

2006 NEW YORK CITY BRIDGES AND TUNNELS ANNUAL CONDITION REPORT



New York City
Michael R. Bloomberg, Mayor



New York City
Department of Transportation
Iris Weinshall, Commissioner

NEW YORK CITY DEPARTMENT OF TRANSPORTATION DIVISION OF BRIDGES 2006 BRIDGES AND TUNNELS ANNUAL CONDITION REPORT



Dancers Camille A. Brown, Juel Lane, and Dana Marie Ingraham on the Brooklyn Bridge Walkway.
(Credit: Matthew Karas)

Michael R. Bloomberg, Mayor

Iris Weinshall, Commissioner

Judith E. Bergtraum, First Deputy Commissioner

Henry D. Perahia, P.E., Chief Bridge Officer

Russell Holcomb, P.E., Deputy Chief Engineer, Maintenance, Inspections & Operations

Lawrence King, P.E., Deputy Chief Engineer, Roadway Bridges

Kamal Kishore, P.E., Deputy Chief Engineer, Engineering Review & Support

Albert P. Novak, P.E., Deputy Chief Engineer, Specialty Engineering & Construction

Jay Patel, P.E., Deputy Chief Engineer, East River & Movable Bridges

Jennifer Dee-Leibman, Chief Staff Manager/Executive Director, Community Affairs

Dorothy Roses, Executive Director, Management & Support Services

Contents

Acknowledgements	iii
Commissioner's Message	iv
Section 1 2006 Executive Summary	1
Section 2 2006 Division Overview	3
Section 3 2006 Chronology	10
Section 4 2006 Innovations and Accomplishments	44
Section 5 2006 Bridge Capital Program – Appendix A	139
Section 6 2006 Flag Conditions – Appendix B	154
Section 7 2006 Inventory – Appendix C	159
Section 8 2006 Glossary of Bridges	211
Section 9 Components of the Preventive Maintenance Program	228
Section 10 Maintenance Personnel Resources – 2006 vs. 1900	237
Section 11 Bridge Inspection Equipment List	239
Section 12 2006 Motion Picture, Television, Video, and Still Photography Highlights	240
Section 13 Suggested Reading	244
Section 14 2006 In Memoriam	251
Section 15 2006 Inventory Location Maps	252

Acknowledgements

Research and Analysis

For their contributions and assistance in the preparation of this report, the Division of Bridges would like to thank the following: Hasan Ahmed, Robert Appel, Balram Chandiramani, Robert Cohen, Beatriz Duran, Lawrence Fletcher, James Gallagher, Yanina Goldfeld, Abul Hossain, Sudhir Jariwala, Paul Kahn, George Kern, Larry King, Kamal Kishore, Walter Kulczycki, Joseph Lamberson, Doreen Langhorne, Leon Levit, Reza Lotfi, Darlene Lucchese, Ali Mallick, Kevin McNulty, NYSDOT, Solademi Olajide, Shant Rally, Kalpa Ramachandran, Abdur Razzaq, Javed Riaz, Vera Ribakove, Dorothy Roses, Dinesh Shah, Mahabal Shah, Chris Sklavounakis, Jennie Too, Thomas Whitehouse, and Antoinette Zeitoun.

Photography

For the photographs used in this report, the Division of Bridges would like to thank the assistance of the following: Syed Alam, Fred Arzideh, Peter Basich, Keith Burrowes, Hani Faouri, Christopher Gilbride, Russell Holcomb, Daniel Hom, Matthew Karas, Nasir Khanzada, Jagtar Khinda, George Klein, Thomas Leung, Avelino Leyco Jr., Daniel Lima, Kevin McNulty, Gholamali Mozaffari, Anatoly Orlov, Vera Ovetskaya, Sergiy Parayev, Roly Parroco, Pinakin Patel, Cesar Pazmino, Devin Plantamura, Mohammad Rahman, Carlos Ramirez, Joseph Saverino, Paul Schwartz, Muhammad Siddiqui, Jonathan Smith, R. Smith, Vadim Sokolovsky, Hany Soliman, Reza Taheri, Samuel Teaw, Edward Timbers, and Bojidar Yanev.

Cover Photograph

View From Brooklyn of the Manhattan Bridge.

Cover Design

Michele N. Vulcan, Director of Analysis – Bridges
David Moidel – NYCDOT Director, Design Services
Diane Murphy, Design Services

Procurement of Printing Services

James Gallagher, Director, Budget & Fiscal - Bridges

Map and Inventory Preparation

Kevin McNulty, Director, Bridge Management Unit
Fitz Arthur Brown and Lidiya Akhmedova, Bridge Management Unit
Magda Kaminska, NYSDOT Region 11

Report Compiled and Prepared by:
Michele N. Vulcan, Director of Analysis - Bridges

New York City Department of Transportation
Division of Bridges
2 Rector Street, 8th Floor
New York, New York 10006

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 2006 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 2006 calendar year.

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, 23,968 square feet of concrete were used to renew sidewalks, curbs, and road decks; some 11,339 cubic yards of debris were removed; 1,208 bridge drains were cleaned; and crews eliminated 6,798,671 square feet of graffiti. DOT crews also eliminated 425 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 Gold Award for the replacement of the Andrews Avenue Bridge over LIRR, as well as the replacement of the median barrier on the Belt Parkway Bridge over Mill Basin.
- The American Council of Engineering Companies selected the replacement of the Third Avenue Bridge as a 2006 National Finalist.
- The Art Commission's Design Award for the Seven Belt Parkway Bridge reconstruction project.
- *New York Construction Magazine* selected the reconstruction of the Metropolitan Bridge over the English Kills for an Award of Merit as one of the best bridge projects of 2006.
- The South Asian American Association's Outstanding Achievement Award recognized the commitment and dedication of Deputy Chief Engineer Kamal Kishore.

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,



Iris Weinshall
Commissioner

EXECUTIVE SUMMARY

Inventory

In calendar year 2006, the inventory of bridges under the jurisdiction of the Division decreased to 787. 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.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Poor	40	24	16	13	9	8	4	6	4	3
Fair	530	516	507	481	459	451	429	456	458	456
Good	145	154	160	180	196	202	209	212	210	210
Vgood	55	75	81	85	88	94	111	116	118	118
Unrated										
	770	769	764	759	752	755	753	*790	790	787

* 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."

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).

2006 was a year in which the use of incentives/disincentives resulted in the early completion of two bridge projects:

The reconstruction of the **17th Avenue Bridge over NYCT** was substantially completed on February 24, 2006. The contract provided incentives of \$10,000 per calendar day for early completion of the project, with a maximum incentive amount of \$150,000. The reconstruction project was substantially completed 15 days early, thus earning the contractor the maximum amount.

The replacement of the **Belt Parkway Bridge over Mill Basin** bridge grid deck was substantially completed on December 22, 2006. The contract provided incentives/disincentives of \$10,000 per calendar day, with a maximum incentive amount of \$300,000, to ensure timely completion of the construction activities that impeded traffic. The contractor earned the maximum amount for this project.

EXECUTIVE SUMMARY

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 2005-2006, a total of 25,875 gallons of anti-icing chemicals were applied on the roadways of all four East River Bridges.

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 in progress, and will include plans to mitigate the impact of construction on the bodies of water. The construction work is expected to commence in 2008.

