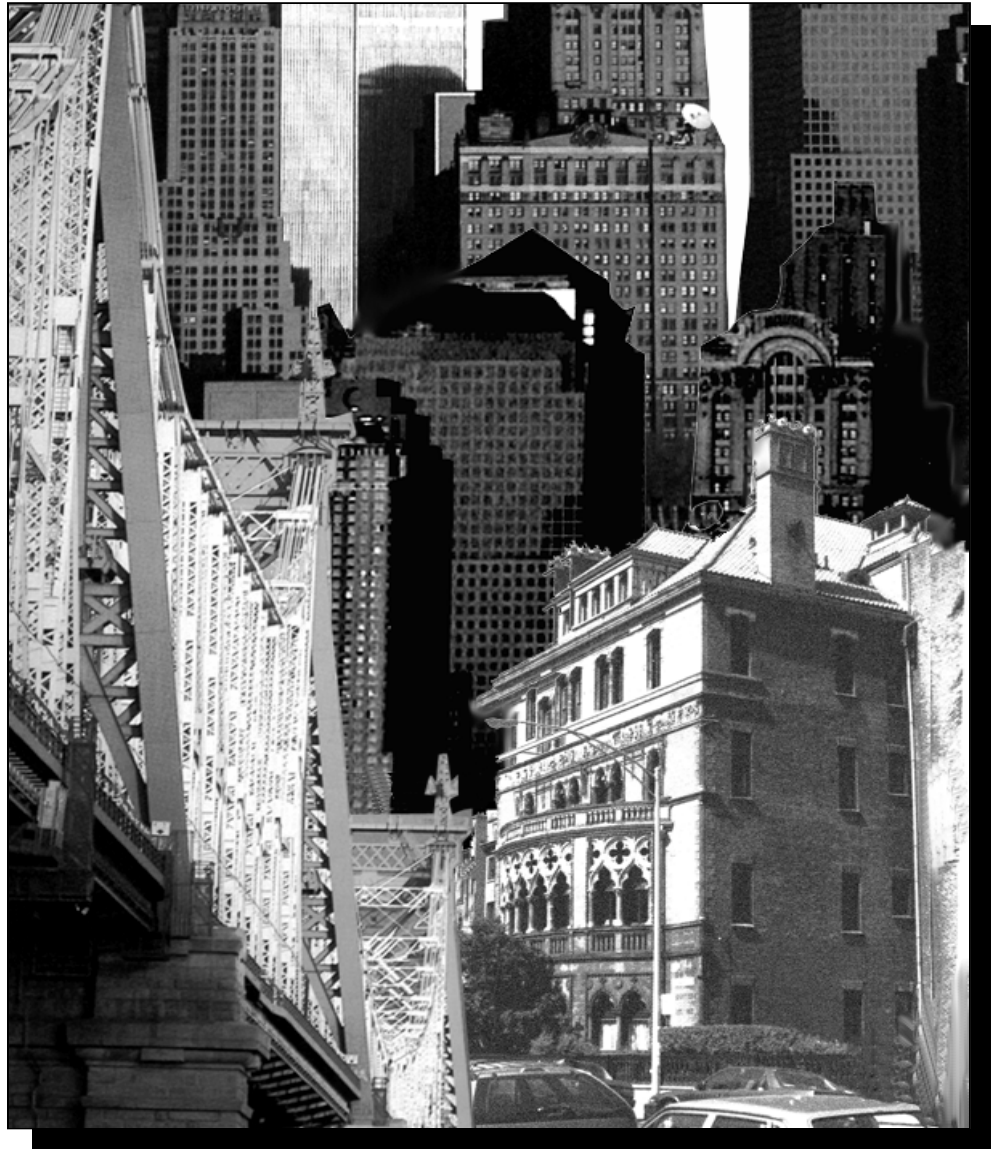




# Asset Information Management System (AIMS) Report

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## *Executive Summary*





THE CITY OF NEW YORK  
OFFICE OF THE MAYOR  
NEW YORK, N.Y. 10007

**MEMORANDUM**

TO: Melissa Mark-Viverito, Speaker, City Council  
Carl Weisbrod, Chairman, City Planning Commission  
Scott M. Stringer, Comptroller

FROM: Bill de Blasio, Mayor *Bill de Blasio*

DATE: November 10, 2015

SUBJECT: Asset Information Management System (AIMS) Executive Summary Report

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In accordance with Section 1110-a of the City Charter, I am transmitting herewith an Executive Summary of the maintenance schedules for the "major portions" of the City's physical plant as defined in that Section for the Fiscal Year 2016. The Charter requires each agency head to submit to the mayor a condition assessment and maintenance schedule necessary to preserve the structural integrity for each of their capital assets with a replacement cost of at least \$10 million and a useful life in excess of ten years. The summary that I am transmitting relates to those maintenance schedules. Detailed information relating to each specific asset is available for review at the Office of Management and Budget.

Included in the summary is a description of the latest methodology used to compile the condition assessment and maintenance schedules. This summary, together with the details of the maintenance schedules and condition assessments, provides the City with a comprehensive assessment of the condition of its major assets, the projected costs necessary to restore these assets to a state of good repair and schedules detailing the maintenance required to maintain the assets' structural integrity. It does not address priorities or relative importance of any particular asset. A separate document will be published in the spring of 2016 comparing total funding recommended in the Fiscal Year 2016 report with the agencies' planned expense program for 2017 and capital program for 2017 through 2020.



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The City of New York

**Asset Information  
Management System  
(AIMS)**

Condition and Maintenance Schedules For  
Major Portions of the City's  
Fixed Assets and Infrastructure

Fiscal Year 2016

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## Background

The November 1988 amendments to the City Charter (Sec. 1110-a) included a requirement that the City compile an inventory of the major portions of its physical plant. Major portions of the physical plant are defined by the Charter to include all assets or asset systems with a replacement cost of ten million dollars or greater, and a useful life in excess of ten years. The Charter amendments also require each agency to assess the condition of their assets and prepare maintenance schedules for those assets. The condition assessments and the maintenance schedules are required to be published each year.

Assets leased to the Transit Authority, the New York City Water Finance Authority and to certain other public benefit corporations are excluded from the above Charter reporting requirements. Excluded also are all properties owned by the City as a result of in-rem proceedings. For the City University, only assets of the Community Colleges are included. Table A provides a Citywide breakdown of assets by classes.

The City Charter requires that a report be issued on an annual basis. The Office of Management and Budget has overall responsibility for the delivery of this yearly publication. This year building surveys were performed by The Department of Design and Construction. Waterfront, retaining wall, bridge and selected building surveys were performed by Gannett Fleming Inc. and their subconsultants. The Department of Transportation continued to survey the City's streets and highways using a 10-point assessment system.

Detailed condition reports and maintenance schedules (i.e. Agency Reports) were provided to agencies for their review and approval. This executive report summarizes all cost data from the agency condition and report schedules. A separate document (i.e. Agency Reconciliation) will be published next Spring to illustrate the comparison of funding recommended in this report with agencies' planned capital and expense activities.

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## Report Context and Items Excluded from Study

While the study is comprehensive, consistent with previous reports, a number of items and considerations were excluded from the condition review and cost estimates. They were not considered directly related to the "structural integrity" of the asset as required by the Charter. These include but are not limited to:

- Most equipment (electronic, fixed and movable)
- Special operating systems within assets
- Aesthetic considerations or special design elements
- Landscaping and outdoor elements
- Statuary or ornamental edifices



- 
- Components not readily observable or accessible by field engineers
  - Handicapped access requirements
  - Information obtained through testing or probing
  - Asbestos, lead paint, and other hazardous material identification and removal
  - Programmatic needs not related to structural integrity
  - Efficiency improvements
  - Swing space costs/phasing costs, or premium time costs
  - Components deficient in code or local law compliance but which do not impact on the integrity of the asset
  - Assets known to be scheduled for near-term total replacement

It should be noted that in surveying piers and bulkheads, underwater surveys were not carried out. Therefore the condition reports for piers and bulkheads do not include those potential repairs that can only be determined by underwater surveys. Special systems include the four East River Bridges, traffic signal systems, street lighting systems and utilities. Due to their critical nature, these systems are not surveyed, but are updated yearly based on the agency's Ten Year Capital Strategy and contract information made available to OMB.

The report continues to reflect changes in the asset inventory every year. At the beginning of this survey year, each agency was requested to provide any additions, deletions or changes to the inventory of assets through new construction, acquisition, sale or demolition.

The asset condition and maintenance schedule report is not a budget document, but rather a broad, unrestrained analysis of a subset of general needs. It serves as a planning tool in addressing overall citywide funding requirements. The report does not attempt in any manner to balance the City's asset and infrastructure requirements against other important City needs, nor does it attempt to make any funding recommendations between the needs of different agencies. It is a general prioritization to indicate to agencies the relative importance of various repairs and maintenance items to the preservation of the assets.

Due to the complexity of the analysis, the large scale of the project, the amount of estimation required, and the necessary methodology constraints, there are inherent limitations to the level of accuracy possible at the detailed asset and component level.

In this context it should be noted that the actual cost for a project may vary substantially from the amount estimated in this report when a detailed scope of work and cost estimate is completed. Agencies will not be restricted to any asset specific number contained in the reports when planning and developing their budget requests. It is further understood that there will be work items (i.e., programmatic) excluded from this study which may require additional expenditures.

## Report Organization

### Report Schedules

This publication contains two major summaries: CITYWIDE SUMMARY SCHEDULES and AGENCY SUMMARY SCHEDULES.

### Capital and Expense Designations

Repairs, replacement and major maintenance costs are all presented at the detailed component level in the Agency Reports. Repairs are defined as reconstruction or renovation. For convenience and citywide reporting purposes, this report presents the cost categories by their appropriate expense budget and capital budget classification. The rules for classifying individual items are as follows:

| <i>Cost Item</i>   | <i>Budget Classification</i> |
|--|------------------------------|
| Repairs greater than \$35,000 AND remaining component life of 5 years or greater<br>Replacements greater than \$35,000<br>Major Maintenance programs greater than \$35,000 at the component type level | Capital                      |
| Repairs less than \$35,000 OR remaining component life less than 5 years<br>Replacements less than \$35,000<br>Major Maintenance programs less than \$35,000 at the component type level               | Expense                      |

### Projected Repair Years

- Expense Budget - Items of need are shown over the next four years
- Capital Budget - Items of need are shown over the next ten years, grouped by periods of four and six years

It should be noted that for reporting purposes all asset component repairs are presented in the funding need for the upcoming fiscal year. This in essence reflects the amounts estimated to “catch up” and bring all assets to a “state of good repair”. In reality, even if funding was available to do everything, it would be beyond the ability of City agencies to plan, design, and implement the work within a single year. The actual work, which can be funded, will operationally have to be spread out over a number of years.

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### **Importance Codes for Repair, Replacement and Major Maintenance**

In the citywide report, component repair, replacement and major maintenance are assigned an A, B, C or D rating. Each component has been assigned an importance to the structural integrity of the assets. For example, architectural exterior components of buildings (i.e. roofs, parapets, exterior walls and windows) are classified as key components and receive higher importance than architectural interior components because of their relative importance in maintaining structural integrity of the assets. (See Exhibit A)

### **Condition Information**

The summary maintenance schedules presented in the citywide executive report represent the maintenance requirements developed from the condition surveys of individual assets. Actual condition data on any particular asset is contained in the Agency Reports. A typical example of an Agency Report and a detailed discussion of the project methodology are included in the technical notes of this report. (See Exhibits B, C)

### **Professional Certification**

The Charter requires a statement by a registered Professional Engineer (PE) or Registered Architect (RA) regarding the reasonableness of the repair/replacement and maintenance schedules for each agency's assets. Certifications are provided by the Department of Design and Construction, the Department of Transportation, Gannett Fleming Inc., and their subconsultants.

## Table A

### Citywide Asset Classes by Agency

|  |     |  |       |
|--|-----|--|-------|
| <b>New York, Brooklyn, Queens Public Libraries</b> |     | <b>Department of Small Business Services</b>     |       |
| Libraries  | 103 | Shelters   | 1     |
| <b>Department of Education</b>                     |     | Museum/Gallery Facilities                        | 3     |
| Primary Schools                                    | 807 | Terminals/Markets                                | 56    |
| Intermediate/Junior High Schools                   | 201 | Piers/Bulkheads                                  | 177   |
| High Schools                                       | 180 | Parking Garages                                  | 1     |
| Administrative Buildings                           | 10  | Ferry Terminal Facilities                        | 2     |
| Piers/Bulkheads                                    | 2   | Marinas/Docks                                    | 6     |
| <b>City University of New York</b>                 |     | <b>Department of Health &amp; Mental Hygiene</b> |       |
| Community College Buildings                        | 84  | Administrative Buildings                         | 1     |
| Piers/Bulkheads                                    | 3   | Clinics/Labs. Classrooms                         | 26    |
| Parking Garages                                    | 1   | Vehicle Maint./Storage Facilities                | 1     |
| <b>Police Department</b>                           |     | Animal Shelters                                  | 3     |
| Precinct Houses                                    | 79  | <b>Health and Hospitals Corporation</b>          |       |
| Police Buildings Non-Precinct                      | 68  | Hospital Buildings                               | 91    |
| Piers/Bulkheads                                    | 3   | <b>Department of Sanitation</b>                  |       |
| Marinas/Docks                                      | 4   | Piers/Bulkheads                                  | 32    |
| <b>Fire Department</b>                             |     | Transfer Stations                                | 5     |
| Fire Department Buildings                          | 50  | Vehicle Maint./Storage Facilities                | 41    |
| Piers/Bulkheads                                    | 3   | Fresh Kills Facilities                           | 17    |
| Firehouses   | 57  | <b>Department of Transportation</b>              |       |
| Marinas/Docks                                      | 1   | Bridge/Waterways                                 | 38    |
| Fireboats  | 5   | Highway Bridges and Tunnels                      | 86    |
| <b>Administration for Children's Services</b>      |     | Highway Facilities                               | 45    |
| Shelters   | 2   | Streets and Arterials (miles)                    | 6,500 |
| Non-Shelters                                       | 2   | Street Lighting Systems                          | 1     |
| Day Care Centers                                   | 5   | Traffic Signal Systems                           | 1     |
| <b>Department of Homeless Services</b>             |     | Ferry Terminal Facilities                        | 5     |
| Shelters   | 61  | Piers/Bulkheads                                  | 26    |
| Non-Shelters                                       | 2   | Ferries/Barges                                   | 8     |
| <b>Department of Correction</b>                    |     | Pier Facilities                                  | 3     |
| Rikers Island Facilities/Utilities                 | 40  | Parking Garages                                  | 9     |
| Correction Facilities                              | 5   | Marinas/Docks                                    | 15    |
| Piers/Bulkheads                                    | 2   | <b>Department of Parks and Recreation</b>        |       |
| Marinas/Docks                                      | 1   | Museum/Gallery Facilities                        | 16    |
| <b>Human Resources Administration</b>              |     | Piers/Bulkheads                                  | 138   |
| Shelters   | 8   | Vehicle Maint./Storage Facilities                | 4     |
| Non-Shelters                                       | 8   | Park Facilities                                  | 717   |
| <b>Department for the Aging</b>                    |     | Stadium Facilities                               | 5     |
| Senior Center                                      | 13  | Marinas/Docks                                    | 26    |
| <b>Department of Cultural Affairs</b>              |     | Walls  | 276   |
| Museum/Gallery Facilities                          | 65  | Park Bridges                                     | 97    |
| Cultural Facilities                                | 224 | <b>Dept. of Citywide Administrative Services</b> |       |
| <b>Division of Youth &amp; Family Justice</b>      |     | Piers/Bulkheads                                  | 10    |
| Juvenile Justice Buildings                         | 4   | Court Buildings                                  | 23    |
| <b>Taxi &amp; Limousine Commission</b>             |     | Public Office Buildings                          | 34    |
| Vehicle Maint./Storage Facilities                  | 1   |  |       |

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## Citywide Summary Schedule

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## CITYWIDE SUMMARY SCHEDULE BY AGENCY

### Asset Information Management System (AIMS) Report on Estimated Cost for Repairs, Replacements, Major Maintenance

|                                    | CAPITAL<br>FY 2017 - 2020 | EXPENSE<br>FY 2017   |
|------------------------------------|---------------------------|----------------------|
| • NEW YORK PUBLIC LIBRARY          | 30,605,000                | 6,175,000            |
| • BROOKLYN PUBLIC LIBRARY          | 15,191,000                | 2,699,000            |
| • QUEENS PUBLIC LIBRARY            | 11,115,000                | 1,310,000            |
| • DEPARTMENT OF EDUCATION          | 2,021,194,000             | 158,668,000          |
| • CITY UNIVERSITY OF NEW YORK      | 99,303,000                | 11,168,000           |
| • POLICE DEPARTMENT                | 90,348,000                | 12,152,000           |
| • FIRE DEPARTMENT                  | 20,107,000                | 10,265,000           |
| • ADMIN. FOR CHILDREN'S SERVICES   | 1,226,000                 | 881,000              |
| • DEPT. OF HOMELESS SERVICES       | 68,259,000                | 6,345,000            |
| • DEPARTMENT OF CORRECTION         | 303,186,000               | 7,333,000            |
| • HUMAN RESOURCES ADMINISTRATION   | 18,915,000                | 2,148,000            |
| • DEPARTMENT FOR THE AGING         | 1,797,000                 | 1,455,000            |
| • DEPARTMENT OF CULTURAL AFFAIRS   | 130,983,000               | 19,970,000           |
| • DIV. OF YOUTH & FAMILY JUSTICE   | 901,000                   | 364,000              |
| • TAXI & LIMOUSINE COMMISSION      | 1,542,000                 | 92,000               |
| • DEPT. OF SMALL BUSINESS SERV.    | 249,654,000               | 10,216,000           |
| • DEPT. OF HEALTH & MENTAL HYGIENE | 28,006,000                | 3,550,000            |
| • HEALTH AND HOSPITALS CORP.       | 278,518,000               | 18,988,000           |
| • DEPARTMENT OF SANITATION         | 146,956,000               | 8,211,000            |
| • DEPARTMENT OF TRANSPORTATION     |                           |                      |
| Bridges                            | 491,732,000               | 23,657,000           |
| Facilities & Ferries               | 68,801,000                | 7,790,000            |
| Street & Traffic Lighting          | 50,312,000                | 62,466,000           |
| Streets & Highways                 | 2,328,110,000             |                      |
| • DEPT. OF PARKS & RECREATION      | 555,628,000               | 33,875,000           |
| • DEPT. OF CITYWIDE ADMIN. SERV.   | 197,508,000               | 23,810,000           |
| <b>Total</b>                       | <b>\$7,209,896,000*</b>   | <b>\$433,589,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

Notes : All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars. Special systems include the four East River Bridges, traffic signal systems, street lighting systems and utilities. Due to their critical nature, these systems are not surveyed, but are updated yearly based on the agency's Ten Year Capital Strategy and contract information made available to OMB. Costs for Streets and Arterials beyond the Four Year Plan are not included in summary.



## CITYWIDE SUMMARY SCHEDULE

### Asset Information Management System (AIMS) Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                            | FY 2017 - 2020           | FY 2021 - 2026         |
|------------------------------------|--------------------------|------------------------|
| • Exterior Architecture            | 1,311,817,000            | 801,036,000            |
| • Interior Architecture            | 1,084,557,000            | 1,169,659,000          |
| • Electrical                       | 858,721,000              | 2,932,095,000          |
| • Mechanical                       | 473,677,000              | 1,805,311,000          |
| • Piers                            | 43,176,000               | 28,389,000             |
| • Bulkheads                        | 130,751,000              | 130,853,000            |
| • Bridge Structure                 | 468,475,000              | 256,347,000            |
| • Ferries                          | 27,700,000               |                        |
| • Vessels                          |                          |                        |
| • Parks' Walls                     | 45,721,000               | 452,000                |
| • Parks' Boardwalks                | 56,237,000               | 57,968,000             |
| • Miscellaneous Buildings          | 47,904,000               | 23,132,000             |
| • Parks' Water and Sewer Utilities | 107,299,000              | 160,949,000            |
| • Parks' Electrical Utilities      | 32,285,000               | 48,427,000             |
| • Elevators/Escalators             |                          |                        |
| • Parks' Streets and Roads         | 71,653,000               | 20,124,000             |
| • Rikers Island Utilities          | 5,200,000                |                        |
| • Park Bridges                     | 25,534,000               | 8,623,000              |
| • Marinas/Docks                    | 17,511,000               | 31,364,000             |
| • Bridge Electrical                | 9,654,000                | 13,412,000             |
| • Bridge Mechanical                | 13,603,000               | 1,175,000              |
| • Primary Streets                  | 385,260,000              |                        |
| • Secondary Streets                | 541,830,000              |                        |
| • Local Streets                    | 1,334,560,000            |                        |
| • Arterial Streets                 | 40,000,000               |                        |
| • Step Streets                     | 26,460,000               |                        |
| • Traffic Signal System            | 15,346,000               |                        |
| • Street Lighting System           | 34,966,000               |                        |
| <b>Total</b>                       | <b>\$7,209,896,000 *</b> | <b>\$7,489,316,000</b> |
| • Importance Code A                | 2,075,711,000            | 1,219,224,000          |
| • Importance Code B                | 3,373,103,000            | 5,860,798,000          |
| • Importance Code C                | 1,615,065,000            | 366,038,000            |
| • Importance Code D                | 146,017,000              | 43,256,000             |
| <b>Total</b>                       | <b>\$7,209,896,000 *</b> | <b>\$7,489,316,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

Note : Costs are in current dollars and are not escalated for potential future inflation.  
Dollars beyond the 4 year plan for Streets and City owned Arterials are not included in summary.

