



NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION

DAVID J. BURNEY, FAIA
Commissioner

CAROL DIAGOSTINO
Agency Chief
Contracting Officer

August 11, 2010

ADDENDUM NO. 2

PROJECT: MED-609, Resident Engineering Inspection Services for the Construction of Trunk Water Main at West 60th Street from West End Avenue to Columbus Avenue, Borough of Manhattan

PIN: 8502010WM0019P

THE ADDENDUM IS ISSUED FOR THE PURPOSE OF AMENDING THE REQUIREMENTS OF THE REQUEST FOR PROPOSALS AND IS HEREBY MADE A PART OF SAID REQUEST FOR PROPOSALS TO THE SAME EXTENT AS THOUGH IT WERE ORIGINALLY THEREIN.

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REQUEST FOR PROPOSAL

The contract is amended as set forth below:

1. Delete in its entirety and replace with the revised contract attached to this addendum.

Contact: Hemwattie Roopnarine, ramnarah@ddc.nyc.gov
Phone No.: 718-391-1375

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By signing in the space provided below, the Proposer acknowledges receipt of this Addendum.

THIS ADDENDUM MUST BE SIGNED BY THE PROPOSER FOR THE CONTRACT AND ATTACHED TO THE TECHNICAL PROPOSAL.

Carol DiAgostino
Agency Chief Contracting Officer

Name of Proposer

By _____

Title _____



THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE
30-30 THOMSON AVENUE
LONG ISLAND CITY, NEW YORK NEW YORK 11101
CONTRACT FOR
RESIDENT ENGINEERING INSPECTION SERVICES

PROJECT: REI Services for the Construction of Trunk
Water Mains at West 60th Street
from West End Avenue to Columbus Avenue,
Borough of Manhattan

FMS NUMBER: MED-609

**REGISTRATION
NUMBER:** _____

PIN NUMBER: 8502010WM0019P

E-PIN: _____

ENGINEER: _____

THIS AGREEMENT, made and entered into this _____ day of _____, _____, by and between the City of New York (the "City") acting by and through the Commissioner of the Department of Design and Construction (the "Commissioner") and _____, (the "Engineer"), located at _____.

WITNESSETH:

WHEREAS, the City desires to have resident engineering inspection services performed for the construction project described in Exhibit E (the "Project"), and

WHEREAS, the Engineer has been selected based upon and in consideration of its representation that it can perform the required services set forth herein in a timely and expeditious manner,

NOW, THEREFORE, in consideration of the mutual covenants and conditions herein contained, the parties hereto agree as follows:

ARTICLE 1 - Definitions

1.1 "Agreement" shall mean the various documents that constitute the contract between the Engineer and the City, including (1) the Request for Proposals for the Contract ("RFP"); (2) the Proposal submitted by the Engineer, and (3) the Exhibits set forth below. In the event of any conflict between the RFP and the Engineer's Proposal for the Contract, the RFP shall prevail.

Exhibit A	Contract Information
Exhibit B	Personnel for the Project
Exhibit C	Qualification Requirements
Exhibit D	Requirements for As-Built Drawings
Exhibit E	Project Description / Additional REI Services
Exhibit F	DDC Safety Requirements
Exhibit G	M/WBE Subcontractor Utilization Plan
Exhibit H	Appendix A: General Provisions Governing Contracts for Consultants, Professional, Technical, Human and Client Services

1.2 "Agency" shall mean a city, county, borough or other office, position, department, division, bureau, board or commission, or a corporation, institution or agency of government, the expenses of which are paid in whole or in part from the City treasury.

1.3 "Agency Chief Contracting Officer" or "ACCO" shall mean the position delegated authority by the Agency Head to organize and supervise the procurement activity of subordinate Agency staff in conjunction with the City Chief Procurement Officer.

1.4 "City" shall mean the City of New York.

1.5 "City Chief Procurement Officer" or "CCPO" shall mean the position delegated authority by the Mayor to coordinate and oversee the procurement activity of Mayoral agency staff, including the ACCOs.

1.6 "Commissioner" or "Agency Head" shall mean the head of the Department or his or her duly authorized representative. The term "duly authorized representative" shall include any person or persons acting within the limits of his or her authority.

1.7 "Commissioner's Representative" shall mean the Project Manager designated by the Commissioner or any successor or alternate representative designated by the Commissioner.

1.8 "Comptroller" shall mean the Comptroller of the City of New York, his/her successors, or duly authorized representatives.

1.9 "Contract" or "Contract Documents" shall mean the Agreement referred to in Paragraph 1.1 of this Article.

