule spans and a steel superstructure, supported on reinforced concrete pier on timber piles, and abutments supported on pre-cast concrete piles. The existing structure and immediate approaches will be demolished and replaced.

The replacement will be a 1,757-foot, 11 span fixed bridge, north of the existing structure. The bridge will have a 36-foot wide roadway with a 12-foot wide right shoulder and a 4-foot wide left shoulder in each direction. The eastbound side will carry a dedicated pedestrian/bike path along the south fascia. The new bridge will be a fixed structure with a 60-foot clearance over Mean High Water, obviating the need for opening and closing the structure to accommodate tall vessels. The new design of the bridge will result in increased sight distances, an increase in lane width from 11-feet 4-inches to 12-feet, and the inclusion of safety shoulders in both directions. The channel will remain navigable during construction, and the clear channel width will remain the

same after the new structure is in place. A new fender system will be installed to protect the bridge substructure from marine traffic.

Mill Basin Bridge. Proposed Mill Basin Bridge.

The existing Bay Ridge Avenue Bridge is a 58-foot long, single span, reinforced concrete deck on a multi-girder system superstructure over Bay Ridge Avenue. The superstructure is supported by concrete gravity type abutments on pile foundations. The underpass is access to the NYCDEP Owl's Head Waste Treatment Plant. The existing superstructure will be demolished and replaced.

The replacement bridge superstructure will consist of pre-stressed concrete box beams and a reinforced concrete slab. The bridge will have three 12-foot wide lanes in the eastbound direction and two 12-foot wide lanes separated by a 4-foot wide painted stripe flush median in the westbound direction. There is no pedestrian/bike path on the structure. The existing bridge will be reconstructed using pre-cast deck sections. The clearance will be increased to 14-feet 6-inches, which removes the need for clearance signs currently posted for a substandard condition and will obviate the need for underdeck wood shielding.

Bay Ridge Avenue Bridge in 2002. (Credit: NYSDOT) Proposed Bay Ridge Avenue Bridge.

The existing Nostrand Avenue Bridge is a 140-foot long, 3 span, multi-girder superstructure, consisting of a concrete deck with an asphalt overlay over Nostrand Avenue. The superstructure is supported by concrete pier columns with a steel cap beam, and abutments on concrete filled steel pile foundations. The existing structure and immediate approaches will be demolished and replaced.

The replacement will be a single span bridge consisting of standard steel girders with a cast-in-place deck superstructure and reinforced concrete abutments on pile footings, thus eliminating the need for intermediate support piers and resulting in improved sight lines on Nostrand Avenue. The bridge will have three 12-foot wide lanes with a 12-foot wide right shoulder. The approaches will have a 10-foot wide right shoulder and a 4-foot wide left shoulder in each direction. Nostrand Avenue will be widened to 81 feet and realigned with the existing approaches. On the Belt Parkway, the bridge will be widened in order to provide new safety shoulders in both directions.

New safety-shape parapets will be installed and the existing corrugated metal center guide-rails will be replaced with a reinforced concrete center median, which will result in a safer condition.

Nostrand Avenue Bridge. Proposed Nostrand Avenue Bridge.

A computerized traffic simulation model was developed to analyze traffic conditions in connection with the Division's plans to reconstruct these seven bridges on the Belt Parkway. This model was a useful tool for understanding the impact of construction on the traveling public and helped us determine appropriate construction schedules. It enabled us to rapidly evaluate the impact of a variety of combinations of construction staging.

BROOKLYN-QUEENS EXPRESSWAY (WB) & (EB) OVER CADMAN PLAZA AND FULTON STREET (BROOKLYN)

The Brooklyn-Queens Expressway over Cadman Plaza and Old Fulton Street, oriented East to West, and located just west of the Brooklyn Bridge, consists of two-level two-span superstructures, one above the other, founded on concrete abutments and piers sharing a common footing on H piles. The bridge was constructed in 1948.

The westbound side (the lower of the two-level structure) is a two-span continuous steel stringer, concrete deck superstructure supported by concrete abutments and a solid concrete center pier. The stringers are supported by fixed bearings at the center pier and with expansion bearings at the abutments. The bridge deck is a reinforced concrete slab overlaid with an asphalt wearing surface.

The eastbound side (located on the upper level) is a cantilever two span continuous steel rigid frame structure of built-up riveted girders. The girders are concrete-encased and rigidly framed into the framing at both abutments and center pier. The existing railings are substandard, and the granite veneer on the substructures has been removed from both of the abutment stems and the south side wing walls.

BQE Bridge Over Cadman Plaza in 2002 – Upper Level is Eastbound, Lower Level is Westbound. (Credit: NYSDOT)

Structural demolition will include removing the existing wearing surface, demolishing and removing the existing bridge railings, safety walks, concrete deck (WB), deck expansion joints, concrete approach slabs, and the top portion of existing abutment and pier stems (WB). New construction for both the westbound and eastbound structures will include new top portions for the abutment stems and pier caps, new abutment expansion bearings and pier fixed bearings, new shear stud connectors on top flanges at existing stringers, new exodermic deck on steel stringers, new approach slabs at the westbound and deck/underdeck repair at the eastbound structure, half-size permanent concrete barriers at both fascias, new deck plug joints, a new wearing surface, and a new waterproof membrane over the concrete deck surface.

The project is currently in its final design phase. Construction is expected to begin in March 2013, and is expected to be complete in April 2014.

CITY ISLAND ROAD BRIDGE OVER EASTCHESTER BAY (BRONX)

The existing City Island Road Bridge was built in 1901 and is the only vehicular, bicycle and pedestrian access between the mainland Bronx and City Island. In 2007, the bridge carried 15,188 vehicles per day. The bridge is part of City Island Road, which is located within Pelham Bay Park and crosses over Eastchester Bay. With seven spans and six piers in the water, the bridge has outlived its useful life and requires extensive continuous maintenance.

Original Bridge in 1873.

The existing bridge will be replaced along the same alignment with a new single span, single tower cable-stayed bridge which will be a unique structure type in the NYC area. The new bridge will be approximately 17 feet wider than the existing one to accommodate three standard 12-foot wide traffic lanes, a 6-foot wide bicycle lane and a 6-foot wide pedestrian walkway on each side. The tower and concrete counterweight for backstay anchorage of the new bridge will be located in Pelham Bay Park. The new bridge will be designed to current standards and with its wider roadway width, will allow future repair and rehabilitation to be carried out while maintaining one 12-foot lane in each direction. In order to maintain traffic during the demolition of the existing bridge and construction of the new bridge, a temporary bridge will be constructed on the south side of the existing bridge.

City Island Road Bridge. Vertical Clearance Posting. (Credit: NYSDOT)

The project is currently in its final design phase. The construction phase for this project is scheduled to begin in November 2011 with an approximate duration of 3 years.

Rendering of New City Island Road Bridge.


Side View Rendering of New City Island Road Bridge.

CLAREMONT PARKWAY BRIDGE OVER METRO NORTH RR (BRONX)

The Claremont Parkway Bridge was built in 1889, with major reconstruction in 1938. This project, currently in its final design phase, will include removal of the entire superstructure and approaches. The new bridge will consist of pre-stressed concrete box beams supporting a reinforced concrete deck and approach slab, concrete sidewalks and reinforced concrete parapet walls with protective fencing, and reconstructed approach roadways. A portion of both existing abutments will be removed to accommodate the new bridge profile. The utility work will include the installation of two new water mains, a gas main, and electrical conduits. The bridge will be constructed in four stages, with one traffic lane open in each direction at all times during construction. Construction is expected to begin in February 2013, and is expected to be complete by February 2015.

Claremont Parkway Bridge. (Credit: NYSDOT)

CONCOURSE VILLAGE AVENUE BRIDGE OVER METRO NORTH (BRONX)

This project will include demolishing the existing bridge deck, removing loose encasement on the structural members, localized steel repairs, and restoring the encasement. A new concrete deck will be installed, and new approach slabs, an east parapet, steel faced curbs, and concrete sidewalks will be built. The existing granite blocks will be repointed as necessary. The bridge will be reconstructed in four stages, with one 14.11 foot wide southbound lane maintained during construction. Construction is expected to begin in November 2017, and is expected to be complete in June 2019.

Concourse Village Avenue Bridge. (Credit: NYSDOT)

CROOKE AVENUE AND NEWKIRK AVENUE BRIDGES OVER BMT SUBWAY (BROOKLYN)

The existing four span Crooke Avenue Bridge was constructed in 1916. A recent inspection revealed significant deterioration of the superstructure. This project, currently in its final design phase, will include removal of the superstructure in the right of way only, approaches and two piers. The new single span bridge will consist of pre-stressed concrete box beams supporting a reinforced deck and approach slabs, concrete sidewalks, reinforced parapet walls with protective fencing and reconstructed approach roadways. The top portion of the abutments will be removed and reconstructed. The utilities will be relocated within project limits. The new bridge will also meet current NYCT sight distance and horizontal clearance standards. The bridge will be constructed in two stages, with one vehicle lane and one sidewalk maintained. Construction is expected to begin in April 2019, and is expected to be complete in October 2020.

The Newkirk Avenue Bridge is a three span structure between East 16th Street and Marlborough Road. This project, currently in its final design stage, will include the removal of the entire

superstructure, including girders, deck slabs, approaches, and existing steel caps on the steel pier columns. The new three span bridge will consist of steel stringers and light weight concrete deck. The exterior and middle columns will be replaced with new steel columns. The top portion of the abutments will be removed and reconstructed. New utilities will be installed. Pedestrian access to the Newkirk Avenue station will be maintained during the three stage construction. During Stage III of construction the bridge will be closed to vehicular traffic. Construction is expected to begin in April 2019, and is expected to be complete in September 2020.

Crooke & Newkirk Avenue Bridges. (Credit: NYSDOT)

GRAND CONCOURSE BRIDGE OVER METRO NORTH (BRONX)

The bridge was originally built in 1906. It is a single span bridge consisting of a concrete deck supported on five steel plate girders, one truss, and a steel truss subway structure located in the center of the bridge. The bridge carries three lanes of vehicular traffic in each northbound and southbound direction as well as NYCT subway traffic underneath the Grand Concourse Boulevard and above the Metro North railroad right of way. The upper portion of the bridge carrying the roadway is now structurally supported by the lower portion carrying the subway. The two portions of the bridge are dependent upon each other for support and stability but are being maintained individually by two separate agencies, the NYC Department of Transportation, and NYC Transit Subways respectively. The subway portion of the structure, comprised of four warren trusses, is stabilized by the roadway portion floor beams and the roadway portion is supported by the subway trusses.

Red flag repairs were made in the first half of 2006.

Red Flag Repairs in February 2006: Ironworkers Removed the Plates From the Holes and Replaced Them at the End of Each Day. They Also Placed Reinforcing Bars for the New Concrete Slab. Supervisor Bridge Repairer and Riveter Gean Pilipiak Monitoring Red Flag Repairs in 2006. (Credit: Peter Basich)

In the new rehabilitation scheme, the roadway will be supported independently from the subway structure: the structures will be physically separated. Steel members will be added to the subway trusses to provide the stability previously provided by the roadway portion floor beams. The substructure consists of two concrete abutments bearing on rock ledges. The tops of these abutments lie at two levels, an upper level which supports the bridge stringers and a lower level which supports the subway trusses. The bridges stringers over the subway tracks bear on a composite steel beam/concrete backwall which will be replaced as part of this project. The foundation for the new trusses being installed to carry the roadway superstructure will bear on the rock behind the existing abutments.

The reconstruction project will also include building new sidewalks, as well as bridge railings with protective fencing, expansion deck joints, electrical conduits and fixtures, and the relocation of the existing water main under the sidewalk. Two lanes of vehicular traffic and the pedestrian walkway will be maintained in each direction on the Grand Concourse. This project, currently in the final design phase, is expected to begin construction in September 2012, and is expected to be complete in December 2014.

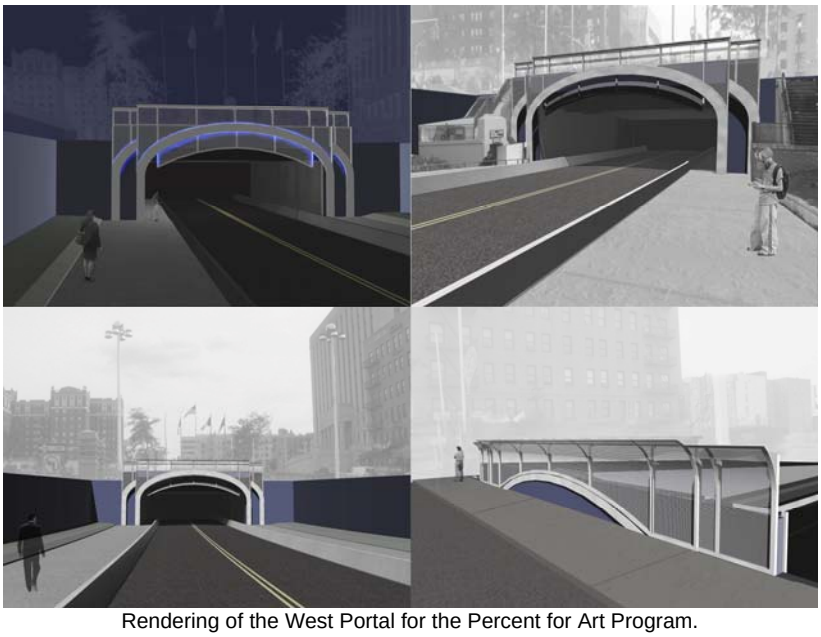
Grand Concourse Bridge over Metro North in 2002.
(Credit: NYSDOT)

GRAND CONCOURSE BRIDGE OVER EAST 161ST STREET (BRONX)

This $52 million project included the rehabilitation of the Lou Gehrig Plaza and the reconstruction of the Grand Concourse from East 161st Street to East 166th Street, as well as landscaping improvements. In addition, artwork will be included under the Percent For Art Program administered by the Department of Cultural Affairs. The underpass and its approaches were closed to traffic during the Yankees' off-season only. The reconstruction was completed in 5 main stages with various sub-stages. This arrangement ensured the maintenance of a minimum of two traffic lanes in each direction along the Grand Concourse. A Notice to Proceed for the project was issued to the contractor with a start date of January 3, 2006. The reconstruction project was substantially completed by the accelerated date of November 1, 2008.

Before Construction: The Bridge over East 161st Street. View of West Portal. Lou Gehrig Plaza.

Rendering of New Lou Gehrig Plaza. Existing Grand Concourse. Rendering of New Grand Concourse.



Rendering of the West Portal for the Percent for Art Program.

Soil boring operations began on January 3, 2006, and were completed on January 6, 2006. Stage I reconstruction of the bridge began on March 27, 2006. Stage IB reconstruction of the bridge began on June 21, 2006.

2006: Transporting Trees From East Median for Replanting. Uncovering Live ECS Cables Above Tunnel Roof Before Bridge Demolition. Excavation for Replacement of Sewer Pipes.

2006: Grand Concourse Bridge: Demolition of Existing Con Ed Vault. Backfill and Compaction of Sewer Manhole.

2006: Removing Asphalt and Concrete Roadway. Installing Sewer Between East 165th and East 166th Streets.

Stage II reconstruction of the bridge began on October 26, 2006. The underpass was closed to traffic as part of this stage, which was completed in April 2007.

2006: Demolition of the Bridge. Removing Debris From the Bridge.

2006: Removing Concrete at the Springline of the South Abutment Stem. Formwork and Concrete Placement at South Abutment.

Installation of precast panels began in the intersection of the Grand Concourse and 161st Street on December 19, 2006. Construction of the west side of the Grand Concourse was nearly complete by the end of 2006.

2006: Installing the Precast Panels.

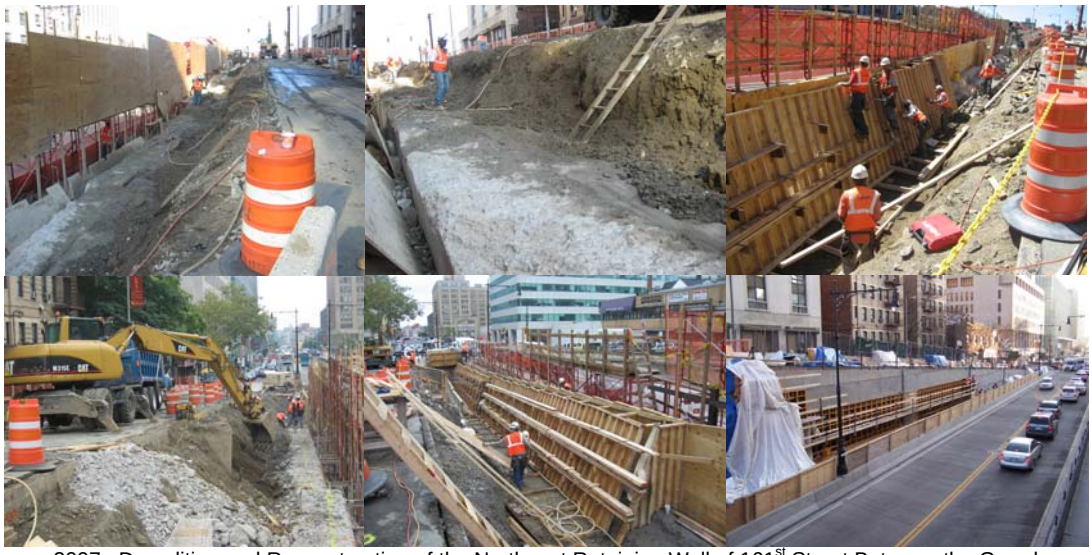
The construction of the underpass and its approaches was completed in April 2007 during the Yankees' off season. The reconstruction of the north East 161st Street Service road and sidewalks was also completed in April 2007.

Construction of Underpass Abutment Wall. Reconstructed Grand Concourse Underpass, Sidewalks, and Bridge. Grand Concourse in November 2007.

On December 6, 2007, Commissioner Janette Sadik-Khan and Bronx Borough President Adolfo Carrión Jr. announced that the planned 45-month renovation of the key roadways would be wrapped up in November 2008—a full 316 days ahead of schedule.

As part of the original renovation contract, DOT reserved the option to accelerate the schedule if the contractor met key milestones. In response to Borough President Carrión's call for accelerating the project, and in light of the contractor's demonstrated ability to speed up the work, DOT successfully negotiated for the faster pace.

Stage IVB reconstruction began on December 18, 2007, at which time, the center portion of the Grand Concourse from East 164th Street to East 166th Street was open to traffic, and the East 161st Street Service in the east bound direction was closed to traffic from Gerard Avenue to Sheridan Avenue while the roadway, sidewalks, water main, drainage, and utility facilities were replaced.



2007: Demolition and Reconstruction of the Northeast Retaining Wall of 161st Street Between the Grand Concourse and Sheridan Avenue.

2007: Pouring Concrete for Pavement. Rigs in Lou Gehrig Plaza Drilling and Installing Cantilever Soldier Piles.

By the end of 2007, the roadways, sidewalks and water main and sewer works along the Grand Concourse were complete. Work in progress at that time included the installation of granite pavers and curbs in the Lou Gehrig Plaza area.

The south underpass sidewalk was closed and the north side reopened on January 12, 2008. The south underpass sidewalk was reopened to pedestrian traffic on August 4, 2008, while the north sidewalk was closed between Walton and Sheridan Avenues, to enable the contractor to repair, clean and paint the north abutment, stain north east wall and install railings on the barrier.

Newly Stained Retaining Walls in May 2008.

This ambitious project, which was designed to improve mobility and safety for pedestrians, motorists and cyclists, reached key milestones early in the construction timeline, enabling the entire project to be completed a full 316 days ahead of schedule.

The three key project milestones were completed on time or ahead of schedule. Milestone 1 (reconstruction and reopening of the East 161st Street underpass) was completed on May 31, 2007. Milestone 2 (reconstruction and reopening of the East 161st Street south service roadway from Gerard Avenue to Sheridan Avenue to traffic) which began on November 10, 2007, was completed on March 14, 2008, 25 days ahead of schedule. As a result, the contractor earned the full incentive valued at $300,000. Milestone 3 (reconstruction and reopening of the Grand Concourse between East 161st to East 166th Street to traffic) was completed on May 15, 2008, 27 days ahead of schedule.

East 161st Street Underpass East Portal in 2005 and 2008. West Portal in 2005 and 2008.

Southeast Staircase in 2005 and 2008. Grand Concourse Boulevard Between East 161st and East 166th Streets in 2005 and 2008.

As part of the transformation, Lou Gehrig Plaza was converted from a parking lot into an open and inviting public space complete with distinctive raised terraces, new granite pavers and steps, ornamental lighting, granite bollards and benches. DOT also replaced the entire East 161st Street underpass arch structure. In addition, the boulevard now boasts new dedicated bicycle lanes, trees, raised planters, distinctive paving and innovative "M"-pole street lighting and fixtures that line both sides of the street. In total, the Agency added 50,160 square feet of new pedestrian plaza and expanded sidewalk space and .7 miles of bicycle lanes to the Grand Concourse – marking a new era for how people use and think of this noble boulevard and its surrounding area.

The Grand Concourse project was substantially completed on November 1, 2008.

New Benches and Lighting. Lou Gehrig Plaza Before and After Reconstruction.

GUN HILL ROAD BRIDGE OVER METRO NORTH RR (BRONX)

The existing Gun Hill Road Bridge was constructed in 1918. An inspection by the Division revealed that the superstructure of the bridge has outlived its useful service life. The effects of age and weather have rendered reconstruction necessary. This project included the removal of the existing superstructure and the top portion of the existing concrete abutments, and the

construction of new approach slabs, roadway, and sidewalks. The work also included replacing the water and gas mains, as well as other utilities, erecting new steel girders, installing new utility supports, placement of a new reinforced concrete deck, and constructing new concrete parapets with pedestrian fencing. The bridge was reconstructed in three stages, with two lanes of traffic maintained during construction. A Notice to Proceed for the $7.4 million reconstruction of this bridge was issued to the contractor with a start date of December 1, 2004.

Gun Hill Road Bridge in 2002. (Credit: NYSDOT) 2005: View of Bridge at the MPT Stage. Demolition of the Existing Bridge Deck. (Deck Credit: Muhammad Siddiqui)

2005: Project Engineer Muhammad Siddiqui Inspecting the Stay-in-Place Formwork for the New Gun Hill Road Bridge Deck. Installing Deck Reinforcement. Concrete Placement.

Effective March 9, 2005, the southbound off ramp of the Bronx River Parkway at Gun Hill Road was closed to traffic for a three year duration. Stage II reconstruction of the bridge began on November 3, 2005. At the end of 2006, the project was in Stage III which consisted of the reconstruction of the northern 1/3 of the bridge.

Gun Hill Road Bridge in January 2006: Stage 2 Construction Zone, South Side of Bridge. March 2006: Looking West From The East Abutment at The Utility Supports for The Gas mains. May 2006: Stage 2B Installing Shielding on Utility Bay.

July 2006: Stage 2 Construction Zone, Prior to Girder Removal. July 2006: Looking East - Placing Concrete for The Gun Hill Road Bridge East Abutment Backwall, and a Quality Assurance Engineer Inspecting the Work.

September 2006: Stage 2 Construction Zone, Placing Concrete for the Deck. November 2006: Looking East - Removing the Existing Water Main Pipe on the Bridge.

Gun Hill Road Bridge in December 2006: Looking East at the Stage III Traffic Shift, and Looking Northeast at Laborers Securing Plastic Covers on ECS Cables.

April 2007: Looking West – Gun Hill Road Bridge Stage III Girders and Temporary Support for Existing ECS Cables. June 2007: Using a Pump to Place Stage III Bridge Deck Concrete.

Gun Hill Road Bridge in June 2007: Looking Southwest at Laborers Demolishing the Existing Center Pier. July and August 2007: Installing a New Water Main.

On December 13, 2007, traffic was shifted to the newly constructed Stage III area of the bridge, and work for Stage IIIA began. The northbound entrance to the Bronx River Parkway was reopened on this date. Due to interference of the existing rubble walls with the alignment of the 48-inch water main on the north side in the approach area, thereby resulting in additional work (removing existing rubble walls in north east and north west corners and reconstructing new reinforced concrete retaining walls), the completion of the water main work in this area was delayed.

North Bridge Parapet in December 2007. Completed Bridge.

The reconstruction of the Gun Hill Road Bridge was substantially completed on May 30, 2008.

HIGHLAND PARK PEDESTRIAN BRIDGE OVER PEDESTRIAN PATH (QUEENS)

The Highland Park Pedestrian Bridge, built in 1935, is a single span arch structure with a clear opening of 60 feet under the bridge. Unlike a conventional steel or concrete bridge structure, the main structure is a brick masonry arch, with wing walls and parapet walls consisting of stacks of random size rocks set in mortar. The height of the parapet walls from the roadway surface varies from four to five feet. The bridge, located inside Highland Park, spans a hiking trail, and carries pedestrian and bicycle traffic. It is 27 feet wide with neither sidewalks nor shoulders.

A recent inspection revealed significant deterioration of the masonry arch. The project, currently in the preliminary design phase, will include the rehabilitation of the existing brick masonry arch structure and the specialized wearing surface. The bridge will be closed to all traffic and will be reconstructed in one stage. Construction is expected to begin in September 2011, and is expected to be complete in September 2013.

Highland Park Bridge. (Credit: NYSDOT)

HILL DRIVE BRIDGE OVER PROSPECT PARK LAKE (BROOKLYN)

The landmark Hill Drive Bridge was built in 1890. The existing bridge is a three span simply supported steel girder/beam structure, with the center arch span crossing Prospect Park Lake, and the other two spans consisting of underground masonry cellular structures with multiple interior masonry-bearing walls and non-composite concrete deck and concrete sidewalk. The substructure of the bridge consists of solid gravity masonry abutments with U-type wing walls.

This project will include the replacement of the existing masonry cellular abutments with new reinforced concrete abutments clad with existing stone and new brick masonry; the removal, storage, and reinstallation of the existing stone wing walls with a new reinforced concrete core;

the replacement of the existing stringers and floor beams with new steel stringers; the reinforcement of the existing arch girders with new cover plates; the reinstallation of the steel arch girders at their current locations to replicate original construction; and the replacement of the existing masonry arches spanning between floor beams by masonry cladding on the underside of the new arched concrete deck. The concrete deck, approaches, sidewalk, and roadway will be replaced within the project limits.

The ornamental cast iron and stones will be rehabilitated and reinstalled, replicating all the historic features and aesthetics of the original bridge. New bridge lighting and drainage systems will be installed. The park landscape will be restored, and trees identified by the Prospect Park Alliance as rare and/or historic shall remain undisturbed during construction.

The project is currently in its final design phase. Construction is expected to begin in September 2009, and is expected to be complete in October 2011.

Hill Drive Bridge in 2001. (Credit: NYSDOT)

MANHATTAN COLLEGE PARKWAY, WEST 232ND STREET, WEST 239TH STREET, AND WEST 252ND STREET BRIDGES OVER HENRY HUDSON PARKWAY (BRONX)

This $6.6 million project will reconstruct four bridges over the Henry Hudson Parkway. A Notice to Proceed was issued to the contractor with a start date of February 23, 2004. The reconstruction of the West 239th Street and West 252nd Street Bridges commenced after the substantial completion of the Manhattan College Parkway and West 232nd Street Bridges. Work on the Manhattan College Parkway, West 232nd Street, and West 239th Street Bridges included the demolition and removal of the existing pavement and roadway slab down to the concrete arch of each bridge, and replacing it with a new deck on a protected membrane waterproofing system. In addition, the reconstruction of these bridges included drainage, repointing the existing stone masonry, new signage and pavement markings, improving the under deck lighting systems, and private utility work.

Manhattan College & West 232nd Street Bridges in 2001. (Credit: NYSDOT)
West 239th Street Bridge in 2001 & West 252nd Street Bridge in 2002.
(Credit: NYSDOT)

On West 232nd Street, the work was completed in three stages, with one lane of vehicular traffic maintained in each direction during construction. On Manhattan College Parkway, the work was also completed in three stages, with one lane of vehicular traffic maintained in the westbound direction during construction.

The West 232nd Street Bridge re-opened to traffic on August 20, 2004, some three months ahead of schedule. The Manhattan College Parkway Bridge re-opened to traffic on October 29, 2004, some six weeks ahead of schedule. The reconstruction of the Manhattan College Parkway and West 232nd Street Bridges was substantially completed on September 28, 2006.

Old Fence on the Manhattan College Parkway Bridge. Newly Installed Picket Fence.

Manhattan College Parkway Bridge Deck During Construction. Completed Bridge.

Old Fence on the West 232nd Street Bridge. Deck During Construction. Completed Bridge.

On West 239th Street, the work was completed in three stages, with one lane of vehicular traffic maintained in the each direction during construction. Stage I reconstruction (northern half) of the bridge began on April 25, 2005. Stage II reconstruction began on September 22, 2005. The bridge re-opened to traffic on April 20, 2006. The reconstruction of the West 239th Street Bridge was substantially completed on December 5, 2006.

West 239th Street Bridge Before Reconstruction. During Construction. Installing the New Picket Fence.

Newly Installed Steel-Backed Timber Guide Rail at West 239th Street Bridge. Completed Bridge.

Work on the West 252nd Street Bridge will include the demolition of the existing concrete arch bridge deck, and replacing it with a new prestressed concrete box beam superstructure. In addition, the reconstruction of this bridge will include installing a new 12 inch diameter water main, improving the under deck lighting systems, private utility work, partial removal of the pier and abutments, new roadway lighting, and adjustment of the existing drain inlets, manholes, and catch basins. The work will be completed in four stages. The work on this bridge began with Stage I on January 3, 2006.

West 252nd Street Bridge Before Reconstruction.

The removal of the existing bridge sections over the northbound Henry Hudson Parkway was performed at night on October 25 and 26, 2006. The removal of the sections over the southbound Henry Hudson Parkway was performed at night on October 31 and November 1, 2006. The demolition of the north half of the bridge was completed in November 2006.

2006: Cutting and Removing the Existing West 252nd Street Bridge Sections Over the Parkway.

2006: Wire Sawing the Deck and Removing the Existing West 252nd Street Bridge Sections Over the Parkway.

2007: West 252nd Street Bridge Formwork and Rebar Fabrication at the Pier and West Abutment. Concrete Placement in Progress.

The new superstructure for the north half of the bridge, comprised of pre-stressed concrete beams and cast-in-place reinforced concrete deck and sidewalks, was completed in May 2007. The approach pavements, steel-backed timber guide rails and ashlars veneer parapet wall on the bridge were completed in October 2007.

Grouting of the West 252nd Street Bridge Box Beams in February 2007.

West 252nd Street Bridge: Transverse Post-Tensioning of the Pre-Cast Concrete Beams in March 2007. Installed Asphalt on Bridge Approach in July 2007.

Stage I was completed in February 21, 2008 and the traffic was switched to this newly constructed portion of the bridge by continuing to maintain one westbound traffic lane. Stage II began on February 25, 2008.

In 2008, the contractor completed the removal of the southern half of the bridge, installed the new pre-stressed concrete box beams for the superstructure, completed the installation of the water and Con Edison gas mains across the bridge along with their connections to the mains in the approaches, placed the reinforced concrete bridge deck, as well the light weight concrete fill within the limits of the bridge approach slabs, and the back fill behind the concrete fill. In addition, the contractor also completed work on the left lanes of the service roads which included saw cutting and removing the existing pavement, placing roadway base course and asphalt pavement, installing the steel faced curb, pouring sidewalk slabs and constructing reinforced concrete approach slabs and sleeper slabs.

The southern half of the bridge was opened to traffic on November 26, 2008, thus restoring the two way traffic onto the bridge structure. The contractor also reopened the left lanes of the east and west service roads and restored all turning movements from the east and west service roads onto the bridge.

At the end of 2008, Stage III and Stage IV construction were in progress. The activities are concentrated on one-half of the service roads. Weather-sensitive work such as placing the concrete base and asphalt pavement on service roads will be completed in the spring of 2009. The service roads will be reopened to two lane traffic after the completion of Stage IV work.

The four bridge project is expected to be complete in May 2009.

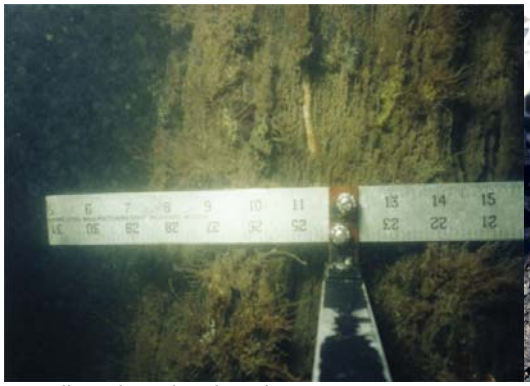
MARINE BORER REMEDIATION (MANHATTAN & BROOKLYN)

Marine borers pose an immediate and serious danger to the thousands of piles and other structures of timber built in the marine environment. In New York Harbor, as the water quality improved due to many years of clean up efforts, marine borer (limnoria, teredo, etc.) activity has increased significantly in recent years. The recent inspections of timber structures by various local agencies (such as The Port Authority of NY & NJ, NYS Department of Transportation, NYC Department of Sanitation, and NYC Economic Development Corporation) indicate increasing

damage to their structures resulting from marine borer activity. These agencies are implementing measures to protect the structures against marine borers.

Marine Borer – Limnoria Species

Marine Borer – Teredo Species



Medium Limnoria Infestation

Teredo Damage (holes up to ¼" diameter)

In October 1999, the Department began a study to assess the existing damage caused by marine borers as well as the potential for future damage at several waterfront DOT structures, including the supporting structures of the relieving platforms along the FDR and Harlem River Drives, and the timber piles and structures of the Carroll Street and Ocean Avenue bridges in Brooklyn. The underwater inspection of timber piles supporting the FDR Drive began on May 8, 2000. Inspection of the Brooklyn sites was conducted during the week of October 23, 2000. The inspections were completed in October 2000, and the Marine Borer Evaluation Report was published in June 2001. Using the results of the underwater inspections, preliminary plans were developed for the implementation of repairs and remediation measures to protect the structures from attack. These preliminary plans were completed in December 2001. The final design is complete. Mitigation work for the impact of the construction on the bodies of water will be done under a separate contract. The construction work is expected to commence in summer 2009, and to be complete in 2013.

ROOSEVELT AVENUE BRIDGE OVER VAN WYCK EXPRESSWAY (QUEENS)

The existing bridge is a two level dual-use steel viaduct consisting of 27 spans. The first level, which carries Roosevelt Avenue, consists of a plate girder floor beam system supported by steel columns, intermediate piers supporting a bascule span spanning over the Van Wyck Expressway, and end abutments. The second level of the viaduct supports and carries the overhead NYC Transit Authority's #7 – Flushing line subway structure.

Concrete deck repairs were performed in July, August, and October of 2003, June and July of 2004, April, May, June, and July of 2005, and June and July of 2006. In the summer of 2005, the When and Where contractor repaired red and yellow flag conditions caused by damage by over-sized trucks using the Van Wyck Expressway. Red-flagged steel shoring and yellow-flagged cracked stringer connection angles were repaired in the spring of 2008.

The project, currently in the preliminary design phase, will include the construction of a new concrete-filled steel grid deck, rehabilitation of the existing east and west viaduct sections, bascule span, piers, abutments, and painting of the entire bridge. In addition, a new bicycle/pedestrian path will be constructed on the north and south sides of the bridge.

The lower level carrying Roosevelt Avenue will be reconstructed in three stages. Both vehicular and pedestrian traffic will be maintained throughout the construction of the bridge, with one lane in each direction. Construction is expected to begin in May 2011, and is expected to be complete in November 2013.

SHORE ROAD CIRCLE BRIDGE OVER AMTRAK (BRONX)

This project will include the removal of the existing two span bridge and the construction of a new single span bridge structure with a reinforced concrete deck over steel girders. The work will also include the construction of new reinforced concrete abutments and wing walls, as well as new parapet walls with protective steel fences. The bridge will be reconstructed in three stages, with one lane of traffic maintained in each direction during construction. Construction was expected to begin in May 2008, and is expected to be complete in May 2011. Due to Amtrak's inability to provide the electric traction crew services for track outage, the construction activities on this project are on hold pending resolution of the problem.

Shore Road Circle Bridge in 2003. (Credit: NYSDOT)

A Notice to Proceed for the project was issued to the contractor with a start date of May 18, 2008.

WESTCHESTER AVENUE BRIDGE OVER THE HUTCHINSON RIVER PARKWAY (BRONX)

This two span bridge supports a transit structure overhead and has substandard clearance over the highway below. A project to install an ITS solution, which includes an overheight vehicle detection system that flashes signs directing vehicles identified as being over 9' in height to exit the parkway, was substantially completed on December 3, 2004. It also includes cameras that are activated by acoustics and that will document future damage to the bridge as well as the offending vehicles' descriptions and plate numbers for recoupment of costs by the City. The

contractor completed extra work associated with landscaping in the spring of 2006. A separate project is underway to reconstruct the bridge and lower the Parkway.

Westchester Avenue Bridge in 2001. (Credit: NYSDOT) Overheight Sensor Unit on the Hutchinson River Parkway. (Credit: Roly Parroco)

New Vehicle Detection System.

Video Stills From the Westchester Avenue Bridge BDSS.

The Westchester Avenue Bridge's vertical clearance over the Hutchinson River Parkway is sub-standard. Due to the number of truck and bus vehicles that mistakenly enter the Hutchinson River Parkway, where commercial vehicles are not allowed, the fascia steel girders of the bridge have been severely impacted and damaged numerous times. The planned lowering of the parkway will make it possible to eliminate the existing sub-standard vertical clearance of the bridge over the parkway without adversely impacting the NYCT elevated structure and its transit train operations. The total length for the lowering of the parkway will be 1000 feet (north and south), with a maximum lowering of the parkway of 2.5 feet under the Westchester Avenue Bridge.

The rehabilitation of the bridge will include the replacement of the existing reinforced concrete deck slab with a new reinforced concrete deck, steel faced curbs, a new parapet wall and

protective screenings, concrete sidewalks, rehabilitation of the damaged steel fascia girders, and replacement of the diaphragms and other bridge elements, including a new steel water main.

This rehabilitation project is currently in final design. Computer traffic simulation models for the proposed maintenance and protection of traffic schemes for both the Westchester Avenue Bridge and the Hutchinson River Parkway are underway. The purpose of the models is to perform traffic capacity/queuing analyses, traffic signal timing optimization and traffic network simulation for the highway and streets. Construction is expected to begin in September 2011, and is expected to be complete in May 2014.

WOODSIDE AVENUE OVER LIRR (QUEENS)

This project, currently in its final design phase, will include the removal of the existing three span bridge and the construction of a new single span structure. The superstructure and abutments will be completely redesigned to comply with current seismic requirements. The bridge will be fully closed to traffic for ten months. Traffic will be detoured to adjacent streets during this period. Construction is expected to begin in December 2012, and is expected to be complete by December 2014.

Woodside Avenue Bridge. (Credit: NYSDOT)

5TH AVENUE BRIDGE OVER LIRR & SEA BEACH NYCT (BROOKLYN)

The bridge is a four span concrete-encased steel girder and floor beam structure, built in 1914. The reconstruction project will include replacement of the superstructure, rehabilitation of the abutments and wingwalls, reinforcement of existing piers, construction of new reinforced concrete sidewalks, approach slabs, new concrete parapet, and bridge fence. Construction is expected to begin in May 2013, and is expected to be complete in June 2015.

5th Avenue Bridge. (Credit: NYSDOT)

EAST 8TH STREET ACCESS RAMP (GUIDER AVENUE RAMP TO BELT PARKWAY) OVER BELT PARKWAY (BROOKLYN)

The East 8th Street access ramp (Guider Avenue ramp) provides vehicular access to the westbound Belt Parkway from Coney Island Avenue and the surrounding area, south of the Belt Parkway. The bridge also serves pedestrian traffic crossing the Belt Parkway. The bridge is a four span, simply supported, multi-girder steel superstructure with a reinforced concrete deck. The abutments and wingwalls are also reinforced concrete, as are the three piers. The entire substructure is supported on reinforced concrete pile caps and steel piles. The project will include the replacement of the superstructure with new steel stringers, a cast-in-place deck including a new sidewalk, a new steel bridge railing with protective screen fencing, and the replacement of the tops of the existing pier columns and abutments. In addition, the piers will be modified by adding two columns on new steel pile foundation, and underdeck and ramp lighting will be installed, as well as new catch basin frames. The ramp will be closed to both vehicular and pedestrian traffic for the duration of the reconstruction. Traffic will be diverted to local streets. Construction is expected to begin in June 2009, and is expected to be complete in February 2011.


East 8th Street Bridge in 2002. (Credit: NYSDOT)

11TH AVENUE VIADUCT (WEST 30TH STREET TO WEST 33RD STREET) OVER LIRR WEST SIDE YARD (MANHATTAN)

This project will consist of the re-decking of the viaduct, the replacement of the sidewalks, the upgrading of the existing bearings to seismic isolation bearings, and the replacement of the street lighting. The work will also include performing repairs of the existing pier and abutment walls.

The viaduct will be constructed in two stages, one half of the viaduct at a time. Three south bound travel lanes will be maintained at all times. Construction is expected to begin in May 2009, and is expected to be completed in February 2011.

11th Avenue Viaduct (West 30th Street to West 33rd Street) in 2006. (Credit: NYSDOT)

15TH AVENUE, 18TH AVENUE, 17TH AVENUE, AND 20TH AVENUE BRIDGES OVER NYCT (BROOKLYN)

A Notice to Proceed for the $17.7 million reconstruction of these four bridges was issued to the contractor with a start date of September 29, 2003. The 15th Avenue Bridge is an arch barrel bridge, constructed in 1912-1913 between 63rd and 64th Streets. Age, weather and increased traffic had affected the bridge. The roadway slab, concrete abutments and concrete piers were severely deteriorated. The bridge had outlasted its useful life. The scope of this project included the removal of the existing pavement, sidewalk, piers, columns, roof beams, portions of the abutments and the concrete arches over the NYCT tracks. The reconstruction included portions of the abutments, installation of precast reinforced concrete pier wall and deck panels, construction of a reinforced concrete deck on top of precast deck panels, and the installation of a 300 mm water main, 408 mm gas main and electric facilities. The approach slabs and bridge joints were replaced. In addition, new roadways, sidewalks, steel faced curbs, and a concrete parapet with pedestrian fencing and street lighting were constructed. The 15th Avenue Bridge was substantially completed on February 8, 2005.

15th Avenue Bridge in 2002. (Credit: NYSDOT). Final Touches on Completed Bridge.

The 18th Avenue Bridge is also an arch barrel bridge, constructed in 1912-1913 between 63rd and 64th Streets. Age, weather and increased traffic had affected the bridge. The roadway slab, concrete abutments and concrete piers were severely deteriorated. The bridge had outlasted its useful life. The scope of this project included sewer work, the removal of a portion of the existing abutments, columns, roof beams, piers and the arches over the NYCT tracks. Cast-in place concrete piles, a steel superstructure, and new integral abutments were installed. The water main, gas main, and sewer were removed and relocated. A new concrete deck, approach slabs, and sidewalks were also part of this reconstruction project. The bridge was constructed in four stages, with one lane open in each direction at all times, as well as pedestrian access to local businesses. The 18th Avenue Bridge was substantially completed on May 16, 2005.

18th Avenue Bridge in 2003. (Credit: NYSDOT) Bridge Nearing Completion.

Finishing the Road. Completed 18th Avenue Bridge.

Similar construction at the 17th Avenue and 20th Avenue Bridges began after the completion of the 15th and 18th Avenue Bridges. The reconstruction of the 17th Avenue Bridge began on May 17, 2005. Effective July 13, 2005, the bridge was closed to vehicular traffic. The work included the demolition of the existing concrete arch superstructure and the existing concrete piers to top of footings. The superstructure was replaced with a new four span reinforced pre-cast pre-stressed rigid frame with new reinforced pre-cast pre-stressed concrete piers and slabs. Utilities were upgraded by installing additional 300 mm water main, gas main and electrical ducts. The bridge was re-opened to vehicular and pedestrian traffic on December 13, 2005, 29 days ahead of schedule. The 17th Avenue Bridge was substantially completed on February 24, 2006. The sidewalks were reopened to pedestrian use 16 days ahead of schedule earning the contractor the maximum incentive payment of $150,000. The total 17th Avenue Bridge project was completed 45 days ahead of schedule.

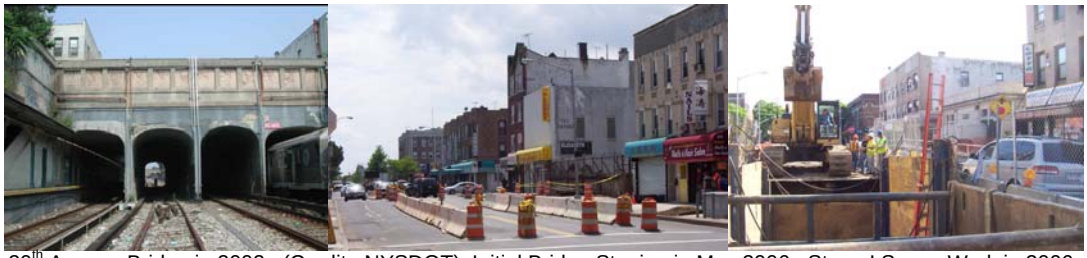
17th Avenue Bridge in 2002. (Credit: NYSDOT) Prior to Reconstruction in 2005.
Inspecting the Bridge Before Construction.

Demolition of the 17th Avenue Bridge Deck. Casting the New East Abutment Wall.
Installing Precast Concrete Footings.

Installing Pier Walls for the 17th Avenue Bridge. Installing Precast Deck Panels.
Placing the Reinforced Concrete Bridge Deck.

Completed 17th Avenue Bridge and Fence.

Work on the 20th Avenue Bridge began on May 15, 2006 after the utility company performed extensive work on the gas main. The bridge was completed in fall 2008. The scope of this project included the demolition of the existing six span reinforced concrete arch superstructure and replacing it with a single span integral abutment reinforced-concrete composite superstructure. Work was performed on the bridge in stages, maintaining two lanes traffic flow on 20th Avenue at all times. Utilities were upgraded by installing new combined sewer pipes, manholes, and a water main.

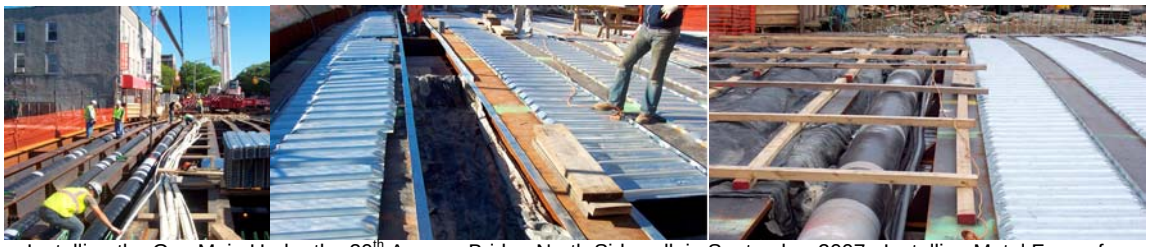


20th Avenue Bridge in 2002. (Credit: NYSDOT) Initial Bridge Staging in May 2006. Stage I Sewer Work in 2006.

Removing the 20th Avenue Bridge Arch Overburden in January 2007. Bridge demolition in February 2007.

20th Avenue Bridge Structural Steel Erection in August 2007.

At the end of 2007, the contractor had completed sewer work, pile driving for the new abutments, soldier piles and lagging. The installation of steel girders and new abutments for the north side of the bridge was also complete, and installation of stay-in-place deck forms and gas main work was in progress.



Installing the Gas Main Under the 20th Avenue Bridge North Sidewalk in September 2007. Installing Metal Forms for the Bridge Deck in November 2007. Gas Mains Prior to Modification in December 2007.

Deck rebar installation was completed on February 4, 2008, and concrete placement began on February 7, 9, and 10, 2008. Concrete was placed for the west approach slab on February 27, for the north bridge sidewalk on March 3, the west roadway base on March 4, the east roadway concrete base on March 7, and the east and west sidewalks of the north bridge on April 8, 2008. The contractor completed construction of the lagging walls on both sides of the bridge on May 29 and completed demolition of the eastern half of the bridge over the weekend of May 31, 2008. On June 16, concrete was poured for the abutment bearing piles. The remaining six steel girders over NYCT tracks were erected on July 12, 2008. The concrete placement for the bridge deck was completed on August 18, 2008.

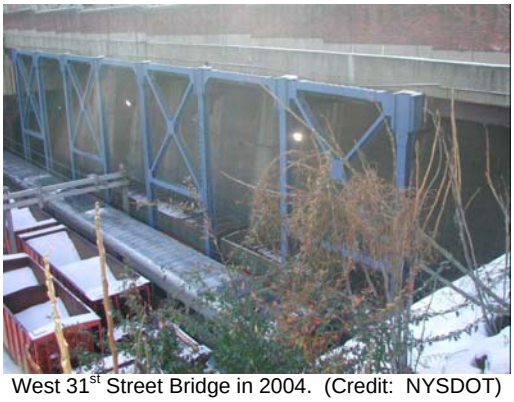
Erecting Steel Stringers on the 20th Avenue Bridge in July 2008.

Installation of Slab Rebars in August 2008. New Bridge Open to Traffic.

The 20th Avenue Bridge was substantially completed on November 20, 2008.

WEST 31ST STREET BRIDGE OVER AMTRAK (MANHATTAN)

This bridge between Ninth Avenue and Dyer Street, is a nine simple span multi-girder jack arch encased in concrete, and was built in 1909. The superstructure is supported by the west abutment, the south retaining wall, and steel columns resting on spread footings. The project will involve installation of new floorbeams and steel stringers with a reinforced concrete deck slab, as well as the bridge seats and steel pier columns. Traffic will be maintained during the relocation of the utilities, but the bridge will be closed during the bridge replacement. This project, currently in the final design stage, is expected to begin in December 2012, and is expected to be complete in March 2016.



West 31st Street Bridge in 2004. (Credit: NYSDOT)

EAST 78TH STREET PEDESTRIAN BRIDGE OVER FDR DRIVE (MANHATTAN)

The current bridge is a nine span reinforced concrete structure over the FDR Drive. There is a ferry house on the East River Esplanade which was used for storage for the old ferry when the bridge was built in 1940. The bridge is supported on the ferry house structure on the Esplanade side. This project, currently in its final design phase, will include the removal of the entire superstructure; concrete deck, floor beams, parapet, girders, railing, protective screening, encased steel beams in the ferry house, existing concrete stair case on the esplanade side, existing substructure of piers, and ramp walls and wall of the ferry house, as well as a portion of the pier foundations below grade. The new fourteen span bridge will include steel piers with caisson foundations, a ramp retaining wall, and new superstructure using welded structural tubing, vertical steel railing, and horizontal hand rails, as well as protective fencing. A new cast-in-place reinforced concrete deck will be installed. The proposed west ramp will be enclosed with

a stone masonry wall to match the existing park wall. The new bridge will comply with ADA regulations.

During construction, pedestrian traffic will be detoured to the 71st and 81st Street pedestrian bridges. Construction is expected to begin in July 2009, and is expected to be complete in August 2010.

East 78th Street Bridge.

153RD STREET BRIDGE OVER METRO NORTH (BRONX)

This project, currently in the final design stage, will construct a two-span, single tower, cable stayed vehicular bridge. It will be the first of its kind in New York City. The new four lane bridge will extend East 153rd Street in the Bronx across the Mott Haven rail yards from Morris Avenue to the Grand Concourse just north of Hostos Community College in the Melrose Section of the Bronx. This bridge will complete a link the street lost in the early 1980's when the old turn-of-the-century bridge was closed and demolished because of its age and deterioration. Construction of the new bridge is tentatively scheduled to begin in the spring of 2014 and be completed by the end of 2017.

Original 153rd Street Bridge. Bridge in Early 1980's.

The new bridge will significantly ease congestion on the current east-west streets in the South Bronx, along 149th and 161st Streets as well as on the local streets in this neighborhood. With this bridge, East 153rd Street will be a continuous east-west thoroughfare from the commercial hub of Third Avenue to the Civic Center area of the Grand Concourse. It will serve the new revitalization projects of Melrose Commons, the Concourse Shopping Plaza and the Bronx Criminal Court Complex.

The bridge's graceful design, similar to the Tampa Bay Bridge in Florida, will create a very prominent landmark for this neighborhood. The cable-stayed structure will contain a tower rising above East 153rd Street to add to the Bronx skyline, with ribbons of steel cables holding up the roadway structure. The roadway will run between the two towers, and the sidewalk and bicycle

lanes will be located on cantilever sections outside of the towers. This will reduce the overall depth of the superstructure by reducing the floor beam depths.

Rendering of New 153rd Street Bridge

EAST 183RD STREET BRIDGE OVER METRO NORTH (BRONX)

This project will include the removal of the existing single span bridge and the construction of a new single span bridge structure with a reinforced concrete deck over steel girders. The work will also include the rehabilitation of existing abutments and wing walls. The bridge will be closed during construction and will be reconstructed in a single stage. Construction is expected to begin in June 2013 and is expected to be completed in August 2014.

East 183rd Street Bridge in 2002. (Credit: NYSDOT)

Specialty Engineering and Construction

Design-Build

In 2008 the Department continued to use the Design-Build process to expedite capital bridge rehabilitation. These contracts retain the same company for both design and construction on selected projects. It is evident that there are many advantages to the Design-Build program, including the use of one consolidated procurement rather than two or more, resulting in significant time savings; the ability to commence construction before design completion; the avoidance of project escalation costs as construction commences two or three years earlier than with the conventional design-bid-build method; minimization of design change orders; and better coordination between design and construction, as critical field issues are addressed expeditiously. In addition, the design is custom made and reflects the capabilities and strength of the specific contractor; the Department establishes a single point of contact for communicating its goals and objectives; and overall costs are reduced substantially.

RIKERS ISLAND BRIDGE OVER RIKERS ISLAND CHANNEL (QUEENS)

Cores taken from the bridge deck in 2003 revealed that the estimated useful life of the deck would soon expire, thus making bridge rehabilitation necessary. In 2007, the bridge carried approximately 13,496 vehicles per day.

Rikers Island Bridge in 2001. (Credit: NYSDOT)

The Division had previously completed the replacement of the bridge's substructure in 1998. The salty environment of the channel significantly contributes to the deterioration of the superstructure. This continued deterioration could also negatively impact the recently completed substructure work. The Division considered Design-Build to be the best delivery method for this project, as it can expeditiously bring projects to the construction stage, and is the preferred method in all cases where time is of the essence. As the bridge exclusively serves the Rikers Island Correctional Facility, the replacement of the bridge will require coordination with the Department of Corrections. Construction is expected to begin in 2017, and is expected to be complete in 2019.

As an interim measure, a project was planned to rehabilitate the bridge deck. The Notice to Proceed was issued to the contractor with a start date of August 24, 2005.

2006: Looking North at a New Bridge Slab And The Roadway Repairs. Painting Under the Bridge.

2006: Performing Underdeck Repairs. Working Inside the West Rebar Box Frame. Beam Repair. Concrete Placement.

The project work was expanded to include superstructure painting, various superstructure repairs, and repairs of the pier caps. The rehabilitation of the bridge deck was substantially completed on December 22, 2006. The painting was completed in 2006, and all of the other repairs were completed in summer 2007. This rehabilitation will allow the extension of the bridge's useful life to at least 2017, when the existing bridge will be replaced.

Assistant Civil Engineer Leonid Gitis and Oded Horodniceanu Inspecting the Bridge.

BRUCKNER EXPRESSWAY BRIDGES (NB AND SB) OVER AMTRAK & CSX (BRONX)

A tanker truck carrying home heating fuel overturned and caught fire on the northbound bridge on the evening of October 4, 2005. The traffic on the bridge, and on the Amtrak and CSX railroad lines below, was adversely affected. The bridge was inspected and core

samples of the concrete from the fire-affected deck were tested. Division crews assisted in emergency repairs and clean-up, re-setting all expansion plates on the abutment, and performing deck repair. The crews worked continuously, and the roadway was reopened in time for the morning rush hour on October 6, 2005.

Bruckner Expressway Bridge in 2002. (Credit: NYSDOT)

2005: The Tanker Truck. Repairs and Cleanup. (Credit: Bojidar Yanev)

To protect the trains and railroad facilities below the bridge after the October 4, 2005 tanker truck fire, contractor crews began the nighttime installation of protective timber shielding under the bridge on October 5, 2005. The project was completed on November 8, 2005. The Division's Surveying Unit assisted the Inspections Unit in monitoring the deflection of the bridge.

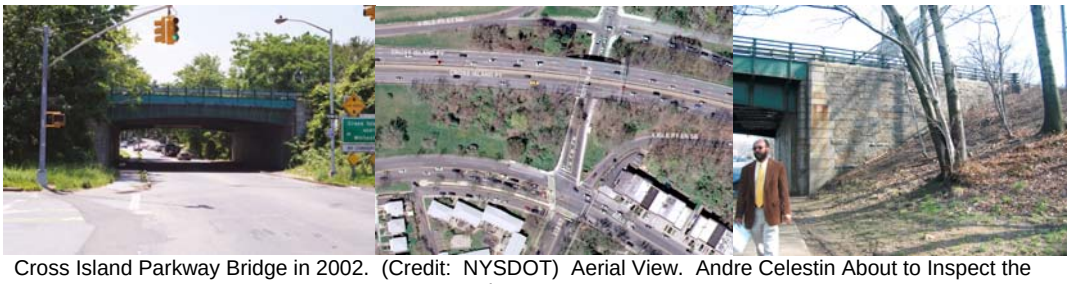
Deteriorated Bridge Deck With Exposed Rebar and Warped Steel Bracing Due to the Heat From the Fire. Timber Shielding on the Underside of the Bridge.

Arial View of the Bridges in August 2008.

The fire on the bridge weakened its members. While the immediate results of the fire were addressed by in-house forces, the aftereffects remain unresolved. The most recent inspection conducted on September 14, 2006 revealed that at least four girders have sagged and they are hit by CSX railroad cars below. The concrete deck has separated from the steel girder and there is a one to two inch gap between the top of the flange and the bottom of the haunches. In addition, the diaphragms between the girders have been burned and their capacity has been weakened. Repairs requiring immediate attention were handled by the When and Where contractor. The contractor installed additional timber bracing of the bridge's timber shielding in January and February 2007, performed emergency removal of loose underdeck concrete in July and August 2007, and repaired a red flag condition at the bridge stringers in September 2007. This will be followed up by the replacement of the bridge's northbound superstructure and the southbound deck, which will be done under a Design-Build contract. A Notice to Proceed was issued to the contractor with a start date of October 27, 2008. Construction is expected to be complete in November 2010. The bridge carries approximately 140,000 motorists and pedestrians per day.

CROSS ISLAND PARKWAY BRIDGE OVER FORT TOTTEN ENTRANCE (QUEENS)

A recent inspection by the Division revealed that the superstructure of the bridge has outlived its useful service life. The effects of age and weather have rendered reconstruction necessary. This project will include a new superstructure; pushing back the abutments to establish a longer bridge; adding one lane in each direction on 212th Street; geometric alignment improvements; and signal and lighting modifications. This project is currently in the preliminary engineering stage. Construction is expected to begin in winter 2015, and is expected to be complete in 2018.



Cross Island Parkway Bridge in 2002. (Credit: NYSDOT) Aerial View. Andre Celestin About to Inspect the Abutment.

Cross Island Bridge Exit Ramp on the Northeast Side. Bridge Underdeck. South View of the Bridge. (Credit: Tamara Berlyavsky)

HARLEM RIVER DRIVE AT EAST 127TH STREET (MANHATTAN)

This project involves the replacement of the existing 11 span bridge and the reconstruction of the Harlem River Drive between the Willis Avenue and Third Avenue Bridges, in addition to various highway improvements. It eliminates a major weaving problem between the southbound Harlem River Drive traffic destined for the Second Avenue exit and the Third Avenue Bridge exit ramp, and allows at-grade access for a future Park/Promenade to be developed by the Department of Parks at 127th Street between the Harlem River Drive and the Harlem River. The viaduct currently carries two northbound and three southbound traffic lanes and serves approximately 79,000 vehicles per day. This area currently has 40 times the State average number of accidents. Construction is expected to begin in spring 2014, and is expected to be complete in spring 2016.

Harlem River Drive at East 127th Street. Deputy Director of Design-Build Beatriz Duran and Director of Design-Build/Emergency Contracts Chris Sklavounakis at the Bridge.

EIGHT RAMPS AND ONE PEDESTRIAN BRIDGE AT THE ST. GEORGE STATEN ISLAND FERRY TERMINAL (STATEN ISLAND)

Ferry service between Staten Island and Manhattan began in 1898, and its operations were taken over by the City's Department of Docks and Ferries in 1905. Today it is run by NYCDOT's Passenger Transport Division and services more than 19 million passengers each year, according to Captain James C. DeSimone, the ferry's Chief Operations Officer. The St. George Ferry Terminal itself recently underwent a major reconstruction project. The old drab, dingy building was converted into a well-lit, modern multi-modal facility. In addition to ferry service, the terminal also includes a very active MTA bus station and a Staten Island Railway Station. To complete the make-over of the St. George Terminal, the Division's Design-Build Unit is undertaking a major rehabilitation project to upgrade vehicular access to the site.

Currently a series of eight ramps carry bus and passenger car traffic in and out of the facility. Seven of the eight ramps were constructed in 1948, with the eighth dating back to the early part of the 20th century. The last major structural work on these bridges was a deck replacement project in 1985 that only addressed three of the eight bridge structures. The planned design-build project will upgrade these eight vehicular structures (and one pedestrian bridge), and provide a design life of 75 years. For seven of the ramps, the project will provide new decks and eliminate joints where feasible, retrofit poorly detailed steel connections, and rehabilitate/replace deteriorated steel superstructure and substructure members, as well as install new paint systems. Lead paint removal and the installation of a new drainage system as well as a pigeon deterrent system will also be included. The eighth ramp is the existing load-restricted north ramp adjacent to the Richmond County Bank Stadium. It will be demolished and reconstructed on a more efficient alignment in order to alleviate traffic congestion at the intersection of Richmond Terrace and Wall Street. In addition, this project will replace the superstructure of a pedestrian bridge connecting the terminal to an office facility, and will address traffic improvements for the entire stretch of Richmond Terrace outside the terminal. Construction is expected to begin in fall 2009, and is expected to be complete by fall 2012.

Arial Views of the Staten Island Ferry Terminal Ramps.

The Ferry Terminal Pedestrian Bridge.

Emergency Contracts

BORDEN AVENUE BRIDGE OVER DUTCH KILLS (QUEENS)

The Borden Avenue Bridge over Dutch Kills is located just south of the Long Island Expressway between 27th Street and Review Avenue in the Sunnyside section of Queens. It is a retractile-type movable bridge. The original bridge construction was completed in 1908 and was opened to traffic on May 25, 1908.

The bridge structure carries two lanes of vehicular traffic with sidewalks on either side. The roadway is 34 feet wide and the sidewalks are 8 feet wide. In 2007, the bridge carried approximately 15,747 vehicles per day.

Borden Avenue Bridge. (Credit: Peter Basich) General View of the Crack in the Wingwall.

In the spring of 2008, the Department determined that an existing crack in the west abutment's wingwall had opened up further. Following a series of subsequent inspections, it was determined that there is continuous movement of the west abutment wall. In an effort to mitigate this condition, two pressure relief joints were installed in the roadway, and the speed limit for eastbound traffic was posted at 15 miles per hour. Unfortunately, these measures did not stop or slow the abutment wall's movement.

On September 11, 2008, the Department and its consultant met to discuss the problem, and it was determined that there were two possible solutions: either to install a tieback-suported anchoring system, which would restrain the west abutment wall's movement, or, to fully replace the bridge's west abutment wall and its wingwalls. The Department would not be able to determine which solution would be the best long-term solution until detailed inspections of the abutment wall and wingwalls were performed.

In early 2009, based on the findings of the underwater inspection, the consultant provided its recommendation to the Department to proceed with the second option, and the Department concurred.

The movement of the wall is undermining the stability of the bridge. Due to the potentially serious danger to life, public safety and property posed by the current condition, it is critical that the repair work be performed as expeditiously as possible.

On October 16, 2008, in the interest of public safety, pursuant to Section 103(4) of the General Municipal Law and Section 315 of the New York City Charter, the Department declared that an emergency exists relative to the movable bridge carrying the Borden Ave. over the Dutch Kills in Queens.

The repairs will include the following: removal of the fill material under the roadway and sidewalks from behind the west abutment and between the wingwalls; relocation of the existing utilities; digging of a test pit to inspect the supporting piles; inspection of the condition and the taking of measurements; and the implementation of the appropriate repair solution based on the inspection findings.

The bridge was closed at noon on December 31, 2008. A Letter of Intent for the emergency repair of this bridge was issued to the contractor with a start date of January 6, 2009. Construction is expected be complete by June 2009.

Borden Avenue Bridge Closed for Emergency Repairs. (Credit: Bernard Ente)

When and Where Unit

In 2008, the following structures were worked on under the Division's When and Where contracts: 86th Street over Brooklyn-Queens Expressway, 150th Street over Ramp to JFK Expressway NB over Amtrak, West 181st Street Pedestrian Bridge over Henry Hudson Parkway NB, 32nd Street Bridge over Brooklyn-Queens Expressway, Columbia Heights Bridge over Brooklyn-Queens Expressway, 92nd Street Pedestrian Bridge over Belt Parkway, Knapp Street Bridge over Belt Parkway, Belt Parkway Bridge over Gerritsen Inslet, Belt Parkway Bridge over Paerdegat Basin, Belt Parkway Bridge over Rockaway Parkway, Linden Boulevard Bridge over Cross Island Parkway, FDR Drive NB off Ramp over FDR Drive and South Street, Corlears Park Road Bridge over FDR Drive, FDR Drive NB to Houston Street over Relief, Houston Street Ramp to FDR Drive over Relief, East 6th Street Pedestrian Bridge over FDR Drive, East 51st Street Pedestrian Bridge over FDR Drive, East 64th Street Pedestrian Bridge over FDR Drive, East 78th Street Pedestrian Bridge over FDR Drive, East 111th Street Pedestrian Bridge over FDR Drive, East 120th Street Pedestrian Bridge over FDR Drive, East 10th Street Pedestrian Bridge over FDR Drive, Ramp to NY from 11th Street over

Terrain (Chamber), Greenpoint Avenue Bridge over Newton Creek, Roosevelt Avenue Bridge over Van Wyck Expressway, 163rd Street Pedestrian Bridge over Hawtree Basin, East Tremont Avenue Bridge over Amtrak/CSX, Bedford Avenue Bridge over LIRR Bay Ridge, East Drive Bridge over Bridle Path, East Drive Bridge over East Wood Arch, West Footbridge over Prospect Park Stream, Hill Drive Bridge over Prospect Park Lane, Footbridge north of Boathouse over Prospect Park Lake, West 148th Street Pedestrian Bridge over Amtrak 30th Street Branch, Riverside Drive over 125th Street and Others, Riverside Drive Bridge over West 158th Street, Pedestrian Bridge Near Union Turnpike over Abandoned LIRR, Woodhaven Boulevard Bridge over Atlantic Avenue, Flushing Meadow Park Bridge over Meadow Lake and 69th Road, Tracy Ave Pedestrian Bridge over SIRT South Shore, Bethel Avenue Pedestrian Bridge over SIRT South Shore, Hempstead Avenue Bridge over Cross Island Parkway, Harlem River Drive NB Ramp over Harlem River Drive, Henry Hudson Parkway over Amtrak 30th Street Branch, 79th Street Traffic Circle over 79th Street Pedestrian Plaza, Matthewson Road Bridge over Mac Cracken Ave, Bus Station North over Staten Island Railway, Bus Station South over Staten Island Railway, Bus Station Exit Ramp over Staten Island Railway, Staten Island Ferry Pedestrian Bridge over Parking Lot Exit Roadway, Brooklyn-Queens Expressway over Cadman Plaza/Brooklyn-Queens Expressway WB, 28th Avenue Pedestrian Bridge over Cross Island Parkway, East 71st Street Pedestrian Bridge over FDR Drive, Ramp to New York from Thomson Ave over Jackson Avenue, West 155th Street Pedestrian Bridge over Amtrak 30th Street Branch, Brooklyn-Queens Expressway WB over Furman Street, and East 81st Street Pedestrian Bridge over FDR Drive.

Currently scheduled projects include the Bus Station North Ramp over SIRT, and the Riverside Drive Bridge over West 155th Street.

MARINE WHEN AND WHERE

New York State DOT conducts the underwater inspections of our waterway structures. A contract was needed to facilitate the performance of marine repairs and to maintain structures in need. The objective is to perform marine structural repairs and maintenance together with other appurtenant work, which constitutes repairs of defective and deteriorated parts of bridge structures due to and in a water environment. The Department has neither the staffing nor the equipment to handle this type of special work. The work could not be handled under the usual time and materials When and Where contract, because the work is unique, in that it requires a consultant with underwater-licensed inspectors to supervise and inspect the work for compliance and adequacy. Furthermore, detailed note taking is necessary by the inspectors to check and approve payments for the contractor's work.

Marine bridge repairs already completed include 145th Street Bridge over Harlem River, Hutchinson River Parkway Bridge over Hutchinson River, Shore Road Bridge over Hutchinson River, Boston Post Road over Hutchinson River, Depot Place Bridge over Conrail Hudson Division, Belt Parkway Bridge over Mill Basin, Roosevelt Island Bridge over East River/East Channel, Hamilton Avenue Bridge over Gowanus Canal, 163rd Street Pedestrian Bridge over Hawtree Basin, and Belt Parkway Bridge over Fresh Creek.

Some of these locations experience repeated damage due to heavy marine traffic and/or a narrow channel. The issuance of new flags necessitates new visits to even recently completed projects. Timber fender systems are subject to recurring hits by barge traffic, and consequently require periodic restoration. In addition to damage due to impact, timber elements are also replaced because of deterioration and attack by marine borers, whose activity has vastly increased as the water quality in the New York City area has improved.

An unusually large amount of work under the Marine When and Where contract was necessitated due to red flag conditions at the Belt Parkway Bridge over Mill Basin. A recent

condition inspection of the bridge found twelve of the fourteen pier-columns supporting the structure to be severely deteriorated. Because they were not considered capable of adequately supporting the bridge, repairs had to be performed without delay. As soon as the required DEC and Coast Guard Permits were received, the Marine When and Where contractor mobilized at the site. The work encompassed cleaning off the deteriorated concrete from the affected pier-columns and installing specially-formed reinforced structural concrete jackets to restore the strength of each column. The work is laborious and time consuming because the daily tide movements affect the ability to access the specific column areas. The entire site itself is not accessible by the usual construction equipment, so the work must be carried out principally by hand.

Mobilizing the Barge and Container. Installing the Barrier Wall Around Columns 13 and 14. The Barrier Wall System at Low Tide. General View of Belt Parkway over the Work Area Below. (Credit: Thomas Leung)

Currently scheduled projects include additional repairs to the Ocean Avenue Pedestrian Bridge over Sheepshead Bay, the West 207th Street/West Fordham Road Bridge over the Harlem River (University Heights Bridge), and the Third Street Bridge over the Gowanus Canal.