2006 Awards

In 2006, the outstanding work of the Division was recognized by the receipt of several awards. In April 2006, the American Council of Engineering Companies of New York selected the replacement of the Andrews Avenue Bridge over LIRR, as well as the replacement of the median barrier on the Belt Parkway Bridge over Mill Basin for Gold Awards (in the transportation engineering and structural systems categories) in its 2006 Engineering Excellence Awards. In May 2006, the American Council of Engineering Companies selected the replacement of the Third Avenue Bridge over the Harlem River as a 2006 National Finalist in its 2006 Engineering Excellence Awards.

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

In November 2006, the South Asian American Association's Outstanding Achievement Award recognized the commitment and dedication of Deputy Chief Engineer Kamal Kishore.

In December 2006, *New York Construction Magazine* selected the reconstruction of the Metropolitan Bridge over the English Kills for an Award of Merit as one of the best bridge projects of 2006.

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.

DIVISION OVERVIEW

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 787 bridges (including 6 tunnels), and 67 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 **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.

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 spot and salt splash/spot painting. Salt splash/spot painting is performed five years after full steel painting, and spot painting is performed four years after salt splash/spot. Three years after spot, we once again perform full steel painting. The interval between full steel applications is 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.

DIVISION OVERVIEW

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. 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 Deputy Chief Engineer for Specialty Engineering and Construction 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/reconstruction 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*.

DIVISION OVERVIEW

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. 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. This unit 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, 617 City owned retaining walls (along major streets) have been inspected and inventoried; 25 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.

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.

DIVISION OVERVIEW

Off-site Quality Assurance services relative to a wide variety of basic and manufactured construction materials including concrete, asphalt, soils, reinforcing steel, bridge bearings, 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, Queensboro, 145th Street, 20th Avenue, Hamilton Avenue, and Grand Concourse Bridges.

Through its *Environmental Engineering Unit*, Quality Assurance also oversees the implementation of the Final Environmental Impact Statement (FEIS) 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 has been instrumental in preparing and obtaining waste water discharge permits for numerous projects involving the generation and disposal of waste water, such as the seismic drilling of the riverbed at the Brooklyn Bridge. The unit prepared and obtained 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 has provided environmental oversight on major capital projects such as the Third Avenue Bridge, Willis Avenue Bridge, 145th Street Bridge, Hamilton Avenue Bridge, Manhattan Bridge, Williamsburg Bridge and the Queensboro Bridge, as well as Component Rehabilitation projects and Design/Build projects.

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 787 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.

DIVISION OVERVIEW

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, Triborough Bridge and Tunnel, 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 2006 Bridge Operations effected a total of 6,336 openings, 5,347 of which allowed 9,006 vessels to pass beneath the bridges. The remaining 989 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.

DIVISION OVERVIEW

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 **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 six primary sections: ***Office of the Executive Director, Administrative, Budget, Capital Procurement, Capital Coordination and Truck Sections***. 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 (EEO) enforcement, confidential investigations, Bridges’ Engineering Service Agreements, space allocation, mail delivery, and special projects, the ***Executive Director*** oversees, on an executive level, the following areas and functions:

The ***Director of the Administrative 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 EEO 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 Director of Administration also serves as the Deputy Director of the Bureau of Management and Support Services, and assumes the responsibilities of the Executive Director in that person’s absence.

The Director of the Administrative Section also oversees the following two 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 NYCDOT Communication Center; and collects required documentation from field personnel for checking Driver Certifications with the Department of Motor Vehicles (DMV).

DIVISION OVERVIEW

The ***Director of the Budget Section*** 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 (ACCO). The duties of this unit include: overseeing the Division's capital consultant contracts from inception to completion; 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 315 (40%) 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.

Our Legal Department and Division engineering staff work together to clarify force account language in an attempt to avoid ambiguity. New agreements are being designed to specify clearly when notices for outages or flagging protection are required, who will be responsible when outage/flagging is canceled, and specify those documents that can be audited to expedite reimbursement of bills. These additions will streamline payment processing. The use of a Master Agreement is not feasible since each railroad has its own rules and regulations governing its employees, its own scheduling procedures and different billing requirements/procedures.

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.

This approval process typically requires three to six months to complete. A tracking process for change orders has been implemented; it reduces the time for the approval process to one-and-a-half to three months.

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 \$5 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; developing and maintaining criteria by which the City's involvement in joint City/State projects is analyzed and evaluated; and determining applicability of projects for funding through the Federal Inter-modal Surface Transportation Efficiency Act (ISTEA).

The ***Truck Section*** issues Annual Overweight Load Permits (renewals only), Annual Self-Propelled Crane Permits, and Daily Oversize/Overdimensional/Supersize Truck Permits, all in accordance with the New York City Department of Transportation Policy and Procedures and the New York City Traffic Rules and Regulations.

JANUARY

Grand Concourse Bridge over East 161st Street (Bronx)

A Notice to Proceed for the reconstruction of this bridge was issued to the contractor with a start date of January 3, 2006.

Officer Francis Hennessy Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on January 11, 2006 in tribute to Police Officer Francis Hennessy of the 70th Precinct, who died in the line of duty on January 10, 2006. Officer Hennessy, 35, was an eight year veteran of the department. He earned three departmental commendations for excellence, and made 75 arrests in his career. The flags remained at half-mast through January 14, 2006.



Brooklyn Bridge Flag at Half-Mast.

Anti-Icing

From January 14 through January 16, 2006, Division personnel applied anti-icing chemicals 12 times to the East River bridges. Icicle patrols monitored the FDR Drive, the Battery Park Underpass, the Brooklyn-Queens Expressway, and the Cross Bronx Expressway.



Inspecting the Williamsburg Bridge South Footwalk After Snow Removal.

Hamilton Avenue Asphalt Plant (Brooklyn)

On January 6, 2006, Division ironworkers repaired the plant's rap bin and rollers. From January 13 through January 16, 2006, they repaired the plant's main drum and rebuilt the teeth of the crusher shaft. On January 21, 2006, they repaired the plant's crusher, drum, and scale.

Roosevelt Avenue Bridge over Brooklyn-Queens Expressway (Queens)

On January 16, 2006, a tanker truck carrying 8,000 gallons of gasoline, traveling through the work zone of the NYSDOT contract for the replacement of the City-owned bridge overturned, hit the supports of an incomplete temporary bridge, and burst into flames, bringing down portions of the temporary bridge. After the fire was brought under control, engineers from NYSDOT and NYCDOT inspected the bridge. No significant fire damage was observed. By approximately 5:00 AM on January 17, 2006, the three westbound lanes and one eastbound lane were clear of debris and fire suppression material, and were reopened. The two remaining eastbound lanes were reopened at approximately 4:30 PM that afternoon.



Putting Out the Fire on the Roosevelt Avenue Bridge. (Credit: Devin Plantamura)



Inspecting the Damage. (Credit: Russell Holcomb)

Officer Kevin Lee, Ms. Coretta Scott King, and Officer Eric Hernandez Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters in late January in tribute to Police Officer Kevin Lee of the 19th Precinct, who died in the line of duty on January 27, 2006. Officer Lee, 31, was a 10 year veteran of the department, who had also served five years as an auxiliary officer. He was a member of the department's Grand Larceny Unit.

The flags remained at half-mast in tribute to Ms. Coretta Scott King, who died on January 31, 2006. Ms. King, 78, was the widow of the Reverend Dr. Martin Luther King, and continued his work to foster racial peace and nonviolent social change. She was an advocate for women's rights, and the struggle against apartheid in South Africa.