## CITYWIDE SUMMARY SCHEDULE (cont.)

### Asset Information Management System (AIMS) Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| EXPENSE                            | FY 2017              | FY 2018              | FY 2019              | FY 2020              |
|------------------------------------|----------------------|----------------------|----------------------|----------------------|
| • Exterior Architecture            | 63,327,000           | 9,382,000            | 10,855,000           | 8,142,000            |
| • Interior Architecture            | 113,660,000          | 15,748,000           | 39,024,000           | 32,937,000           |
| • Electrical                       | 32,617,000           | 22,077,000           | 24,018,000           | 22,092,000           |
| • Mechanical                       | 86,549,000           | 55,201,000           | 75,421,000           | 56,706,000           |
| • Piers                            | 3,050,000            | 170,000              | 323,000              | 647,000              |
| • Bulkheads                        | 7,059,000            | 410,000              | 367,000              | 235,000              |
| • Bridge Structure                 | 21,318,000           | 12,819,000           | 26,080,000           | 14,654,000           |
| • Ferries                          | 3,648,000            |                      |                      |                      |
| • Vessels                          | 583,000              | 600,000              | 1,622,000            | 637,000              |
| • Parks' Walls                     | 3,575,000            |                      |                      |                      |
| • Parks' Boardwalks                | 109,000              |                      |                      |                      |
| • Miscellaneous Buildings          | 3,562,000            | 932,000              | 914,000              | 1,163,000            |
| • Parks' Water and Sewer Utilities | 2,682,000            | 2,682,000            | 2,682,000            | 2,682,000            |
| • Parks' Electrical Utilities      | 808,000              | 808,000              | 808,000              | 808,000              |
| • Elevators/Escalators             | 18,360,000           | 18,298,000           | 18,298,000           | 18,298,000           |
| • Parks' Streets and Roads         |                      |                      |                      |                      |
| • Rikers Island Utilities          | 1,750,000            | 1,750,000            | 1,750,000            | 1,750,000            |
| • Park Bridges                     | 4,485,000            | 8,000                | 6,000                | 771,000              |
| • Marinas/Docks                    | 1,643,000            | 265,000              | 508,000              | 804,000              |
| • Bridge Electrical                | 780,000              | 69,000               | 100,000              | 80,000               |
| • Bridge Mechanical                | 1,559,000            | 86,000               | 638,000              | 98,000               |
| • Primary Streets                  |                      |                      |                      |                      |
| • Secondary Streets                |                      |                      |                      |                      |
| • Local Streets                    |                      |                      |                      |                      |
| • Arterial Streets                 |                      |                      |                      |                      |
| • Step Streets                     |                      |                      |                      |                      |
| • Traffic Signal System            | 39,066,000           | 42,322,000           | 42,322,000           | 42,322,000           |
| • Street Lighting System           | 23,400,000           | 23,400,000           | 23,400,000           | 23,400,000           |
| <b>Total</b>                       | <b>\$433,589,000</b> | <b>\$207,028,000</b> | <b>\$269,136,000</b> | <b>\$228,227,000</b> |
|                                    |                      |                      |                      |                      |
| • Importance Code A                | 168,321,000          | 104,204,000          | 114,637,000          | 105,144,000          |
| • Importance Code B                | 220,684,000          | 100,367,000          | 151,152,000          | 119,736,000          |
| • Importance Code C                | 41,023,000           | 1,526,000            | 2,434,000            | 2,184,000            |
| • Importance Code D                | 3,562,000            | 932,000              | 914,000              | 1,163,000            |
| <b>Total</b>                       | <b>\$433,589,000</b> | <b>\$207,028,000</b> | <b>\$269,136,000</b> | <b>\$228,227,000</b> |



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## Report Schedules by Agency

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# NEW YORK PUBLIC LIBRARY - 035

Project Type : NEW YORK PUBLIC LIBRARY

LIBRARIES : 54

Total Assets in AIMS : 54

## Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                 | FY 2017 - 2020        | FY 2021 - 2026      |
|-------------------------|-----------------------|---------------------|
| • Exterior Architecture | 9,938,000             | 4,499,000           |
| • Interior Architecture | 3,805,000             | 8,443,000           |
| • Electrical            | 11,865,000            | 20,360,000          |
| • Mechanical            | 4,998,000             | 22,957,000          |
| <b>Total</b>            | <b>\$30,605,000 *</b> | <b>\$56,259,000</b> |
| • Importance Code A     | 10,245,000            | 4,595,000           |
| • Importance Code B     | 20,054,000            | 48,797,000          |
| • Importance Code C     | 305,000               | 2,866,000           |
| <b>Total</b>            | <b>\$30,605,000 *</b> | <b>\$56,259,000</b> |

| EXPENSE                 | FY 2017            | FY 2018            | FY 2019            | FY 2020            |
|-------------------------|--------------------|--------------------|--------------------|--------------------|
| • Exterior Architecture | 1,419,000          | 81,000             | 196,000            | 209,000            |
| • Interior Architecture | 2,610,000          | 1,021,000          | 261,000            | 1,759,000          |
| • Electrical            | 762,000            | 350,000            | 1,036,000          | 149,000            |
| • Mechanical            | 1,084,000          | 561,000            | 1,207,000          | 570,000            |
| • Elevators/Escalators  | 298,000            | 298,000            | 298,000            | 298,000            |
| <b>Total</b>            | <b>\$6,175,000</b> | <b>\$2,311,000</b> | <b>\$2,999,000</b> | <b>\$2,985,000</b> |
| • Importance Code A     | 1,564,000          | 164,000            | 303,000            | 286,000            |
| • Importance Code B     | 4,252,000          | 2,139,000          | 2,686,000          | 2,696,000          |
| • Importance Code C     | 359,000            | 8,000              | 10,000             | 3,000              |
| • Importance Code D     |                    |                    |                    |                    |
| <b>Total</b>            | <b>\$6,175,000</b> | <b>\$2,311,000</b> | <b>\$2,999,000</b> | <b>\$2,985,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

# BROOKLYN PUBLIC LIBRARY - 038

Project Type : **BROOKLYN PUBLIC LIBRARY**

LIBRARIES : 32

Total Assets in AIMS : 32

## Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                 | FY 2017 - 2020        | FY 2021 - 2026      |
|-------------------------|-----------------------|---------------------|
| • Exterior Architecture | 6,746,000             | 2,122,000           |
| • Interior Architecture | 1,979,000             | 2,092,000           |
| • Electrical            | 4,442,000             | 15,556,000          |
| • Mechanical            | 2,023,000             | 7,380,000           |
| <b>Total</b>            | <b>\$15,191,000 *</b> | <b>\$27,150,000</b> |
| • Importance Code A     | 6,746,000             | 2,295,000           |
| • Importance Code B     | 8,356,000             | 24,749,000          |
| • Importance Code C     | 89,000                | 106,000             |
| <b>Total</b>            | <b>\$15,191,000 *</b> | <b>\$27,150,000</b> |

| EXPENSE                 | FY 2017            | FY 2018          | FY 2019            | FY 2020          |
|-------------------------|--------------------|------------------|--------------------|------------------|
| • Exterior Architecture | 1,116,000          | 23,000           | 104,000            | 84,000           |
| • Interior Architecture | 864,000            | 34,000           | 84,000             | 512,000          |
| • Electrical            | 246,000            | 51,000           | 348,000            | 66,000           |
| • Mechanical            | 337,000            | 183,000          | 440,000            | 198,000          |
| • Elevators/Escalators  | 136,000            | 136,000          | 136,000            | 136,000          |
| <b>Total</b>            | <b>\$2,699,000</b> | <b>\$426,000</b> | <b>\$1,111,000</b> | <b>\$997,000</b> |
| • Importance Code A     | 1,184,000          | 82,000           | 169,000            | 143,000          |
| • Importance Code B     | 1,256,000          | 337,000          | 939,000            | 852,000          |
| • Importance Code C     | 259,000            | 7,000            | 3,000              | 1,000            |
| • Importance Code D     |                    |                  |                    |                  |
| <b>Total</b>            | <b>\$2,699,000</b> | <b>\$426,000</b> | <b>\$1,111,000</b> | <b>\$997,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

## QUEENS PUBLIC LIBRARY - 039

Project Type : QUEENS PUBLIC LIBRARY

LIBRARIES : 17

Total Assets in AIMS : 17

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                 | FY 2017 - 2020        | FY 2021 - 2026     |
|-------------------------|-----------------------|--------------------|
| • Exterior Architecture | 2,565,000             | 1,696,000          |
| • Interior Architecture | 1,234,000             | 1,712,000          |
| • Electrical            | 4,327,000             | 3,532,000          |
| • Mechanical            | 2,988,000             | 1,640,000          |
| <b>Total</b>            | <b>\$11,115,000 *</b> | <b>\$8,580,000</b> |
| • Importance Code A     | 2,565,000             | 1,799,000          |
| • Importance Code B     | 7,959,000             | 6,707,000          |
| • Importance Code C     | 590,000               | 74,000             |
| <b>Total</b>            | <b>\$11,115,000 *</b> | <b>\$8,580,000</b> |

| EXPENSE                 | FY 2017            | FY 2018          | FY 2019          | FY 2020          |
|-------------------------|--------------------|------------------|------------------|------------------|
| • Exterior Architecture | 295,000            | 84,000           | 69,000           | 34,000           |
| • Interior Architecture | 463,000            | 248,000          | 91,000           | 210,000          |
| • Electrical            | 220,000            | 124,000          | 264,000          | 44,000           |
| • Mechanical            | 270,000            | 166,000          | 333,000          | 167,000          |
| • Elevators/Escalators  | 63,000             | 63,000           | 63,000           | 63,000           |
| <b>Total</b>            | <b>\$1,310,000</b> | <b>\$685,000</b> | <b>\$820,000</b> | <b>\$518,000</b> |
| • Importance Code A     | 331,000            | 113,000          | 103,000          | 63,000           |
| • Importance Code B     | 944,000            | 570,000          | 714,000          | 454,000          |
| • Importance Code C     | 36,000             | 2,000            | 2,000            | 1,000            |
| • Importance Code D     |                    |                  |                  |                  |
| <b>Total</b>            | <b>\$1,310,000</b> | <b>\$685,000</b> | <b>\$820,000</b> | <b>\$518,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.



## DEPARTMENT OF EDUCATION - 040

**Project Type : EDUCATION**

|                                  |   |     |
|----------------------------------|---|-----|
| PRIMARY SCHOOLS                  | : | 807 |
| INTERMEDIATE/JUNIOR HIGH SCHOOLS | : | 201 |
| HIGH SCHOOLS                     | : | 180 |
| ADMINISTRATIVE BUILDINGS         | : | 10  |
| PIERS/BULKHEADS                  | : | 2   |

**Total Assets in AIMS : 1,200**

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                 | FY 2017 - 2020           | FY 2021 - 2026         |
|-------------------------|--------------------------|------------------------|
| • Exterior Architecture | 450,756,000              | 344,569,000            |
| • Interior Architecture | 710,687,000              | 579,607,000            |
| • Electrical            | 611,320,000              | 1,364,444,000          |
| • Mechanical            | 247,347,000              | 1,077,390,000          |
| • Bulkheads             | 1,084,000                | 1,053,000              |
| <b>Total</b>            | <b>\$2,021,194,000 *</b> | <b>\$3,367,063,000</b> |
| • Importance Code A     | 503,215,000              | 498,234,000            |
| • Importance Code B     | 1,398,333,000            | 2,809,693,000          |
| • Importance Code C     | 119,646,000              | 59,136,000             |
| <b>Total</b>            | <b>\$2,021,194,000 *</b> | <b>\$3,367,063,000</b> |

| EXPENSE                 | FY 2017              | FY 2018             | FY 2019             | FY 2020             |
|-------------------------|----------------------|---------------------|---------------------|---------------------|
| • Exterior Architecture | 28,815,000           | 5,325,000           | 6,386,000           | 4,840,000           |
| • Interior Architecture | 58,452,000           | 9,416,000           | 11,861,000          | 16,400,000          |
| • Electrical            | 16,141,000           | 11,710,000          | 12,138,000          | 12,077,000          |
| • Mechanical            | 50,298,000           | 31,600,000          | 42,774,000          | 32,874,000          |
| • Bulkheads             | 4,000                | 0                   |                     |                     |
| • Elevators/Escalators  | 4,958,000            | 4,935,000           | 4,935,000           | 4,935,000           |
| <b>Total</b>            | <b>\$158,668,000</b> | <b>\$62,986,000</b> | <b>\$78,092,000</b> | <b>\$71,126,000</b> |
| • Importance Code A     | 38,995,000           | 16,803,000          | 17,872,000          | 16,324,000          |
| • Importance Code B     | 99,023,000           | 45,443,000          | 58,918,000          | 54,087,000          |
| • Importance Code C     | 20,650,000           | 740,000             | 1,302,000           | 716,000             |
| • Importance Code D     |                      |                     |                     |                     |
| <b>Total</b>            | <b>\$158,668,000</b> | <b>\$62,986,000</b> | <b>\$78,092,000</b> | <b>\$71,126,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

Notes : All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars. The AIMS Report represents a small percentage of a comprehensive inspection utilized by the School Construction Authority in assessing capital planning priorities. The AIMS Report offers supplemental inspection data as an additional reference but does not claim to represent the full context of capital needs in New York City public schools.

# CITY UNIVERSITY OF NEW YORK - 042

**Project Type : CITY UNIVERSITY OF NEW YORK**

COMMUNITY COLLEGE BUILDINGS : 84

PIERS/BULKHEADS : 3

PARKING GARAGES : 1

**Total Assets in AIMS : 88**

## Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                   |  | FY 2017 - 2020        | FY 2021 - 2026       |
|---------------------------|--|-----------------------|----------------------|
| • Exterior Architecture   |  | 38,156,000            | 24,756,000           |
| • Interior Architecture   |  | 17,948,000            | 22,714,000           |
| • Electrical              |  | 18,361,000            | 95,552,000           |
| • Mechanical              |  | 24,246,000            | 88,166,000           |
| • Bulkheads               |  | 403,000               | 1,054,000            |
| • Miscellaneous Buildings |  | 190,000               | 182,000              |
| <b>Total</b>              |  | <b>\$99,303,000 *</b> | <b>\$232,424,000</b> |
| • Importance Code A       |  | 42,908,000            | 27,245,000           |
| • Importance Code B       |  | 54,046,000            | 202,077,000          |
| • Importance Code C       |  | 2,160,000             | 2,920,000            |
| • Importance Code D       |  | 190,000               | 182,000              |
| <b>Total</b>              |  | <b>\$99,303,000 *</b> | <b>\$232,424,000</b> |

| EXPENSE                   | FY 2017             | FY 2018            | FY 2019            | FY 2020            |
|---------------------------|---------------------|--------------------|--------------------|--------------------|
| • Exterior Architecture   | 2,522,000           | 325,000            | 437,000            | 332,000            |
| • Interior Architecture   | 3,621,000           | 639,000            | 3,237,000          | 3,115,000          |
| • Electrical              | 1,184,000           | 828,000            | 786,000            | 855,000            |
| • Mechanical              | 3,022,000           | 2,213,000          | 2,711,000          | 2,225,000          |
| • Bulkheads               | 10,000              | 11,000             | 10,000             |                    |
| • Miscellaneous Buildings | 33,000              | 9,000              | 13,000             | 9,000              |
| • Elevators/Escalators    | 776,000             | 776,000            | 776,000            | 776,000            |
| <b>Total</b>              | <b>\$11,168,000</b> | <b>\$4,802,000</b> | <b>\$7,970,000</b> | <b>\$7,313,000</b> |
| • Importance Code A       | 2,946,000           | 646,000            | 737,000            | 697,000            |
| • Importance Code B       | 7,644,000           | 4,089,000          | 7,168,000          | 6,564,000          |
| • Importance Code C       | 546,000             | 57,000             | 53,000             | 42,000             |
| • Importance Code D       | 33,000              | 9,000              | 13,000             | 9,000              |
| <b>Total</b>              | <b>\$11,168,000</b> | <b>\$4,802,000</b> | <b>\$7,970,000</b> | <b>\$7,313,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

## POLICE DEPARTMENT - 056

**Project Type : POLICE**

|                               |   |    |
|-------------------------------|---|----|
| PRECINCT HOUSES               | : | 79 |
| POLICE BUILDINGS NON-PRECINCT | : | 68 |
| PIERS/BULKHEADS               | : | 3  |
| MARINAS/DOCKS                 | : | 4  |

**Total Assets in AIMS : 154**

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                   |  | FY 2017 - 2020        | FY 2021 - 2026       |
|---------------------------|--|-----------------------|----------------------|
| • Exterior Architecture   |  | 32,838,000            | 14,133,000           |
| • Interior Architecture   |  | 25,750,000            | 21,468,000           |
| • Electrical              |  | 13,994,000            | 88,136,000           |
| • Mechanical              |  | 11,707,000            | 53,644,000           |
| • Piers                   |  | 2,024,000             | 242,000              |
| • Bulkheads               |  |                       | 558,000              |
| • Miscellaneous Buildings |  | 3,956,000             | 3,205,000            |
| • Marinas/Docks           |  | 79,000                | 1,925,000            |
| <b>Total</b>              |  | <b>\$90,348,000 *</b> | <b>\$183,312,000</b> |
| • Importance Code A       |  | 33,985,000            | 17,378,000           |
| • Importance Code B       |  | 49,192,000            | 161,565,000          |
| • Importance Code C       |  | 3,215,000             | 1,164,000            |
| • Importance Code D       |  | 3,956,000             | 3,205,000            |
| <b>Total</b>              |  | <b>\$90,348,000 *</b> | <b>\$183,312,000</b> |

| EXPENSE                   | FY 2017             | FY 2018            | FY 2019            | FY 2020            |
|---------------------------|---------------------|--------------------|--------------------|--------------------|
| • Exterior Architecture   | 3,248,000           | 498,000            | 374,000            | 329,000            |
| • Interior Architecture   | 3,909,000           | 274,000            | 343,000            | 555,000            |
| • Electrical              | 1,373,000           | 1,212,000          | 956,000            | 755,000            |
| • Mechanical              | 2,740,000           | 1,923,000          | 2,246,000          | 2,137,000          |
| • Piers                   | 18,000              |                    |                    |                    |
| • Bulkheads               | 60,000              | 1,000              |                    | 4,000              |
| • Miscellaneous Buildings | 294,000             | 97,000             | 148,000            | 102,000            |
| • Elevators/Escalators    | 338,000             | 338,000            | 338,000            | 338,000            |
| • Marinas/Docks           | 172,000             | 24,000             | 57,000             | 132,000            |
| <b>Total</b>              | <b>\$12,152,000</b> | <b>\$4,369,000</b> | <b>\$4,463,000</b> | <b>\$4,352,000</b> |
| • Importance Code A       | 3,748,000           | 773,000            | 675,000            | 691,000            |
| • Importance Code B       | 6,602,000           | 3,465,000          | 3,577,000          | 3,529,000          |
| • Importance Code C       | 1,509,000           | 33,000             | 62,000             | 30,000             |
| • Importance Code D       | 294,000             | 97,000             | 148,000            | 102,000            |
| <b>Total</b>              | <b>\$12,152,000</b> | <b>\$4,369,000</b> | <b>\$4,463,000</b> | <b>\$4,352,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

