



Metropolitan Transportation Authority

December 2014

MTA Board Action Items



MTA Board Meeting
347 Madison Avenue - 5th Floor Board Room
New York, N.Y. 10017
Wednesday, 12/17/2014
10:00 AM - 12:00 PM ET

1. PUBLIC COMMENTS PERIOD Discussion

2. APPROVAL OF MINUTES

MTA Regular Board Minutes, November 19, 2014

MTAHQ Minutes - November 19, 2014 - Page 5

NYCT/MaBSTOA/SIR/Bus Company Regular Board Minutes, November 19, 2014

NYCTA Minutes - November 19, 2014 - Page 9

MTA Metro-North Railroad Regular Board Minutes, November 19, 2014

Metro-North Minutes - November 19, 2014 - Page 13

MTA Long Island Rail Road Regular Board Minutes, November 19, 2014

LIRR Minutes - November 19, 2014 - Page 18

Triborough Bridge & Tunnel Authority Regular Board Minutes, November 19, 2014

TBTA Minutes - November 19, 2014 - Page 23

MTA Capital Construction Regular Board Minutes, November 19, 2014

MTACC Minutes - November 19, 2014 - Page 28

3. COMMITTEE ON FINANCE

Action Items

i. MTA and TBTA Reimbursement Resolutions for Federal Tax Purposes

MTA and TBTA Reimbursement Resolutions for Federal Tax Purposes - Page 30

ii. Authorization to Issue Bonds

Authorization to Issue Transportation Revenue Bonds, Dedicated Tax Fund Bonds, TBTA General Revenue Bonds, and TBTA Subordinated Revenue Bonds - Page 33

iii. Approval of Supplemental Resolutions Authorizing Refunding Bonds

Approval of Supplemental Resolutions Authorizing Refunding Bonds - Page 79

iv. Executive Order 88 Energy Audits and Retrocommissioning Studies

Executive Order 88 Energy Audits and Retrocommissioning Studies - Page 130

v. OCIP Extension SAS Phase I

OCIP Extension SAS Phase I - Page 136

Procurements

MTAHQ Procurement Report - Page 138

i. Non-Competitive (no items)

ii. Competitive

MTAHQ Competitive Procurements - Page 140

iii. Ratifications

MTAHQ Ratification - Page 144

Real Estate Items

i. Real Estate Items

Real Estate Items - Page 147

4. COMMITTEE ON NYCT & BUS

Action Item

i. TAB Senior Hearing Officers Retainer Agreement

TAB Senior Hearing Officers Retainer Agreement - Page 153

Procurements

NYC Transit December Procurement Staff Summary and Resolution - Page 155

i. Non-Competitive

NYCT Non-Competitive Actions - Page 159

ii. Competitive

NYCT and MTACC Competitive Actions - Page 161

iii. Ratifications

NYCT and MTACC Ratifications - Page 172

5. COMMITTEE ON METRO NORTH RAILROAD

Procurements

Procurements - Page 176

i. Non-Competitive

Non-Competitive - Page 179

ii. Competitive

Competitive - Page 182

iii. Ratifications (no items)

6. COMMITTEE ON LIRR

Action Item

i. MTACC Building Repairs to 50 Vanderbilt Avenue

MTACC Action Item - 50 Vanderbilt Avenue - Page 198

Procurements LIRR

LIRR Procurements - Page 200

i. Non-Competitive

LIRR Non-Competitive Procurements - Page 204

ii. Competitive

LIRR Competitive Procurements - Page 206

iii. Ratification (no items)

Procurements MTACC

MTACC Procurements - Page 215

i. Non-Competitive (no items)

ii. Competitive

MTACC Competitive Procurements - Page 218

iii. Ratification

MTACC Ratifications - Page 220

7. COMMITTEE ON MTA BRIDGES & TUNNELS OPERATIONS

Procurements

BT Procurement Report - December 2014 - Page 224

i. Non-Competitive (no items)

ii. Competitive

BT Competitive - December 2014 - Page 227

iii. Ratifications

BT Ratifications - December 2014 - Page 239

8. FIRST MUTUAL TRANSPORTATION ASSURANCE CO (FMTAC) (no items)

9. MTA 2015 BUDGET ADOPTION MATERIALS (action items)

(materials distributed separately)

10. EXECUTIVE SESSION

Date of Next Meeting: Wednesday, January 21, 2015 at 10:00 A.M.

**Metropolitan Transportation Authority
Minutes of
Regular Board Meeting
347 Madison Avenue
New York, NY 10017**

**Wednesday, November 19, 2014
10:00 a.m.**

The following members were present:

**Hon. Thomas F. Prendergast, Chairman & CEO
Hon. Fernando Ferrer, Vice Chairman
Hon. Andrew Albert
Hon. Jonathan A. Ballan
Hon. John H. Banks, III
Hon. Robert C. Bickford
Hon. Allen P. Cappelli
Hon. Jeffrey A. Kay
Hon. Susan Metzger
Hon. Charles G. Moerdler
Hon. John J. Molloy
Hon. Mitchell H. Pally
Hon. Andrew M. Saul
Hon. James L. Sedore, Jr.
Hon. Polly Trottenberg
Hon. Iris Weinshall
Hon. Carl V. Wortendyke**

The following Members were absent:

Hon. Vincent Tessitore, Jr.

Catherine Rinaldi, Chief of Staff, Jerome F. Page, General Counsel, Stephen J. Morello, Counselor to the Chairman, Board Member Ira Greenberg, Board Member Neal Zuckerman, Carmen Bianco, President, NYCTA, Patrick A. Nowakowski, President, Long Island Rail Road, John Kesich, Sr. V.P. Operations, Metro-North Railroad, James Ferrara, President, TBTA, Darryl Irick, President/SVP, MTA Bus Operations and Michael Horodniceanu, MTA Capital Construction, also attended the meeting.

The Board of the Metropolitan Transportation Authority also met as the Board of the New York City Transit Authority, the Manhattan and Bronx Surface Transit Operating Authority, the Staten Island Rapid Transit Operating Authority, the Metropolitan Suburban Bus Authority, the Triborough Bridge and Tunnel Authority, the Long Island Rail Road, the Metro-North Commuter Railroad Company, the MTA Capital Construction Company, the MTA Bus Company, and the First Mutual Transportation Assurance Company.

Unless otherwise indicated, these minutes reflect items on the agenda of the Board of the Metropolitan Transportation Authority, the Metropolitan Suburban Bus Authority, and the First Mutual Transportation Assurance Company. Refer to the other agencies' minutes of this date for items on the agendas of the Boards of the other agencies.

1. **PUBLIC SPEAKERS.** There were six (3) public speakers, the following speakers spoke on items relevant to the MTA agenda. Refer to the video recording of the meeting produced by the MTA and maintained in MTA records, and to the other agencies' minutes of this date, for the names of other speakers and for the content of speakers' statements.

Linda Baran, President/CEO, Staten Island Chamber of Commerce
Gene Russianoff, Staphangers Campaign

2. **CHAIRMAN'S OPENING COMMENTS.**

Chairman Prendergast acknowledged the opening of the new Fulton Center earlier this month. The Chairman remarked on the success of the opening and he encouraged everyone to visit the Center.

Chairman Prendergast announced that toward the end of the meeting, Robert Foran, Chief Financial Officer, would give a presentation on the MTA's November Financial Plan. The Chairman said that he is pleased that the agency is maintaining a commitment it made a year ago to keep fare and toll increases at four percent over two years, which he said is possible due to continued budget discipline and increased ridership, despite rising operational costs.

Chairman Prendergast said that public hearings will be held across the region in December to discuss fare and toll changes. The Board will review public input and will vote on proposed fare and toll changes in January, which are scheduled to take place in March.

3. **MINUTES.** Upon motion duly made and seconded, the Board approved the minutes of the regular Board meeting held on October 29, 2014.

4. **COMMITTEE ON FINANCE.**

- A. **Information Item.**

1. **2013-2014 Station Maintenance Receivable.** The Board was informed of the 2013-2014 monies billed and received by the MTA for Station Maintenance as of October 31, 2014.

- B. **Procurement Items.** Upon motion duly made and seconded, the Board approved the following procurement items. The specifics are set forth in the staff summaries and documentation filed with the meeting materials.

**Regular Board Meeting
November 19, 2014**

1. New York State Industries for the Disabled (“NYSID”) - Digital Document Scanning and Imaging Services – No. 14370-0100. Approved the award of a New York State Preferred Source, miscellaneous service contract with NYSID to perform digital document scanning and imaging processing services for MTAHQ departments located at 341, 345, 347 Madison Avenue as part of the Relocation Project.
2. Day Engineering P.C. – Multi-Agency Environmental Consulting Services – No. 13307-0100. Approved the award of a competitively negotiated, multi-agency personal services contract to perform as-needed environmental consulting services including, but not limited to: site assessments; exposure assessments; compliance inspections; review of environmental regulations; and research and preparation of environmental position papers.
3. Marsh USA, Inc. – All-Agency Master Broker Services – No. 11257-0100, S/A #1. Approved an amendment to the Board-approved, competitively negotiated personal services contract with Marsh USA, Inc. to replenish funds in the amount of \$10 million due to unanticipated forensic accounting and other professional and expert services arising of the Sandy insurance and FEMA claims.

C. **Real Estate Items.** Upon motion duly made and seconded, the Board approved the following real estate items. The specifics are set forth in the staff summaries and documentation filed with the meeting materials.

New York City Transit Authority

1. Lease extension between New York City Transit Authority and SAG, LLC for warehouse space located at 58 2nd Avenue, Brooklyn, N.Y.

Long Island Rail Road

2. License agreement with Danny Enterprises Inc. for employees and visitors parking located on a parcel of land under LIRR’s Babylon Branch Line at West Hoffman Avenue on the west side of 6th Street, Lindenhurst, N.Y.
3. Lease agreement with Shahid Haroon for the operation of a newsstand at LIRR’s Babylon Station, Babylon, N.Y.
4. Lease agreement with Parking Systems Plus, Inc. for the operation of the LIRR’s Douglaston commuter parking lot, Little Neck commuter parking lot, and Westbury commuter parking lot.

Metropolitan Transportation Authority

5. Approved a resolution authorizing the negotiation and execution of agreements by MTA and LIRR necessary to effectuate the Amtrak Tunnel Casing Project in conformity with the terms set forth in the staff summary.

**Regular Board Meeting
November 19, 2014**

5. **COMMITTEE ON CORPORATE GOVERNANCE.**

A. **Action Items.** Upon motion duly made and seconded, the Board approved the following action items. The specifics are set forth in the staff summaries and documentation filed with the meeting materials. Board member Charles Moerdler asked that materials for board consideration be provided to Board members prior to one week in advance of the meeting.

1. **Revisions to MTA Whistleblower Policy.** Approved the revised Whistleblower Policy.
2. **Revisions to MTA Codes of Ethics.** Approved the amendments to the existing MTA All-Agency Code of Ethics and the MTA Board Member Code of Ethics.

6. **CHIEF FINANCIAL OFFICER PRESENTATION ON MTA 2014 FINAL PROPOSED BUDGET AND NOVEMBER FINANCIAL PLAN 2015-2018.**

Chairman Prendergast introduced MTA Chief Financial Officer Robert Foran, who presented the MTA 2015 Final Proposed Budget and November Financial Plan for 2015-2018. Chairman Prendergast noted that the November presentation was for informational purposes and that the Board would vote on the Budget materials at the December 17, 2014 Board meeting.

Copies of the proposed budget and plan were distributed to Board members at the meeting.

Following the presentation made by the Chief Financial Officer, Chairman Prendergast thanked Mr. Foran and invited Board discussion concerning the proposed budget and the financial plan.

The details of the presentation on the proposed budget and financial plan and Board members' comments and questions with respect thereto are included in the video recording of the meeting produced by the MTA and maintained in MTA records.

7. **ADJOURNMENT.** Upon motion duly made and seconded, the Board voted to adjourn the meeting at 11:00 a.m.

Respectively submitted,

Victoria Clement
Assistant Secretary

**Regular Board Meeting
November 19, 2014**

**Minutes of the
Regular Board Meeting
for the New York City Transit Authority,
Manhattan and Bronx Surface Transit Operating Authority,
Staten Island Rapid Transit Operating Authority and
MTA Bus Company**

**Wednesday, November 19, 2014
10:00 a.m.**

The following members were present:

Hon. Thomas F. Prendergast, Chairman & CEO

Hon. Fernando Ferrer, Vice Chairman

Hon. Andrew Albert

Hon. Jonathan A. Ballan

Hon. John H. Banks, III

Hon. Robert C. Bickford

Hon. Allen P. Cappelli

Hon. Jeffrey A. Kay

Hon. Susan Metzger

Hon. Charles G. Moerdler

Hon. John J. Molloy

Hon. Mitchell H. Pally

Hon. Andrew M. Saul

Hon. James L. Sedore, Jr.

Hon. Polly Trottenberg

Hon. Iris Weinshall

Hon. Carl V. Wortendyke

The following Members were absent:

Hon. Vincent Tessitore, Jr.

Catherine Rinaldi, Chief of Staff, Jerome F. Page, General Counsel, Stephen J. Morello, Counselor to the Chairman, Board Member Ira Greenberg, Board Member Neal Zuckerman, Carmen Bianco, President, NYCTA, Patrick A. Nowakowski, President, Long Island Rail Road, John Kesich, Sr. V.P. Operations, Metro-North Rail Road, James Ferrara, President, TBTA, Darryl Irick, President/SVP, MTA Bus Operations and Michael Horodniceanu, MTA Capital Construction, also attended the meeting.

1. **CHAIRMAN PRENDERGAST CALLED THE MEETING TO ORDER**

2. **PUBLIC COMMENT PERIOD**

Three public speakers addressed MTA NYC Transit/MTA Bus issues:

Murray Bodin, Concerned Grandparents, asked the Chairman to replace Board Member Allen Cappelli.

Linda Baron, SI Chambers of Commerce, expressed support for North Shore Bus Rapid Transit for Staten Island riders.

Gene Russianoff, Straphangers Campaign, discussed the proposed Capital Program and the need for support from Albany.

3. **CHAIRMAN PRENDERGAST'S COMMENTS**

Details of Chairman Prendergast's comments are set forth in minutes recorded by the MTA, copies of which are on file with the records of the meeting of the Board of the MTA NYC Transit/Staten Island Rapid Transit Operating Authority/MTA Bus Company.

4. **MINUTES**

Upon motion duly made and seconded, the Board unanimously approved the minutes of the regular board meeting of MTA NYC Transit, the Manhattan and Bronx Surface Transit Operating Authority, the Staten Island Rapid Transit Operating Authority, and MTA Bus Company held on October 29, 2014.

5. **COMMITTEE ON FINANCE**

Real Estate Item:

MTA NYC Transit: Upon motion duly made and seconded, the Board authorized a lease extension between MTA NYC Transit and SAG, LLC for warehouse space at 58 Second Avenue, Brooklyn, NY.

6. **COMMITTEE ON TRANSIT & BUS OPERATIONS**
NYC Transit & MTA Bus Company

Action Item:

Amendment of Salary Cap in TAB Hearing Officer Contracts: Upon motion duly made and seconded, the Board approved the amendment of the retainer agreements between the MTA NYC Transit and 12 attorneys serving in the capacity of per diem hearing officers for the Transit Adjudication Bureau (TAB) so as to increase the maximum amounts of such agreements from \$19,500 to \$30,000.

Procurements:

Non-Competitive Procurements: Upon motion duly made and seconded, the Board approved the non-competitive procurements requiring a two-thirds vote (Schedule A in the Agenda). Details of the above items are set forth in staff summaries, copies of which are on file with the records of the meeting of the Board of MTA NYC Transit/Staten Island Rapid Transit Operating Authority/MTA Bus Company.

Competitive Procurements: Upon motion duly made and seconded, the Board approved the competitive procurements requiring a two-thirds vote (Schedule C in the Agenda) and a majority vote (Schedules F, G, I and L in the Agenda). Details of the above items are set forth in staff summaries, copies of which are on file with the records of the meeting of the Board of MTA NYC Transit /Staten Island Rapid Transit Operating Authority /MTA Bus Company.

Ratifications: Upon motion duly made and seconded, the Board approved the ratifications requiring a majority vote (Schedule K in the Agenda). Details of the above items are set forth in staff summaries, copies of which are on file with the records of the meeting of the Board of MTA NYC Transit /Staten Island Rapid Transit Operating Authority/MTA Bus Company.

7. CORPORATE GOVERNANCE COMMITTEE

Action Item(s):

Revisions to MTA Whistleblower Policy: Upon motion duly made and seconded, the Board adopted a revised whistleblower protection policy.

All-Agency & Board Members Code of Ethics Revisions: Upon motion duly made and seconded, the Board approved amendments to the existing MTA All-Agency Code of Ethics and MTA Board Member Code of Ethics.

8. CFO PRESENTATION ON MTA 2015 FINAL PROPOSED BUDGET AND NOVEMBER FINANCIAL PLAN 2015-2018

Chairman Prendergast introduced MTA Chief Financial Officer Robert Foran, who presented the MTA 2015 Final Proposed Budget and November Financial Plan for 2015-2018. Chairman Prendergast noted that the November presentation was for informational purposes and that the Board would vote on the Budget at the December 17, 2014 Board meeting.

Copies of the proposed budget and plan were distributed to Board members at the meeting.

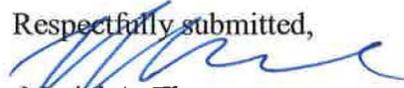
Following the presentation made by the Chief Financial Officer, Chairman Prendergast thanked Mr. Foran and invited Board discussion concerning the proposed budget and the financial plan.

The details of the presentation on the proposed budget and financial plan and Board members' comments and questions with respect thereto are included in the video recording of the meeting produced by the MTA and maintained in MTA records.

9. ADJOURNMENT

Upon motion duly made and seconded, the Board voted to adjourn the meeting at 11:00 a.m.

Respectfully submitted,


Mariel A. Thompson
Assistant Secretary

Minutes of the Regular Meeting
Metro-North Commuter Railroad Company
347 Madison Avenue
New York, NY 10017

Wednesday, November 19, 2014
10:00 a.m.

The following Members were present:

Hon. Thomas F. Prendergast, Chairman & CEO
Hon. Fernando Ferrer, Vice Chairman
Hon. Andrew Albert
Hon. Jonathan A. Ballan
Hon. John H. Banks, III
Hon. Robert C. Bickford
Hon. Allen P. Cappelli
Hon. Jeffrey A. Kay
Hon. Susan Metzger
Hon. Charles G. Moerdler
Hon. John J. Molloy
Hon. Mitchell H. Pally
Hon. Andrew M. Saul
Hon. James L. Sedore, Jr.
Hon. Polly Trottenberg
Hon. Iris Weinshall
Hon. Carl V. Wortendyke

The following Members were absent:

Hon. Vincent Tessitore, Jr.

Catherine Rinaldi, Chief of Staff, Jerome F. Page, General Counsel, Stephen J. Morello, Counselor to the Chairman, Board Member Ira Greenberg, Board Member Neal Zuckerman, Carmen Bianco, President, NYCTA, Patrick A. Nowakowski, President, Long Island Rail Road, John Kesich, Sr. V.P. Operations, Metro-North Railroad, James Ferrara, President, TBTA, Darryl Irick, President/SVP, MTA Bus Operations and Michael Horodniceanu, MTA Capital Construction, also attended the meeting.

Chairman Prendergast called the meeting to order.

1. Public Speakers:

There were three public speakers, none of whom spoke concerning Metro-North agenda items. The details of the speakers' comments are contained in the video recording of the

meeting, produced by the Metropolitan Transportation Authority (MTA) and maintained in MTA records, and in the minutes of the other Agencies of this date.

2. Chairman's Opening Remarks:

Chairman Prendergast acknowledged the opening of the new Fulton Center earlier this month. The Chairman remarked on the success of the opening and he encouraged everyone to visit the Center.

Chairman Prendergast announced that toward the end of the meeting, Robert Foran, Chief Financial Officer, would give a presentation on the MTA's November Financial Plan. The Chairman said that he is pleased that the agency is maintaining a commitment it made a year ago to keep fare and toll increases at four percent over two years, which he said is possible due to continued budget discipline and increased ridership, despite rising operational costs.

Chairman Prendergast said that public hearings will be held across the region in December to discuss fare and toll changes. The Board will review public input and will vote on proposed fare and toll changes in January, which are scheduled to take place in March.

The details of the Chairman's comments are contained in the video recording of the meeting, produced by the MTA and maintained in MTA records and in the minutes of the other Agencies of this date.

3. Approval of Minutes:

Upon motion duly made and seconded, the minutes of the Regular Board Meeting of October 29, 2014 were approved.

4. Committee on Finance:

Information Item:

- 2013-2014 Station Maintenance Receivables – Schedule showing all monies billed and received by the MTA for Station Maintenance as of October 31, 2014.

The details of the above item are contained in the minutes of the MTA Board meeting held this day and in a staff summary and report filed with those minutes.

Procurements:

The MTA Board voted on MTA Headquarters procurements.

The following competitive procurements that relate to Metro-North were approved:

- Approval of a competitively negotiated, multi-agency, personal services contract for Multi-Agency Environmental Consulting Services to Day Engineering P.C. to perform as-needed environmental consulting services.
- Approval of an amendment to the Board-approved, competitively negotiated, personal services contract with Marsh USA, Inc. to replenish funds in the amount of \$10 million due to unanticipated forensic accounting and other professional and expert services arising out of the Sandy insurance and FEMA claims.

The details of the above items are contained in the minutes of the MTA Board meeting held this day, staff summaries filed with the minutes and in the video recording of the meeting, produced by the MTA and maintained in MTA records.

5. Committee on New York City Transit & Bus:

The MTA Board voted on New York City Transit procurements.

The following competitive procurement that relates to Metro-North was approved:

- Approval of a three year, multi-agency, competitive, miscellaneous service contract with Compulink Technologies, Inc. (Compulink) for hardware and software maintenance of Cisco network equipment and provide support to NYC Transit, Bridges and Tunnels and Metro-North Railroad.

The details of the above item are contained in the minutes of the New York City Transit Board meeting held this day, a staff summary filed with those minutes and in the video recording of the meeting, produced by the MTA and maintained in MTA records.

6. Committee on Metro-North Railroad:

Action Item:

Upon motion duly made and seconded, the Board approved the following action item recommended to it by the Committee on Metro-North Railroad Operations:

- New Haven Line Connecticut Fare Increase – Board adoption of a resolution authorizing implementation of one percent increases legislated by the State of Connecticut in Metro-North New Haven Main Line fares for travel to or from Connecticut stations.

Procurements:

Upon motion duly made and seconded, the Board approved the following non-competitive procurement recommended to it by the Committee on Metro-North Railroad Operations:

- Approval for additional funding to an in-place, negotiated and Board approved All-Agency agreement with New York State Industries for the Disabled (NYSID) for as-needed temporary personnel services.

Upon motion duly made and seconded, the Board approved the following competitive procurements recommended to it by the Committee on Metro-North Railroad Operations:

- Approval of a 36-month competitively solicited and negotiated design-build contract with Skanska-ECCO III Joint Venture (Skanska-ECCO) for the first stage of the complete replacement of the current Main Shop (Bldg. 6) along with a new EMU Annex Building located in Croton Harmon, New York.
- Approval of two 36 month competitively solicited contracts to (1) 4D Security Solutions and (2) Sepsa North America for the Design and Delivery of Video Recording systems for Metro-North and Long Island Rail Road.
- Approval of a competitively solicited and negotiated miscellaneous service contract to Port Imperial Ferry Corp. d/b/a NY Waterway for trans-Hudson River Commuter Ferry and Ancillary services. The period of performance for this contract is four years with three 2-year renewal options.
- Approval of a competitively solicited three-year miscellaneous service contract to retain (1) Peter Pan Lines, (2) Leprechaun Lines, (3) White Plains Bus Co. and (4) Greater Bridgeport Transit to furnish emergency and scheduled bus services on an as-needed basis.

The details of the above items are contained in staff summaries and reports filed with the records of this meeting and in the video recording of the meeting produced by the MTA and maintained in the MTA records.

7. Committee on Long Island Rail Road:

The MTA Board voted on Long Island Rail Road procurements.

The following non-competitive procurement that relates to Metro-North was approved:

- A sole source omnibus award to Ansaldo STS USA, Inc. for a 36-month period for engineering services and parts to support Long Island Rail Road, Metro-North Railroad and New York City Transit's current inventory of equipment designed and manufactured by Ansaldo, the OEM and designer and only responsible source for various wayside switch and signal systems installed and operated by Long Island Rail Road, Metro-North Railroad and New York City Transit, as well as Automatic Speed Control Systems installed on Long Island Rail Road and Metro-North Railroad rolling stock.

The details of the above item are contained in the minutes of the Long Island Rail Road Board meeting held this day, staff summaries filed with those minutes and in the video recording of the meeting, produced by the MTA and maintained in MTA records.

8. Committee on Corporate Governance:

The following action items that relate to Metro-North were approved:

- Approval of revisions to the MTA All-Agency Whistleblower Policy.
- Approval of revisions to the MTA All-Agency Code of Ethics and MTA Board Member Code of Ethics.

The details of the above items are contained in the minutes of the MTA Board meeting held this day, staff summaries and reports filed with the minutes and in the video recording of the meeting, produced by the MTA and maintained in MTA records.

9. CFO Presentation of MTA 2015 Final Proposed Budget and November Financial Plan 2015-2018:

Mr. Foran presented the budget and financial plan. The details of that presentation are contained in the minutes of the MTA held this day, reports filed with the minutes and in the video recording of the meeting, produced by the MTA and maintained in MTA records which recording includes discussions between Board Members, staff and the Chairman pertaining to the presentation.

8. Adjournment:

Upon motion duly made and seconded, the Board voted to adjourn the meeting at 11:00 a.m.

Respectfully submitted,



Linda Montanino
Assistant Secretary

**Minutes of the Regular Meeting
Long Island Rail Road Company
347 Madison Avenue
New York, NY 10017**

**Wednesday, November 19, 2014
10:00 a.m.**

The following members were present:

Hon. Thomas F. Prendergast, Chairman & CEO
Hon. Fernando Ferrer, Vice Chairman
Hon. Andrew Albert
Hon. Jonathan A. Ballan
Hon. John H. Banks, III
Hon. Robert C. Bickford
Hon. Allen P. Cappelli
Hon. Jeffrey A. Kay
Hon. Susan Metzger
Hon. Charles G. Moerdler
Hon. John J. Molloy
Hon. Mitchell H. Pally
Hon. Andrew M. Saul
Hon. James L. Sedore, Jr.
Hon. Polly Trottenberg
Hon. Iris Weinshall
Hon. Carl V. Wortendyke

The following Members were absent:

Hon. Vincent Tessitore, Jr.

Catherine Rinaldi, Chief of Staff, Jerome F. Page, General Counsel, Stephen J. Morello, Counselor to the Chairman, Board Member Ira Greenberg, Board Member Neal Zuckerman, Carmen Bianco, President, NYCTA, Patrick A. Nowakowski, President, Long Island Rail Road, John Kesich, Sr. V.P. Operations, Metro-North Railroad, James Ferrara, President, TBTA, Darryl Irick, President/SVP, MTA Bus Operations and Michael Horodniceanu, MTA Capital Construction, also attended the meeting.

Chairman Prendergast called the meeting to order.

1. Public Speakers:

There were three public speakers, none of whom spoke concerning LIRR agenda items. The details of the speakers' comments are contained in the video recording of the meeting, produced by the Metropolitan Transportation Authority (MTA) and maintained in MTA records, and in the minutes of the other Agencies of this date.

2. Opening Remarks:

Chairman Prendergast acknowledged the opening of the new Fulton Center earlier this month. The Chairman remarked on the success of the opening and encourages everyone to visit the Center.

Chairman Prendergast announced that toward the end of the meeting, Robert Foran, Chief Financial Officer, would give a presentation on the MTA's November Financial Plan. The Chairman said he is pleased that the agency is maintaining a commitment it made a year ago to keep fare and toll increases at four percent over two years, which he said is possible due to continued budget discipline and increased ridership, despite rising operating costs.

Chairman Prendergast said that public hearings will be held across the region in December to discuss fare and toll changes. The Board will review public input and will vote on proposed fare and toll changes in January, which are scheduled to take effect in March.

The details of the Chairman's comments are contained in the video recording of the meeting, produced by the MTA and maintained in MTA records, which recording includes discussions between Board Members and the Chairman, and in the minutes of the other Agencies of this date.

3. Approval of Minutes:

Upon motion duly made and seconded, the minutes of the Regular Board Meeting of October 29, 2014 were approved.

4. Committee on Finance:

Information Item:

The following information item was provided to the Board:

- 2013-2014 Station Maintenance Receivables

A staff summary setting forth the details of the above item is filed with the minutes of the meeting of the Metropolitan Transportation Authority held this day.

Procurements:

Upon motion duly made and seconded, the Board approved the following procurement items relating to LIRR:

- Approval of a competitively negotiated, multi-agency, personal services contract for Multi-Agency Environmental Consulting Services to Day Engineering P.C. in the not-to-exceed amount of \$860,000.
- Approval of an amendment to the personal services contract with Marsh USA, Inc. to replenish funds in the amount of \$10 million with respect to Sandy insurance and FEMA claims.

Staff summaries setting forth the details of the above items are filed with the minutes of the meeting of the Metropolitan Transportation Authority held this day.

Real Estate Items:

Upon motion duly made and seconded, the Board approved the following procurement items relating to LIRR:

- License agreement with Danny Enterprises Inc., for a parcel of land under LIRR's Babylon Branch Line at West Hoffman Avenue on the west side of 6th Street, Lindenhurst, NY, for a term of 10 years, with total compensation over such term, on a present value basis, of \$46,834.15.
- Lease agreement with Shahid Haroon at LIRR's Babylon Station for a newsstand, for a term of 10 years, with total compensation over such term, on a present value basis, of \$172,926.44.
- Lease agreement with Parking Systems Plus, Inc., for the operation of the LIRR Douglaston commuter parking lot, Little Neck commuter parking lot, and Westbury commuter parking lot, for a term of 10 years, with total compensation over such term, on a present value basis, of \$3,523,056.40.
- Authorization of the negotiation and execution of agreements by MTA and LIRR to facilitate the construction of a concrete casing to preserve the future subsurface Right of Way for Amtrak's proposed Gateway Tunnel for the segment underneath 11th Avenue, and to provide \$5.5 million as a contribution to Amtrak for such work.

Staff summaries setting forth the details of the above items are filed with the minutes of the meeting of the Metropolitan Transportation Authority held this day.

5. Committee on Metro-North Railroad & Long Island Rail Road:

Metro-North Procurements:

Among the procurements approved for Metro-North were: a request for additional funding for an All-Agency Temporary Personnel Services Agreement with New York State Industries for the Disabled, in the estimated amount of \$4,350,000; and, pursuant to a joint Railroad procurement, award of a contract in the not-to-exceed amount of \$16,698,528 to 4D Security Solutions for the Design, Manufacture, Assembly and Delivery of an On-Board Video Camera Recording System.

LIRR Procurements:

Upon motion duly made and seconded, the Board approved the following LIRR procurements:

- On behalf of LIRR, Metro-North and New York City Transit, approval to issue a Sole Source Omnibus award to Ansaldo STS USA, Inc., in an aggregate not-to-exceed amount of \$14,800,000, over a 36-month period for engineering services and parts to support the Agencies' current inventory of Original Equipment Manufacturer-provided wayside switch and signal systems and automatic speed control systems.
- Approval to award a competitively bid personal service contract to HARSCO Rail, in the not-to-exceed amount of \$59,578, for Derailment Investigation and Prevention Training Seminars, for a period of three-years, with two one-year options.
- Approval to award a competitively bid personal service contract to Phoenix Environmental Labs, Inc., in the not-to-exceed amount of \$170,374, for as-needed Laboratory Testing Services, for a period of three years.

Staff summaries setting forth the details of the above items are filed with the minutes of the meeting of the Metropolitan Transportation Authority held this day.

6. Committee on Corporate Governance:

Upon motion duly made and seconded, the Board approved the following action items:

- Revisions to MTA Whistleblower Policy
- Amendments to the MTA All-Agency Code of Ethics and MTA Board Member Code of Ethics

Staff summaries setting forth the details of the above items are filed with the minutes of the meeting of the Metropolitan Transportation Authority held this day.

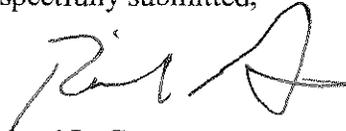
7. **CFO Presentation on MTA 2015 Final Proposed Budget and November Financial Plan 2015-2018:**

Mr. Foran presented the budget and financial plan. The details of that presentation are contained in the minutes of the MTA held this day, reports filed with the minutes and in the video recording of the meeting, produced by the MTA and maintained in MTA records which recording includes discussions between Board Members, staff and the Chairman pertaining to the presentation.

8. **Adjournment:**

Upon motion duly made and seconded, the Board voted to adjourn the meeting at 11 a.m.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Richard L. Gans', written in a cursive style.

Richard L. Gans
Secretary

TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY

BOARD MINUTES

November 19, 2014

Minutes of the Regular Meeting
Triborough Bridge and Tunnel Authority
November 19, 2014

Meeting Held at
347 Madison Avenue
New York, New York 10017

10:00 a.m.

The following members were present:

Hon. Thomas F. Prendergast, Chairman & CEO, MTA
Hon. Fernando Ferrer, Vice Chairman, MTA
Hon. Andrew Albert
Hon. Jonathan A. Ballan
Hon. John H. Banks, III
Hon. Robert C. Bickford
Hon. Allen P. Cappelli
Hon. Jeffrey A. Kay
Hon. Susan G. Metzger
Hon. Charles G. Moerdler
Hon. John J. Molloy
Hon. Mitchell H. Pally
Hon. Andrew M. Saul
Hon. James L. Sedore, Jr.
Hon. Polly Trottenberg
Hon. Iris Weinshall
Hon. Carl V. Wortendyke

Not Present:

Hon. Vincent Tessitore, Jr.

Catherine Rinaldi, Chief of Staff; Jerome F. Page, General Counsel; Stephen J. Morello, Counselor to the Chairman; Board Member Ira Greenberg, Board Member Neal Zuckerman; Carmen Bianco, President, New York City Transit; Patrick A. Nowakowski, President, Long Island Rail Road; John Kesich, Sr., Vice President Operations, Metro-North Railroad; James Ferrara, President, Triborough Bridge and Tunnel Authority; Darryl Irick, President/SVP, MTA Bus Operations; and Michael Horodniceanu, President, MTA Capital Construction, also attended the meeting.

The Board of the Metropolitan Transportation Authority also met as the Board of the New York City Transit Authority, the Manhattan and Bronx Surface Transit Operating Authority, the Staten Island Rapid Transit Operating Authority, the Metropolitan Suburban Bus Authority, the Triborough Bridge and Tunnel Authority, the Long Island Rail Road, the Metro-North Commuter Railroad Company, the MTA Capital Construction Company, the MTA Bus Company, and the First Mutual Transportation Assurance Company.

Chairman and Chief Executive Officer Prendergast called the meeting to order.

1. Public Speakers

There were three (3) public speakers. Mr. Murray Bodin, Concerned Grandparents, stated that MTA Bridges and Tunnels is ignoring the Manual on Uniform Traffic Control Devices; he discussed proper roadway markings; and suggested that if Bridges and Tunnels cannot be brought into compliance by their Committee Chairman then he should be replaced. Linda Baran, President and CEO of Staten Island Chamber of Commerce, referred to the 50th Anniversary of Verrazano Narrows Bridge and the proposal for a \$16 toll to advocate for the inclusion of the North Shore Right of Way Bus Rapid Transit, due to Staten Island's limited transit options.

The remaining public speaker did not specifically comment on issues regarding the Triborough Bridge and Tunnel Authority. Refer to the video recording of the meeting produced by the MTA and maintained in MTA records, and the MTA's and other agencies' minutes of the meeting of this date, for the content of the speakers' statements.

2. Chairman and Chief Executive Officer Prendergast's Opening Comments

Chairman and CEO Prendergast opened his remarks by discussing the opening of the new Fulton Center. He then mentioned that Robert Foran, MTA Chief Financial Officer, will be presenting the 2015 Final Proposed Budget and November Financial Plan 2015-2018, which recognizes that the MTA will be able to keep fare and toll increases to 4 percent over two years due to budget discipline and increased ridership, despite rising operational costs. More than a billion dollars has been cut from expenses with more cuts planned every year to bring annual savings to \$1.5 billion by 2017. The fare and toll revenues, however, cover only half of the \$14 billion operating budget. In December 2014, hearings will be held to discuss fare and toll changes that are scheduled to take effect in March 2015. The Board will review public input and vote at a meeting in January 2015.

The details of Chairman and CEO Prendergast's comments are contained in the video recording of this meeting, produced by the MTA and maintained in MTA records, and the MTA's and other agencies' minutes of the meeting of this date.

3. Approval of the Minutes of the Regular Meeting October 29, 2014

Upon a motion duly made and seconded, the minutes of the Regular Board Meeting held on October 29, 2014 were approved.

4. Committee on Finance

Upon motions duly made and seconded, the Board approved the following recommended to it by the Committee on Finance:

(a) Procurements:

- One (1) non-competitive procurement in the amount of \$1.4 million, and
- Two (2) competitive procurements in the amount of \$10.9 million.

(c) Real Estate Items:

- Five (5) real estate action items.

A copy of the staff summaries, resolutions and documents setting forth the details of the above items, as well as discussion with regard to same, are filed with the minutes of the meeting of the Board of the Metropolitan Transportation Authority held this day.

5. Committee on MTA Bridges and Tunnels Operations

Action Items

Prior to Commissioner Cappelli's report, Chairman & CEO Prendergast stated that last month the action item that would have authorized TBTA to enter into two Memoranda of Understanding with the New York City Department of Parks and Recreation (DPR) in connection with a project to replace the approach ramps to the Robert F. Kennedy Bridge in Manhattan was tabled to give TBTA the opportunity to address concerns raised by Commissioner Ballan regarding costs associated with tree removal and replacement. TBTA, with the help of Commissioner Trottenberg, was able to renegotiate a tree restitution plan with DPR, as permitted by statute, that will plant the required number of trees while limiting the costs to a not to exceed amount of \$320,000. Commissioner Ballan thanked DPR, Chairman and CEO Prendergast, Commissioner Trottenberg, MTA Vice Chairman Fernando Ferrer, and TBTA. The Commissioner also asked that DPR review their calculations for the purpose of reducing the cost of removal and replacement due to the condition of the trees and their location near the roadway. Commissioner Trottenberg thanked DPR for reducing the cost of the tree removal and replacement because their mandate is to save trees and keep New York City green. Chairman & CEO Prendergast asked for a vote to approve the new action item authorizing TBTA to enter into the two Memoranda of Understanding with DPR, one of which related to the relocation of DPR facilities that will be impacted by the project and is unchanged. Upon a motion duly made and seconded, the action item was approved.

Procurements

Commissioner Cappelli stated that there is one (1) procurement totaling \$282 million.

Non-Competitive Procurements

Commissioner Cappelli stated that there are no non-competitive procurements.

Competitive Procurements

Commissioner Cappelli stated that there is one (1) competitive procurement totaling \$282 million.

Competitive Procurements

Competitive Requests for Proposals (Award of Purchase and Public Work Contracts)

Tully Construction Company, Inc.	Contract No. BB-28S Sandy Restoration and Project BB-28, Phase II/BB-54 Rehabilitation of the Tunnel and Brooklyn Plaza at the Hugh L. Carey Tunnel.	\$282,454,276.12
----------------------------------	--	------------------

Commissioner Cappelli stated that the Committee members who were present at the Committee meeting considered and voted in favor of the one (1) procurement although a Committee quorum was not present. Upon a motion duly made and seconded, the Board approved the procurement recommended to it by the Committee for MTA Bridges and Tunnels Operations.

Ratifications

Commissioner Cappelli stated that there are no ratifications.

6. **Governance Committee**

Upon a motion duly made and seconded, the Board approved the following action items:

- Revisions to the Whistleblower Protection Policy, and
- Amendments to the existing MTA All-Agency Code of Ethics and MTA Board Member Code of Ethics.

Commissioner Moerdler requested that information regarding governance changes be submitted to the Board members for due consideration in advance of the meetings.

7. **MTA 2015 Final Proposed Budget and November Financial Plan 2015-2018**

MTA Chief Financial Officer Robert Foran presented and discussed the MTA's 2015 Final Proposed Budget and November Financial Plan for 2015 through 2017. The details of Mr. Foran's presentation and the discussions with regard to same are contained in the minutes of the meeting of the Board of the Metropolitan Transportation Authority.

8. **Adjournment**

Upon a motion duly made and seconded, the Board unanimously voted to adjourn the meeting at 11:00 a.m.

Respectfully submitted,



Julia R. Christ
Acting Assistant Secretary

**Regular Board Meeting
MTA Capital Construction Company
347 Madison Avenue
New York, NY 10017**

**Monday, November 19, 2014
10:00 AM**

The following members were present:

Hon. Thomas F. Prendergast, Chairman & CEO
Hon. Fernando Ferrer, Vice Chairman
Hon. Andrew Albert
Hon. Jonathan A. Ballan
Hon. John H. Banks, III
Hon. Robert C. Bickford
Hon. Allen P. Cappelli
Hon. Jeffrey A. Kay
Hon. Susan Metzger
Hon. Charles G. Moerdler
Hon. John J. Molloy
Hon. Mitchell H. Pally
Hon. Andrew M. Saul
Hon. James L. Sedore, Jr.
Hon. Polly Trottenberg
Hon. Iris Weinshall
Hon. Carl V. Wortendyke

The following Members were absent:

Hon. Vincent Tessitore, Jr.

Catherine Rinaldi, Chief of Staff, Jerome F. Page, General Counsel, Stephen J. Morello, Counselor to the Chairman, Board Member Ira Greenberg, Board Member Neal Zuckerman, Carmen Bianco, President, NYCTA, Patrick A. Nowakowski, President, Long Island Rail Road, John Kesich, Sr. V.P. Operations, Metro-North Railroad, James Ferrara, President, TBTA, Darryl Irick, President/SVP, MTA Bus Operations and Michael Horodniceanu, MTA Capital Construction, also attended the meeting.

The Board of the Metropolitan Transportation Authority also met as the Board of the New York City Transit Authority, the Manhattan and Bronx Surface Transit Operating Authority, the Staten Island Rapid Transit Operating Authority, the Triborough Bridge and Tunnel Authority, the Long Island Rail Road, the Metro-North Commuter Railroad Company, the MTA Capital Construction Company, the MTA Bus Company, and the First Mutual Transportation Assurance Company.

Chairman and Chief Executive Officer ("Chairman") Prendergast called the meeting to order.

Public Comment Period

There were three public speakers, none of whom spoke on MTA Capital Construction Company matters. The names of the speakers and the subject matter of their comments are filed with the minutes of the meeting of the Board of the Metropolitan Transportation Authority held on November 19, 2014.

Chairman and Chief Executive Officer's Opening Remarks

The Chairman spoke about the opening of the Fulton Center noting it will become as distinguishable as Grand Central Terminal and will become one of our biggest transfer points.

The Chairman's remarks are more fully noted in the minutes of the Regular Meeting of the Board of the Metropolitan Transportation Authority held on November 19, 2014.

Approval of Minutes

Upon motion duly made and seconded, the Board approved the minutes of the Regular Meeting of the Board of the Metropolitan Transportation Authority and the MTA Capital Construction Company held on September 24, 2014.

Committee on Governance

Upon motion duly made and seconded, the Board approved the following Action Items:

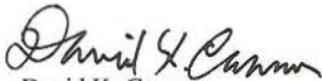
1. Adoption of a revised Whistleblower Protection Policy.
2. Adoption of a revised MTA All-Agency Code of Ethics.
3. Adoption of a revised MTA Board Member Code of Ethics.

A copy of the Staff Summaries, details of the above items and revised policy and codes are filed with the records of the meeting of the Board of the Metropolitan Transportation Authority held on November 19, 2014.

Adjournment

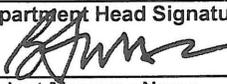
Upon motion duly made and seconded, the Board voted to adjourn the public meeting at 11:00 AM

Respectfully submitted,



David K. Cannon
Assistant Secretary

Staff Summary

Subject MTA and TBTA Reimbursement Resolution for Federal Tax purposes
Department Chief Financial Officer
Department Head Name Robert E. Foran, Chief Financial Officer
Department Head Signature 
Project Manager Name Vinay Dayal, Director of Treasury 

Date December 17, 2014
Vendor Name
Contract Number
Contract Manager Name
Table of Contents Ref #

Board Action					
Order	To	Date	Approval	Info	Other
1	Finance Comm.	12/15	X		
2	Board	12/17	X		

Internal Approvals			
Order	Approval	Order	Approval
1	Legal 	2	Chief of Staff 

To obtain MTA and TBTA adoption of the annexed reimbursement resolutions, which are required by Federal tax law to preserve the ability to finance certain capital projects on a tax exempt basis.

PURPOSE:

As it has in the past, the Metropolitan Transportation Authority (the “MTA”) intends to finance the transit and commuter capital improvement program, and Triborough Bridge and Tunnel Authority (“TBTA” or “MTA Bridges and Tunnels”) intends to finance MTA Bridges and Tunnels’ bridge and tunnel capital improvement program.

It is important that MTA and MTA Bridges and Tunnels preserve the ability to finance capital projects in these capital improvement programs on a tax exempt basis. To maintain the ability of MTA and MTA Bridges and Tunnels to finance capital projects in the capital improvement programs on such tax exempt basis, consistent with Federal tax law, the MTA and TBTA Boards periodically adopt reimbursement resolutions. Federal tax law requires that official action that sets forth the issuer’s intent to spend tax exempt bond proceeds on a project must be taken by an issuer that wants to reimburse itself from tax exempt bond proceeds for capital project costs that were funded from another source of revenue. Copies of the 2015 reimbursement resolutions submitted for Board adoption are attached hereto.

For purposes of the attached reimbursement resolutions, (i) in the case of MTA, the Project refers to the capital programs approved by the Metropolitan Transportation Authority Capital Program Review Board, including, particularly the 2000-2004 Transit and Commuter Capital Program, the 2005-2009 Transit and Commuter Capital Program, the 2010-2014 Transit and Commuter Capital Program and the 2015-2019 Transit and Commuter Capital Program when approved, and (ii) in the case of TBTA, the Project refers to the capital programs approved by the TBTA Board, including, particularly, the 2000-2004 TBTA Capital Program, the 2005-2009 TBTA Capital Program, the 2010-2014 TBTA Capital Program, the 2015-2019 TBTA Capital Program and the security projects authorized to be constructed and/or installed at the TBTA bridges and tunnels.

ALTERNATIVES:

There is no alternative to preserve the ability to finance certain capital projects on a tax-exempt basis under Federal tax law.

RECOMMENDATION:

The MTA and TBTA Boards approve the above-referenced resolutions. This authorization shall continue in effect until the adoption by the MTA and TBTA Boards of subsequent reimbursement resolutions relating to 2016 bond financings.

RESOLUTION

WHEREAS, Metropolitan Transportation Authority (“MTA”) intends to finance the MTA’s transit and commuter capital improvement program, including MTA Bus Company, as more fully described in the accompanying staff summary and capital program documents referenced therein (the “MTA Project”);

WHEREAS, MTA desires to finance the MTA Project through the issuance of tax-exempt debt and other sources as described in the approved capital programs;

NOW THEREFORE, BE IT:

RESOLVED, that the statements contained in this Resolution with respect to the reimbursement of the expenditures described in this Resolution are intended to be statements of official intent as required by, and in conformance with, the provisions of Treasury Regulation Section 1.150-2(e); and

RESOLVED, that the expenditures in connection with the MTA Project to be reimbursed pursuant to this Resolution have been incurred and paid not more than 60 days prior to the date hereof or will be incurred and paid after the date hereof in connection with the MTA Project; and

RESOLVED, that the MTA reasonably expects that the maximum principal amount of tax-exempt debt (including bonds, tax-exempt commercial paper and bond anticipation notes) to be issued by MTA subsequent to the date hereof to pay MTA Project expenditures in 2015 (whether directly or as a reimbursement) is \$2 billion (plus associated financing costs); and

RESOLVED, that this Resolution shall take effect immediately.

December 17, 2014

RESOLUTION

WHEREAS, Triborough Bridge and Tunnel Authority (“MTA Bridge and Tunnels”) intends to finance the MTA Bridges and Tunnels’ bridge and tunnel capital improvement program, as more fully described in the accompanying staff summary and capital program documents referenced therein (the “Project”);

WHEREAS, MTA Bridge and Tunnels desires to finance the Project through the issuance of tax-exempt debt;

NOW THEREFORE, BE IT:

RESOLVED, that the statements contained in this Resolution with respect to the reimbursement of the expenditures described in this Resolution are intended to be statements of official intent as required by, and in conformance with, the provisions of Treasury Regulation Section 1.150-2(e); and

RESOLVED, that the expenditures in connection with the Project to be reimbursed pursuant to this Resolution have been incurred and paid not more than 60 days prior to the date hereof or will be incurred and paid after the date hereof in connection with the Project; and

RESOLVED, that MTA Bridge and Tunnels reasonably expects that the maximum principal amount of tax-exempt debt (including bonds, tax-exempt commercial paper and bond anticipation notes) to be issued by MTA Bridge and Tunnels subsequent to the date hereof to pay MTA Bridge and Tunnels Project expenditures in 2015 (whether directly or as a reimbursement) is \$250 million (plus associated financing costs); and

RESOLVED, that this Resolution shall take effect immediately.

December 17, 2014

Staff Summary

Subject Authorization to Issue Transportation Revenue Bonds, Dedicated Tax Fund Bonds, and Triborough Bridge and Tunnel Authority General Revenue and Subordinate Revenue Bonds
Department Finance
Department Head Name Robert E. Foran, Chief Financial Officer
Department Head Signature 
Project Manager Name Patrick J. McCoy, Director, Finance 

Date December 17, 2014
Vendor Name
Contract Number
Contract Manager Name
Table of Contents Ref #

Board Action					
Order	To	Date	Approval	Info	Other
1	Finance Comm.	12/15	X		
2	Board	12/17	X		

Internal Approvals			
Order	Approval	Order	Approval
1	Legal 	2	Chief of Staff 

PURPOSE:

The MTA Finance Department is seeking MTA and TBTA Board authorization and approval of the necessary documentation to issue new money bonds to finance up to \$2.0 billion of capital projects set forth in existing approved transit and commuter capital programs, and up to \$250 million to finance capital projects set forth in existing approved bridges and tunnels capital programs. The MTA Finance Department will report to the Board on the status of the proposed debt issuance schedule, the results of each bond issue and planned bond issues.

DISCUSSION:

MTA and TBTA Board approval is sought for the following resolutions, documents and activities in connection with the issuance of bonds in an aggregate principal amount necessary to finance up to \$2.250 billion of capital projects of the transit and commuter systems and MTA Bridges & Tunnels set forth in existing approved capital programs:

- Multiple 2015 Series Supplemental Resolution authorizing Metropolitan Transportation Authority Transportation Revenue Obligations, including providing for the issuance of the following:
 - o An aggregate principal amount of up to \$2.0 billion of Transportation Revenue Bonds (reduced by any bonds issued under the Dedicated Tax Fund Resolution) in one or more series necessary to finance capital projects of the transit and commuter systems, plus applicable issuance costs and any original issue discount, and
 - o Parity Reimbursement Obligations and Parity Debt in an amount sufficient to secure any Credit Facilities entered into in connection with the issuance of the Transportation Revenue Bonds.
- Multiple 2015 Series Supplemental Resolution authorizing Metropolitan Transportation Authority Dedicated Tax Fund Revenue Obligations, including providing for the issuance of the following:
 - o An aggregate principal amount of up to \$2.0 billion of Dedicated Tax Fund Bonds (reduced by any bonds issued under the Transportation Revenue Bond Resolution) in one or more series necessary to finance capital projects of the transit and commuter systems, plus applicable issuance costs and any original issue discount, and
 - o Parity Reimbursement Obligations and Parity Debt in an amount sufficient to secure any Credit Facilities entered into in connection with the issuance of the Dedicated Tax Fund Bonds.
- Multiple 2015 Series Supplemental Resolution authorizing Triborough Bridge and Tunnel Authority General Revenue Obligations, including providing for the issuance of the following:

- Resolution) in one or more series necessary to finance capital projects of TBTA as set forth in existing MTA Bridges & Tunnels capital programs, plus applicable issuance costs and any original issue discount, and
- o Parity Reimbursement Obligations and other Parity Debt in an amount sufficient to secure any Credit Facilities entered into in connection with the issuance of the General Revenue Obligations.
- Multiple Series 2015 Subordinate Revenue Bond Supplemental Resolution authorizing Triborough Bridge and Tunnel Authority Subordinate Revenue Obligations, including providing for the issuance of the following:
 - o An aggregate principal amount of up to \$250 million of Triborough Bridge and Tunnel Authority Subordinate Revenue Obligations (reduced by any bonds issued under the Triborough Bridge and Tunnel Authority General Revenue Bond Resolution) in one or more series necessary to finance capital projects of TBTA, as set forth in existing MTA Bridges & Tunnels capital programs plus applicable issuance costs and any original issue discount, and
 - o Parity Reimbursement Obligations and other Parity Debt in an amount sufficient to secure any Credit Facilities entered into in connection with the issuance of the Subordinate Revenue Obligations.

With respect to the above-referenced financial transactions, MTA and TBTA Board approval, as applicable, is sought:

(a) delegating authority to the Chairman and Chief Executive Officer, the Chair of the Finance Committee, the Vice Chairman, the Chief Financial Officer or the Director, Finance to award the obligations either pursuant to competitive bid or to members (or entities related to such firms) of the Board-approved MTA underwriting syndicate and to execute and/or deliver in each case, where appropriate:

- o Notices of Sale and bid forms,
- o Purchase Agreements with underwriters,
- o Official Statements and other disclosure documents,
- o Continuing Disclosure Agreements and related filings,
- o Remarketing Agreements,
- o Dealer and Broker/Dealer Agreements,
- o Issuing and Paying Agent Agreements,
- o Credit Facilities and related Parity Reimbursement Obligations and Parity Debt,
- o Related Subordinated Contract Obligations, and
- o Investment Agreements.

Any such documents will be in substantially the form of any document previously entered into by MTA or TBTA for previous issues, with such changes as approved by any one or more of the foregoing officers.

(b) authorizing such officers to terminate, amend, supplement, replace or extend any such documents, including Credit Facilities (and related Parity Reimbursement Obligations and Parity Debt), as they shall deem advisable, and to take such other actions as may be necessary or desirable to effectuate the issuance of the new money bonds and other financial transactions set forth above, on behalf of MTA, TBTA or other MTA subsidiaries and affiliates.

ALTERNATIVES:

There are no viable funding alternatives to the bond funded portion of existing capital programs.

RECOMMENDATION:

The Boards approve the above-referenced resolutions and documents and all other actions described above, including the execution and delivery of such other documents, and the taking of all other actions, from time to time deemed necessary or desirable by such officers in connection therewith. The authorization to issue the Bonds and take other related actions hereunder shall continue in effect without any further action by the Issuer until the adoption by the MTA Board of a subsequent bond supplemental resolution relating to 2016 bond issues unless (a) the Issuer shall have confirmed the effectiveness of this authorization for an additional period, or (b) the Issuer shall have modified or repealed this authorization.

METROPOLITAN TRANSPORTATION AUTHORITY

**MULTIPLE SERIES 2015
TRANSPORTATION REVENUE BOND
SUPPLEMENTAL RESOLUTION**

Adopted December 17, 2014

Table of Contents

Page

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01. Supplemental Resolution	1
Section 1.02. Definitions.....	1
Section 1.03. Authority for this Supplemental Resolution	1

ARTICLE II

AUTHORIZATION OF SERIES 2015 BONDS

Section 2.01. Authorized Principal Amount, Designation and Series	2
Section 2.02. Purposes	2
Section 2.03. Dates, Maturities, Principal Amounts and Interest	2
Section 2.04. Interest Payments	3
Section 2.05. Denominations, Numbers and Letters.....	3
Section 2.06. Places of Payment and Paying Agent	3
Section 2.07. Sinking Fund Installments	3
Section 2.08. Redemption Prices and Terms	3
Section 2.09. Delegation to an Authorized Officer.....	4
Section 2.10. Sale of Series 2015 Bonds	6
Section 2.11. Forms of Series 2015 Bonds and Trustee’s Authentication Certificate.....	8
Section 2.12. Appointment of Trustee and Paying Agent	8

ARTICLE III

DISPOSITION OF SERIES 2015 BOND PROCEEDS

Section 3.01. Disposition of Series 2015 Bond Proceeds.....	8
---	---

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01. Tax Covenants Relating to the Series 2015 Bonds.....	8
Section 4.02. Defeasance	9

**MULTIPLE SERIES 2015
TRANSPORTATION REVENUE FUND BOND
SUPPLEMENTAL RESOLUTION**

BE IT RESOLVED by the Metropolitan Transportation Authority (the “Issuer”),
as follows:

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01. Supplemental Resolution. This resolution is supplemental to, and is adopted, in accordance with Article II and Article A-VIII of a resolution of the Issuer adopted on March 26, 2002, entitled “General Resolution Authorizing Transportation Revenue Obligations” (the “Resolution”).

Section 1.02. Definitions.

1. All capitalized terms which are used but not otherwise defined in this Multiple Series 2015 Transportation Revenue Bond Supplemental Resolution (the “Supplemental Resolution”) shall have the same meanings, respectively, as such terms are given by Section 102 of the Resolution.

2. In this Supplemental Resolution:

“Authorized Officer” shall include the officers designated as such in the Resolution, and the Chairman and Chief Executive Officer, the Chair of the Finance Committee, the Vice Chairman, the Chief Financial Officer or the Director, Finance, as well as any officer duly designated as “Acting” in said officer’s capacity, except that, for the purposes of any delegation set forth herein that does not expressly include any Assistant Secretary, “Authorized Officer” shall not include any Assistant Secretary of the Issuer.

“Board” shall mean the members of the Issuer acting as such pursuant to the provisions of the Issuer Act.

“Bond Counsel” shall mean Hawkins Delafield & Wood LLP, Nixon Peabody LLP or any other attorney or firm of attorneys of nationally recognized standing in the field of law relating to the issuance of obligations by state and municipal entities selected by the Issuer.

“Code” shall mean the Internal Revenue Code of 1986, as amended, and regulations thereunder.

Section 1.03. Authority for this Supplemental Resolution. This Supplemental Resolution is adopted pursuant to the provisions of the Issuer Act and the Resolution.