PAINTING

In 2008, the following bridges were painted: Belt Parkway Bridge over Bay Ridge Avenue, Belt Parkway Bridge over Nostrand Avenue, Braddock Avenue Bridge over Cross Island Parkway, Brooklyn-Queens Expressway Westbound and Eastbound over Cadman Plaza, Bulova Avenue Bridge over the BQE West Leg, Coney Island Avenue Bridge over Belt Parkway, Cross Bay Boulevard over Belt Parkway, Eagle Avenue Bridge over East 161st Street, Elliot Avenue Bridge over Queens Boulevard, Grand Avenue Bridge over Long Island Expressway, Grand Concourse Bridge over East 167th Street, Grand Concourse Bridge over East 204th Street, Hamilton Place Bridge over Long Island Expressway, Hutchinson River

Parkway over Hutchinson River, Jamaica Avenue Bridge over the Cross Island Parkway, Linden Boulevard Bridge over Cross Island Parkway, Mosholu Parkway Bridge over Webster Avenue, Park Road (204th Street) Bridge over Bronx River, Riverside Drive Bridge over West 96th Street, Seeley Street Bridge over Prospect Avenue, South Conduit Boulevard Bridge over Belt Parkway, Superior Road Bridge over Cross Island Parkway, Westchester Avenue over Hutchinson River Parkway, Woodhaven Boulevard Bridge over Queens Boulevard, East 14th Street Pedestrian Bridge over Belt Parkway, 49th Street Bridge over the BQE West Leg, 69th Street Bridge over Long Island Expressway, 81st Street Pedestrian Bridge over Belt Parkway, 92nd Street Pedestrian Bridge over Belt Parkway, East 156th Street Bridge over Access to Housing, 236th Street Bridge over Henry Hudson Parkway, Houston Street Bridge Railings over FDR Drive, 17th Avenue Pedestrian Bridge over Belt Parkway (railings), and the Queensboro Bridge Ramp from 11th Street and Terrain.

During 2008, the following structures were also painted: DEP Plants at Bowery Bay, Astoria and Wards Island, DOT Shops at 59th Street, Kent Avenue, and Maspeth, and the DOT Garage at College Point.

GRAFFITI REMOVAL

In 2008, 6,722,630 square feet of graffiti were eliminated. This program focuses its primary attention on the four East River bridges, as well as the following 21 arterial highways: Clearview Expressway, Gowanus Expressway/Belt Parkway, Major Deegan Expressway, Harlem River Drive, Van Wyck Expressway/Whitestone Expressway, Brooklyn-Queens Expressway, Jackie Robinson Parkway, Sheridan Expressway, Hutchinson River Parkway, Henry Hudson Parkway, West Shore Expressway, Richmond Parkway, Martin Luther King Jr. Expressway, Staten Island Expressway, Bruckner Expressway, Prospect Expressway, Grand Central Parkway, Long Island Expressway, Cross Bronx Expressway, Nassau Expressway, and Bronx River Parkway.

Pressure Washing Machine Used for Graffiti Removal. It is Set to 2500 psi and 212˚ F. Bridge Painters Frank Duic and Russell Newme Feeding the Spray Pump and Preparing the Paint.

During 2008, graffiti was also removed from the following structures: Avenue U between 7th and 8th Streets, Bay Street bus shelter, Belt Parkway at Exit #8, Borden Avenue Bridge over Dutch Kills, Bronx River Parkway at Westchester Avenue, Brooklyn Bridge Park, Bruckner Boulevard at Hunts Point Avenue, Caton Avenue Bridge over BMT Subway, Church Avenue Bridge over BMT Subway, Clove Road under the Staten Island Expressway, Coney Island Avenue Bridge over Belt Parkway, Cross Island Parkway, Cross Island Parkway over Francis Lewis Boulevard, East Clifford Place at Walton Avenue, FDR Drive at the Manhattan Bridge, FDR Drive at 34th Street, FDR Drive between East 79th Street and East 81st Street, 5 Boro Bike Tour Route, Grand Concourse over Burnside Avenue, Grand Concourse over East Tremont Avenue, Grand Concourse over East 174th Street, Hamilton Avenue, Jerome Avenue, Korean War Veterans Parkway, Labau Avenue near Staten Island Expressway, Long Island Expressway over Queens Boulevard, Long Island Expressway at 48th Street, Macombs Dam Bridge over Harlem River, Madison Avenue Bridge over Harlem River,

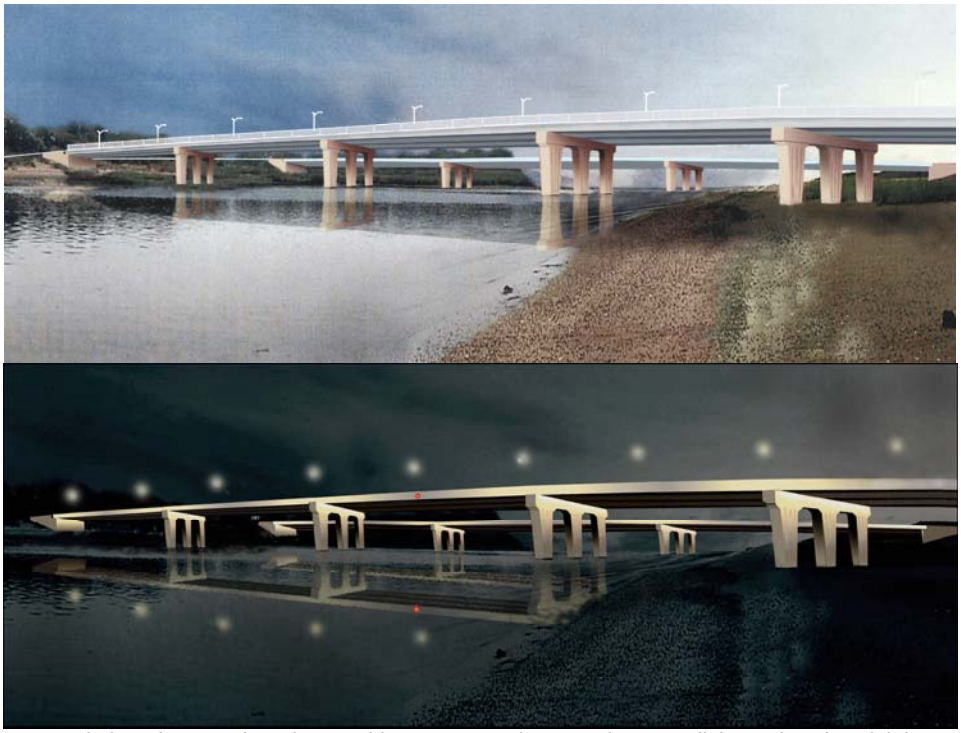
Manhattan Bridge Plaza, Marathon Route, Middleton Service Road at Bruckner Expressway, Mosel Avenue under the Staten Island Expressway, Barrier walls under the overpass on Mosel Avenue between Sable and Price Streets, Queens Boulevard near Long Island Expressway, Richmond Avenue under the Staten Island Expressway, Richmond Parkway, Riverdale Avenue at 235th Street, Shore Road Bridge over Hutchinson River (Pelham Bay Bridge), Spartan Avenue, Sound barriers of the Staten Island Expressway eastbound at Exit #2, Third Avenue Bridge over Harlem River, Willis Avenue Bridge over Harlem River, Woodside Avenue between 43rd Street and 44th Street, East 6th Street Pedestrian Bridge over the FDR Drive, 27th Avenue Pedestrian Bridge over Belt Parkway, 32nd Street at Astoria Boulevard, 42nd Street at 1st Avenue, 43rd Street and 10th Avenue, 73rd Avenue at 199th Street, Abutment wall of the 80th Street Bridge over 71st to 77th Avenues, East 120th Street Pedestrian Bridge over FDR Drive, 145th Street Bridge over Harlem River, East 161st Street under the Grand Concourse, 181st Street overpass at the Henry Hudson Parkway, East 181st Street at Webster Avenue, 191st Underground Street to Broadway, West 207th Street/West Fordham Road over Harlem River (a.k.a. University Heights Bridge), 230th Street between Irwin Avenue and Johnson Avenue, Houston Street Bridge over FDR Drive, 230 Park Avenue, Delancey Street at Ridge Avenue, Pearl Street at Dover Street, Flushing Avenue Service Road over Flushing Avenue, Woodhaven Boulevard and 82nd Street, Woodhaven Boulevard from 73rd to 78th Street, Long Island Expressway at 252nd Street Service Road, 115th Avenue, Hillside Avenue Bridge over Cross Island Parkway, Linden Boulevard Bridge over Cross Island Parkway, Bartow Avenue Overpass, Grand Concourse over East 204th Street, 59 Adams Street, 81st Street Pedestrian Bridge over Belt Parkway, Belt Parkway Bridge over Nostrand Avenue, 92nd Street Pedestrian Bridge over Belt Parkway, Pulaski Bridge over Newtown Creek, South 5th Street, Henry Hudson Parkway over Kappock Street, Sackett Avenue at Williamsbridge Road, and Waldo Avenue at West 238th Street.

Engineering Review and Support

IN-HOUSE DESIGN

In-House Design staff prepares plans and specifications for bridge replacement/rehabilitation projects that enable the Division to restore bridges considered "structurally deficient" to a "very good" condition rating. This unit handles urgent Division projects, as well as special projects under construction by the Bureau of Bridge Maintenance, Inspections and Operations.

Projects underway in 2008 included the Belt Parkway Bridge over Paerdegat Basin in Brooklyn. The existing bridge with its nest of thirteen piers will be replaced in its entirety by two split bridges, one each for eastbound and westbound traffic. The bridge for eastbound traffic will have four piers whereas the bridge for westbound traffic will have two piers. This is the first bridge to be designed by NYCDOT with trapezoidal steel box girders utilizing high performance steel and seismic isolation sliding bearings. In addition, the aesthetics of the bridge will be enhanced by its nightly illumination utilizing light emitting diodes on both fascias and piers. This project will also include wetland mitigation and landscaping in the immediate vicinity of the proposed bridges. The design phase of this project is now complete, and it will be constructed together with two other adjacent bridges in the Belt Parkway Corridor as a combined contract.



Rendering of New Belt Parkway Bridge Over Paerdegat Basin, In Daylight, and Under Nightly Illumination. (Credit: Alexander Berens)

Rendering of Existing and Proposed Belt Parkway Bridges Over Paerdegat Basin. (Credit: Alexander Berens)

Final design is in progress for the component rehabilitation project to replace the concrete-filled steel grid deck of the Greenpoint Avenue Bridge over Newtown Creek, which connects the boroughs of Brooklyn and Queens. The existing bascule span bridge was built in 1990 and carries two lanes of traffic in each direction. The bridge consists of eleven fixed spans and a bascule span. This project will also include the replacement of the cracked stringers and the compression seals at all of the joints, as well as the resurfacing of the approach pavement and the intersection at the Queens end. The project is scheduled to start in December 2009.

Other projects underway include the Union Turnpike Bridge over Cross Island Parkway (and Creedmoor Center Road), and Hillside Avenue Bridge over Cross Island Parkway in Queens. Both bridges are two span rigid frame concrete structures. The In-House Design staff prepared the scope of work and a sub-consultant is performing surveys, borings, corings, hazardous material evaluation, and traffic studies. After the sub-consultant completes these tasks, the unit will proceed with the preliminary design.

This unit is supervising the design of a proposed pedestrian bridge that will connect Park Row to the existing One Police Plaza overpass. The bridge will enhance the area while providing a safe pedestrian connection from Police Plaza to Park Row. The new bridge will be part of a Park Row/Chatham Square reconstruction project, which is being handled by DDC.

In-House Design's Electrical Group reviews and/or prepares contract documents for all electrical and street lighting work on all projects on the Division's Capital Program. Some of the contracts reviewed during 2008 included the Willis Avenue, Broadway, 145th Street, and Wards Island Pedestrian Bridges over the Harlem River; Third Street and Hamilton Avenue Bridges over Gowanus Canal; and Belt Parkway Bridge over Paerdegat Basin in Brooklyn; Roosevelt Island Bridge over East River Channel; Bruckner Expressway NB & SB Service Road (Unionport Bridge) over Westchester Creek in the Bronx; Park Avenue Tunnel; Manhattan Bridge; Brooklyn Bridge; Queensboro Bridge; Williamsburg Bridge; the East River Waterfront; and City Island Road Bridge over Eastchester Bay.

HAMILTON AVENUE ASPHALT PLANT EMERGENCY REPAIRS

In late 2007, the existing support system for the conveyor platform of the Roadway Repair and Maintenance Division's Hamilton Avenue Asphalt Plant exhibited some settlement. This rendered the plant inoperable. Our staff was requested to perform the urgent total design of a new support system. The Surveying Unit conducted field measurements of the damaged structure on December 7, 11, 20, and 21, 2007. Within two weeks, the In-House Design staff designed the system and prepared fabrication drawings for the Bridge Maintenance, Inspections and Operations Bureau. The Division's In-House Repair personnel then fabricated and installed the side frames, bracings, and I-beams necessary to restore operations at the facility. Additional emergency repairs were also made to the drum, conveyor belt, and hopper. Upon completion, Division bridge painters painted the new steel. The plant is now operational and 400 tons of asphalt were processed on January 21, 2008.

NYCDOT Hamilton Avenue Asphalt Plant.

Erecting the New Support System. (Support System Credit: Hany Soliman) Measuring the Steel: Bridge Repairer & Riveters David Collins and Yiu Liu, and Assistant Civil Engineers Clara Medina (Obscured) and Hany Soliman. (Credit: George Klein)

THE WATERFALLS

The Engineering Review Section and its consultant conducted the design review of the foundation for the waterfall structure under the Brooklyn Bridge. Olafur Eliasson's the New York City Waterfalls was a work of public art comprised of four man-made waterfalls in the New York Harbor. Presented by the Public Art Fund in collaboration with the City of New York, they were situated along the shorelines of Lower Manhattan, Brooklyn and Governors Island, including the one installed under the Brooklyn Bridge.

Between April 23, 2007 and March 10, 2008, Specialty Engineering and Construction's When and Where Unit worked on stabilizing the foundation of the park promenade bulkhead underneath the Brooklyn Bridge to ensure the stability of the upcoming temporary waterfall structure. After careful planning and coordination between the Engineering Review Section and its consultant, several flags were issued to the When and Where Unit. The contractor mobilized material, equipment and crews to implement repairs to stop the loss of fill material

which was undermining the area under the Brooklyn side of the bridge. Time was of the essence because the waterfall had to be ready before the summer.

The project was subcontracted to a specialized marine contractor to perform underwater weld patching to plug up numerous holes in the existing steel cofferdam sheeting, thus preventing further loss of the existing fill material. Immediately after the steel sheets were patched, the contractor removed the paving blocks and stored them at an Agency maintenance facility. Then new good fill material was placed and compacted in the voided areas. In addition, specialized flowable concrete fill was placed under the existing concrete walkway as a buttressing wall abutting the patched steel cofferdam. The entire area of the promenade was then backfilled, tamped and graded to the level of the existing paving blocks. The site was then turned over to the outside contractor who installed a concrete foundation and the waterfall structure over the area we prepared. The When and Where contractor completed the work on March 10, 2008. The waterfall contractor erected the tower structure, and the attraction opened on June 26, 2008.

The man-made waterfalls ranged from 90 to 120-feet tall and were on view from June 26 through October 13, 2008. They were lit each night after sunset. The Waterfalls were made of common building materials, mainly scaffolding, pumps and piping. Water from the East River was collected in “intake filter pools”, which were covered in fine mesh and placed underwater. These pools, which filtered the water, protected the fish and aquatic life because they could not penetrate the fabric. Pumps pulled water out of these pools and raised it from the river to the top of the scaffolding through pipes. Water was then pushed over a “trough,” and fell back into the river creating a waterfall effect.

Holes in the Steel Sheet Cofferdam of the Brooklyn Bridge Esplanade in April 2007. View of the Work Area in October 2007. The Barge and Equipment Used on the Steel Cofferdam Repairs. (Credit: Thomas Leung)

October 2007 - View of the Barge Equipment Blocking the East River Waves and Protecting the Crew Patching the Steel Wall. Dockbuilders Preparing Holes Prior to Welding Steel Patches on the Existing Cofferdam. Dockbuilders Applying Splash Zone Compound Over the Welded Steel Patch Plates. (Credit: Thomas Leung)

View of the Pavers Before Work Began to Stabilize the Area in December 2007. January 2008 – Top View of Backhoe Removing the Paving Blocks. Excavated Promenade Revealing the Exposed Steel Cofferdam Under the Concrete Walkway. (Credit: Thomas Leung)

New Concrete Fill Material Under the Sidewalk in February 2008. Excavated Area Backfilled With Sand and Crushed Stone as Top Layer in March 2008. (Credit: Thomas Leung)Waterfall Structure Under Construction in May 2008. (Credit: Russell Holcomb) View of the Structure From the Brooklyn Side in June 2008. (Credit: Thomas Leung)

Waterfall Under the Brooklyn Bridge in July 2008. (Credit: Peter Basich)
At Night in August 2008. (Credit: Bernard Ente)

ENVIRONMENTAL ENGINEERING

The Environmental Engineering staff of the Quality Assurance section provides environmental oversight and compliance on all capital projects in the Division. Lead paint abrasive cleaning projects underway or completed in 2008 included the Queensboro Bridge, Manhattan Bridge, Rikers Island Bridge, Roosevelt Island Bridge, Brooklyn Bridge, Willis Avenue Bridge, and the Williamsburg Bridge. In addition, the unit continued to provide emergency response related to environmental issues.

As part of the Environmental Committee for the Office of Environmental Assessment and Compliance (OEAC), the unit assisted in developing environmental procedures such as spill prevention, control and countermeasures protocols, roadway spill clean-up protocols, RCRA contingency plans and the disposal of universal waste. The unit also worked with OEAC to develop and implement training for working over water as well as the Clean Water Act.

The unit performs quarterly water discharge monitoring in compliance with the NYSDEC SPDES system for bridges that cross waterways such as the Gowanus Canal, English Kills Creek and the Newtown Creek. Environmental oversight was provided to emergency work-over-water projects on the Brooklyn Bridge, Mill Basin Bridge, Roosevelt Island Bridge, Willis Avenue Bridge, Hamilton Avenue Bridge, Gerritsen Inlet Bridge, Paerdegat Basin Bridge, Third Avenue Bridge, Borden Avenue Bridge, Grand Street Bridge, Borden Avenue Bridge, Hutchinson River Parkway Bridge, and Greenpoint Avenue Bridge. This environmental oversight ensured that there was no environmental impact to the city's waterways during emergency repair projects.

The unit also manages hazardous waste generated by both the in-house work of the Division and the capital projects. Through the use of environmental testing laboratories, the unit has

continued to identify and dispose of out-of-date and expired chemical products stored in bridge facilities. Hazardous waste such as spent paints, solvents, oils and lead-paint debris is generated during maintenance and construction projects. This waste is managed in accordance with all applicable regulations for treatment and disposal. The unit is responsible for providing reports to the NYSDEC regarding the management and disposal of this waste.

The unit ensures compliance with storm water regulations, hazardous waste management, Clean Air Act requirements, Clean Water Act requirements, asbestos regulations, lead paint removal protocols, and health and safety on NYCDOT bridge projects. This includes projects such as the Willis Avenue Bridge and Roosevelt Island Bridge, where compliance with environmental concerns such as dredging and dewatering is required in conjunction with submarine cable installation, pier demolition, pier construction, and channel widening.

The unit also provided environmental oversight and management for the environmental remediation of a former car wash and oil change facility located at 670 Grand Concourse in the Bronx. This facility will be demolished to allow construction of a new 153rd Street Bridge over Metro North to provide community access across a rail yard and improve traffic flow. Oversight was also provided during the remediation of a gas station located over the Metropolitan Avenue Bridge. Numerous underground storage tanks needed to be removed and the unit assisted in conjunction with Exxon/Mobil to close the station as part of a planned bridge rehabilitation project.

In addition, the staff continued the implementation of a new quality assurance plan for coating inspection and application on Division bridge structures. Services are implemented through the use of consultant contracts. Coating inspection services and engineering were provided on numerous projects such as the Brooklyn Bridge traveler repair project, Rikers Island Bridge, Roosevelt Island Bridge, Manhattan Bridge, Williamsburg Bridge, Willis Avenue Bridge, and the Queensboro Bridge Painting Project.

BRIDGE PROJECT SPECIFICATIONS

In 2008, the Specifications staff of the Engineering Support Section prepared and/or reviewed contract proposal books and/or specifications for 20 bridge rehabilitation and reconstruction contracts which included several combined or multiple-bridge contracts and four private developer contracts. Seven of these contracts totaling approximately $590 million in construction costs were either bid or advertised for bid. The two bid contracts are currently in different stages of award and registration. Out of thirteen contracts with an estimated construction cost of $1.13 billion that were submitted to the Law Department for approval, nine were approved, and another four are still in the approval process. The specifications for the remaining seven contracts are in various stages of preparation.

Notable among the bridge contracts prepared and/or reviewed are: rehabilitation of the Manhattan Bridge cables and suspenders; approach and ramp rehabilitation of the Brooklyn Bridge (as well as its complete painting); rehabilitation of the 11th Avenue Viaduct over the LIRR West Side Yards (West 30th Street to West 33rd Street); Protection of Timber Structures against Marine Borers; reconstruction of East 8th Street Access ramp (Guider Avenue Ramp to Belt Parkway); reconstruction of East 78th Street Pedestrian Bridge over FDR Drive; reconstruction of Hill Drive Bridge over Prospect Park Lake; and reconstruction of Belt Parkway Bridges over Fresh Creek Basin, Paerdegat Basin, and Rockaway Parkway.

CONVERSION OF DIVISION ENGINEERING ARCHIVES

Since the first digitizing contract of engineering records began ten years ago, we have converted over 58,000 full-size drawings and 20,000 construction photographs into digitized image and data formats, a total of 43 CD-ROMs.

The next phase of the project will consist of the digitizing of the microfilm collection. Since we began microfilming contract and other drawings in the early 1980s, we have accumulated more than 360 microfilm rolls (over 100,000 frames of film). Microfilming of records is rapidly becoming an obsolete technology as it cannot be used to perform rapid searches, sorting of information, or sending and sharing files via the Internet and/or copying electronic files to CDs.

The purpose of the new digitizing contract is to transfer microfilms to a digital CD-WORM media and to consolidate records according to their BIN (Bridge Identification Number) for future use.

While awaiting the award of this contract, the key contract pages of all digitized projects were scanned and placed on the Agency server. By linking drawing images (Title Sheet, List of Drawings, General Notes, etc.) from the digital archives to a contract number in the database file the essential information about every job is supplied.

Server-based records support quality communications and enhance our public image. They ensure faster, flexible and effective delivery, improve document security, and organize, retrieve, distribute and print all documents more efficiently.

We have also started updating the specifications for the preparation of record drawings and electronic media. This major revision of the specifications is concentrated on the elimination of the microfilming requirements, the deletion of hard copies at the end of projects, and conversion to the US custom system. The new specifications are concise, well-illustrated, and simple to follow. A copy of the specifications in PDF format is easy to transmit electronically and we do not need to print large quantities of books.

The switch to electronic media and server-based archiving will save money on drawing submissions as well, and will lead to the establishment of a unified electronic database for bridge archives. Digitizing documents and storing them online, where they are easy to access and print, will simplify contract submission process and cut costs in a long run.

GRACE ASPHALT PLANT

The Department intends to acquire the Grace Asphalt Plant in Corona, Queens (both the real estate and the plant equipment) for its Roadway Repair and Maintenance Division. The acquisition of this private plant will help the City streamline its asphalt procurement and save costs. The Department will also be able to recycle some milled asphalt materials. The Land Use Unit coordinated the ULURP application process for this project.

CRP/EXTELL PARCEL H PROJECT

The CRP/Extell Parcel H, LP project (Riverside Drive between 59th and 72nd Streets) includes the construction of seven new bridges, a ramp, and connector roads along Riverside Drive as a part of the residential and commercial development over the former Penn Central Rail Yard.

The project will also include a half tunnel section in what was formerly known as the Miller Highway Tunnel. When completed, the infrastructure network will be transferred to DOT for maintenance. The Division is providing engineering review of the design drawings, as well as quality assurance inspections, to ensure the developer's compliance with DOT's construction and design standards. Construction is complete for four of the bridges (which are open for traffic), and the other three bridges are under construction. The first phase of construction for the half tunnel section is complete and phase two is in progress. The project is now in its second stage, and is 90 percent complete overall.

Division and Contractor Personnel at the Final Inspection of the Manhattan Bridge Anchorage in February 2008: Director of Quality Assurance Muhammad Afzal, Assistant Civil Engineer Javed Sarwar, Contractor Chief Inspector A. Perez, Assistant Engineer-in-Charge Syed Arfeen, Contractor Assistant Resident Engineer T. Mee, Contractor A. Farkas, Assistant Civil Engineer Yuliy Zak, and Civil Engineer Mohammad Hossain. Touring the Yankee Stadium Redevelopment Project in May 2008: Jennifer Tabakin, Executive Director of OCMC Joe Noto, Deputy Director of OCMC Frank Puccio, Bronx Borough Commissioner Constance Moran, Chief Bridge Officer Henry Perahia, Traffic Deputy Commissioner Michael Primeggia, Director of Engineering Support Mahabal Shah, and Civil Engineer Wen-Yang Tsay.

BRIDGE SEISMIC DESIGN AND RETROFITTING

The seismic retrofitting of bridges in New York City is part of the inspection and rehabilitation program mandated by Congress and administrated by the FHWA through the local authorities. During the period of 1993 to 1996, four major bridge owners in the New York City area (NYCDOT, NYSDOT, MTA, and the Port Authority of New York and New Jersey) retained seismologists to study hard rock seismic ground motions. The rock motions generated by these studies differed from each other and from the AASHTO spectrum as modified by NYSDOT. The differences were such that the resulting retrofit costs varied widely, depending upon which motions were adopted. To resolve this issue, NYCDOT, in association with NYSDOT and the FHWA, retained a consultant to assemble an expert panel to develop recommendations for rock motions that would be adopted uniformly by the New York City region. The panel consisted of a team of six internationally recognized experts in the fields of seismology, geology, earthquake engineering, ground motion, and geotechnical studies. There were several brainstorming workshops held in New York, where the senior officials from NYCDOT, NYSDOT, and the FHWA provided their input to the panel members.

The expert panel formulated recommendations regarding rock motions and corresponding time histories. Subsequently, the consultant derived soil generic response spectra, based on the hard rock motions and NEHRP amplification factors. The consultant also established bridge performance criteria to be used for critical, essential or other bridges undergoing structural analyses. The recommendations are described in the report entitled "New York

City, Seismic Hazard Study and its Applications, Final Report, December 1998." This report is now extensively used by NYCDOT, NYSDOT, the FHWA, their consultants, and other agencies in the New York area for bridge projects. Thus, NYCDOT's leading role and efforts to establish ground motion standards have brought uniformity in seismic design to the New York City area.

In 2002, the consultant convened a second panel of seismologists to update the 1998 Hazard Study and associated rock motions. On June 3, 2004, after the USGS national hazard maps were adopted by NEHRP, in a meeting attended by NYCDOT, NYSDOT and FHWA, it was unanimously agreed to adopt the new hard rock ground motions recommended by the panel of seismologists.

Following the adoption of the very hard rock motions, the consultant started the preparation of a new edition of the NYCDOT Seismic Design Guidelines for Bridges. Data from geotechnical bridge studies performed within the five boroughs of NYC were compiled. A series of generalized subsurface soil and bedrock profiles were developed to be representative of the range of soil profiles, overburden thickness, and rock types found within NYC. A fully probabilistic approach, utilizing Random Vibration Theory (RVT) in conjunction with the new hard rock ground motions, (from the 2002 Hazard Study) and the generalized NYC subsurface profiles, was used to develop vertical and horizontal Uniform Hazard Spectra (UHS), which, in turn, served as the starting point to derive design rock and soil response spectra. The method allowed computation of soil UHS, while preserving the hazard level of the very hard rock UHS. It accounted, in a rigorous probabilistic manner, for variations and uncertainties in soil stiffness, stress-strain nonlinearity, and material damping; depth of soil to rock; and, stiffness of the rock under the soil.

Generic horizontal and vertical design spectra were derived using the calculated UHS as the starting point. Generic design V/H ratios to be used in site-specific studies to generate site specific vertical motions, were also produced. All the generic soil curves are presented as a function of three parameters: soil class; depth to rock; and, rock class under the soil.

The development of these parameters for the NYCDOT Guidelines represent a significant improvement to the previous guidelines and other codes, since it will result in better representation of the ground motions at a bridge site, bringing closer the generic ground motions to those that could be obtained from site-specific studies. The fact that the new guidelines better fit the specific characteristics of the NYC region, will permit the engineers to evaluate the need for retrofitting existing bridges or strengthening new ones at the right places.

Recommendations for liquefaction evaluation are also provided in the guidelines, including recommendations for earthquake magnitude and peak ground surface accelerations, which are critical parameters for evaluating liquefaction potential and which have not been included in previous guidelines. The new document also includes recommendations for site-specific studies, providing guidelines and minimum requirements that must be satisfied. These include: procedures to establish soil horizontal and vertical design motions; recommendations to evaluate the effects of the depth to the rock surface; recommendations to account for uncertainties in the soil properties; minimum requirements to establish lower bound horizontal design motions; recommendations for time history analysis of bridges; recommendations for the incorporation of spatial variation effects in the analysis; and different requirements for critical and non-critical bridges site-specific studies.

The final draft of the new NYCDOT Seismic Design Guidelines for Bridges was submitted in September 2008.

Conducting Soil Borings 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.

Bridge Maintenance, Inspections and Operations

EAST RIVER BRIDGES ANTI-ICING PROGRAM

Traditional snow and ice control practices rely heavily on the use of salt, a material known to corrode steel and accelerate the deterioration of concrete and asphalt surfaces. A new method of snow and ice control was needed to protect the City's $2.5 billion investment in the rehabilitated East River Bridges. This method, known as anti-icing, involves the application of a chemical freezing point depressant to the roadway surface to prevent snow and ice from bonding to the roadway. Frequent plowing removes any accumulation of unbonded snow or ice before traffic is affected.

The Division's Anti-Icing Program uses the liquid chemical potassium acetate and aggregate chemical sodium acetate. The anti-icing fleet consists of twenty-two spray trucks, six plow trucks and several smaller plows. Ten of the spray trucks are combination spray/plow trucks with a 1,000 gallon tank capacity, and five are spray-spreader/plow trucks with a 360 gallon spray capacity, and a nine cubic yard spreader capacity. There are twenty chemical storage tanks, with a total storage capacity of 114,250 gallons.

New anti-icing yards storing both chemicals have been established under all four East River bridges. Supervisors monitor the bridge decks during storm events by traversing them and using thermal instrumentation installed in their vehicles to make informed decisions as to when to apply chemicals. GPS capabilities have been installed in key vehicles to assist supervisors with the decision making process.

In the winter of 2007-2008, a total of 51,000 gallons of potassium acetate and 92 tons of sodium acetate were applied on the roadways of all four East River Bridges.

Anti-Icing Trucks. (Credit: Chris Gilbride)

INSPECTIONS

In 2008, Inspections covered 102 bridges and 610 spans. Emphasis was placed on ensuring public safety through the monitoring of potentially hazardous conditions and temporary repairs. The unit performed 403 monitoring inspections, and 253 special winter monitoring inspections of cellular structures, shorings, and potential fire hazards. In addition, 181 emergency inspections were conducted in response to hot line calls, in-house requests, or citizen complaints.

The Bridge Data System (BDS) allows inspection reports to be generated and transmitted electronically. It provides access to data from the latest inspection reports on all bridges to all Division units. In addition, when an emergency arises, our inspectors are able to send photographs and other information to the main office via a wireless connection to the internet. This feature enables bridge repair engineers to assess the condition and dispatch repair crews with the appropriate equipment in a timely manner. The test version of the system was field verified in 2006, along with the selected portable computers. The production version of the system was implemented in 2007.

Work is underway under a new contract to expand the BDS capabilities by incorporating data from capital reconstruction projects. Additional features will include in-depth inspection reports by consultants as well as GPS data.

In 2002, the Division began to receive State DOT bridge inspection reports in CD-ROM format. Flag reports are now also transmitted electronically. As of September 2003, standard inspection work is funded by a federal grant. Emergency response inspections and administrative support remain city funded.

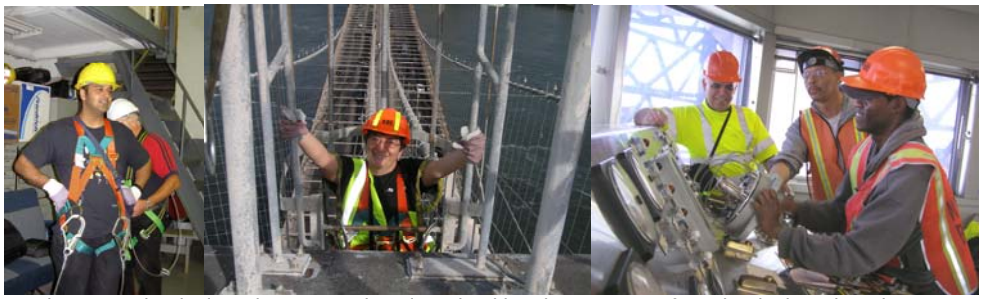
Following the collapse of the bridge carrying I-35W in Minnesota on August 1, 2007, inspection practices nationwide were intensely scrutinized. On instruction of Commissioner Janette Sadik-Khan, Dr. Yanev assembled a panel of experts including representatives of the consultant community, academia and members of the Bridge Management and Maintenance Committees of the Transportation Research Board, of which he is a member. A questionnaire was circulated among the panelists in order to facilitate their responses. These responses and the opinion of in-house experts were taken into account in considering the potential benefits of using non-destructive techniques for the health monitoring of structures in the future. It was concluded that the current inspection methods and frequency are safe. As a result of the rehabilitations of the past decade, bridge conditions have improved significantly. The Bridge Inspection and Research and Development Units have pioneered the use of various nondestructive tests on City bridges, including X-ray diffraction, fiber optics, strain-gauging, ground penetrating radar, and ultrasonic testing. Future applications of such technologies are under consideration.

On September 17, 2007, Division representatives, along with engineers from NYS DOT, the Port Authority of New York and New Jersey, and the Metropolitan Transit Authority reported to the New York City Council on the safety of the bridges and the methods of inspection and hazard mitigation.

STRAIN GAUGE AND TELLTALE TESTING

In July 2007, a team headed by Vera Ovetskaya of Bridge Preventive Maintenance tested several structural members on the Brooklyn Bridge after a fractured secondary steel member was discovered by Bridge Maintenance. The project involved attaching strain-gauges to the structure at selected locations and monitoring the response to live loads. It was concluded that the fractured member was not critical and it could be repaired without consequences to the structure.

Summer Intern Samantha Shropshire and Mechanical Engineering Intern Shafqat Wasi Measuring the Main Pinion Shaft Displacement on the Pulaski Bridge in July 2008. (Credit: Vera Ovetskaya) Civil Engineer Gennadiy Kaplun Climbing the Brooklyn Bridge Cable in August 2008. (Credit: Anatoly Orlov) Assistant Mechanical Engineer Anatoly Orlov on the Cable. (Credit: Gennadiy Kaplun)



Assistant Mechanical Engineer Anatoly Orlov Checking the Harness of Mechanical Engineering Intern Shafqat Wasi. (Credit: Vera Ovetskaya) Assistant Mechanical Engineer Vera Ovetskaya Climbing to the Tower. (Credit: Gennadiy Kaplun) 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)

Assistant Mechanical Engineer Vera Ovetskaya and Summer Interns Samantha Shropshire and Edward Yee Checking Measurements at the Union Street Bridge in June 2008. (Credit: Ibrahim Ibrahim)

Telltales for crack monitoring have been installed at several locations, including three pre-stressed bridges in Staten Island and the FDR Drive at 92nd Street. These devices are attached to both sides of the crack and allow us to measure the changes from one inspection to the next. There is a grid on the face of the telltale that allows for precise measurements.

In 2008, the Research and Development Unit successfully used a new borescope and the acoustic emission equipment for monitoring inaccessible details at the Williamsburg Bridge, and the Bridge Inspection Unit retained consultants to inspect and evaluate the potential vulnerability to scour of bridges over the Bronx River.

Snuff Mill Road Bridge is One of the Bridges Investigated for Scour Vulnerability and Found to be Structurally Sound, But it Remains Under Surveillance During Heavy Rains and Floods.

In December 2008, as a follow-up of the commitment to enhance bridge inspections by non-destructive remote monitoring techniques, two approach spans of the Brooklyn Bridge were instrumented with fiber optic sensors. The project is funded by FHWA and will be continued in 2009.

CLEANING

In 2008, 10,497 cubic yards of debris were removed from bridges and their surrounding areas, and 1,820 drains were cleaned.

PIGEON DETERRENCE

Excessive numbers of pigeons cause property deterioration, unsafe working conditions and health hazards. Besides being unsightly, accumulation of pigeon droppings and feathers is corrosive to steel structures and raises concerns about health hazards. Many disease organisms have been associated with pigeons. They harbor ectoparasites which can infest or bite humans. Pigeon droppings also harbor fungi that can trigger serious, even fatal, lung diseases such as Histoplasmosis, Cryptococosis and Toxoplasmosis, when the spores are transmitted to humans who breathe in the harmful dust.

The Division utilizes a relatively low tech, and passive, approach to deterring pigeons. In 2006, the type of barrier used to cage out pigeons was changed from the drop ceiling method to netting. The netting is supported by steel cables that are clipped to the beams. This method is currently in use under the Brooklyn Queens Expressway (over Prospect Street), at the Pulaski Bridge, under the Brooklyn Bridge at “Ash Alley,” and at the anti-icing tank storage area under the Brooklyn Bridge at Dover Street. In addition, a pigeon deterrent system involving low voltage wires is in place at the Belt Parkway Bridge over Ocean Parkway. The wires are installed along the web of the girders and are hardly visible, yet highly effective. The system has been in operation for over three years now and no pigeons have been observed under or by the bridge ever since. The community is pleased that we addressed one of their most serious and longstanding complaints. The system requires minimum maintenance and is extremely easy to operate.

In 2008, pigeon dropping removal and/or pigeon proofing were performed at the 207th Street (University Heights) Bridge over the Harlem River; the Belt Parkway Bridge over Bay Ridge Avenue; the Belt Parkway Bridge over Rockaway Parkway; the Brooklyn-Queens

Expressway at Atlantic Avenue and Queens Boulevard; the Bruckner Expressway over Bronx River (Eastern Boulevard Bridge); the Grand Central Parkway at 37th Street; the Harlem River Drive Ramp at 127th Street; the LIRR Main Line over Woodhaven Boulevard; the Long Island Expressway at 74th Street; Queens Boulevard over Eliot Avenue; Bruckner Expressway over Westchester Creek (Unionport Bridge); the Brooklyn Bridge; the Brooklyn Bridge over Cadman Plaza; the Brooklyn Bridge at Prospect Street; the Main Street Pedestrian Bridge over SIRT; the Morgan Street Storage area; and the Division's Pulaski preventive maintenance yard.

Nature's Pigeon Deterrent—A Falcon on the Brooklyn Bridge South Side Tower. Falcon Family on the Williamsburg Bridge. In 2008, There Were 13 Falcon Pairs in New York City. (Family Credit: Russell Holcomb) "Owl" Guarding the Machinery Room of the Broadway Bridge. (Credit: Albert Hong)

BRIDGE CLASSIFICATION

The Coast Guard regulations, which govern the operation of the City's movable bridges, define the owner's responsibility to the mariner by classifying a bridge as "open on demand" or "open on advance notice." An "on demand" bridge provides an immediate opening to any vessel wishing to pass the bridge. An "advance notice" bridge opens after the mariner requests an opening several hours in advance. "On demand" bridges must be staffed at all times. "Advance notice" bridges are staffed only when necessary. DOT redesigned the work process in order to reduce personnel costs to the City and improve the delivery of services to the maritime community.

In October 2000, the Department implemented the United States Coast Guard-approved changes, establishing a four-hour notice for the Harlem River bridges, and a two-hour notice for the remaining "advance notice" bridges. The "on demand" classification remains for three bridges. The revised advance notice requirements allowed the formation of mobile crews

with overlapping responsibilities, meeting the mariners' needs and, in some instances, improving service by providing two mobile crews to expedite a vessel's travel along a waterway.

The reduction in planned personnel will save approximately $1,019,819 annually. In addition, bridge operational capabilities, general maintenance, and debris and snow removal have been enhanced through the more efficient utilization of existing personnel.

The remaining task is the conversion of the three remaining bridges to "on demand" status. This will be achieved by the replacement of the Shore Road over Hutchinson River and the Belt Parkway over Mill Basin bridges with new bridges built with higher clearances, thereby reducing the number of times the bridges must be opened. The third bridge, Hamilton Avenue, does not require a higher elevation.

Summary of Vessel Openings 1994 - 2008

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Brdn Ave. (Q)	0	0	105	15	0	3	0	28	0	0	0	1	0	0	0
Brdwy (B/M)	6	7	24	7	2	0	6	27	83	49	16	2	18	42	58
Brcknr Expwy (Estrn Blvd) (B)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brcknr Expwy (Unnprt Brdg) (B)	594	431	386	363	257	345	385	420	332	300	309	253	250	281	323
Carroll St. (K)	704	432	245	142	110	174	102	80	124	186	49	22	28	13	38
Grand St. (K/Q)	254	239	189	37	23	24	17	50	19	10	8	5	2	5	0
Grnpoint Ave. (K/Q)	549	498	557	626	669	787	688	641	659	738	1093	1045	905	641	485
Hmltn Ave. (K)	1336	1246	1191	1157	996	982	933	832	946	824	757	677	1077	354	0
Hntrs Point Ave. (Q)	0	0	113	15	0	1	0	36	0	0	0	0	0	1	0
Htchnsn River Pkwy (B)	0	37	31	32	75	46	5	120	30	5	37	10	2	51	61
Macombs Dam (B/M)	6	5	13	3	0	0	0	0	0	0	0	0	0	4	2
Mdsn Ave. (B/M)	5	0	0	0	0	0	0	0	0	0	7	0	9	35	8
Metrpltn Ave. (K)	310	272	407	423	448	513	279	366	339	342	153	0	104	329	245
Mill Bsn (K)	1250	954	903	628	591	433	336	317	142	173	164	162	174	182	190
Pulaski (K/Q)	239	206	195	291	332	383	276	208	308	599	694	734	433	489	639
Rsvlt Islnd (M/Q)	0	0	0	0	4	0	58	48	125	63	669	150	54	48	0
Shore Rd (Pelham Pky) (B)	2222	2190	2167	2158	2274	2162	2168	2222	1897	1910	2011	1683	1704	1645	1446
Union St. (K)	713	432	236	144	103	144	85	101	62	24	21	11	9	5	10
Ward's Isnd Pdstrn (M)	0	1	0	2	1	0	0	279	0	0	7	2	8	4	6
Willis Ave. (B/M)	18	24	17	9	0	4	4	40	0	7	25	2	41	67	17
3rd Ave. (B/M)	19	20	18	9	0	2	1	1	0	0	0	0	6	60	7
3rd St. (K)	732	432	256	149	112	157	178	117	212	152	99	43	31	39	49
9th St. (K)	836	0	0	0	0	192	513	808	733	547	457	360	480	333	287
145th St. (B/M)	9	24	24	3	0	0	1	6	0	0	9	0	0	0	0
W.207th St. (B/M)	6	4	12	7	2	0	6	14	4	6	10	1	12	24	2
TOTAL	**9808**	**7454**	**7089**	**6220**	**5999**	**6352**	**6041**	**6761**	**6015**	**5935**	**6595**	**5163**	**5347**	**4652**	**3873**

RESEARCH AND PRESENTATIONS

In 2008, research work and/or case histories of the Division were presented in the following proceedings:

ASHE Region 6, New York Metro Section, New York City, 19 February 2008. Celestin, A. *Reconstruction of the Belt Parkway: The Planning, Design and Construction for 7 bridges and 5 miles of Highway Along the Belt Parkway*.

7th Annual Executive Forum, ASCE Metropolitan Section, New York City, 21 February 2008. Perahia, H. *The State of Our Bridges*.

Bruce Podwal Seminar Series in Structural, Environmental, and Transportation Engineering, New York City, 4 March 2008. Herrmann, A. W. *Design and Construction of the Third Avenue Bridge.*

National Association of Corrosion Engineers (NACE), NACE in the Big Easy: Corrosion 2008, New Orleans, Louisiana, 16 - 19 March 2008. Rauch, R. F. *From the Chemistry in the Can to the Chemistry on the Project*

2008 FHWA Accelerated Bridge Construction: Highway For Life Conference. Baltimore, Maryland, 20 – 21 March 2008. Sklavounakis, C., Duran, B., Lahti, M., and Hill, G. *Replacement of the Bascule Span Deck of the Mill Basin Bridge on the Belt Parkway*.

The Municipal Engineers of the City of New York, 26 March 2008. Sklavounakis, C. *Deck and Miscellaneous Repairs of the Rikers Island Bridge.*

Geotechnical Earthquake Engineering and Soil Dynamics IV Congress 2008, Sacramento, California, 18 – 22 May 2008. Yegian, M. K. *Seismic Soil-Structure Interaction Analyses of the Brooklyn Bridge*.

Proceedings of the Geotechnical Earthquake Engineering and Soil Dynamics IV Congress 2008, Sacramento, California, 18 – 22 May 2008. 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*.

25th Annual International Bridge Conference, Pittsburgh, 2 – 4 June 2008. Griesling, K. *Replacement of a Rare Hanover Skewed Bascule – the Hamilton Avenue Bridge*.

25th Annual International Bridge Conference, Pittsburgh, 2 – 4 June 2008. Mele, C., and Macnow, E. *History and Inspection of New York City's Oldest Standing Bridge*.

25th Annual International Bridge Conference, Pittsburgh, 2 – 4 June 2008. Rauch, R. F. *From the Chemistry in the Can to the Chemistry on the Project (Follow up to the IBC 2007 Presentation*.)

6th National Seismic Conference on Bridges and Highways: Seismic Technologies for Extreme Loads, Charleston, South Carolina, 28 – 30 July 2008. Arzoumanidis, S., Edwards, N., Patel, J., Kishore, K., Ahmed, H., and Kulczycki, W. *Seismic Evaluation and Retrofit of the Brooklyn Bridge*.

6th National Seismic Conference on Bridges and Highways: Seismic Technologies for Extreme Loads, Charleston, South Carolina, 28 – 30 July 2008. Gajer, R., Dobry, R., Silva, W., Thomann, T., Kishore, K., Patel, J., Razzaq, A., and Jain, S. *2008 New York City DOT Seismic Design Guidelines for Bridges Considering Local Site Conditions*.

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

4th US – Taiwan Bridge Engineering Workshop, Princeton, New Jersey, 4 – 5 August 2008. Yanev, B. *New York City Bridges: Network and Project Management.*

24th US – Japan Bridge Engineering Workshop, Minneapolis, Minnesota, 22 – 24 September 2008. Yanev, B. *Management of New York City Bridges as Projects and Networks*.

Yanev, B. *New York City Bridges: Network and Project Management*. Bridge Engineering, September 2008, Volume 161, Issue 3.

Colloque 2008: Colloque "Le Pont" Sur Les Ouvrages D'art, Toulouse, France, 21- - 22 October 2008. Yanev, B. *Collapse of the Bridge Carring I35W at Minneapolis on August 1, 2007.*

Colloque 2008: Colloque "Le Pont" Sur Les Ouvrages D'art, Toulouse, France, 21- - 22 October 2008. Yanev, B. *Suspension Bridges in the United States: An Update*.

12th Heavy Movable Structures Conference, Orlando, Florida, 3 – 6 November 2008. Foerster, G., and Griesling, K. *Replacement of a Rare Hanover Skewed Bascule – Hamilton Avenue Bridge*.

12th Heavy Movable Structures Conference, Orlando, Florida, 3 – 6 November 2008. Nyman, William E. *Willis Avenue Swing Bridge (NYC) Carrying A $612M Project – Design Into Construction*.

In addition, Dr. Bojidar Yanev continued his participation on the FHWA project "Structural Safety Appraisal Guidelines for Suspension Bridge Cables" along with the principal investigator, Columbia University. He guided a team of researchers installing sensors on the Manhattan Bridge during the final phase of the project. He will be participating in the FHWA project "Long Term Health Monitoring of Bridges," along with principal investigator Rutgers University.

Dr. Yanev is on the review panel for NCHRP Project 20-07/Task 244 *Modifications for AASHTO LRFD Bridge Design Specifications to Incorporate or Update the Guide Specifications for Design of Pedestrian Bridges*. He is also a member of the Transportation Research Board Committees on Bridge Maintenance, Management, and Seismic Design.

In addition, the Division sponsors an in-house lecture series, inviting speakers from industry and academia several times a month. Highlight topics of the presentations in 2008 included: stainless-clad reinforcement; integrated systems for health monitoring of bridges; stainless steel reinforcement; operations, maintenance and inspection; soluble salt contamination detection and remediation; one-coat paint system; strength assessment of suspension

cables; and a comparison of bridge management in New York City and the French National Highway system.

Electricians on the Brooklyn Bridge With NBC Staff in February 2008: Executive Director of Bridge Preventive Maintenance and Repair Thomas Whitehouse (4th From Left), Electrician Robert Stackpole (5th From Left), Supervisor Electrician Ben Cipriano (Center), Electrician Jerry Salzman (3rd From Right), Ted Timbers (2nd From Right), and Electrician Richard Parisi (on Right). Electrician Michael Marino and Chief Bridge Officer Henry Perahia (on Right). Electrician Richard Parisi on the Cable. (Credit: Russell Holcomb)

Cement Masons Installing Ladders and Mooring Rings for the FDNY on the Manhattan Bridge Towers. Cement Masons Victor Porowski, Paul Maguire, and Frank Finizio, and Bricklayer Vincent Sciulla. (Credit: Hany Soliman)

Carpenters and Electricians Replacing the Corrugated Roof and Lighting on the Bethel Avenue Pedestrian Bridge. Bridge View. Carpenter Michael Short III, Supervisor Carpenter John Motylewski, and Carpenter Mark Pavia. Roof Detail. Carpenter Pavia on the Roof. Electrician Gary Emmanuel and Supervisor Electrician Jose Done. Inspecting the Work: Carpenters Pavia and Short III, Supervisor Carpenter Motylewski, Carpenter John Green, and Electricians Emmanuel and Nelson Crooks. (Credit: Samuel Teaw)

On September 8, 2008, Researchers From Columbia University and Engineer-In-Charge Brian Gill (at Right) Climbed the Manhattan Bridge and Installed Accelerometers and GPS Sensors to Monitor the Overall Dynamic Behavior of the Bridge to Improve Computer Modeling Techniques for a Possible Reduction of Seismic Retrofit Modifications. (Credit: Bojidar Yanev)

Appendix A

BRIDGE CAPITAL PROGRAM

MANHATTAN BRIDGE

REHABILITATION ITEMS
TOTAL ESTIMATED COST

	Est. Cost ($ in millions)
• Repair floor beams. (1982)	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 on 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)	40.30*
• 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)	23.50*
• 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 Manhattan anchorage chambers; dehumidify Brooklyn and Manhattan anchorages. (1997)	141.82*
• 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)	150.00 to 200.00***
• 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)	127.98*

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)	193.77*
• 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)	156.13**
• Seismic Retrofit. (2013)	40.00 to 60.00***
TOTAL:	**$ 902.72 to $ 972.72**

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

Revised 11/17/08

QUEENSBORO BRIDGE

REHABILITATION ITEMS
TOTAL ESTIMATED COST

	Est. Cost ($ in millions)
• Repair lower outer roadways / reconstruct two ramps in lower Queens. (1984)	18.80*
• Reconstruct south upper roadway, replace inspection platforms, lighting. (1986)	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. (In Progress)	167.75**
• Miscellaneous Items. (In Progress)	43.48**
• Seismic Retrofit. (2014)	40.00 to 60.00***
• Installation of aviation lighting (2008)	3.0 To 5.0
TOTAL:	**$ 787.78 to $ 809.78**

* Construction Complete
** In Construction
*** In Design

Revised 11/17/08

WILLIAMSBURG BRIDGE

REHABILITATION ITEMS
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 north inner roadway. (1994)	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 inner roadway deck of the main bridge, and replace south inner roadway substructure of the approaches. (1998)	198.00*

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. (In Progress)	216.40**
• Replace north approach structures (Manhattan / Brooklyn), and rehabilitate north half of bridge. (2002)	233.00*
• Seismic Retrofit – reinforce concrete with granite cladding. (In Progress)	11.90***
• Bearing replacement at PP 10 and 15. (In Progress)	18.50***
• Rehabilitation of wind tongue casting assembly at main towers.	1.63**
• Contra-flow of south inner roadway: installation of contra-flow barriers and building of BTM garage.	6.50***
TOTAL:	**$1,061.29**

* 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 11/19/08

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. (2009)	350.00 to 400.00**
• Seismic Retrofit. (2013)	30.00 to 60.00**
• Replacement of Travelers.	20.50***
TOTAL:	**$ 645.77 to $ 725.77**

* Construction Complete
** In Design
*** In Construction

Revised 11/17/08

APPENDIX A-2

BRIDGES UNDER CONSTRUCTION

CALENDAR YEAR 2008

CONTRACT #	BRIDGE
HBX1029	145th Street Bridge over Harlem River
HBX1104	Grand Concourse over East 161st Street
HBX1123	Bruckner Expressway SB & NB over Amtrak & CSX
HBX1157	West 252nd Street Bridge over Henry Hudson Parkway
HBX1195	Shore Road Circle Bridge over Amtrak
HBM1117	Roosevelt Island Bridge over East River/East Channel
HBM1124	Willis Avenue Bridge over Harlem River
HBK539	20th Avenue Bridge over NYCT
HBK1140	Hamilton Avenue Bridge over Gowanus Canal
HBX1163	Gun Hill Road Bridge over Metro North RR
HBR1166	Annadale Road Bridge over SIRT South Shore
BRC156A	Manhattan Bridge (Contract #11)
BRC231C	Queensboro Bridge – Contract #6
BRC253CC	Williamsburg Bridge – Contract #8
BRC270T	Brooklyn Bridge – Traveler Replacement

APPENDIX A-2

BRIDGE CONSTRUCTION

Projects Completed in Calendar Year 2008

CONTRACT #	BRIDGE
HBX1104	Grand Concourse over East 161st Street
HBX1163	Gun Hill Road Bridge over Metro North RR
HBK539	20th Avenue Bridge over NYCT
BRC156A	Manhattan Bridge (Contract #11)
BRC231C	Queensboro Bridge – Contract #6* {Substantial completion in 2007}

Component Rehabilitation

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

	FY 01	*FY 02	**FY 03	#FY 04	FY 05	*FY 06	##FY 07	FY 08
Number of Bridges	16	0	0	12	9	0	0	10
Construction Cost	$13.2 M	$0	$0	$8.25	$5.63	$0	$0	$14.93

*No contracts were bid during the 2002 and 2006 calendar years.
**One contract was bid during the 2003 calendar year, but was not registered until February 2005.
One contract was bid during the 2004 calendar year, but was not registered until February 2005.
One contract was bid during the 2007 calendar year, but was not registered until April 2008.

In 2008, work was completed at the following bridges, in the indicated boroughs, at the final cost shown, in millions:

East 149th Street Bridge over Metro North (BX)	$0.785
East 238th Street (Nereid Avenue)/Bronx River Parkway & Metro North (BX)	$3.216
Metropolitan Avenue Bridge over Conrail (Q)	$0.743
3rd Avenue over Gowanus Canal (K)	$2.258
TOTAL	**$7,002 M**

During calendar year 2008, work commenced at the following bridges:

Riverdale Avenue/HHP (BX)
West 246th Street/HHP (BX)

Merrick Boulevard over Laurelton Parkway E.B. (Q)
Merrick Boulevard over Laurelton Parkway W.B. (Q)
130th Avenue over Laurelton Parkway E.B. (Q)
130th Avenue over Laurelton Parkway W.B. (Q)

Revised 12/9/08

APPENDIX A-3

Component Rehabilitation

There are no projects “still under construction” since the 2007 *Annual Report* was issued.

17 component rehabilitation projects are slated to continue, commence or be completed in the 2009 calendar year. They are:

Riverdale Avenue/HHP (BX)
3rd Avenue/Conrail Port Morris (BX)
East 156th Street/Conrail Port Morris (BX)
East 238th Street (Nereid Avenue)/Bronx River Parkway & Metro North (BX)
West 246th Street/HHP (BX)

3rd Avenue over Gowanus Canal (K)

Merrick Boulevard over Laurelton Parkway E.B. (Q)
Merrick Boulevard over Laurelton Parkway W.B. (Q)
149th Street over LIRR (Q)
130th Avenue over Laurelton Parkway E.B. (Q)
130th Avenue over Laurelton Parkway W.B. (Q)
Queensboro Bridge Ramp over 21st (& 22nd Streets) (Q)
Queensboro Bridge Ramp over 11th Street & Terrain (Q)
United Nations Plaza over 1st Avenue Tunnel (M)
Belt Parkway over Ocean Avenue (K)
Ocean Avenue over LIRR Bay Ridge (K)

Greenpoint Avenue over Newtown Creek

BRIDGES UNDER DESIGN BY NEW YORK CITY

BIN NO.	CAPIS NO.	FEATURE CARRIED	FEATURE CROSSED	FY CNST	PHASE	BORO
206672A	HBCR00	EAST 174TH ST (NORTH) PED BRIDGE	SHERIDAN EXPRESSWAY	2010	FD	B
206672B	HBCR00	EAST 174TH ST (SOUTH) PED BRIDGE	SHERIDAN EXPRESSWAY	2010	FD	B
2230300	HBCR01B	MOSHOLU PARKWAY	CONRAIL (ABANDONED)	2011	PD	B
2241139	HBCR01B	LEGGETT AVENUE	AMTRAK - CSX	2011	PD	B
2241620	HBCR01B	EAST 162ND ST	METRO NORTH RR HAR	2011	PD	B
2241630	HBCR01B	EAST 165TH ST	METRO NORTH RR HAR	2011	PD	B
2241820	HBCR01B	EAST 187TH ST	METRO NORTH RR HAR	2011	PD	B
2242029	HBCR01B	SOUTHERN BOULEVARD	BRONX PELHAM PARKWAY	2011	PD	B
2242280	HBCR01B	GRAND CONCOURSE	EAST 167TH ST	2011	PD	B
2242400	HBCR01B	EAST 180TH ST	BRONX RIVER	2011	PD	B
2241570	HBX199	EAST 153RD ST	METRO NORTH RR	2013	FD	B
2075837	HBX1086	WESTCHESTER AVENUE	HRP	2012	FD	B
2241590	HBX1103	CONCOURSE VILL AVE	METRO NORTH RR HAR	2018	FD	B
1066510	HBX1131	BRUCKNER EXP.	WESTCHESTER CREEK	2013	FD	B
2241800	HBX1139	EAST 183RD ST	METRO NORTH RR HAR	2013	FD	B
NEW 2240200	HBX1148B	SHORE ROAD (NEW)	HUTCHINSON RIVER	2019	PD	B
2241210	HBX1152	BRYANT AVE	AMTRAK	2011	PD	B
2241710	HBX1160	CLAREMONT PKWY	METRO NORTH RR HAR	2013	FD	B
2240210	HBX1164	CITY ISLAND ROAD	EASTCHESTER BAY	2011	FD	B
2241810	HBX1172	EAST 188TH ST	METRO NORTH RR HAR	2018	FD	B
2241409	HBX1190	GRAND CONCOURSE	METRO NORTH RR HUD	2013	PD	B
2242319	HBX1191	GRAND CONCOURSE	EAST 174TH ST	2018	PD	B
2242220	HBX1214	SNUFF MILL ROAD (SOUTHERN BLVD)	BRONX RIVER	2019	PD	B
2241740	HBX1215	EAST 175TH ST	METRO NORTH RR	2019	PD	B
2230250	HBX1216	MOSHOLU PARKWAY	BRONX RIVER	2013	PD	B
2240137	HBM1147	BROADWAY	HARLEM RIVER	2013	PD	BM
2240079	HBX644S	MADISON AVE	HARLEM RIVER	2017	PD	BM
1240090	BRX287S	MACOMBS DAM BRIDGE	HARLEM RIVER	2014	PD	BM
2240027	BRC156R	MANHATTAN BRIDGE (LL)	EAST RIVER	2010	FD	KM
2240028	BRC156R	MANHATTAN BRIDGE (UL)	NYCTA TRACKS-BMT	2010	FD	KM
2240028	BRC156S2	MANHATTAN BRIDGE (UL)	NYCTA TRACKS-BMT	2014	PD	KM
2240019	BRC270C	BROOKLYN BRIDGE	2781 (B.Q.E.)	2009	FD	KM
2240019	BRC270S	BROOKLYN BRIDGE	2781 (B.Q.E.)	2013	PD	KM
VARIOUS	HBCBORERS-R	VARIOUS	VARIOUS	2009	FD	KM
2243340	HBCR00	15TH AVE	LIRR BAY RIDGE	2010	FD	K
2243640	HBCR00	13TH AVE	LIRR & SEA BEACH	2010	FD	K
2244040	HBCR00	EAST DRIVE	EAST WOOD ARCH	2010	FD	K
2230360	HBCR01A	UNION ST	2781 (B.Q.E.)	2011	PD	K
2230440	HBCR01A	2781 (B.Q.E.)	ADAMS ST N.B.	2011	PD	K
2230450	HBCR01A	2781 (B.Q.E.)	ADAMS ST S.B.	2011	PD	K
2231270	HBCR01A	4TH AVE	BSHP	2011	PD	K
2231429	HBCR01A	BSHP	BEDFORD AVE	2011	PD	K
2240260	HBCR01A	CARROLL ST	GOWANUS CANAL	2011	PD	K
2243230	HBCR01A	CROWN ST	FRANKLIN SHUTTLE	2011	PD	K

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BRIDGES UNDER DESIGN BY NEW YORK CITY

BIN NO.	CAPIS NO.	FEATURE CARRIED	FEATURE CROSSED	FY CNST	PHASE	BORO
2243490	HBCR01A	BEDFORD AVE	LIRR BAY RIDGE	2011	PD	K
2244060	HBCR01A	CLEFT RIDGE SPAN	PROSPECT PARK	2011	PD	K
2244480	HBCR01A	5TH AVE	GREENWOOD CEMETERY	2011	PD	K
2243710	HBKC062	19TH AVE	BMT SEA BEACH	2016	FD	K
2243100	HBKC064	BEVERLY ROAD	BMT SUBWAY, BRIGHTON	2013	FD	K
2240250	HBKC068	3RD STREET	GOWANUS CANAL	2018	PD	K
2243020	HBK530	PARKSIDE AVE	BMT SUBWAY, BRIGHTON	2015	FD	K
2243050	HBK531	CATON AVE	BMT SUBWAY, BRIGHTON	2019	FD	K
2243820	HBK548	21ST AVE	BMT SEA BEACH	2016	FD	K
2231450	HBK643	BSHP	GERRITSEN INLET	2011	FD	K
2231370	HBK668	GUIDER AVE RMP TO BSHP (E 8TH ST ACCESS RMP)	BSHP	2009	FD	K
2231479	HBK1023	BSHP	MILL BASIN	2011	FD	K
2231489	HBK1024	BSHP	PAERDEGAT BASIN	2009	FD	K
2243080	HBK1032	CHURCH AVE	BMT SUBWAY, BRIGHTON	2019	FD	K
2243510	HBK1046	FLATBUSH AVE	LIRR BAY RIDGE	2013	FD	K
2231509	HBK1072	BSHP	FRESH CREEK	2009	FD	K
2231249	HBK1089	BSHP	BAY RIDGE AVE	2013	FD	K
2231439	HBK1090	BSHP	NOSTRAND AVE	2013	FD	K
2231499	HBK1091	BSHP	ROCKAWAY PKWY	2009	FD	K
2230887	HBK1151	278I W.B. (B.Q.E.)	CADMAN PLAZA	2013	FD	K
2230888	HBK1151	2781 E.B. (B.Q.E.)	CADMAN PLAZA	2013	FD	K
2243140	HBK1153	NEWKIRK AVE	BMT SUBWAY, BRIGHTON	2013	FD	K
2243040	HBK1154	CROOKE AVE	BMT SUBWAY, BRIGHTON	2013	FD	K
2243569	HBK1201	ATLANTIC AVE	LIRR ATLANTIC AVE	2015	FD	K
2240270	HBK1213	UNION STREET BRIDGE	GOWANUS CANAL	2016	PD	K
2240390	HBK1161	GRAND ST BRIDGE	NEWTON CREEK	2018	PD	KQ
2231319	HBK1202	BELT PARKWAY	BAY PARKWAY	2013	PD	K
2243400	HBK1204	50TH STREET	LIRR BAY RIDGE	2013	FD	K
2243580	HBK1205	5TH AVENUE	LIRR & SEA BEACH	2013	PD	K
2244120	HBK1206	HILL DRIVE	PROSPECT PARK LAKE	2009	FD	K
2243150	HBK1208	FOSTER AVENUE	BMT SUBWAY BRIGHTON	2013	FD	K
2240047	BRC231S	QUEENSBORO BRIDGE (LL)	EAST RIVER	2014	PD	MQ
2240048	BRC231S	QUEENSBORO BRIDGE (UL)	EAST RIVER	2014	PD	MQ
2246489	HBCR00	W 181ST ST	RAMP TO WASHINGTON BRIDGE	2010	FD	M
2245230	HBCR00	W 148TH ST PED BRIDGE	AMTRAK 30TH ST BRANCH	2010	FD	M
2245300	HBCR00	INWOOD HILL PARK FOOTBRIDGE	AMTRAK 30TH ST BRANCH	2010	FD	M
2246980	HBCR01B	RIVERSIDE DRIVE	WEST 138TH ST	2011	PD	M
2267130	HBCR01B	RIVERSIDE DRIVE	WEST 145TH ST	2011	PD	M
2245090	HBMC032	W 43RD ST	AMTRAK 30TH ST BRANCH	2017	PD	M
2245130	HBMC033	W 47TH ST	AMTRAK 30TH ST BRANCH	2013	PD	M
2245150	HBMC034	W 49TH ST	AMTRAK 30TH ST BRANCH	2015	PD	M
2245340	HBMC035	W 50TH ST	AMTRAK 30TH ST BRANCH	2015	PD	M
2245180	HBMC036	W 53RD ST	AMTRAK 30TH ST BRANCH	2017	PD	M
224501C	HBMC037	W 33RD ST	LAND ADJ TO AMTRAK	2013	FD	M
2246540	HBM551	EAST 34TH ST	PARK AVE TUNNEL	2012	FD	M

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2233059	HBM1027	HARLEM RIVER DRIVE	RAMP TO HRD N.B.	2013	DB	M
2245010	HBM1120	11TH AVE VIADUCT	LIRR WEST SIDE YARD	2013	FD	M
2246490	HBM1145	A.C. POWELL BLVD N.B.	A.C. POWELL BLVD	2013	FD	M
2246710	HBM1145B	WEST 153RD ST	A.C. POWELL BLVD	2013	FD	M
2240620	HBM1159	WARDS ISLAND PED BRDG	HARLEM RIVER	2017	FD	M
2246720	HBM1165	RIVERSIDE DRIVE	WEST 158TH ST	2015	PD	M
226672A	HBM1171	W 31ST ST	AMTRAK LAYUP TRACKS	2013	FD	M
2245070	HBM1174	W 38TH ST	AMTRAK 30TH ST BRANCH	2013	PD	M
2245080	HBM1175	W 39TH ST	AMTRAK 30TH ST BRANCH	2013	PD	M
2245100	HBM1176	W 44TH ST	AMTRAK 30TH ST BRANCH	2017	PD	M
2245120	HBM1177	W 46TH ST	AMTRAK 30TH ST BRANCH	2015	PD	M
2245140	HBM1178	W 48TH ST	AMTRAK 30TH ST BRANCH	2013	PD	M
2245210	HBM1179	W 42ND ST	AMTRAK 30TH ST BRANCH	2013	PD	M
2245440	HBM1180	W 40TH ST	AMTRAK 30TH ST BRANCH	2015	PD	M
2245330	HBM1183	W 41ST ST	AMTRAK 30TH ST BRANCH	2015	PD	M
224501B	HBM1184	W 33RD ST	AMTRAK 30TH ST BRANCH	2013	FD	M
224501D	HBM1185	W 34TH ST	AMTRAK 30TH ST BRANCH	2013	FD	M
224501E	HBM1186	W 35TH ST	AMTRAK 30TH ST BRANCH	2013	FD	M
224501F	HBM1187	W 36TH ST	AMTRAK 30TH ST BRANCH	2013	FD	M
2245209	HBM1188	11TH AVE	AMTRAK 30TH ST BRANCH	2017	PD	M
2229290	HBM1189	W 79TH ST	AMTRAK	2013	PD	M
2267717	HBM1189	79TH ST PED PLAZA	79TH ST BOAT BASIN GARAGE	2013	PD	M
2267718	HBM1189	79TH ST TRAFFIC CIRCLE	79TH ST PED PLAZA	2013	PD	M
226771A	HBM1189	79TH ST RAMP TO HHP	79TH ST BOAT BASIN GARAGE	2013	PD	M
226771B	HBM1189	79TH ST RAMP TO GARAGE	79TH ST BOAT BASIN GARAGE	2013	PD	M
226771C	HBM1189	GARAGE RAMP TO 79TH ST	79TH ST BOAT BASIN GARAGE	2013	PD	M
226771D	HBM1189	SB HHP RAMP TO 79TH ST	79TH ST BOAT BASIN GARAGE	2013	PD	M
2248299	HBCR00	JACKIE ROBINSON PKWY & UNION TURNPIKE	AUSTIN STREET	2010	FD	Q
2231800	HBCR00	SUPERIOR ROAD	CROSS ISLAND PKWY	2010	FD	Q
2230620	HBCR00	37TH STREET	BQE	2010	FD	Q
2240660	BRC289A	RIKERS ISLAND BRIDGE	RIKERS ISLAND CHANNEL	2017	DB	Q
1247560	HBQ1112	METRO AVE (FRESH POND)	LIRR MONTAUK DIV	2014	FD	Q
2231780	HBQ1114	HEMPSTEAD AVE	BCIP	2016	PD	Q
2266149	HBQ1114	HEMPSTEAD AVE	RAMP TO BCIP NB	2016	PD	Q
2231850	HBQ1115	UNION TPKE	BCIP	2019	PD	Q
2247120	HBQ1130	WOODSIDE AVE	LIRR MAIN LINE	2013	FD	Q
2248159	HBQ1134	WOODHAVEN BLVD	QUEENS BLVD	2018	FD	Q
2248160	HBQ1137	ELLIOT AVE	QUEENS BLVD	2019	PD	Q
2240410	HBQ1162E	BORDEN AVE	DUTCH KILLS	2009	DB	Q
2231760	HBQ1173	BCIP	DUTCH BRDWAY-115 AVE	2018	PD	Q
2240507	HBQ1203	ROOSEVELT AVE	VAN WYCK EXPRY	2010	PD	Q
2248080	HBQ1204	MOTOR PKWY PED BRDG	HOLLIS COURT BLVD	2012	PD	Q
2248280	HBQ1206	HIGHLAND PK PED BRDG	PEDESTRIAN PATH	2012	PD	Q

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BRIDGES UNDER DESIGN BY NEW YORK CITY

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2231840	HBQ1207	HILLSIDE AVE	BCIP	2015	PD	Q
2266160	HBQC064	WHITESTONE EXPRY/VAN WYCK EXPRY SB TO BCIP EB	ACCESS ROAD FROM WHITESTONE EXPRY/VAN WYCK EXPRY	2019	PD	Q
2249320	HBCR00	ALBEE AVENUE	SIRT SOUTH SHORE	2010	FD	R
R00010	HBRC036	GALLOWAY AVE	MARIANNE ST	2013	PD	R
R00011	HBRC037	FOREST AVE	CRYSTAL AVE	2013	PD	R
R00013	HBRC038	NAUGHTON AVE	PATTERSON AVE	2013	PD	R
R00023	HBRC039	MIDLAND AVE	HYLAN BLVD	2013	PD	R
R00034	HBRC040	ROCKLAND AVE	BRIELLE AVE	2013	PD	R
R00068	HBRC041	FOREST AVE	RANDALL AVE	2013	PD	R
R00069	HBRC042	GREGG PLACE	RANDALL AVE	2013	PD	R
R00084	HBRC043	ARTHUR KILL RD	MULDOON AVE	2013	PD	R
R00097	HBRC044	RICHMOND HILL RD	RICHMOND RD	2013	PD	R
R00122	HBRC045	ARTHUR KILL RD	RIDGEWOOD AVE	2013	PD	R
2249820	HBRC1149	ARTHUR KILL ROAD	ARTHUR KILL STREAM	2015	FD	R

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Appendix B

FLAG CONDITIONS

FLAG DEFINITIONS AND PROCEDURES

(Source: NYSDOT *Engineering Instruction 94-002*)

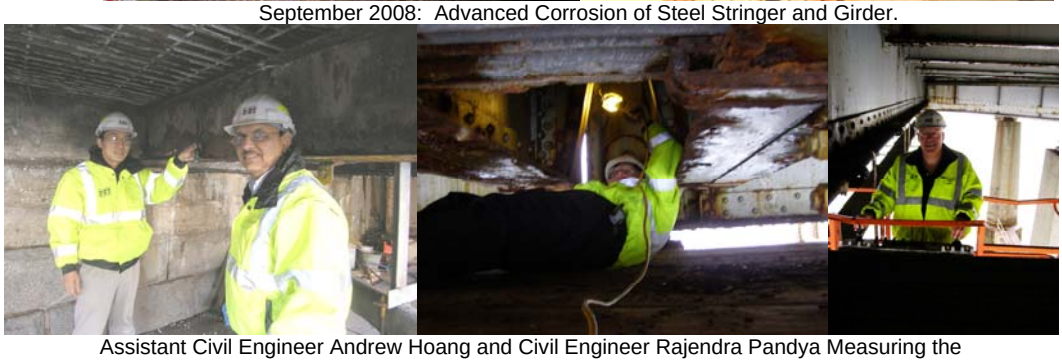
New York State Department of Transportation (NYSDOT) bridge inspection procedures require that "Flags" be issued to report the existence of conditions that pose a clear and present danger, or conditions which, if left unattended for an extended period, would likely become a clear and present danger.