The flags remained at half-mast in tribute to Police Officer Eric Hernandez of the 52nd precinct, who died on February 8, 2006, as a result of injuries sustained on January 28, 2006 after being assaulted and subsequently shot in the Bronx. Officer Hernandez, 24, was a two year veteran of the department. The flags remained at half-mast until February 15, 2006.

Borden Avenue Bridge over Dutch Kills (Queens)

Cleaning and painting of the bridge operator house, which began in December 2005, was completed in January 2006.

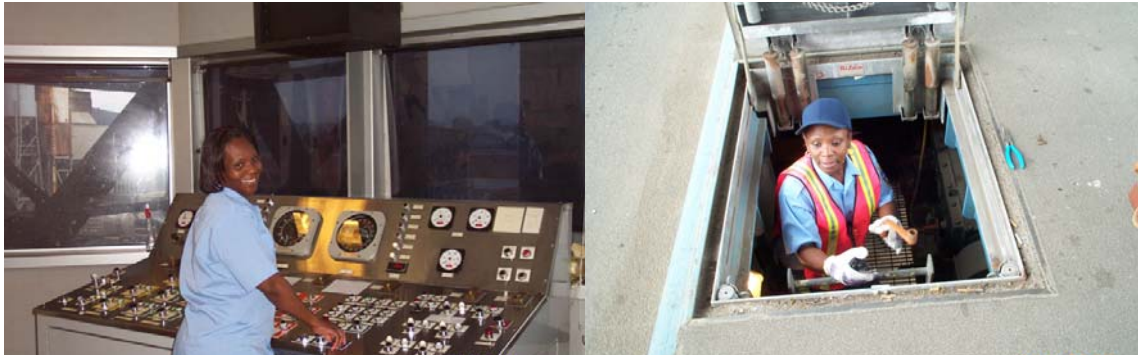
Union Street over the Gowanus Canal (Brooklyn)

Cleaning and painting of the bridge operator house, which began in December 2005, was completed in January 2006.

FEBRUARY

9th Street Bridge over Gowanus Canal (Brooklyn)

Delonda Bates-Pinkney, Bridge Operator-in-Charge at the 9th Street Bridge, was the subject of a feature in the February 4, 2006 edition of the *New York Times*. The article recounted a typical opening of the bridge to marine traffic, as well as Ms. Bates-Pinkney's other duties beyond operating the control panel.



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)

Anti-Icing

The storm of February 11 and 12, 2006 dumped 26.9 inches of snow in Central Park, the highest tally since records started being kept in 1869. The old record was 26.4 inches in December 1947. 24.5 inches fell in the Bronx, 15 inches in Staten Island, 19 inches in Brooklyn, 25.4 inches at La Guardia Airport, and 16.7 inches at JFK Airport. From February 11 through February 13, 2006, Division personnel applied 6,650 gallons (10 applications) of anti-icing material and 16 tons (5 applications) of de-icing material to the East River Bridges. Priority overpasses were cleared and icicle patrols monitored the FDR Drive, the Battery Park Underpass, the Brooklyn-Queens Expressway, and the Cross Bronx Expressway.



Preparing for the Storm. The Brooklyn Bridge Team: Director of Bridge Preventive Maintenance Paul Schwartz, Highway Repairer Timothy Pope, Supervisor Highway Repairer Salvatore Gioia, Highway Repairer James Torain, Executive Director of Bridge Preventive Maintenance and Repair Tom Whitehouse, Area Supervisor Highway Maintenance James Campbell, Area Supervisor Highway Maintenance Michael Cumiskey, Highway Repairer Joseph Ross, Assistant City Highway Repairer Donato Ruggiero, Supervisor Highway Repairer Stephen Harbeck, and Highway Repairer Mike Biancaniello. The Manhattan Bridge Team: Highway Repairer Luis Soto, Supervisor Highway Repairer Isidro Suarez, Area Supervisor Highway Maintenance James Campbell, Assistant City Highway Repairer Joseph Davis, Assistant City Highway Repairer Willie Easterling, Highway Repairer Anna Fittipaldi, and Supervisor Highway Repairer Como Mordente. (Credit: Christopher Gilbride)



Preparing for the Storm. The Queensboro Bridge Team: Assistant City Highway Repairer Carlos Ortiz, Supervisor Highway Repairer Joseph Lopez, Cement Mason Clifton Gravesande, Traffic Device Maintainer Peter Roth, Highway Repairer Thomas Engelken, Highway Repairer Steven Borowik, Area Supervisor Highway Maintenance James Campbell, and Supervisor Highway Repairer Abibi O'Campo-Guevara. The Williamsburg Bridge Team: Assistant City Highway Repairer Randy Smith, Highway Repairer Sharon Britt, Supervisor Highway Repairer Salvatore Mazzatenda, Bricklayer Abraham James, Assistant City Highway Repairer Anita Ramos, Area Supervisor Highway Maintenance James Campbell, Supervisor Highway Repairer Thomas Cruz, and Area Supervisor Highway Maintenance Howard Lesser. (Credit: Christopher Gilbride)

Greenpoint Avenue Bridge over Newton Creek (Brooklyn/Queens)

At approximately 4:15 AM on February 13, 2006, the bridge was taken out of marine service due to the heavy snow. The bridge was placed back in service to marine traffic at 2:20 PM that afternoon.

Pulaski Bridge over Newtown Creek (Brooklyn/Queens)

At approximately 4:15 AM on February 13, 2006, the bridge was taken out of marine service due to the heavy snow. The bridge was placed back in service to marine traffic at 1:15 PM that afternoon.

17th Avenue Bridge over NYCT (Brooklyn)

The reconstruction of this bridge, which began on May 17, 2005, was substantially completed on February 24, 2006, 15 days early, earning the contractor the maximum incentive of \$150,000.

Bruckner Expressway over Westchester Creek (Bronx) (a.k.a. Unionport Bridge)

Cleaning and painting of the bridge operator house, which began in January 2006, was completed in February 2006.

Pulaski Bridge over Newtown Creek (Brooklyn/Queens)

Cleaning and painting of the bridge operator house, which began in January 2006, was completed in February 2006.

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

Cleaning and painting of the bridge operator house began and was completed in February 2006.

MARCH

145th Street Bridge over Harlem River (Bronx/Manhattan)

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.



Aerial View of 145th Street Bridge. Demolition of Manhattan Approach.

Hamilton Avenue Asphalt Plant (Brooklyn)

On March 3, 2006, Division ironworkers performed emergency repairs on the runners and ring of the mixing drum. On March 11, 2006, they performed emergency repairs on the drum's scrapers, flights, and access doors. On March 25, 2006, they repaired the drum, scale, and conveyor frame.

Grand Concourse Bridge over East 161st Street (Bronx)

Stage I reconstruction of the bridge began on March 27, 2006.



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

Queensboro Bridge

March 30, 2006 marked the 97th anniversary of the opening of the bridge.



Queensboro Bridge. (Credit: Michele N. Vulcan)

Brooklyn Bridge

Responding to DOT's announcement in March 2006 that a cache of Civil Defense emergency supplies were found inside the masonry foundations of the Brooklyn Bridge in Lower Manhattan, print, TV, and wire service reporters were allowed to photograph the items and interview the DOT personnel who came upon the items. The items, dated 1957 (year of the USSR launch of the Sputnik satellite) and 1962 (year of the Cuban missile crisis), included some 352,000 survival crackers, 50 containers to hold water and serve as commodes, medical kits, and waterproof paper blankets (labeled "for use only after enemy attack"). The items will be inventoried and sent to a civil defense museum.