ARTICLE II

AUTHORIZATION OF SERIES 2015 BONDS

Section 2.01. Authorized Principal Amount, Designation and Series. Pursuant to the provisions of the Resolution and in order to finance Capital Costs, multiple Series of Transportation Revenue Obligations (which may be issued at one time or from time to time and in any number of Series or subseries, which for purposes of this Supplemental Resolution shall collectively be referred to herein as the “Series 2015 Bonds”, constituting Capital Cost Obligations, subject to redesignation as hereinafter provided) entitled to the benefit, protection and security of such provisions are hereby authorized to be issued in an aggregate principal amount not exceeding the principal amount necessary so that, after giving effect to any net original issue discount and underwriters’ discount from the principal amount, the amount to be deposited in the Proceeds Account pursuant to, or otherwise applied to effectuate the purposes of, Section 2.02 and Section 3.01 of this Supplemental Resolution (exclusive of the amount so deposited therein determined in the related Certificate of Determination as estimated to be necessary to pay capitalized interest or to pay any Costs of Issuance of the Series 2015 Bonds), shall not exceed the amount or amounts determined in a Certificate of Determination to be necessary to effectuate the purposes set forth in Section 2.02 hereof; provided, however, that the Series 2015 Bonds issued to finance Capital Costs shall not exceed \$2.0 billion reduced by the amount of bonds then Outstanding issued under the Metropolitan Transportation Authority Multiple Series 2015 Dedicated Tax Fund Bond Supplemental Resolution, adopted December 17, 2014 (excluding all amounts excluded above, such as net original issue discount, underwriters’ discount, capitalized interest and Costs of Issuance). For all purposes of this Section 2.01, net original issue premium as determined to be advisable by an Authorized Officer in connection with the marketing of the Series 2015 Bonds shall not be counted.

Series 2015 Bonds shall be designated as, and shall be distinguished from the Obligations of all other Series by the title, “Transportation Revenue Bonds, Series 2015” or such other title or titles set forth in one or more Certificates of Determination.

The authority to issue Obligations and take related actions granted under previous resolutions of the Issuer shall continue in full force and effect. The authorization to issue the Series 2015 Bonds shall continue in effect until the adoption by the MTA Board of a subsequent new money bond issuance supplemental resolution relating to 2016 new money financings.

Section 2.02. Purposes. The purposes for which the Series 2015 Bonds are issued shall be set forth in one or more Certificates of Determination and may include the payment of all or any part of the Capital Costs, all to the extent and in the manner provided in this Supplemental Resolution.

Section 2.03. Dates, Maturities, Principal Amounts and Interest. The Series 2015 Bonds, except as otherwise provided in the Resolution, shall be dated the date or dates determined in the related Certificate of Determination. The Series 2015 Bonds shall mature on the date or dates and in the year or years and principal amount or amounts, and shall bear interest at the rate or rates per annum, if any, specified in or determined in the manner provided in the related Certificate of Determination.

Section 2.04. Interest Payments. The Series 2015 Bonds shall bear interest from their date or dates and be payable on such date or dates as may be determined pursuant to the related Certificate of Determination. Except as otherwise provided in the related Certificate of Determination, interest on the Series 2015 Bonds shall be computed on the basis of twelve 30-day months and a 360-day year.

Section 2.05. Denominations, Numbers and Letters. Unless otherwise provided in the related Certificate of Determination, the Series 2015 Bonds shall be issued in fully registered form without coupons in the denomination of \$5,000 or any integral multiple thereof

The Series 2015 Bonds shall be lettered and numbered as provided in the related Certificate of Determination.

Section 2.06. Places of Payment and Paying Agent. Except as otherwise provided in the related Certificate of Determination, principal and Redemption Price of the Series 2015 Bonds shall be payable to the registered owner of each Series 2015 Bond when due upon presentation of such Series 2015 Bond at the principal corporate trust office of the Trustee. Except, as otherwise provided in the related Certificate of Determination, interest on the registered Series 2015 Bonds will be paid by check or draft mailed on the interest payment date by the Paying Agent, to the registered owner at his address as it appears on the registration books or, at the option of any Owner of at least one million dollars (\$1,000,000) in principal amount of the Series 2015 Bonds, by wire transfer in immediately available funds on each interest payment date to such Owner thereof upon written notice from such Owner to the Trustee, at such address as the Trustee may from time to time notify such Owner, containing the wire transfer address (which shall be in the continental United States) to which such Owner wishes to have such wire directed, if such written notice is received not less than twenty (20) days prior to the related interest payment date (such notice may refer to multiple interest payments).

Section 2.07. Sinking Fund Installments. The Series 2015 Bonds, if any, determined in the related Certificate of Determination shall be subject to redemption in part, by lot, or otherwise as determined in accordance with Section A-404 of the Resolution, on each date in the year or years determined in the related Certificate of Determination at the principal amount thereof plus accrued interest up to but not including the date of redemption thereof, from mandatory Sinking Fund Installments which are required to be made in amounts sufficient to redeem on each such date the principal amount of such Series 2015 Bonds.

Section 2.08. Redemption Prices and Terms. The Series 2015 Bonds may also be subject to redemption prior to maturity, at the option of the Issuer, upon notice as provided in Article A-IV of the Resolution, at any time as a whole or in part (and by lot within a maturity, or otherwise as determined in accordance with Section A-404 of the Resolution, if less than all of a maturity is to be redeemed), from maturities designated by the Issuer on and after the date and in the years and at the Redemption Prices (expressed as a percentage of principal amount) determined in the related Certificate of Determination, plus accrued interest up to but not including the redemption date. Notwithstanding the foregoing, in the case of taxable Series 2015 Bonds, if set forth in the Certificate of Determination, the taxable Series 2015 Bonds may be made subject to pro rata redemption and/or a make-whole redemption premium.

Section 2.09. Delegation to an Authorized Officer. 1. There is hereby delegated to each Authorized Officer, subject to the limitations contained in this Supplemental Resolution, the following powers with respect to the Series 2015 Bonds:

(a) to determine whether and when to issue any Series 2015 Bonds constituting Capital Cost Obligations, the amount of the Series 2015 Bonds to be applied to finance Capital Costs, and the amount of the proceeds of the Series 2015 Bonds estimated to be necessary to pay the Costs of Issuance of the Series 2015 Bonds and capitalized interest, if any;

(b) to determine the purpose or purposes for which the Series 2015 Bonds are being issued, which shall be one or more of the purposes set forth in Section 2.02 of this Supplemental Resolution;

(c) to determine the principal amounts of the Series 2015 Bonds to be issued for the purposes set forth in Section 2.02 of this Supplemental Resolution and whether such principal amounts constitute a separate Series or a subseries of Series 2015 Bonds, which principal amounts (and the aggregate of all such Series and subseries) shall not exceed the principal amounts permitted by Section 2.01 of this Supplemental Resolution, and to determine Accreted Values and Appreciated Values, if applicable;

(d) to determine the maturity date and principal amount of each maturity of the Series 2015 Bonds and the amount and due date of each Sinking Fund Installment, if any;

(e) to determine the date or dates which the Series 2015 Bonds shall be dated and the interest rate or rates of the Series 2015 Bonds or the manner of determining such interest rate or rates; provided, however, that any Series 2015 Bonds issued as fixed rate Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 10% per annum, any Series 2015 Bonds issued as fixed rate Taxable Obligations shall be subject to a maximum interest rate of not greater than 12% per annum, any Variable Interest Rate Obligations issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 15% per annum, any Variable Interest Rate Obligations issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 18% per annum and any Parity Reimbursement Obligations shall be subject to a maximum interest rate of not greater than 25% per annum, or, in each such case, such higher rate or rates as determined by the Issuer's Board;

(f) to determine the Redemption Price or Redemption Prices, if any, and the redemption terms, if any, for the Series 2015 Bonds; provided, however, that if the Series 2015 Bonds are to be redeemable at the election of the Issuer, the Redemption Price (except in the case of taxable Series 2015 Bonds) shall not be greater than one hundred three percent (103%) of the principal amount of the Series 2015 Bonds to be redeemed, plus accrued interest thereon up to but not including the date of redemption and in the case of taxable Series 2015 Bonds any provisions relating to pro rata redemption and/or make-whole redemption;

(g) to determine whether the sale of the Series 2015 Bonds shall be conducted on either a negotiated or competitive bid basis and, as applicable, to determine the purchase price for the Series 2015 Bonds to be paid by the purchaser or purchasers referred to in one or more Purchase Agreements or a bank direct purchase agreement or the purchase price for the

Series 2015 Bonds to be paid by the winning bidder, if such sale is conducted by competitive bid pursuant to a Notice of Sale (as hereinafter defined), in either case as such document is described in Section 2.10 of this Supplemental Resolution, which may include such original issue discount and original issue premium as shall be determined in the related Certificate of Determination; provided, however, that, in the case of Series 2015 Bonds sold on a negotiated basis, the underwriters' discount reflected in such purchase price shall not exceed \$10.00 for each one thousand dollars (\$1,000) principal amount of the Series 2015 Bonds;

(h) to take all actions required for the Series 2015 Bonds to be eligible under the rules and, regulations of The Depository Trust Company ("DTC") for investment and trading as uncertificated securities, to execute and deliver a standard form of letter of representation with DTC and notwithstanding any provisions to the contrary contained in this Supplemental Resolution, to include in the related Certificate of Determination such terms and provisions as may be appropriate or necessary to provide for uncertificated securities in lieu of Series 2015 Bonds issuable in fully registered form;

(i) to determine whether to issue all or any portion of the Series 2015 Bonds as Tax Exempt Obligations, Taxable Obligations, Put Obligations, Variable Interest Rate Obligations or as any other form of Obligations permitted by the Resolution and any matters related thereto, including (i) the terms and provisions of any such Series 2015 Bonds, (ii) the selection of remarketing agents, tender agents, calculation agents, auction agents, dealers, bidding agents or any other agents or parties to ancillary arrangements and the terms of any such arrangements, and (iii) the methods for determining the accrual of Debt Service;

(j) to determine the advisability, as compared to an unenhanced transaction, of obtaining one or more Credit Facilities, to select a provider or providers thereof and to determine and accept the terms and provisions and price thereof, to determine such other matters related thereto as in the opinion of the officer executing the related Certificate of Determination shall be considered necessary or appropriate and to effect such determinations by making any changes in or additions to this Supplemental Resolution required by Credit Facility providers, if any, or required by a Rating Agency in order to attain or maintain specific ratings on the Series 2015 Bonds, or relating to the mechanisms for the repayment of amounts advanced thereunder or payment of fees, premiums, expenses or any other amounts, notices, the provision of information, and such other matters of a technical, mechanical, procedural or descriptive nature necessary or appropriate to obtain or implement a Credit Facility with respect to the Series 2015 Bonds, and to make any changes in connection therewith;

(k) to make such changes in or from the form of this Supplemental Resolution as may be required by a Rating Agency in order to attain or maintain specific ratings on the Series 2015 Bonds;

(l) to make such changes in or from the form of this Supplemental Resolution as may be necessary or desirable in order to cure any ambiguities, inconsistencies or other defects; and

(m) to determine such other matters specified in or permitted by (i) Sections 202, 203, and A-201 of the Resolution or (ii) this Supplemental Resolution, including preparation of any documentation therefor.

2. Any Authorized Officer shall execute one or more Certificates of Determination evidencing the determinations made pursuant to this Supplemental Resolution and any such Certificate of Determination shall be conclusive evidence of the determinations of such Authorized Officer, as stated therein. More than one Certificate of Determination may be delivered to the extent more than one Series or subseries of Series 2015 Bonds are delivered from time to time, or other authority is exercised under this Supplemental Resolution from time to time and each such Certificate of Determination shall be delivered to the Trustee prior to the authentication and delivery of the respective Series or subseries of Series 2015 Bonds by the Trustee or other documentation. Determinations set forth in the related Certificate of Determination shall have the same effect as if set forth in this Supplemental Resolution. Any such Authorized Officer may exercise any authority delegated under this Supplemental Resolution from time to time following issuance of any Series 2015 Bonds, as appropriate for any purposes, including, in order to change interest rate modes or auction periods, obtain a substitute or additional Credit Facility, enter into a bank direct purchase agreement or similar instrument, or to appoint new or additional agents or other parties deemed appropriate to a particular form or mode of Obligation or manner of sale.

Section 2.10. Sale of Series 2015 Bonds. If it is determined that any sale of Series 2015 Bonds shall be conducted on a negotiated basis, each Authorized Officer is hereby authorized to sell and award the Series 2015 Bonds to the purchasers who shall be on the list of underwriters then approved by the Issuer and shall be referred to in the Purchase Agreement or Agreements, which Purchase Agreement or Agreements shall be substantially in the form most recently executed or delivered by the Issuer in connection with the sale or remarketing of Obligations, with such revisions to reflect the terms and provisions of the Series 2015 Bonds as may be approved by the officer executing the Purchase Agreement (each, a "Purchase Agreement"). Each Authorized Officer is hereby authorized to agree to the selection of the representative of the underwriters as referred to in the Purchase Agreement or Agreements and to execute and deliver the Purchase Agreement or Agreements for and on behalf and in the name of the Issuer with such changes, omissions, insertions and revisions as may be approved by the officer executing the Purchase Agreement or Agreements, said execution being conclusive evidence of such approval and concurrence in the selection of the representative of the underwriters.

If it is determined that any sale of Series 2015 Bonds shall be conducted on a competitive bid basis, each Authorized Officer is hereby further authorized to conduct the sale and award of the Series 2015 Bonds on the basis of a competitive bid, pursuant to the terms of a notice of sale, including bid form (the "Notice of Sale"), in a form, including any limitations on permitted bidders and a description of the basis for determining the winning bidder or bidders, determined by such Authorized Officer. Each Authorized Officer is hereby authorized to conduct such competitive sale of the Series 2015 Bonds in a manner consistent with this Supplemental Resolution and to utilize the services of the Authority's financial advisor and the services of an electronic bidding service, as such Authorized Officer shall determine, and the execution by such Authorized Officer of a letter of award shall be conclusive evidence of such award.

Each Authorized Officer is hereby authorized to make public and to authorize the use and distribution by said purchasers or other appropriate parties of a preliminary official statement, offering circular, or other disclosure document (the "Preliminary Official Statement") in connection with each public offering or any direct or private placement of the Series 2015 Bonds, in substantially the form most recently executed or delivered by the Issuer in connection with the sale of Obligations, with such changes, omissions, insertions and revisions as such officer shall deem advisable. The Issuer authorizes any of said officers to deliver a certification to the effect that such Preliminary Official Statement or Official Statement, if deemed necessary or appropriate, together with such other documents, if any, described in such certificate, was deemed final as of its date for purposes of Rule 15c2-12 of the Securities and Exchange Commission as applicable.

Each Authorized Officer is hereby authorized to make public and to authorize distribution of a final Official Statement in substantially the form of each Preliminary Official Statement or the most recently executed and delivered Official Statement if there is not a Preliminary Official Statement, with such changes, omissions, insertions and revisions as such officer shall deem advisable, to sign such Official Statement and to deliver such Official Statement to the purchasers of such issue of the Series 2015 Bonds, such execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

Each Authorized Officer is hereby authorized to execute and deliver for and on behalf and in the name of the Issuer, to the extent determined by such Authorized Officer to be necessary or convenient, a Continuing Disclosure Agreement, substantially in the form appended to the Purchase Agreement or Notice of Sale, with such changes, omissions, insertions and revisions as such officer shall deem advisable (the "Continuing Disclosure Agreement"), said execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

The proceeds of each good faith check, if any, received by the Issuer from the purchasers of each issue of the Series 2015 Bonds under the terms of the related Purchase Agreement or Notice of Sale may be invested by the Issuer pending application of the proceeds of such good faith check for the purposes provided in Section 2.02 of this Supplemental Resolution at the time of the issuance and delivery of such Series 2015 Bonds.

Each Authorized Officer (including any Assistant Secretary of the Issuer) is hereby authorized and directed to execute, deliver, amend, replace or terminate any and all documents and instruments (including any remarketing agreements, tender agency agreements, dealer agreements, broker dealer agreements, tender agent agreements, or auction agency agreements, any investment agreements or arrangements, or any reimbursement agreements or documents or instruments relating to a Credit Facility deemed appropriate to a given form or mode of an Obligation) and to do and cause to be done any and all acts necessary or proper for carrying out each Purchase Agreement or Notice of Sale, the Continuing Disclosure Agreement, the terms of any Credit Facility or other such agreement or arrangement, and the issuance, sale and delivery of each issue of the Series 2015 Bonds and for implementing the terms of each issue of the Series 2015 Bonds and the transactions contemplated hereby or thereby.

When reference is made in this Supplemental Resolution to the authorization of an Authorized Officer to do any act, such act may be accomplished by any of such officers individually.

Section 2.11. Forms of Series 2015 Bonds and Trustee's Authentication Certificate. Subject to the provisions of the Resolution, the form of registered Series 2015 Bonds, and the Trustee's certificate of authentication, shall be substantially in the form set forth in Exhibit One to the Resolution including, if necessary, any changes to comply with the requirements of DTC or the provisions of this Supplemental Resolution or the related Certificate of Determination.

Section 2.12. Appointment of Trustee and Paying Agent. Unless otherwise provided by Certificate of Determination, The Bank of New York Mellon, as successor in interest to JPMorgan Chase Bank, N.A., shall be the Trustee under the Resolution and the Paying Agent for the Series 2015 Bonds.

ARTICLE III

DISPOSITION OF SERIES 2015 BOND PROCEEDS

Section 3.01. Disposition of Series 2015 Bond Proceeds. Any proceeds of the sale of the Series 2015 Bonds, other than accrued interest and capitalized interest, if any, shall be deposited, simultaneously with the issuance and delivery of the Series 2015 Bonds, at one time or from time to time in one or more Series or subseries, in the Proceeds Account which is deemed to be established for each Series in the Proceeds Fund to be applied, or shall otherwise be applied pursuant to the related Certificate of Determination to:

- (a) the payment of all or any part of the Capital Costs; and
- (b) the balance of such proceeds, exclusive of accrued interest, shall be deposited in the Costs of Issuance Account and applied to the payment of Costs of Issuance or otherwise applied to the payment of Costs of Issuance.

Unless otherwise provided in the related Certificate of Determination, the accrued interest and any capitalized interest, if any, received on the sale of the Series 2015 Bonds shall be deposited in the Debt Service Fund.

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01. Tax Covenants Relating to the Series 2015 Bonds. The Issuer covenants that in order to maintain the exclusion from gross income for Federal income tax purposes of the interest on the Series 2015 Bonds issued as Tax Exempt Obligations, the Issuer will satisfy, or take such actions as are necessary to cause to be satisfied, each provision of the Code necessary to maintain such exclusion. In furtherance of this covenant, the Issuer agrees to comply with such written instructions as may be provided by Bond Counsel. In furtherance of the covenant contained in the preceding sentence, the Issuer agrees to continually comply with the provisions of any "Arbitrage and Use of Proceeds Certificate" or "Tax Certificate" to be

executed by the Issuer in connection with the execution and delivery of any Series 2015 Bonds issued as Tax Exempt Obligations, as amended from time to time.

Notwithstanding any other provision of the Resolution to the contrary, upon the Issuer's failure to observe, or refusal to comply with, the above covenant (a) the Owners of the Series 2015 Bonds, or the Trustee acting on their behalf, shall be entitled to the rights and remedies provided to Owners or the Trustee under Section 702 of the Resolution, and (b) neither the Owners of the Obligations of any Series or holders of any Parity Debt (other than the Series 2015 Bonds or the Trustee acting on their behalf), nor the Trustee acting on their behalf, shall be entitled to exercise any right or remedy provided to the Owners, the Parity Debt holders or the Trustee under the Resolution based upon the Issuer's failure to observe, or refusal to comply with, the above covenant.

The provisions of the foregoing covenants set forth in this Section shall not apply to any Series 2015 Bonds, including any subseries thereof, which the Issuer determines pursuant to the applicable Certificate of Determination to issue as Taxable Obligations.

Section 4.02. Defeasance. In the event the Issuer shall seek, prior to the maturity or redemption date thereof, to pay or cause to be paid, within the meaning and with the effect expressed in the Resolution, all or less than all Outstanding Series 2015 Bonds issued as Tax Exempt Obligations and the provisions of Section 4.01 hereof shall then be of any force or effect, then, notwithstanding the provisions of Article A-X1 of the Resolution, the Series 2015 Bonds issued as Tax Exempt Obligations which the Issuer then seeks to pay or cause to be paid shall not be, deemed to have been paid within the meaning and with the effect expressed in Section A-1101 of the Resolution unless (i) the Issuer has confirmed in writing that the Owners of the Series 2015 Bonds issued as Tax Exempt Obligations which the Issuer then seeks to pay or cause to be paid will continue, after such action, to have the benefit of a covenant to the effect of the covenant of the Issuer contained in Section 4.01 hereof or (ii) there shall have been delivered to the Trustee an Opinion of Bond Counsel to the effect that non compliance thereafter with the applicable provisions of the Code will not affect the then current treatment of interest on the Series 2015 Bonds issued as Tax Exempt Obligations in determining gross income for Federal income tax purposes.

METROPOLITAN TRANSPORTATION AUTHORITY

**MULTIPLE SERIES 2015
DEDICATED TAX FUND BOND SUPPLEMENTAL RESOLUTION**

Adopted December 17, 2014

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

SECTION 1.01. Supplemental Resolution.....1
SECTION 1.02. Definitions.....1
SECTION 1.03. Authority for this Supplemental Resolution1

ARTICLE II

AUTHORIZATION OF SERIES 2015 BONDS

SECTION 2.01. Principal Amount, Designation and Series.....2
SECTION 2.02. Purposes.....2
SECTION 2.03. Date, Maturity and Interest for Series 2015 Bonds2
SECTION 2.04. Interest Payments.....2
SECTION 2.05. Denominations, Numbers and Letters3
SECTION 2.06. Places of Payment and Paying Agents3
SECTION 2.07. Sinking Fund Installments3
SECTION 2.08. Redemption Prices and Terms.....3
SECTION 2.09. Delegation to an Authorized Officer3
SECTION 2.10. Sale of Series 2015 Bonds6
SECTION 2.11. Forms of Series 2015 Bonds and Trustee’s Authentication Certificate...7
SECTION 2.12. Appointment of Trustee and Paying Agent.....8

ARTICLE III

DISPOSITION OF SERIES 2015 BONDS PROCEEDS

SECTION 3.01. Disposition of Series 2015 Bond Proceeds8
SECTION 3.02. Application of Series 2015 Bond Proceeds Account8

ARTICLE IV

TAX COVENANT PROVISIONS AND DEFEASANCE

SECTION 4.01. Tax Covenants Relating to the Series 2015 Bonds.....8
SECTION 4.02. Defeasance9

**MULTIPLE SERIES 2015
DEDICATED TAX FUND REVENUE BOND
SUPPLEMENTAL RESOLUTION**

BE IT RESOLVED by the Board of Metropolitan Transportation Authority (the “Issuer”), as follows:

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

SECTION 1.01. Supplemental Resolution. This resolution is supplemental to, and is adopted in accordance with Article II, Article A-II and Article A-VIII of, a resolution adopted by the Issuer on March 26, 2002, entitled “Dedicated Tax Fund Obligation Resolution”, as heretofore supplemented (the “Resolution”).

SECTION 1.02. Definitions.

1. All terms which are defined in Section 101 of the Resolution shall have the same meanings, respectively, in this Multiple Series 2015 Dedicated Tax Fund Bond Supplemental Resolution (hereinafter referred to as the “Supplemental Resolution”) as such terms are given in said Section 101 of the Resolution.

2. In this Supplemental Resolution:

“Authorized Officer” shall include the officers designated as such in the Resolution, and the Chairman and Chief Executive Officer, the Vice Chairman, the Chair of the Finance Committee, the Chief Financial Officer or the Director, Finance of the MTA, as well as any officer duly designated as “Acting” in said officer’s capacity, except that, for the purposes of any delegation set forth herein that does not expressly include any Assistant Secretary, “Authorized Officer” shall not include any Assistant Secretary of the Issuer.

“Board” shall mean, when used with respect to the Issuer, the board of the Issuer acting as such pursuant to the provisions of the Issuer Act.

“Bond Counsel” shall mean Hawkins Delafield & Wood LLP, Nixon Peabody LLP or any other attorney or firm of attorneys of nationally recognized standing in the field of law relating to the issuance of obligations by state and municipal entities, selected by the Issuer.

“Code” shall mean the Internal Revenue Code of 1986, as amended, and regulations thereunder.

SECTION 1.03. Authority for this Supplemental Resolution. This Supplemental Resolution is adopted pursuant to the provisions of the Issuer Act and the Resolution.

ARTICLE II

AUTHORIZATION OF SERIES 2015 BONDS

SECTION 2.01. Principal Amount, Designation and Series. Pursuant to the provisions of the Resolution and in order to finance Capital Costs, a Series of Dedicated Tax Fund Bonds (which may be issued in one or more Series or subseries and from time to time, which for purposes of this Supplemental Resolution shall collectively be referred to herein as the “Series 2015 Bonds”, subject to redesignation as hereinafter provided) entitled to the benefit, protection and security of such provisions are hereby authorized to be issued in an aggregate principal amount not exceeding the principal amount necessary so that, after giving effect to any net original issue discount and underwriters’ discount from the principal amount, the amount to be deposited in the Proceeds Account pursuant to, or otherwise applied to effectuate the purposes of, Section 2.02 and Section 3.01 of this Supplemental Resolution (exclusive of the amount so deposited therein determined in any Certificate of Determination as estimated to be necessary to pay capitalized interest or to pay any Costs of Issuance of the Series 2015 Bonds), shall not exceed the amount or amounts determined in a Certificate of Determination to be necessary to effectuate the purposes set forth in Section 2.02 hereof; provided, however, that the Series 2015 Bonds issued to finance Capital Costs shall not exceed \$2.0 billion, reduced by the amount of bonds then Outstanding issued under the Metropolitan Transportation Authority Series 2015 Transportation Revenue Bond Supplemental Resolution, adopted December 17, 2014 (excluding all amounts excluded above, such as net original issue discount, underwriters’ discount, capitalized interest and Costs of Issuance). For all purposes of this Section 2.01, net original issue premium as determined to be advisable by an Authorized Officer in connection with the marketing of the Series 2015 Bonds also shall be excluded.

Series 2015 Bonds shall be designated as, and shall be distinguished from the Obligations of all other Series by the title “Dedicated Tax Fund Bonds, Series 2015” or such other title or titles set forth in one or more Certificates of Determination.

The authority to issue Obligations and take related actions granted under previous resolutions of the Issuer shall continue in full force and effect. The authorization to issue the Series 2015 Bonds shall continue in effect until the adoption by the MTA Board of a subsequent new money bond issuance supplemental resolution relating to 2016 new money financings.

SECTION 2.02. Purposes. The purposes for which the Series 2015 Bonds are issued are to fund a portion of the Capital Costs, all to the extent and in the manner provided in this Supplemental Resolution.

SECTION 2.03. Date, Maturity and Interest for Series 2015 Bonds. The Series 2015 Bonds, except as otherwise provided in the Resolution, shall be dated the date or dates determined in any Certificate of Determination. The Series 2015 Bonds shall mature on January 1 of each year, in the year or years and principal amount or amounts, and shall bear interest at the rate or rates per annum, if any, determined in any Certificate of Determination.

SECTION 2.04. Interest Payments. The Series 2015 Bonds shall bear interest from their date or dates and be payable on such date or dates as may be determined

pursuant to any Certificate of Determination. Except as otherwise provided in any Certificate of Determination, interest on the Series 2015 Bonds shall be computed on the basis of twelve 30-day months and a 360-day year.

SECTION 2.05. Denominations, Numbers and Letters. Unless otherwise provided in any Certificate of Determination, the Series 2015 Bonds shall be issuable in fully registered form without coupons in the denomination of \$5,000 or any integral multiple thereof. The Series 2015 Bonds shall be numbered as provided in any Certificate of Determination.

SECTION 2.06. Places of Payment and Paying Agents. Except as otherwise provided in any Certificate of Determination, principal and Redemption Price of the Series 2015 Bonds shall be payable to the registered owner of each Series 2015 Bond when due upon presentation of such Series 2015 Bond at the principal corporate trust office of the Trustee. Except as otherwise provided in any Certificate of Determination, interest on the registered Series 2015 Bonds will be paid by check or draft mailed on the interest payment date by the Paying Agent, to the registered owner at his address as it appears on the registration books or, at the option of any Owner of at least one million dollars (\$1,000,000) in principal amount of the Series 2015 Bonds, by wire transfer in immediately available funds on each interest payment date to such Owner thereof upon written notice from such Owner to the Trustee, at such address as the Trustee may from time to time notify such Owner, containing the wire transfer address (which shall be in the continental United States) to which such Owner wishes to have such wire directed, if such written notice is received not less than twenty (20) days prior to the related interest payment date (such notice may refer to multiple interest payments).

SECTION 2.07. Sinking Fund Installments. The Series 2015 Bonds, if any, determined in any Certificate of Determination shall be subject to redemption in part, by lot, or otherwise as determined in accordance with Section A-404 of the Resolution, on each date in the year or years determined in any Certificate of Determination at the principal amount thereof plus accrued interest up to but not including the date of redemption thereof, from mandatory Sinking Fund Installments which are required to be made in amounts sufficient to redeem on each such date the principal amount of such Series 2015 Bonds.

SECTION 2.08. Redemption Prices and Terms. The Series 2015 Bonds may also be subject to redemption prior to maturity, at the option of the Issuer, upon notice as provided in Article A-IV of the Resolution, at any time as a whole or in part (and by lot within a maturity, or otherwise as determined in accordance with Section A-404 of the Resolution, if less than all of a maturity is to be redeemed), from maturities designated by the Issuer on and after the date and in the years and at the Redemption Prices (expressed as a percentage of principal amount) determined in any Certificate of Determination, plus accrued interest up to but not including the redemption date. Notwithstanding the foregoing, in the case of taxable Series 2015 Bonds, if set forth in the Certificate of Determination, the taxable Series 2015 Bonds may be made subject to pro rata redemption and/or a make-whole redemption premium.

SECTION 2.09. Delegation to an Authorized Officer. 1. There is hereby delegated to each Authorized Officer, subject to the limitations contained in this Supplemental Resolution, the following powers with respect to the Series 2015 Bonds:

(a) to determine whether and when to issue any Series 2015 Bonds constituting Capital Cost Obligations, the amount of the Series 2015 Bonds to be applied to finance Capital Costs, and the amount of the proceeds of the Series 2015 Bonds estimated to be necessary to pay the Costs of Issuance of the Series 2015 Bonds and capitalized interest, if any;

(b) to determine the purpose or purposes for which the Series 2015 Bonds are being issued, which shall be one or more of the purposes set forth in Section 2.02 of this Supplemental Resolution;

(c) to determine the principal amounts of the Series 2015 Bonds to be issued for the purposes set forth in Section 2.02 of this Supplemental Resolution and whether such principal amounts constitute a separate Series or a subseries of Series 2015 Bonds, which principal amounts (and the aggregate of all such Series and subseries) shall not exceed the principal amounts permitted by Section 2.01 of this Supplemental Resolution, and to determine Accreted Values and Appreciated Values, if applicable;

(d) to determine the maturity date and principal amount of each maturity of the Series 2015 Bonds and the amount and due date of each Sinking Fund Installment, if any;

(e) to determine the date or dates which the Series 2015 Bonds shall be dated and the interest rate or rates of the Series 2015 Bonds or the manner of determining such interest rate or rates; provided, however, that any Series 2015 Bonds issued as fixed rate Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 10% per annum, any Series 2015 Bonds issued as fixed rate Taxable Obligations shall be subject to a maximum interest rate of not greater than 12% per annum, any Variable Interest Rate Obligations issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 15% per annum, any Variable Interest Rate Obligations issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 18% per annum and any Parity Reimbursement Obligations shall be subject to a maximum interest rate of not greater than 25% per annum, or, in each such case, such higher rate or rates as determined by the Issuer's Board;

(f) to determine the Redemption Price or Redemption Prices, if any, and the redemption terms, if any, for the Series 2015 Bonds; provided, however, that if the Series 2015 Bonds are to be redeemable at the election of the Issuer, the Redemption Price (except in the case of taxable Series 2015 Bonds) shall not be greater than one hundred three percent (103%) of the principal amount of the Series 2015 Bonds to be redeemed, plus accrued interest thereon up to but not including the date of redemption and in the case of taxable Series 2015 Bonds any provisions relating to pro rata redemption and/or make-whole redemption;

(g) to determine whether the sale of the Series 2015 Bonds shall be conducted on either a negotiated or competitive bid basis and, as applicable, to determine the purchase price for the Series 2015 Bonds to be paid by the purchasers referred to in one or more Purchase Agreements or a bank direct purchase agreement or the purchase price for the Series 2015 Bonds to be paid by the winning bidder, if such sale is conducted by competitive bid pursuant to a Notice of Sale (as hereinafter defined), in either case as such document is described in Section 2.10 of this Supplemental Resolution, which may include such original issue discount and original issue premium as shall be determined in any Certificate of Determination; provided,

however, that, in the case of Series 2015 Bonds sold on a negotiated basis, the underwriters' discount reflected in such purchase price shall not exceed \$10.00 for each one thousand dollars (\$1,000) principal amount of the Series 2015 Bonds;

(h) to take all actions required for the Series 2015 Bonds to be eligible under the rules and regulations of The Depository Trust Company ("DTC") for investment and trading as uncertificated securities, to execute and deliver a standard form of letter of representation with DTC and, notwithstanding any provisions to the contrary contained in this Supplemental Resolution, to include in any Certificate of Determination such terms and provisions as may be appropriate or necessary to provide for uncertificated securities in lieu of Series 2015 Bonds issuable in fully registered form;

(i) to determine whether to issue all or any portion of the Series 2015 Bonds as Tax Exempt Obligations, Taxable Obligations, Put Obligations, Variable Interest Rate Obligations or as any other form of Obligations permitted by the Resolution and any matters related thereto, including (i) the terms and provisions of any such Series 2015 Bonds, (ii) the selection of remarketing agents, tender agents, calculation agents, auction agents, dealers, bidding agents or any other agents or parties to ancillary arrangements and the terms of any such arrangements, and (iii) the methods for determining the accrual of Debt Service;

(j) to determine the advisability, as compared to an unenhanced transaction, of obtaining one or more Credit Facilities, to select a provider or providers thereof and to determine and accept the terms and provisions and price thereof, to determine such other matters related thereto as in the opinion of the officer executing any Certificate of Determination shall be considered necessary or appropriate and to effect such determinations by making any changes in or additions to this Supplemental Resolution required by Credit Facility providers, if any, or required by a Rating Agency in order to attain or maintain specific ratings on the Series 2015 Bonds, or relating to the mechanisms for the repayment of amounts advanced thereunder or payment of fees, premiums, expenses or any other amounts, notices, the provision of information, and such other matters of a technical, mechanical, procedural or descriptive nature necessary or appropriate to obtain or implement a Credit Facility with respect to the Series 2015 Bonds, and to make any changes in connection therewith;

(k) to make such changes in or from the form of this Supplemental Resolution as may be required by a Rating Agency in order to attain or maintain specific ratings on the Series 2015 Bonds;

(l) to make such changes in or from the form of this Supplemental Resolution as may be necessary or desirable in order to cure any ambiguities, inconsistencies or other defects; and

(m) to determine such other matters specified in or permitted by (i) Sections 202, 203, and A-201 of the Resolution or (ii) this Supplemental Resolution, including preparation of any documentation therefor.

2. Any Authorized Officer shall execute any Certificate of Determination evidencing the determinations made pursuant to this Supplemental Resolution and such

Certificate of Determination shall be conclusive evidence of the determinations of such Authorized Officer, as stated therein. More than one Certificate of Determination may be delivered to the extent more than one Series or subseries of Series 2015 Bonds are delivered, or other authority is exercised under this Supplemental Resolution from time to time and each such Certificate of Determination shall be delivered to the Trustee prior to the authentication and delivery of the respective Series or subseries of Series 2015 Bonds by the Trustee or other documentation. Determinations set forth in any Certificate of Determination shall have the same effect as if set forth in this Supplemental Resolution. Any such Authorized Officer may exercise any authority delegated under this Supplemental Resolution from time to time following issuance of any Series 2015 Bonds, as appropriate for any purposes, including, in order to change interest rate modes or auction periods, obtain a substitute or additional Credit Facility, enter into a bank direct purchase agreement or similar instrument, or to appoint new or additional agents or other parties deemed appropriate to a particular form or mode of Obligation or manner of sale.

SECTION 2.10. Sale of Series 2015 Bonds. If it is determined that any sale of Bonds shall be conducted on a negotiated basis, each Authorized Officer is hereby authorized to sell and award the Series 2015 Bonds to the purchasers who shall be on the list of underwriters then approved by the Issuer and shall be referred to in the Purchase Agreement or Agreements, which Purchase Agreement or Agreements shall be substantially in the form most recently executed or delivered by the Issuer in connection with the sale of Obligations, with such revisions to reflect the terms and provisions of the Series 2015 Bonds as may be approved by the officer executing the Purchase Agreement (each, a “Purchase Agreement”). Each Authorized Officer is hereby authorized to agree to the selection of the representative of the underwriters as referred to in the Purchase Agreement or Agreements and to execute and deliver the Purchase Agreement or Agreements for and on behalf and in the name of the Issuer with such changes, omissions, insertions and revisions as may be approved by the officer executing the Purchase Agreement or Agreements, said execution being conclusive evidence of such approval and concurrence in the selection of the representative of the underwriters.

If it is determined that any sale of Series 2015 Bonds shall be conducted on a competitive bid basis, each Authorized Officer is hereby further authorized to conduct the sale and award of the Series 2015 Bonds on the basis of a competitive bid, pursuant to the terms of a notice of sale, including bid form (the “Notice of Sale”), in a form, including any limitations on permitted bidders and a description of the basis for determining the winning bidder or bidders, determined by such Authorized Officer. Each Authorized Officer is hereby authorized to conduct such competitive sale of the Series 2015 Bonds in a manner consistent with this Supplemental Resolution and to utilize the services of the Authority’s financial advisor and the services of an electronic bidding service, as such Authorized Officer shall determine, and the execution by such Authorized Officer of a letter of award shall be conclusive evidence of such award.

Each Authorized Officer is hereby authorized to make public and to authorize the use and distribution by said purchasers or other appropriate parties of a preliminary official statement, offering circular, or other disclosure document (the “Preliminary Official Statement”) in connection with each public offering or any direct placement of the Series 2015 Bonds, in substantially the form most recently executed or delivered by the Issuer in connection with the sale of Obligations, with such changes, omissions, insertions and revisions as such officer shall

deem advisable. The Issuer authorizes any of said officers to deliver a certification to the effect that such Preliminary Official Statement or Official Statement, if deemed necessary or appropriate, together with such other documents, if any, described in such certificate, was deemed final as of its date for purposes of Rule 15c2-12 of the Securities and Exchange Commission as applicable.

Each Authorized Officer is hereby authorized to make public and to authorize distribution of a final Official Statement in substantially the form of each Preliminary Official Statement or the most recently executed and delivered Official Statement if there is not a Preliminary Official Statement, with such changes, omissions, insertions and revisions as such officer shall deem advisable, to sign such Official Statement and to deliver such Official Statement to the purchasers of the Series 2015 Bonds, such execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

Each Authorized Officer is hereby authorized to execute and deliver for and on behalf and in the name of the Issuer, to the extent determined by such Authorized Officer to be necessary or convenient, a Continuing Disclosure Agreement, substantially in the form appended to the Purchase Agreement or Notice of Sale, with such changes, omissions, insertions and revisions as such officer shall deem advisable (the "Continuing Disclosure Agreement"), said execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

The proceeds of a good faith check, if any, received by the Issuer from the purchasers of the Series 2015 Bonds under the terms of the related Purchase Agreement or Notice of Sale may be invested by the Issuer pending application of the proceeds of such good faith check for the purposes provided in Section 2.02 of this Supplemental Resolution at the time of the issuance and delivery of such Series 2015 Bonds.

Each Authorized Officer (including any Assistant Secretary of the Issuer) is hereby authorized and directed to execute, deliver, amend, replace or terminate any and all documents and instruments (including any remarketing agreements, tender agency agreements, dealer agreements, broker dealer agreements, tender agent agreements, or auction agency agreements, any investment agreements or arrangements, or any reimbursement agreements or documents or instruments relating to a Credit Facility deemed appropriate to a given form or mode of an Obligation) and to do and cause to be done any and all acts necessary or proper for carrying out each Purchase Agreement or Notice of Sale, the Continuing Disclosure Agreement, the terms of any Credit Facility or other such agreement or arrangement, and the issuance, sale and delivery of the Series 2015 Bonds and for implementing the terms of the Series 2015 Bonds and the transactions contemplated hereby or thereby.

When reference is made in this Supplemental Resolution to the authorization of an Authorized Officer to do any act, such act may be accomplished by any of such officers individually.

SECTION 2.11. Forms of Series 2015 Bonds and Trustee's Authentication Certificate. Subject to the provisions of the Resolution, the form of registered Series 2015 Bonds, and the Trustee's certificate of authentication, shall be substantially in the

form set forth in Exhibit One to the Resolution including, if necessary, any changes to comply with the requirements of DTC or the provisions of this Supplemental Resolution or any Certificate of Determination.

SECTION 2.12. Appointment of Trustee and Paying Agent. Unless otherwise provided by Certificate of Determination, The Bank of New York Mellon, as successor in interest to JPMorgan Chase Bank, N.A., shall be the Trustee under the Resolution and the Paying Agent for the Series 2015 Bonds.

ARTICLE III

DISPOSITION OF SERIES 2015 BONDS PROCEEDS

SECTION 3.01. Disposition of Series 2015 Bond Proceeds. Any proceeds of the sale of the Series 2015 Bonds, other than accrued interest and capitalized interest, if any, shall be deposited, simultaneously with the issuance and delivery of the Series 2015 Bonds, at one time or from time to time in one or more Series or subseries, in the Proceeds Account which is deemed to be established for each Series in the Proceeds Fund to be applied, or shall otherwise be applied pursuant to the related Certificate of Determination to:

1. the payment of all or any part of the Capital Costs; and
2. the balance of such proceeds, exclusive of accrued interest, shall be deposited in the Costs of Issuance Account and applied to the payment of Costs of Issuance or otherwise applied to the payment of Costs of Issuance.

Unless otherwise provided in the related Certificate of Determination, the accrued interest and any capitalized interest, if any, received on the sale of the Series 2015 Bonds shall be deposited in the Debt Service Fund.

SECTION 3.02. Application of Series 2015 Bond Proceeds Account. All of the proceeds (or such lesser amount as may be determined in any Certificate of Determination) on deposit in the Series 2015 Bond Proceeds Account shall be applied to pay all or any part of the Costs of Issuance relating to the Series 2015 Bonds or to any other Capital Costs.

ARTICLE IV

TAX COVENANT PROVISIONS AND DEFEASANCE

SECTION 4.01. Tax Covenants Relating to the Series 2015 Bonds. The Issuer covenants that, in order to maintain the exclusion from gross income for Federal income tax purposes of the interest on the Series 2015 Bonds issued as Tax Exempt Obligations, the Issuer will satisfy, or take such actions as are necessary to cause to be satisfied, each provision of the Code necessary to maintain such exclusion. In furtherance of this covenant, the Issuer agrees to comply with such written instructions as may be provided by Bond Counsel. In furtherance of the covenant contained in the preceding sentence, the Issuer agrees to continually comply with the provisions of any "Arbitrage and Use of Proceeds Certificate" or "Tax Certificate" to be

executed by the Issuer in connection with the execution and delivery of any Series 2015 Bonds issued as Tax Exempt Obligations, as amended from time to time.

Notwithstanding any other provision of the Resolution to the contrary, upon the Issuer's failure to observe, or refusal to comply with, the above covenant (a) the Owners of the Series 2015 Bonds, or the Trustee acting on their behalf, shall be entitled to the rights and remedies provided to Owners or the Trustee under Section 702 of the Resolution, and (b) neither the Owners of the Obligations of any Series or holders of any Parity Debt (other than the Series 2015 Bonds or the Trustee acting on their behalf), nor the Trustee acting on their behalf, shall be entitled to exercise any right or remedy provided to the Owners, the Parity Debt holders or the Trustee under the Resolution based upon the Issuer's failure to observe, or refusal to comply with, the above covenant.

SECTION 4.02. Defeasance. In the event the Issuer shall seek, prior to the maturity or redemption date thereof, to pay or cause to be paid, within the meaning and with the effect expressed in the Resolution, all or less than all Outstanding Series 2015 Bonds and the provisions of Section 4.01 hereof shall then be of any force or effect, then, notwithstanding the provisions of Article A-XI of the Resolution, the Series 2015 Bonds which the Issuer then seeks to pay or cause to be paid shall not be deemed to have been paid within the meaning and with the effect expressed in Section A-1101 of the Resolution unless (i) the Issuer has confirmed in writing that the Holders of the Series 2015 Bonds which the Issuer then seeks to pay or cause to be paid will continue, after such action, to have the benefit of a covenant of the Issuer to the effect of the covenant contained in Section 4.01 hereof or (ii) there shall have been delivered to the Trustee an opinion of Bond Counsel to the effect that non-compliance thereafter with the applicable provisions of the Code will not affect the then current treatment of interest on the Series 2015 Bonds issued as Tax Exempt Obligations in determining gross income for Federal income tax purposes.

TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY

**MULTIPLE SERIES 2015
GENERAL REVENUE BOND
SUPPLEMENTAL RESOLUTION**

Adopted December 17, 2014

TABLE OF CONTENTS

Page

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01. Supplemental Resolution1
Section 1.02. Definitions.....1
Section 1.03. Authority for this Supplemental Resolution1

ARTICLE II

AUTHORIZATION OF SERIES 2015 BONDS

Section 2.01. Authorized Principal Amount, Designation and Series2
Section 2.02. Purposes2
Section 2.03. Dates, Maturities, Principal Amounts and Interest2
Section 2.04. Interest Payments3
Section 2.05. Denominations, Numbers and Letters.....3
Section 2.06. Places of Payment and Paying Agent3
Section 2.07. Sinking Fund Installments3
Section 2.08. Redemption Prices and Terms3
Section 2.09. Delegation to an Authorized Officer.....4
Section 2.10. Sale of Series 2015 Bonds6
Section 2.11. Forms of Series 2015 Bonds and Trustee’s Authentication Certificate.....8
Section 2.12. Appointment of Trustee and Paying Agent8

ARTICLE III

DISPOSITION OF SERIES 2015 BOND PROCEEDS

Section 3.01. Disposition of Series 2015 Bond Proceeds8

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01. Tax Covenants Relating to the Series 2015 Bonds8
Section 4.02. Defeasance9

**MULTIPLE SERIES 2015
GENERAL REVENUE BOND
SUPPLEMENTAL RESOLUTION**

BE IT RESOLVED by the Triborough Bridge and Tunnel Authority (the “Issuer”), as follows:

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01. Supplemental Resolution. This resolution is supplemental to, and is adopted, in accordance with Article II and Article A-VIII of a resolution of the Issuer adopted on March 26, 2002, entitled “General Resolution Authorizing General Revenue Obligations” (the “Resolution”).

Section 1.02. Definitions.

1. All capitalized terms which are used but not otherwise defined in this Multiple Series 2015 General Revenue Bond Supplemental Resolution (the “Supplemental Resolution”) shall have the same meanings, respectively, as such terms are given by Section 102 of the Resolution.

2. In this Supplemental Resolution:

“Authorized Officer” shall include the officers designated as such in the Resolution, and the Chairman and Chief Executive Officer, the Chair of the Finance Committee, the Vice Chairman, the Chief Financial Officer or the Director, Finance, as well as any officer duly designated as “Acting” in said officer’s capacity, except that, for the purposes of any delegation set forth herein that does not expressly include any Assistant Secretary, “Authorized Officer” shall not include any Assistant Secretary of the Issuer.

“Board” shall mean, when used with respect to the Issuer, the board of the Issuer acting as such pursuant to the provisions of the Issuer Act, and when used with respect to the MTA, the members of the MTA acting as such pursuant to the provisions of the MTA Act.

“Bond Counsel” shall mean Hawkins Delafield & Wood LLP, Nixon Peabody LLP or any other attorney or firm of attorneys of nationally recognized standing in the field of law relating to the issuance of obligations by state and municipal entities, selected by the Issuer.

“Code” shall mean the Internal Revenue Code of 1986, as amended, and regulations thereunder.

Section 1.03. Authority for this Supplemental Resolution. This Supplemental Resolution is adopted pursuant to the provisions of the Issuer Act and the Resolution.

ARTICLE II

AUTHORIZATION OF SERIES 2015 BONDS

Section 2.01. Authorized Principal Amount, Designation and Series.

Pursuant to the provisions of the Resolution and in order to finance Capital Costs, multiple Series of General Revenue Obligations (which may be issued at one time or from time to time in any number of Series or subseries, which for purposes of this Supplemental Resolution shall collectively be referred to herein as the "Series 2015 Bonds", constituting Capital Cost Obligations, subject to redesignation as hereinafter provided) entitled to the benefit, protection and security of such provisions are hereby authorized to be issued in an aggregate principal amount not exceeding the principal amount necessary so that, after giving effect to any net original issue discount and underwriters' discount from the principal amount, the amount to be deposited in the Proceeds Account pursuant to, or otherwise applied to effectuate the purposes of, Section 2.02 and Section 3.01 of this Supplemental Resolution (exclusive of the amount so deposited therein determined in the related Certificate of Determination as estimated to be necessary to pay capitalized interest or to pay any Costs of Issuance of the Series 2015 Bonds) shall not exceed the amount or amounts determined in one or more Certificates of Determination to be necessary to effectuate the purposes set forth in Section 2.02 hereof; provided, however, that the Series 2015 Bonds issued to finance Capital Costs shall not exceed \$250 million reduced by the amount of bonds then Outstanding issued under the Triborough Bridge and Tunnel Authority Multiple Series 2001 Subordinate Revenue Bond Supplemental Resolution, adopted December 17, 2014 (excluding all amounts excluded above, such as net original issue discount, underwriters' discounts, capitalized interest and Costs of Issuance). For all purposes of this Section 2.01, net original issue premium as determined to be advisable by an Authorized Officer in connection with the marketing of the Series 2015 Bonds, shall not be counted.

Series 2015 Bonds shall be designated as, and shall be distinguished from the Obligations of all other Series by the title, "General Revenue Bonds, Series 2015" or such other title or titles set forth in one or more Certificates of Determination.

The authority to issue Obligations and take related actions granted under previous resolutions of the Issuer shall continue in full force and effect. The authorization to issue the Series 2015 Bonds shall continue in effect until the adoption by the MTA Board of a subsequent new money bond issuance supplemental resolution relating to 2016 new money financings.

Section 2.02. Purposes. The purposes for which the Series 2015 Bonds are issued shall be set forth in one or more Certificates of Determination and shall include the payment of all or any part of the Capital Costs, all to the extent and in the manner provided in this Supplemental Resolution.

Section 2.03. Dates, Maturities, Principal Amounts and Interest. The Series 2015 Bonds, except as otherwise provided in the Resolution, shall be dated the date or dates determined in the related Certificate of Determination. The Series 2015 Bonds shall mature on the date or dates and in the year or years and principal amount or amounts, and shall bear interest at the rate or rates per annum, if any, specified in or determined in the manner provided in the related Certificate of Determination.

Section 2.04. Interest Payments. The Series 2015 Bonds shall bear interest from their date or dates and be payable on such date or dates as may be determined pursuant to the related Certificate of Determination. Except as otherwise provided in the related Certificate of Determination, interest on the Series 2015 Bonds shall be computed on the basis of twelve (12) 30-day months and a 360-day year.

Section 2.05. Denominations, Numbers and Letters. Unless otherwise provided in the related Certificate of Determination, the Series 2015 Bonds shall be issued in fully registered form without coupons in the denomination of \$5,000 or any integral multiple thereof.

The Series 2015 Bonds shall be lettered and numbered as provided in the related Certificate of Determination.

Section 2.06. Places of Payment and Paying Agent. Except as otherwise provided in the related Certificate of Determination, principal and Redemption Price of the Series 2015 Bonds shall be payable to the registered owner of each Series 2015 Bond when due upon presentation of such Series 2015 Bond at the principal corporate trust office of the Trustee. Except as otherwise provided in the related Certificate of Determination, interest on the registered Series 2015 Bonds will be paid by check or draft mailed on the interest payment date by the Paying Agent, to the registered owner at his address as it appears on the registration books or, at the option of any Owner of at least one million dollars (\$1,000,000) in principal amount of the Series 2015 Bonds, by wire transfer in immediately available funds on each interest payment date to such Owner thereof upon written notice from such Owner to the Trustee, at such address as the Trustee may from time to time notify such Owner, containing the wire transfer address (which shall be in the continental United States) to which such Owner wishes to have such wire directed, if such written notice is received not less than twenty (20) days prior to the related interest payment date (such notice may refer to multiple interest payments).

Section 2.07. Sinking Fund Installments. The Series 2015 Bonds, if any, determined in the related Certificate of Determination shall be subject to redemption in part, by lot, or otherwise as determined in accordance with Section A-404 of the Resolution, on each date in the year or years determined in the related Certificate of Determination at the principal amount thereof plus accrued interest up to but not including the date of redemption thereof, from mandatory Sinking Fund Installments which are required to be made in amounts sufficient to redeem on each such date the principal amount of such Series 2015 Bonds.

Section 2.08. Redemption Prices and Terms. The Series 2015 Bonds may also be subject to redemption prior to maturity, at the option of the Issuer, upon notice as provided in Article A-IV of the Resolution, at any time as a whole or in part (and by lot within a maturity, or otherwise as determined in accordance with Section A-404 of the Resolution, if less than all of a maturity is to be redeemed), from maturities designated by the Issuer on and after the date and in the years and at the Redemption Prices (expressed as a percentage of principal amount) determined in the related Certificate of Determination, plus accrued interest up to but not including the redemption date. Notwithstanding the foregoing, in the case of taxable Series 2015 Bonds, if set forth in the Certificate of Determination, the taxable Series 2015 Bonds may be made subject to pro rata redemption and/or a make-whole redemption premium.

Section 2.09. Delegation to an Authorized Officer. 1. There is hereby delegated to each Authorized Officer, subject to the limitations contained in this Supplemental Resolution, the following powers with respect to the Series 2015 Bonds:

(a) to determine whether and when to issue any Series 2015 Bonds constituting Capital Cost Obligations, the amount of the Series 2015 Bonds to be applied to finance Capital Costs, and the amount of the proceeds of the Series 2015 Bonds, estimated to be necessary to pay the Costs of Issuance of the Series 2015 Bonds and capitalized interest, if any;

(b) to determine the purpose or purposes for which the Series 2015 Bonds are being issued, which shall be one or more of the purposes set forth in Section 2.02 of this Supplemental Resolution;

(c) to determine the principal amounts of the Series 2015 Bonds to be issued for the purposes set forth in Section 2.02 of this Supplemental Resolution and whether such principal amounts constitute a separate Series or a subseries of Series 2015 Bonds, which principal amounts (and the aggregate of all such Series and subseries) shall not exceed the principal amounts permitted by Section 2.01 of this Supplemental Resolution, and to determine Accreted Values and Appreciated Values, if applicable;

(d) to determine the maturity date and principal amount of each maturity of the Series 2015 Bonds and the amount and due date of each Sinking Fund Installment, if any;

(e) to determine the date or dates which the Series 2015 Bonds shall be dated and the interest rate or rates of the Series 2015 Bonds or the manner of determining such interest rate or rates; provided, however, that any Series 2015 Bonds issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 10% per annum, any Series 2015 Bonds issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 12% per annum, any Variable Interest Rate Obligations issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 15% per annum, any Variable Interest Rate Obligations issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 18% per annum and any Parity Reimbursement Obligations shall be subject to a maximum interest rate of not greater than 25% per annum, or, in each such case, such higher rate or rates as determined by the Issuer's Board;

(f) to determine the Redemption Price or Redemption Prices, if any and the redemption terms, if any, for the Series 2015 Bonds; provided, however, that if the Series 2015 Bonds are to be redeemable at the election of the Issuer, the Redemption Price (except in the case of taxable Series 2015 Bonds) shall not be greater than one hundred three percent (103%) of the principal amount of the Series 2015 Bonds to be redeemed, plus accrued interest thereon up to but not including the date of redemption and in the case of taxable Series 2015 Bonds any provisions relating to pro rata redemption and/or make-whole redemption;

(g) to determine whether the sale of the Series 2015 Bonds shall be conducted on either a negotiated or competitive bid basis and, as applicable, to determine the purchase price for the Series 2015 Bonds to be paid by the purchaser or purchasers referred to in one or more Purchase Agreements or a bank direct purchase agreement or the purchase price for the

Series 2015 Bonds to be paid by the winning bidder, if such sale is conducted by competitive bid pursuant to a Notice of Sale (as hereinafter defined), in either case as such document is described in Section 2.10 of this Supplemental Resolution, which may include such original issue discount and original issue premium as shall be determined in the related Certificate of Determination; provided, however, that the underwriters' discount reflected in such purchase price shall not exceed \$10.00 for each one thousand dollars (\$1,000) principal amount of the Series 2015 Bonds;

(h) to take all actions required for the Series 2015 Bonds to be eligible under the rules and regulations of The Depository Trust Company ("DTC") for investment and trading as uncertificated securities, to execute and deliver a standard form of letter of representation with DTC and, notwithstanding any provisions to the contrary contained in this Supplemental Resolution, to include in the related Certificate of Determination such terms and provisions as may be appropriate or necessary to provide for uncertificated securities in lieu of Series 2015 Bonds issuable in fully registered form;

(i) to determine whether to issue all or any portion of the Series 2015 Bonds as Tax-Exempt Obligations, Taxable Obligations, Put Obligations, Variable Interest Rate Obligations or as any other form of Obligations permitted by the Resolution and any matters related thereto, including (i) the terms and provisions of any such Series 2015 Bonds, (ii) the selection of remarketing agents, tender agents, calculation agents, auction agents, dealers, bidding, agents or any other agents or parties to ancillary arrangements and the terms of any such arrangements, and (iii) the methods for determining the accrual of Debt Service;

(j) to determine the advisability, as compared to an unenhanced transaction, of obtaining one or more Credit Facilities, to select a provider or providers thereof and to determine and accept the terms and provisions and price thereof, to determine such other matters related thereto as in the opinion of the officer executing the related Certificate of Determination shall be considered necessary or appropriate and to effect such determinations by making any changes in or additions to this Supplemental Resolution required by Credit Facility providers, if any, or required by a Rating Agency in order to attain or maintain specific ratings on the Series 2015 Bonds, or relating to the mechanisms for the repayment of amounts advanced thereunder or payment of fees, premiums, expenses or any other amounts, notices, the provision of information, and such other matters of a technical, mechanical, procedural or descriptive nature necessary or appropriate to obtain or implement a Credit Facility with respect to the Series 2015 Bonds, and to make any changes in connection therewith;

(k) to make such changes in or from the form of this Supplemental Resolution as may be necessary or desirable in order to cure any ambiguities, inconsistencies or other defects; and

(l) to determine such other matters specified in or permitted by (i) Sections 202, 203, and A-201 of the Resolution or (ii) this Supplemental Resolution, including preparation of any documentation therefor.