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.

Flag Engineers Inspecting a Red Flag (Floor Beam Web) on the Tower Structure of the Manhattan Bridge. Closeup of the Location. (Credit: Bojidar Yanev)

September 2008: Advanced Corrosion of Steel Stringer and Girder.



Assistant Civil Engineer Andrew Hoang and Civil Engineer Rajendra Pandya Measuring the Section Loss of the Bottom Flange of A Floor Beam, Utilizing a Digital Caliper. Executive Director of Bridge Preventive Maintenance and Repair Thomas Whitehouse Inspecting a Red Flag on a Girder Floor Beam at the Belt Parkway Bridge over Gerritsen Inlet. Mr. Whitehouse Operating a Zoomboom. (Gerritsen Credit: Steve Havemann)

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.

FLAG DEFINITIONS AND PROCEDURES

(Source: NYSDOT *Engineering Instruction 94-002*)

February 2008: Originally a Safety Flag Due to Loose Material, but Upgraded to a 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 vehicle or pedestrian traffic hazard, but there is no danger of structural failure or collapse.

August, October, and November 2008: Examples of Tripping Hazards.

February 2008: Loose Bolts at the Lighting Base. October 2008: Electrical Hazard, and Loose Joint.

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.

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

FLAG CONDITIONS BY CALENDAR YEAR

Citywide

	2004*	2005*	2006*	2007*	2008*	% increase (2004 – 2008)
FLAGS ROUTED	1,198	1,138	1,253	1,261	1,764	47%
RED	20	21	24	41	84	320%
YELLOW	157	121	127	206	247	57%
SAFETY	1,021	996	1,102	1,014	1,433	40%
TTL FLGS ELIMINATED	1,042	1,072	987	1,083	1,137	9%
RED	33	22	19	36	60	82%
YELLOW	233	151	99	214	195	-16%
SAFETY	776	899	869	833	882	14%
TTL FLGS OUTSTANDING	1,846	1,912	2,178	2,356	2,983	62%
RED	6	5	10	15	39	550%
YELLOW	578	548	576	568	620	7%
SAFETY	1,262	1,359	1,592	1,773	2,324	84%

Division of Bridges Workload

FLAGS ROUTED	976	953	1,002	931	1,127	15%
RED	19	21	19	38	66	247%
YELLOW	154	121	119	203	240	56%
SAFETY	803	811	864	690	821	2%
FLAGS ELIMINATED	918	923	796	916	969	6%
RED	32	21	14	34	41	28%
YELLOW	233	150	99	193	188	-19%
SAFETY	653	752	683	689	740	13%
FLAGS OUTSTANDING	1,435	1,457	1,638	1,650	1,823	27%
RED	6	5	10	14	39	550%
YELLOW	540	509	527	537	594	10%
SAFETY	889	943	1,101	1,099	1,190	34%

*The number of flags routed, eliminated, and outstanding has been revised since the 2007 *Annual Condition Report*.

Revised 1/14/09

APPENDIX B-3

FLAG REPORTING AND TRACKING PROCESS

There are three primary sources from which flags originate:

- NYSDOT inspectors
- NYCDOT inspectors
- NYCDOT Communications Center

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 the Maintenance Section for in-house or contractor 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 the Maintenance Section for in-house or contractor 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

1. Flag condition is phoned in.
2. City inspectors visit the site to review the reported condition.
3. If the deficiency warrants, a flag 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 desired, or
   - assign flags to the Maintenance Section for in-house or contractor repair, or
   - assign flags to the Construction Section for Capital contractor repair.
6. When flag conditions are eliminated, the database is updated.

Appendix C

2008 INVENTORY

Inventory Summary

In Calendar Year 2008, the total number of bridge and tunnel structures under the jurisdiction of the New York City Department of Transportation (NYCDOT) decreased to 788. NYCDOT owns, operates, and/or maintains 757 non-movable bridges, 25 movable bridges, and six 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 61) 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 788 elevated bridge structures (including six tunnels), as measured by the City's general condition rating, are as follows: 3 structures were rated *Poor*, 455 structures were rated *Fair*, 213 structures were rated *Good*, 116 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 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 nineteen (40%) of the Division's structures consist of one span (the portion of a bridge between two supports). One hundred five (13%) bridges carry pedestrian traffic. Of the 788 structures in the City's inventory, 101 (13%) cross waterways; of these, 20 connect the boroughs of the Bronx, Brooklyn, Manhattan and Queens. Three hundred twenty-six (41%) structures cross the City's labyrinthine system of railroad and subway tracks. Two hundred fifty (32%) 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.

The State inspected 673 (85%) bridge structures. The balance of 115 (15%) were inspected by the City, with the exception of the High Bridge over the Harlem River, which was inspected 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		City 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 2008 Structure Conditions

Rating	Number of Structures	Percent	Number of Spans	Percent	Deck Area Sq Ft	Percent
Poor	3	0.38%	98	2.19%	578,988	3.67%
Fair	455	57.81%	3,431	76.58%	11,729,400	74.30%
Good	213	27.06%	632	14.11%	1,997,037	12.65%
Very Good	116	14.74%	319	7.12%	1,481,914	9.39%
Not Rated	1	—	—	—	—	—
Total	788	100%	4,480	100%	15,787,339	100.00%

As of December 31, 2008, the condition of the City's bridges and tunnels indicated that 0.38% were rated as *Poor*; 57.81% were classified as *Fair*; 27.06% were awarded ratings of *Good*; and 14.74% as *Very Good*. Those structures given ratings of Poor and Fair encompassed 78.77% of bridge spans.

Rating	2005		2006		2007		2008	
Poor	4	0.51%	3	0.38%	3	0.38%	3	0.38%
Fair	458	57.97%	456	57.94%	459	58.25%	455	57.81%
Good	210	26.58%	210	26.68%	215	27.28%	213	27.06%
Very Good	118	14.94%	118	14.99%	111	14.09%	116	14.74%
Not Rated					1		1	
Total	790	100%	787	100%	789	100%	788	100

During 2008, Manhattan had the highest percentage of bridge structures rated *fair* – 74.71% - as well as the lowest percentage of bridge structures rated *good* – 20.11%. Staten Island had the highest percentage of bridge structures classified as *good* – 32.84%, and the second highest percentage of bridge structures rated *very good* – 19.40%, for a total of 52.24%. In 2008, Brooklyn had the highest percentage of bridge structures rated as *very good* – 24.57%. The Bronx had no bridges rated as *poor*, and the second highest percentage of bridge structures classified as *fair* – 62.50%. Queens had no bridges rated as poor, the third highest percentage of bridge structures classified as very good – 19.10%, and the second highest percentage of bridge structures rated as *good* – 31.16%.

Borough*	Poor	% of Boro	Fair	% of Boro	Good	% of Boro	Very Good	% of Boro	Total
Bronx	0	0.00%	95	62.50%	45	29.61%	12	7.89%	152
Brooklyn	1	0.57%	86	49.14%	45	25.71%	43	24.57%	175
Manhattan	1	0.57%	130	74.71%	35	20.11%	8	4.60%	174
Queens	0	0.00%	99	49.75%	62	31.16%	38	19.10%	199
Staten Island	0	0.00%	32	47.76%	22	32.84%	13	19.40%	67
Total	2	0.26%	442	57.63%	209	27.25%	114	14.86%	767

* Does not include borough-crossing bridges (see next table).

Summary of 2008 Structure Conditions

Seventy percent of the 20 bridge structures that service the five boroughs were rated in either *poor* or *fair* condition in 2008, 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	1	25.00%	3	75.00%	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	1	5.00%	13	65.00%	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 2008, the total number of closed or partially closed bridge structures was three, with one closed and two partially-closed structures (see Appendix C-2).

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
2-23145-0	BROOKLYN	BELT SHORE PKWY.	GERRITSEN INLET		2011	5	CONDITION OF PAERDEGAT BASIN BRIDGE
2-23147-9	BROOKLYN	BELT SHORE PKWY.	MILL BASIN CREEK		2011	5	CONDITION OF PAERDEGAT BASIN BRIDGE
2-23148-9	BROOKLYN	BELT SHORE PKWY	PAERDEGAT BASIN		2009	5	
2-23149-9	BROOKLYN	BELT SHORE PKWY.	ROCKAWAY PKWY.		2009	5	PASSENGER CARS ONLY
2231509	BROOKLYN	BELT SHORE PKWY.	FRESH CREEK		2009	5	PASSENGER CARS ONLY
	MANHATTAN	FDR DRIVE (NB & SB)	23RD TO 63RD STREET			4	PASSENGER CARS ONLY
2-23304-0	MANHATTAN	EAST 60TH STREET	FDR DRIVE			7	TO BE LET BY NYSDOT
2-24001-9	BROOKLYN & MANHATTAN	BROOKLYN BRIDGE	EAST RIVER	INCLUDING RAMPS	2009	3	NO COMMERCIAL TRAFFIC NO TRUCKS, NO BUSSES; 11'0" CLEARANCE
2240027	MANHATTAN & BROOKLYN	MANHATTAN BRIDGE	EAST RIVER				DESIGN LOAD FOR HS 20 TRUCK LOAD; PEDESTRIANS ONLY ON SOUTH OUTER ROADWAY; BICYCLES ONLY ON NORTH OUTER ROADWAY
2-24003-9	BROOKLYN & MANHATTAN	WILLIAMSBURG BRIDGE	EAST RIVER				INNER ROADWAYS, NO TRUCKS; OUTER ROADWAYS DESIGN FOR HS20 AND TRUCKS ARE PERMITTED ON OUTER ROADWAY
2-24004-7	MANHATTAN & QUEENS	QUEENSBORO BRIDGE	EAST RIVER			7.5	LOWER OUTER ROADWAYS POSTED AS H-7.5 (PASSENGER CARS ONLY FOR SOUTHBOUND; PEDESTRIANS AND BICYCLES ONLY FOR NORTHBOUND); LOWER INNER ROADWAYS ARE DESIGNED FOR HS20 TRUCK LOAD; UPPER ROADWAYS DESIGNED FOR H-15, NO TRUCKS, ONLY BUSES
2-24026-0	BROOKLYN	CARROLL STREET BRIDGE	GOWANUS CANAL	CARROLL STREET	2011	10	
2-24064-0	MANHATTAN & QUEENS	ROOSEVELT ISLAND	EAST CHANNEL OF THE EAST RIVER			36	
2-24066-0	QUEENS	RIKERS ISLAND BRIDGE	RIKERS ISLAND CHANNEL		2017	36	
2-24655-0	MANHATTAN	PARK AVENUE VIADUCT	42ND STREET			15	NO COMMERCIAL TRAFFIC
2-24759-0	QUEENS	FOREST PARK DRIVE	LIRR			18	
2-24310-0	BROOKLYN	BEVERLY ROAD	BMT SUBWAY		2013	7	FROM 12/2005 UNTIL 2013

17 COUNT * - **CONSTRUCTION CONTRACT LETTING**

Revised 11/18/08

Partially Closed Bridges

NEW YORK CITY DEPARTMENT OF TRANSPORTATION

BIN	BOROUGH	LOCATION FEATURE-1	LOCATION FEATURE-2	LOCATION FEATURE-3	FISCAL YEAR*	REMARKS
2-07664-0	BRONX	DEPOT PLACE	CONRAIL HUDSON DIVISION			ONE LANE CLOSED TO TRAFFIC AND ONE LANE OPEN
2-23087-0	BROOKLYN	COLUMBIA HEIGHTS	B.Q.E.	MIDDAGH ST.		CLOSED TO TRAFFIC OPEN TO PEDESTRIANS (TO BE DONE BY NYS W/B.Q.E)

2 COUNT *** - CONSTRUCTION CONTRACT LETTING**

Revised 12/3/07

Paerdegat Basin, Fresh Creek, and Carroll Street Bridge Posted Weight Restriction Signs. (Credit: NYSDOT)

Closed Bridges

NEW YORK CITY DEPARTMENT OF TRANSPORTATION

There is one closed bridge.

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

Revised 2/8/08

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.

APPENDIX C-4

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	Description
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 rating of 5 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 ratings of 2, 4, and 6 are utilized to shade between each of the above ratings.

APPENDIX C-5

Standard Abbreviations

General Abbreviations :

APP:	Approach
AVE:	Avenue
BLVD:	Boulevard
BR:	Bridge
CPK:	Central Park
DR:	Drive
EB:	Eastbound
EXPWY:	Expressway
I:	Interstate
LN:	Lane
NB:	Northbound
PED BR:	Pedestrian Bridge
PKWY:	Parkway
PL:	Place
RD:	Road
SB:	Southbound
ST:	Street
TPKE:	Turnpike
WB:	Westbound
X:	No State accepted mileage markers exist on this route

Routes :

No.	Borough	Name
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
  K - Brooklyn
  Q - Queens
  M - Manhattan
  R - Staten Island

- **Feature Carried** : Name of passageway carrying vehicle or pedestrian traffic.

- **Feature Crossed** : Description of area crossed.

  - **Railroad Crossed** (if applicable):

    A - Amtrak
    C - CSX
    L - Long Island Railroad
    M - Metro-North (MTA)
    N - New York & Atlantic
    O - B & O Railroad
    S - Staten Island Rapid Transit Operating Authority
    T - NYC Transit Authority

- **Other Owner** :

  ED Department of Education
  F Ferries (Department of Transportation)
  P Department of Parks and Recreation

- **Bridge Type :**

  A - Arterial
  O - Off-System
  PED - Pedestrian
  W - Waterway
  M - Movable
  E - East River

- **Rating Source:**

  (C) City Inspection
  (S) State Inspection
  (P) Parks Inspection

- **Rating** : Numerical and/or verbal rating

  1.000 - 3.000: (P) POOR
  3.001 - 4.999: (F) FAIR
  5.000 - 6.000: (G) GOOD
  6.001 - 7.000: (V) VERY GOOD

- **Deck Area:** Square feet

- **CD:**

  Community Board District

APPENDIX C-7

2008 Bridge Inventory Adjustments

B.I.N.	BORO	FEATURE CARRIED	FEATURE CROSSED	EXPLANATION
- Bridge removed from the City's Inventory:				
2242200	B	YANKEE STADIUM PEDESTRIAN BRIDGE	East 153RD STREET & METRO NORTH	**DEMOLISHED – NEW BRIDGE BUILT & OWNED BY MTA**

REV. DATE 2/5/09

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
1065210	Q	WHITESTONE EXP NB	BCIP (2065210)			A	1	S	9/4/2008	4.683	F	2500	$5,500,000	407		
1066510	B	BRUCKNER EXP.(2066510)	WESTCHESTER CREEK			WMA	17	S	10/25/2007	3.597	F	39400	$86,680,000	209		
1067150	B	NEREID AVE (2241880)	BRONX RIVER PKWY	M		O	10	S	11/30/2007	4.632	F	57750	$127,050,000	212		
1240090	BM	MACOMBS DAM BRIDGE	HARLEM RIVER	M		WMO	52	S	11/30/2007	3.972	F	211788	$465,933,600	110	204	
1247010	Q	91 PLACE (2247010)	LIRR PT WASH BRANCH	L		O	1	S	11/29/2007	6.833	V	2760	$6,072,000	404		
1247200	Q	67 AVE PED BR 2247200	LIRR MAIN LINE	L		O-PED	3	C	12/7/2006	4.000	F	1300	$2,860,000	406		
1247280	Q	51 AVE PED BR.2247280	LIRR MAIN LINE	L		O-PED	5	C	12/1/2006	3.164	F	700	$1,540,000	402		
1247560	Q	METROPOLITAN AVE	LIRR MONTAUK DIV	L		O	2	S	10/24/2008	3.762	F	20900	$45,980,000	405		
2055801	Q	NORTHERN BLVD W.B.	FLUSHING RIVER			WO	40	S	9/20/2006	4.817	F	71900	$158,180,000	407		
2055802	Q	NORTHERN BLVD E.B.	FLUSHING RIVER			WO	40	S	9/20/2006	4.366	F	78894	$173,566,800	407		
205580A	Q	N.BLVD WB TO 678I SB	VACANT LAND			AR	16	S	8/28/2008	5.571	G	8600	$18,920,000	407		
2065629	B	BRONX RVR PKWY	BOSTON RD BX ZOO			A	1	S	7/3/2007	5.000	G	6300	$13,860,000	227		
2065930	Q	HAMILTON PLACE	495I (L.I.E.)			A	2	S	3/5/2008	6.069	V	11111	$24,444,200	405		
2065940	Q	GRAND AVE	495I (L.I.E.)			A	2	S	10/23/2006	5.264	G	12850	$28,270,000	405		
2065950	Q	69TH STREET	495I (L.I.E.)			A	2	S	5/23/2007	5.361	G	10336	$22,739,200	405		
2066002	Q	495I (2066000)	WOODHAVEN BLVD			A	2	S	6/29/2007	5.592	G	25200	$55,440,000	406	404	
2066100	K	5TH AVE	27 X PROSPECT EXPWY			A	1	S	5/21/2008	5.104	G	8800	$19,360,000	307		
2066671	B	BRUCKNER EXPWY SB	BRONX RIVER			WMA	3	S	7/24/2007	5.222	G	12400	$27,280,000	202	209	
2066672	B	BRUCKNER EXPWY NB	BRONX RIVER			WMA	8	S	7/19/2007	4.567	F	22300	$49,060,000	202	209	
2066720	B	E 174TH ST	SHERIDAN EXPWY/AMTRAK	A		A	13	S	10/17/2006	4.250	F	47430	$104,346,000	209	203	
206672A	B	174TH ST-NTH PED BRDG	895I - SHERIDAN EXPWY			A-PED	4	C	4/22/2008	5.153	G	1800	$3,960,000	209		
206672B	B	174TH ST-STH PED BRDG	895I - SHERIDAN EXPWY			A-PED	4	C	4/18/2008	5.361	G	1900	$4,180,000	209		
2066919	BM	WASHINGTON BRIDGE	HARLEM RIVER	M		WO	9	S	10/8/2008	4.642	F	128339	$282,345,800	112	205	204
2075351	B	BRUCKNER EXPWY SB	AMTRAK - CSX	AC		A	1	S	8/8/2006	3.625	F	11600	$25,520,000	202		
2075352	B	BRUCKNER EXPWY NB	AMTRAK - CSX	AC		A	1	S	9/21/2007	3.188	F	10900	$23,980,000	202		
2075820	B	E TREMONT AVE	HUTCHINSON RVR PKWY			A	2	S	12/18/2007	4.472	F	10200	$22,440,000	210		
2075837	B	WESTCHESTER AVE	HUTCHINSON RVR PKWY			A	2	S	2/20/2008	4.333	F	15858	$34,887,600	210	211	
2075849	B	BRONX PELHAM PKWY	HUTCHINSON RVR PKWY			A	2	S	6/17/2008	3.974	F	17600	$38,720,000	210	211	
2075859	B	HUTCHINSON RVR PKWY	HUTCHINSON RIVER			WMA	7	S	10/24/2008	4.828	F	60500	$133,100,000	210	228	
2076109	B	BE NB SERVICE RD	HUTCHINSON RVR PKWY			A	2	S	10/5/2007	4.632	F	7800	$17,160,000	210		
2076129	B	BE SB SERVICE RD	HUTCHINSON RVR PKWY			A	2	S	2/20/2008	5.105	G	7100	$15,620,000	210		
2076640	B	DEPOT PLACE	METRO NORTH RR HUD	CM		O	11	S	11/10/2007	4.972	F	26566	$58,445,200	204		
2076929	B	BRUCKNER EXPWY	CSX - HUNTS POINT	C		A	1	S	9/20/2007	4.700	F	3800	$8,360,000	202		
2229289	M	HHP VIADUCT	W 72 ST TO W 79 ST	A		A	145	S	12/22/2006	3.448	F	236100	$519,420,000	108		
222928C	M	PED BR AT 73RD ST	HHP - AMTRAK	A	P	A-PED	5	C	10/26/2008	4.145	F	3480	$7,656,000	107		
2229290	M	W 79 ST	AMTRAK	A		A	1	S	9/7/2006	4.288	F	4500	$9,900,000	112		
2229309	M	HHP	RIVERSIDE PARK			A	1	S	1/22/2008	5.267	G	2400	$5,280,000	112		
2229311	M	HHP SB	RAMP TO 96 ST			A	1	S	2/17/2008	4.636	F	2000	$4,400,000	109		
2229312	M	HHP NB	RAMP TO 96 ST			A	1	S	2/17/2008	4.364	F	2000	$4,400,000	107		
2229321	M	HHP SB	RAMP TO 96 ST			A	1	S	3/14/2008	5.133	G	2000	$4,400,000	107		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2229322	M	HHP NB	RAMP TO 96 ST			A	1	S	3/10/2008	5.300	G	2000	$4,400,000	107		
2229349	M	HHP	W 158 ST	A		A	44	S	10/18/2006	4.268	F	140000	$308,000,000	101		
222934A	M	RAMP TO N.B. HHP	AMTRAK WEST SIDE	A		AR	26	S	8/2/2006	3.875	F	10800	$23,760,000	101		
2229400	M	W 181ST ST PED BRDG	HHP N.B.		P	A-PED	7	C	3/24/2008	4.514	F	1500	$3,300,000	112		
2229440	B	HHP	KAPPOCK ST			A	1	S	10/3/2007	4.931	F	3900	$8,580,000	208		
2229450	B	232ND ST	HHP			A	2	S	10/1/2007	5.026	G	4900	$10,780,000	208		
2229460	B	236TH ST PED BRDG	HHP			A-PED	3	C	6/30/2008	4.803	F	2500	$5,500,000	208		
2229470	B	239TH ST	HHP			A	2	S	5/31/2007	5.368	G	6100	$13,420,000	208		
2229480	B	MANHATTAN COLL PKWY	HHP			A	3	S	5/22/2007	5.368	G	6200	$13,640,000	208		
2229490	B	246TH ST	HHP			A	2	S	5/8/2007	4.632	F	5600	$12,320,000	208		
2229500	B	252ND ST	HHP			A	2	S	2/28/2008	5.474	G	4500	$9,900,000	208		
2229510	B	RIVERDALE AVE	HHP			A	2	S	9/7/2007	4.053	F	5200	$11,440,000	208		
2229520	B	FIELDSTON ROAD	HHP			A	1	S	9/19/2007	5.500	G	6600	$14,520,000	208		
2229530	B	HHP	BROADWAY			A	1	S	9/26/2007	4.574	F	7500	$16,500,000	208		
2229540	B	VAN CRTLDT PARK	HHP		P	A-PED	2	C	8/5/2008	4.879	F	3900	$8,580,000	226		
2229550	B	VAN CRTLDT EQUES	HHP		P	A-PED	2	C	8/5/2008	4.732	F	2100	$4,620,000	226		
2229560	B	BRONX PELHAM PKWY	AMTRAK - CSX	AC		A	3	S	8/15/2006	4.972	F	24591	$54,100,200	211		
2229579	B	BOSTON POST ROAD	HUTCHINSON RIVER			WO	14	S	6/22/2007	4.444	F	95700	$210,540,000	212		
2230000	K	HIGHLAND BLVD E.B.	JACKIE ROBINSON PKWY			A	1	S	5/20/2008	4.600	F	4900	$10,780,000	305		
2230010	K	HIGHLAND BLVD W.B.	JACKIE ROBINSON PKWY			A	1	S	5/20/2008	4.933	F	3500	$7,700,000	305		
2230020	K	HIGHLAND BLVD W.B.	JACKIE ROBINSON PKWY			A	2	S	5/20/2008	4.842	F	4700	$10,340,000	305		
2230040	Q	CYPRESS HILLS ST	JACKIE ROBINSON PKWY			A	1	S	4/17/2008	5.278	G	5000	$11,000,000	405		
2230099	Q	JACKIE ROBINSON PKWY	CYPRESS HILLS CEMETRY			A	1	S	1/18/2008	5.444	G	4200	$9,240,000	405		
2230120	Q	MYRTLE AVE	JACKIE ROBINSON PKWY			A	1	S	5/2/2008	5.479	G	6400	$14,080,000	405	482	
2230179	Q	JACKIE ROBINSON PKWY	METROPOLITAN AVE			A	2	S	5/21/2008	5.321	G	8673	$19,080,600	482		
2230180	Q	UNION TPKE	JACKIE ROBINSON PKWY			A	1	S	2/25/2008	5.891	G	5359	$11,789,800	482		
2230190	Q	MARKWOOD ROAD	JACKIE ROBINSON PKWY			A	1	S	5/5/2008	5.389	G	4400	$9,680,000	482	406	
2230209	Q	QUEENS BLVD	JACKIE ROBINSON PKWY	T		A	5	S	7/29/2008	4.746	F	37700	$82,940,000	409		
2230220	K	HIGHLAND BLVD NB	VERMONT AVE			A	1	S	7/13/2007	5.857	G	3995	$8,789,000	305		
2230250	B	MOSHOLU PARKWAY	BRONX RIVER			WA	5	S	1/30/2008	4.263	F	16300	$35,860,000	227		
2230260	B	MOSHOLU PARKWAY	METRO NORTH	M		A	1	S	4/7/2008	5.516	G	8880	$19,536,000	227	207	
2230270	B	MOSHOLU PARKWAY	WEBSTER AVE			A	1	S	5/14/2007	5.609	G	8480	$18,656,000	207		
2230287	B	JEROME AVE	MOSHOLU PARKWAY	T		A	3	S	5/17/2007	4.711	F	11800	$25,960,000	207		
2230290	B	MOSHOLU PARKWAY	EQUESTRIAN PATH			A	1	S	1/23/2008	4.448	F	4300	$9,460,000	226		
2230300	B	MOSHOLU PARKWAY	CONRAIL (ABANDONED)	C		A	1	S	10/29/2008	4.146	F	5200	$11,440,000	226		
2230310	B	MOSHOLU PARKWAY	SB RAMP TO HHP			A	2	S	11/26/2007	5.135	G	7400	$16,280,000	226		
2230350	K	SUMMIT ST PED BRDG	278I (B.Q.E.)			A-PED	2	S	5/4/2008	4.500	F	1400	$3,080,000	306		
2230360	K	UNION ST	278I (B.Q.E.)			A	2	S	4/23/2008	4.375	F	5000	$11,000,000	306		
2230370	K	SACKETT ST	278I (B.Q.E.)			A	2	S	4/23/2008	4.500	F	5000	$11,000,000	306		
2230380	K	KANE ST	278I (B.Q.E.)			A	2	S	4/11/2008	4.069	F	5000	$11,000,000	306		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230390	K	CONGRESS ST	278I (B.Q.E.)			A	2	S	4/10/2008	6.382	V	5000	$11,000,000	306		
2230410	K	278I (B.Q.E.)	WASHINGTON ST			A	1	S	7/23/2008	4.438	F	2500	$5,500,000	302		
2230420	K	278I (B.Q.E.)	WASHINGTON ST			A	1	S	7/23/2008	4.750	F	2500	$5,500,000	302		
2230430	K	278I (B.Q.E.)	PROSPECT ST			A	1	S	2/28/2008	5.000	G	1100	$2,420,000	302		
2230440	K	278I (B.Q.E.)	ADAMS ST N.B.			A	1	S	1/18/2008	5.200	G	2700	$5,940,000	302		
2230450	K	278I (B.Q.E.)	ADAMS ST S.B.			A	1	S	1/18/2008	4.933	F	2500	$5,500,000	302		
2230460	K	278I (B.Q.E.)	PEARL ST			A	1	S	3/10/2008	5.333	G	4500	$9,900,000	302		
2230470	K	278I (B.Q.E.)	JAY ST			A	1	S	3/10/2008	4.833	F	5100	$11,220,000	302		
2230480	K	278I (B.Q.E.)	PROSPECT ST			A	1	S	4/24/2008	5.093	G	8400	$18,480,000	302		
2230490	K	278I (B.Q.E.)	SANDS ST			A	1	S	3/26/2008	5.019	G	12600	$27,720,000	302		
2230500	K	278I (B.Q.E.)	RAMP TO BQE EB			A	1	S	3/25/2008	5.100	G	1300	$2,860,000	302		
2230510	K	278I (B.Q.E.)	NASSAU ST			A	6	S	7/14/2008	4.775	F	51200	$112,640,000	302		
2230520	Q	65TH PLACE	278I (B.Q.E.)			A	2	S	2/22/2008	4.508	F	11600	$25,520,000	402		
2230530	Q	QUEENS BLVD	278I (B.Q.E.)			A	2	S	12/4/2008	6.417	V	25543	$56,194,600	402		
2230540	Q	WOODSIDE AVE	278I (B.Q.E.)			A	1	S	1/29/2008	5.797	G	7500	$16,500,000	402		
2230550	Q	69TH ST	278I (B.Q.E.)			A	2	S	2/15/2008	5.123	G	12600	$27,720,000	402		
2230560	Q	70TH ST	278I (B.Q.E.)			A	2	S	12/11/2008	6.667	V	8500	$18,700,000	402		
2230570	Q	41ST AVE	278I (B.Q.E.)			A	3	S	4/16/2007	4.931	F	8800	$19,360,000	402		
2230587	Q	ROOSEVELT AVE	278I (B.Q.E.)			A	2	S	12/12/2007	5.833	G	6600	$14,520,000	402		
2230590	Q	BROADWAY	278I (B.Q.E.)			O	2	S	12/11/2008	5.789	G	16000	$35,200,000	402		
2230600	Q	STEINWAY ST	278I W.B. (B.Q.E.)			A	1	S	10/21/2008	6.581	V	4200	$9,240,000	401		
2230610	Q	STEINWAY ST	278I E.B. (B.Q.E.)			A	1	S	10/21/2008	6.581	V	4200	$9,240,000	401		
2230620	Q	37TH ST	278I (B.Q.E.)			A	2	S	3/26/2008	4.583	F	5300	$11,660,000	401		
2230630	Q	35TH ST	278I (B.Q.E.)			A	4	S	4/14/2008	4.736	F	9000	$19,800,000	401		
2230640	Q	32ND ST	278I (B.Q.E.)			A	2	S	6/11/2007	4.903	F	8100	$17,820,000	401		
2230657	Q	31ST ST	278I (B.Q.E.)			A	2	S	9/29/2006	4.847	F	9500	$20,900,000	401		
2230669	Q	278I (B.Q.E.)	35TH AVE			A	1	S	8/28/2007	6.729	V	13135	$28,897,000	402		
2230679	Q	278I (B.Q.E.)	34TH AVE			A	1	S	6/13/2007	6.305	V	7793	$17,144,600	402		
2230680	Q	278I (B.Q.E.)	NORTHERN BLVD			A	1	S	12/4/2006	6.492	V	27011	$59,424,200	402	401	
2230690	Q	BQE EAST LEG NB	32ND AVE			A	1	S	8/20/2008	6.627	V	4080	$8,976,000	401		
2230700	Q	BQE EAST LEG	TO BQE WEST LEG			A	8	S	11/6/2008	6.746	V	31600	$69,520,000	401	403	
2230710	Q	278I S.B. (B.Q.E.)	32ND AVE			A	1	S	8/31/2007	6.695	V	5240	$11,528,000	401		
2230720	Q	BQE EAST LEG	BQE NB WEST LEG			A	3	S	5/17/2007	6.273	V	20896	$45,971,200	401		
2230730	Q	31ST AVE	278I (B.Q.E.)			A	1	S	7/31/2007	6.517	V	5875	$12,925,000	401		
2230740	Q	BQE WEST LEG SB	31ST AVE			A	1	S	8/31/2007	6.391	V	5246	$11,541,200	401		
2230750	Q	BQE EAST LEG SB	31ST AVE			A	1	S	9/17/2007	6.407	V	4221	$9,286,200	401	403	
2230760	Q	BQE WEST LEG NB	31ST AVE			A	1	S	10/6/2008	6.610	V	4161	$9,154,200	401		
2230770	Q	BQE WEST LEG	30TH AVE			A	1	S	6/26/2007	6.695	V	6199	$13,637,800	401		
2230780	Q	BQE EAST LEG	30TH AVE			A	1	S	6/26/2007	6.524	V	7071	$15,556,200	403	401	
2230790	Q	BULOVA AVE	BQE WEST LEG			A	2	S	4/25/2008	5.333	G	3300	$7,260,000	401		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230800	Q	49TH ST	BQE WEST LEG			A	2	S	4/25/2008	5.333	G	4900	$10,780,000	401		
2230810	Q	ASTORIA BLVD E.B.	BQE WEST LEG			A	4	S	1/24/2008	4.103	F	8200	$18,040,000	401		
2230820	Q	47TH ST	GCP			A	2	S	5/20/2008	4.944	F	5700	$12,540,000	401		
2230830	Q	BQE WEST LEG	GCP			A	2	S	5/20/2008	4.750	F	7600	$16,720,000	401		
2230840	Q	44TH ST	GCP			A	2	S	5/13/2008	4.847	F	5000	$11,000,000	401		
2230857	K	278I (B.Q.E.)	JORALEMON ST			A	1	S	5/24/2008	5.000	G	2100	$4,620,000	302		
2230858	K	278I (B.Q.E.)	JORALEMON ST / BQE WB			A	2	S	5/30/2008	4.177	F	5900	$12,980,000	302		
2230869	Q	QUEENS BLVD	ACCESS RD BQE S.B.			A	1	S	11/26/2006	4.205	F	7900	$17,380,000	402		
2230870	K	COLUMBIA HEIGHTS	278I (B.Q.E.)			A	1	S	9/3/2008	4.550	F	16500	$36,300,000	302		
2230887	K	278I W.B. (B.Q.E.)	CADMAN PLAZA			A	2	S	8/21/2008	4.426	F	4500	$9,900,000	302		
2230888	K	278I E.B. (B.Q.E.)	CADMAN PLAZA / 278I WB			A	2	S	8/21/2008	5.053	G	4500	$9,900,000	302		
2230890	Q	49TH ST	GCP			A	2	S	5/14/2008	4.667	F	6350	$13,970,000	401		
2231249	K	BSHP	BAY RIDGE AVE			A	1	S	4/19/2008	3.313	F	4900	$10,780,000	310		
2231250	K	81ST ST PED BR	BSHP		P	A-PED	5	C	12/23/2008	4.721	F	3100	$6,820,000	310		
2231260	K	92ND ST PED BR	BSHP		P	A-PED	6	C	8/13/2008	4.079	F	3000	$6,600,000	310		
2231270	K	4TH AVE	BSHP			A	2	S	4/10/2008	4.842	F	6100	$13,420,000	310		
2231290	K	BAY 8TH ST	BSHP			A	1	S	5/11/2007	5.921	G	4950	$10,890,000	311		
2231300	K	17TH AVE PED BRDG	BSHP		P	A-PED	1	C	11/12/2008	3.397	F	2100	$4,620,000	311		
2231319	K	BSHP	BAY PKWY			A	1	S	7/21/2008	4.535	F	7200	$15,840,000	311		
2231329	K	BSHP	26TH AVE			A	1	S	6/5/2008	4.867	F	6700	$14,740,000	313		
2231330	K	27TH AVE PED BRDG	BSHP		P	A-PED	1	C	1/15/2008	3.927	F	2100	$4,620,000	313		
2231340	K	CROPSEY AVE	BSHP			A	2	S	7/18/2008	4.806	F	13100	$28,820,000	313		
2231360	K	BSHP	OCEAN PKWY			A	3	S	8/20/2008	6.776	V	29637	$65,201,400	313		
2231370	K	GUIDER AV RAMP TO BSHP	BSHP			A	4	S	8/22/2008	3.653	F	12800	$28,160,000	313		
2231380	K	CONEY ISLAND AVE	BSHP			A	4	S	10/5/2007	6.292	V	19866	$43,705,200	313		
2231390	K	E 12TH ST	BSHP			A	4	S	7/12/2008	4.875	F	17200	$37,840,000	315		
2231409	K	BSHP	SHEEPSHEAD BAY ROAD			A	1	S	4/30/2008	4.967	F	6500	$14,300,000	315		
2231419	K	BSHP	OCEAN AVE			A	3	S	5/1/2008	4.222	F	14000	$30,800,000	315		
2231429	K	BSHP	BEDFORD AVE			A	3	S	5/3/2008	4.167	F	12000	$26,400,000	315		
2231439	K	BSHP	NOSTRAND AVE			A	3	S	4/24/2008	4.097	F	13000	$28,600,000	315		
2231449	K	KNAPP ST	BSHP			A	1	S	6/10/2008	4.391	F	9500	$20,900,000	315		
2231450	K	BSHP	GERRITSEN INLET			WA	11	S	6/26/2007	3.597	F	52000	$114,400,000	356		
2231460	K	FLATBUSH AVE	BSHP			A	2	S	10/3/2007	6.306	V	14058	$30,927,600	356		
2231479	K	BSHP	MILL BASIN			WMA	14	S	12/18/2007	2.955	P	73500	$161,700,000	318		
2231489	K	BSHP	PAERDEGAT BASIN			WA	15	S	8/11/2007	3.222	F	58300	$128,260,000	318		
2231499	K	BSHP	ROCKAWAY PKWY			A	4	S	10/3/2007	4.000	F	11500	$25,300,000	356		
2231509	K	BSHP	FRESH CREEK			WA	5	S	8/9/2007	3.333	F	23000	$50,600,000	356		
2231519	K	PENNSYLVANIA AVE	BSHP			A	2	S	4/24/2007	6.181	V	6640	$14,608,000	356		
2231559	Q	CROSS BAY BLVD	BSHP			A	4	S	5/29/2008	5.139	G	23205	$51,051,000	410		
2231560	Q	S CONDUIT BLVD	BSOP			A	2	S	7/29/2008	5.465	G	15776	$34,707,200	410		