Crackers (An Estimated 140 Boxes, Each Containing Six Cans, For a Total of Some 352,000 Crackers) and Drinking Water.



Medical Supplies (Including Dextran, Used to Treat or Prevent Shock) and Blankets.



New York City Publicity Posters, Found With the Supplies. ERB Section Engineer-in-Charge Bala Nair; Executive Director of Bridge Preventive Maintenance and Repair Thomas Whitehouse; Director of Bridge Repair George Klein; Director of Bridge Preventive Maintenance Paul Schwartz; and Supervisor Carpenter Joseph Vaccaro With the Civil Defense Supplies.

APRIL

Award

In April 2006, the American Council of Engineering Companies of New York selected the replacement of the Andrews Avenue Bridge over LIRR for a Gold Award in the transportation engineering category in its 2006 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.

The Andrews Avenue Bridge was built in 1937. A Notice to Proceed for the \$3.7 million replacement of this bridge was issued to the contractor with a start date of August 4, 2003. The bridge was completely closed beginning in winter 2004, and the new bridge was fully re-opened to traffic on November 24, 2004. The new bridge, designed by the Division's In-House Design Section, accommodates two 3.6-meter traffic lanes and two 2.5-meter wide sidewalks to better serve the community. The old four-span bridge was completely removed and replaced with a single span concrete-filled grid deck with multiple weathering steel stringers and girders supported by precast modules for the abutments and wing walls. This was the first use of this material in a NYCDOT bridge project. The proposed geometry of the south approach roadway required the construction of a retaining wall at the edge of a soccer field, lumber yard, and other private properties, due to the rise in profile. The precast wall required the excavation of only half a meter as compared to about two meters with the use of conventional cast-in-place concrete. The installation of these wall units greatly minimized the disturbance to the adjacent private

CHRONOLOGY

properties, and enabled installation of the precast units in a relatively short time, even in winter. Precast wall units also improved the aesthetics of the playground and the area within the project limits. The use of precast concrete modules assured better quality concrete, and ease of installation reduced the total construction time from 15 months to 9 months. The use of weathering steel for bridges over railroads eliminates expensive costs involved in maintenance painting. This project was substantially completed on February 1, 2005.



Andrews Avenue Bridge Prior To Reconstruction. Installing Pre-Cast T-Wall for the Modular Abutments. Constructing the Third Level of the Pre-Cast Abutment. (Credit: Syed Alam)



Installation of the Grid Deck. Newly Completed Andrews Avenue Bridge (Credit: Syed Alam)

Award

In April 2006, the American Council of Engineering Companies of New York selected the replacement of the median barrier on the Belt Parkway Bridge over Mill Basin for a Gold Award in the structural systems category in its 2006 Engineering Excellence Awards.

On November 6, 2002, 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 existed relative to the movable bridge carrying the Belt Parkway over Mill Basin.

A Notice to Proceed for this \$3 million emergency contract was issued to the contractor with a start date of December 23, 2002. The project included an incentive for early fabrication completion of \$10,000 per day with a cap of \$50,000, and an incentive for early construction completion of \$10,000 per day with a cap of \$70,000. There were disincentives of the same amounts for a late finish with no limit to the amount of penalty.

The contractor completed the emergency median guide rail installation and re-opened all lanes to traffic on March 29, 2003, six days ahead of schedule, thus collecting an incentive of \$60,000. The bridge was re-opened to marine traffic on April 3, 2003. The emergency project on this bridge, which began on December 23, 2002, was substantially completed on April 5, 2003.

Crash tests were performed at a testing site on a copy of the new barrier, resulting in the need to make some modifications to the barrier that was installed. Additional crash tests were completed in 2004, and further modifications were made. The new barrier has already proved its worth by saving lives on more than one occasion. Recent accidents at the site have resulted in property damage only.



Deputy Director of Design-Build Beatriz Duran, Andre Celestin, and Director of Design-Build/Emergency Contracts Chris Sklavounakis at the Award Presentation. New Median Barrier of the Mill Basin Bridge (Credit: Vera Ovetskaya)

West 181st Street Bridge over Ramp to the George Washington Bridge (Manhattan)

Cleaning and painting of the bridge, which began in February 2006, was completed on April 6, 2006.

Fifth Annual “Take Our Children to Work Day”

On April 27, 2006, as part of the Agency’s fifth annual “Take Our Children to Work Day,” Division personnel hosted children at several trades’ shops at Kent Avenue, and at Division headquarters at 2 Rector Street. The children were treated to demonstrations by the electricians, bridge painters, carpenters, and ironworkers.



Executive Director of Inspections and Bridge Management Dr. Bojidar Yanev Lecturing. (Credit: Sergiy Parayev) Chief Bridge Officer Henry Perahia Interviewing a Future Engineer. (Credit: Michele N. Vulcan)



Chief Bridge Officer Henry Perahia, Dr. Bojidar Yanev, and Deputy Director of In-House Painting Earlene Powell With the Children. (Credit: Michele N. Vulcan) Future Ironworker Demonstrating Equipment.

CHRONOLOGY



Staff and Children on Their Way to Brooklyn. Electricity Demonstration by Electrician Jerry Salzman. Supervisor Electrician Ben Cipriano (on Right) Explaining the Necklace Lights. (Credit: Earlene Powell)



Children Assisting the Bridge Painters in Painting Movable Bridge Gates. Supervisor Bridge Repairer & Riveter Steve Havemann Demonstrating Tools. (Credit: Earlene Powell)



Bridge Repairer & Riveter William Dolan Preparing to Cut a Steel Beam. Bridge Repairer & Riveter Alfred Benecke Demonstrating Equipment. Supervisor Carpenter Joseph Vaccaro (Back to Camera) Exhibiting Wooden Items. (Credit: Earlene Powell)



Carpenters William Sic and Andrew Myjer Demonstrating Equipment And Shop Safety Precautions. (Credit: Earlene Powell)



Bridge Repairer & Riveters Gonzalo Montano and Daniel Martin, Supervisor Bridge Repairer & Riveter Steve Havemann, and Bridge Repairer & Riveter Alfred Benecke With the Children. Carpenters Patrick Burns, Daniel O'Sullivan, William Sic, Supervisor Carpenter Joseph Vaccaro, and Carpenter Andrew Myjer With the Children. (Credit: Earlene Powell)



Actor Mark Wahlberg Posing With the Children During a Break From Filming "We Own The Night." (Credit: Earlene Powell)

Hamilton Avenue Asphalt Plant (Brooklyn)

On April 1, 22, and 29, 2006, Division ironworkers repaired the plant's conveyors and drum.

MAY

Award Finalist

In May 2006, the American Council of Engineering Companies selected the replacement of the Third Avenue Bridge as a National Finalist in the competition for its 2006 Engineering Excellence Awards.



Third Avenue Bridge.

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

May 1, 2006 marked the 111th anniversary of the opening of the bridge.



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

East Tremont Avenue Bridge over Bronx River (Bronx)

Cleaning and painting of the bridge, which began in May 2005, was completed on May 5, 2006.

Hamilton Avenue Asphalt Plant (Brooklyn)

On May 6, 2006, Division ironworkers repaired the plant's cyclone, piston, and main drum.

29th Annual Five Borough Bike Tour

In preparation for the 42-mile Five Borough Bike Tour on May 7, 2006, division personnel moved Jersey barriers for a route crossover on the Queensboro Bridge and swept all the bridges along the tour route.