## FIRE DEPARTMENT - 057

**Project Type : FIRE DEPARTMENT**

|                           |   |    |
|---------------------------|---|----|
| FIRE DEPARTMENT BUILDINGS | : | 50 |
| PIERS/BULKHEADS           | : | 3  |
| FIREHOUSES                | : | 57 |
| MARINAS/DOCKS             | : | 1  |
| FIREBOATS                 | : | 5  |

**Total Assets in AIMS : 116**

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| <b>CAPITAL</b>            | <b>FY 2017 - 2020</b> | <b>FY 2021 - 2026</b> |
|---------------------------|-----------------------|-----------------------|
| • Exterior Architecture   | 10,895,000            | 5,330,000             |
| • Interior Architecture   | 4,038,000             | 3,257,000             |
| • Electrical              | 2,844,000             | 8,801,000             |
| • Mechanical              | 967,000               | 2,883,000             |
| • Piers                   | 736,000               | 101,000               |
| • Bulkheads               | 52,000                |                       |
| • Vessels                 |                       |                       |
| • Miscellaneous Buildings | 382,000               | 186,000               |
| • Marinas/Docks           | 193,000               | 234,000               |
| <b>Total</b>              | <b>\$20,107,000 *</b> | <b>\$20,792,000</b>   |

|                     |                       |                     |
|---------------------|-----------------------|---------------------|
| • Importance Code A | 11,710,000            | 5,871,000           |
| • Importance Code B | 7,250,000             | 13,809,000          |
| • Importance Code C | 765,000               | 926,000             |
| • Importance Code D | 382,000               | 186,000             |
| <b>Total</b>        | <b>\$20,107,000 *</b> | <b>\$20,792,000</b> |

| <b>EXPENSE</b>            | <b>FY 2017</b>      | <b>FY 2018</b>     | <b>FY 2019</b>     | <b>FY 2020</b>     |
|---------------------------|---------------------|--------------------|--------------------|--------------------|
| • Exterior Architecture   | 3,006,000           | 127,000            | 350,000            | 148,000            |
| • Interior Architecture   | 4,338,000           | 74,000             | 217,000            | 156,000            |
| • Electrical              | 863,000             | 351,000            | 382,000            | 179,000            |
| • Mechanical              | 1,249,000           | 488,000            | 749,000            | 382,000            |
| • Piers                   | 95,000              |                    | 7,000              | 5,000              |
| • Bulkheads               | 27,000              | 1,000              |                    | 0                  |
| • Vessels                 | 583,000             | 600,000            | 1,622,000          | 637,000            |
| • Miscellaneous Buildings | 39,000              | 11,000             | 19,000             | 10,000             |
| • Elevators/Escalators    | 67,000              | 29,000             | 29,000             | 29,000             |
| • Marinas/Docks           | 1,000               | 0                  | 6,000              | 0                  |
| <b>Total</b>              | <b>\$10,265,000</b> | <b>\$1,680,000</b> | <b>\$3,381,000</b> | <b>\$1,547,000</b> |

*\* Investment necessary to bring assets to a State of Good Repair*

*All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.*

## FIRE DEPARTMENT - 057

|                     |                     |                    |                    |                    |
|---------------------|---------------------|--------------------|--------------------|--------------------|
| • Importance Code A | 3,825,000           | 817,000            | 2,064,000          | 874,000            |
| • Importance Code B | 4,836,000           | 847,000            | 1,281,000          | 635,000            |
| • Importance Code C | 1,565,000           | 4,000              | 16,000             | 28,000             |
| • Importance Code D | 39,000              | 11,000             | 19,000             | 10,000             |
| <b>Total</b>        | <b>\$10,265,000</b> | <b>\$1,680,000</b> | <b>\$3,381,000</b> | <b>\$1,547,000</b> |

*\* Investment necessary to bring assets to a State of Good Repair*

*All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.*

## ADMIN. FOR CHILDREN'S SERVICES - 068

**Project Type : CHILDREN'S SERVICES**

|                  |   |   |
|------------------|---|---|
| SHELTERS         | : | 2 |
| NON-SHELTERS     | : | 2 |
| DAY CARE CENTERS | : | 5 |

**Total Assets in AIMS : 9**

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                 | FY 2017 - 2020       | FY 2021 - 2026     |
|-------------------------|----------------------|--------------------|
| • Exterior Architecture | 531,000              | 262,000            |
| • Interior Architecture | 412,000              | 520,000            |
| • Electrical            | 153,000              | 850,000            |
| • Mechanical            | 130,000              | 1,042,000          |
| <b>Total</b>            | <b>\$1,226,000 *</b> | <b>\$2,674,000</b> |

|                     |                      |                    |
|---------------------|----------------------|--------------------|
| • Importance Code A | 531,000              | 332,000            |
| • Importance Code B | 479,000              | 2,132,000          |
| • Importance Code C | 216,000              | 210,000            |
| <b>Total</b>        | <b>\$1,226,000 *</b> | <b>\$2,674,000</b> |

| EXPENSE                 | FY 2017          | FY 2018          | FY 2019          | FY 2020          |
|-------------------------|------------------|------------------|------------------|------------------|
| • Exterior Architecture | 354,000          | 12,000           | 8,000            | 9,000            |
| • Interior Architecture | 266,000          | 17,000           | 42,000           | 16,000           |
| • Electrical            | 33,000           | 25,000           | 61,000           | 59,000           |
| • Mechanical            | 179,000          | 70,000           | 112,000          | 133,000          |
| • Elevators/Escalators  | 49,000           | 49,000           | 49,000           | 49,000           |
| <b>Total</b>            | <b>\$881,000</b> | <b>\$173,000</b> | <b>\$272,000</b> | <b>\$266,000</b> |
| • Importance Code A     | 385,000          | 22,000           | 19,000           | 20,000           |
| • Importance Code B     | 415,000          | 149,000          | 251,000          | 245,000          |
| • Importance Code C     | 82,000           | 2,000            | 3,000            | 1,000            |
| • Importance Code D     |                  |                  |                  |                  |
| <b>Total</b>            | <b>\$881,000</b> | <b>\$173,000</b> | <b>\$272,000</b> | <b>\$266,000</b> |

*\* Investment necessary to bring assets to a State of Good Repair*

*All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.*

## DEPT. OF HOMELESS SERVICES - 071

**Project Type : HOMELESS SERVICES**

SHELTERS : 61

NON-SHELTERS : 2

**Total Assets in AIMS : 63**

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                 | FY 2017 - 2020        | FY 2021 - 2026       |
|-------------------------|-----------------------|----------------------|
| • Exterior Architecture | 29,725,000            | 11,751,000           |
| • Interior Architecture | 20,561,000            | 24,676,000           |
| • Electrical            | 12,314,000            | 158,511,000          |
| • Mechanical            | 5,658,000             | 29,204,000           |
| <b>Total</b>            | <b>\$68,259,000 *</b> | <b>\$224,142,000</b> |
| • Importance Code A     | 30,391,000            | 13,636,000           |
| • Importance Code B     | 33,318,000            | 207,501,000          |
| • Importance Code C     | 4,550,000             | 3,005,000            |
| <b>Total</b>            | <b>\$68,259,000 *</b> | <b>\$224,142,000</b> |

| EXPENSE                 | FY 2017            | FY 2018            | FY 2019            | FY 2020            |
|-------------------------|--------------------|--------------------|--------------------|--------------------|
| • Exterior Architecture | 1,753,000          | 308,000            | 284,000            | 111,000            |
| • Interior Architecture | 1,871,000          | 367,000            | 256,000            | 458,000            |
| • Electrical            | 634,000            | 407,000            | 432,000            | 621,000            |
| • Mechanical            | 1,701,000          | 1,018,000          | 1,412,000          | 1,264,000          |
| • Elevators/Escalators  | 385,000            | 385,000            | 385,000            | 385,000            |
| <b>Total</b>            | <b>\$6,345,000</b> | <b>\$2,485,000</b> | <b>\$2,768,000</b> | <b>\$2,839,000</b> |
| • Importance Code A     | 2,039,000          | 595,000            | 567,000            | 396,000            |
| • Importance Code B     | 3,634,000          | 1,856,000          | 2,171,000          | 2,403,000          |
| • Importance Code C     | 671,000            | 34,000             | 31,000             | 40,000             |
| • Importance Code D     |                    |                    |                    |                    |
| <b>Total</b>            | <b>\$6,345,000</b> | <b>\$2,485,000</b> | <b>\$2,768,000</b> | <b>\$2,839,000</b> |

*\* Investment necessary to bring assets to a State of Good Repair*

*All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.*

## DEPARTMENT OF CORRECTION - 072

**Project Type : CORRECTION**

|                          |   |    |
|--------------------------|---|----|
| RIKERS ISLAND FACILITIES | : | 34 |
| CORRECTION FACILITIES    | : | 5  |
| PIERS/BULKHEADS          | : | 2  |
| RIKERS ISLAND UTILITIES  | : | 6  |
| MARINAS/DOCKS            | : | 1  |

**Total Assets in AIMS : 48**

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                   | FY 2017 - 2020         | FY 2021 - 2026       |
|---------------------------|------------------------|----------------------|
| • Exterior Architecture   | 210,353,000            | 166,711,000          |
| • Interior Architecture   | 51,219,000             | 54,852,000           |
| • Electrical              | 11,627,000             | 371,219,000          |
| • Mechanical              | 19,941,000             | 76,825,000           |
| • Piers                   | 2,063,000              | 44,000               |
| • Bulkheads               | 2,742,000              | 1,814,000            |
| • Rikers Island Utilities | 5,200,000              |                      |
| • Marinas/Docks           | 41,000                 | 314,000              |
| <b>Total</b>              | <b>\$303,186,000 *</b> | <b>\$671,777,000</b> |

|                     |                        |                      |
|---------------------|------------------------|----------------------|
| • Importance Code A | 214,616,000            | 172,663,000          |
| • Importance Code B | 75,415,000             | 495,896,000          |
| • Importance Code C | 13,155,000             | 3,219,000            |
| <b>Total</b>        | <b>\$303,186,000 *</b> | <b>\$671,777,000</b> |

| EXPENSE                   | FY 2017            | FY 2018            | FY 2019            | FY 2020            |
|---------------------------|--------------------|--------------------|--------------------|--------------------|
| • Exterior Architecture   | 601,000            | 43,000             | 61,000             | 8,000              |
| • Interior Architecture   | 1,594,000          | 75,000             | 172,000            | 378,000            |
| • Electrical              | 927,000            | 644,000            | 638,000            | 597,000            |
| • Mechanical              | 1,709,000          | 998,000            | 1,476,000          | 891,000            |
| • Piers                   | 106,000            | 2,000              |                    | 22,000             |
| • Bulkheads               | 89,000             | 0                  | 0                  | 5,000              |
| • Elevators/Escalators    | 514,000            | 514,000            | 514,000            | 514,000            |
| • Rikers Island Utilities | 1,750,000          | 1,750,000          | 1,750,000          | 1,750,000          |
| • Marinas/Docks           | 42,000             | 4,000              | 42,000             | 7,000              |
| <b>Total</b>              | <b>\$7,333,000</b> | <b>\$4,030,000</b> | <b>\$4,653,000</b> | <b>\$4,173,000</b> |
| • Importance Code A       | 1,196,000          | 499,000            | 595,000            | 465,000            |
| • Importance Code B       | 5,430,000          | 3,526,000          | 4,011,000          | 3,667,000          |
| • Importance Code C       | 706,000            | 5,000              | 46,000             | 41,000             |
| • Importance Code D       |                    |                    |                    |                    |
| <b>Total</b>              | <b>\$7,333,000</b> | <b>\$4,030,000</b> | <b>\$4,653,000</b> | <b>\$4,173,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.



# HUMAN RESOURCES ADMINISTRATION - 096

**Project Type : HUMAN RESOURCES**

SHELTERS : 8

NON-SHELTERS : 8

**Total Assets in AIMS : 16**

## Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                 | FY 2017 - 2020        | FY 2021 - 2026      |
|-------------------------|-----------------------|---------------------|
| • Exterior Architecture | 7,810,000             | 2,019,000           |
| • Interior Architecture | 4,957,000             | 2,949,000           |
| • Electrical            | 4,021,000             | 12,797,000          |
| • Mechanical            | 2,127,000             | 3,862,000           |
| <b>Total</b>            | <b>\$18,915,000 *</b> | <b>\$21,627,000</b> |
| • Importance Code A     | 8,392,000             | 2,369,000           |
| • Importance Code B     | 9,234,000             | 18,950,000          |
| • Importance Code C     | 1,288,000             | 308,000             |
| <b>Total</b>            | <b>\$18,915,000 *</b> | <b>\$21,627,000</b> |

| EXPENSE                 | FY 2017            | FY 2018          | FY 2019          | FY 2020          |
|-------------------------|--------------------|------------------|------------------|------------------|
| • Exterior Architecture | 811,000            | 61,000           | 54,000           |                  |
| • Interior Architecture | 928,000            | 80,000           | 37,000           | 167,000          |
| • Electrical            | 63,000             | 121,000          | 148,000          | 50,000           |
| • Mechanical            | 304,000            | 189,000          | 320,000          | 167,000          |
| • Elevators/Escalators  | 41,000             | 41,000           | 41,000           | 41,000           |
| <b>Total</b>            | <b>\$2,148,000</b> | <b>\$493,000</b> | <b>\$602,000</b> | <b>\$426,000</b> |
| • Importance Code A     | 855,000            | 130,000          | 102,000          | 47,000           |
| • Importance Code B     | 1,066,000          | 350,000          | 494,000          | 379,000          |
| • Importance Code C     | 227,000            | 12,000           | 6,000            |                  |
| • Importance Code D     |                    |                  |                  |                  |
| <b>Total</b>            | <b>\$2,148,000</b> | <b>\$493,000</b> | <b>\$602,000</b> | <b>\$426,000</b> |

*\* Investment necessary to bring assets to a State of Good Repair*

*All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.*

## DEPARTMENT FOR THE AGING - 125

Project Type : AGING

SENIOR CENTER

: 13

Total Assets in AIMS

: 13

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                   | FY 2017 - 2020       |  | FY 2021 - 2026     |  |
|---------------------------|----------------------|--|--------------------|--|
| • Exterior Architecture   | 642,000              |  | 262,000            |  |
| • Interior Architecture   | 295,000              |  | 319,000            |  |
| • Electrical              | 274,000              |  | 1,978,000          |  |
| • Mechanical              | 83,000               |  | 636,000            |  |
| • Miscellaneous Buildings | 502,000              |  | 342,000            |  |
| <b>Total</b>              | <b>\$1,797,000 *</b> |  | <b>\$3,538,000</b> |  |
| • Importance Code A       | 642,000              |  | 341,000            |  |
| • Importance Code B       | 587,000              |  | 2,855,000          |  |
| • Importance Code C       | 66,000               |  |                    |  |
| • Importance Code D       | 502,000              |  | 342,000            |  |
| <b>Total</b>              | <b>\$1,797,000 *</b> |  | <b>\$3,538,000</b> |  |

| EXPENSE                   | FY 2017            | FY 2018          | FY 2019          | FY 2020          |
|---------------------------|--------------------|------------------|------------------|------------------|
| • Exterior Architecture   | 172,000            | 15,000           | 8,000            |                  |
| • Interior Architecture   | 878,000            | 15,000           | 12,000           | 40,000           |
| • Electrical              | 118,000            | 70,000           | 65,000           | 26,000           |
| • Mechanical              | 193,000            | 122,000          | 165,000          | 46,000           |
| • Miscellaneous Buildings | 51,000             | 21,000           | 27,000           | 20,000           |
| • Elevators/Escalators    | 42,000             | 42,000           | 42,000           | 42,000           |
| <b>Total</b>              | <b>\$1,455,000</b> | <b>\$285,000</b> | <b>\$320,000</b> | <b>\$175,000</b> |
| • Importance Code A       | 204,000            | 24,000           | 19,000           | 9,000            |
| • Importance Code B       | 1,104,000          | 238,000          | 272,000          | 144,000          |
| • Importance Code C       | 96,000             | 2,000            | 2,000            | 2,000            |
| • Importance Code D       | 51,000             | 21,000           | 27,000           | 20,000           |
| <b>Total</b>              | <b>\$1,455,000</b> | <b>\$285,000</b> | <b>\$320,000</b> | <b>\$175,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

# DEPARTMENT OF CULTURAL AFFAIRS - 126

## Project Type : CULTURAL AFFAIRS

MUSEUM/GALLERY FACILITIES : 65

CULTURAL FACILITIES : 224

Total Assets in AIMS : 289

## Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                   | FY 2017 - 2020         |  | FY 2021 - 2026       |  |
|---------------------------|------------------------|--|----------------------|--|
| • Exterior Architecture   | 71,318,000             |  | 33,717,000           |  |
| • Interior Architecture   | 22,089,000             |  | 75,867,000           |  |
| • Electrical              | 20,423,000             |  | 76,514,000           |  |
| • Mechanical              | 13,625,000             |  | 57,737,000           |  |
| • Miscellaneous Buildings | 3,527,000              |  | 2,912,000            |  |
| <b>Total</b>              | <b>\$130,983,000 *</b> |  | <b>\$246,746,000</b> |  |
| • Importance Code A       | 71,688,000             |  | 36,834,000           |  |
| • Importance Code B       | 51,806,000             |  | 147,513,000          |  |
| • Importance Code C       | 3,962,000              |  | 59,488,000           |  |
| • Importance Code D       | 3,527,000              |  | 2,912,000            |  |
| <b>Total</b>              | <b>\$130,983,000 *</b> |  | <b>\$246,746,000</b> |  |

| EXPENSE                   | FY 2017             | FY 2018            | FY 2019             | FY 2020            |
|---------------------------|---------------------|--------------------|---------------------|--------------------|
| • Exterior Architecture   | 4,283,000           | 818,000            | 496,000             | 535,000            |
| • Interior Architecture   | 7,848,000           | 993,000            | 4,328,000           | 1,269,000          |
| • Electrical              | 1,727,000           | 1,272,000          | 1,376,000           | 1,032,000          |
| • Mechanical              | 4,300,000           | 2,685,000          | 2,900,000           | 2,366,000          |
| • Miscellaneous Buildings | 637,000             | 176,000            | 155,000             | 160,000            |
| • Elevators/Escalators    | 1,174,000           | 1,174,000          | 1,174,000           | 1,174,000          |
| <b>Total</b>              | <b>\$19,970,000</b> | <b>\$7,117,000</b> | <b>\$10,430,000</b> | <b>\$6,536,000</b> |
| • Importance Code A       | 4,544,000           | 1,041,000          | 760,000             | 763,000            |
| • Importance Code B       | 13,474,000          | 5,890,000          | 9,419,000           | 5,575,000          |
| • Importance Code C       | 1,315,000           | 11,000             | 95,000              | 38,000             |
| • Importance Code D       | 637,000             | 176,000            | 155,000             | 160,000            |
| <b>Total</b>              | <b>\$19,970,000</b> | <b>\$7,117,000</b> | <b>\$10,430,000</b> | <b>\$6,536,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

## DIV. OF YOUTH & FAMILY JUSTICE - 130

Project Type : JUVENILE JUSTICE

JUVENILE JUSTICE BUILDINGS : 4

Total Assets in AIMS : 4

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                 | FY 2017 - 2020     | FY 2021 - 2026     |
|-------------------------|--------------------|--------------------|
| • Exterior Architecture | 161,000            | 857,000            |
| • Interior Architecture | 336,000            | 1,608,000          |
| • Electrical            | 195,000            |                    |
| • Mechanical            | 209,000            | 1,916,000          |
| <b>Total</b>            | <b>\$901,000 *</b> | <b>\$4,381,000</b> |
| • Importance Code A     | 161,000            | 947,000            |
| • Importance Code B     | 740,000            | 3,341,000          |
| • Importance Code C     |                    | 93,000             |
| <b>Total</b>            | <b>\$901,000 *</b> | <b>\$4,381,000</b> |

| EXPENSE                 | FY 2017          | FY 2018          | FY 2019          | FY 2020          |
|-------------------------|------------------|------------------|------------------|------------------|
| • Exterior Architecture | 163,000          | 93,000           | 24,000           | 1,000            |
| • Interior Architecture | 74,000           | 23,000           |                  | 15,000           |
| • Electrical            | 31,000           | 70,000           | 60,000           | 31,000           |
| • Mechanical            | 81,000           | 60,000           | 149,000          | 40,000           |
| • Elevators/Escalators  | 16,000           | 16,000           | 16,000           | 16,000           |
| <b>Total</b>            | <b>\$364,000</b> | <b>\$262,000</b> | <b>\$249,000</b> | <b>\$103,000</b> |
| • Importance Code A     | 174,000          | 108,000          | 36,000           | 13,000           |
| • Importance Code B     | 172,000          | 154,000          | 213,000          | 90,000           |
| • Importance Code C     | 18,000           | 0                |                  |                  |
| • Importance Code D     |                  |                  |                  |                  |
| <b>Total</b>            | <b>\$364,000</b> | <b>\$262,000</b> | <b>\$249,000</b> | <b>\$103,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