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2231570	Q	COHANCY ST	BSOP			A	2	S	5/7/2008	4.632	F	6400	$14,080,000	410		
2231580	Q	AQUEDUCT RCTK RAMP	BSOP			A	4	S	7/17/2008	4.208	F	14000	$30,800,000	410		
2231590	Q	130TH ST	BSOP			A	2	S	2/12/2008	4.659	F	6800	$14,960,000	410		
2231610	Q	GUY R. BREWER BLVD	BSOP			A	4	S	5/21/2007	6.569	V	12342	$27,152,400	413		
2231620	Q	FARMERS BLVD	BSOP			A	2	S	6/26/2008	4.568	F	6400	$14,080,000	413		
2231630	Q	SPRINGFIELD BLVD	BSOP			A	2	S	5/20/2008	4.614	F	8500	$18,700,000	413		
2231640	Q	225TH ST	BSOP			A	2	S	6/26/2008	5.000	G	7000	$15,400,000	413		
2231650	Q	SUNRISE HWY W.B.	BLP E.B.			A	1	S	4/16/2008	4.623	F	4100	$9,020,000	413		
2231660	Q	SUNRISE HWY W.B.	BLP W.B.			A	2	S	3/10/2008	4.652	F	5350	$11,770,000	413		
2231670	Q	N CONDUIT AVE W.B.	BLP E.B.			A	1	S	2/7/2008	4.917	F	4000	$8,800,000	413		
2231680	Q	N CONDUIT AVE WB	BLP W.B.			A	2	S	2/12/2008	4.932	F	6500	$14,300,000	413		
2231690	Q	FRANCIS LEWIS BLVD	BLP E.B.			A	1	S	4/18/2008	5.167	G	6000	$13,200,000	413		
2231700	Q	FRANCIS LEWIS BLVD	BLP W.B.			A	1	S	4/17/2008	4.833	F	6000	$13,200,000	413		
2231710	Q	MERRICK BLVD	BLP N.B.			A	1	S	2/27/2008	4.400	F	6000	$13,200,000	413		
2231720	Q	MERRICK BLVD	BLP S.B.			A	1	S	2/27/2008	4.200	F	6000	$13,200,000	413		
2231730	Q	130TH AVE	BLP N.B.			A	1	S	1/23/2008	5.267	G	4400	$9,680,000	413		
2231740	Q	130TH AVE	BLP S.B.			A	1	S	2/8/2008	4.767	F	4400	$9,680,000	413		
2231750	Q	LINDEN BLVD	BCIP			A	2	S	3/7/2008	4.341	F	6700	$14,740,000	413		
2231760	Q	BCIP	DUTCH BROADWAY-115 AVE			A	1	S	3/7/2008	4.442	F	7300	$16,060,000	413		
2231770	Q	BELMONT PARK RAMP	BCIP		P	A	1	S	2/14/2008	4.688	F	3200	$7,040,000	413		
2231780	Q	HEMPSTEAD AVE	BCIP			A	2	S	2/19/2008	3.903	F	14200	$31,240,000	413		
2231790	Q	BELMONT PARK RAMP	BCIP		P	A	1	S	1/29/2008	4.563	F	3400	$7,480,000	413		
2231800	Q	SUPERIOR ROAD	BCIP			A	2	S	4/14/2008	4.136	F	7000	$15,400,000	413		
2231819	Q	JAMAICA AVE	BCIP			A	2	S	3/3/2008	4.773	F	11500	$25,300,000	413		
2231829	Q	BRADDOCK AVE	BCIP			A	2	S	3/3/2008	4.591	F	10600	$23,320,000	413		
2231840	Q	HILLSIDE AVE	BCIP			A	2	S	4/8/2008	4.184	F	9672	$21,278,400	413		
2231850	Q	UNION TPKE	BCIP			A	2	S	4/3/2008	4.409	F	13600	$29,920,000	413		
2231860	Q	W ALLEY ROAD	BCIP			A	2	S	8/3/2007	5.474	G	7200	$15,840,000	411		
2231870	Q	NORTHERN BLVD	BCIP			A	2	S	9/22/2008	6.236	V	9400	$20,680,000	411		
2231880	Q	CROCHERON PK PED	BCIP		P	A-PED	9	C	5/13/2008	4.710	F	2300	$5,060,000	411		
2231890	Q	28TH AVE PED BRDG	BCIP		P	A-PED	24	C	7/10/2008	4.600	F	7600	$16,720,000	411		
2231900	Q	BCIP	FORT TOTTEN ENTRANCE			A	1	S	6/27/2008	4.797	F	4900	$10,780,000	407		
2231910	Q	UTOPIA PKWY	BCIP			A	2	S	3/14/2008	5.114	G	7200	$15,840,000	407		
2231920	Q	160TH ST	BCIP			A	2	S	5/2/2007	5.750	G	5550	$12,210,000	407		
2231930	Q	FRANCIS LEWIS BLVD	BCIP			A	3	S	2/15/2008	4.773	F	9100	$20,020,000	407		
2231940	Q	CLINTONVILLE ST	BCIP			A	2	S	2/19/2008	4.705	F	7400	$16,280,000	407		
2231950	Q	150TH ST	BCIP			A	2	S	3/4/2008	4.795	F	5900	$12,980,000	407		
2231960	Q	149TH ST	BCIP			A	2	S	2/28/2008	4.841	F	6210	$13,662,000	407		
2231970	Q	14TH AVE	BCIP			A	2	S	2/28/2008	4.614	F	8100	$17,820,000	407		
2231980	Q	147TH ST	BCIP			A	2	S	3/6/2008	4.523	F	6300	$13,860,000	407		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2232000	M	BATTERY PLACE	FDR DRIVE			AT	2	S	12/14/2007	6.045	V	142000	$312,400,000	107		
223201A	M	FDR DR N.B. OFF RMP	FDR DR & SOUTH ST			AR	17	S	2/29/2008	3.716	F	102225	$224,895,000	106		
223201B	M	STH ST RMP TO FDR S.B.	SOUTH ST			AR	10	S	2/27/2008	3.761	F	44625	$98,175,000	101		
223201C	M	STH ST RMP TO FDR	SOUTH ST			AR	8	S	2/20/2008	4.701	F	39150	$86,130,000	103		
223201D	M	RAMP TO N.B. FDR DRIVE	FDR & SOUTH ST.			AR	22	S	3/2/2008	4.967	F	15825	$34,815,000	107		
2232029	M	CORLEARS PARK ROAD	FDR DRIVE		P	A	4	S	2/24/2008	3.625	F	4100	$9,020,000	103		
2232030	M	DELANCEY ST PED BRDG	FDR DRIVE		P	A-PED	12	C	9/7/2008	4.535	F	2900	$6,380,000	103		
2232040	M	HOUSTON ST	FDR DRIVE			A	2	S	3/9/2008	3.455	F	11010	$24,222,000	108		
223204A	M	FDR NB TO HOUSTON ST	RELIEF			AR	4	S	1/30/2008	4.471	F	6150	$13,530,000	107		
223204B	M	HOUSTON ST RAMP TO FDR	RELIEF			AR	4	S	2/1/2008	4.625	F	7642	$16,812,400	107		
2232050	M	E 6TH ST PED BRDG	FDR DRIVE		P	A-PED	22	C	3/16/2008	4.353	F	2200	$4,840,000	103		
2232070	M	25TH ST PED BRDG	FDR DRIVE			A-PED	4	C	3/16/2008	4.627	F	1700	$3,740,000	106		
2232100	M	E 51ST ST PED BRDG	FDR DRIVE		P	A-PED	10	C	4/6/2008	4.186	F	2800	$6,160,000	106		
2232110	M	E 64TH ST PED BRDG	FDR DRIVE		P	A-PED	24	C	10/19/2008	4.562	F	2100	$4,620,000	108		
2232120	M	E 71ST ST PED BRDG	FDR DRIVE		P	A-PED	19	C	8/17/2008	5.761	G	1800	$3,960,000	108		
2232140	M	E 78TH ST PED BRDG	FDR DRIVE		P	A-PED	9	C	4/6/2008	2.711	P	1700	$3,740,000	108		
2232158	M	FDR DRIVE S.B.	FDR DRIVE N.B.			AT	32	S	6/22/2007	4.591	F	54302	$119,464,400	107		
2232167	M	PROMENADE OVER FDR	FDR/E79TH ST-E91ST ST		P	A-PED	53	S	10/31/2007	3.857	F	93000	$204,600,000	107		
2232180	M	E 103RD ST PED BRDG	FDR DRIVE			A-PED	20	C	8/17/2008	4.739	F	6000	$13,200,000	111		
2232190	M	E 111TH ST PED BRDG	FDR DRIVE		P	A-PED	14	C	8/3/2008	4.689	F	2600	$5,720,000	111		
2232200	M	E 120TH ST PED BRDG	FDR DRIVE		P	A-PED	21	C	8/3/2008	4.522	F	2500	$5,500,000	111		
2233020	M	E 10TH ST PED BRDG	FDR DRIVE		P	A-PED	25	C	9/7/2008	5.216	G	1632	$3,590,400	103		
2233038	M	FDR DRIVE SB	FDR NB / E 62ND ST			AT	34	S	10/23/2006	6.887	V	58700	$129,140,000	107		
2233040	M	E 60TH ST	FDR DRIVE			A	17	S	5/2/2008	4.746	F	24480	$53,856,000	107		
2233059	M	HARLEM RIVER DRIVE	RAMP TO HRD N.B.			A	11	S	9/11/2008	3.269	F	51000	$112,200,000	112		
2233080	K	E 14 ST PED BR	BSHP			A-PED	14	C	7/22/2008	4.500	F	4700	$10,340,000	315		
2240019	KM	BROOKLYN BRIDGE	278I (B.Q.E.)			WEO	75	S	11/17/2006	2.917	P	503788	$1,108,333,600	103	302	101
224001A	M	PARK ROW TO BKLN	WILLIAM ST N.B.			OE	4	S	4/9/2008	4.167	F	10167	$22,367,400	101		
224001B	M	TO BKLN FRM FDR	FRANKFRT & CITY			OE	31	S	6/6/2006	4.148	F	51400	$113,080,000	101		
224001C	M	PEARL ST TO BKLN	LAND ADJ TO BRDG			OE	9	S	3/17/2008	3.814	F	6489	$14,275,800	103		
224001D	M	TO FDR DR N.B.	PEARL STREET			OE	30	S	5/17/2007	4.906	F	49600	$109,120,000	101		
224001E	M	TO PEARL ST	LAND ADJ TO BRDG			OE	3	S	5/4/2007	5.141	G	5300	$11,660,000	106		
224001F	M	PEARL ST TO FDR DR	LAND ADJ TO BRDG			OE	3	S	3/4/2008	5.338	G	5200	$11,440,000	101		
224001G	M	TO PARK ROW	ROSE ST			OE	11	S	5/18/2007	4.549	F	16551	$36,412,200	101		
2240027	KM	MANHATTAN BRIDGE(LL)	EAST RIVER	T		WEO	23	S	11/30/2006	4.407	F	616390	$1,356,058,000	103	302	
2240028	KM	MANHATTAN BRIDGE(UL)	NYCTA TRACKS-BMT	T		WEO	43	S	11/30/2006	4.357	F	587424	$1,292,332,800	103	302	
2240039	KM	WILLIAMSBURG BRIDGE	EAST RIVER	T		WEO	53	S	11/3/2006	4.736	F	824000	$1,812,800,000	103	301	
2240047	MQ	QUEENSBORO BRIDGE(LL)	EAST RIVER	AL		WEO	53	S	11/15/2006	4.472	F	626900	$1,379,180,000	108	402	401
2240048	MQ	QUEENSBORO BRIDGE(UL)	EAST RIVER-LL			WEO	37	S	11/15/2006	4.434	F	322300	$709,060,000	108	402	401
224004A	M	TO QNS FRM E 59TH ST	FIRST AVE			OE	13	S	5/9/2008	5.254	G	14800	$32,560,000	106		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
224004B	M	TO E 60TH ST FROM QNS	FIRST AVE			OE	13	S	5/9/2008	5.708	G	14800	$32,560,000	106		
224004C	M	TO E 62ND ST FROM QNS	E 60TH ST			OE	10	S	10/2/2008	4.985	F	16720	$36,784,000	106		
224004D	M	TO QNS FROM E 58TH ST	E 59TH ST			OE	12	S	7/10/2008	4.547	F	11781	$25,918,200	106		
224004E	Q	TO NY FR THOMSON AVE	JACKSON AVE			OE	94	S	12/7/2006	4.792	F	104600	$230,120,000	402		
224004F	Q	TO NY FROM 21ST ST	21ST ST (QUEENS)			OE	63	S	12/12/2008	4.833	F	63310	$139,282,000	402	401	
224004G	Q	TO NY FROM 11TH ST	TERRAIN (CHAMBER)			OE	36	S	11/10/2006	4.634	F	8360	$18,392,000	401	402	
224004H	Q	TO 21ST ST FROM NY	22ND ST			OE	43	S	12/14/2006	4.366	F	48100	$105,820,000	402		
224004I	Q	TO THOMSON AVE FROM NY	JACKSON AVE			OE	39	S	10/18/2006	5.082	G	59100	$130,020,000	402		
224004J	M	25X	NYC GARAGE			OE	14	S	5/19/2008	4.537	F	22058	$48,527,600	106		
2240059	BM	WILLIS AVENUE	HARLEM RIVER			WMO	26	S	12/10/2007	3.292	F	94700	$208,340,000	111	201	
224005A	M	FROM FDR DRIVE	HARLEM RIVER DR			OR	19	S	6/6/2008	4.299	F	29900	$65,780,000	111		
224005B	B	TO BRUCKNER BLVD	RELIEF			OR	5	S	7/26/2007	3.861	F	12100	$26,620,000	201		
2240069	BM	THIRD AVE BRIDGE	HARLEM RIVER			WMO	14	S	10/9/2008	6.746	V	100232	$220,510,400	111	201	
224006A	B	TO BRUCKNER BLVD	RELIEF			OR	5	S	12/19/2007	6.817	V	14037	$30,881,400	201		
2240079	BM	MADISON AVE BRIDGE	HARLEM RIVER			WMO	21	S	11/6/2006	4.889	F	80000	$176,000,000	111	201	
224007A	M	TO MADISON AVENUE	RELIEF			OR	7	S	4/18/2008	5.225	G	19880	$43,736,000	111		
2240089	BM	145TH ST BRIDGE	HARLEM RIVER			WMO	8	S	12/7/2007	6.333	V	56700	$124,740,000	110	204	201
2240120	BM	W 207TH/W FORDHAM RD	HARLEM RIVER			WMO	5	S	9/22/2008	5.333	G	31784	$69,924,800	112	207	
2240137	BM	BROADWAY BRIDGE	HARLEM RIVER	TM		WMO	3	S	11/30/2007	4.014	F	46848	$103,065,600	112	207	208
2240138	BM	NYCTA IRT	HARLEM RVR/BROADWAY	TM		WMO	3	S	12/17/2007	5.000	G	19520	$42,944,000	112	207	208
2240180	B	WESTCHESTER AVE	BRONX RIVER			WO	1	S	7/17/2007	4.932	F	5476	$12,047,200	202	209	
2240200	B	SHORE ROAD	HUTCHINSON RIVER			WMO	7	S	7/9/2008	4.478	F	4800	$10,560,000	228		
2240210	B	CITY ISLAND ROAD	EASTCHESTER BAY			WO	7	S	10/9/2007	3.389	F	28900	$63,580,000	228		
2240231	K	HAMILTON AVE BRIDGE	GOWANUS CANAL			WMO	3	S	12/2/2008	5.472	G	7300	$16,060,000	307	306	
2240232	K	HAMILTON AVE BRIDGE	GOWANUS CANAL			WMO	3	S	10/8/2007	5.444	G	7300	$16,060,000	306		
2240240	K	NINTH ST BRIDGE	GOWANUS CANAL			WMO	3	S	6/4/2007	6.581	V	5772	$12,698,400	306		
2240250	K	THIRD ST	GOWANUS CANAL			WMO	5	S	6/5/2007	4.931	F	4900	$10,780,000	306		
2240260	K	CARROLL ST	GOWANUS CANAL			WMO	2	S	10/14/2008	4.803	F	3000	$6,600,000	306		
2240270	K	UNION ST	GOWANUS CANAL			WMO	5	S	10/14/2008	4.014	F	4900	$10,780,000	306		
2240290	K	METROPOLITAN AVE	ENGLISH KILLS			WMO	5	S	7/26/2007	6.319	V	10550	$23,210,000	301		
2240301	K	CROPSEY AVE	CONEY ISLAND CREEK			WO	3	S	10/17/2008	5.113	G	9400	$20,680,000	313		
2240302	K	CROPSEY AVE	CONEY ISLAND CREEK			WO	3	S	10/22/2008	5.028	G	9400	$20,680,000	313		
2240310	K	THIRD AVE	GOWANUS CANAL			WO	1	S	9/4/2007	5.000	G	3200	$7,040,000	306		
2240320	K	OCEAN AVE PED BRDG	SHEEPSHEAD BAY			WO-PED	30	C	9/9/2008	3.939	F	4000	$8,800,000	315		
2240350	R	RICHMOND AVE	RICHMOND CREEK			WO	3	S	8/10/2007	5.653	G	32589	$71,695,800	502		
2240370	KQ	GREENPOINT AVE BRIDGE	NEWTOWN CREEK	L		WMO	12	S	7/27/2007	5.111	G	76106	$167,433,200	301	402	
2240390	KQ	GRAND ST BRIDGE	NEWTOWN CREEK			WMO	2	S	9/28/2007	4.292	F	5100	$11,220,000	301	405	
2240410	Q	BORDEN AVE	DUTCH KILLS			WMO	2	S	8/7/2008	3.181	F	8400	$18,480,000	402		
2240440	Q	NORTHERN BLVD	ALLEY CREEK			WO	2	S	8/15/2008	4.750	F	8300	$18,260,000	411		
2240450	Q	HUNTERS PT AVE BRIDGE	DUTCH KILLS			WMO	4	S	7/22/2008	5.083	G	12168	$26,769,600	402		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240507	Q	ROOSEVELT AVE	678I - VAN WYCK EXPWY			WA	27	S	12/13/2006	3.535	F	84424	$185,732,800	407	481	
2240540	K	STILLWELL AVE	CONEY ISLAND CRK			WO	2	S	6/5/2007	6.292	V	17000	$37,400,000	313		
2240620	M	WARDS ISLAND PED BRDG	HARLEM RIVER			WMO-PED	10	C	11/1/2008	4.367	F	12600	$27,720,000	111		
2240639	KQ	PULASKI BRIDGE	NEWTOWN CREEK			WMO	44	S	6/3/2008	4.408	F	205770	$452,694,000	301	402	
2240640	MQ	ROOSEVELT ISLAND	E. RIVER E. CHANNEL			WMO	8	S	11/4/2008	5.389	G	36500	$80,300,000	108	401	
2240650	Q	163RD ST PED BRDG	HAWTREE BASIN			WO-PED	13	C	11/12/2008	4.304	F	5000	$11,000,000	410		
2240660	Q	RIKERS ISLAND BRIDGE	RIKERS ISL CHANNEL			WO	56	S	12/21/2007	4.521	F	183100	$402,820,000	401	480	
2241000	B	WESTCHESTER AVE	CSX TRANS - PT MORRIS	C		O	1	S	7/18/2008	5.128	G	1740	$3,828,000	201		
2241010	B	E 156TH STREET	CSX TRANS - PT MORRIS	C		O	1	S	7/18/2008	4.556	F	2400	$5,280,000	201		
2241020	B	E 161ST STREET	CSX TRANS - PT MORRIS	C		O	1	S	5/12/2008	6.700	V	12800	$28,160,000	203		
2241030	B	E 163RD STREET	CSX TRANS - PT MORRIS	C		O	1	S	4/11/2008	4.796	F	3200	$7,040,000	203		
2241040	B	THIRD AVE	CSX TRANS - PT MORRIS	C		O	1	S	10/28/2008	4.563	F	2700	$5,940,000	201	203	
2241050	B	E 149TH ST/JACKSON AVE	CSX TRANS - PT MORRIS	C		O	1	S	6/30/2008	4.850	F	65000	$143,000,000	201		
2241060	B	ST. MARYS & CONCORD	CSX TRANS - PT MORRIS	C		O	1	S	9/12/2008	5.333	G	4500	$9,900,000	201		
2241070	B	WALES AVE	CSX TRANS - PT MORRIS	C		O	1	S	10/17/2008	6.567	V	2535	$5,577,000	201		
2241080	B	SOUTHERN BLVD	CSX TRANS - PT MORRIS	C		O	1	S	10/16/2008	4.259	F	3900	$8,580,000	201		
2241099	B	BRUCKNER BLVD	CSX TRANS - PT MORRIS	C		O	1	S	10/16/2008	6.583	V	6700	$14,740,000	201		
2241110	B	MELROSE AVE	CSX TRANS - PT MORRIS	C		O	8	S	10/16/2007	5.667	G	37854	$83,278,800	203		
2241129	B	E 149TH ST	AMTRAK - CSX	AC		O	2	S	8/7/2006	4.620	F	12575	$27,665,000	201	202	
2241139	B	LEGGETT AVE	AMTRAK - CSX	AC		O	3	S	8/7/2006	4.690	F	28300	$62,260,000	202		
2241159	B	LONGWOOD AVE	AMTRAK - CSX	AC		O	2	S	7/23/2008	5.306	G	10625	$23,375,000	202		
2241169	B	LAFAYETTE AVE	AMTRAK - CSX	AC		O	1	S	8/8/2006	5.794	G	12000	$26,400,000	202		
2241170	B	TIFFANY ST	AMTRAK - CSX	AC		O	1	S	9/21/2007	5.627	G	7267	$15,987,400	202		
2241180	B	BARRETTO ST	AMTRAK - CSX	AC		O	1	S	7/25/2008	6.000	G	5313	$11,688,600	202		
2241190	B	HUNTS POINT AVE	AMTRAK - CSX	AC		O	1	S	11/7/2008	4.984	F	13700	$30,140,000	202		
2241200	B	FAILE ST	AMTRAK - CSX	AC		O	1	S	11/7/2008	5.672	G	6208	$13,657,600	202		
2241210	B	BRYANT AVE	AMTRAK - CSX	AC		O	1	S	9/10/2007	3.136	F	5300	$11,660,000	202		
2241230	B	WESTCHESTER AVE	AMTRAK - CSX	AC		O	3	S	8/10/2006	6.125	V	15600	$34,320,000	202	209	
2241259	B	204TH ST PED BRDG	METRO NORTH RR HAR	M	P	O-PED	1	C	7/26/2004	4.121	F	4700	$10,340,000	227	207	
2241269	B	E 177TH ST	AMTRAK - CSX	AC		O	3	S	8/11/2006	5.458	G	16606	$36,533,200	209		
2241270	B	E TREMONT AVE	AMTRAK - CSX	AC		O	2	S	7/26/2006	5.153	G	22300	$49,060,000	209	211	
2241329	B	WHITE PLAINS ROAD	AMTRAK - CSX	AC		O	1	S	8/17/2006	4.859	F	6900	$15,180,000	211		
2241330	B	UNIONPORT ROAD	AMTRAK - CSX	AC		O	1	S	8/17/2006	4.875	F	4400	$9,680,000	211		
2241369	B	WILLIAMSBRIDGE RD	AMTRAK - CSX	AC		O	2	S	7/27/2006	4.836	F	10400	$22,880,000	211		
2241380	B	PELHAM BAY PK EQUES	AMTRAK - CSX	AC	P	O-PED	1	C	11/13/1978	5.109	G	4223	$9,290,600	228		
2241390	B	SHORE RD CIRCLE	AMTRAK - CSX	AC		O	2	S	9/10/2007	3.254	F	4800	$10,560,000	228		
2241409	B	GRAND CONCOURSE	METRO NORTH RR HUD	MT		O	1	S	4/21/2008	3.859	F	16100	$35,420,000	204		
2241410	B	WALTON AVE	METRO NORTH RR HUD	M		O	1	S	4/22/2008	5.297	G	3600	$7,920,000	204		
2241420	B	GERARD AVE	METRO NORTH RR HUD	M		O	1	S	4/29/2008	5.922	G	5063	$11,138,600	204		
2241430	B	RIVER AVE	METRO NORTH RR HUD	M		O	1	S	11/9/2007	6.281	V	5040	$11,088,000	204		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2241460	B	W TREMONT AVE	METRO NORTH RR HUD	M		O	8	S	5/9/2008	4.194	F	12900	$28,380,000	205		
2241470	B	W FORDHAM RD	METRO NORTH RR HUD	M		O	4	S	11/26/2007	5.694	G	16052	$35,314,400	207		
2241489	B	W 225TH ST	CSX TRASP - PUTNAM	C		O	2	S	5/2/2008	5.149	G	10900	$23,980,000	207	208	
2241490	B	W 230TH ST	CONRAIL (ABANDONED) PUTNAM			O	1	S	5/9/2007	5.625	G	5600	$12,320,000	208		
2241509	B	W 231ST ST	CONRAIL (ABANDONED) PUTNAM			O	1	S	10/29/2008	4.745	F	4723	$10,390,600	208		
2241510	B	W 233RD ST	CONRAIL (ABANDONED) PUTNAM			O	1	S	4/13/2007	5.275	G	3760	$8,272,000	208		
2241520	B	W 234TH ST	CONRAIL (ABANDONED) PUTNAM			O	1	S	4/18/2007	5.176	G	3770	$8,294,000	208		
2241550	B	E 144TH ST	METRO NORTH RR HAR	M		O	2	S	11/14/2007	6.444	V	8290	$18,238,000	201		
2241560	B	E 149TH ST	METRO NORTH RR HAR	M		O	8	S	4/21/2008	4.708	F	27900	$61,380,000	201	204	
2241590	B	CONCOURSE VILL AVE	METRO NORTH RR HAR	M		O	1	S	4/11/2006	4.125	F	17800	$39,160,000	204		
2241600	B	E 158TH ST	METRO NORTH RR HAR	M		O	1	S	10/31/2007	5.200	G	3400	$7,480,000	204		
2241610	B	E 161ST ST	METRO NORTH RR HAR	M		O	1	S	10/30/2007	5.050	G	6600	$14,520,000	204	203	
2241620	B	E 162ND ST	METRO NORTH RR HAR	M		O	1	S	4/14/2008	4.859	F	4700	$10,340,000	203		
2241630	B	E 165TH ST	METRO NORTH RR HAR	M		O	1	S	4/21/2008	4.200	F	16400	$36,080,000	203		
2241650	B	E 167TH ST	METRO NORTH RR HAR	M		O	1	S	3/24/2008	5.510	G	3363	$7,398,600	203		
2241660	B	E 168TH ST	METRO NORTH RR HAR	M		O	1	S	3/24/2008	4.859	F	7700	$16,940,000	203		
2241670	B	E 169TH ST	METRO NORTH RR HAR	M		O	1	S	3/24/2008	4.250	F	3300	$7,260,000	203		
2241680	B	E 170TH ST	METRO NORTH RR HAR	M		O	1	S	3/24/2008	6.333	V	3150	$6,930,000	203		
2241700	B	ST PAULS PL PED BRDG	METRO NORTH RR HAR	M		O-PED	2	C	11/2/2005	5.000	G	600	$1,320,000	203		
2241710	B	CLAREMONT PKWY	METRO NORTH RR HAR	M		O	1	S	3/24/2008	4.391	F	6300	$13,860,000	203		
2241720	B	E 173RD ST	METRO NORTH RR HAR	M		O	1	S	3/31/2008	4.875	F	3000	$6,600,000	203		
2241740	B	E 175TH ST	METRO NORTH RR HAR	M		O	1	S	3/31/2008	3.813	F	3600	$7,920,000	206		
2241760	B	E TREMONT AVE	METRO NORTH RR HAR	M		O	1	S	11/3/2007	6.517	V	7300	$16,060,000	206		
2241770	B	E 178TH ST PED BRDG	METRO NORTH RR HAR	M		O-PED	1	C	10/31/2005	4.918	F	700	$1,540,000	206		
2241780	B	E 179TH ST PED BRDG	METRO NORTH RR HAR	M		O-PED	6	C	11/1/2005	5.695	G	700	$1,540,000	206		
2241790	B	E 180TH ST	METRO NORTH RR HAR	M		O	1	S	3/31/2008	3.906	F	5000	$11,000,000	206		
2241800	B	E 183TH ST	METRO NORTH RR HAR	M		O	1	S	3/31/2008	4.109	F	3600	$7,920,000	206		
2241810	B	E 188TH ST	METRO NORTH RR HAR	M		O	1	S	4/7/2008	4.063	F	5300	$11,660,000	206		
2241820	B	E 187TH ST	METRO NORTH RR HAR	M		O	1	S	4/7/2008	4.438	F	3800	$8,360,000	206		
2241839	B	E 189TH ST	METRO NORTH RR HAR	M		O	1	S	11/1/2007	6.533	V	43157	$94,945,400	206	207	
2241840	B	BEDFORD PARK BLVD	METRO NORTH RR HAR	M		O	1	S	4/21/2008	4.594	F	6400	$14,080,000	227	207	
2241860	B	GUN HILL RD	METRO NORTH RR HAR	M		O	1	S	5/13/2008	6.531	V	9000	$19,800,000	212		
2241870	B	E 233RD ST	METRO NORTH RR HAR	M		O	1	S	5/2/2008	4.941	F	7664	$16,860,800	212	207	
2241890	B	E 241ST ST	BRP, METRO NORTH HAR	M		WO	28	S	11/2/2007	4.444	F	49500	$108,900,000	212		
2241900	B	EASTCHESTER ROAD	NYCTA-DYRE AVE LN	T		O	3	S	8/14/2008	4.667	F	13500	$29,700,000	212		
2241910	B	GUN HILL ROAD	NYCTA-DYRE AVE LN	T		O	1	S	8/14/2008	6.000	G	75000	$165,000,000	211	212	
2241930	B	BEDFORD PARK BLVD	NYCTA IND YARDS	T		O	4	S	8/12/2008	5.681	G	46300	$101,860,000	207		
2241940	B	W 205TH ST	NYCTA IND YARDS	T		O	4	S	8/14/2008	5.625	G	32508	$71,517,600	207		
2241959	B	HUTCHINSON RVR PKWY	AMTRAK - CSX	AC		O	1	S	11/14/2008	5.915	G	15444	$33,976,800	210	211	
2242010	B	BRONX PELHAM PKWY	BRONX RIVER			WA	1	S	5/7/2008	5.207	G	9200	$20,240,000	227		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2242029	B	SOUTHERN BLVD	EAST FORDHAM ROAD			O	2	S	3/19/2008	4.658	F	12900	$28,380,000	227		
2242030	B	CROTONA AVE	BRONX PELHAM PKWY			O	2	S	3/19/2008	5.447	G	7600	$16,720,000	206		
2242071	B	BRONX BLVD S.B.	BRONX RIVER			WO	1	S	5/20/2008	4.633	F	1800	$3,960,000	212		
2242072	B	BRONX BLVD N.B.	BRONX RIVER			WO	1	S	5/19/2008	4.967	F	1800	$3,960,000	212		
2242081	B	BRONX BLVD S.B.	BRONX RIVER			WO	1	S	5/20/2008	4.467	F	2800	$6,160,000	212		
2242082	B	BRONX BLVD N.B.	BRONX RIVER			WO	1	S	5/19/2008	4.467	F	2800	$6,160,000	212		
2242099	B	PARK ROAD (204TH ST)	BRONX RIVER			WO	1	S	6/19/2008	4.793	F	4700	$10,340,000	212		
2242100	B	BOTANICAL GARDEN ROAD	TWIN LAKES		P	WO	1	S	5/7/2008	4.900	F	2200	$4,840,000	227		
2242110	B	BOSTON ROAD	BRONX RIVER			WO	1	S	5/6/2008	4.273	F	6200	$13,640,000	227		
2242120	B	FTBG N OF RTE 1	BRONX RIVER		P	WO-PED	1	C	12/2/2008	4.000	F	1904	$4,188,800	209		
2242149	B	E TREMONT AVE	BRONX RIVER			WO	2	S	5/5/2008	4.500	F	12900	$28,380,000	206		
2242210	B	S OF ALLERTON AVE	BRONX RIVER			WO	3	S	5/27/2008	4.763	F	6200	$13,640,000	227		
2242220	B	SNUFF MILL ROAD	BRONX RIVER			WO	2	S	1/31/2008	4.395	F	4800	$10,560,000	227		
2242259	B	GRAND CONCOURSE	E 161ST ST			O	1	S	9/18/2008	6.533	V	24100	$53,020,000	204		
2242260	B	EAGLE AVE	E 161ST ST			O	1	S	3/17/2008	5.017	G	2800	$6,160,000	201	203	
2242280	B	GRAND CONCOURSE	E 167TH ST			O	2	S	7/21/2006	4.789	F	42900	$94,380,000	204		
2242299	B	GRAND CONCOURSE	E 138TH ST			O	1	S	6/1/2007	4.933	F	9500	$20,900,000	201		
2242300	B	GRAND CONCOURSE	E 170TH ST			O	2	S	4/24/2008	4.789	F	39300	$86,460,000	204		
2242319	B	GRAND CONCOURSE	E 174TH ST	T		O	1	S	3/27/2008	4.067	F	14900	$32,780,000	204		
2242329	B	GRAND CONCOURSE	E 175TH ST	T		O	1	S	8/5/2008	4.867	F	11900	$26,180,000	205		
2242330	B	GRAND CONCOURSE	E TREMONT AVE			O	1	S	10/9/2007	5.983	G	11700	$25,740,000	205		
2242340	B	GRAND CONCOURSE	EAST KINGSBRIDGE			O	2	S	9/15/2008	4.714	F	16500	$36,300,000	207		
2242350	B	EAST FORDHAM RD	GRAND CONCOURSE			O	1	S	4/8/2008	4.567	F	10300	$22,660,000	205	207	
2242360	B	GRAND CONCOURSE	BURNSIDE AVE			O	2	S	9/27/2006	4.441	F	8400	$18,480,000	205		
2242370	B	GRAND CONCOURSE	BEDFORD PARK BLVD			O	1	S	4/23/2008	4.412	F	8418	$18,519,600	207		
2242380	B	GRAND CONCOURSE	E 204TH ST			O	1	S	8/6/2007	5.391	G	9272	$20,398,400	207		
2242400	B	E 180TH ST	BRONX RIVER			WO	1	S	10/6/2008	4.810	F	4500	$9,900,000	206	227	
2242430	B	GUN HILL ROAD	BRONX BLVD			O	4	S	4/29/2008	4.772	F	9400	$20,680,000	212		
2242440	B	GUN HILL ROAD	BRONX RIVER			WO	1	S	2/29/2008	4.900	F	8700	$19,140,000	212		
2242459	B	E 233RD ST	BRONX RIVER			WO	1	S	5/2/2008	4.367	F	7000	$15,400,000	212		
2242460	B	E 233RD ST	ENTR RD BNX RVR PKWY			O	1	S	2/1/2008	4.900	F	5300	$11,660,000	212		
2243010	K	LINCOLN ROAD	BMT SUBWAY, BRIGHTON	T		O	1	S	9/3/2008	6.722	V	6016	$13,235,200	355		
2243020	K	PARKSIDE AVE	BMT SUBWAY, BRIGHTON	T		O	6	S	10/1/2008	4.043	F	48700	$107,140,000	314		
2243040	K	CROOKE AVE	BMT SUBWAY, BRIGHTON	T		O	4	S	10/3/2008	4.105	F	6000	$13,200,000	314		
2243050	K	CATON AVE	BMT SUBWAY, BRIGHTON	T		O	4	S	8/17/2007	4.500	F	20800	$45,760,000	314		
2243080	K	CHURCH AVE	BMT SUBWAY, BRIGHTON	T		O	4	S	8/29/2007	4.545	F	18200	$40,040,000	314		
2243100	K	BEVERLY ROAD	BMT SUBWAY, BRIGHTON	T		O	3	S	9/25/2008	3.737	F	4200	$9,240,000	314		
2243110	K	CORTELYOU ROAD	BMT SUBWAY, BRIGHTON	T		O	3	S	9/11/2007	6.167	V	4810	$10,582,000	314		
2243120	K	DORCHESTER ROAD	BMT SUBWAY, BRIGHTON	T		O	1	S	9/19/2008	5.882	G	4825	$10,615,000	314		
2243130	K	DITMAS AVE	BMT SUBWAY, BRIGHTON	T		O	1	S	9/6/2007	5.723	G	5150	$11,330,000	314		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2243140	K	NEWKIRK AVE	BMT SUBWAY, BRIGHTON	T		O	3	S	9/27/2008	4.338	F	4100	$9,020,000	314		
2243150	K	FOSTER AVE	BMT SUBWAY, BRIGHTON	T		O	1	S	9/18/2008	4.550	F	3000	$6,600,000	314		
2243170	K	STERLING PLACE	FRANKLIN SHUTTLE	T		O	1	S	9/28/2007	6.500	V	2300	$5,060,000	308		
2243180	K	ST JOHNS PLACE	FRANKLIN SHUTTLE	T		O	1	S	9/28/2007	6.781	V	2300	$5,060,000	308		
2243190	K	LINCOLN PLACE	FRANKLIN SHUTTLE	T		O	1	S	10/15/2008	6.922	V	2460	$5,412,000	308		
2243200	K	UNION ST	FRANKLIN SHUTTLE	T		O	2	S	10/13/2008	5.043	G	4100	$9,020,000	309		
2243210	K	PRESIDENT ST	FRANKLIN SHUTTLE	T		O	2	S	10/10/2008	5.314	G	2500	$5,500,000	309		
2243220	K	CARROLL ST PED BRDG	FRANKLIN SHUTTLE	T		O-PED	3	C	7/11/2007	5.268	G	600	$1,320,000	309		
2243230	K	CROWN ST	FRANKLIN SHUTTLE	T		O	3	S	10/8/2008	5.097	G	4060	$8,932,000	309		
2243240	K	MONTGOMERY ST	FRANKLIN SHUTTLE	T		O	1	S	10/1/2007	6.275	V	2240	$4,928,000	309		
2243250	K	WASHINGTON AVE	FRANKLIN SHUTTLE	T		O	1	S	10/6/2008	6.344	V	3657	$8,045,400	309	355	
2243260	K	FLATBUSH AVE	FRANKLIN SHUTTLE	T		O	2	S	9/2/2008	4.961	F	11300	$24,860,000	309		
2243279	K	EASTERN PKWY	FRANKLIN SHUTTLE	T		O	1	S	10/14/2008	4.861	F	7700	$16,940,000	309	308	
2243280	K	6TH AVE	LIRR ATLANTIC AVE	L		O	9	S	11/23/2008	5.403	G	12276	$27,007,200	302		
2243290	K	CARLTON AVE	LIRR ATLANTIC AVE	L		O	7	S	12/6/2008	5.069	G	10823	$23,810,600	302		
2243310	K	2ND AVE	LIRR BAY RIDGE	N		O	2	S	12/15/2008	6.444	V	17751	$39,052,200	310		
2243320	K	3RD AVE	LIRR BAY RIDGE	N		O	4	S	11/19/2007	5.347	G	17230	$37,906,000	310		
2243330	K	4TH AVE	LIRR BAY RIDGE	NT		O	4	S	11/19/2007	5.819	G	13668	$30,069,600	310		
2243340	K	15TH AVE	LIRR BAY RIDGE	N		O	1	S	11/26/2008	4.723	F	3614	$7,950,800	311		
2243350	K	60TH ST	LIRR BAY RIDGE	N		O	1	S	11/12/2007	6.267	V	3900	$8,580,000	311		
2243360	K	16TH AVE	LIRR BAY RIDGE	N		O	1	S	11/26/2008	5.350	G	4345	$9,559,000	311		
2243370	K	17TH AVE	LIRR BAY RIDGE	N		O	1	S	12/11/2008	4.824	F	3406	$7,493,200	312		
2243380	K	18TH AVE	LIRR BAY RIDGE	N		O	1	S	12/11/2008	4.656	F	6006	$13,213,200	312		
2243390	K	52ND ST	LIRR BAY RIDGE	N		O	1	S	12/11/2008	6.250	V	3293	$7,244,600	312		
2243400	K	50TH ST	LIRR BAY RIDGE	N		O	2	S	11/14/2007	4.701	F	7100	$15,620,000	312		
2243410	K	MCDONALD AVE	LIRR BAY RIDGE	N		O	1	S	12/16/2008	5.047	G	2760	$6,072,000	312		
2243420	K	E 3RD ST	LIRR BAY RIDGE	N		O	1	S	11/13/2007	6.583	V	1840	$4,048,000	312		
2243439	K	OCEAN PKWY	LIRR BAY RIDGE	N		O	1	S	12/16/2008	5.018	G	7000	$15,400,000	312		
2243440	K	CONEY ISLAND AVE	LIRR BAY RIDGE	N		O	1	S	12/12/2008	5.234	G	3231	$7,108,200	312		
2243450	K	E 14TH ST	LIRR BAY RIDGE	N		O	1	S	12/11/2008	4.809	F	1775	$3,905,000	314		
2243460	K	E 15TH ST - PED	LIRR BAY RIDGE	N		O-PED	3	C	9/16/2008	5.193	G	900	$1,980,000	314		
2243480	K	OCEAN AVE	LIRR BAY RIDGE	N		O	2	S	12/10/2008	4.912	F	5000	$11,000,000	314		
2243490	K	BEDFORD AVE	LIRR BAY RIDGE	N		O	6	S	12/15/2008	4.264	F	12000	$26,400,000	314		
2243500	K	NOSTRAND AVE	LIRR BAY RIDGE	N		O	2	S	12/15/2008	4.966	F	4320	$9,504,000	314		
2243510	K	FLATBUSH AVE	LIRR BAY RIDGE	N		O	2	S	10/9/2007	4.702	F	5900	$12,980,000	318		
2243520	K	BROOKLYN AVE	LIRR BAY RIDGE	N		O	3	S	10/10/2007	6.236	V	4500	$9,900,000	318		
2243530	K	AVENUE H	LIRR BAY RIDGE	N		O	2	S	10/10/2007	5.956	G	35100	$77,220,000	318		
2243569	K	ATLANTIC AVE	LIRR ATLANTIC AVE	L		O	75	S	9/13/2008	3.789	F	135100	$297,220,000	316	305	
2243570	K	86TH ST	BMT SEA BEACH	T		O	1	S	9/11/2008	6.078	V	3840	$8,448,000	313		
2243580	K	5TH AVE	LIRR & SEA BEACH	NT		O	4	S	12/2/2008	4.147	F	12395	$27,269,000	310		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2243590	K	6TH AVE	LIRR & SEA BEACH	NT		O	2	S	10/31/2007	6.361	V	14382	$31,640,400	310		
2243600	K	7TH AVE	LIRR & SEA BEACH	NT		O	7	S	12/9/2008	5.028	G	18628	$40,981,600	310		
2243610	K	8TH AVE	LIRR & SEA BEACH	NT		O	2	S	10/31/2007	6.319	V	10834	$23,834,800	310		
2243620	K	FORT HAMILTON PKWY	LIRR & SEA BEACH	NT		O	3	S	9/6/2006	4.797	F	14800	$32,560,000	310		
2243630	K	11TH AVE	LIRR & SEA BEACH	NT		O	5	S	9/7/2006	6.603	V	9700	$21,340,000	310		
2243640	K	13TH AVE	LIRR & SEA BEACH	NT		O	5	S	10/31/2007	4.694	F	16000	$35,200,000	310		
2243650	K	14TH AVE	LIRR BAY RIDGE	N		O	1	S	12/5/2008	6.967	V	4720	$10,384,000	311		
2243660	K	NEW UTRECHT AVE	LIRR BAY RIDGE	N		O	1	S	12/6/2008	6.217	V	2350	$5,170,000	311		
2243670	K	15TH AVE	BMT SEA BEACH	T		O	4	S	9/20/2007	6.386	V	16020	$35,244,000	311		
2243680	K	16TH AVE	BMT SEA BEACH	T		O	3	S	8/11/2006	5.519	G	6816	$14,995,200	311		
2243690	K	17TH AVE	BMT SEA BEACH	T		O	4	S	8/18/2006	6.288	V	8946	$19,681,200	311		
2243700	K	18TH AVE	BMT SEA BEACH	T		O	1	S	9/18/2007	6.842	V	5200	$11,440,000	311		
2243710	K	19TH AVE	BMT SEA BEACH	T		O	4	S	10/27/2008	4.395	F	4800	$10,560,000	311		
2243720	K	20TH AVE	BMT SEA BEACH	T		O	6	S	10/28/2008	6.673	V	12500	$27,500,000	311		
2243730	K	65TH ST	BMT SEA BEACH	T		O	4	S	9/24/2008	5.237	G	12000	$26,400,000	311		
2243740	K	BAY PKWY	BMT SEA BEACH	T		O	4	S	9/26/2008	4.921	F	16800	$36,960,000	311		
2243750	K	AVENUE O	BMT SEA BEACH	T		O	1	S	9/26/2007	5.863	G	4658	$10,247,600	311		
2243760	K	AVENUE P	BMT SEA BEACH	T		O	1	S	9/26/2007	6.605	V	5544	$12,196,800	311		
2243770	K	KINGS HIGHWAY	BMT SEA BEACH	T		O	1	S	10/9/2007	6.767	V	5032	$11,070,400	311		
2243780	K	HIGHLAWN AVE	BMT SEA BEACH	T		O	1	S	10/9/2007	6.440	V	6960	$15,312,000	311		
2243790	K	AVENUE S	BMT SEA BEACH	T		O	1	S	10/11/2007	5.967	G	5360	$11,792,000	315		
2243800	K	AVENUE T	BMT SEA BEACH	T		O	1	S	10/11/2007	6.033	V	5360	$11,792,000	311		
2243810	K	AVENUE U	BMT SEA BEACH	T		O	1	S	7/24/2006	5.824	G	5880	$12,936,000	315		
2243820	K	21ST AVE	BMT SEA BEACH	T		O	4	S	10/31/2008	3.921	F	21400	$47,080,000	311		
2243839	K	4TH AVE	NYCTA BMT TRACKS	T		O	1	S	10/12/2007	6.600	V	4440	$9,768,000	307		
2243840	K	9TH AVE	NYCTA BMT YARD	T		O	5	S	10/16/2007	6.319	V	12440	$27,368,000	312		
2243850	K	LIBERTY AVE	LIRR BAY RIDGE	N		O	3	S	10/27/2008	6.368	V	6659	$14,649,800	316		
2243860	K	GLENMORE AVE	LIRR BAY RIDGE	N		O	2	S	10/27/2008	6.559	V	5616	$12,355,200	316		
2243870	K	PITKIN AVE	LIRR BAY RIDGE	N		O	2	S	10/29/2008	6.515	V	5328	$11,721,600	316		
2243890	K	SUTTER AVE	LIRR BAY RIDGE	N		O	3	S	10/31/2008	6.542	V	5497	$12,093,400	316		
2243900	K	BLAKE AVE	LIRR BAY RIDGE LINE	N		O	3	S	12/17/2008	5.000	G	4912	$10,806,400	316		
2243910	K	LIVONIA AVE PED BRDG	LIRR BAY RIDGE LINE	N		O-PED	6	C	8/27/2007	4.660	F	2500	$5,500,000	316		
2243920	K	7TH AVE	NYCTA BMT YARD	T		O	2	S	10/16/2008	6.324	V	4700	$10,340,000	307		
2243940	K	9TH AVE	NYCTA IND SBWY	T		O	5	S	10/19/2007	4.737	F	6300	$13,860,000	312		
2244010	K	PROSPECT PK E DRIVE	ENDALE ARCH E DRIVE		P	O	1	C	5/5/2008	4.367	F	900	$1,980,000	355		
2244020	K	W DR OV WK-MA.ENT	MEADOWPORT ARCH		P	O	1	S	4/30/2007	5.679	G	2500	$5,500,000	355		
2244030	K	EAST DRIVE	BRIDLE PATH		P	O	1	S	6/22/2007	4.755	F	2000	$4,400,000	355		
2244040	K	EAST DRIVE	EAST WOOD ARCH		P	O	1	C	7/8/2008	4.200	F	900	$1,980,000	355		
2244050	K	CENTRAL DRIVE	PED PATH & STREAM		P	WO	3	S	4/27/2007	5.000	G	7400	$16,280,000	355		
2244060	K	CLEFT RIDGE SPAN	PROSPECT PARK		P	O	1	C	4/15/2008	4.433	F	900	$1,980,000	355		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2244100	K	WEST FOOTBRIDGE	PROSPCT PK STREAM		P	WO-PED	1	C	12/9/2008	4.875	F	308	$677,600	355		
2244120	K	HILL DRIVE	PROSPECT PK LAKE		P	WO	3	S	4/25/2007	3.873	F	7800	$17,160,000	355		
2244130	K	FTBRG NR BOATHSE	PROSPECT PK LAKE		P	WO-PED	1	C	6/19/2008	5.000	G	1260	$2,772,000	355		
2244150	K	RIDGE BLVD	SHORE RD DRIVE			O	1	S	5/8/2007	6.800	V	4350	$9,570,000	310		
2244160	K	3RD AVE	SHORE RD DRIVE			O	1	S	5/8/2007	6.727	V	4360	$9,592,000	310		
2244170	K	ATLNTC AV SVC RD E.B.	EAST NEW YORK AVE			O	2	S	9/17/2007	5.474	G	3192	$7,022,400	305		
2244180	K	ATLNTC AV SVC RD W.B.	EAST NEW YORK AVE			O	2	S	9/17/2007	5.175	G	5600	$12,320,000	305		
2244440	K	SOUTH OF TILLARY ST	NAVY ST			O-PED	1	C	10/17/2008	4.354	F	6200	$13,640,000	302		
2244460	K	CONDUIT BLVD NB	ATLANTIC AVE EB			O	1	S	11/15/2008	4.833	F	3800	$8,360,000	305		
2244470	K	SEELEY ST	PROSPECT AVE			O	1	S	6/7/2007	4.100	F	8482	$18,660,400	307		
2244480	K	5TH AVE	GREENWOOD CEMETERY			O	1	S	7/20/2007	4.933	F	3600	$7,920,000	307		
2245010	M	11TH AVE VIADUCT	LIRR WEST SIDE YARD	AL		O	39	S	12/15/2006	3.917	F	157500	$346,500,000	104		
224501B	M	W 33RD ST	AMTRAK 30 ST BRANCH	A		O	8	S	3/21/2008	4.611	F	16500	$36,300,000	104		
224501C	M	W 33RD ST	LAND ADJ TO AMTRAK	A		O	2	S	7/3/2007	4.750	F	4620	$10,164,000	104		
224501D	M	W 34TH ST	AMTRAK 30 ST BRANCH	A		O	4	S	7/3/2007	4.597	F	11800	$25,960,000	104		
224501E	M	W 35TH ST	AMTRAK 30 ST BRANCH	A		O	3	S	10/12/2006	4.208	F	6500	$14,300,000	104		
224501F	M	W 36TH ST	AMTRAK 30 ST BRANCH	A		O	7	S	8/30/2006	3.866	F	16400	$36,080,000	104		
2245040	M	FORT TRYON PARK	SOUTH OF CLOISTERS		P	O	1	C	5/2/2008	6.000	G	750	$1,650,000	112		
2245050	M	FORT TRYON PARK	UNDERPASS		P	O	1	C	5/2/2008	4.800	F	750	$1,650,000	112		
2245060	M	W 37TH ST	AMTRAK 30 ST BRANCH	A		O	3	S	12/17/2007	6.270	V	7505	$16,511,000	104		
2245070	M	W 38TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/2/2008	4.154	F	6200	$13,640,000	104		
2245080	M	W 39TH ST	AMTRAK 30 ST BRANCH	A		O	3	S	9/27/2006	4.196	F	6300	$13,860,000	104		
2245090	M	W 43RD ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/18/2008	4.662	F	4100	$9,020,000	104		
2245100	M	W 44TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/18/2008	4.662	F	4300	$9,460,000	104		
2245110	M	W 45TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/19/2008	5.662	G	4100	$9,020,000	104		
2245120	M	W 46TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/19/2008	4.412	F	4100	$9,020,000	104		
2245130	M	W 47TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/21/2008	4.721	F	4100	$9,020,000	104		
2245140	M	W 48TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/24/2008	4.618	F	4100	$9,020,000	104		
2245150	M	W 49TH ST	AMTRAK 30 ST BRANCH	A		O	3	S	4/2/2008	4.426	F	4100	$9,020,000	104		
2245160	M	W 51ST ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/11/2008	4.868	F	4300	$9,460,000	104		
2245170	M	W 52ND ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/7/2008	5.015	G	4300	$9,460,000	104		
2245180	M	W 53RD ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/7/2008	5.029	G	5100	$11,220,000	104		
2245190	M	W 58TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/11/2008	4.706	F	4100	$9,020,000	104		
2245209	M	11TH AVE	AMTRAK 30 ST BRANCH	A		O	2	S	4/10/2008	4.471	F	15400	$33,880,000	104		
2245210	M	W 42ND ST	AMTRAK 30 ST BRANCH	A		O	4	S	9/21/2006	4.619	F	9155	$20,141,000	104		
2245220	M	W 57TH ST	AMTRAK 30 ST BRANCH	A		O	3	S	4/11/2008	4.765	F	9100	$20,020,000	104		
2245230	M	W 148TH ST PED BRDG	AMTRAK 30 ST BRANCH	A	P	O-PED	3	C	10/25/2008	4.033	F	1100	$2,420,000	109		
2245250	M	W 158TH ST	AMTRAK 30 ST BRANCH	A		O	7	S	11/28/2007	6.319	V	29170	$64,174,000	112		
2245260	M	W 173RD ST PED BRDG	AMTRAK 30 ST BRANCH	A	P	O-PED	2	C	10/25/2008	4.446	F	1500	$3,300,000	112		
2245290	M	W 155TH ST PED BRDG	AMTRAK 30 ST BRANCH	A		O-PED	3	C	10/25/2008	3.292	F	800	$1,760,000	109	112	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2245300	M	INWOOD HILL PK FTBR	AMTRAK 30 ST BRANCH	A	P	O-PED	6	C	10/26/2008	4.100	F	700	$1,540,000	112		
2245319	M	E 97TH ST	METRO NORTH MAIN LN	M		O	1	S	11/7/2006	4.627	F	3200	$7,040,000	111		
2245330	M	W 41ST ST	AMTRAK 30 ST BRANCH	A		O	3	S	9/23/2006	4.388	F	6200	$13,640,000	104		
2245340	M	W 50TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/4/2008	4.574	F	4100	$9,020,000	104		
2245350	M	W 54TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/8/2008	5.476	G	4700	$10,340,000	104		
2245360	M	W 55TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/10/2008	5.382	G	4300	$9,460,000	104		
2245370	M	W 56TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/10/2008	5.618	G	4400	$9,680,000	104		
2245380	M	E 66TH ST	PED WALK N. OF ZOO		P	O	1	S	1/23/2008	5.000	G	1500	$3,300,000	108		
2245420	M	W 65TH ST E.B.	BRIDLE PATH W END		P	O	1	S	2/5/2008	4.900	F	1600	$3,520,000	164		
2245440	M	W 40TH ST	AMTRAK 30 ST BRANCH	A		O	4	S	12/4/2007	3.847	F	9400	$20,680,000	104		
2245460	M	PARK AVE S.B.	E 45TH ST			O	1	S	8/23/2008	4.514	F	2400	$5,280,000	105		
2245470	M	PARK AVE N.B	E 45TH ST			O	1	S	8/23/2008	4.865	F	2400	$5,280,000	105		
2245480	M	TO GWB OPP W 171ST ST	RIVERSIDE DRIVE			O	1	S	4/11/2008	5.048	G	10800	$23,760,000	112		
2246000	M	WEST DRIVE	PED BET 61ST & 62ST		P	O	1	S	1/28/2008	5.400	G	2500	$5,500,000	164		
2246010	M	FTBRG OPP 62ND ST	BRIDLE PATH		P	O-PED	1	C	8/26/2008	4.894	F	1026	$2,257,200	164		
2246030	M	PEDESTRIAN BRIDGE	POND		P	O-PED	1	C	5/1/2008	4.172	F	1400	$3,080,000	164		
2246040	M	EAST DR AT CNTRL PARK	PEDESTRIAN WALK		P	O	1	C	4/30/2008	4.400	F	1200	$2,640,000	105		
2246050	M	CENTRAL DRIVE	PED OPP 63RD ST		P	O	1	S	1/30/2008	5.133	G	2000	$4,400,000	164		
2246069	M	EAST DRIVE	PEDESTRIAN WALK		P	O	1	S	2/6/2008	4.500	F	2700	$5,940,000	164		
2246070	M	CPK UNDER CENTR DR	OPP 65TH ST-IN E&W		P	O	1	C	7/24/2008	4.367	F	1200	$2,640,000	164		
2246080	M	WEST DRIVE	BRIDLE PATH @ 64TH ST		P	O	1	S	1/22/2008	4.667	F	2000	$4,400,000	164		
2246090	M	PED BRDG OPP 65 ST	TRANSVERSE RD #1		P	O-PED	1	C	5/31/2008	4.583	F	2300	$5,060,000	164		
2246100	M	CENTRAL DRIVE	TRANSVERSE RD #1		P	O	1	S	3/5/2008	4.467	F	6000	$13,200,000	164		
2246110	M	EAST DRIVE	TRANSVERSE RD #1		P	O	1	S	3/5/2008	4.667	F	6000	$13,200,000	164		
2246120	M	WEST DRIVE	TRANSVERSE RD #1		P	O	1	S	3/3/2008	4.967	F	7900	$17,380,000	164		
2246130	M	CENTRAL PARK	UNDER EAST DRIVE		P	O	1	C	5/29/2007	4.233	F	1200	$2,640,000	164		
2246140	M	72ND ST ENT TO W DR	BRIDLE PATH		P	O	1	S	1/25/2008	4.633	F	3600	$7,920,000	164		
2246150	M	72ND ST CROSS DR	NEAR CONCERT GRNDS		P	O	3	S	3/14/2008	6.018	V	7300	$16,060,000	164		
2246160	M	PED BET 73ST&74ST	THE LAKE		P	WO-PED	1	C	1/14/2008	4.575	F	1655	$3,641,000	164		
2246170	M	EAST DRIVE	PED WALK @ 73RD ST		P	O	1	S	2/15/2008	5.056	G	1900	$4,180,000	164		
2246230	M	EAST DRIVE	TRANSVERSE RD #2		P	O	1	S	3/7/2008	4.600	F	6500	$14,300,000	164		
2246240	M	WEST DRIVE	TRANSVERSE RD #2		P	O	1	S	3/7/2008	4.167	F	7200	$15,840,000	164		
2246250	M	EAST DRIVE	TRANSVERSE RD #3		P	O	1	S	2/28/2008	4.300	F	5100	$11,220,000	164		
2246260	M	WEST DRIVE	TRANSVERSE RD #3		P	O	1	S	2/28/2008	4.800	F	5100	$11,220,000	164		
2246270	M	EAST DRIVE	TRANSVERSE RD #4		P	O	1	S	3/23/2008	3.967	F	7000	$15,400,000	164		
2246280	M	WEST DRIVE	TRANSVERSE RD #4		P	O	1	S	3/23/2008	4.300	F	4700	$10,340,000	164		
2246330	M	WEST DRIVE	FEEDER TO LAKE		P	WO	1	S	2/7/2008	5.000	G	2019	$4,441,800	164		
2246340	M	PED WALK OPP 77ST	STREAM TO LAKE		P	WO-PED	3	C	11/7/2008	4.871	F	455	$1,001,000	164		
2246350	M	CNTRL PK OVER E DRIVE	S OF CLEOPATRAS NDL		P	O	1	C	5/7/2008	4.400	F	750	$1,650,000	164		
2246360	M	WEST DRIVE	PED WALK OPP 82 ST		P	O	1	S	2/6/2008	5.636	G	3100	$6,820,000	164		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2246380	M	PED WALK OPP 86ST	BRIDLE PATH		P	O-PED	1	C	11/6/2008	4.347	F	714	$1,570,800	164		
2246390	M	PED WALK OPP 86ST	BRIDLE PATH		P	O-PED	3	C	11/18/2008	4.638	F	1095	$2,409,000	164		
2246400	M	E FOOTBRIDGE	TRANSVERSE RD #2		P	O-PED	1	C	5/10/2008	4.233	F	3700	$8,140,000	164		
2246410	M	TRANSVERSE RD. #1	PED WALK NEAR 5 AV		P	O	1	S	2/8/2008	4.182	F	1739	$3,825,800	108		
2246430	M	WEST DRIVE	PED OPP 109TH ST		P	O	1	S	4/25/2008	4.383	F	1200	$2,640,000	164		
2246440	M	PED IN CTR OF PK	TRANSVERSE RD NO.2		P	O-PED	1	C	5/10/2008	3.778	F	5900	$12,980,000	164		
2246450	M	79 ST ENTR TO E DR	PED PATH OPP 77TH ST		P	O-PED	1	C	1/9/2008	4.655	F	5000	$11,000,000	164		
2246460	M	77 ST ENTR TO W DR	PED PATH OPP 77TH ST		P	O	2	S	1/29/2008	4.263	F	5800	$12,760,000	164		
2246470	M	EAST DRIVE	THE LOCH		P	WO	1	S	2/11/2008	4.500	F	1100	$2,420,000	164		
2246489	M	W 181 ST	RAMP TO WASH BR			O	1	S	2/17/2008	4.500	F	8200	$18,040,000	112		
2246490	M	A.C. POWELL BLVD N.B.	A.C. POWELL BLVD			O	1	S	2/22/2008	4.020	F	5600	$12,320,000	110		
2246500	M	FORT TRYON PLACE	ENTR FROM RIVERSIDE DR		P	O	1	S	3/3/2008	4.333	F	6600	$14,520,000	112		
2246510	M	CORBIN PL OVERPASS	CORBIN PLACE		P	O	1	S	1/25/2008	5.000	G	2200	$4,840,000	112		
2246540	M	E 34TH ST	PARK AVE TUNNEL			OT	1	S	8/24/2006	4.117	F	36200	$79,640,000	105		
2246550	M	PARK AVE VIADUCT	E 42ND ST			O	10	S	12/20/2007	4.597	F	22150	$48,730,000	106		
2246560	M	TUDOR CITY PLACE	E 42ND ST			O	1	S	2/14/2008	5.133	G	6600	$14,520,000	106		
2246570	M	UNITED NATIONS PL	FIRST AVE TUNNEL			OT	2	S	7/13/2008	5.078	G	95000	$209,000,000	106		
2246580	BM	HIGH BRIDGE PDOVP	87I - HARLEM RIVER	M	P	WA-PED	11	PARK	8/12/2002	3.759	F	34100	$75,020,000	112	204	
2246600	M	W 176TH ST PED BRDG	APPROACH TO G.W.B.			O-PED	1	C	1/2/2008	4.172	F	1200	$2,640,000	112		
2246620	M	PEDESTRIAN BRIDGE	E 128TH ST			O-PED	18	C	8/14/2008	4.042	F	2300	$5,060,000	111		
2246660	M	RIVERSIDE DRIVE	W 125TH ST & OTHERS			O	27	S	8/6/2007	4.500	F	148300	$326,260,000	109		
2246670	M	W 134 ST VIADUCT	RIVERSIDE DRIVE			O	4	S	11/30/2007	4.870	F	7500	$16,500,000	109		
2246690	M	ISHAM PK VEHICULR	HARLEM RIVER INLET		P	O	1	S	7/7/2008	6.261	V	911	$2,004,200	112		
2246700	M	ISHM PK PEDESTRN	HARLEM RV INLET		P	WO-PED	1	C	1/10/2008	4.000	F	285	$627,000	112		
2246710	M	W 153 ST	A.C. POWELL BLVD			O	1	S	2/22/2008	4.370	F	3082	$6,780,400	110		
2246720	M	RIVERSIDE DRIVE	W 158TH ST	A		O	77	S	11/16/2007	3.750	F	185658	$408,447,600	109		
2246970	M	RIVERSIDE DRIVE	W 96TH ST			O	3	S	7/19/2007	5.559	G	10600	$23,320,000	107		
2246980	M	RIVERSIDE DRIVE	W 138TH ST			O	1	S	2/8/2008	4.767	F	6700	$14,740,000	109		
2246990	M	129 - 130 ST PED BRDG	RAMP OFF 3RD AVE			O-PED	1	C	11/24/2008	4.636	F	500	$1,100,000	111		
2247020	Q	94TH ST PED BRDG	LIRR N SIDE DIV	L		O-PED	5	C	12/6/2006	4.030	F	500	$1,100,000	404		
2247040	Q	UNION ST	LIRR N SIDE DIV	L		O	1	S	10/12/2007	6.391	V	3313	$7,288,600	407		
2247050	Q	BOWNE AVE	LIRR N SIDE DIV	L		O	1	S	9/9/2008	5.490	G	4974	$10,942,800	407		
2247060	Q	PARSONS BLVD	LIRR N SIDE DIV	L		O	1	S	9/10/2008	4.824	F	4200	$9,240,000	407		
2247070	Q	147TH ST	LIRR N SIDE DIV	L		O	1	S	9/21/2007	5.549	G	2800	$6,160,000	407		
2247080	Q	149TH ST	LIRR N SIDE DIV	L		O	1	S	9/19/2007	4.776	F	4100	$9,020,000	407		
2247090	Q	149TH PLACE	LIRR N SIDE DIV	L		O	2	S	9/20/2007	5.000	G	4300	$9,460,000	407		
2247100	Q	150TH ST	LIRR N SIDE DIV	L		O	2	S	9/18/2007	6.176	V	7830	$17,226,000	407		
2247110	Q	MURRAY ST	LIRR N SIDE DIV	L		O	1	S	9/17/2007	5.481	G	4000	$8,800,000	407		
2247120	Q	WOODSIDE AVE	LIRR MAIN LINE	L		O	3	S	10/5/2007	4.349	F	14900	$32,780,000	402		
2247130	Q	CORPORAL KENNEDY ST	LIRR N SIDE DIV	L		O	1	S	10/11/2007	6.235	V	3379	$7,433,800	411		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2247140	Q	BELL BLVD	LIRR N SIDE DIV	L		O	1	S	10/10/2007	5.814	G	4320	$9,504,000	411		
2247150	Q	65TH ST	LIRR N SIDE DIV	L		O	3	S	12/19/2007	6.375	V	6344	$13,956,800	402		
2247160	Q	65TH PLACE	LIRR N SHR DIV	L		O	3	S	12/19/2007	6.471	V	8381	$18,438,200	402		
2247170	Q	DOUGLASTON PKWY	LIRR N SIDE DIV	L		O	3	S	9/11/2008	4.712	F	6300	$13,860,000	411		
2247180	Q	GRAND AVE	LIRR MAIN LINE	L		O	3	S	10/8/2008	4.660	F	7415	$16,313,000	404		
2247190	Q	55TH AVE PED BRDG	LIRR MAIN LINE	L		O-PED	3	C	11/30/2006	4.360	F	13000	$28,600,000	404		
2247220	Q	80TH ROAD	LIRR MAIN LINE	L		O	3	S	10/21/2007	4.857	F	4100	$9,020,000	409		
2247230	Q	82ND AVE	LIRR MAIN LINE	L		O	3	S	10/21/2007	5.377	G	4100	$9,020,000	409		
2247240	Q	LEFFERTS BLVD	LIRR MAIN LINE	L		O	3	S	10/21/2007	5.806	G	5460	$12,012,000	409		
2247260	Q	JACKSON AVE	LIRR,AMT,CON NE	L		O	1	S	11/20/2006	6.183	V	4517	$9,937,400	402		
2247270	Q	21ST STREET	CONRAIL	C		O	6	S	11/9/2007	5.472	G	17590	$38,698,000	402		
2247290	Q	49TH AVE	LIRR,AMT,CON NE	L		O	5	S	12/8/2008	4.014	F	20400	$44,880,000	402		
2247300	Q	THOMPSON AVE	AMTRAK YARD	L		O	14	S	11/19/2008	5.042	G	61280	$134,816,000	402		
2247310	Q	QUEENS BLVD	AMTRAK & LIRR YARD	L		O	19	S	12/5/2008	6.408	V	92400	$203,280,000	402	401	
2247320	Q	HONEYWELL ST	AMTRAK & LIRR YARD	AL		O	22	S	12/21/2007	5.903	G	99036	$217,879,200	402	401	
2247330	Q	39TH ST (NORTH)	SUNNYSIDE YARDS	AL		O	14	S	12/21/2007	6.556	V	48200	$106,040,000	402	401	
2247370	Q	37TH AVE	CONRAIL HELLGATE	C		O	1	S	11/13/2007	6.362	V	5300	$11,660,000	402		
2247380	Q	ROOSEVELT AVE	CONRAIL HELLGATE	C		O	2	S	11/27/2007	5.889	G	5200	$11,440,000	402	403	404
2247390	Q	41ST AVE	CONRAIL HELLGATE	C		O	2	S	11/13/2007	4.942	F	4400	$9,680,000	402	404	
2247400	Q	WOODSIDE AVE	CONRAIL	C		O	1	S	11/26/2007	5.033	G	8200	$18,040,000	402	404	
2247410	Q	43RD AVE	CONRAIL	C		O	1	S	11/26/2007	5.033	G	4800	$10,560,000	402	404	
2247420	Q	44TH AVE	CONRAIL	C		O	1	S	10/26/2007	5.033	G	5100	$11,220,000	402	404	
2247430	Q	45TH AVE	CONRAIL	C		O	1	S	11/14/2007	5.306	G	2400	$5,280,000	402	404	
2247440	Q	GRAND AVE	CONRAIL	C		O	1	S	11/20/2007	6.183	V	3280	$7,216,000	405		
2247450	Q	57TH AVE	CONRAIL	C		O	1	S	11/20/2007	6.073	V	2248	$4,945,600	405		
2247460	Q	CALDWELL AVE	CONRAIL	C		O	1	S	9/22/2008	6.167	V	2243	$4,934,600	405		
2247470	Q	ELIOT AVE	CONRAIL	C		O	1	S	11/20/2007	5.250	G	2960	$6,512,000	405		
2247480	Q	JUNIPER BLVD SO	CONRAIL	C		O	1	S	11/21/2007	5.111	G	9000	$19,800,000	405		
2247490	Q	69TH ST JUNPR BLVD	CONRAIL	C		O	1	S	9/22/2008	5.149	G	6175	$13,585,000	405		
2247500	Q	METROPOLITAN AVE	CONRAIL	C		O	1	S	11/27/2007	4.233	F	18650	$41,030,000	405		
2247530	Q	ANDREWS AVE	LIRR MONTAUK DIV	L		O	1	S	9/27/2007	7.000	V	1765	$3,883,000	405		
2247540	Q	60TH ST	LIRR MONTAUK DIV	L		O	2	S	9/28/2007	5.208	G	5340	$11,748,000	405		
2247550	Q	ELIOT AVE	LIRR MONTAUK DIV	L		O	2	S	9/26/2007	5.894	G	9550	$21,010,000	405		
2247570	Q	80TH ST	71ST TO 77TH AVE	L		O	5	S	12/4/2008	5.254	G	11725	$25,795,000	405		
2247590	Q	FOREST PARK DRIVE	LIRR MONTAUK DIV	L	P	O	5	S	10/9/2008	5.509	G	6000	$13,200,000	409		
2247600	Q	PARK LANE SOUTH	LIRR MONTAUK DIV	AL		O	1	S	10/9/2008	6.983	V	3024	$6,652,800	409	482	
2247620	Q	MYRTLE AVE	ABANDONED LIRR	L		O	3	S	1/16/2008	5.028	G	6725	$14,795,000	482	406	
2247630	Q	PED BRG NEAR UNION TPK	ABANDONED LIRR			O-PED	8	C	5/13/2008	5.359	G	900	$1,980,000	406		
2247640	Q	39 ST (SOUTH)	AMTRAK & LIRR YARD	AL		O	9	S	12/20/2007	6.125	V	34100	$75,020,000	402		
2247650	Q	60TH RD PED BRDG	LIRR MAIN LINE	L		O-PED	3	C	11/29/2006	4.934	F	2293	$5,044,600	405	406	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2247660	Q	FOREST PARK DRIVE	ABANDONED LIRR	L	P	O	6	S	2/5/2008	5.286	G	10000	$22,000,000	409		
2247680	Q	221ST ST	LIRR N SIDE DIV	L		O	3	S	10/9/2007	6.000	G	6050	$13,310,000	411		
2248019	Q	WOODHAVEN BLVD	ATLANTIC AVE			O	3	S	4/9/2008	4.306	F	19400	$42,680,000	409		
2248020	Q	WHITELAW PED BRDG	CONDUIT AVE			O-PED	7	C	11/10/2008	4.662	F	5500	$12,100,000	410		
2248039	Q	CROSS BAY BLVD	CONDUIT BLVD			O	2	S	7/2/2007	6.444	V	16544	$36,396,800	410		
2248040	Q	LINDEN BLVD	CONDUIT AVE			O	1	S	7/18/2008	5.267	G	3352	$7,374,400	410		
2248059	Q	MOTOR PKWY (PED)	FRANCIS LEWIS BLD		P	O-PED	2	C	7/28/2008	4.736	F	2756	$6,063,200	408		
2248060	Q	MOTOR PKWY (PED)	BELL BLVD		P	O-PED	2	C	7/16/2008	4.667	F	2648	$5,825,600	411		
2248070	Q	MOTOR PKWY (PED)	SPRINGFIELD BLVD		P	O-PED	3	C	7/2/2008	4.179	F	2940	$6,468,000	411		
2248080	Q	MOTOR PKWY (PED)	HOLLIS COURT BLVD		P	O-PED	3	C	12/3/2008	5.000	G	2670	$5,874,000	408		
2248090	Q	FLSHG MDW PK PED.	COLLEGE POINT BLVD		P	O-PED	3	C	12/18/2007	4.694	F	8418	$18,519,600	407		
2248100	Q	MOTOR PKWY (PED)	73RD AVE		P	O-PED	3	C	2/29/2008	4.965	F	2640	$5,808,000	408		
2248110	Q	MOTOR PKWY (PED)	ALLEY PK PED WALK		P	O-PED	1	C	8/6/2008	5.000	G	963	$2,118,600	413		
2248129	Q	UNION TPKE	CREEDMO0RE HOSP RD			O	1	S	7/6/2007	4.867	F	3500	$7,700,000	413		
2248130	Q	FLUSHING MEADW PK	WILLOW LK&76TH RD		P	WO-PED	4	C	4/20/2002	1.000	C	1891	$4,160,200	481		
2248140	Q	FLUSHING MEADW PK	STREAM N OF LIE		P	WO-PED	5	C	6/17/2008	4.580	F	4102	$9,024,400	481		
2248159	Q	WOODHAVEN BLVD	QUEENS BLVD			O	2	S	9/15/2008	4.288	F	11500	$25,300,000	404		
2248160	Q	ELLIOT AVE	QUEENS BLVD			O	2	S	9/15/2008	4.922	F	13785	$30,327,000	406		
2248200	Q	RUST ST	FLUSHING AVE			O	1	S	7/27/2007	5.078	G	2940	$6,468,000	405		
2248220	Q	FLUSHING AV SERVICE	FLUSHING AVE			O	1	S	7/27/2007	5.063	G	2940	$6,468,000	405		
2248230	Q	BEACH CHANNEL DR WB	BEACH CHANNEL DR EB			O	1	S	7/19/2007	4.400	F	3600	$7,920,000	484		
2248240	Q	SERVICE RD TURNAROUND	OVER FLUSHING AVE			O	1	S	7/27/2007	5.188	G	2940	$6,468,000	405		
2248250	Q	102ND ST	HAWTREE BASIN			WO	3	S	7/26/2007	5.941	G	4900	$10,780,000	410		
2248260	Q	FLUSHING MEADW PARK	MEADOW LAKE & 69TH RD		P	WO	5	S	5/28/2008	4.709	F	4200	$9,240,000	481		
2248280	Q	HIGHLAND PK PED.	PEDESTRIAN PATH		P	O-PED	1	C	11/20/2008	3.667	F	1856	$4,083,200	405		
2248299	Q	INTER PKWY-UNION TPK	AUSTIN ST			O	1	S	6/2/2008	4.250	F	5900	$12,980,000	409	406	
2248300	Q	71ST AVE	COOPER AVE			O	1	S	7/16/2007	4.458	F	2800	$6,160,000	405		
2248340	Q	FOREST PARK DR	MYRTLE AVE		P	O	3	S	6/25/2007	4.984	F	5100	$11,220,000	409		
2248369	Q	ROCKAWAY BLVD	THURSTON BASIN			WO	2	S	8/7/2007	5.158	G	6000	$13,200,000	483	413	
2248379	Q	FLUSHING MW PK RD	AQUACADE LAKE		P	WO-PED	5	C	6/17/2008	4.037	F	6321	$13,906,200	481		
2249040	R	TOMPKINS AVE	B&O RR (ABANDONED)			O	1	S	8/1/2008	6.047	V	5096	$11,211,200	501		
2249070	R	JOHN ST	B&O RAILROAD	O		O-PED	3	C	10/31/2008	5.648	G	5800	$12,760,000	501		
2249090	R	MORNINGSTAR ROAD	B&O RAILROAD	O		O	4	S	4/20/2007	5.169	G	7900	$17,380,000	501		
2249100	R	GRANITE AVE	B&O RAILROAD	O		O	4	S	5/13/2008	6.034	V	7300	$16,060,000	501		
2249110	R	LAKE AVE	B&O RAILROAD	O		O	3	S	8/23/2008	5.333	G	5900	$12,980,000	501		
2249120	R	SIMONSON AVE	B&O RAILROAD	O		O	3	S	4/20/2007	5.981	G	5819	$12,801,800	501		
2249130	R	VAN NAME AVE	B&O RAILROAD	O		O	3	S	5/14/2008	5.254	G	5474	$12,042,800	501		
2249140	R	VAN PELT AVE	B&O RAILROAD	O		O	3	S	4/27/2007	5.644	G	5000	$11,000,000	501		
2249160	R	DE HART AVE	B&O RAILROAD	O		O	4	S	4/20/2007	6.500	V	6700	$14,740,000	501		
2249170	R	UNION AVE	B&O RAILROAD	O		O	4	S	4/17/2007	5.426	G	6500	$14,300,000	501		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2249180	R	HARBOR ROAD	B&O RAILROAD	O		O	4	S	5/18/2007	6.356	V	5778	$12,711,600	501		
2249200	R	SOUTH AVE	B&O RAILROAD	O		O	3	S	12/8/2007	6.745	V	8322	$18,308,400	501		
2249210	R	MAIN ST PED BRDG	SIRT SOUTH SHORE	S		O-PED	9	C	3/31/2008	4.309	F	400	$880,000	503		
2249230	R	TRACY AVE PED BRDG	SIRT SOUTH SHORE	S		O-PED	9	C	4/2/2008	4.149	F	200	$440,000	503		
2249240	R	ARTHUR KILL ROAD	SIRT SOUTH SHORE	S		O	1	S	11/13/2008	4.611	F	3650	$8,030,000	503		
2249250	R	BETHEL AV PED BRDG	SIRT SOUTH SHORE	S		O-PED	12	C	3/31/2008	3.525	F	500	$1,100,000	503		
2249269	R	PAGE AVE	SIRT SOUTH SHORE	S		O	4	S	10/19/2007	6.347	V	30710	$67,562,000	503		
2249270	R	RICHMOND VALLY ROAD	SIRT SOUTH SHORE	S		O	4	S	10/25/2007	5.284	G	9440	$20,768,000	503		
2249280	R	CHAMP COURT PED BRDG	SIRT SOUTH SHORE	S		O-PED	7	C	4/10/2008	4.923	F	200	$440,000	503		
2249290	R	SEGUINE AVE	SIRT SOUTH SHORE	S		O	1	S	10/19/2007	6.016	V	3250	$7,150,000	503		
2249300	R	HUGUENOT AVE	SIRT SOUTH SHORE	S		O	2	S	10/23/2007	4.864	F	4900	$10,780,000	503		
2249320	R	ALBEE AVE	SIRT SOUTH SHORE	S		O	3	S	11/6/2007	4.623	F	6500	$14,300,000	503		
2249330	R	ANNADALE ROAD	SIRT SOUTH SHORE	S		O	2	S	10/29/2007	4.409	F	4500	$9,900,000	503		
2249350	R	NELSON AVE PED BRDG	SIRT SOUTH SHORE	S		O-PED	3	C	4/1/2008	4.652	F	300	$660,000	503		
2249360	R	GIFFORDS LANE	SIRT SOUTH SHORE	S		O	1	S	11/12/2008	5.781	G	3042	$6,692,400	503		
2249370	R	GREAVES AVE	SIRT SOUTH SHORE	S		O	1	S	11/12/2007	6.750	V	2650	$5,830,000	503		
2249380	R	GUYON AVE	SIRT SOUTH SHORE	S		O	3	S	11/5/2007	4.869	F	6900	$15,180,000	503		
2249390	R	CEDARVIEW AVE PED BRDG	SIRT SOUTH SHORE	S		O-PED	5	C	4/3/2008	4.308	F	600	$1,320,000	503		
2249400	R	BEACH AVE	SIRT SOUTH SHORE	S		O	2	S	11/5/2007	5.576	G	3700	$8,140,000	502		
2249410	R	ROSS AVE	SIRT SOUTH SHORE	S		O	2	S	11/7/2007	5.500	G	3800	$8,360,000	502		
2249420	R	ROSE AVE	SIRT SOUTH SHORE	S		O	2	S	11/5/2007	5.591	G	3800	$8,360,000	502		
2249430	R	NEW DORP LANE	SIRT SOUTH SHORE	S		O	2	S	11/7/2007	4.972	F	7600	$16,720,000	502		
2249440	R	BANCROFT AVE	SIRT SOUTH SHORE	S		O	3	S	11/9/2007	5.361	G	5900	$12,980,000	502		
2249450	R	FREMONT AVE PED BRDG	SIRT SOUTH SHORE	S		O-PED	3	C	4/4/2008	3.488	F	800	$1,760,000	502		
2249460	R	LINCOLN AVE	SIRT SOUTH SHORE	S		O	1	S	11/3/2007	5.310	G	4500	$9,900,000	502		
2249470	R	MIDLAND AVE	SIRT SOUTH SHORE	S		O	1	S	11/9/2007	5.569	G	3000	$6,600,000	502		
2249480	R	FINGERBOARD ROAD	SIRT SOUTH SHORE	S		O	2	S	11/27/2007	6.542	V	5100	$11,220,000	502		
2249490	R	CLOVE ROAD	SIRT SOUTH SHORE	S		O	3	S	11/10/2008	6.097	V	5104	$11,228,800	502		
2249510	R	TOMPKINS AVE	WILLOW AVE, SIRT	S		O	2	S	11/15/2008	5.567	G	5378	$11,831,600	501		
2249520	R	HANNAH ST	SIRT SOUTH SHORE	S		O	10	S	11/30/2007	4.763	F	10020	$22,044,000	501		
2249530	R	MINTHORNE ST PED BRDG	SIRT SOUTH SHORE	S		O-PED	26	C	4/8/2008	5.000	G	1600	$3,520,000	501		
2249580	R	BELFIELD AVE PED BRDG	SIRT SOUTH SHORE	S		O-PED	5	C	4/9/2008	4.765	F	400	$880,000	503		
2249710	R	WEST FOOTBRIDGE	CLOVE LAKE		P	WO-PED	2	C	7/8/2008	4.371	F	899	$1,977,800	501		
2249720	R	EAST FOOTBRIDGE	CLOVE LAKE		P	WO-PED	2	C	7/9/2008	4.229	F	899	$1,977,800	501		
2249730	R	BRIDGE OVER DAM	N.END CLOVE LAKE		P	WO-PED	1	C	7/14/2008	3.784	F	972	$2,138,400	501		
2249760	R	MARTLINGS AVE	RICHMOND LAKE DAM			WO	2	S	5/16/2007	4.600	F	7000	$15,400,000	501		
2249770	R	S OF BROOKS LAKE	STREAM IN PARK		P	WO-PED	3	C	11/18/2008	5.000	G	696	$1,531,200	501		
2249780	R	FOOTBRIDGE	BROOKS LAKE DAM		P	WO-PED	1	C	7/9/2008	4.433	F	800	$1,760,000	501		
2249790	R	FB S OF FOREST AV	STREAM IN PARK		P	WO-PED	3	C	11/20/2008	4.814	F	658	$1,447,600	501		
2249800	R	FOREST AVE	CLOVE LAKES PK STREAM		P	WO	1	S	10/18/2007	4.867	F	1600	$3,520,000	501		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2249810	R	HYLAN BLVD	LEMON CREEK			WO	1	S	4/25/2008	6.406	V	11400	$25,080,000	503		
2249820	R	ARTHUR KILL ROAD	ARTHUR KILL STREAM			WO	1	S	5/2/2007	4.286	F	2000	$4,400,000	503		
2249840	R	TOMPKINS AVE	GREENFIELD AVE			O	1	S	4/7/2008	5.106	G	2562	$5,636,400	501		
2249860	R	SLATER BLVD	NEW CREEK			WO	1	S	5/15/2007	5.673	G	2037	$4,481,400	502		
2249870	R	TRAVIS AVE	MAIN CREEK			WO	1	S	11/1/2008	5.783	G	1700	$3,740,000	502		
2249880	R	CHELSEA ROAD	SAWMILL CREEK			WO	1	S	5/4/2007	6.833	V	2205	$4,851,000	502		
2257569	M	MILLER HIGHWAY	TERRAIN			A	64	S	8/24/2007	4.831	F	264190	$581,218,000	106		
2266129	Q	DOUGLASTON PKWY	BCIP			A	1	S	4/1/2008	4.592	F	4400	$9,680,000	411		
2266139	Q	DOUGLASTON PKWY	BCIP			A	1	S	3/25/2008	4.551	F	6400	$14,080,000	411		
2266149	Q	HEMPSTEAD AVE	CROSS ISLAND PKWY			A	2	S	3/10/2008	4.190	F	9500	$20,900,000	413		
2266160	Q	678I SB TO BCIP EB	ACCESS RD FROM 678I			A	1	S	6/2/2008	3.984	F	2300	$5,060,000	407		
2266229	M	HHP	PED UNDERPASS @ 148 ST			A	1	S	2/19/2008	5.476	G	1800	$3,960,000	107		
2266230	M	HHP	PED UNDERPASS INWD PK			A	1	S	1/23/2008	5.286	G	800	$1,760,000	101		
2266240	M	HHP	PED UNDERPASS INWD PK			A	1	S	1/24/2008	5.571	G	1100	$2,420,000	201		
2266540	B	BRUCKNER BLVD OVRPAS	133RD - 135TH ST			A	2	S	6/5/2007	4.565	F	32900	$72,380,000	104		
226672A	M	W 31ST ST	AMTRAK LAYUP TRACKS	A		O	9	S	12/11/2006	3.619	F	8800	$19,360,000	413		
2266770	Q	CROSS ISLAND PKWY	LAURELTON PKWY			A	1	S	3/7/2008	5.250	G	9508	$20,917,600	109		
2267130	M	RIVERSIDE DRIVE	W 145TH ST			O	1	S	6/29/2007	5.000	G	5800	$12,760,000	481		
2267160	Q	ROOSEVELT AVE	FLUSHING MDW PK ROAD			O	4	S	8/8/2007	4.905	F	7280	$16,016,000	408		
2267199	Q	FRANCIS LEWIS BLVD	PARK ROAD			O	1	S	4/17/2007	5.033	G	7085	$15,587,000	103		
2267240	M	HRD NB RAMP	HARLEM RIVER DR			A	55	S	12/12/2007	3.250	F	122900	$270,380,000	107		
2267250	M	HHP	AMTRAK 30TH ST LINE	A		A	55	S	11/29/2006	3.710	F	40000	$88,000,000	112		
2267380	M	WEST STREET	RECTOR ST			AT	1	S	12/17/2007	5.033	G	25760	$56,672,000	108		
2267717	M	79 ST PED PLAZA	79 ST BT BASIN GAR		P	A	10	S	5/4/2007	4.519	F	27400	$60,280,000	101		
2267718	M	79 ST TRAFFIC CIRC	79 ST PED PLAZA		P	A	34	S	7/6/2007	3.934	F	24130	$53,086,000	101		
226771A	M	79 ST RAMP TO HHP	79 ST BT BASIN GAR		P	AR	4	S	5/18/2007	4.221	F	3131	$6,888,200	107		
226771B	M	79 ST RAMP TO GAR	79 ST BT BASIN GAR		P	AR	21	S	5/31/2007	4.532	F	8989	$19,775,800	107		
226771C	M	GAR RAMP TO 79 ST	79 ST BT BASIN GAR		P	AR	21	S	7/13/2007	4.565	F	9095	$20,009,000	302		
226771D	M	SB HHP RAMP TO 79 ST	79 ST BT BASIN GAR		P	AR	4	S	6/4/2007	4.645	F	2601	$5,722,200	302		
2267860	K	BROOKLYN BR APPROACH	SANDS STREET			O	1	S	7/31/2008	4.607	F	6490	$14,278,000	302		
2268350	K	BROOKLYN PROMENADE	278I N.B. (B.Q.E.)		P	A-PED	35	C	9/28/2008	3.643	F	46184	$101,604,800	302		
2268480	M	CHAMBERS ST PED BRDG	WEST SIDE HWY			O-PED	10	C	1/16/2008	5.585	G	3344	$7,356,800	101		
2268497	K	278I W.B. (B.Q.E.)	FURMAN ST			A	45	S	9/15/2007	4.214	F	86406	$190,093,200	302		
2268498	K	278I E.B. (B.Q.E.)	278I W.B. (B.Q.E.)			A	69	S	8/8/2007	4.035	F	1337084	$2,941,584,800	302		
2268507	K	278I W.B. (B.Q.E.)	YORK ST			A	6	S	5/14/2007	4.167	F	10388	$22,853,600	302		
2268508	K	278I E.B. (B.Q.E.)	278I W.B. (B.Q.E.)			A	11	S	5/18/2007	4.034	F	20529	$45,163,800	302		
2268517	K	278I W.B. (B.Q.E.)	FURMAN ST			A	7	S	7/27/2007	4.059	F	10988	$24,173,600	103		
2268518	K	278I E.B. (B.Q.E.)	278I W.B. (B.Q.E.)			A	5	S	10/16/2007	4.214	F	9275	$20,405,000	413		
2268650	M	FDR NB 42ND TO 49ST	EAST RIVER			A	119	S	11/30/2007	4.075	F	30767	$67,687,400	503		
2268760	M	PS-5 PEDESTRIAN BR.	TENTH AVENUE			O-PED	5	C	1/30/2008	4.735	F	1500	$3,300,000	112		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2268770	Q	SPRINGFIELD BLVD	EQUES. PATH (ABAND.)			O	1	S	5/15/2007	4.667	F	1470	$3,234,000	111		
2268920	R	AMBOY ROAD	LEMON CREEK			WO	1	S	4/22/2008	6.500	V	1310	$2,882,000	207		
2268930	M	MORRIS ST PED BRDG	BKLN-BATTERY TUNN PLZ			A-PED	3	C	1/10/2008	3.803	F	1200	$2,640,000	101		
2269030	B	MATTHEWSON ROAD	MAC CRACKEN AVE			O	15	S	12/12/2006	4.737	F	14880	$32,736,000	107		
2269190	M	W.70TH STREET	AMTRAK	A		O	3	S	12/13/2007	6.528	V	17258	$37,967,600	107		
2269210	M	W.68TH STREET	AMTRAK	A		O	3	S	11/27/2007	6.780	V	5382	$11,840,400	109	112	
2269240	M	RIVERSIDE DRIVE	W. 155TH ST			O	1	S	6/29/2007	4.640	F	4397	$9,673,400	305	356	
2269260	K	W. 8TH STREET	SURF AVE.		P	O-PED	39	C	3/6/2008	3.278	F	14742	$32,432,400	313		
2269600	K	ERSKINE STREET	BSHP			A	1	S	11/13/2008	5.938	G	8258	$18,167,600	501		
2269730	R	PARKING EXIT RAMP	SIRT	S	F	O	10	S	12/26/2008	4.028	F	20727	$45,599,400	501		
2269740	R	BUS STATION NORTH	SIRT	S	F	O	12	S	11/16/2006	4.880	F	64605	$142,131,000	501		
2269750	R	BUS STATION SOUTH	SIRT	S	F	O	12	S	12/21/2007	4.720	F	154688	$340,313,600	501		
2269760	R	NORTH RAMP	SIRT	S	F	O	9	S	12/26/2008	4.292	F	17589	$38,695,800	501		
2269770	R	BUS STA ENTR RAMP	SIRT	S	F	O	19	S	11/21/2006	4.319	F	39333	$86,532,600	501		
2269780	R	PARKING ENTR RAMP	SIRT	S	F	O	3	S	12/18/2008	4.986	F	8589	$18,895,800	501		
2269790	R	BUS STATION EXIT RAMP	SIRT	S	F	O	7	S	10/12/2006	4.667	F	28721	$63,186,200	204		
2269820	M	E 81 ST PED BRIDGE	FDR DRIVE N.B.		P	A-PED	3	C	10/26/2008	3.149	F	900	$1,980,000	108		
2270030	B	E 156TH ST	ACCESS TO HOUSING		ED	O	16	S	12/16/2006	3.612	F	49696	$109,331,200	501		
2270170	R	SI FERRY PEDESTRIAN BRIDGE	PARKING LOT EXIT ROADWAY		F	O-PED	5	C	6/11/2008	3.936	F	1750	$3,850,000	501		
2270180	R	BOROUGH PLACE - RAMP A	STATEN ISLAND RAILWAY	S	F	O	1	S	12/29/2005	4.938	F	1250	$2,750,000	201		
2270250	B	BROOKE AVENUE	CSX TRANS - PT MORRIS			O	1	S	5/28/2008	3.709	F	21035	$46,277,000	413		
2300130	Q	HOOK CREEK	HOOK CREEK BRIDGE			WO	3	S	7/27/2007	6.271	V	18302	$40,264,400	112		
7703720	Q	216TH ST PED BRDG	LIRR PORT WASH BRANCH	L		O-PED	6	C	11/27/2006	3.688	F	400	$880,000	411		
7705510	Q	167TH ST PED BRDG	LIRR PORT WASH BRANCH	L		O-PED	3	C	11/28/2006	4.020	F	600	$1,320,000	407		
M00001	M	191ST ST. PED. TUNNEL	BROADWAY TO			O-PED	1	C	1/9/2008	4.556	F	2000	$4,400,000	112		
M00003	M	HHP ON/OFF RMP-79TH ST SOUTH SIDE	PEDESTRIAN PATH			A	1	C	5/1/2008	4.867	F	900	$1,980,000	107		
M00004	M	HHP ON/OFF RMP-79TH ST NORTH SIDE	PEDESTRIAN PATH			A	1	C	7/25/2008	5.167	G	900	$1,980,000	107		
Q00002	Q	BCIP	PATH OPPOSITE 88TH RD			A	1	C	7/21/2008	4.667	F	1200	$2,640,000	413		
		787 OPEN BRIDGES				OPEN SPANS 4,480				OPEN SF		15,787,339	34,736,306,000			

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2266540	B	BRUCKNER BLVD OVRPAS	133RD - 135TH ST			A	2	S	6/5/2007	4.565	F	32900	$72,380,000	104		
2269030	B	MATTHEWSON ROAD	MAC CRACKEN AVE			O	15	S	12/12/2006	4.737	F	14880	$32,736,000	107		
2241000	B	WESTCHESTER AVE	CSX TRANS - PT MORRIS	C		O	1	S	7/18/2008	5.128	G	1740	$3,828,000	201		
2241010	B	E 156TH STREET	CSX TRANS - PT MORRIS	C		O	1	S	7/18/2008	4.556	F	2400	$5,280,000	201		
2241040	B	THIRD AVE	CSX TRANS - PT MORRIS	C		O	1	S	10/28/2008	4.563	F	2700	$5,940,000	201	203	
2241050	B	E 149TH ST/JACKSON AVE	CSX TRANS - PT MORRIS	C		O	1	S	6/30/2008	4.850	F	65000	$143,000,000	201		
2241060	B	ST. MARYS & CONCORD	CSX TRANS - PT MORRIS	C		O	1	S	9/12/2008	5.333	G	4500	$9,900,000	201		
2241070	B	WALES AVE	CSX TRANS - PT MORRIS	C		O	1	S	10/17/2008	6.567	V	2535	$5,577,000	201		
2241080	B	SOUTHERN BLVD	CSX TRANS - PT MORRIS	C		O	1	S	10/16/2008	4.259	F	3900	$8,580,000	201		
2241099	B	BRUCKNER BLVD	CSX TRANS - PT MORRIS	C		O	1	S	10/16/2008	6.583	V	6700	$14,740,000	201		
2241129	B	E 149TH ST	AMTRAK - CSX	AC		O	2	S	8/7/2006	4.620	F	12575	$27,665,000	201	202	
2241550	B	E 144TH ST	METRO NORTH RR HAR	M		O	2	S	11/14/2007	6.444	V	8290	$18,238,000	201		
2241560	B	E 149TH ST	METRO NORTH RR HAR	M		O	8	S	4/21/2008	4.708	F	27900	$61,380,000	201	204	
2242260	B	EAGLE AVE	E 161ST ST			O	1	S	3/17/2008	5.017	G	2800	$6,160,000	201	203	
2242299	B	GRAND CONCOURSE	E 138TH ST			O	1	S	6/1/2007	4.933	F	9500	$20,900,000	201		
224005B	B	TO BRUCKNER BLVD	RELIEF			OR	5	S	7/26/2007	3.861	F	12100	$26,620,000	201		
224006A	B	TO BRUCKNER BLVD	RELIEF			OR	5	S	12/19/2007	6.817	V	14037	$30,881,400	201		
2066671	B	BRUCKNER EXPWY SB	BRONX RIVER			WMA	3	S	7/24/2007	5.222	G	12400	$27,280,000	202	209	
2066672	B	BRUCKNER EXPWY NB	BRONX RIVER			WMA	8	S	7/19/2007	4.567	F	22300	$49,060,000	202	209	
2075351	B	BRUCKNER EXPWY SB	AMTRAK - CSX	AC		A	1	S	8/8/2006	3.625	F	11600	$25,520,000	202		
2075352	B	BRUCKNER EXPWY NB	AMTRAK - CSX	AC		A	1	S	9/21/2007	3.188	F	10900	$23,980,000	202		
2076929	B	BRUCKNER EXPWY	CSX - HUNTS POINT	C		A	1	S	9/20/2007	4.700	F	3800	$8,360,000	202		
2240180	B	WESTCHESTER AVE	BRONX RIVER			WO	1	S	7/17/2007	4.932	F	5476	$12,047,200	202	209	
2241139	B	LEGGETT AVE	AMTRAK - CSX	AC		O	3	S	8/7/2006	4.690	F	28300	$62,260,000	202		
2241159	B	LONGWOOD AVE	AMTRAK - CSX	AC		O	2	S	7/23/2008	5.306	G	10625	$23,375,000	202		
2241169	B	LAFAYETTE AVE	AMTRAK - CSX	AC		O	1	S	8/8/2006	5.794	G	12000	$26,400,000	202		
2241170	B	TIFFANY ST	AMTRAK - CSX	AC		O	1	S	9/21/2007	5.627	G	7267	$15,987,400	202		
2241180	B	BARRETTO ST	AMTRAK - CSX	AC		O	1	S	7/25/2008	6.000	G	5313	$11,688,600	202		
2241190	B	HUNTS POINT AVE	AMTRAK - CSX	AC		O	1	S	11/7/2008	4.984	F	13700	$30,140,000	202		
2241200	B	FAILE ST	AMTRAK - CSX	AC		O	1	S	11/7/2008	5.672	G	6208	$13,657,600	202		
2241210	B	BRYANT AVE	AMTRAK - CSX	AC		O	1	S	9/10/2007	3.136	F	5300	$11,660,000	202		
2241230	B	WESTCHESTER AVE	AMTRAK - CSX	AC		O	3	S	8/10/2006	6.125	V	15600	$34,320,000	202	209	
2241020	B	E 161ST STREET	CSX TRANS - PT MORRIS	C		O	1	S	5/12/2008	6.700	V	12800	$28,160,000	203		
2241030	B	E 163RD STREET	CSX TRANS - PT MORRIS	C		O	1	S	4/11/2008	4.796	F	3200	$7,040,000	203		
2241110	B	MELROSE AVE	CSX TRANS - PT MORRIS	C		O	8	S	10/16/2007	5.667	G	37854	$83,278,800	203		
2241620	B	E 162ND ST	METRO NORTH RR HAR	M		O	1	S	4/14/2008	4.859	F	4700	$10,340,000	203		
2241630	B	E 165TH ST	METRO NORTH RR HAR	M		O	1	S	4/21/2008	4.200	F	16400	$36,080,000	203		
2241650	B	E 167TH ST	METRO NORTH RR HAR	M		O	1	S	3/24/2008	5.510	G	3363	$7,398,600	203		
2241660	B	E 168TH ST	METRO NORTH RR HAR	M		O	1	S	3/24/2008	4.859	F	7700	$16,940,000	203		
2241670	B	E 169TH ST	METRO NORTH RR HAR	M		O	1	S	3/24/2008	4.250	F	3300	$7,260,000	203		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2241680	B	E 170TH ST	METRO NORTH RR HAR	M		O	1	S	3/24/2008	6.333	V	3150	$6,930,000	203		
2241700	B	ST PAULS PL PED BRDG	METRO NORTH RR HAR	M		O-PED	2	C	11/2/2005	5.000	G	600	$1,320,000	203		
2241710	B	CLAREMONT PKWY	METRO NORTH RR HAR	M		O	1	S	3/24/2008	4.391	F	6300	$13,860,000	203		
2241720	B	E 173RD ST	METRO NORTH RR HAR	M		O	1	S	3/31/2008	4.875	F	3000	$6,600,000	203		
2076640	B	DEPOT PLACE	METRO NORTH RR HUD	CM		O	11	S	11/10/2007	4.972	F	26566	$58,445,200	204		
2241409	B	GRAND CONCOURSE	METRO NORTH RR HUD	MT		O	1	S	4/21/2008	3.859	F	16100	$35,420,000	204		
2241410	B	WALTON AVE	METRO NORTH RR HUD	M		O	1	S	4/22/2008	5.297	G	3600	$7,920,000	204		
2241420	B	GERARD AVE	METRO NORTH RR HUD	M		O	1	S	4/29/2008	5.922	G	5063	$11,138,600	204		
2241430	B	RIVER AVE	METRO NORTH RR HUD	M		O	1	S	11/9/2007	6.281	V	5040	$11,088,000	204		
2241590	B	CONCOURSE VILL AVE	METRO NORTH RR HAR	M		O	1	S	4/11/2006	4.125	F	17800	$39,160,000	204		
2241600	B	E 158TH ST	METRO NORTH RR HAR	M		O	1	S	10/31/2007	5.200	G	3400	$7,480,000	204		
2241610	B	E 161ST ST	METRO NORTH RR HAR	M		O	1	S	10/30/2007	5.050	G	6600	$14,520,000	204	203	
2242259	B	GRAND CONCOURSE	E 161ST ST			O	1	S	9/18/2008	6.533	V	24100	$53,020,000	204		
2242280	B	GRAND CONCOURSE	E 167TH ST			O	2	S	7/21/2006	4.789	F	42900	$94,380,000	204		
2242300	B	GRAND CONCOURSE	E 170TH ST			O	2	S	4/24/2008	4.789	F	39300	$86,460,000	204		
2242319	B	GRAND CONCOURSE	E 174TH ST	T		O	1	S	3/27/2008	4.067	F	14900	$32,780,000	204		
2241460	B	W TREMONT AVE	METRO NORTH RR HUD	M		O	8	S	5/9/2008	4.194	F	12900	$28,380,000	205		
2242329	B	GRAND CONCOURSE	E 175TH ST	T		O	1	S	8/5/2008	4.867	F	11900	$26,180,000	205		
2242330	B	GRAND CONCOURSE	E TREMONT AVE			O	1	S	10/9/2007	5.983	G	11700	$25,740,000	205		
2242350	B	EAST FORDHAM RD	GRAND CONCOURSE			O	1	S	4/8/2008	4.567	F	10300	$22,660,000	205	207	
2242360	B	GRAND CONCOURSE	BURNSIDE AVE			O	2	S	9/27/2006	4.441	F	8400	$18,480,000	205		
2241740	B	E 175TH ST	METRO NORTH RR HAR	M		O	1	S	3/31/2008	3.813	F	3600	$7,920,000	206		
2241760	B	E TREMONT AVE	METRO NORTH RR HAR	M		O	1	S	11/3/2007	6.517	V	7300	$16,060,000	206		
2241770	B	E 178TH ST PED BRDG	METRO NORTH RR HAR	M		O-PED	1	C	10/31/2005	4.918	F	700	$1,540,000	206		
2241780	B	E 179TH ST PED BRDG	METRO NORTH RR HAR	M		O-PED	6	C	11/1/2005	5.695	G	700	$1,540,000	206		
2241790	B	E 180TH ST	METRO NORTH RR HAR	M		O	1	S	3/31/2008	3.906	F	5000	$11,000,000	206		
2241800	B	E 183TH ST	METRO NORTH RR HAR	M		O	1	S	3/31/2008	4.109	F	3600	$7,920,000	206		
2241810	B	E 188TH ST	METRO NORTH RR HAR	M		O	1	S	4/7/2008	4.063	F	5300	$11,660,000	206		
2241820	B	E 187TH ST	METRO NORTH RR HAR	M		O	1	S	4/7/2008	4.438	F	3800	$8,360,000	206		
2241839	B	E 189TH ST	METRO NORTH RR HAR	M		O	1	S	11/1/2007	6.533	V	43157	$94,945,400	206	207	
2242030	B	CROTONA AVE	BRONX PELHAM PKWY			O	2	S	3/19/2008	5.447	G	7600	$16,720,000	206		
2242149	B	E TREMONT AVE	BRONX RIVER			WO	2	S	5/5/2008	4.500	F	12900	$28,380,000	206		
2242400	B	E 180TH ST	BRONX RIVER			WO	1	S	10/6/2008	4.810	F	4500	$9,900,000	206	227	
2230270	B	MOSHOLU PARKWAY	WEBSTER AVE			A	1	S	5/14/2007	5.609	G	8480	$18,656,000	207		
2230287	B	JEROME AVE	MOSHOLU PARKWAY	T		A	3	S	5/17/2007	4.711	F	11800	$25,960,000	207		
2241470	B	W FORDHAM RD	METRO NORTH RR HUD	M		O	4	S	11/26/2007	5.694	G	16052	$35,314,400	207		
2241489	B	W 225TH ST	CSX TRASP - PUTNAM	C		O	2	S	5/2/2008	5.149	G	10900	$23,980,000	207	208	
2241930	B	BEDFORD PARK BLVD	NYCTA IND YARDS	T		O	4	S	8/12/2008	5.681	G	46300	$101,860,000	207		
2241940	B	W 205TH ST	NYCTA IND YARDS	T		O	4	S	8/14/2008	5.625	G	32508	$71,517,600	207		
2242340	B	GRAND CONCOURSE	EAST KINGSBRIDGE			O	2	S	9/15/2008	4.714	F	16500	$36,300,000	207		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