- 1.10 "Contractor" or "Engineer" shall mean the entity entering into this Agreement with the Department.
- 1.11 "Department" or "DDC" shall mean the Department of Design and Construction of the City of New York acting by and through the Commissioner thereof, or his/her duly authorized representative.
- 1.12 "Days" shall mean calendar days unless otherwise specifically noted to mean business days.
- 1.13 "Drawings" shall mean all graphic or written illustrations, descriptions, explanations, directions, requirements and standards of performance applied to the construction work.
- 1.14 "Engineer" shall mean the entity entering into this Agreement with the Department.
- 1.15 "Final Acceptance" shall mean the final written acceptance of all required construction work for the Project, as determined by the Commissioner.
- 1.16 "Government Entity" shall mean the United States, the State and City of New York, and any and every agency, department, court, commission, or other instrumentality or political subdivision of government of any kind whatsoever, now existing or hereafter created.
- 1.17 "Law" or "Laws" shall mean the New York City Charter ("Charter"), the New York City Administrative Code ("Admin. Code"), a local rule of the City of New York, the Constitutions of the United States and the State of New York, a statute of the United States or of the State of New York and any ordinance, rule or regulation having the force of law and adopted pursuant thereto, as amended, and common law.
- 1.18 "Mayor" shall mean the Mayor of the City of New York, his/her successors or duly authorized representatives.
- 1.19 "Modification" shall mean any written amendment of this Agreement signed by both the Department and the Engineer.
- 1.20 "Procurement Policy Board" or "PPB" shall mean the board established pursuant to Charter § 311 whose function is to establish comprehensive and consistent procurement policies and rules which have broad application throughout the City.
- 1.21 "PPB Rules" shall mean the rules of the Procurement Policy Board as set forth in Title 9 of the Rules of the City of New York ("RCNY"), § 1-01 et seq.
- 1.22 "Project" shall mean the Project for which services are required, as described in Exhibit E.
- 1.23 "Safety Standards" shall mean all laws, union rules and trade or industry custom or codes of any kind whatsoever, in effect from the date of this Agreement through Final Acceptance of the construction work, pertaining to worker safety and accident prevention applicable to the Project and/or the construction work (including, but not limited to, rules, regulations and standards adopted pursuant to the Occupational Safety and Health Act of 1970, as amended from time to time).
- 1.24 "Shop Drawing" shall mean any and all drawings, diagrams, layouts, explanations, illustrations, manufacturer's drawings or other written or graphic materials which illustrate any portion of the construction work.
- 1.25 "Site(s)" shall mean the area(s) upon or in which the construction work is carried on, and such other areas adjacent thereto as may be designated by the Commissioner.
- 1.26 "Specifications" shall mean all of the directions, requirements and standards of performance applied to the construction work.
- 1.27 "State" shall mean the State of New York.
- 1.28 "Subcontractor" shall mean any person, firm, or corporation, other than employees of the Engineer, who or which

contracts with the Engineer or his subcontractors to furnish, or actually furnishes services, labor, or labor and materials, or labor and equipment hereunder. All subcontractors are subject to the prior written approval of the Commissioner.

1.29 "Substantial Completion" shall mean the written determination by the Commissioner that all required construction work for the Project is substantially complete.

ARTICLE 2 - General Provisions

2.1 General Provisions governing the Contract, including insurance coverage the Engineer is required to provide, are set forth in Appendix A. Appendix A is included as Exhibit H to the Contract.

ARTICLE 3 - Agreement to Serve

3.1 The City hereby retains the Engineer to perform the services hereinafter described, on the terms and conditions specified herein, and the Engineer agrees to so serve. The Engineer agrees to provide, to the satisfaction of the Commissioner, all services necessary and required for the inspection, management, coordination and administration of the Project, so that the required construction work is properly executed, completed in a timely fashion and conforms to the requirements of the construction contract and to good construction practice. The services to be provided shall include without limitation the services set forth in Article 6. The Engineer hereby certifies that it has the necessary experience, expertise, manpower and resources to fulfill its obligations under this Contract competently and efficiently. The Engineer agrees to use its best efforts to complete the Project as soon as possible and at the lowest possible cost to the City.

ARTICLE 4 - Time Provisions

4.1 Base Term of the Contract: The Contract shall commence as of the date of registration by the Comptroller and shall remain in effect until Final Acceptance of all required construction work for the Project and completion of all required services hereunder, including Post Construction Services, as set forth in Article 6. The anticipated time frame for completion of all required services is set forth in Exhibit A.

4.2 Extension of Contract: Upon written application by the Engineer, the Agency Chief Contracting Officer ("ACCO") may grant an extension of time for performance of the Contract. Said application must state, at a minimum, in detail, each cause for delay, the date the cause of the alleged delay occurred, and the total number of delay in days attributable to such cause. The ruling of the ACCO shall be final and binding as to the allowance of an extension and the number of days allowed.

4.3 Time of Essence: In performing the services hereunder, the Engineer shall place emphasis on considerations which will aid in expediting the construction of the Project consistent with the construction standards and procedures of the City. The Engineer agrees to use all resources at its command so that the Project is completed on or before the established Project completion date by the construction contractor(s). To accomplish such timely completion, the Engineer shall give constant attention to the adequacy of the contractor's planning, personnel, equipment and the availability of materials and supplies. The Engineer acknowledges that time will be of the essence in bringing the Project to completion and agrees to use its best efforts to prevent delays. If a situation cannot be resolved, the Engineer shall bring it to the immediate attention of the Commissioner.

4.4 Responsibility for Delay: In the event the Project is not completed within the timeframe set forth in Exhibit A, the Commissioner shall prepare a report analyzing the causes of the delay and determining responsibility for the same.

4.4.1 If the report indicates that the Engineer, as a result of its actions or inactions, is responsible for the delay, or any portion thereof, the Commissioner shall deduct, from any amount due and owing to the Engineer under this Contract, the total amount of staffing expenses paid to the Engineer for the period of the delay, or any portion thereof, for which the Commissioner determines the Engineer is responsible. For the purpose of this deduction, staffing expenses shall mean the Direct Salary Rates for all Assigned Employees times the Multiplier for Overhead and Profit. If the amount due and owing to the Engineer under this Contract is less than the total amount of the deduction described herein, the Engineer shall be liable for and agrees to pay the difference upon demand by the Commissioner.

4.4.2 If the Engineer files a dispute regarding its responsibility for the delay, or any portion thereof, the Engineer is obligated, while the dispute is pending, to continue performing any required services pursuant to this Contract,

and, if demanded by the Commissioner, to pay the amount described in the paragraph above.

