MEMORANDUM OF UNDERSTANDING BETWEEN

THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION

AND

THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL

PROTECTION

CONCERNING TRANSPORTATION PROJECTS IN

THE WATERSHED OF THE NEW YORK CITY WATER SUPPLY

WHEREAS:

A. The City of New York (“City”) owns and operates a water supply system with portions in the Counties of Ulster, Greene, Delaware, Schoharie, Sullivan, Westchester, Putnam, and Dutchess. This water supply system is the source of drinking water for approximately nine million citizens of New York State, residing within and outside the City.

B. The City, with the approval of the New York State Department of Health, has promulgated Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and its Sources (“Watershed Regulations”) which govern, among other things, stormwater discharges from construction activities and the creation of impervious surfaces. The Watershed Regulations are administered by the New York City Department of Environmental Protection (“NYCDEP”).

C. State agencies, including the New York State Department of Transportation (“NYSDOT”), are exempt from compliance with the requirements of Watershed Regulations.
D. In recognition of the imperative to assure continued protection of the City’s drinking water supply, on May 20, 1997, the Governor issued Executive Order No. 51, governing the activities of State agencies within the New York City Watershed. Executive order No. 51 directs any State agency that undertakes any regulated activity in the watershed to comply with the substantive requirements of the Watershed Regulations.

E. This Memorandum of Understanding implements the intent of Executive Order No. 51 by establishing a framework for the application of the Watershed Regulations to NYSDOT’s construction and maintenance activities within the watershed by striking a proper balance between protecting surface water resources within the watershed of the New York City drinking water supply system (“Watershed”) while, at the same time, recognizing the importance of providing the public with adequate, safe, balanced, efficient, and environmentally sound transportation at a reasonable cost.

NOW THEREFORE, it is agreed by NYSDOT and NYCDEP as follows:

General Stormwater Management Principles

1. NYSDOT will employ appropriate erosion and sediment control practices on each of its construction and maintenance projects in the Watershed. NYCDEP has reviewed NYSDOT’s statewide standards and specifications for stormwater management, including erosion and sediment control, and has found that those generic standards and specifications are satisfactory. These standards and specifications may, however, be amended as necessary to suit each individual project.

3. Widening of an existing road or highway is permitted. In accordance with Section 18-39(a)(6)(v) of the Watershed Regulations, whenever an existing roadway is widened, the widening shall occur on the side furthest away from the water body to the maximum extent practicable, if within the following limiting distances:

   a) within 300 feet (91.44 meters) of a reservoir, reservoir stem or controlled lake,

   b) within 100 feet (30.48 meters) of a perennial stream, or

   c) within 50 feet (15.24 meters) of an intermittent stream or DEC wetland.

4. All bridges, crossings, pipings, diversions and culverts shall be constructed to prevent adverse impacts on water quality.

5. Routine maintenance of existing roadways and other impervious surfaces such as parking lots and bike paths is not prohibited. Routine maintenance of an impervious surface would include repair, reconstruction, rehabilitation, or replacement in like or similar kind. Minor changes for maintenance purposes in a roadway’s configuration or filled areas are allowed, such as changes in materials or construction techniques, current construction codes, or safety standards.
Spot realignments of unsafe and substandard roadways and temporary detours are allowed in connection with maintenance of an existing roadway. If such minor realignments or detours require the creation of new impervious surfaces, NYSDOT must notify NYCDEP.

The resurfacing of existing pavements and bridges or the full depth replacements of existing pavements and bridges in like or similar kind and at approximately the same location are not considered to be new impervious surfaces. The construction of new rest areas, and the construction of new travel or turning lanes are examples of new impervious surfaces.

6. In accordance with Section 18-39(b)(3) of the Watershed Regulations, NYSDOT will prepare Stormwater Pollution Prevention Plans (SPPPs) for all projects which involve:

   (a) the disturbance of five or more acres anywhere in the watershed;

   (b) land clearing or grading involving the disturbance of two or more acres located at least in part within the limiting distance of 100 feet (30.44 meters) of a watercourse or wetland, or within the limiting distance of 300 feet (91.44 meters) of a reservoir, reservoir stem or controlled lake, or on a slope exceeding 15 percent;

   (c) construction of a new road within the following limiting distances:

       1) within 50’ of an intermittent stream

       2) between 50’ and 100’ of a wetland or perennial stream

   (d) the creation of an impervious surface totaling over 40,000 square feet in size that is not part of a road widening.

1 Disturbance means that the imperviousness of an area has or will be permanently changed. Disturbance does not include activities required to replace or restore existing impervious areas.
7. Unless specifically requested to do so by NYCDEP, NYSDOT shall not be required to conduct a phosphorus analysis as described in section 18-39(c)(1), a coliform analysis as described in section 18-39 (c)(2) and 18-39(c)(3), or other pollutant analysis.