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2242370	B	GRAND CONCOURSE	BEDFORD PARK BLVD			O	1	S	4/23/2008	4.412	F	8418	$18,519,600	207		
2242380	B	GRAND CONCOURSE	E 204TH ST			O	1	S	8/6/2007	5.391	G	9272	$20,398,400	207		
2229440	B	HHP	KAPPOCK ST			A	1	S	10/3/2007	4.931	F	3900	$8,580,000	208		
2229450	B	232ND ST	HHP			A	2	S	10/1/2007	5.026	G	4900	$10,780,000	208		
2229460	B	236TH ST PED BRDG	HHP			A-PED	3	C	6/30/2008	4.803	F	2500	$5,500,000	208		
2229470	B	239TH ST	HHP			A	2	S	5/31/2007	5.368	G	6100	$13,420,000	208		
2229480	B	MANHATTAN COLL PKWY	HHP			A	3	S	5/22/2007	5.368	G	6200	$13,640,000	208		
2229490	B	246TH ST	HHP			A	2	S	5/8/2007	4.632	F	5600	$12,320,000	208		
2229500	B	252ND ST	HHP			A	2	S	2/28/2008	5.474	G	4500	$9,900,000	208		
2229510	B	RIVERDALE AVE	HHP			A	2	S	9/7/2007	4.053	F	5200	$11,440,000	208		
2229520	B	FIELDSTON ROAD	HHP			A	1	S	9/19/2007	5.500	G	6600	$14,520,000	208		
2229530	B	HHP	BROADWAY			A	1	S	9/26/2007	4.574	F	7500	$16,500,000	208		
2241490	B	W 230TH ST	CONRAIL (ABANDONED) PUTNAM			O	1	S	5/9/2007	5.625	G	5600	$12,320,000	208		
2241509	B	W 231ST ST	CONRAIL (ABANDONED) PUTNAM			O	1	S	10/29/2008	4.745	F	4723	$10,390,600	208		
2241510	B	W 233RD ST	CONRAIL (ABANDONED) PUTNAM			O	1	S	4/13/2007	5.275	G	3760	$8,272,000	208		
2241520	B	W 234TH ST	CONRAIL (ABANDONED) PUTNAM			O	1	S	4/18/2007	5.176	G	3770	$8,294,000	208		
1066510	B	BRUCKNER EXP.(2066510)	WESTCHESTER CREEK			WMA	17	S	10/25/2007	3.597	F	39400	$86,680,000	209		
2066720	B	E 174TH ST	SHERIDAN EXPWY/AMTRAK	A		A	13	S	10/17/2006	4.250	F	47430	$104,346,000	209	203	
2241269	B	E 177TH ST	AMTRAK - CSX	AC		O	3	S	8/11/2006	5.458	G	16606	$36,533,200	209		
2241270	B	E TREMONT AVE	AMTRAK - CSX	AC		O	2	S	7/26/2006	5.153	G	22300	$49,060,000	209	211	
2242120	B	FTBG N OF RTE 1	BRONX RIVER		P	WO-PED	1	C	12/2/2008	4.000	F	1904	$4,188,800	209		
206672A	B	174TH ST-NTH PED BRDG	895I - SHERIDAN EXPWY			A-PED	4	C	4/22/2008	5.153	G	1800	$3,960,000	209		
206672B	B	174TH ST-STH PED BRDG	895I - SHERIDAN EXPWY			A-PED	4	C	4/18/2008	5.361	G	1900	$4,180,000	209		
2075820	B	E TREMONT AVE	HUTCHINSON RVR PKWY			A	2	S	12/18/2007	4.472	F	10200	$22,440,000	210		
2075837	B	WESTCHESTER AVE	HUTCHINSON RVR PKWY			A	2	S	2/20/2008	4.333	F	15858	$34,887,600	210	211	
2075849	B	BRONX PELHAM PKWY	HUTCHINSON RVR PKWY			A	2	S	6/17/2008	3.974	F	17600	$38,720,000	210	211	
2075859	B	HUTCHINSON RVR PKWY	HUTCHINSON RIVER			WMA	7	S	10/24/2008	4.828	F	60500	$133,100,000	210	228	
2076109	B	BE NB SERVICE RD	HUTCHINSON RVR PKWY			A	2	S	10/5/2007	4.632	F	7800	$17,160,000	210		
2076129	B	BE SB SERVICE RD	HUTCHINSON RVR PKWY			A	2	S	2/20/2008	5.105	G	7100	$15,620,000	210		
2241959	B	HUTCHINSON RVR PKWY	AMTRAK - CSX	AC		O	1	S	11/14/2008	5.915	G	15444	$33,976,800	210	211	
2229560	B	BRONX PELHAM PKWY	AMTRAK - CSX	AC		A	3	S	8/15/2006	4.972	F	24591	$54,100,200	211		
2241329	B	WHITE PLAINS ROAD	AMTRAK - CSX	AC		O	1	S	8/17/2006	4.859	F	6900	$15,180,000	211		
2241330	B	UNIONPORT ROAD	AMTRAK - CSX	AC		O	1	S	8/17/2006	4.875	F	4400	$9,680,000	211		
2241369	B	WILLIAMSBRIDGE RD	AMTRAK - CSX	AC		O	2	S	7/27/2006	4.836	F	10400	$22,880,000	211		
2241910	B	GUN HILL ROAD	NYCTA-DYRE AVE LN	T		O	1	S	8/14/2008	6.000	G	75000	$165,000,000	211	212	
1067150	B	NEREID AVE (2241880)	BRONX RIVER PKWY	M		O	10	S	11/30/2007	4.632	F	57750	$127,050,000	212		
2229579	B	BOSTON POST ROAD	HUTCHINSON RIVER			WO	14	S	6/22/2007	4.444	F	95700	$210,540,000	212		
2241860	B	GUN HILL RD	METRO NORTH RR HAR	M		O	1	S	5/13/2008	6.531	V	9000	$19,800,000	212		
2241870	B	E 233RD ST	METRO NORTH RR HAR	M		O	1	S	5/2/2008	4.941	F	7664	$16,860,800	212	207	
2241890	B	E 241ST ST	BRP, METRO NORTH HAR	M		WO	28	S	11/2/2007	4.444	F	49500	$108,900,000	212		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

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2241900	B	EASTCHESTER ROAD	NYCTA-DYRE AVE LN	T		O	3	S	8/14/2008	4.667	F	13500	$29,700,000	212		
2242071	B	BRONX BLVD S.B.	BRONX RIVER			WO	1	S	5/20/2008	4.633	F	1800	$3,960,000	212		
2242072	B	BRONX BLVD N.B.	BRONX RIVER			WO	1	S	5/19/2008	4.967	F	1800	$3,960,000	212		
2242081	B	BRONX BLVD S.B.	BRONX RIVER			WO	1	S	5/20/2008	4.467	F	2800	$6,160,000	212		
2242082	B	BRONX BLVD N.B.	BRONX RIVER			WO	1	S	5/19/2008	4.467	F	2800	$6,160,000	212		
2242099	B	PARK ROAD (204TH ST)	BRONX RIVER			WO	1	S	6/19/2008	4.793	F	4700	$10,340,000	212		
2242430	B	GUN HILL ROAD	BRONX BLVD			O	4	S	4/29/2008	4.772	F	9400	$20,680,000	212		
2242440	B	GUN HILL ROAD	BRONX RIVER			WO	1	S	2/29/2008	4.900	F	8700	$19,140,000	212		
2242459	B	E 233RD ST	BRONX RIVER			WO	1	S	5/2/2008	4.367	F	7000	$15,400,000	212		
2242460	B	E 233RD ST	ENTR RD BNX RVR PKWY			O	1	S	2/1/2008	4.900	F	5300	$11,660,000	212		
2229540	B	VAN CRTLDT PARK	HHP		P	A-PED	2	C	8/5/2008	4.879	F	3900	$8,580,000	226		
2229550	B	VAN CRTLDT EQUES	HHP		P	A-PED	2	C	8/5/2008	4.732	F	2100	$4,620,000	226		
2230290	B	MOSHOLU PARKWAY	EQUESTRIAN PATH			A	1	S	1/23/2008	4.448	F	4300	$9,460,000	226		
2230300	B	MOSHOLU PARKWAY	CONRAIL (ABANDONED)	C		A	1	S	10/29/2008	4.146	F	5200	$11,440,000	226		
2230310	B	MOSHOLU PARKWAY	SB RAMP TO HHP			A	2	S	11/26/2007	5.135	G	7400	$16,280,000	226		
2065629	B	BRONX RVR PKWY	BOSTON RD BX ZOO			A	1	S	7/3/2007	5.000	G	6300	$13,860,000	227		
2230250	B	MOSHOLU PARKWAY	BRONX RIVER			WA	5	S	1/30/2008	4.263	F	16300	$35,860,000	227		
2230260	B	MOSHOLU PARKWAY	METRO NORTH	M		A	1	S	4/7/2008	5.516	G	8880	$19,536,000	227	207	
2241259	B	204TH ST PED BRDG	METRO NORTH RR HAR	M	P	O-PED	1	C	7/26/2004	4.121	F	4700	$10,340,000	227	207	
2241840	B	BEDFORD PARK BLVD	METRO NORTH RR HAR	M		O	1	S	4/21/2008	4.594	F	6400	$14,080,000	227	207	
2242010	B	BRONX PELHAM PKWY	BRONX RIVER			WA	1	S	5/7/2008	5.207	G	9200	$20,240,000	227		
2242029	B	SOUTHERN BLVD	EAST FORDHAM ROAD			O	2	S	3/19/2008	4.658	F	12900	$28,380,000	227		
2242100	B	BOTANICAL GARDEN ROAD	TWIN LAKES		P	WO	1	S	5/7/2008	4.900	F	2200	$4,840,000	227		
2242110	B	BOSTON ROAD	BRONX RIVER			WO	1	S	5/6/2008	4.273	F	6200	$13,640,000	227		
2242210	B	S OF ALLERTON AVE	BRONX RIVER			WO	3	S	5/27/2008	4.763	F	6200	$13,640,000	227		
2242220	B	SNUFF MILL ROAD	BRONX RIVER			WO	2	S	1/31/2008	4.395	F	4800	$10,560,000	227		
2240200	B	SHORE ROAD	HUTCHINSON RIVER			WMO	7	S	7/9/2008	4.478	F	4800	$10,560,000	228		
2240210	B	CITY ISLAND ROAD	EASTCHESTER BAY			WO	7	S	10/9/2007	3.389	F	28900	$63,580,000	228		
2241380	B	PELHAM BAY PK EQUES	AMTRAK - CSX	AC	P	O-PED	1	C	11/13/1978	5.109	G	4223	$9,290,600	228		
2241390	B	SHORE RD CIRCLE	AMTRAK - CSX	AC		O	2	S	9/10/2007	3.254	F	4800	$10,560,000	228		
2270250	B	BROOKE AVENUE	CSX TRANS - PT MORRIS			O	1	S	5/28/2008	3.709	F	21035	$46,277,000	413		
2270030	B	E 156TH ST	ACCESS TO HOUSING		ED	O	16	S	12/16/2006	3.612	F	49696	$109,331,200	501		
1240090	BM	MACOMBS DAM BRIDGE	HARLEM RIVER	M		WMO	52	S	11/30/2007	3.972	F	211788	$465,933,600	110	204	
2240089	BM	145TH ST BRIDGE	HARLEM RIVER			WMO	8	S	12/7/2007	6.333	V	56700	$124,740,000	110	204	201
2240059	BM	WILLIS AVENUE	HARLEM RIVER			WMO	26	S	12/10/2007	3.292	F	94700	$208,340,000	111	201	
2240069	BM	THIRD AVE BRIDGE	HARLEM RIVER			WMO	14	S	10/9/2008	6.746	V	100232	$220,510,400	111	201	
2240079	BM	MADISON AVE BRIDGE	HARLEM RIVER			WMO	21	S	11/6/2006	4.889	F	80000	$176,000,000	111	201	
2066919	BM	WASHINGTON BRIDGE	HARLEM RIVER	M		WO	9	S	10/8/2008	4.642	F	128339	$282,345,800	112	205	204
2240120	BM	W 207TH/W FORDHAM RD	HARLEM RIVER			WMO	5	S	9/22/2008	5.333	G	31784	$69,924,800	112	207	
2240137	BM	BROADWAY BRIDGE	HARLEM RIVER	TM		WMO	3	S	11/30/2007	4.014	F	46848	$103,065,600	112	207	208

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240138	BM	NYCTA IRT	HARLEM RVR/BROADWAY	TM		WMO	3	S	12/17/2007	5.000	G	19520	$42,944,000	112	207	208
2246580	BM	HIGH BRIDGE PDOVP	87I - HARLEM RIVER	M	P	WA-PED	11	PARK	8/12/2002	3.759	F	34100	$75,020,000	112	204	
2268517	K	278I W.B. (B.Q.E.)	FURMAN ST			A	7	S	7/27/2007	4.059	F	10988	$24,173,600	103		
2240290	K	METROPOLITAN AVE	ENGLISH KILLS			WMO	5	S	7/26/2007	6.319	V	10550	$23,210,000	301		
2230410	K	278I (B.Q.E.)	WASHINGTON ST			A	1	S	7/23/2008	4.438	F	2500	$5,500,000	302		
2230420	K	278I (B.Q.E.)	WASHINGTON ST			A	1	S	7/23/2008	4.750	F	2500	$5,500,000	302		
2230430	K	278I (B.Q.E.)	PROSPECT ST			A	1	S	2/28/2008	5.000	G	1100	$2,420,000	302		
2230440	K	278I (B.Q.E.)	ADAMS ST N.B.			A	1	S	1/18/2008	5.200	G	2700	$5,940,000	302		
2230450	K	278I (B.Q.E.)	ADAMS ST S.B.			A	1	S	1/18/2008	4.933	F	2500	$5,500,000	302		
2230460	K	278I (B.Q.E.)	PEARL ST			A	1	S	3/10/2008	5.333	G	4500	$9,900,000	302		
2230470	K	278I (B.Q.E.)	JAY ST			A	1	S	3/10/2008	4.833	F	5100	$11,220,000	302		
2230480	K	278I (B.Q.E.)	PROSPECT ST			A	1	S	4/24/2008	5.093	G	8400	$18,480,000	302		
2230490	K	278I (B.Q.E.)	SANDS ST			A	1	S	3/26/2008	5.019	G	12600	$27,720,000	302		
2230500	K	278I (B.Q.E.)	RAMP TO BQE EB			A	1	S	3/25/2008	5.100	G	1300	$2,860,000	302		
2230510	K	278I (B.Q.E.)	NASSAU ST			A	6	S	7/14/2008	4.775	F	51200	$112,640,000	302		
2230857	K	278I (B.Q.E.)	JORALEMON ST			A	1	S	5/24/2008	5.000	G	2100	$4,620,000	302		
2230858	K	278I (B.Q.E.)	JORALEMON ST / BQE WB			A	2	S	5/30/2008	4.177	F	5900	$12,980,000	302		
2230870	K	COLUMBIA HEIGHTS	278I (B.Q.E.)			A	1	S	9/3/2008	4.550	F	16500	$36,300,000	302		
2230887	K	278I W.B. (B.Q.E.)	CADMAN PLAZA			A	2	S	8/21/2008	4.426	F	4500	$9,900,000	302		
2230888	K	278I E.B. (B.Q.E.)	CADMAN PLAZA / 278I WB			A	2	S	8/21/2008	5.053	G	4500	$9,900,000	302		
2243280	K	6TH AVE	LIRR ATLANTIC AVE	L		O	9	S	11/23/2008	5.403	G	12276	$27,007,200	302		
2243290	K	CARLTON AVE	LIRR ATLANTIC AVE	L		O	7	S	12/6/2008	5.069	G	10823	$23,810,600	302		
2244440	K	SOUTH OF TILLARY ST	NAVY ST			O-PED	1	C	10/17/2008	4.354	F	6200	$13,640,000	302		
2267860	K	BROOKLYN BR APPROACH	SANDS STREET			O	1	S	7/31/2008	4.607	F	6490	$14,278,000	302		
2268350	K	BROOKLYN PROMENADE	278I N.B. (B.Q.E.)		P	A-PED	35	C	9/28/2008	3.643	F	46184	$101,604,800	302		
2268497	K	278I W.B. (B.Q.E.)	FURMAN ST			A	45	S	9/15/2007	4.214	F	86406	$190,093,200	302		
2268498	K	278I E.B. (B.Q.E.)	278I W.B. (B.Q.E.)			A	69	S	8/8/2007	4.035	F	1337084	$2,941,584,800	302		
2268507	K	278I W.B. (B.Q.E.)	YORK ST			A	6	S	5/14/2007	4.167	F	10388	$22,853,600	302		
2268508	K	278I E.B. (B.Q.E.)	278I W.B. (B.Q.E.)			A	11	S	5/18/2007	4.034	F	20529	$45,163,800	302		
2230000	K	HIGHLAND BLVD E.B.	JACKIE ROBINSON PKWY			A	1	S	5/20/2008	4.600	F	4900	$10,780,000	305		
2230010	K	HIGHLAND BLVD W.B.	JACKIE ROBINSON PKWY			A	1	S	5/20/2008	4.933	F	3500	$7,700,000	305		
2230020	K	HIGHLAND BLVD W.B.	JACKIE ROBINSON PKWY			A	2	S	5/20/2008	4.842	F	4700	$10,340,000	305		
2230220	K	HIGHLAND BLVD NB	VERMONT AVE			A	1	S	7/13/2007	5.857	G	3995	$8,789,000	305		
2244170	K	ATLNTC AV SVC RD E.B.	EAST NEW YORK AVE			O	2	S	9/17/2007	5.474	G	3192	$7,022,400	305		
2244180	K	ATLNTC AV SVC RD W.B.	EAST NEW YORK AVE			O	2	S	9/17/2007	5.175	G	5600	$12,320,000	305		
2244460	K	CONDUIT BLVD NB	ATLANTIC AVE EB			O	1	S	11/15/2008	4.833	F	3800	$8,360,000	305		
2230350	K	SUMMIT ST PED BRDG	278I (B.Q.E.)			A-PED	2	S	5/4/2008	4.500	F	1400	$3,080,000	306		
2230360	K	UNION ST	278I (B.Q.E.)			A	2	S	4/23/2008	4.375	F	5000	$11,000,000	306		
2230370	K	SACKETT ST	278I (B.Q.E.)			A	2	S	4/23/2008	4.500	F	5000	$11,000,000	306		
2230380	K	KANE ST	278I (B.Q.E.)			A	2	S	4/11/2008	4.069	F	5000	$11,000,000	306		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230390	K	CONGRESS ST	278I (B.Q.E.)			A	2	S	4/10/2008	6.382	V	5000	$11,000,000	306		
2240232	K	HAMILTON AVE BRIDGE	GOWANUS CANAL			WMO	3	S	10/8/2007	5.444	G	7300	$16,060,000	306		
2240240	K	NINTH ST BRIDGE	GOWANUS CANAL			WMO	3	S	6/4/2007	6.581	V	5772	$12,698,400	306		
2240250	K	THIRD ST	GOWANUS CANAL			WMO	5	S	6/5/2007	4.931	F	4900	$10,780,000	306		
2240260	K	CARROLL ST	GOWANUS CANAL			WMO	2	S	10/14/2008	4.803	F	3000	$6,600,000	306		
2240270	K	UNION ST	GOWANUS CANAL			WMO	5	S	10/14/2008	4.014	F	4900	$10,780,000	306		
2240310	K	THIRD AVE	GOWANUS CANAL			WO	1	S	9/4/2007	5.000	G	3200	$7,040,000	306		
2066100	K	5TH AVE	27 X PROSPECT EXPWY			A	1	S	5/21/2008	5.104	G	8800	$19,360,000	307		
2240231	K	HAMILTON AVE BRIDGE	GOWANUS CANAL			WMO	3	S	12/2/2008	5.472	G	7300	$16,060,000	307	306	
2243839	K	4TH AVE	NYCTA BMT TRACKS	T		O	1	S	10/12/2007	6.600	V	4440	$9,768,000	307		
2243920	K	7TH AVE	NYCTA BMT YARD	T		O	2	S	10/16/2008	6.324	V	4700	$10,340,000	307		
2244470	K	SEELEY ST	PROSPECT AVE			O	1	S	6/7/2007	4.100	F	8482	$18,660,400	307		
2244480	K	5TH AVE	GREENWOOD CEMETERY			O	1	S	7/20/2007	4.933	F	3600	$7,920,000	307		
2243170	K	STERLING PLACE	FRANKLIN SHUTTLE	T		O	1	S	9/28/2007	6.500	V	2300	$5,060,000	308		
2243180	K	ST JOHNS PLACE	FRANKLIN SHUTTLE	T		O	1	S	9/28/2007	6.781	V	2300	$5,060,000	308		
2243190	K	LINCOLN PLACE	FRANKLIN SHUTTLE	T		O	1	S	10/15/2008	6.922	V	2460	$5,412,000	308		
2243200	K	UNION ST	FRANKLIN SHUTTLE	T		O	2	S	10/13/2008	5.043	G	4100	$9,020,000	309		
2243210	K	PRESIDENT ST	FRANKLIN SHUTTLE	T		O	2	S	10/10/2008	5.314	G	2500	$5,500,000	309		
2243220	K	CARROLL ST PED BRDG	FRANKLIN SHUTTLE	T		O-PED	3	C	7/11/2007	5.268	G	600	$1,320,000	309		
2243230	K	CROWN ST	FRANKLIN SHUTTLE	T		O	3	S	10/8/2008	5.097	G	4060	$8,932,000	309		
2243240	K	MONTGOMERY ST	FRANKLIN SHUTTLE	T		O	1	S	10/1/2007	6.275	V	2240	$4,928,000	309		
2243250	K	WASHINGTON AVE	FRANKLIN SHUTTLE	T		O	1	S	10/6/2008	6.344	V	3657	$8,045,400	309	355	
2243260	K	FLATBUSH AVE	FRANKLIN SHUTTLE	T		O	2	S	9/2/2008	4.961	F	11300	$24,860,000	309		
2243279	K	EASTERN PKWY	FRANKLIN SHUTTLE	T		O	1	S	10/14/2008	4.861	F	7700	$16,940,000	309	308	
2231249	K	BSHP	BAY RIDGE AVE			A	1	S	4/19/2008	3.313	F	4900	$10,780,000	310		
2231250	K	81ST ST PED BR	BSHP		P	A-PED	5	C	12/23/2008	4.721	F	3100	$6,820,000	310		
2231260	K	92ND ST PED BR	BSHP		P	A-PED	6	C	8/13/2008	4.079	F	3000	$6,600,000	310		
2231270	K	4TH AVE	BSHP			A	2	S	4/10/2008	4.842	F	6100	$13,420,000	310		
2243310	K	2ND AVE	LIRR BAY RIDGE	N		O	2	S	12/15/2008	6.444	V	17751	$39,052,200	310		
2243320	K	3RD AVE	LIRR BAY RIDGE	N		O	4	S	11/19/2007	5.347	G	17230	$37,906,000	310		
2243330	K	4TH AVE	LIRR BAY RIDGE	NT		O	4	S	11/19/2007	5.819	G	13668	$30,069,600	310		
2243580	K	5TH AVE	LIRR & SEA BEACH	NT		O	4	S	12/2/2008	4.147	F	12395	$27,269,000	310		
2243590	K	6TH AVE	LIRR & SEA BEACH	NT		O	2	S	10/31/2007	6.361	V	14382	$31,640,400	310		
2243600	K	7TH AVE	LIRR & SEA BEACH	NT		O	7	S	12/9/2008	5.028	G	18628	$40,981,600	310		
2243610	K	8TH AVE	LIRR & SEA BEACH	NT		O	2	S	10/31/2007	6.319	V	10834	$23,834,800	310		
2243620	K	FORT HAMILTON PKWY	LIRR & SEA BEACH	NT		O	3	S	9/6/2006	4.797	F	14800	$32,560,000	310		
2243630	K	11TH AVE	LIRR & SEA BEACH	NT		O	5	S	9/7/2006	6.603	V	9700	$21,340,000	310		
2243640	K	13TH AVE	LIRR & SEA BEACH	NT		O	5	S	10/31/2007	4.694	F	16000	$35,200,000	310		
2244150	K	RIDGE BLVD	SHORE RD DRIVE			O	1	S	5/8/2007	6.800	V	4350	$9,570,000	310		
2244160	K	3RD AVE	SHORE RD DRIVE			O	1	S	5/8/2007	6.727	V	4360	$9,592,000	310		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2231290	K	BAY 8TH ST	BSHP			A	1	S	5/11/2007	5.921	G	4950	$10,890,000	311		
2231300	K	17TH AVE PED BRDG	BSHP		P	A-PED	1	C	11/12/2008	3.397	F	2100	$4,620,000	311		
2231319	K	BSHP	BAY PKWY			A	1	S	7/21/2008	4.535	F	7200	$15,840,000	311		
2243340	K	15TH AVE	LIRR BAY RIDGE	N		O	1	S	11/26/2008	4.723	F	3614	$7,950,800	311		
2243350	K	60TH ST	LIRR BAY RIDGE	N		O	1	S	11/12/2007	6.267	V	3900	$8,580,000	311		
2243360	K	16TH AVE	LIRR BAY RIDGE	N		O	1	S	11/26/2008	5.350	G	4345	$9,559,000	311		
2243650	K	14TH AVE	LIRR BAY RIDGE	N		O	1	S	12/5/2008	6.967	V	4720	$10,384,000	311		
2243660	K	NEW UTRECHT AVE	LIRR BAY RIDGE	N		O	1	S	12/6/2008	6.217	V	2350	$5,170,000	311		
2243670	K	15TH AVE	BMT SEA BEACH	T		O	4	S	9/20/2007	6.386	V	16020	$35,244,000	311		
2243680	K	16TH AVE	BMT SEA BEACH	T		O	3	S	8/11/2006	5.519	G	6816	$14,995,200	311		
2243690	K	17TH AVE	BMT SEA BEACH	T		O	4	S	8/18/2006	6.288	V	8946	$19,681,200	311		
2243700	K	18TH AVE	BMT SEA BEACH	T		O	1	S	9/18/2007	6.842	V	5200	$11,440,000	311		
2243710	K	19TH AVE	BMT SEA BEACH	T		O	4	S	10/27/2008	4.395	F	4800	$10,560,000	311		
2243720	K	20TH AVE	BMT SEA BEACH	T		O	6	S	10/28/2008	6.673	V	12500	$27,500,000	311		
2243730	K	65TH ST	BMT SEA BEACH	T		O	4	S	9/24/2008	5.237	G	12000	$26,400,000	311		
2243740	K	BAY PKWY	BMT SEA BEACH	T		O	4	S	9/26/2008	4.921	F	16800	$36,960,000	311		
2243750	K	AVENUE O	BMT SEA BEACH	T		O	1	S	9/26/2007	5.863	G	4658	$10,247,600	311		
2243760	K	AVENUE P	BMT SEA BEACH	T		O	1	S	9/26/2007	6.605	V	5544	$12,196,800	311		
2243770	K	KINGS HIGHWAY	BMT SEA BEACH	T		O	1	S	10/9/2007	6.767	V	5032	$11,070,400	311		
2243780	K	HIGHLAWN AVE	BMT SEA BEACH	T		O	1	S	10/9/2007	6.440	V	6960	$15,312,000	311		
2243800	K	AVENUE T	BMT SEA BEACH	T		O	1	S	10/11/2007	6.033	V	5360	$11,792,000	311		
2243820	K	21ST AVE	BMT SEA BEACH	T		O	4	S	10/31/2008	3.921	F	21400	$47,080,000	311		
2243370	K	17TH AVE	LIRR BAY RIDGE	N		O	1	S	12/11/2008	4.824	F	3406	$7,493,200	312		
2243380	K	18TH AVE	LIRR BAY RIDGE	N		O	1	S	12/11/2008	4.656	F	6006	$13,213,200	312		
2243390	K	52ND ST	LIRR BAY RIDGE	N		O	1	S	12/11/2008	6.250	V	3293	$7,244,600	312		
2243400	K	50TH ST	LIRR BAY RIDGE	N		O	2	S	11/14/2007	4.701	F	7100	$15,620,000	312		
2243410	K	MCDONALD AVE	LIRR BAY RIDGE	N		O	1	S	12/16/2008	5.047	G	2760	$6,072,000	312		
2243420	K	E 3RD ST	LIRR BAY RIDGE	N		O	1	S	11/13/2007	6.583	V	1840	$4,048,000	312		
2243439	K	OCEAN PKWY	LIRR BAY RIDGE	N		O	1	S	12/16/2008	5.018	G	7000	$15,400,000	312		
2243440	K	CONEY ISLAND AVE	LIRR BAY RIDGE	N		O	1	S	12/12/2008	5.234	G	3231	$7,108,200	312		
2243840	K	9TH AVE	NYCTA BMT YARD	T		O	5	S	10/16/2007	6.319	V	12440	$27,368,000	312		
2243940	K	9TH AVE	NYCTA IND SBWY	T		O	5	S	10/19/2007	4.737	F	6300	$13,860,000	312		
2231329	K	BSHP	26TH AVE			A	1	S	6/5/2008	4.867	F	6700	$14,740,000	313		
2231330	K	27TH AVE PED BRDG	BSHP		P	A-PED	1	C	1/15/2008	3.927	F	2100	$4,620,000	313		
2231340	K	CROPSEY AVE	BSHP			A	2	S	7/18/2008	4.806	F	13100	$28,820,000	313		
2231360	K	BSHP	OCEAN PKWY			A	3	S	8/20/2008	6.776	V	29637	$65,201,400	313		
2231370	K	GUIDER AV RAMP TO BSHP	BSHP			A	4	S	8/22/2008	3.653	F	12800	$28,160,000	313		
2231380	K	CONEY ISLAND AVE	BSHP			A	4	S	10/5/2007	6.292	V	19866	$43,705,200	313		
2240301	K	CROPSEY AVE	CONEY ISLAND CREEK			WO	3	S	10/17/2008	5.113	G	9400	$20,680,000	313		
2240302	K	CROPSEY AVE	CONEY ISLAND CREEK			WO	3	S	10/22/2008	5.028	G	9400	$20,680,000	313		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240540	K	STILLWELL AVE	CONEY ISLAND CRK			WO	2	S	6/5/2007	6.292	V	17000	$37,400,000	313		
2243570	K	86TH ST	BMT SEA BEACH	T		O	1	S	9/11/2008	6.078	V	3840	$8,448,000	313		
2269260	K	W. 8TH STREET	SURF AVE.		P	O-PED	39	C	3/6/2008	3.278	F	14742	$32,432,400	313		
2243020	K	PARKSIDE AVE	BMT SUBWAY, BRIGHTON	T		O	6	S	10/1/2008	4.043	F	48700	$107,140,000	314		
2243040	K	CROOKE AVE	BMT SUBWAY, BRIGHTON	T		O	4	S	10/3/2008	4.105	F	6000	$13,200,000	314		
2243050	K	CATON AVE	BMT SUBWAY, BRIGHTON	T		O	4	S	8/17/2007	4.500	F	20800	$45,760,000	314		
2243080	K	CHURCH AVE	BMT SUBWAY, BRIGHTON	T		O	4	S	8/29/2007	4.545	F	18200	$40,040,000	314		
2243100	K	BEVERLY ROAD	BMT SUBWAY, BRIGHTON	T		O	3	S	9/25/2008	3.737	F	4200	$9,240,000	314		
2243110	K	CORTELYOU ROAD	BMT SUBWAY, BRIGHTON	T		O	3	S	9/11/2007	6.167	V	4810	$10,582,000	314		
2243120	K	DORCHESTER ROAD	BMT SUBWAY, BRIGHTON	T		O	1	S	9/19/2008	5.882	G	4825	$10,615,000	314		
2243130	K	DITMAS AVE	BMT SUBWAY, BRIGHTON	T		O	1	S	9/6/2007	5.723	G	5150	$11,330,000	314		
2243140	K	NEWKIRK AVE	BMT SUBWAY, BRIGHTON	T		O	3	S	9/27/2008	4.338	F	4100	$9,020,000	314		
2243150	K	FOSTER AVE	BMT SUBWAY, BRIGHTON	T		O	1	S	9/18/2008	4.550	F	3000	$6,600,000	314		
2243450	K	E 14TH ST	LIRR BAY RIDGE	N		O	1	S	12/11/2008	4.809	F	1775	$3,905,000	314		
2243460	K	E 15TH ST - PED	LIRR BAY RIDGE	N		O-PED	3	C	9/16/2008	5.193	G	900	$1,980,000	314		
2243480	K	OCEAN AVE	LIRR BAY RIDGE	N		O	2	S	12/10/2008	4.912	F	5000	$11,000,000	314		
2243490	K	BEDFORD AVE	LIRR BAY RIDGE	N		O	6	S	12/15/2008	4.264	F	12000	$26,400,000	314		
2243500	K	NOSTRAND AVE	LIRR BAY RIDGE	N		O	2	S	12/15/2008	4.966	F	4320	$9,504,000	314		
2231390	K	E 12TH ST	BSHP			A	4	S	7/12/2008	4.875	F	17200	$37,840,000	315		
2231409	K	BSHP	SHEEPSHEAD BAY ROAD			A	1	S	4/30/2008	4.967	F	6500	$14,300,000	315		
2231419	K	BSHP	OCEAN AVE			A	3	S	5/1/2008	4.222	F	14000	$30,800,000	315		
2231429	K	BSHP	BEDFORD AVE			A	3	S	5/3/2008	4.167	F	12000	$26,400,000	315		
2231439	K	BSHP	NOSTRAND AVE			A	3	S	4/24/2008	4.097	F	13000	$28,600,000	315		
2231449	K	KNAPP ST	BSHP			A	1	S	6/10/2008	4.391	F	9500	$20,900,000	315		
2233080	K	E 14 ST PED BR	BSHP			A-PED	14	C	7/22/2008	4.500	F	4700	$10,340,000	315		
2240320	K	OCEAN AVE PED BRDG	SHEEPSHEAD BAY			WO-PED	30	C	9/9/2008	3.939	F	4000	$8,800,000	315		
2243790	K	AVENUE S	BMT SEA BEACH	T		O	1	S	10/11/2007	5.967	G	5360	$11,792,000	315		
2243810	K	AVENUE U	BMT SEA BEACH	T		O	1	S	7/24/2006	5.824	G	5880	$12,936,000	315		
2243569	K	ATLANTIC AVE	LIRR ATLANTIC AVE	L		O	75	S	9/13/2008	3.789	F	135100	$297,220,000	316	305	
2243850	K	LIBERTY AVE	LIRR BAY RIDGE	N		O	3	S	10/27/2008	6.368	V	6659	$14,649,800	316		
2243860	K	GLENMORE AVE	LIRR BAY RIDGE	N		O	2	S	10/27/2008	6.559	V	5616	$12,355,200	316		
2243870	K	PITKIN AVE	LIRR BAY RIDGE	N		O	2	S	10/29/2008	6.515	V	5328	$11,721,600	316		
2243890	K	SUTTER AVE	LIRR BAY RIDGE	N		O	3	S	10/31/2008	6.542	V	5497	$12,093,400	316		
2243900	K	BLAKE AVE	LIRR BAY RIDGE LINE	N		O	3	S	12/17/2008	5.000	G	4912	$10,806,400	316		
2243910	K	LIVONIA AVE PED BRDG	LIRR BAY RIDGE LINE	N		O-PED	6	C	8/27/2007	4.660	F	2500	$5,500,000	316		
2231479	K	BSHP	MILL BASIN			WMA	14	S	12/18/2007	2.955	P	73500	$161,700,000	318		
2231489	K	BSHP	PAERDEGAT BASIN			WA	15	S	8/11/2007	3.222	F	58300	$128,260,000	318		
2243510	K	FLATBUSH AVE	LIRR BAY RIDGE	N		O	2	S	10/9/2007	4.702	F	5900	$12,980,000	318		
2243520	K	BROOKLYN AVE	LIRR BAY RIDGE	N		O	3	S	10/10/2007	6.236	V	4500	$9,900,000	318		
2243530	K	AVENUE H	LIRR BAY RIDGE	N		O	2	S	10/10/2007	5.956	G	35100	$77,220,000	318		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2243010	K	LINCOLN ROAD	BMT SUBWAY, BRIGHTON	T		O	1	S	9/3/2008	6.722	V	6016	$13,235,200	355		
2244010	K	PROSPECT PK E DRIVE	ENDALE ARCH E DRIVE		P	O	1	C	5/5/2008	4.367	F	900	$1,980,000	355		
2244020	K	W DR OV WK-MA.ENT	MEADOWPORT ARCH		P	O	1	S	4/30/2007	5.679	G	2500	$5,500,000	355		
2244030	K	EAST DRIVE	BRIDLE PATH		P	O	1	S	6/22/2007	4.755	F	2000	$4,400,000	355		
2244040	K	EAST DRIVE	EAST WOOD ARCH		P	O	1	C	7/8/2008	4.200	F	900	$1,980,000	355		
2244050	K	CENTRAL DRIVE	PED PATH & STREAM		P	WO	3	S	4/27/2007	5.000	G	7400	$16,280,000	355		
2244060	K	CLEFT RIDGE SPAN	PROSPECT PARK		P	O	1	C	4/15/2008	4.433	F	900	$1,980,000	355		
2244100	K	WEST FOOTBRIDGE	PROSPCT PK STREAM		P	WO-PED	1	C	12/9/2008	4.875	F	308	$677,600	355		
2244120	K	HILL DRIVE	PROSPECT PK LAKE		P	WO	3	S	4/25/2007	3.873	F	7800	$17,160,000	355		
2244130	K	FTBRG NR BOATHSE	PROSPECT PK LAKE		P	WO-PED	1	C	6/19/2008	5.000	G	1260	$2,772,000	355		
2231450	K	BSHP	GERRITSEN INLET			WA	11	S	6/26/2007	3.597	F	52000	$114,400,000	356		
2231460	K	FLATBUSH AVE	BSHP			A	2	S	10/3/2007	6.306	V	14058	$30,927,600	356		
2231499	K	BSHP	ROCKAWAY PKWY			A	4	S	10/3/2007	4.000	F	11500	$25,300,000	356		
2231509	K	BSHP	FRESH CREEK			WA	5	S	8/9/2007	3.333	F	23000	$50,600,000	356		
2231519	K	PENNSYLVANIA AVE	BSHP			A	2	S	4/24/2007	6.181	V	6640	$14,608,000	356		
2268518	K	278I E.B. (B.Q.E.)	278I W.B. (B.Q.E.)			A	5	S	10/16/2007	4.214	F	9275	$20,405,000	413		
2269600	K	ERSKINE STREET	BSHP			A	1	S	11/13/2008	5.938	G	8258	$18,167,600	501		
2240019	KM	BROOKLYN BRIDGE	278I (B.Q.E.)			WEO	75	S	11/17/2006	2.917	P	503788	$1,108,333,600	103	302	101
2240027	KM	MANHATTAN BRIDGE(LL)	EAST RIVER	T		WEO	23	S	11/30/2006	4.407	F	616390	$1,356,058,000	103	302	
2240028	KM	MANHATTAN BRIDGE(UL)	NYCTA TRACKS-BMT	T		WEO	43	S	11/30/2006	4.357	F	587424	$1,292,332,800	103	302	
2240039	KM	WILLIAMSBURG BRIDGE	EAST RIVER	T		WEO	53	S	11/3/2006	4.736	F	824000	$1,812,800,000	103	301	
2240370	KQ	GREENPOINT AVE BRIDGE	NEWTOWN CREEK	L		WMO	12	S	7/27/2007	5.111	G	76106	$167,433,200	301	402	
2240390	KQ	GRAND ST BRIDGE	NEWTOWN CREEK			WMO	2	S	9/28/2007	4.292	F	5100	$11,220,000	301	405	
2240639	KQ	PULASKI BRIDGE	NEWTOWN CREEK			WMO	44	S	6/3/2008	4.408	F	205770	$452,694,000	301	402	
2229349	M	HHP	W 158 ST	A		A	44	S	10/18/2006	4.268	F	140000	$308,000,000	101		
2266230	M	HHP	PED UNDERPASS INWD PK			A	1	S	1/23/2008	5.286	G	800	$1,760,000	101		
2267717	M	79 ST PED PLAZA	79 ST BT BASIN GAR		P	A	10	S	5/4/2007	4.519	F	27400	$60,280,000	101		
2267718	M	79 ST TRAFFIC CIRC	79 ST PED PLAZA		P	A	34	S	7/6/2007	3.934	F	24130	$53,086,000	101		
2268480	M	CHAMBERS ST PED BRDG	WEST SIDE HWY			O-PED	10	C	1/16/2008	5.585	G	3344	$7,356,800	101		
2268930	M	MORRIS ST PED BRDG	BKLN-BATTERY TUNN PLZ			A-PED	3	C	1/10/2008	3.803	F	1200	$2,640,000	101		
222934A	M	RAMP TO N.B. HHP	AMTRAK WEST SIDE	A		AR	26	S	8/2/2006	3.875	F	10800	$23,760,000	101		
223201B	M	STH ST RMP TO FDR S.B.	SOUTH ST			AR	10	S	2/27/2008	3.761	F	44625	$98,175,000	101		
224001A	M	PARK ROW TO BKLN	WILLIAM ST N.B.			OE	4	S	4/9/2008	4.167	F	10167	$22,367,400	101		
224001B	M	TO BKLN FRM FDR	FRANKFRT & CITY			OE	31	S	6/6/2006	4.148	F	51400	$113,080,000	101		
224001D	M	TO FDR DR N.B.	PEARL STREET			OE	30	S	5/17/2007	4.906	F	49600	$109,120,000	101		
224001F	M	PEARL ST TO FDR DR	LAND ADJ TO BRDG			OE	3	S	3/4/2008	5.338	G	5200	$11,440,000	101		
224001G	M	TO PARK ROW	ROSE ST			OE	11	S	5/18/2007	4.549	F	16551	$36,412,200	101		
2232029	M	CORLEARS PARK ROAD	FDR DRIVE		P	A	4	S	2/24/2008	3.625	F	4100	$9,020,000	103		
2232030	M	DELANCEY ST PED BRDG	FDR DRIVE		P	A-PED	12	C	9/7/2008	4.535	F	2900	$6,380,000	103		
2232050	M	E 6TH ST PED BRDG	FDR DRIVE		P	A-PED	22	C	3/16/2008	4.353	F	2200	$4,840,000	103		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

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2233020	M	E 10TH ST PED BRDG	FDR DRIVE		P	A-PED	25	C	9/7/2008	5.216	G	1632	$3,590,400	103		
223201C	M	STH ST RMP TO FDR	SOUTH ST			AR	8	S	2/20/2008	4.701	F	39150	$86,130,000	103		
224001C	M	PEARL ST TO BKLN	LAND ADJ TO BRDG			OE	9	S	3/17/2008	3.814	F	6489	$14,275,800	103		
2245010	M	11TH AVE VIADUCT	LIRR WEST SIDE YARD	AL		O	39	S	12/15/2006	3.917	F	157500	$346,500,000	104		
2245060	M	W 37TH ST	AMTRAK 30 ST BRANCH	A		O	3	S	12/17/2007	6.270	V	7505	$16,511,000	104		
2245070	M	W 38TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/2/2008	4.154	F	6200	$13,640,000	104		
2245080	M	W 39TH ST	AMTRAK 30 ST BRANCH	A		O	3	S	9/27/2006	4.196	F	6300	$13,860,000	104		
2245090	M	W 43RD ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/18/2008	4.662	F	4100	$9,020,000	104		
2245100	M	W 44TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/18/2008	4.662	F	4300	$9,460,000	104		
2245110	M	W 45TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/19/2008	5.662	G	4100	$9,020,000	104		
2245120	M	W 46TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/19/2008	4.412	F	4100	$9,020,000	104		
2245130	M	W 47TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/21/2008	4.721	F	4100	$9,020,000	104		
2245140	M	W 48TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/24/2008	4.618	F	4100	$9,020,000	104		
2245150	M	W 49TH ST	AMTRAK 30 ST BRANCH	A		O	3	S	4/2/2008	4.426	F	4100	$9,020,000	104		
2245160	M	W 51ST ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/11/2008	4.868	F	4300	$9,460,000	104		
2245170	M	W 52ND ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/7/2008	5.015	G	4300	$9,460,000	104		
2245180	M	W 53RD ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/7/2008	5.029	G	5100	$11,220,000	104		
2245190	M	W 58TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/11/2008	4.706	F	4100	$9,020,000	104		
2245209	M	11TH AVE	AMTRAK 30 ST BRANCH	A		O	2	S	4/10/2008	4.471	F	15400	$33,880,000	104		
2245210	M	W 42ND ST	AMTRAK 30 ST BRANCH	A		O	4	S	9/21/2006	4.619	F	9155	$20,141,000	104		
2245220	M	W 57TH ST	AMTRAK 30 ST BRANCH	A		O	3	S	4/11/2008	4.765	F	9100	$20,020,000	104		
2245330	M	W 41ST ST	AMTRAK 30 ST BRANCH	A		O	3	S	9/23/2006	4.388	F	6200	$13,640,000	104		
2245340	M	W 50TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/4/2008	4.574	F	4100	$9,020,000	104		
2245350	M	W 54TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/8/2008	5.476	G	4700	$10,340,000	104		
2245360	M	W 55TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/10/2008	5.382	G	4300	$9,460,000	104		
2245370	M	W 56TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/10/2008	5.618	G	4400	$9,680,000	104		
2245440	M	W 40TH ST	AMTRAK 30 ST BRANCH	A		O	4	S	12/4/2007	3.847	F	9400	$20,680,000	104		
224501B	M	W 33RD ST	AMTRAK 30 ST BRANCH	A		O	8	S	3/21/2008	4.611	F	16500	$36,300,000	104		
224501C	M	W 33RD ST	LAND ADJ TO AMTRAK	A		O	2	S	7/3/2007	4.750	F	4620	$10,164,000	104		
224501D	M	W 34TH ST	AMTRAK 30 ST BRANCH	A		O	4	S	7/3/2007	4.597	F	11800	$25,960,000	104		
224501E	M	W 35TH ST	AMTRAK 30 ST BRANCH	A		O	3	S	10/12/2006	4.208	F	6500	$14,300,000	104		
224501F	M	W 36TH ST	AMTRAK 30 ST BRANCH	A		O	7	S	8/30/2006	3.866	F	16400	$36,080,000	104		
2245460	M	PARK AVE S.B.	E 45TH ST			O	1	S	8/23/2008	4.514	F	2400	$5,280,000	105		
2245470	M	PARK AVE N.B	E 45TH ST			O	1	S	8/23/2008	4.865	F	2400	$5,280,000	105		
2246040	M	EAST DR AT CNTRL PARK	PEDESTRIAN WALK		P	O	1	C	4/30/2008	4.400	F	1200	$2,640,000	105		
2246540	M	E 34TH ST	PARK AVE TUNNEL			OT	1	S	8/24/2006	4.117	F	36200	$79,640,000	105		
2232070	M	25TH ST PED BRDG	FDR DRIVE			A-PED	4	C	3/16/2008	4.627	F	1700	$3,740,000	106		
2232100	M	E 51ST ST PED BRDG	FDR DRIVE		P	A-PED	10	C	4/6/2008	4.186	F	2800	$6,160,000	106		
2246550	M	PARK AVE VIADUCT	E 42ND ST			O	10	S	12/20/2007	4.597	F	22150	$48,730,000	106		
2246560	M	TUDOR CITY PLACE	E 42ND ST			O	1	S	2/14/2008	5.133	G	6600	$14,520,000	106		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

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2246570	M	UNITED NATIONS PL	FIRST AVE TUNNEL			OT	2	S	7/13/2008	5.078	G	95000	$209,000,000	106		
2257569	M	MILLER HIGHWAY	TERRAIN			A	64	S	8/24/2007	4.831	F	264190	$581,218,000	106		
223201A	M	FDR DR N.B. OFF RMP	FDR DR & SOUTH ST			AR	17	S	2/29/2008	3.716	F	102225	$224,895,000	106		
224001E	M	TO PEARL ST	LAND ADJ TO BRDG			OE	3	S	5/4/2007	5.141	G	5300	$11,660,000	106		
224004A	M	TO QNS FRM E 59TH ST	FIRST AVE			OE	13	S	5/9/2008	5.254	G	14800	$32,560,000	106		
224004B	M	TO E 60TH ST FROM QNS	FIRST AVE			OE	13	S	5/9/2008	5.708	G	14800	$32,560,000	106		
224004C	M	TO E 62ND ST FROM QNS	E 60TH ST			OE	10	S	10/2/2008	4.985	F	16720	$36,784,000	106		
224004D	M	TO QNS FROM E 58TH ST	E 59TH ST			OE	12	S	7/10/2008	4.547	F	11781	$25,918,200	106		
224004J	M	25X	NYC GARAGE			OE	14	S	5/19/2008	4.537	F	22058	$48,527,600	106		
2229312	M	HHP NB	RAMP TO 96 ST			A	1	S	2/17/2008	4.364	F	2000	$4,400,000	107		
2229321	M	HHP SB	RAMP TO 96 ST			A	1	S	3/14/2008	5.133	G	2000	$4,400,000	107		
2229322	M	HHP NB	RAMP TO 96 ST			A	1	S	3/10/2008	5.300	G	2000	$4,400,000	107		
2232000	M	BATTERY PLACE	FDR DRIVE			AT	2	S	12/14/2007	6.045	V	142000	$312,400,000	107		
2232158	M	FDR DRIVE S.B.	FDR DRIVE N.B.			AT	32	S	6/22/2007	4.591	F	54302	$119,464,400	107		
2232167	M	PROMENADE OVER FDR	FDR/E79TH ST-E91ST ST		P	A-PED	53	S	10/31/2007	3.857	F	93000	$204,600,000	107		
2233038	M	FDR DRIVE SB	FDR NB / E 62ND ST			AT	34	S	10/23/2006	6.887	V	58700	$129,140,000	107		
2233040	M	E 60TH ST	FDR DRIVE			A	17	S	5/2/2008	4.746	F	24480	$53,856,000	107		
2246970	M	RIVERSIDE DRIVE	W 96TH ST			O	3	S	7/19/2007	5.559	G	10600	$23,320,000	107		
2266229	M	HHP	PED UNDERPASS @ 148 ST			A	1	S	2/19/2008	5.476	G	1800	$3,960,000	107		
2267240	M	HRD NB RAMP	HARLEM RIVER DR			A	55	S	12/12/2007	3.250	F	122900	$270,380,000	107		
2269190	M	W.70TH STREET	AMTRAK	A		O	3	S	12/13/2007	6.528	V	17258	$37,967,600	107		
222928C	M	PED BR AT 73RD ST	HHP - AMTRAK	A	P	A-PED	5	C	10/26/2008	4.145	F	3480	$7,656,000	107		
223201D	M	RAMP TO N.B. FDR DRIVE	FDR & SOUTH ST.			AR	22	S	3/2/2008	4.967	F	15825	$34,815,000	107		
223204A	M	FDR NB TO HOUSTON ST	RELIEF			AR	4	S	1/30/2008	4.471	F	6150	$13,530,000	107		
223204B	M	HOUSTON ST RAMP TO FDR	RELIEF			AR	4	S	2/1/2008	4.625	F	7642	$16,812,400	107		
226771A	M	79 ST RAMP TO HHP	79 ST BT BASIN GAR		P	AR	4	S	5/18/2007	4.221	F	3131	$6,888,200	107		
226771B	M	79 ST RAMP TO GAR	79 ST BT BASIN GAR		P	AR	21	S	5/31/2007	4.532	F	8989	$19,775,800	107		
M00003	M	HHP ON/OFF RMP-79TH ST SOUTH SIDE	PEDESTRIAN PATH			A	1	C	5/1/2008	4.867	F	900	$1,980,000	107		
M00004	M	HHP ON/OFF RMP-79TH ST NORTH SIDE	PEDESTRIAN PATH			A	1	C	7/25/2008	5.167	G	900	$1,980,000	107		
2229289	M	HHP VIADUCT	W 72 ST TO W 79 ST	A		A	145	S	12/22/2006	3.448	F	236100	$519,420,000	108		
2232040	M	HOUSTON ST	FDR DRIVE			A	2	S	3/9/2008	3.455	F	11010	$24,222,000	108		
2232110	M	E 64TH ST PED BRDG	FDR DRIVE		P	A-PED	24	C	10/19/2008	4.562	F	2100	$4,620,000	108		
2232120	M	E 71ST ST PED BRDG	FDR DRIVE		P	A-PED	19	C	8/17/2008	5.761	G	1800	$3,960,000	108		
2232140	M	E 78TH ST PED BRDG	FDR DRIVE		P	A-PED	9	C	4/6/2008	2.711	P	1700	$3,740,000	108		
2245380	M	E 66TH ST	PED WALK N. OF ZOO		P	O	1	S	1/23/2008	5.000	G	1500	$3,300,000	108		
2246410	M	TRANSVERSE RD. #1	PED WALK NEAR 5 AV		P	O	1	S	2/8/2008	4.182	F	1739	$3,825,800	108		
2267380	M	WEST STREET	RECTOR ST			AT	1	S	12/17/2007	5.033	G	25760	$56,672,000	108		
2269820	M	E 81 ST PED BRIDGE	FDR DRIVE N.B.		P	A-PED	3	C	10/26/2008	3.149	F	900	$1,980,000	108		
2229311	M	HHP SB	RAMP TO 96 ST			A	1	S	2/17/2008	4.636	F	2000	$4,400,000	109		
2245230	M	W 148TH ST PED BRDG	AMTRAK 30 ST BRANCH	A	P	O-PED	3	C	10/25/2008	4.033	F	1100	$2,420,000	109		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2245290	M	W 155TH ST PED BRDG	AMTRAK 30 ST BRANCH	A		O-PED	3	C	10/25/2008	3.292	F	800	$1,760,000	109	112	
2246660	M	RIVERSIDE DRIVE	W 125TH ST & OTHERS			O	27	S	8/6/2007	4.500	F	148300	$326,260,000	109		
2246670	M	W 134 ST VIADUCT	RIVERSIDE DRIVE			O	4	S	11/30/2007	4.870	F	7500	$16,500,000	109		
2246720	M	RIVERSIDE DRIVE	W 158TH ST	A		O	77	S	11/16/2007	3.750	F	185658	$408,447,600	109		
2246980	M	RIVERSIDE DRIVE	W 138TH ST			O	1	S	2/8/2008	4.767	F	6700	$14,740,000	109		
2269210	M	W.68TH STREET	AMTRAK	A		O	3	S	11/27/2007	6.780	V	5382	$11,840,400	109	112	
2246490	M	A.C. POWELL BLVD N.B.	A.C. POWELL BLVD			O	1	S	2/22/2008	4.020	F	5600	$12,320,000	110		
2246710	M	W 153 ST	A.C. POWELL BLVD			O	1	S	2/22/2008	4.370	F	3082	$6,780,400	110		
2232180	M	E 103RD ST PED BRDG	FDR DRIVE			A-PED	20	C	8/17/2008	4.739	F	6000	$13,200,000	111		
2232190	M	E 111TH ST PED BRDG	FDR DRIVE		P	A-PED	14	C	8/3/2008	4.689	F	2600	$5,720,000	111		
2232200	M	E 120TH ST PED BRDG	FDR DRIVE		P	A-PED	21	C	8/3/2008	4.522	F	2500	$5,500,000	111		
2240620	M	WARDS ISLAND PED BRDG	HARLEM RIVER			WMO-PED	10	C	11/1/2008	4.367	F	12600	$27,720,000	111		
2245319	M	E 97TH ST	METRO NORTH MAIN LN	M		O	1	S	11/7/2006	4.627	F	3200	$7,040,000	111		
2246620	M	PEDESTRIAN BRIDGE	E 128TH ST			O-PED	18	C	8/14/2008	4.042	F	2300	$5,060,000	111		
2246990	M	129 - 130 ST PED BRDG	RAMP OFF 3RD AVE			O-PED	1	C	11/24/2008	4.636	F	500	$1,100,000	111		
224005A	M	FROM FDR DRIVE	HARLEM RIVER DR			OR	19	S	6/6/2008	4.299	F	29900	$65,780,000	111		
224007A	M	TO MADISON AVENUE	RELIEF			OR	7	S	4/18/2008	5.225	G	19880	$43,736,000	111		
2229290	M	W 79 ST	AMTRAK	A		A	1	S	9/7/2006	4.288	F	4500	$9,900,000	112		
2229309	M	HHP	RIVERSIDE PARK			A	1	S	1/22/2008	5.267	G	2400	$5,280,000	112		
2229400	M	W 181ST ST PED BRDG	HHP N.B.		P	A-PED	7	C	3/24/2008	4.514	F	1500	$3,300,000	112		
2233059	M	HARLEM RIVER DRIVE	RAMP TO HRD N.B.			A	11	S	9/11/2008	3.269	F	51000	$112,200,000	112		
2245040	M	FORT TRYON PARK	SOUTH OF CLOISTERS		P	O	1	C	5/2/2008	6.000	G	750	$1,650,000	112		
2245050	M	FORT TRYON PARK	UNDERPASS		P	O	1	C	5/2/2008	4.800	F	750	$1,650,000	112		
2245250	M	W 158TH ST	AMTRAK 30 ST BRANCH	A		O	7	S	11/28/2007	6.319	V	29170	$64,174,000	112		
2245260	M	W 173RD ST PED BRDG	AMTRAK 30 ST BRANCH	A	P	O-PED	2	C	10/25/2008	4.446	F	1500	$3,300,000	112		
2245300	M	INWOOD HILL PK FTBR	AMTRAK 30 ST BRANCH	A	P	O-PED	6	C	10/26/2008	4.100	F	700	$1,540,000	112		
2245480	M	TO GWB OPP W 171ST ST	RIVERSIDE DRIVE			O	1	S	4/11/2008	5.048	G	10800	$23,760,000	112		
2246489	M	W 181 ST	RAMP TO WASH BR			O	1	S	2/17/2008	4.500	F	8200	$18,040,000	112		
2246500	M	FORT TRYON PLACE	ENTR FROM RIVERSIDE DR		P	O	1	S	3/3/2008	4.333	F	6600	$14,520,000	112		
2246510	M	CORBIN PL OVERPASS	CORBIN PLACE		P	O	1	S	1/25/2008	5.000	G	2200	$4,840,000	112		
2246600	M	W 176TH ST PED BRDG	APPROACH TO G.W.B.			O-PED	1	C	1/2/2008	4.172	F	1200	$2,640,000	112		
2246690	M	ISHAM PK VEHICULR	HARLEM RIVER INLET		P	O	1	S	7/7/2008	6.261	V	911	$2,004,200	112		
2246700	M	ISHM PK PEDESTRN	HARLEM RV INLET		P	WO-PED	1	C	1/10/2008	4.000	F	285	$627,000	112		
2267250	M	HHP	AMTRAK 30TH ST LINE	A		A	55	S	11/29/2006	3.710	F	40000	$88,000,000	112		
2268760	M	PS-5 PEDESTRIAN BR.	TENTH AVENUE			O-PED	5	C	1/30/2008	4.735	F	1500	$3,300,000	112		
M00001	M	191ST ST. PED. TUNNEL	BROADWAY TO			O-PED	1	C	1/9/2008	4.556	F	2000	$4,400,000	112		
2245420	M	W 65TH ST E.B.	BRIDLE PATH W END		P	O	1	S	2/5/2008	4.900	F	1600	$3,520,000	164		
2246000	M	WEST DRIVE	PED BET 61ST & 62ST		P	O	1	S	1/28/2008	5.400	G	2500	$5,500,000	164		
2246010	M	FTBRG OPP 62ND ST	BRIDLE PATH		P	O-PED	1	C	8/26/2008	4.894	F	1026	$2,257,200	164		
2246030	M	PEDESTRIAN BRIDGE	POND		P	O-PED	1	C	5/1/2008	4.172	F	1400	$3,080,000	164		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2246050	M	CENTRAL DRIVE	PED OPP 63RD ST		P	O	1	S	1/30/2008	5.133	G	2000	$4,400,000	164		
2246069	M	EAST DRIVE	PEDESTRIAN WALK		P	O	1	S	2/6/2008	4.500	F	2700	$5,940,000	164		
2246070	M	CPK UNDER CENTR DR	OPP 65TH ST-IN E&W		P	O	1	C	7/24/2008	4.367	F	1200	$2,640,000	164		
2246080	M	WEST DRIVE	BRIDLE PATH @ 64TH ST		P	O	1	S	1/22/2008	4.667	F	2000	$4,400,000	164		
2246090	M	PED BRDG OPP 65 ST	TRANSVERSE RD #1		P	O-PED	1	C	5/31/2008	4.583	F	2300	$5,060,000	164		
2246100	M	CENTRAL DRIVE	TRANSVERSE RD #1		P	O	1	S	3/5/2008	4.467	F	6000	$13,200,000	164		
2246110	M	EAST DRIVE	TRANSVERSE RD #1		P	O	1	S	3/5/2008	4.667	F	6000	$13,200,000	164		
2246120	M	WEST DRIVE	TRANSVERSE RD #1		P	O	1	S	3/3/2008	4.967	F	7900	$17,380,000	164		
2246130	M	CENTRAL PARK	UNDER EAST DRIVE		P	O	1	C	5/29/2007	4.233	F	1200	$2,640,000	164		
2246140	M	72ND ST ENT TO W DR	BRIDLE PATH		P	O	1	S	1/25/2008	4.633	F	3600	$7,920,000	164		
2246150	M	72ND ST CROSS DR	NEAR CONCERT GRNDS		P	O	3	S	3/14/2008	6.018	V	7300	$16,060,000	164		
2246160	M	PED BET 73ST&74ST	THE LAKE		P	WO-PED	1	C	1/14/2008	4.575	F	1655	$3,641,000	164		
2246170	M	EAST DRIVE	PED WALK @ 73RD ST		P	O	1	S	2/15/2008	5.056	G	1900	$4,180,000	164		
2246230	M	EAST DRIVE	TRANSVERSE RD #2		P	O	1	S	3/7/2008	4.600	F	6500	$14,300,000	164		
2246240	M	WEST DRIVE	TRANSVERSE RD #2		P	O	1	S	3/7/2008	4.167	F	7200	$15,840,000	164		
2246250	M	EAST DRIVE	TRANSVERSE RD #3		P	O	1	S	2/28/2008	4.300	F	5100	$11,220,000	164		
2246260	M	WEST DRIVE	TRANSVERSE RD #3		P	O	1	S	2/28/2008	4.800	F	5100	$11,220,000	164		
2246270	M	EAST DRIVE	TRANSVERSE RD #4		P	O	1	S	3/23/2008	3.967	F	7000	$15,400,000	164		
2246280	M	WEST DRIVE	TRANSVERSE RD #4		P	O	1	S	3/23/2008	4.300	F	4700	$10,340,000	164		
2246330	M	WEST DRIVE	FEEDER TO LAKE		P	WO	1	S	2/7/2008	5.000	G	2019	$4,441,800	164		
2246340	M	PED WALK OPP 77ST	STREAM TO LAKE		P	WO-PED	3	C	11/7/2008	4.871	F	455	$1,001,000	164		
2246350	M	CNTRL PK OVER E DRIVE	S OF CLEOPATRAS NDL		P	O	1	C	5/7/2008	4.400	F	750	$1,650,000	164		
2246360	M	WEST DRIVE	PED WALK OPP 82 ST		P	O	1	S	2/6/2008	5.636	G	3100	$6,820,000	164		
2246380	M	PED WALK OPP 86ST	BRIDLE PATH		P	O-PED	1	C	11/6/2008	4.347	F	714	$1,570,800	164		
2246390	M	PED WALK OPP 86ST	BRIDLE PATH		P	O-PED	3	C	11/18/2008	4.638	F	1095	$2,409,000	164		
2246400	M	E FOOTBRIDGE	TRANSVERSE RD #2		P	O-PED	1	C	5/10/2008	4.233	F	3700	$8,140,000	164		
2246430	M	WEST DRIVE	PED OPP 109TH ST		P	O	1	S	4/25/2008	4.383	F	1200	$2,640,000	164		
2246440	M	PED IN CTR OF PK	TRANSVERSE RD NO.2		P	O-PED	1	C	5/10/2008	3.778	F	5900	$12,980,000	164		
2246450	M	79 ST ENTR TO E DR	PED PATH OPP 77TH ST		P	O-PED	1	C	1/9/2008	4.655	F	5000	$11,000,000	164		
2246460	M	77 ST ENTR TO W DR	PED PATH OPP 77TH ST		P	O	2	S	1/29/2008	4.263	F	5800	$12,760,000	164		
2246470	M	EAST DRIVE	THE LOCH		P	WO	1	S	2/11/2008	4.500	F	1100	$2,420,000	164		
2266240	M	HHP	PED UNDERPASS INWD PK			A	1	S	1/24/2008	5.571	G	1100	$2,420,000	201		
226771C	M	GAR RAMP TO 79 ST	79 ST BT BASIN GAR		P	AR	21	S	7/13/2007	4.565	F	9095	$20,009,000	302		
226771D	M	SB HHP RAMP TO 79 ST	79 ST BT BASIN GAR		P	AR	4	S	6/4/2007	4.645	F	2601	$5,722,200	302		
2269240	M	RIVERSIDE DRIVE	W. 155TH ST			O	1	S	6/29/2007	4.640	F	4397	$9,673,400	305	356	
226672A	M	W 31ST ST	AMTRAK LAYUP TRACKS	A		O	9	S	12/11/2006	3.619	F	8800	$19,360,000	413		
2267130	M	RIVERSIDE DRIVE	W 145TH ST			O	1	S	6/29/2007	5.000	G	5800	$12,760,000	481		
2268650	M	FDR NB 42ND TO 49ST	EAST RIVER			A	119	S	11/30/2007	4.075	F	30767	$67,687,400	503		
2240047	MQ	QUEENSBORO BRIDGE(LL)	EAST RIVER	AL		WEO	53	S	11/15/2006	4.472	F	626900	$1,379,180,000	108	402	401
2240048	MQ	QUEENSBORO BRIDGE(UL)	EAST RIVER-LL			WEO	37	S	11/15/2006	4.434	F	322300	$709,060,000	108	402	401