4.4.3 The following shall have no relevance to a determination by the Commissioner that the Engineer is responsible for the delay, or any portion thereof: (a) approval by the Commissioner of any time extension(s), and/or (2) approval by the Commissioner of any revised timeframe for completion. Any such approval(s) by the Commissioner shall not be referred to or offered in evidence by the Engineer or its attorneys in any dispute or proceeding regarding the Engineer's responsibility for the delay.

ARTICLE 5 – Personnel for REI Services

5.1 Provision of Personnel: The Engineer agrees, throughout the term of the Contract, to provide personnel for the performance of all required services for the Project, as directed by the Commissioner. The Engineer specifically agrees that its employees, agents and consultants shall possess the experience, knowledge and character necessary to qualify them individually for the particular duties they perform.

5.1.1 Required Personnel: Requirements for personnel for the Project are set forth in Exhibit B, including the following: (1) required titles of personnel, (2) qualification requirements per title, (3) estimated hours per title, and (4) Maximum Allowable Direct Salary Rate per hour per title. If the commencement date (i.e., the date on which the Contract is registered by the Comptroller) is more than twelve (12) months after the date on which the Engineer submitted its Fee Proposal for the Contract, the Commissioner may, by written directive, increase the Maximum Allowable Direct Salary Rates per hour set forth in Exhibit B.

5.1.2 Key Personnel: Requirements for Key Personnel for the Project are set forth in Exhibit B, including the following: (1) required titles of Key Personnel, (2) individuals identified as Key Personnel by the Engineer in its Proposal for the Contract, and (3) actual direct salary rates per hour for individuals identified as Key Personnel, as set forth by the Engineer in its Fee Proposal for the Contract.

- (a) Agreement to Assign: The Engineer specifically agrees to assign to the Project for its entire duration, the individuals named in Exhibit B as Key Personnel. These individuals were identified by the Engineer in its Proposal for the Contract. Failure by the Engineer to provide any of the individuals identified in Exhibit B as Key Personnel shall be considered a material breach of the Contract and grounds for termination for cause. Replacement of such individual(s) will only be permitted in the following circumstances: (1) if the designated individual is no longer employed by the Engineer, or (2) if the commencement date (i.e., the date on which the Contract is registered by the Comptroller) is more than nine (9) months after the date on which the Engineer submitted its Fee Proposal for the Contract. In the event replacement of individuals identified as Key Personnel is permitted, the proposed replacement must meet the qualification requirements set forth in Exhibit C.
- (b) Increase: In accordance with Article 7, the actual direct salary rates per hour for individuals identified as Key Personnel, as set forth in Exhibit B, may be subject to an increase for the period of time commencing as of the date on which the Engineer submitted its Fee Proposal for the Contract and ending as of the commencement date (i.e., the date on which the Contract is registered by the Comptroller).

5.2 Staffing Plan: A Staffing Plan for the Project shall be established as set forth below. Such Staffing Plan must be established and approved by the Commissioner prior to commencement of services pursuant to this Contract.

5.2.1 Contents of Staffing Plan: The Staffing Plan shall include the items set forth below.

- (a) Key Personnel: Individuals named in Exhibit B as Key Personnel
- (b) Other Engineering Personnel: Required titles per Phase (Pre-Construction, Construction, and Post Construction) and specific individual for each title
- (c) Direct Salary Rate per hour for each specified individual (except Project Executive), as determined by the Commissioner. The Direct Salary Rate per hour shall be the **LESSER** of (1) the individual's actual annual direct salary, computed on an hourly basis in accordance with Article 7, or (2) the Maximum Allowable Direct Salary Rate per hour for the specified title set forth in Exhibit B.
- (d) Total estimated hours per title per Phase (Pre-Construction, Construction and Post Construction)
- (e) Total estimated amounts per title per Phase (Pre-Construction, Construction, and Post Construction)

5.2.2 Payment Limitation: The Engineer shall not be entitled to payment for any personnel not assigned to the Project and not included in the approved Staffing Plan. The specific personnel identified in the approved Staffing Plan shall be considered Assigned Personnel or Assigned Employees for the purpose of the Engineer's entitlement to payment for services performed by such personnel.

- (a) Project Executive: The Engineer shall not be entitled to payment for the services of the Project Executive. Compensation for the Project Executive is deemed included in the Multiplier.
- (b) Principal: The Engineer shall not be entitled to payment for a principal's time performing oversight or management duties. This prohibition on payment for a principal's time shall not apply if the following criteria are met: (1) such principal is qualified to perform services in accordance with one of the titles set forth in Exhibit B, and (2) such principal is included in the approved Staffing Plan for such title.

5.2.3 Proposed Staffing Plan: Within seven (7) days of receipt of the advice of award, the Engineer shall submit a proposed Staffing Plan for the Project. Such Staffing Plan shall include the items listed above. With respect to each proposed employee, the Engineer shall provide: (1) the employee's resume, as well as any other information detailing his/her technical qualifications and expertise, (2) the title in Exhibit B for which the employee meets the qualification requirements, and (3) direct salary information, including the employee's current actual annual direct salary, as defined in Article 7, and direct salary history for the past three years.

5.2.4 Review and Approval of Staffing Plan: The Commissioner shall review the Engineer's proposed Staffing Plan and shall direct revisions to the same if necessary prior to final approval thereof. As part of his/her review, the Commissioner shall determine (1) whether each specific employee meets the qualification requirements for the applicable title, and (2) the direct salary rate per hour to be paid for each specific employee, in accordance with Article 7. The Engineer shall revise the proposed Staffing Plan as directed, until such plan is approved in writing by the Commissioner.

5.2.5 Revisions to the Staffing Plan: Any revisions to the Staffing Plan are subject to the prior written approval of the Commissioner.

