APPENDIX B

SCOPE OF SERVICES

Seaport City Feasibility Study: Scope of Work

I. Background

In December 2012, Mayor Bloomberg created the Special Initiative for Rebuilding and Resiliency ("SIRR") to address how to create a more resilient New York City in the wake of Superstorm Sandy, with a long-term focus on preparing for and protecting against the impacts of climate change. The report "A Stronger, More Resilient New York" (released June 2013) is the result of this effort and provides more than 250 actionable recommendations both for rebuilding the communities impacted by Sandy and increasing the resilience of infrastructure and buildings citywide.

These recommendations are based on the central principles that initiatives for resiliency should be ambitious but achievable, stretch resources to maximize benefits per dollar, and protect, not abandon, coastal neighborhoods. Additionally, the strategies recommended in this report hold a multi-layered approach, seeking to: build coastal defenses, design new and retrofit existing buildings for resiliency, and protect critical city infrastructure and services.

The Seaport City Feasibility Study is intended to advance the recommendations of "A Stronger, More Resilient New York." The Consultant shall study the feasibility of developing a multi-purpose levee (the "MPL" or the "Project") along the eastern edge of Lower Manhattan.

Multi-purpose levees function much like a simple levee but play additional roles, serving, for example, as transportation infrastructure, providing parking, supporting residential, retail or commercial uses, or serving as open space. In certain high-density locations, multi-purpose levees can serve not only as flood protection for adjacent neighborhoods, but also can provide a cost-effective mechanism to pay for coastal protection by creating land for development, which is also elevated and thus itself not at risk of flooding ("A Stronger, More Resilient New York" p. 56).

The levee would seek to first address coastal flooding and enhance resiliency in Lower Manhattan and also create economic development opportunities in the area that could fund resiliency measures citywide.

II. Introduction

The study is envisioned as a comprehensive and detailed assessment that considers all the relevant aspects needed to establish the feasibility of developing the MPL, including technical, environmental, financial, and legal feasibility. To make that assessment, the Consultant shall holistically evaluate specific factors such as the technical/physical configuration of the MPL, infrastructure requirements, costs, environmental issues, legal issues, and implementation strategies. Drawing on the expertise of global thought leaders as well as local advisors, the Consultant shall identify and evaluate visionary options for developing the MPL and put forward a recommended option at the end of the study that embodies the following principles:

- Resiliency to Climate Change
- Environmental Sustainability and Ecological Excellence
- Habitat Enhanced/Living Shoreline Design
- Maritime Use Shoreline
- Financial Sustainability
- Economic Development
- Connectivity of Urban Fabric

III. Study Area/Project Site

The study will focus on the area (the "Project Site" or "Study Area") generally bounded:

- To the north, by Rutgers Street/Pier 35;
- To the south, by Broad Street/Battery Maritime Building;
- To the east, by the U.S. Pier head and Bulkhead Line; and
- To the west, by South Street.

The Consultant may be required to consider/evaluate certain aspects that reasonably extend beyond the general boundaries above, e.g. certain environmental impacts.

IV. Tasks

❖ Task 0: Work Plan

- The Consultant shall prepare and submit to NYCEDC for approval, a detailed work plan (the "Work Plan") for all Services to be performed under the Contract. The Work Plan shall include the following, without limitation:
 - Detailed listing of all tasks, sub-tasks, and milestones required to fully provide the Services;
 - The time necessary to complete such various tasks, sub-tasks, and milestones;
 - Projected target dates to complete the Services, per their component tasks and subtasks; and
 - Projected target dates for submitting interim memos (as applicable) for NYCEDC's review, in order to meet overall task deliverables deadlines (see Deliverables section)
 - o The interrelationship and dependency of the various elements of the Work Plan.

Task 1: Existing Conditions

- Task 1.1: Preparation and Review
 - Collect, organize, review, and analyze available prior reports, plans, drawings, designs, maps, surveys, agreements, and documents, relevant to the Study Area, including, but not limited to:
 - Special Manhattan Landing Development District (1973)
 - Guggenheim Museum on Piers 9, 13 and 14 (2000)
 - East River Waterfront Esplanade (NYCEDC ongoing)—to be provided by NYCEDC
 - SIRR initial investigation on MPL (2013)—to be provided by NYCEDC
 - Relevant transportation studies
 - Identify any additional information needed to fully assess the historic background, existing conditions, and capacity at the Study Area
 - Supplement existing documentary information, as required to assist in the completion of the study
 - o Identify and document lessons learned from other recent land reclamation and multipurpose levee projects, such as Battery Park City and others outside of NYC, as relevant. This could include—without limitation—information about technical/engineering considerations, urban design considerations, outreach and public process, and/or offsite mitigation that was completed as part of any similar recent projects, among others.