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240640	MQ	ROOSEVELT ISLAND	E. RIVER E. CHANNEL			WMO	8	S	11/4/2008	5.389	G	36500	$80,300,000	108	401	
2267199	Q	FRANCIS LEWIS BLVD	PARK ROAD			O	1	S	4/17/2007	5.033	G	7085	$15,587,000	103		
2266770	Q	CROSS ISLAND PKWY	LAURELTON PKWY			A	1	S	3/7/2008	5.250	G	9508	$20,917,600	109		
2268770	Q	SPRINGFIELD BLVD	EQUES. PATH (ABAND.)			O	1	S	5/15/2007	4.667	F	1470	$3,234,000	111		
2300130	Q	HOOK CREEK	HOOK CREEK BRIDGE			WO	3	S	7/27/2007	6.271	V	18302	$40,264,400	112		
2230600	Q	STEINWAY ST	278I W.B. (B.Q.E.)			A	1	S	10/21/2008	6.581	V	4200	$9,240,000	401		
2230610	Q	STEINWAY ST	278I E.B. (B.Q.E.)			A	1	S	10/21/2008	6.581	V	4200	$9,240,000	401		
2230620	Q	37TH ST	278I (B.Q.E.)			A	2	S	3/26/2008	4.583	F	5300	$11,660,000	401		
2230630	Q	35TH ST	278I (B.Q.E.)			A	4	S	4/14/2008	4.736	F	9000	$19,800,000	401		
2230640	Q	32ND ST	278I (B.Q.E.)			A	2	S	6/11/2007	4.903	F	8100	$17,820,000	401		
2230657	Q	31ST ST	278I (B.Q.E.)			A	2	S	9/29/2006	4.847	F	9500	$20,900,000	401		
2230690	Q	BQE EAST LEG NB	32ND AVE			A	1	S	8/20/2008	6.627	V	4080	$8,976,000	401		
2230700	Q	BQE EAST LEG	TO BQE WEST LEG			A	8	S	11/6/2008	6.746	V	31600	$69,520,000	401	403	
2230710	Q	278I S.B. (B.Q.E.)	32ND AVE			A	1	S	8/31/2007	6.695	V	5240	$11,528,000	401		
2230720	Q	BQE EAST LEG	BQE NB WEST LEG			A	3	S	5/17/2007	6.273	V	20896	$45,971,200	401		
2230730	Q	31ST AVE	278I (B.Q.E.)			A	1	S	7/31/2007	6.517	V	5875	$12,925,000	401		
2230740	Q	BQE WEST LEG SB	31ST AVE			A	1	S	8/31/2007	6.391	V	5246	$11,541,200	401		
2230750	Q	BQE EAST LEG SB	31ST AVE			A	1	S	9/17/2007	6.407	V	4221	$9,286,200	401	403	
2230760	Q	BQE WEST LEG NB	31ST AVE			A	1	S	10/6/2008	6.610	V	4161	$9,154,200	401		
2230770	Q	BQE WEST LEG	30TH AVE			A	1	S	6/26/2007	6.695	V	6199	$13,637,800	401		
2230790	Q	BULOVA AVE	BQE WEST LEG			A	2	S	4/25/2008	5.333	G	3300	$7,260,000	401		
2230800	Q	49TH ST	BQE WEST LEG			A	2	S	4/25/2008	5.333	G	4900	$10,780,000	401		
2230810	Q	ASTORIA BLVD E.B.	BQE WEST LEG			A	4	S	1/24/2008	4.103	F	8200	$18,040,000	401		
2230820	Q	47TH ST	GCP			A	2	S	5/20/2008	4.944	F	5700	$12,540,000	401		
2230830	Q	BQE WEST LEG	GCP			A	2	S	5/20/2008	4.750	F	7600	$16,720,000	401		
2230840	Q	44TH ST	GCP			A	2	S	5/13/2008	4.847	F	5000	$11,000,000	401		
2230890	Q	49TH ST	GCP			A	2	S	5/14/2008	4.667	F	6350	$13,970,000	401		
2240660	Q	RIKERS ISLAND BRIDGE	RIKERS ISL CHANNEL			WO	56	S	12/21/2007	4.521	F	183100	$402,820,000	401	480	
224004G	Q	TO NY FROM 11TH ST	TERRAIN (CHAMBER)			OE	36	S	11/10/2006	4.634	F	8360	$18,392,000	401	402	
1247280	Q	51 AVE PED BR.2247280	LIRR MAIN LINE	L		O-PED	5	C	12/1/2006	3.164	F	700	$1,540,000	402		
2230520	Q	65TH PLACE	278I (B.Q.E.)			A	2	S	2/22/2008	4.508	F	11600	$25,520,000	402		
2230530	Q	QUEENS BLVD	278I (B.Q.E.)			A	2	S	12/4/2008	6.417	V	25543	$56,194,600	402		
2230540	Q	WOODSIDE AVE	278I (B.Q.E.)			A	1	S	1/29/2008	5.797	G	7500	$16,500,000	402		
2230550	Q	69TH ST	278I (B.Q.E.)			A	2	S	2/15/2008	5.123	G	12600	$27,720,000	402		
2230560	Q	70TH ST	278I (B.Q.E.)			A	2	S	12/11/2008	6.667	V	8500	$18,700,000	402		
2230570	Q	41ST AVE	278I (B.Q.E.)			A	3	S	4/16/2007	4.931	F	8800	$19,360,000	402		
2230587	Q	ROOSEVELT AVE	278I (B.Q.E.)			A	2	S	12/12/2007	5.833	G	6600	$14,520,000	402		
2230590	Q	BROADWAY	278I (B.Q.E.)			O	2	S	12/11/2008	5.789	G	16000	$35,200,000	402		
2230669	Q	278I (B.Q.E.)	35TH AVE			A	1	S	8/28/2007	6.729	V	13135	$28,897,000	402		
2230679	Q	278I (B.Q.E.)	34TH AVE			A	1	S	6/13/2007	6.305	V	7793	$17,144,600	402		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230680	Q	278I (B.Q.E.)	NORTHERN BLVD			A	1	S	12/4/2006	6.492	V	27011	$59,424,200	402	401	
2230869	Q	QUEENS BLVD	ACCESS RD BQE S.B.			A	1	S	11/26/2006	4.205	F	7900	$17,380,000	402		
2240410	Q	BORDEN AVE	DUTCH KILLS			WMO	2	S	8/7/2008	3.181	F	8400	$18,480,000	402		
2240450	Q	HUNTERS PT AVE BRIDGE	DUTCH KILLS			WMO	4	S	7/22/2008	5.083	G	12168	$26,769,600	402		
2247120	Q	WOODSIDE AVE	LIRR MAIN LINE	L		O	3	S	10/5/2007	4.349	F	14900	$32,780,000	402		
2247150	Q	65TH ST	LIRR N SIDE DIV	L		O	3	S	12/19/2007	6.375	V	6344	$13,956,800	402		
2247160	Q	65TH PLACE	LIRR N SHR DIV	L		O	3	S	12/19/2007	6.471	V	8381	$18,438,200	402		
2247260	Q	JACKSON AVE	LIRR,AMT,CON NE	L		O	1	S	11/20/2006	6.183	V	4517	$9,937,400	402		
2247270	Q	21ST STREET	CONRAIL	C		O	6	S	11/9/2007	5.472	G	17590	$38,698,000	402		
2247290	Q	49TH AVE	LIRR,AMT,CON NE	L		O	5	S	12/8/2008	4.014	F	20400	$44,880,000	402		
2247300	Q	THOMPSON AVE	AMTRAK YARD	L		O	14	S	11/19/2008	5.042	G	61280	$134,816,000	402		
2247310	Q	QUEENS BLVD	AMTRAK & LIRR YARD	L		O	19	S	12/5/2008	6.408	V	92400	$203,280,000	402	401	
2247320	Q	HONEYWELL ST	AMTRAK & LIRR YARD	AL		O	22	S	12/21/2007	5.903	G	99036	$217,879,200	402	401	
2247330	Q	39TH ST (NORTH)	SUNNYSIDE YARDS	AL		O	14	S	12/21/2007	6.556	V	48200	$106,040,000	402	401	
2247370	Q	37TH AVE	CONRAIL HELLGATE	C		O	1	S	11/13/2007	6.362	V	5300	$11,660,000	402		
2247380	Q	ROOSEVELT AVE	CONRAIL HELLGATE	C		O	2	S	11/27/2007	5.889	G	5200	$11,440,000	402	403	404
2247390	Q	41ST AVE	CONRAIL HELLGATE	C		O	2	S	11/13/2007	4.942	F	4400	$9,680,000	402	404	
2247400	Q	WOODSIDE AVE	CONRAIL	C		O	1	S	11/26/2007	5.033	G	8200	$18,040,000	402	404	
2247410	Q	43RD AVE	CONRAIL	C		O	1	S	11/26/2007	5.033	G	4800	$10,560,000	402	404	
2247420	Q	44TH AVE	CONRAIL	C		O	1	S	10/26/2007	5.033	G	5100	$11,220,000	402	404	
2247430	Q	45TH AVE	CONRAIL	C		O	1	S	11/14/2007	5.306	G	2400	$5,280,000	402	404	
2247640	Q	39 ST (SOUTH)	AMTRAK & LIRR YARD	AL		O	9	S	12/20/2007	6.125	V	34100	$75,020,000	402		
224004E	Q	TO NY FR THOMSON AVE	JACKSON AVE			OE	94	S	12/7/2006	4.792	F	104600	$230,120,000	402		
224004F	Q	TO NY FROM 21ST ST	21ST ST (QUEENS)			OE	63	S	12/12/2008	4.833	F	63310	$139,282,000	402	401	
224004H	Q	TO 21ST ST FROM NY	22ND ST			OE	43	S	12/14/2006	4.366	F	48100	$105,820,000	402		
224004I	Q	TO THOMSON AVE FROM NY	JACKSON AVE			OE	39	S	10/18/2006	5.082	G	59100	$130,020,000	402		
2230780	Q	BQE EAST LEG	30TH AVE			A	1	S	6/26/2007	6.524	V	7071	$15,556,200	403	401	
1247010	Q	91 PLACE (2247010)	LIRR PT WASH BRANCH	L		O	1	S	11/29/2007	6.833	V	2760	$6,072,000	404		
2247020	Q	94TH ST PED BRDG	LIRR N SIDE DIV	L		O-PED	5	C	12/6/2006	4.030	F	500	$1,100,000	404		
2247180	Q	GRAND AVE	LIRR MAIN LINE	L		O	3	S	10/8/2008	4.660	F	7415	$16,313,000	404		
2247190	Q	55TH AVE PED BRDG	LIRR MAIN LINE	L		O-PED	3	C	11/30/2006	4.360	F	13000	$28,600,000	404		
2248159	Q	WOODHAVEN BLVD	QUEENS BLVD			O	2	S	9/15/2008	4.288	F	11500	$25,300,000	404		
1247560	Q	METROPOLITAN AVE	LIRR MONTAUK DIV	L		O	2	S	10/24/2008	3.762	F	20900	$45,980,000	405		
2065930	Q	HAMILTON PLACE	495I (L.I.E.)			A	2	S	3/5/2008	6.069	V	11111	$24,444,200	405		
2065940	Q	GRAND AVE	495I (L.I.E.)			A	2	S	10/23/2006	5.264	G	12850	$28,270,000	405		
2065950	Q	69TH STREET	495I (L.I.E.)			A	2	S	5/23/2007	5.361	G	10336	$22,739,200	405		
2230040	Q	CYPRESS HILLS ST	JACKIE ROBINSON PKWY			A	1	S	4/17/2008	5.278	G	5000	$11,000,000	405		
2230099	Q	JACKIE ROBINSON PKWY	CYPRESS HILLS CEMETRY			A	1	S	1/18/2008	5.444	G	4200	$9,240,000	405		
2230120	Q	MYRTLE AVE	JACKIE ROBINSON PKWY			A	1	S	5/2/2008	5.479	G	6400	$14,080,000	405	482	
2247440	Q	GRAND AVE	CONRAIL	C		O	1	S	11/20/2007	6.183	V	3280	$7,216,000	405		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2247450	Q	57TH AVE	CONRAIL	C		O	1	S	11/20/2007	6.073	V	2248	$4,945,600	405		
2247460	Q	CALDWELL AVE	CONRAIL	C		O	1	S	9/22/2008	6.167	V	2243	$4,934,600	405		
2247470	Q	ELIOT AVE	CONRAIL	C		O	1	S	11/20/2007	5.250	G	2960	$6,512,000	405		
2247480	Q	JUNIPER BLVD SO	CONRAIL	C		O	1	S	11/21/2007	5.111	G	9000	$19,800,000	405		
2247490	Q	69TH ST JUNPR BLVD	CONRAIL	C		O	1	S	9/22/2008	5.149	G	6175	$13,585,000	405		
2247500	Q	METROPOLITAN AVE	CONRAIL	C		O	1	S	11/27/2007	4.233	F	18650	$41,030,000	405		
2247530	Q	ANDREWS AVE	LIRR MONTAUK DIV	L		O	1	S	9/27/2007	7.000	V	1765	$3,883,000	405		
2247540	Q	60TH ST	LIRR MONTAUK DIV	L		O	2	S	9/28/2007	5.208	G	5340	$11,748,000	405		
2247550	Q	ELIOT AVE	LIRR MONTAUK DIV	L		O	2	S	9/26/2007	5.894	G	9550	$21,010,000	405		
2247570	Q	80TH ST	71ST TO 77TH AVE	L		O	5	S	12/4/2008	5.254	G	11725	$25,795,000	405		
2247650	Q	60TH RD PED BRDG	LIRR MAIN LINE	L		O-PED	3	C	11/29/2006	4.934	F	2293	$5,044,600	405	406	
2248200	Q	RUST ST	FLUSHING AVE			O	1	S	7/27/2007	5.078	G	2940	$6,468,000	405		
2248220	Q	FLUSHING AV SERVICE	FLUSHING AVE			O	1	S	7/27/2007	5.063	G	2940	$6,468,000	405		
2248240	Q	SERVICE RD TURNAROUND	OVER FLUSHING AVE			O	1	S	7/27/2007	5.188	G	2940	$6,468,000	405		
2248280	Q	HIGHLAND PK PED.	PEDESTRIAN PATH		P	O-PED	1	C	11/20/2008	3.667	F	1856	$4,083,200	405		
2248300	Q	71ST AVE	COOPER AVE			O	1	S	7/16/2007	4.458	F	2800	$6,160,000	405		
1247200	Q	67 AVE PED BR 2247200	LIRR MAIN LINE	L		O-PED	3	C	12/7/2006	4.000	F	1300	$2,860,000	406		
2066002	Q	495I (2066000)	WOODHAVEN BLVD			A	2	S	6/29/2007	5.592	G	25200	$55,440,000	406	404	
2247630	Q	PED BRG NEAR UNION TPK	ABANDONED LIRR			O-PED	8	C	5/13/2008	5.359	G	900	$1,980,000	406		
2248160	Q	ELLIOT AVE	QUEENS BLVD			O	2	S	9/15/2008	4.922	F	13785	$30,327,000	406		
1065210	Q	WHITESTONE EXP NB	BCIP (2065210)			A	1	S	9/4/2008	4.683	F	2500	$5,500,000	407		
2055801	Q	NORTHERN BLVD W.B.	FLUSHING RIVER			WO	40	S	9/20/2006	4.817	F	71900	$158,180,000	407		
2055802	Q	NORTHERN BLVD E.B.	FLUSHING RIVER			WO	40	S	9/20/2006	4.366	F	78894	$173,566,800	407		
2231900	Q	BCIP	FORT TOTTEN ENTRANCE			A	1	S	6/27/2008	4.797	F	4900	$10,780,000	407		
2231910	Q	UTOPIA PKWY	BCIP			A	2	S	3/14/2008	5.114	G	7200	$15,840,000	407		
2231920	Q	160TH ST	BCIP			A	2	S	5/2/2007	5.750	G	5550	$12,210,000	407		
2231930	Q	FRANCIS LEWIS BLVD	BCIP			A	3	S	2/15/2008	4.773	F	9100	$20,020,000	407		
2231940	Q	CLINTONVILLE ST	BCIP			A	2	S	2/19/2008	4.705	F	7400	$16,280,000	407		
2231950	Q	150TH ST	BCIP			A	2	S	3/4/2008	4.795	F	5900	$12,980,000	407		
2231960	Q	149TH ST	BCIP			A	2	S	2/28/2008	4.841	F	6210	$13,662,000	407		
2231970	Q	14TH AVE	BCIP			A	2	S	2/28/2008	4.614	F	8100	$17,820,000	407		
2231980	Q	147TH ST	BCIP			A	2	S	3/6/2008	4.523	F	6300	$13,860,000	407		
2240507	Q	ROOSEVELT AVE	678I - VAN WYCK EXPWY			WA	27	S	12/13/2006	3.535	F	84424	$185,732,800	407	481	
2247040	Q	UNION ST	LIRR N SIDE DIV	L		O	1	S	10/12/2007	6.391	V	3313	$7,288,600	407		
2247050	Q	BOWNE AVE	LIRR N SIDE DIV	L		O	1	S	9/9/2008	5.490	G	4974	$10,942,800	407		
2247060	Q	PARSONS BLVD	LIRR N SIDE DIV	L		O	1	S	9/10/2008	4.824	F	4200	$9,240,000	407		
2247070	Q	147TH ST	LIRR N SIDE DIV	L		O	1	S	9/21/2007	5.549	G	2800	$6,160,000	407		
2247080	Q	149TH ST	LIRR N SIDE DIV	L		O	1	S	9/19/2007	4.776	F	4100	$9,020,000	407		
2247090	Q	149TH PLACE	LIRR N SIDE DIV	L		O	2	S	9/20/2007	5.000	G	4300	$9,460,000	407		
2247100	Q	150TH ST	LIRR N SIDE DIV	L		O	2	S	9/18/2007	6.176	V	7830	$17,226,000	407		

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2247110	Q	MURRAY ST	LIRR N SIDE DIV	L		O	1	S	9/17/2007	5.481	G	4000	$8,800,000	407		
2248090	Q	FLSHG MDW PK PED.	COLLEGE POINT BLVD		P	O-PED	3	C	12/18/2007	4.694	F	8418	$18,519,600	407		
2266160	Q	678I SB TO BCIP EB	ACCESS RD FROM 678I			A	1	S	6/2/2008	3.984	F	2300	$5,060,000	407		
7705510	Q	167TH ST PED BRDG	LIRR PORT WASH BRANCH	L		O-PED	3	C	11/28/2006	4.020	F	600	$1,320,000	407		
205580A	Q	N.BLVD WB TO 678I SB	VACANT LAND			AR	16	S	8/28/2008	5.571	G	8600	$18,920,000	407		
2248059	Q	MOTOR PKWY (PED)	FRANCIS LEWIS BLD		P	O-PED	2	C	7/28/2008	4.736	F	2756	$6,063,200	408		
2248080	Q	MOTOR PKWY (PED)	HOLLIS COURT BLVD		P	O-PED	3	C	12/3/2008	5.000	G	2670	$5,874,000	408		
2248100	Q	MOTOR PKWY (PED)	73RD AVE		P	O-PED	3	C	2/29/2008	4.965	F	2640	$5,808,000	408		
2267160	Q	ROOSEVELT AVE	FLUSHING MDW PK ROAD			O	4	S	8/8/2007	4.905	F	7280	$16,016,000	408		
2230209	Q	QUEENS BLVD	JACKIE ROBINSON PKWY	T		A	5	S	7/29/2008	4.746	F	37700	$82,940,000	409		
2247220	Q	80TH ROAD	LIRR MAIN LINE	L		O	3	S	10/21/2007	4.857	F	4100	$9,020,000	409		
2247230	Q	82ND AVE	LIRR MAIN LINE	L		O	3	S	10/21/2007	5.377	G	4100	$9,020,000	409		
2247240	Q	LEFFERTS BLVD	LIRR MAIN LINE	L		O	3	S	10/21/2007	5.806	G	5460	$12,012,000	409		
2247590	Q	FOREST PARK DRIVE	LIRR MONTAUK DIV	L	P	O	5	S	10/9/2008	5.509	G	6000	$13,200,000	409		
2247600	Q	PARK LANE SOUTH	LIRR MONTAUK DIV	AL		O	1	S	10/9/2008	6.983	V	3024	$6,652,800	409	482	
2247660	Q	FOREST PARK DRIVE	ABANDONED LIRR	L	P	O	6	S	2/5/2008	5.286	G	10000	$22,000,000	409		
2248019	Q	WOODHAVEN BLVD	ATLANTIC AVE			O	3	S	4/9/2008	4.306	F	19400	$42,680,000	409		
2248299	Q	INTER PKWY-UNION TPK	AUSTIN ST			O	1	S	6/2/2008	4.250	F	5900	$12,980,000	409	406	
2248340	Q	FOREST PARK DR	MYRTLE AVE		P	O	3	S	6/25/2007	4.984	F	5100	$11,220,000	409		
2231559	Q	CROSS BAY BLVD	BSHP			A	4	S	5/29/2008	5.139	G	23205	$51,051,000	410		
2231560	Q	S CONDUIT BLVD	BSOP			A	2	S	7/29/2008	5.465	G	15776	$34,707,200	410		
2231570	Q	COHANCY ST	BSOP			A	2	S	5/7/2008	4.632	F	6400	$14,080,000	410		
2231580	Q	AQUEDUCT RCTK RAMP	BSOP			A	4	S	7/17/2008	4.208	F	14000	$30,800,000	410		
2231590	Q	130TH ST	BSOP			A	2	S	2/12/2008	4.659	F	6800	$14,960,000	410		
2240650	Q	163RD ST PED BRDG	HAWTREE BASIN			WO-PED	13	C	11/12/2008	4.304	F	5000	$11,000,000	410		
2248020	Q	WHITELAW PED BRDG	CONDUIT AVE			O-PED	7	C	11/10/2008	4.662	F	5500	$12,100,000	410		
2248039	Q	CROSS BAY BLVD	CONDUIT BLVD			O	2	S	7/2/2007	6.444	V	16544	$36,396,800	410		
2248040	Q	LINDEN BLVD	CONDUIT AVE			O	1	S	7/18/2008	5.267	G	3352	$7,374,400	410		
2248250	Q	102ND ST	HAWTREE BASIN			WO	3	S	7/26/2007	5.941	G	4900	$10,780,000	410		
2231860	Q	W ALLEY ROAD	BCIP			A	2	S	8/3/2007	5.474	G	7200	$15,840,000	411		
2231870	Q	NORTHERN BLVD	BCIP			A	2	S	9/22/2008	6.236	V	9400	$20,680,000	411		
2231880	Q	CROCHERON PK PED	BCIP		P	A-PED	9	C	5/13/2008	4.710	F	2300	$5,060,000	411		
2231890	Q	28TH AVE PED BRDG	BCIP		P	A-PED	24	C	7/10/2008	4.600	F	7600	$16,720,000	411		
2240440	Q	NORTHERN BLVD	ALLEY CREEK			WO	2	S	8/15/2008	4.750	F	8300	$18,260,000	411		
2247130	Q	CORPORAL KENNEDY ST	LIRR N SIDE DIV	L		O	1	S	10/11/2007	6.235	V	3379	$7,433,800	411		
2247140	Q	BELL BLVD	LIRR N SIDE DIV	L		O	1	S	10/10/2007	5.814	G	4320	$9,504,000	411		
2247170	Q	DOUGLASTON PKWY	LIRR N SIDE DIV	L		O	3	S	9/11/2008	4.712	F	6300	$13,860,000	411		
2247680	Q	221ST ST	LIRR N SIDE DIV	L		O	3	S	10/9/2007	6.000	G	6050	$13,310,000	411		
2248060	Q	MOTOR PKWY (PED)	BELL BLVD		P	O-PED	2	C	7/16/2008	4.667	F	2648	$5,825,600	411		
2248070	Q	MOTOR PKWY (PED)	SPRINGFIELD BLVD		P	O-PED	3	C	7/2/2008	4.179	F	2940	$6,468,000	411		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

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2266129	Q	DOUGLASTON PKWY	BCIP			A	1	S	4/1/2008	4.592	F	4400	$9,680,000	411		
2266139	Q	DOUGLASTON PKWY	BCIP			A	1	S	3/25/2008	4.551	F	6400	$14,080,000	411		
7703720	Q	216TH ST PED BRDG	LIRR PORT WASH BRANCH	L		O-PED	6	C	11/27/2006	3.688	F	400	$880,000	411		
2231610	Q	GUY R. BREWER BLVD	BSOP			A	4	S	5/21/2007	6.569	V	12342	$27,152,400	413		
2231620	Q	FARMERS BLVD	BSOP			A	2	S	6/26/2008	4.568	F	6400	$14,080,000	413		
2231630	Q	SPRINGFIELD BLVD	BSOP			A	2	S	5/20/2008	4.614	F	8500	$18,700,000	413		
2231640	Q	225TH ST	BSOP			A	2	S	6/26/2008	5.000	G	7000	$15,400,000	413		
2231650	Q	SUNRISE HWY W.B.	BLP E.B.			A	1	S	4/16/2008	4.623	F	4100	$9,020,000	413		
2231660	Q	SUNRISE HWY W.B.	BLP W.B.			A	2	S	3/10/2008	4.652	F	5350	$11,770,000	413		
2231670	Q	N CONDUIT AVE W.B.	BLP E.B.			A	1	S	2/7/2008	4.917	F	4000	$8,800,000	413		
2231680	Q	N CONDUIT AVE WB	BLP W.B.			A	2	S	2/12/2008	4.932	F	6500	$14,300,000	413		
2231690	Q	FRANCIS LEWIS BLVD	BLP E.B.			A	1	S	4/18/2008	5.167	G	6000	$13,200,000	413		
2231700	Q	FRANCIS LEWIS BLVD	BLP W.B.			A	1	S	4/17/2008	4.833	F	6000	$13,200,000	413		
2231710	Q	MERRICK BLVD	BLP N.B.			A	1	S	2/27/2008	4.400	F	6000	$13,200,000	413		
2231720	Q	MERRICK BLVD	BLP S.B.			A	1	S	2/27/2008	4.200	F	6000	$13,200,000	413		
2231730	Q	130TH AVE	BLP N.B.			A	1	S	1/23/2008	5.267	G	4400	$9,680,000	413		
2231740	Q	130TH AVE	BLP S.B.			A	1	S	2/8/2008	4.767	F	4400	$9,680,000	413		
2231750	Q	LINDEN BLVD	BCIP			A	2	S	3/7/2008	4.341	F	6700	$14,740,000	413		
2231760	Q	BCIP	DUTCH BROADWAY-115 AVE			A	1	S	3/7/2008	4.442	F	7300	$16,060,000	413		
2231770	Q	BELMONT PARK RAMP	BCIP		P	A	1	S	2/14/2008	4.688	F	3200	$7,040,000	413		
2231780	Q	HEMPSTEAD AVE	BCIP			A	2	S	2/19/2008	3.903	F	14200	$31,240,000	413		
2231790	Q	BELMONT PARK RAMP	BCIP		P	A	1	S	1/29/2008	4.563	F	3400	$7,480,000	413		
2231800	Q	SUPERIOR ROAD	BCIP			A	2	S	4/14/2008	4.136	F	7000	$15,400,000	413		
2231819	Q	JAMAICA AVE	BCIP			A	2	S	3/3/2008	4.773	F	11500	$25,300,000	413		
2231829	Q	BRADDOCK AVE	BCIP			A	2	S	3/3/2008	4.591	F	10600	$23,320,000	413		
2231840	Q	HILLSIDE AVE	BCIP			A	2	S	4/8/2008	4.184	F	9672	$21,278,400	413		
2231850	Q	UNION TPKE	BCIP			A	2	S	4/3/2008	4.409	F	13600	$29,920,000	413		
2248110	Q	MOTOR PKWY (PED)	ALLEY PK PED WALK		P	O-PED	1	C	8/6/2008	5.000	G	963	$2,118,600	413		
2248129	Q	UNION TPKE	CREEDMO0RE HOSP RD			O	1	S	7/6/2007	4.867	F	3500	$7,700,000	413		
2266149	Q	HEMPSTEAD AVE	CROSS ISLAND PKWY			A	2	S	3/10/2008	4.190	F	9500	$20,900,000	413		
Q00002	Q	BCIP	PATH OPPOSITE 88TH RD			A	1	C	7/21/2008	4.667	F	1200	$2,640,000	413		
2248130	Q	FLUSHING MEADW PK	WILLOW LK&76TH RD		P	WO-PED	4	C	4/20/2002	1.000	C	1891	$4,160,200	481		
2248140	Q	FLUSHING MEADW PK	STREAM N OF LIE		P	WO-PED	5	C	6/17/2008	4.580	F	4102	$9,024,400	481		
2248260	Q	FLUSHING MEADW PARK	MEADOW LAKE & 69TH RD		P	WO	5	S	5/28/2008	4.709	F	4200	$9,240,000	481		
2248379	Q	FLUSHING MW PK RD	AQUACADE LAKE		P	WO-PED	5	C	6/17/2008	4.037	F	6321	$13,906,200	481		
2230179	Q	JACKIE ROBINSON PKWY	METROPOLITAN AVE			A	2	S	5/21/2008	5.321	G	8673	$19,080,600	482		
2230180	Q	UNION TPKE	JACKIE ROBINSON PKWY			A	1	S	2/25/2008	5.891	G	5359	$11,789,800	482		
2230190	Q	MARKWOOD ROAD	JACKIE ROBINSON PKWY			A	1	S	5/5/2008	5.389	G	4400	$9,680,000	482	406	
2247620	Q	MYRTLE AVE	ABANDONED LIRR	L		O	3	S	1/16/2008	5.028	G	6725	$14,795,000	482	406	
2248369	Q	ROCKAWAY BLVD	THURSTON BASIN			WO	2	S	8/7/2007	5.158	G	6000	$13,200,000	483	413	

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2248230	Q	BEACH CHANNEL DR WB	BEACH CHANNEL DR EB			O	1	S	7/19/2007	4.400	F	3600	$7,920,000	484		
2270180	R	BOROUGH PLACE - RAMP A	STATEN ISLAND RAILWAY	S	F	O	1	S	12/29/2005	4.938	F	1250	$2,750,000	201		
2269790	R	BUS STATION EXIT RAMP	SIRT	S	F	O	7	S	10/12/2006	4.667	F	28721	$63,186,200	204		
2268920	R	AMBOY ROAD	LEMON CREEK			WO	1	S	4/22/2008	6.500	V	1310	$2,882,000	207		
2249040	R	TOMPKINS AVE	B&O RR (ABANDONED)			O	1	S	8/1/2008	6.047	V	5096	$11,211,200	501		
2249070	R	JOHN ST	B&O RAILROAD	O		O-PED	3	C	10/31/2008	5.648	G	5800	$12,760,000	501		
2249090	R	MORNINGSTAR ROAD	B&O RAILROAD	O		O	4	S	4/20/2007	5.169	G	7900	$17,380,000	501		
2249100	R	GRANITE AVE	B&O RAILROAD	O		O	4	S	5/13/2008	6.034	V	7300	$16,060,000	501		
2249110	R	LAKE AVE	B&O RAILROAD	O		O	3	S	8/23/2008	5.333	G	5900	$12,980,000	501		
2249120	R	SIMONSON AVE	B&O RAILROAD	O		O	3	S	4/20/2007	5.981	G	5819	$12,801,800	501		
2249130	R	VAN NAME AVE	B&O RAILROAD	O		O	3	S	5/14/2008	5.254	G	5474	$12,042,800	501		
2249140	R	VAN PELT AVE	B&O RAILROAD	O		O	3	S	4/27/2007	5.644	G	5000	$11,000,000	501		
2249160	R	DE HART AVE	B&O RAILROAD	O		O	4	S	4/20/2007	6.500	V	6700	$14,740,000	501		
2249170	R	UNION AVE	B&O RAILROAD	O		O	4	S	4/17/2007	5.426	G	6500	$14,300,000	501		
2249180	R	HARBOR ROAD	B&O RAILROAD	O		O	4	S	5/18/2007	6.356	V	5778	$12,711,600	501		
2249200	R	SOUTH AVE	B&O RAILROAD	O		O	3	S	12/8/2007	6.745	V	8322	$18,308,400	501		
2249510	R	TOMPKINS AVE	WILLOW AVE, SIRT	S		O	2	S	11/15/2008	5.567	G	5378	$11,831,600	501		
2249520	R	HANNAH ST	SIRT SOUTH SHORE	S		O	10	S	11/30/2007	4.763	F	10020	$22,044,000	501		
2249530	R	MINTHORNE ST PED BRDG	SIRT SOUTH SHORE	S		O-PED	26	C	4/8/2008	5.000	G	1600	$3,520,000	501		
2249710	R	WEST FOOTBRIDGE	CLOVE LAKE		P	WO-PED	2	C	7/8/2008	4.371	F	899	$1,977,800	501		
2249720	R	EAST FOOTBRIDGE	CLOVE LAKE		P	WO-PED	2	C	7/9/2008	4.229	F	899	$1,977,800	501		
2249730	R	BRIDGE OVER DAM	N.END CLOVE LAKE		P	WO-PED	1	C	7/14/2008	3.784	F	972	$2,138,400	501		
2249760	R	MARTLINGS AVE	RICHMOND LAKE DAM			WO	2	S	5/16/2007	4.600	F	7000	$15,400,000	501		
2249770	R	S OF BROOKS LAKE	STREAM IN PARK		P	WO-PED	3	C	11/18/2008	5.000	G	696	$1,531,200	501		
2249780	R	FOOTBRIDGE	BROOKS LAKE DAM		P	WO-PED	1	C	7/9/2008	4.433	F	800	$1,760,000	501		
2249790	R	FB S OF FOREST AV	STREAM IN PARK		P	WO-PED	3	C	11/20/2008	4.814	F	658	$1,447,600	501		
2249800	R	FOREST AVE	CLOVE LAKES PK STREAM		P	WO	1	S	10/18/2007	4.867	F	1600	$3,520,000	501		
2249840	R	TOMPKINS AVE	GREENFIELD AVE			O	1	S	4/7/2008	5.106	G	2562	$5,636,400	501		
2269730	R	PARKING EXIT RAMP	SIRT	S	F	O	10	S	12/26/2008	4.028	F	20727	$45,599,400	501		
2269740	R	BUS STATION NORTH	SIRT	S	F	O	12	S	11/16/2006	4.880	F	64605	$142,131,000	501		
2269750	R	BUS STATION SOUTH	SIRT	S	F	O	12	S	12/21/2007	4.720	F	154688	$340,313,600	501		
2269760	R	NORTH RAMP	SIRT	S	F	O	9	S	12/26/2008	4.292	F	17589	$38,695,800	501		
2269770	R	BUS STA ENTR RAMP	SIRT	S	F	O	19	S	11/21/2006	4.319	F	39333	$86,532,600	501		
2269780	R	PARKING ENTR RAMP	SIRT	S	F	O	3	S	12/18/2008	4.986	F	8589	$18,895,800	501		
2270170	R	SI FERRY PEDESTRIAN BRIDGE	PARKING LOT EXIT ROADWAY		F	O-PED	5	C	6/11/2008	3.936	F	1750	$3,850,000	501		
2240350	R	RICHMOND AVE	RICHMOND CREEK			WO	3	S	8/10/2007	5.653	G	32589	$71,695,800	502		
2249400	R	BEACH AVE	SIRT SOUTH SHORE	S		O	2	S	11/5/2007	5.576	G	3700	$8,140,000	502		
2249410	R	ROSS AVE	SIRT SOUTH SHORE	S		O	2	S	11/7/2007	5.500	G	3800	$8,360,000	502		
2249420	R	ROSE AVE	SIRT SOUTH SHORE	S		O	2	S	11/5/2007	5.591	G	3800	$8,360,000	502		
2249430	R	NEW DORP LANE	SIRT SOUTH SHORE	S		O	2	S	11/7/2007	4.972	F	7600	$16,720,000	502		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2249440	R	BANCROFT AVE	SIRT SOUTH SHORE	S		O	3	S	11/9/2007	5.361	G	5900	$12,980,000	502		
2249450	R	FREMONT AVE PED BRDG	SIRT SOUTH SHORE	S		O-PED	3	C	4/4/2008	3.488	F	800	$1,760,000	502		
2249460	R	LINCOLN AVE	SIRT SOUTH SHORE	S		O	1	S	11/3/2007	5.310	G	4500	$9,900,000	502		
2249470	R	MIDLAND AVE	SIRT SOUTH SHORE	S		O	1	S	11/9/2007	5.569	G	3000	$6,600,000	502		
2249480	R	FINGERBOARD ROAD	SIRT SOUTH SHORE	S		O	2	S	11/27/2007	6.542	V	5100	$11,220,000	502		
2249490	R	CLOVE ROAD	SIRT SOUTH SHORE	S		O	3	S	11/10/2008	6.097	V	5104	$11,228,800	502		
2249860	R	SLATER BLVD	NEW CREEK			WO	1	S	5/15/2007	5.673	G	2037	$4,481,400	502		
2249870	R	TRAVIS AVE	MAIN CREEK			WO	1	S	11/1/2008	5.783	G	1700	$3,740,000	502		
2249880	R	CHELSEA ROAD	SAWMILL CREEK			WO	1	S	5/4/2007	6.833	V	2205	$4,851,000	502		
2249210	R	MAIN ST PED BRDG	SIRT SOUTH SHORE	S		O-PED	9	C	3/31/2008	4.309	F	400	$880,000	503		
2249230	R	TRACY AVE PED BRDG	SIRT SOUTH SHORE	S		O-PED	9	C	4/2/2008	4.149	F	200	$440,000	503		
2249240	R	ARTHUR KILL ROAD	SIRT SOUTH SHORE	S		O	1	S	11/13/2008	4.611	F	3650	$8,030,000	503		
2249250	R	BETHEL AV PED BRDG	SIRT SOUTH SHORE	S		O-PED	12	C	3/31/2008	3.525	F	500	$1,100,000	503		
2249269	R	PAGE AVE	SIRT SOUTH SHORE	S		O	4	S	10/19/2007	6.347	V	30710	$67,562,000	503		
2249270	R	RICHMOND VALLY ROAD	SIRT SOUTH SHORE	S		O	4	S	10/25/2007	5.284	G	9440	$20,768,000	503		
2249280	R	CHAMP COURT PED BRDG	SIRT SOUTH SHORE	S		O-PED	7	C	4/10/2008	4.923	F	200	$440,000	503		
2249290	R	SEGUINE AVE	SIRT SOUTH SHORE	S		O	1	S	10/19/2007	6.016	V	3250	$7,150,000	503		
2249300	R	HUGUENOT AVE	SIRT SOUTH SHORE	S		O	2	S	10/23/2007	4.864	F	4900	$10,780,000	503		
2249320	R	ALBEE AVE	SIRT SOUTH SHORE	S		O	3	S	11/6/2007	4.623	F	6500	$14,300,000	503		
2249330	R	ANNADALE ROAD	SIRT SOUTH SHORE	S		O	2	S	10/29/2007	4.409	F	4500	$9,900,000	503		
2249350	R	NELSON AVE PED BRDG	SIRT SOUTH SHORE	S		O-PED	3	C	4/1/2008	4.652	F	300	$660,000	503		
2249360	R	GIFFORDS LANE	SIRT SOUTH SHORE	S		O	1	S	11/12/2008	5.781	G	3042	$6,692,400	503		
2249370	R	GREAVES AVE	SIRT SOUTH SHORE	S		O	1	S	11/12/2007	6.750	V	2650	$5,830,000	503		
2249380	R	GUYON AVE	SIRT SOUTH SHORE	S		O	3	S	11/5/2007	4.869	F	6900	$15,180,000	503		
2249390	R	CEDARVIEW AVE PED BRDG	SIRT SOUTH SHORE	S		O-PED	5	C	4/3/2008	4.308	F	600	$1,320,000	503		
2249580	R	BELFIELD AVE PED BRDG	SIRT SOUTH SHORE	S		O-PED	5	C	4/9/2008	4.765	F	400	$880,000	503		
2249810	R	HYLAN BLVD	LEMON CREEK			WO	1	S	4/25/2008	6.406	V	11400	$25,080,000	503		
2249820	R	ARTHUR KILL ROAD	ARTHUR KILL STREAM			WO	1	S	5/2/2007	4.286	F	2000	$4,400,000	503		
		787 OPEN BRIDGES				OPEN SPANS 4,480				OPEN SF		15,787,339	34,736,306,000			