2. Any Authorized Officer shall execute one or more Certificate of Determination evidencing the determinations made pursuant to this Supplemental Resolution and

such Certificate of Determination shall be conclusive evidence of the determinations of such Authorized Officer, as stated therein. More than one Certificate of Determination may be delivered to the extent more than one Series or subseries of Series 2015 Bonds are delivered from time to time, or other authority is exercised under this Supplemental Resolution from time to time and each such Certificate of Determination shall be delivered to the Trustee prior to the authentication and delivery of the respective Series or subseries of Series 2015 Bonds by the Trustee or other documentation. Determinations set forth in the related Certificate of Determination shall have the same effect as if set forth in this Supplemental Resolution. Any such Authorized Officer may exercise any authority delegated under this Supplemental Resolution from time to time following issuance of any Series 2015 Bonds, as appropriate for any purposes, including, in order to change interest rate modes or auction periods, obtain a substitute or additional Credit Facility, enter into a bank direct purchase agreement or similar instrument, or to appoint new or additional agents or other parties deemed appropriate to a particular form or mode of Obligation or manner of sale.

Section 2.10. Sale of Series 2015 Bonds. If it is determined that any sale of Bonds shall be conducted on a negotiated basis, each Authorized Officer is hereby authorized to sell and award the Series 2015 Bonds to the purchasers who shall be on the list of underwriters then approved by the Issuer and shall be referred to in the Purchase Agreement or Agreements, which Purchase Agreement or Agreements shall be substantially in the form most recently executed or delivered by the Issuer in connection with the sale or remarketing of Obligations, with such revisions to reflect the terms and provisions of the Series 2015 Bonds as may be approved by the officer executing the Purchase Agreement (each, a “Purchase Agreement”). Each Authorized Officer is hereby authorized to agree to the selection of the representative of the underwriters as referred to in the Purchase Agreement or Agreements and to execute and deliver the Purchase Agreement or Agreements for and on behalf and in the name of the Issuer with such changes, omissions, insertions and revisions as may be approved by the officer executing the Purchase Agreement or Agreements, said execution being conclusive evidence of such approval and concurrence in the selection of the representative of the underwriters.

If it is determined that any sale of Series 2015 Bonds shall be conducted on a competitive bid basis each Authorized Officer is hereby further authorized to conduct the sale and award of the Series 2015 Bonds on the basis of a competitive bid, pursuant to the terms of a notice of sale, including bid form (the “Notice of Sale”), in a form, including any limitations on permitted bidders and a description of the basis for determining the winning bidder or bidders, determined by such Authorized Officer. Each Authorized Officer is hereby authorized to conduct such competitive sale of the Series 2015 Bonds in a manner consistent with this Supplemental Resolution and to utilize the services of the Authority’s financial advisor and the services of an electronic bidding service, as such Authorized Officer shall determine, and the execution by such Authorized Officer of a letter of award shall be conclusive evidence of such award.

Each Authorized Officer is hereby authorized to make public and to authorize the use and distribution by said purchasers or other appropriate parties of a preliminary official statement, offering circular, or other disclosure document (the “Preliminary Official Statement”) in connection with each public offering or any private placement of the Series 2015 Bonds, in substantially the form most recently executed or delivered by the Issuer in connection with the

sale of Obligations, with such changes, omissions, insertions and revisions as such officer shall deem advisable. The Issuer authorizes any of said officers to deliver a certification to the effect that such Preliminary Official Statement or Official Statement, if deemed necessary or appropriate, together with such other documents, if any, described in such certificate, was deemed final as of its date for purposes of Rule 15c2-12 of the Securities and Exchange Commission as applicable.

Each Authorized Officer is hereby authorized to make public and to authorize distribution of a final Official Statement in substantially the form of each Preliminary Official Statement or the most recently executed and delivered Official Statement if there is not a Preliminary Official Statement, with such changes, omissions, insertions and revisions as such officer shall deem advisable, to sign such Official Statement and to deliver such Official Statement to the purchasers of such issue of the Series 2015 Bonds, such execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

Each Authorized Officer is hereby authorized to execute and deliver for and on behalf and in the name of the Issuer, to the extent determined by such Authorized Officer to be necessary or convenient, a Continuing Disclosure Agreement, substantially in the form appended to the Purchase Agreement or Notice of Sale, with such changes, omissions, insertions and revisions as such officer shall deem advisable (the "Continuing Disclosure Agreement"), said execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

The proceeds of each good faith check, if any, received by the Issuer from the purchasers of each issue of the Series 2015 Bonds under the terms of the related Purchase Agreement or Notice of Sale may be invested by the Issuer pending application of the proceeds of such good faith check for the purposes provided in Section 2.02 of this Supplemental Resolution at the time of the issuance and delivery of such Series 2015 Bonds.

Each Authorized Officer (including any Assistant Secretary of the Issuer) is hereby authorized and directed to execute, deliver, amend, replace or terminate any and all documents and instruments (including any remarketing agreements, tender agency agreements, dealer agreements, broker-dealer agreements, tender agent agreements, or auction agency agreements, any investment agreements or arrangements, or any reimbursement agreements or documents or instruments relating to a Credit Facility deemed appropriate to a given form or mode of an Obligation) and to do and cause to be done any and all acts necessary or proper for carrying out each Purchase Agreement or Notice of Sale, each Continuing Disclosure Agreement, the terms of any Credit Facility or other such agreement or arrangement, and the issuance, sale and delivery of each issue of the Series 2015 Bonds and for implementing the terms of each issue of the Series 2015 Bonds and the transactions contemplated hereby or thereby.

When reference is made in this Supplemental Resolution to the authorization of an Authorized Officer to do any act, such act may be accomplished by any of such officers individually.

Section 2.11. Forms of Series 2015 Bonds and Trustee's Authentication Certificate. Subject to the provisions of the Resolution, the form of registered Series 2015 Bonds, and the Trustee's certificate of authentication, shall be substantially in the form set forth in Exhibit One to the Resolution including, if necessary, any changes to comply with the requirements of DTC or the provisions of this Supplemental Resolution or the related Certificate of Determination.

Section 2.12. Appointment of Trustee and Paying Agent. Unless otherwise provided by Certificate of Determination, U.S. Bank Trust National Association shall be the Trustee under the Resolution and the Paying Agent for the Series 2015 Bonds.

ARTICLE III

DISPOSITION OF SERIES 2015 BOND PROCEEDS

Section 3.01. Disposition of Series 2015 Bond Proceeds. Any proceeds of the sale of the Series 2015 Bonds, other than accrued interest, if any, shall be deposited, simultaneously with the issuance and delivery of the Series 2015 Bonds, at one time or from time to time in one or more Series or subseries, in the Proceeds Account which is deemed to be established for each Series in the Proceeds Fund to be applied, or shall otherwise be applied pursuant to a Certificate of Determination to:

- (a) the payment of all or any part of the Capital Costs; and
- (b) the balance of such proceeds, exclusive of accrued interest, shall be deposited in the COI Account and applied to the payment of Costs of Issuance or otherwise applied to the payment of Costs of Issuance.

Unless otherwise provided in a Certificate of Determination, the accrued interest, if any and any capitalized interest, received on the sale of the Series 2015 Bonds shall be deposited in the Debt Service Fund.

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01. Tax Covenants Relating to the Series 2015 Bonds. The Issuer covenants that, in order to maintain the exclusion from gross income for Federal income tax purposes of the interest on the Series 2015 Bonds issued as Tax-Exempt Obligations, the Issuer will satisfy, or take such actions as are necessary to cause to be satisfied, each provision of the Code necessary to maintain such exclusion. In furtherance of this covenant, the Issuer agrees to comply with such written instructions as may be provided by Bond Counsel. In furtherance of the covenant contained in the preceding sentence, the Issuer agrees to continually comply with the provisions of any "Arbitrage and Use of Proceeds Certificate" or "Tax Certificate" to be executed by the Issuer in connection with the execution and delivery of any Series 2015 Bonds issued as Tax-Exempt Obligations, as amended from time to time.

Notwithstanding any other provision of the Resolution to the contrary, upon the Issuer's failure to observe, or refusal to comply with the above covenant (a) the Owners of the Series 2015 Bonds, or the Trustee acting on their behalf, shall be entitled to the rights and remedies provided to Owners or the Trustee under Section 702 of the Resolution, other than the right (which is hereby abrogated solely as to the Issuer's failure to observe, or refusal to comply with the above covenant) to declare the principal of all Obligations then Outstanding, and the interest accrued thereon, to be due and payable pursuant to Section 567 of the Issuer Act, and (b) neither the Owners of the Obligations of any Series or holders of any Parity Debt (other than the Series 2015 Bonds or the Trustee acting on their behalf), nor the Trustee acting on their behalf, shall be entitled to exercise any right or remedy provided to the Owners, the Parity Debt holders or the Trustee under the Resolution based upon the Issuer's failure to observe, or refusal to comply with, the above covenant.

The provisions of the foregoing covenants set forth in this Section shall not apply to any Series 2015 Bonds, including any subseries thereof, which the Issuer determines pursuant to the applicable Certificate of Determination to issue as Taxable Obligations.

Section 4.02. Defeasance. In the event the Issuer shall seek, prior to the maturity or redemption date thereof, to pay or cause to be paid, within the meaning and with the effect expressed in the Resolution, all or less than all Outstanding Series 2015 Bonds issued as Tax-Exempt Obligations and the provisions of Section 4.01 hereof shall then be of any force or effect, then, notwithstanding the provisions of Article A-XI of the Resolution, the Series 2015 Bonds issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid shall not be deemed to have been paid within the meaning and with the effect expressed in Section A-1101 of the Resolution unless (i) the Issuer has confirmed in writing that the Owners of the Series 2015 Bonds issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid will continue, after such action, to have the benefit of a covenant to the effect of the covenant of the Issuer contained in Section 4.01 hereof or (ii) there shall have been delivered to the Trustee an Opinion of Bond Counsel to the effect that non-compliance thereafter with the applicable provisions of the Code will not affect the then current treatment of interest on the Series 2015 Bonds issued as Tax-Exempt Obligations in determining gross income for Federal income tax purposes.

TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY

**MULTIPLE SERIES 2001
SUBORDINATE REVENUE BOND
SUPPLEMENTAL RESOLUTION**

Adopted December 17, 2014

TABLE OF CONTENTS

Page

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01. Supplemental Resolution1
Section 1.02. Definitions.....1
Section 1.03. Authority for this Supplemental Resolution1

ARTICLE II

AUTHORIZATION OF SERIES 2015 BONDS

Section 2.01. Authorized Principal Amount, Designation and Series2
Section 2.02. Purposes2
Section 2.03. Dates, Maturities, Principal Amounts and Interest2
Section 2.04. Interest Payments3
Section 2.05. Denominations, Numbers and Letters.....3
Section 2.06. Places of Payment and Paying Agent3
Section 2.07. Sinking Fund Installments3
Section 2.08. Redemption Prices and Terms3
Section 2.09. Delegation to an Authorized Officer.....4
Section 2.10. Sale of Series 2015 Bonds6
Section 2.11. Forms of Series 2015 Bonds and Trustee’s Authentication Certificate.....8
Section 2.12. Appointment of Trustee and Paying Agent8

ARTICLE III

DISPOSITION OF SERIES 2015 BOND PROCEEDS

Section 3.01. Disposition of Series 2015 Bond Proceeds8

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01. Tax Covenants Relating to the Series 2015 Bonds8
Section 4.02. Defeasance9

**MULTIPLE SERIES 2001
SUBORDINATE REVENUE BOND
SUPPLEMENTAL RESOLUTION**

BE IT RESOLVED by the Triborough Bridge and Tunnel Authority (the “Issuer”), as follows:

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01. Supplemental Resolution. This resolution is supplemental to, and is adopted, in accordance with Article II and Article A-VIII of a resolution of the Issuer adopted on March 26, 2002, entitled “2001 Subordinate Revenue Resolution Authorizing Subordinate Revenue Obligations” (the “Resolution”).

Section 1.02. Definitions.

1. All capitalized terms which are used but not otherwise defined in this Multiple Series 2001 Subordinate Revenue Bond Supplemental Resolution (the “Supplemental Resolution”) shall have the same meanings, respectively, as such terms are given by Section 102 of the Resolution.

2. In this Supplemental Resolution:

“Authorized Officer” shall include the officers designated as such in the Resolution, and the Chairman and Chief Executive Officer, the Chair of the Finance Committee, the Vice Chairman, the Chief Financial Officer or the Director, Finance, as well as any officer duly designated as “Acting” in said officer’s capacity, except that, for the purposes of any delegation set forth herein that does not expressly include any Assistant Secretary, “Authorized Officer” shall not include any Assistant Secretary of the Issuer.

“Board” shall mean, when used with respect to the Issuer, the board of the Issuer acting as such pursuant to the provisions of the Issuer Act, and when used with respect to the MTA, the members of the MTA acting as such pursuant to the provisions of the MTA Act.

“Bond Counsel” shall mean Hawkins Delafield & Wood LLP, Nixon Peabody LLP or any other attorney or firm of attorneys of nationally recognized standing in the field of law relating to the issuance of obligations by state and municipal entities, selected by the Issuer.

“Code” shall mean the Internal Revenue Code of 1986, as amended, and regulations thereunder.

Section 1.03. Authority for this Supplemental Resolution. This Supplemental Resolution is adopted pursuant to the provisions of the Issuer Act and the Resolution.

ARTICLE II

AUTHORIZATION OF SERIES 2015 BONDS

Section 2.01. Authorized Principal Amount, Designation and Series.

Pursuant to the provisions of the Resolution and in order to finance Capital Costs, multiple Series of Subordinate Revenue Obligations (which may be issued at one time or from time to time in any number of Series or subseries, which for purposes of this Supplemental Resolution shall collectively be referred to herein as the "Series 2015 Bonds", constituting Capital Cost Subordinate Revenue Obligations, subject to redesignation as hereinafter provided) entitled to the benefit, protection and security of such provisions are hereby authorized to be issued in an aggregate principal amount not exceeding the principal amount necessary so that, after giving effect to any net original issue discount and underwriters' discount from the principal amount, the amount to be deposited in the Proceeds Account pursuant to, or otherwise applied to effectuate the purposes of, Section 2.02 and Section 3.01 of this Supplemental Resolution (exclusive of the amount so deposited therein determined in the related Certificate of Determination as estimated to be necessary to pay capitalized interest or to pay any Costs of Issuance of the Series 2015 Bonds) shall not exceed the amount or amounts determined in one or more Certificates of Determination to be necessary to effectuate the purposes set forth in Section 2.02 hereof; provided, however, that the Series 2015 Bonds issued to finance Capital Costs shall not exceed \$250 million, reduced by the amount of bonds then Outstanding issued under the Triborough Bridge and Tunnel Authority Multiple Series 2015 General Revenue Bond Supplemental Resolution, adopted December 17, 2014 (excluding all amounts excluded above, such as net original issue discount, underwriters' discounts, capitalized interest and Costs of Issuance). For all purposes of this Section 2.01, net original issue premium as determined to be advisable by an Authorized Officer in connection with the marketing of the Series 2015 Bonds, shall not be counted.

Series 2015 Bonds shall be designated as, and shall be distinguished from the Obligations of all other Series by the title, "Subordinate Revenue Bonds, Series 2015" or such other title or titles set forth in one or more Certificates of Determination.

The authority to issue Obligations and take related actions granted under previous resolutions of the Issuer shall continue in full force and effect. The authorization to issue the Series 2015 Bonds shall continue in effect until the adoption by the MTA Board of a subsequent new money bond issuance supplemental resolution relating to 2016 new money financings.

Section 2.02. Purposes. The purposes for which the Series 2015 Bonds are issued shall be set forth in one or more Certificates of Determination and may include the payment of all or any part of the Capital Costs, all to the extent and in the manner provided in this Supplemental Resolution.

Section 2.03. Dates, Maturities, Principal Amounts and Interest. The Series 2015 Bonds, except as otherwise provided in the Resolution, shall be dated the date or dates determined in the related Certificate of Determination. The Series 2015 Bonds shall mature on the date or dates and in the year or years and principal amount or amounts, and shall bear

interest at the rate or rates per annum, if any, specified in or determined in the manner provided in the related Certificate of Determination.

Section 2.04. Interest Payments. The Series 2015 Bonds shall bear interest from their date or dates and be payable on such date or dates as may be determined pursuant to the related Certificate of Determination. Except as otherwise provided in the related Certificate of Determination, interest on the Series 2015 Bonds shall be computed on the basis of twelve (12) 30-day months and a 360-day year.

Section 2.05. Denominations, Numbers and Letters. Unless otherwise provided in the related Certificate of Determination, the Series 2015 Bonds shall be issued in fully registered form without coupons in the denomination of \$5,000 or any integral multiple thereof.

The Series 2015 Bonds shall be lettered and numbered as provided in the related Certificate of Determination.

Section 2.06. Places of Payment and Paying Agent. Except as otherwise provided in the related Certificate of Determination, principal and Redemption Price of the Series 2015 Bonds shall be payable to the registered owner of each Series 2015 Bond when due upon presentation of such Series 2015 Bond at the principal corporate trust office of the Trustee. Except as otherwise provided in the related Certificate of Determination, interest on the registered Series 2015 Bonds will be paid by check or draft mailed on the interest payment date by the Paying Agent, to the registered owner at his address as it appears on the registration books or, at the option of any Owner of at least one million dollars (\$1,000,000) in principal amount of the Series 2015 Bonds, by wire transfer in immediately available funds on each interest payment date to such Owner thereof upon written notice from such Owner to the Trustee, at such address as the Trustee may from time to time notify such Owner, containing the wire transfer address (which shall be in the continental United States) to which such Owner wishes to have such wire directed, if such written notice is received not less than twenty (20) days prior to the related interest payment date (such notice may refer to multiple interest payments).

Section 2.07. Sinking Fund Installments. The Series 2015 Bonds, if any, determined in the related Certificate of Determination shall be subject to redemption in part, by lot, or otherwise as determined in accordance with Section A-404 of the Resolution, on each date in the year or years determined in the related Certificate of Determination at the principal amount thereof plus accrued interest up to but not including the date of redemption thereof, from mandatory Sinking Fund Installments which are required to be made in amounts sufficient to redeem on each such date the principal amount of such Series 2015 Bonds.

Section 2.08. Redemption Prices and Terms. The Series 2015 Bonds may also be subject to redemption prior to maturity, at the option of the Issuer, upon notice as provided in Article A-IV of the Resolution, at any time as a whole or in part (and by lot within a maturity, or otherwise as determined in accordance with Section A-404 of the Resolution, if less than all of a maturity is to be redeemed), from maturities designated by the Issuer on and after the date and in the years and at the Redemption Prices (expressed as a percentage of principal amount) determined in the related Certificate of Determination, plus accrued interest up to but not

including the redemption date. Notwithstanding the foregoing, in the case of taxable Series 2015 Bonds, if set forth in the Certificate of Determination, the taxable Series 2015 Bonds may be made subject to pro rata redemption and/or a make-whole redemption premium.

Section 2.09. Delegation to an Authorized Officer. 1. There is hereby delegated to each Authorized Officer, subject to the limitations contained in this Supplemental Resolution, the following powers with respect to the Series 2015 Bonds:

(a) to determine whether and when to issue any Series 2015 Bonds constituting Capital Cost Subordinate Revenue Obligations, the amount of the Series 2015 Bonds to be applied to finance Capital Costs, and the amount of the proceeds of the Series 2015 Bonds, estimated to be necessary to pay the Costs of Issuance of the Series 2015 Bonds and capitalized interest, if any;

(b) to determine the purpose or purposes for which the Series 2015 Bonds are being issued, which shall be one or more of the purposes set forth in Section 2.02 of this Supplemental Resolution;

(c) to determine the principal amounts of the Series 2015 Bonds to be issued for the purposes set forth in Section 2.02 of this Supplemental Resolution and whether such principal amounts constitute a separate Series or a subseries of Series 2015 Bonds, which principal amounts (and the aggregate of all such Series and subseries) shall not exceed the principal amounts permitted by Section 2.01 of this Supplemental Resolution, and to determine Accreted Values and Appreciated Values, if applicable;

(d) to determine the maturity date and principal amount of each maturity of the Series 2015 Bonds and the amount and due date of each Sinking Fund Installment, if any;

(e) to determine the date or dates which the Series 2015 Bonds shall be dated and the interest rate or rates of the Series 2015 Bonds or the manner of determining such interest rate or rates; provided, however, that any Series 2015 Bonds issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 10% per annum, any Series 2015 Bonds issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 12% per annum, any Variable Interest Rate Obligations issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 15% per annum, any Variable Interest Rate Obligations issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 18% per annum and any Parity Reimbursement Obligations shall be subject to a maximum interest rate of not greater than 25% per annum, or, in each such case, such higher rate or rates as determined by the Issuer's Board;

(f) to determine the Redemption Price or Redemption Prices, if any and the redemption terms, if any, for the Series 2015 Bonds; provided, however, that if the Series 2015 Bonds are to be redeemable at the election of the Issuer, the Redemption Price (except in the case of taxable Series 2015 Bonds) shall not be greater than one hundred three percent (103%) of the principal amount of the Series 2015 Bonds to be redeemed, plus accrued interest thereon up to but not including the date of redemption and in the case of taxable Series 2015 Bonds any provisions relating to pro rata redemption and/or make-whole redemption;

(g) to determine whether the sale of the Series 2015 Bonds shall be conducted on either a negotiated or competitive bid basis and, as applicable, to determine the purchase price for the Series 2015 Bonds to be paid by the purchaser or purchasers referred to in one or more Purchase Agreements or a bank direct purchase agreement or the purchase price for the Series 2015 Bonds to be paid by the winning bidder, if such sale is conducted by competitive bid pursuant to a Notice of Sale (as hereinafter defined), in either case as such document is described in Section 2.10 of this Supplemental Resolution, which may include such original issue discount and original issue premium as shall be determined in the related Certificate of Determination; provided, however, that the underwriters' discount reflected in such purchase price shall not exceed \$10.00 for each one thousand dollars (\$1,000) principal amount of the Series 2015 Bonds;

(h) to take all actions required for the Series 2015 Bonds to be eligible under the rules and regulations of The Depository Trust Company ("DTC") for investment and trading as uncertificated securities, to execute and deliver a standard form of letter of representation with DTC and, notwithstanding any provisions to the contrary contained in this Supplemental Resolution, to include in the related Certificate of Determination such terms and provisions as may be appropriate or necessary to provide for uncertificated securities in lieu of Series 2015 Bonds issuable in fully registered form;

(i) to determine whether to issue all or any portion of the Series 2015 Bonds as Tax-Exempt Obligations, Taxable Obligations, Put Obligations, Variable Interest Rate Obligations or as any other form of Obligations permitted by the Resolution and any matters related thereto, including (i) the terms and provisions of any such Series 2015 Bonds, (ii) the selection of remarketing agents, tender agents, calculation agents, auction agents, dealers, bidding, agents or any other agents or parties to ancillary arrangements and the terms of any such arrangements, and (iii) the methods for determining the accrual of Debt Service;

(j) to determine the advisability, as compared to an unenhanced transaction, of obtaining one or more Credit Facilities, to select a provider or providers thereof and to determine and accept the terms and provisions and price thereof, to determine such other matters related thereto as in the opinion of the officer executing the related Certificate of Determination shall be considered necessary or appropriate and to effect such determinations by making any changes in or additions to this Supplemental Resolution required by Credit Facility providers, if any, or required by a Rating Agency in order to attain or maintain specific ratings on the Series 2015 Bonds, or relating to the mechanisms for the repayment of amounts advanced thereunder or payment of fees, premiums, expenses or any other amounts, notices, the provision of information, and such other matters of a technical, mechanical, procedural or descriptive nature necessary or appropriate to obtain or implement a Credit Facility with respect to the Series 2015 Bonds, and to make any changes in connection therewith;

(k) to make such changes in or from the form of this Supplemental Resolution as may be necessary or desirable in order to cure any ambiguities, inconsistencies or other defects; and

(1) to determine such other matters specified in or permitted by (i) Sections 202, 203, and A-201 of the Resolution or (ii) this Supplemental Resolution, including preparation of any documentation therefor.

2. Any Authorized Officer shall execute one or more Certificates of Determination evidencing the determinations made pursuant to this Supplemental Resolution and such Certificate of Determination shall be conclusive evidence of the determinations of such Authorized Officer, as stated therein. More than one Certificate of Determination may be delivered to the extent more than one Series or subseries of Series 2015 Bonds are delivered from time to time, or other authority is exercised under this Supplemental Resolution from time to time and each such Certificate of Determination shall be delivered to the Trustee prior to the authentication and delivery of the respective Series or subseries of Series 2015 Bonds by the Trustee or other documentation. Determinations set forth in the related Certificate of Determination shall have the same effect as if set forth in this Supplemental Resolution. Any such Authorized Officer may exercise any authority delegated under this Supplemental Resolution from time to time following issuance of any Series 2015 Bonds, as appropriate for any purposes, including, in order to change interest rate modes or auction periods, obtain a substitute or additional Credit Facility, enter into a bank direct purchase agreement or similar instrument, or to appoint new or additional agents or other parties deemed appropriate to a particular form or mode of Obligation or manner of sale.

Section 2.10. Sale of Series 2015 Bonds. If it is determined that any sale of Bonds shall be conducted on a negotiated basis, each Authorized Officer is hereby authorized to sell and award the Series 2015 Bonds to the purchasers who shall be on the list of underwriters then approved by the Issuer and shall be referred to in the Purchase Agreement or Agreements, which Purchase Agreement or Agreements shall be substantially in the form most recently executed or delivered by the Issuer in connection with the sale or remarketing of Obligations, with such revisions to reflect the terms and provisions of the Series 2015 Bonds as may be approved by the officer executing the Purchase Agreement (each, a "Purchase Agreement"). Each Authorized Officer is hereby authorized to agree to the selection of the representative of the underwriters as referred to in the Purchase Agreement or Agreements and to execute and deliver the Purchase Agreement or Agreements for and on behalf and in the name of the Issuer with such changes, omissions, insertions and revisions as may be approved by the officer executing the Purchase Agreement or Agreements, said execution being conclusive evidence of such approval and concurrence in the selection of the representative of the underwriters.

If it is determined that any sale of Series 2015 Bonds shall be conducted on a competitive bid basis each Authorized Officer is hereby further authorized to conduct the sale and award of the Series 2015 Bonds on the basis of a competitive bid, pursuant to the terms of a notice of sale, including bid form (the "Notice of Sale"), in a form, including any limitations on permitted bidders and a description of the basis for determining the winning bidder or bidders, determined by such Authorized Officer. Each Authorized Officer is hereby authorized to conduct such competitive sale of the Series 2015 Bonds in a manner consistent with this Supplemental Resolution and to utilize the services of the Authority's financial advisor and the services of an electronic bidding service, as such Authorized Officer shall determine, and the execution by such Authorized Officer of a letter of award shall be conclusive evidence of such award.

Each Authorized Officer is hereby authorized to make public and to authorize the use and distribution by said purchasers or other appropriate parties of a preliminary official statement, offering circular, or other disclosure document (the "Preliminary Official Statement") in connection with each public offering or any private placement of the Series 2015 Bonds, in substantially the form most recently executed or delivered by the Issuer in connection with the sale of Obligations, with such changes, omissions, insertions and revisions as such officer shall deem advisable. The Issuer authorizes any of said officers to deliver a certification to the effect that such Preliminary Official Statement or Official Statement, if deemed necessary or appropriate, together with such other documents, if any, described in such certificate, was deemed final as of its date for purposes of Rule 15c2-12 of the Securities and Exchange Commission as applicable.

Each Authorized Officer is hereby authorized to make public and to authorize distribution of a final Official Statement in substantially the form of each Preliminary Official Statement or the most recently executed and delivered Official Statement if there is not a Preliminary Official Statement, with such changes, omissions, insertions and revisions as such officer shall deem advisable, to sign such Official Statement and to deliver such Official Statement to the purchasers of such issue of the Series 2015 Bonds, such execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

Each Authorized Officer is hereby authorized to execute and deliver for and on behalf and in the name of the Issuer, to the extent determined by such Authorized Officer to be necessary or convenient, a Continuing Disclosure Agreement, substantially in the form appended to the Purchase Agreement or Notice of Sale, with such changes, omissions, insertions and revisions as such officer shall deem advisable (the "Continuing Disclosure Agreement"), said execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

The proceeds of each good faith check, if any, received by the Issuer from the purchasers of each issue of the Series 2015 Bonds under the terms of the related Purchase Agreement or Notice of Sale may be invested by the Issuer pending application of the proceeds of such good faith check for the purposes provided in Section 2.02 of this Supplemental Resolution at the time of the issuance and delivery of such Series 2015 Bonds.

Each Authorized Officer (including any Assistant Secretary of the Issuer) is hereby authorized and directed to execute, deliver, amend, replace or terminate any and all documents and instruments (including any remarketing agreements, tender agency agreements, dealer agreements, broker-dealer agreements, tender agent agreements, or auction agency agreements, any investment agreements or arrangements, or any reimbursement agreements or documents or instruments relating to a Credit Facility deemed appropriate to a given form or mode of an Obligation) and to do and cause to be done any and all acts necessary or proper for carrying out each Purchase Agreement or Notice of Sale, each Continuing Disclosure Agreement, the terms of any Credit Facility or other such agreement or arrangement, and the issuance, sale and delivery of each issue of the Series 2015 Bonds and for implementing the terms of each issue of the Series 2015 Bonds and the transactions contemplated hereby or thereby.

When reference is made in this Supplemental Resolution to the authorization of an Authorized Officer to do any act, such act may be accomplished by any of such officers individually.

Section 2.11. Forms of Series 2015 Bonds and Trustee's Authentication Certificate. Subject to the provisions of the Resolution, the form of registered Series 2015 Bonds, and the Trustee's certificate of authentication, shall be substantially in the form set forth in Exhibit One to the Resolution including, if necessary, any changes to comply with the requirements of DTC or the provisions of this Supplemental Resolution or the related Certificate of Determination.

Section 2.12. Appointment of Trustee and Paying Agent. Unless otherwise provided by Certificate of Determination, The Bank of New York Mellon, as successor in interest to JPMorgan Chase Bank, N.A., shall be the Trustee under the Resolution and the Paying Agent for the Series 2015 Bonds.

ARTICLE III

DISPOSITION OF SERIES 2015 BOND PROCEEDS

Section 3.01. Disposition of Series 2015 Bond Proceeds. Any proceeds of the sale of the Series 2015 Bonds, other than accrued interest, if any, shall be deposited, simultaneously with the issuance and delivery of the Series 2015 Bonds, at one time or from time to time in one or more Series or subseries, in the Proceeds Account which is deemed to be established for each Series in the Proceeds Fund to be applied, or shall otherwise be applied pursuant to a Certificate of Determination to:

- (a) the payment of all or any part of the Capital Costs; and
- (b) the balance of such proceeds, exclusive of accrued interest, shall be deposited in the COI Account and applied to the payment of Costs of Issuance or otherwise applied to the payment of Costs of Issuance.

Unless otherwise provided in a Certificate of Determination, the accrued interest, if any and any capitalized interest, received on the sale of the Series 2015 Bonds shall be deposited in the Debt Service Fund.

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01. Tax Covenants Relating to the Series 2015 Bonds. The Issuer covenants that, in order to maintain the exclusion from gross income for Federal income tax purposes of the interest on the Series 2015 Bonds issued as Tax-Exempt Obligations, the Issuer will satisfy, or take such actions as are necessary to cause to be satisfied, each provision of the Code necessary to maintain such exclusion. In furtherance of this covenant, the Issuer agrees to comply with such written instructions as may be provided by Bond Counsel. In furtherance of the covenant contained in the preceding sentence, the Issuer agrees to continually comply with

the provisions of any “Arbitrage and Use of Proceeds Certificate” or “Tax Certificate” to be executed by the Issuer in connection with the execution and delivery of any Series 2015 Bonds issued as Tax-Exempt Obligations, as amended from time to time.

Notwithstanding any other provision of the Resolution to the contrary, upon the Issuer’s failure to observe, or refusal to comply with the above covenant (a) the Owners of the Series 2015 Bonds, or the Trustee acting on their behalf, shall be entitled to the rights and remedies provided to Owners or the Trustee under Section 702 of the Resolution, other than the right (which is hereby abrogated solely as to the Issuer’s failure to observe, or refusal to comply with the above covenant) to declare the principal of all Obligations then Outstanding, and the interest accrued thereon, to be due and payable pursuant to Section 567 of the Issuer Act, and (b) neither the Owners of the Obligations of any Series or holders of any Parity Debt (other than the Series 2015 Bonds or the Trustee acting on their behalf), nor the Trustee acting on their behalf, shall be entitled to exercise any right or remedy provided to the Owners, the Parity Debt holders or the Trustee under the Resolution based upon the Issuer’s failure to observe, or refusal to comply with, the above covenant.

The provisions of the foregoing covenants set forth in this Section shall not apply to any Series 2015 Bonds, including any subseries thereof, which the Issuer determines pursuant to the applicable Certificate of Determination to issue as Taxable Obligations.

Section 4.02. Defeasance. In the event the Issuer shall seek, prior to the maturity or redemption date thereof, to pay or cause to be paid, within the meaning and with the effect expressed in the Resolution, all or less than all Outstanding Series 2015 Bonds issued as Tax-Exempt Obligations and the provisions of Section 4.01 hereof shall then be of any force or effect, then, notwithstanding the provisions of Article A-XI of the Resolution, the Series 2015 Bonds issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid shall not be deemed to have been paid within the meaning and with the effect expressed in Section A-1101 of the Resolution unless (i) the Issuer has confirmed in writing that the Owners of the Series 2015 Bonds issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid will continue, after such action, to have the benefit of a covenant to the effect of the covenant of the Issuer contained in Section 4.01 hereof or (ii) there shall have been delivered to the Trustee an Opinion of Bond Counsel to the effect that non-compliance thereafter with the applicable provisions of the Code will not affect the then current treatment of interest on the Series 2015 Bonds issued as Tax-Exempt Obligations in determining gross income for Federal income tax purposes.

Staff Summary

Subject Authorization to Issue Transportation Revenue Refunding Bonds, Dedicated Tax Fund Refunding Bonds, Triborough Bridge and Tunnel Authority General Revenue Refunding and Subordinate Revenue Bonds Refunding Bonds
Department Finance
Department Head Name Robert E. Foran, Chief Financial Officer
Department Head Signature 
Project Manager Name Patrick McCoy, Director of Finance 

Date December 17, 2014
Vendor Name N/A
Contract Number
Contract Manager Name
Table of Contents Ref #

Board Action					
Order	To	Date	Approval	Info	Other
1	Finance Comm.	12/15	X		
2	Board	12/17	X		

Internal Approvals			
Order	Approval	Order	Approval
1	Legal 	2	Chief of Staff 

PURPOSE:

The MTA Finance Department is seeking MTA and TBTA Board authorization and approval of the necessary documentation to issue refunding bonds, from time to time, subject, if applicable, to the refunding policy attached hereto adopted by the Board in May, 2010, as amended from time to time, and provided that the MTA Chief Financial Officer or the MTA Director, Finance makes a determination that the refunding of such bonds or other obligations will be beneficial to the obligors thereof and/or their affiliates and subsidiaries. MTA's portfolio of outstanding indebtedness is \$34.9 billion (exclusive of State Service Contract Bonds, which debt service is paid by the State).

DISCUSSION:

MTA and TBTA Board approval is sought for the following resolutions, documents and activities in connection with the issuance of refunding bonds:

- MTA Multiple Series Transportation Revenue Refunding Bond Supplemental Resolution (2015) authorizing Metropolitan Transportation Authority Transportation Revenue Refunding Obligations, including providing for the issuance of the following:
 - o Parity Reimbursement Obligations and Parity Debt in an amount sufficient to secure any Credit Facilities entered into in connection with the issuance of the Transportation Revenue Refunding Bonds.
- MTA Multiple Series Dedicated Tax Fund Refunding Bond Supplemental Resolution (2015) authorizing Metropolitan Transportation Authority Dedicated Tax Fund Revenue Refunding Obligations, including providing for the issuance of the following:
 - o Parity Reimbursement Obligations and Parity Debt in an amount sufficient to secure any Credit Facilities entered into in connection with the issuance of the Dedicated Tax Fund Revenue Refunding Obligations.
- TBTA Multiple Series General Revenue Refunding Bond Supplemental Resolution (2015) authorizing Triborough Bridge and Tunnel Authority General Revenue Refunding Obligations, including providing for the issuance of the following:
 - o Parity Reimbursement Obligations and other Parity Debt in an amount sufficient to secure any Credit Facilities entered into in connection with the issuance of the General Revenue Refunding Obligations.

- TBTA Multiple Series 2001 Subordinate Revenue Refunding Bond Supplemental Resolution (2015) authorizing Triborough Bridge and Tunnel Authority Subordinate Revenue Refunding Obligations, including providing for the issuance of the following:
 - o Parity Reimbursement Obligations and other Parity Debt in an amount sufficient to secure any Credit Facilities entered into in connection with the issuance of the Subordinate Revenue Refunding Obligations.

With respect to the above-referenced financial transactions, MTA and TBTA Board approval, as applicable, is sought:

(a) delegating authority to the Chairman and Chief Executive Officer, the Chair of the Finance Committee, the Vice Chairman, the Chief Financial Officer or the Director, Finance to award the obligations either pursuant to competitive bid or to members (or entities related to such firms) of the Board-approved MTA underwriting syndicate and to execute and/or deliver in each case, where appropriate:

- o Notices of Sale and bid forms,
- o Purchase Agreements with underwriters,
- o Official Statements and other disclosure documents,
- o Continuing Disclosure Agreements and related filings,
- o Remarketing Agreements,
- o Dealer and Broker/Dealer Agreements,
- o Issuing and Paying Agent Agreements,
- o Credit Facilities and related Parity Reimbursement Obligations and Parity Debt,
- o Related Subordinated Contract Obligations,
- o Verification Reports,
- o Escrow Agreements, and
- o Investment Agreements.

Any such documents will be in substantially the form of any document previously entered into by MTA or TBTA for previous issues, with such changes as approved by any one or more of the foregoing officers.

(b) authorizing such officers to terminate, amend, supplement, replace or extend any such documents, including Credit Facilities (and related Parity Reimbursement Obligations and Parity Debt), as they shall deem advisable, and to take such other actions as may be necessary or desirable to effectuate the issuance of the refunding bonds and other financial transactions set forth above, on behalf of MTA, TBTA or other MTA subsidiaries and affiliates.

ALTERNATIVES:

The Board could determine that staff seek specific approval for each refunding contemplated in advance of undertaking such refunding. This alternative is not advised as the timing of the Board cycle could result in missed market opportunities.

RECOMMENDATION:

The MTA and TBTA Boards approve the above-referenced amended and restated resolutions and documents and all other actions described above, including the execution and delivery of such other documents, and the taking of all other actions, from time to time deemed necessary or desirable by such officers in connection therewith. The authorization to issue the Refunding Bonds and take other related actions hereunder shall continue in effect without any further action by the Issuer until the adoption by the MTA Board of a subsequent refunding bond supplemental resolution relating to 2016 refundings unless (a) the Issuer shall have confirmed the effectiveness of this authorization for an additional period, or (b) the Issuer shall have modified or repealed this authorization.

Adopted May 26, 2010

BOND AND OTHER DEBT OBLIGATIONS REFUNDING POLICY

WHEREAS, The Metropolitan Transportation Authority has a large portfolio of outstanding bonds and other debt obligations; and

WHEREAS, The Metropolitan Transportation Authority desires to achieve the lowest possible interest cost for such bonds; and

WHEREAS, The Metropolitan Transportation Authority desires, from time to time, to benefit from favorable capital market conditions to undertake refundings of the outstanding bonds and other obligations; and

WHEREAS, The Metropolitan Transportation Authority has determined that in order to provide guidance in the issuance of refunding bonds, a refunding policy ("Refunding Policy") is desirable.

WHEREAS, such refunding bonds must be authorized by the Board in accordance with a supplemental resolution for each of the MTA and TBTA credits, such supplemental resolutions are attached hereto;

BE IT RESOLVED by the Metropolitan Transportation Authority that, except as otherwise provided by separate action of the Authority relating to a particular refunding, the Refunding Policy as set forth below shall be adopted and shall apply to all refundings of bonds or other debt obligations described therein hereafter.

Metropolitan Transportation Authority and Triborough Bridge and Tunnel Authority Bond and Other Debt Obligations Refunding Policy

This bond and other debt obligations refunding policy establishes conditions precedent to any issuance of fixed rate bonds for the purposes of refunding fixed rate bonds previously issued by the MTA or any of the Related Entities.

- For a standard fixed rate refunding, each individual bond maturity is expected to have net present value (NPV) savings (expressed as a percentage of the par amount of refunded bonds) of at least the following amounts at the time of mailing the Preliminary Official Statement and at the time of the initial pricing of the refunding bonds (nothing herein precludes the addition of individual bond maturities that meet the savings criteria, or the deletion of bond maturities that do not meet the savings criteria on the day of pricing):

		Years to Call		
		0 to 2	3 to 7	8 plus
Years From Call to Maturity	0 to 5	0.5%	1.0%	2.0%
	6 to 10	1.0%	2.5%	4.0%
	11 to 15	3.0%	4.0%	5.0%
	16 plus	4.0%	5.0%	5.5%

- In addition to achieving the above maturity-by-maturity NPV savings, aggregate NPV savings must be at least 3.0 percent of the par amount of refunded bonds.
- The arbitrage yield must be utilized in calculating NPV savings.
- Actual escrow investments must be used in calculation of refunding savings at the time of pricing.

Additional Criteria and Instructions

- The evaluation of refunding opportunities with respect to the State Bond Issuance Charge (BIC) shall be factored in as a cost of issuance with respect to total NPV savings requirement calculations. The individual bond-by-bond maturity evaluations shall also include BIC as a factor.
- If it is possible to meet the arbitrage yield in a refunding escrow with SLGS, they should be used. In the event SLGS could provide a yield higher than the arbitrage yield, as many rolling 0 percent SLGS as possible should be used to blend down the arbitrage yield. If the arbitrage yield cannot be met with SLGS or the SLGS window is not open, treasury securities and other open market securities can be considered, consistent with the investment restrictions in the bond resolution.

METROPOLITAN TRANSPORTATION AUTHORITY

**MULTIPLE SERIES
TRANSPORTATION REVENUE REFUNDING BOND
SUPPLEMENTAL RESOLUTION**

Adopted December 17, 2014

TABLE OF CONTENTS

Page

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01. Supplemental Resolution1
Section 1.02. Definitions.....1
Section 1.03. Authority for this Supplemental Resolution2

ARTICLE II

AUTHORIZATION OF REFUNDING BONDS

Section 2.01. Authorized Principal Amount, Designation and Series3
Section 2.02. Purposes3
Section 2.03. Dates, Maturities, Principal Amounts and Interest4
Section 2.04. Interest Payments4
Section 2.05. Denominations, Numbers and Letters.....4
Section 2.06. Places of Payment and Paying Agent4
Section 2.07. Sinking Fund Installments4
Section 2.08. Redemption Prices and Terms4
Section 2.09. Delegation to an Authorized Officer.....5
Section 2.10. Sale of Refunding Bonds7
Section 2.11. Forms of Refunding Bonds and Trustee’s Authentication Certificate.....9
Section 2.12. Appointment of Trustee and Paying Agent9

ARTICLE III

DISPOSITION OF REFUNDING BOND PROCEEDS

Section 3.01. Disposition of Refunding Bond Proceeds.....10

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01. Tax Covenants Relating to the Refunding Bonds.....11
Section 4.02. Defeasance11

**MULTIPLE SERIES
TRANSPORTATION REVENUE REFUNDING BOND
SUPPLEMENTAL RESOLUTION**

BE IT RESOLVED by the Metropolitan Transportation Authority (the “Issuer”),
as follows:

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01. Supplemental Resolution. This resolution is supplemental to, and is adopted in accordance with Article II and Article A-VIII of, a resolution of the Issuer adopted on March 26, 2002, entitled “General Resolution Authorizing Transportation Revenue Obligations” (the “Resolution”).

Section 1.02. Definitions.

1. All capitalized terms which are used but not otherwise defined in this Multiple Series Transportation Revenue Refunding Bond Supplemental Resolution (the “Supplemental Resolution”) shall have the same meanings, respectively, as such terms are given by Section 102 of the Resolution.

2. In this Supplemental Resolution:

“Authorized Officer” shall include the officers designated as such in the Resolution, and the Chairman and Chief Executive Officer, the Chair of the Finance Committee, the Vice Chairman, the Chief Financial Officer or the Director, Finance, as well as any officer duly designated as “Acting” in said officer’s capacity, except that, for the purposes of any delegation set forth herein that does not expressly include any Assistant Secretary, “Authorized Officer” shall not include any Assistant Secretary of the Issuer.

“Board” shall mean the members of the Issuer acting as such pursuant to the provisions of the Issuer Act.

“Bond Counsel” shall mean Hawkins Delafield & Wood LLP, Nixon Peabody LLP or any other attorney or firm of attorneys of nationally recognized standing in the field of law relating to the issuance of obligations by state and municipal entities, selected by the Issuer.

“Code” shall mean the Internal Revenue Code of 1986, as amended, and regulations thereunder.

“Cross-Credit Obligations” shall mean indebtedness or other obligations issued or incurred by the Issuer or any other Related Entity as described in clause (iii) of the definition of “Capital Costs”, but excluding Obligations.

“Refunding Bonds” shall mean the Transportation Revenue Bonds authorized by Article II of this Supplemental Resolution in one or more Series or subseries.

Section 1.03. Authority for this Supplemental Resolution. This Supplemental Resolution is adopted pursuant to the provisions of the Issuer Act and the Resolution.

ARTICLE II

AUTHORIZATION OF REFUNDING BONDS

Section 2.01. Authorized Principal Amount, Designation and Series. 1. Pursuant to the provisions of the Resolution and in order to issue (a) Refunding Obligations, and (b) Obligations for the purpose of refunding Cross-Credit Obligations, multiple Series of Transportation Revenue Obligations (which may be issued at one time or from time to time in any number of Series or subseries, which for purposes of this Supplemental Resolution shall collectively be referred to herein as the “Refunding Bonds”, subject to redesignation as hereinafter provided) entitled to the benefit, protection and security of such provisions are hereby authorized to be issued in an aggregate principal amount not exceeding the principal amount necessary so that, after giving effect to any net original issue discount or premium and underwriters’ discount from the principal amount, the amount to be deposited in the Proceeds Account pursuant to, or otherwise applied to effectuate the purposes of, Section 2.02 and Section 3.01 of this Supplemental Resolution (exclusive of the amount so deposited therein determined in any Certificate of Determination as estimated to be necessary to pay any Costs of Issuance of the Refunding Bonds payable from such Proceeds Account or otherwise applied to pay such Costs of Issuance), shall not exceed the amount or amounts determined in one or more Certificates of Determination to be necessary to effectuate the purposes set forth in Section 2.02 hereof; provided, however, that any Refunding Bonds issued pursuant to this Supplemental Resolution shall be issued in compliance with any Board policies relating to the issuance of refunding bonds as may be in effect from time to time.

2. Nothing in this Supplemental Resolution is intended to preclude the issuance of Refunding Bonds as refunding obligations in accordance with Section 203 of the Resolution.

Refunding Bonds shall be designated as, and shall be distinguished from the Obligations of all other Series by the title, “Transportation Revenue Bonds, Series [insert calendar year of issuance]” or such other title or titles set forth in the related Certificate of Determination.

The authority to issue Obligations and take related actions granted under previous resolutions of the Issuer shall continue in full force and effect. The authorization to issue the Refunding Bonds and take other related actions hereunder shall continue in effect without any further action by the Issuer until the adoption by the MTA Board of a subsequent refunding bond supplemental resolution relating to 2016 refundings.

Section 2.02. Purposes. The purposes for which the Refunding Bonds are issued shall be set forth in one or more Certificates of Determination and may include the refunding, restructuring or payment, including by purchasing, exchanging or tendering therefor, of all or any portion of any Outstanding Obligations or Parity Debt or Cross-Credit Obligations deemed advisable by an Authorized Officer in accordance with Section 203 or 204 of the Resolution, as applicable.

Section 2.03. Dates, Maturities, Principal Amounts and Interest. The Refunding Bonds, except as otherwise provided in the Resolution, shall be dated the date or dates determined in the related Certificate of Determination. The Refunding Bonds shall mature on the date or dates and in the year or years and principal amount or amounts, and shall bear interest at the rate or rates per annum, if any, specified in or determined in the manner provided in the related Certificate of Determination.

Section 2.04. Interest Payments. The Refunding Bonds shall bear interest from their date or dates and be payable on such date or dates as may be determined pursuant to the related Certificate of Determination. Except as otherwise provided in the related Certificate of Determination, interest on the Refunding Bonds shall be computed on the basis of twelve 30-day months and a 360-day year.

Section 2.05. Denominations, Numbers and Letters. Unless otherwise provided in the related Certificate of Determination, the Refunding Bonds shall be issued in fully registered form without coupons in the denomination of \$5,000 or any integral multiple thereof.

The Refunding Bonds shall be lettered and numbered as provided in the related Certificate of Determination.

Section 2.06. Places of Payment and Paying Agent. Except as otherwise provided in the related Certificate of Determination, principal and Redemption Price of the Refunding Bonds shall be payable to the registered owner of each Refunding Bond when due upon presentation of such Refunding Bond at the principal corporate trust office of the Trustee. Except as otherwise provided in the related Certificate of Determination, interest on the registered Refunding Bonds will be paid by check or draft mailed on the interest payment date by the Paying Agent, to the registered owner at his address as it appears on the registration books or, at the option of any Owner of at least one million dollars (\$1,000,000) in principal amount of the Refunding Bonds, by wire transfer in immediately available funds on each interest payment date to such Owner thereof upon written notice from such Owner to the Trustee, at such address as the Trustee may from time to time notify such Owner, containing the wire transfer address (which shall be in the continental United States) to which such Owner wishes to have such wire directed, if such written notice is received not less than twenty (20) days prior to the related interest payment date (such notice may refer to multiple interest payments).

Section 2.07. Sinking Fund Installments. The Refunding Bonds, if any, determined in the related Certificate of Determination shall be subject to redemption (a) in part, by lot, (b) pro rata (in the case of taxable Refunding Bonds), or (c) otherwise as determined in accordance with Section A-404 of the Resolution, as set forth in the Certificate of Determination, on each date in the year or years determined in the Certificate of Determination at the principal amount thereof plus accrued interest up to but not including the date of redemption thereof, from mandatory Sinking Fund Installments which are required to be made in amounts sufficient to redeem on each such date the principal amount of such Refunding Bonds.

Section 2.08. Redemption Prices and Terms. The Refunding Bonds may also be subject to redemption prior to maturity, at the option of the Issuer, upon notice as provided in Article A-IV of the Resolution, at any time as a whole or in part (and by lot within a maturity, or

otherwise as determined in accordance with Section A-404 of the Resolution, if less than all of a maturity is to be redeemed), from maturities designated by the Issuer on and after the date and in the years and at the Redemption Prices (expressed as a percentage of principal amount) determined in the related Certificate of Determination, plus accrued interest up to but not including the redemption date. Notwithstanding the foregoing, in the case of taxable Refunding Bonds, if set forth in the Certificate of Determination, the taxable Refunding Bonds may be made subject to pro rata redemption and/or a make-whole redemption premium.

Section 2.09. Delegation to an Authorized Officer. 1. There is hereby delegated to each Authorized Officer, subject to the limitations contained in this Supplemental Resolution, the following powers with respect to the Refunding Bonds:

(a) to determine whether and when to issue any Refunding Bonds constituting Refunding Obligations or Obligations issued to refund Cross-Credit Obligations, and to determine the amount of the proceeds of the Refunding Bonds to be applied to refunding purposes as well as the specific Obligations or Parity Debt or Cross-Credit Obligations, or portions of either to be refunded and the date or dates, if any, on which such refunded obligations shall be redeemed, and the amount of the proceeds of the Refunding Bonds estimated to be necessary to pay the Costs of Issuance of the Refunding Bonds;

(b) to determine the purpose or purposes for which the Refunding Bonds are being issued, which shall be one or more of the purposes set forth in Section 2.02 of this Supplemental Resolution;

(c) to determine the principal amounts of the Refunding Bonds to be issued for the purposes set forth in Section 2.02 of this Supplemental Resolution and whether such principal amounts constitute a separate Series or a subseries of Refunding Bonds, and to determine Accreted Values and Appreciated Values, if applicable;

(d) to determine the maturity date and principal amount of each maturity of the Refunding Bonds and the amount and due date of each Sinking Fund Installment, if any;

(e) to determine the date or dates which the Refunding Bonds shall be dated and the interest rate or rates of the Refunding Bonds or the manner of determining such interest rate or rates; provided, however, that any Obligations issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 10% per annum, any Obligations issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 12% per annum, any Variable Interest Rate Obligations issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 15% per annum, any Variable Interest Rate Obligations issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 18% per annum and any Parity Reimbursement Obligations shall be subject to a maximum interest rate of not greater than 25% per annum, or, in each such case, such higher rate or rates as determined by the Issuer's Board;

(f) to determine the Redemption Price or Redemption Prices, if any, and the redemption terms, if any, for the Refunding Bonds; provided, however, that if the Refunding Bonds are to be redeemable at the election of the Issuer, the Redemption Price (except in the case

of taxable Refunding Bonds) shall not be greater than one hundred three percent (103%) of the principal amount of the Refunding Bonds to be redeemed, plus accrued interest thereon up to but not including the date of redemption and in the case of taxable Refunding Bonds any provisions relating to pro rata redemption and/or make-whole redemption;

(g) to determine whether the sale of the Refunding Bonds shall be conducted on either a negotiated or competitive bid basis and, as applicable, to determine the purchase price for the Refunding Bonds to be paid by the purchaser or purchasers referred to in one or more Purchase Agreements or a bank direct purchase agreement, or the purchase price for the Refunding Bonds to be paid by the winning bidder, if such sale is conducted by competitive bid pursuant to a Notice of Sale, in either case as such document is described in Section 2.10 of this Supplemental Resolution, which may include such original issue discount and original issue premium as shall be determined in the related Certificate of Determination; provided, however, that the underwriters' discount reflected in such purchase price shall not exceed \$10.00 for each one thousand dollars (\$1,000) principal amount of the Refunding Bonds;

(h) to take all actions required for the Refunding Bonds to be eligible under the rules and regulations of The Depository Trust Company ("DTC") for investment and trading as uncertificated securities, to execute and deliver a standard form of letter of representation with DTC and, notwithstanding any provisions to the contrary contained in this Supplemental Resolution, to include in the related Certificate of Determination such terms and provisions as may be appropriate or necessary to provide for uncertificated securities in lieu of Refunding Bonds issuable in fully registered form;

(i) to determine whether to issue all or any portion of the Refunding Bonds as Tax-Exempt Obligations, Taxable Obligations, Put Obligations, Variable Interest Rate Obligations or as any other form of Obligations permitted by the Resolution and any matters related thereto, including (i) the terms and provisions of any such Obligations, (ii) the selection of remarketing agents, tender agents, auction agents, dealers, calculation agents, bidding agents or any other agents or parties to ancillary arrangements and the terms of any such arrangements, and (iii) the methods for determining the accrual of Debt Service;

(j) to determine the advisability, as compared to an unenhanced transaction, of obtaining one or more Credit Facilities, to select a provider or providers thereof and to determine and accept the terms and provisions and price thereof, to determine such other matters related thereto as in the opinion of the officer executing the related Certificate of Determination shall be considered necessary or appropriate and to effect such determinations by making any changes in or additions to this Supplemental Resolution required by Credit Facility providers, if any, or required by a Rating Agency in order to attain or maintain specific ratings on the Refunding Bonds, or relating to the mechanisms for the repayment of amounts advanced thereunder or payment of fees, premiums, expenses or any other amounts, notices, the provision of information, and such other matters of a technical, mechanical, procedural or descriptive nature necessary or appropriate to obtain or implement a Credit Facility with respect to the Refunding Bonds, and to make any changes in connection therewith;

(k) to make such changes in or from the form of this Supplemental Resolution as may be necessary or desirable in order to cure any ambiguities, inconsistencies or other defects;

(l) to determine whether to (i) enter into an escrow agreement or other arrangement in connection with the issuance of Refunding Bonds, including the selection of escrow agents, verification agents and the manner of determining specified matters relating to the defeasance of the refunded obligations and (ii) purchase SLGs or open market securities and the form and substance thereof and any related investment agreement, and to determine the application of any amounts released in connection with any such refunding;

(m) to determine that such Refunding Bonds comply with all Board policies relating to the issuance of refunding obligations in effect at the time of such determination; and

(n) to determine such other matters specified in or permitted by (i) Sections 202, 203, 204 and A-201 of the Resolution or (ii) this Supplemental Resolution, or to determine matters relating to the payment or defeasance of Obligation Anticipation Notes, including preparation of any documentation therefor.

2. Any Authorized Officer shall execute one or more Certificates of Determination evidencing the determinations made pursuant to this Supplemental Resolution and any such Certificate of Determination shall be conclusive evidence of the determinations of such Authorized Officer, as stated therein. More than one Certificate of Determination may be delivered to the extent more than one Series or subseries of Refunding Bonds are delivered from time to time, or other authority is exercised under this Supplemental Resolution from time to time and each such Certificate of Determination shall be delivered to the Trustee prior to the authentication and delivery of the respective Series or subseries of Refunding Bonds by the Trustee or other documentation. Determinations set forth in any Certificate of Determination shall have the same effect as if set forth in this Supplemental Resolution. Any such Authorized Officer may exercise any authority delegated under this Supplemental Resolution from time to time following issuance of any Refunding Bonds, as appropriate for any purposes, including, in order to change interest rate modes or auction periods, if any Refunding Bonds shall consist of multiple subseries, to change the principal amounts and number of the individual subseries or to combine all subseries into a single Series, if any Refunding Bonds consist of a single Series, to divide such Series into two or more subseries and to determine the principal amount of such subseries, obtain a substitute or additional Credit Facility, enter into a bank direct purchase agreement or similar instrument, or to appoint new or additional agents or other parties deemed appropriate to a particular form or mode of Obligation or manner of sale.

Section 2.10. Sale of Refunding Bonds. If it is determined that any sale of Bonds shall be conducted on a negotiated basis, each Authorized Officer is hereby authorized to sell and award the Refunding Bonds to the purchasers who shall be on the list of underwriters then approved by the Issuer and shall be referred to in the Purchase Agreement or Agreements, which Purchase Agreement or Agreements shall be substantially in the form most recently executed or delivered by the Issuer in connection with the sale or remarketing of Obligations, with such revisions to reflect the terms and provisions of the Refunding Bonds as may be approved by the officer executing the Purchase Agreement (each, a "Purchase Agreement").

Each Authorized Officer is hereby authorized to agree to the selection of the representative of the underwriters as referred to in the Purchase Agreement or Agreements and to execute and deliver the Purchase Agreement or Agreements for and on behalf and in the name of the Issuer with such changes, omissions, insertions and revisions as may be approved by the officer executing the Purchase Agreement or Agreements, said execution being conclusive evidence of such approval and concurrence in the selection of the representative of the underwriters.

If it is determined that any sale of Bonds shall be conducted on a competitive bid basis, each Authorized Officer is hereby further authorized to conduct the sale and award of the Refunding Bonds on the basis of a competitive bid, pursuant to the terms of a notice of sale, including bid form (the "Notice of Sale"), in a form, including any limitations on permitted bidders and a description of the basis for determining the winning bidder or bidders, determined by such Authorized Officer. Each Authorized Officer is hereby authorized to conduct such competitive sale of the Refunding Bonds in a manner consistent with this Supplemental Resolution and to utilize the services of the Authority's financial advisor and the services of an electronic bidding service, as such Authorized Officer shall determine, and the execution by such Authorized Officer of a letter of award shall be conclusive evidence of such award.