Task 1.2: Site Conditions

The Consultant shall visit, inspect, and document the Project Site to (i) become familiar with the general and specific nature of the area, including immediate surroundings, general conditions, and current activity, and (ii) identify any existing conditions that may have an impact on the conceptual plan and/or the Project. For use in the Feasibility Study Report and to inform the conceptual plan(s), as appropriate, the Consultant shall analyze and document current Project Site conditions, including:

- Site survey (upland and marine)
- o Geological features of the site and geotechnical study of riverbed
- Shoreline configuration, including the location of the shoreline, bulkhead, or stabilized natural shore
- Flood plain issues
- Existing waterfront improvements (e.g. East River Waterfront Esplanade)
- Land and waterside infrastructure and utilities (location, extent, condition, and capacity)
- o Sun, shadows, light, noise, and wind gusts
- o Baseline environmental surveys:
 - Detailed investigation of the marine environment (including vegetative and benthic habitat surveys and hydrology including but not limited to sources, measurement of currents, water levels, water quality, and wave heights and directions)
 - Phase I Environmental Site Assessments (the "Phase I ESA") of the City-owned lots located along the waterfront The Consultant shall synthesize the methodology, data, findings, conclusions, and recommendations of such assessments in a report to be used by NYCEDC. The Consultant shall revise or supplement the work product relating to the Phase I ESA as directed by NYCEDC and required by the New York State Department of Conservation (NYSDEC) upon review thereof, in order to comply with the State Environmental Quality Review Act (SEQRA), to the extent applicable hereto.
- Land ownership/control
- Land and water uses
- Configuration of the blocks and lots immediately adjacent to the existing waterfront
- o General character of the area
- o Spatial, architectural, urban design, and natural/environmental features and quality
- Site relationships, views, and linkages, especially with respect to the uplands
- Pedestrian, non-motorized, and vehicular circulation and connections, especially to the uplands; Public transit access; Parking
- Historic and/or cultural assets

• Task 1.3: Legal/Regulatory framework

 Identify and assess applicable laws and regulations, legal issues, City/State/Federal policies and plans

• Task 1.4: Permitting requirements/process

- Identify and describe the City/State/Federal (including Congressional) permitting requirements and approvals for implementation
- o Identify other interested agencies/authorities

• Task 1.5: Base Map

The Consultant shall prepare a consolidated base map (the "Base Map") that will be used throughout the duration of the Contract, in documents and during the performance of Tasks 2 through 5. The Base Map shall cover the Project Site and adjacent properties, clearly and accurately showing existing streets, lots, building footprints, shoreline, as well as identifying other key sites within the Study Area.

❖ Task 2: MPL Options Assessment

The Consultant shall identify and evaluate different options for the development of the MPL, including—without limitation—a fill option, a platform option and a no-build option. The consultant's analysis should compare and contrast the MPL to a scenario where only an integrated flood protection system is provided.

In addition, the Consultant shall identify and evaluate different scenarios for new development on the MPL, including —without limitation— low-, medium- and high-density development scenarios. The evaluation of such different scenarios is expected to include sensitivities to different use/program mixes, as well as varying levels of public investment. The assessment should discuss in detail the corresponding trade-offs, and it should prepare the Consultant for identifying, in Task 4, a recommended scenario that should be pursued upon completion of the study.

• <u>Task 2.1: Define MPL/development options, considering the following design and engineering elements</u>

- o Technical/Engineering Strategies for the Shoreline
 - Assessment of methods to create land reclamation (consultant should consider both infill and platform strategies)
 - Detailed design of marine and edge treatment structures
 - Evaluation of size of reclaimed land, volume of fill, new ground level, water depth, etc. for each type of structure

o Conceptual Plan

- Preparation of a basic conceptual plan for each MPL option
 - The conceptual plan shall establish the building massing and engineering elements for each MPL option to the extent that assumptions need to be defined in order to complete the technical feasibility analyses and detailed cost estimation
- Preparation of basic graphics (plans, illustrations, renderings) to help stakeholders visualize the development concepts

Infrastructure

- Connections to city street grid
- Connections to city public transportation network
- On-site roads
- Water supply
- Sewers, drainage, and sustainable stormwater management
- Power
- Lighting
- Telecommunications
- Resiliency and redundancy measures

o FDR Drive

- Options for highway and street network modifications adjacent to the MPL to improve access to the waterfront and the new development area
- Existing City investments on the East River Waterfront
 - Opportunities to integrate/utilize existing investments in MPL options
 - Relocation of existing maritime and aviation facilities

Mitigation Strategies

Options for large-scale offsite mitigation and other major mitigation strategies

Task 2.2: Evaluate impacts and outcomes of the MPL/development options defined in Task 2.1

o Environmental

- Analysis as of impacts on ecology, hydrology, water quality, and ecosystems (ornithology, fisheries, benthic), as applicable;
- Analysis of impacts on historic and/or cultural assets, as applicable;
- Preliminary evaluation of the supplementary environmental services and studies that would be required in future environmental assessments, including a description of the Environmental Resource Areas that would need to be included.