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2248250	Q	102ND ST	HAWTREE BASIN			WO	3	S	7/26/2007	5.941	G	4900	$10,780,000	410		
2245209	M	11TH AVE	AMTRAK 30 ST BRANCH	A		O	2	S	4/10/2008	4.471	F	15400	$33,880,000	104		
2243630	K	11TH AVE	LIRR & SEA BEACH	NT		O	5	S	9/7/2006	6.603	V	9700	$21,340,000	310		
2245010	M	11TH AVE VIADUCT	LIRR WEST SIDE YARD	AL		O	39	S	12/15/2006	3.917	F	157500	$346,500,000	104		
2246990	M	129 - 130 ST PED BRDG	RAMP OFF 3RD AVE			O-PED	1	C	11/24/2008	4.636	F	500	$1,100,000	111		
2231730	Q	130TH AVE	BLP N.B.			A	1	S	1/23/2008	5.267	G	4400	$9,680,000	413		
2231740	Q	130TH AVE	BLP S.B.			A	1	S	2/8/2008	4.767	F	4400	$9,680,000	413		
2231590	Q	130TH ST	BSOP			A	2	S	2/12/2008	4.659	F	6800	$14,960,000	410		
2243640	K	13TH AVE	LIRR & SEA BEACH	NT		O	5	S	10/31/2007	4.694	F	16000	$35,200,000	310		
2240089	BM	145TH ST BRIDGE	HARLEM RIVER			WMO	8	S	12/7/2007	6.333	V	56700	$124,740,000	110	204	201
2231980	Q	147TH ST	BCIP			A	2	S	3/6/2008	4.523	F	6300	$13,860,000	407		
2247070	Q	147TH ST	LIRR N SIDE DIV	L		O	1	S	9/21/2007	5.549	G	2800	$6,160,000	407		
2247090	Q	149TH PLACE	LIRR N SIDE DIV	L		O	2	S	9/20/2007	5.000	G	4300	$9,460,000	407		
2231960	Q	149TH ST	BCIP			A	2	S	2/28/2008	4.841	F	6210	$13,662,000	407		
2247080	Q	149TH ST	LIRR N SIDE DIV	L		O	1	S	9/19/2007	4.776	F	4100	$9,020,000	407		
2231970	Q	14TH AVE	BCIP			A	2	S	2/28/2008	4.614	F	8100	$17,820,000	407		
2243650	K	14TH AVE	LIRR BAY RIDGE	N		O	1	S	12/5/2008	6.967	V	4720	$10,384,000	311		
2231950	Q	150TH ST	BCIP			A	2	S	3/4/2008	4.795	F	5900	$12,980,000	407		
2247100	Q	150TH ST	LIRR N SIDE DIV	L		O	2	S	9/18/2007	6.176	V	7830	$17,226,000	407		
2243670	K	15TH AVE	BMT SEA BEACH	T		O	4	S	9/20/2007	6.386	V	16020	$35,244,000	311		
2243340	K	15TH AVE	LIRR BAY RIDGE	N		O	1	S	11/26/2008	4.723	F	3614	$7,950,800	311		
2231920	Q	160TH ST	BCIP			A	2	S	5/2/2007	5.750	G	5550	$12,210,000	407		
2240650	Q	163RD ST PED BRDG	HAWTREE BASIN			WO-PED	13	C	11/12/2008	4.304	F	5000	$11,000,000	410		
7705510	Q	167TH ST PED BRDG	LIRR PORT WASH BRANCH	L		O-PED	3	C	11/28/2006	4.020	F	600	$1,320,000	407		
2243680	K	16TH AVE	BMT SEA BEACH	T		O	3	S	8/11/2006	5.519	G	6816	$14,995,200	311		
2243360	K	16TH AVE	LIRR BAY RIDGE	N		O	1	S	11/26/2008	5.350	G	4345	$9,559,000	311		
206672A	B	174TH ST-NTH PED BRDG	895I - SHERIDAN EXPWY			A-PED	4	C	4/22/2008	5.153	G	1800	$3,960,000	209		
206672B	B	174TH ST-STH PED BRDG	895I - SHERIDAN EXPWY			A-PED	4	C	4/18/2008	5.361	G	1900	$4,180,000	209		
2243690	K	17TH AVE	BMT SEA BEACH	T		O	4	S	8/18/2006	6.288	V	8946	$19,681,200	311		
2243370	K	17TH AVE	LIRR BAY RIDGE	N		O	1	S	12/11/2008	4.824	F	3406	$7,493,200	312		
2231300	K	17TH AVE PED BRDG	BSHP		P	A-PED	1	C	11/12/2008	3.397	F	2100	$4,620,000	311		
2243700	K	18TH AVE	BMT SEA BEACH	T		O	1	S	9/18/2007	6.842	V	5200	$11,440,000	311		
2243380	K	18TH AVE	LIRR BAY RIDGE	N		O	1	S	12/11/2008	4.656	F	6006	$13,213,200	312		
M00001	M	191ST ST. PED. TUNNEL	BROADWAY TO			O-PED	1	C	1/9/2008	4.556	F	2000	$4,400,000	112		
2243710	K	19TH AVE	BMT SEA BEACH	T		O	4	S	10/27/2008	4.395	F	4800	$10,560,000	311		
2241259	B	204TH ST PED BRDG	METRO NORTH RR HAR	M	P	O-PED	1	C	7/26/2004	4.121	F	4700	$10,340,000	227	207	
2243720	K	20TH AVE	BMT SEA BEACH	T		O	6	S	10/28/2008	6.673	V	12500	$27,500,000	311		
7703720	Q	216TH ST PED BRDG	LIRR PORT WASH BRANCH	L		O-PED	6	C	11/27/2006	3.688	F	400	$880,000	411		
2243820	K	21ST AVE	BMT SEA BEACH	T		O	4	S	10/31/2008	3.921	F	21400	$47,080,000	311		
2247270	Q	21ST STREET	CONRAIL	C		O	6	S	11/9/2007	5.472	G	17590	$38,698,000	402		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2247680	Q	221ST ST	LIRR N SIDE DIV	L		O	3	S	10/9/2007	6.000	G	6050	$13,310,000	411		
2231640	Q	225TH ST	BSOP			A	2	S	6/26/2008	5.000	G	7000	$15,400,000	413		
2229450	B	232ND ST	HHP			A	2	S	10/1/2007	5.026	G	4900	$10,780,000	208		
2229460	B	236TH ST PED BRDG	HHP			A-PED	3	C	6/30/2008	4.803	F	2500	$5,500,000	208		
2229470	B	239TH ST	HHP			A	2	S	5/31/2007	5.368	G	6100	$13,420,000	208		
2229490	B	246TH ST	HHP			A	2	S	5/8/2007	4.632	F	5600	$12,320,000	208		
2229500	B	252ND ST	HHP			A	2	S	2/28/2008	5.474	G	4500	$9,900,000	208		
2232070	M	25TH ST PED BRDG	FDR DRIVE			A-PED	4	C	3/16/2008	4.627	F	1700	$3,740,000	106		
224004J	M	25X	NYC GARAGE			OE	14	S	5/19/2008	4.537	F	22058	$48,527,600	106		
2230679	Q	278I (B.Q.E.)	34TH AVE			A	1	S	6/13/2007	6.305	V	7793	$17,144,600	402		
2230669	Q	278I (B.Q.E.)	35TH AVE			A	1	S	8/28/2007	6.729	V	13135	$28,897,000	402		
2230440	K	278I (B.Q.E.)	ADAMS ST N.B.			A	1	S	1/18/2008	5.200	G	2700	$5,940,000	302		
2230450	K	278I (B.Q.E.)	ADAMS ST S.B.			A	1	S	1/18/2008	4.933	F	2500	$5,500,000	302		
2230470	K	278I (B.Q.E.)	JAY ST			A	1	S	3/10/2008	4.833	F	5100	$11,220,000	302		
2230857	K	278I (B.Q.E.)	JORALEMON ST			A	1	S	5/24/2008	5.000	G	2100	$4,620,000	302		
2230858	K	278I (B.Q.E.)	JORALEMON ST / BQE WB			A	2	S	5/30/2008	4.177	F	5900	$12,980,000	302		
2230510	K	278I (B.Q.E.)	NASSAU ST			A	6	S	7/14/2008	4.775	F	51200	$112,640,000	302		
2230680	Q	278I (B.Q.E.)	NORTHERN BLVD			A	1	S	12/4/2006	6.492	V	27011	$59,424,200	402	401	
2230460	K	278I (B.Q.E.)	PEARL ST			A	1	S	3/10/2008	5.333	G	4500	$9,900,000	302		
2230430	K	278I (B.Q.E.)	PROSPECT ST			A	1	S	2/28/2008	5.000	G	1100	$2,420,000	302		
2230480	K	278I (B.Q.E.)	PROSPECT ST			A	1	S	4/24/2008	5.093	G	8400	$18,480,000	302		
2230500	K	278I (B.Q.E.)	RAMP TO BQE EB			A	1	S	3/25/2008	5.100	G	1300	$2,860,000	302		
2230490	K	278I (B.Q.E.)	SANDS ST			A	1	S	3/26/2008	5.019	G	12600	$27,720,000	302		
2230410	K	278I (B.Q.E.)	WASHINGTON ST			A	1	S	7/23/2008	4.438	F	2500	$5,500,000	302		
2230420	K	278I (B.Q.E.)	WASHINGTON ST			A	1	S	7/23/2008	4.750	F	2500	$5,500,000	302		
2268498	K	278I E.B. (B.Q.E.)	278I W.B. (B.Q.E.)			A	69	S	8/8/2007	4.035	F	1337084	$2,941,584,800	302		
2268508	K	278I E.B. (B.Q.E.)	278I W.B. (B.Q.E.)			A	11	S	5/18/2007	4.034	F	20529	$45,163,800	302		
2268518	K	278I E.B. (B.Q.E.)	278I W.B. (B.Q.E.)			A	5	S	10/16/2007	4.214	F	9275	$20,405,000	413		
2230888	K	278I E.B. (B.Q.E.)	CADMAN PLAZA / 278I WB			A	2	S	8/21/2008	5.053	G	4500	$9,900,000	302		
2230710	Q	278I S.B. (B.Q.E.)	32ND AVE			A	1	S	8/31/2007	6.695	V	5240	$11,528,000	401		
2230887	K	278I W.B. (B.Q.E.)	CADMAN PLAZA			A	2	S	8/21/2008	4.426	F	4500	$9,900,000	302		
2268497	K	278I W.B. (B.Q.E.)	FURMAN ST			A	45	S	9/15/2007	4.214	F	86406	$190,093,200	302		
2268517	K	278I W.B. (B.Q.E.)	FURMAN ST			A	7	S	7/27/2007	4.059	F	10988	$24,173,600	103		
2268507	K	278I W.B. (B.Q.E.)	YORK ST			A	6	S	5/14/2007	4.167	F	10388	$22,853,600	302		
2231330	K	27TH AVE PED BRDG	BSHP		P	A-PED	1	C	1/15/2008	3.927	F	2100	$4,620,000	313		
2231890	Q	28TH AVE PED BRDG	BCIP		P	A-PED	24	C	7/10/2008	4.600	F	7600	$16,720,000	411		
2243310	K	2ND AVE	LIRR BAY RIDGE	N		O	2	S	12/15/2008	6.444	V	17751	$39,052,200	310		
2230730	Q	31ST AVE	278I (B.Q.E.)			A	1	S	7/31/2007	6.517	V	5875	$12,925,000	401		
2230657	Q	31ST ST	278I (B.Q.E.)			A	2	S	9/29/2006	4.847	F	9500	$20,900,000	401		
2230640	Q	32ND ST	278I (B.Q.E.)			A	2	S	6/11/2007	4.903	F	8100	$17,820,000	401		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230630	Q	35TH ST	278I (B.Q.E.)			A	4	S	4/14/2008	4.736	F	9000	$19,800,000	401		
2247370	Q	37TH AVE	CONRAIL HELLGATE	C		O	1	S	11/13/2007	6.362	V	5300	$11,660,000	402		
2230620	Q	37TH ST	278I (B.Q.E.)			A	2	S	3/26/2008	4.583	F	5300	$11,660,000	401		
2247640	Q	39 ST (SOUTH)	AMTRAK & LIRR YARD	AL		O	9	S	12/20/2007	6.125	V	34100	$75,020,000	402		
2247330	Q	39TH ST (NORTH)	SUNNYSIDE YARDS	AL		O	14	S	12/21/2007	6.556	V	48200	$106,040,000	402	401	
2243320	K	3RD AVE	LIRR BAY RIDGE	N		O	4	S	11/19/2007	5.347	G	17230	$37,906,000	310		
2244160	K	3RD AVE	SHORE RD DRIVE			O	1	S	5/8/2007	6.727	V	4360	$9,592,000	310		
2230570	Q	41ST AVE	278I (B.Q.E.)			A	3	S	4/16/2007	4.931	F	8800	$19,360,000	402		
2247390	Q	41ST AVE	CONRAIL HELLGATE	C		O	2	S	11/13/2007	4.942	F	4400	$9,680,000	402	404	
2247410	Q	43RD AVE	CONRAIL	C		O	1	S	11/26/2007	5.033	G	4800	$10,560,000	402	404	
2247420	Q	44TH AVE	CONRAIL	C		O	1	S	10/26/2007	5.033	G	5100	$11,220,000	402	404	
2230840	Q	44TH ST	GCP			A	2	S	5/13/2008	4.847	F	5000	$11,000,000	401		
2247430	Q	45TH AVE	CONRAIL	C		O	1	S	11/14/2007	5.306	G	2400	$5,280,000	402	404	
2230820	Q	47TH ST	GCP			A	2	S	5/20/2008	4.944	F	5700	$12,540,000	401		
2066002	Q	495I (2066000)	WOODHAVEN BLVD			A	2	S	6/29/2007	5.592	G	25200	$55,440,000	406	404	
2247290	Q	49TH AVE	LIRR,AMT,CON NE	L		O	5	S	12/8/2008	4.014	F	20400	$44,880,000	402		
2230800	Q	49TH ST	BQE WEST LEG			A	2	S	4/25/2008	5.333	G	4900	$10,780,000	401		
2230890	Q	49TH ST	GCP			A	2	S	5/14/2008	4.667	F	6350	$13,970,000	401		
2231270	K	4TH AVE	BSHP			A	2	S	4/10/2008	4.842	F	6100	$13,420,000	310		
2243330	K	4TH AVE	LIRR BAY RIDGE	NT		O	4	S	11/19/2007	5.819	G	13668	$30,069,600	310		
2243839	K	4TH AVE	NYCTA BMT TRACKS	T		O	1	S	10/12/2007	6.600	V	4440	$9,768,000	307		
2243400	K	50TH ST	LIRR BAY RIDGE	N		O	2	S	11/14/2007	4.701	F	7100	$15,620,000	312		
1247280	Q	51 AVE PED BR.2247280	LIRR MAIN LINE	L		O-PED	5	C	12/1/2006	3.164	F	700	$1,540,000	402		
2243390	K	52ND ST	LIRR BAY RIDGE	N		O	1	S	12/11/2008	6.250	V	3293	$7,244,600	312		
2247190	Q	55TH AVE PED BRDG	LIRR MAIN LINE	L		O-PED	3	C	11/30/2006	4.360	F	13000	$28,600,000	404		
2247450	Q	57TH AVE	CONRAIL	C		O	1	S	11/20/2007	6.073	V	2248	$4,945,600	405		
2066100	K	5TH AVE	27 X PROSPECT EXPWY			A	1	S	5/21/2008	5.104	G	8800	$19,360,000	307		
2244480	K	5TH AVE	GREENWOOD CEMETERY			O	1	S	7/20/2007	4.933	F	3600	$7,920,000	307		
2243580	K	5TH AVE	LIRR & SEA BEACH	NT		O	4	S	12/2/2008	4.147	F	12395	$27,269,000	310		
2247650	Q	60TH RD PED BRDG	LIRR MAIN LINE	L		O-PED	3	C	11/29/2006	4.934	F	2293	$5,044,600	405	406	
2243350	K	60TH ST	LIRR BAY RIDGE	N		O	1	S	11/12/2007	6.267	V	3900	$8,580,000	311		
2247540	Q	60TH ST	LIRR MONTAUK DIV	L		O	2	S	9/28/2007	5.208	G	5340	$11,748,000	405		
2230520	Q	65TH PLACE	278I (B.Q.E.)			A	2	S	2/22/2008	4.508	F	11600	$25,520,000	402		
2247160	Q	65TH PLACE	LIRR N SHR DIV	L		O	3	S	12/19/2007	6.471	V	8381	$18,438,200	402		
2243730	K	65TH ST	BMT SEA BEACH	T		O	4	S	9/24/2008	5.237	G	12000	$26,400,000	311		
2247150	Q	65TH ST	LIRR N SIDE DIV	L		O	3	S	12/19/2007	6.375	V	6344	$13,956,800	402		
1247200	Q	67 AVE PED BR 2247200	LIRR MAIN LINE	L		O-PED	3	C	12/7/2006	4.000	F	1300	$2,860,000	406		
2266160	Q	678I SB TO BCIP EB	ACCESS RD FROM 678I			A	1	S	6/2/2008	3.984	F	2300	$5,060,000	407		
2230550	Q	69TH ST	278I (B.Q.E.)			A	2	S	2/15/2008	5.123	G	12600	$27,720,000	402		
2247490	Q	69TH ST JUNPR BLVD	CONRAIL	C		O	1	S	9/22/2008	5.149	G	6175	$13,585,000	405		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2065950	Q	69TH STREET	495I (L.I.E.)			A	2	S	5/23/2007	5.361	G	10336	$22,739,200	405		
2243590	K	6TH AVE	LIRR & SEA BEACH	NT		O	2	S	10/31/2007	6.361	V	14382	$31,640,400	310		
2243280	K	6TH AVE	LIRR ATLANTIC AVE	L		O	9	S	11/23/2008	5.403	G	12276	$27,007,200	302		
2230560	Q	70TH ST	278I (B.Q.E.)			A	2	S	12/11/2008	6.667	V	8500	$18,700,000	402		
2248300	Q	71ST AVE	COOPER AVE			O	1	S	7/16/2007	4.458	F	2800	$6,160,000	405		
2246150	M	72ND ST CROSS DR	NEAR CONCERT GRNDS		P	O	3	S	3/14/2008	6.018	V	7300	$16,060,000	164		
2246140	M	72ND ST ENT TO W DR	BRIDLE PATH		P	O	1	S	1/25/2008	4.633	F	3600	$7,920,000	164		
2246460	M	77 ST ENTR TO W DR	PED PATH OPP 77TH ST		P	O	2	S	1/29/2008	4.263	F	5800	$12,760,000	164		
2246450	M	79 ST ENTR TO E DR	PED PATH OPP 77TH ST		P	O-PED	1	C	1/9/2008	4.655	F	5000	$11,000,000	164		
2267717	M	79 ST PED PLAZA	79 ST BT BASIN GAR		P	A	10	S	5/4/2007	4.519	F	27400	$60,280,000	101		
226771B	M	79 ST RAMP TO GAR	79 ST BT BASIN GAR		P	AR	21	S	5/31/2007	4.532	F	8989	$19,775,800	107		
226771A	M	79 ST RAMP TO HHP	79 ST BT BASIN GAR		P	AR	4	S	5/18/2007	4.221	F	3131	$6,888,200	107		
2267718	M	79 ST TRAFFIC CIRC	79 ST PED PLAZA		P	A	34	S	7/6/2007	3.934	F	24130	$53,086,000	101		
2243600	K	7TH AVE	LIRR & SEA BEACH	NT		O	7	S	12/9/2008	5.028	G	18628	$40,981,600	310		
2243920	K	7TH AVE	NYCTA BMT YARD	T		O	2	S	10/16/2008	6.324	V	4700	$10,340,000	307		
2247220	Q	80TH ROAD	LIRR MAIN LINE	L		O	3	S	10/21/2007	4.857	F	4100	$9,020,000	409		
2247570	Q	80TH ST	71ST TO 77TH AVE	L		O	5	S	12/4/2008	5.254	G	11725	$25,795,000	405		
2231250	K	81ST ST PED BR	BSHP		P	A-PED	5	C	12/23/2008	4.721	F	3100	$6,820,000	310		
2247230	Q	82ND AVE	LIRR MAIN LINE	L		O	3	S	10/21/2007	5.377	G	4100	$9,020,000	409		
2243570	K	86TH ST	BMT SEA BEACH	T		O	1	S	9/11/2008	6.078	V	3840	$8,448,000	313		
2243610	K	8TH AVE	LIRR & SEA BEACH	NT		O	2	S	10/31/2007	6.319	V	10834	$23,834,800	310		
1247010	Q	91 PLACE (2247010)	LIRR PT WASH BRANCH	L		O	1	S	11/29/2007	6.833	V	2760	$6,072,000	404		
2231260	K	92ND ST PED BR	BSHP		P	A-PED	6	C	8/13/2008	4.079	F	3000	$6,600,000	310		
2247020	Q	94TH ST PED BRDG	LIRR N SIDE DIV	L		O-PED	5	C	12/6/2006	4.030	F	500	$1,100,000	404		
2243840	K	9TH AVE	NYCTA BMT YARD	T		O	5	S	10/16/2007	6.319	V	12440	$27,368,000	312		
2243940	K	9TH AVE	NYCTA IND SBWY	T		O	5	S	10/19/2007	4.737	F	6300	$13,860,000	312		
2246490	M	A.C. POWELL BLVD N.B.	A.C. POWELL BLVD			O	1	S	2/22/2008	4.020	F	5600	$12,320,000	110		
2249320	R	ALBEE AVE	SIRT SOUTH SHORE	S		O	3	S	11/6/2007	4.623	F	6500	$14,300,000	503		
2268920	R	AMBOY ROAD	LEMON CREEK			WO	1	S	4/22/2008	6.500	V	1310	$2,882,000	207		
2247530	Q	ANDREWS AVE	LIRR MONTAUK DIV	L		O	1	S	9/27/2007	7.000	V	1765	$3,883,000	405		
2249330	R	ANNADALE ROAD	SIRT SOUTH SHORE	S		O	2	S	10/29/2007	4.409	F	4500	$9,900,000	503		
2231580	Q	AQUEDUCT RCTK RAMP	BSOP			A	4	S	7/17/2008	4.208	F	14000	$30,800,000	410		
2249820	R	ARTHUR KILL ROAD	ARTHUR KILL STREAM			WO	1	S	5/2/2007	4.286	F	2000	$4,400,000	503		
2249240	R	ARTHUR KILL ROAD	SIRT SOUTH SHORE	S		O	1	S	11/13/2008	4.611	F	3650	$8,030,000	503		
2230810	Q	ASTORIA BLVD E.B.	BQE WEST LEG			A	4	S	1/24/2008	4.103	F	8200	$18,040,000	401		
2243569	K	ATLANTIC AVE	LIRR ATLANTIC AVE	L		O	75	S	9/13/2008	3.789	F	135100	$297,220,000	316	305	
2244170	K	ATLNTC AV SVC RD E.B.	EAST NEW YORK AVE			O	2	S	9/17/2007	5.474	G	3192	$7,022,400	305		
2244180	K	ATLNTC AV SVC RD W.B.	EAST NEW YORK AVE			O	2	S	9/17/2007	5.175	G	5600	$12,320,000	305		
2243530	K	AVENUE H	LIRR BAY RIDGE	N		O	2	S	10/10/2007	5.956	G	35100	$77,220,000	318		
2243750	K	AVENUE O	BMT SEA BEACH	T		O	1	S	9/26/2007	5.863	G	4658	$10,247,600	311		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2243760	K	AVENUE P	BMT SEA BEACH	T		O	1	S	9/26/2007	6.605	V	5544	$12,196,800	311		
2243790	K	AVENUE S	BMT SEA BEACH	T		O	1	S	10/11/2007	5.967	G	5360	$11,792,000	315		
2243800	K	AVENUE T	BMT SEA BEACH	T		O	1	S	10/11/2007	6.033	V	5360	$11,792,000	311		
2243810	K	AVENUE U	BMT SEA BEACH	T		O	1	S	7/24/2006	5.824	G	5880	$12,936,000	315		
2249440	R	BANCROFT AVE	SIRT SOUTH SHORE	S		O	3	S	11/9/2007	5.361	G	5900	$12,980,000	502		
2241180	B	BARRETTO ST	AMTRAK - CSX	AC		O	1	S	7/25/2008	6.000	G	5313	$11,688,600	202		
2232000	M	BATTERY PLACE	FDR DRIVE			AT	2	S	12/14/2007	6.045	V	142000	$312,400,000	107		
2231290	K	BAY 8TH ST	BSHP			A	1	S	5/11/2007	5.921	G	4950	$10,890,000	311		
2243740	K	BAY PKWY	BMT SEA BEACH	T		O	4	S	9/26/2008	4.921	F	16800	$36,960,000	311		
2231760	Q	BCIP	DUTCH BROADWAY-115 AVE			A	1	S	3/7/2008	4.442	F	7300	$16,060,000	413		
2231900	Q	BCIP	FORT TOTTEN ENTRANCE			A	1	S	6/27/2008	4.797	F	4900	$10,780,000	407		
Q00002	Q	BCIP	PATH OPPOSITE 88TH RD			A	1	C	7/21/2008	4.667	F	1200	$2,640,000	413		
2076109	B	BE NB SERVICE RD	HUTCHINSON RVR PKWY			A	2	S	10/5/2007	4.632	F	7800	$17,160,000	210		
2076129	B	BE SB SERVICE RD	HUTCHINSON RVR PKWY			A	2	S	2/20/2008	5.105	G	7100	$15,620,000	210		
2249400	R	BEACH AVE	SIRT SOUTH SHORE	S		O	2	S	11/5/2007	5.576	G	3700	$8,140,000	502		
2248230	Q	BEACH CHANNEL DR WB	BEACH CHANNEL DR EB			O	1	S	7/19/2007	4.400	F	3600	$7,920,000	484		
2243490	K	BEDFORD AVE	LIRR BAY RIDGE	N		O	6	S	12/15/2008	4.264	F	12000	$26,400,000	314		
2241840	B	BEDFORD PARK BLVD	METRO NORTH RR HAR	M		O	1	S	4/21/2008	4.594	F	6400	$14,080,000	227	207	
2241930	B	BEDFORD PARK BLVD	NYCTA IND YARDS	T		O	4	S	8/12/2008	5.681	G	46300	$101,860,000	207		
2249580	R	BELFIELD AVE PED BRDG	SIRT SOUTH SHORE	S		O-PED	5	C	4/9/2008	4.765	F	400	$880,000	503		
2247140	Q	BELL BLVD	LIRR N SIDE DIV	L		O	1	S	10/10/2007	5.814	G	4320	$9,504,000	411		
2231770	Q	BELMONT PARK RAMP	BCIP		P	A	1	S	2/14/2008	4.688	F	3200	$7,040,000	413		
2231790	Q	BELMONT PARK RAMP	BCIP		P	A	1	S	1/29/2008	4.563	F	3400	$7,480,000	413		
2249250	R	BETHEL AV PED BRDG	SIRT SOUTH SHORE	S		O-PED	12	C	3/31/2008	3.525	F	500	$1,100,000	503		
2243100	K	BEVERLY ROAD	BMT SUBWAY, BRIGHTON	T		O	3	S	9/25/2008	3.737	F	4200	$9,240,000	314		
2243900	K	BLAKE AVE	LIRR BAY RIDGE LINE	N		O	3	S	12/17/2008	5.000	G	4912	$10,806,400	316		
2240410	Q	BORDEN AVE	DUTCH KILLS			WMO	2	S	8/7/2008	3.181	F	8400	$18,480,000	402		
2270180	R	BOROUGH PLACE - RAMP A	STATEN ISLAND RAILWAY	S	F	O	1	S	12/29/2005	4.938	F	1250	$2,750,000	201		
2229579	B	BOSTON POST ROAD	HUTCHINSON RIVER			WO	14	S	6/22/2007	4.444	F	95700	$210,540,000	212		
2242110	B	BOSTON ROAD	BRONX RIVER			WO	1	S	5/6/2008	4.273	F	6200	$13,640,000	227		
2242100	B	BOTANICAL GARDEN ROAD	TWIN LAKES		P	WO	1	S	5/7/2008	4.900	F	2200	$4,840,000	227		
2247050	Q	BOWNE AVE	LIRR N SIDE DIV	L		O	1	S	9/9/2008	5.490	G	4974	$10,942,800	407		
2230780	Q	BQE EAST LEG	30TH AVE			A	1	S	6/26/2007	6.524	V	7071	$15,556,200	403	401	
2230720	Q	BQE EAST LEG	BQE NB WEST LEG			A	3	S	5/17/2007	6.273	V	20896	$45,971,200	401		
2230700	Q	BQE EAST LEG	TO BQE WEST LEG			A	8	S	11/6/2008	6.746	V	31600	$69,520,000	401	403	
2230690	Q	BQE EAST LEG NB	32ND AVE			A	1	S	8/20/2008	6.627	V	4080	$8,976,000	401		
2230750	Q	BQE EAST LEG SB	31ST AVE			A	1	S	9/17/2007	6.407	V	4221	$9,286,200	401	403	
2230770	Q	BQE WEST LEG	30TH AVE			A	1	S	6/26/2007	6.695	V	6199	$13,637,800	401		
2230830	Q	BQE WEST LEG	GCP			A	2	S	5/20/2008	4.750	F	7600	$16,720,000	401		
2230760	Q	BQE WEST LEG NB	31ST AVE			A	1	S	10/6/2008	6.610	V	4161	$9,154,200	401		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230740	Q	BQE WEST LEG SB	31ST AVE			A	1	S	8/31/2007	6.391	V	5246	$11,541,200	401		
2231829	Q	BRADDOCK AVE	BCIP			A	2	S	3/3/2008	4.591	F	10600	$23,320,000	413		
2249730	R	BRIDGE OVER DAM	N.END CLOVE LAKE		P	WO-PED	1	C	7/14/2008	3.784	F	972	$2,138,400	501		
2230590	Q	BROADWAY	278I (B.Q.E.)			O	2	S	12/11/2008	5.789	G	16000	$35,200,000	402		
2240137	BM	BROADWAY BRIDGE	HARLEM RIVER	TM		WMO	3	S	11/30/2007	4.014	F	46848	$103,065,600	112	207	208
2242072	B	BRONX BLVD N.B.	BRONX RIVER			WO	1	S	5/19/2008	4.967	F	1800	$3,960,000	212		
2242082	B	BRONX BLVD N.B.	BRONX RIVER			WO	1	S	5/19/2008	4.467	F	2800	$6,160,000	212		
2242071	B	BRONX BLVD S.B.	BRONX RIVER			WO	1	S	5/20/2008	4.633	F	1800	$3,960,000	212		
2242081	B	BRONX BLVD S.B.	BRONX RIVER			WO	1	S	5/20/2008	4.467	F	2800	$6,160,000	212		
2229560	B	BRONX PELHAM PKWY	AMTRAK - CSX	AC		A	3	S	8/15/2006	4.972	F	24591	$54,100,200	211		
2242010	B	BRONX PELHAM PKWY	BRONX RIVER			WA	1	S	5/7/2008	5.207	G	9200	$20,240,000	227		
2075849	B	BRONX PELHAM PKWY	HUTCHINSON RVR PKWY			A	2	S	6/17/2008	3.974	F	17600	$38,720,000	210	211	
2065629	B	BRONX RVR PKWY	BOSTON RD BX ZOO			A	1	S	7/3/2007	5.000	G	6300	$13,860,000	227		
2270250	B	BROOKE AVENUE	CSX TRANS - PT MORRIS			O	1	S	5/28/2008	3.709	F	21035	$46,277,000	413		
2243520	K	BROOKLYN AVE	LIRR BAY RIDGE	N		O	3	S	10/10/2007	6.236	V	4500	$9,900,000	318		
2267860	K	BROOKLYN BR APPROACH	SANDS STREET			O	1	S	7/31/2008	4.607	F	6490	$14,278,000	302		
2240019	KM	BROOKLYN BRIDGE	278I (B.Q.E.)			WEO	75	S	11/17/2006	2.917	P	503788	$1,108,333,600	103	302	101
2268350	K	BROOKLYN PROMENADE	278I N.B. (B.Q.E.)		P	A-PED	35	C	9/28/2008	3.643	F	46184	$101,604,800	302		
2241099	B	BRUCKNER BLVD	CSX TRANS - PT MORRIS	C		O	1	S	10/16/2008	6.583	V	6700	$14,740,000	201		
2266540	B	BRUCKNER BLVD OVRPAS	133RD - 135TH ST			A	2	S	6/5/2007	4.565	F	32900	$72,380,000	104		
1066510	B	BRUCKNER EXP.(2066510)	WESTCHESTER CREEK			WMA	17	S	10/25/2007	3.597	F	39400	$86,680,000	209		
2076929	B	BRUCKNER EXPWY	CSX - HUNTS POINT	C		A	1	S	9/20/2007	4.700	F	3800	$8,360,000	202		
2075352	B	BRUCKNER EXPWY NB	AMTRAK - CSX	AC		A	1	S	9/21/2007	3.188	F	10900	$23,980,000	202		
2066672	B	BRUCKNER EXPWY NB	BRONX RIVER			WMA	8	S	7/19/2007	4.567	F	22300	$49,060,000	202	209	
2075351	B	BRUCKNER EXPWY SB	AMTRAK - CSX	AC		A	1	S	8/8/2006	3.625	F	11600	$25,520,000	202		
2066671	B	BRUCKNER EXPWY SB	BRONX RIVER			WMA	3	S	7/24/2007	5.222	G	12400	$27,280,000	202	209	
2241210	B	BRYANT AVE	AMTRAK - CSX	AC		O	1	S	9/10/2007	3.136	F	5300	$11,660,000	202		
2231329	K	BSHP	26TH AVE			A	1	S	6/5/2008	4.867	F	6700	$14,740,000	313		
2231319	K	BSHP	BAY PKWY			A	1	S	7/21/2008	4.535	F	7200	$15,840,000	311		
2231249	K	BSHP	BAY RIDGE AVE			A	1	S	4/19/2008	3.313	F	4900	$10,780,000	310		
2231429	K	BSHP	BEDFORD AVE			A	3	S	5/3/2008	4.167	F	12000	$26,400,000	315		
2231509	K	BSHP	FRESH CREEK			WA	5	S	8/9/2007	3.333	F	23000	$50,600,000	356		
2231450	K	BSHP	GERRITSEN INLET			WA	11	S	6/26/2007	3.597	F	52000	$114,400,000	356		
2231479	K	BSHP	MILL BASIN			WMA	14	S	12/18/2007	2.955	P	73500	$161,700,000	318		
2231439	K	BSHP	NOSTRAND AVE			A	3	S	4/24/2008	4.097	F	13000	$28,600,000	315		
2231419	K	BSHP	OCEAN AVE			A	3	S	5/1/2008	4.222	F	14000	$30,800,000	315		
2231360	K	BSHP	OCEAN PKWY			A	3	S	8/20/2008	6.776	V	29637	$65,201,400	313		
2231489	K	BSHP	PAERDEGAT BASIN			WA	15	S	8/11/2007	3.222	F	58300	$128,260,000	318		
2231499	K	BSHP	ROCKAWAY PKWY			A	4	S	10/3/2007	4.000	F	11500	$25,300,000	356		
2231409	K	BSHP	SHEEPSHEAD BAY ROAD			A	1	S	4/30/2008	4.967	F	6500	$14,300,000	315		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230790	Q	BULOVA AVE	BQE WEST LEG			A	2	S	4/25/2008	5.333	G	3300	$7,260,000	401		
2269770	R	BUS STA ENTR RAMP	SIRT	S	F	O	19	S	11/21/2006	4.319	F	39333	$86,532,600	501		
2269790	R	BUS STATION EXIT RAMP	SIRT	S	F	O	7	S	10/12/2006	4.667	F	28721	$63,186,200	204		
2269740	R	BUS STATION NORTH	SIRT	S	F	O	12	S	11/16/2006	4.880	F	64605	$142,131,000	501		
2269750	R	BUS STATION SOUTH	SIRT	S	F	O	12	S	12/21/2007	4.720	F	154688	$340,313,600	501		
2247460	Q	CALDWELL AVE	CONRAIL	C		O	1	S	9/22/2008	6.167	V	2243	$4,934,600	405		
2243290	K	CARLTON AVE	LIRR ATLANTIC AVE	L		O	7	S	12/6/2008	5.069	G	10823	$23,810,600	302		
2240260	K	CARROLL ST	GOWANUS CANAL			WMO	2	S	10/14/2008	4.803	F	3000	$6,600,000	306		
2243220	K	CARROLL ST PED BRDG	FRANKLIN SHUTTLE	T		O-PED	3	C	7/11/2007	5.268	G	600	$1,320,000	309		
2243050	K	CATON AVE	BMT SUBWAY, BRIGHTON	T		O	4	S	8/17/2007	4.500	F	20800	$45,760,000	314		
2249390	R	CEDARVIEW AVE PED BRDG	SIRT SOUTH SHORE	S		O-PED	5	C	4/3/2008	4.308	F	600	$1,320,000	503		
2246050	M	CENTRAL DRIVE	PED OPP 63RD ST		P	O	1	S	1/30/2008	5.133	G	2000	$4,400,000	164		
2244050	K	CENTRAL DRIVE	PED PATH & STREAM		P	WO	3	S	4/27/2007	5.000	G	7400	$16,280,000	355		
2246100	M	CENTRAL DRIVE	TRANSVERSE RD #1		P	O	1	S	3/5/2008	4.467	F	6000	$13,200,000	164		
2246130	M	CENTRAL PARK	UNDER EAST DRIVE		P	O	1	C	5/29/2007	4.233	F	1200	$2,640,000	164		
2268480	M	CHAMBERS ST PED BRDG	WEST SIDE HWY			O-PED	10	C	1/16/2008	5.585	G	3344	$7,356,800	101		
2249280	R	CHAMP COURT PED BRDG	SIRT SOUTH SHORE	S		O-PED	7	C	4/10/2008	4.923	F	200	$440,000	503		
2249880	R	CHELSEA ROAD	SAWMILL CREEK			WO	1	S	5/4/2007	6.833	V	2205	$4,851,000	502		
2243080	K	CHURCH AVE	BMT SUBWAY, BRIGHTON	T		O	4	S	8/29/2007	4.545	F	18200	$40,040,000	314		
2240210	B	CITY ISLAND ROAD	EASTCHESTER BAY			WO	7	S	10/9/2007	3.389	F	28900	$63,580,000	228		
2241710	B	CLAREMONT PKWY	METRO NORTH RR HAR	M		O	1	S	3/24/2008	4.391	F	6300	$13,860,000	203		
2244060	K	CLEFT RIDGE SPAN	PROSPECT PARK		P	O	1	C	4/15/2008	4.433	F	900	$1,980,000	355		
2231940	Q	CLINTONVILLE ST	BCIP			A	2	S	2/19/2008	4.705	F	7400	$16,280,000	407		
2249490	R	CLOVE ROAD	SIRT SOUTH SHORE	S		O	3	S	11/10/2008	6.097	V	5104	$11,228,800	502		
2246350	M	CNTRL PK OVER E DRIVE	S OF CLEOPATRAS NDL		P	O	1	C	5/7/2008	4.400	F	750	$1,650,000	164		
2231570	Q	COHANCY ST	BSOP			A	2	S	5/7/2008	4.632	F	6400	$14,080,000	410		
2230870	K	COLUMBIA HEIGHTS	278I (B.Q.E.)			A	1	S	9/3/2008	4.550	F	16500	$36,300,000	302		
2241590	B	CONCOURSE VILL AVE	METRO NORTH RR HAR	M		O	1	S	4/11/2006	4.125	F	17800	$39,160,000	204		
2244460	K	CONDUIT BLVD NB	ATLANTIC AVE EB			O	1	S	11/15/2008	4.833	F	3800	$8,360,000	305		
2231380	K	CONEY ISLAND AVE	BSHP			A	4	S	10/5/2007	6.292	V	19866	$43,705,200	313		
2243440	K	CONEY ISLAND AVE	LIRR BAY RIDGE	N		O	1	S	12/12/2008	5.234	G	3231	$7,108,200	312		
2230390	K	CONGRESS ST	278I (B.Q.E.)			A	2	S	4/10/2008	6.382	V	5000	$11,000,000	306		
2246510	M	CORBIN PL OVERPASS	CORBIN PLACE		P	O	1	S	1/25/2008	5.000	G	2200	$4,840,000	112		
2232029	M	CORLEARS PARK ROAD	FDR DRIVE		P	A	4	S	2/24/2008	3.625	F	4100	$9,020,000	103		
2247130	Q	CORPORAL KENNEDY ST	LIRR N SIDE DIV	L		O	1	S	10/11/2007	6.235	V	3379	$7,433,800	411		
2243110	K	CORTELYOU ROAD	BMT SUBWAY, BRIGHTON	T		O	3	S	9/11/2007	6.167	V	4810	$10,582,000	314		
2246070	M	CPK UNDER CENTR DR	OPP 65TH ST-IN E&W		P	O	1	C	7/24/2008	4.367	F	1200	$2,640,000	164		
2231880	Q	CROCHERON PK PED	BCIP		P	A-PED	9	C	5/13/2008	4.710	F	2300	$5,060,000	411		
2243040	K	CROOKE AVE	BMT SUBWAY, BRIGHTON	T		O	4	S	10/3/2008	4.105	F	6000	$13,200,000	314		
2231340	K	CROPSEY AVE	BSHP			A	2	S	7/18/2008	4.806	F	13100	$28,820,000	313		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240301	K	CROPSEY AVE	CONEY ISLAND CREEK			WO	3	S	10/17/2008	5.113	G	9400	$20,680,000	313		
2240302	K	CROPSEY AVE	CONEY ISLAND CREEK			WO	3	S	10/22/2008	5.028	G	9400	$20,680,000	313		
2231559	Q	CROSS BAY BLVD	BSHP			A	4	S	5/29/2008	5.139	G	23205	$51,051,000	410		
2248039	Q	CROSS BAY BLVD	CONDUIT BLVD			O	2	S	7/2/2007	6.444	V	16544	$36,396,800	410		
2266770	Q	CROSS ISLAND PKWY	LAURELTON PKWY			A	1	S	3/7/2008	5.250	G	9508	$20,917,600	109		
2242030	B	CROTONA AVE	BRONX PELHAM PKWY			O	2	S	3/19/2008	5.447	G	7600	$16,720,000	206		
2243230	K	CROWN ST	FRANKLIN SHUTTLE	T		O	3	S	10/8/2008	5.097	G	4060	$8,932,000	309		
2230040	Q	CYPRESS HILLS ST	JACKIE ROBINSON PKWY			A	1	S	4/17/2008	5.278	G	5000	$11,000,000	405		
2249160	R	DE HART AVE	B&O RAILROAD	O		O	4	S	4/20/2007	6.500	V	6700	$14,740,000	501		
2232030	M	DELANCEY ST PED BRDG	FDR DRIVE		P	A-PED	12	C	9/7/2008	4.535	F	2900	$6,380,000	103		
2076640	B	DEPOT PLACE	METRO NORTH RR HUD	CM		O	11	S	11/10/2007	4.972	F	26566	$58,445,200	204		
2243130	K	DITMAS AVE	BMT SUBWAY, BRIGHTON	T		O	1	S	9/6/2007	5.723	G	5150	$11,330,000	314		
2243120	K	DORCHESTER ROAD	BMT SUBWAY, BRIGHTON	T		O	1	S	9/19/2008	5.882	G	4825	$10,615,000	314		
2266129	Q	DOUGLASTON PKWY	BCIP			A	1	S	4/1/2008	4.592	F	4400	$9,680,000	411		
2266139	Q	DOUGLASTON PKWY	BCIP			A	1	S	3/25/2008	4.551	F	6400	$14,080,000	411		
2247170	Q	DOUGLASTON PKWY	LIRR N SIDE DIV	L		O	3	S	9/11/2008	4.712	F	6300	$13,860,000	411		
2232180	M	E 103RD ST PED BRDG	FDR DRIVE			A-PED	20	C	8/17/2008	4.739	F	6000	$13,200,000	111		
2233020	M	E 10TH ST PED BRDG	FDR DRIVE		P	A-PED	25	C	9/7/2008	5.216	G	1632	$3,590,400	103		
2232190	M	E 111TH ST PED BRDG	FDR DRIVE		P	A-PED	14	C	8/3/2008	4.689	F	2600	$5,720,000	111		
2232200	M	E 120TH ST PED BRDG	FDR DRIVE		P	A-PED	21	C	8/3/2008	4.522	F	2500	$5,500,000	111		
2231390	K	E 12TH ST	BSHP			A	4	S	7/12/2008	4.875	F	17200	$37,840,000	315		
2233080	K	E 14 ST PED BR	BSHP			A-PED	14	C	7/22/2008	4.500	F	4700	$10,340,000	315		
2241550	B	E 144TH ST	METRO NORTH RR HAR	M		O	2	S	11/14/2007	6.444	V	8290	$18,238,000	201		
2241129	B	E 149TH ST	AMTRAK - CSX	AC		O	2	S	8/7/2006	4.620	F	12575	$27,665,000	201	202	
2241560	B	E 149TH ST	METRO NORTH RR HAR	M		O	8	S	4/21/2008	4.708	F	27900	$61,380,000	201	204	
2241050	B	E 149TH ST/JACKSON AVE	CSX TRANS - PT MORRIS	C		O	1	S	6/30/2008	4.850	F	65000	$143,000,000	201		
2243450	K	E 14TH ST	LIRR BAY RIDGE	N		O	1	S	12/11/2008	4.809	F	1775	$3,905,000	314		
2270030	B	E 156TH ST	ACCESS TO HOUSING		ED	O	16	S	12/16/2006	3.612	F	49696	$109,331,200	501		
2241010	B	E 156TH STREET	CSX TRANS - PT MORRIS	C		O	1	S	7/18/2008	4.556	F	2400	$5,280,000	201		
2241600	B	E 158TH ST	METRO NORTH RR HAR	M		O	1	S	10/31/2007	5.200	G	3400	$7,480,000	204		
2243460	K	E 15TH ST - PED	LIRR BAY RIDGE	N		O-PED	3	C	9/16/2008	5.193	G	900	$1,980,000	314		
2241610	B	E 161ST ST	METRO NORTH RR HAR	M		O	1	S	10/30/2007	5.050	G	6600	$14,520,000	204	203	
2241020	B	E 161ST STREET	CSX TRANS - PT MORRIS	C		O	1	S	5/12/2008	6.700	V	12800	$28,160,000	203		
2241620	B	E 162ND ST	METRO NORTH RR HAR	M		O	1	S	4/14/2008	4.859	F	4700	$10,340,000	203		
2241030	B	E 163RD STREET	CSX TRANS - PT MORRIS	C		O	1	S	4/11/2008	4.796	F	3200	$7,040,000	203		
2241630	B	E 165TH ST	METRO NORTH RR HAR	M		O	1	S	4/21/2008	4.200	F	16400	$36,080,000	203		
2241650	B	E 167TH ST	METRO NORTH RR HAR	M		O	1	S	3/24/2008	5.510	G	3363	$7,398,600	203		
2241660	B	E 168TH ST	METRO NORTH RR HAR	M		O	1	S	3/24/2008	4.859	F	7700	$16,940,000	203		
2241670	B	E 169TH ST	METRO NORTH RR HAR	M		O	1	S	3/24/2008	4.250	F	3300	$7,260,000	203		
2241680	B	E 170TH ST	METRO NORTH RR HAR	M		O	1	S	3/24/2008	6.333	V	3150	$6,930,000	203		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2241720	B	E 173RD ST	METRO NORTH RR HAR	M		O	1	S	3/31/2008	4.875	F	3000	$6,600,000	203		
2066720	B	E 174TH ST	SHERIDAN EXPWY/AMTRAK	A		A	13	S	10/17/2006	4.250	F	47430	$104,346,000	209	203	
2241740	B	E 175TH ST	METRO NORTH RR HAR	M		O	1	S	3/31/2008	3.813	F	3600	$7,920,000	206		
2241269	B	E 177TH ST	AMTRAK - CSX	AC		O	3	S	8/11/2006	5.458	G	16606	$36,533,200	209		
2241770	B	E 178TH ST PED BRDG	METRO NORTH RR HAR	M		O-PED	1	C	10/31/2005	4.918	F	700	$1,540,000	206		
2241780	B	E 179TH ST PED BRDG	METRO NORTH RR HAR	M		O-PED	6	C	11/1/2005	5.695	G	700	$1,540,000	206		
2242400	B	E 180TH ST	BRONX RIVER			WO	1	S	10/6/2008	4.810	F	4500	$9,900,000	206	227	
2241790	B	E 180TH ST	METRO NORTH RR HAR	M		O	1	S	3/31/2008	3.906	F	5000	$11,000,000	206		
2241800	B	E 183TH ST	METRO NORTH RR HAR	M		O	1	S	3/31/2008	4.109	F	3600	$7,920,000	206		
2241820	B	E 187TH ST	METRO NORTH RR HAR	M		O	1	S	4/7/2008	4.438	F	3800	$8,360,000	206		
2241810	B	E 188TH ST	METRO NORTH RR HAR	M		O	1	S	4/7/2008	4.063	F	5300	$11,660,000	206		
2241839	B	E 189TH ST	METRO NORTH RR HAR	M		O	1	S	11/1/2007	6.533	V	43157	$94,945,400	206	207	
2242459	B	E 233RD ST	BRONX RIVER			WO	1	S	5/2/2008	4.367	F	7000	$15,400,000	212		
2242460	B	E 233RD ST	ENTR RD BNX RVR PKWY			O	1	S	2/1/2008	4.900	F	5300	$11,660,000	212		
2241870	B	E 233RD ST	METRO NORTH RR HAR	M		O	1	S	5/2/2008	4.941	F	7664	$16,860,800	212	207	
2241890	B	E 241ST ST	BRP, METRO NORTH HAR	M		WO	28	S	11/2/2007	4.444	F	49500	$108,900,000	212		
2246540	M	E 34TH ST	PARK AVE TUNNEL			OT	1	S	8/24/2006	4.117	F	36200	$79,640,000	105		
2243420	K	E 3RD ST	LIRR BAY RIDGE	N		O	1	S	11/13/2007	6.583	V	1840	$4,048,000	312		
2232100	M	E 51ST ST PED BRDG	FDR DRIVE		P	A-PED	10	C	4/6/2008	4.186	F	2800	$6,160,000	106		
2233040	M	E 60TH ST	FDR DRIVE			A	17	S	5/2/2008	4.746	F	24480	$53,856,000	107		
2232110	M	E 64TH ST PED BRDG	FDR DRIVE		P	A-PED	24	C	10/19/2008	4.562	F	2100	$4,620,000	108		
2245380	M	E 66TH ST	PED WALK N. OF ZOO		P	O	1	S	1/23/2008	5.000	G	1500	$3,300,000	108		
2232050	M	E 6TH ST PED BRDG	FDR DRIVE		P	A-PED	22	C	3/16/2008	4.353	F	2200	$4,840,000	103		
2232120	M	E 71ST ST PED BRDG	FDR DRIVE		P	A-PED	19	C	8/17/2008	5.761	G	1800	$3,960,000	108		
2232140	M	E 78TH ST PED BRDG	FDR DRIVE		P	A-PED	9	C	4/6/2008	2.711	P	1700	$3,740,000	108		
2269820	M	E 81 ST PED BRIDGE	FDR DRIVE N.B.		P	A-PED	3	C	10/26/2008	3.149	F	900	$1,980,000	108		
2245319	M	E 97TH ST	METRO NORTH MAIN LN	M		O	1	S	11/7/2006	4.627	F	3200	$7,040,000	111		
2246400	M	E FOOTBRIDGE	TRANSVERSE RD #2		P	O-PED	1	C	5/10/2008	4.233	F	3700	$8,140,000	164		
2241270	B	E TREMONT AVE	AMTRAK - CSX	AC		O	2	S	7/26/2006	5.153	G	22300	$49,060,000	209	211	
2242149	B	E TREMONT AVE	BRONX RIVER			WO	2	S	5/5/2008	4.500	F	12900	$28,380,000	206		
2075820	B	E TREMONT AVE	HUTCHINSON RVR PKWY			A	2	S	12/18/2007	4.472	F	10200	$22,440,000	210		
2241760	B	E TREMONT AVE	METRO NORTH RR HAR	M		O	1	S	11/3/2007	6.517	V	7300	$16,060,000	206		
2242260	B	EAGLE AVE	E 161ST ST			O	1	S	3/17/2008	5.017	G	2800	$6,160,000	201	203	
2246040	M	EAST DR AT CNTRL PARK	PEDESTRIAN WALK		P	O	1	C	4/30/2008	4.400	F	1200	$2,640,000	105		
2244030	K	EAST DRIVE	BRIDLE PATH		P	O	1	S	6/22/2007	4.755	F	2000	$4,400,000	355		
2244040	K	EAST DRIVE	EAST WOOD ARCH		P	O	1	C	7/8/2008	4.200	F	900	$1,980,000	355		
2246170	M	EAST DRIVE	PED WALK @ 73RD ST		P	O	1	S	2/15/2008	5.056	G	1900	$4,180,000	164		
2246069	M	EAST DRIVE	PEDESTRIAN WALK		P	O	1	S	2/6/2008	4.500	F	2700	$5,940,000	164		
2246470	M	EAST DRIVE	THE LOCH		P	WO	1	S	2/11/2008	4.500	F	1100	$2,420,000	164		
2246110	M	EAST DRIVE	TRANSVERSE RD #1		P	O	1	S	3/5/2008	4.667	F	6000	$13,200,000	164		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2246230	M	EAST DRIVE	TRANSVERSE RD #2		P	O	1	S	3/7/2008	4.600	F	6500	$14,300,000	164		
2246250	M	EAST DRIVE	TRANSVERSE RD #3		P	O	1	S	2/28/2008	4.300	F	5100	$11,220,000	164		
2246270	M	EAST DRIVE	TRANSVERSE RD #4		P	O	1	S	3/23/2008	3.967	F	7000	$15,400,000	164		
2249720	R	EAST FOOTBRIDGE	CLOVE LAKE		P	WO-PED	2	C	7/9/2008	4.229	F	899	$1,977,800	501		
2242350	B	EAST FORDHAM RD	GRAND CONCOURSE			O	1	S	4/8/2008	4.567	F	10300	$22,660,000	205	207	
2241900	B	EASTCHESTER ROAD	NYCTA-DYRE AVE LN	T		O	3	S	8/14/2008	4.667	F	13500	$29,700,000	212		
2243279	K	EASTERN PKWY	FRANKLIN SHUTTLE	T		O	1	S	10/14/2008	4.861	F	7700	$16,940,000	309	308	
2247470	Q	ELIOT AVE	CONRAIL	C		O	1	S	11/20/2007	5.250	G	2960	$6,512,000	405		
2247550	Q	ELIOT AVE	LIRR MONTAUK DIV	L		O	2	S	9/26/2007	5.894	G	9550	$21,010,000	405		
2248160	Q	ELLIOT AVE	QUEENS BLVD			O	2	S	9/15/2008	4.922	F	13785	$30,327,000	406		
2269600	K	ERSKINE STREET	BSHP			A	1	S	11/13/2008	5.938	G	8258	$18,167,600	501		
2241200	B	FAILE ST	AMTRAK - CSX	AC		O	1	S	11/7/2008	5.672	G	6208	$13,657,600	202		
2231620	Q	FARMERS BLVD	BSOP			A	2	S	6/26/2008	4.568	F	6400	$14,080,000	413		
2249790	R	FB S OF FOREST AV	STREAM IN PARK		P	WO-PED	3	C	11/20/2008	4.814	F	658	$1,447,600	501		
223201A	M	FDR DR N.B. OFF RMP	FDR DR & SOUTH ST			AR	17	S	2/29/2008	3.716	F	102225	$224,895,000	106		
2232158	M	FDR DRIVE S.B.	FDR DRIVE N.B.			AT	32	S	6/22/2007	4.591	F	54302	$119,464,400	107		
2233038	M	FDR DRIVE SB	FDR NB / E 62ND ST			AT	34	S	10/23/2006	6.887	V	58700	$129,140,000	107		
2268650	M	FDR NB 42ND TO 49ST	EAST RIVER			A	119	S	11/30/2007	4.075	F	30767	$67,687,400	503		
223204A	M	FDR NB TO HOUSTON ST	RELIEF			AR	4	S	1/30/2008	4.471	F	6150	$13,530,000	107		
2229520	B	FIELDSTON ROAD	HHP			A	1	S	9/19/2007	5.500	G	6600	$14,520,000	208		
2249480	R	FINGERBOARD ROAD	SIRT SOUTH SHORE	S		O	2	S	11/27/2007	6.542	V	5100	$11,220,000	502		
2231460	K	FLATBUSH AVE	BSHP			A	2	S	10/3/2007	6.306	V	14058	$30,927,600	356		
2243260	K	FLATBUSH AVE	FRANKLIN SHUTTLE	T		O	2	S	9/2/2008	4.961	F	11300	$24,860,000	309		
2243510	K	FLATBUSH AVE	LIRR BAY RIDGE	N		O	2	S	10/9/2007	4.702	F	5900	$12,980,000	318		
2248090	Q	FLSHG MDW PK PED.	COLLEGE POINT BLVD		P	O-PED	3	C	12/18/2007	4.694	F	8418	$18,519,600	407		
2248220	Q	FLUSHING AV SERVICE	FLUSHING AVE			O	1	S	7/27/2007	5.063	G	2940	$6,468,000	405		
2248260	Q	FLUSHING MEADW PARK	MEADOW LAKE & 69TH RD		P	WO	5	S	5/28/2008	4.709	F	4200	$9,240,000	481		
2248140	Q	FLUSHING MEADW PK	STREAM N OF LIE		P	WO-PED	5	C	6/17/2008	4.580	F	4102	$9,024,400	481		
2248130	Q	FLUSHING MEADW PK	WILLOW LK&76TH RD		P	WO-PED	4	C	4/20/2002	1.000	C	1891	$4,160,200	481		
2248379	Q	FLUSHING MW PK RD	AQUACADE LAKE		P	WO-PED	5	C	6/17/2008	4.037	F	6321	$13,906,200	481		
2249780	R	FOOTBRIDGE	BROOKS LAKE DAM		P	WO-PED	1	C	7/9/2008	4.433	F	800	$1,760,000	501		
2249800	R	FOREST AVE	CLOVE LAKES PK STREAM		P	WO	1	S	10/18/2007	4.867	F	1600	$3,520,000	501		
2248340	Q	FOREST PARK DR	MYRTLE AVE		P	O	3	S	6/25/2007	4.984	F	5100	$11,220,000	409		
2247660	Q	FOREST PARK DRIVE	ABANDONED LIRR	L	P	O	6	S	2/5/2008	5.286	G	10000	$22,000,000	409		
2247590	Q	FOREST PARK DRIVE	LIRR MONTAUK DIV	L	P	O	5	S	10/9/2008	5.509	G	6000	$13,200,000	409		
2243620	K	FORT HAMILTON PKWY	LIRR & SEA BEACH	NT		O	3	S	9/6/2006	4.797	F	14800	$32,560,000	310		
2245040	M	FORT TRYON PARK	SOUTH OF CLOISTERS		P	O	1	C	5/2/2008	6.000	G	750	$1,650,000	112		
2245050	M	FORT TRYON PARK	UNDERPASS		P	O	1	C	5/2/2008	4.800	F	750	$1,650,000	112		
2246500	M	FORT TRYON PLACE	ENTR FROM RIVERSIDE DR		P	O	1	S	3/3/2008	4.333	F	6600	$14,520,000	112		
2243150	K	FOSTER AVE	BMT SUBWAY, BRIGHTON	T		O	1	S	9/18/2008	4.550	F	3000	$6,600,000	314		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2231930	Q	FRANCIS LEWIS BLVD	BCIP			A	3	S	2/15/2008	4.773	F	9100	$20,020,000	407		
2231690	Q	FRANCIS LEWIS BLVD	BLP E.B.			A	1	S	4/18/2008	5.167	G	6000	$13,200,000	413		
2231700	Q	FRANCIS LEWIS BLVD	BLP W.B.			A	1	S	4/17/2008	4.833	F	6000	$13,200,000	413		
2267199	Q	FRANCIS LEWIS BLVD	PARK ROAD			O	1	S	4/17/2007	5.033	G	7085	$15,587,000	103		
2249450	R	FREMONT AVE PED BRDG	SIRT SOUTH SHORE	S		O-PED	3	C	4/4/2008	3.488	F	800	$1,760,000	502		
224005A	M	FROM FDR DRIVE	HARLEM RIVER DR			OR	19	S	6/6/2008	4.299	F	29900	$65,780,000	111		
2242120	B	FTBG N OF RTE 1	BRONX RIVER		P	WO-PED	1	C	12/2/2008	4.000	F	1904	$4,188,800	209		
2244130	K	FTBRG NR BOATHSE	PROSPECT PK LAKE		P	WO-PED	1	C	6/19/2008	5.000	G	1260	$2,772,000	355		
2246010	M	FTBRG OPP 62ND ST	BRIDLE PATH		P	O-PED	1	C	8/26/2008	4.894	F	1026	$2,257,200	164		
226771C	M	GAR RAMP TO 79 ST	79 ST BT BASIN GAR		P	AR	21	S	7/13/2007	4.565	F	9095	$20,009,000	302		
2241420	B	GERARD AVE	METRO NORTH RR HUD	M		O	1	S	4/29/2008	5.922	G	5063	$11,138,600	204		
2249360	R	GIFFORDS LANE	SIRT SOUTH SHORE	S		O	1	S	11/12/2008	5.781	G	3042	$6,692,400	503		
2243860	K	GLENMORE AVE	LIRR BAY RIDGE	N		O	2	S	10/27/2008	6.559	V	5616	$12,355,200	316		
2065940	Q	GRAND AVE	495I (L.I.E.)			A	2	S	10/23/2006	5.264	G	12850	$28,270,000	405		
2247440	Q	GRAND AVE	CONRAIL	C		O	1	S	11/20/2007	6.183	V	3280	$7,216,000	405		
2247180	Q	GRAND AVE	LIRR MAIN LINE	L		O	3	S	10/8/2008	4.660	F	7415	$16,313,000	404		
2242370	B	GRAND CONCOURSE	BEDFORD PARK BLVD			O	1	S	4/23/2008	4.412	F	8418	$18,519,600	207		
2242360	B	GRAND CONCOURSE	BURNSIDE AVE			O	2	S	9/27/2006	4.441	F	8400	$18,480,000	205		
2242299	B	GRAND CONCOURSE	E 138TH ST			O	1	S	6/1/2007	4.933	F	9500	$20,900,000	201		
2242259	B	GRAND CONCOURSE	E 161ST ST			O	1	S	9/18/2008	6.533	V	24100	$53,020,000	204		
2242280	B	GRAND CONCOURSE	E 167TH ST			O	2	S	7/21/2006	4.789	F	42900	$94,380,000	204		
2242300	B	GRAND CONCOURSE	E 170TH ST			O	2	S	4/24/2008	4.789	F	39300	$86,460,000	204		
2242319	B	GRAND CONCOURSE	E 174TH ST	T		O	1	S	3/27/2008	4.067	F	14900	$32,780,000	204		
2242329	B	GRAND CONCOURSE	E 175TH ST	T		O	1	S	8/5/2008	4.867	F	11900	$26,180,000	205		
2242380	B	GRAND CONCOURSE	E 204TH ST			O	1	S	8/6/2007	5.391	G	9272	$20,398,400	207		
2242330	B	GRAND CONCOURSE	E TREMONT AVE			O	1	S	10/9/2007	5.983	G	11700	$25,740,000	205		
2242340	B	GRAND CONCOURSE	EAST KINGSBRIDGE			O	2	S	9/15/2008	4.714	F	16500	$36,300,000	207		
2241409	B	GRAND CONCOURSE	METRO NORTH RR HUD	MT		O	1	S	4/21/2008	3.859	F	16100	$35,420,000	204		
2240390	KQ	GRAND ST BRIDGE	NEWTOWN CREEK			WMO	2	S	9/28/2007	4.292	F	5100	$11,220,000	301	405	
2249100	R	GRANITE AVE	B&O RAILROAD	O		O	4	S	5/13/2008	6.034	V	7300	$16,060,000	501		
2249370	R	GREAVES AVE	SIRT SOUTH SHORE	S		O	1	S	11/12/2007	6.750	V	2650	$5,830,000	503		
2240370	KQ	GREENPOINT AVE BRIDGE	NEWTOWN CREEK	L		WMO	12	S	7/27/2007	5.111	G	76106	$167,433,200	301	402	
2231370	K	GUIDER AV RAMP TO BSHP	BSHP			A	4	S	8/22/2008	3.653	F	12800	$28,160,000	313		
2241860	B	GUN HILL RD	METRO NORTH RR HAR	M		O	1	S	5/13/2008	6.531	V	9000	$19,800,000	212		
2242430	B	GUN HILL ROAD	BRONX BLVD			O	4	S	4/29/2008	4.772	F	9400	$20,680,000	212		
2242440	B	GUN HILL ROAD	BRONX RIVER			WO	1	S	2/29/2008	4.900	F	8700	$19,140,000	212		
2241910	B	GUN HILL ROAD	NYCTA-DYRE AVE LN	T		O	1	S	8/14/2008	6.000	G	75000	$165,000,000	211	212	
2231610	Q	GUY R. BREWER BLVD	BSOP			A	4	S	5/21/2007	6.569	V	12342	$27,152,400	413		
2249380	R	GUYON AVE	SIRT SOUTH SHORE	S		O	3	S	11/5/2007	4.869	F	6900	$15,180,000	503		
2240231	K	HAMILTON AVE BRIDGE	GOWANUS CANAL			WMO	3	S	12/2/2008	5.472	G	7300	$16,060,000	307	306	

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240232	K	HAMILTON AVE BRIDGE	GOWANUS CANAL			WMO	3	S	10/8/2007	5.444	G	7300	$16,060,000	306		
2065930	Q	HAMILTON PLACE	495I (L.I.E.)			A	2	S	3/5/2008	6.069	V	11111	$24,444,200	405		
2249520	R	HANNAH ST	SIRT SOUTH SHORE	S		O	10	S	11/30/2007	4.763	F	10020	$22,044,000	501		
2249180	R	HARBOR ROAD	B&O RAILROAD	O		O	4	S	5/18/2007	6.356	V	5778	$12,711,600	501		
2233059	M	HARLEM RIVER DRIVE	RAMP TO HRD N.B.			A	11	S	9/11/2008	3.269	F	51000	$112,200,000	112		
2231780	Q	HEMPSTEAD AVE	BCIP			A	2	S	2/19/2008	3.903	F	14200	$31,240,000	413		
2266149	Q	HEMPSTEAD AVE	CROSS ISLAND PKWY			A	2	S	3/10/2008	4.190	F	9500	$20,900,000	413		
2267250	M	HHP	AMTRAK 30TH ST LINE	A		A	55	S	11/29/2006	3.710	F	40000	$88,000,000	112		
2229530	B	HHP	BROADWAY			A	1	S	9/26/2007	4.574	F	7500	$16,500,000	208		
2229440	B	HHP	KAPPOCK ST			A	1	S	10/3/2007	4.931	F	3900	$8,580,000	208		
2266229	M	HHP	PED UNDERPASS @ 148 ST			A	1	S	2/19/2008	5.476	G	1800	$3,960,000	107		
2266230	M	HHP	PED UNDERPASS INWD PK			A	1	S	1/23/2008	5.286	G	800	$1,760,000	101		
2266240	M	HHP	PED UNDERPASS INWD PK			A	1	S	1/24/2008	5.571	G	1100	$2,420,000	201		
2229309	M	HHP	RIVERSIDE PARK			A	1	S	1/22/2008	5.267	G	2400	$5,280,000	112		
2229349	M	HHP	W 158 ST	A		A	44	S	10/18/2006	4.268	F	140000	$308,000,000	101		
2229312	M	HHP NB	RAMP TO 96 ST			A	1	S	2/17/2008	4.364	F	2000	$4,400,000	107		
2229322	M	HHP NB	RAMP TO 96 ST			A	1	S	3/10/2008	5.300	G	2000	$4,400,000	107		
M00004	M	HHP ON/OFF RMP-79TH ST NORTH SIDE	PEDESTRIAN PATH			A	1	C	7/25/2008	5.167	G	900	$1,980,000	107		
M00003	M	HHP ON/OFF RMP-79TH ST SOUTH SIDE	PEDESTRIAN PATH			A	1	C	5/1/2008	4.867	F	900	$1,980,000	107		
2229311	M	HHP SB	RAMP TO 96 ST			A	1	S	2/17/2008	4.636	F	2000	$4,400,000	109		
2229321	M	HHP SB	RAMP TO 96 ST			A	1	S	3/14/2008	5.133	G	2000	$4,400,000	107		
2229289	M	HHP VIADUCT	W 72 ST TO W 79 ST	A		A	145	S	12/22/2006	3.448	F	236100	$519,420,000	108		
2246580	BM	HIGH BRIDGE PDOVP	87I - HARLEM RIVER	M	P	WA-PED	11	PARK	8/12/2002	3.759	F	34100	$75,020,000	112	204	
2230000	K	HIGHLAND BLVD E.B.	JACKIE ROBINSON PKWY			A	1	S	5/20/2008	4.600	F	4900	$10,780,000	305		
2230220	K	HIGHLAND BLVD NB	VERMONT AVE			A	1	S	7/13/2007	5.857	G	3995	$8,789,000	305		
2230010	K	HIGHLAND BLVD W.B.	JACKIE ROBINSON PKWY			A	1	S	5/20/2008	4.933	F	3500	$7,700,000	305		
2230020	K	HIGHLAND BLVD W.B.	JACKIE ROBINSON PKWY			A	2	S	5/20/2008	4.842	F	4700	$10,340,000	305		
2248280	Q	HIGHLAND PK PED.	PEDESTRIAN PATH		P	O-PED	1	C	11/20/2008	3.667	F	1856	$4,083,200	405		
2243780	K	HIGHLAWN AVE	BMT SEA BEACH	T		O	1	S	10/9/2007	6.440	V	6960	$15,312,000	311		
2244120	K	HILL DRIVE	PROSPECT PK LAKE		P	WO	3	S	4/25/2007	3.873	F	7800	$17,160,000	355		
2231840	Q	HILLSIDE AVE	BCIP			A	2	S	4/8/2008	4.184	F	9672	$21,278,400	413		
2247320	Q	HONEYWELL ST	AMTRAK & LIRR YARD	AL		O	22	S	12/21/2007	5.903	G	99036	$217,879,200	402	401	
2300130	Q	HOOK CREEK	HOOK CREEK BRIDGE			WO	3	S	7/27/2007	6.271	V	18302	$40,264,400	112		
2232040	M	HOUSTON ST	FDR DRIVE			A	2	S	3/9/2008	3.455	F	11010	$24,222,000	108		
223204B	M	HOUSTON ST RAMP TO FDR	RELIEF			AR	4	S	2/1/2008	4.625	F	7642	$16,812,400	107		
2267240	M	HRD NB RAMP	HARLEM RIVER DR			A	55	S	12/12/2007	3.250	F	122900	$270,380,000	107		
2249300	R	HUGUENOT AVE	SIRT SOUTH SHORE	S		O	2	S	10/23/2007	4.864	F	4900	$10,780,000	503		
2240450	Q	HUNTERS PT AVE BRIDGE	DUTCH KILLS			WMO	4	S	7/22/2008	5.083	G	12168	$26,769,600	402		
2241190	B	HUNTS POINT AVE	AMTRAK - CSX	AC		O	1	S	11/7/2008	4.984	F	13700	$30,140,000	202		
2241959	B	HUTCHINSON RVR PKWY	AMTRAK - CSX	AC		O	1	S	11/14/2008	5.915	G	15444	$33,976,800	210	211	

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2075859	B	HUTCHINSON RVR PKWY	HUTCHINSON RIVER			WMA	7	S	10/24/2008	4.828	F	60500	$133,100,000	210	228	
2249810	R	HYLAN BLVD	LEMON CREEK			WO	1	S	4/25/2008	6.406	V	11400	$25,080,000	503		
2248299	Q	INTER PKWY-UNION TPK	AUSTIN ST			O	1	S	6/2/2008	4.250	F	5900	$12,980,000	409	406	
2245300	M	INWOOD HILL PK FTBR	AMTRAK 30 ST BRANCH	A	P	O-PED	6	C	10/26/2008	4.100	F	700	$1,540,000	112		
2246690	M	ISHAM PK VEHICULR	HARLEM RIVER INLET		P	O	1	S	7/7/2008	6.261	V	911	$2,004,200	112		
2246700	M	ISHM PK PEDESTRN	HARLEM RV INLET		P	WO-PED	1	C	1/10/2008	4.000	F	285	$627,000	112		
2230099	Q	JACKIE ROBINSON PKWY	CYPRESS HILLS CEMETRY			A	1	S	1/18/2008	5.444	G	4200	$9,240,000	405		
2230179	Q	JACKIE ROBINSON PKWY	METROPOLITAN AVE			A	2	S	5/21/2008	5.321	G	8673	$19,080,600	482		
2247260	Q	JACKSON AVE	LIRR,AMT,CON NE	L		O	1	S	11/20/2006	6.183	V	4517	$9,937,400	402		
2231819	Q	JAMAICA AVE	BCIP			A	2	S	3/3/2008	4.773	F	11500	$25,300,000	413		
2230287	B	JEROME AVE	MOSHOLU PARKWAY	T		A	3	S	5/17/2007	4.711	F	11800	$25,960,000	207		
2249070	R	JOHN ST	B&O RAILROAD	O		O-PED	3	C	10/31/2008	5.648	G	5800	$12,760,000	501		
2247480	Q	JUNIPER BLVD SO	CONRAIL	C		O	1	S	11/21/2007	5.111	G	9000	$19,800,000	405		
2230380	K	KANE ST	278I (B.Q.E.)			A	2	S	4/11/2008	4.069	F	5000	$11,000,000	306		
2243770	K	KINGS HIGHWAY	BMT SEA BEACH	T		O	1	S	10/9/2007	6.767	V	5032	$11,070,400	311		
2231449	K	KNAPP ST	BSHP			A	1	S	6/10/2008	4.391	F	9500	$20,900,000	315		
2241169	B	LAFAYETTE AVE	AMTRAK - CSX	AC		O	1	S	8/8/2006	5.794	G	12000	$26,400,000	202		
2249110	R	LAKE AVE	B&O RAILROAD	O		O	3	S	8/23/2008	5.333	G	5900	$12,980,000	501		
2247240	Q	LEFFERTS BLVD	LIRR MAIN LINE	L		O	3	S	10/21/2007	5.806	G	5460	$12,012,000	409		
2241139	B	LEGGETT AVE	AMTRAK - CSX	AC		O	3	S	8/7/2006	4.690	F	28300	$62,260,000	202		
2243850	K	LIBERTY AVE	LIRR BAY RIDGE	N		O	3	S	10/27/2008	6.368	V	6659	$14,649,800	316		
2249460	R	LINCOLN AVE	SIRT SOUTH SHORE	S		O	1	S	11/3/2007	5.310	G	4500	$9,900,000	502		
2243190	K	LINCOLN PLACE	FRANKLIN SHUTTLE	T		O	1	S	10/15/2008	6.922	V	2460	$5,412,000	308		
2243010	K	LINCOLN ROAD	BMT SUBWAY, BRIGHTON	T		O	1	S	9/3/2008	6.722	V	6016	$13,235,200	355		
2231750	Q	LINDEN BLVD	BCIP			A	2	S	3/7/2008	4.341	F	6700	$14,740,000	413		
2248040	Q	LINDEN BLVD	CONDUIT AVE			O	1	S	7/18/2008	5.267	G	3352	$7,374,400	410		
2243910	K	LIVONIA AVE PED BRDG	LIRR BAY RIDGE LINE	N		O-PED	6	C	8/27/2007	4.660	F	2500	$5,500,000	316		
2241159	B	LONGWOOD AVE	AMTRAK - CSX	AC		O	2	S	7/23/2008	5.306	G	10625	$23,375,000	202		
1240090	BM	MACOMBS DAM BRIDGE	HARLEM RIVER	M		WMO	52	S	11/30/2007	3.972	F	211788	$465,933,600	110	204	
2240079	BM	MADISON AVE BRIDGE	HARLEM RIVER			WMO	21	S	11/6/2006	4.889	F	80000	$176,000,000	111	201	
2249210	R	MAIN ST PED BRDG	SIRT SOUTH SHORE	S		O-PED	9	C	3/31/2008	4.309	F	400	$880,000	503		
2240027	KM	MANHATTAN BRIDGE(LL)	EAST RIVER	T		WEO	23	S	11/30/2006	4.407	F	616390	$1,356,058,000	103	302	
2240028	KM	MANHATTAN BRIDGE(UL)	NYCTA TRACKS-BMT	T		WEO	43	S	11/30/2006	4.357	F	587424	$1,292,332,800	103	302	
2229480	B	MANHATTAN COLL PKWY	HHP			A	3	S	5/22/2007	5.368	G	6200	$13,640,000	208		
2230190	Q	MARKWOOD ROAD	JACKIE ROBINSON PKWY			A	1	S	5/5/2008	5.389	G	4400	$9,680,000	482	406	
2249760	R	MARTLINGS AVE	RICHMOND LAKE DAM			WO	2	S	5/16/2007	4.600	F	7000	$15,400,000	501		
2269030	B	MATTHEWSON ROAD	MAC CRACKEN AVE			O	15	S	12/12/2006	4.737	F	14880	$32,736,000	107		
2243410	K	MCDONALD AVE	LIRR BAY RIDGE	N		O	1	S	12/16/2008	5.047	G	2760	$6,072,000	312		
2241110	B	MELROSE AVE	CSX TRANS - PT MORRIS	C		O	8	S	10/16/2007	5.667	G	37854	$83,278,800	203		
2231710	Q	MERRICK BLVD	BLP N.B.			A	1	S	2/27/2008	4.400	F	6000	$13,200,000	413		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2231720	Q	MERRICK BLVD	BLP S.B.			A	1	S	2/27/2008	4.200	F	6000	$13,200,000	413		
2247500	Q	METROPOLITAN AVE	CONRAIL	C		O	1	S	11/27/2007	4.233	F	18650	$41,030,000	405		
2240290	K	METROPOLITAN AVE	ENGLISH KILLS			WMO	5	S	7/26/2007	6.319	V	10550	$23,210,000	301		
1247560	Q	METROPOLITAN AVE	LIRR MONTAUK DIV	L		O	2	S	10/24/2008	3.762	F	20900	$45,980,000	405		
2249470	R	MIDLAND AVE	SIRT SOUTH SHORE	S		O	1	S	11/9/2007	5.569	G	3000	$6,600,000	502		
2257569	M	MILLER HIGHWAY	TERRAIN			A	64	S	8/24/2007	4.831	F	264190	$581,218,000	106		
2249530	R	MINTHORNE ST PED BRDG	SIRT SOUTH SHORE	S		O-PED	26	C	4/8/2008	5.000	G	1600	$3,520,000	501		
2243240	K	MONTGOMERY ST	FRANKLIN SHUTTLE	T		O	1	S	10/1/2007	6.275	V	2240	$4,928,000	309		
2249090	R	MORNINGSTAR ROAD	B&O RAILROAD	O		O	4	S	4/20/2007	5.169	G	7900	$17,380,000	501		
2268930	M	MORRIS ST PED BRDG	BKLN-BATTERY TUNN PLZ			A-PED	3	C	1/10/2008	3.803	F	1200	$2,640,000	101		
2230250	B	MOSHOLU PARKWAY	BRONX RIVER			WA	5	S	1/30/2008	4.263	F	16300	$35,860,000	227		
2230300	B	MOSHOLU PARKWAY	CONRAIL (ABANDONED)	C		A	1	S	10/29/2008	4.146	F	5200	$11,440,000	226		
2230290	B	MOSHOLU PARKWAY	EQUESTRIAN PATH			A	1	S	1/23/2008	4.448	F	4300	$9,460,000	226		
2230260	B	MOSHOLU PARKWAY	METRO NORTH	M		A	1	S	4/7/2008	5.516	G	8880	$19,536,000	227	207	
2230310	B	MOSHOLU PARKWAY	SB RAMP TO HHP			A	2	S	11/26/2007	5.135	G	7400	$16,280,000	226		
2230270	B	MOSHOLU PARKWAY	WEBSTER AVE			A	1	S	5/14/2007	5.609	G	8480	$18,656,000	207		
2248100	Q	MOTOR PKWY (PED)	73RD AVE		P	O-PED	3	C	2/29/2008	4.965	F	2640	$5,808,000	408		
2248110	Q	MOTOR PKWY (PED)	ALLEY PK PED WALK		P	O-PED	1	C	8/6/2008	5.000	G	963	$2,118,600	413		
2248060	Q	MOTOR PKWY (PED)	BELL BLVD		P	O-PED	2	C	7/16/2008	4.667	F	2648	$5,825,600	411		
2248059	Q	MOTOR PKWY (PED)	FRANCIS LEWIS BLD		P	O-PED	2	C	7/28/2008	4.736	F	2756	$6,063,200	408		
2248080	Q	MOTOR PKWY (PED)	HOLLIS COURT BLVD		P	O-PED	3	C	12/3/2008	5.000	G	2670	$5,874,000	408		
2248070	Q	MOTOR PKWY (PED)	SPRINGFIELD BLVD		P	O-PED	3	C	7/2/2008	4.179	F	2940	$6,468,000	411		
2247110	Q	MURRAY ST	LIRR N SIDE DIV	L		O	1	S	9/17/2007	5.481	G	4000	$8,800,000	407		
2247620	Q	MYRTLE AVE	ABANDONED LIRR	L		O	3	S	1/16/2008	5.028	G	6725	$14,795,000	482	406	
2230120	Q	MYRTLE AVE	JACKIE ROBINSON PKWY			A	1	S	5/2/2008	5.479	G	6400	$14,080,000	405	482	
2231670	Q	N CONDUIT AVE W.B.	BLP E.B.			A	1	S	2/7/2008	4.917	F	4000	$8,800,000	413		
2231680	Q	N CONDUIT AVE WB	BLP W.B.			A	2	S	2/12/2008	4.932	F	6500	$14,300,000	413		
205580A	Q	N.BLVD WB TO 678I SB	VACANT LAND			AR	16	S	8/28/2008	5.571	G	8600	$18,920,000	407		
2249350	R	NELSON AVE PED BRDG	SIRT SOUTH SHORE	S		O-PED	3	C	4/1/2008	4.652	F	300	$660,000	503		
1067150	B	NEREID AVE (2241880)	BRONX RIVER PKWY	M		O	10	S	11/30/2007	4.632	F	57750	$127,050,000	212		
2249430	R	NEW DORP LANE	SIRT SOUTH SHORE	S		O	2	S	11/7/2007	4.972	F	7600	$16,720,000	502		
2243660	K	NEW UTRECHT AVE	LIRR BAY RIDGE	N		O	1	S	12/6/2008	6.217	V	2350	$5,170,000	311		
2243140	K	NEWKIRK AVE	BMT SUBWAY, BRIGHTON	T		O	3	S	9/27/2008	4.338	F	4100	$9,020,000	314		
2240240	K	NINTH ST BRIDGE	GOWANUS CANAL			WMO	3	S	6/4/2007	6.581	V	5772	$12,698,400	306		
2269760	R	NORTH RAMP	SIRT	S	F	O	9	S	12/26/2008	4.292	F	17589	$38,695,800	501		
2240440	Q	NORTHERN BLVD	ALLEY CREEK			WO	2	S	8/15/2008	4.750	F	8300	$18,260,000	411		
2231870	Q	NORTHERN BLVD	BCIP			A	2	S	9/22/2008	6.236	V	9400	$20,680,000	411		
2055802	Q	NORTHERN BLVD E.B.	FLUSHING RIVER			WO	40	S	9/20/2006	4.366	F	78894	$173,566,800	407		
2055801	Q	NORTHERN BLVD W.B.	FLUSHING RIVER			WO	40	S	9/20/2006	4.817	F	71900	$158,180,000	407		
2243500	K	NOSTRAND AVE	LIRR BAY RIDGE	N		O	2	S	12/15/2008	4.966	F	4320	$9,504,000	314		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240138	BM	NYCTA IRT	HARLEM RVR/BROADWAY	TM		WMO	3	S	12/17/2007	5.000	G	19520	$42,944,000	112	207	208
2243480	K	OCEAN AVE	LIRR BAY RIDGE	N		O	2	S	12/10/2008	4.912	F	5000	$11,000,000	314		
2240320	K	OCEAN AVE PED BRDG	SHEEPSHEAD BAY			WO-PED	30	C	9/9/2008	3.939	F	4000	$8,800,000	315		
2243439	K	OCEAN PKWY	LIRR BAY RIDGE	N		O	1	S	12/16/2008	5.018	G	7000	$15,400,000	312		
2249269	R	PAGE AVE	SIRT SOUTH SHORE	S		O	4	S	10/19/2007	6.347	V	30710	$67,562,000	503		
2245470	M	PARK AVE N.B	E 45TH ST			O	1	S	8/23/2008	4.865	F	2400	$5,280,000	105		
2245460	M	PARK AVE S.B.	E 45TH ST			O	1	S	8/23/2008	4.514	F	2400	$5,280,000	105		
2246550	M	PARK AVE VIADUCT	E 42ND ST			O	10	S	12/20/2007	4.597	F	22150	$48,730,000	106		
2247600	Q	PARK LANE SOUTH	LIRR MONTAUK DIV	AL		O	1	S	10/9/2008	6.983	V	3024	$6,652,800	409	482	
2242099	B	PARK ROAD (204TH ST)	BRONX RIVER			WO	1	S	6/19/2008	4.793	F	4700	$10,340,000	212		
224001A	M	PARK ROW TO BKLN	WILLIAM ST N.B.			OE	4	S	4/9/2008	4.167	F	10167	$22,367,400	101		
2269780	R	PARKING ENTR RAMP	SIRT	S	F	O	3	S	12/18/2008	4.986	F	8589	$18,895,800	501		
2269730	R	PARKING EXIT RAMP	SIRT	S	F	O	10	S	12/26/2008	4.028	F	20727	$45,599,400	501		
2243020	K	PARKSIDE AVE	BMT SUBWAY, BRIGHTON	T		O	6	S	10/1/2008	4.043	F	48700	$107,140,000	314		
2247060	Q	PARSONS BLVD	LIRR N SIDE DIV	L		O	1	S	9/10/2008	4.824	F	4200	$9,240,000	407		
224001C	M	PEARL ST TO BKLN	LAND ADJ TO BRDG			OE	9	S	3/17/2008	3.814	F	6489	$14,275,800	103		
224001F	M	PEARL ST TO FDR DR	LAND ADJ TO BRDG			OE	3	S	3/4/2008	5.338	G	5200	$11,440,000	101		
2246160	M	PED BET 73ST&74ST	THE LAKE		P	WO-PED	1	C	1/14/2008	4.575	F	1655	$3,641,000	164		
222928C	M	PED BR AT 73RD ST	HHP - AMTRAK	A	P	A-PED	5	C	10/26/2008	4.145	F	3480	$7,656,000	107		
2246090	M	PED BRDG OPP 65 ST	TRANSVERSE RD #1		P	O-PED	1	C	5/31/2008	4.583	F	2300	$5,060,000	164		
2247630	Q	PED BRG NEAR UNION TPK	ABANDONED LIRR			O-PED	8	C	5/13/2008	5.359	G	900	$1,980,000	406		
2246440	M	PED IN CTR OF PK	TRANSVERSE RD NO.2		P	O-PED	1	C	5/10/2008	3.778	F	5900	$12,980,000	164		
2246340	M	PED WALK OPP 77ST	STREAM TO LAKE		P	WO-PED	3	C	11/7/2008	4.871	F	455	$1,001,000	164		
2246380	M	PED WALK OPP 86ST	BRIDLE PATH		P	O-PED	1	C	11/6/2008	4.347	F	714	$1,570,800	164		
2246390	M	PED WALK OPP 86ST	BRIDLE PATH		P	O-PED	3	C	11/18/2008	4.638	F	1095	$2,409,000	164		
2246620	M	PEDESTRIAN BRIDGE	E 128TH ST			O-PED	18	C	8/14/2008	4.042	F	2300	$5,060,000	111		
2246030	M	PEDESTRIAN BRIDGE	POND		P	O-PED	1	C	5/1/2008	4.172	F	1400	$3,080,000	164		
2241380	B	PELHAM BAY PK EQUES	AMTRAK - CSX	AC	P	O-PED	1	C	11/13/1978	5.109	G	4223	$9,290,600	228		
2231519	K	PENNSYLVANIA AVE	BSHP			A	2	S	4/24/2007	6.181	V	6640	$14,608,000	356		
2243870	K	PITKIN AVE	LIRR BAY RIDGE	N		O	2	S	10/29/2008	6.515	V	5328	$11,721,600	316		
2243210	K	PRESIDENT ST	FRANKLIN SHUTTLE	T		O	2	S	10/10/2008	5.314	G	2500	$5,500,000	309		
2232167	M	PROMENADE OVER FDR	FDR/E79TH ST-E91ST ST		P	A-PED	53	S	10/31/2007	3.857	F	93000	$204,600,000	107		
2244010	K	PROSPECT PK E DRIVE	ENDALE ARCH E DRIVE		P	O	1	C	5/5/2008	4.367	F	900	$1,980,000	355		
2268760	M	PS-5 PEDESTRIAN BR.	TENTH AVENUE			O-PED	5	C	1/30/2008	4.735	F	1500	$3,300,000	112		
2240639	KQ	PULASKI BRIDGE	NEWTOWN CREEK			WMO	44	S	6/3/2008	4.408	F	205770	$452,694,000	301	402	
2230530	Q	QUEENS BLVD	278I (B.Q.E.)			A	2	S	12/4/2008	6.417	V	25543	$56,194,600	402		
2230869	Q	QUEENS BLVD	ACCESS RD BQE S.B.			A	1	S	11/26/2006	4.205	F	7900	$17,380,000	402		
2247310	Q	QUEENS BLVD	AMTRAK & LIRR YARD	L		O	19	S	12/5/2008	6.408	V	92400	$203,280,000	402	401	
2230209	Q	QUEENS BLVD	JACKIE ROBINSON PKWY	T		A	5	S	7/29/2008	4.746	F	37700	$82,940,000	409		
2240047	MQ	QUEENSBORO BRIDGE(LL)	EAST RIVER	AL		WEO	53	S	11/15/2006	4.472	F	626900	$1,379,180,000	108	402	401

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240048	MQ	QUEENSBORO BRIDGE(UL)	EAST RIVER-LL			WEO	37	S	11/15/2006	4.434	F	322300	$709,060,000	108	402	401
223201D	M	RAMP TO N.B. FDR DRIVE	FDR & SOUTH ST.			AR	22	S	3/2/2008	4.967	F	15825	$34,815,000	107		
222934A	M	RAMP TO N.B. HHP	AMTRAK WEST SIDE	A		AR	26	S	8/2/2006	3.875	F	10800	$23,760,000	101		
2240350	R	RICHMOND AVE	RICHMOND CREEK			WO	3	S	8/10/2007	5.653	G	32589	$71,695,800	502		
2249270	R	RICHMOND VALLY ROAD	SIRT SOUTH SHORE	S		O	4	S	10/25/2007	5.284	G	9440	$20,768,000	503		
2244150	K	RIDGE BLVD	SHORE RD DRIVE			O	1	S	5/8/2007	6.800	V	4350	$9,570,000	310		
2240660	Q	RIKERS ISLAND BRIDGE	RIKERS ISL CHANNEL			WO	56	S	12/21/2007	4.521	F	183100	$402,820,000	401	480	
2241430	B	RIVER AVE	METRO NORTH RR HUD	M		O	1	S	11/9/2007	6.281	V	5040	$11,088,000	204		
2229510	B	RIVERDALE AVE	HHP			A	2	S	9/7/2007	4.053	F	5200	$11,440,000	208		
2246660	M	RIVERSIDE DRIVE	W 125TH ST & OTHERS			O	27	S	8/6/2007	4.500	F	148300	$326,260,000	109		
2246980	M	RIVERSIDE DRIVE	W 138TH ST			O	1	S	2/8/2008	4.767	F	6700	$14,740,000	109		
2267130	M	RIVERSIDE DRIVE	W 145TH ST			O	1	S	6/29/2007	5.000	G	5800	$12,760,000	481		
2246720	M	RIVERSIDE DRIVE	W 158TH ST	A		O	77	S	11/16/2007	3.750	F	185658	$408,447,600	109		
2246970	M	RIVERSIDE DRIVE	W 96TH ST			O	3	S	7/19/2007	5.559	G	10600	$23,320,000	107		
2269240	M	RIVERSIDE DRIVE	W. 155TH ST			O	1	S	6/29/2007	4.640	F	4397	$9,673,400	305	356	
2248369	Q	ROCKAWAY BLVD	THURSTON BASIN			WO	2	S	8/7/2007	5.158	G	6000	$13,200,000	483	413	
2230587	Q	ROOSEVELT AVE	278I (B.Q.E.)			A	2	S	12/12/2007	5.833	G	6600	$14,520,000	402		
2240507	Q	ROOSEVELT AVE	678I - VAN WYCK EXPWY			WA	27	S	12/13/2006	3.535	F	84424	$185,732,800	407	481	
2247380	Q	ROOSEVELT AVE	CONRAIL HELLGATE	C		O	2	S	11/27/2007	5.889	G	5200	$11,440,000	402	403	404
2267160	Q	ROOSEVELT AVE	FLUSHING MDW PK ROAD			O	4	S	8/8/2007	4.905	F	7280	$16,016,000	408		
2240640	MQ	ROOSEVELT ISLAND	E. RIVER E. CHANNEL			WMO	8	S	11/4/2008	5.389	G	36500	$80,300,000	108	401	
2249420	R	ROSE AVE	SIRT SOUTH SHORE	S		O	2	S	11/5/2007	5.591	G	3800	$8,360,000	502		
2249410	R	ROSS AVE	SIRT SOUTH SHORE	S		O	2	S	11/7/2007	5.500	G	3800	$8,360,000	502		
2248200	Q	RUST ST	FLUSHING AVE			O	1	S	7/27/2007	5.078	G	2940	$6,468,000	405		
2231560	Q	S CONDUIT BLVD	BSOP			A	2	S	7/29/2008	5.465	G	15776	$34,707,200	410		
2242210	B	S OF ALLERTON AVE	BRONX RIVER			WO	3	S	5/27/2008	4.763	F	6200	$13,640,000	227		
2249770	R	S OF BROOKS LAKE	STREAM IN PARK		P	WO-PED	3	C	11/18/2008	5.000	G	696	$1,531,200	501		
2230370	K	SACKETT ST	278I (B.Q.E.)			A	2	S	4/23/2008	4.500	F	5000	$11,000,000	306		
226771D	M	SB HHP RAMP TO 79 ST	79 ST BT BASIN GAR		P	AR	4	S	6/4/2007	4.645	F	2601	$5,722,200	302		
2244470	K	SEELEY ST	PROSPECT AVE			O	1	S	6/7/2007	4.100	F	8482	$18,660,400	307		
2249290	R	SEGUINE AVE	SIRT SOUTH SHORE	S		O	1	S	10/19/2007	6.016	V	3250	$7,150,000	503		
2248240	Q	SERVICE RD TURNAROUND	OVER FLUSHING AVE			O	1	S	7/27/2007	5.188	G	2940	$6,468,000	405		
2241390	B	SHORE RD CIRCLE	AMTRAK - CSX	AC		O	2	S	9/10/2007	3.254	F	4800	$10,560,000	228		
2240200	B	SHORE ROAD	HUTCHINSON RIVER			WMO	7	S	7/9/2008	4.478	F	4800	$10,560,000	228		
2270170	R	SI FERRY PEDESTRIAN BRIDGE	PARKING LOT EXIT ROADWAY		F	O-PED	5	C	6/11/2008	3.936	F	1750	$3,850,000	501		
2249120	R	SIMONSON AVE	B&O RAILROAD	O		O	3	S	4/20/2007	5.981	G	5819	$12,801,800	501		
2249860	R	SLATER BLVD	NEW CREEK			WO	1	S	5/15/2007	5.673	G	2037	$4,481,400	502		
2242220	B	SNUFF MILL ROAD	BRONX RIVER			WO	2	S	1/31/2008	4.395	F	4800	$10,560,000	227		
2249200	R	SOUTH AVE	B&O RAILROAD	O		O	3	S	12/8/2007	6.745	V	8322	$18,308,400	501		
2244440	K	SOUTH OF TILLARY ST	NAVY ST			O-PED	1	C	10/17/2008	4.354	F	6200	$13,640,000	302		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2241080	B	SOUTHERN BLVD	CSX TRANS - PT MORRIS	C		O	1	S	10/16/2008	4.259	F	3900	$8,580,000	201		
2242029	B	SOUTHERN BLVD	EAST FORDHAM ROAD			O	2	S	3/19/2008	4.658	F	12900	$28,380,000	227		
2231630	Q	SPRINGFIELD BLVD	BSOP			A	2	S	5/20/2008	4.614	F	8500	$18,700,000	413		
2268770	Q	SPRINGFIELD BLVD	EQUES. PATH (ABAND.)			O	1	S	5/15/2007	4.667	F	1470	$3,234,000	111		
2243180	K	ST JOHNS PLACE	FRANKLIN SHUTTLE	T		O	1	S	9/28/2007	6.781	V	2300	$5,060,000	308		
2241700	B	ST PAULS PL PED BRDG	METRO NORTH RR HAR	M		O-PED	2	C	11/2/2005	5.000	G	600	$1,320,000	203		
2241060	B	ST. MARYS & CONCORD	CSX TRANS - PT MORRIS	C		O	1	S	9/12/2008	5.333	G	4500	$9,900,000	201		
2230610	Q	STEINWAY ST	278I E.B. (B.Q.E.)			A	1	S	10/21/2008	6.581	V	4200	$9,240,000	401		
2230600	Q	STEINWAY ST	278I W.B. (B.Q.E.)			A	1	S	10/21/2008	6.581	V	4200	$9,240,000	401		
2243170	K	STERLING PLACE	FRANKLIN SHUTTLE	T		O	1	S	9/28/2007	6.500	V	2300	$5,060,000	308		
223201C	M	STH ST RMP TO FDR	SOUTH ST			AR	8	S	2/20/2008	4.701	F	39150	$86,130,000	103		
223201B	M	STH ST RMP TO FDR S.B.	SOUTH ST			AR	10	S	2/27/2008	3.761	F	44625	$98,175,000	101		
2240540	K	STILLWELL AVE	CONEY ISLAND CRK			WO	2	S	6/5/2007	6.292	V	17000	$37,400,000	313		
2230350	K	SUMMIT ST PED BRDG	278I (B.Q.E.)			A-PED	2	S	5/4/2008	4.500	F	1400	$3,080,000	306		
2231650	Q	SUNRISE HWY W.B.	BLP E.B.			A	1	S	4/16/2008	4.623	F	4100	$9,020,000	413		
2231660	Q	SUNRISE HWY W.B.	BLP W.B.			A	2	S	3/10/2008	4.652	F	5350	$11,770,000	413		
2231800	Q	SUPERIOR ROAD	BCIP			A	2	S	4/14/2008	4.136	F	7000	$15,400,000	413		
2243890	K	SUTTER AVE	LIRR BAY RIDGE	N		O	3	S	10/31/2008	6.542	V	5497	$12,093,400	316		
2241040	B	THIRD AVE	CSX TRANS - PT MORRIS	C		O	1	S	10/28/2008	4.563	F	2700	$5,940,000	201	203	
2240310	K	THIRD AVE	GOWANUS CANAL			WO	1	S	9/4/2007	5.000	G	3200	$7,040,000	306		
2240069	BM	THIRD AVE BRIDGE	HARLEM RIVER			WMO	14	S	10/9/2008	6.746	V	100232	$220,510,400	111	201	
2240250	K	THIRD ST	GOWANUS CANAL			WMO	5	S	6/5/2007	4.931	F	4900	$10,780,000	306		
2247300	Q	THOMPSON AVE	AMTRAK YARD	L		O	14	S	11/19/2008	5.042	G	61280	$134,816,000	402		
2241170	B	TIFFANY ST	AMTRAK - CSX	AC		O	1	S	9/21/2007	5.627	G	7267	$15,987,400	202		
224004H	Q	TO 21ST ST FROM NY	22ND ST			OE	43	S	12/14/2006	4.366	F	48100	$105,820,000	402		
224001B	M	TO BKLN FRM FDR	FRANKFRT & CITY			OE	31	S	6/6/2006	4.148	F	51400	$113,080,000	101		
224005B	B	TO BRUCKNER BLVD	RELIEF			OR	5	S	7/26/2007	3.861	F	12100	$26,620,000	201		
224006A	B	TO BRUCKNER BLVD	RELIEF			OR	5	S	12/19/2007	6.817	V	14037	$30,881,400	201		
224004B	M	TO E 60TH ST FROM QNS	FIRST AVE			OE	13	S	5/9/2008	5.708	G	14800	$32,560,000	106		
224004C	M	TO E 62ND ST FROM QNS	E 60TH ST			OE	10	S	10/2/2008	4.985	F	16720	$36,784,000	106		
224001D	M	TO FDR DR N.B.	PEARL STREET			OE	30	S	5/17/2007	4.906	F	49600	$109,120,000	101		
2245480	M	TO GWB OPP W 171ST ST	RIVERSIDE DRIVE			O	1	S	4/11/2008	5.048	G	10800	$23,760,000	112		
224007A	M	TO MADISON AVENUE	RELIEF			OR	7	S	4/18/2008	5.225	G	19880	$43,736,000	111		
224004E	Q	TO NY FR THOMSON AVE	JACKSON AVE			OE	94	S	12/7/2006	4.792	F	104600	$230,120,000	402		
224004G	Q	TO NY FROM 11TH ST	TERRAIN (CHAMBER)			OE	36	S	11/10/2006	4.634	F	8360	$18,392,000	401	402	
224004F	Q	TO NY FROM 21ST ST	21ST ST (QUEENS)			OE	63	S	12/12/2008	4.833	F	63310	$139,282,000	402	401	
224001G	M	TO PARK ROW	ROSE ST			OE	11	S	5/18/2007	4.549	F	16551	$36,412,200	101		
224001E	M	TO PEARL ST	LAND ADJ TO BRDG			OE	3	S	5/4/2007	5.141	G	5300	$11,660,000	106		
224004A	M	TO QNS FRM E 59TH ST	FIRST AVE			OE	13	S	5/9/2008	5.254	G	14800	$32,560,000	106		
224004D	M	TO QNS FROM E 58TH ST	E 59TH ST			OE	12	S	7/10/2008	4.547	F	11781	$25,918,200	106		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
224004I	Q	TO THOMSON AVE FROM NY	JACKSON AVE			OE	39	S	10/18/2006	5.082	G	59100	$130,020,000	402		
2249040	R	TOMPKINS AVE	B&O RR (ABANDONED)			O	1	S	8/1/2008	6.047	V	5096	$11,211,200	501		
2249840	R	TOMPKINS AVE	GREENFIELD AVE			O	1	S	4/7/2008	5.106	G	2562	$5,636,400	501		
2249510	R	TOMPKINS AVE	WILLOW AVE, SIRT	S		O	2	S	11/15/2008	5.567	G	5378	$11,831,600	501		
2249230	R	TRACY AVE PED BRDG	SIRT SOUTH SHORE	S		O-PED	9	C	4/2/2008	4.149	F	200	$440,000	503		
2246410	M	TRANSVERSE RD. #1	PED WALK NEAR 5 AV		P	O	1	S	2/8/2008	4.182	F	1739	$3,825,800	108		
2249870	R	TRAVIS AVE	MAIN CREEK			WO	1	S	11/1/2008	5.783	G	1700	$3,740,000	502		
2246560	M	TUDOR CITY PLACE	E 42ND ST			O	1	S	2/14/2008	5.133	G	6600	$14,520,000	106		
2249170	R	UNION AVE	B&O RAILROAD	O		O	4	S	4/17/2007	5.426	G	6500	$14,300,000	501		
2230360	K	UNION ST	278I (B.Q.E.)			A	2	S	4/23/2008	4.375	F	5000	$11,000,000	306		
2243200	K	UNION ST	FRANKLIN SHUTTLE	T		O	2	S	10/13/2008	5.043	G	4100	$9,020,000	309		
2240270	K	UNION ST	GOWANUS CANAL			WMO	5	S	10/14/2008	4.014	F	4900	$10,780,000	306		
2247040	Q	UNION ST	LIRR N SIDE DIV	L		O	1	S	10/12/2007	6.391	V	3313	$7,288,600	407		
2231850	Q	UNION TPKE	BCIP			A	2	S	4/3/2008	4.409	F	13600	$29,920,000	413		
2248129	Q	UNION TPKE	CREEDMO0RE HOSP RD			O	1	S	7/6/2007	4.867	F	3500	$7,700,000	413		
2230180	Q	UNION TPKE	JACKIE ROBINSON PKWY			A	1	S	2/25/2008	5.891	G	5359	$11,789,800	482		
2241330	B	UNIONPORT ROAD	AMTRAK - CSX	AC		O	1	S	8/17/2006	4.875	F	4400	$9,680,000	211		
2246570	M	UNITED NATIONS PL	FIRST AVE TUNNEL			OT	2	S	7/13/2008	5.078	G	95000	$209,000,000	106		
2231910	Q	UTOPIA PKWY	BCIP			A	2	S	3/14/2008	5.114	G	7200	$15,840,000	407		
2229550	B	VAN CRTLDT EQUES	HHP		P	A-PED	2	C	8/5/2008	4.732	F	2100	$4,620,000	226		
2229540	B	VAN CRTLDT PARK	HHP		P	A-PED	2	C	8/5/2008	4.879	F	3900	$8,580,000	226		
2249130	R	VAN NAME AVE	B&O RAILROAD	O		O	3	S	5/14/2008	5.254	G	5474	$12,042,800	501		
2249140	R	VAN PELT AVE	B&O RAILROAD	O		O	3	S	4/27/2007	5.644	G	5000	$11,000,000	501		
2246670	M	W 134 ST VIADUCT	RIVERSIDE DRIVE			O	4	S	11/30/2007	4.870	F	7500	$16,500,000	109		
2245230	M	W 148TH ST PED BRDG	AMTRAK 30 ST BRANCH	A	P	O-PED	3	C	10/25/2008	4.033	F	1100	$2,420,000	109		
2246710	M	W 153 ST	A.C. POWELL BLVD			O	1	S	2/22/2008	4.370	F	3082	$6,780,400	110		
2245290	M	W 155TH ST PED BRDG	AMTRAK 30 ST BRANCH	A		O-PED	3	C	10/25/2008	3.292	F	800	$1,760,000	109	112	
2245250	M	W 158TH ST	AMTRAK 30 ST BRANCH	A		O	7	S	11/28/2007	6.319	V	29170	$64,174,000	112		
2245260	M	W 173RD ST PED BRDG	AMTRAK 30 ST BRANCH	A	P	O-PED	2	C	10/25/2008	4.446	F	1500	$3,300,000	112		
2246600	M	W 176TH ST PED BRDG	APPROACH TO G.W.B.			O-PED	1	C	1/2/2008	4.172	F	1200	$2,640,000	112		
2246489	M	W 181 ST	RAMP TO WASH BR			O	1	S	2/17/2008	4.500	F	8200	$18,040,000	112		
2229400	M	W 181ST ST PED BRDG	HHP N.B.		P	A-PED	7	C	3/24/2008	4.514	F	1500	$3,300,000	112		
2241940	B	W 205TH ST	NYCTA IND YARDS	T		O	4	S	8/14/2008	5.625	G	32508	$71,517,600	207		
2240120	BM	W 207TH/W FORDHAM RD	HARLEM RIVER			WMO	5	S	9/22/2008	5.333	G	31784	$69,924,800	112	207	
2241489	B	W 225TH ST	CSX TRASP - PUTNAM	C		O	2	S	5/2/2008	5.149	G	10900	$23,980,000	207	208	
2241490	B	W 230TH ST	CONRAIL (ABANDONED) PUTNAM			O	1	S	5/9/2007	5.625	G	5600	$12,320,000	208		
2241509	B	W 231ST ST	CONRAIL (ABANDONED) PUTNAM			O	1	S	10/29/2008	4.745	F	4723	$10,390,600	208		
2241510	B	W 233RD ST	CONRAIL (ABANDONED) PUTNAM			O	1	S	4/13/2007	5.275	G	3760	$8,272,000	208		
2241520	B	W 234TH ST	CONRAIL (ABANDONED) PUTNAM			O	1	S	4/18/2007	5.176	G	3770	$8,294,000	208		
226672A	M	W 31ST ST	AMTRAK LAYUP TRACKS	A		O	9	S	12/11/2006	3.619	F	8800	$19,360,000	413		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
224501B	M	W 33RD ST	AMTRAK 30 ST BRANCH	A		O	8	S	3/21/2008	4.611	F	16500	$36,300,000	104		
224501C	M	W 33RD ST	LAND ADJ TO AMTRAK	A		O	2	S	7/3/2007	4.750	F	4620	$10,164,000	104		
224501D	M	W 34TH ST	AMTRAK 30 ST BRANCH	A		O	4	S	7/3/2007	4.597	F	11800	$25,960,000	104		
224501E	M	W 35TH ST	AMTRAK 30 ST BRANCH	A		O	3	S	10/12/2006	4.208	F	6500	$14,300,000	104		
224501F	M	W 36TH ST	AMTRAK 30 ST BRANCH	A		O	7	S	8/30/2006	3.866	F	16400	$36,080,000	104		
2245060	M	W 37TH ST	AMTRAK 30 ST BRANCH	A		O	3	S	12/17/2007	6.270	V	7505	$16,511,000	104		
2245070	M	W 38TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/2/2008	4.154	F	6200	$13,640,000	104		
2245080	M	W 39TH ST	AMTRAK 30 ST BRANCH	A		O	3	S	9/27/2006	4.196	F	6300	$13,860,000	104		
2245440	M	W 40TH ST	AMTRAK 30 ST BRANCH	A		O	4	S	12/4/2007	3.847	F	9400	$20,680,000	104		
2245330	M	W 41ST ST	AMTRAK 30 ST BRANCH	A		O	3	S	9/23/2006	4.388	F	6200	$13,640,000	104		
2245210	M	W 42ND ST	AMTRAK 30 ST BRANCH	A		O	4	S	9/21/2006	4.619	F	9155	$20,141,000	104		
2245090	M	W 43RD ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/18/2008	4.662	F	4100	$9,020,000	104		
2245100	M	W 44TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/18/2008	4.662	F	4300	$9,460,000	104		
2245110	M	W 45TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/19/2008	5.662	G	4100	$9,020,000	104		
2245120	M	W 46TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/19/2008	4.412	F	4100	$9,020,000	104		
2245130	M	W 47TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/21/2008	4.721	F	4100	$9,020,000	104		
2245140	M	W 48TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	3/24/2008	4.618	F	4100	$9,020,000	104		
2245150	M	W 49TH ST	AMTRAK 30 ST BRANCH	A		O	3	S	4/2/2008	4.426	F	4100	$9,020,000	104		
2245340	M	W 50TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/4/2008	4.574	F	4100	$9,020,000	104		
2245160	M	W 51ST ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/11/2008	4.868	F	4300	$9,460,000	104		
2245170	M	W 52ND ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/7/2008	5.015	G	4300	$9,460,000	104		
2245180	M	W 53RD ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/7/2008	5.029	G	5100	$11,220,000	104		
2245350	M	W 54TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/8/2008	5.476	G	4700	$10,340,000	104		
2245360	M	W 55TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/10/2008	5.382	G	4300	$9,460,000	104		
2245370	M	W 56TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/10/2008	5.618	G	4400	$9,680,000	104		
2245220	M	W 57TH ST	AMTRAK 30 ST BRANCH	A		O	3	S	4/11/2008	4.765	F	9100	$20,020,000	104		
2245190	M	W 58TH ST	AMTRAK 30 ST BRANCH	A		O	2	S	4/11/2008	4.706	F	4100	$9,020,000	104		
2245420	M	W 65TH ST E.B.	BRIDLE PATH W END		P	O	1	S	2/5/2008	4.900	F	1600	$3,520,000	164		
2229290	M	W 79 ST	AMTRAK	A		A	1	S	9/7/2006	4.288	F	4500	$9,900,000	112		
2231860	Q	W ALLEY ROAD	BCIP			A	2	S	8/3/2007	5.474	G	7200	$15,840,000	411		
2244020	K	W DR OV WK-MA.ENT	MEADOWPORT ARCH		P	O	1	S	4/30/2007	5.679	G	2500	$5,500,000	355		
2241470	B	W FORDHAM RD	METRO NORTH RR HUD	M		O	4	S	11/26/2007	5.694	G	16052	$35,314,400	207		
2241460	B	W TREMONT AVE	METRO NORTH RR HUD	M		O	8	S	5/9/2008	4.194	F	12900	$28,380,000	205		
2269260	K	W. 8TH STREET	SURF AVE.		P	O-PED	39	C	3/6/2008	3.278	F	14742	$32,432,400	313		
2269210	M	W.68TH STREET	AMTRAK	A		O	3	S	11/27/2007	6.780	V	5382	$11,840,400	109	112	
2269190	M	W.70TH STREET	AMTRAK	A		O	3	S	12/13/2007	6.528	V	17258	$37,967,600	107		
2241070	B	WALES AVE	CSX TRANS - PT MORRIS	C		O	1	S	10/17/2008	6.567	V	2535	$5,577,000	201		
2241410	B	WALTON AVE	METRO NORTH RR HUD	M		O	1	S	4/22/2008	5.297	G	3600	$7,920,000	204		
2240620	M	WARDS ISLAND PED BRDG	HARLEM RIVER			WMO-PED	10	C	11/1/2008	4.367	F	12600	$27,720,000	111		
2243250	K	WASHINGTON AVE	FRANKLIN SHUTTLE	T		O	1	S	10/6/2008	6.344	V	3657	$8,045,400	309	355	