Carroll Street Bridge over the Gowanus Canal (Brooklyn)

On May 10 and 18, 2006, Bridge Operations personnel hosted first grade children from PS #321 on class trips to the bridge. Students, teachers, and parents enjoyed their visit.



Bridge Operator-in-Charge Tony Allen Answering Questions. Mr. Allen Has Been With DOT Since 1982. Bridge Operator Patrick Telfort and Supervisor Bridge Operator Mohamed Adel Tork With the Children.

Brooklyn Bridge

May 24, 2006 marked the 123rd birthday of the bridge.



Water Taxi Dock Near the Brooklyn Bridge. Roebling Memorial Plaque. (Credit: Russell Holcomb)

Page Avenue Bridge over SIRT South Shore (Staten Island)

Cleaning and painting of the bridge, which began in April 2006, was completed on May 24, 2006.



Page Avenue Bridge.

Fort Tryon Place Bridge over Entrance from Riverside Drive (Manhattan)

The component rehabilitation of this bridge, which began on October 10, 2005, was substantially completed on May 25, 2006.

Bronx River Parkway Bridge over Boston Road/Bronx Zoo (Bronx)

Cleaning and painting of the bridge began and was completed in May 2006.



Bronx River Parkway Bridge.

Myrtle Avenue Bridge over Jackie Robinson Parkway (Queens)

Cleaning and painting of the bridge began and was completed in May 2006.



Myrtle Avenue Bridge.

Southern Boulevard Bridge over Bronx Pelham Parkway (Bronx)

Cleaning and painting of the bridge began and was completed in May 2006.



Southern Boulevard Bridge.

JUNE

Williamsburg Bridge

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.



Priming Application and Asphalt Paving Operation on the South Outer Roadway.

Crotona Avenue Bridge over Bronx Pelham Parkway (Bronx)

Cleaning and painting of the bridge, which began in May 2006, was completed on June 19, 2006.

Lincoln Road Bridge over BMT Subway (Brooklyn)

The reconstruction of this bridge, which began on April 26, 2004, was substantially completed on June 20, 2006.

Grand Concourse Bridge over East 161st Street (Bronx)

Stage IB reconstruction of the bridge began on June 21, 2006.

CHRONOLOGY



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

Cypress Hills Cemetery Road Bridges (West & East) over Jackie Robinson Parkway (Queens)

The project to demolish these bridges was substantially completed on June 27, 2006.



Demolishing the Bridges. New Sign.

Hamilton Avenue Asphalt Plant (Brooklyn)

On June 30, 2006, Division ironworkers installed a new cone for the plant's exhaust system.

JULY

Hamilton Avenue Bridge over Gowanus Canal (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 1:30 PM on July 2, 2006. It was returned to service at 12:45 AM on July 3, 2006. Further heat expansion closed the bridge to marine traffic from 2:45 AM on July 5, 2006 until 5:20 AM that morning.

Manhattan Bridge

Contract #10, which began in March 2001, was substantially completed on July 11, 2006.

Hamilton Avenue Bridge over Gowanus Canal (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 6:30 PM on July 10, 2006. It was returned to service at 4:15 AM on July 11, 2006. Further heat expansion closed the bridge to marine traffic from 4:00 PM on July 12, 2006 until 6:30 AM on July 13, 2006.

Belt Parkway Bridge over Rockaway Parkway (Brooklyn)

Cleaning and painting of the bridge, which began in October 2005, was completed on July 12, 2006.

Westchester Avenue Bridge over Hutchinson River Parkway (Bronx)

On July 14, 2006, Division ironworkers addressed red and yellow flags, repairing two lateral bracings (at the first bay of the south fascia girder) and a cracked bottom flange, and installing new stiffeners and filler plates. These repairs addressed the damage caused by a truck hit to the bridge on May 24, 2006.

Hamilton Avenue Asphalt Plant (Brooklyn)

On July 15, 2006, Division ironworkers repaired the plant's scale, drum, and rap bin.

Bruckner Expressway over Westchester Creek (Bronx) (a.k.a. Unionport Bridge)

Due to heat expansion, the bridge was closed to marine traffic beginning at 3:06 PM on July 16, 2006. It was returned to service at 12:05 AM on July 17, 2006.

Willis Avenue Bridge over Harlem River (Bronx/Manhattan)

Due to heat expansion, the bridge was closed to marine traffic beginning at 2:05 PM on July 16, 2006. It was returned to service at 1:25 AM on July 17, 2006.

Belt Parkway Bridge over Mill Basin (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 9:15 AM on July 18, 2006. It was returned to service at 10:29 PM that night.

Greenpoint Avenue Bridge over Newton Creek (Brooklyn/Queens)

Due to heat expansion and periods of low voltage, the bridge was closed to marine traffic beginning at 12:40 PM on July 17, 2006. It was returned to service at 2:05 AM on July 18, 2006. Further heat expansion and low voltage closed the bridge to marine traffic from 5:30 AM on July 18, 2006 until 3:05 AM on July 19, 2006, from 11:40 AM on July 19, 2006 until 7:10 PM that night, and from 9:15 AM on July 20, 2006 until 8:30 AM on July 21, 2006.

Award

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. The Art Commission is New York City's design review agency. Since 1983, the Commission has recognized outstanding public projects with its Annual Awards for Excellence in Design.



Belt Parkway Bridge Design Renderings.

Hamilton Avenue Bridge over Gowanus Canal (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 2:15 PM on July 19, 2006. It was returned to service at 3:05 AM on July 20, 2006.

Highland Boulevard Bridge (Eastbound) over Jackie Robinson Parkway (Brooklyn)

Cleaning and painting of the bridge, which began in June 2006, was completed on July 20, 2006.

Congressman Thomas J. Manton Tribute

The American flags on the Brooklyn Bridge were lowered to half mast by Division painters on July 24, 2006, in tribute to Thomas J. Manton, former seven-term U.S. Congressman and NYC Councilmember who was chairman of the Queens Democratic party for the past two decades. He died on July 22, 2006 at age 73. Before starting his political career, Mr. Manton served as a U.S. Marine during the Korean War and was a New York City Police Officer. The flags remained at half-mast through July 28, 2006.

PS-5 Pedestrian Bridge over 10th Avenue (Manhattan)

Cleaning and painting of the bridge, which began in June 2006, was completed on July 27, 2006.



PS-5 Pedestrian Bridge. (Credit: Michele N. Vulcan)

Richmond Avenue Bridge over Richmond Creek (Staten Island)

Cleaning and painting of the bridge, which began in June 2006, was completed on July 28, 2006.



Richmond Avenue Bridge.

AUGUST

Manhattan Bridge

Effective August 1, 2006, the south walkway was closed to pedestrians until October 9, 2006. For the duration of this closure, the north bikeway served as a shared use facility for both pedestrians and bicyclists.



North Bikeway Approach Ramp in Brooklyn.

Belt Parkway Bridge over Mill Basin (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 2:21 AM on August 1, 2006. It was returned to service at 7:00 AM on August 4, 2006.



Bridge Operator-In-Charge Nestor Ortiz,
Assigned to the Mill Basin Bridge.

Greenpoint Avenue Bridge over Newton Creek (Brooklyn/Queens)

Due to heat expansion, the bridge was closed to marine traffic beginning at 2:35 PM on August 1, 2006. It was returned to service at 6:20 AM on August 4, 2006.

3rd Street Bridge over Gowanus Canal (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 8:25 AM on August 3, 2006. It was returned to service at 6:55 AM on August 4, 2006.