# TAXI & LIMOUSINE COMMISSION - 156

Project Type : PUBLIC BUILDINGS

VEHICLE MAINT./STORAGE FACILITIES : 1

Total Assets in AIMS : 1

## Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                 | FY 2017 - 2020       | FY 2021 - 2026     |
|-------------------------|----------------------|--------------------|
| • Exterior Architecture | 659,000              | 768,000            |
| • Interior Architecture | 587,000              | 442,000            |
| • Electrical            | 112,000              | 50,000             |
| • Mechanical            | 184,000              | 40,000             |
| <b>Total</b>            | <b>\$1,542,000 *</b> | <b>\$1,299,000</b> |
| • Importance Code A     | 659,000              | 768,000            |
| • Importance Code B     | 690,000              | 531,000            |
| • Importance Code C     | 193,000              |                    |
| <b>Total</b>            | <b>\$1,542,000 *</b> | <b>\$1,299,000</b> |

| EXPENSE                 | FY 2017         | FY 2018         | FY 2019         | FY 2020         |
|-------------------------|-----------------|-----------------|-----------------|-----------------|
| • Exterior Architecture | 43,000          | 14,000          |                 |                 |
| • Interior Architecture | 4,000           |                 | 53,000          | 6,000           |
| • Electrical            | 5,000           | 12,000          | 4,000           | 4,000           |
| • Mechanical            | 39,000          | 4,000           | 31,000          | 5,000           |
| <b>Total</b>            | <b>\$92,000</b> | <b>\$30,000</b> | <b>\$88,000</b> | <b>\$15,000</b> |
| • Importance Code A     | 59,000          | 16,000          | 3,000           | 2,000           |
| • Importance Code B     | 33,000          | 14,000          | 85,000          | 13,000          |
| • Importance Code C     |                 |                 |                 |                 |
| • Importance Code D     |                 |                 |                 |                 |
| <b>Total</b>            | <b>\$92,000</b> | <b>\$30,000</b> | <b>\$88,000</b> | <b>\$15,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

## DEPT. OF SMALL BUSINESS SERV. - 801

### Project Type : ECONOMIC DEVELOPMENT

|                             |   |            |
|-----------------------------|---|------------|
| SHELTERS                    | : | 1          |
| MUSEUM/GALLERY FACILITIES   | : | 3          |
| TERMINALS/MARKETS           | : | 56         |
| PIERS/BULKHEADS             | : | 177        |
| PARKING GARAGES             | : | 1          |
| FERRY TERMINAL FACILITIES   | : | 2          |
| MARINAS/DOCKS               | : | 6          |
| <b>Total Assets in AIMS</b> | : | <b>246</b> |

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                   | FY 2017 - 2020         | FY 2021 - 2026       |
|---------------------------|------------------------|----------------------|
| • Exterior Architecture   | 67,102,000             | 64,709,000           |
| • Interior Architecture   | 41,142,000             | 27,843,000           |
| • Electrical              | 44,029,000             | 49,862,000           |
| • Mechanical              | 20,556,000             | 22,546,000           |
| • Piers                   | 17,346,000             | 13,445,000           |
| • Bulkheads               | 58,617,000             | 31,709,000           |
| • Miscellaneous Buildings | 338,000                | 140,000              |
| • Marinas/Docks           | 524,000                | 2,820,000            |
| <b>Total</b>              | <b>\$249,654,000 *</b> | <b>\$213,074,000</b> |

|                     |                        |                      |
|---------------------|------------------------|----------------------|
| • Importance Code A | 121,429,000            | 78,358,000           |
| • Importance Code B | 113,069,000            | 131,944,000          |
| • Importance Code C | 14,818,000             | 2,632,000            |
| • Importance Code D | 338,000                | 140,000              |
| <b>Total</b>        | <b>\$249,654,000 *</b> | <b>\$213,074,000</b> |

| EXPENSE                   | FY 2017             | FY 2018            | FY 2019            | FY 2020            |
|---------------------------|---------------------|--------------------|--------------------|--------------------|
| • Exterior Architecture   | 1,400,000           | 137,000            | 220,000            | 97,000             |
| • Interior Architecture   | 2,152,000           | 39,000             | 403,000            | 401,000            |
| • Electrical              | 655,000             | 279,000            | 436,000            | 690,000            |
| • Mechanical              | 1,351,000           | 944,000            | 1,151,000          | 1,016,000          |
| • Piers                   | 725,000             | 25,000             | 57,000             | 255,000            |
| • Bulkheads               | 3,375,000           | 199,000            | 161,000            | 34,000             |
| • Miscellaneous Buildings | 19,000              | 9,000              | 8,000              | 6,000              |
| • Elevators/Escalators    | 406,000             | 406,000            | 406,000            | 406,000            |
| • Marinas/Docks           | 133,000             | 5,000              | 42,000             | 63,000             |
| <b>Total</b>              | <b>\$10,216,000</b> | <b>\$2,041,000</b> | <b>\$2,883,000</b> | <b>\$2,968,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

## DEPT. OF SMALL BUSINESS SERV. - 801

|                     |                     |                    |                    |                    |
|---------------------|---------------------|--------------------|--------------------|--------------------|
| • Importance Code A | 3,137,000           | 515,000            | 564,000            | 518,000            |
| • Importance Code B | 6,040,000           | 1,502,000          | 2,280,000          | 2,437,000          |
| • Importance Code C | 1,020,000           | 16,000             | 31,000             | 6,000              |
| • Importance Code D | 19,000              | 9,000              | 8,000              | 6,000              |
| <b>Total</b>        | <b>\$10,216,000</b> | <b>\$2,041,000</b> | <b>\$2,883,000</b> | <b>\$2,968,000</b> |

*\* Investment necessary to bring assets to a State of Good Repair*

*All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.*

## DEPT. OF HEALTH & MENTAL HYGIENE - 816

**Project Type : HEALTH AND MENTAL HYGIENE**

|                                   |   |    |
|-----------------------------------|---|----|
| ADMINISTRATIVE BUILDINGS          | : | 1  |
| CLINICS/LABS. CLASSROOMS          | : | 26 |
| VEHICLE MAINT./STORAGE FACILITIES | : | 1  |
| ANIMAL SHELTERS                   | : | 3  |

**Total Assets in AIMS : 31**

**Report on Estimated Cost for Repairs, Replacements, Major Maintenance**

| CAPITAL                   | FY 2017 - 2020        | FY 2021 - 2026      |
|---------------------------|-----------------------|---------------------|
| • Exterior Architecture   | 10,450,000            | 3,981,000           |
| • Interior Architecture   | 6,865,000             | 5,754,000           |
| • Electrical              | 6,183,000             | 22,207,000          |
| • Mechanical              | 4,355,000             | 5,924,000           |
| • Miscellaneous Buildings | 152,000               | 129,000             |
| <b>Total</b>              | <b>\$28,006,000 *</b> | <b>\$37,995,000</b> |
| • Importance Code A       | 10,450,000            | 4,220,000           |
| • Importance Code B       | 16,513,000            | 32,890,000          |
| • Importance Code C       | 890,000               | 755,000             |
| • Importance Code D       | 152,000               | 129,000             |
| <b>Total</b>              | <b>\$28,006,000 *</b> | <b>\$37,995,000</b> |

| EXPENSE                   | FY 2017            | FY 2018            | FY 2019            | FY 2020            |
|---------------------------|--------------------|--------------------|--------------------|--------------------|
| • Exterior Architecture   | 872,000            | 76,000             | 113,000            | 162,000            |
| • Interior Architecture   | 1,031,000          | 139,000            | 326,000            | 147,000            |
| • Electrical              | 440,000            | 266,000            | 349,000            | 171,000            |
| • Mechanical              | 775,000            | 429,000            | 818,000            | 491,000            |
| • Miscellaneous Buildings | 16,000             | 6,000              | 8,000              | 8,000              |
| • Elevators/Escalators    | 415,000            | 415,000            | 415,000            | 415,000            |
| <b>Total</b>              | <b>\$3,550,000</b> | <b>\$1,332,000</b> | <b>\$2,029,000</b> | <b>\$1,394,000</b> |
| • Importance Code A       | 937,000            | 136,000            | 175,000            | 218,000            |
| • Importance Code B       | 2,345,000          | 1,182,000          | 1,835,000          | 1,166,000          |
| • Importance Code C       | 252,000            | 7,000              | 12,000             | 2,000              |
| • Importance Code D       | 16,000             | 6,000              | 8,000              | 8,000              |
| <b>Total</b>              | <b>\$3,550,000</b> | <b>\$1,332,000</b> | <b>\$2,029,000</b> | <b>\$1,394,000</b> |

*\* Investment necessary to bring assets to a State of Good Repair*

*All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.*



# HEALTH AND HOSPITALS CORP. - 819

Project Type : **HEALTH & HOSPITALS CORP.**

HOSPITAL BUILDINGS : 91

Total Assets in AIMS : 91

## Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                   |  | FY 2017 - 2020         |  | FY 2021 - 2026       |
|---------------------------|--|------------------------|--|----------------------|
| • Exterior Architecture   |  | 138,255,000            |  | 35,182,000           |
| • Interior Architecture   |  | 43,645,000             |  | 168,133,000          |
| • Electrical              |  | 34,685,000             |  | 376,351,000          |
| • Mechanical              |  | 61,380,000             |  | 147,348,000          |
| • Miscellaneous Buildings |  | 554,000                |  | 519,000              |
| <b>Total</b>              |  | <b>\$278,518,000 *</b> |  | <b>\$727,534,000</b> |
| • Importance Code A       |  | 142,992,000            |  | 40,771,000           |
| • Importance Code B       |  | 126,117,000            |  | 632,363,000          |
| • Importance Code C       |  | 8,856,000              |  | 53,882,000           |
| • Importance Code D       |  | 554,000                |  | 519,000              |
| <b>Total</b>              |  | <b>\$278,518,000 *</b> |  | <b>\$727,534,000</b> |

| EXPENSE                   | FY 2017             | FY 2018             | FY 2019             | FY 2020             |
|---------------------------|---------------------|---------------------|---------------------|---------------------|
| • Exterior Architecture   | 2,790,000           | 323,000             | 509,000             | 437,000             |
| • Interior Architecture   | 3,939,000           | 779,000             | 3,126,000           | 1,445,000           |
| • Electrical              | 2,305,000           | 1,716,000           | 1,826,000           | 1,969,000           |
| • Mechanical              | 6,586,000           | 4,887,000           | 7,442,000           | 4,904,000           |
| • Miscellaneous Buildings | 64,000              | 20,000              | 24,000              | 21,000              |
| • Elevators/Escalators    | 3,304,000           | 3,304,000           | 3,304,000           | 3,304,000           |
| <b>Total</b>              | <b>\$18,988,000</b> | <b>\$11,030,000</b> | <b>\$16,230,000</b> | <b>\$12,080,000</b> |
| • Importance Code A       | 3,385,000           | 1,001,000           | 1,230,000           | 1,170,000           |
| • Importance Code B       | 14,323,000          | 9,906,000           | 14,806,000          | 10,799,000          |
| • Importance Code C       | 1,216,000           | 102,000             | 171,000             | 90,000              |
| • Importance Code D       | 64,000              | 20,000              | 24,000              | 21,000              |
| <b>Total</b>              | <b>\$18,988,000</b> | <b>\$11,030,000</b> | <b>\$16,230,000</b> | <b>\$12,080,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

## DEPARTMENT OF SANITATION - 827

**Project Type : SANITATION**

|                                   |   |    |
|-----------------------------------|---|----|
| PIERS/BULKHEADS                   | : | 32 |
| TRANSFER STATIONS                 | : | 5  |
| VEHICLE MAINT./STORAGE FACILITIES | : | 41 |
| FRESH KILLS FACILITIES            | : | 17 |

**Total Assets in AIMS : 95**

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                   | FY 2017 - 2020         | FY 2021 - 2026      |
|---------------------------|------------------------|---------------------|
| • Exterior Architecture   | 71,864,000             | 12,446,000          |
| • Interior Architecture   | 39,143,000             | 11,757,000          |
| • Electrical              | 7,004,000              | 31,450,000          |
| • Mechanical              | 8,657,000              | 31,197,000          |
| • Piers                   | 13,594,000             | 877,000             |
| • Bulkheads               | 6,348,000              | 1,520,000           |
| • Miscellaneous Buildings | 345,000                | 81,000              |
| <b>Total</b>              | <b>\$146,956,000 *</b> | <b>\$89,329,000</b> |
| • Importance Code A       | 81,323,000             | 14,461,000          |
| • Importance Code B       | 57,480,000             | 74,378,000          |
| • Importance Code C       | 7,808,000              | 408,000             |
| • Importance Code D       | 345,000                | 81,000              |
| <b>Total</b>              | <b>\$146,956,000 *</b> | <b>\$89,329,000</b> |

| EXPENSE                   | FY 2017            | FY 2018            | FY 2019            | FY 2020            |
|---------------------------|--------------------|--------------------|--------------------|--------------------|
| • Exterior Architecture   | 1,685,000          | 27,000             | 220,000            | 15,000             |
| • Interior Architecture   | 2,277,000          | 129,000            | 127,000            | 548,000            |
| • Electrical              | 903,000            | 296,000            | 268,000            | 210,000            |
| • Mechanical              | 2,074,000          | 796,000            | 1,121,000          | 589,000            |
| • Piers                   | 757,000            | 41,000             | 21,000             | 129,000            |
| • Bulkheads               | 360,000            | 4,000              | 2,000              | 49,000             |
| • Miscellaneous Buildings | 41,000             | 8,000              | 13,000             | 8,000              |
| • Elevators/Escalators    | 114,000            | 114,000            | 114,000            | 114,000            |
| <b>Total</b>              | <b>\$8,211,000</b> | <b>\$1,416,000</b> | <b>\$1,886,000</b> | <b>\$1,663,000</b> |
| • Importance Code A       | 2,156,000          | 207,000            | 398,000            | 181,000            |
| • Importance Code B       | 4,928,000          | 1,186,000          | 1,470,000          | 1,444,000          |
| • Importance Code C       | 1,086,000          | 15,000             | 6,000              | 30,000             |
| • Importance Code D       | 41,000             | 8,000              | 13,000             | 8,000              |
| <b>Total</b>              | <b>\$8,211,000</b> | <b>\$1,416,000</b> | <b>\$1,886,000</b> | <b>\$1,663,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

## DEPARTMENT OF TRANSPORTATION - 841

|  |   |            |
|--|---|------------|
| <b>Project Type : WATERWAY BRIDGES</b> |   |            |
| BRIDGES, WATERWAYS                     | : | 38         |
| HIGHWAY BRIDGES AND TUNNELS            | : | 2          |
| <b>Project Type : FERRIES</b>          |   |            |
| FERRIES/BARGES                         | : | 8          |
| PIERS/BULKHEADS                        | : | 16         |
| FERRY TERMINAL FACILITIES              | : | 5          |
| MARINAS/DOCKS                          | : | 15         |
| <b>Project Type : ELECTRIC CONTROL</b> |   |            |
| STREET LIGHTING SYSTEMS                | : | 1          |
| <b>Project Type : HIGHWAY BRIDGES</b>  |   |            |
| HIGHWAY BRIDGES AND TUNNELS            | : | 84         |
| <b>Project Type : HIGHWAYS</b>         |   |            |
| PIERS/BULKHEADS                        | : | 10         |
| HIGHWAY FACILITIES                     | : | 45         |
| PIER FACILITIES                        | : | 3          |
| PARKING GARAGES                        | : | 9          |
| STREET AND CITY OWNED ARTERIALS        | : | 5          |
| <b>Project Type : TRAFFIC</b>          |   |            |
| TRAFFIC SIGNAL SYSTEMS                 | : | 1          |
| <b>Total Assets in AIMS</b>            | : | <b>242</b> |

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                   | FY 2017 - 2020           | FY 2021 - 2026       |
|---------------------------|--------------------------|----------------------|
| • Exterior Architecture   | 12,258,000               | 13,133,000           |
| • Interior Architecture   | 9,697,000                | 6,599,000            |
| • Electrical              | 4,630,000                | 7,745,000            |
| • Mechanical              | 1,404,000                | 11,547,000           |
| • Piers                   | 1,886,000                | 2,449,000            |
| • Bulkheads               | 7,269,000                | 2,296,000            |
| • Bridge Structure        | 468,475,000              | 256,347,000          |
| • Ferries                 | 27,700,000               |                      |
| • Miscellaneous Buildings | 143,000                  | 65,000               |
| • Marinas/Docks           | 3,815,000                | 15,895,000           |
| • Bridge Electrical       | 9,654,000                | 13,412,000           |
| • Bridge Mechanical       | 13,603,000               | 1,175,000            |
| • Primary Streets         | 385,260,000              |                      |
| • Secondary Streets       | 541,830,000              |                      |
| • Local Streets           | 1,334,560,000            |                      |
| • Arterial Streets        | 40,000,000               |                      |
| • Step Streets            | 26,460,000               |                      |
| • Traffic Signal System   | 15,346,000               |                      |
| • Street Lighting System  | 34,966,000               |                      |
| <b>Total</b>              | <b>\$2,938,954,000 *</b> | <b>\$330,661,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

Notes : All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars. Special systems include the four East River Bridges, traffic signal systems, street lighting systems and utilities. Due to their critical nature, these systems are not surveyed, but are updated yearly based on the agency's Ten Year Capital Strategy and contract information made available to OMB. Costs for Streets and Arterials beyond the Four Year Plan are not included in summary.

## DEPARTMENT OF TRANSPORTATION - 841

|                     |               |             |
|---------------------|---------------|-------------|
| • Importance Code A | 452,206,000   | 111,336,000 |
| • Importance Code B | 1,061,627,000 | 102,475,000 |
| • Importance Code C | 1,398,519,000 | 116,785,000 |
| • Importance Code D | 26,603,000    | 65,000      |

|              |                          |                      |
|--------------|--------------------------|----------------------|
| <b>Total</b> | <b>\$2,938,954,000 *</b> | <b>\$330,661,000</b> |
|--------------|--------------------------|----------------------|

| EXPENSE                   | FY 2017             | FY 2018             | FY 2019             | FY 2020             |
|---------------------------|---------------------|---------------------|---------------------|---------------------|
| • Exterior Architecture   | 916,000             | 172,000             | 116,000             | 144,000             |
| • Interior Architecture   | 958,000             | 121,000             | 130,000             | 127,000             |
| • Electrical              | 265,000             | 217,000             | 216,000             | 211,000             |
| • Mechanical              | 497,000             | 435,000             | 513,000             | 430,000             |
| • Piers                   | 519,000             | 27,000              | 67,000              | 20,000              |
| • Bulkheads               | 313,000             | 7,000               | 7,000               | 20,000              |
| • Bridge Structure        | 21,318,000          | 12,819,000          | 26,080,000          | 14,654,000          |
| • Ferries                 | 3,648,000           |                     |                     |                     |
| • Miscellaneous Buildings | 178,000             | 23,000              | 28,000              | 28,000              |
| • Elevators/Escalators    | 139,000             | 139,000             | 139,000             | 139,000             |
| • Marinas/Docks           | 357,000             | 17,000              | 129,000             | 85,000              |
| • Bridge Electrical       | 780,000             | 69,000              | 100,000             | 80,000              |
| • Bridge Mechanical       | 1,559,000           | 86,000              | 638,000             | 98,000              |
| • Primary Streets         |                     |                     |                     |                     |
| • Secondary Streets       |                     |                     |                     |                     |
| • Local Streets           |                     |                     |                     |                     |
| • Arterial Streets        |                     |                     |                     |                     |
| • Step Streets            |                     |                     |                     |                     |
| • Traffic Signal System   | 39,066,000          | 42,322,000          | 42,322,000          | 42,322,000          |
| • Street Lighting System  | 23,400,000          | 23,400,000          | 23,400,000          | 23,400,000          |
| <b>Total</b>              | <b>\$93,913,000</b> | <b>\$79,854,000</b> | <b>\$93,885,000</b> | <b>\$81,757,000</b> |
| • Importance Code A       | 82,958,000          | 78,360,000          | 86,110,000          | 80,118,000          |
| • Importance Code B       | 6,049,000           | 1,044,000           | 7,289,000           | 1,084,000           |
| • Importance Code C       | 4,728,000           | 426,000             | 458,000             | 527,000             |
| • Importance Code D       | 178,000             | 23,000              | 28,000              | 28,000              |
| <b>Total</b>              | <b>\$93,913,000</b> | <b>\$79,854,000</b> | <b>\$93,885,000</b> | <b>\$81,757,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

Notes : All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars. Special systems include the four East River Bridges, traffic signal systems, street lighting systems and utilities. Due to their critical nature, these systems are not surveyed, but are updated yearly based on the agency's Ten Year Capital Strategy and contract information made available to OMB. Costs for Streets and Arterials beyond the Four Year Plan are not included in summary.