- (a) Replacement Personnel: No substitutions for assigned personnel shall be permitted unless the proposed replacement has received the prior written approval of the Commissioner. Replacement personnel must: (1) meet the qualification requirements, and (2) possess qualifications substantially similar to those of the personnel being replaced.
- (b) Changes by the Commissioner: The Commissioner reserves the right to direct changes to the Staffing Plan, including without limitation, modifying the titles of personnel necessary for the Project and increasing or decreasing the personnel assigned to the Project, based upon the scope of the required Work. The Engineer shall increase or decrease the personnel assigned to the Project, as directed by the Commissioner.
- (c) Removal of Personnel: At the Commissioner's request at any time, the Engineer shall remove any personnel and substitute another employee of the Engineer reasonably satisfactory to the Commissioner. The Commissioner may request such substitution at any time, in his/her sole discretion.
- (d) Revisions Due to Delay: In the event completion of the Project is delayed for any reason, including without limitation, strike, work stoppage, severe weather conditions or other circumstances not due to the fault of the Engineer, the Commissioner shall, in writing, direct revisions to the Staffing Plan to decrease the level of staffing to be maintained throughout the delay. The Engineer shall be paid for the cost of the staffing it is directed by the Commissioner to maintain. Upon termination of the delay, the Engineer shall restore the level of staffing as directed by the Commissioner.

5.2.6 Night Differential / Overtime: The Engineer shall provide a statement describing its company policy with respect to payment of a premium for services performed during other than regular business hours (i.e., premium for Night Differential and/or Overtime). The Engineer's statement describing its policy shall indicate the following: (1) whether the policy is consistently applied to all clients; (2) the designated class(s) of employees to whom such policy applies, and (3) the premium or rate of increase to be paid to employees for such services. For the purpose of payment, the Engineer's policy regarding payment of a premium for services performed during other than regular business hours is subject to approval by the Commissioner. Approval shall only be given if the policy is reasonable, consistently applied to all clients and in accordance with standard practice in the industry. Payment of a premium for services performed during other than regular business hours is subject to the limitations set forth in Article 7.

5.3 Subconsultants: The Engineer shall engage the Subconsultant(s) identified in its Proposal for the Contract and set forth in Exhibit A, unless otherwise approved by the Commissioner. Failure by the Engineer to provide the Subconsultant(s) set forth in Exhibit A shall be grounds for termination for cause. The Engineer shall be responsible for the performance of services by its Subconsultant(s), including maintenance of schedules, correlation of their work and resolution of all differences between them.

5.3.1 General Provisions: General Provisions governing the Contract, including provisions requiring the approval of subcontractors, are set forth in Appendix A. Appendix A is included as Exhibit H to the Contract.

5.3.2 Replacement Subconsultants: No substitution for any Subconsultant shall be permitted unless approved by the Commissioner. Any proposed replacement Subconsultant must possess qualifications and experience substantially similar to those of the Subconsultant being replaced and is subject to the prior written approval of the Commissioner. In addition, at the Commissioner's request at any time, the Engineer shall remove any Subconsultant and substitute another Subconsultant reasonably satisfactory to the Commissioner. The Commissioner may request such substitution at any time, if, in his sole opinion, he determines that any Subconsultant may be unable to satisfactorily provide the required services in a timely fashion.

5.3.3 Payment: Expenses incurred by the Engineer in connection with furnishing Subconsultants for the performance of required services hereunder are deemed included in the payments by the City to the Consultant, as set forth in Article 7. The Engineer shall pay its Subconsultant(s) the full amount due them from their proportionate share of the requisition, as paid by the City. The Engineer shall make such payment not later than seven (7) calendar days after receipt of payment from the City.

ARTICLE 6 - Engineering Services

6.1 General: The Engineer shall provide, to the satisfaction of the Commissioner, the services set forth below.

6.1.1 Resident Inspection Engineering (REI) Services: The Engineer shall provide all services necessary and required for the inspection, management, coordination and administration of the Project, so that the required construction work is properly executed, completed in a timely fashion and conforms to the requirements of the construction contract and to good construction practice. The REI services to be provided by the Engineer shall include without limitation the services set forth in this Article 6, as well as additional REI services required for the Project. Such additional REI services are set forth in Exhibit E.

- (a) The Engineer's services shall be provided from the date the construction contractor(s) is directed to commence work until the completion of all construction operations and the final acceptance of the completed work by the Commissioner.
- (b) In general, the Engineer shall serve as the representative of the Department at the site and, subject to review by the Commissioner, shall be responsible for the inspection, management and administration of the performance of the work, as delineated in the article of the construction contract(s) entitled "The Resident Engineer".
- (c) The Engineer shall ascertain the standard practices of the City prior to the performance of services required by this Contract, and all such services shall be performed in accordance with these standard practices.
- (d) The Commissioner or his/her duly authorized representative(s) shall have the right at all times to inspect the work of the Engineer and contractors.
- (e) The Commissioner shall advise the Engineer in writing of any special or particular requirements applicable to the performance of services hereunder and/or the construction work.
- (f) The Engineer's services shall include the management, supervision and coordination of any Reimbursable Services required for the Project.

6.1.2 Reimbursable Services: The Engineer may be directed in writing by the Commissioner to provide Reimbursable Services. Reimbursable Services are described in Article 6.5.

6.1.3 Non-reimbursable Services: Throughout the Project, the Engineer shall be responsible for providing the non-reimbursable services set forth below. All costs for such services are deemed included in the Multiplier.