Grand Concourse over East Tremont Avenue (Bronx)

Cleaning and painting of the bridge, which began in July 2006, was completed on August 4, 2006.

Hamilton Avenue Bridge over Gowanus Canal (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 2:20 PM on August 1, 2006. It was returned to service at 3:50 AM on August 5, 2006.

9th Street Bridge over Gowanus Canal (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 11:40 AM on August 1, 2006. It was returned to service at 4:20 PM on August 5, 2006.

Whitestone Expressway Bridge NB over Cross Island Parkway (Queens)

Cleaning and painting of the bridge was completed on August 9, 2006.

Hamilton Avenue Asphalt Plant (Brooklyn)

On August 12, 2006, Division ironworkers replaced the shell of the main drum. On August 19, 2006, they repaired the drum, chute, and shakers. On August 26, 2006, they repaired the plant's cyclone and chutes.

Hylan Boulevard Bridge over Lemon Creek (Staten Island)

Cleaning and painting of the bridge began and was completed on August 25, 2006.

Firefighter Michael C. Reilly, Fire Lieutenant Howard Carpluk, Jr., and Sanitation Worker Michael Occhino Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on August 28, 2006 in tribute to Firefighter Michael C. Reilly of Engine Company 75, Fire Lieutenant Howard Carpluk, Jr. of Engine Company 42, and Sanitation Worker Michael Occhino of Brooklyn South District 11. Firefighter Reilly, 25, a probationary firefighter who graduated from the Fire Academy on July 6, 2006, was fatally injured while battling a three-alarm fire in the South Bronx on August 27. Fire Lieutenant Carpluk, 43, and a 20 year veteran of the department, died on August 28 from injuries he sustained during the same fire. Firefighter Reilly and Fire Lieutenant Carpluk were the 1,133rd and 1,134th members of the New York City Fire Department to make the supreme sacrifice in the Department's 141-year history. Sanitation Worker Michael Occhino, 25, died in the line of duty in a vehicle accident on the Brooklyn-Queens Expressway on August 28, 2006. The flags remained at half-mast until September 3, 2006.

Conference

At the 5th International Cable-Supported Bridge Operators' Conference and LRFD Workshop on Bridge Design and Evaluation, held on August 28 and 29, 2006, Chief Bridge Officer Henry Perahia delivered a keynote session address on the rehabilitation of the lower roadway of the Manhattan Bridge. He also chaired the session on aesthetic and historic bridges.



Chief Bridge Officer Henry Perahia Addressing the Conference. Dr. Khaled Mahmoud, Chief Bridge Officer Henry Perahia, and Dr. Bojidar Yanev During a Panel Discussion.
(Credit: Jagtar Khinda)

SEPTEMBER

East River Bridges

The necklace lighting on the bridges, turned off on the night of July 18, 2006 to conserve power during the heat wave, were turned back on September 5.

Cropsey Avenue Bridge over Coney Island Creek (Brooklyn)

Cleaning and painting of the bridge, which began in September 2005, was completed on September 6, 2006.



Cropsey Avenue Bridge

Hamilton Avenue Asphalt Plant (Brooklyn)

On September 9, 2006, Division ironworkers repaired the plant's crusher, drum, and silo.

Patriot Day and Sanitation Worker Allen Gormely Tribute

The Brooklyn Bridge flags flew at half-mast on September 11, 2006 to commemorate Patriot Day. The flags remained at half-staff in tribute to Sanitation Worker Allen Gormely of Brooklyn South District 13, who died in the line of duty on September 11, 2006. Mr. Gormely, 53, was a 21 year veteran of the department. The flags remained at half-mast until September 18, 2006.

Metropolitan Avenue Bridge over English Kills (Brooklyn)

The reconstruction of this bridge, which began on October 10, 2003, was substantially completed on September 18, 2006.



Tugboat Pushing a Barge Under the Open Metropolitan Avenue Bridge.

San Gennaro Festival

In preparation for the San Gennaro Festival on Mulberry Street, which was held from September 14 through September 24, 2006, Division electricians installed cables, carpenters prepared pedestrian ramps to cover cables, and preventive maintenance crews installed signs. The electrical lines and ramps were maintained throughout the festival. All of the equipment, cables, and ramps were removed on September 25, 2006.



Carpenter Patrick Burns, Supervisor Carpenter Joseph Vaccaro, Electrician Jerry Salzman, Mayor Michael Bloomberg, Electrician John Bayliss, Electrician Raymond Hanley, and Electrician's Helper Richard Parisi at the San Gennaro Festival.

Bay 8th Street Bridge over Belt Parkway (Brooklyn)

Cleaning and painting of the bridge, which began in August 2006, was completed on September 28, 2006.



Bay 8th Street Bridge.

CHRONOLOGY

Manhattan College Parkway Bridge and West 232nd Street Bridge over Henry Hudson Parkway (Bronx)

The reconstruction of these bridges, which began on February 23, 2004, was substantially completed on September 28, 2006.



Completed Manhattan College and West 232nd Street Bridges.

Highway Repairer Nicky Antico Tribute

Highway Repairer Nicky Antico of the Agency's Roadway Maintenance and Repair Division died on September 27, 2005 as a result of injuries suffered on the job on September 22, 2005. Mr. Antico and two other Department highway workers were struck by a hit-and-run driver as they were preparing to resurface Slosson Avenue near Lortel Avenue in Staten Island. On September 23, 2006, the corner of 76th Street and 14th Avenue in Brooklyn was renamed "Nicky Antico Jr. Way."



Anna Marie Scuteri, Arianna Antico, Anna Antico, and Roadway Repair and Maintenance Deputy Commissioner Joseph Cannisi at the Ceremony. The Newly Renamed Corner. (Credit: Edward Timbers)

150th Street Bridge over Cross Island Parkway (Queens)

Cleaning and painting of the bridge began and was completed on September 29, 2006.

OCTOBER

East 173rd Street Bridge over Metro North (Bronx)

The component rehabilitation of this bridge was substantially completed on October 2, 2006.



East 173rd Street Repairs in Progress. (Credit: Nasir Khanzada)



Engineers Krishan Baweja and Shant Rally (on Right) Reviewing the Project.
The Completed Repairs. (Credit: Nasir Khanzada)

Manhattan Bridge

Effective October 9, 2006, the south walkway was reopened, and the north bikeway was closed for one year. For the duration of this closure, the south walkway will serve as a shared use facility for both pedestrians and bicyclists.

Hamilton Avenue Asphalt Plant (Brooklyn)

On October 13, 2006, Division ironworkers performed extensive repairs to the plant's dryer, including replacement of the blades.

Manhattan Bridge

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.



Removal of First Floorbeam for Lower Roadway Reconstruction.

Metropolitan Avenue Bridge over Conrail (Queens)

Component rehabilitation work commenced on the underside of the bridge on October 16, 2006.



Metropolitan Avenue Bridge over Conrail.
(Credit: NYSDOT)

Williamsburg Bridge

In order to help minimize the impact of Manhattan-bound traffic after the closure of the Manhattan Bridge lower roadway, beginning October 16, 2006 two additional lanes were made available on the Williamsburg Bridge (except for trucks and buses) from 6 AM to 10 AM Monday to Friday by reversing the south inner roadway. These two traffic lanes only accommodate traffic directly to southbound Allen Street.



Removing the Brooklyn Approach Barrier. New Rush Hour Traffic Pattern on the Williamsburg Bridge.