## DEPT. OF PARKS & RECREATION - 846

**Project Type : PARKS AND RECREATION**

|                                   |   |              |
|-----------------------------------|---|--------------|
| MUSEUM/GALLERY FACILITIES         | : | 16           |
| PIERS/BULKHEADS                   | : | 138          |
| VEHICLE MAINT./STORAGE FACILITIES | : | 4            |
| PARK FACILITIES                   | : | 717          |
| STADIUM FACILITIES                | : | 5            |
| MARINAS/DOCKS                     | : | 26           |
| WALLS                             | : | 276          |
| PARK BRIDGES                      | : | 97           |
| <b>Total Assets in AIMS</b>       | : | <b>1,279</b> |

**Report on Estimated Cost for Repairs, Replacements, Major Maintenance**

| <b>CAPITAL</b>                     | <b>FY 2017 - 2020</b>  | <b>FY 2021 - 2026</b> |
|------------------------------------|------------------------|-----------------------|
| • Exterior Architecture            | 67,535,000             | 22,846,000            |
| • Interior Architecture            | 21,670,000             | 14,884,000            |
| • Electrical                       | 14,372,000             | 37,166,000            |
| • Mechanical                       | 5,443,000              | 33,969,000            |
| • Piers                            | 5,157,000              | 10,926,000            |
| • Bulkheads                        | 52,677,000             | 84,996,000            |
| • Parks' Walls                     | 45,721,000             | 452,000               |
| • Parks' Boardwalks                | 56,237,000             | 57,968,000            |
| • Miscellaneous Buildings          | 37,185,000             | 14,786,000            |
| • Parks' Water and Sewer Utilities | 107,299,000            | 160,949,000           |
| • Parks' Electrical Utilities      | 32,285,000             | 48,427,000            |
| • Parks' Streets and Roads         | 71,653,000             | 20,124,000            |
| • Park Bridges                     | 25,534,000             | 8,623,000             |
| • Marinas/Docks                    | 12,860,000             | 10,176,000            |
| <b>Total</b>                       | <b>\$555,628,000 *</b> | <b>\$526,294,000</b>  |
| • Importance Code A                | 254,125,000            | 146,389,000           |
| • Importance Code B                | 171,555,000            | 333,229,000           |
| • Importance Code C                | 21,109,000             | 11,766,000            |
| • Importance Code D                | 108,838,000            | 34,910,000            |
| <b>Total</b>                       | <b>\$555,628,000 *</b> | <b>\$526,294,000</b>  |

*\* Investment necessary to bring assets to a State of Good Repair*

*All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.*

## DEPT. OF PARKS & RECREATION - 846

| EXPENSE                            | FY 2017             | FY 2018            | FY 2019            | FY 2020            |
|------------------------------------|---------------------|--------------------|--------------------|--------------------|
| • Exterior Architecture            | 5,679,000           | 587,000            | 482,000            | 334,000            |
| • Interior Architecture            | 5,889,000           | 367,000            | 762,000            | 475,000            |
| • Electrical                       | 1,914,000           | 660,000            | 617,000            | 800,000            |
| • Mechanical                       | 2,078,000           | 931,000            | 1,251,000          | 1,327,000          |
| • Piers                            | 802,000             | 75,000             | 171,000            | 216,000            |
| • Bulkheads                        | 2,538,000           | 187,000            | 178,000            | 122,000            |
| • Parks' Walls                     | 3,575,000           |                    |                    |                    |
| • Parks' Boardwalks                | 109,000             |                    |                    |                    |
| • Miscellaneous Buildings          | 2,145,000           | 521,000            | 438,000            | 760,000            |
| • Parks' Water and Sewer Utilities | 2,682,000           | 2,682,000          | 2,682,000          | 2,682,000          |
| • Parks' Electrical Utilities      | 808,000             | 808,000            | 808,000            | 808,000            |
| • Elevators/Escalators             | 234,000             | 234,000            | 234,000            | 234,000            |
| • Parks' Streets and Roads         |                     |                    |                    |                    |
| • Park Bridges                     | 4,485,000           | 8,000              | 6,000              | 771,000            |
| • Marinas/Docks                    | 938,000             | 214,000            | 232,000            | 516,000            |
| <b>Total</b>                       | <b>\$33,875,000</b> | <b>\$7,274,000</b> | <b>\$7,862,000</b> | <b>\$9,045,000</b> |
| • Importance Code A                | 11,580,000          | 1,110,000          | 927,000            | 1,028,000          |
| • Importance Code B                | 16,240,000          | 5,605,000          | 6,415,000          | 6,737,000          |
| • Importance Code C                | 3,910,000           | 38,000             | 81,000             | 520,000            |
| • Importance Code D                | 2,145,000           | 521,000            | 438,000            | 760,000            |
| <b>Total</b>                       | <b>\$33,875,000</b> | <b>\$7,274,000</b> | <b>\$7,862,000</b> | <b>\$9,045,000</b> |

\* Investment necessary to bring assets to a State of Good Repair

All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

## DEPT. OF CITYWIDE ADMIN. SERV. - 856

**Project Type : REAL PROPERTY**

|                         |   |    |
|-------------------------|---|----|
| PIERS/BULKHEADS         | : | 10 |
| COURT BUILDINGS         | : | 23 |
| PUBLIC OFFICE BUILDINGS | : | 34 |

**Total Assets in AIMS : 67**

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

| CAPITAL                   | FY 2017 - 2020         | FY 2021 - 2026       |
|---------------------------|------------------------|----------------------|
| • Exterior Architecture   | 71,258,000             | 35,288,000           |
| • Interior Architecture   | 56,497,000             | 134,164,000          |
| • Electrical              | 31,543,000             | 189,012,000          |
| • Mechanical              | 35,649,000             | 127,459,000          |
| • Piers                   | 369,000                | 304,000              |
| • Bulkheads               | 1,560,000              | 5,855,000            |
| • Miscellaneous Buildings | 631,000                | 585,000              |
| <b>Total</b>              | <b>\$197,508,000 *</b> | <b>\$492,666,000</b> |

|                     |                        |                      |
|---------------------|------------------------|----------------------|
| • Importance Code A | 74,731,000             | 38,383,000           |
| • Importance Code B | 109,280,000            | 407,403,000          |
| • Importance Code C | 12,866,000             | 46,295,000           |
| • Importance Code D | 631,000                | 585,000              |
| <b>Total</b>        | <b>\$197,508,000 *</b> | <b>\$492,666,000</b> |

| EXPENSE                   | FY 2017             | FY 2018             | FY 2019             | FY 2020             |
|---------------------------|---------------------|---------------------|---------------------|---------------------|
| • Exterior Architecture   | 1,381,000           | 235,000             | 343,000             | 315,000             |
| • Interior Architecture   | 9,694,000           | 898,000             | 13,156,000          | 4,738,000           |
| • Electrical              | 1,809,000           | 1,395,000           | 1,612,000           | 1,493,000           |
| • Mechanical              | 5,680,000           | 4,499,000           | 6,101,000           | 4,485,000           |
| • Piers                   | 28,000              |                     |                     |                     |
| • Bulkheads               | 283,000             |                     | 8,000               | 0                   |
| • Miscellaneous Buildings | 46,000              | 30,000              | 35,000              | 31,000              |
| • Elevators/Escalators    | 4,889,000           | 4,889,000           | 4,889,000           | 4,889,000           |
| <b>Total</b>              | <b>\$23,810,000</b> | <b>\$11,945,000</b> | <b>\$26,144,000</b> | <b>\$15,951,000</b> |
| • Importance Code A       | 2,117,000           | 1,040,000           | 1,209,000           | 1,119,000           |
| • Importance Code B       | 20,876,000          | 10,874,000          | 24,859,000          | 14,735,000          |
| • Importance Code C       | 772,000             | 2,000               | 42,000              | 66,000              |
| • Importance Code D       | 46,000              | 30,000              | 35,000              | 31,000              |
| <b>Total</b>              | <b>\$23,810,000</b> | <b>\$11,945,000</b> | <b>\$26,144,000</b> | <b>\$15,951,000</b> |

*\* Investment necessary to bring assets to a State of Good Repair*

*All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.*

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## **Exhibits A - C**

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- A. Component Importance Codes for  
Repair, Replacement and Major  
Maintenance
- B. Technical Notes and Project  
Methodology
- C. Legend for Individual Survey Report  
and Sample Asset Report





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Exhibit A  
Component Importance  
Codes for Repair,  
Replacement and Major  
Maintenance

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## Exhibit A

### Component Importance Codes for Repair, Replacement and Major Maintenance

| D.S.C. | Discipline (D) | System (S)           | Component (C)        | Importance |
|--------|----------------|----------------------|----------------------|------------|
| 1.1.1  | Architecture   | Exterior             | Exterior Walls       | A          |
| 1.1.2  | Architecture   | Exterior             | Windows              | A          |
| 1.1.3  | Architecture   | Exterior             | Parapets             | A          |
| 1.1.4  | Architecture   | Exterior             | Roof                 | A          |
| 1.2.5  | Architecture   | Interior             | Floors               | B          |
| 1.2.6  | Architecture   | Interior             | Interior Walls       | C          |
| 1.2.7  | Architecture   | Interior             | Ceiling              | B          |
| 1.3.8  | Architecture   | Site Enclosure       | Fence/Gates          | C          |
| 1.3.9  | Architecture   | Site Enclosure       | Free Standing Walls  | C          |
| 1.3.10 | Architecture   | Site Enclosure       | Retaining Walls      | B          |
| 1.4.11 | Architecture   | Site Pavements       | Public Sidewalk      | B          |
| 1.4.12 | Architecture   | Site Pavements       | On-Site Walkways     | C          |
| 1.4.13 | Architecture   | Site Pavements       | Parking/Driveway     | C          |
| 1.4.14 | Architecture   | Site Pavements       | Activity Yard        | B          |
| 2.1.1  | Electrical     | Over 600 volts       | Service Equipment    | A          |
| 2.1.2  | Electrical     | Over 600 volts       | Transformers         | B          |
| 2.1.3  | Electrical     | Over 600 volts       | Switchgear           | B          |
| 2.1.4  | Electrical     | Over 600 volts       | Feeders              | B          |
| 2.1.5  | Electrical     | Over 600 volts       | Raceway              | B          |
| 2.2.1  | Electrical     | Under 600 Volts      | Service Equipment    | A          |
| 2.2.2  | Electrical     | Under 600 Volts      | Transformers         | B          |
| 2.2.3  | Electrical     | Under 600 Volts      | Switchgear           | B          |
| 2.2.5  | Electrical     | Under 600 Volts      | Raceway              | B          |
| 2.2.6  | Electrical     | Under 600 Volts      | Panelboards          | B          |
| 2.2.7  | Electrical     | Under 600 Volts      | Wiring               | B          |
| 2.2.8  | Electrical     | Under 600 Volts      | Motor Controllers    | B          |
| 2.3.11 | Electrical     | Ground               | Grounding Devices    | B          |
| 2.4.9  | Electrical     | Stand-by Power       | Transfer Switches    | B          |
| 2.4.12 | Electrical     | Stand-by Power       | Generators           | B          |
| 2.4.13 | Electrical     | Stand-by Power       | Batteries            | B          |
| 2.4.17 | Electrical     | Stand-by Power       | Fuel Storage         | B          |
| 2.5.10 | Electrical     | Lighting             | Interior Lighting    | B          |
| 2.5.16 | Electrical     | Lighting             | Egress Lighting      | B          |
| 2.5.18 | Electrical     | Lighting             | Exterior Lighting    | B          |
| 2.6.15 | Electrical     | Lightning Protection | Arresters            | B          |
| 2.7.19 | Electrical     | Alarm                | Security System      | B          |
| 2.7.20 | Electrical     | Alarm                | Fire/Smoke Detection | B          |
| 3.1.1  | Mechanical     | Heating              | Energy Source        | B          |
| 3.1.2  | Mechanical     | Heating              | Conversion Equipment | A          |
| 3.1.3  | Mechanical     | Heating              | Distribution         | B          |
| 3.1.4  | Mechanical     | Heating              | Terminal Devices     | B          |

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| <b>D.S.C.</b> | <b>Discipline (D)</b> | <b>System (S)</b>  | <b>Component (C)</b>   | <b>Importance</b> |
|---------------|-----------------------|--------------------|------------------------|-------------------|
| 3.2.1         | Mechanical            | Air Conditioning   | Energy Source          | B                 |
| 3.2.2         | Mechanical            | Air Conditioning   | Conversion Equipment   | B                 |
| 3.2.3         | Mechanical            | Air Conditioning   | Distribution           | B                 |
| 3.2.4         | Mechanical            | Air Conditioning   | Terminal Devices       | B                 |
| 3.2.5         | Mechanical            | Air Conditioning   | Heat Rejection         | B                 |
| 3.2.24        | Mechanical            | Air Conditioning   | Dehumidifier           | B                 |
| 3.3.3         | Mechanical            | Ventilation        | Distribution           | B                 |
| 3.3.6         | Mechanical            | Ventilation        | Exhaust Fans           | B                 |
| 3.4.7         | Mechanical            | Plumbing           | H/C Water Piping       | B                 |
| 3.4.8         | Mechanical            | Plumbing           | Water Heater           | B                 |
| 3.4.9         | Mechanical            | Plumbing           | HW Heat Exchanger      | B                 |
| 3.4.10        | Mechanical            | Plumbing           | Sanitary Piping        | B                 |
| 3.4.11        | Mechanical            | Plumbing           | Storm Drain Piping     | B                 |
| 3.4.12        | Mechanical            | Plumbing           | Sump Pump(s)           | B                 |
| 3.4.13        | Mechanical            | Plumbing           | Pool Filter/Treatment  | B                 |
| 3.4.15        | Mechanical            | Plumbing           | Sewage Ejector(s)      | B                 |
| 3.4.18        | Mechanical            | Plumbing           | Backflow Preventer     | B                 |
| 3.4.19        | Mechanical            | Plumbing           | Fixtures               | B                 |
| 3.5.16        | Mechanical            | Vertical Transport | Elevators              | C                 |
| 3.5.17        | Mechanical            | Vertical Transport | Escalators             | C                 |
| 3.6.20        | Mechanical            | Fire Suppression   | Standpipe              | B                 |
| 3.6.21        | Mechanical            | Fire Suppression   | Sprinkler              | B                 |
| 3.6.22        | Mechanical            | Fire Suppression   | Fire Pump              | B                 |
| 3.6.23        | Mechanical            | Fire Suppression   | Chemical System        | B                 |
| 4.1.2         | Piers                 | Structural         | Deck                   | A                 |
| 4.1.3         | Piers                 | Structural         | Deck Surface           | C                 |
| 4.1.5         | Piers                 | Structural         | Firewalls              | A                 |
| 4.1.6         | Piers                 | Structural         | Pile Caps              | A                 |
| 4.1.7         | Piers                 | Structural         | Piles and Bracing      | A                 |
| 4.1.11        | Piers                 | Structural         | Coping/Curb            | C                 |
| 4.2.1         | Piers                 | Fender             | Buffer                 | B                 |
| 4.2.4         | Piers                 | Fender             | Facing                 | B                 |
| 4.2.8         | Piers                 | Fender             | Wales and Chocks       | B                 |
| 4.2.9         | Piers                 | Fender             | Piles                  | B                 |
| 4.2.13        | Piers                 | Fender             | Pile Cluster           | B                 |
| 4.3.3         | Piers                 | Deck Elements      | Deck Surface           | B                 |
| 4.3.10        | Piers                 | Deck Elements      | Railing                | B                 |
| 4.3.11        | Piers                 | Deck Elements      | Coping/Curb            | B                 |
| 5.1.1         | Bulkheads             | Structural         | Relieving Platform Top | A                 |
| 5.1.3         | Bulkheads             | Structural         | Coping                 | C                 |
| 5.1.4         | Bulkheads             | Structural         | Facing                 | C                 |
| 5.1.6         | Bulkheads             | Structural         | Gravity Wall           | A                 |
| 5.1.7         | Bulkheads             | Structural         | Pile Supported Wall    | A                 |
| 5.1.9         | Bulkheads             | Structural         | Piles and Bracing      | A                 |
| 5.1.10        | Bulkheads             | Structural         | Rip Rap                | C                 |
| 5.1.11        | Bulkheads             | Structural         | Sheet Piles            | A                 |

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| D.S.C. | Discipline (D)   | System (S)      | Component (C)         | Importance |
|--------|------------------|-----------------|-----------------------|------------|
| 5.1.13 | Bulkheads        | Structural      | Wales                 | A          |
| 5.1.15 | Bulkheads        | Structural      | Pile Caps             | A          |
| 5.1.19 | Bulkheads        | Structural      | Lowlevel Pile Caps    | A          |
| 5.2.5  | Bulkheads        | Backfill        | Fill                  | B          |
| 5.2.12 | Bulkheads        | Backfill        | Surface               | B          |
| 5.3.2  | Bulkheads        | Fender          | Buffer                | B          |
| 5.3.4  | Bulkheads        | Fender          | Facing                | B          |
| 5.3.8  | Bulkheads        | Fender          | Piles                 | B          |
| 5.3.14 | Bulkheads        | Fender          | Wales and Chocks      | B          |
| 5.3.17 | Bulkheads        | Fender          | Pile Cluster          | B          |
| 5.4.16 | Bulkheads        | Deck Elements   | Railing               | B          |
| 5.4.18 | Bulkheads        | Deck Elements   | Parapet               | B          |
| 6.1.1  | Bridge Structure | Abutments       | Bridge Seat&pedestals | A          |
| 6.1.7  | Bridge Structure | Abutments       | Backwall              | C          |
| 6.1.9  | Bridge Structure | Abutments       | Brngs,Ancr Blts,Pads  | A          |
| 6.1.14 | Bridge Structure | Abutments       | Footings              | B          |
| 6.1.17 | Bridge Structure | Abutments       | Joint with Deck       | B          |
| 6.1.20 | Bridge Structure | Abutments       | Mat (scour & erosion) | B          |
| 6.1.24 | Bridge Structure | Abutments       | Pedestals             | A          |
| 6.1.31 | Bridge Structure | Abutments       | Stem (breastwall)     | B          |
| 6.1.32 | Bridge Structure | Abutments       | Walls                 | A          |
| 6.2.14 | Bridge Structure | Wingwalls       | Footings              | C          |
| 6.2.20 | Bridge Structure | Wingwalls       | Mat (scour & erosion) | C          |
| 6.2.25 | Bridge Structure | Wingwalls       | Piles                 | C          |
| 6.2.32 | Bridge Structure | Wingwalls       | Walls                 | C          |
| 6.3.8  | Bridge Structure | Feature Crossed | Bank Protection       | C          |
| 6.3.20 | Bridge Structure | Feature Crossed | Mat (scour & erosion) | A          |
| 6.3.44 | Bridge Structure | Feature Crossed | Pier Protection       | B          |
| 6.4.4  | Bridge Structure | Approaches      | Pavement              | C          |
| 6.4.11 | Bridge Structure | Approaches      | Curbs                 | A          |
| 6.4.13 | Bridge Structure | Approaches      | Embankment            | C          |
| 6.4.16 | Bridge Structure | Approaches      | Guide Railing         | A          |
| 6.4.20 | Bridge Structure | Approaches      | Mat (scour & erosion) | A          |
| 6.4.21 | Bridge Structure | Approaches      | Median                | A          |
| 6.4.28 | Bridge Structure | Approaches      | Railings/Parapets     | A          |
| 6.4.30 | Bridge Structure | Approaches      | Sidewalks/Fascias     | C          |
| 6.5.2  | Bridge Structure | Piers           | Cap Beam              | A          |
| 6.5.5  | Bridge Structure | Piers           | Pier,Columns          | B          |
| 6.5.6  | Bridge Structure | Piers           | Stem,Solid Pier       | B          |
| 6.5.9  | Bridge Structure | Piers           | Brngs,Ancr Blts,Pads  | A          |
| 6.5.14 | Bridge Structure | Piers           | Footings              | B          |
| 6.5.20 | Bridge Structure | Piers           | Mat (scour & erosion) | A          |
| 6.5.24 | Bridge Structure | Piers           | Pedestals             | B          |
| 6.5.25 | Bridge Structure | Piers           | Piles                 | A          |
| 6.6.11 | Bridge Structure | Deck Elements   | Curbs                 | A          |
| 6.6.15 | Bridge Structure | Deck Elements   | Gratings              | A          |