8. When an SPPP is required for a NYSDOT project, it shall consist of the following elements, and will be kept on the project site by the NYSDOT Engineer-in-Charge (“EIC”):

a) A photocopy of the Notice of Intent required by the NYS SPDES Stormwater General Permit (if applicable);

b) the stormwater management and erosion and sediment control narratives, details, notes, and specifications developed by the design team and included in the contract documents;

c) the NYSDOT approved contractor’s written construction schedule and measures for temporary and permanent erosion and sediment control work, and schedule of operations as required by Sections 107-12 and 209 of the NYSDOT’s Standard Specifications and required certification statements as approved by NYSDOT;

d) relevant sections of any state or federal water-related permits required for the project;

e) any project plans and drawings relevant to the water quality issues; and

f) other relevant information prepared by the design team, including any drainage studies and a copy of the project Design Approval Document.
9. The following considerations pertain when applying Appendix D of the General Permit to NYSDOT projects requiring SPPPs:

a) NYSDOT will incorporate practices to capture and treat the "first flush" wherever attainable. The “first flush” is defined as the first one-half inch of rainfall runoff per acre of land for which the imperviousness has increased from pre-project conditions.

b) Unless NYCDEP has identified a significant concern for a given surface water body, attenuation of peak rates of discharge will not be required in SPPPs where:

1) the proposed project will return the overall project area to a pre-construction runoff condition at the conclusion of the project;

2) the proposed project generates a post-development peak discharge rate at each discharging point of less than five (5) cubic feet per second (0.14 cubic meters per second) for a two-year frequency, 24 hour storm event;

3) the proposed project does not generate an increase in the post-construction peak discharge of more than 10 percent for a two-year frequency, 24 hour storm event; or

4) the site is surrounded by existing developed areas which are served by an existing network of public storm drainage systems of adequate capacity to accommodate runoff from additional construction.

c) Peak flow attenuation intended to meet the goal of no net increase in peak stormwater runoff from pre-project conditions will be assessed at the point of discharge to a watercourse in the New York City water supply system.
Where a highway is crossed in multiple locations by the same stream, the peak flow attenuation may be measured at each crossing or at the last point of discharge to the stream as agreed upon by NYSDOT and NYCDEP.

d) NYSDOT will address potential thermal discharges to cold water fisheries from highway stormwater runoff through control of the first flush.

**SPPP Procedures**

10. Within 30 days of the signing of this MOU, the NYSDOT Regions which contain any parts of the Watershed within them will arrange to meet with NYCDEP to discuss their five-year capital construction and annual maintenance programs. At such meeting(s), NYSDOT will provide NYCDEP with listings of all capital projects and all major maintenance projects (e.g., those conducted under contract with NYSDOT) within the Watershed that are a) currently under construction, b) at or within 120 days of the Final Plans, Specifications and Estimates (PS&E) Stage of design, c) in Advanced Detail Plans Stage of design, and d) other remaining projects in the five-year program. NYSDOT will also identify any emergency contracts.

11. Where sufficient project information is known, NYSDOT will indicate which projects have or will likely require SPPPs pursuant to the Watershed Regulations as they are applicable to NYSDOT under Executive Order 51 and this MOU. Within 30 days of the meeting(s), NYCDEP will confirm which projects in the program require SPPPs. NYCDEP will also identify any initial specific water quality concerns that it has with any project.

The meeting will also be used to exchange lists of contact persons and to identify opportunities to improve coordination, communication, resources protection and enhancement practices, and administrative processes.
12. NYSDOT projects let and/or under construction before the effective date of this agreement ("pre-existing projects") and projects that are within 120 days of Plans, Specifications, and Estimates (PS&E) from the effective date of this agreement will have erosion and sediment control plans and, where applicable, SPPPs prepared under the SPDES Stormwater General Permit contained within each project’s contract documents. Erosion control and stormwater management practices for these projects will be consistent with NYSDOT’s statewide standards and specifications for stormwater management and erosion and sediment control. Where NYCDEP has identified a specific water quality concern and has made a recommendation as to how to address said concern, as a result of the meeting(s) in paragraph 10 above, NYSDOT will make all reasonable efforts to modify the project to accommodate such concerns. However, it is mutually acknowledged that it may not be practicable to add substantive erosion and stormwater controls or design modifications because of project schedule, contracting requirements, right of way restrictions and costs. Where conformance with NYCDEP recommendations is not practicable, the NYSDOT Regional design staff will provide a written explanation to NYCDEP, and in the project files, demonstrating that conformance is unattainable and explaining how NYSDOT is providing alternative measures that are equally protective to water quality. Such notice must be provided with the submission of the final SPPP. NYCDEP will provide its response to such notice, if a response is necessary, within 10 business days of its receipt or the project is considered approved.