Each Authorized Officer is hereby authorized to make public and to authorize the use and distribution by said purchasers or other appropriate parties of a preliminary official statement, offering circular, or other disclosure document (the "Preliminary Official Statement") in connection with each public offering or any private placement of the Refunding Bonds, in substantially the form most recently executed or delivered by the Issuer in connection with the sale of Obligations, with such changes, omissions, insertions and revisions as such officer shall deem advisable. The Issuer authorizes any of said officers to deliver a certification to the effect that such Preliminary Official Statement or Official Statement, if deemed necessary or appropriate, together with such other documents, if any, described in such certificate, was deemed final as of its date for purposes of Rule 15c2-12 of the Securities and Exchange Commission as applicable.

Each Authorized Officer is hereby authorized to make public and to authorize distribution of a final Official Statement in substantially the form of each Preliminary Official Statement or the most recently executed and delivered Official Statement if there is not a Preliminary Official Statement, with such changes, omissions, insertions and revisions as such officer shall deem advisable, to sign such Official Statement and to deliver such Official Statement to the purchasers of such issue of the Refunding Bonds, such execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

Each Authorized Officer is hereby authorized to execute and deliver for and on behalf and in the name of the Issuer, to the extent determined by such Authorized Officer to be necessary or convenient, a Continuing Disclosure Agreement, substantially in the form appended to the Purchase Agreement or Notice of Sale, with such changes, omissions, insertions and revisions as such officer shall deem advisable (the "Continuing Disclosure Agreement"), said execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

The proceeds of each good faith check, if any, received by the Issuer from the purchasers of each issue of Refunding Bonds under the terms of the related Purchase Agreement or Notice of Sale may be invested by the Issuer pending application of the proceeds of such good faith check for the purposes provided in Section 2.02 of this Supplemental Resolution at the time of the issuance and delivery of such Refunding Bonds.

Each Authorized Officer (including any Assistant Secretary of the Issuer) is hereby authorized and directed to execute, deliver, amend, replace or terminate any and all documents and instruments (including any remarketing agreements, tender agency agreements, dealer agreements, broker-dealer agreements, tender agent agreements, or auction agency agreements, any escrow agreements, any investment agreements or arrangements, or any reimbursement agreements or documents or instruments relating to a Credit Facility deemed appropriate to a given form or mode of an Obligation) and to do and cause to be done any and all acts necessary or proper for carrying out each Purchase Agreement or Notice of Sale, each Continuing Disclosure Agreement, the terms of any Credit Facility or other such agreement or arrangement, and the issuance, sale and delivery of each issue of the Refunding Bonds and for implementing the terms of each issue of the Refunding Bonds and the transactions contemplated hereby or thereby.

When reference is made in this Supplemental Resolution to the authorization of an Authorized Officer to do any act, such act may be accomplished by any of such officers individually.

Section 2.11. Forms of Refunding Bonds and Trustee's Authentication Certificate. Subject to the provisions of the Resolution, the form of registered Refunding Bonds, and the Trustee's certificate of authentication, shall be substantially in the form set forth in Exhibit One to the Resolution including, if necessary, any changes to comply with the requirements of DTC or the provisions of this Supplemental Resolution or any Certificate of Determination.

Section 2.12. Appointment of Trustee and Paying Agent. Unless otherwise provided by Certificate of Determination, The Bank of New York Mellon, as successor in interest to JPMorgan Chase Bank, N.A. shall be the Trustee under the Resolution and the Paying Agent for the Refunding Bonds.

ARTICLE III

DISPOSITION OF REFUNDING BOND PROCEEDS

Section 3.01. Disposition of Refunding Bond Proceeds. Any proceeds of the sale of the Refunding Bonds, other than accrued interest, if any, shall be deposited, simultaneously with the issuance and delivery of the Refunding Bonds, at one time or from time to time in one or more Series or subseries, in the Proceeds Account which is deemed to be established for each Series in the Proceeds Fund to be applied, or shall otherwise be applied pursuant to a Certificate of Determination to:

(a) the refunding of any Obligations, Parity Debt or Cross-Credit Obligations, or portions of any of them, in accordance with Section 2.02 hereof; and

(b) the balance of such proceeds, exclusive of accrued interest, shall be deposited in the Costs of Issuance Account and applied to the payment of Costs of Issuance or otherwise applied to the payment of Costs of Issuance.

Unless otherwise provided in a Certificate of Determination, the accrued interest, if any, and any capitalized interest received on the sale of the Refunding Bonds shall be deposited in the Debt Service Fund.

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01. Tax Covenants Relating to the Refunding Bonds. The Issuer covenants that, in order to maintain the exclusion from gross income for Federal income tax purposes of the interest on the Refunding Bonds issued as Tax-Exempt Obligations, the Issuer will satisfy, or take such actions as are necessary to cause to be satisfied, each provision of the Code necessary to maintain such exclusion. In furtherance of this covenant, the Issuer agrees to comply with such written instructions as may be provided by Bond Counsel. In furtherance of the covenant contained in the preceding sentence, the Issuer agrees to continually comply with the provisions of any "Arbitrage and Use of Proceeds Certificate" or "Tax Certificate" to be executed by the Issuer in connection with the execution and delivery of any Refunding Bonds issued as Tax-Exempt Obligations, as amended from time to time.

Notwithstanding any other provision of the Resolution to the contrary, upon the Issuer's failure to observe, or refusal to comply with, the above covenant (a) the Owners of the Refunding Bonds, or the Trustee acting on their behalf, shall be entitled to the rights and remedies provided to Owners or the Trustee under Section 702 of the Resolution, and (b) neither the Owners of the Obligations of any Series or holders of any Parity Debt (other than the Refunding Bonds or the Trustee acting on their behalf), nor the Trustee acting on their behalf, shall be entitled to exercise any right or remedy provided to the Owners, the Parity Debt holders or the Trustee under the Resolution based upon the Issuer's failure to observe, or refusal to comply with, the above covenant.

The provisions of the foregoing covenants set forth in this Section shall not apply to any Refunding Bonds, including any subseries thereof, which the Issuer determines pursuant to the applicable Certificate of Determination to issue as Taxable Obligations.

Section 4.02. Defeasance. In the event the Issuer shall seek, prior to the maturity or redemption date thereof, to pay or cause to be paid, within the meaning and with the effect expressed in the Resolution, all or less than all Outstanding Refunding Bonds issued as Tax-Exempt Obligations and the provisions of Section 4.01 hereof shall then be of any force or effect, then, notwithstanding the provisions of Article A-XI of the Resolution, the Refunding Bonds issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid shall not be deemed to have been paid within the meaning and with the effect expressed in Section A-1101 of the Resolution unless (i) the Issuer has confirmed in writing that the Owners of the Refunding Bonds issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid will continue, after such action, to have the benefit of a covenant to the effect of the covenant of the Issuer contained in Section 4.01 hereof or (ii) there shall have been delivered to the Trustee an Opinion of Bond Counsel to the effect that non-compliance thereafter with the applicable provisions of the Code will not affect the then current treatment of interest on the Refunding Bonds issued as Tax-Exempt Obligations in determining gross income for Federal income tax purposes.

METROPOLITAN TRANSPORTATION AUTHORITY

**MULTIPLE SERIES
DEDICATED TAX FUND REFUNDING BOND
SUPPLEMENTAL RESOLUTION**

Adopted December 17, 2014

TABLE OF CONTENTS

Page

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01. Supplemental Resolution..... 1
Section 1.02. Definitions..... 1
Section 1.03. Authority for this Supplemental Resolution..... 1

ARTICLE II

AUTHORIZATION OF REFUNDING BONDS

Section 2.01. Authorized Principal Amount, Designation and Series..... 2
Section 2.02. Purposes 2
Section 2.03. Dates, Maturities, Principal Amounts and Interest..... 2
Section 2.04. Interest Payments 2
Section 2.05. Denominations, Numbers and Letters 3
Section 2.06. Places of Payment and Paying Agent..... 3
Section 2.07. Sinking Fund Installments..... 3
Section 2.08. Redemption Prices and Terms..... 3
Section 2.09. Delegation to an Authorized Officer 3
Section 2.10. Sale of Refunding Bonds..... 6
Section 2.11. Forms of Refunding Bonds and Trustee’s Authentication Certificate 7
Section 2.12. Appointment of Trustee and Paying Agent 7

ARTICLE III

DISPOSITION OF REFUNDING BOND PROCEEDS

Section 3.01. Disposition of Refunding Bond Proceeds 8

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01. Tax Covenants Relating to the Refunding Bonds 9
Section 4.02. Defeasance 9

**MULTIPLE SERIES
DEDICATED TAX FUND REFUNDING BOND
SUPPLEMENTAL RESOLUTION**

BE IT RESOLVED by the Metropolitan Transportation Authority (the “Issuer”), as follows:

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01. Supplemental Resolution. This resolution is supplemental to, and is adopted in accordance with Article II and Article A-VIII of, a resolution of the Issuer adopted on March 26, 2002, entitled “Dedicated Tax Fund Obligation Resolution” (the “Resolution”).

Section 1.02. Definitions.

1. All capitalized terms which are used but not otherwise defined in this Multiple Series Dedicated Tax Fund Refunding Bond Supplemental Resolution (the “Supplemental Resolution”) shall have the same meanings, respectively, as such terms are given by Section 102 of the Resolution.

2. In this Supplemental Resolution:

“Authorized Officer” shall include the officers designated as such in the Resolution, and the Chairman and Chief Executive Officer, the Chair of the Finance Committee, the Vice Chairman, the Chief Financial Officer or the Director, Finance, as well as any officer duly designated as “Acting” in said officer’s capacity, except that, for the purposes of any delegation set forth herein that does not expressly include any Assistant Secretary, “Authorized Officer” shall not include any Assistant Secretary of the Issuer.

“Board” shall mean the members of the Issuer acting as such pursuant to the provisions of the Issuer Act.

“Bond Counsel” shall mean Hawkins Delafield & Wood LLP, Nixon Peabody LLP or any other attorney or firm of attorneys of nationally recognized standing in the field of law relating to the issuance of obligations by state and municipal entities, selected by the Issuer.

“Code” shall mean the Internal Revenue Code of 1986, as amended, and regulations thereunder.

“Cross-Credit Obligations” shall mean indebtedness or other obligations issued or incurred by the Issuer or any other Related Entity as described in clause (iii) of the definition of “Capital Costs”, but excluding Obligations.

“Refunding Bonds” shall mean the Dedicated Tax Fund Bonds authorized by Article II of this Supplemental Resolution in one or more Series or subseries.

Section 1.03. Authority for this Supplemental Resolution. This Supplemental Resolution is adopted pursuant to the provisions of the Issuer Act and the Resolution.

ARTICLE II

AUTHORIZATION OF REFUNDING BONDS

Section 2.01. Authorized Principal Amount, Designation and Series. 1. Pursuant to the provisions of the Resolution and in order to issue (a) Refunding Obligations, and (b) Obligations for the purpose of refunding Cross-Credit Obligations, multiple Series of Dedicated Tax Fund Obligations (which may be issued at one time or from time to time in any number of Series or subseries, which for purposes of this Supplemental Resolution shall collectively be referred to herein as the “Refunding Bonds”, subject to redesignation as hereinafter provided) entitled to the benefit, protection and security of such provisions are hereby authorized to be issued in an aggregate principal amount not exceeding the principal amount necessary so that, after giving effect to any net original issue discount or premium and underwriters’ discount from the principal amount, the amount to be deposited in the Proceeds Account pursuant to, or otherwise applied to effectuate the purposes of, Section 2.02 and Section 3.01 of this Supplemental Resolution (exclusive of the amount so deposited therein determined in any Certificate of Determination as estimated to be necessary to pay any Costs of Issuance of the Refunding Bonds payable from such Proceeds Account or otherwise applied to pay such Costs of Issuance), shall not exceed the amount or amounts determined in one or more Certificates of Determination to be necessary to effectuate the purposes set forth in Section 2.02 hereof; provided, however, that any Refunding Bonds issued pursuant to this Supplemental Resolution shall be issued in compliance with any Board policies relating to the issuance of refunding bonds as may be in effect from time to time.

2. Nothing in this Supplemental Resolution is intended to preclude the issuance of Refunding Bonds as refunding obligations in accordance with Section 203 of the Resolution.

Refunding Bonds shall be designated as, and shall be distinguished from the Obligations of all other Series by the title, “Dedicated Tax Fund Bonds, Series [insert calendar year of issuance]” or such other title or titles set forth in the related Certificate of Determination.

The authority to issue Obligations and take related actions granted under previous resolutions of the Issuer shall continue in full force and effect. The authorization to issue the Refunding Bonds and take other related actions hereunder shall continue in effect without any further action by the Issuer until the adoption by the MTA Board of a subsequent refunding bond supplemental resolution relating to 2016 refundings.

Section 2.02. Purposes. The purposes for which the Refunding Bonds are issued shall be set forth in one or more Certificates of Determination and may include the refunding, restructuring or payment, including by purchasing, exchanging or tendering therefor, of all or any portion of any Outstanding Obligations or Parity Debt or Cross-Credit Obligations deemed advisable by an Authorized Officer in accordance with Section 203 or 204 of the Resolution, as applicable.

Section 2.03. Dates, Maturities, Principal Amounts and Interest. The Refunding Bonds, except as otherwise provided in the Resolution, shall be dated the date or dates determined in the related Certificate of Determination. The Refunding Bonds shall mature on the date or dates and in the year or years and principal amount or amounts, and shall bear interest at the rate or rates per annum, if any, specified in or determined in the manner provided in the related Certificate of Determination.

Section 2.04. Interest Payments. The Refunding Bonds shall bear interest from their date or dates and be payable on such date or dates as may be determined pursuant to the related Certificate of Determination. Except as otherwise provided in the related Certificate of Determination,

interest on the Refunding Bonds shall be computed on the basis of twelve 30-day months and a 360-day year.

Section 2.05. Denominations, Numbers and Letters. Unless otherwise provided in the related Certificate of Determination, the Refunding Bonds shall be issued in fully registered form without coupons in the denomination of \$5,000 or any integral multiple thereof.

The Refunding Bonds shall be lettered and numbered as provided in the related Certificate of Determination.

Section 2.06. Places of Payment and Paying Agent. Except as otherwise provided in the related Certificate of Determination, principal and Redemption Price of the Refunding Bonds shall be payable to the registered owner of each Refunding Bond when due upon presentation of such Refunding Bond at the principal corporate trust office of the Trustee. Except as otherwise provided in the related Certificate of Determination, interest on the registered Refunding Bonds will be paid by check or draft mailed on the interest payment date by the Paying Agent, to the registered owner at his address as it appears on the registration books or, at the option of any Owner of at least one million dollars (\$1,000,000) in principal amount of the Refunding Bonds, by wire transfer in immediately available funds on each interest payment date to such Owner thereof upon written notice from such Owner to the Trustee, at such address as the Trustee may from time to time notify such Owner, containing the wire transfer address (which shall be in the continental United States) to which such Owner wishes to have such wire directed, if such written notice is received not less than twenty (20) days prior to the related interest payment date (such notice may refer to multiple interest payments).

Section 2.07. Sinking Fund Installments. The Refunding Bonds, if any, determined in the related Certificate of Determination shall be subject to redemption (a) in part, by lot, (b) pro rata (in the case of taxable Refunding Bonds), or (c) otherwise as determined in accordance with Section A-404 of the Resolution, as set forth in the Certificate of Determination, on each date in the year or years determined in the Certificate of Determination at the principal amount thereof plus accrued interest up to but not including the date of redemption thereof, from mandatory Sinking Fund Installments which are required to be made in amounts sufficient to redeem on each such date the principal amount of such Refunding Bonds.

Section 2.08. Redemption Prices and Terms. The Refunding Bonds may also be subject to redemption prior to maturity, at the option of the Issuer, upon notice as provided in Article A-IV of the Resolution, at any time as a whole or in part (and by lot within a maturity, or otherwise as determined in accordance with Section A-404 of the Resolution, if less than all of a maturity is to be redeemed), from maturities designated by the Issuer on and after the date and in the years and at the Redemption Prices (expressed as a percentage of principal amount) determined in the related Certificate of Determination, plus accrued interest up to but not including the redemption date. Notwithstanding the foregoing, in the case of taxable Refunding Bonds, if set forth in the Certificate of Determination, the taxable Refunding Bonds may be made subject to pro rata redemption and/or a make-whole redemption premium.

Section 2.09. Delegation to an Authorized Officer. 1. There is hereby delegated to each Authorized Officer, subject to the limitations contained in this Supplemental Resolution, the following powers with respect to the Refunding Bonds:

(a) to determine whether and when to issue any Refunding Bonds constituting Refunding Obligations or Obligations issued to refund Cross-Credit Obligations, and to determine the amount of the proceeds of the Refunding Bonds to be applied to refunding purposes as well as the specific

Obligations or Parity Debt or Cross-Credit Obligations, or portions of either to be refunded and the date or dates, if any, on which such refunded obligations shall be redeemed, and the amount of the proceeds of the Refunding Bonds estimated to be necessary to pay the Costs of Issuance of the Refunding Bonds;

(b) to determine the purpose or purposes for which the Refunding Bonds are being issued, which shall be one or more of the purposes set forth in Section 2.02 of this Supplemental Resolution;

(c) to determine the principal amounts of the Refunding Bonds to be issued for the purposes set forth in Section 2.02 of this Supplemental Resolution and whether such principal amounts constitute a separate Series or a subseries of Refunding Bonds, and to determine Accreted Values and Appreciated Values, if applicable;

(d) to determine the maturity date and principal amount of each maturity of the Refunding Bonds and the amount and due date of each Sinking Fund Installment, if any;

(e) to determine the date or dates which the Refunding Bonds shall be dated and the interest rate or rates of the Refunding Bonds or the manner of determining such interest rate or rates; provided, however, that any Obligations issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 10% per annum, any Obligations issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 12% per annum, any Variable Interest Rate Obligations issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 15% per annum, any Variable Interest Rate Obligations issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 18% per annum and any Parity Reimbursement Obligations shall be subject to a maximum interest rate of not greater than 25% per annum, or, in each such case, such higher rate or rates as determined by the Issuer's Board;

(f) to determine the Redemption Price or Redemption Prices, if any, and the redemption terms, if any, for the Refunding Bonds; provided, however, that if the Refunding Bonds are to be redeemable at the election of the Issuer, the Redemption Price (except in the case of taxable Refunding Bonds) shall not be greater than one hundred three percent (103%) of the principal amount of the Refunding Bonds to be redeemed, plus accrued interest thereon up to but not including the date of redemption and in the case of taxable Refunding Bonds any provisions relating to pro rata redemption and/or make whole redemption;

(g) to determine whether the sale of the Refunding Bonds shall be conducted on either a negotiated or competitive bid basis and, as applicable, to determine the purchase price for the Refunding Bonds to be paid by the purchaser or purchasers referred to in one or more Purchase Agreements or a bank direct purchase agreement, or the purchase price for the Refunding Bonds to be paid by the winning bidder, if such sale is conducted by competitive bid pursuant to a Notice of Sale, in either case as such document is described in Section 2.10 of this Supplemental Resolution, which may include such original issue discount and original issue premium as shall be determined in the related Certificate of Determination; provided, however, that the underwriters' discount reflected in such purchase price shall not exceed \$10.00 for each one thousand dollars (\$1,000) principal amount of the Refunding Bonds;

(h) to take all actions required for the Refunding Bonds to be eligible under the rules and regulations of The Depository Trust Company ("DTC") for investment and trading as uncertificated securities, to execute and deliver a standard form of letter of representation with DTC and, notwithstanding any provisions to the contrary contained in this Supplemental Resolution, to include in

the related Certificate of Determination such terms and provisions as may be appropriate or necessary to provide for uncertificated securities in lieu of Refunding Bonds issuable in fully registered form;

(i) to determine whether to issue all or any portion of the Refunding Bonds as Tax-Exempt Obligations, Taxable Obligations, Put Obligations, Variable Interest Rate Obligations or as any other form of Obligations permitted by the Resolution and any matters related thereto, including (i) the terms and provisions of any such Obligations, (ii) the selection of remarketing agents, tender agents, auction agents, dealers, calculation agents, bidding agents or any other agents or parties to ancillary arrangements and the terms of any such arrangements, and (iii) the methods for determining the accrual of Debt Service;

(j) to determine the advisability, as compared to an unenhanced transaction, of obtaining one or more Credit Facilities, to select a provider or providers thereof and to determine and accept the terms and provisions and price thereof, to determine such other matters related thereto as in the opinion of the officer executing the related Certificate of Determination shall be considered necessary or appropriate and to effect such determinations by making any changes in or additions to this Supplemental Resolution required by Credit Facility providers, if any, or required by a Rating Agency in order to attain or maintain specific ratings on the Refunding Bonds, or relating to the mechanisms for the repayment of amounts advanced thereunder or payment of fees, premiums, expenses or any other amounts, notices, the provision of information, and such other matters of a technical, mechanical, procedural or descriptive nature necessary or appropriate to obtain or implement a Credit Facility with respect to the Refunding Bonds, and to make any changes in connection therewith;

(k) to make such changes in or from the form of this Supplemental Resolution as may be necessary or desirable in order to cure any ambiguities, inconsistencies or other defects;

(l) to determine whether to (i) enter into an escrow agreement or other arrangement in connection with the issuance of Refunding Bonds, including the selection of escrow agents, verification agents and the manner of determining specified matters relating to the defeasance of the refunded obligations and (ii) purchase SLGs or open market securities and the form and substance thereof and any related investment agreement, and to determine the application of any amounts released in connection with any such refunding;

(m) to determine that such Refunding Bonds comply with all Board policies relating to the issuance of refunding obligations in effect at the time of such determination; and

(n) to determine such other matters specified in or permitted by (i) Sections 202, 203, 204 and A-201 of the Resolution or (ii) this Supplemental Resolution, or to determine matters relating to the payment or defeasance of Obligation Anticipation Notes, including preparation of any documentation therefor.

2. Any Authorized Officer shall execute one or more Certificates of Determination evidencing the determinations made pursuant to this Supplemental Resolution and any such Certificate of Determination shall be conclusive evidence of the determinations of such Authorized Officer, as stated therein. More than one Certificate of Determination may be delivered to the extent more than one Series or subseries of Refunding Bonds are delivered from time to time, or other authority is exercised under this Supplemental Resolution from time to time and each such Certificate of Determination shall be delivered to the Trustee prior to the authentication and delivery of the respective Series or subseries of Refunding Bonds by the Trustee or other documentation. Determinations set forth in any Certificate of Determination shall have the same effect as if set forth in this Supplemental Resolution. Any such Authorized Officer may exercise any authority delegated under this Supplemental Resolution from time

to time following issuance of any Refunding Bonds, as appropriate for any purposes, including, in order to change interest rate modes or auction periods, if any Refunding Bonds shall consist of multiple subseries, to change the principal amounts and number of the individual subseries or to combine all subseries into a single Series, if any Refunding Bonds consist of a single Series, to divide such Series into two or more subseries and to determine the principal amount of such subseries, obtain a substitute or additional Credit Facility, enter into a bank direct purchase agreement or similar instrument or to appoint new or additional agents or other parties deemed appropriate to a particular form or mode of Obligation or manner of sale.

Section 2.10. Sale of Refunding Bonds. If it is determined that any sale of Bonds shall be conducted on a negotiated basis, each Authorized Officer is hereby authorized to sell and award the Refunding Bonds to the purchasers who shall be on the list of underwriters then approved by the Issuer and shall be referred to in the Purchase Agreement or Agreements, which Purchase Agreement or Agreements shall be substantially in the form most recently executed or delivered by the Issuer in connection with the sale or remarketing of Obligations, with such revisions to reflect the terms and provisions of the Refunding Bonds as may be approved by the officer executing the Purchase Agreement (each, a "Purchase Agreement"). Each Authorized Officer is hereby authorized to agree to the selection of the representative of the underwriters as referred to in the Purchase Agreement or Agreements and to execute and deliver the Purchase Agreement or Agreements for and on behalf and in the name of the Issuer with such changes, omissions, insertions and revisions as may be approved by the officer executing the Purchase Agreement or Agreements, said execution being conclusive evidence of such approval and concurrence in the selection of the representative of the underwriters.

If it is determined that any sale of Bonds shall be conducted on a competitive bid basis, each Authorized Officer is hereby further authorized to conduct the sale and award of the Refunding Bonds on the basis of a competitive bid, pursuant to the terms of a notice of sale, including bid form (the "Notice of Sale"), in a form, including any limitations on permitted bidders and a description of the basis for determining the winning bidder or bidders, determined by such Authorized Officer. Each Authorized Officer is hereby authorized to conduct such competitive sale of the Refunding Bonds in a manner consistent with this Supplemental Resolution and to utilize the services of the Authority's financial advisor and the services of an electronic bidding service, as such Authorized Officer shall determine, and the execution by such Authorized Officer of a letter of award shall be conclusive evidence of such award.

Each Authorized Officer is hereby authorized to make public and to authorize the use and distribution by said purchasers or other appropriate parties of a preliminary official statement, offering circular, or other disclosure document (the "Preliminary Official Statement") in connection with each public offering or any private placement of the Refunding Bonds, in substantially the form most recently executed or delivered by the Issuer in connection with the sale of Obligations, with such changes, omissions, insertions and revisions as such officer shall deem advisable. The Issuer authorizes any of said officers to deliver a certification to the effect that such Preliminary Official Statement or Official Statement, if deemed necessary or appropriate, together with such other documents, if any, described in such certificate, was deemed final as of its date for purposes of Rule 15c2-12 of the Securities and Exchange Commission as applicable.

Each Authorized Officer is hereby authorized to make public and to authorize distribution of a final Official Statement in substantially the form of each Preliminary Official Statement or the most recently executed and delivered Official Statement if there is not a Preliminary Official Statement, with such changes, omissions, insertions and revisions as such officer shall deem advisable, to sign such Official Statement and to deliver such Official Statement to the purchasers of such issue of the Refunding Bonds, such execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

Each Authorized Officer is hereby authorized to execute and deliver for and on behalf and in the name of the Issuer, to the extent determined by such Authorized Officer to be necessary or convenient, a Continuing Disclosure Agreement, substantially in the form appended to the Purchase Agreement or Notice of Sale, with such changes, omissions, insertions and revisions as such officer shall deem advisable (the "Continuing Disclosure Agreement"), said execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

The proceeds of each good faith check, if any, received by the Issuer from the purchasers of each issue of Refunding Bonds under the terms of the related Purchase Agreement or Notice of Sale may be invested by the Issuer pending application of the proceeds of such good faith check for the purposes provided in Section 2.02 of this Supplemental Resolution at the time of the issuance and delivery of such Refunding Bonds.

Each Authorized Officer (including any Assistant Secretary of the Issuer) is hereby authorized and directed to execute, deliver, amend, replace or terminate any and all documents and instruments (including any remarketing agreements, tender agency agreements, dealer agreements, broker-dealer agreements, tender agent agreements, or auction agency agreements, any escrow agreements, any investment agreements or arrangements, or any reimbursement agreements or documents or instruments relating to a Credit Facility deemed appropriate to a given form or mode of an Obligation) and to do and cause to be done any and all acts necessary or proper for carrying out each Purchase Agreement or Notice of Sale, each Continuing Disclosure Agreement, the terms of any Credit Facility or other such agreement or arrangement, and the issuance, sale and delivery of each issue of the Refunding Bonds and for implementing the terms of each issue of the Refunding Bonds and the transactions contemplated hereby or thereby.

When reference is made in this Supplemental Resolution to the authorization of an Authorized Officer to do any act, such act may be accomplished by any of such officers individually.

Section 2.11. Forms of Refunding Bonds and Trustee's Authentication Certificate.

Subject to the provisions of the Resolution, the form of registered Refunding Bonds, and the Trustee's certificate of authentication, shall be substantially in the form set forth in Exhibit One to the Resolution including, if necessary, any changes to comply with the requirements of DTC or the provisions of this Supplemental Resolution or any Certificate of Determination.

Section 2.12. Appointment of Trustee and Paying Agent. Unless otherwise provided by Certificate of Determination, The Bank of New York Mellon shall be the Trustee under the Resolution and the Paying Agent for the Refunding Bonds.

ARTICLE III

DISPOSITION OF REFUNDING BOND PROCEEDS

Section 3.01. Disposition of Refunding Bond Proceeds. Any proceeds of the sale of the Refunding Bonds, other than accrued interest, if any, shall be deposited, simultaneously with the issuance and delivery of the Refunding Bonds, at one time or from time to time in one or more Series or subseries, in the Proceeds Account which is deemed to be established for each Series in the Proceeds Fund to be applied, or shall otherwise be applied pursuant to a Certificate of Determination to:

(a) the refunding of any Obligations, Parity Debt or Cross-Credit Obligations, or portions of any of them, in accordance with Section 2.02 hereof; and

(b) the balance of such proceeds, exclusive of accrued interest, shall be deposited in the COI Account and applied to the payment of Costs of Issuance or otherwise applied to the payment of Costs of Issuance.

Unless otherwise provided in a Certificate of Determination, the accrued interest, if any, and any capitalized interest, received on the sale of the Refunding Bonds shall be deposited in the Debt Service Fund.

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01. Tax Covenants Relating to the Refunding Bonds. The Issuer covenants that, in order to maintain the exclusion from gross income for Federal income tax purposes of the interest on the Refunding Bonds issued as Tax-Exempt Obligations, the Issuer will satisfy, or take such actions as are necessary to cause to be satisfied, each provision of the Code necessary to maintain such exclusion. In furtherance of this covenant, the Issuer agrees to comply with such written instructions as may be provided by Bond Counsel. In furtherance of the covenant contained in the preceding sentence, the Issuer agrees to continually comply with the provisions of any "Arbitrage and Use of Proceeds Certificate" or "Tax Certificate" to be executed by the Issuer in connection with the execution and delivery of any Refunding Bonds issued as Tax-Exempt Obligations, as amended from time to time.

Notwithstanding any other provision of the Resolution to the contrary, upon the Issuer's failure to observe, or refusal to comply with, the above covenant (a) the Owners of the Refunding Bonds, or the Trustee acting on their behalf, shall be entitled to the rights and remedies provided to Owners or the Trustee under Section 702 of the Resolution, and (b) neither the Owners of the Obligations of any Series or holders of any Parity Debt (other than the Refunding Bonds or the Trustee acting on their behalf), nor the Trustee acting on their behalf, shall be entitled to exercise any right or remedy provided to the Owners, the Parity Debt holders or the Trustee under the Resolution based upon the Issuer's failure to observe, or refusal to comply with, the above covenant.

The provisions of the foregoing covenants set forth in this Section shall not apply to any Refunding Bonds, including any subseries thereof, which the Issuer determines pursuant to the applicable Certificate of Determination to issue as Taxable Obligations.

Section 4.02. Defeasance. In the event the Issuer shall seek, prior to the maturity or redemption date thereof, to pay or cause to be paid, within the meaning and with the effect expressed in the Resolution, all or less than all Outstanding Refunding Bonds issued as Tax-Exempt Obligations and the provisions of Section 4.01 hereof shall then be of any force or effect, then, notwithstanding the provisions of Article A-XI of the Resolution, the Refunding Bonds issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid shall not be deemed to have been paid within the meaning and with the effect expressed in Section A-1101 of the Resolution unless (i) the Issuer has confirmed in writing that the Owners of the Refunding Bonds issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid will continue, after such action, to have the benefit of a covenant to the effect of the covenant of the Issuer contained in Section 4.01 hereof or (ii) there shall have been delivered to the Trustee an Opinion of Bond Counsel to the effect that non-compliance thereafter with the applicable provisions of the Code will not affect the then current treatment of interest on the Refunding Bonds issued as Tax-Exempt Obligations in determining gross income for Federal income tax purposes.

TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY

**MULTIPLE SERIES
GENERAL REVENUE REFUNDING BOND
SUPPLEMENTAL RESOLUTION**

Adopted December 17, 2014

TABLE OF CONTENTS

Page

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01. Supplemental Resolution..... 1
Section 1.02. Definitions..... 1
Section 1.03. Authority for this Supplemental Resolution..... 1

ARTICLE II

AUTHORIZATION OF REFUNDING BONDS

Section 2.01. Authorized Principal Amount, Designation and Series..... 2
Section 2.02. Purposes 2
Section 2.03. Dates, Maturities, Principal Amounts and Interest..... 2
Section 2.04. Interest Payments 2
Section 2.05. Denominations, Numbers and Letters 3
Section 2.06. Places of Payment and Paying Agent..... 3
Section 2.07. Sinking Fund Installments..... 3
Section 2.08. Redemption Prices and Terms..... 3
Section 2.09. Delegation to an Authorized Officer 3
Section 2.10. Sale of Refunding Bonds..... 6
Section 2.11. Forms of Refunding Bonds and Trustee’s Authentication Certificate 7
Section 2.12. Appointment of Trustee and Paying Agent 7

ARTICLE III

DISPOSITION OF REFUNDING BOND PROCEEDS

Section 3.01. Disposition of Refunding Bond Proceeds 8

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01. Tax Covenants Relating to the Refunding Bonds 9
Section 4.02. Defeasance 9

**MULTIPLE SERIES
GENERAL REVENUE REFUNDING BOND
SUPPLEMENTAL RESOLUTION**

BE IT RESOLVED by the Triborough Bridge and Tunnel Authority (the “Issuer”), as follows:

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01. Supplemental Resolution. This resolution is supplemental to, and is adopted in accordance with Article II and Article A-VIII of, a resolution of the Issuer adopted on March 26, 2002, entitled “General Resolution Authorizing General Revenue Obligations” (the “Resolution”).

Section 1.02. Definitions.

1. All capitalized terms which are used but not otherwise defined in this Multiple Series General Revenue Refunding Bond Supplemental Resolution (the “Supplemental Resolution”) shall have the same meanings, respectively, as such terms are given by Section 102 of the Resolution.

2. In this Supplemental Resolution:

“Authorized Officer” shall include the officers designated as such in the Resolution, and the Chairman and Chief Executive Officer, the Chair of the Finance Committee, Vice Chairman, the Chief Financial Officer or the Director, Finance, as well as any officer duly designated as “Acting” in said officer’s capacity, except that, for the purposes of any delegation set forth herein that does not expressly include any Assistant Secretary, “Authorized Officer” shall not include any Assistant Secretary of the Issuer.

“Board” shall mean, when used with respect to the Issuer, the board of the Issuer acting as such pursuant to the provisions of the Issuer Act, and when used with respect to the MTA, the members of the MTA acting as such pursuant to the provisions of the MTA Act.

“Bond Counsel” shall mean Hawkins Delafield & Wood LLP, Nixon Peabody LLP or any other attorney or firm of attorneys of nationally recognized standing in the field of law relating to the issuance of obligations by state and municipal entities, selected by the Issuer.

“Code” shall mean the Internal Revenue Code of 1986, as amended, and regulations thereunder.

“Cross-Credit Obligations” shall mean indebtedness or other obligations issued or incurred by the Issuer or any other Related Entity as described in clause (iii) of the definition of “Capital Costs”, but excluding Obligations.

“Refunding Bonds” shall mean the General Revenue Bonds authorized by Article II of this Supplemental Resolution in one or more Series or subseries.

Section 1.03. Authority for this Supplemental Resolution. This Supplemental Resolution is adopted pursuant to the provisions of the Issuer Act and the Resolution.

ARTICLE II

AUTHORIZATION OF REFUNDING BONDS

Section 2.01. Authorized Principal Amount, Designation and Series. 1. Pursuant to the provisions of the Resolution and in order to issue (a) Refunding Obligations, and (b) Obligations for the purpose of refunding Cross-Credit Obligations, multiple Series of General Revenue Obligations (which may be issued at one time or from time to time in any number of Series or subseries, which for purposes of this Supplemental Resolution shall collectively be referred to herein as the “Refunding Bonds”, subject to redesignation as hereinafter provided) entitled to the benefit, protection and security of such provisions are hereby authorized to be issued in an aggregate principal amount not exceeding the principal amount necessary so that, after giving effect to any net original issue discount or premium and underwriters’ discount from the principal amount, the amount to be deposited in the Proceeds Account pursuant to, or otherwise applied to effectuate the purposes of, Section 2.02 and Section 3.01 of this Supplemental Resolution (exclusive of the amount so deposited therein determined in any Certificate of Determination as estimated to be necessary to pay any Costs of Issuance of the Refunding Bonds payable from such Proceeds Account or otherwise applied to pay such Costs of Issuance), shall not exceed the amount or amounts determined in one or more Certificates of Determination to be necessary to effectuate the purposes set forth in Section 2.02 hereof; provided, however, that any Refunding Bonds issued pursuant to this Supplemental Resolution shall be issued in compliance with any Board policies relating to the issuance of refunding bonds as may be in effect from time to time.

2. Nothing in this Supplemental Resolution is intended to preclude the issuance of Refunding Bonds as refunding obligations in accordance with Section 203 of the Resolution.

Refunding Bonds shall be designated as, and shall be distinguished from the Obligations of all other Series by the title, “General Revenue Bonds, Series [insert calendar year of issuance]” or such other title or titles set forth in the related Certificate of Determination.

The authority to issue Obligations and take related actions granted under previous resolutions of the Issuer shall continue in full force and effect. The authorization to issue the Refunding Bonds and take other related actions hereunder shall continue in effect without any further action by the Issuer until the adoption by the MTA Board of a subsequent refunding bond supplemental resolution relating to 2016 refundings.

Section 2.02. Purposes. The purposes for which the Refunding Bonds are issued shall be set forth in one or more Certificates of Determination and may include the refunding, restructuring or payment, including by purchasing, exchanging or tendering therefor, of all or any portion of any Outstanding Obligations or Parity Debt or Cross-Credit Obligations deemed advisable by an Authorized Officer in accordance with Section 203 or 204 of the Resolution, as applicable.

Section 2.03. Dates, Maturities, Principal Amounts and Interest. The Refunding Bonds, except as otherwise provided in the Resolution, shall be dated the date or dates determined in the related Certificate of Determination. The Refunding Bonds shall mature on the date or dates and in the year or years and principal amount or amounts, and shall bear interest at the rate or rates per annum, if any, specified in or determined in the manner provided in the related Certificate of Determination.

Section 2.04. Interest Payments. The Refunding Bonds shall bear interest from their date or dates and be payable on such date or dates as may be determined pursuant to the related Certificate of Determination. Except as otherwise provided in the related Certificate of Determination,

interest on the Refunding Bonds shall be computed on the basis of twelve 30-day months and a 360-day year.

Section 2.05. Denominations, Numbers and Letters. Unless otherwise provided in the related Certificate of Determination, the Refunding Bonds shall be issued in fully registered form without coupons in the denomination of \$5,000 or any integral multiple thereof.

The Refunding Bonds shall be lettered and numbered as provided in the related Certificate of Determination.

Section 2.06. Places of Payment and Paying Agent. Except as otherwise provided in the related Certificate of Determination, principal and Redemption Price of the Refunding Bonds shall be payable to the registered owner of each Refunding Bond when due upon presentation of such Refunding Bond at the principal corporate trust office of the Trustee. Except as otherwise provided in the related Certificate of Determination, interest on the registered Refunding Bonds will be paid by check or draft mailed on the interest payment date by the Paying Agent, to the registered owner at his address as it appears on the registration books or, at the option of any Owner of at least one million dollars (\$1,000,000) in principal amount of the Refunding Bonds, by wire transfer in immediately available funds on each interest payment date to such Owner thereof upon written notice from such Owner to the Trustee, at such address as the Trustee may from time to time notify such Owner, containing the wire transfer address (which shall be in the continental United States) to which such Owner wishes to have such wire directed, if such written notice is received not less than twenty (20) days prior to the related interest payment date (such notice may refer to multiple interest payments).

Section 2.07. Sinking Fund Installments. The Refunding Bonds, if any, determined in the related Certificate of Determination shall be subject to redemption (a) in part, by lot, (b) pro rata (in the case of taxable Refunding Bonds), or (c) otherwise as determined in accordance with Section A-404 of the Resolution, as set forth in the Certificate of Determination, on each date in the year or years determined in the Certificate of Determination at the principal amount thereof plus accrued interest up to but not including the date of redemption thereof, from mandatory Sinking Fund Installments which are required to be made in amounts sufficient to redeem on each such date the principal amount of such Refunding Bonds.

Section 2.08. Redemption Prices and Terms. The Refunding Bonds may also be subject to redemption prior to maturity, at the option of the Issuer, upon notice as provided in Article A-IV of the Resolution, at any time as a whole or in part (and by lot within a maturity, or otherwise as determined in accordance with Section A-404 of the Resolution, if less than all of a maturity is to be redeemed), from maturities designated by the Issuer on and after the date and in the years and at the Redemption Prices (expressed as a percentage of principal amount) determined in the related Certificate of Determination, plus accrued interest up to but not including the redemption date. Notwithstanding the foregoing, in the case of taxable Refunding Bonds, if set forth in the Certificate of Determination, the taxable Refunding Bonds may be made subject to pro rata redemption and/or a make-whole redemption premium.

Section 2.09. Delegation to an Authorized Officer. 1. There is hereby delegated to each Authorized Officer, subject to the limitations contained in this Supplemental Resolution, the following powers with respect to the Refunding Bonds:

(a) to determine whether and when to issue any Refunding Bonds constituting Refunding Obligations or Obligations issued to refund Cross-Credit Obligations, and to determine the amount of the proceeds of the Refunding Bonds to be applied to refunding purposes as well as the specific

Obligations or Parity Debt or Cross-Credit Obligations, or portions of either to be refunded and the date or dates, if any, on which such refunded obligations shall be redeemed, and the amount of the proceeds of the Refunding Bonds estimated to be necessary to pay the Costs of Issuance of the Refunding Bonds;

(b) to determine the purpose or purposes for which the Refunding Bonds are being issued, which shall be one or more of the purposes set forth in Section 2.02 of this Supplemental Resolution;

(c) to determine the principal amounts of the Refunding Bonds to be issued for the purposes set forth in Section 2.02 of this Supplemental Resolution and whether such principal amounts constitute a separate Series or a subseries of Refunding Bonds, and to determine Accreted Values and Appreciated Values, if applicable;

(d) to determine the maturity date and principal amount of each maturity of the Refunding Bonds and the amount and due date of each Sinking Fund Installment, if any;

(e) to determine the date or dates which the Refunding Bonds shall be dated and the interest rate or rates of the Refunding Bonds or the manner of determining such interest rate or rates; provided, however, that any Obligations issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 10% per annum, any Obligations issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 12% per annum, any Variable Interest Rate Obligations issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 15% per annum, any Variable Interest Rate Obligations issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 18% per annum and any Parity Reimbursement Obligations shall be subject to a maximum interest rate of not greater than 25% per annum, or, in each such case, such higher rate or rates as determined by the Issuer's Board;

(f) to determine the Redemption Price or Redemption Prices, if any, and the redemption terms, if any, for the Refunding Bonds; provided, however, that if the Refunding Bonds are to be redeemable at the election of the Issuer, the Redemption Price (except in the case of taxable Refunding Bonds) shall not be greater than one hundred three percent (103%) of the principal amount of the Refunding Bonds to be redeemed, plus accrued interest thereon up to but not including the date of redemption and in the case of taxable Refunding Bonds, any provisions relating to pro rata redemption and/or make whole redemption;

(g) to determine whether the sale of the Refunding Bonds shall be conducted on either a negotiated or competitive bid basis and, as applicable, to determine the purchase price for the Refunding Bonds to be paid by the purchaser or purchasers referred to in one or more Purchase Agreements or a bank direct purchase agreement, or the purchase price for the Refunding Bonds to be paid by the winning bidder, if such sale is conducted by competitive bid pursuant to a Notice of Sale, in either case as such document is described in Section 2.10 of this Supplemental Resolution, which may include such original issue discount and original issue premium as shall be determined in the related Certificate of Determination; provided, however, that the underwriters' discount reflected in such purchase price shall not exceed \$10.00 for each one thousand dollars (\$1,000) principal amount of the Refunding Bonds;

(h) to take all actions required for the Refunding Bonds to be eligible under the rules and regulations of The Depository Trust Company ("DTC") for investment and trading as uncertificated securities, to execute and deliver a standard form of letter of representation with DTC and, notwithstanding any provisions to the contrary contained in this Supplemental Resolution, to include in

the related Certificate of Determination such terms and provisions as may be appropriate or necessary to provide for uncertificated securities in lieu of Refunding Bonds issuable in fully registered form;

(i) to determine whether to issue all or any portion of the Refunding Bonds as Tax-Exempt Obligations, Taxable Obligations, Put Obligations, Variable Interest Rate Obligations or as any other form of Obligations permitted by the Resolution and any matters related thereto, including (i) the terms and provisions of any such Obligations, (ii) the selection of remarketing agents, tender agents, auction agents, dealers, calculation agents, bidding agents or any other agents or parties to ancillary arrangements and the terms of any such arrangements, and (iii) the methods for determining the accrual of Debt Service;

(j) to determine the advisability, as compared to an unenhanced transaction, of obtaining one or more Credit Facilities, to select a provider or providers thereof and to determine and accept the terms and provisions and price thereof, to determine such other matters related thereto as in the opinion of the officer executing the related Certificate of Determination shall be considered necessary or appropriate and to effect such determinations by making any changes in or additions to this Supplemental Resolution required by Credit Facility providers, if any, or required by a Rating Agency in order to attain or maintain specific ratings on the Refunding Bonds, or relating to the mechanisms for the repayment of amounts advanced thereunder or payment of fees, premiums, expenses or any other amounts, notices, the provision of information, and such other matters of a technical, mechanical, procedural or descriptive nature necessary or appropriate to obtain or implement a Credit Facility with respect to the Refunding Bonds, and to make any changes in connection therewith;

(k) to make such changes in or from the form of this Supplemental Resolution as may be necessary or desirable in order to cure any ambiguities, inconsistencies or other defects;

(l) to determine whether to (i) enter into an escrow agreement or other arrangement in connection with the issuance of Refunding Bonds, including the selection of escrow agents, verification agents and the manner of determining specified matters relating to the defeasance of the refunded obligations and (ii) purchase SLGs or open market securities and the form and substance thereof and any related investment agreement, and to determine the application of any amounts released in connection with any such refunding;

(m) to determine that such Refunding Bonds comply with all Board policies relating to the issuance of refunding obligations in effect at the time of such determination; and

(n) to determine such other matters specified in or permitted by (i) Sections 202, 203, 204 and A-201 of the Resolution or (ii) this Supplemental Resolution, or to determine matters relating to the payment or defeasance of Obligation Anticipation Notes, including preparation of any documentation therefor.

2. Any Authorized Officer shall execute one or more Certificates of Determination evidencing the determinations made pursuant to this Supplemental Resolution and any such Certificate of Determination shall be conclusive evidence of the determinations of such Authorized Officer, as stated therein. More than one Certificate of Determination may be delivered to the extent more than one Series or subseries of Refunding Bonds are delivered from time to time, or other authority is exercised under this Supplemental Resolution from time to time and each such Certificate of Determination shall be delivered to the Trustee prior to the authentication and delivery of the respective Series or subseries of Refunding Bonds by the Trustee or other documentation. Determinations set forth in any Certificate of Determination shall have the same effect as if set forth in this Supplemental Resolution. Any such Authorized Officer may exercise any authority delegated under this Supplemental Resolution from time

to time following issuance of any Refunding Bonds, as appropriate for any purposes, including, in order to change interest rate modes or auction periods, if any Refunding Bonds shall consist of multiple subseries, to change the principal amounts and number of the individual subseries or to combine all subseries into a single Series, if any Refunding Bonds consist of a single Series, to divide such Series into two or more subseries and to determine the principal amount of such subseries, obtain a substitute or additional Credit Facility, enter into a bank direct purchase agreement or similar instrument or to appoint new or additional agents or other parties deemed appropriate to a particular form or mode of Obligation or manner of sale.

Section 2.10. Sale of Refunding Bonds. If it is determined that any sale of Bonds shall be conducted on a negotiated basis, each Authorized Officer is hereby authorized to sell and award the Refunding Bonds to the purchasers who shall be on the list of underwriters then approved by the Issuer and shall be referred to in the Purchase Agreement or Agreements, which Purchase Agreement or Agreements shall be substantially in the form most recently executed or delivered by the Issuer in connection with the sale or remarketing of Obligations, with such revisions to reflect the terms and provisions of the Refunding Bonds as may be approved by the officer executing the Purchase Agreement (each, a "Purchase Agreement"). Each Authorized Officer is hereby authorized to agree to the selection of the representative of the underwriters as referred to in the Purchase Agreement or Agreements and to execute and deliver the Purchase Agreement or Agreements for and on behalf and in the name of the Issuer with such changes, omissions, insertions and revisions as may be approved by the officer executing the Purchase Agreement or Agreements, said execution being conclusive evidence of such approval and concurrence in the selection of the representative of the underwriters.

If it is determined that any sale of Bonds shall be conducted on a competitive bid basis, each Authorized Officer is hereby further authorized to conduct the sale and award of the Refunding Bonds on the basis of a competitive bid, pursuant to the terms of a notice of sale, including bid form (the "Notice of Sale"), in a form, including any limitations on permitted bidders and a description of the basis for determining the winning bidder or bidders, determined by such Authorized Officer. Each Authorized Officer is hereby authorized to conduct such competitive sale of the Refunding Bonds in a manner consistent with this Supplemental Resolution and to utilize the services of the Authority's financial advisor and the services of an electronic bidding service, as such Authorized Officer shall determine, and the execution by such Authorized Officer of a letter of award shall be conclusive evidence of such award.

Each Authorized Officer is hereby authorized to make public and to authorize the use and distribution by said purchasers or other appropriate parties of a preliminary official statement, offering circular, or other disclosure document (the "Preliminary Official Statement") in connection with each public offering or any private placement of the Refunding Bonds, in substantially the form most recently executed or delivered by the Issuer in connection with the sale of Obligations, with such changes, omissions, insertions and revisions as such officer shall deem advisable. The Issuer authorizes any of said officers to deliver a certification to the effect that such Preliminary Official Statement or Official Statement, if deemed necessary or appropriate, together with such other documents, if any, described in such certificate, was deemed final as of its date for purposes of Rule 15c2-12 of the Securities and Exchange Commission as applicable.

Each Authorized Officer is hereby authorized to make public and to authorize distribution of a final Official Statement in substantially the form of each Preliminary Official Statement or the most recently executed and delivered Official Statement if there is not a Preliminary Official Statement, with such changes, omissions, insertions and revisions as such officer shall deem advisable, to sign such Official Statement and to deliver such Official Statement to the purchasers of such issue of the Refunding Bonds, such execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

Each Authorized Officer is hereby authorized to execute and deliver for and on behalf and in the name of the Issuer, to the extent determined by such Authorized Officer to be necessary or convenient, a Continuing Disclosure Agreement, substantially in the form appended to the Purchase Agreement or Notice of Sale, with such changes, omissions, insertions and revisions as such officer shall deem advisable (the "Continuing Disclosure Agreement"), said execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

The proceeds of each good faith check, if any, received by the Issuer from the purchasers of each issue of Refunding Bonds under the terms of the related Purchase Agreement or Notice of Sale may be invested by the Issuer pending application of the proceeds of such good faith check for the purposes provided in Section 2.02 of this Supplemental Resolution at the time of the issuance and delivery of such Refunding Bonds.

Each Authorized Officer (including any Assistant Secretary of the Issuer) is hereby authorized and directed to execute, deliver, amend, replace or terminate any and all documents and instruments (including any remarketing agreements, tender agency agreements, dealer agreements, broker-dealer agreements, tender agent agreements, or auction agency agreements, any escrow agreements, any investment agreements or arrangements, or any reimbursement agreements or documents or instruments relating to a Credit Facility deemed appropriate to a given form or mode of an Obligation) and to do and cause to be done any and all acts necessary or proper for carrying out each Purchase Agreement or Notice of Sale, each Continuing Disclosure Agreement, the terms of any Credit Facility or other such agreement or arrangement, and the issuance, sale and delivery of each issue of the Refunding Bonds and for implementing the terms of each issue of the Refunding Bonds and the transactions contemplated hereby or thereby.

When reference is made in this Supplemental Resolution to the authorization of an Authorized Officer to do any act, such act may be accomplished by any of such officers individually.

Section 2.11. Forms of Refunding Bonds and Trustee's Authentication Certificate. Subject to the provisions of the Resolution, the form of registered Refunding Bonds, and the Trustee's certificate of authentication, shall be substantially in the form set forth in Exhibit One to the Resolution including, if necessary, any changes to comply with the requirements of DTC or the provisions of this Supplemental Resolution or any Certificate of Determination.

Section 2.12. Appointment of Trustee and Paying Agent. Unless otherwise provided by Certificate of Determination, U.S. Bank Trust National Association shall be the Trustee under the Resolution and the Paying Agent for the Refunding Bonds.

ARTICLE III

DISPOSITION OF REFUNDING BOND PROCEEDS

Section 3.01. Disposition of Refunding Bond Proceeds. Any proceeds of the sale of the Refunding Bonds, other than accrued interest, if any, shall be deposited, simultaneously with the issuance and delivery of the Refunding Bonds, at one time or from time to time in one or more Series or subseries, in the Proceeds Account which is deemed to be established for each Series in the Proceeds Fund to be applied, or shall otherwise be applied pursuant to a Certificate of Determination to:

(a) the refunding of any Obligations, Parity Debt or Cross-Credit Obligations, or portions of any of them, in accordance with Section 2.02 hereof; and

(b) the balance of such proceeds, exclusive of accrued interest, shall be deposited in the COI Account and applied to the payment of Costs of Issuance or otherwise applied to the payment of Costs of Issuance.

Unless otherwise provided in a Certificate of Determination, the accrued interest, if any, and any capitalized interest, received on the sale of the Refunding Bonds shall be deposited in the Debt Service Fund.

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01. Tax Covenants Relating to the Refunding Bonds. The Issuer covenants that, in order to maintain the exclusion from gross income for Federal income tax purposes of the interest on the Refunding Bonds issued as Tax-Exempt Obligations, the Issuer will satisfy, or take such actions as are necessary to cause to be satisfied, each provision of the Code necessary to maintain such exclusion. In furtherance of this covenant, the Issuer agrees to comply with such written instructions as may be provided by Bond Counsel. In furtherance of the covenant contained in the preceding sentence, the Issuer agrees to continually comply with the provisions of any "Arbitrage and Use of Proceeds Certificate" or "Tax Certificate" to be executed by the Issuer in connection with the execution and delivery of any Refunding Bonds issued as Tax-Exempt Obligations, as amended from time to time.

Notwithstanding any other provision of the Resolution to the contrary, upon the Issuer's failure to observe, or refusal to comply with, the above covenant (a) the Owners of the Refunding Bonds, or the Trustee acting on their behalf, shall be entitled to the rights and remedies provided to Owners or the Trustee under Section 702 of the Resolution, other than the right (which is hereby abrogated solely as to the Issuer's failure to observe, or refusal to comply with the above covenant) to declare the principal of all Obligations then Outstanding, and the interest accrued thereon, to be due and payable pursuant to Section 567 of the Issuer Act, and (b) neither the Owners of the Obligations of any Series or holders of any Parity Debt (other than the Refunding Bonds or the Trustee acting on their behalf), nor the Trustee acting on their behalf, shall be entitled to exercise any right or remedy provided to the Owners, the Parity Debt holders or the Trustee under the Resolution based upon the Issuer's failure to observe, or refusal to comply with, the above covenant.

The provisions of the foregoing covenants set forth in this Section shall not apply to any Refunding Bonds, including any subseries thereof, which the Issuer determines pursuant to the applicable Certificate of Determination to issue as Taxable Obligations.

Section 4.02. Defeasance. In the event the Issuer shall seek, prior to the maturity or redemption date thereof, to pay or cause to be paid, within the meaning and with the effect expressed in the Resolution, all or less than all Outstanding Refunding Bonds issued as Tax-Exempt Obligations and the provisions of Section 4.01 hereof shall then be of any force or effect, then, notwithstanding the provisions of Article A-XI of the Resolution, the Refunding Bonds issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid shall not be deemed to have been paid within the meaning and with the effect expressed in Section A-1101 of the Resolution unless (i) the Issuer has confirmed in writing that the Owners of the Refunding Bonds issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid will continue, after such action, to have the benefit of a covenant to the effect of the covenant of the Issuer contained in Section 4.01 hereof or (ii) there shall have been delivered to the Trustee an Opinion of Bond Counsel to the effect that non-compliance thereafter with the applicable provisions of the Code will not affect the then current treatment of interest on the Refunding Bonds issued as Tax-Exempt Obligations in determining gross income for Federal income tax purposes.

TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY

**MULTIPLE SERIES
2001 SUBORDINATE REVENUE REFUNDING BOND
SUPPLEMENTAL RESOLUTION**

Adopted December 17, 2014

TABLE OF CONTENTS

Page

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01. Supplemental Resolution..... 1
Section 1.02. Definitions..... 1
Section 1.03. Authority for this Supplemental Resolution..... 2

ARTICLE II

AUTHORIZATION OF REFUNDING BONDS

Section 2.01. Authorized Principal Amount, Designation and Series..... 3
Section 2.02. Purposes 3
Section 2.03. Dates, Maturities, Principal Amounts and Interest..... 3
Section 2.04. Interest Payments 3
Section 2.05. Denominations, Numbers and Letters 4
Section 2.06. Places of Payment and Paying Agent..... 4
Section 2.07. Sinking Fund Installments..... 4
Section 2.08. Redemption Prices and Terms..... 4
Section 2.09. Delegation to an Authorized Officer 4
Section 2.10. Sale of Refunding Bonds..... 7
Section 2.11. Forms of Refunding Bonds and Trustee’s Authentication Certificate 8
Section 2.12. Appointment of Trustee and Paying Agent 8

ARTICLE III

DISPOSITION OF REFUNDING BOND PROCEEDS

Section 3.01. Disposition of Refunding Bond Proceeds 8

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01. Tax Covenants Relating to the Refunding Bonds 9
Section 4.02. Additional Covenants 9
Section 4.03. Defeasance 10

**MULTIPLE SERIES
2001 SUBORDINATE REVENUE REFUNDING BOND
SUPPLEMENTAL RESOLUTION**

BE IT RESOLVED by the Triborough Bridge and Tunnel Authority (the “Issuer”), as follows:

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01. Supplemental Resolution. This resolution is supplemental to, and is adopted in accordance with Article II and Article A-VIII of, a resolution of the Issuer adopted on March 26, 2002, entitled “2001 Subordinate Resolution Authorizing General Revenue Obligations” (the “Resolution”).

Section 1.02. Definitions.

1. All capitalized terms which are used but not otherwise defined in this Multiple Series 2001 Subordinate Revenue Refunding Bond Supplemental Resolution (the “Supplemental Resolution”) shall have the same meanings, respectively, as such terms are given by Section 102 of the Resolution.