| D.S.C.  | Discipline (D)    | System (S)                | Component (C)         | Importance |
|---------|-------------------|---------------------------|-----------------------|------------|
| 6.6.16  | Bridge Structure  | Deck Elements             | Guide Railing         | A          |
| 6.6.21  | Bridge Structure  | Deck Elements             | Median                | A          |
| 6.6.22  | Bridge Structure  | Deck Elements             | Mono Deck Surface     | C          |
| 6.6.28  | Bridge Structure  | Deck Elements             | Railings/Parapets     | A          |
| 6.6.30  | Bridge Structure  | Deck Elements             | Sidewalks             | C          |
| 6.6.33  | Bridge Structure  | Deck Elements             | Wearing Surface       | C          |
| 6.6.52  | Bridge Structure  | Deck Elements             | Scupper               | C          |
| 6.7.12  | Bridge Structure  | Superstructure            | Deck,Structural       | A          |
| 6.7.18  | Bridge Structure  | Superstructure            | Joints                | C          |
| 6.7.27  | Bridge Structure  | Superstructure            | Primary Member        | A          |
| 6.7.29  | Bridge Structure  | Superstructure            | Secondary Member      | B          |
| 6.7.50  | Bridge Structure  | Superstructure            | Vertical Lift Tower   | A          |
| 6.8.10  | Bridge Structure  | Movable Bridges           | Controls              | A          |
| 6.8.19  | Bridge Structure  | Movable Bridges           | Machinery             | A          |
| 6.8.26  | Bridge Structure  | Movable Bridges           | Power                 | A          |
| 6.8.45  | Bridge Structure  | Movable Bridges           | Swing Span Truss      | A          |
| 6.8.46  | Bridge Structure  | Movable Bridges           | Swing Span Pivot Pier | A          |
| 6.8.47  | Bridge Structure  | Movable Bridges           | Bascule Span          | A          |
| 6.8.48  | Bridge Structure  | Movable Bridges           | Bascule Span Pier     | A          |
| 6.8.49  | Bridge Structure  | Movable Bridges           | Vertical Lift Span    | A          |
| 6.8.50  | Bridge Structure  | Movable Bridges           | Vertical Lift Tower   | A          |
| 6.8.51  | Bridge Structure  | Movable Bridges           | Vertical Lift Pier    | A          |
| 9.1.1   | Park Wall         | Wall                      | Coping                | B          |
| 9.1.2   | Park Wall         | Wall                      | Wall/Fence            | A          |
| 9.1.3   | Park Wall         | Wall                      | Base                  | B          |
| 10.1.2  | Boardwalks        | Superstructure            | Deck                  | A          |
| 10.1.3  | Boardwalks        | Superstructure            | Railing               | B          |
| 10.2.4  | Boardwalks        | Substructure              | Beams                 | A          |
| 10.2.5  | Boardwalks        | Substructure              | Piers                 | A          |
| 10.2.6  | Boardwalks        | Substructure              | Girders               | A          |
| 10.2.7  | Boardwalks        | Substructure              | Underside Enclosure   | C          |
| 12.1.5  | Bridge Electrical | Communication Electrical  | Communications        | B          |
| 12.1.18 | Bridge Electrical | Communication Electrical  | Intercom              | B          |
| 12.1.38 | Bridge Electrical | Communication Electrical  | Telephone             | B          |
| 12.1.50 | Bridge Electrical | Communication Electrical  | Jack                  | B          |
| 12.2.6  | Bridge Electrical | Control System Electrical | Computer              | B          |
| 12.2.8  | Bridge Electrical | Control System Electrical | Control Console       | B          |
| 12.2.9  | Bridge Electrical | Control System Electrical | Control Devices       | B          |
| 12.2.10 | Bridge Electrical | Control System Electrical | Disconnect Switch     | B          |
| 12.2.22 | Bridge Electrical | Control System Electrical | Limit Switch          | B          |
| 12.2.23 | Bridge Electrical | Control System Electrical | Local Starter         | B          |
| 12.3.14 | Bridge Electrical | Drive                     | Grating Motor         | B          |
| 12.3.25 | Bridge Electrical | Drive                     | Machinery Brake       | B          |
| 12.3.27 | Bridge Electrical | Drive                     | Motor Brake           | B          |
| 12.3.33 | Bridge Electrical | Drive                     | Span Lock Motor       | B          |
| 12.3.47 | Bridge Electrical | Drive                     | Wedge Motor           | B          |

| <b>D.S.C.</b> | <b>Discipline (D)</b> | <b>System (S)</b>           | <b>Component (C)</b>   | <b>Importance</b> |
|---------------|-----------------------|-----------------------------|------------------------|-------------------|
| 12.4.24       | Bridge Electrical     | Electric Power              | MCC                    | B                 |
| 12.4.28       | Bridge Electrical     | Electric Power              | PanelBoard             | B                 |
| 12.4.31       | Bridge Electrical     | Electric Power              | Service Equipment      | B                 |
| 12.4.37       | Bridge Electrical     | Electric Power              | Switchgear             | B                 |
| 12.4.43       | Bridge Electrical     | Electric Power              | Transfer Switch        | B                 |
| 12.4.44       | Bridge Electrical     | Electric Power              | Transformer            | B                 |
| 12.4.51       | Bridge Electrical     | Electric Power              | Heating                | B                 |
| 12.4.54       | Bridge Electrical     | Electric Power              | Dist Equip/Motor Cont. | B                 |
| 12.5.19       | Bridge Electrical     | Exterior Lighting           | Lighting Contactor     | B                 |
| 12.5.20       | Bridge Electrical     | Exterior Lighting           | Lighting Fixture       | B                 |
| 12.5.30       | Bridge Electrical     | Exterior Lighting           | Pole                   | B                 |
| 12.5.34       | Bridge Electrical     | Exterior Lighting           | Spot Lighting          | B                 |
| 12.6.15       | Bridge Electrical     | Ground/Lightning Protection | Ground Bus             | B                 |
| 12.6.16       | Bridge Electrical     | Ground/Lightning Protection | Ground Rod             | B                 |
| 12.6.17       | Bridge Electrical     | Ground/Lightning Protection | Ground Wire            | B                 |
| 12.6.21       | Bridge Electrical     | Ground/Lightning Protection | Lightning Terminals    | B                 |
| 12.7.11       | Bridge Electrical     | Interior Lighting           | Exit Lighting          | B                 |
| 12.7.20       | Bridge Electrical     | Interior Lighting           | Lighting Fixture       | B                 |
| 12.7.49       | Bridge Electrical     | Interior Lighting           | Wiring Device          | B                 |
| 12.8.1        | Bridge Electrical     | Navigation Lighting         | Air Beacon             | B                 |
| 12.8.12       | Bridge Electrical     | Navigation Lighting         | Fender Lighting        | B                 |
| 12.8.29       | Bridge Electrical     | Navigation Lighting         | Pier Lighting          | B                 |
| 12.8.32       | Bridge Electrical     | Navigation Lighting         | Span Lighting          | B                 |
| 12.9.31       | Bridge Electrical     | Power Over 600V             | Service Equipment      | B                 |
| 12.9.44       | Bridge Electrical     | Power Over 600V             | Transformer            | B                 |
| 12.10.3       | Bridge Electrical     | Raceway                     | Box                    | B                 |
| 12.10.4       | Bridge Electrical     | Raceway                     | Collector Ring         | B                 |
| 12.10.5       | Bridge Electrical     | Raceway                     | Communications         | B                 |
| 12.10.7       | Bridge Electrical     | Raceway                     | Conduit                | B                 |
| 12.10.35      | Bridge Electrical     | Raceway                     | Submarine Ctrl Cables  | B                 |
| 12.10.36      | Bridge Electrical     | Raceway                     | Submarine Power Cable  | B                 |
| 12.10.45      | Bridge Electrical     | Raceway                     | Trough                 | B                 |
| 12.10.46      | Bridge Electrical     | Raceway                     | Under Ground Structure | B                 |
| 12.10.48      | Bridge Electrical     | Raceway                     | Wires                  | B                 |
| 12.10.52      | Bridge Electrical     | Raceway                     | Wiring                 | B                 |
| 12.11.26      | Bridge Electrical     | Span Lock                   | Motor                  | B                 |
| 12.12.13      | Bridge Electrical     | Stand-by Power              | Generator              | B                 |
| 12.12.43      | Bridge Electrical     | Stand-by Power              | Transfer Switch        | B                 |
| 12.13.2       | Bridge Electrical     | Traffic System Electrical   | Barrier Gate Lighting  | B                 |
| 12.13.39      | Bridge Electrical     | Traffic System Electrical   | Traffic Gate Lighting  | B                 |
| 12.13.40      | Bridge Electrical     | Traffic System Electrical   | Traffic Gong           | B                 |
| 12.13.41      | Bridge Electrical     | Traffic System Electrical   | Traffic Sign           | B                 |
| 12.13.42      | Bridge Electrical     | Traffic System Electrical   | Traffic Signal         | B                 |
| 12.14.53      | Bridge Electrical     | Lighting                    | Lighting Devices       | B                 |
| 13.1.7        | Bridge Mechanical     | Bascule                     | Counter Weight         | B                 |
| 13.1.9        | Bridge Mechanical     | Bascule                     | Emergency Drive        | B                 |



| <b>D.S.C.</b> | <b>Discipline (D)</b> | <b>System (S)</b> | <b>Component (C)</b>      | <b>Importance</b> |
|---------------|-----------------------|-------------------|---------------------------|-------------------|
| 13.1.12       | Bridge Mechanical     | Bascule           | Fuel Tanks                | B                 |
| 13.1.13       | Bridge Mechanical     | Bascule           | Houses                    | B                 |
| 13.1.14       | Bridge Mechanical     | Bascule           | Lock Bars                 | B                 |
| 13.1.15       | Bridge Mechanical     | Bascule           | Main Drive System         | B                 |
| 13.1.16       | Bridge Mechanical     | Bascule           | Rack                      | B                 |
| 13.1.20       | Bridge Mechanical     | Bascule           | Live Load Supports        | B                 |
| 13.1.22       | Bridge Mechanical     | Bascule           | Track                     | B                 |
| 13.1.23       | Bridge Mechanical     | Bascule           | Traffic Devices           | B                 |
| 13.1.24       | Bridge Mechanical     | Bascule           | Trunnion                  | B                 |
| 13.3.4        | Bridge Mechanical     | Swing             | Center Latch              | B                 |
| 13.3.5        | Bridge Mechanical     | Swing             | Center Lift               | B                 |
| 13.3.6        | Bridge Mechanical     | Swing             | Center Pivot              | B                 |
| 13.3.9        | Bridge Mechanical     | Swing             | Emergency Drive           | B                 |
| 13.3.10       | Bridge Mechanical     | Swing             | End Lift                  | B                 |
| 13.3.12       | Bridge Mechanical     | Swing             | Fuel Tanks                | B                 |
| 13.3.13       | Bridge Mechanical     | Swing             | Houses                    | B                 |
| 13.3.15       | Bridge Mechanical     | Swing             | Main Drive System         | B                 |
| 13.3.16       | Bridge Mechanical     | Swing             | Rack                      | B                 |
| 13.3.20       | Bridge Mechanical     | Swing             | Live Load Supports        | B                 |
| 13.3.23       | Bridge Mechanical     | Swing             | Traffic Devices           | B                 |
| 13.4.1        | Bridge Mechanical     | Vertical Lift     | Buffers                   | B                 |
| 13.4.2        | Bridge Mechanical     | Vertical Lift     | CTRW T Ropes&Guides       | B                 |
| 13.4.7        | Bridge Mechanical     | Vertical Lift     | Counter Weight            | B                 |
| 13.4.8        | Bridge Mechanical     | Vertical Lift     | Elevators                 | B                 |
| 13.4.9        | Bridge Mechanical     | Vertical Lift     | Emergency Drive           | B                 |
| 13.4.11       | Bridge Mechanical     | Vertical Lift     | End Locks                 | B                 |
| 13.4.12       | Bridge Mechanical     | Vertical Lift     | Fuel Tanks                | B                 |
| 13.4.13       | Bridge Mechanical     | Vertical Lift     | Houses                    | B                 |
| 13.4.15       | Bridge Mechanical     | Vertical Lift     | Main Drive System         | B                 |
| 13.4.19       | Bridge Mechanical     | Vertical Lift     | Sheaves                   | B                 |
| 13.4.20       | Bridge Mechanical     | Vertical Lift     | Live Load Supports        | B                 |
| 13.4.21       | Bridge Mechanical     | Vertical Lift     | Towers                    | B                 |
| 13.4.23       | Bridge Mechanical     | Vertical Lift     | Traffic Devices           | B                 |
| 14.1.2        | Marinas/Docks         | Access Walkways   | Deck                      | A                 |
| 14.1.5        | Marinas/Docks         | Access Walkways   | Gangways                  | B                 |
| 14.1.8        | Marinas/Docks         | Access Walkways   | Pile Caps                 | A                 |
| 14.1.11       | Marinas/Docks         | Access Walkways   | Piles and Bracing         | A                 |
| 14.1.15       | Marinas/Docks         | Access Walkways   | Fender Piles,Wales/Chocks | A                 |
| 14.2.1        | Marinas/Docks         | Floating Docks    | Anchor Piles              | A                 |
| 14.2.2        | Marinas/Docks         | Floating Docks    | Deck                      | A                 |
| 14.2.3        | Marinas/Docks         | Floating Docks    | Fenders                   | C                 |
| 14.2.4        | Marinas/Docks         | Floating Docks    | Floats/Frames             | A                 |
| 14.2.7        | Marinas/Docks         | Floating Docks    | Mooring Piles             | B                 |
| 14.2.10       | Marinas/Docks         | Floating Docks    | Railing                   | A                 |
| 14.2.16       | Marinas/Docks         | Floating Docks    | Barge                     | A                 |
| 14.3.3        | Marinas/Docks         | Launch/Haulout    | Fenders                   | B                 |

| D.S.C.   | Discipline (D) | System (S)           | Component (C)         | Importance |
|----------|----------------|----------------------|-----------------------|------------|
| 14.3.11  | Marinas/Docks  | Launch/Haulout       | Piles and Bracing     | A          |
| 14.3.12  | Marinas/Docks  | Launch/Haulout       | Ramp                  | B          |
| 14.3.13  | Marinas/Docks  | Launch/Haulout       | Runway                | A          |
| 14.4.3   | Marinas/Docks  | Protective Structure | Fenders               | A          |
| 14.4.6   | Marinas/Docks  | Protective Structure | Ice Breaker           | A          |
| 14.4.9   | Marinas/Docks  | Protective Structure | Piles Cluster         | C          |
| 14.4.14  | Marinas/Docks  | Protective Structure | Wave Attenuator       | A          |
| 14.4.28  | Marinas/Docks  | Protective Structure | Donut Fender          | A          |
| 14.5.10  | Marinas/Docks  | Deck Elements        | Railing               | A          |
| 14.6.18  | Marinas/Docks  | Electrical           | Conduit               | A          |
| 14.6.21  | Marinas/Docks  | Electrical           | Lighting Fixture      | A          |
| 14.7.23  | Marinas/Docks  | Electrical/Mech.     | Power Supply/Bollards | A          |
| 14.8.20  | Marinas/Docks  | Fender               | Facing                | A          |
| 14.8.22  | Marinas/Docks  | Fender               | Piles                 | A          |
| 14.8.26  | Marinas/Docks  | Fender               | Wales and Chocks      | A          |
| 14.9.25  | Marinas/Docks  | Gallows Frames       | Tower Frames          | A          |
| 14.10.24 | Marinas/Docks  | Mech./Plumbing       | Sanitary Piping       | A          |
| 14.10.27 | Marinas/Docks  | Mech./Plumbing       | Water Supply          | A          |
| 14.11.17 | Marinas/Docks  | Movable Ramps        | Bearings              | A          |
| 14.11.19 | Marinas/Docks  | Movable Ramps        | Deck and Railing      | A          |
| 16.1.1   | Park Bridges   | Abutments            | Bridge Seat&Pedestals | A          |
| 16.1.7   | Park Bridges   | Abutments            | Backwall              | C          |
| 16.1.9   | Park Bridges   | Abutments            | Brngs,Ancr Blts,Pads  | A          |
| 16.1.14  | Park Bridges   | Abutments            | Footings              | B          |
| 16.1.17  | Park Bridges   | Abutments            | Joint with Deck       | B          |
| 16.1.20  | Park Bridges   | Abutments            | Mat (scour & erosion) | B          |
| 16.1.24  | Park Bridges   | Abutments            | Pedestals             | A          |
| 16.1.31  | Park Bridges   | Abutments            | Stem (breastwall)     | B          |
| 16.1.32  | Park Bridges   | Abutments            | Walls                 | B          |
| 16.2.14  | Park Bridges   | Wingwalls            | Footings              | C          |
| 16.2.20  | Park Bridges   | Wingwalls            | Mat (scour & erosion) | C          |
| 16.2.25  | Park Bridges   | Wingwalls            | Piles                 | C          |
| 16.2.32  | Park Bridges   | Wingwalls            | Walls                 | C          |
| 16.3.8   | Park Bridges   | Stream Channel       | Bank Protection       | C          |
| 16.3.20  | Park Bridges   | Stream Channel       | Mat (scour & erosion) | A          |
| 16.3.44  | Park Bridges   | Stream Channel       | Pier Protection       | B          |
| 16.4.4   | Park Bridges   | Approaches           | Pavement              | C          |
| 16.4.11  | Park Bridges   | Approaches           | Curbs                 | A          |
| 16.4.13  | Park Bridges   | Approaches           | Embankment            | C          |
| 16.4.16  | Park Bridges   | Approaches           | Guide Railing         | A          |
| 16.4.20  | Park Bridges   | Approaches           | Mat (scour & erosion) | A          |
| 16.4.23  | Park Bridges   | Approaches           | Pavement Base         | C          |
| 16.4.28  | Park Bridges   | Approaches           | Railings/Parapets     | A          |
| 16.4.30  | Park Bridges   | Approaches           | Sidewalks             | C          |
| 16.4.35  | Park Bridges   | Approaches           | Fascias               | C          |
| 16.4.52  | Park Bridges   | Approaches           | Scupper               | C          |

| D.S.C.  | Discipline (D)         | System (S)                 | Component (C)         | Importance |
|---------|------------------------|----------------------------|-----------------------|------------|
| 16.5.2  | Park Bridges           | Piers                      | Cap beam              | A          |
| 16.5.5  | Park Bridges           | Piers                      | Pier,Columns          | B          |
| 16.5.6  | Park Bridges           | Piers                      | Stem,Solid Pier       | B          |
| 16.5.9  | Park Bridges           | Piers                      | Brngs,Ancr Blts,Pads  | A          |
| 16.5.14 | Park Bridges           | Piers                      | Footings              | B          |
| 16.5.20 | Park Bridges           | Piers                      | Mat (scour & erosion) | A          |
| 16.5.24 | Park Bridges           | Piers                      | Pedestals             | B          |
| 16.5.25 | Park Bridges           | Piers                      | Piles                 | A          |
| 16.6.11 | Park Bridges           | Deck Elements              | Curbs                 | A          |
| 16.6.15 | Park Bridges           | Deck Elements              | Gratings              | A          |
| 16.6.16 | Park Bridges           | Deck Elements              | Guide Railing         | A          |
| 16.6.21 | Park Bridges           | Deck Elements              | Median                | A          |
| 16.6.22 | Park Bridges           | Deck Elements              | Mono Deck Surface     | C          |
| 16.6.28 | Park Bridges           | Deck Elements              | Railings/Parapets     | A          |
| 16.6.30 | Park Bridges           | Deck Elements              | Sidewalks             | C          |
| 16.6.33 | Park Bridges           | Deck Elements              | Wearing Surface       | C          |
| 16.6.35 | Park Bridges           | Deck Elements              | Fascias               | C          |
| 16.6.52 | Park Bridges           | Deck Elements              | Scupper               | C          |
| 16.7.12 | Park Bridges           | Superstructure             | Deck,Structural       | A          |
| 16.7.18 | Park Bridges           | Superstructure             | Joints                | C          |
| 16.7.27 | Park Bridges           | Superstructure             | Primary Member        | A          |
| 16.7.29 | Park Bridges           | Superstructure             | Secondary Member      | B          |
|         | Rikers Island          | Electrical                 |                       | A          |
|         | Rikers Island          | Gas Mains                  |                       | B          |
|         | Rikers Island          | Sanitary System            |                       | B          |
|         | Rikers Island          | Underground Steam Tunnel   |                       | B          |
|         | Rikers Island          | Storm System               |                       | B          |
|         | Rikers Island          | Domestic/Fire Water System |                       | B          |
|         | Brooklyn Bridge        |                            |                       | A          |
|         | Manhattan Bridge       |                            |                       | A          |
|         | Queensboro Bridge      |                            |                       | A          |
|         | Williamsburg Bridge    |                            |                       | A          |
|         | Street Lighting System |                            |                       | A          |
|         | Traffic Signal System  |                            |                       | A          |
|         | Streets and Highways   | Primary Streets            |                       | B          |
|         | Streets and Highways   | Secondary Streets          |                       | B          |
|         | Streets and Highways   | Local Streets              |                       | C          |
|         | Streets and Highways   | Arterial Streets           |                       | A          |
|         | Streets and Highways   | Step Streets               |                       | D          |
|         | Park Utilities         | Electrical                 |                       | A          |
|         | Park Utilities         | Water and Sewers           |                       | B          |
|         | Park Streets and Roads |                            |                       | D          |
|         | Ferries                | Capital Repairs            |                       | A          |
|         | Ferries                | Major Maintenance          |                       | A          |
|         | Vessels                | Capital Repairs            |                       | A          |
|         | Vessels                | Major Maintenance          |                       | A          |

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Exhibit B  
Technical Notes and  
Project Methodology

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## **Exhibit B**

### **Technical Notes and Project Methodology**

#### **Asset Definition**

In single structure assets, the sub-asset and the asset are synonymous. In the agency reports, an “asset” generally has a one-to-one correspondence with a unique structure and has an individual Program Number. In some instances, the initial “asset” was defined as an organizational unit which provided a common service, but consists of numerous individual structures. An example of this would be Bellevue Hospital which is considered to be the “asset”, but which has several significant individual structures. Bellevue Hospital is numbered as the “asset” and individual buildings are numbered as “sub-assets”. Bridges with individual Bridge Identification Numbers are also considered separate sub-assets. Actual surveying, costing and reporting always occur at the sub-asset level.