13. For NYSDOT projects for which the PS&E dates are more than 120 calendar days after the effective date of this agreement ("new projects"), the appropriate NYSDOT Region will prepare and send a draft SPPP, where one is required, to the NYCDEP Deputy Director of Operations and Engineering, or his designee, at the Advanced Detail Plans Stage. NYCDEP will provide NYSDOT any comments or recommendations for changes to the SPPP within 30 calendar days of receiving the draft of SPPP. NYSDOT will modify the SPPP where practicable to accommodate NYCDEP recommendations. The final SPPP must be submitted to NYCDEP at least
30 calendar days prior to PS&E and shall be signed by the NYSDOT Regional Director or designee. In all events, NYSDOT must notify NYCDEP of the project at least thirty days before construction begins or the project is considered approved. The final SPPP will incorporate the practices listed in paragraph 8 above as appropriate to the work.

14. Emergency Procedures: If NYSDOT has determined that immediate implementation of an activity that would require an SPPP is necessary to respond to an imminent threat to the health and safety of humans and animals, or to respond to a substantial imminent threat to property, the procedure described above for NYCDEP’s review of NYSDOT’s draft SPPP may be waived. In such a case, before a regulated activity begins, NYSDOT shall notify NYCDEP by telephone of the nature of the imminent threat that necessitates expedited review and shall arrange, if possible, for a meeting with NYCDEP before construction begins to discuss plans for erosion control and stormwater management measures. If it is not possible to arrange a meeting before commencement of construction, NYSDOT shall schedule a meeting as soon as possible. Whether or not a meeting is held, NYSDOT shall submit to NYCDEP a complete SPPP for the project, as soon as practicable.

15. NYSDOT will design, construct, and maintain highway and bridge projects in accordance with the substantive requirements of the Watershed Regulations and this MOU to the maximum extent practicable. However, strict conformance may not always be possible because of the unique limitations placed on NYSDOT by narrow rights-of-way, existing adjacent development, and other manmade or natural constraints. Where conformance of the SPPP to relevant provisions of the Watershed Regulations and this MOU is unattainable, the NYSDOT Regional design staff will provide a written explanation to NYCDEP and in the project files demonstrating that strict conformance is unattainable and explaining how NYSDOT is minimizing any deviation from the substance of the Regulations and is providing alternative measures to protect that are equally
NYCDEP will provide its response to such notice, if a response is necessary, within 10 business days of its receipt of the final SPPP from NYSDOT or the project is considered approved.

16. If NYCDEP is not able to reach a consensus with the NYSDOT design team for a capital project and believes that an SPPP does not satisfy the substantive requirements for such plans as contained in the Watershed Regulations and in this MOU, NYCDEP shall provide the NYSDOT Regional Design Engineer with a letter specifically identifying what requirements have not been met and will make specific recommendations for an appropriate solution. If the project is a maintenance activity requiring an SPPP, NYCDEP will advise the NYSDOT Regional Transportation Maintenance Engineer (RTME) by a similar letter. If NYSDOT and NYCDEP cannot resolve the concern NYCDEP may seek assistance from the NYSDOT Regional Director for capital projects. If resolution is still not achieved, the concern will be referred to the Assistant Commissioner for the Office of Engineering for Capital projects or to the Assistant Commissioner for the Office of Operations for maintenance projects. Similarly, if NYSDOT feels that NYCDEP recommendations are unreasonable, NYSDOT may elevate its concerns to the NYCDEP Deputy Commissioner.

17. The NYSDOT Regional Directors, or their designees, shall sign certification statements for all applicable projects certifying that the SPPP satisfies the substantive requirements of this MOU. NYSDOT area construction supervisors for capital projects and the Resident Engineer for maintenance projects shall sign certification statements certifying that they understand the terms and conditions of the SPPPs and will see that plans are appropriately implemented. Sample certification forms are attached as Appendix A. The persons identified above are the only NYSDOT design, construction, and maintenance personnel authorized or required to sign certifications. The Regional Director, or designee, the EIC, and the RTME, as appropriate, are
responsible for compliance with plans and specifications covered under the certifications. A photocopy of each certification statement will be kept at the project site.

18. Prime contractors will be required to sign certification statements agreeing to comply with SPPPs. The certification statement will be included in the contract documents and will make the prime contractor responsible for the erosion and sediment control and stormwater management work developed and/or performed by any subcontractor hired by the prime contractor. NYSDOT will submit a sample prime contractor certification form to the NYCDEP Deputy Director of Engineering and Operations or his designee, for approval.