2. In this Supplemental Resolution:

“Authorized Officer” shall include the officers designated as such in the Resolution, and the Chairman and Chief Executive Officer, the Chair of the Finance Committee, the Vice Chairman, the Chief Financial Officer or the Director, Finance, as well as any officer duly designated as “Acting” in said officer’s capacity, except that, for the purposes of any delegation set forth herein that does not expressly include any Assistant Secretary, “Authorized Officer” shall not include any Assistant Secretary of the Issuer.

“Board” shall mean, when used with respect to the Issuer, the board of the Issuer acting as such pursuant to the provisions of the Issuer Act, and when used with respect to the MTA, the members of the MTA acting as such pursuant to the provisions of the MTA Act.

“Bond Counsel” shall mean Hawkins Delafield & Wood LLP, Nixon Peabody LLP or any other attorney or firm of attorneys of nationally recognized standing in the field of law relating to the issuance of obligations by state and municipal entities, selected by the Issuer.

“Code” shall mean the Internal Revenue Code of 1986, as amended, and regulations thereunder.

“Cross-Credit Obligations” shall mean indebtedness or other obligations issued or incurred by the Issuer or any other Related Entity as described in clause (iii) of the definition of “Capital Costs”, but excluding Obligations.

“Refunding Bonds” shall mean the 2001 Subordinate Revenue Bonds authorized by Article II of this Supplemental Resolution in one or more Series or subseries.

Section 1.03. Authority for this Supplemental Resolution. This Supplemental Resolution is adopted pursuant to the provisions of the Issuer Act and the Resolution.

ARTICLE II

AUTHORIZATION OF REFUNDING BONDS

Section 2.01. Authorized Principal Amount, Designation and Series. 1. Pursuant to the provisions of the Resolution and in order to issue (a) Refunding Subordinate Obligations, and (b) Obligations for the purpose of refunding Cross-Credit Obligations, multiple Series of Subordinate Revenue Obligations (which may be issued at one time or from time to time in any number of Series or subseries, which for purposes of this Supplemental Resolution shall collectively be referred to herein as the "Refunding Bonds", subject to redesignation as hereinafter provided) entitled to the benefit, protection and security of such provisions are hereby authorized to be issued in an aggregate principal amount not exceeding the principal amount necessary so that, after giving effect to any net original issue discount or premium and underwriters' discount from the principal amount, the amount to be deposited in the Proceeds Account pursuant to, or otherwise applied to effectuate the purposes of, Section 2.02 and Section 3.01 of this Supplemental Resolution (exclusive of the amount so deposited therein determined in any Certificate of Determination as estimated to be necessary to pay any Costs of Issuance of the Refunding Bonds payable from such Proceeds Account or otherwise applied to pay such Costs of Issuance), shall not exceed the amount or amounts determined in one or more Certificates of Determination to be necessary to effectuate the purposes set forth in Section 2.02 hereof; provided, however, that any Refunding Bonds issued pursuant to this Supplemental Resolution shall be issued in compliance with any Board policies relating to the issuance of refunding bonds as may be in effect from time to time.

2. Nothing in this Supplemental Resolution is intended to preclude the issuance of Refunding Bonds as refunding obligations in accordance with Section 203 of the Resolution.

Refunding Bonds shall be designated as, and shall be distinguished from the Obligations of all other Series by the title, "Subordinate Revenue Bonds, Series [insert calendar year of issuance]" or such other title or titles set forth in the related Certificate of Determination.

The authority to issue Obligations and take related actions granted under previous resolutions of the Issuer shall continue in full force and effect. The authorization to issue the Refunding Bonds and take other related actions hereunder shall continue in effect without any further action by the Issuer until the adoption by the MTA Board of a subsequent refunding bond supplemental resolution relating to 2016 refundings.

Section 2.02. Purposes. The purposes for which the Refunding Bonds are issued shall be set forth in one or more Certificates of Determination and may include the refunding, restructuring or payment, including by purchasing, exchanging or tendering therefor, of all or any portion of any Outstanding Obligations or Parity Debt or Cross-Credit Obligations deemed advisable by an Authorized Officer in accordance with Section 203 or 204 of the Resolution, as applicable.

Section 2.03. Dates, Maturities, Principal Amounts and Interest. The Refunding Bonds, except as otherwise provided in the Resolution, shall be dated the date or dates determined in the related Certificate of Determination. The Refunding Bonds shall mature on the date or dates and in the year or years and principal amount or amounts, and shall bear interest at the rate or rates per annum, if any, specified in or determined in the manner provided in the related Certificate of Determination.

Section 2.04. Interest Payments. The Refunding Bonds shall bear interest from their date or dates and be payable on such date or dates as may be determined pursuant to the related Certificate of Determination. Except as otherwise provided in the related Certificate of Determination,

interest on the Refunding Bonds shall be computed on the basis of twelve 30-day months and a 360-day year.

Section 2.05. Denominations, Numbers and Letters. Unless otherwise provided in the related Certificate of Determination, the Refunding Bonds shall be issued in fully registered form without coupons in the denomination of \$5,000 or any integral multiple thereof.

The Refunding Bonds shall be lettered and numbered as provided in the related Certificate of Determination.

Section 2.06. Places of Payment and Paying Agent. Except as otherwise provided in the related Certificate of Determination, principal and Redemption Price of the Refunding Bonds shall be payable to the registered owner of each Refunding Bond when due upon presentation of such Refunding Bond at the principal corporate trust office of the Trustee. Except as otherwise provided in the related Certificate of Determination, interest on the registered Refunding Bonds will be paid by check or draft mailed on the interest payment date by the Paying Agent, to the registered owner at his address as it appears on the registration books or, at the option of any Owner of at least one million dollars (\$1,000,000) in principal amount of the Refunding Bonds, by wire transfer in immediately available funds on each interest payment date to such Owner thereof upon written notice from such Owner to the Trustee, at such address as the Trustee may from time to time notify such Owner, containing the wire transfer address (which shall be in the continental United States) to which such Owner wishes to have such wire directed, if such written notice is received not less than twenty (20) days prior to the related interest payment date (such notice may refer to multiple interest payments).

Section 2.07. Sinking Fund Installments. The Refunding Bonds, if any, determined in the related Certificate of Determination shall be subject to redemption (a) in part, by lot, (b) pro rata (in the case of taxable Refunding Bonds), or (c) otherwise as determined in accordance with Section A-404 of the Resolution, as set forth in the Certificate of Determination, on each date in the year or years determined in the Certificate of Determination at the principal amount thereof plus accrued interest up to but not including the date of redemption thereof, from mandatory Sinking Fund Installments which are required to be made in amounts sufficient to redeem on each such date the principal amount of such Refunding Bonds.

Section 2.08. Redemption Prices and Terms. The Refunding Bonds may also be subject to redemption prior to maturity, at the option of the Issuer, upon notice as provided in Article A-IV of the Resolution, at any time as a whole or in part (and by lot within a maturity, or otherwise as determined in accordance with Section A-404 of the Resolution, if less than all of a maturity is to be redeemed), from maturities designated by the Issuer on and after the date and in the years and at the Redemption Prices (expressed as a percentage of principal amount) determined in the related Certificate of Determination, plus accrued interest up to but not including the redemption date. Notwithstanding the foregoing, in the case of taxable Refunding Bonds, if set forth in the Certificate of Determination, the taxable Refunding Bonds may be made subject to pro rata redemption and/or a make-whole redemption premium.

Section 2.09. Delegation to an Authorized Officer. 1. There is hereby delegated to each Authorized Officer, subject to the limitations contained in this Supplemental Resolution, the following powers with respect to the Refunding Bonds:

(a) to determine whether and when to issue any Refunding Bonds constituting Refunding Subordinate Obligations or Obligations issued to refund Cross-Credit Obligations, and to determine the amount of the proceeds of the Refunding Bonds to be applied to refunding purposes as well

as the specific Obligations or Parity Debt or Cross-Credit Obligations, or portions of either to be refunded and the date or dates, if any, on which such refunded obligations shall be redeemed, and the amount of the proceeds of the Refunding Bonds estimated to be necessary to pay the Costs of Issuance of the Refunding Bonds;

(b) to determine the purpose or purposes for which the Refunding Bonds are being issued, which shall be one or more of the purposes set forth in Section 2.02 of this Supplemental Resolution;

(c) to determine the principal amounts of the Refunding Bonds to be issued for the purposes set forth in Section 2.02 of this Supplemental Resolution and whether such principal amounts constitute a separate Series or a subseries of Refunding Bonds, and to determine Accreted Values and Appreciated Values, if applicable;

(d) to determine the maturity date and principal amount of each maturity of the Refunding Bonds and the amount and due date of each Sinking Fund Installment, if any;

(e) to determine the date or dates which the Refunding Bonds shall be dated and the interest rate or rates of the Refunding Bonds or the manner of determining such interest rate or rates; provided, however, that any Obligations issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 10% per annum, any Obligations issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 12% per annum, any Variable Interest Rate Obligations issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 15% per annum, any Variable Interest Rate Obligations issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 18% per annum and any Parity Reimbursement Obligations shall be subject to a maximum interest rate of not greater than 25% per annum, or, in each such case, such higher rate or rates as determined by the Issuer's Board;

(f) to determine the Redemption Price or Redemption Prices, if any, and the redemption terms, if any, for the Refunding Bonds; provided, however, that if the Refunding Bonds are to be redeemable at the election of the Issuer, the Redemption Price (except in the case of taxable Refunding Bonds) shall not be greater than one hundred three percent (103%) of the principal amount of the Refunding Bonds to be redeemed, plus accrued interest thereon up to but not including the date of redemption and in the case of taxable Refunding Bonds any provisions relating to pro rata redemption and/or make whole redemption;

(g) to determine whether the sale of the Refunding Bonds shall be conducted on either a negotiated or competitive bid basis and, as applicable, to determine the purchase price for the Refunding Bonds to be paid by the purchaser or purchasers referred to in one or more Purchase Agreements or a bank direct purchase agreement, or the purchase price for the Refunding Bonds to be paid by the winning bidder, if such sale is conducted by competitive bid pursuant to a Notice of Sale, in either case as such document is described in Section 2.10 of this Supplemental Resolution, which may include such original issue discount and original issue premium as shall be determined in the related Certificate of Determination; provided, however, that the underwriters' discount reflected in such purchase price shall not exceed \$10.00 for each one thousand dollars (\$1,000) principal amount of the Refunding Bonds;

(h) to take all actions required for the Refunding Bonds to be eligible under the rules and regulations of The Depository Trust Company ("DTC") for investment and trading as uncertificated securities, to execute and deliver a standard form of letter of representation with DTC and, notwithstanding any provisions to the contrary contained in this Supplemental Resolution, to include in

the related Certificate of Determination such terms and provisions as may be appropriate or necessary to provide for uncertificated securities in lieu of Refunding Bonds issuable in fully registered form;

(i) to determine whether to issue all or any portion of the Refunding Bonds as Tax-Exempt Obligations, Taxable Obligations, Put Obligations, Variable Interest Rate Obligations or as any other form of Obligations permitted by the Resolution and any matters related thereto, including (i) the terms and provisions of any such Obligations, (ii) the selection of remarketing agents, tender agents, auction agents, dealers, calculation agents, bidding agents or any other agents or parties to ancillary arrangements and the terms of any such arrangements, and (iii) the methods for determining the accrual of Debt Service;

(j) to determine the advisability, as compared to an unenhanced transaction, of obtaining one or more Credit Facilities, to select a provider or providers thereof and to determine and accept the terms and provisions and price thereof, to determine such other matters related thereto as in the opinion of the officer executing the related Certificate of Determination shall be considered necessary or appropriate and to effect such determinations by making any changes in or additions to this Supplemental Resolution required by Credit Facility providers, if any, or required by a Rating Agency in order to attain or maintain specific ratings on the Refunding Bonds, or relating to the mechanisms for the repayment of amounts advanced thereunder or payment of fees, premiums, expenses or any other amounts, notices, the provision of information, and such other matters of a technical, mechanical, procedural or descriptive nature necessary or appropriate to obtain or implement a Credit Facility with respect to the Refunding Bonds, and to make any changes in connection therewith;

(k) to make such changes in or from the form of this Supplemental Resolution as may be necessary or desirable in order to cure any ambiguities, inconsistencies or other defects;

(l) to determine whether to (i) enter into an escrow agreement or other arrangement in connection with the issuance of Refunding Bonds, including the selection of escrow agents, verification agents and the manner of determining specified matters relating to the defeasance of the refunded obligations and (ii) purchase SLGs or open market securities and the form and substance thereof and any related investment agreement, and to determine the application of any amounts released in connection with any such refunding;

(m) to determine that such Refunding Bonds comply with all Board policies relating to the issuance of refunding obligations in effect at the time of such determination; and

(n) to determine such other matters specified in or permitted by (i) Sections 202, 203, 204 and A-201 of the Resolution or (ii) this Supplemental Resolution, or to determine matters relating to the payment or defeasance of Obligation Anticipation Notes, including preparation of any documentation therefor.

2. Any Authorized Officer shall execute one or more Certificates of Determination evidencing the determinations made pursuant to this Supplemental Resolution and any such Certificate of Determination shall be conclusive evidence of the determinations of such Authorized Officer, as stated therein. More than one Certificate of Determination may be delivered to the extent more than one Series or subseries of Refunding Bonds are delivered from time to time, or other authority is exercised under this Supplemental Resolution from time to time and each such Certificate of Determination shall be delivered to the Trustee prior to the authentication and delivery of the respective Series or subseries of Refunding Bonds by the Trustee or other documentation. Determinations set forth in any Certificate of Determination shall have the same effect as if set forth in this Supplemental Resolution. Any such Authorized Officer may exercise any authority delegated under this Supplemental Resolution from time

to time following issuance of any Refunding Bonds, as appropriate for any purposes, including, in order to change interest rate modes or auction periods, if any Refunding Bonds shall consist of multiple subseries, to change the principal amounts and number of the individual subseries or to combine all subseries into a single Series, if any Refunding Bonds consist of a single Series, to divide such Series into two or more subseries and to determine the principal amount of such subseries, obtain a substitute or additional Credit Facility, enter into a bank direct purchase agreement or similar instrument or to appoint new or additional agents or other parties deemed appropriate to a particular form or mode of Obligation or manner of sale.

Section 2.10. Sale of Refunding Bonds. If it is determined that any sale of Bonds shall be conducted on a negotiated basis, each Authorized Officer is hereby authorized to sell and award the Refunding Bonds to the purchasers who shall be on the list of underwriters then approved by the Issuer and shall be referred to in the Purchase Agreement or Agreements, which Purchase Agreement or Agreements shall be substantially in the form most recently executed or delivered by the Issuer in connection with the sale or remarketing of Obligations, with such revisions to reflect the terms and provisions of the Refunding Bonds as may be approved by the officer executing the Purchase Agreement (each, a "Purchase Agreement"). Each Authorized Officer is hereby authorized to agree to the selection of the representative of the underwriters as referred to in the Purchase Agreement or Agreements and to execute and deliver the Purchase Agreement or Agreements for and on behalf and in the name of the Issuer with such changes, omissions, insertions and revisions as may be approved by the officer executing the Purchase Agreement or Agreements, said execution being conclusive evidence of such approval and concurrence in the selection of the representative of the underwriters.

If it is determined that any sale of Bonds shall be conducted on a competitive bid basis, each Authorized Officer is hereby further authorized to conduct the sale and award of the Refunding Bonds on the basis of a competitive bid, pursuant to the terms of a notice of sale, including bid form (the "Notice of Sale"), in a form, including any limitations on permitted bidders and a description of the basis for determining the winning bidder or bidders, determined by such Authorized Officer. Each Authorized Officer is hereby authorized to conduct such competitive sale of the Refunding Bonds in a manner consistent with this Supplemental Resolution and to utilize the services of the Authority's financial advisor and the services of an electronic bidding service, as such Authorized Officer shall determine, and the execution by such Authorized Officer of a letter of award shall be conclusive evidence of such award.

Each Authorized Officer is hereby authorized to make public and to authorize the use and distribution by said purchasers or other appropriate parties of a preliminary official statement, offering circular, or other disclosure document (the "Preliminary Official Statement") in connection with each public offering or any private placement of the Refunding Bonds, in substantially the form most recently executed or delivered by the Issuer in connection with the sale of Obligations, with such changes, omissions, insertions and revisions as such officer shall deem advisable. The Issuer authorizes any of said officers to deliver a certification to the effect that such Preliminary Official Statement or Official Statement, if deemed necessary or appropriate, together with such other documents, if any, described in such certificate, was deemed final as of its date for purposes of Rule 15c2-12 of the Securities and Exchange Commission as applicable.

Each Authorized Officer is hereby authorized to make public and to authorize distribution of a final Official Statement in substantially the form of each Preliminary Official Statement or the most recently executed and delivered Official Statement if there is not a Preliminary Official Statement, with such changes, omissions, insertions and revisions as such officer shall deem advisable, to sign such Official Statement and to deliver such Official Statement to the purchasers of such issue of the Refunding Bonds, such execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

Each Authorized Officer is hereby authorized to execute and deliver for and on behalf and in the name of the Issuer, to the extent determined by such Authorized Officer to be necessary or convenient, a Continuing Disclosure Agreement, substantially in the form appended to the Purchase Agreement or Notice of Sale, with such changes, omissions, insertions and revisions as such officer shall deem advisable (the "Continuing Disclosure Agreement"), said execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

The proceeds of each good faith check, if any, received by the Issuer from the purchasers of each issue of Refunding Bonds under the terms of the related Purchase Agreement or Notice of Sale may be invested by the Issuer pending application of the proceeds of such good faith check for the purposes provided in Section 2.02 of this Supplemental Resolution at the time of the issuance and delivery of such Refunding Bonds.

Each Authorized Officer (including any Assistant Secretary of the Issuer) is hereby authorized and directed to execute, deliver, amend, replace or terminate any and all documents and instruments (including any remarketing agreements, tender agency agreements, dealer agreements, broker-dealer agreements, tender agent agreements, or auction agency agreements, any escrow agreements, any investment agreements or arrangements, or any reimbursement agreements or documents or instruments relating to a Credit Facility deemed appropriate to a given form or mode of an Obligation) and to do and cause to be done any and all acts necessary or proper for carrying out each Purchase Agreement or Notice of Sale, each Continuing Disclosure Agreement, the terms of any Credit Facility or other such agreement or arrangement, and the issuance, sale and delivery of each issue of the Refunding Bonds and for implementing the terms of each issue of the Refunding Bonds and the transactions contemplated hereby or thereby.

When reference is made in this Supplemental Resolution to the authorization of an Authorized Officer to do any act, such act may be accomplished by any of such officers individually.

Section 2.11. Forms of Refunding Bonds and Trustee's Authentication Certificate.

Subject to the provisions of the Resolution, the form of registered Refunding Bonds, and the Trustee's certificate of authentication, shall be substantially in the form set forth in Exhibit One to the Resolution including, if necessary, any changes to comply with the requirements of DTC or the provisions of this Supplemental Resolution or any Certificate of Determination.

Section 2.12. Appointment of Trustee and Paying Agent.

Unless otherwise provided by Certificate of Determination, The Bank of New York Mellon shall be the Trustee under the Resolution and the Paying Agent for the Refunding Bonds.

ARTICLE III

DISPOSITION OF REFUNDING BOND PROCEEDS

Section 3.01. Disposition of Refunding Bond Proceeds.

Any proceeds of the sale of the Refunding Bonds, other than accrued interest, if any, shall be deposited, simultaneously with the issuance and delivery of the Refunding Bonds, at one time or from time to time in one or more Series or subseries, in the Proceeds Account which is deemed to be established for each Series in the Proceeds Fund to be applied, or shall otherwise be applied pursuant to a Certificate of Determination to:

- (a) the refunding of any Obligations, Parity Debt or Cross-Credit Obligations, or portions of any of them, in accordance with Section 2.02 hereof; and

(b) the balance of such proceeds, exclusive of accrued interest, shall be deposited in the COI Account and applied to the payment of Costs of Issuance or otherwise applied to the payment of Costs of Issuance.

Unless otherwise provided in a Certificate of Determination, the accrued interest, if any, and any capitalized interest, received on the sale of the Refunding Bonds shall be deposited in the Debt Service Fund.

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01. Tax Covenants Relating to the Refunding Bonds. The Issuer covenants that, in order to maintain the exclusion from gross income for Federal income tax purposes of the interest on the Refunding Bonds issued as Tax-Exempt Obligations, the Issuer will satisfy, or take such actions as are necessary to cause to be satisfied, each provision of the Code necessary to maintain such exclusion. In furtherance of this covenant, the Issuer agrees to comply with such written instructions as may be provided by Bond Counsel. In furtherance of the covenant contained in the preceding sentence, the Issuer agrees to continually comply with the provisions of any "Arbitrage and Use of Proceeds Certificate" or "Tax Certificate" to be executed by the Issuer in connection with the execution and delivery of any Refunding Bonds issued as Tax-Exempt Obligations, as amended from time to time.

Notwithstanding any other provision of the Resolution to the contrary, upon the Issuer's failure to observe, or refusal to comply with, the above covenant (a) the Owners of the Refunding Bonds, or the Trustee acting on their behalf, shall be entitled to the rights and remedies provided to Owners or the Trustee under Section 702 of the Resolution, other than the right (which is hereby abrogated solely as to the Issuer's failure to observe, or refusal to comply with the above covenant) to declare the principal of all Obligations then Outstanding, and the interest accrued thereon, to be due and payable pursuant to Section 567 of the Issuer Act, and (b) neither the Owners of the Obligations of any Series or holders of any Parity Debt (other than the Refunding Bonds or the Trustee acting on their behalf), nor the Trustee acting on their behalf, shall be entitled to exercise any right or remedy provided to the Owners, the Parity Debt holders or the Trustee under the Resolution based upon the Issuer's failure to observe, or refusal to comply with, the above covenant.

The provisions of the foregoing covenants set forth in this Section shall not apply to any Refunding Bonds, including any subseries thereof, which the Issuer determines pursuant to the applicable Certificate of Determination to issue as Taxable Obligations.

Section 4.02. Additional Covenants. 1. The Issuer covenants and agrees that it will not issue any Senior Obligations under the Senior Resolution (other than pursuant to Section 205 thereof) unless in addition to satisfying the requirements of the Senior Resolution, an Authorized Officer delivers to the trustee under the Senior Resolution a certificate demonstrating that for any period of 12 consecutive calendar months out of the 18 complete calendar months next preceding the date of authentication and delivery such issue of Senior Obligations, Net Revenues are at least equal to 1.10 times the Combined Maximum Annual Calculated Debt Service for all Subordinate Revenue Obligations, Parity Debt, Senior Obligations and Senior Parity Debt.

2. The Issuer covenants and agrees that in addition to complying with the provisions of Section 604 of the Bond Resolution, the Issuer shall at all times establish, levy, maintain and collect, or cause to be established, levied, maintained and collected, such tolls, rentals and other charges in connection with the TBTA Facilities as shall always be sufficient, together with other money available

therefor (including the anticipated receipt of proceeds of sale of Obligations or other bonds, notes or other obligations or evidences of indebtedness of the Issuer that will be used to pay the principal of Obligations issued in anticipation of such receipt, but not including any anticipated or actual proceeds from the sale of TBTA Facilities), to equal or exceed in each calendar year the greater of (a) an amount equal to the sum of amounts necessary in such calendar year (i) to pay all Operating Expenses of the Issuer, plus (ii) to pay the sum of Calculated Debt Service as defined in the Bond Resolution and Calculated Debt Service as defined in the Senior Resolution, plus (iii) to maintain any reserve established by the Issuer pursuant to the Senior Resolution, in such amount as may be determined from time to time by an Authorized Officer in his or her judgment, or (b) an amount such that Revenues less Operating Expenses shall equal at least 1.10 times the sum of Calculated Debt Service as defined in the Senior Resolution and Calculated Debt Service as defined in the Bond Resolution for such calendar year.

Section 4.03. Defeasance. In the event the Issuer shall seek, prior to the maturity or redemption date thereof, to pay or cause to be paid, within the meaning and with the effect expressed in the Resolution, all or less than all Outstanding Refunding Bonds issued as Tax-Exempt Obligations and the provisions of Section 4.01 hereof shall then be of any force or effect, then, notwithstanding the provisions of Article A-XI of the Resolution, the Refunding Bonds issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid shall not be deemed to have been paid within the meaning and with the effect expressed in Section A-1101 of the Resolution unless (i) the Issuer has confirmed in writing that the Owners of the Refunding Bonds issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid will continue, after such action, to have the benefit of a covenant to the effect of the covenant of the Issuer contained in Section 4.01 hereof or (ii) there shall have been delivered to the Trustee an Opinion of Bond Counsel to the effect that non-compliance thereafter with the applicable provisions of the Code will not affect the then current treatment of interest on the Refunding Bonds issued as Tax-Exempt Obligations in determining gross income for Federal income tax purposes.

Staff Summary

Subject Executive Order 88 Energy Audits and Retrocommissioning Studies – Phase 2
Department Environmental Sustainability and Compliance
Director-Porie Sakia-Espen 
Department Head Signature Craig Stewart 
Division Head Name Peter Bass 

Date December 1, 2014
Vendor Name New York Power Authority
Contract Number NA
Contract Manager Name NA
Table of Contents Ref #

Board Action					
Order	To	Date	Approval	Info	Other
1	Finance	12/15/14			
2	Board	12/17/14			

Internal Approvals			
Order	Approval	Order	Approval
3	Chief of Staff 	2	Legal 
1	Chief Financial Officer 		

I. Purpose

To obtain Board approval for Phase 2 of energy audits and retrocommissioning studies performed in MTA facilities utilizing the services of the New York Power Authority (NYPA), consistent with the MTA/NYPA Energy Services Program Agreement approved by the Board in December 2005, and in furtherance of the objectives of Executive Order 88, governing the improvement of energy efficiency in State buildings.

II. Discussion

Under the terms of the Board-approved Energy Services Program Agreement with NYPA, the MTA and its affiliated agencies undertake energy-efficiency projects that are financed and managed by NYPA and paid back through a surcharge to the subject agency's electrical bill that is equal to, or less than, the value of the project's energy savings. Utilizing this method, energy-efficiency projects can be developed and executed without negatively impacting operating or capital budgets. Over one hundred and twenty-five energy-efficiency projects have been completed under this program, replacing such items as lighting, compressors, motors, pumps and boilers, with new energy-efficient equipment.

Executive Order 88 targets state agency and state authority buildings greater than 20,000 square feet for 20% energy use reductions by April 2020. To help accomplish this reduction, subject buildings are to receive either an ASHRAE (American Society of Heating, Refrigeration and Air-Conditioning Engineers) Level II Energy Audit, which identifies and prioritizes the replacement of inefficient equipment based on return on investment, or a retrocommissioning study, which measures the energy performance of existing equipment and provides recommendations for returning the subject equipment to maximum efficiency.

Utilizing the services of NYPA, the MTA intends to perform energy audits or retrocommissioning studies in 42 buildings. In Phase 1 of the work, 7 energy audits and 6 retrocommissioning studies were performed. This staff summary seeks Board authorization of the Phase 2 work, which will consist of 20 energy audits and 9 retrocommissioning studies, the services for which have been competitively procured by NYPA, at a cost of \$932,965.86. Subsequent to MTA Board approval, the MTA intends to execute a Customer Installation Commitment (CIC) with NYPA, which set forth the terms of the audits and retrocommissioning studies, including the scope of services, schedule, cost (including fees and interest) and payment.

Under the terms of the Board approval for the 2005 Energy Services Program Agreement, projects conducted pursuant to that Agreement that result in net energy savings are not required to be presented to the Board. Projects for which there are no net savings are presented to the Board for approval. Although it is anticipated that both the energy audits and retrocommissioning studies will lead to energy-efficiency projects and actions, the studies in and of themselves cannot be said to produce energy savings and thus are presented for Board approval.

III. Impact on Funding

The total not-to-exceed cost of \$932,965.86 for the work is chargeable to the Environmental Sustainability and Compliance Department budget for Outside Audit Services.

IV. Alternative

A scope of work and contract for energy audits and retrocommissioning studies could be developed and procured directly by the MTA. However, the MTA lacks energy audit and retrocommissioning experience. NYPA has the necessary experience and expertise to implement and manage this work at a cost structure similar to, or less than, the MTA. In addition, the schedule to complete the work under Executive Order 88 is aggressive and would be difficult to achieve under standard procurement timelines. NYPA has already satisfactorily performed Phase 1 of the work and has the necessary services in place to execute Phase 2.

V. Recommendation

It is recommended that the Board approve NYPA to perform Phase 2 of the ASHRAE Level II Energy Audits and Retrocommissioning studies at MTA buildings, and authorize the MTA to enter into a Customer Installation Commitment with NYPA for these Phase 2 audits and studies.

Governor Andrew M. Cuomo



Performance • Integrity • Pride

About

Newsroom

Legislation



Initiatives

Translate

Contact



- 中文
- Español
- Français
- Kreyòl Ayisyen
- Italiano
- 한국어
- Русский

DIRECTING STATE AGENCIES AND AUTHORITIES TO IMPROVE THE ENERGY EFFICIENCY OF STATE BUILDINGS

[Printer-friendly version](#)

WHEREAS, New York is dedicated to the mutually compatible goals of environmental protection, energy security, and economic growth; and

WHEREAS, increasing energy efficiency has been identified as among the most cost-effective methods for reducing greenhouse gas and other environmental pollutant emissions and increasing energy security; and

WHEREAS, increasing energy efficiency can lead to increased jobs and a reduction in building operating expenses; and

WHEREAS, New York is committed to implementing new policies to promote the efficient use of energy and natural resources in the interest of the long-term protection and enhancement of the State's environment, economy and public health;

NOW, THEREFORE, I, Andrew M. Cuomo, Governor of the State of New York, by virtue of the authority vested in me by the Constitution and the Laws of the State of New York, do hereby order as follows:

I. DEFINITIONS

For the purposes of this Executive Order, the following terms are defined as follows:

- A. "Affected State Entities" means (i) all agencies and departments over which the Governor has Executive Authority, and (ii) all public-benefit corporations, public authorities and commissions, for which the Governor appoints the Chair, the Chief Executive, or the majority of Board Members, except for the Port Authority of New York and New Jersey.
- B. "Average Source Energy Use Intensity" or "average EUI" means the average source energy use per square foot for all state-owned and managed buildings.
- C. "Source energy" means all the energy used in delivering energy to a site, including power generation, transmission and distribution losses.

II. ENERGY REDUCTION TARGET

By April 1, 2020, all Affected State Entities shall collectively reduce the average EUI in State-owned and managed buildings by at least 20% from a baseline of the average EUI of such buildings for State fiscal year 2010/2011 ("Target").

III. OBLIGATIONS TO MEET TARGET

A. Central Management and Implementation Team: The New York Power Authority ("NYPA") shall establish a central management and implementation team ("CMIT") to administer this Executive Order.

(1) The CMIT is hereby directed and authorized to:

- (a) Take all appropriate measures to ensure that the Target is met;
- (b) Direct Affected State Entities to comply with the requirements of this Executive Order;
- (c) Create guidelines ("Guidelines") within nine months of the issuance of this Executive Order to assist Affected State Entities in complying with this Executive Order, and thereafter update such Guidelines as necessary;
- (d) Provide strategic, technical, and other assistance to each Affected State Entity to support implementation of this Executive Order;
- (e) Develop annual milestones for achieving the Target over the next seven years within 12 months of the issuance of this Executive Order;
- (f) Develop and implement reporting requirements to document each Affected State Entity's progress toward meeting the Target;
- (g) Develop a comprehensive operations and maintenance plan for the State's building portfolio to help achieve no cost and low cost efficiency improvements and ensure that efficiency savings are sustained; and

(h) Submit an annual report to the Governor by January 15th of each year, beginning in 2014, detailing the overall progress Affected State Entities are making toward meeting the Target. Requirements for the annual report shall be contained in the Guidelines.

(2) The Office of General Services and the New York State Energy Research and Development Authority are hereby directed to provide technical assistance to the CMIT and each of the Affected State Entities with respect to complying with and implementing the requirements of this Executive Order and those established by the CMIT pursuant to this Executive Order.

B. Affected State Entities

In addition to the requirements established above, each of the Affected State Entities shall comply with the following:

(1) Benchmarking. For each State fiscal year, each Affected State Entity shall measure the energy use in State-owned and managed buildings having an area greater than 20,000 square feet. Buildings on master-metered campuses shall be benchmarked at the campus level until they are sub-metered at the building level, after which point those buildings shall be benchmarked at the building level.

(2) Audits. Buildings that receive low benchmark scores, as defined by the Guidelines, shall undergo an American Society of Heating, Refrigeration, and Air-Conditioning Engineers ("ASHRAE") Level II energy audit, or any other comparable audit that the CMIT approves. Campuses that have above-average EUIs or poor benchmark scores, as defined by the Guidelines, or are otherwise prioritized by the Affected State Entities and the CMIT, shall undergo a campus-wide ASHRAE Level II energy audit or any other comparable audit approved by the CMIT. In addition to energy efficiency measures, the audits shall identify opportunities for cost-effective on-site renewable generation and high-efficiency combined heat and power.

(3) Required Capital Projects and Energy Optimization Measures. Affected State Entities shall implement a cost-effective portfolio of measures identified and recommended in the audit and shall complete or make substantial progress toward completion of such measures within two years of completion of the audit. A portfolio may include, but shall not be limited to, no- and low-cost operational improvements, retrocommissioning, capital energy efficiency retrofits, on-site renewable and high-efficiency combined heat and power, and other measures identified by the CMIT.

(4) Submetering. Affected State Entities shall work with the CMIT to prioritize sub-metering for all relevant energy sources of buildings larger than 100,000 square feet on a master-metered campus to identify ways to finance such sub-metering. All buildings having an area larger than 100,000 square feet on master-metered campuses shall be sub-metered for all fuels and other energy sources by December 31, 2016, to enable individual building benchmarking, unless the Affected State Entity that owns or operates the building can demonstrate to the CMIT that it is not cost-effective or feasible to do so.

(5) Incorporating Energy Efficiency Analysis in the Capital Planning Process. As part of the capital planning process, all Affected State Entities shall include an energy efficiency analysis in the design phase of all capital project plans. The capital project should include energy efficient measures or technologies determined to be the most cost-effective, as defined by the Guidelines.

(6) Credits. Affected State Entities may receive credit towards the Target for increasing energy efficiency in leased space. In addition, Affected State Entities may receive credit towards meeting the Target for installing on-site renewable generation if the host site for such renewable generation has deployed all cost-effective energy efficiency improvements consistent with the goals of this Executive Order. Affected State Entities shall consult with and apply to the CMIT concerning such credits.

(7) Reporting. No later than October 1st of each calendar year, each Affected State Entity shall submit all information requested by the CMIT on all State-owned and managed buildings having an area over 20,000 square feet, as well as any other information related to assessing

compliance with this Executive Order.

C. Exemptions

Electric usage attributable to vehicle charging shall not be included in the Target and requirements of this Executive Order. The CMIT is authorized to provide other exemptions for good cause shown pursuant to criteria and procedures established in the Guidelines, including exceptions associated with buildings that have obtained and maintained ENERGY STAR or similar certification, or have benchmark scores placing such buildings in the top quartile of comparable buildings for the particular year at issue. Affected State Entities shall submit requests for annual exemptions to the CMIT. Any such request for exemptions and resulting determination by the CMIT shall be included in the annual report.

IV. REPEAL OF PRIOR EXECUTIVE ORDERS

Executive Order No. 111, promulgated on June 10, 2001, is hereby revoked and superseded by this Executive Order as of the date hereof.

G I V E N under my hand and the Privy Seal of the State in the City of Albany this twenty-eighth day of December in the year two thousand twelve.

BY THE GOVERNOR

Secretary to the Governor

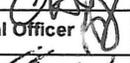
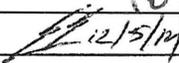
[Judicial Screening](#) | [FOIL](#) | [Internships](#) | [Privacy Policy](#) | [Disclaimer](#) | [Accessibility](#) | [Site Map](#) | [Contact](#)
[Contact Webmaster](#)

Staff Summary

Subject OCIP Extension SAS Phase I
Department Risk and Insurance Management
Department Head Name Laureen Coyne
Department Head Signature 
Project Manager Name

Date December 5, 2014
Vendor Name
Contract Number
Contract Manager Name
Table of Contents Ref. #

Board Action					
Order	To	Date	Approval	Info	Other
1	Finance Committee	12/15/14	X		
2	Board	12/17/14	X		

Internal Approvals			
Order	Approval	Order	Approval
1	Legal		
3	Chief of Staff 		
2	Chief Financial Officer 		
4	MTACC 		

PURPOSE:

To obtain Board approval to transfer insurance coverage for the balance of Work remaining on the Second Avenue Subway (SAS) Project Phase I from an Owner Controlled Insurance Program (OCIP) exclusively for that project to the 2010-2014 Capital Plan OCIP and to provide additional funding for the Second Avenue Subway insurance program in the amount of \$34 Million.

DISCUSSION:

In December 2006, MTA Risk and Insurance Management (RIM) received MTA Board Approval to procure an OCIP for the Second Avenue Subway Project Phase I with a budget of \$149 Million. Insurance policies were purchased covering Workers Compensation and General Liability for the term of January 31, 2007 to January 31, 2015 and Excess Liability and Builders Risk from March 15, 2007 to March 15, 2015. These policies were based on an estimated construction cost of \$2.545 Billion and a construction completion date of December 31, 2014. The actual amount expended for these policies totals approximately \$147.5 Million.

The current budget for third party construction costs, including contingency, is \$2.915 Billion. The revised forecasted construction completion date is December, 2016. In order to obtain continued coverage for the extended duration and the increase in anticipated construction cost, an extension of insurance policy terms must be negotiated.

MTA RIM entered into negotiations with the incumbent broker, AON Risk Services, Inc., and carriers American International Group (AIG) and Lloyds syndicates (Lloyds) for extension terms. The carriers submitted quotes that were significantly greater than anticipated. Therefore, MTA RIM explored possible alternatives, including changing carriers, self-insuring and transferring the remaining work into the MTA 2010-2014 Capital Program OCIP established for New York City Transit (NYCT), Long Island Rail Road (LIRR), Metro North Railroad (MNR) and Small Business Mentoring Program (SBMP) projects. These options are described in more detail below:

- **Extension Proposals:** The incumbent carriers, AIG and Lloyds, provided quotes that were based on the issuance of new policies with reduced coverage limits, added financial risks and additional premiums totaling over \$44 Million.

Staff Summary

FINANCE COMMITTEE MEETING

OCIP Extension SAS Phase I (Cont'd)

- Other Insurance Companies: The only other quotes that AON was able to secure were deemed unacceptable because they included a significant premium for completed operations, which premium exceeded the cost of the extension proposals received from AIG and Lloyds.
- Self-Insurance: Another option that MTA RIM investigated was to self-insure the program through the MTA captive insurance company, First Mutual Transportation Assurance Company (FMTAC). AON explored scenarios that involved fronting with commercial carriers and hiring third party administrators to handle the claims. The fixed costs of the fronting agreements and the variable funding necessary for the retained losses would be comparable to the AIG extension proposal quote. However, FMTAC would be unable to cap its losses under a self-insurance plan and, therefore, this option was deemed unacceptable because it presented too much risk.
- Agency Capital Plan OCIP: The last option evaluated involves rolling the Second Avenue Subway Project into the MTA 2010-2014 Capital Plan OCIP that was approved by the Board in September 2012. The Capital Plan OCIP covers the projects of NYCT, LIRR, MNR and SBMP within the MTA 2010-2014 Capital Plan (many of which projects will continue in construction beyond the end of 2014). The Capital Plan OCIP rate for the Second Avenue Subway Project will be a flat 6% of construction value, which is the same rate charged to all other contracts in the program. In addition, the rate will only be charged against the value of construction work remaining. The present estimate of the value of remaining construction work at the end of March, 2015 is \$655 Million. Thus, the cost of this program will be \$39.3 Million.

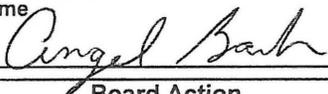
MTA RIM anticipates a return of approximately \$2.8 Million in premiums from the expiring Second Avenue Subway Phase I OCIP so the total additional insurance cost for this option will be \$36.5 Million. Moreover, the Capital Program OCIP will extend coverage until November, 2018, while the proposed extension to the existing policy will expire in March, 2017.

In sum, transferring the work to the Capital Plan OCIP is the most cost-effective option. This option will cost an estimated \$36.5 Million versus \$44 Million to extend the expiring policy and provide coverage through November 2018 versus March 2017. However, this option will require increasing the budget previously approved by the MTA Board by \$34 Million, from \$149 Million to \$183 Million. The difference between the increased cost of \$36.5 Million and the increased budget amount of \$34 Million is due the fact that, as noted above, only \$147.5 of the original \$149 Million budgeted has been expended.

RECOMMENDATION

It is recommended that the Board authorize MTA RIM to use the 2010-2014 Capital Program OCIP to cover the remaining work on the Second Avenue Subway project Phase I and to increase the authorized funding for this program by \$34 Million, from \$149 Million to \$183 Million.

Staff Summary

Subject Request for Authorization to Award Various Procurements
Department Executive
Department Head Name Bob Foran
Department Head Signature 
Division Head Name Angel Barbosa 

Date December 5, 2014
Vendor Name Various
Contract Number Various
Contract Manager Name Various
Table of Contents Ref #

Board Action					
Order	To	Date	Approval	Info	Other
1	Finance	12/15/2014			
2	Board	12/17/2014			

Internal Approvals					
Order	Approval	Order	Approval		
1	Procurement 	3	CFO 		
2	Legal 				

PURPOSE:

To obtain approval of the Board to award various contracts/contract modifications and purchase orders, as reviewed by the MTA Finance Committee.

DISCUSSION:

MTAHQ proposes to award Non-competitive procurements in the following categories:

# of Actions	\$ Amount
None	None

MTAHQ proposes to award Competitive procurements in the following categories:

Schedules Requiring Majority Vote

Schedule E: Miscellaneous Procurement Contracts	1	0.00
Schedule F: Personal Services Contracts	1	\$ 2,434,000.00
SUBTOTAL	2	\$ 2,434,000.00

MTAHQ presents the following procurement actions for Ratification:

Schedule K: Ratification of Completed Procurement Actions (Involving Schedules E-J)	1	3,190,873.00
TOTAL	3	\$ 5,624,873.00

BUDGET IMPACT: The purchases/contracts will result in obligating MTAHQ operating and capital funds in the amount listed. Funds are available in the current MTAHQ operating/capital budgets for this purpose.

RECOMMENDATION: That the purchases/contracts be approved as proposed. (Items are included in the resolution of approval at the beginning of the Procurement Section.)

BOARD RESOLUTION

METROPOLITAN TRANSPORTATION AUTHORITY

WHEREAS, in accordance with Section 1265-a and Section 1209 of the Public Authorities Law and the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive purchase and public work contracts, and the solicitation and award of request for proposals in regard to purchase and public work contracts; and

WHEREAS, in accordance with the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive miscellaneous procurement contracts, and certain change orders to procurement, public work, and miscellaneous procurement contracts; and

WHEREAS, in accordance with Section 2879 of the Public Authorities Law and the All Agency Guidelines for Procurement of Services, the Board authorizes the award of certain service contracts and certain change orders to service contracts.

NOW, the Board resolves as follows:

1. As to each purchase and public work contract set forth in the annexed Schedule A, the Board declares competitive bidding to be impractical or inappropriate for the reasons specified therein and authorizes the execution of each such contract.

2. As to each request for proposals (for purchase and public work contracts) set forth in Schedule B for which authorization to solicit proposals is requested, for the reasons specified therein the Board declares competitive bidding to be impractical or inappropriate, declares it is in the public interest to solicit competitive request for proposals and authorizes the solicitation of such proposals.

3. As to each request for proposals (for purchase and public work contracts) set forth in Schedule C for which a recommendation is made to award the contract, the Board authorizes the execution of said contract.

4. The Board ratifies each action taken set forth in Schedule D for which ratification is requested.

5. The Board authorizes the execution of each of the following for which Board authorization is required: i) the miscellaneous procurement contracts set forth in Schedule E; ii) the personal service contracts set forth in Schedule F; iii) the miscellaneous service contracts set forth in Schedule G; iv) the modifications to personal/miscellaneous service contracts set forth in Schedule H; v) the contract modifications to purchase and public work contracts set forth in Schedule I; and vi) the modifications to miscellaneous procurement contracts set forth in Schedule J.

6. The Board ratifies each action taken set forth in Schedule K for which ratification is requested.

7. The Board authorizes the budget adjustments to estimated quantity contracts set forth in Schedule L.

LIST OF PROCUREMENTS FOR BOARD APPROVAL, DECEMBER 2014
COMPETITIVE PROCUREMENTS

METROPOLITAN TRANSPORTATION AUTHORITY

Procurements Requiring Majority Vote:

E. Miscellaneous Procurement Contracts

(Staff Summaries required for all items greater than: \$100K Sole Source; \$250K Other Non-Competitive)

1. **Pollen, Inc., d/b/a C2FO** **\$0** **Staff Summary Attached**
All-Agency Early Payment Management Program
Contract No. 14041-0100

Competitively negotiated – 5 proposals – 36 months

To recommend that the Board approve the award of an all-agency, competitively negotiated, personal services contract to Pollen, Inc. d/b/a C2FO (C2FO) to provide MTA with an early payment management program that will enable MTA and its agencies to realize significant savings through identifying vendors who will offer a discount for receipt of early payments by Automated Clearing House (“ACH”) and then to pay the identified vendors by ACH in a timely and efficient manner that entitles MTA to the early payment discount. MTA estimates an initial annual savings of \$1M. This contract will be for a period of three (3) years from February 1, 2015 through January 31, 2018 with two one-year options, on a 75% MTA and 25% C2FO split of the early payment discounts actually realized by MTA. There is no prior contract for these services with which this cost can be compared; however, C2FO represents and warrants to MTA that the pricing under this agreement is equal to or better than the pricing offered by C2FO to any other prior or existing client. MTA has conducted a responsibility review and other due diligence on C2FO and has deemed it to be responsible for award.

F. Personal Service Contracts

(Staff Summaries required for items greater than: \$100K Sole Source; \$250K Other Non-Competitive; \$1M Competitive)

2. **Hill International, Inc.** **\$2,434,000** **Staff Summary Attached**
Independent Engineer Certification of NYCTA, **(Fixed)**
LIRR, MNR and MTA Bus Programs
Contract No. 13053-0100

Competitively negotiated – 1 proposal – 60 months

To recommend that the Board approve the award of a competitively negotiated, personal services contract to Hill International, Inc. to provide Independent Engineer Certification of Transit and Railroad Programs as legally required by the bond covenants of the General Resolution Authorizing Transportation Revenue Obligations, for a period of five (5) years from January 31, 2015 to January 31, 2020, in a fixed amount of \$2,434,000. The Independent Engineer will be responsible for certifying that the current inspection, maintenance and repair programs adopted by New York City Transit (NYCT), the Long Island Rail Road (LIRR), Metro-North Railroad (MNR) and MTA BUS are appropriate and sufficient to assure the continued operation of the system as a whole. As a result of negotiations, the original cost of \$3,386,427 proposed by Hill International for the five-year period was reduced to a fixed cost of \$2,434,000, a negotiated savings of \$952,427 or 28.12%. This represents an annual increase of 0.6% compared to the current five-year agreement.

Staff Summary

Schedule E: Miscellaneous Procurement Contracts

Item Number:

Vendor Name (& Location): Pollen, Inc. d/b/a C2FO	<table border="1"> <tr> <td style="width: 70%;">Contract Number: 14041-0100</td> <td style="width: 30%;">Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</td> </tr> <tr> <td>Total Amount:</td> <td>Est. \$1M Annual Savings</td> </tr> <tr> <td colspan="2">Funding Source: <input type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:</td> </tr> <tr> <td colspan="2">Requesting Dept/Div & Dept/Div Head Name: Business Service Center/Wael Hibri</td> </tr> <tr> <td colspan="2">Contract Manager: Damon Chan</td> </tr> </table>	Contract Number: 14041-0100	Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Total Amount:	Est. \$1M Annual Savings	Funding Source: <input type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:		Requesting Dept/Div & Dept/Div Head Name: Business Service Center/Wael Hibri		Contract Manager: Damon Chan	
Contract Number: 14041-0100	Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No										
Total Amount:	Est. \$1M Annual Savings										
Funding Source: <input type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:											
Requesting Dept/Div & Dept/Div Head Name: Business Service Center/Wael Hibri											
Contract Manager: Damon Chan											
Description: All-Agency Early Payment Management Program											
Contract Term (including Options, if any): 3 Years with 2 one year options											
Option(s) included in Total Amount? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No											
Procurement Type: <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive											
Solicitation Type: <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:											

DISCUSSION:

To recommend that the Board approve the award of an all-agency, competitively negotiated, personal services contract to Pollen, Inc. d/b/a C2FO (C2FO) to provide MTA with an early payment management program that will enable MTA and its agencies to realize significant savings through identifying vendors who will offer a discount for receipt of early payments by Automated Clearing House (“ACH”) and then to pay the identified vendors by ACH in a timely and efficient manner that entitles MTA to the early payment discount. MTA estimates an initial annual savings of \$1M. This contract will be for a period of three (3) years from February 1, 2015 through January 31, 2018 with two one-year options, on a 75% MTA and 25% C2FO split of the early payment discounts actually realized by MTA.

In response to the reduction in MTA revenues resulting from the U.S. and New York State economic crisis, the MTA has been aggressively seeking to reduce costs. Since January 2010, the MTA has made significant progress towards its commitment to ‘Make Every Dollar Count’ and to supporting goals of (i) identifying and implementing opportunities for recurring operating savings, (ii) identifying and implementing opportunities to centralize customer service and administrative support services and (iii) significantly enhancing the cost effectiveness of each function under MTA control.

The MTA implemented this project to obtain a firm to provide MTA with an early payment management program that will enable MTA and its agencies to realize significant savings through identifying vendors who will offer a discount for receipt of early payments. The MTA’s overall goal is a solution that will reduce the costs to MTA to purchase goods and services by identifying and taking advantage of early payment discounts. Emphasis will be placed on maximizing return for the MTA while minimizing internal costs and implementation risks.

In order to obtain these consulting services, a competitive Request for Proposal (RFP) was conducted. The RFP was publicly advertised and letters advising potential proposers of the RFP’s availability were sent to ten (10) firms. Five (5) proposals were received. The Selection Committee, comprised of management from Governance and Administration, MTA Audit, Finance, Strategic Initiatives and the Office of the CFO evaluated the proposals and invited four (4) firms: C2FO, Oxygen Finance, Taulia, Inc., and Tradeshift Inc., for oral presentations. Based on these presentations and subsequent discussions, the Selection Committee determined that C2FO was best suited to perform the required services based upon its extensive experience in early payment management and its low cost contingency fee (Contingency fee of 75% MTA and 25% C2FO split of the early payment discounts actually realized) There is no prior contract for these services with which this cost can be compared; however, C2FO represents and warrants to MTA that the pricing under this agreement is equal to or better than the pricing offered by C2FO to any other prior or existing client. MTA has conducted a responsibility review and other due diligence on C2FO and has deemed it to be responsible for award.

The MTA Department of Diversity & Civil Rights established 0% MBE and 0% WBE goals on this contract because there were no certified M/WBE firms in the marketplace to provide this service. Pollen, Inc. has not completed any MTA contracts; therefore, no assessment of the firm’s MWDBE performance can be determined at this time.

Staff Summary

Schedule F: Personal Service Contracts

Item Number:					
Dept & Dept Head Name: Chief Financial Officer/Bob Foran <i>[Signature]</i>					
Division & Division Head Name: Budgets/Douglas Johnson <i>[Signature]</i>					
Board Reviews					
Order	To	Date	Approval	Info	Other
1	Finance	12/15/2014			
2	Board	12/17/2014			
Internal Approvals					
Order	Approval	Order	Approval		
1	Procurement <i>[Signature]</i>	4	DDCR <i>[Signature]</i>		
2	Division of Budgets <i>[Signature]</i>	5	Legal <i>[Signature]</i>		
3	Chief Financial Officer				
Narrative					

SUMMARY INFORMATION	
Vendor Name: Hill International, Inc.	Contract Number: 13053-0100
Description: Independent Engineer Certification of NYCT, LIRR, MNR and MTA BUS Programs	
Total Amount: 2,434,000	
Contract Term (including Options, if any): January 31, 2015 thru January 31, 2020	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Renewal? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Procurement Type: <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	
Solicitation Type: <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source: <input checked="" type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	

I. PURPOSE/RECOMMENDATION

To recommend that the Board approve the award of a competitively negotiated, personal services contract to Hill International, Inc. to provide Independent Engineer Certification of New York City Transit (NYCT), the Long Island Rail Road (LIRR), Metro-North Railroad (MNR) and MTA Bus as legally required by the bond covenants of the General Resolution Authorizing Transportation Revenue Obligations, for a period of five (5) years from January 31, 2015 to January 31, 2020, in a fixed amount of \$2,434,000.

II. DISCUSSION

Under this contract, the Contractor shall function as the Independent Engineer as necessitated by the bond covenants of the General Resolution Authorizing Transportation Revenue Obligations. The Independent Engineer will be responsible for certifying that the current inspection, maintenance and repair programs adopted by NYCT, the LIRR, MNR and MTA Bus are appropriate and sufficient to assure the continued operation of the system as a whole. The Independent Engineer will also be responsible for certifying that the costs estimated for the described programs are logically derived and reasonable, and that adequate provisions are included in each respective operating agency's budget. Included in the services is the requirement for the Independent Engineer to issue four reports annually (one report each for NYCT, LIRR, MNR and MTA Bus).

The current two competitively awarded contracts (one for NYCT, LIRR and MNR and the other for MTA Bus) will expire on January 31, 2015. In order to continue these essential services and consolidate them under one single contract, a Request for Proposals (RFP) was publicly advertised, and letters advising potential proposers of the RFP's availability were mailed to 62 firms, 5 of which were D/M/WBE firms. One proposal was received and that was from the incumbent, Hill International, Inc. The Selection Committee, consisting of representatives from New York City Transit, the Commuter Railroads and MTA Headquarters, evaluated the proposal based on the criteria set forth in the RFP, which were as follows: i) demonstrated capability to complete the project in a professional and timely manner, ii) relevant experience and qualifications of key personnel to be assigned to the project and the project management structure, iii) reasonableness of cost, iv) reasonableness of methodology, v) prior experience of the firm in mass transportation operations, and vi) overall quality and responsiveness of the proposal and firms demonstration of a clear understanding of the objectiveness of the project.

Staff Summary

Because only one proposal was received, several other firms on the mailing list were contacted to ascertain their reasons for not submitting a proposal. Some of those firms indicated that because they were either considering or proposing on other RFP's for MTA and the agencies, they decided not to propose on the Independent Engineering Certification RFP as doing so would present a conflict of interest situation, which would result in their not meeting the level of independence legally required by the bond covenants. Some firms stated that the scope of work involved a number of functional areas, such as infrastructural inspections and audits, which were not within their expertise. While the lack of competition was of concern, it was recognized by the selection committee that Hill International has performed all of its duties well (and within budget), and that if negotiations could result in a cost-effective contract, it would then be prudent to award a new contract to Hill.

As a result of those negotiations, the original cost of \$3,386,427 proposed by Hill International for the five-year period was reduced to a fixed cost of \$2,434,000, a negotiated savings of \$952,427 or 28.1%. This represents an annual increase of only 0.6% when compared with the current agreement.

III. D/M/WBE INFORMATION

The MTA Department of Diversity & Civil Rights has established 10% MBE and 10% WBE participation goals on the contract. Hill International has achieved its previous M/WBE goals on previous MTA contracts.

IV. IMPACT ON FUNDING

The total cost for this fixed contract is \$2,434,000. Funds for this project are available within the MTAHQ budget.

V. ALTERNATIVES

None. The Independent Engineer Certification is legally required by the bond covenants of the General Resolution Authorizing Transportation Revenue Obligations. The MTA Capital Program would jeopardize a significant funding source if this certification is not obtained.

LIST OF PROCUREMENTS FOR BOARD APPROVAL, DECEMBER 2014
PROCUREMENTS FOR RATIFICATION

METROPOLITAN TRANSPORTATION AUTHORITY

Procurements Requiring Two-Thirds Vote:

K. Ratifications of Completed Procurement Actions (Involving Schedules E-J)

(Staff Summaries required for unusually large or complex items which otherwise would require Board approval)

1. **PricewaterhouseCoopers LLP** **\$3,190,873** **Staff Summary Attached**
All-Agency Independent Quality Assurance Services
Contract No. 14235-0100

Competitively negotiated – 8 proposals – 24 months

To recommend that the Board ratify the award of an all-agency competitively negotiated, personal services contract to PricewaterhouseCoopers LLP (“PwC”) to provide professional consulting services for Independent Verification & Validation (IV &V) of IBM’s implementation of the PeopleSoft 9.2 upgrade at MTA’s Business Service Center (BSC) for a period of two years from November 14, 2014 through November 13, 2016 for a fixed price of \$3,190,873.

In July 2014 the Board approved the award of a contract for technical professional services to IBM for the upgrade of MTA’s core Financial and Human Resource Systems (PeopleSoft - ERP) to PeopleSoft Version 9.2. Contracting for IV&V services is a critical component of the implementation effort to confirm the upgrade meets industry best practices and meets all the requirements of the MTA and its affiliated agencies. With the IBM team already on board since August 2014 initiating the upgrade, ensuring an IV&V team commenced work no later than the 2nd week of November was paramount to the overall success of the PeopleSoft 9.2 upgrade. The IV&V firm immediately began to take part in the upgrade independently performing critical reviews of the project tasks. Any delay in the arrival of the IV&V team would have increased costs and negatively impacted the upgrade timeline.

As a result of negotiations, the original cost of \$3,996,755 submitted by PwC was reduced to \$3,190,873 (fixed) for a savings of \$805,882 or 20.16%. Based on the above and the negotiated savings, the total fixed cost of \$3,190,873 is considered to be fair and reasonable.

Staff Summary

Schedule K: Ratification of Completed Procurement Actions (Involving Schedules E-J)

Item Number:

Vendor Name (& Location): PriceWaterHouseCoopers LLP (PwC)	Contract Number: 14235-0100	Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Description: Independent Quality Assurance Services	Total Amount: \$3,190,873	
Contract Term (including Options, if any): November 14, 2014 through November 13, 2016	Funding Source: <input type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Requesting Dept/Div & Dept/Div Head Name: Business Service Center Procurement / Wael Hibri	
Procurement Type: <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	Contract Manager: Yuliana Konovalova	
Solicitation Type: <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:		

PURPOSE/RECOMMENDATION

To recommend that the Board ratify the award of an all-agency competitively negotiated, personal services contract to PricewaterhouseCoopers LLP (“PwC”) to provide professional consulting services for Independent Verification & Validation (IV&V) of IBM’s implementation of the PeopleSoft 9.2 upgrade at MTA’s Business Service Center (BSC) for a period of two years from November 14, 2014 through November 13, 2016 for a fixed price of \$3,190,873.

DISCUSSION

In July 2014 the Board approved the award of a contract for technical professional services to IBM for the upgrade of MTA’s core Financial and Human Resource Systems (PeopleSoft - ERP) to PeopleSoft Version 9.2. The primary tenet of the upgrade is to improve BSC customer service and increase the productivity of the MTA, removing customizations and replacing them with existing PeopleSoft functionality where possible. Contracting for IV&V services is a critical component of the implementation effort to confirm the upgrade meets industry best practices and meets all the requirements of the MTA and its affiliated agencies.