- (a) The Engineer shall provide overnight delivery of the following Project documents: (1) design documents; (2) all required submittals, including without limitation shop drawings, material samples and catalogue cuts; (3) change orders; (4) documents with respect to payment, and (5) any other critical communications and/or documents.
- (b) The Engineer shall provide the items set forth below for all personnel performing services for the Project, including any Project Executive(s).
 - (1) Transportation, including transportation to the Project site, as well as parking and tolls. Engineers and/or Subconsultants that are not located in New York City or its vicinity shall not be entitled to reimbursement for transportation expenses.
 - (2) All necessary CADD or computer usage time
 - (3) All necessary office supplies and/or tools
 - (4) Communications equipment and service, including without limitation cellular telephones for all personnel assigned to the Project. The telephone numbers of all personnel assigned to the Project shall be submitted to the Commissioner.
 - (5) Hard hats, safety vests, and all other necessary and required Personal Protective Equipment (P.P.E.).
- (c) If the Engineer is located outside New York City, it shall obtain a New York City telephone number and submit such number to the Commissioner.

6.1.4 Commissioner's Representative: The Assistant Commissioner, acting on behalf of the Commissioner, shall, in writing, designate a City employed engineer to serve as the Commissioner's Representative with respect to this Contract. Such Commissioner's Representative shall be authorized to review the performance of the Engineer. The Commissioner's Representative shall be the senior authority in the field and shall be authorized to review the performance of the Engineer. The Engineer shall be responsible to the Commissioner's Representative.

6.2 REI Services During Pre-Construction Phase: The services to be provided by the Engineer during the Pre-Construction Phase shall include without limitation the services set forth below.

6.2.1 Undertake the following responsibilities with respect to shop drawings:

- (a) Implement procedures to be followed by the construction contractor(s) for the expeditious processing of submittals, including without limitation shop drawings, material samples and catalogue cuts. Such procedures shall be in accordance with DDC guidelines.
- (b) Review and approve all shop drawings for the Project, including without limitation shop drawings for temporary sheeting, bracing, shoring, underpinning, temporary vehicular and pedestrian bridges, retaining walls, decks and all permanent structures in the Project.
- (c) Review and approve all rebar drawings/shop drawings and placement of all steel reinforcement and structural steel for structures.
- (d) Ensure that no construction work commences until the shop drawing is approved.
- (e) Upon approval, transmit to the Commissioner the original stamped, signed and dated approved shop drawing. All shop drawings must be stamped and signed by a licensed Professional Engineer.

6.2.2 Prepare correspondence or other communications in order to advance the Project.

6.2.3 Perform minor design services for the Project. Minor design services shall be those services which, in the determination of the Commissioner, involve relatively small adjustments, enhancements or changes to the design for the Project. Minor design services may include, without limitation, the services set forth below.

- (a) Raising or lowering the curb profile along the majority of the blockface.
- (b) Temporary support of defective retaining wall
- (c) Adjustment to or addition of catch basins
- (d) Removal of minor encroachments (chain link or wood fence, hedges, pavement block, etc.) and restoration in connection with such removal, if required

- (e) Modification of sidewalk grades to match existing adjacent properties. Such adjustments shall comply with the Americans with Disabilities Act (ADA), as well as tree requirements of the Department of Parks and Recreation.
- (f) Re-design of original curb profiles to lessen the impact upon existing field conditions, including any associated infrastructure changes necessitated by these re-designs.
- (g) Addition, subtraction or movement of multiple "break" points within a blockface.

6.3 REI Services During Construction Phase: The services to be provided by the Engineer during the Construction Phase shall include without limitation the services set forth below.

6.3.1 Prior to the commencement of the Work, obtain or verify that the construction contractor(s) has obtained all necessary permits, certificates, licenses or approvals, required for the performance of the work by the New York City Building Code or any other applicable law, rule or regulation of any government entity. Assure that no work proceeds in the absence of such necessary permits, certificates, licenses or approvals.

6.3.2 Make recommendations to the Commissioner regarding the approval of proposed subcontractors and material vendors.

6.3.3 Undertake the following responsibilities with respect to the inspection of the work:

- (a) Provide technical inspection, management and administration of the work on the Project until final completion and acceptance of the Work by the Commissioner, verifying that the materials furnished and work performed are in accordance with the requirements of the construction contract(s) and that work on the Project is progressing on schedule.
- (b) Provide offsite plant inspection of fabricated and/or raw materials to be used on the Project, as directed by the Commissioner, to insure conformance with the material specifications of the construction contract(s).
- (c) Take appropriate action to prevent the installation of work, or the furnishing of material or equipment, which has not been properly approved or otherwise fails to conform to the requirements of the construction contract(s), and inform the Commissioner promptly of such action and the reasons for and outcome of such action.
- (d) Supervise the performance of all detailed inspection and field-testing of materials and items of work, quality control tests, or any other tests required by the construction contract(s), to ensure that such tests are performed in a satisfactory and timely fashion. Such tests shall include without limitation slump test, air-entrainment test, material temperature test and density tests. If directed by the Commissioner in writing as an additional service, the Engineer shall retain the services of a qualified laboratory to provide any required testing. Compensation for such laboratory services will be provided to the Engineer pursuant to the Allowance for Reimbursable Services.
- (e) Inspect the Project in conjunction with the Commissioner's Representative on a periodic basis and prior to Substantial Completion or Final Acceptance, as described below. The Engineer shall furnish a detailed report to the Commissioner setting forth any discrepancies or deficiencies in the finished work.
- (f) Inspect the Project and provide a report prior to the expiration of the guarantee period set forth in the construction contract(s), as described in Article 6.3.20 below.