o Financial Analysis

- Pro forma that includes development period costs, lease-up period costs and cash flows, and 10 years of stabilization and operation costs and cash flows. The pro forma should include:
 - An itemized list of all assumptions used including escalations, discount rates, absorption rates, etc;
 - Detailed infrastructure costs, with all hard and soft costs itemized and a statement of sources and uses of funds;
 - Detailed development costs, with all hard and soft costs itemized and a statement of sources and uses of funds;
 - Phasing schedule including estimated construction time;
 - Operating pro formas that include any necessary capital improvements over time and capital reserves;
 - Debt service payments and other financing terms such as interest rate, term of loan, and payment schedule;
 - Details of any as-of-right or discretionary real estate tax, other tax, energy, or other governmental benefits assumed in the model;
 - An Internal Rate of Return (IRR), cash-on-cost, and cash-on-cash return analysis;
 - Market comparables, in the form of a detailed listing of at least three properties/projects with similar operations, as back-up for revenue and cost assumptions.
- Sensitivity analysis of what mix of density and use would render project feasible

o Implementation

- Required assemblage
- Phasing plan and timeline (including public review, environmental assessments, design, construction and permitting)
- Considerations related to adjacent properties/owners
- Identification of contractual/compliance implications under the agreements pursuant to which Federal and/or State funding has been provided to construct improvements within the Study Area, e.g. East River Waterfront Esplanade
- Public approvals and/or regulatory permits required for implementation
- Identification of legislative/policy changes that would be required for implementation
- Public and private sector roles/responsibilities in implementation and recommended public/private partnership arrangements
- Define universe of potential developers

Performance

- Performance of mitigation measures during different scales or future storms (e.g., ability of each option to protect against hazards)
- Impact of project on neighborhoods adjacent to the project or non-contiguous but otherwise affected by changes resulting from the project

o Risks

- Identification and pricing of potential economic and financial risks
- Mitigation strategies and estimated costs

❖ Task 3: Overall Assessment and Conclusions

Based on the findings from Tasks 1 and 2, is an MPL feasible?

❖ Task 4: Recommendations

- Determine the preferred MPL scenario
- Define and describe immediate next steps

❖ Task 5: Stakeholder engagement

- Establish a stakeholder outreach framework to run parallel to the technical feasibility study;
- Support NYCEDC/City in any stakeholder outreach during the feasibility study;
- Develop a stakeholder engagement strategy for subsequent phases beyond the completion of the feasibility study.

V. Deliverables

- Task 0
 - Work Plan

Task 1

- Task 1.1: Interim memo on Study Area history, previous plans and lessons learned from other projects
- Task 1.2: Interim memo on existing conditions (with any larger tasks studies attached as appendices)

- Task 1.3: Interim memo on legal/regulatory framework
- Task 1.4: Interim memo on permitting requirements and process
- Task 1.5: Base Map
- Task 1 Overall: summary report, utilizing subtask memos

Task 2

- Task 2.1: Interim memo on the MPL/development options
- Task 2.2: Interim memo evaluating impacts and outcomes of the MPL/development options
- Task 2 Overall: summary report, utilizing subtask memos

Task 3

Feasibility Study Report, based on Task 1 and Task 2 findings

Task 4

Memo discussing recommendations and next steps

Task 5

 Memo describing stakeholder outreach completed during the technical feasibility study, documenting any feedback from stakeholders, and outlining the public engagement strategy for subsequent phases beyond the completion of the feasibility study.

• Executive Summary

 Overall executive summary of study work, findings and recommendations, intended as primary public document for circulation

VI. Timeline - Please price two schedules:

• SCHEDULE A

- o Work start date: September 16, 2013
- o First set of deliverables: November 15, 2013 (Tasks 1 and 2 overall reports)
 - The consultant shall propose a timeline for the interim memos, considering the overall report deadline
- Second set of deliverables: December 2, 2013 (Drafts of Task 3 and 4 overall reports)
- Third set of deliverables: December 13, 2013 (Final Task 3 and 4 overall reports, Task 5 memo, and Executive Summary)

• SCHEDULE B

- o Work start date: September 16, 2013
- o First set of deliverables: December 2, 2013 (Tasks 1 and 2 overall reports)
 - The consultant shall propose a timeline for the interim memos, considering the overall report deadline
- Second set of deliverables: December 23, 2013 (Drafts of Task 3 and 4 overall reports)
- Third set of deliverables: January 15, 2014 (Final Task 3 and 4 overall reports and Task 5 memo)
- o Final set of deliverables: February 3, 2014 (Executive Summary)

VII. Allowable Additional Costs

"Allowable Additional Costs" is defined herein to mean: Costs of out-of-pocket-expenses which may include the cost of purchasing project-related industry data, printing, special mailings (such as overnight delivery and messenger services), Services-related long distance telephone and facsimile charges, cell phone usage, and any other out-of-pocket expenses, approved in advance by the Director, on a direct cost basis (with no additional provisions or overhead fee). Allowable Additional Costs shall not include travel to and from the Project Site, meals, and those costs considered to be overhead such as normal mailing, local telephone and facsimile charges, in-house copying secretarial, clerical and typist time and the purchase of office or graphic supplies.