With the IBM team already on board since August 2014 initiating the upgrade, ensuring an IV&V team commenced work no later than the 2nd week of November was paramount to the overall success of the PeopleSoft 9.2 upgrade. The IV&V firm immediately began to take part in the upgrade independently performing critical reviews of the project tasks. Any delay in the arrival of the IV&V team would have increased costs and negatively impacted the upgrade timeline.

In order to provide these services a competitive Request for Proposal (RFP) was issued. The RFP was publicly advertised and letters advising potential proposers of the RFP’s availability were sent to eighty (80) firms including eighteen (18) WBE/MBE firms. Eight (8) proposals were received. The Selection Committee, consisting of representatives from NYCT, MNR, LIRR, B&T, MTAHQ, MTA Bus and MTA Audit, recommended that three (3) firms (PwC, KPMG, CTGi) be invited for oral presentations. Based on the oral presentations, the selection committee short-listed to two (2) firms, PwC and KPMG. The Selection Committee determined that PwC was the most technically qualified and best suited to perform the services identified by the RFP.

As a result of negotiations, the original cost of \$3,996,755 submitted by PwC was reduced to \$3,190,873 (fixed) for a savings of \$805,882 or 20.16%. Based on the above and the negotiated savings, the total fixed cost of \$3,190,873 is considered to be fair and reasonable.

The MTA Department of Diversity & Civil Rights established 10% MBE and 10% WBE goals on the contract. PricewaterhouseCoopers LLP (PwC) did not satisfy the 20% MBE goal on its previous contract. That contract expired on August 31, 2007. Going forward DDCR will monitor the subject contract to ensure that the 10% MBE and 1 0% WBE goals are obtained.

[THIS PAGE INTENTIONALLY LEFT BLANK]

DECEMBER 2014
MTA REAL ESTATE
LIST OF REAL ESTATE ACTION ITEMS FOR BOARD APPROVAL

ACTION ITEMS

MTA NEW YORK CITY TRANSIT

Lease Agreement with Bozena and Aleksandra Brzostek (or corporation to be formed) for the operation of a gourmet food market at 218 Beach 116th Street, Queens, New York

Lease Modification between Concord Business Services and MTA NYCT for Parking Lot at 242 Gold Street, Brooklyn, NY

MANHATTEN AND BRONX SURFACE TRANSIT OPERATING AUTHORITY

Lease Modification between Royal Charter Properties and MTA MaBSTOA for Swing Room at 53 Audubon Avenue, New York, NY

Staff Summary

Subject LEASE AGREEMENT
Department REAL ESTATE
Department Head Name JEFFREY B. ROSEN
Department Head Signature 
Project Manager Name ARTURO ESPINOZA

Date DECEMBER 15, 2014
Vendor Name
Contract Number
Contract Manager Name
Table of Contents Ref. #

Board Action					
Order	To	Date	Approval	Info	Other
1	Finance Committee	12/15/14	X		
2	Board	12/17/14	X		

Internal Approvals			
Order	Approval	Order	Approval
		1	Legal 
3	Chief of Staff 		
2	Chief Financial Officer 		

AGENCY: MTA New York City Transit ("NYCT")

LESSEE: Bozena and Aleksandra Brzostek (or corporation to be formed)

LOCATION: 218 Beach 116th Street, Queens, New York

ACTIVITY: Gourmet food market

ACTION REQUESTED: Approval of terms

TERM: 10 years, with one 5-year option subject to MTA approval

SPACE: Approximately 2,225 square feet with 60 feet of street frontage (the "Premises")

COMPENSATION: \$43,200 in Year 1, 3% annual escalations

COMMENTS:

The renovated Rockaway Park - Beach 116th Street Station in Rockaway Park, Queens is the terminus of the A train and features a large head house, the NYPD Transit Bureau District 23 offices, and five retail stores with nearly 250 feet of frontage along Beach 116th Street and a total of 5,400 square feet of retail space. The station occupies a central place in the Rockaway Park retail strip extending between Rockaway Beach Boulevard and Beach Channel Drive. Improvements made to the station in recent years include a restored façade for the entire station with new storefronts, awnings, and a new roof. In addition to the Premises, which are currently vacant, NYCT's street front retail tenants include a diner, a jeweler, a dry cleaner, and an accountant's office. Other retail along the east side of the Beach 116th Street corridor includes gift and stationery stores, a pizzeria, convenience stores and newsstands, a cobbler, a small grocery store, quick-service food establishments, delicatessens, a 99-cent store, a juice bar, and a pharmacy.

A lease for the Premises was publicly offered via a request for proposals and three responses were received. Two of the responses, from Mr. Abdusalam Yafee and Mr. Mohammed Saleh, proposed combination deli/grocery stores.

Details of the proposals are listed in the following table:

Name of Proposer	First Year Rent	Present Value: Ten Year Term, 9% Discount Rate
Abdusalam Yafee	\$50,000	\$360,258
Mohammed Saleh	\$48,000	\$345,843
Aleksandra and Bozena Brzostek	\$43,200	\$311,267

Staff Summary

FINANCE COMMITTEE MEETING Brozstek (Cont'd.)

While Mr. Yafee and Mr. Saleh offered more rent, MTA Real Estate believes the Brozstek's proposal to be the most beneficial of the three to the MTA, taking into account its potential to help reinforce and foster a general upgrading of the Beach 116th Street retail corridor of which NYCT's five stores constitute a key element.

The Brzosteks, who have extensive financial resources and excellent credit, propose to open a European food market primarily featuring products imported from Poland. The Brzosteks have operated a highly successful international foods market in a nearby but less busy section of this Rockaways neighborhood.

The Beach 116th Street retail strip already includes numerous deli/convenience stores, newsstands, and discount stores. Adding another combination deli/grocery store, as proposed by Mr. Yafee and Mr. Saleh, would not enhance the character of the corridor, and would diminish the appeal of NYCT's other four storefronts along Beach 116th Street. The existing leases for the MTA's four other storefronts expire in 2018 and MTA Real Estate anticipates issuing RFPs for those spaces in 2017. MTA Real Estate believes that introducing a retail operation of the quality proposed by the Brzosteks will attract higher rents from the proposer's who will bid on MTA's four stores spaces in the future. In addition, the Brzostek's proposal will result in a more attractive station, and an improved street level experience on Beach 116th, an area that is still recovering from Hurricane Sandy and beginning to experience rejuvenation.

Based on the foregoing, MTA Real Estate recommends awarding a lease for the Premises to Bozena and Aleksandra Brzotek (or corporation to be formed) on the above-referenced terms and conditions above.

Staff Summary

Subject LEASE MODIFICATION
Department REAL ESTATE
Department Head Name JEFFREY B. ROSEN
Department Head Signature 
Project Manager Name MICHAEL B. DANIELS

Date DECEMBER 15, 2014
Vendor Name
Contract Number
Contract Manager Name
Table of Contents Ref. #

Board Action					
Order	To	Date	Approval	Info	Other
1	Finance Committee	12/15/14	X		
2	Board	12/17/14	X		

Internal Approvals			
Order	Approval	Order	Approval
		1	Legal 
3	Chief of Staff 		
2	Chief Financial Officer 		

AGENCY: MTA New York City Transit ("NYCT")

LANDLORD: Concord Business Services, Inc.

LOCATION: 242 Gold Street, Brooklyn, NY

ACTIVITY: Lease modification and extension

ACTION REQUESTED: Approval of terms

TERM: Three years

SPACE: Approximately 2,700 square feet of paved parking

BASE RENT: 1st Year - January 2015 through December 2015 at \$48,600.00 annum /\$18.00 rsf
 2nd Year - January 2016 through December 2016 at \$48,600.00 annum/\$18.00 rsf
 3rd Year - January 2017 through December 2017 at \$50,058.00 annum/\$18.54 rsf

TAX ESCALATION: Tenant responsible for 100% of the real estate taxes; NYCT has obtained tax exemption

RENEWAL OPTION: None

TERMINATION RIGHT: Either party can terminate after second anniversary following 6-months' notice

ELECTRICITY: Tenant expense via direct meter

CLEANING AND MAINTENANCE: Tenant responsible for removal of debris, snow and ice. Landlord responsible for maintenance of all paved areas and sidewalks

COMMENTS:

Since 2005, NYCT's Maintenance Shop and Emergency Response Operation groups use the Location to store emergency generators and provide 24/7 parking for trucks and vans. Due to limited street parking in this area of downtown Brooklyn, NYCT needs to secure off-street parking for vehicles and equipment within reasonable proximity to the groups' reporting location at the Hoyt Street Station.

Staff Summary

FINANCE COMMITTEE MEETING Concord Business Services, Inc. (Cont'd.)

MTA Real Estate was unable to identify any leased or owned space within NYCT's existing space inventory that would accommodate this function. To identify other options, MTA Real Estate worked with Cushman & Wakefield/JRT Realty. Several properties were identified but they did not meet the proximity requirement relative to the reporting location.

Based on the foregoing, MTA Real Estate requests authorization to enter into a lease amendment on the above-described terms and conditions.

Staff Summary



Subject LEASE AMENDMENT
Department REAL ESTATE
Department Head Name JEFFREY B. ROSEN
Department Head Signature
Project Manager Name MICHAEL B. DANIELS

Date DECEMBER 15, 2014
Vendor Name
Contract Number
Contract Manager Name
Table of Contents Ref. #

Board Action					
Order	To	Date	Approval	Info	Other
1	Finance Committee	12/15/14	X		
2	Board	12/17/14	X		

Internal Approvals			
Order	Approval	Order	Approval
		1	Legal
3	Chief of Staff		
2	Chief Financial Officer		

AGENCY: Manhattan and Bronx Surface Transit Operating Authority ("MaBSTOA")

LANDLORD: Royal Charter Properties, Inc.

LOCATION: 53 Audubon Avenue, NY, NY

USE: Swing space for bus operations and dispatchers

ACTION REQUESTED: Approval of terms

TERM: Five years

OPTION TERM: Five years

SPACE: Approximately 735 square feet – 1st floor retail space

BASE RENT:

1/1/15 - 12/31/15	\$43,389.96
1/1/16 - 12/31/16	\$44,691.66
1/1/17 - 12/31/17	\$46,032.41
1/1/18 - 12/31/18	\$47,413.38
1/1/19 - 12/31/19	\$48,835.78

TAX ESCALATION: Tenant to pay its proportionate share over 2015/2016 base year

RENEWAL OPTION: Five years with rent escalation of 3.5% per annum

ELECTRICITY: Tenant expense via direct meter. Water and heat included in rent.

SERVICES: Tenant to pay for snow, ice and debris removal from sidewalk - \$3,500 per annum (\$292 per month), subject to 3% annual escalation.

COMMENTS:

MaBSTOA has occupied this swing room since 2007 and is satisfied with the location. There are no current plans to change the bus routes (M2, M3, M5) that would impact the location of the swing space. Approximately 30 operators and 2 dispatchers utilize this location 7 days per week. The renegotiated rent, which represents a 3% increase over the current rent, is considered to be reasonable. A search revealed no suitable alternative spaces in the immediate area.

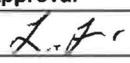
Based on the foregoing, MTA Real Estate requests authorization to enter into a lease amendment extending the term and otherwise modifying the existing lease on the above-described terms and conditions.

Subject TAB Senior Hearing Officers
Department Law Department
Department Head Name Lewis S. Finkelman
Department Head Signature
Project Manager Name Mary-Ann E. Maloney

Date December 1, 2014
Vendor Name
Contract Number
Contract Manager Name
Table of Contents Ref #

Board Action					
Order	To	Date	Approval	Info	Other
1	NYCT Committee		X		
2	MTA Board		X		

Internal Approvals			
Order	Approval	Order	Approval
3	President 		
2	Executive VP 		

Internal Approvals (cont.)							
Order	Approval	Order	Approval	Order	Approval	Order	Approval
1	Law 		Human Resources		Labor Relations		Material

Narrative

Purpose

To obtain Board approval for the renewal of retainer agreements with TAB's current panel of two Senior Hearing Officers in amounts not to exceed \$70,000 and \$55,000 for the period of January 1, 2015 – December 31, 2015 and to obtain Board approval for retaining an additional Senior Hearing Officer in an amount not to exceed \$87,000 for the period of January 1, 2015- December 31, 2015.

Discussion

In accordance with Section 1209-a (2) of the Public Authorities Law (PAL), TAB maintains a roster of per diem hearing officers appointed by the President of NYCT. There are currently two per diem Senior Hearing Officers on TAB's roster, who serve under separate retainers. An additional per diem Senior Hearing Officer is necessary due to the 21% increase in the volume of hearings (through the 3rd quarter of 2014) and significant anticipated changes to the adjudication functions in 2015 which will require greater oversight and training of the hearing officers during the 2015 calendar year (TAB will be implementing a new database system in 2015 that will also impact training needs).

The Senior Hearing Officers are responsible for conducting hearings, training and supervising the panel of hearing officers, reviewing decisions and chairing the TAB Appeals Board, a three-member panel with responsibility to review appeals of hearing officer determinations. Debra Siedman DeWan, who was appointed in January 1990, serves approximately 3 days per week and is paid at a hourly rate of \$56.75 (or \$397.25 for a seven hour day). Rebecca Novak who was appointed in July 1995, serves approximately 2 days per week, and is paid at a hourly rate of \$49.33 (or \$345.31 for a seven hour day). Melissa Brody, who was appointed in March 2014, will serve 4-5 days per week and will be paid an hourly rate of \$47.50 (or \$332.50 for a seven hour day).

The legal name of MTA New York City Transit is New York City Transit Authority.

NYC Transit requests approval to renew its agreements with Ms. Siedman DeWan and Ms. Novak for the period of January 1, 2015 – December 31, 2015. Both have demonstrated themselves to be highly competent attorneys who have served as Senior Hearing Officers for a substantial period of time. NYC Transit also requests approval to execute a retainer agreement with Melissa Brody as a Senior Hearing Officer. Since her appointment to the TAB hearing officer panel in March 2014, Ms. Brody has performed her duties exceptionally. She is a quick study, who is dedicated, and detail and solution oriented. Ms. Siedman DeWan, Ms. Novak and Ms. Brody are considered the best candidates for the Senior Hearing Officer positions. Their retainers will be capped as follows: Ms. Siedman DeWan at \$70,000, Ms. Novak at \$55,000 and Ms. Brody at \$87,000. Please note that the caps include provisions for anticipated extra hours due to the potential of an increased workload.

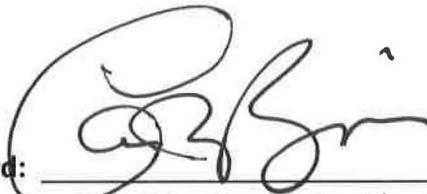
Impact on Funding

Funding for the per diem Senior Hearing Officers has been included in TAB's 2015 operating budget.

Recommendation

That the Board approves the award of retainer agreements for Debra Siedman DeWan, Rebecca Novak and Melissa Brody as described above.

Approved For Submission to the Board: _____



Carmen Bianco, President

Dated: 12.5.14

Report

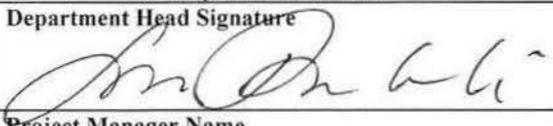
PROCUREMENTS

The Procurement Agenda this month includes 13 actions for a proposed expenditure of \$304.3M.

Subject Request for Authorization to Award Various Procurements

Department Materiel Division – NYCT

Department Head Name Stephen M. Plochochi

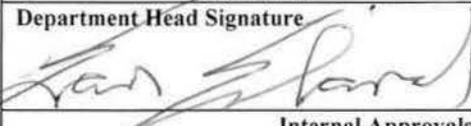
Department Head Signature


Project Manager Name Rose Davis

December 4, 2014

Department Law and Procurement – MTACC

Department Head Name Eyan Eisland

Department Head Signature


Board Action

Order	To	Date	Approval	Info	Other
1	Committee	12/15/14			
2	Board	12/17/14			

Internal Approvals

	Approval		Approval
	President NYCT		President MTACC
	Executive VP		President MTA Bus
X	Capital Prog. Management	X	Subways
	Law	X	Diversity/Civil Rights

Internal Approvals (cont.)

Order	Approval	Order	Approval	Order	Approval	Order	Approval

PURPOSE:

To obtain approval of the Board to award various contracts and purchase orders, and to inform the NYC Transit Committee of these procurement actions.

DISCUSSION:

NYC Transit proposes to award Non-Competitive procurements in the following categories:

Procurements Requiring Two Thirds Vote:

	<u># of Actions</u>	<u>\$ Amount</u>
Schedule A: Non-Competitive Purchases and Public Work Contracts	1	\$ 25.0 M
• Vapor Stone Rail Systems \$ 25.0 M		
SUBTOTAL	1	\$ 25.0 M

MTA Capital Construction proposes to award Non-Competitive procurements in the following categories: NONE

MTA Bus Company proposes to award Non-Competitive procurements in the following categories: NONE

NYC Transit proposes to award Competitive procurements in the following categories:

Schedules Requiring Majority Vote:

Schedule G: Miscellaneous Service Contracts	2	\$	7.9 M
Schedule H: Modifications to Personal/Miscellaneous Service Contracts	3	\$	9.2 M
Schedule I: Modifications to Purchase and Public Works Contracts	1	\$	240.0 M
Schedule L: Budget Adjustments to Estimated Quantity Contracts	1	\$	2.7 M
	<u>7</u>	<u>\$</u>	<u>259.8 M</u>

MTA Capital Construction proposes to award Competitive procurements in the following categories:

Schedules Requiring Majority Vote:

Schedule I: Modifications to Purchase and Public Works Contracts	1	\$	1.0 M
	<u>1</u>	<u>\$</u>	<u>1.0 M</u>

MTA Bus Company proposes to award Competitive procurements in the following categories: NONE

MTA Bus Company proposes to award Ratifications in the following categories: NONE

NYC Transit proposes to award Ratifications in the following categories:

Schedules Requiring Two-Thirds Vote:

Schedule D: Ratification of Completed Procurement Actions	3	\$	16.0 M
	<u>3</u>	<u>\$</u>	<u>16.0 M</u>

MTA Capital Construction proposes to award Ratifications in the following categories:

Schedules Requiring Majority Vote:

Schedule K: Ratification of Completed Procurement Actions	1	\$	2.5 M
	<u>1</u>	<u>\$</u>	<u>2.5 M</u>
	<u>13</u>	<u>\$</u>	<u>304.3 M</u>

COMPETITIVE BIDDING REQUIREMENTS: The procurement actions in Schedules A, B, C and D are subject to the competitive bidding requirements of PAL 1209 or 1265-a relating to contracts for the purchase of goods or public work. Procurement actions in the remaining Schedules are not subject to these requirements.

BUDGET IMPACT: The purchases/contracts will result in obligating funds in the amounts listed. Funds are available in the current operating/capital budgets for this purpose.

RECOMMENDATION: That the purchases/contracts be approved as proposed. (Items are included in the resolution of approval at the beginning of the Procurement Section.)

BOARD RESOLUTION

WHEREAS, in accordance with Section 1265-a and 1209 of the Public Authorities Law and the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive purchase and public work contracts, and the solicitation and award of request for proposals in regard to purchase and public work contracts; and

WHEREAS, in accordance with the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive miscellaneous service and miscellaneous procurement contracts, certain change orders to purchase, public work, and miscellaneous service and miscellaneous procurement contracts, and certain budget adjustments to estimated quantity contracts; and

WHEREAS, in accordance with Section 2879 of the Public Authorities Law and the All-Agency Guidelines for Procurement of Services, the Board authorizes the award of certain service contracts and certain change orders to service contracts.

NOW, the Board resolves as follows:

1. As to each purchase and public work contract set forth in annexed Schedule A, the Board declares competitive bidding to be impractical or inappropriate for the reasons specified therein and authorizes the execution of each such contract.

2. As to each request for proposals (for purchase and public work contracts) set forth in Schedule B for which authorization to solicit proposals is requested, for the reasons specified therein, the Board declares competitive bidding to be impractical or inappropriate, declares it is in the public interest to solicit competitive request for proposals, and authorizes the solicitation of such proposals.

3. As to each request for proposals (for purchase and public work contracts) set forth in Schedule C for which a recommendation is made to award the contract, the Board authorizes the execution of said contract.

4. As to each action set forth in Schedule D, the Board declares competitive bidding impractical or inappropriate for the reasons specified therein, and ratifies each action for which ratification is requested.

5. The Board authorizes the execution of each of the following for which Board authorization is required: i) the miscellaneous procurement contracts set forth in Schedule E; ii) the personal service contracts set forth in Schedule F; iii) the miscellaneous service contracts set forth in Schedule G; iv) the modifications to personal/miscellaneous service contracts set forth in Schedule H; v) the contract modifications to purchase and public work contracts set forth in Schedule I; and vi) the modifications to miscellaneous procurement contracts set forth in Schedule J.

6. The Board ratifies each action taken set forth in Schedule K for which ratification is requested.

7. The Board authorizes the budget adjustments to estimated contracts set forth in Schedule L.

DECEMBER 2014

LIST OF NON-COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Procurements Requiring Two-Thirds Vote:

A. Non-Competitive Purchases and Public Work Contracts

(Staff Summaries required for all items greater than: \$100K Sole Source; \$250K Other Non-Competitive.) Note – in the following solicitations, NYC Transit attempted to secure a price reduction. No other substantive negotiations were held except as indicated for individual solicitations.

- | | | |
|--|----------------------------|--------------------------------------|
| 1. Vapor Stone Rail Systems
A Division of Wabtec Corp.
Sole Source - Three-year omnibus | \$25,000,000 (Est.) | <u>Staff Summary Attached</u> |
| Purchase of non-inventory and inventory replacement door operator parts and other sole source parts for subway cars. | | |

Item Number: 1

Vendor Name (& Location) Vapor Stone Rail Systems (Plattsburgh, NY)
Description Purchase of non-inventory and inventory replacement door operator parts and other sole source parts for subway cars
Contract Term (including Options, if any) December 31, 2014 – December 30, 2017
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> n/a
Procurement Type <input type="checkbox"/> Competitive <input checked="" type="checkbox"/> Non-competitive
Solicitation Type <input type="checkbox"/> RFP <input type="checkbox"/> Bid <input checked="" type="checkbox"/> Other: Omnibus Sole Source Approval

Contract Number NONE	Renewal? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Total Amount:	\$25,000,000 (Est.)
Funding Source <input checked="" type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	
Requesting Dept/Div & Dept/Div Head Name: Division of Materiel, Stephen M. Plochochi	

Discussion:

This is an omnibus approval request for items identified as obtainable only from Vapor Stone Rail Systems, a Division of Wabtec Corp. (Vapor Stone), and will eliminate the need to advertise and prepare individual procurement staff summaries for Board approval for each procurement over the \$15,000 small purchase threshold. NYC Transit is not obligated to generate any purchase orders pursuant to an omnibus approval. Any purchases made under this approval will be made pursuant to paragraph 9(b) of Public Authorities Law § 1209, which allows for purchases of items that are available from only a single responsible source to be conducted without competitive bidding.

There are approximately 5,672 items covered by this approval for the purchase of replacement door operator parts, monitoring and diagnostic parts, and certain other sole source parts such as heating, ventilation, and air conditioning (HVAC) parts used on NYC Transit subway cars. These items are identified as obtainable only from Vapor Stone for the following reasons: sole pre-qualified source on the Qualified Products List and not available from any distributor or other source; publicly advertised within a twelve month period without an acceptable alternate supplier; or proprietary to Vapor Stone. These items are advertised a minimum of once every twelve months to seek competition. A list of Vapor Stone sole source items, as well as NYC Transit’s intention to buy items on the list without competitive bidding, is available for download from the NYC Transit website at any time by any prospective vendor. These sole source parts, some of which are safety sensitive, will be used by the Division of Car Equipment (DCE) for normal maintenance and Scheduled Maintenance System (SMS) requirements for door equipment for 4,957 subway cars in the NYC Transit fleet (all subway cars with the exception of the 660 Kawasaki-built R160 cars and 752 R46 cars.) Vapor Stone will also supply HVAC parts for approximately 2,788 subway cars (all pre-R142 and R142A cars) as well as monitoring and diagnostic parts for 1,030 R142 cars.

The current omnibus approval for \$20,000,000 was approved by the Board in November 2012 and expires on October 30, 2015. There is a remaining balance of \$2,082,485 on the current approval. A new omnibus approval is requested now because the remaining balance will be insufficient to support SMS and regular running repair projects for NYC Transit’s subway cars through October 2015. The greater-than-anticipated spend of approved funds during the term of the current omnibus approval is attributed to new and modified SMS work scopes and forecast changes since the current omnibus approval was approved by the Board. During the term of the new omnibus approval, the R62, R62A, and R160 subway cars will undergo a seven-year overhaul and the R142, R142A, and R143 subway cars will undergo a 14-year heavy overhaul.

Procurement performed an analysis on the 111 items issued during the term of the current omnibus approval that exceeded the \$15,000 threshold. Of the 111 items, 30 items have purchase price history. Of the 30 items, the pricing for four was excluded because quantity fluctuations artificially reduced the computed price escalation. When these items are excluded from the calculation, the prices for the remaining 26 items show an overall weighted average annual price increase of 0.3%. This compares favorably with the Producer Price Index used for the analysis over the same time period, which revealed an annual weighted average price increase of approximately 0.6%.

Based on current forecasts and projections for 2015 through 2018 as provided by DCE, it is anticipated that DCE will require approximately \$25,000,000 for sole source items from Vapor Stone during the term of this omnibus approval request. Procurement believes that the amount requested will be sufficient to procure all sole source materials from Vapor Stone for the next three-year period. Procurement and DCE will continue to research alternate sources of supply wherever possible. Under this omnibus approval, pricing for any procurement is established by requesting a quotation for each item from Vapor Stone on an as-required basis. Each item to be purchased under this approval will be subject to a cost and/or price analysis and determination that the negotiated price is found to be fair and reasonable.

DECEMBER 2014

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Procurements Requiring Majority Vote:

G. Miscellaneous Service Contracts

(Staff Summaries required for all items greater than: \$100K Sole Source; \$250K Other Non-Competitive; \$1M RFP; No Staff Summary required if sealed bid procurement.)

1. **Asplundh Tree Expert Co.** **\$890,850 (Est.)** Staff Summary Attached
Four Bids/Low Bidder – Three-year contract
RFQ# 82553
Tree removal and tree trimming services.

2. **Simaren Corp.** **\$7,034,903 (Est.)** Staff Summary Attached
d/b/a Wisdom Protective Services
Seven Bids/Low Bidder – Five-year contract
RFQ# 81895
Fire Safety Director Services.

DECEMBER 2014

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Procurements Requiring Majority Vote cont'd:

H. Modifications to Personal Service Contracts and Miscellaneous Service Contracts

(Approvals/Staff Summaries required for substantial change orders and change orders that cause the original contract to equal or exceed the monetary or durational threshold required for Board approval.)

Trillium USA LLC

- | | | |
|----|----------------------------------|---------------------------|
| 3. | Contract# 04B8867.4 | \$4,071,090 (Est.) |
| 4. | Contract# 06A9336.4 | \$3,407,454 (Est.) |
| 5. | Contract# CC CNG 200501.9 | \$1,692,310 (Est.) |

Staff Summary Attached

↓
↓
↓

Modification to the contract for the operation and maintenance of the West Farms and Jackie Gleason CNG fueling facilities for NYC Transit and the College Point and Spring Creek Depots for MTA Bus Company, in order to exercise the option of a three-year extension for the Jackie Gleason CNG facility and extend the terms of the West Farms and MTA Bus Company contracts for three years and add funding.

I. Modifications to Purchase and Public Works Contracts

(Staff Summaries required for individual change orders greater than \$250K. Approval without Staff Summary required for change orders greater than 15% of the adjusted contract amount which are also at least \$50K.)

- | | | |
|----|----------------------------|-----------------------------|
| 6. | OptumRx, Inc. | \$240,000,000 (Est.) |
| | Contract# 08I9983.4 | |

Staff Summary Attached

Modification to the contract for Pharmacy Benefits Manager Services, in order to extend the contract term for one year and add funding.

DECEMBER 2014

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

L. Budget Adjustments to Estimated Quantity Contracts

(Expenditures which are anticipated to exceed the lesser of \$250,000 or \$50,000 in the event such expenditures exceed 15% of the adjusted contract budget, including any contract modifications.)

**7. StrataGen Systems, Inc.
Contract# 04F8952**

\$2,662,053

Staff Summary Attached

Provide additional funding for the continued software maintenance and enhancements to the program known as ADEPT, a Paratransit Trip Scheduling Software.

DECEMBER 2014

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Procurements Requiring Majority Vote:

I. Modifications to Purchase and Public Work Contracts

(Staff Summaries required for individual change orders greater than \$250K. Approval without Staff Summary required for change orders greater than 15% of the adjusted contract amount which are also at least \$50K.)

1. **Plaza Schiavone JV** **\$1,048,500** **Staff Summary Attached**
Contract# A-36125.404

Modification to the contract for the Fulton Center Enclosure, in order to address the resolution of the contractor's claim for costs associated with additional fire watch personnel per revised NYC Fire Code.

Item Number: 3-5

Vendor Name (& Location) Trillium USA LLC (Salt Lake City, UT)
Description Operation and Maintenance of CNG Bus Fueling
Contract Term (including Options, if any) 04B8867: August 14, 2003 – December 31, 2014 06A9336: January 1, 2008 – December 31, 2014 CC CNG 200501: March 1, 2006 – December 31, 2014
Option(s) included in Total Amount? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive
Solicitation Type <input type="checkbox"/> RFP <input type="checkbox"/> Bid <input checked="" type="checkbox"/> Other: Modification
Funding Source <input checked="" type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:
Requesting Dept/Div & Dept/Div Head Name: Department of Buses and MTA Bus Company, Darryl C. Irick

Contract Numbers 04B8867; 06A9336; and CC CNG 200501	AWO/Mod.# 4, 4 and 9
Original Amount: 04B8867: \$9,360,000 06A9336: \$8,634,291 CC CNG 200501: \$2,062,900	\$ 23,227,922
Option Amount: CC CNG 200501: \$3,170,731	
Prior Modifications: 04B8867: \$2,593,603 06A9336: \$758,851 CC CNG 200501: \$8,769,382	\$ 12,121,836
Prior Budgetary Increases: 04B8867: \$240,000 CC CNG 200501: \$445,000	\$ 685,000
Current Amount: 04B8867: \$12,193,603 06A9336: \$9,393,142 CC CNG 200501: \$14,448,013	\$ 36,034,758
This Request: 04B8867: \$4,071,090 (Est.) 06A9336: \$3,407,454 (Est.) CC CNG 200501: \$1,692,310 (Est.)	\$ 9,170,854 (Est.)
% of This Request to Current Amount:	25.5%
% of Modifications (including This Request) to Total Amount:	94.6%

Discussion:

These multi-agency contract modifications to three competitively negotiated estimated quantity contracts awarded to Trillium USA LLC (Trillium), two contracts for NYC Transit for the operation and maintenance of the Jackie Gleason and West Farms fast-fill Compressed Natural Gas (CNG) facilities and one contract for MTA Bus Company (MTABC) for the operation and maintenance of the College Point and Spring Creek fast-fill CNG facilities, will: 1) exercise the 3-year option under NYC Transit Contract 06A9336 for the Jackie Gleason CNG facility that will extend the contract from January 1, 2015 through December 31, 2017; 2) extend NYC Transit Contract 04B8867 for the West Farms CNG facility by three years, from January 1, 2015 through December 31, 2017; and 3) extend MTA Bus Company Contract CNG200501 for the College Point and Spring Creek CNG facilities by three years, from January 1, 2015 through December 31, 2017. The modification to the West Farms contract also includes provisions to add preventative and remedial maintenance for the two NYC Transit slow-fill CNG facilities at Zerega and Grand Ave Central Maintenance Facilities. The slow-fill CNG facilities are utilized for fueling/defueling buses when the buses are brought into the central maintenance facilities to be serviced. The fast-fill CNG facilities are utilized for the daily fueling of buses.

Under these contracts, the contractor is responsible for the maintenance and operation of the entire CNG facility from the point where the natural gas enters the facility through the compression stages and up to the point where the compressed gas is dispensed at the fueling stations. The actual dispensing of the compressed gas into the buses is performed by NYC Transit and MTABC employees. It should be noted that the supply of natural gas is outside the scope of these contracts and is obtained from the utility and/or from third party providers. The contractor's responsibilities include providing preventive maintenance including calibration, diagnostics, testing, cleaning, lubrication, and parts replacement in order to ensure that all of the CNG fueling

equipment operates in peak condition and in compliance with performance specifications. The contractor is also responsible for providing remedial maintenance when any of the facility components are malfunctioning or inoperable, including all electrical, electronic, or mechanical adjustments, troubleshooting, alignment, and replacement of parts and assemblies. The price schedules for the fast-fill facilities are structured where the contractor receives a monthly payment based on the volume of CNG dispensed (therms used) multiplied by an established rate per therm and includes tiered pricing where the per-therm pricing decreases as the volume of CNG dispensed increases. The per-therm rates are adjusted yearly based on fluctuations to a predetermined Consumer Price Index (CPI). However, due to the extremely low volume of gas dispensed through the slow-fill facilities, their price schedule is structured with flat-fee line items covering preventive maintenance and hourly rates plus material for remedial maintenance.

The unique technical nature of the CNG fueling facilities requires an experienced, technically qualified contractor to operate and maintain the facilities to ensure safe and continuous operation. Trillium has proven to be a reliable, knowledgeable and overall excellent contractor with no fueling disruptions since award of these contracts. In each of the competitively negotiated base contracts Trillium was ranked technically superior to the other competitors.

NYC Transit Contract 06A9336 covering Jackie Gleason CNG facility was a competitively negotiated 7-year contract awarded to Trillium, through December 31, 2014 with a 3-year option which is the subject of this modification. NYC Transit Contract 04B8867 covering the West Farms CNG facility was part of a competitively negotiated contract awarded to Trillium for the design and construction of the West Farms CNG facility followed by a 10-year period of operation and maintenance, through August 14, 2013. The January 2013 Board approved a modification to the West Farms contract which reduced the per-therm pricing to match the more favorable pricing provided under the Jackie Gleason contract, extended the contract through December 31, 2014 in order to be coterminous with the Jackie Gleason contract, and increased the contract funding. MTABC Contract CNG200501 covering College Point and Spring Creek CNG facilities was an 18-month competitively negotiated contract awarded to Trillium and included two 1-year extension options. MTABC exercised the two 1-year extension options and ultimately issued a contract modification that was approved by the March 2012 Board which changed the pricing structure of the contract from time and material to the tiered and more favorable pricing provided under the Jackie Gleason contract and extended the contract through December 31, 2014 in order to be coterminous with the Jackie Gleason contract. As indicated to the March 2012 and January 2013 Board by MTABC and NYC Transit, respectively, having all the CNG contracts expire at the same time was part of a plan to conduct a market survey to determine whether exercise of the 3-year option under the Jackie Gleason contract would be advantageous and if so, to also extend the other CNG maintenance contracts or conduct a single competitive RFP for the combined requirements of all CNG facilities.

A market survey conducted by the NYC Transit and MTABC's CNG consultant concluded that the current fast-fill rates under the existing contracts are favorable and exercising the option would be advantageous. Additionally, the requirements for the two NYC Transit slow-fill CNG facilities will be incorporated into the West Farms contract based on a market survey conducted by NYC Transit that revealed that other CNG service providers would not be interested in providing service for the two slow-fill facilities alone as it would not be cost effective. The pricing negotiated for the addition of the two slow-fill facilities leverages the favorable hourly labor rates contained in the larger fast-fill facility contracts.

The extension of the West Farms contract and the College Point and Spring Creek contract to match the 3-year option under the Jackie Gleason contract and the incorporation of the requirements for the slow-fill CNG facilities allows for combining requirements for all CNG facilities for NYC Transit and MTABC under a single, joint agency competitive RFP that will be put in place prior to the expiration of this 3-year extension. The strategy associated with this 3-year extension will provide continuity of service while a complete survey of the equipment at each facility is carried out, specifications for capital upgrades are developed, and the solicitation and award of a competitively negotiated contract is conducted that will cover any upgrades as well as the long term maintenance for NYC Transit/MTABC's combined requirements. NYC Transit's Procurement Office and its CNG consultant, with input from the CNG contracting community, consider the strategy of aggregating all of MTA's CNG Bus facility requirements under one solicitation, including capital upgrades and long term maintenance, to be the best opportunity to yield the most competitive financial outcome and the best value to NYC Transit and MTABC.

Trillium's initial proposal included: \$3,480,766 to exercise the option to extend the Jackie Gleason contract; \$4,198,995 to extend the West Farms contract and add the preventative and remedial maintenance for the Zerega and Grand Ave slow-fill CNG facilities; and \$2,114,582 to extend the College Point and Spring Creek contract. Notwithstanding the determination of favorable pricing resulting from the consultant's survey, Procurement obtained additional reductions by combining all the requirements resulting in final pricing of \$3,407,454 for the Jackie Gleason contract; \$4,071,090 for the West Farms contract; and \$1,692,310 for the College Point and Spring Creek contract. Trillium's final proposal represents an overall reduction of \$836,856, or 8.6% from its current pricing under the three contracts. Trillium's pricing for these modifications is very competitive and is found to be fair and reasonable.

Schedule I: Modifications to Purchase and Public Work Contracts



Item Number: 6

Vendor Name (& Location) OptumRx, Inc. (Irvine, CA)
Description Pharmacy Benefits Management Services
Contract Term (including Options, if any) September 1, 2009 – December 31, 2014
Option(s) included in Total Amount? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive
Solicitation Type <input type="checkbox"/> RFP <input type="checkbox"/> Bid <input checked="" type="checkbox"/> Other: Modification
Funding Source <input checked="" type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:
Requesting Dept/Div & Dept/Div Head Name: Department of Human Resources, Patricia Lodge (Acting)

Contract Number	AWO/Modification
0819983	4
Original Amount:	\$ 490,000,000
Option Amount:	\$ 200,000,000
Total Amount:	\$ 690,000,000
Prior Modifications:	\$ 250,000,000
Prior Budgetary Increases:	\$ 0
Current Amount:	\$ 940,000,000
This Request:	\$ 240,000,000 (Est.)
% of This Request to Current Amount:	25.5%
% of Modifications (including This Request) to Total Amount:	71.0%

Discussion:

This Modification No. 4 will extend the contract term for one year from January 1, 2015 through December 31, 2015.

This contract is for pharmacy benefit management (PBM) services. Under this contract, OptumRx provides PBM services for members of Transport Workers Union Local 100, Amalgamated Transit Union Locals 726 and 1056, the Subway Surface Supervisors Association, Transit Supervisory Organization Local 106, and the MTA Bus Company. The services include paying claims from dispensing pharmacies and administering a mail order drug fulfillment program. Approximately 61,000 members and 81,000 dependents receive PBM services under this contract.

The base contract was awarded for \$490 million for a three year period ending August 2012. In July 2012, the Board approved Modification No. 2 to extend the contract term for sixteen months from September 1, 2012 through December 31, 2013 for \$250 million and to change the contractor’s name to OptumRx. The extension was necessary because of ongoing collective bargaining, which rendered the parameters of any new pharmacy benefits plan uncertain.

The Modification No. 2 extension included an option to extend the contract for up to an additional twelve months. In November 2013, the Board approved Modification No. 3 to exercise the option and extend the contract term for up to an additional twelve months for \$200 million. At the time the option was exercised, it was anticipated that a competitive RFP would be solicited during the option period. However, the RFP was delayed because of the need for extensive union coordination. As a result, additional time was needed to obtain updated prescription claims data, employee/retiree and dependent census data, and to incorporate the data into the RFP. The competitive RFP for a successor contract has since been advertised.

The proposed extension will allow NYC Transit to receive and evaluate competing proposals, complete the RFP process and award a new contract. The proposed extension also allows for a three month transition and ramp up period.

During the previous sixteen month extension, changes were implemented to achieve greater financial savings. For Modification No. 3, NYC Transit negotiated a change to the pricing structure to introduce fixed discounts and dispensing fees. In addition, on April 1, 2013, NYC Transit implemented the Employer Group Waiver plus Wrap prescription drug plan for Medicare retirees and their dependents, with financial incentives related to the Affordable Care Act. Together, these changes saved approximately \$24 million in 2013 and are expected to save approximately \$30 million in 2014.

For this modification, NYC Transit leveraged the one year extension to negotiate concessions which are expected to yield \$4.8 million in additional savings for 2015. Based on the market survey data provided by NYC Transit’s benefit consultant, pricing for the one year extension has been found to be fair and reasonable.

Schedule L: Budget Adjustments to Estimated Quantity Contracts



L. Budget Adjustments to Estimated Quantity Contracts

(Expenditures which are anticipated to exceed the lesser of \$250,000 or \$50,000 in the event such expenditures exceed 15% of the adjusted contract budget, including any contract modifications.)

<p>7. StrataGen Systems, Inc. Contract# 04F8952 June 1, 2004 – March 31, 2020</p>	<p>Original Amount: Prior Modifications: Prior Budgetary Increases: Current Amount:</p>	<p>\$ 1,044,720 \$ 19,607,693 \$ 1,432,000 \$ <u>22,084,413</u></p>
	<p>This Request:</p>	<p>\$ 2,662,053</p>
	<p>% of This Request to Current Amount:</p>	<p>12.1%</p>
	<p>% of Mods/Budget Adjustments (including This Request) to Original Amount:</p>	<p>2268.7%</p>

Discussion:

The approval of the Board is requested for a retroactive Budget Adjustment to provide additional funds for the continued maintenance support and programming of new enhancements to the Paratransit scheduling/dispatching software program known as ADEPT (Adaptive Decision Engine for Passenger Transportation), a product of StrataGen Systems, Inc. (StrataGen). StrataGen is also responsible for Paratransit’s Interactive Voice Response system (IVR), a product produced by Unified Dispatch, Inc. (UDI), which provides customer access to ADEPT scheduling and detailed trip information via telephone and text messages.

StrataGen ADEPT was competitively selected in 2001 as the premium scheduling software product, providing superior capacity, speed, functionality and state-of-the-art solutions to scheduling challenges. Through prior Board approved modifications, enhancements were made to ADEPT to significantly increase the scheduling capacity from 20K to 50K daily trips, the inclusion of IVR providing trip information to riders and the introduction of an innovative Intermodal Trip Planner (ITP) functionality for cost savings and efficiency. The investment made in the ADEPT system is a key component of the Paratransit savings objectives. ITP, which has saved approximately \$14 million annually, incorporated trip by trip eligibility and feeder service into Paratransit trip scheduling. Annual savings of approximately \$2.7 million for IVR were achieved by a reduction in Command Center resources.

Although the term of this contract is to March 31, 2020, under prior Modification #4, only two years of ADEPT maintenance was funded (September 2012 through September 2014) as the impact of ITP functionality on future maintenance costs was then unknown. While it was anticipated that maintenance costs would have risen due to the increase in the scale and scope of ADEPT due to ITP, StrataGen agreed to keep the maintenance fees at their original, contract rates. Funding totaling \$2,162,703 is being requested for another two years of ADEPT maintenance and support for the period October 2014 through October 2016. This funding will provide continued maintenance while StrataGen is developing a new version of ADEPT, which if adopted by NYC Transit, is anticipated to have lower maintenance costs than the current version.

The balance of this funding request totals \$499,350, which will be utilized to effect enhancements to ADEPT through a Task Order provision at pre-established rates for programming work. NYC Transit requested a price concession relative to the task order rates. StrataGen found it could not further reduce its pricing without impacting the quality of service required as it previously agreed to maintain the current rates through October 2016.

Schedule I: Modifications to Purchase and Public Work Contracts



Item Number: 1

Vendor Name (& Location) Plaza Schiavone JV (New York, NY)
Description Fulton Street Transit Center Enclosure
Contract Term (including Options, if any) August 5, 2010 – June 16, 2014
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> n/a
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive
Solicitation Type <input type="checkbox"/> RFP <input type="checkbox"/> Bid <input checked="" type="checkbox"/> Other: Modification
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other:
Requesting Dept/Div & Dept/Div Head Name: MTA Capital Construction, Dr. Michael Horodniceanu

Contract Number A-36125	AWO/Mod. # 404
Original Amount:	\$ 175,988,000
Prior Modifications:	\$ 28,191,790
Prior Budgetary Increases:	\$ 0
Current Amount:	\$ 199,605,012
This Request:	\$ 1,048,500
% of This Request to Current Amount:	0.5%
% of Modifications (including This Request) to Original Amount:	16.6%

Discussion:

This modification is for the resolution of the Contractor’s Claim, as determined by a MTACC Chief Engineer’s Decision, for costs associated with additional fire watch personnel resulting from the revised NYC Fire Code.

This contract is for the construction of the Fulton Center Enclosure at the corner of Fulton Street and Broadway in the Borough of Manhattan, including all interior finishes and systems.

The contract requires the contractor to comply with certain local, state, and federal regulations and codes including the NYC Building and Electrical Code, which in turn requires that construction and demolition operations be performed in accordance with the NYC Fire Code. One requirement of the regulations is for the use of a fire watch for any construction operation that could potentially cause a fire. In May 2011, subsequent to contract award, the NYC Fire Code was changed to become more stringent with regard to fire watch requirements.

The Contractor’s Claim indicated that their bid was based on the previous NYC Fire Code and that the release of the revised Code after contract award resulted in additional costs due to the additional fire watch requirements. The Chief Engineer’s decision determined that the contractor could not have anticipated the additional fire watch requirements. This modification addresses the costs associated with additional fire watch personnel resulting from the revised NYC Fire Code.

The contractor’s proposal was \$1,436,127; MTACC’s revised estimate is \$1,190,391. Following review by MTA Audit, negotiations resulted in agreement on a lump sum price of \$1,048,500, which was found to be fair and reasonable. Savings of \$387,627 were achieved.

DECEMBER 2014

LIST OF RATIFICATIONS FOR BOARD APPROVAL

Procurements Requiring Two-Thirds Vote:

D. Ratification of Completed Procurement Actions

(Staff Summaries required for items requiring Board approval.) Note – in the following solicitations, NYC Transit attempted to secure a price reduction. No other substantive negotiations were held except as indicated for individual solicitations.

**HBE/Kratos Public Safety &
Security Solutions, Inc.
Emergency Declaration**

Staff Summary Attached

- | | | | |
|----|----------------------------|--------------|---|
| 1. | Contract# C-52111.15 | \$2,904,000 | ↓ |
| 2. | Contract# C-52111.17/20/21 | \$2,425,290 | ↓ |
| 3. | Contract# C-52111.19 | \$10,670,864 | ↓ |

Modifications to the contract to furnish, install and integrate an Electronic Security System at 51st Street/Lexington Avenue and 74th Street/Roosevelt Avenue Station Complexes, in order to upgrade hardware and software at two command centers and for furnishing equipment, which will be used to enhance NYC Transit’s Connection Oriented Ethernet Network Station Expansion.

Schedule D: Ratification of Completed Procurement Actions

Item Number: 1-3

Vendor Name (& Location) HBE/Kratos Public Safety & Security Solutions, Inc. (Fair Lawn, NJ)	
Electronic Security System at Two Station Complexes	
Contract Term (including Options, if any) January 8, 2013 – July 8, 2014	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> n/a	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	
Solicitation Type <input type="checkbox"/> RFP <input type="checkbox"/> Bid <input checked="" type="checkbox"/> Other: Modification	
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other:	
Requesting Dept/Div & Dept/Div Head Name: Capital Program Management, Frederick E. Smith	

Contract Number C-52111/C-52112	AWO/Modification .. 15, 17/20/21, & 19
Original Amount:	\$ 17,951,000
Prior Modifications:	\$ 367,175
Prior Budgetary Increases:	\$ 0
Current Amount:	\$ 18,318,175
This Request:	
Mod. No. 15: \$2,904,000	\$ 16,000,154
Mod. No. 17/20/21: \$2,425,290	
Mod. No. 19: \$10,670,864	
% of This Request to Current Amount:	87.3%
% of Modifications (including This Request) to Original Amount:	89.3%

Discussion:

These retroactive modifications are for upgrading hardware and software at two command centers and for furnishing equipment to enhance the ability to stream live information from NYC Transit stations to NYC Transit security command centers and the NYC Police Department.

The contract is for furnishing and installing an Electronic Security System (ESS) at 51st Street/Lexington Avenue Station in Manhattan and at 74th Street/Roosevelt Avenue Station in Queens and associated hardware and software at the command centers. The MTA Security Program is developing an integrated Inter-Agency ESS infrastructure to allow for commonality across all MTA agencies as well as direct communication to the NYC Police Department. The ESS is an infrastructure consisting of hardware and software that will integrate all NYC Transit legacy security subsystems as well as new applications onto a single platform.

Due to numerous factors, there have been delays to this contract and other projects funded by a Federal Department of Homeland Security (DHS) grant. Those factors include field conditions and design changes identified during construction, especially those required for systems integration. In addition to these factors has been the impact of Superstorm Sandy, that among challenges, restricted access to work locations and tunnels. As a result of the foregoing, this contract and other security projects were forecast to extend beyond a grant expiration date; accordingly, MTA requested and DHS approved the reallocation of the balance of grant funds to purchase critical equipment to expand and increase the reliability of the MTA and NYC Transit security information network and security information sharing platforms. Implementation of the reallocation included the following modifications which were issued retroactively, beginning in April 2014, in order to comply with DHS grant requirements.

Modification No. 15

DHS reallocated funds for this modification which will provide a system at the command centers that ensures that operational data is secure and protected from failure during normal and emergency operations. NYC Transit’s estimate was \$2,792,691; the contractor proposed \$3,070,394. After negotiations, the lump sum of \$2,904,000 was agreed upon and found to be fair and reasonable. Savings of \$166,394 were achieved.

Modification Nos. 17/20/21 and 19

DHS reallocated funds for these modifications which provide equipment that will be stored by NYC Transit and later installed under future contracts to enhance the ability to stream live information from NYC Transit stations to the command centers and NYC Police Department. To accomplish this and obtain competitive pricing, two Requests for Quotations (RFQ) were solicited from the four general contractors currently installing NYC Transit security systems. Each RFQ stipulated that award would be made by means of a modification to the current security contract of the contractor that submitted the lowest quotation. HBE submitted the lowest quotations on both. Quantities solicited under the RFQ for Modification 17 were re-evaluated and reduced under Modifications 20 and 21, and the amount shown above of \$2,425,290 is the net amount.

Schedule K: Ratification of Completed Procurement Actions



Item Number: 1

Vendor Name (& Location) E. E. Cruz / Tully Construction Company, JV, LLC (New York, NY)	
Second Avenue Subway– 96 th Street Station Finishes	
Contract Term (including Options, if any) June 22, 2012 – December 20, 2015	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> n/a	
Procurement Type	<input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive
Solicitation Type	<input type="checkbox"/> RFP <input type="checkbox"/> Bid <input checked="" type="checkbox"/> Other: Modification
Funding Source	
<input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other:	
Requesting Dept/Div & Dept/Div Head Name: MTA Capital Construction, Dr. Michael Horodniceanu	

Contract Number C-26010	AWO/Mod. 70
Original Amount:	\$ 324,600,000
Prior Modifications:	\$ 13,639,646
Prior Budgetary Increases:	\$ 0
Current Amount:	\$ 338,239,646
This Request:	\$ 2,475,000
% of This Request to Current Amount:	0.7%
% of Modifications (including This Request) to Original Amount:	5.0%

Discussion:

This retroactive modification will address various utility changes between 92nd Street and 99th Street along 2nd Avenue.

This contract is for 96th Street Station Finishes for the Second Avenue Subway Project, and requires rehabilitation and retrofit of the existing 99th – 105th Street Tunnel; construction of invert slab and benches in the newly constructed 87th -92nd Street Tunnels and in the northern section of the 97th – 99th Street Tunnel; installation of mechanical systems including HVAC, electrical medium voltage and 120V systems; plumbing; supply and installation of elevators and escalators in the station and entrances; construction of the station platform, mezzanine levels, ancillaries and entrances; construction of interior walls and rooms; installation of architectural finishes; restoration of the surface of Second Avenue and adjacent streets; removal of temporary road decking installed in previous contracts; and maintenance of the station until contract completion.

Given the expanse of the work site, the quantity of existing utilities and the limited amount of space available; and in order to record the most precise existing conditions, MTACC commissioned the 2nd Avenue Designer of Record to conduct a three-dimensional topographic survey of all existing utilities temporarily suspended from deck beams above the excavated portions of the station between 92nd Street and 99th Street. Utilizing this survey, the 2nd Avenue Designer of Record has been working with the various utility companies and the contractor to identify and resolve conflicts resulting from changed conditions and changed and/or new requirements. This modification includes changes to catch basins; changes to a NYCDEP 60-inch trunk distribution water main including additional pier and plate protection for shallow crossings; changes to Con Edison gas main service distribution, including labor to support Con Edison’s additional gas main connections; increase in size for 24 feet of manifold gas main from 20 inches to 24 inches; and various changes to electric and telephone duct bank sizes.

Due to potential time impact associated with this additional work, and in order to mitigate delays, it was necessary to proceed with the work on a retroactive basis. Retroactive approval was obtained from the MTACC President on August 20, 2014.

The contractor’s proposal was \$2,816,607. MTACC’s revised estimate is \$2,351,453. Negotiations resulted in a lump sum price of \$2,475,000, which was found to be fair and reasonable. Savings of \$341,607 were achieved.

MNR proposes to award competitive procurements in the following categories:

<u>Schedules Requiring Two-Thirds Vote (or more, where noted)</u>	<u># of Actions</u>	<u>\$ Amount</u>
Schedule C: Competitive Requests for Proposals (Award of Purchase and Public Work Contracts)	1	\$17,619,622
• HNTB New York Engineering & Architecture, P.C. \$17,619,622		
 <u>Schedules Requiring Majority Vote</u>		
Schedule F: Personal Service Contracts	2	\$250,200,000
• General Engineering Consultants \$250,000,000		
• Persante Health Care, Inc. \$200,000		
Schedule H: Modifications to Personal/Miscellaneous Service Contracts	2	\$660,440
• Gannett Fleming Engineers and Architects, P.C. \$510,826		
• Konecranes, Inc. \$149,614		
SUB TOTAL:	5	\$268,480,062

MNR presents the following procurement actions for Ratification:

<u>Schedules Requiring Two-Thirds Vote (or more, where noted)</u>	NONE
 <u>Schedules Requiring Majority Vote</u>	 NONE
SUB TOTAL:	6
TOTAL:	6 \$268,657,202

The contractors noted above and on the following Staff Summary Sheets have been found in all respects responsive and responsible, and are in compliance with State laws and regulations concerning procurements.

BUDGET IMPACT: The purchases/contracts will result in obligating MNR operating and capital funds in the amount listed. Funds are available in the current MNR operating/capital budgets for this purpose.

RECOMMENDATION: That the purchases/contracts be approved as proposed. (Items are included in the resolution of approval at the beginning of the Procurement Section.)

METROPOLITAN TRANSPORTATION AUTHORITY

WHEREAS, in accordance with Section 1265-a and Section 1209 of the Public Authorities law and the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive purchase and public work contracts, and the solicitation and award of request for proposals in regard to purchase and public work contracts; and

WHEREAS, in accordance with the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive miscellaneous procurement contracts, and certain change orders to procurement, public work, and miscellaneous procurement contracts; and

WHEREAS, in accordance with Section 2879 of the Public Authorities Law and the All Agency Guidelines for Procurement of Services, the Board authorizes the award of certain service contracts and certain change orders to service contracts.

NOW, the Board resolves as follows:

1. As to each purchase and public work contract set forth in the annexed Schedule A, the Board declares competitive bidding to be impractical or inappropriate for the reasons specified therein and authorizes the execution of each such contract.
2. As to each request for proposals (for purchase and public work contracts) set forth in Schedule B for which it is deemed in the public interest to obtain authorization to solicit competitive proposals through a publicly advertised RFP for the reasons specified therein the Board declares it to be impractical or inappropriate to utilize a procurement process inviting sealed bids with award to the lowest responsive/responsible bidder.
3. As to each request for proposals (for purchase and public work contracts) set forth in Schedule C for which a recommendation is made to award the contract, the Board authorizes the execution of said contract.
4. The Board ratifies each action taken set forth in Schedule D for which ratification is requested.
5. The Board authorizes the execution of each of the following for which Board authorization is required: i) the miscellaneous procurement contracts set forth in Schedule E; ii) the personal service contracts set forth in Schedule F; iii) the miscellaneous service contracts set forth in Schedule G; iv) the modifications to personal/miscellaneous service contracts set forth in Schedule H; v) the contract modifications to purchase and public work contracts set forth in Schedule I; and vi) the modifications to miscellaneous procurement contracts set forth in Schedule J.
6. The Board ratifies each action taken set forth in Schedule K for which ratification is requested.

Staff Summary

Item Number E					
Dept & Dept Head Name: Procurement & Material Management, Al Muir, Acting Sr. Director					
Division & Division Head Name: <i>Muir for Al Muir</i>					
Board Reviews					
Order	To	Date	Approval	Info	Other
1	M-N Comm.Mtg.	12-15-14	X		
2	MTA Board Mtg.	12-17-14	X		
Internal Approvals					
Order	Approval	Order	Approval		
X	President <i>[Signature]</i>		V.P. Planning		
	Sr. V.P. Operations <i>[Signature]</i>	X	V.P. General Counsel <i>[Signature]</i>		
X	V.P. Finance & IT <i>[Signature]</i>				
	V.P. Capital Programs				

SUMMARY INFORMATION	
Vendor Name Smart Software, Inc.	Contract Number 45748
Description Maintenance and Support Services for Algorithmic Forecasting System	
Total Amount \$177,140 (not-to-exceed)	
Contract Term (including Options, if any) Three years	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Renewal? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Procurement Type <input type="checkbox"/> Competitive <input checked="" type="checkbox"/> Non-competitive	
Solicitation Type <input type="checkbox"/> RFP <input type="checkbox"/> Bid <input checked="" type="checkbox"/> Other:	
Funding Source <input checked="" type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	

Narrative

I. PURPOSE/RECOMMENDATION:

Approval is requested to award a non-competitive miscellaneous service contract to Smart Software, Inc. for a period of three years to provide maintenance and support of Metro-North's Algorithmic Forecasting System. This software system (SmartForecasts) provides a forecasting tool for MNR's operating material needs and optimizes material inventory re-order points to meet varied requirements in support of MNR's overall operation. This tool has performed well and at this time MNR seeks to extend the maintenance services contract in support of this software which is proprietary and custom-designed for MNR.

II. DISCUSSION:

In 2010, Smart Software, Inc. was awarded a competitively solicited 42 months (6 months implementation and 36 months of maintenance services) contract to design, furnish, implement and support a Material Forecasting System as part of the Procurement & Material Management (P&MM) Materials Management Shortage Control System. Smart Software is the innovative leader in enterprise demand forecasting, planning, and inventory optimization. They have automated and customized MNR's forecasting of inventory for increased forecast accuracy, reduction of inventory levels and improved customer service. In addition, the use of SmartForecasts has facilitated control of MNR's supply chain and provided cost savings.