Grand Concourse Bridge over East 161st Street (Bronx)

Stage II reconstruction of the bridge began on October 26, 2006. The underpass was closed to traffic as part of this stage, which will be in place through April 1, 2007.



Demolition of the Bridge. Removing Debris From the Bridge.

Steinway Street Bridges over Grand Central Parkway WB & EB (Brooklyn-Queens Expressway) (Queens)

The two-thirds structure was opened to pedestrian and vehicular traffic on October 26, 2006, five days ahead of schedule, earning the contractor the full acceleration payment of \$132,000.

Merrick Boulevard Bridges over Laurelton Parkway (NB) & (SB) (Queens)

Cleaning and painting of the bridges, which began in September 2006, was completed on October 27, 2006.

CHRONOLOGY

Aqueduct Racetrack Ramp over Belt Parkway (Queens)

Cleaning and painting of the bridge, which began in July 2006, was completed on October 30, 2006.



Aqueduct Racetrack Ramp.

20th Avenue over BMT Sea Beach (Brooklyn)

Stage III reconstruction of the bridge began on October 30, 2006.

145th Street Bridge over Harlem River (Bronx/Manhattan)

The barge carrying the new swing span arrived at the Third Avenue Bridge site on October 31, 2006.



New 145th Street Bridge Span Passing the Statue of Liberty. Passing the Brooklyn Bridge.



Passing Under the Williamsburg Bridge. Third Avenue Bridge Site. (Site Credit: Russell Holcomb)

NOVEMBER

145th Street Bridge over Harlem River (Bronx/Manhattan)

Effective November 1, 2006, the bridge was fully closed for four months.

West 252nd Street Bridge over Henry Hudson Parkway (Bronx)

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.



Cutting and Removing the Existing Bridge Sections Over the Parkway.

New York City Marathon

In preparation for the Marathon on November 5, 2006, Division personnel inspected and cleaned the Brooklyn, Queensboro, Pulaski, Madison Avenue, and Willis Avenue Bridges, and repaired potholes along the route. In addition, they re-configured the Jersey barriers and placed hay bales at the Queensboro Bridge. Standard traffic configurations were restored before the next morning rush hour.



Female Racers on the Willis Avenue Bridge: Ukraine's Tatiana Hladyr (Wearing #F7, Finished in 2nd Place), and Latvia's Jelena Prokopcuka (Wearing #F1, Winner). Kenya's Catherine Ndereba (on Left, Wearing #4, Finished in 3rd Place). (Credit: Russell Holcomb)



Male Winner on the Willis Avenue Bridge, Brazil's Marilson Gomes dos Santos, and Supervisor Bridge Operator Edgardo Montanez (in Yellow Jacket). Wheelchair Racer Winner on the Bridge: Austria's Kurt Fearnley (Wearing #W5). (Credit: Russell Holcomb)

CHRONOLOGY



Wheelchair Racers on the Bridge: France's Alain Fuss (Wearing #W16, Finished in 11th Place), and Spain's Rafael Botello Jimenez (Wearing #W17, Finished in 10th Place). Joan Benoit Samuelson (in Black Cap), Winner of the 1st Women's Olympic Marathon at the 1984 Los Angeles Olympics, and Lance Armstrong (Wearing "Lance" Bib), the 7-Time Tour de France Winning Cyclist, Who Completed the Marathon in 2:59:36. (Credit: Russell Holcomb)



Bridge Operator Selwyn Phillip, Bridge Operator-In-Charge Anthony Small, and Bridge Operator Dennis Aquino Staffing the Willis Avenue Bridge During the Marathon. The New York Scottish Pipes & Drums (on the Right) Play Each Year at Mile #20 at the Willis Avenue Bridge, the Crossing Point Into the Bronx. (Credit: Russell Holcomb)

Award

On November 9, 2006, Deputy Chief Engineer Kamal Kishore was honored with a 2006 Outstanding Achievement Award by the South Asian American Association. The association was founded in 2000 to recognize the commitment, dedication and contributions of South Asians in the United States.



Deputy Chief Engineer Kamal Kishore; and First Deputy Commissioner Judith Bertraum at the Award Presentation.

Harlem River Drive Bridge over Ramp to Harlem River Drive (NB) (Manhattan)

Cleaning and painting of the bridge, which began in August 2006, was completed on November 9, 2006.



Painting the Harlem River Drive Bridge.

Third Avenue Bridge over Harlem River (Bronx/Manhattan)

The reconstruction of this bridge, which began in July 2001, was substantially completed on November 14, 2006.



Tour Boat Passing Under the New Third Avenue Bridge.

Brooklyn-Queens Expressway (WB) over Furman Street & Brooklyn-Queens Expressway (EB) over Brooklyn-Queens Expressway (WB) a.k.a. BQE Triple Cantilever Joints (Brooklyn)

The reconstruction of these joints, which began on May 3, 2004, was substantially completed on November 16, 2006.

Brooklyn Bridge

A Notice to Proceed for the replacement of the travelers was issued to the contractor with a start date of November 22, 2006.

80th Annual Macy's Thanksgiving Day Parade

Division engineers reviewed and approved the design specifications of three new large balloons to be introduced in the parade, as follows: Flying Ace Snoopy, Macy's 80th Parade Anniversary, and Pickachu 2006. 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.

CHRONOLOGY



Macy's Overdimensional Exhibit Truck En Route to NYC

On November 23, 2006, Division electricians assisted in the set-up and operation of the Agency Command Van. The NYPD, in coordination with Macy's and OEM, monitored the wind data that was continuously measured at seven locations along the route.

Chief Bridge Officer Henry Perahia, Deputy Chief Engineer Kamal Kishore, Director of Engineering Review Abul Hossain, Mahabal Shah, and George Jarvis, as well as four consultants, were positioned at various locations along the parade route to observe compliance with the approved procedures.

To ensure public safety, shortly before the start of the parade during an all day downpour, officials ordered that the balloons be flown at the lowered height of 17 feet, as measured from the midpoint of each balloon to the ground.



New Flying Ace Snoopy, Macy's 80th Parade Anniversary, and New Pikachu.



New Pikachu. Director of Engineering Review Abul Hossain; Mahabal Shah; Christopher Fuhr; Chief Bridge Officer Henry Perahia; George Jarvis; Vlad Koyfman; Olivia Szabo; John Daza; and Deputy Chief Engineer Kamal Kishore.

East Tremont Avenue Bridge over Hutchinson River Parkway (Bronx)

Cleaning and painting of the bridge, which began in August 2006, was completed in November 2006.



East Tremont Avenue Bridge.

Whitestone Expressway Bridge SB over Cross Island Parkway (Queens)

Cleaning and painting of the bridge, which began in October 2006, was completed on November 27, 2006.

DECEMBER

Award

In December 2006, *New York Construction Magazine* selected the reconstruction of the Metropolitan Bridge over the English Kills for an Award of Merit in the Bridge category in the Best Projects of 2006. The award recognizes design and construction excellence, the contribution of key team members and the innovative solutions to a project's challenges.



Northeast View of the Metropolitan Avenue Bridge.

Tudor City Place Bridge over East 42nd Street (Manhattan)

Cleaning and painting of the bridge, which began in November 2006, was completed on December 5, 2006.

West 239th Street Bridge over Henry Hudson Parkway (Bronx)

The reconstruction of this bridge, which began on February 23, 2004, was substantially completed on December 5, 2006.