INVENTORY SORTED BY FEATURE CARRIED

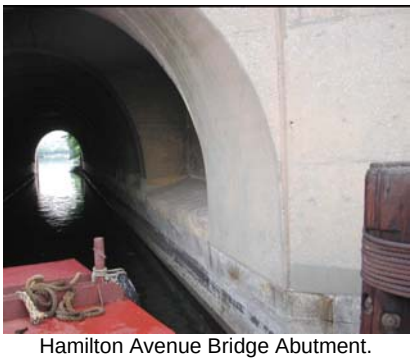
BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAILROAD	OTHER OWNER	BRIDGE TYPE	SPANS	RTNGSRC	Inspection Date	Condition Rating	VRBLRTNG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2066919	BM	WASHINGTON BRIDGE	HARLEM RIVER	M		WO	9	S	10/8/2008	4.642	F	128339	$282,345,800	112	205	204
2246080	M	WEST DRIVE	BRIDLE PATH @ 64TH ST		P	O	1	S	1/22/2008	4.667	F	2000	$4,400,000	164		
2246330	M	WEST DRIVE	FEEDER TO LAKE		P	WO	1	S	2/7/2008	5.000	G	2019	$4,441,800	164		
2246000	M	WEST DRIVE	PED BET 61ST & 62ST		P	O	1	S	1/28/2008	5.400	G	2500	$5,500,000	164		
2246430	M	WEST DRIVE	PED OPP 109TH ST		P	O	1	S	4/25/2008	4.383	F	1200	$2,640,000	164		
2246360	M	WEST DRIVE	PED WALK OPP 82 ST		P	O	1	S	2/6/2008	5.636	G	3100	$6,820,000	164		
2246120	M	WEST DRIVE	TRANSVERSE RD #1		P	O	1	S	3/3/2008	4.967	F	7900	$17,380,000	164		
2246240	M	WEST DRIVE	TRANSVERSE RD #2		P	O	1	S	3/7/2008	4.167	F	7200	$15,840,000	164		
2246260	M	WEST DRIVE	TRANSVERSE RD #3		P	O	1	S	2/28/2008	4.800	F	5100	$11,220,000	164		
2246280	M	WEST DRIVE	TRANSVERSE RD #4		P	O	1	S	3/23/2008	4.300	F	4700	$10,340,000	164		
2249710	R	WEST FOOTBRIDGE	CLOVE LAKE		P	WO-PED	2	C	7/8/2008	4.371	F	899	$1,977,800	501		
2244100	K	WEST FOOTBRIDGE	PROSPCT PK STREAM		P	WO-PED	1	C	12/9/2008	4.875	F	308	$677,600	355		
2267380	M	WEST STREET	RECTOR ST			AT	1	S	12/17/2007	5.033	G	25760	$56,672,000	108		
2241230	B	WESTCHESTER AVE	AMTRAK - CSX	AC		O	3	S	8/10/2006	6.125	V	15600	$34,320,000	202	209	
2240180	B	WESTCHESTER AVE	BRONX RIVER			WO	1	S	7/17/2007	4.932	F	5476	$12,047,200	202	209	
2241000	B	WESTCHESTER AVE	CSX TRANS - PT MORRIS	C		O	1	S	7/18/2008	5.128	G	1740	$3,828,000	201		
2075837	B	WESTCHESTER AVE	HUTCHINSON RVR PKWY			A	2	S	2/20/2008	4.333	F	15858	$34,887,600	210	211	
2241329	B	WHITE PLAINS ROAD	AMTRAK - CSX	AC		O	1	S	8/17/2006	4.859	F	6900	$15,180,000	211		
2248020	Q	WHITELAW PED BRDG	CONDUIT AVE			O-PED	7	C	11/10/2008	4.662	F	5500	$12,100,000	410		
1065210	Q	WHITESTONE EXP NB	BCIP (2065210)			A	1	S	9/4/2008	4.683	F	2500	$5,500,000	407		
2241369	B	WILLIAMSBRIDGE RD	AMTRAK - CSX	AC		O	2	S	7/27/2006	4.836	F	10400	$22,880,000	211		
2240039	KM	WILLIAMSBURG BRIDGE	EAST RIVER	T		WEO	53	S	11/3/2006	4.736	F	824000	$1,812,800,000	103	301	
2240059	BM	WILLIS AVENUE	HARLEM RIVER			WMO	26	S	12/10/2007	3.292	F	94700	$208,340,000	111	201	
2248019	Q	WOODHAVEN BLVD	ATLANTIC AVE			O	3	S	4/9/2008	4.306	F	19400	$42,680,000	409		
2248159	Q	WOODHAVEN BLVD	QUEENS BLVD			O	2	S	9/15/2008	4.288	F	11500	$25,300,000	404		
2230540	Q	WOODSIDE AVE	278I (B.Q.E.)			A	1	S	1/29/2008	5.797	G	7500	$16,500,000	402		
2247400	Q	WOODSIDE AVE	CONRAIL	C		O	1	S	11/26/2007	5.033	G	8200	$18,040,000	402	404	
2247120	Q	WOODSIDE AVE	LIRR MAIN LINE	L		O	3	S	10/5/2007	4.349	F	14900	$32,780,000	402		
		787 OPEN BRIDGES				OPEN SPANS 4,480				OPEN SF		15,787,339	34,736,306,000			

STATEN ISLAND CULVERTS

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED		BRIDGE TYPE	SPANS	SOURCE
R00003	R	DELAFIELD AVE	RAYMOND PLACE		O	1	CITY
R00004	R	DICKIE AVE	NEAR COLUMBUS PLACE		O	1	CITY
R00005	R	BIDWELL AVE	COLUMBUS PLACE		O	1	CITY
R00006	R	LIVERMORE AVE	WATCHOGUE ROAD		O	1	CITY
R00010	R	GALLOWAY AVE	MARIANNE ST		O	1	CITY
R00011	R	FOREST AVE	CRYSTAL AVE		O	1	CITY
R00013	R	NAUGHTON AVE	PATTERSON AVE		O	3	CITY
R00015	R	OLYMPIA BLVD	SLATER AVE		O	1	CITY
R00016	R	GRAHAM BLVD	JAY ST		O	2	CITY
R00021	R	HUNTER AVE	IDLEASE PLACE		O	1	CITY
R00022	R	IDLEASE PLACE	HUNTER AVE		O	1	CITY
R00023	R	MIDLAND AVE	HYLAN BLVD		O	1	CITY
R00024	R	LINCOLN AVE	SANILAC ST		O	1	CITY
R00025	R	GREELEY AVE	SANILAC ST		O	1	CITY
R00027	R	ELEANOR ST	ROCKLAND AVE		O	1	CITY
R00031	R	TARLTON ST	GREAT KILLS LANE		O	1	CITY
R00032	R	SEGUINE AVE	PURDY PLACE		O	1	CITY
R00034	R	ROCKLAND AVE	BRIELLE AVE		O	1	CITY
R00035	R	BRADLEY AVE	WILLOWBROOK ROAD		O	1	CITY
R00036	R	AMBOY ROAD	ARBUTUS AVE		O	1	CITY
R00038	R	MAGUIRE AVE	DEPEW PLACE		O	1	CITY
R00039	R	MAGUIRE AVE	DEPEW PLACE		O	1	CITY
R00040	R	113 MAGUIRE AVE	DEPEW PLACE		O	1	CITY
R00041	R	93 FOSTER ROAD	AMBOY ROAD		O	1	CITY
R00042	R	LEDYARD PLACE	LACONIA AVE		O	1	CITY
R00046	R	RICHMOND TERRACE	SNUG HARBOUR		O	2	CITY
R00048	R	VAN NAME AVE	WALKER AVE		O	1	CITY
R00049	R	VAN PELT AVE	WALKER ST		O	1	CITY
R00050	R	UNION AVE	NETHERLAND AVE		O	1	CITY
R00051	R	HARBOR ROAD	DUBLIN PLACE		O	1	CITY
R00055	R	TRAVIS AVE	VICTORY BLVD		O	1	CITY
R00059	R	WESTERN AVE	RR BRIDGE		WO	1	CITY
R00060	R	SIGNS ROAD	VICTORY BLVD		O	1	CITY
R00062	R	KISSEL AVE	SNUG HARBOR ROAD		O	1	CITY
R00065	R	HENDERSON AVE	WESTBURY AVE		O	1	CITY
R00068	R	FOREST AVE	RANDALL AVE		O	1	CITY
R00069	R	GREGG PLACE	RANDALL AVE		O	1	CITY
R00076	R	ROOSEVELT AVE	HAROLD ST		O	1	CITY
R00077	R	BUCHANAN AVE	HAROLD ST		O	1	CITY
R00078	R	WILLOW BROOK ROAD	FILLMORE AVE		O	1	CITY
R00079	R	FILLMORE AVE	WILLOW BROOK ROAD		O	1	CITY
R00084	R	ARTHUR KILL ROAD	MULDOON AVE		O	1	CITY
R00085	R	ARTHUR KILL ROAD	150' N.W. ELLIS ROAD		O	1	CITY
R00086	R	ARTHUR KILL ROAD	ENGLEWOOD ST		O	1	CITY
R00095	R	MEISNER AVE	ROCKLAND AVE		O	1	CITY
R00096	R	ROCKLAND AVE	MANOR ROAD		O	1	CITY
R00097	R	RICHMOND HILL ROAD	RICHMOND ROAD		O	1	CITY
R00101	R	ST ANDREWS ROAD	LIGHTHOUSE AVE		O	1	CITY
R00103	R	AULTMAN AVE	ST GEORGE ROAD		O	2	CITY
R00106	R	ARTHUR KILL ROAD	RICHMONDTOWN ROAD		O	1	CITY
R00111	R	ELTINGVILLE BLVD	KATAN AVE		O	2	CITY
R00114	R	SWEET BROOK ROAD	RIDGEWOOD ROAD		O	1	CITY
R00115	R	VICTORY BLVD	CLOVES LAKE PARK		O	3	CITY
R00122	R	ARTHUR KILL ROAD	RIDGEWOOD AVE		O	1	CITY
R00133	R	ARDEN AVE	HALPIN AVE		O	1	CITY
R00135	R	HYLAN BLVD	CORNELIA AVE		O	1	CITY
R00136	R	SNUG HARBOR ROAD	KISSEL AVE		O	1	CITY
R00137	R	RICHMOND TERRACE	WESTERN AVE		O	2	CITY
R00138	R	HOLLAND AVE	BENJAMIN PLACE		O	1	CITY
R00139	R	DE PEW PL	MAGUIRE AVE		O	1	CITY
R00141	R	ALTER AVE	STORM&GRND FED STREAM		O	1	CITY

A brief 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.

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.



Hamilton Avenue Bridge Abutment.
(Credit: NYSDOT)

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.

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.

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

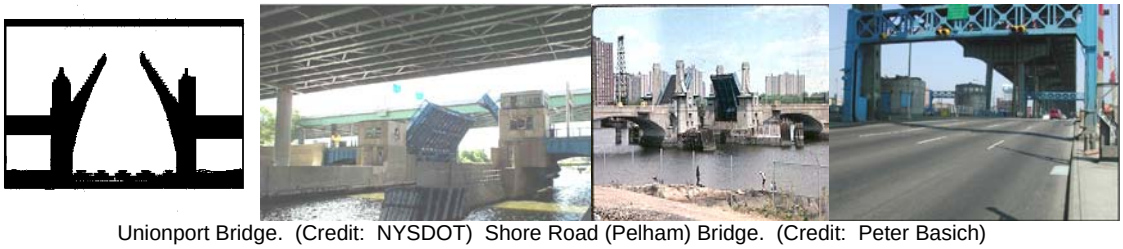
ARTERIAL BRIDGE
Any bridge upon which an arterial highway runs as it crosses streets, water, railroads, etc.

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.

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***, and ***Greenpoint Avenue*** Bridges.



Unionport Bridge. (Credit: NYSDOT) Shore Road (Pelham) Bridge. (Credit: Peter Basich)
Hamilton Avenue Bridge. (Credit: NYSDOT)

Union Street Bridge. Greenpoint Avenue Bridge.
(Greenpoint Credit: Michele N. Vulcan)

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.

Truss Bearing on Manhattan Bridge.
(Credit: NYSDOT)

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

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

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.
(Credit: NYSDOT)

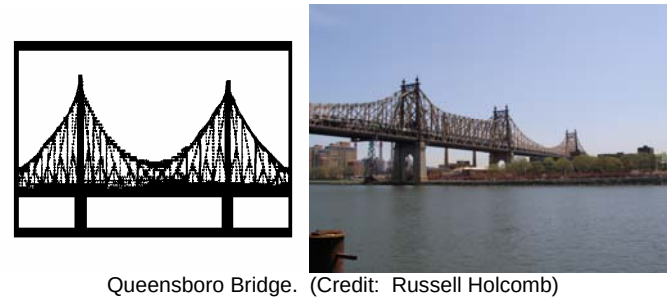
CABLE STAYED BRIDGES
Bridges in which the superstructure is directly supported by cables, or stays, passing over or attached to towers located at the main piers.

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 ***Queensboro Bridge*** is a notable example of this type of structure.



Queensboro Bridge. (Credit: Russell Holcomb)

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

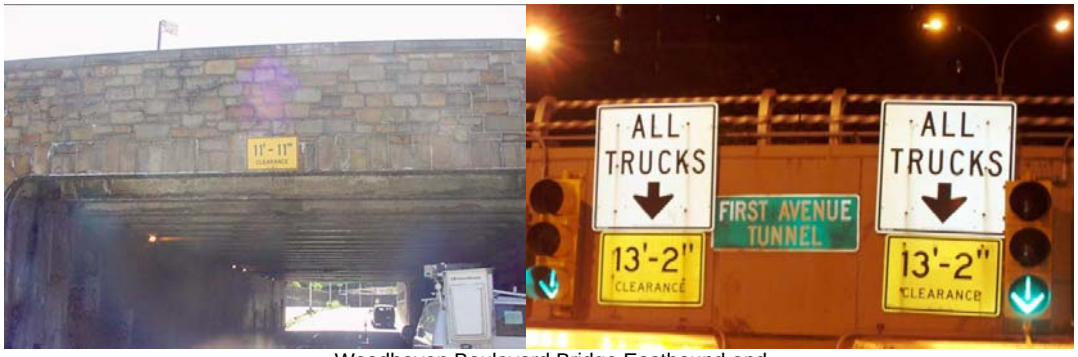
CATCH BASIN
A receptacle, commonly box shaped and fitted with a grilled inlet and a pipe outlet drain, designed to collect the rain water and floating debris from the roadway surface and retain the solid material so that it may be periodically removed.

CATWALK
A narrow walkway for access to some part of a structure.

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.

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



Woodhaven Boulevard Bridge Eastbound and United Nations – 1st Avenue Tunnel Vertical Clearance Postings. (Credit: NYSDOT)

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

COLONNADE
A series of regularly spaced columns.


Manhattan Bridge Colonnade.
(Credit: Peter Basich)

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.

CORROSION
The general disintegration of surface metal through oxidation.

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.

CULVERT
Any structure under the roadway with a clear opening of twenty feet or less, measured along the center of the roadway.

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

DECK
The supporting slab and wearing surface of a bridge.


Hamilton Avenue Bridge Deck. (Credit: NYSDOT)

DELAMINATION
The subsurface separation of concrete into layers.

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

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.

Greenpoint Avenue Dolphin & Fender System.
(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.

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)

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).

EXPANSION JOINTS
Located throughout a bridge, 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.

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.

FATIGUE
Cause of structural deficiencies due to repetitive 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.

Rikers Island Dolphin & Fender System.
(Credit: NYSDOT)

FINGER DAM
EXPANSION JOINT in which the opening is spanned by meshing steel fingers or teeth.

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.
(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.

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 Bridge***s are of this type.

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

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.

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

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

JACKING
The mechanical lifting or sliding of an element.

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.

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.

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.

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

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

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 Queensboro Bridge.

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 25 movable bridges currently under the jurisdiction of the New York City Department of Transportation include the Harlem River group (Broadway, West 207th/West Fordham Road, Macombs Dam, 145th Street, Madison Avenue, Third Avenue, Willis Avenue, and Wards Island); the Bronx group (Bruckner Expressway/Bronx River, 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.)

Tugboat Pushing a Barge Under the Open Metropolitan Avenue Bridge. Third Avenue Bridge Over Harlem River. (Third Avenue Credit: Edgardo Montanez)

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.

A Bulb of the Queensboro Bridge Necklace Lights. (Credit: Peter Basich) Repairing a Manhattan Bridge Necklace Light. (Credit: Hany Soliman)

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 Operator House.

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.

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

Morris Street, West 8th Street, and Ocean Avenue 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 of Hamilton Avenue Bridge. Pier 17 of Rikers Island Bridge. Pier 15 of Madison Avenue Bridge.
(Credit: NYSDOT)

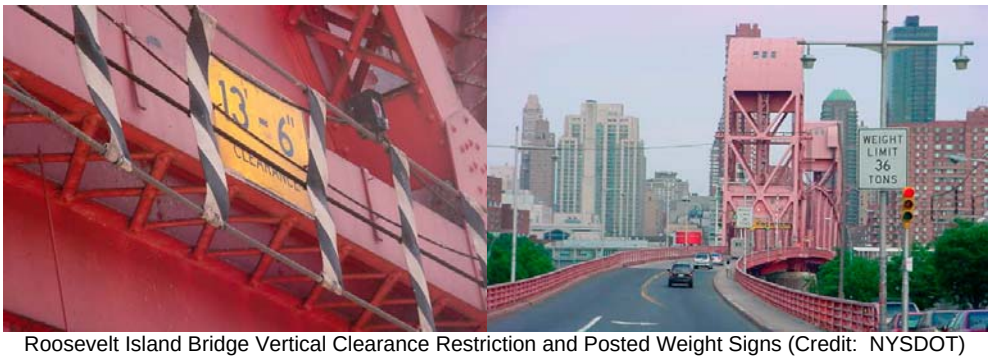
PILES
A concrete, steel or timber column located beneath the FOOTINGS of a bridge and embedded in the soil. Piles are employed in bridges only if the soil directly below the footing is not firm enough to support the bridge loads.

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.

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.

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.

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.

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.

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.

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

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. (Credit: Peter Basich). Carroll Street Bridge. (Credit: NYSDOT)

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

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

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

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

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.

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.

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.

Scuppers on the Pulaski, Madison Avenue, and Brooklyn Bridges. (Credit: NYSDOT)

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

SHORING
Temporary bracing to support a structure.

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

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.

SPAN
The distance between consecutive supports of a bridge.

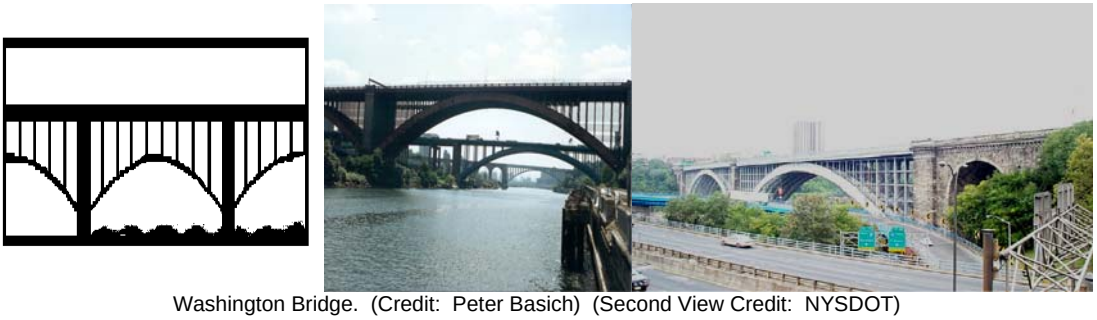
SPECIFICATIONS OR SPECS
A detailed listing of required construction materials and methods to be used in the project. This information is a supplement to the blue prints and working drawings.

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 181st Street. This bridge opened to traffic in December 1888 and, with its approaches, is 2,375 feet long.



Washington Bridge. (Credit: Peter Basich) (Second View Credit: NYSDOT)

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

East Face of
Brooklyn Bridge
North Stem Wall.
(Credit: NYSDOT)

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.

Division Staff Installing Strain Gauges in 1995 and 2006 on the Greenpoint Avenue Bridge. Checking the Measurements in 2006. (2006 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 & 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.

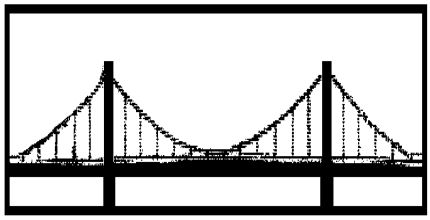
SUBSTRUCTURE
The name given to those elements below a bridge's road deck system, namely the ABUTMENTS, ANCHORAGES, BEARINGS, and PIERS.

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 enables the forces of the roadway of a SUSPENSION BRIDGE to be translated into an axial force in the supporting CABLES.

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

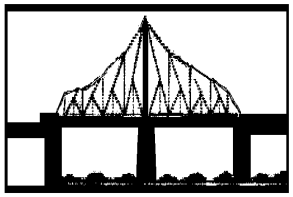
prevent excessive deflection at any point. The Brooklyn, Manhattan and ***Williamsburg*** Bridges are noted New York City examples of this type.



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 Bridge. Madison Avenue Bridge and 145th Street Bridge.
(Madison and 145th Street Credit: Peter Basich)

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

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.

Williamsburg Bridge Tower. (Credit: Peter Basich) Inspectors on Manhattan Bridge Tower. (Inspector Credit: NYSDOT) Manhattan Bridge Tower. (Credit: Michele N. Vulcan)

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.

Manhattan Bridge Traveler. (Credit: NYSDOT)

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).

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)

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 ***103rd Street - Wards Island Pedestrian Bridge***, ***Ninth Street Bridge***, and Broadway Bridge are examples of this type of bridge.

Wards Island Pedestrian Bridge. (2nd View Credit: Peter Basich)
Ninth Street Bridge. (Credit: Bojidar Yanev)

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.

WEARING SURFACE

The topmost layer of material applied on the DECK or roadway that receives the traffic loads; also known as wearing course.

Brooklyn Bridge Wearing Surface.
(Credit: NYSDOT)

WELD
To fasten together metals by bonding with molten metal.

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. Also known as a retaining wall.

Broadway Bridge & Bay Ridge Avenue Bridge Wingwalls. (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)

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.

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.



Manhattan Bridge Tower After Debris Removal. (Credit: Peter Basich) Hutchinson River Parkway Under Westchester Avenue. (Credit: Anthony Napolitano) 161st Street Pedestrian Bridge Over Major Deegan Expressway.

Assistant City Highway Repairer Lashawn Elam and Highway Repairer Anita Ramos Removing Vegetation and Other Debris.

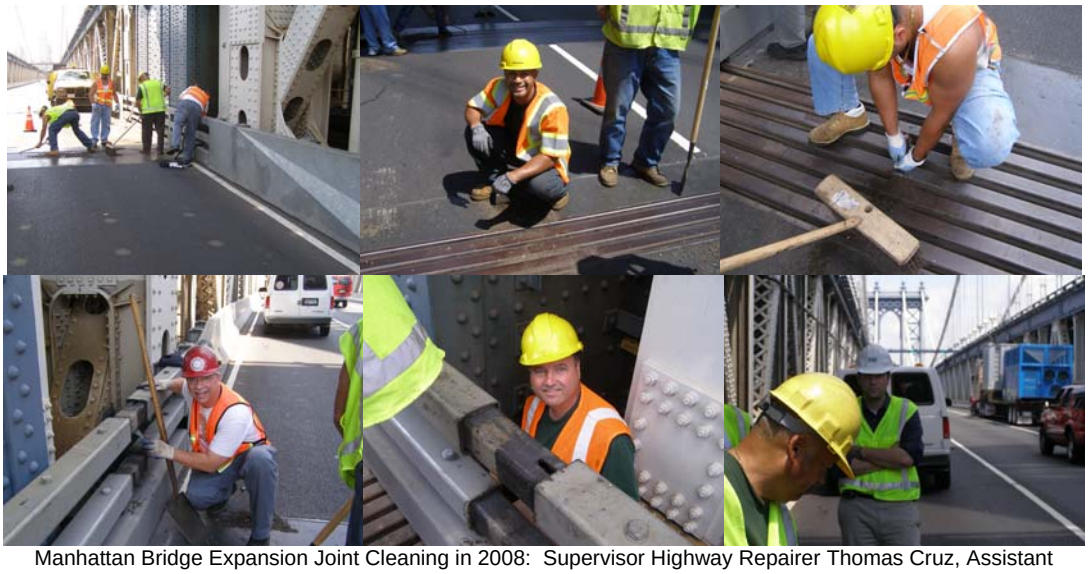
Cleaning of Drainage System Removal of debris, dirt and vegetation from drainage systems, including gutter gratings, gutters and leaders, scuppers, down spouts and scupper piping systems. The cleaning of surface gratings and gutters requires hand tools, brooms and brushes. In some cases, an air compressor 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)

Cleaning Catch Basins on the Manhattan Bridge.

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.

Expansion Joint Cleaning and Cleaned Joint on the Manhattan Bridge.



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, Highway Repairer Louie Dumeng, and Director of Bridge Preventive Maintenance Paul Schwartz. (Credit: Thomas Whitehouse)

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

Sweeping Sweeping each bridge with a mechanical sweeper along each curb.

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.

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)

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.

Repaired Bullnose Curb and Sidewalk at Crotona Avenue. (Credit: Joseph Saverino)

Sidewalk Repairs at East 174th Street Over The Ramp to The Cross Island Parkway. (Credit: Reza Taheri)

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.

Asphalt Trailer and Tar Kettle. (Credit: Peter Basich)

Masonry Crews and Highway Repairers Repairing Recurrent Potholes on the Eastbound Brooklyn-Queens Expressway, Just Past the Middagh Street Underpass. Break-Out and Removal of the Old Asphalt Roadway and Concrete Deck. (Credit: Anthony Napolitano)

Installing New Concrete With Rebar in the Cutout on the Eastbound BQE. (Credit: Anthony Napolitano)

Rolling and Tamping the Asphalt on the Eastbound BQE. (Credit: Anthony Napolitano)

Sealing the Edges of the Cutout With Asphalt Cement to Prevent Water From Seeping In. Closeup of Part of the Completed Concrete Deck Repair on the Eastbound BQE. (Credit: Anthony Napolitano)

Electrical and Mechanical Component Maintenance of the 4 East River Bridges and 25 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.

Electrician Robert Stackpole and Supervisor Electrician Ben Cipriano Atop the Queensboro Bridge. Electrician Helper Richard Parisi. (Credit: Peter Basich) Supervisor Electrician Ben Cipriano Installing an Outlet on the Brooklyn Bridge. (Credit: Hany Soliman)

Changing a Bulb on the Queensboro Bridge Necklace Lighting. (Credit: Peter Basich)

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-five 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.

Inspecting the Eyebars in the Brooklyn Anchorage of the Manhattan Bridge. (Credit: NYSDOT) 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. (Credit: Anatoly Orlov)

Oiler T. McAuliffe at the 9th Street Bridge. Oilers Andrew Sorrentino, Rene Francis, Steven Marxhausen, John Garone, and Daniel Cantirino, Along With Mechanical Engineering Intern Vincent Competello at the Third Avenue Bridge Prior to Practicing an Emergency Hydraulic Bridge Opening. (Credit: Vera Ovetskaya)

Cleaning and Lubricating the Broadway Bridge. (Credit: Reza Taheri)

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.

Abrasive Blasting. Platform Installed for Painting of the Queensboro Bridge (Credit: Vadim Sokolovsky)
Containment on Queensboro Bridge Manhattan Ramp. (Credit: Peter Basich)

Inside the Queensboro Bridge Containment. 2005: Roadway Containment.
(Roadway Credit: Michele N. Vulcan) 2006: Containment Above the Upper Roadway.

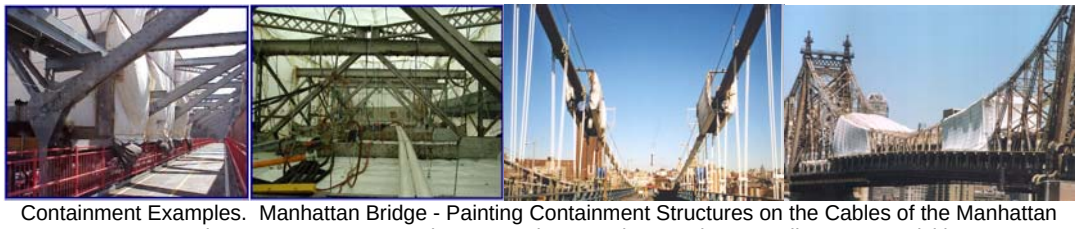
The Division treats all lead paint waste as hazardous waste, and stores and disposes of it according to the Resource Conservation and Recovery Act (RCRA). Waste is stored in approved leak-proof drums and containers which are, in turn stored temporarily in a fenced, secured area on-site until they are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

Spot Cleaning Before Painting on the Williamsburg Bridge. Primer Coating on the Williamsburg Bridge. Salt Splash Painting on the Williamsburg Bridge. (Salt Splash Credit: Fouad Althaibani)



Containment Examples. Manhattan Bridge - Painting Containment Structures on the Cables of the Manhattan Approach Span. 2005: Queensboro Containment. (Queensboro Credit: Peter Basich)

2005: Queensboro Bridge Containment. (Credit: Peter Basich) 2005: Preventing Paint From Falling Into the Dutch Kills under the Hunters Point Avenue Bridge. (Credit: Sergiy Parayev) Working Inside the Queensboro Bridge Containment.

*COMPONENTS OF THE PREVENTIVE MAINTENANCE PROGRAM**

2007 Queensboro Bridge Lower Level and Upper Level Shielding.

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)

*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 2008

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	2	4
BRIDGE OPERATORS (INCLUDES ASSISTANTS)	20	75
BRIDGE PAINTERS	6	31
BRIDGE REPAIRERS/RIVETERS	4	40
CARPENTERS	3	12
CEMENT MASONS	-	7
ELECTRICIANS (INCLUDES HELPERS)	5	22
HIGHWAY REPAIRERS (INCLUDES ASSISTANTS & SEASONAL WORKERS)	26	86
MACHINISTS	-	2
MOTOR GRADER OPERATORS	-	1
OILERS	-	15
STATIONARY ENGINEERS (ELECTRIC)	-	1
TRACTOR OPERATORS	-	1
TOTALS	66 SUPERVISORS	297 MECHANICS

Bridge Operator Mary Harrigan at the Union Street Bridge. (Credit: Adal Maldonado) Bridge Repairer/Riveters Repairing the Willis Avenue Bridge Grating. (Credit: Reza Taheri) Supervisor Electrician Ben Cipriano Repairing a Damaged Electrical Cable on The Queensboro Bridge in March 2007. (Credit: Bala Nair)

Bridge Operator-in-Charge Delonda Bates-Pinkney at the Controls of the 9th Street Bridge. She has worked for the Department since 1989. (Credit: Keith Burrowes) BOIC Bates-Pinkney Preparing to Check the Bridge's Mechanisms. (Credit: Vera Ovetskaya)

Revised 11/19/08

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.

*BRIDGE INSPECTION EQUIPMENT LIST**

Inspector Equipment	Inspection Team Equipment	Inspection Van Equipment
Boots-Knee High	5 Boro Map	Tool Chest
Dust Masks (Disposable)	Binoculars	Clip Boards
Safety Goggles	Broom	Flashlight (3 “D” Cell)
Hard Hat With Liner	Digital Camera	Fire Extinguisher
Rain Hat & Jacket	Camera Card Reader	First Aid Kit
Work Gloves Long Cuff	Hand Compass	3 Safety Flags
Work Gloves Unlined	Screwdriver Set (Regular)	Step Ladder 6’ or 8’
Work Gloves Lined	Screwdriver Set (Phillips)	10 Traffic Cones
Work Boots	Dye Penetrant Kit	
Chipping Hammer	Lantern	
Clip Boards	D-Meter With Test Block	**Put In Trucks By Highway Repairers When Needed**
Deceleration Lanyards	Marking Paint Spray	
Flashlight (2 “D” Cell)	Retract Survey Rod 25’	Generator
	Portable Laser Distance Meter	
Safety Vest	Handheld Computer	Oil For Generator
Level 9” (Magnetic)	Thermometer	Extension Ladder 32’
Tool Bags (24”)	Spray Penetrating Oil	Extension Ladder 24’
Class III Body Harness	Cell Phone/Radio	Extension Ladder 16’
Lanyards	Vernier Calipers	Shovel
Bridge Inspection Manual (New York State)	Wrenches 12”	Push Broom
Technical Advisories For Inspection Manual	Tool Pouch	Dust Pan & Sweep Broom
Emergency Procedure Instructions	Lumber Crayons	Bottled Water
OSHA Approved Respirator & Filters	Spray Paint	Bolt Cutter
Belt With Two Drop Forged D-Rings	Awl	Flood Lights
Hard Hat Flashlight	Calipers	Approved Safety Gasoline Can
	Hacksaw	Sledge Hammer (8 lbs.)
	Hacksaw Blades (Extra)	Extension Cord Winder
	Paint Scraper	
	Inspection Mirror	
	Level 24”	
	Pliers 8”, Vinyl Coated	
	Plumb Bob	
	Pocket Knife	
	Ruler 25’ or 30’ (Metal)	
	Ruler 100’ (Fiberglass)	
	Scraper Blades (Extra)	
	Wire Brush	
	Folding Ruler 8’	
	Rope 5/8” With 100’ Coil	

NYSDOT Inspector on The Brooklyn Bridge.
(Credit: Michele N. Vulcan)

Division Personnel Inspecting Paerdegat Bridge Utilizing a Barge.
(Credit: Avelino Leyco Jr.)

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Queensboro Bridge.
(Credit: Russell Holcomb)

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Gapstow Bridge During the Exhibition *The Gates, Project for Central Park, 1979-2005*. (Credit: Russell Holcomb)

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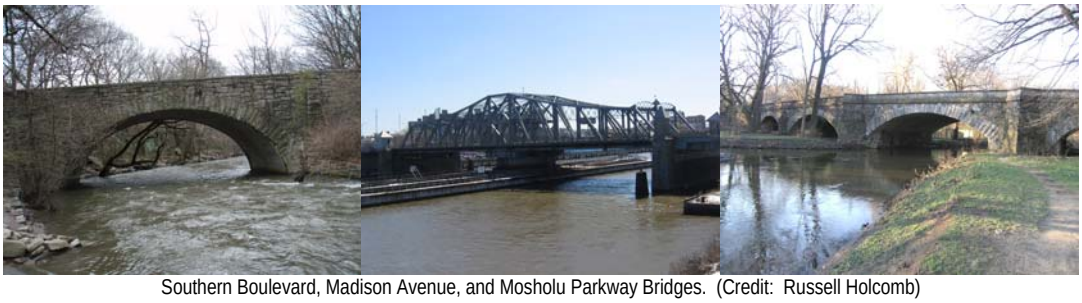

Southern Boulevard, Madison Avenue, and Mosholu Parkway Bridges. (Credit: Russell Holcomb)

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Manhattan Bridge. (Credit: R. Smith)

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Brooklyn Bridge in 1909 and 2008. (2008 Credit: Russell Holcomb)

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Revised 1/28/09

In Memoriam

The 2008 edition of the New York City Bridges And Tunnels Annual Condition Report is dedicated to the memory of the following employees, whose wisdom and dedication to their work will be sorely missed. Their passing reminds us that the people of the Division of Bridges are the strength of the Agency, providing a tradition of quality service to the public.

Tom Der-Hsiung Su, Civil Engineer

October 17, 1942 - January 10, 2008 19 years, 5 months City service

Mr. Su joined DOT in 1988 as a project engineer. During his almost 20 years with the Division, he oversaw many bridge rehabilitation and reconstruction projects throughout the City, including the Sutter Avenue, Glenmore Avenue, and Liberty Avenue Bridges, as well as roadway bridges over the Long Island Railroad in Brooklyn.

Mr. Su will be remembered as a natural teacher who could easily explain the complicated process of reconstructing bridges. One could ask him questions at any time and always be the recipient of good suggestions. He was regarded by all as hard working, reliable, and conscientious.

Wayne Durant, Seasonal Assistant City Highway Repairer

December 4, 1979 - August 21, 2008 1 ½ years City service

Mr. Durant worked with Bridge Preventive Maintenance for 1½ years, reporting from Pulaski Yard. Affectionately known as "Busta," Mr. Durant was eager to learn all aspects of maintenance. Though his time with PM was brief, he formed strong bonds with his co-workers where his upbeat demeanor and constant smile lifted everyone's spirits.

Leonid Kestelboym, Assistant Civil Engineer

May 9, 1937 - November 22, 2008 11 years, 5 months City service

Mr. Kestelboym worked in the Engineering Review and Support Specifications Unit since 1997. He reviewed contract proposal bid books, prepared and reviewed addenda, and conducted the final quality control checks of the contract proposal books before they were sent for the Law Department's approval.

His recent major projects included the reconstruction of the 11th Avenue Viaduct between West 30th Street and West 33rd Streets over LIRR Yard, the component rehabilitation of various bridges citywide, the lifesaving skiff supply and service contract, and the installation of aviation lighting on the Queensboro Bridge.

Mr. Kestelboym was a very detail-oriented and dedicated engineer who took pride in his work and could be always depended upon for excellent performance of his duties. He was a nice, quiet person who liked art, especially photography. He will be remembered for his humble and friendly attitude towards everyone working with him.

Tom Der-Hsiung Su, Wayne Durant, and Leonid Kestelboym. (Su Credit: Boris Krakovskiy)

2008 INVENTORY LOCATION MAPS

Eight years ago, we added a new feature to the Inventory Location Maps; Community Board borders. With this added feature, the reader will be able to identify within which Community Boards bridges are located.

On these maps, all Community Boards consist of three (3) digits. The first digit is for map plotting purposes. The next two digits identify the Community Board. In cases of certain parks and airports, the Community Board number does not correspond with any Community Board. These exceptions are:

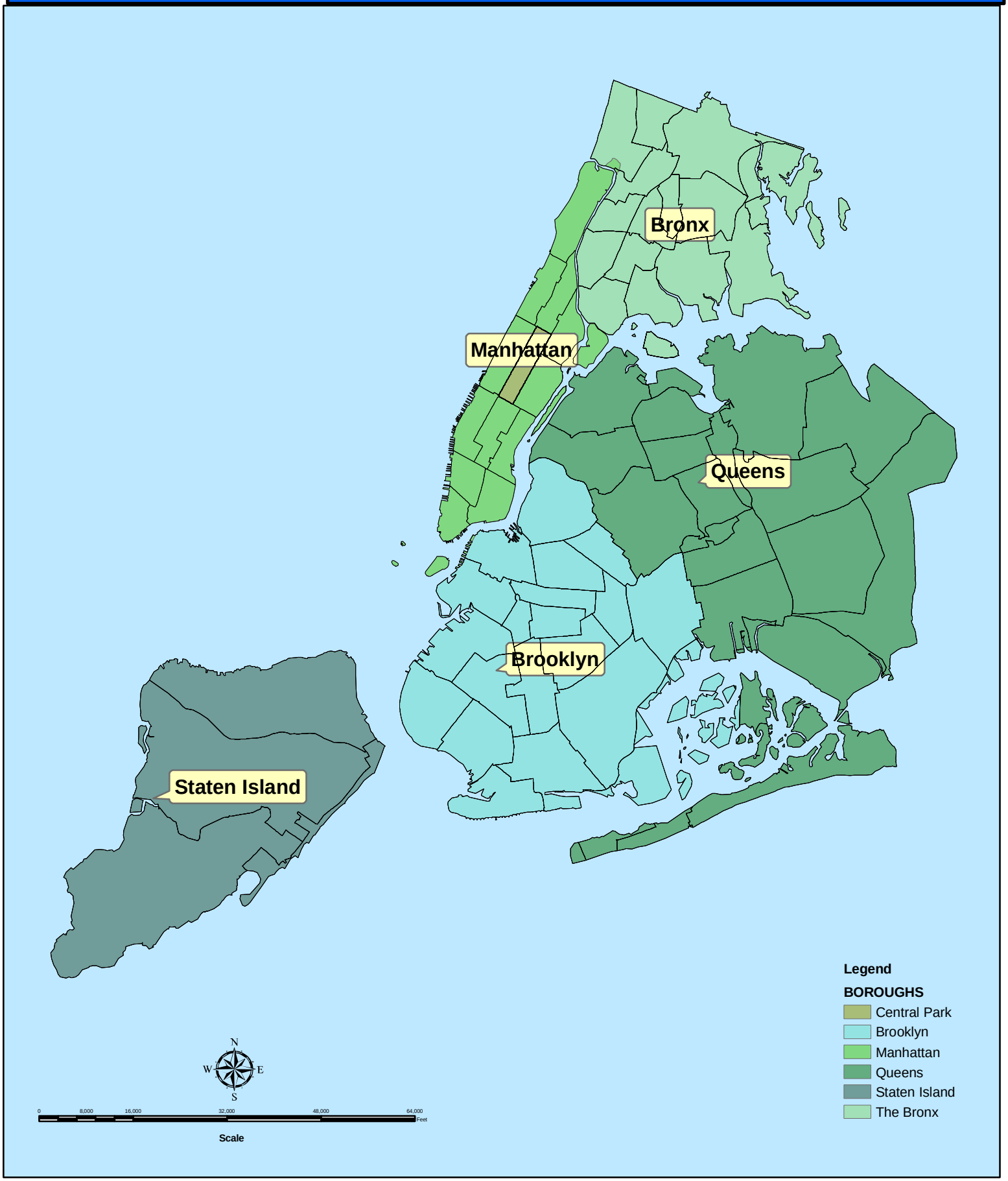
Bronx	26=Van Cortlandt Park	**Brooklyn**	55=Prospect Park
	27=Bronx Park		56=Gateway Nat'l Rec. Area/Floyd Bennett Field
	28=Pelham Bay Park	**Queens**	80=La Guardia Airport
Manhattan	64= Central Park		81=Alley Pond Park
			82=Cunningham Park
			83=JFK Airport
			84= Gateway Nat'l Rec. Area/Fort Tilden-Jacob Riis Park

The Community Board listings correspond to those listed in the inventory, which begins on page 209.

Some structures fall on Community Board dividing lines: their additional Community Boards are now identified in the inventory in columns CD2 and CD3.

Brooklyn, Manhattan, and Williamsburg Bridges.
(Credit: Michele N. Vulcan)

ALL BOROUGHS



BROOKLYN


Pulaski Bridge
Williamsburg Bridge
Manhattan Bridge
Brooklyn Bridge
Prospect Park Southwest
See Brooklyn CB 302, 308, 309 Detail Map
KOSCIUSZKO BRIDGE
MANHATTAN AVENUE
BQE
PARK AVENUE
DE KALB AVENUE
BUSHWICK AVENUE
JACKIE ROBINSON PARKWAY
SUTTER AVENUE
EASTERN PARKWAY
LINDEN BOULEVARD
FOSTER AVE
PENNSYLVANIA AVENUE
SHORE PARKWAY
REMSEN AVENUE
SEAVIEW AVENUE
UTICA AVENUE
FLATBUSH AVENUE
NOSTRAND AVENUE
OCEAN AVENUE
OCEAN PARKWAY
SHORE ROAD
86 STREET
85 STREET
VERRAZANO BRIDGE
SHORE PARKWAY SR NORTH
BAY PARKWAY
AVIATION ROAD
CANARSIE VETERANS CIRCLE
FLOYD BENNETT FIELD
MARINE PARKWAY BRIDGE
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Legend
Bridges In Parks
Brooklyn/Queens Bridges
Manhattan/Brooklyn Bridges
DOT Bridges
Major Roadways
Community Boards
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302
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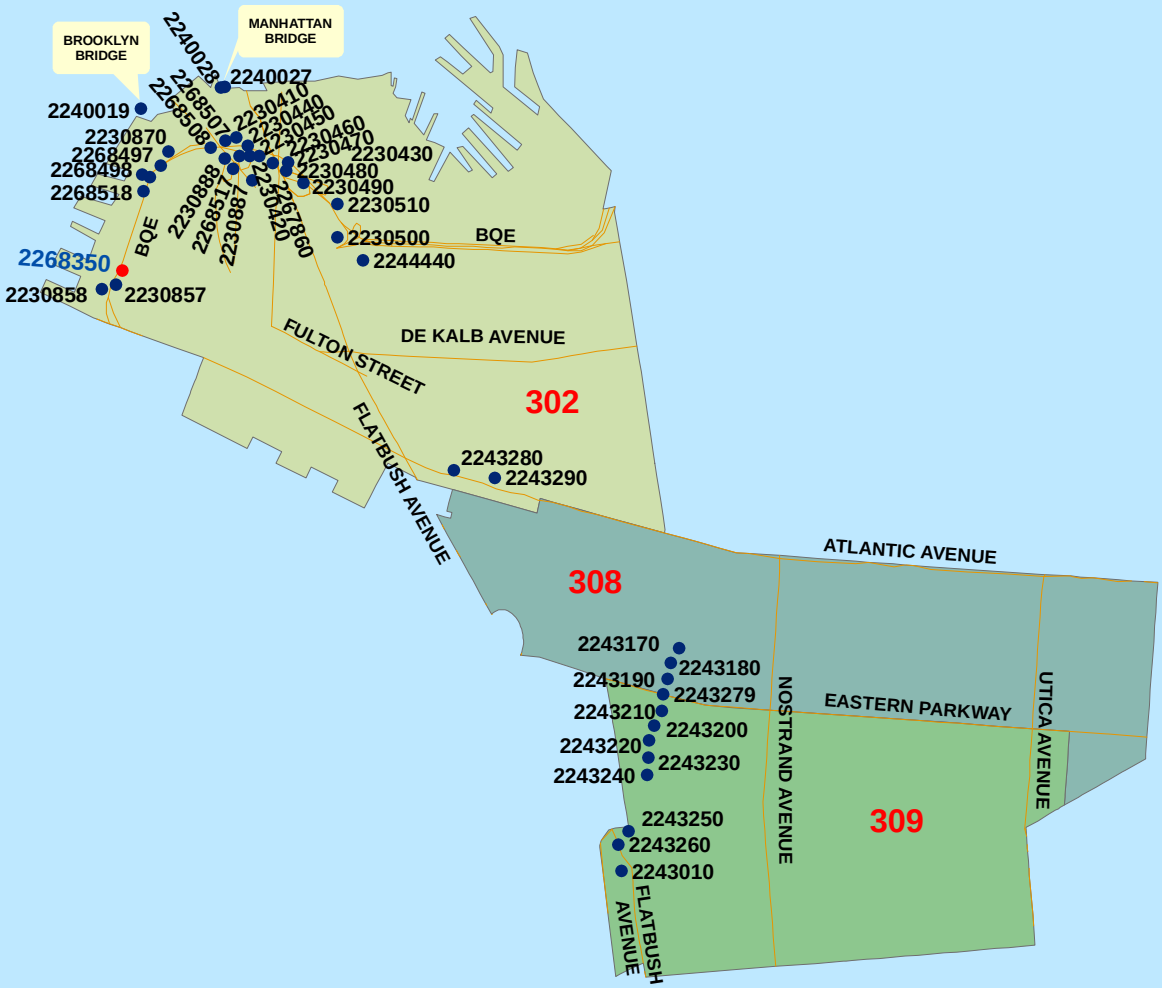
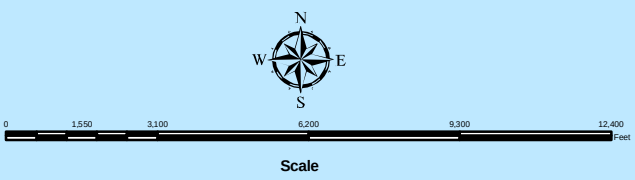
BROOKLYN
CB 302, 308, 309 DETAIL





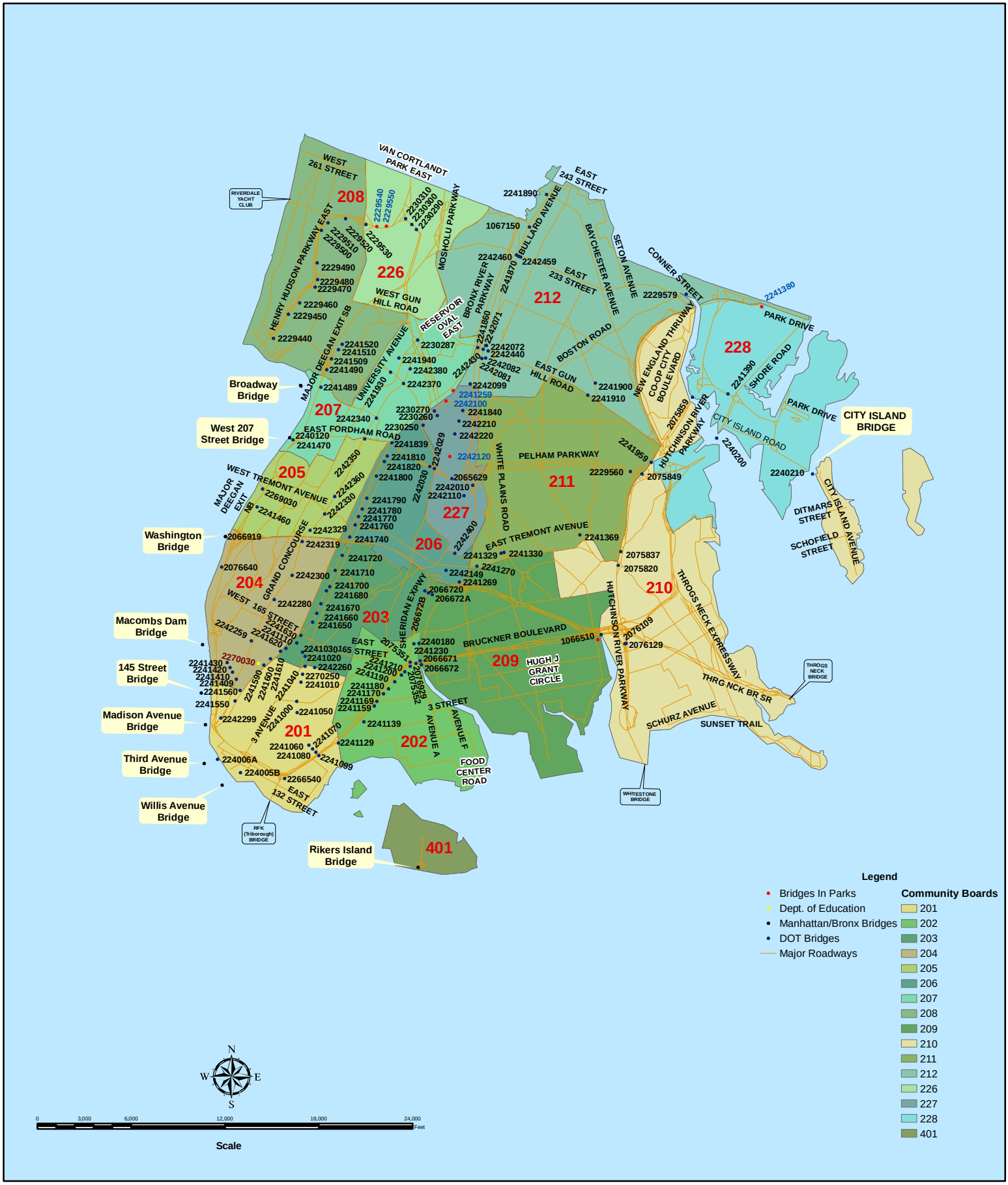
Legend

- Bridges In Parks
- DOT Bridges
- Major Roadways

Community Boards

- 302
- 308
- 309

BRONX


208
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Broadway Bridge
West 207 Street Bridge
Washington Bridge
Macombs Dam Bridge
145 Street Bridge
Madison Avenue Bridge
Third Avenue Bridge
Willis Avenue Bridge
Rikers Island Bridge
CITY ISLAND BRIDGE
Bridges In Parks
Dept. of Education
Manhattan/Bronx Bridges
DOT Bridges
Major Roadways
Community Boards
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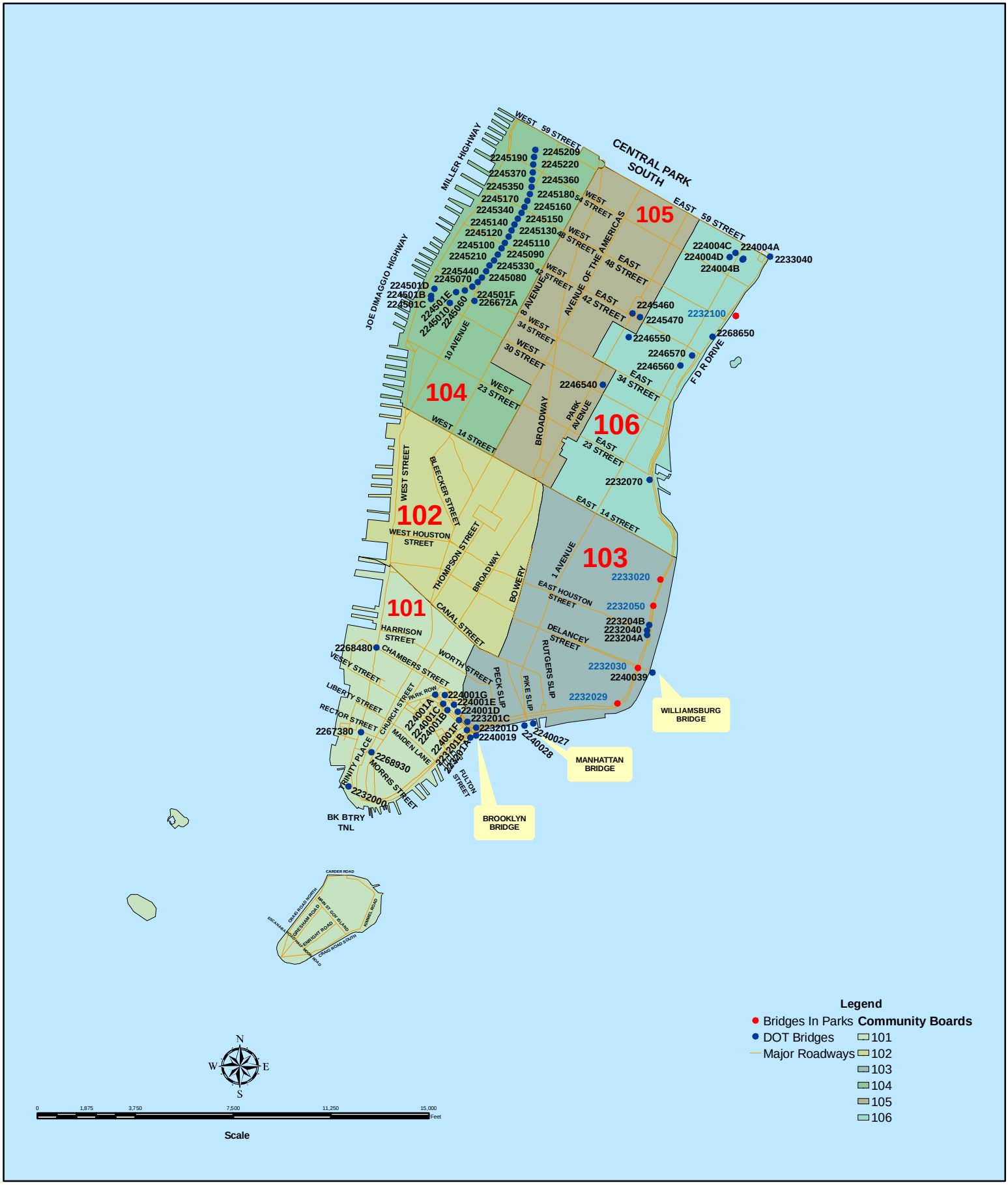
Scale

DOWNTOWN MANHATTAN



MIDTOWN MANHATTAN

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Scale

Legend

- Bridges in Parks
- DOT Bridges
- Major Roadways

Community Boards

- 107
- 108
- 164

UPTOWN MANHATTAN

QUEENS


RIKERS ISLAND BRIDGE
RFK (Triborough) BRIDGE
ROOSEVELT ISLAND BRIDGE
QUEENSBORO BRIDGE
QUEENS MIDTOWN TUNNEL
KOSCIUSZKO BRIDGE
See Queens CB 401, 402 & 405 Detail
WHITESTONE BRIDGE
THROGS NECK BRIDGE
La Guardia Airport
JFK Airport
CROSS ISLAND PARKWAY
SHORE ROAD
SHORE BOULEVARD
WHITESTONE EXPRESSWAY
CLEARVIEW EXPRESSWAY
NORTHERN BOULEVARD
GRAND CENTRAL PARKWAY
ASTORIA BOULEVARD
VERNON BOULEVARD
QUEENS PLAZA NORTH
BQE
LONG ISLAND EXPRESSWAY
UNION TURNPIKE
JACKIE ROBINSON PARKWAY
NORTH CONDUIT AVENUE
WOODHAVEN BOULEVARD
VAN WYCK EXPRESSWAY
BELT/ SOUTHERN PARKWAY
NASSAU EXPRESSWAY
BELT/SHORE PARKWAY
CROSS BAY BOULEVARD
CROSS BAY PARKWAY
ROCKAWAY BOULEVARD
BEACH CHANNEL DRIVE
SEAGIRT BOULEVARD
ROCKAWAY BEACH BOULEVARD
SEA BEACH COURT
ROCKAWAY BREEZY BOULEVARD
401
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Legend
Bridges In Parks Community Board
DOT Bridges
Major Roadway
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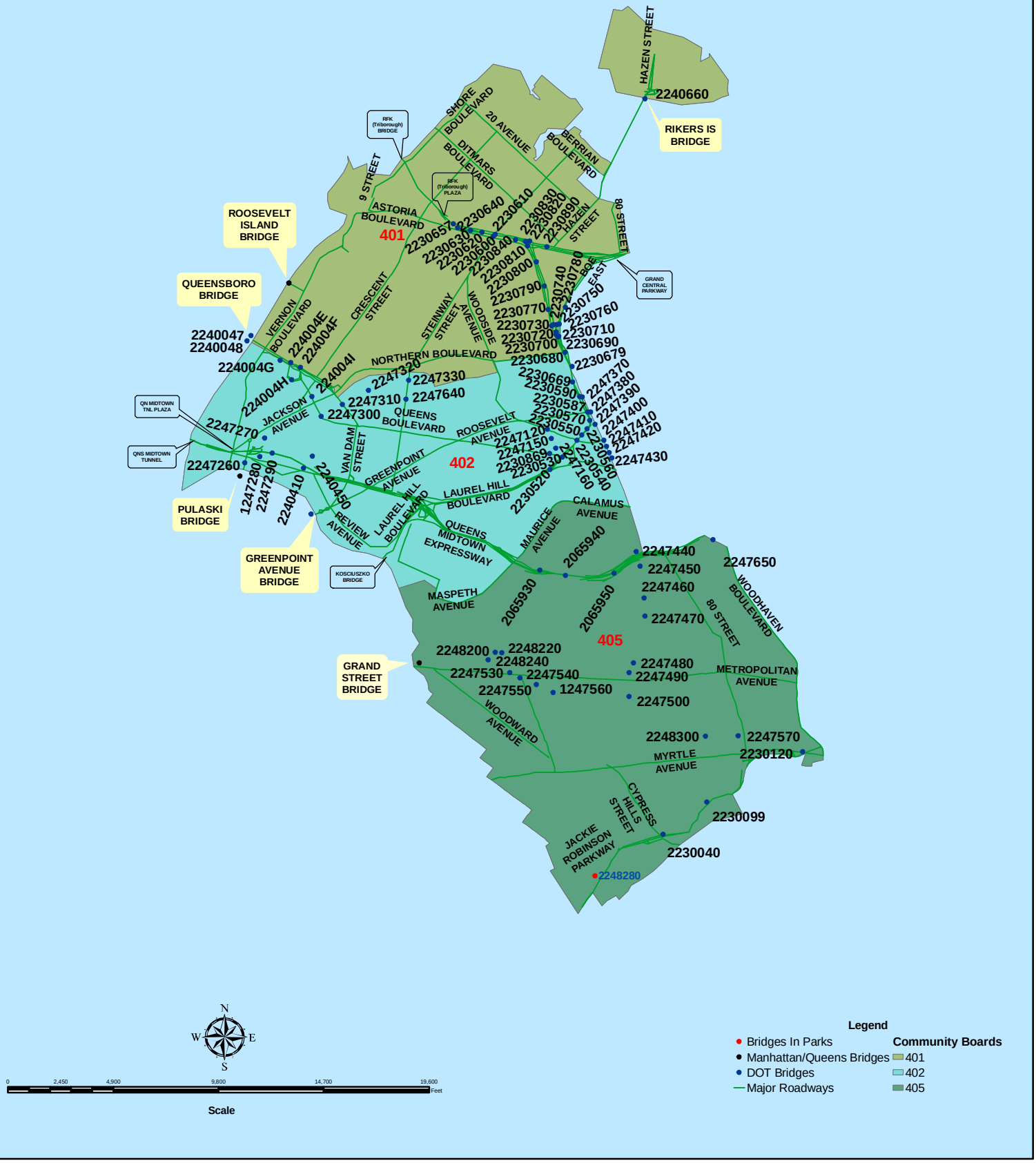
QUEENS
CB 401, 402, 405 DETAIL



STATEN ISLAND