The maintenance contract includes all software with unlimited 24/7 phone support, diagnostics and software engineering services for specified enhancements when requested by MNR. Negotiations with Smart Software, Inc. resulted in a cap of 2% in the annual increase in years 2 and 3 in lieu of their normal 5% annual increase. The yearly renewal costs break down is shown below:

- Year 1: January 1, 2015 – December 31, 2015 = \$57,881
- Year 2: January 1, 2016 – December 31, 2016 = \$59,039
- Year 3: January 1, 2017 – December 31, 2017 = \$60,220

III. D/M/WBE INFORMATION:

No MBE/WBE participation goals were assigned to this project.

Staff Summary

IV. IMPACT ON FUNDING:

The total cost for maintenance and support services for a period of three years is \$177,140. This procurement is to be funded by MNR's Operating Budget.

V. ALTERNATIVES:

There are no reasonable available alternatives to maintaining and supporting the SmartForecasts Algorithmic Forecasting System. MNR does not have the resources or technical skill necessary to maintain the SmartForecasts system.

DECEMBER 2014

METRO-NORTH RAILROAD

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Schedules Requiring Two-Thirds Vote:

C. Competitive Requests for Proposals (Award of Purchase and Public Work Contracts)

(Staff Summaries required for items requiring Board approval)

1. HNTB New York Engineering & Architecture, P.C. \$17,619,622 *Staff Summary Attached*
Customer Service Initiatives Communication System Design

Approval is requested to award a 48 month competitively solicited and negotiated design contract (RFP process, four proposals received) to HNTB New York Engineering and Architecture, P.C. (HNTB) to design various customer communication systems at Grand Central Terminal (GCT) and at outlying passenger stations.

This project will provide connectivity improvements that will support current and future planned application initiatives as well as deliver improved customer communication services including new passenger station Public Address systems, new and upgraded Visual Message Signs (VMS) with real-time train information, upgraded communication links for Ticket Selling and Ticket Vending Machines (TSM/TVM), LAN connections to passenger stations to provide corporate services to staffed ticket offices, elevator monitoring and control from a centralized control center, and Train Locator Systems for train detection at select passenger stations with integration into the existing Virtual Train Tracking System (VTTS) and Centralized networking of CCTV at all passenger stations to Security control center (SCC). HNTB has extensive experience with railroad design, build and construction, including LIRR Jamaica Stations Capacity Improvements which included replacement of PA, VIS and expansion of CCTV and access control system.

In accordance with MTA procurement guidelines, an advertisement for the requisitioned service was placed in the New York State Contract Reporter, The Daily Challenge, El Diario, the New York Post, and posted on the MNR website. Four proposals were received and evaluated based on the criteria established in the RFP. All four firms were short-listed and invited for oral presentations. At the conclusion of the evaluation process, the Selection Committee unanimously selected HNTB. Negotiations resulted in a 5.4% or \$1,008,378 savings from HNTB's cost proposal. This procurement will be funded by the current MTA Capital Program Budget.

Schedules Requiring Majority Vote:

F. Personal Service Contracts

(Staff Summaries required for all items greater than: \$100K Sole Source; \$250K Other Non-Competitive; \$1M Competitive)

**2. General Engineering Consultants \$250,000,000 (not-to-exceed) Staff Summary Attached
GEC 2015-2019 Consultant Prequalification**

Approval is requested to obtain MTA board approval to retain the consultants listed in Attachment, who propose to perform personal services for design, engineering, supervision inspection services and miscellaneous professional services to support both the 2015-2019 Capital Program and the needs of the Operating Divisions.

A joint procurement endeavor was initiated by Metro-North Railroad, Long Island Rail Road, MTA Capital Construction, MTA Headquarters and New York City Transit (for rolling stock) (hereinafter “the Agencies”) only to identify and retain qualified engineering, design and construction management consultant firms (“GEC”) who will be available to the Agencies for future service assignments. The GEC pre-qualification and retention approach has been used successfully for the past 15 years. It had been proven by the Agencies to streamline the request for proposal process and reduce procurement lead time and overall project time as well as administrative costs while ensuring appropriate on-going competition and best value in making GEC project assignments.

A Request for Proposal was developed and advertised in accordance with MTA All-Agency Guidelines in the New York State Contract Reporter, New York Post, El Diario, Daily Challenge and posted on the MNR website. In addition, all firms on the current GEC were solicited. Proposals were received from 480 firms during three separate weeks in July-August 2014 for the three major types of services to be performed and the twenty-eight categories of work. 407 firms have been selected in 28 categories of work for execution of retention agreements. All consultants selected who met the requirements of the RFP will be deemed eligible to propose on individual task assignments offered by the individual Agency in their respective category of work.

The total period of performance for this arrangement is five years and is estimated at a total value not-to-exceed \$250,000,000 for all the Agencies. Funding for work under these contracts will be taken from the funding source applicable to each Project.

**3. Persante Health Care, Inc. \$200,000 (not-to-exceed)
Obstructive Sleep Apnea/Sleep Disorder Pilot program**

Approval is requested to award a competitively solicited and negotiated (RFP process, four proposals received) seven month personal service contract to the firm, Persante Health Care Inc. to screen (through the use of a home sleep study), manage, coordinate, evaluate and monitor treatment for up to 250 Locomotive Engineers for Obstructive Sleep Apnea.

This Pilot program shall consist of an initial evaluation of Locomotive Engineers, based upon industry best practices. MNR’s Occupational Health Services offices will evaluate employees based upon factors identified in industry leader’s best practices including, medical history and represents a medical questionnaire. Those employees who are deemed at risk based upon the initial screening will be sent for further testing and potential diagnosis. This pilot program will enable the Railroad to evaluate the effectiveness of this type of program and possible application on a larger scale.

In accordance with MTA procurement guidelines, an advertisement for the required services was placed in the New York State Contract Reporter, New York Post, El Diario and the Daily Challenge and was posted on the MNR website. RFP documents were sent to eight firms.

Four firms were short-listed, and technical evaluations and oral presentations were conducted. Vendor evaluations were based on established selection criteria contained within the RFP documents and included: understanding of work scope requirements, detailed description of how the Services will be performed, commitment of relevant resources to the project, including the qualifications of key personnel and reliability to perform the services, demonstrated past experience and skills provided on similar projects, and overall cost.

Persante's technical and cost proposal conveyed a comprehensive understanding of MNR requirements. As a result, the Selection Committee unanimously selected Persante as the best qualified and cost-effective firm for these services. Persante demonstrated extensive expertise in Obstructive Sleep Apnea/Sleep Disorder and proposed geographically advantageous resources with specialized medical experience. A budgetary amount of \$200,000 is being proposed for this Pilot program. MNR has established unit pricing that will remain fixed throughout this program. This procurement will be funded by MNR's Operating Budget.

H. Modifications to Personal/Miscellaneous Service Contracts

(Approvals/Staff Summaries required for substantial change orders and change orders that cause the original contract to equal or exceed monetary or durational threshold required for Board approval)

4. Gannett Fleming Engineers and Architects, P.C. \$510,826 (not-to-exceed) Staff Summary Attached Additional Funding and Time Extension for Design and Inspection Services for the Replacement of Grand Central Terminal (GCT) Escalators

Approval is requested for additional funding totaling \$510,826 and a one year extension to Gannett Fleming Engineers and Architects, P.C. ("Gannett Fleming") for additional design services to advance the Grand Central Terminal ("GCT") escalator replacement drawings from 30% to 100% complete design. The additional design services are required to develop viable plans and specifications that are best suited to support construction.

The subject design services were competitively solicited to consulting firms pre-approved under the 2010 – 2014 General Engineering Consultant Services program. In response to a Request for Proposal ("RFP") issued, Gannett Fleming was selected for award and a 27 month contract was executed in August 2013. The contract required Gannett Fleming to provide design-build plans and specifications to approximately the 30% completion level for the replacement of all eleven escalators in GCT. Plans and specifications were completed and an RFP for design-build construction services was solicited in June 2014. No proposals were received from any of the nine plan holders. Based upon subsequent discussions conducted with MNR and plan holders, MNR concluded that the design-build approach must be revised to a design-bid-build approach (100% complete design).

Gannett Fleming's cost proposal to complete the design in the amount of \$510,826 was significantly less than our in-house estimate and is deemed to be fair and reasonable. The additional funding will be provided by the MNR Operating Budget.

5. Konecranes, Inc. \$149,614
Additional Funding for Preventative Maintenance, Inspection and Repair of Jib and Overhead Cranes

Approval is requested for additional funding totaling \$149,614 to Konecranes, Inc. to provide preventative maintenance, inspection, and repair for all Jib and Overhead Cranes located throughout Metro-North Railroad (MNR) New York and Connecticut facilities.

In July 2014, the MTA Board approved a one year (with options) miscellaneous service contract for preventative maintenance, and inspection for all Jib and Overhead Cranes located throughout MNR's New York and Connecticut facilities. The services included but are not limited to monthly and yearly inspection of all Jib and Overhead cranes in New York and Connecticut, as well as repair services. These cranes are essential to the Maintenance of Equipment (MofE) Department's ability to lift and move heavy equipment on a daily basis. It is critical this equipment be maintained to current operational and safety requirements.

The recent inspections from Konecranes, indicate a higher level of repair than originally projected due to the aging of the equipment; some of these cranes are well over 25 years old and are failing at a faster rate than originally envisioned by the MofE Department. The total amount of these repairs exceeds the original budget and is valued at \$149,614. This additional funding will be provided by the MNR Operating Budget.

Staff Summary

Item Number C					
Dept & Dept Head Name: Procurement & Material Management, Alfred Muir					
Division & Division Head Name: <i>Muir for M Muir</i>					
Board Reviews					
Order	To	Date	Approval	Info	Other
1	M-N Comm.Mtg.	12-15-14	x		
2	MTA Board Mtg.	12-17-14	x		
Internal Approvals					
Order	Approval	Order	Approval		
X	President <i>JH</i>				
X	Sr. V.P. Operations <i>JH</i>	X	V.P. Planning <i>JH</i>		
X	V.P. Finance & IT <i>JH</i>	X	V.P. & General Counsel <i>GRH</i>		
X	V.P. Capital Programs <i>JH</i>				

SUMMARY INFORMATION	
Vendor Name HNTB New York Engineering & Architecture, P.C.	Contract Number 40554
Description Customer Service Initiatives Communications System Design	
Total Amount \$17,619,622	
Contract Term (including Options, if any) 48 months	
Option(s) included in Total Amount? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	

Narrative

I. PURPOSE/RECOMMENDATION:

Approval is requested to award a 48 month competitively solicited and negotiated design contract (RFP process, four proposals received) to HNTB New York Engineering and Architecture, P.C. (HNTB) to design various customer communication systems at Grand Central Terminal (GCT) and at outlying passenger stations.

II. DISCUSSION:

Metro-North intends to improve customer communications in GCT and at outlying passenger stations through the rollout of a Customer Service Initiatives Program. These initiatives support MTA initiatives for transformational customer communications improvements. This project will provide connectivity improvements that will support current and future planned application initiatives as well as provide improved customer communication services including new passenger station Public Address (PA) systems, new and upgraded Visual Message Signs (VMS) with real-time train information, upgraded communication links for Ticket Selling and Ticket Vending Machines (TSM/TVM), LAN connections to passenger stations to provide corporate services to staffed ticket offices, elevator monitoring and control from a centralized control center, and Train Locator Systems (TLS) for train detection at select passenger stations with integration into the existing Virtual Train Tracking System (VTTS) and centralized networking of Closed Circuit Television (CCTV) at all passenger stations to the Security Control Center (SCC).

A Request for Proposal (RFP), dated August 21, 2014, was prepared and advertised in the New York State Contract Reporter, the New York Post, El Diario, The Daily Challenge and posted on the MNR website. On September 18, 2014, technical proposals containing qualifications and cost from the following four firms (Aecom, Gannett Fleming, HNTB, and STV) were received.

The criteria for selection established in the RFP are as follows:

- A. Project plan (detailed description of how the services will be performed).

Staff Summary

- B. Confidence level, commitment of relevant resources to the project including the qualifications of key personnel and reliability to perform the services including Subconsultant services.
- C. Demonstrated understanding of the workscope requirements, including but not limited to the quality and completeness of any required submissions.
- D. Cost.
- E. Past experience on similar projects

The Selection Committee was comprised of members representing MNR's Procurement and Material Management, Customer Service, GCT & Corporate Development, Maintenance of Way (M of W) Communications & Signals, and MTA Information Technology departments. The Committee evaluated the proposals and decided that all four firms should be invited to come in for an oral presentation.

Upon completion of oral presentations and in accordance with the criteria for selection, the Selection Committee unanimously recommended contract award to HNTB. HNTB proposed viable comprehensible integration design concepts that were deemed to be well engineered, time/labor efficient, and compliant with the scope of work. HNTB has extensive experience with railroad design, build and construction, including LIRR Jamaica Stations Capacity Improvements which included replacement of PA, VIS and expansion of CCTV and access control system.

Negotiations with HNTB resulted in a reduction of 5.4% or \$1,008,378 savings from HNTB's original cost proposal. The negotiated price of \$17,619,622 is inclusive of options for the GCT PA system, CSI for West of Hudson, and the preparation of concept of operations for all tasks.

III. D/M/WBE INFORMATION:

The MTA Department of Diversity and Civil Rights (DDCR) established 10% MBE and a 10% WBE goals for this project. DDCR has determined that HNTB, Inc. has responded satisfactorily to the MBE/WBE submission requirements established for this contract.

IV. IMPACT ON FUNDING:

Board approval is requested in the amount of \$17,619,622. This project is state funded and is included in the MTA 2010-2014 Capital Program Budget.

V. ALTERNATIVES:

MNR does not have the available in-house staff with both the expertise and capability to perform the required design and construction services as specified.

Staff Summary

Item Number F					
Dept & Dept Head Name: Procurement & Material Management, Al Muir- Acting Sr. Director					
Division & Division Head Name: <i>Maucher for Al Muir</i>					
Board Reviews					
Order	To	Date	Approval	Info	Other
1	M-N Comm.Mtg.	12-15-14	x		
2	MTA Board Mtg.	12-17-14	x		
Internal Approvals					
Order	Approval	Order	Approval		
X	President <i>JJA</i>	X	Sr. V.P. Operations <i>JJA</i>		
X	V.P. IT & Finance <i>JP</i>	X	V.P. Planning <i>JJA</i>		
X	V.P. Capital Programs <i>JP</i>	X	V.P. & General Counsel <i>JJA</i>		

SUMMARY INFORMATION	
Vendor Name Various	Contract Number N/A
Description GEC 2015-2019 Consultant Engagements	
Total Amount \$250,000,000 (not-to-exceed)	
Contract Term (including Options, if any) Five Years	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source <input checked="" type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other:	

Narrative

I. PURPOSE/RECOMMENDATION: To obtain MTA board approval to retain the consultants listed in Attachment who propose to perform personal services for design, engineering, supervision inspection services and miscellaneous professional services to support both the 2015-2019 Capital Program and the needs of the Operating Divisions.

II. DISCUSSION: A joint procurement endeavor was initiated by Metro-North Railroad, Long Island Rail Road, MTA Capital Construction, MTA Headquarters and New York City Transit (for rolling stock) (hereinafter "the Agencies") to identify and retain qualified engineering, design and construction management consultant firms ("GEC") who will be available to the Agencies for future service assignments. The GEC pre-qualification and retention approach has been used successfully for the past 15 years. It had been proven by the Agencies to streamline the request for proposal process and reduce procurement lead time and overall project time as well as administrative costs while ensuring appropriate on-going competition and best value in making GEC project assignments.

A Request for Proposal was developed and advertised in accordance with MTA All-Agency Guidelines in the New York State Contract Reporter, New York Post, El Diario, Daily Challenge and posted on MNR's website. In addition, all firms on the current GEC were solicited. Proposals were received from 480 firms during three separate weeks in July-August 2014 for the three major types of services to be performed and the twenty-eight categories of work. Independent selection committees were formed by the Agencies for each category of work and the committees evaluated the proposals received using the criteria of selection as set forth in the RFP. Proposals were evaluated based on the following selection criteria listed in equal order of importance:

1. Demonstrated experience of the Consultant in the execution of work of similar nature;
2. Expertise and experience of key personnel proposed to be assigned to perform the work;
3. Proposed approach to organize, direct and manage the work (Project Management Plan");
4. Knowledge of and experience with railroad operations; or demonstrated ability to adapt to railroad operations.

The committees selected a pool of consultants for specific categories based on the merits of the responding firms' qualifications with respect to the established selection criteria. There were no restraints as to size of the final consultant pool for any category. Final selection of any firm was based upon a pass/fail method with 75 points being the minimum requirement for a firm's selection and receipt of an offer of retention.

407 firms have been selected in 28 categories of work for execution of retention agreements. All consultants selected who met the requirements of the RFP may be deemed eligible to propose on individual task assignments offered by the individual Agency in their respective category of work. Prior to the award of any task assignment to any of these firms, a full responsibility review will be required to be performed in accordance with the MTA guidelines.

The categories of work included are listed below:

A. Design and Engineering Services

- Category 1: Line Structures
- Category 2: Buildings, Passenger Stations, Shops & Yards, and Parking Facilities
- Category 3: Power
- Category 4: Track
- Category 5: Signals & Communications
- Category 6: Rolling Stock
- Category 7: Value Engineering
- Category 8: Security Engineering
- Category 9: Environmental Engineering
- Category 10: Forensic Engineering / Laboratory Testing Services
- Category 11: Soils / Foundation Engineering

B. Construction Supervision & Inspection Services

- Category 1: Line Structures
- Category 2: Buildings, Passenger Stations, Shops & Yards, and Parking Facilities
- Category 3: Power
- Category 4: Track
- Category 5: Signals & Communications
- Category 6: Rolling Stock
- Category 7: Environmental Engineering

C. Misc. Professional Services

- Category 1: Scheduling
- Category 2: Cost Estimating
- Category 3: Claims Support
- Category 4: Constructability
- Category 5: Test and Evaluation
- Category 6: Useful Life Analysis
- Category 7: Design Reviews
- Category 8: Technical Writer
- Category 9: Quality Management
- Category 10: Operational Studies & Simulation Models

When a specific workscope requiring GEC services is identified and approved, the responsible Agency will solicit technical and level of effort proposals from consultants listed in the category to which the workscope belongs. The responsible Agency will request proposals from the consultants within the relevant category, Based on exigent circumstances, an Agency may seek task assignment proposals from a limited number of consultants in a category. Also, where a consultant demonstrates sufficient qualification, an Agency may solicit a proposal from a firm approved in a different category of work. For New York State funded task assignments, a consultant's receipt of a task assignment will usually involve a two phase selection process, taking into account costs and technical aspects of a consultant's proposal. All federally funded task assignments will utilize the "Brooks Method" of selection. The Federal Brooks Act requires a qualification-based selection process for federally-funded engineering contracts. Each specific proposal will be evaluated in accordance with specific evaluation criteria established at the time the task assignments are solicited.

Attachment lists the categories of work and the firms selected for each category. The firms on the Attachment will be eligible for task assignments for a period of five years. To promote competition, new firms that are not contained on this Attachment that wish to compete for GEC assignments in connection with the 2015-19 Capital Program and other Agency operating needs, as well as firms which were not selected or did not participate in this selection process, will be given further opportunity to compete for such assignments by participating in a supplemental GEC selection process, to be initiated by the Agencies in approximately 24 months of the Board's approval of Attachment.

III. D/M/WBE INFORMATION: Minority participation goals will be sought on a task assignment basis.

IV. IMPACT ON FUNDING: The total period of performance for this arrangement is five years and is estimated at a total value not-to-exceed \$250,000,000 for all the Agencies. Funding for work under these contracts will be taken from the funding source applicable to each Project.

V. ALTERNATIVES: The Agencies will continue to require consultant assistance to provide essential design, construction supervision and inspection and specialty engineering services to support both the Capital Programs and respective Operating Divisions. The alternative is to use an individual Request for Proposal process for each individual project requirement. The general engineering approach described herein is strongly recommended as a replacement to the traditional method as a means to significantly lessen the procurement lead-time for task award, thus reducing overall project time and costs.

Firms Recommended for \$0 Award - MNR General Engineering Consultant Contract

Attachment

A Design and Engineering Services

01 Line Structures

A. DiCesare Associates, P.C.
AECOM USA, Inc.
Ammann and Whitney Consulting Engineers, P.C.
CH2M HILL New York, Inc.
CHA Consulting, Inc.
Dewberry Engineers, Inc.
Erdman Anthony
FST Engineers, Inc.
Gannett Fleming Engineers and Architects, P.C.
Garg Consulting Services, Inc.
Greenman-Pedersen, Inc.
HAKS Engineers, Architects and Land Surveyors, P.C.
Hardesty and Hanover, LLC
Hatch Mott MacDonald NY, Inc.
Henningson, Durham and Richardson Architecture and Engineering, P.C.
HNTB New York Engineering and Architecture, PC
HVEA Engineers
Jacobs Civil Consultants, Inc.
KS Engineers, P.C.
LiRo Engineers, Inc.
Lochner Engineering, P.C.
McLaren Engineering Group
Michael Baker Engineering, Inc.
Mueser Rutledge Consulting Engineers
Ove Arup and Partners, PC
Parsons Brinckerhoff, Inc.

Parsons Transportation Group of NY, Inc.
SJH Engineering, P.C.
Stantec Consulting Services, Inc.
STV, Inc.
Tectonic Engineering and Surveying Consultants, P.C.
TranSystems Architect and Engineer, P.C.
URS Corporation
VHB Engineering, Surveying and Landscape Architecture, P.C.
WSP USA Corp.

35 Firms Selected

02 Stations/Bldgs/Shops/Yards/Parking

AECOM USA, Inc.
AI Engineers, Inc., P.C.
B. Thayer Associates
Cameron Engineering and Associates, LLP
CHA Consulting, Inc.
CSA Group NY Architects and Engineers, P.C.
D&B Engineers and Architects, P.C.
Dattner Architects
Dewberry Engineers, Inc.
DHK Architects, Inc.
di Domenico + Partners, LLP
FST Engineers, Inc.
Gannett Fleming Engineers and Architects, P.C.
Garg Consulting Services, Inc.
Greenman-Pedersen, Inc.
H2M Architects + Engineers
HAKS Engineers, Architects and Land Surveyors, P.C.
Hatch Mott MacDonald NY, Inc.

Henningson, Durham and Richardson Architecture and Engineering, P.C.
HNTB New York Engineering and Architecture, PC
HVEA Engineers
IBI Group - Gruzen Samton
Jacobs Civil Consultants, Inc.
KS Engineers, P.C.
Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
Lee Harris Pomeroy Architects + Weidlinger Associates
LiRo Engineers, Inc.
Lochner
McLaren Engineering Group
Michael Baker Engineering, Inc.
Ove Arup and Partners, PC
Parsons Brinckerhoff, Inc.
Parsons Transportation Group of NY, Inc.
SIMCO Engineering, P.C.
SJH Engineering, P.C.
Stantec Consulting Services, Inc.
Studio V Architecture, PLLC
STV, Inc.
SUPERSTRUCTURES Engineering + Architecture, PLLC
SYSTRA Engineering, Inc.
TranSystems Architect and Engineer, P.C.
Urbahn Architects, PLLC
URS Corporation
VHB Engineering, Surveying and Landscape Architecture, P.C.
WSP USA Corp.

45 Firms Selected

03 Power

AECOM USA, Inc.
 Gannett Fleming Engineers and Architects, P.C.
 Henningson, Durham & Richardson Architecture and Engineering, P.C.
 HNTB New York Engineering and Architecture, PC
 Jacobs Civil Consultants, Inc.
 Louis T. Klauder And Associates
 Parsons Brinckerhoff, Inc.
 Parsons Transportation Group of NY, Inc.

11 Firms Selected

STV, Inc.
 SYSTRA Engineering, Inc.
 URS Corporation

04 Track

AECOM USA, Inc.
 Ove Arup and Partners, PC
 CHA Consulting, Inc.
 Gannett Fleming Engineers and Architects, P.C.
 Hatch Mott MacDonald NY, Inc.
 Henningson, Durham and Richardson Architecture and Engineering, P.C.
 HNTB New York Engineering and Architecture, PC
 Jacobs Civil Consultants, Inc.
 Lochner Engineering, P.C.
 Michael Baker Engineering, Inc.
 Parsons Brinckerhoff, Inc.
 Parsons Transportation Group of NY, Inc.
 STV, Inc.
 SYSTRA Engineering, Inc.
 TranSystems Architect and Engineer, P.C.

URS Corporation
 VHB Engineering, Surveying and Landscape Architecture, P.C.
 WSP USA Corp.

18 Firms Selected

05 Signals and Communications

AECOM USA, Inc.
 Gannett Fleming Engineers and Architects, P.C.
 Hatch Mott MacDonald NY, Inc.
 HNTB New York Engineering and Architecture, PC
 Jacobs Civil Consultants, Inc.
 Louis T. Klauder and Associates
 Parsons Brinckerhoff, Inc.
 Parsons Transportation Group of NY, Inc.

STV, Inc.

SYSTRA Engineering, Inc.

VHB Engineering, Surveying and Landscape Architecture, P.C.

11 Firms Selected

06 Rolling Stock

CH2M HILL New York, Inc.
 Interfleet Technology, Inc.
 Louis T. Klauder and Associates
 Parsons Brinckerhoff, Inc.
 Parsons Transportation Group of NY, Inc.
 STV, Inc.

6 Firms Selected

07 Value Engineering

AECOM USA, Inc.
 ARCADIS of New York, Inc.
 Greenman-Pedersen, Inc.

Hatch Mott MacDonald NY, Inc.
 Henningson, Durham and Richardson Architecture and Engineering, P.C.

HNTB New York Engineering and Architecture, PC

Jacobs Civil Consultants, Inc.

LiRo Engineers, Inc.

Parsons Brinckerhoff, Inc.

PMA Consultants

10 Firms Selected

08 Security Engineering

AECOM USA, Inc.
 Gannett Fleming Engineers and Architects, P.C.
 HNTB New York Engineering and Architecture, PC
 Ove Arup and Partners, PC
 Parsons Brinckerhoff, Inc.
 Parsons Transportation Group of NY, Inc.

TRC Engineers, Inc.

URS Corporation

8 Firms Selected

09 Environmental Engineering

AECOM USA, Inc.
 AKRF Engineering, P.C.
 ARCADIS of New York, Inc.
 CH2M HILL New York, Inc.
 CORE Environmental Consultants, Inc.
 D&B Engineers and Architects, P.C.
 Dewberry Engineers, Inc.
 FPM Group, Ltd.
 Gannett Fleming Engineers and Architects, P.C.
 GZA GeoEnvironmental of New York
 H2M Architects + Engineers

Hatch Mott MacDonald NY, Inc.
 Henningson, Durham and Richardson Architecture and Engineering, P.C.
 HNTB New York Engineering and Architecture, PC
 Jacobs Civil Consultants, Inc.
 Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
 LiRo Engineers, Inc.
 Lochner Engineering, P.C.
 Matrix New World Engineering, Inc.
 Parsons Brinckerhoff, Inc.
 STV, Inc.
 Tectonic Engineering and Surveying Consultants, P.C.
 TRC Engineers, Inc.
 URS Corporation
 VHB Engineering, Surveying and Landscape Architecture, P.C.
 YU and Associates, PC

26 Firms Selected

10 Forensic Eng/Laboratory Testing Services

HAKS Engineers, Architects and Land Surveyors, P.C.
 HNTB New York Engineering and Architecture, PC
 HVEA Engineers
 McLaren Engineering Group
 Simpson Gumpertz and Heger Associates, Inc.
 Tectonic Engineering and Surveying Consultants, P.C.
 Thornton Tomasetti, Inc.
 WSP USA Corp.

8 Firms Selected

11 Soils / Foundation Engineering

AECOM USA, Inc.

Dewberry Engineers, Inc.
 Gannett Fleming Engineers and Architects, P.C.
 GeoDesign, Inc., P.C.
 GZA GeoEnvironmental of New York
 Hardesty and Hanover, LLC
 Hatch Mott MacDonald NY, Inc.
 HNTB New York Engineering and Architecture, PC
 Jacobs Civil Consultants, Inc.
 Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
 Matrix New World Engineering, Inc.
 Mueser Rutledge Consulting Engineers
 Ove Arup and Partners, PC
 Parsons Brinckerhoff, Inc.
 Stantec Consulting Services, Inc.
 STV, Inc.
 Tectonic Engineering and Surveying Consultants, P.C.
 URS Corporation
 YU and Associates Engineers, PC

19 Firms Selected

B Construction Supervision and Inspection Services

01 Line Structures

A. DiCesare Associates, P.C.
 AECOM USA, Inc.
 AI Engineers, Inc., P.C.
 Ammann and Whitney Consulting Engineers, P.C.
 ARCADIS of New York, Inc.
 B&H Engineering, P.C.
 CH2M HILL New York, Inc.
 CHA Consulting, Inc.

Dewberry Engineers, Inc.
 Gannett Fleming Engineers and Architects, P.C.
 Garg Consulting Services, Inc.
 Greenman-Pedersen, Inc.
 Haider Engineering, P.C.
 HAKS Engineers, Architects and Land Surveyors, P.C.
 Hardesty and Hanover Construction Services, LLC
 Hatch Mott MacDonald NY, Inc.
 Henningson, Durham and Richardson Architecture and Engineering, P.C.
 Hirani Engineering and Land Surveying, P.C.
 HNTB New York Engineering and Architecture, PC
 HVEA Engineers, PC
 Jacobs Civil Consultants, Inc.
 JED Engineering, P.C.
 KS Engineers, P.C.
 LiRo Engineers, Inc.
 Lochner Engineering, P.C.
 Michael Baker Engineering, Inc.
 Parsons Brinckerhoff, Inc.
 Parsons Transportation Group of NY, Inc.
 STV, Inc.
 SYSTRA Engineering, Inc.
 Tectonic Engineering and Surveying Consultants, P.C.
 TRC Engineers, Inc.
 URS Corporation
 WSP USA Corp.

34 Firms Selected

02 Stations/Bldgs/Shops/Yards/Parking

AECOM USA, Inc.
 AI Engineers, Inc., P.C.

Ammann and Whitney Consulting Engineers, P.C.

ARCADIS of New York, Inc.

CHA Consulting, Inc.

D&B Engineers and Architects, P.C.

Gannett Fleming Engineers and Architects, P.C.

Garg Consulting Services, Inc.

Greenman-Pedersen, Inc.

HAKS Engineers, Architects and Land Surveyors, P.C.

Hatch Mott MacDonald NY, Inc.

Henningson, Durham and Richardson, Architecture and Engineering, P.C.

HNTB New York Engineering and Architecture, PC

HVEA Engineers, PC

Jacobs Civil Consultants, Inc.

Jois Construction Management Systems, Inc.

KS Engineers, P.C.

Langan Engineering, Environmental, Surveying and | Landscape Architecture, D.P.C.

LiRo Engineers, Inc.

Lochner Engineering, P.C.

Michael Baker Engineering, Inc.

Parsons Brinckerhoff, Inc.

Parsons Transportation Group of NY, Inc.

Simco Engineering, P.C.

STV, Inc.

SYSTRA Engineering, Inc.

Tectonic Engineering and Surveying Consultants, P.C.

URS Corporation

WSP USA Corp.

29 Firms Selected

03 Power

AECOM USA, Inc.

Gannett Fleming Engineers and Architects, P.C.

Hatch Mott MacDonald NY, Inc.

Henningson, Durham and Richardson, Architecture and Engineering, P.C.

HNTB New York Engineering and Architecture, PC

Jacobs Civil Consultants, Inc.

LiRo Engineers, Inc.

STV, Inc.

SYSTRA Engineering, Inc.

URS Corporation

10 Firms Selected

04 Track

AECOM USA, Inc.

ARCADIS of New York, Inc.

CHA Consulting, Inc.

Gannett Fleming Engineers and Architects, P.C.

Hatch Mott MacDonald NY, Inc.

Henningson, Durham and Richardson Architecture and Engineering, P.C.

HNTB New York Engineering and Architecture, PC

Jacobs Civil Consultants, Inc.

Jois Construction Management Systems, Inc.

LiRo Engineers, Inc.

Michael Baker Engineering, Inc.

Parsons Brinckerhoff, Inc.

STV, Inc.

SYSTRA Engineering, Inc.

URS Corporation

WSP USA Corp.

16 Firms Selected

05 Signals and Communications

AECOM USA, Inc.

Gannett Fleming Engineers and Architects, P.C.

Garg Consulting Services, Inc.

Hatch Mott MacDonald NY, Inc.

HNTB New York Engineering and Architecture, PC

Jacobs Civil Consultants, Inc.

Louis T. Klauder and Associates

STV, Inc.

SYSTRA Engineering, Inc.

URS Corporation

10 Firms Selected

06 Rolling Stock

CH2M HILL New York, Inc.

Interfleet Technology, Inc.

Louis T. Klauder and Associates

STV, Inc.

4Firms Selected

07 Environmental Engineering

ARCADIS of New York, Inc.

CH2M HILL New York, Inc.

D&B Engineers and Architects, P.C.

Dewberry Engineers, Inc.

FPM Group, Ltd.

Gannett Fleming Engineers and Architects, P.C.

GZA GeoEnvironmental of New York

Hatch Mott MacDonald NY, Inc.

Henningson, Durham and Richardson, Architecture and Engineering, P.C.

HNTB New York Engineering and Architecture, PC

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.

LiRo Engineers, Inc.

Parsons Brinckerhoff, Inc.

STV, Inc.

Tectonic Engineering and Surveying Consultants, P.C.

TRC Engineers, Inc.

URS Corporation

17 Firms Selected

C Miscellaneous Professional Services

01 Scheduling

Ammann and Whitney Consulting Engineers, P.C.

ARCADIS of New York, Inc.

Atkins, P.A.

HAKS Engineers, Architects and Land Surveyors, P.C.

Henningson, Durham and Richardson Architecture and Engineering, P.C.

Hill International, Inc.

HNTB New York Engineering and Architecture, PC

Jois Construction Management System

LiRo Engineers, Inc.

M&J Engineering, P.C.

Parsons Brinckerhoff, Inc.

PMA Consultants

STV, Inc.

Toscano Clements Taylor, LLC

URS Corporation

15 Firms Selected

02 Cost Estimating

Accu-Cost Construction Consultants, Inc.

ARCADIS of New York, Inc.

Atkins, P.A.

HAKS Engineers, Architects and Land Surveyors, P.C.

Henningson, Durham and Richardson, Architecture and Engineering, P.C.

Hill International, Inc.

HNTB New York Engineering and Architecture, PC

Jois Construction Management System

LiRo Engineers, Inc.

Parsons Brinckerhoff, Inc.

PMA Consultants

STV, Inc.

Toscano Clements Taylor, LLC

URS Corporation

14 Firms Selected

03 Claims Support

Ammann and Whitney Consulting Engineers, P.C.

ARCADIS of New York, Inc.

Henningson, Durham and Richardson Architecture and Engineering, P.C.

Hill International, Inc.

HNTB New York Engineering and Architecture, PC

Jois Construction Management System

MDC Systems

PMA Consultants

SYSTRA Engineering, Inc.

9 Firms Selected

04 Constructability

ARCADIS of New York, Inc.

CES Consultants, Inc.

FST Engineers, Inc.

Greenman-Pedersen, Inc.

Hatch Mott MacDonald NY, Inc.

Henningson, Durham and Richardson, Architecture and Engineering, P.C.

Hill International, Inc.

HNTB New York Engineering and Architecture, PC

Jacobs Civil Consultants, Inc.

LiRo Engineers, Inc.

Michael Baker Engineering, Inc.

Parsons Brinckerhoff, Inc.

PMA Consultants

STV, Inc.

SYSTRA Engineering, Inc.

URS Corporation

16 Firms Selected

05 Test & Evaluation

Interfleet Technology, Inc.

1 Firm Selected

06 Useful Life Analysis

Henningson, Durham and Richardson, Architecture and Engineering, P.C.

1 Firm Selected

07 Design Reviews

Atkins, P.A.

CH2M HILL New York, Inc.

FST Engineers, Inc.

Greenman-Pedersen, Inc.

Hatch Mott MacDonald NY, Inc.

Henningson, Durham and Richardson, Architecture and Engineering, P.C.

Hill International, Inc.

HNTB New York Engineering and Architecture, PC

Jacobs Civil Consultants, Inc.

LiRo Engineers, Inc.

Louis T. Klauder and Associates
Michael Baker Engineering, Inc.

Ove Arup and Partners, PC

Parsons Brinckerhoff, Inc.

STV, Inc.

URS Corporation

16 Firms Selected

VHB Engineering, Surveying and Landscape Architecture,
P.C.

9 Firms Selected

08 ***Technical Writer***

CES Consultants, Inc.

Henningson, Durham and Richardson, Architecture and
Engineering, P.C.

HNTB New York Engineering and Architecture, PC

SIMCO Engineering, P.C.

4 Firms Selected

09 ***Quality Management***

CES Consultants, Inc.

Greenman-Pedersen, Inc.

HNTB New York Engineering and Architecture, PC

Parsons Brinckerhoff, Inc.

SYSTRA Engineering, Inc.

5 Firms Selected

10 ***Operational Studies & Simulations***

CH2M HILL New York, Inc.

Gannett Fleming Engineers and Architects, P.C.

HNTB New York Engineering and Architecture, PC

Louis T. Klauder and Associates

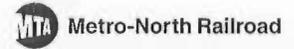
Ove Arup and Partners, PC

Parsons Brinckerhoff, Inc.

STV, Inc.

SYSTRA Engineering, Inc.

Schedule H: Modifications to Personal Service and Miscellaneous Service Contracts



Item Number: H

Vendor Name (& Location) Gannett Fleming Engineers and Architects, P.C.
Description Design and Inspection Services for the Replacement of Grand Central Terminal Escalators
Contract Term (including Options, if any) 26 months
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:
Funding Source <input checked="" type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:
Requesting Dept./Div. & Dept./Div. Head Name: <i>Al Muir for Al Muir</i> Procurement & Material Management, Al Muir, Acting Sr. Director

Contract Number 24442	AWO/Modification # 1
Original Amount:	\$672,906
Prior Modifications:	\$ 0.00
Prior Budgetary Increases:	\$ 0.00
Current Amount:	\$672,906 (not-to-exceed)
This Request:	\$510,826
% of This Request to Current Amount:	75.9%
% of Modifications (including This Request) to Original Amount:	75.9%

Discussion:

Approval is requested for funding totaling \$510,826 for additional design services to advance the Grand Central Terminal (“GCT”) escalator replacement design from 30% to 100% complete design. The additional design services from Gannett Fleming Engineers and Architects, P.C. (“Gannett Fleming”) are required to develop viable plans and specifications that are best suited to support construction.

The subject design services were competitively solicited to consulting firms pre-approved under the 2010 – 2014 General Engineering Consultant Services program. In response to a Request for Proposal (“RFP”) issued, Gannett Fleming was selected for award and a 27 month contract was executed in August 2013. The contract required Gannett Fleming to provide design-build plans and specifications to approximately the 30% completion level for the replacement of all eleven escalators in GCT. Plans and specifications were completed and an RFP for design-build construction services was solicited in June 2014. No proposals were received from any of the nine plan holders on the required due date. Based on subsequent phone inquiries conducted by MNR with plan holders, MNR concluded that the design-build plan must be revised to a design-bid-build approach (100% complete design). This change is required to: 1) minimize construction contractor risk due to unidentified existing conditions; and 2) better define the optimum capacity rating of each escalator, based on its location.

Gannett Fleming’s cost proposal to complete the design in the amount of \$510,826 was significantly less than our in-house estimate and is deemed to be fair and reasonable. A one year extension to the period of performance is also required and the additional funding will be provided by the MNR Operating Budget.

LONG ISLAND RAILROAD COMMITTEE

ACTION ITEM

DECEMBER 2014

Staff Summary

Subject Design and Construction of Building Repairs to 50 Vanderbilt Avenue	Date December 1, 2014
Department East Side Access	Vendor Name The Yale Club
Department Head Name William Goodrich	Contract Number
Department Head Signature 	

Board Action					
Order	To	Date	Approval	Info	Other
1	LIRR Committee	12/15/14	X		
2	MTA Board	12/17/14	X		

Internal Approvals			
Order	Approval	Order	Approval
1	Sr. VP & General Counsel	3	President
2	Interim EVP AD		

Purpose:

To seek MTA Board authorization to reimburse the Yale Club of New York City, a New York not-for-profit corporation, having an address at 50 Vanderbilt Avenue, New York for a not-to-exceed amount of \$455,000 to compensate the owner for the design, construction and construction management of facade work to the owner's property.

Background:

The MTA Capital Construction (MTACC) East Side Access (ESA) Project on occasion, when circumstances require, entered into agreements with property owners to minimize potential impacts and consequential damages associated with project related work to privately owned buildings located adjacent to the project's construction site. These agreements occasionally involve cooperative agreements with the building owner to cover the owner's costs for design and/or construction and consultant oversight to assist MTA Capital Construction and its contractors through all phases of project related work.

Discussion

In order to facilitate construction of a new ventilation facility at 44th Street between Vanderbilt and Madison Avenues, ESA demolished an existing structure immediately adjacent to the Yale Club. In its place a new ventilation building was constructed which is shorter than the previous structure. This height differential exposed portions of the Yale Club's exterior wall which previously abutted and was covered by the demolished building. The ESA contractor applied a temporary waterproofing to the building during construction of the ventilation facility. However the building requires permanent building repairs and waterproofing. The building repairs required include repair to cracked and spalling brickwork and installation of miscellaneous steel, masonry and other surface preparations to waterproof the exposed structure. The work may also include providing protection for the ventilation building necessitated by the execution of this work.

MTACC determined that the Yale Club performing the required work is the most cost-effective solution allowing for less costly access to the affected areas by the property owner as well as lower oversight related costs. The construction work is estimated at not-to-exceed \$445,000. Because the property owner has no in-house expertise to review the design or oversee the construction, the Yale Club will retain their engineering consultants, RAND Engineering, to prepare design drawings, expedite the necessary work permits, and perform construction management. This work is estimated not-to-exceed \$10,000.

Alternatives

The alternative is for MTACC to issue a change order to an existing contract to perform the work. This is not recommended because it would likely cost more and take longer to perform the work and add potential delays to the contractor's existing schedule.

Impact on Funding

The work will be funded from the MTA's 2010-2014 Capital Plan.

Recommendation

MTACC recommends that the Board approve reimbursement to the Yale Club of New York City for a not-to-exceed amount of \$455,000 to compensate the owner for the design review, construction and construction management of building repairs to the owner's property.

LONG ISLAND RAIL ROAD

PROCUREMENTS

FOR

BOARD ACTION

December 17, 2014

Staff Summary



Subject : Request for Authorization to Award Various Procurements						Date December 17, 2014			
Department Procurement & Logistics									
Department Head Name Dennis L. Mahon, Chief Procurement & Logistics Officer									
Department Head Signature 									
Board Action						Internal Approvals			
Order	To	Date	Approval	Info	Other	Order	Approval	Order	Approval
1	LI Committee	12.15.14				X	President		VP & CFO
2	MTA Board	12.17.14				X	Sr. VP-Administration		VP, Gen. Counsel & Secy
							Sr. VP-Operations		
							Executive VP		

PURPOSE:

To obtain approval of the Board to award various contracts and purchase orders, and to inform the Long Island Rail Road Committee of these procurement actions.

DISCUSSION:

LIRR proposes to award Non-Competitive Procurements in the following categories:

Schedules Requiring Two-Thirds Vote

Schedule A: Non-Competitive Purchases and Public Work Contracts	# of Actions	\$ Amount
	1	\$0.344M
SUBTOTAL:	1	\$0.344M

LIRR proposes to award Competitive Procurements in the following categories:

Schedules Requiring Two-Thirds Vote

Schedule C: Competitive Requests for Proposals	# of Actions	\$ Amount
	3	\$27.822M

Schedules Requiring Majority Vote

Schedule G: Miscellaneous Service Contracts	# of Actions	\$ Amount
Schedule H: Mods to Personal & Miscellaneous Service Contracts	1	\$8.847M
	1	\$0.300M
SUBTOTAL:	5	\$36.969M

LIRR proposes to award Ratifications in the following categories:

# of Actions	\$ Amount
None	

TOTAL: **6** **\$37.313M**

BUDGET IMPACT:

The purchases/contracts will result in obligating LIRR operating and capital funds in the amount listed. Funds are available in the current operating/capital budgets for this purpose.

RECOMMENDATION:

That the purchases/contracts be approved as proposed. (Items are included in the resolution of approval at the beginning of the Procurement Section.)

METROPOLITAN TRANSPORTATION AUTHORITY

WHEREAS, in accordance with Section 1265-a and Section 1209 of the Public Authorities law and the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive purchase and public work contracts, and the solicitation and award of request for proposals in regard to purchase and public work contracts; and

WHEREAS, in accordance with the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive miscellaneous procurement contracts, and certain change orders to procurement, public work, and miscellaneous procurement contracts; and

WHEREAS, in accordance with Section 2879 of the Public Authorities Law and the All Agency Guidelines for Procurement of Services, the Board authorizes the award of certain service contracts and certain change orders to service contracts.

NOW, the Board resolves as follows:

1. As to each purchase and public work contract set forth in the annexed Schedule A, the Board declares competitive bidding to be impractical or inappropriate for the reasons specified therein and authorizes the execution of each such contract.

2. As to each request for proposals (for purchase and public work contracts) set forth in Schedule B for which it is deemed in the public interest to obtain authorization to solicit competitive proposals through a publicly advertised RFP for the reasons specified therein the Board declares it to be impractical or inappropriate to utilize a procurement process inviting sealed bids with award to the lowest responsive/responsible bidder.

3. As to each request for proposals (for purchase and public work contracts) set forth in Schedule C for which a recommendation is made to award the contract, the Board authorizes the execution of said contract.

4. The Board ratifies each action taken set forth in Schedule D for which ratification is requested.

5. The Board authorizes the execution of each of the following for which Board authorization is required: i) the miscellaneous procurement contracts set forth in Schedule E; ii) the personal service contracts set forth in Schedule F; iii) the miscellaneous service contracts set forth in Schedule G; iv) the modifications to personal/miscellaneous service contracts set forth in Schedule H; v) the contract modifications to purchase and public work contracts set forth in Schedule I; and vi) the modifications to miscellaneous procurement contracts set forth in Schedule J.

6. The Board ratifies each action taken set forth in Schedule K for which ratification is requested.

DECEMBER 2014

MTA LONG ISLAND RAIL ROAD

LIST OF NON-COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Procurements Requiring Two-Thirds Vote

Schedule A: Non-Competitive Purchases and Public Work Contracts

(Staff Summaries required for all items greater than: \$100K Sole Source; \$250K Other Non-Competitive)

- | | | | |
|-----------|------------------------------------|----------------------|--------------------------------------|
| 1. | Simplex Grinnell, LP | \$343,800 | <i><u>Staff Summary Attached</u></i> |
| | Sole Source | Not-to-Exceed | |
| | Contract No. 141103GS6-SS-N | | |

Long Island Rail Road requests MTA Board approval to award a sole source, Public Works contract to Simplex Grinnell, LP (Simplex Grinnell) for a three year period in the not-to-exceed amount of \$343,800, to provide all labor, materials, and equipment necessary for the testing, inspection, maintenance and repairs of the Fire Alarm Detection and Command System located throughout the Long Island Rail Road's Hillside Maintenance Complex.

Schedule A Non-Competitive Purchases and Public Works

Staff Summary



Item Number: 1

Vendor Name (& Location) Simplex Grinnell, LP (New York City)
Description Fire Alarm & Detection System Maintenance and Repair Services
Contract Term (including Options, if any) January 1, 2015 – December 31, 2017
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Procurement Type <input type="checkbox"/> Competitive <input checked="" type="checkbox"/> Non-Competitive
Solicitation Type <input type="checkbox"/> RFP <input type="checkbox"/> Bid <input checked="" type="checkbox"/> Other: Sole Source

Contact Number 141103GS6-SS-N	Renewal? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Total Amount:	\$343,800 NTE
Funding Source <input checked="" type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	
Requesting Dept/Div & Dept/Div Head Name: Engineering, Dennis Varley	
Contract Manager : Louis R. Drago	

Discussion:

Long Island Rail Road requests MTA Board approval to award a sole source, Public Works contract to Simplex Grinnell, LP (Simplex Grinnell) for a three year period in the not-to-exceed amount of \$343,800, to provide all labor, materials, and equipment necessary for the testing, inspection, maintenance and repairs of the Fire Alarm Detection and Command System (FAD&CS) located throughout the Long Island Rail Road's Hillside Maintenance Complex (HMC).

The HMC FAD&CS is a proprietary, large scale, campus style platform provided by Simplex Grinnell. Accordingly, Simplex Grinnell is the only contractor that can maintain and modify the system. The HMC campus consists of six buildings where the FAD&CS are inter-connected through a network of nodes, sensors and panels. The campus continually undergoes renovations, and alterations requiring modifications and upgrades to the FAD&CS. Network system programming and software updates are routinely performed during maintenance, testing & inspection of the system. Due to the proprietary nature of the system, only Simplex Grinnell has access to the required software and hardware. The scope of work for this contract has been significantly reduced from the previous contract, leaving in only the required critical elements. LIRR advertised its intent to award this sole source contract to Simplex Grinnell in the NYS Contract Reporter, NY Post and on the MTA Website. No other contractors expressed an interest in competing for this work.

Simplex had proposed a total price of \$632,654, which included all scheduled inspection, testing and maintenance, emergency, non-emergency repairs, as well as parts and materials. Simplex Grinnell's labor and material prices are as published in the current New York State Office of General Services Contract PT63104. LIRR's internal estimate of \$586,443 is \$46,211, or 7.3% less than the proposed price.

MTA Audit, in conjunction with LIRR Procurement determined that Simplex Grinnell's proposed price is for full-coverage, which includes non-scheduled emergency or non-emergency repairs, parts and materials. MTA Audit recommended removing the on-call emergency and non-emergency repairs, parts and material costs from the price, reducing the overall proposed price to \$418,750, versus a revised estimate of \$396,443. Upon further evaluation, MTA Audit recommended \$295,479 as a supported price, including an escalation factor of 6.28% for years two and three. The total MTA Audit recommended amount of \$295,479 was further negotiated with the vendor to \$290,800, plus a mutually accepted contingency of \$53,000 for emergency and non-emergency repairs, to be billed in accordance with OGS rates as authorized, resulting in a final negotiated price of \$343,800.

This negotiated price is \$52,643 or 13.2% less than the revised estimate. Simplex Grinnell has certified that all prices offered for this procurement are equal to or less than the prices listed on the NYS OGS contract. The final negotiated price of \$343,800 is deemed to be fair and reasonable. The prices will remain fixed for the three year term of the contract.

All appropriate due diligence has been performed revealing no adverse information. Funding for this contract is included in LIRR's Operating Budget.

DECEMBER 2014

MTA LONG ISLAND RAIL ROAD

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Procurements Requiring Two-Thirds Vote

Schedule C: Competitive Requests for Proposals (Award of Purchase and Public Work Contracts)
(Staff Summaries only required for items estimated to be greater than \$1 million)

2. **Mass Electric Construction Co.** **\$4,966,500** *(Staff Summary Attached)*
Competitive RFP
Contract No. 6126

Pursuant to a competitive Request for Proposal, Long Island Rail Road requests MTA approval to award a Public Works Contract to Mass Electric Construction Company (MECC) in the amount of \$4,966,500 (Base Work and one Abatement Option) to provide Design-Build Services for A/C Switchgear in the First Avenue Substation, located in Manhattan. As a result of Superstorm Sandy, LIRR sustained an unprecedented amount of storm related damage requiring the replacement of the AC Switchgear. Approximately 18 inches of storm water flooded the AC Switchgear during the storm. The overall goal of this project is to replace the damaged equipment which provides traction power for LIRR train services in the four East River Tunnels between Penn Station and Long Island City.

3. **Posillico Civil, Inc.** **\$7,073,000** *(Staff Summary Attached)*
Competitive RFP
Contract No. 6167

Pursuant to a competitive Request for Proposal, Long Island Rail Road requests MTA Board approval to award a Firm Fixed Price contract to Posillico Civil Inc. ("Posillico"), in the amount of \$7,073,000 to provide Design-Build Services for the Ellison Avenue Bridge Replacement Project. The Ellison Avenue Bridge is a roadway bridge over LIRR's Main Line, which was originally constructed by the LIRR as an overpass in 1896, and was rebuilt in 1941 as a two-lane roadway bridge with pedestrian sidewalks on both sides. The roadway deck of the Bridge is in poor condition and is in need of replacement. The existing 3-span bridge (including piers and abutments) will be completely demolished and replaced with a wider single span steel bridge. The contract is scheduled to begin in January 2015 and attain Substantial Completion in 2016.

4. **Railworks Transit, Inc.** **\$15,782,000** *(Staff Summary Attached)*
Competitive RFP
Contract No. 6158

Pursuant to a competitive Request for Proposal ("RFP"), LIRR requests approval to award a Public Work Contract to Railworks Transit, Inc. in the amount of \$15,782,000 to provide construction services for the Atlantic Branch (between Jamaica and Brooklyn) Half-Tie Replacement project (21,500 half-ties). This RFP was advertised in the New York State Contract Reporter, N.Y. Post, and the MTA webpage on October 2, 2014, and additional six firms deemed capable of performing this work were sent notifications of the solicitation.

Schedule C Competitive Requests for Proposals (Award of Purchase and Public Work Contracts)

Staff Summary



Item Number: 2					
Dept & Dept Head Name: Procurement & Logistics, Dennis Mahon					
Department Head Signature & Date					
Division & Division Head Name: Special Projects, Lori Katzman					
Division Head Signature & Date					
Board Reviews					
Order	To	Date	Approval	Info	Other
1	LI Committee	12.15.14	X		
2	MTA Board	12.17.14	X		
Internal Approvals					
Order	Approval	Order	Approval		
6	President	3	VP/CFO		
5	Executive VP	2	Sr. VP/Operations		
4	VP/Gen'l Counsel & Sec'y	1	Sr. VP/ Administration		

SUMMARY INFORMATION	
Vendor Name	Contract Number
Mass Electric Construction Co.	6126
Description Design-Build Services for the Replacement of the 1 st Ave Substation AC Switchgear	
Total Amount \$4,966,500	
\$4,950,000 Base Work and one Abatement Option (\$16,500)	
Contract Term (including Options, if any)	
26 months (Base Work)	
Options(s) included in Total Amount:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Renewal?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Procurement Type	
<input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-Competitive	
Solicitation Type	
<input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source	
<input type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input checked="" type="checkbox"/> Other: Sandy	

Narrative

I. PURPOSE/RECOMMENDATION:

Pursuant to a competitive Request for Proposal (“RFP”), Long Island Rail Road requests MTA approval to award a Public Works Contract to Mass Electric Construction Company (MECC) in the amount of \$4,966,500 (Base Work and one Abatement Option) to provide Design-Build Services for A/C Switchgear in the First Avenue Substation, located in Manhattan. As a result of Superstorm Sandy, LIRR sustained an unprecedented amount of storm related damage requiring the replacement of the AC Switchgear. Approximately 18 inches of storm water flooded the AC Switchgear during the storm. The overall goal of this project is to replace the damaged equipment which provides traction power for LIRR train services in the four East River Tunnels between Penn Station and Long Island City. LIRR proceeded with this solicitation under the authority granted by the MTA Board at its November 13, 2013 meeting (“Post-Super Storm Sandy Projects”), which issued omnibus approval to use the competitive RFP process pursuant to Section 1265-a of the Public Authorities Law to solicit various Design-Build and other contracts in connection with post-Super Storm Sandy restoration, mitigation and resiliency initiatives.

II. DISCUSSION:

Based upon a 30% conceptual design completed under a separate contract, MECC shall complete the design, and furnish and install the AC Switchgear including all necessary equipment/accessories required to integrate new AC Switchgear with the existing equipment. On July 11, 2013, LIRR publicly advertised a “Request for Qualifications” for this contract in the New York State Contract Reporter, N.Y. Post, and on the MTA website, as a way to identify qualified vendors who would be asked to propose on this work. Responses were submitted by five firms: MECC; L.K. Comstock; E-J Electrical; Hawkeye; and Myers Controlled Power Corp. All firms were deemed qualified based on their construction/design experience and proposed key personnel. However, Hawkeye subsequently withdrew their RFQ response based on the inability to provide adequate resources during their merger with another firm.

Staff Summary



On April 4, 2014, the development of the Conceptual Design (30%) and project specifications were completed by a third party design contract. On July 16, 2014, this RFP was sent to the four qualified firms as well as publicly advertised. Proposals were received from two firms: L.K. Comstock (\$10,818,150) and MECC (\$5,242,000).

MECC's proposal, which conformed entirely to LIRR requirements, was found to be superior when evaluated against the RFP technical criteria, which included technical approach, qualifications and experience of the project team, planning and scheduling, and corporate qualifications. L.K. Comstock's proposal was evaluated as technically lacking because the approach was broad and provided limited detail. Further, L.K. Comstock's proposed staff did not meet the requirements as well as MECC's staff. L.K. Comstock's schedule provided limited detail and was inconsistent throughout the technical proposal.

However, both firms were invited to provide oral presentations, and subsequently Best and Final Offers (BAFOs). BAFO pricing was as follows: MECC - \$5,142,000, L.K. Comstock - \$8,608,150.

Based on the final technical and cost evaluations, MECC was determined to be the top-ranked firm. A second BAFO was requested from MECC and received in the amount of \$5,073,500 vs. the LIRR estimate of \$4,999,743. Negotiations were held and the parties agreed to a final price of \$4,966,500, which is 0.99% below the LIRR estimate and considered fair and reasonable. All appropriate due diligence has been performed revealing no adverse information.

III. D/M/WBE INFORMATION:

The Department of Diversity and Civil Rights has assigned a 17% DBE goal, which MECC has agreed to meet. The final participation plan has been reviewed and approved by DDCR. MECC has achieved its MBE/WBE/DBE goals on previous MTA contracts.

IV. IMPACT ON FUNDING:

This contract will be funded by LIRR's Capital Budget supported by federal Superstorm Sandy funds.

V. ALTERNATIVES:

LIRR does not have the ability to undertake the design build services for the replacement of the new First Avenue Substation AC Switchgear with in-house forces.

Staff Summary



Item Number: 3					
Dept & Dept Head Name: Procurement & Logistics dept. Dennis L. Mahon, Chief Procurement Officer <i>[Signature]</i>					
Division & Division Head Name: Program Management Richard Oakley Signature & Date <i>[Signature]</i>					
Board Reviews					
Order	To	Date	Approval	Info	Other
1	LI Committee	12.15.14	X		
2	MTA Board	12.17.14	X		
Internal Approvals					
Order	Approval	Order	Approval		
6	President <i>[Signature]</i>	3	VP/CFO <i>[Signature]</i>		
5	Executive VP <i>[Signature]</i>	2	Sr. VP/Operations		
4	VP/Gen'l Counsel & Sec'y <i>[Signature]</i>	1	Sr. VP/ Administration <i>[Signature]</i>		

SUMMARY INFORMATION	
Vendor Name Posillico Civil Inc.	Contract Number 6167
Description: Design – Build Services for Ellison Avenue Bridge Replacement Project	
Total Amount \$7,073,000	
Contract Term (including Options, if any) 575 consecutive calendar days	
Options(s) included in Total Amount:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Renewal?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-Competitive	
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	

I. PURPOSE/RECOMMENDATION:

Pursuant to a competitive Request for Proposal (“RFP”), Long Island Rail Road requests MTA Board approval to award a Firm Fixed Price contract to Posillico Civil Inc. (“Posillico”), in the amount of \$7,073,000 to provide Design-Build Services for the Ellison Avenue Bridge Replacement Project.