6.3.4 Undertake the following responsibilities with respect to the Progress Schedule:

- (a) Review proposed Progress Schedule, and any updates thereto, submitted by the contractor(s) and direct revisions to the Progress Schedule as required by the Commissioner.
- (b) Make recommendations to the Commissioner regarding approval or disapproval of the Progress Schedule.
- (c) If necessary, prepare a Progress Schedule for the Project in the form of a bar chart.
- (d) Monitor compliance with the Progress Schedule by the contractor(s).
- (e) Review the adequacy of the personnel and equipment of the contractor(s) and the availability of necessary materials and supplies to ensure compliance with the Progress Schedule.
- (f) Notify the Commissioner of any anticipated delays in fabrication, erection or construction.
- (g) If performance of the work by the contractor(s) falls behind the Progress Schedule, advise the Commissioner of the same and make recommendations as to what methods should be adopted to make up for lost time.

- (h) Render assistance when required to minimize delays to the Project caused by labor disputes during construction.

6.3.5 Review and evaluate the means and methods of construction proposed by the contractor(s) and advise the Commissioner in the event the Engineer reasonably believes that such proposed means and methods of construction will constitute or create a hazard to the work, or persons or property, or will not produce finished work in accordance with the construction contract(s).

6.3.6 Undertake the following responsibilities with respect to the safety of the site:

- (a) Perform all RE responsibilities set forth in the DDC Safety Requirements (Exhibit F).
- (b) Monitor contractor compliance with (1) Safety Program, (2) Site Safety Plan, (3) DDC Safety Requirements, and (4) all applicable regulations that pertain to construction safety. The Engineer shall perform a daily inspection of the Project site(s) at the beginning and end of each day (“Dawn and Dusk Patrol”) and shall issue directives to the contractor(s) to correct any deficiencies which may be identified.
- (c) Promptly notify the Commissioner and the contractor(s) if the Engineer observes any hazardous conditions at the site or non-compliance by the contractor(s) with its Safety Program, Site Safety Plan, DDC Safety Requirements, any applicable safety regulations or subcontract requirements.
- (d) Coordinate with city agencies and public and private utilities, so that the contractor(s) provides a safe environment for both workers and the general public.
- (e) Inspect the maintenance and protection of pedestrian and vehicular traffic operations on a daily basis and record observations in the Engineer’s diary. Review and evaluate contractor proposals regarding pedestrian and vehicular traffic operations and make recommendations to the Commissioner. The Engineer’s personnel assigned this responsibility shall be trained in this area, and approved by the Commissioner for this work. This employee shall be designated the "safety officer" for the Project.
- (f) In the event of an emergency, provide such labor, materials, equipment and supervision necessary to cure such emergency condition. The Engineer shall immediately notify the Commissioner of any such emergency condition.

6.3.7 Undertake the following responsibilities with respect to Project record keeping:

- (a) Keep accurate and detailed written records of the progress of the Project during all stages of planning and construction.
- (b) Maintain daily detailed time and material records regarding the use of labor, equipment and material for the Project. The Engineer shall use such records to prepare the Contract Cost Summary/Close Out Report set forth in Article 6.4.
- (c) Maintain a daily job diary or log book describing all activities which occurred on the Project on a daily basis, including without limitation, all work accomplished, the number of workers, identified by trade, employed at the site by the contractor(s), the number of hours worked, material shortages, labor difficulties, weather conditions, visits by officials, decisions reached, specific problems encountered, general and specific observations, and all other pertinent data relative to the performance of the construction contract(s).
- (d) Maintain accurate, orderly and detailed files and written records and documents regarding the Project, including without limitation, correspondence, minutes and/or reports of job conferences, progress reports, shop drawings and other submissions, construction contract documents, including all addenda, change orders, supplemental drawings and all other Project-related documents. The Engineer shall provide any records, documents or information concerning the Project to the Commissioner as directed.
- (e) With respect to work to be performed on a time-and-materials, unit cost, or similar basis, requiring the keeping of records and computation therefrom, maintain cost accounting records in accordance with the City’s procedures.
- (f) Prepare record (“as built”) drawings as described in Article 6.4.3 below.
- (g) Prepare and maintain fixed asset inventory forms for all required contract components.
- (h) Maintain all Project records in accordance with DDC requirements, as set forth in the DDC manual entitled “DDC Standard Records”, a copy of which will be provided to the Engineer.
- (i) All Project records, including without limitation those specified above, shall be available to the Commissioner at all times immediately upon request, and the Commissioner shall have the right to remove such Project records and make copies thereof.

6.3.8 Monitor compliance by the contractor(s) with the following requirements applicable to the construction work: (1) New York State Labor Law; (2) Americans with Disabilities Act (ADA); (3) requirements for the participation of LBEs, and (4) requirements for the participation of M/WBEs.

6.3.9 Prepare correspondence or other communications to the contractor(s) as required in order to advance the Project, including without limitation letters for the signature of the Commissioner or the Commissioner's Representative.

6.3.10 Undertake the following responsibilities with respect to contractor payments:

- (a) Review all requisitions for payments submitted by the contractor(s), including without limitation partial payments, payments for extra work, substantial completion and final payments.
- (b) Make recommendations to the Commissioner for approval or disapproval of all contractor requisitions for payment in accordance with City procedures.
- (c) Verify all estimates for payments of work performed, computations, as well as field measurements and sketches necessary for payment purposes.
- (d) With respect to each requisition for payments submitted by the contractor(s), determine the amount of liquidated damages, back charges or other deductions to be assessed.
- (e) Submit to the Commissioner the requisition for final payment within one (1) month after the date of final inspection of the Project.
- (f) Maintain all accounts and records with respect to payments in accordance with the State Comptroller's Manual and good accounting practices.

6.3.11 Review applications for extensions of time submitted by the contractor(s). Make recommendations to the Commissioner for approval or disapproval thereof in accordance with the City's procedures.

6.3.12 Undertake the responsibilities set forth below with respect to questions raised and/or disputes submitted by the contractor(s).