#### **Criteria for Survey Selection**

The decision criteria below have been developed and generally followed in determining sub-assets to receive an engineering survey:

- Assets meeting the Charter criteria which had a previous survey conducted four years ago.
- Sub-assets appraised at greater than \$1 million regardless of size
- Sub-assets valued at greater than \$250,000 and greater in size than 10,000 sq. ft.
- Other sub-assets used as an “average cost” group.
- Special requests from agencies.

#### **Repair, Replacement and Major Maintenance**

Repairs, replacements and “major maintenance” costs are all presented at the detailed component level in the maintenance schedules. Repairs are defined as reconstruction or renovation.

#### **Cost Estimating**

In order to have a consistent, standard methodology, all costs were developed on a contracted-out basis adjusted for work in the NYC public sector. Costs were developed for individual component repairs/replacements. Costs presented are considered all-inclusive (i.e. labor, materials, equipment, design, construction management, overhead and profit). The data obtained by the field survey teams and by the estimators was combined in a project computer database. This database was used to generate the

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asset cost data. Actual work, when performed by an agency may be on a different basis or packaged in a different manner. Future work, performed on a large scale (i.e., major rehabilitation or modernization), may include other logical work items that are not specifically cited in the agency reports as currently needing major repair or replacement.

### **Quantity Estimating and Modeling Procedures**

A team of professional construction cost estimators utilized asset plans and other reports to conduct a quantity take-off of selected components in typical assets. This data was used to develop models for calculating the replacement cost of those components in place. When plans were not available, it was necessary for the estimators to visit the site with a field survey team or to have a field survey team obtain quantities when they were at that specific site. It was not practical or cost effective to measure each asset to determine the quantities of the various components and types contained. To address this issue the cost estimating team developed hundreds of models for which they generated detailed quantity relationships. Assets were then assigned models to which they were similar in size and type. Unique assets and recent additions to the inventory generally became their own models.

### **Average Cost Methods**

Average cost methods are used for small assets where an average cost per square foot, within a project type, is computed for repair in the next fiscal year. Replacement and maintenance costs are calculated on an annual basis over a ten-year period.

### **Life Cycle Projections**

The engineers have developed a typical life cycle for each component type based on industry standards and engineering judgment. These were previously shared with each agency and have subsequently been updated to better reflect City practices. The component life cycles, along with survey assessment, are used in the report to estimate the likely point in time that a component may need replacement.

### **Major Maintenance**

Major Maintenance as presented in the report has a specific meaning to meet the requirements of the Charter. With the exception of bridges, major maintenance is defined as those activities that should be performed at intervals of at least one year or greater and that are required to maintain the useful life and integrity of the component. Major maintenance, as here defined, does not generally include the more frequent annual and on-going normal preventive maintenance activities that should regularly occur as part of a good overall maintenance program. Major maintenance activities are generally large in scope and, depending on the agency, may often be the type of work that would be contracted-out. Major maintenance for bridges was treated differently from all other assets and does include items that are of a preventive

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nature. Such activities as cleaning and debris removal are large-scale identifiable items that should not only occur regularly, but would also have a direct impact on the structural integrity of the bridge over time. Major maintenance includes all the items recommended by the project engineers as well as the full preventive maintenance program that was outlined in the bridge engineering report to the City, prepared by the Consortium of New York Engineering Schools, generally known as the “Consortium Report.”

*Major Maintenance Programming:*

The recommended date for the start of each maintenance program was developed with consideration of engineering judgment, recommended practice, observed conditions, repairs/replacements, and general practicality. The decision rules, which apply, are as follows:

- If a repair is called for, maintenance starts in the next cycle.
- If two or more observations are rated severe, maintenance starts in the next fiscal year.
- If the replacement year is within five years of the current fiscal year, maintenance starts in the next fiscal year.
- When a component's standard life is the life of the asset, maintenance begins the next fiscal year after a new survey.
- If no repair is needed and less than two observations are rated severe for a component type whose life is the life of the asset, maintenance starts in the next cycle.
- If no repair is needed and maintenance does not start in the next fiscal year, then the maintenance start year is calculated from the year of replacement back to the present, using the maintenance cycle as an interval.
- If replacement year coincides with the maintenance start year, then no maintenance accrues.

*Major Maintenance Costing:*

Generally, the major maintenance programs are priced as a cost per square foot times either the area of the component or area serviced by the component. However, for a number of components, the first step in the maintenance program is to conduct a detailed survey of the component to precisely determine its condition and specific maintenance needs. The cycle frequency of the maintenance survey is much shorter than the actual maintenance cycle, thus it is presumed that the maintenance effort is not required for the whole area of the component in each cycle, but will be required for some portion of the component. As a result, the maintenance program of a certain component (i.e. repointing of exterior wall) may happen more than one time in the ten-year projection to maintain different portions of the component.



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### **Component Observations**

Component observations are meant to qualify the repair and replacement needs of the component, i.e. describing the deficiencies and locations where they occur. Even when there is no repair called for, surveyors have the ability to record observations in the field to better describe the condition of the component type and the extent of its severity.

### **Special Systems and Reports**

There are a number of special systems and situations within a few agencies that required unique treatment and which did not readily fit within the format of the standard agency report. These assets were treated separately and were reported on in a number of different modes as appropriate to the situation. The methodology required in such cases was sometimes different than the general approach for most assets described in this report. Each of the special reports outlines how the assets were assessed and the resulting cost factors calculated.

The four East River Bridges (i.e., Brooklyn, Manhattan, Queensboro, Williamsburg) are updated yearly based on the agency's Ten Year Plan to bring them up to a state of good repair. DPR's roads and utilities are based on surveys and engineering estimates. Maintenance needs for DOT's Street Lighting and Traffic Signal Systems have been updated yearly to reflect the latest contract information available from the Agency. Streets and Highways are assessed each year based on a reinspection by DOT. Annual maintenance and repair costs for marine vessels from DOT and FDNY, and DOC's underground utilities were provided by the respective agencies.

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| Agency  | Special Systems   |
|---|---|
| Department of Transportation (DOT)<br>FY 2016 | Four East River Bridges<br><ul style="list-style-type: none"> <li>yearly report based on DOT's Ten Year Plan to bring them to a state of good repair</li> </ul> |
| Department of Transportation (DOT)<br>FY 2016 | Street and City Owned Arterial System<br><ul style="list-style-type: none"> <li>report produced by DOT</li> </ul>   |
| Department of Transportation (DOT)<br>FY 2016 | Street Lighting System<br><ul style="list-style-type: none"> <li>agency contract information</li> </ul>   |
| Department of Transportation (DOT)<br>FY 2016 | Traffic Signal System<br><ul style="list-style-type: none"> <li>agency contract information</li> </ul>  |
| Department of Transportation (DOT)<br>FY 2016 | Ferries<br><ul style="list-style-type: none"> <li>agency contract information</li> </ul>  |
| Parks Department (DPR)<br>FY 2016             | Underground Utilities<br><ul style="list-style-type: none"> <li>narrative report submitted on electrical, sewer, and water utilities</li> </ul>                 |
| Parks Department (DPR)<br>FY 2016             | Streets and Roads in Parks<br><ul style="list-style-type: none"> <li>narrative report submitted</li> </ul>  |
| Department of Correction (DOC)<br>FY 2016     | Rikers Island Underground Utilities<br><ul style="list-style-type: none"> <li>yearly report based on agency information</li> </ul>                              |
| Fire Department (FDNY)<br>FY 2016             | Fireboats<br><ul style="list-style-type: none"> <li>yearly report based on agency information</li> </ul>  |



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Exhibit C  
Legend for Individual  
Survey Report and  
Sample Asset Report

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## Exhibit C Legend for Individual Survey Report

|                               |  |                                  |
|-------------------------------|--|----------------------------------|
| Print Date: <sup>a</sup>      | AGENCY <sup>b</sup> – Fiscal Year <sup>c</sup> | Page: <sup>d</sup>               |
| Asset Name: <sup>1</sup>      |  |                                  |
| Address: <sup>2</sup>         |  |                                  |
| Borough: <sup>3</sup>         |  | Agency's Number: <sup>8</sup>    |
| Program/Asset #: <sup>4</sup> |  | Yr Built/Renovated: <sup>9</sup> |
| Area Sq Ft: <sup>5</sup>      |  | Project Type: <sup>10</sup>      |
| Date of Survey: <sup>6</sup>  |  | Landmark Status: <sup>11</sup>   |
| Areas Surveyed: <sup>7</sup>  |  |                                  |
| Block: <sup>12</sup>          | Lot: <sup>13</sup>                             | BIN: <sup>14</sup>               |

### Header

- |           |                  |  |
|-----------|------------------|--|
| <b>a.</b> | Print Date:      | Date of report printing  |
| <b>b.</b> | Agency:          | Name of agency being reported  |
| <b>c.</b> | Fiscal Year:     | Fiscal year of report creation   |
| <b>d.</b> | Page:            | Page number of agency report   |
| <b>1.</b> | Asset Name:      | The asset name/description   |
| <b>2.</b> | Address:         | Self explanatory   |
| <b>3.</b> | Borough:         | Self explanatory   |
| <b>4.</b> | Program/Asset #: | The unique number assigned to every sub-asset in the study   |
| <b>5.</b> | Area Sq Ft:      | The gross square feet of the asset. Some unique assets (i.e., piers and bulkheads) may also have a second measurement such as linear feet or linear feet fender.   |
| <b>6.</b> | Date of Survey:  | Date of last survey  |
| <b>7.</b> | Areas Surveyed:  | Sub-basement, basement, and roof are indicated if surveyed. The floors surveyed are indicated by floor number (applicable to buildings only). The codes ATT and PH are used to indicate attic and penthouse. |

|                               |  |                                  |
|-------------------------------|--|----------------------------------|
| Print Date: <sup>a</sup>      | AGENCY <sup>b</sup> – Fiscal Year <sup>c</sup> | Page: <sup>d</sup>               |
| Asset Name: <sup>1</sup>      |  |                                  |
| Address: <sup>2</sup>         |  |                                  |
| Borough: <sup>3</sup>         |  | Agency's Number: <sup>8</sup>    |
| Program/Asset #: <sup>4</sup> |  | Yr Built/Renovated: <sup>9</sup> |
| Area Sq Ft: <sup>5</sup>      |  | Project Type: <sup>10</sup>      |
| Date of Survey: <sup>6</sup>  |  | Landmark Status: <sup>11</sup>   |
| Areas Surveyed: <sup>7</sup>  |  |                                  |
| Block: <sup>12</sup>          | Lot: <sup>13</sup>                             | BIN: <sup>14</sup>               |

### Header (continued)

- |     |                     |   |
|-----|---------------------|---|
| 8.  | Agency's Number:    | For cross reference, the internal number within the agency  |
| 9.  | Yr Built/Renovated: | Year of construction and last major renovation or addition  |
| 10. | Project Type:       | NYC Capital Budget designation  |
| 11. | Landmark Status:    | Whether the asset is associated with a landmark designation:<br><i>I – Interior Landmark</i><br><i>E – Exterior Landmark</i><br><i>H – Historical Landmark District</i><br><i>B – Interior and Exterior Landmark</i><br><i>C – Exterior Landmark in Historical District</i><br><i>D – Interior, Exterior Landmark in Historical District</i><br><i>S – Scenic Landmark</i><br><i>N – Not a Landmark</i> |
| 12. | Block               | Tax Block   |
| 13. | Lot                 | Tax Lot   |
| 14. | BIN                 | Building/Bridge Identification Number   |

| Discipline <sup>1</sup> | Current Repair    |                        | Future Replacement     |                   | Maintenance            |                    |                        |                        |
|-------------------------|-------------------|------------------------|------------------------|-------------------|------------------------|--------------------|------------------------|------------------------|
| System <sup>2</sup>     |                   |                        |                        |                   |                        |                    |                        |                        |
| Component               | % of <sup>3</sup> | Fail Date <sup>4</sup> | Estimated <sup>5</sup> | Year <sup>6</sup> | Estimated <sup>7</sup> | Cycle <sup>8</sup> | Estimated <sup>9</sup> | Priority <sup>10</sup> |
| Type                    | Total             | (Years)                | Cost                   | FY                | Cost                   | (Yrs)              | Cost                   |                        |

1. Discipline: The name of the discipline being evaluated (i.e. architectural, electrical, mechanical). Some agencies may have additional unique assets, which for the purposes of this report are treated as “disciplines” (i.e. piers, bulkheads, bridges).
2. System: The system that is being rated  
Component: The component of the system  
Type: The primary type(s) of material or equipment
3. % of Total: The percentage of the total component that is represented by the type.
4. Fail Date (Years): Indicates the component rating as follows:  

**Now:** The Component has failed or is inoperative at the time of the survey.

**0-2:** It is predicted, based solely on observation that the component may fail or cease to operate within two years of the survey.

**2-4:** It is predicted, based solely on observation that the component may fail or cease to function within a period of two to four years after the survey.

**4+:** It is predicted, based solely on observation that the component may fail or cease to function beyond four years after the survey.
5. Estimated Cost: The costed dollar amount estimated to fix a component rated as failed or needing a repair.



| Discipline <sup>1</sup> | Current Repair    |                        |                        | Future Replacement |                        | Maintenance        |                        |                        |
|-------------------------|-------------------|------------------------|------------------------|--------------------|------------------------|--------------------|------------------------|------------------------|
| System <sup>2</sup>     |                   |                        |                        |                    |                        |                    |                        |                        |
| Component               | % of <sup>3</sup> | Fail Date <sup>4</sup> | Estimated <sup>5</sup> | Year <sup>6</sup>  | Estimated <sup>7</sup> | Cycle <sup>8</sup> | Estimated <sup>9</sup> | Priority <sup>10</sup> |
| Type                    | Total             | (Years)                | Cost                   | FY                 | Cost                   | (Yrs)              | Cost                   |                        |

6. Year FY: The estimated fiscal year in which component is projected to need replacement based on standard life, condition as of the last survey, and estimate of % of life remaining, with the assumption that recommended repairs and maintenance activities are performed. Some “life” components are expected to last for the life of the asset and are not normally replaced.
  
7. Estimated Cost: The estimated cost in current dollars to replace the component. Items with a replacement date of “life” are not costed and are shown as \*\*. Only components that have replacement dates projected within the next ten years are shown as cost items.
  
8. Cycle (Yrs): The recommended cycle at which the major maintenance program should be performed.
  
9. Estimated Cost: The estimated maintenance cost over a ten year period, (in current dollars), as calculated on a standard contracting basis.
  
10. Priority: A calculated score given to important components that require urgent repair/replacement based on severity of condition.

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**Observations**

| System <sup>1</sup><br>Component<br>Type | Observation <sup>2</sup><br>Location <sup>3</sup> | Extent <sup>4</sup> | Area Affected <sup>5</sup> |
|--|---|---------------------|----------------------------|
|--|---|---------------------|----------------------------|

- |    |                          |  |
|----|--------------------------|--|
| 1. | System, Component, Type: | Same as previous report sections.  |
| 2. | Observation:             | Observation made by surveyor regarding components of the Asset.                            |
| 3. | Location:                | Location is given as needed for an observation.  |
| 4. | Extent:                  | Light, Medium, or Severe.  |
| 5. | Area Affected:           | Extent of observed condition expressed as a percentage of the component or component type. |

Print Date : 22-Oct-2015

**DEPARTMENT OF EDUCATION - FY 2016**

**Asset Name** : P. S. 131 - BK  
**Address** : 4305 FT HAMILTON PKWY BTWN: 43 ST., 44 ST.  
**Borough** : BROOKLYN **Agency's Number** : K131  
**Program / Asset #** : BOE0437.000 / 1365 **Yr Built/Renovated** : 1901 / 2005  
**Area Sq Ft** : 86,000 **Project Type** : EDUCATION  
**Date of Survey** : 09-Mar-2015 **Landmark Status** : NONE  
**Areas Surveyed** : Basement, Roof, Floors 1,3,4  
**Block** : 5603 **Lot** : 1 **BIN** : 3136085

| CAPITAL               |  | FY 2017 - 2020     | FY 2021 - 2026     |
|-----------------------|--|--------------------|--------------------|
| Exterior Architecture |  | \$2,556,400        | \$199,800          |
| Interior Architecture |  | \$837,900          | \$693,700          |
| Electrical            |  |                    | \$2,378,900        |
| Mechanical            |  |                    | \$1,238,600        |
| <b>Total</b>          |  | <b>\$3,394,300</b> | <b>\$4,510,900</b> |
| Importance Code A     |  | \$2,556,400        | \$236,800          |
| Importance Code B     |  | \$585,700          | \$4,274,100        |
| Importance Code C     |  | \$252,200          |                    |
| <b>Total</b>          |  | <b>\$3,394,300</b> | <b>\$4,510,900</b> |

| EXPENSE               | FY 2017          | FY 2018         | FY 2019         | FY 2020         |
|-----------------------|------------------|-----------------|-----------------|-----------------|
| Exterior Architecture | \$106,400        |                 |                 |                 |
| Interior Architecture | \$96,000         |                 | \$2,000         | \$10,800        |
| Electrical            | \$2,200          | \$600           | \$1,000         | \$1,600         |
| Mechanical            | \$40,800         | \$15,000        | \$19,700        | \$17,000        |
| <b>Total</b>          | <b>\$245,400</b> | <b>\$15,600</b> | <b>\$22,600</b> | <b>\$29,400</b> |
| Importance Code A     | \$115,200        | \$8,800         | \$8,800         | \$8,800         |
| Importance Code B     | \$103,700        | \$6,900         | \$13,900        | \$20,600        |
| Importance Code C     | \$26,500         |                 |                 |                 |
| <b>Total</b>          | <b>\$245,400</b> | <b>\$15,600</b> | <b>\$22,600</b> | <b>\$29,400</b> |



Note : All component repairs \$ estimates are in current dollars and are not escalated for potential future inflation.  
 Estimates are rounded to the nearest hundred dollars.