19. NYCDEP may enter a project site at any reasonable time, including weekends, holidays and during and after storm events, to ascertain compliance with the SPPP. Within 45 days of the signing of this agreement, key NYSDOT design, environmental, construction and maintenance staff will meet with NYCDEP staff to discuss protocols for how NYCDEP staff will enter onto NYSDOT project sites, and to exchange points of contact lists. The goal of such visits is to assure compliance and to remediate any identified problems as quickly as possible.

If NYCDEP believes that construction is proceeding in violation of an SPPP, NYCDEP shall contact the NYSDOT area construction Supervisor or Resident Engineer as appropriate and the Regional Environmental Contact (REC) to attempt to resolve the issue. If NYCDEP and the NYSDOT are unable to resolve the issue(s) at this level, NYCDEP may seek assistance in resolving the matter from the NYSDOT Regional Construction Engineer or, if necessary, the NYSDOT Construction Division Director and Environmental Analysis Bureau Director.

20. It is acknowledged that NYSDOT statewide snow and ice control and vegetation management practices are generally consistent with the Watershed Regulations. NYSDOT Office of Operations will provide NYCDEP annually with a list of the names of all its certified
pesticides applicators and shall provide a summary of all the types and quantities of pesticides used within the Watershed by NYSDOT Region.

21. NYSDOT and NYCDEP shall meet at least annually to review NYSDOT’s upcoming five-year capital and annual maintenance programs, review experiences of the past construction season, the adequacy of State erosion control and stormwater management standards and specifications, update lists of contact persons, evaluate SPPP submittals, and review procedures and discuss opportunities to improve coordination, communication, resources protection, construction technologies and administrative processes.

22. There may be occasions where NYCDEP requests that certain features or facilities be included in NYSDOT construction contracts that are not required as direct mitigation for NYSDOT project impacts. This might include facilities, such as new or enlarged stormwater detention basins or infiltration systems to address water quality problems that are originating off of the NYSDOT right-of-way and that has been identified in various NYCDEP watershed management plans. In such instances, NYCDEP, as appropriate, may provide funding, land or easements in order to facilitate NYSDOT construction of such features or facilities. NYSDOT will consider incorporating this work into its projects whenever it is reasonable and feasible to do so. To facilitate this, NYCDEP will provide NYSDOT with copies of any applicable watershed management plans as they are developed.

Bridge Washing

23. NYSDOT will implement the following procedures when washing bridges over water bodies or wetlands within the New York City Watershed

1) Areas with loose or flaking paint shall not be washed;

2) Roadways will be swept or vacuumed;

3) The underside and supporting structures will be vacuumed;
4) Debris will be collected and disposed of either on adjacent land or off-site. Any debris disposed of on adjacent land must be at least 100 feet from any wetland or watercourse;

5) No debris will be allowed to enter water bodies or wetlands;

6) Downspouts, leaders and drains will be cleaned and washed;

7) No chemicals will be added to the wash water;

8) If equipment, supplies, or other materials are off-loaded or temporarily stored on City Property, a standard Watershed Permit is obtained;

9) All water storage and application equipment shall be steam cleaned in such a manner as to eliminate the threat of zebra mussels contamination of the reservoir system;

10) NYSDOT shall notify the appropriate office of NYCDEP at least 48 hours prior to any washing operations;

11) The following standards shall apply to all bridge washing operations:

   I. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;

   ii. There shall be no suspended, colloidal and settleable solids that will cause deposition or impair the waters for their best usage as a result of the washing; and

   iii. There shall be no residue from oil and floating substances, visible oil film, globules or grease in the subject surface waters as a result of the washing.

**General Provisions**

24. Any identified conflicts with regard to NYCDEP requirements and the requirements of other agencies with jurisdiction shall be resolved by NYSDOT in consultation with
the involved agencies. NYCDEP shall be actively involved in providing assistance in reaching consensuses among the involved agencies.

25. This MOU may be modified upon mutual agreement, as needed or terminated upon 30 days notice to either party.

26. This MOU shall be effective as of the latest date of the signatures appearing below.

27. Any notifications to be sent hereunder shall be sent as follows:

To DEP: Thomas Hook, P.E.
Deputy Director of Operations and Engineering
New York City Department of Environmental Protection
465 Columbus Avenue
Valhalla, NY 10595

Attention: James D. Benson

To NYSDOT: Dr. Gary R. McVoy
Director, Environmental Analysis Bureau
New York State Department of Transportation
Building 5, Room 303
1220 Washington Avenue
Albany, New York 12232-0473

Attention: Mark E. Sengenberger

Dated: ________________

Francis P. Gerace, P.E.  
Deputy Commissioner  
New York State Department of Transportation

William N. Stasiuk, P.E., Ph.D.  
Deputy Commissioner  
New York City Department of Environmental Protection