- (a) Interpret the Drawings and Specifications and add explanatory information consistent with the construction contract(s). In the event the contractor(s) disagrees with the Engineer's interpretation of the meaning and intent of the Drawings and Specifications, the Engineer shall prepare a report to the Commissioner setting forth the contractor's interpretation and that by the Engineer. Such report shall be in sufficient detail so that the Commissioner may, from it, make a determination as described in the article of the construction contract entitled "Resolution of Disputes".
- (b) Review, evaluate and prepare a recommended determination with respect to disputes submitted by the contractor(s) in accordance with the article of the construction contract entitled "Resolution of Disputes". The Engineer's recommendation shall be in writing, and shall contain a clearly stated, reasoned explanation for the determination based upon the information and evidence presented by the contractor, as well as the requirements of the Drawings, the Specifications and the construction contract.
- (c) Keep DDC advised of potential disputes, with analysis and recommendations regarding actions to be taken.

6.3.13 Review all requests for change orders from the contractor(s) and obtain cost proposals from the contractor(s). Prepare a report to the Commissioner recommending approval or disapproval thereof in accordance with City procedures. Such report shall include the Engineer's review and evaluation of the change order request and the cost proposal submitted by the contractor(s), as well as any recommendations the Engineer may have concerning the quantities of labor, equipment and materials relative to the proposed change order. The Engineer must be prepared to substantiate the information contained in its report to the Commissioner, the Engineering Audit Officer, the Comptroller and any other agency having jurisdiction in this area. The Commissioner will make all final determinations regarding change orders, modifications and additions to the construction contract(s). If directed by the Commissioner, the Engineer shall negotiate a price, i.e., lump sum or unit price, for the performance of the proposed change order work and submit the same to the Commissioner for his approval. If directed by the Commissioner, the Engineer shall provide cost estimates for the proposed change order.

6.3.14 Schedule and conduct job meetings with the contractor(s), representatives of the Commissioner, interested city agencies, regulatory agencies and any other entities or individuals involved with the Project to discuss

procedures, performance, progress, problems, scheduling and related issues. If required, the Engineer shall prepare minutes of such meetings in a format authorized by the Commissioner and shall distribute such minutes to all attendees.

6.3.15 Undertake the following responsibilities with respect to Project reports:

- (a) Submit written progress reports to the Commissioner on a monthly basis, unless otherwise directed, including without limitation (1) information concerning the work of the contractor(s); (2) the percentage of completion of the work; (3) the number and amount of change orders, and (4) an update of the budget for the Project, including a comparison of the original budget with current disbursements and the estimated cost to complete.
- (b) Prepare reports regarding the work as may be directed by the Commissioner, incorporating such information, interpretation, detail or back-up material as may be required by the Commissioner.
- (c) Prepare reports in a form suitable for transmission to the Comptroller and the Law Department on claims made during the course of the work and within one year after completion and final acceptance of the work.

6.3.16 Determine the need for and recommend to the Commissioner the institution of default proceeding against the contractor(s) or the assessment of liquidated damages. Assist the Commissioner in selecting an alternate contractor(s) to perform the work and assist in evaluating back charges or other deductions to be assessed.

6.3.17 Undertake the following responsibilities with respect to Substantial Completion of the Project:

- (a) Inspect the Project in conjunction with the Commissioner's Representative at the time of Substantial Completion.
- (b) Furnish a detailed report to the Commissioner setting forth any discrepancies or deficiencies in the finished work.
- (c) Make recommendations to the Commissioner regarding a determination of Substantial Completion.
- (d) Prepare and finalize all necessary punch lists, including completion dates for all items and expedite execution of the same by the contractor(s).
- (e) Prepare and deliver to the Commissioner record ("as built") drawings as described in Article 6.4.3.
- (f) Perform the above duties in the event the City is to take over, use, operate or occupy any part or all of the Project.

6.3.18 Undertake the following responsibilities with respect to Final Acceptance of the Project:

- (a) Inspect the Project in conjunction with the Commissioner's Representative at the time of Final Acceptance.
- (b) Furnish a detailed report to the Commissioner setting forth any discrepancies or deficiencies in the finished work.
- (c) Make recommendations to the Commissioner regarding a determination of Final Acceptance.

6.3.19 Collect guarantees from the manufacturer, maintenance and operations manuals, keying schedules and other data required of the contractor(s), and maintain photographic records, material and equipment delivery records, visual aids, charts and graphs.

6.3.20 Prior to the expiration of the guarantee period set forth in the construction contract(s), inspect the Project and furnish a report to the Commissioner describing in detail any finished Work in which defects of materials or workmanship may have appeared or to which damage may have occurred because of such defects, during the applicable guarantee period.

6.3.21 Provide progress photographs on a regular basis as directed by the Commissioner.

6.3.22 Provide or cause to be provided all temporary facilities and utilities as necessary for the performance of the Work.

6.3.23 Prepare and submit DDC's construction contractor(s) performance evaluation form. Such performance evaluation shall be completed when fifty (50%) of the contract amount has been vouchered and at substantial completion of

the Project. The form shall be submitted to DDC no later than fifteen (15) calendar days after each of these events has occurred.

6.3.24 In the event any claim is made or any action brought in any way relating to the design or construction of the Project, the Engineer shall diligently render to the City all assistance which the City may require. Such services shall be rendered by the Engineer without additional fee or other compensation, except for the costs and expense of personnel who were assigned to the Project as job-site or management staff, or comparable personnel if those who were assigned to the Project are no longer employed by the Engineer.

6.3.25 Check the erection of structures necessary to protect the public during the construction operations.

6.3.26 Spot check, for accuracy, Survey and Stake-out performed by the contractor(s).

6.3.27 Check the construction contractor's layout and concrete form work for correctness, including line and grade. Check the placement of concrete, structural concrete and asphalt pavements.