Maintenance \$ are aggregated over a ten-year period. Site specific cost escalations are not included.

\*\* Replacement cost estimated to be beyond ten years is not included in this report.

## DEPARTMENT OF EDUCATION - 040

## P. S. 131 - BK

## Asset # : 1365

| Architecture           |   | Current Repair    |                | Future Replacement |                | Maintenance |                |          |
|------------------------|---|-------------------|----------------|--------------------|----------------|-------------|----------------|----------|
| System Component Type  | % of Total  | Fail Date (Years) | Estimated Cost | Year FY            | Estimated Cost | Cycle (Yrs) | Estimated Cost | Priority |
| Exterior               |   |                   |                |                    |                |             |                |          |
| Exterior Walls         |   |                   |                |                    |                |             |                |          |
| Cast Stone/Terra Cotta | 5%  | Now               | \$378,100      | LIFE               | * *            | 5           | \$60,500       |          |
|                        | Cracking/Crumbling, Extent : Moderate, Area Affected : 40%    |                   |                |                    |                |             |                |          |
|                        | Location : Throughout   |                   |                |                    |                |             |                |          |
| Masonry: Brick         | 90%   | Now               | \$1,261,200    | LIFE               | * *            | 5           | \$139,300      | 1        |
|                        | Cracking/Crumbling, Extent : Severe, Area Affected : 30%      |                   |                |                    |                |             |                |          |
|                        | Location : Throughout   |                   |                |                    |                |             |                |          |
|                        | Expansion Jnt Failure, Extent : Light, Area Affected : 30%    |                   |                |                    |                |             |                |          |
|                        | Location : Throughout   |                   |                |                    |                |             |                |          |
| Masonry: Limestone     | 5%  | 0-2               | \$169,100      | LIFE               | * *            | 5           | \$5,800        | 1        |
|                        | Cracking/Crumbling, Extent : Severe, Area Affected : 30%      |                   |                |                    |                |             |                |          |
|                        | Location : Throughout   |                   |                |                    |                |             |                |          |
| Windows                |   |                   |                |                    |                |             |                |          |
| Aluminum               | 100%  | Now               | \$560,500      | 2042               | * *            | 5           | \$22,300       |          |
|                        | Ctrwt/Balnc Not Funct, Extent : Moderate, Area Affected : 25% |                   |                |                    |                |             |                |          |
|                        | Location : Throughout   |                   |                |                    |                |             |                |          |
|                        | Hardware Missing, Extent : Moderate, Area Affected : 20%      |                   |                |                    |                |             |                |          |
|                        | Location : Throughout   |                   |                |                    |                |             |                |          |
| Parapets               |   |                   |                |                    |                |             |                |          |
| Cast Stone/Terra Cotta | 5%  | Now               | \$33,800       | LIFE               | * *            | 5           | \$5,600        | 1        |
|                        | Cracking/Crumbling, Extent : Severe, Area Affected : 30%      |                   |                |                    |                |             |                |          |
|                        | Location : Throughout   |                   |                |                    |                |             |                |          |
|                        | Jnt Mortar Miss/Erod, Extent : Severe, Area Affected : 30%    |                   |                |                    |                |             |                |          |
|                        | Location : Throughout   |                   |                |                    |                |             |                |          |
|                        | Water Penetration, Extent : Severe, Area Affected : 30%       |                   |                |                    |                |             |                |          |
|                        | Location : Throughout   |                   |                |                    |                |             |                |          |
| Copper/Terne           | 10%   | Now               | \$24,900       | 2061               | * *            | 5           | \$3,500        |          |
|                        | Cracking/Crumbling, Extent : Severe, Area Affected : 20%      |                   |                |                    |                |             |                |          |
|                        | Location : Throughout   |                   |                |                    |                |             |                |          |
| Masonry: Brick         | 75%   | Now               | \$187,500      | LIFE               | * *            | 5           | \$10,800       | 1        |
|                        | Cracking/Crumbling, Extent : Severe, Area Affected : 30%      |                   |                |                    |                |             |                |          |
|                        | Location : Throughout   |                   |                |                    |                |             |                |          |
|                        | Jnt Mortar Miss/Erod, Extent : Light, Area Affected : 30%     |                   |                |                    |                |             |                |          |
|                        | Location : Throughout   |                   |                |                    |                |             |                |          |
| Metal Cornice          | 5%  | Now               | \$8,500        | 2054               | * *            |             |                |          |
|                        | Deformed/Dented, Extent : Severe, Area Affected : 30%         |                   |                |                    |                |             |                |          |
|                        | Location : Throughout   |                   |                |                    |                |             |                |          |
| Pre-Cast Concrete      | 5%  | Now               | \$5,200        | LIFE               | * *            | 5           | \$4,500        | 1        |
|                        | Cracking/Crumbling, Extent : Moderate, Area Affected : 30%    |                   |                |                    |                |             |                |          |
|                        | Location : Throughout   |                   |                |                    |                |             |                |          |
|                        | Expansion Jnt Failure, Extent : Severe, Area Affected : 30%   |                   |                |                    |                |             |                |          |
|                        | Location : Throughout   |                   |                |                    |                |             |                |          |

Note : All component repairs \$ estimates are in current dollars and are not escalated for potential future inflation.  
Estimates are rounded to the nearest hundred dollars.

Maintenance \$ are aggregated over a ten-year period. Site specific cost escalations are not included.

\*\* Replacement cost estimated to be beyond ten years is not included in this report.

## DEPARTMENT OF EDUCATION - 040

## P. S. 131 - BK

## Asset # : 1365

| Architecture   |            | Current Repair    |                |         | Future Replacement |             | Maintenance    |          |  |
|--|------------|-------------------|----------------|---------|--------------------|-------------|----------------|----------|--|
| System Component Type  | % of Total | Fail Date (Years) | Estimated Cost | Year FY | Estimated Cost     | Cycle (Yrs) | Estimated Cost | Priority |  |
| Exterior   |            |                   |                |         |                    |             |                |          |  |
| Roof   |            |                   |                |         |                    |             |                |          |  |
| Asphalt Shingle  | 20%        |                   |                | 2035    | **                 | 10          | \$1,800        |          |  |
| Built-Up (BUR)   | 60%        | Now               | \$30,400       | 2031    | **                 |             |                |          |  |
| Drains Inad/Misposn, Extent : Moderate, Area Affected : 10%  |            |                   |                |         |                    |             |                |          |  |
| Location : Gymnasium   |            |                   |                |         |                    |             |                |          |  |
| Water Penetration, Extent : Moderate, Area Affected : 20%    |            |                   |                |         |                    |             |                |          |  |
| Location : Throughout  |            |                   |                |         |                    |             |                |          |  |
| Copper/Terne   | 5%         | Now               | \$3,700        | 2041    | **                 |             |                |          |  |
| Water Penetration, Extent : Moderate, Area Affected : 20%    |            |                   |                |         |                    |             |                |          |  |
| Location : Throughout  |            |                   |                |         |                    |             |                |          |  |
| Modified Bitumen   | 15%        |                   |                | 2031    | **                 | 10          | \$8,300        |          |  |
| Interior   |            |                   |                |         |                    |             |                |          |  |
| Floors   |            |                   |                |         |                    |             |                |          |  |
| Cast in Place Concrete                                       | 5%         |                   |                | LIFE    | **                 | 5           | \$29,000       |          |  |
| Ceramic Tile   | 3%         | Now               | \$23,100       | 2035    | **                 | 5           | \$2,000        |          |  |
| Loose Units, Extent : Moderate, Area Affected : 30%          |            |                   |                |         |                    |             |                |          |  |
| Location : Toilet(s)   |            |                   |                |         |                    |             |                |          |  |
| Patching Evident, Extent : Moderate, Area Affected : 30%     |            |                   |                |         |                    |             |                |          |  |
| Location : Throughout  |            |                   |                |         |                    |             |                |          |  |
| Quarry Tile  | 2%         |                   |                | 2039    | **                 | 5           | \$4,000        |          |  |
| Vinyl Tile   | 55%        | Now               | \$61,900       | 2026    | \$619,200          | 3           | \$27,300       |          |  |
| Cracking/Crumbling, Extent : Light, Area Affected : 10%      |            |                   |                |         |                    |             |                |          |  |
| Location : Throughout  |            |                   |                |         |                    |             |                |          |  |
| Vinyl Tile 9" X 9"   | 10%        | Now               | \$7,300        | 2031    | **                 | 3           | \$5,000        |          |  |
| Cracking/Crumbling, Extent : Severe, Area Affected : 10%     |            |                   |                |         |                    |             |                |          |  |
| Location : Throughout  |            |                   |                |         |                    |             |                |          |  |
| Wood   | 25%        | Now               | \$54,600       | 2041    | **                 | 5           | \$31,000       |          |  |
| Deteriorated Finish, Extent : Moderate, Area Affected : 10%  |            |                   |                |         |                    |             |                |          |  |
| Location : Throughout  |            |                   |                |         |                    |             |                |          |  |
| Interior Walls   |            |                   |                |         |                    |             |                |          |  |
| Ceramic Tile   | 3%         | Now               | \$13,600       | 2029    | **                 | 5           | \$2,500        |          |  |
| Cracking/Crumbling, Extent : Light, Area Affected : 10%      |            |                   |                |         |                    |             |                |          |  |
| Location : Throughout  |            |                   |                |         |                    |             |                |          |  |
| Masonry: Brick   | 2%         | Now               | \$12,900       | LIFE    | **                 |             |                |          |  |
| Cracking/Crumbling, Extent : Moderate, Area Affected : 10%   |            |                   |                |         |                    |             |                |          |  |
| Location : Throughout  |            |                   |                |         |                    |             |                |          |  |
| Jnt Mortar Miss/Erod, Extent : Moderate, Area Affected : 10% |            |                   |                |         |                    |             |                |          |  |
| Location : Throughout  |            |                   |                |         |                    |             |                |          |  |
| Plaster  | 70%        | Now               | \$92,600       | LIFE    | **                 | 5           | \$34,600       |          |  |
| Cracking/Crumbling, Extent : Light, Area Affected : 10%      |            |                   |                |         |                    |             |                |          |  |
| Location : Throughout  |            |                   |                |         |                    |             |                |          |  |
| Water Penetration, Extent : Severe, Area Affected : 10%      |            |                   |                |         |                    |             |                |          |  |
| Location : Throughout  |            |                   |                |         |                    |             |                |          |  |
| SGFT/Glazed Masonry  | 25%        | Now               | \$159,600      | LIFE    | **                 |             |                |          |  |
| Cracking/Crumbling, Extent : Light, Area Affected : 10%      |            |                   |                |         |                    |             |                |          |  |
| Location : Throughout  |            |                   |                |         |                    |             |                |          |  |

Note : All component repairs \$ estimates are in current dollars and are not escalated for potential future inflation.  
Estimates are rounded to the nearest hundred dollars.

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## DEPARTMENT OF EDUCATION - 040

## P. S. 131 - BK

## Asset # : 1365

| Architecture          |            | Current Repair    |                | Future Replacement |                | Maintenance |                | Priority |
|-----------------------|------------|-------------------|----------------|--------------------|----------------|-------------|----------------|----------|
| System Component Type | % of Total | Fail Date (Years) | Estimated Cost | Year FY            | Estimated Cost | Cycle (Yrs) | Estimated Cost |          |

## Interior

## Ceilings

AcousTile,Adhered 10% Now \$24,600 2031 \* \* 5 \$6,600

*Cracking/Crumbling, Extent : Light, Area Affected : 20%  
Location : Throughout*

Plaster 90% Now \$469,200 LIFE \* \* 5 \$74,500

*Cracking/Crumbling, Extent : Light, Area Affected : 30%  
Location : Throughout  
Water Penetration, Extent : Severe, Area Affected : 30%  
Location : Throughout*

| Electrical            |            | Current Repair    |                | Future Replacement |                | Maintenance |                | Priority |
|-----------------------|------------|-------------------|----------------|--------------------|----------------|-------------|----------------|----------|
| System Component Type | % of Total | Fail Date (Years) | Estimated Cost | Year FY            | Estimated Cost | Cycle (Yrs) | Estimated Cost |          |

## Under 600 Volts

## Service Equipment

Fused Disc Sw 100% 2026 \$37,000 5 \$400

*Other Observation, Extent : Moderate, Area Affected : 100%  
Location : Electrical Room  
Explanation : One 2000 Main Disconnect Switch*

## Switchgear / Switchboard

Fused Disc Sw 100% 2026 \$171,100 5 \$400

## Raceway

Conduit 100% 2026 \$172,600 1

## Panelboards

Fused Disc Sw 10% 2025 \$17,900 5 \$200

Molded Case Bkrs 80% 2025 \$143,500 5 \$1,800

Molded Case Bkrs 10% 2034 \* \* 5 \$200

## Wiring

Thermoplastic 80% 2026 \$204,400 1

Thermoplastic 20% 2036 \* \* 1

## Motor Controllers

Locally Mounted 70% 2024 \$52,900 5 \$400

Locally Mounted 30% 2031 \* \* 5 \$200

## Ground

## Grounding Devices

Generic 100% LIFE \* \* 5 \$2,500

*Other Observation, Extent : Moderate, Area Affected : 100%  
Location : Basement  
Explanation : Water Main*

## Lighting

## Interior Lighting

Fluorescent 98% 2026 \$963,000 10 \$79,500

*Other Observation, Extent : Moderate, Area Affected : 100%  
Location : Throughout The Building  
Explanation : T-12 Lamps*

HID 2% 2026 \$14,100 10 \$100

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## DEPARTMENT OF EDUCATION - 040

P. S. 131 - BK

Asset # : 1365

| Electrical            |            | Current Repair    |                | Future Replacement |                | Maintenance |                | Priority |
|-----------------------|------------|-------------------|----------------|--------------------|----------------|-------------|----------------|----------|
| System Component Type | % of Total | Fail Date (Years) | Estimated Cost | Year FY            | Estimated Cost | Cycle (Yrs) | Estimated Cost |          |

## Lighting

|                    |      |  |  |      |           |    |          |  |
|--------------------|------|--|--|------|-----------|----|----------|--|
| Egress Lighting    |      |  |  |      |           |    |          |  |
| Emergency, Battery | 50%  |  |  | 2036 | * *       | 10 | \$10,700 |  |
| Exit, Service      | 50%  |  |  | 2036 | * *       | 1  |          |  |
| Exterior Lighting  |      |  |  |      |           |    |          |  |
| HID                | 100% |  |  | 2021 | \$324,800 | 10 | \$300    |  |

## Alarm

|                      |     |  |  |      |           |   |         |  |
|----------------------|-----|--|--|------|-----------|---|---------|--|
| Security System      |     |  |  |      |           |   |         |  |
| No Component         | 80% |  |  |      |           |   |         |  |
| Generic              | 20% |  |  | 2026 | \$52,000  | 1 | \$6,400 |  |
| Fire/Smoke Detection |     |  |  |      |           |   |         |  |
| No Component         | 80% |  |  |      |           |   |         |  |
| Generic, Analog      | 20% |  |  | 2021 | \$178,100 |   |         |  |

| Mechanical            |            | Current Repair    |                | Future Replacement |                | Maintenance |                | Priority |
|-----------------------|------------|-------------------|----------------|--------------------|----------------|-------------|----------------|----------|
| System Component Type | % of Total | Fail Date (Years) | Estimated Cost | Year FY            | Estimated Cost | Cycle (Yrs) | Estimated Cost |          |

## Heating

|   |      |  |  |      |           |   |          |  |
|---|------|--|--|------|-----------|---|----------|--|
| Energy Source   |      |  |  |      |           |   |          |  |
| Fuel Oil No 4   | 100% |  |  | 2036 | * *       | 5 | \$27,400 |  |
| Conversion Equipment                                    |      |  |  |      |           |   |          |  |
| Steam Boiler  | 100% |  |  | 2031 | * *       | 1 | \$87,600 |  |
| Other Observation, Extent : Light, Area Affected : 100% |      |  |  |      |           |   |          |  |
| Location : Basement Boiler Room                         |      |  |  |      |           |   |          |  |
| Explanation : 3 Units                                   |      |  |  |      |           |   |          |  |
| Distribution  |      |  |  |      |           |   |          |  |
| Steam Piping/Pump                                       | 100% |  |  | 2026 | \$617,700 | 4 | \$6,500  |  |
| Terminal Devices  |      |  |  |      |           |   |          |  |
| Air Handler   | 20%  |  |  | 2026 | \$95,400  | 1 | \$10,900 |  |
| Convactor/Radiator                                      | 50%  |  |  | 2031 | * *       | 1 | \$14,300 |  |
| Fan Coil Unit/Heat                                      | 25%  |  |  | 2021 | \$331,100 | 1 | \$7,100  |  |
| Unit Heater-Stm/HW                                      | 5%   |  |  | 2026 | \$28,600  | 4 | \$600    |  |

## Air Conditioning

|                      |      |  |  |      |           |   |  |  |
|----------------------|------|--|--|------|-----------|---|--|--|
| Energy Source        |      |  |  |      |           |   |  |  |
| Electricity          | 100% |  |  | 2034 | * *       | 1 |  |  |
| Conversion Equipment |      |  |  |      |           |   |  |  |
| Window/Wall Unit     | 80%  |  |  | 2021 | \$145,500 | 1 |  |  |
| No Component         | 20%  |  |  |      |           |   |  |  |

## Ventilation

|                    |      |  |  |      |          |     |          |  |
|--------------------|------|--|--|------|----------|-----|----------|--|
| Distribution       |      |  |  |      |          |     |          |  |
| Ductwork/Diffusers | 100% |  |  | LIFE | * *      | 2-5 | \$78,100 |  |
| Exhaust Fans       |      |  |  |      |          |     |          |  |
| Interior           | 50%  |  |  | 2026 | \$48,900 | 2   | \$1,400  |  |
| No Component       | 50%  |  |  |      |          |     |          |  |

## Plumbing

|                  |      |  |  |      |     |   |  |  |
|------------------|------|--|--|------|-----|---|--|--|
| H/C Water Piping |      |  |  |      |     |   |  |  |
| Brass/Copper     | 100% |  |  | 2036 | * * | 1 |  |  |

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## DEPARTMENT OF EDUCATION - 040

P. S. 131 - BK

Asset # : 1365

| Mechanical            |            | Current Repair   |                | Future Replacement |                | Maintenance |                | Priority |
|-----------------------|------------|--|----------------|--------------------|----------------|-------------|----------------|----------|
| System Component Type | % of Total | Fail Date (Years)  | Estimated Cost | Year FY            | Estimated Cost | Cycle (Yrs) | Estimated Cost |          |
| Plumbing              |            |  |                |                    |                |             |                |          |
| Water Heater          |            |  |                |                    |                |             |                |          |
| Gas Fired             | 100%       |  |                | 2026               | \$20,600       | 2           | \$1,300        |          |
|                       |            | <i>Recent Installation, Extent : Light, Area Affected : 100%</i> |                |                    |                |             |                |          |
|                       |            | <i>Location : Basement</i>                                       |                |                    |                |             |                |          |
| HW Heat Exchanger     |            |  |                |                    |                |             |                |          |
| Low Temp              | 100%       |  |                | 2036               | * *            | 4           | \$8,700        |          |
| Sanitary Piping       |            |  |                |                    |                |             |                |          |
| Cast Iron             | 100%       |  |                | LIFE               | * *            | 1           |                |          |
| Storm Drain Piping    |            |  |                |                    |                |             |                |          |
| Cast Iron             | 100%       |  |                | LIFE               | * *            | 1           |                |          |
| Sump Pump(s)          |            |  |                |                    |                |             |                |          |
| Rigid Piping          | 100%       |  |                | 2031               | * *            | 4           | \$1,600        |          |
| Fixtures              |            |  |                |                    |                |             |                |          |
| Generic               | 100%       |  |                |                    |                |             |                |          |
| Fire Suppression      |            |  |                |                    |                |             |                |          |
| Sprinkler             |            |  |                |                    |                |             |                |          |
| No Component          | 98%        |  |                |                    |                |             |                |          |
| Generic               | 2%         |  |                | 2026               | \$20,700       | 1-2         | \$500          |          |

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