Completed West 239th Street Bridge and Impact Attenuator.

DOT Employee Recognition Ceremony

Many Division personnel were among the DOT employees honored on December 6, 2006 for their years of service to the City. Commissioner Iris Weinshall and Lillian Roberts, Executive Director of District Council 37, led the ceremony, which took place at DC 37's headquarters at 125 Barclay Street in Manhattan.

48 Years of Service

Supervisor Highway Repairer Willie E. Tucker Sr.



Supervisor Highway Repairer Willie E. Tucker Sr. Mr. Tucker is the Longest Serving Active Agency Employee. (Credit: Christopher Gilbride)

36 Years of Service

Civil Engineer Saul Basri, and Administrative Engineer Balram Chandiramani.

30 Years of Service

Highway Repairer Louie Dumeng, and Associate Staff Analyst Vera Ribakove.

25 Years of Service

Senior Estimator – General Construction Yakov Isakov, Associate Project Manager Vladimir Kobets, Highway Repairer Patrick Macaluso, and Highway Repairer James Torain.

20 Years of Service

Principal Administrative Associate Lourdes Acevedo, Highway Repairer Rudolph Bentley, Principal Administrative Associate Fitz Arthur Brown, Highway Repairer Robert Bynes, Civil Engineer Adam Caplan, Highway Repairer Fred Carrasquillo, Supervisor Electrician Ben Cipriano, Bridge Repairer & Riveter Kenneth Cromer, Associate Staff Analyst Charlotte Davis, Bridge Operator Louie Davis, Highway Repairer Nancy Feliciano, Associate Staff Analyst Susan Garcia, Associate Project Manager Yanina Goldfeld, Oiler

Ronald Grady, Administrative Engineer Ken Hui, Civil Engineer Sudhir Jariwala, Bridge Operator Chackalayil Joseph, Electrician James Kane, Administrative Superintendent of Bridge Operations George Kern, Electrician Michael Kowalenko, Assistant Civil Engineer John Laurretta, Principal Administrative Associate Rita Lebron, Motor Grader Operator Robert Lovdahl, Supervisor Bridge Operator Edgardo Montanez, Supervisor Carpenter John Motylewski, Supervisor Highway Repairer Albert Nizzari, Associate Project Manager Rosa Ostrovsky, Bridge Painter Francisco Pinheiro, Bridge Repairer & Riveter Philip Rudolph, Supervisor Electrician Rasheed Salim, Bridge Operator In Charge Michael Sangiuolo, Bridge Painter Joao Silva, Bridge Operator David Stewart, Supervisor Highway Repairer Isidro Suarez, Supervisor Highway Repairer Joseph Turchiano, Bridge Painter Willie Tyler, Principal Administrative Associate Delores Whitfield, and Bridge Repairer & Riveter James Wright.

15 Years of Service

Administrative Engineer Hasan Ahmed, Principal Administrative Associate Kathy Barker, Principal Administrative Associate Peter Basich, Highway Repairer Joseph Cappello, Administrative Engineer Andre Celestin, Procurement Analyst Vinoo Chandiramani, Bridge Operator Amado Chavez, Electrician Nelson Crooks, Area Supervisor Highway Maintenance Michael Cummiskey, Supervisor Bridge Painter Jure Dzida, Highway Repairer Thomas Engelken, Bridge Operator Kelli Fazzio, Principal Administrative Associate Gloria Ferrer, Cement Mason Frank Finizio, Highway Repairer Joseph Finn, Supervisor Bridge Painter Hughie Flood, Civil Engineer Michael Galasso, Construction Project Manager Sabin Gane, Bridge Painter Reynaldo Grant, Procurement Analyst Samuel Greisman, Bridge Painter Joseph Guzzetta, Staff Analyst Delphine Hodge, Highway Repairer Anthony Irizarry, Civil Engineer Sat Kataria, Bridge Operator Reynold Lavache, Civil Engineer Alfred Lee, Principal Administrative Associate George Liang, Clerical Associate Joyce McClain, Highway Repairer Gaetano Messina, Highway Repairer Manny Nardiello, Deputy Chief Engineer Albert Novak, Assistant Civil Engineer Tony Ohikuare-Ojo, Carpenter Daniel O'Sullivan, Highway Repairer Perry Palmieri, Administrative Engineer Sanjeev Patel, Highway Repairer Elbert Phillips, Principal Administrative Associate Leslie Pipes, Supervisor Bridge Painter Georgeios Ploumis, Administrative Engineer Javed Riaz, Carpenter Demetrius Samadjopoulos, Supervisor Bricklayer Joseph Saverino, Highway Repairer Vincent Sciulla, Administrative Engineer Jyotish Shah, Assistant Civil Engineer Uday Shah, Highway Repairer Edward Shorte, Highway Repairer Joseph Tagliavia, Staff Analyst Dr. Ghodsieh Tehrani, Supervisor Highway Repairer Richard Valles, Traffic Device Maintainer Ronald Whytock, Supervisor Bridge Painter David Yanolatos, and Construction Project Manager Amir Youseff.

Sanitation Worker Rafael Concepcion Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on December 11, 2006 in tribute to Sanitation Worker Rafael Concepcion of Bronx District 6, who died in the line of duty on December 9, 2006. Mr. Concepcion, 36, joined the department in September 2005. The flag remained at half-mast until December 20, 2006.

Borden Avenue Bridge over Dutch Kills (Queens)

Cleaning and painting of the bridge, which began in November 2006, was completed on December 18, 2006.

Belt Parkway Bridge over Mill Basin (Brooklyn)

The replacement of the bridge grid deck, which began on October 25, 2005, was substantially completed on December 22, 2006.

Rikers Island Bridge over Rikers Island Channel (Queens)

The rehabilitation of the bridge deck, which began on August 24, 2005, was substantially completed on December 22, 2006.



Concrete Placement. View of Rikers Island Bridge.

Roosevelt Avenue Bridge over Flushing Meadow Park Road (Queens)

Cleaning and painting of the bridge, which began in November 2006, was completed on December 22, 2006.

President Gerald Ford Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast on December 27, 2006 in tribute to former President Gerald R. Ford, who died at age 93 on December 26, 2006. Mr. Ford served as the 68th president of the United States from 1974 to 1977. In 1999, President Bill Clinton conferred on President Ford the Medal of Freedom, the nation's highest civilian honor. He also received the Congressional Medal of Honor. The flags remained at half-mast until January 27, 2007.



President Gerald Ford.

http://arcweb.archives.gov/arc/digital_detail.jsp?pg=95&rn=95&tn=186789&st=a&rp=detail_s&nh=100 (accessed December 27, 2006) Brooklyn Bridge Flag at Half-Mast at Dusk.

(Flag Credit: Michele N. Vulcan)

New Year's Eve

On the night of December 27, 2006, 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.

160th Street Bridge over Cross Island Parkway (Queens)

Cleaning and painting of the bridge, which began in November 2006, was completed on December 27, 2006.

Manhattan Bridge

December 31, 2006 marked the 97th anniversary of the opening of the bridge.



Manhattan Bridge at Twilight. (Credit: Michele N. Vulcan) The Bridge And Its Reflection in Ponded Water Under The FDR Drive. (Credit: Peter Basich)

Belt Parkway Bridge over Sheepshead Bay Road (Brooklyn)

Cleaning and painting of the bridge began and was completed in December 2006.

71st Avenue Bridge over Cooper Avenue (Queens)

Cleaning and painting of the bridge began and was completed in December 2006.