II. DISCUSSION:

The Ellison Avenue Bridge is a roadway bridge over LIRR's Main Line, which was originally constructed by the LIRR as an overpass in 1896, and was rebuilt in 1941 as a two-lane roadway bridge with pedestrian sidewalks on both sides. The bridge is located above LIRR’s Main Line at Mile Post 21.0, north of Old Country Road and between the Carle Place and Westbury Train Stations. The roadway deck of the Bridge is in poor condition and is in need of replacement. As part of the awarded contract requirement the selected firm will be required to complete the final design of the bridge with specific design details and construct the new pre-stressed concrete members, bridge deck, bridge seats, and abutments. The existing 3-span bridge (including piers and abutments) will be completely demolished and replaced with a wider single span steel bridge to accommodate a future third track as part of Main Line Corridor Improvements. In addition, the bridge will be constructed to accommodate additional vertical clearance (19’-6”) for potential future freight train service. The contract is scheduled to begin in January 2015 and attain Substantial Completion in 2016.

The contract requires Posillico to utilize the Design-Build Documents along with the additional reference documents to advance the design from approximately the 30% level to the 100% Final Design level. The contractor shall assume the responsibility of Designer of Record.

Upon approval of the final design, Posillico shall provide all services, labor, material, equipment and facilities required to complete the Work identified in the Contract Documents. Posillico will be provided with a total of two weekend outages on the main line during 2015 to support various stages of construction.

Staff Summary



At its April 2014 meeting, the MTA Board approved the use of the RFP method to procure this design-build contract. Hence, in September 2014 LIRR advertised this RFP in the New York State Contract Reporter, the New York Post, and the MTA website, as well as alerting eleven (11) companies who might have been interested in this type of work about the solicitation.

On October 20, 2014, three proposers responded to the LIRR's RFP: Posillico Civil; Picone-Bove JV, and Peter Scalamandre & Sons Inc.

A Technical Evaluation Committee reviewed each proposal based upon criteria set forth in the RFP. The Technical Evaluation Criteria consisted of Contractors' Corporate Qualifications and Experience, Qualifications and Experience of Project Team (including Key Personnel), as well as the proposed Technical Approach, and Contract Planning and Scheduling.

Oral discussions were then held with all three proposers. A request for "Best and Final Offer" was prepared for each vendor, with specific technical questions based upon the need for clarifications of their individual technical proposals.

Best and Final Proposals were submitted by all three firms. Posillico submitted a BAFO price of \$7,073,000 (compared to Scalamandre's price of \$7,177,713 and Picone-Bove's price of \$7,500,000). It was determined that Posillico's approach had a better design/construction phase services (CPS) structure with significantly more CPS hours as recommended for design/build delivery since their Design Consultant is the Engineer of Record, and a better quality approach utilizing NYSDOT qualified third party inspectors for quality control of the concrete fabricator. Posillico's proposed schedule was roughly equal to Scalamandre's, but Posillico proposes to open the bridge to traffic one month earlier than Scalamandre. (Picone's schedule was approximately 40% longer than that of the other two proposers.) LIRR analysis of Posillico's price breakdown found that the proposed price is comprehensive, and fair and reasonable against the LIRR estimate of \$7,889,015. Hence, the TEC unanimously concurred that the contract should be awarded to Posillico. All appropriate due diligence has been performed, revealing no adverse information.

III. D/M/WBE INFORMATION:

MTA's Department of Diversity and Civil Rights has set 10% MBE and 10% WBE goals for this contract, which Posillico meets. Posillico Civil, Inc. has not completed any MTA contracts; therefore, no assessment of the firm's M/W/DBE performance can be determined at this time.

IV. IMPACT ON FUNDING:

This contract will be funded by LIRR's 2005 to 2009 Capital Program Budget under Project PN-TT.

V. ALTERNATIVES:

The LIRR currently lacks sufficient manpower and in house design expertise to complete the design and construction of the Ellison Avenue Bridge Replacement. Therefore we must hire a third party contractor with design-build expertise in bridge replacement.

Schedule C Competitive Requests for Proposals (Award of Purchase and Public Work Contracts)

Staff Summary



Item Number: 4					
Dept & Dept Head Name: Procurement & Logistics, Dennis Mahon Department Head Signature & Date <i>[Signature]</i>					
Division & Division Head Name: Program Management, Richard Oakley Division Head Signature & Date <i>[Signature]</i>					
Board Reviews					
Order	To	Date	Approval	Info	Other
1	LI Committee	12.15.14	X		
2	MTA Board	12.17.14	X		
Internal Approvals					
Order	Approval	Order	Approval		
6	President <i>[Signature]</i>	3	VP/CFO <i>[Signature]</i>		
5	Executive VP <i>[Signature]</i>	2	Sr. VP/Operations		
4	VP/Gen'l Counsel & Sec'y <i>[Signature]</i>	1	Sr. VP/ Administration <i>[Signature]</i>		

SUMMARY INFORMATION	
Vendor Name Railworks Transit, Inc.	Contract Number 6158
Description Atlantic Branch Half-Tie Replacement	
Total Amount \$15,782,000	
Contract Term (including Options, if any) 20 months	
Options(s) included in Total Amount: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-Competitive	
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source <input type="checkbox"/> Operating <input type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other:	

I. PURPOSE/RECOMMENDATION:

Pursuant to a competitive Request for Proposal (“RFP”), LIRR requests approval to award a Public Work Contract to Railworks Transit, Inc. in the amount of \$15,782,000 to provide construction services for the Atlantic Branch (between Jamaica and Brooklyn) Half-Tie Replacement project (21,500 half-ties).

II. DISCUSSION:

At its May 2014 meeting, the MTA Board approved the use of the RFP method to solicit this contract. This RFP was advertised in the New York State Contract Reporter, N.Y. Post, and the MTA webpage on October 2, 2014, and in addition six firms deemed capable of performing this work were sent notifications of the solicitation. Proposals were submitted by four firms (Delta Railroad Construction, Inc.; J-Track LLC; Kiewit Infrastructure Co.; and Railworks Transit, Inc.), with pricing ranging from \$15,782,000 to \$47,329,633.

One firm was eliminated from further consideration as its cost proposal was well outside the competitive range. After an initial technical evaluation of the remaining proposals, based on the technical evaluation criteria of Technical Approach and Corporate/Staff Qualifications, one firm was rated technically inadequate and the remaining two firms (Kiewit and Railworks) were short-listed. Technical follow-up was conducted with the two remaining firms. The price differential between the two firms based on their initial proposals was in excess of \$4M. Consequently, negotiations were only conducted with the lowest priced firm. Railworks’ final price after negotiations of \$15,782,000 was determined to be fair and reasonable. Railworks’ responsibility has been reviewed and the firm has been found to be a responsible vendor. Based on the final evaluation (combining technical and cost), it is the recommendation of LIRR that Railworks be awarded this contract for the price of \$15,782,000.

III. D/M/WBE INFORMATION:

The Department of Diversity and Civil Rights has assigned this contract a 17% DBE goal, which Railworks has agreed to meet. Railworks has achieved previous M/W/DBE goals on recent MTA contracts.

Staff Summary



IV. IMPACT ON FUNDING:

Funding for the full project has been identified and is included in LIRR's 2010 – 2014 Capital Budget under Project PN-TG. The initial funding was based on replacing 25% of the half-ties in Atlantic Avenue tunnel representing the ties in the worst condition followed by subsequent phases of life cycle replacements in future capital programs. Upon completion of the project design, and based on a more thorough condition assessment, it was determined that it was necessary to replace 50% of the ties to achieve a state of good repair. This approach eliminates the need for additional replacements in the foreseeable future and the associated support costs, track outages and service diversions. The additional funding for the increased scope is included in the 2010-2014 Capital Plan.

V. ALTERNATIVES:

LIRR in-house forces are not available to perform all of the construction work associated with the half-tie replacement program. Hence, the only alternative to retaining a third-party vendor is to not undertake the work. This is not a viable alternative, as this project is required to achieve a "state of good repair" in the Atlantic Tunnel, and to ensure the safety of train traffic therein.

Staff Summary



Item Number: 5

Vendor Name (& Location) HILO Materials Handling Group (Hauppauge, N.Y.)	
Description Joint Agency Procurement of Preventive Maintenance and Repair of Material Handling Equipment	
Contract Term (including Options, if any) February 1, 2015 – January 31, 2020	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-Competitive	
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other: Sole Source	

Contact Number 150201GS4-L-Y	Renewal? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Total Amount: \$8,846,758 Estimated Quantity	
Funding Source <input checked="" type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	
Requesting Dept/Div & Dept/Div Head Name: Stores, Elvin Vazquez	
Contract Manager : Donald Riker	

Discussion:

Pursuant to a competitive Request for Proposal (“RFP”), Long Island Rail Road, on behalf of itself, New York City Transit (NYCT), and Staten Island Rapid Transit Operating Authority (SIRTOA), (“the Agencies”) requests MTA Board approval to award a competitively negotiated Miscellaneous Service Contract to HILO Materials Handling Group (“HILO”), in the estimated quantity amount of \$8,846,758 (\$2,124,658-LIRR, \$6,705,323-NYCT, and \$16,777-SIRTOA), to provide material handling equipment maintenance and repair services for a period of five years. This contract is a renewal of a five-year joint-agency contract.

The LIRR publicly advertised this RFP in the NYS Contract Reporter, the New York Post, El Diario and on the MTA website. The Department of Diversity and Civil Rights had assigned a 10% MBE and 10% WBE goals for this contract, which was competitively solicited using an RFP process on an E-Procurement platform, managed by Government Sourcing Group. The E-Procurement platform is the MTA Board approved competitive process for soliciting and receiving proposals electronically, as well as competitively negotiating on-line, in real-time. A pre-proposal conference was conducted on August 2014. Two addendums were issued in response to questions on the RFP requirements. Prospective proposers downloaded the RFP documents directly from the internet-based web site, submitted all requests for clarification and uploaded their technical and cost proposals to the platform. Three proposers responded to the LIRR’s Request for Proposal; HILO, Crown Lift Trucks (the incumbent), and Transervice Lease Corp (Transervice).

The Technical Evaluation Committee (TEC) reviewed each proposal based upon criteria set forth in the RFP, resulting in all three firms being invited to oral presentations. Subsequent to the oral presentations, Transervice withdrew their proposal due on their inability to meet all the requirements of the technical scope of work, including providing required off-site work space.

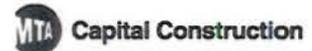
Live negotiations were conducted electronically on October 24, 2014 in the presence of the TEC through Government Sourcing Group’s E-Procurement Platform. The live negotiation provided an opportunity for the two remaining firms to submit “real-time” revised pricing. HILO’s Best and Final Offer of \$8,846,758 was \$1,032,486, or 10.4% less than Crown’s total of \$9,879,244. HILO’s price is considered fair and reasonable as the 9.72% increase over the previous contract total represents a 1.64% compounded annual increase over the six year period the current contract has been in effect. The TEC voted HILO’s proposal technically superior and more cost efficient than Crown’s. HILO has proposed 20% MBE and has been granted a full waiver of the WBE 10% goal. All due diligence has been performed revealing no adverse information. Each Agency’s Operating Budget will fund these contracts.

LONG ISLAND RAILROAD COMMITTEE

BOARD PROCUREMENT PACKAGE

DECEMBER 2014

Staff Summary



Subject	Request for Authorization to Award Various Procurements				
Department	Law and Procurement				
Department Head Name	Evan M. Eisland				
Department Head Signature					
Board Action					
Order	To	Date	Approval	Info	Other
1	Long Island Rail Road Committee	12/15/14	X		
2	Board	12/17/14	X		

Date: December 3, 2014			
Vendor Name Various			
Contract Number Various			
Contract Manager Name			
Internal Approvals			
	Approval		Approval
4	President 	3	Interim Executive Vice President AD
2	Vice President, Program Controls 	1	Chief Procurement Officer

PURPOSE

To obtain the approval of the Board to award various contract modifications and to inform the Long Island Railroad Committee of these procurement actions.

DISCUSSION

MTA Capital Construction proposes to award Competitive Procurements in the following categories:

Schedules Requiring Majority Vote:

Schedule I Modifications to Purchase and Public Work Contracts

	<u># of Actions</u>	<u>\$ Amount</u>
	1	\$ 6,525,000
SUBTOTAL	1	\$ 6,525,000

MTA Capital Construction proposes to award Ratifications in the following category:

Schedules Requiring Majority Vote:

Schedule K Ratification of Completed Procurement Actions

	<u># of Actions</u>	<u>\$ Amount</u>
	2	\$ 5,199,400
SUBTOTAL	2	\$ 5,199,400

TOTAL	3	\$11,724,400
-------	---	--------------

Budget Impact:

The approval of the modifications will obligate MTA Capital Construction capital funds in the respective amounts listed. Funds are available in the current capital budget for this purpose.

Recommendation:

That the modifications be approved as proposed. (Items are included in the resolution of approval at the beginning of the Procurement Section.)

MTA Capital Construction Company

BOARD RESOLUTION

WHEREAS, in accordance with Section 1265-a and 1209 of the Public Authorities Law and the All Agency Procurement guidelines, the Board authorizes the award of certain non-competitive purchase and public works contracts, and the solicitation and award of request for proposals in regard to purchase and public work contracts; and

WHEREAS, in accordance with the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive miscellaneous service and miscellaneous procurement contracts, certain change orders to purchase, public work, and miscellaneous service and miscellaneous procurement contracts;

WHEREAS, in accordance with Section 2879 of the Public Authorities Law and the All-Agency Guidelines for Procurement of Services, the Board authorizes the award of certain service contracts and certain change orders to service contracts.

NOW, the Board resolves as follows:

1. As to each purchase and public work contract set forth in annexed Schedule A, the Board declares competitive bidding to be impractical or inappropriate for the reasons specified therein and authorizes the execution of each such contract.
2. As to each request for proposals (for purchase and public work contracts) set forth in Schedule B for which authorization to solicit proposals is requested, for the reasons specified therein, the Board declares competitive bidding to be impractical or inappropriate, declares it is in the public interest to solicit competitive request for proposals and authorizes the solicitation of such proposals.
3. As to each request for proposals (for purchase and public work contracts set forth in Schedule C for which a recommendation is made to award the contract), the Board authorizes the execution of said contract.
4. As to each action set forth in Schedule D, the Board declares competitive bidding impractical or inappropriate for the reasons specified therein, and ratifies each action for which ratification is requested.
5. The Board authorizes the execution of each of the following for which Board authorization is required: i) the miscellaneous procurement contracts set forth in Schedule E; ii) the personal service contracts set forth in Schedule F; iii) the miscellaneous service contracts set forth in Schedule G; iv) the modifications to personal/miscellaneous service contracts set forth in Schedule H; v) the contract modifications to purchase and public work contracts set forth in Schedule I; vi) the modifications to miscellaneous procurement contracts set forth in Schedule J.
6. The Board ratifies each action taken set forth in Schedule K for which ratification is requested.
7. The Board authorizes the budget adjustments to estimated contracts set forth in Schedule L.

DECEMBER 2014

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Procurements Requiring Majority Vote

Schedule I. Modifications To Purchase and Public Work Contracts

(Staff Summaries required for individual change orders greater than \$750K. Approval without Staff Summary required for change orders greater than 15% of the adjusted contract amount which are also at least \$250K)

- | | | | |
|-----------|--|--------------------|--------------------------------------|
| 1. | Tutor Perini Corporation
Contract No. CQ032
Modification No. 58 | \$6,525,000 | <u>Staff Summary Attached</u> |
|-----------|--|--------------------|--------------------------------------|

Pursuant to Article IX of the MTA All-Agency Procurement Guidelines, MTACC is requesting Board approval to modify the Contract for the construction of a duct bench in the Yard Lead Tunnel ("YLT"). This is a scope and budget transfer.

Item Number 1

Vendor Name (& Location) Tutor Perini Corporation (Peekskill, New York)
Description Plaza Substation and Queens Structures for the ESA Project
Contract Term (including Options, if any) 1,653 days
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive
Solicitation Type <input type="checkbox"/> RFP <input type="checkbox"/> Bid <input checked="" type="checkbox"/> Other: Modification
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other:
Requesting Dept/Div & Dept/Div Head Name: East Side Access, W. Goodrich, P.E.

Contract Number CQ032	AWO/Modification # 58
Original Amount:	\$ 147,377,000
Prior Modifications:	\$ 68,975,317
Prior Budgetary Increases:	\$ -0-
Current Amount:	\$ 216,352,317
This Request	\$ 6,525,000
% of This Request to Current Amount:	3%
% of Modifications (including This Request) to Original Amount:	51%

Discussion:

The work under this Contract is for the structural and architectural rehabilitation to existing facilities along the existing 63rd Street Tunnel as well as construction of Plaza Interlocking and Facility Power Substation B10 for the East Side Access (“ESA”) Project. In accordance with Article IX of the All-Agency Procurement Guidelines, MTACC is requesting Board approval to modify the Contract to add the construction of a duct bench in the Yard Lead Tunnel (“YLT”). This is a scope and budget transfer.

The construction of a duct bench (from STA 1181+89 to STA 1225+10) in the YLT was originally planned as part of the future CS284 Contract. However, the CS179 Contractor is scheduled to begin the installation of cables in conduits and troughs of the duct bench in the YLT in June 2015 so the duct benches must be constructed sooner.

The work cannot be added to the CS179 Contract because that contract does not have duct bench civil work in its scope and the Contractor will not be mobilized in the YLT in time to perform this work. Conversely, the CQ032 Contractor is currently mobilized on-site in the YLT, is performing duct bench work under its Contract and can complete the work in time so that the CS179 Contractor can begin its installation work in the YLT.

MTACC’s estimate for the Work is \$6,444,889. The Contractor submitted a cost proposal in the amount of \$7,390,430. Negotiations were held and the parties agreed to the amount of \$6,525,000 which is considered to be fair and reasonable. There is no time impact to the Contract. The budget for this work will be transferred from CS284.

DECEMBER 2014

LIST OF RATIFICATIONS FOR BOARD APPROVAL**Procurements Requiring Majority Vote:****Schedule K. Ratification of Completed Procurement Actions (Involving Schedule E-J)
(Staff Summaries required for items requiring Board Approval)**

- | | | | |
|-----------|------------------------------------|--------------------|--------------------------------------|
| 2. | Yonkers Contracting Company | \$2,799,400 | <u>Staff Summary Attached</u> |
| | Contract No. CM014A | | |
| | Modification No. 27 | | |

Pursuant to Article IX of the MTA All-Agency Procurement Guidelines, MTACC requests the Board ratify a retroactive contract modification to incorporate revisions to the Contract Work associated with the Supervisory Control and Data Acquisition (SCADA) System as well as an extension of time and impact costs resulting from delays caused by the SCADA related revisions to the Contract Work and from the installation of a temporary fire alarm system in unit substation B30.

- | | | | |
|-----------|---------------------------------|--------------------|--------------------------------------|
| 3. | Tutor Perini Corporation | \$2,400,000 | <u>Staff Summary Attached</u> |
| | Contract No. CQ032 | | |
| | Modification No. 50 | | |

Pursuant to Article IX of the MTA All-Agency Procurement Guidelines, MTACC requests the Board ratify a retroactive contract modification to revise Stages 3 and 4, the final stages of the Re-bracing for the Early Access Chamber.

Item Number 2

Vendor Name (& Location) Yonkers Contracting Company, Inc. (Yonkers, New York)	
Description GCT Concourse and Facilities Fit-Out for the ESA Project	
Contract Term (including Options, if any) 841 Days	
Option(s) included in Total Amount?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Procurement Type	<input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive
Solicitation Type	<input type="checkbox"/> RFP <input type="checkbox"/> Bid <input checked="" type="checkbox"/> Other: Modification
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other:	
Requesting Dept/Div & Dept/Div Head Name: East Side Access, W. Goodrich, P.E.	

Contract Number CM014A	AWO/Modification # 27
Original Amount:	\$ 43,502,000
Prior Modifications:	\$ 8,019,389
Prior Budgetary Increases:	\$ -0-
Current Amount:	\$ 51,521,389
This Request	\$ 2,799,400
% of This Request to Current Amount:	5.4%
% of Modifications (including This Request) to Original Amount:	25%

Discussion:

The work under this Contract is for the facility fit-out of the lower portion of the new Long Island Railroad (“LIRR”) Concourse located in the lower level of Grand Central Station for the East Side Access (“ESA”) project. In accordance with Article IX of the All-Agency Procurement Guidelines, MTACC is requesting Board ratification of a modification to incorporate revisions to the Contract scope of work associated with the Supervisory Control and Data Acquisition (SCADA) System, impact costs associated with delays caused by the SCADA-related revisions to the Contract scope of work, and for the installation of a temporary fire alarm system in unit substation B30.

The SCADA system enables the LIRR to monitor and control facilities remotely. In May 2012, after the construction portion of the work on this Contract began, MTACC discovered that the design for the SCADA System was outdated. The main issue was that the multifunction relays specified to control the facility power equipment (transformers and breakers) did not communicate with the SCADA System’s existing protocol. Alternate solutions were evaluated including using the specified relays with an alternate communications protocol and utilizing a memory mapping communication protocol; but neither proved workable. Ultimately, a new relay was selected, however, the selected relay required extensive bench testing to confirm it was acceptable. Bench testing began in October 2012 and was completed in December 2012.

The selected relay affected other parts of the SCADA system design including its interfaces and connections to other devices. To avoid additional delays, the MTACC President approved a retroactive memorandum and the Contractor was directed to proceed with shop drawings reviewed by LIRR and Con Edison. It took approximately 8 months after the bench test (until August 2013) to finalize the redesign with the designer, Con Edison, MTACC and LIRR.

Negotiations to address the additional work, delay and impact costs associated with the SCADA redesign came to an impasse. As a result, on July 29, 2013, MTACC executed Unilateral Modification No. 8, which granted a 308 day extension of time but deferred issues of compensability for a subsequent negotiation.

During this same period, MTACC completed a separate Modification for a required fire alarm system that was not included in the original contract documents. For safety reasons, Metro North Railroad (“MNR”) required that MTACC install a fire alarm system to tie into MNR’s fire control panel to notify MNR in the event of an incident in the ESA Concourse area in the B30 Substation to be constructed and energized under this contract. MTACC did not become aware of this safety requirement until after the original substantial completion date. A separate modification will be issued for the cost of materials and installation of the fire alarm system but the issue of time and associated impact costs are included in this modification.

The Contractor submitted a proposal for 420 excusable and compensable days for the SCADA issues and 146 excusable and compensable days for the fire alarm system for a total of 566 excusable and compensable days. MTACC prepared a revised Time Impact Analysis which established a total of 502 days of excusable delay (including the 308 days granted by Modification 8) and 220 days of compensable delay. Of the 220 days of compensable delay, 164 days were attributable to SCADA and 56 days were attributable to the fire alarm system. The Contractor's proposal sought impact costs for 566 compensable days of \$6,005,278. MTACC's estimate of impact costs for 220 compensable days was \$2,242,900. Negotiations were held, and the parties agreed to an extension of 502 excusable days (including the 308 granted by Modification 8) of which 220 are compensable, and impact costs for the 220 compensable days in the amount of \$2,242,500.

For the direct costs (purchase, fabrication and installation) associated with the revised SCADA system, the contractor proposed \$614,121 while MTACC's estimate was \$767,262. Negotiations on these costs resulted in an agreed to lump sum of \$556,500.

Thus, the total cost for this Modification is \$2,799,400.

Please note that the issues addressed in this Modification have been referred to the Cost Recovery Panel to perform an error and omission analysis.

Item Number 3

Vendor Name (& Location) Tutor Perini Corporation (Peekskill, New York)
Description Plaza Substation and Queens Structures for the ESA Project
Contract Term (including Options, if any) 1,653 days
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive
Solicitation Type <input type="checkbox"/> RFP <input type="checkbox"/> Bid <input checked="" type="checkbox"/> Other: Modification
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other:
Requesting Dept/Div & Dept/Div Head Name: East Side Access, W. Goodrich, P.E.

Contract Number CQ032	AWO/Modification # 50
Original Amount:	\$ 147,377,000
Prior Modifications:	\$ 68,975,317
Prior Budgetary Increases:	\$ -0-
Current Amount:	\$ 216,352,317
This Request	\$ 2,400,000
% of This Request to Current Amount:	1%
% of Modifications (including This Request) to Original Amount:	48%

Discussion:

The work under this Contract is for the structural and architectural rehabilitation of existing facilities within the 63rd Street Tunnel as well as the construction of the Plaza Interlocking and Facility Power Substation B10 for the East Side Access (ESA) Project. In accordance with Article IX of the All-Agency Procurement Guidelines, MTACC is requesting Board ratification of a modification to revise Stages 3 and 4, the final stages of the Re-Bracing for the Early Access Chamber.

As previously reported to the Board, the design of the support of excavation bracing for the Early Access Chamber (“EAC”) was, with limited modification, intended to allow for the construction of the Plaza Interlocking Structure within the EAC. However, as constructed, the support of excavation bracing, which includes 5 levels of reinforced concrete slabs, is interfering with construction of the Plaza Interlocking Structure beyond what was anticipated. A redesign has been prepared to address the unanticipated interferences and to provide for the construction of the Plaza Interlocking Structure and required bracing.

This work of removing bracing and constructing the EAC is being performed in 4 stages. The first two stages were addressed in previous modifications. This modification is for the final two stages, Stages 3 & 4, which includes, among other work, placement of concrete, construction of exterior walls and the north wall of stair 1, construction of the remainder of slab C07, and the removal of portions of the Level 2 bracing slab.

The Contractor submitted a cost proposal for the additional work for Stage 3 & 4, in the amount of \$5,446,400 while MTACC’s estimate is \$2,284,541. Negotiations were held and the parties agreed to a cost of \$2,400,000 which is considered to be fair and reasonable.

Please note that the issues addressed in this Modification have been referred to the Cost Recovery Panel to perform an errors and omission analysis.

In order to prevent further delays to this Contract, the President approved a retroactive memorandum on November 18, 2014 and the Contractor was directed to proceed with the work.

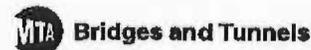


Bridges and Tunnels

Procurements December 2014



Staff Summary



Subject: Request for Authorization to Award Various Procurements
Department: Procurement
Department Head Name M. Margaret Terry <i>MMT</i>
Department Head Signature
Project Manager Name Various

Date December 3, 2014
Vendor Name
Contract Number
Contract Manager Name
Table of Contents Ref #

Board Action					
Order	To	Date	Approval	Info	Other
1	President	12/3/14	<i>[Signature]</i>		
2	MTA B&T Committee	12/15/14			
3	MTA Board	12/17/14			

Internal Approvals			
Order	Approval	Order	Approval
	President <i>[Signature]</i>		VP Operations
<i>[Signature]</i>	Executive Vice President		VP & Chief Engineer
<i>[Signature]</i>	SVP & General Counsel	<i>[Signature]</i>	Chief Procurement Officer
	VP Administration		

Internal Approvals (cont.)							
Order	Approval	Order	Approval	Order	Approval	Order	Approval
	Chief Financial Officer <i>[Signature]</i>		Chief Technology Officer		Chief Health & Safety Officer		Chief EEO Officer
	Chief Security Officer		Chief Maintenance Officer		MTA Office of Civil Rights		

PURPOSE:

To obtain approval of the Board to award various contracts and purchase orders, and to inform the MTA B&T Committee of these procurement actions.

DISCUSSION:

MTA B&T proposes to award Non-Competitive procurements in the following categories: None.

MTA B&T proposes to award Competitive procurements in the following categories:

<u>Schedules Requiring Majority Vote</u>		<u># of Actions</u>	<u>\$ Amount</u>
Schedule C	Competitive Requests for Proposals	1	\$ 13.916M
Schedule F	Personal Service Contracts	2	\$ 10.469M
Schedule H	Modifications to Personal/Miscellaneous Service Contracts	3	\$ 6.261M
Schedule I	Modifications to Purchase & Public Works Contracts	1	\$ 1.187M
SUBTOTAL		7	\$ 31.833M

MTA B&T presents the following procurement actions for Ratification:

<u>Schedules Requiring Majority Vote</u>			
Schedule D	Ratification of Completed Procurement Actions (Involving Schedule A-C)	1	\$ 0.035M
SUBTOTAL		1	\$ 0.035M
TOTAL		8	\$ 31.868M

BUDGET IMPACT:

The purchases/contracts will result in obligating MTA B&T and Capital funds in the amount listed. Funds are available in the current MTA B&T operating/capital budgets for this purpose.

RECOMMENDATION:

That the purchases/contracts be approved as proposed. (Items are included in the resolution of approval at the beginning of the Procurement Section.)

The legal name of MTA Bridges and Tunnels is Triborough Bridge and Tunnel Authority.

MTA BRIDGES & TUNNELS
TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY

WHEREAS, in accordance with §559 and §2879 of the Public Authorities Law and the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive purchase and public work contracts, and the solicitation and award of request for proposals in regard to purchase and public work contracts; and

WHEREAS, in accordance with §2879 of the Public Authorities Law and the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive miscellaneous procurement contracts, and certain changes orders to procurement, public work, and miscellaneous procurement contracts; and

WHEREAS, in accordance with § 2879 of the Public Authorities Law and the All Agency Guidelines for Procurement of Services, the Board authorizes the award of certain service contracts, and certain change orders to service contracts; and

NOW, the Board resolves as follows:

1. As to each purchase and public work contract set forth in annexed Schedule A, the Board declares competitive bidding to be impractical or inappropriate for the reasons specified therein and authorizes the execution of each such contract.
2. As to each request for proposals (for purchase and public work contracts) set forth in Schedule B for which authorization to solicit proposals is requested, for the reasons specified therein, the Board declares competitive bidding to be impractical or inappropriate, declares it is in the public interest to solicit competitive request for proposals and authorizes the solicitation of such proposals.
3. As to each request for proposals (for purchase and public work contracts) set forth in Schedule C for which a recommendation is made to award the contract, the Board authorizes the execution of said contract.
4. The Board ratifies each action set forth in Schedule D for which ratification is requested.
5. The Board authorizes the execution of each of the following for which Board authorization is required: i) the miscellaneous procurement contracts set forth in Schedule E; ii) the personal service contracts set forth in Schedule F; iii) the miscellaneous service contracts set forth in Schedule G; iv) the modifications to personal/miscellaneous service contracts set forth in Schedule H; the contract modifications to purchase and public work contracts set forth in Schedule I; and vi) the modifications to miscellaneous procurement contracts set forth in Schedule J.
6. The Board ratifies each action taken set forth in Schedule K for which ratification is requested.
7. The Board authorizes the budget adjustments to estimated contracts set forth in Schedule L.

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL
DECEMBER 2014

MTA BRIDGES & TUNNELS

Procurements Requiring Majority Vote:

C: Competitive Requests for Proposals (Award of Purchase and Public Work Contracts)
(Staff Summaries required for items requiring Board approval)

1. **John P. Picone, Inc.** **\$13,916,000.00** **Staff Summary Attached**
Contract No. MP-21
1 yr. 5 mo. contract – Competitive RFP – 5 Proposals
Provide Design/Build Services for Project MP-21, Rehabilitation of the Rockaway Point Boulevard and Jacob Riis Pedestrian Overpasses at the Marine Parkway-Gil Hodges Memorial Bridge.

F: Personal Service Contracts

(Staff Summaries required for items greater than: \$100K Sole Source; \$250K Other Non-Competitive; \$1M Competitive)

2. **Parsons/GPI** **\$6,827,695.06** **Staff Summary Attached**
Contract No. PSC-14-2956
3 yr. 7 mo. contract - Competitive RFP - 5 Proposals
Provide Construction Administration and Inspection Services for Project RK-23A, Reconstruction and Rehabilitation of the Manhattan Approach Ramps to the RFK Bridge.
3. **WSP-HNTB, JV** **\$3,641,416.00** **Staff Summary Attached**
Contract No. PSC-14-2957
2 yr. 6 mo. contract - Competitive RFP - 3 Proposals
Perform a Feasibility Study and Conceptual Design for Project RK-65B, Reconstruction of Manhattan Plaza of the Robert F. Kennedy Bridge and Associated Ramps.

H: Modifications to Personal Service Contracts and Miscellaneous Service Contracts Awarded as Contracts for Services

(Approvals/Staff Summaries required for substantial change orders and change orders that cause original contract to equal or exceed monetary or durational threshold required for Board approval)

4. **URS Corporation-NY** **\$4,510,552.17** **Staff Summary Attached**
Contract No. PSC-12-2920
Add funding for construction support services for Projects QM-40S, Super Storm Sandy Restoration and Mitigation and Projects QM-40/QM-18, Tunnel Leak Control and Rehabilitation of the Manhattan Exit Plaza at the Queens Midtown Tunnel.

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL
DECEMBER 2014

5. **WSP/URS, a Joint Venture** **\$1,397,203.11** **Staff Summary Attached**
Contract No. PSC-12-2906
Add funding for construction support services and additional design services for Project HH-88A, Reconstruction of the Upper and Lower Level Toll Plazas and Southbound Approach at the Henry Hudson Bridge.
6. **Weidlinger Associates, Inc.** **\$353,427.32** **Staff Summary Attached**
Contract No. PSC-13-2927
Perform additional design services for Project TN-60, Dehumidification System for the Main Cable Splays and Elimination of Water Infiltration at the Throgs Neck Bridge.

I: Modifications to Purchase & Public Works Contracts

(Approvals/Staff Summaries required for individual change orders greater than \$250K. Approvals without Staff Summaries required for change orders greater than 15% of previous approved amount which are also at least \$50K)

7. **D’Onofrio General Contractors Corp.** **\$1,186,865.49** **Staff Summary Attached**
Contract No. MP-06
Perform additional substructure and underwater work at the Marine Parkway – Gil Hodges Memorial Bridge.

Staff Summary

Item Number 1 (Final)					
Dept & Dept Head Name: Engineering & Construction, Joe Keane, P.E. <i>Joe Keane</i>					
Division & Division Head Name: Engineering & Construction, Romolo DeSantis, P.E. <i>Romolo DeSantis</i>					
Board Reviews					
Order	To	Date	Approval	Info	Other
1	President	12/03/14			
2	MTA B&T Committee	12/15/14			
3	MTA Board	12/17/14			
Internal Approvals					
Order	Approval	Order	Approval		
1	Chief Financial Officer <i>DS</i>	4	Executive Vice President <i>ES</i>		
2	General Counsel <i>GRD FOR MMT</i>	5	President <i>DS</i>		
3	Chief Procurement Officer <i>GRD</i>				

SUMMARY INFORMATION	
Vendor Name John P. Picone, Inc.	Contract Number MP-21
Description Design/Build Services for Project MP-21, Rehabilitation of the Rockaway Point Boulevard and Jacob Riis Pedestrian Overpasses at the Marine Parkway-Gil Hodges Memorial Bridge	
Total Amount \$13,916,000	
Contract Term (including Options, if any) One year, five months	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source <input checked="" type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	

Narrative

I. PURPOSE/RECOMMENDATION

B&T is seeking Board approval in accordance with the All-Agency Procurement Guidelines to award a competitively solicited public work contract for Design/Build Services for the Rehabilitation of the Rockaway Point Boulevard and Jacob Riis Pedestrian Overpasses at the Marine Parkway-Gil Hodges Memorial Bridge (MPB) to John P. Picone, Inc. (Picone) for a period of one year, five months at a price of \$13,916,000.

II. DISCUSSION

In July 2013, the Board authorized B&T to enter into a competitive Request for Proposal (RFP) process for design/build services for the rehabilitation of the Rockaway Point Boulevard and Jacob Riis Pedestrian Overpasses at the MPB. The design/build scope for the rehabilitation work includes but is not limited to the following: replacement of the bridge deck, expansion joints, steel diaphragm, railings, barriers, fencing, approach slabs and roadway pavement, associate electrical and lighting, painting, abatement of lead and asbestos containing materials and maintenance and protection of traffic.

The service requirements were publicly advertised; nine firms submitted qualification information. Five firms were chosen to receive the RFP based on a review of those qualifications and all firms submitted proposals: Picone; Halmar International, LLC; J-Track, LLC; Posillico Co., Inc. and El Sol Contracting and Construction Corp. The proposals were evaluated against established criteria set forth in the RFP, including cost, proposed schedule, project design and understanding and constructability, record of performance for proposed contractor and designer, qualifications of the firm and proposed personnel. Based on the selection criteria and oral presentations, the committee recommended Picone.

(rev. 1/22/14)

Staff Summary

The committee's basis for the selection of Picone included: (i) the lowest proposed price; (ii) the proposed utilization of a temporary bridge to divert traffic off the Rockaway Point Boulevard (RPB) overpass thereby allowing a continuous flow of traffic during overpass demolition and rehabilitation construction activities and (iii) a proposed aggressive schedule, which substantially completes the RPB overpass work in one construction season.

Picone submitted a proposal in the amount \$13,916,000. The Engineer's estimate is \$13,141,000. After discussion between the parties, B&T accepted Picone's proposal in the amount of \$13,916,000. The accepted price is 5.9% above the estimate and is fair and reasonable. Significant adverse information was discovered concerning Picone. An award will not be made until the required approvals are obtained and Picone is deemed to be a responsible contractor.

III. D/M/WBE INFORMATION

The MTA DDCR has established goals of 10% MBE and 10% WBE for the Contract. John P. Picone, Inc. has achieved its previous MWBE goals on prior MTA contracts.

IV. IMPACT ON FUNDING

Funding is available in the 2010-2014 Capital Program under Project MP-21 in the amount of \$8,091,000 and the Major Maintenance Budget under Project MPM-350 in the amount of \$5,825,000.

V. ALTERNATIVES

There are no recommended alternatives. B&T does not possess the resources required to perform these services.

Staff Summary

Item Number 2 (Final)					
Dept & Dept Head Name: Engineering & Construction, Joe Keane, P.E. <i>Joe Keane</i>					
Division & Division Head Name: Engineering and Construction, Walter Hickey, P.E. <i>Walter Hickey</i>					
Board Reviews					
Order	To	Date	Approval	Info	Other
1	President	12/1/14	<i>[Signature]</i>		
2	MTA B&T Committee	12/15/14			
3	MTA Board	12/17/14			
Internal Approvals					
Order	Approval	Order	Approval		
<i>6/11</i>	Chief Procurement Officer	4	Chief Financial Officer <i>DS</i>		
2	Vice President, Administration	5	SVP & General Counsel <i>MMI</i>		
3	Director, Strategic Initiatives <i>[Signature]</i>	6	President <i>[Signature]</i>		

SUMMARY INFORMATION	
Vendor Name Parsons/GPI RK23A JV	Contract Number PSC-14-2956
Description Construction Administration and Inspection Services for RK-23A, Reconstruction and Rehabilitation of the Manhattan Approach Ramps to the RFK Bridge	
Total Amount \$6,827,695.06	
Contract Term (Including Options, If any) Three years, seven months	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	

Narrative:

I. PURPOSE/RECOMMENDATION

B&T is seeking Board approval under the All Agency Guidelines for Procurement of Services to award a personal service contract to Parsons/GPI RK23A JV, Babylon, New York, for Construction Administration and Inspection Services for Project RK-23A, Reconstruction and Rehabilitation of the Manhattan Approach Ramps to the RFK Bridge in the negotiated amount of \$6,827,695.06 and for three years, seven months.

II. DISCUSSION

B&T requires the services of a consultant to provide construction administration and inspection services for Project RK-23A as described above. The work includes but is not limited to replacing the on- and off-bound ramps from 125th Street to the RFK Bridge. Project requirements include building a temporary off-ramp to 125th Street before constructing the new replacement ramp to minimize the impact of construction to customers and the community.

The service requirements were publicly advertised. Fourteen firms submitted qualification information for review and evaluation by the selection committee. Five firms, Ammann & Whitney (A&W), EnTech Engineering, P.C. (EnTech), LiRo Engineers, Inc. (LiRo), Parsons/GPI RK23 JV (Parsons/GPI), and STV, Inc were chosen to receive the RFP based on a review of those qualifications and all five firms submitted proposals. The proposals were evaluated against established criteria set forth in the RFP including technical work proposed, depth of understanding of the project and qualifications of the firm for specific personnel proposed. Four firms were invited for oral presentations. Based on the detailed review of all submittals and its consideration of proposed costs, the selection committee recommended that negotiations be conducted with Parsons/GPI.

The committee selected Parsons/GPI based on (i) a highly qualified team with experience that includes construction inspection services on a similar recent project at the Bronx-Whitestone Bridge and a NYCDOT project for the reconstruction of the Harlem River Drive at 127th Street that abuts and will be coordinated with this work; (ii) the consultant's thorough understanding of contract requirements during construction; (iii) a project specific presentation highlighting safety, security and community relations; (iv) its substantial experience in connection with staged bridgework and Maintenance and Protection of Traffic as will be constructed under this project; and (v) a competitive cost proposal that includes the lowest number of hours proposed.

Although others proposed qualified teams, the selection committee felt Parsons/GPI provided the strongest proposal for the project. LiRo's proposed Resident Engineer demonstrated less relevant experience as a Resident Engineer. A&W's Resident Engineer demonstrated less experience on projects of this magnitude; and Entech's cost proposal was excessive compared to the estimate.

Parsons/GPI submitted a proposal of \$7,163,016.61. The Engineer's revised estimate is \$7,107,000.00. Negotiations were conducted and the parties agreed to the revised amount of \$6,827,695.06, which is within 5% of the Engineer's estimate and is considered fair and reasonable.

Significant adverse information was discovered for Greenman Pedersen, Inc. (GPI) and after due consideration thereof, the Agency determined that GPI should be deemed a responsible consultant under the All-Agency Responsibility Guidelines, a recommendation with which the Chairman concurred. Parsons/GPI is deemed a responsible consultant.

III. D/M/WBE INFORMATION

The MTA Department of Diversity and Civil Rights has established goals of 10% MBE and 10% WBE for this contract. Parsons Transportation Group and Greenman Pedersen, Inc. have achieved their M/WBE goals on previous MTA contracts.

IV. IMPACT ON FUNDING

Funding is available under Project RK-23A (\$6,827,695.06) in the 2010-2014 Capital Budget.

V. ALTERNATIVES

There are no recommended alternatives. B&T does not possess the resources required to perform these services.

Staff Summary

Item Number 3 (Final)						SUMMARY INFORMATION					
Dept & Dept Head Name: Engineering & Construction, Joe Keane, P.E. <i>Joe Keane</i>						Vendor Name WSP-HNTB, JV			Contract Number PSC-14-2957		
Division & Division Head Name: Engineering & Construction, Walter Hickey, P.E. <i>Walter Hickey</i>						Description Feasibility Study & Conceptual Design for project RK-65B, Reconstruction of Manhattan Plaza of the Robert F. Kennedy Bridge & Associated Ramps					
Board Reviews						Total Amount \$3,641,416					
Order	To	Date	Approval	Info	Other	Contract Term (Including Options, if any) Two Years, Six Months					
1	President	12/03/14	<i>[Signature]</i>			Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
2	MTA B&T Committee	12/15/14				Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
3	MTA Board	12/17/14				Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive					
Internal Approvals						Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:					
Order	Approval		Order	Approval		Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:					
1	Chief Procurement Officer <i>[Signature]</i>		4	Chief Financial Officer <i>[Signature]</i>							
2	SVP & General Counsel <i>[Signature]</i>		5	Executive Vice President <i>[Signature]</i>							
3	Director, Strategic Initiatives <i>[Signature]</i>		6	President <i>[Signature]</i>							

Narrative:

I. PURPOSE/RECOMMENDATION

B&T is seeking Board approval under the All Agency Guidelines for Procurement of Services to award a personal service contract, Contract PSC-14-2957 to WSP-HNTB, JV to conduct a feasibility study and conceptual design for Project RK-65B, Reconstruction of the Manhattan Plaza of the Robert F. Kennedy Bridge & Associated Ramps in the amount of \$3,641,416 and for two years, six months.

II. DISCUSSION

B&T requires the services of a consultant firm to perform a detailed feasibility study and develop a master plan to replace the Manhattan Plaza Structure and associated ramps. The services include all design, investigation and testing necessary to determine the feasibility of potential alternatives which may include, but not be limited to: (i) traffic studies; (ii) coordination with other B&T and surrounding regional improvement projects; (iii) structural and geotechnical investigation; (iv) property and jurisdictional issues; (v) environmental issues; (vi) staff relocation/space repurposing; (vii) realignment/ relocation of ramps; (viii) advancing enabling projects to a 40% design level; and (ix) cost estimating. This work is related to a substantial, multi-phased long-term project. Based on information acquired during the initial study, B&T will have the option to add the design and construction support services associated with this project, which will be added as a contract amendment.

The service requirements were publicly advertised. Seven firms submitted qualification information for review and evaluation by the selection committee. Three firms, Parsons Brinkerhoff, Inc. (PB), URS-Ammann & Whitney, JV (URS/A&W) and WSP-HNTB, JV were chosen to receive the RFP based on review of those qualifications and all three firms submitted proposals. The proposals were evaluated against established criteria set forth in the RFP, including technical work proposed, depth of understanding of the project, and qualifications of the firm for specific personnel proposed, and all three firms were subsequently invited to give oral presentations. Based on the detailed review of all submittals, presentations and proposed costs, the selection committee recommended that negotiations be conducted with URS/A&W and WSP-HNTB and that each of the firms provide best and final offers (BAFO). After evaluating BAFOs submitted by these two firms, the selection committee unanimously recommended that WSP-HNTB be awarded the referenced Contract.

The committee selected WSP-HNTB based on: (i) their proposed project team consisted of seasoned design professionals with extensive B&T experience on comparable projects, such as RK-65A – Bronx Plaza/Structural Rehabilitation at the RFK Bridge and RK-75 – Interim Repairs of the Manhattan Plaza; (ii) efficiencies which the firm proposes to realize stemming from its work on AW-48; (iii) WSP-HNTB's BAFO was a substantially lower cost while remaining true to its original technical proposal, making them a better value for the required services.

WSP-HNTB's BAFO cost proposal was in the amount of \$3,641,416. The Engineer's estimate is \$5,050,000. When compared with the Engineer's estimate, WSP-HNTB's BAFO proposal in the amount of \$3,641,416 is 28% under the Engineer's estimate and is considered fair and reasonable. WSP-HNTB is considered a responsible consultant.

III. D/M/WBE INFORMATION

The Department of Diversity and Civil Rights (DDCR) has established goals of 10% MBE and 10% WBE. WSP and HNTB, the principal firms of this joint venture, have each achieved their M/WBE goals on previous MTA contracts.

IV. IMPACT ON FUNDING

Funding is available in the 2010-2014 Capital Budget under Project RK-65B.

V. ALTERNATIVES

There are no recommended alternatives. B&T does not possess the resources required to perform these services.

Schedule H: Modifications to Personal Service Contracts and Miscellaneous Service Contracts

Item Number: **4** (Final)

Vendor Name (& Location) URS Corporation-NY (New York, N.Y.)	Contract Number PSC-12-2920	AWO/Modification #
Description Comprehensive Tunnel Inspection and Design for Project QM-40, Tunnel Leak Control at the Queens Midtown Tunnel	Original Amount:	\$3,206,383.44
Contract Term (including Options, if any) Month, Day, year – Month, Day, year	Prior Modifications:	\$4,566,547.22
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prior Budgetary Increases:	\$0.00
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	Current Amount:	\$7,772,930.66
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	This Request:	\$4,510,552.17
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input checked="" type="checkbox"/> Other:	% of This Request to Current Amount:	58.0%
Requesting Dept/Div & Dept/Div Head Name: Engineering & Construction/Joe Keane, VP, Chief Engineer	% of Modifications (including This Request) to Original Amount:	283.1%

Discussion:

B&T is seeking the Board's approval under the All-Agency Guidelines for Procurement of Services to amend this contract with URS Corporation - NY (URS) to add funding for construction support services (CSS) for Projects QM-40S, Super Storm Sandy Restoration and Mitigation and Projects QM-40/QM-18, Tunnel Leak Control and Rehabilitation of the Manhattan Exit Plaza at the Queens Midtown Tunnel (QMT). The negotiated increase is in the amount of \$4,510,552.17 and consistent with Procurement Guidelines, this amendment constitutes a substantial change.

The performance of CSS was included in the original scope of services. Funding was not included since the construction scopes were not determined for both Projects QM-40 and QM-40S (Sandy). The services required include reviews of shop drawings, requests for information, catalog cuts, calculations, meetings and unanticipated designs. After initial discussions, URS submitted a proposal totaling \$4,510,552.17. The Engineer's estimate is \$4,192,876. Negotiations resulted in B&T determining that the estimate understated the electrical/mechanical CSS effort required in terms of hours to support the Project. B&T accepted the URS proposal in the amount totaling \$4,510,552.17, which is 7.6% above the estimate and is fair and reasonable.

Funding for the CSS in the amount of \$989,615.15 is available in the 2010-2014 Capital Program under Project QM-40 and the Sandy Restoration Program in the amount of \$3,520,937.02 (Projects ED010240, ED020203, ED040281 and ED050203).

Schedule H: Modifications to Personal Service Contracts and Miscellaneous Service Contracts

Item Number: 5 (Final)

Vendor Name (& Location) WSP/URS a Joint Venture, Briarcliff Manor, NY	Contract Number PSC-12-2906	AWO/Modification# 3
Description Design Services for Reconstruction of the Upper and Lower Level Toll Plazas and Southbound Approach at the Henry Hudson Bridge	Original Amount:	\$7,193,724.52
Contract Term (including Options, if any) January 4, 2013 – April 3, 2020	Prior Modifications:	\$835,267.90
Option(s) included in Total Amount <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prior Budgetary Increases:	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	Current Amount:	\$8,028,992.42
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	This Request:	\$1,397,203.11
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	% of This Request to Current Amount:	17.4%
Requesting Dept/Div & Dept/Div Head Name: Engineering & Construction, Joe Keane, P.E.	% of Modifications (including This Request) to Original Amount:	31.0%

Discussion:

B&T is seeking Board approval under the All-Agency Guidelines for Procurement of Services to amend this contract with WSP/URS a Joint Venture (W/U) for: (i) construction support services (CSS) and (ii) additional design costs for Project HH-88A, Design Services for Reconstruction of the Upper and Lower Level Toll Plazas and Southbound Approach at the Henry Hudson Bridge (HHB) in the amount of \$1,397,203.11. This proposed amendment is comprised of:

- (i) The performance of CSS was included in the original scope of services, however, costs associated with Construction Support Services were not included until the project scope was better defined so levels of effort could be estimated. The engineering services required during construction include reviews of shop drawings, requests for information, catalog cuts, calculations, meetings and unanticipated designs. W/U submitted a proposal totaling \$1,221,687.14. The Engineer's estimate is \$1,194,740.00. When compared with the estimate, B&T determined W/U's proposal in the amount of \$1,221,687.14 (2.3% over the estimate) is fair and reasonable. Funding is available in the 2010-2014 Capital Program under Project HH-88A CSS.
- (ii) Since the design must be integrated with services required by the HHB Service Building, the design necessarily involved utilities shared with that building. During the design, W/U encountered several issues that resulted in additional effort to complete the design services including: (i) the replacement of various HVAC components that have reached their useful life; (ii) extending various utilities to the new fourth floor; (iii) upgraded lightning protection to the building; and (iv) enhanced security on the toll equipment gantry. W/U submitted a proposal totaling \$182,724.95 for the additional services; the Engineer's estimate is \$190,742.07. When compared with the estimate, the negotiated total amount of \$175,515.97 (8.7% under the estimate) is considered fair and reasonable. Funding is available in the 2010-2014 Capital Program under Project HH-88A.

Schedule H: Modifications to Personal Service Contracts and Miscellaneous Service Contracts
Item Number: 6 (Final)

Vendor Name (& Location) Weidlinger Associates, Inc. (New York, New York)	Contract Number PSC-13-2927	AWO/Modification # 1
Description Design and Construction Support Services for Project TN-60, Dehumidification System for the Main Cable Splays and Elimination of Water Infiltration at the Throgs Neck Bridge (TNB)	Original Amount:	\$983,385.67
Contract Term (including Options, if any) July 31, 2013 – July 30, 2015	Prior Modifications:	0
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prior Budgetary Increases:	N/A
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	Current Amount:	\$983,385.67
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	This Request:	\$353,427.32
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	% of This Request to Current Amount:	35.9%
Requesting Dept/Div & Dept/Div Head Name: Engineering & Construction/Joe Keane, P.E.	% of Modifications (including This Request) to Original Amount:	35.9%

Discussion:

B&T is seeking Board approval under the All-Agency Guidelines for Procurement of Services to amend this contract with Weidlinger Associates, Inc. (WAI) for additional design services for structural steel repairs and repair/replacement of ladders and hatch covers in tower cells, repairs to suspender rope socket boxes and separators, designs to convert the existing anchorage lighting system to LED, enhancements to the anchorage fire alarm and security systems and painting of anchorage catwalks, main cable, suspender ropes and lower tower cells at the Throgs Neck Bridge. The negotiated increase is in the amount of \$353,427.32 and consistent with Procurement Guidelines, this amendment constitutes a substantial change.

Pursuant to Board approval, on July 31, 2013 the subject contract was awarded to WAI in an amount not-to-exceed \$983,385.67 for a duration of two (2) years. The Contract requires WAI to prepare design and bid documents to eliminate water infiltration into the bridge anchorages and to dehumidify the main cable splays by means of enclosures and mechanical dehumidification equipment. The original design objectives include but are not be limited to: desiccant dehumidification systems; cleaning and as required coating/oiling of cable splays/strand shoes and eye bars; repairs/waterproofing of the anchorage top and walls in order to eliminate storm water infiltration.

During the design process, it was recommended that the scope of work under TN-60 be increased to include repairs to the suspension system (socket boxes and suspender rope separators), painting of the main cables and suspender ropes, repairing/re-coating of the lower tower cells, as well as the enhancements to the lighting, fire alarm and security systems. Structural steel repairs and repairs to the socket boxes, suspender rope separators and lower tower cells were identified in the 2013 Biennial Inspection. WAI submitted a proposal in the amount of \$363,319.82. The Engineer's Estimate is \$380,938. Negotiations resulted in B&T and WAI agreeing to the negotiated amount totaling \$353,427.32, which is 7.8% below the estimate and is fair and reasonable. Funding is available in the 2010-2014 Capital Program under Project TN-60 in the amount of \$207,895.39 and in the Operating Budget under Project TNM-388 in the amount of \$145,531.93.

Schedule I: Modifications to Purchase and Public Works Contracts

Item Number: **7** (Final)

Vendor Name (& Location) D'Onofrio General Contractors Corp., Brooklyn, NY	Contract Number MP-06	AWO/Modification #
Description Substructure and Under Water Work at the Marine Parkway – Gil Hodges Memorial Bridge (MPB)	Original Amount:	\$13,763,000.00
Contract Term (including Options, if any) November, 25, 2013 – September 1, 2015	Prior Modifications:	N/A
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prior Budgetary Increases:	\$0.00
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	Current Amount:	\$13,763,000.00
Solicitation Type <input type="checkbox"/> RFP <input checked="" type="checkbox"/> Bid <input type="checkbox"/> Other:	This Request:	\$ 1,186,865.49
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	% of This Request to Current Amount:	8.6%
Requesting Dept/Div & Dept/Div Head Name: Engineering & Construction, Joe Keane, P.E.	% of Modifications (including This Request) to Original Amount:	8.6%

Discussion:

B&T is seeking Board approval under the All-Agency Procurement Guidelines to modify the Contract with D'Onofrio General Contractors Corp. (D'Onofrio) for additional substructure and under water work at the Marine Parkway – Gil Hodges Memorial Bridge in the negotiated amount totaling \$1,186,865.49.

Geotextile fabric was initially specified to be placed below a new bedding of the medium and heavy stone to remedy scour conditions in the area of the MPB. It has been determined that the geotextile fabric cannot be effectively installed due to swift currents and wave action in the channel. In lieu of the fabric, it was recommended that an additional 24" layer of smaller stone be placed prior to the placement of the medium and heavy stone. Additionally, B&T's Engineer determined that it is necessary to perform additional repairs and replacements to deteriorated sections of the fender system at Piers 11 through 16.

D'Onofrio submitted cost proposals totaling in the amount of \$1,409,806.69, for the Work (inclusive of a \$100,000 credit for no longer utilizing the geotextile fabric). The Engineer's estimates total \$1,206,991 for the Work. Negotiations were conducted and the parties agreed to an amount totaling of \$1,186,865.49 for the Work, which is 1.7% below the estimate and is fair and reasonable. On November 5, 2014 B&T authorized D'Onofrio to commence the required additional work in a not-to-exceed amount of \$500,000 so as not to further delay the Work, given the onset of winter. Funds are available in the 2010-2014 Capital Program under Project MP-06.

LIST OF RATIFICATIONS FOR BOARD APPROVAL
DECEMBER 2014

MTA BRIDGES & TUNNELS

Procurements Requiring Majority Vote:

D: Ratification of Completed Procurement Actions

(Ratifications are to be briefly summarized with Staff Summaries attached only for unusually large or especially significant items)

1. **New York City Department of Parks and Recreation** **\$34,691.00**
Agreement MOU-14-70

B&T is seeking the Board's ratification under the All-Agency Procurement Guidelines of the award of an agreement (Memorandum of Understanding) designated as MOU-14-70 to the New York City Department of Parks and Recreation (NYCDPR) for repairing a drainage system on its property for the amount of \$34,691.

While performing construction tasks at Inwood Hill Park adjacent to B&T's Northbound Parkway between Staff Street and Dyckman Street Bridges, NYCDPR discovered that runoff from a portion of the parkway drains into a B&T storm system that runs through a project site where NYCDPR is constructing an ADA pedestrian ramp under its Contract MG-609. This drainage system was not functioning properly and repair was needed. NYCDPR agreed to repair B&T's drainage system under its Contract MG-609 at the unit prices in its contract subject to the drainage system repair not delaying the NYCDPR work. Failure to act at this time would either leave a non-performing drainage system in place or be substantially more costly due to: (i) re-mobilization costs and (ii) a need to demolish and later reconstruct work being performed under NYCDPR's Contract MG-609. Furthermore, the drainage system is on NYCDPR's property requiring special permits and access, which are costs that B&T will avoid. Therefore, on September 11, 2014 B&T provided a letter of intent to have this work performed. After completing the drainage repair work, NYCDPR provided a final amount for this work of \$34,691 based on the actual costs incurred. B&T has reviewed NYCDPR's costs and found them fair and reasonable. Costs incurred under this agreement must be paid directly to NYCDPR. Funding is available in B&T's Major Maintenance Project HHM-382.