6.3.28 Check the removal, installation and reinstallation of all signs, including the fastening of chains from sign structures.

6.3.29 Check layout of conduits, pipes, gas mains, water mains, electrical conduit and lighting equipment, and other miscellaneous structures.

6.3.30 Check all electrical wiring, permanent or temporary, for compliance with the plans and specifications.

6.3.31 Check the performance of excavation, and compliance with safety standards for sheeting, and prepare necessary trench certifications and backfill certifications.

6.3.32 Substantiate the quality and check the placement of all pre-cast pre-stressed structural elements when they are to be used on the Project.

6.3.33 Check and approve if applicable the contractor's pile layout, condition of piles, treatment of piles, pile driving equipment and method of pile driving; certify pile records, locations and lengths.

6.3.34 If applicable, prepare and certify, on a monthly basis, Sidewalk Assessment data for all sidewalks constructed. Sidewalk Assessment data may be transmitted by lists or other methods as specified by the Commissioner. Assessment data must be prepared in accordance with Design Directive 33, a copy of which will be provided to the Engineer upon request.

6.3.35 If the Project involves the installation of Traffic Signals and Street Lighting, check all components of the installation, including without limitation, (1) the installation of conduit for type, depth, quantity, manner of installation, drag line observations; (2) the installation of foundations to insure proper location, size, type, anchor rod assemblies, mats, quality of concrete, number of bends, sidewalk finish; (3) the installation of pull boxes for proper types, locations, drainage, orientation, covers, sidewalk restoration; (4) the installation of cable for proper type, method of installation, conductors, fuses, tagging; (5) the operations, size, testing procedures, amplification systems, luminaries, photoelectric cells; (6) the installation of traffic posts for proper type, mats, cleats, orientations, grounding, installation of appurtenant fixtures on the post such as push buttons, signs, street light arms, luminaries; (7) the installation of all signal and lighting assemblies for proper orientation, grounding, wiring, installation; (8) the installation of all control boxes and controllers for proper mechanical and electrical installation, timing operations, phasing; (9) the installation and operation of all temporary signals, lighting overhead cable.

6.3.36 If the Project involves the installation of water mains, provide the following services: (1) review and approve pipe laying schedules, where required; (2) prepare pipe geometry, as required; (3) perform record search and field investigation to taps, connections and data on existing mains; (4) prepare, control and record the necessary requisitions for material from the Department of Environmental Protection's pipe yards; (5) plan and control, under Bureau of Water Supply guidance, necessary shutdowns of water mains to permit prosecution of the work; (6) under the guidance and subject to approval of the Bureau of Water Supply Personnel, recommend field changes in pipe, recommend resolution of utility and other interference problems, test and report on cleanliness of new mains, make final inspection and punch list,

and (7) prepare all necessary change orders, extensions of time and correspondence.

6.3.37 If the Project involves the installation of fire alarm communication systems, the Engineer shall furnish all services required in this contract; however, final inspection of this work will be performed by the New York City Fire Department.

6.3.38 Undertake the following responsibilities with respect to the coordination of utility work:

- (a) Provide a dedicated “utility coordinator” who shall perform the following tasks:
 - (1) Interpret and apply specifications and contract documents especially with regard to utility items and accommodation work
 - (2) Communicate daily with utility representative to reconcile items and quantities for work performed at various locations. This must be done at a time that is mutually agreed upon.
 - (3) Sign daily reconciliation sheets and verify that the quantities actually installed become part of the payment to the contractor for utility work.
 - (4) Verify that there are no discrepancies between quantities installed and quantities reflected on application for payment for utility work.
 - (5) Become familiar with all DOT and DEP regulations.
 - (6) Coordinate meetings with resident engineer, City representatives, and utility personnel to resolve any conflicts that may develop.
 - (7) Be responsible to facilitate all resolution discussions.
 - (8) Prepare reports that identify payments to date which includes all utility involvement.
- (b) Check the relocation, replacement, support and protection of utility facilities for Con Ed, New York Telephone and Empire City Subway, Ltd. where a utility agreement is part of the construction contract. For such agreements each utility company shall provide inspectors at the work site to inspect work methods and verify quantities of work.
- (c) Ensure that all utility work is coordinated with reference to Industrial Code Rule 53 of the New York State Department of Labor.

6.3.39 Community Construction Liaison: The Engineer shall, if directed by the Commissioner, as part of its personnel for the Project, provide a Community Construction Liaison (“CCL”), who shall perform the services set forth in this section with respect to interaction with the community. Prior to assignment to the Project, the CCL is subject to the prior written approval of the Commissioner. With respect to the proposed CCL, the Engineer shall provide the following: (1) resumes and any other information, and (2) a writing sample. The Engineer shall provide its CCL with PHOTO IDENTIFICATION, clearly indicating the Project Name/Number, EIC name/number, field office, phone/fax, and validation dates, which shall correspond with the anticipated contract duration plus three (3) months. The Engineer shall also provide the CCL with business cards, which shall include the same Project information. The construction contractor shall provide a personal computer with a designated email address for use by the CCL.

The Engineer shall, as directed by DDC, print necessary community notification materials (e.g. kiosk posters, brochures, buttons, newsletters) as developed in conjunction with DDC-OCON staff. Materials may be printed in 4-colour as required by design; the Engineer shall also pay for any related installation costs for Kiosk Posters. Reimbursement for these items shall be paid for through “Reimbursable Services”.

The CCL shall perform the following services:

- (a) Produce and widely distribute within the community a monthly Reconstruction Newsletter, using WORD Software Template provided by the DDC Office of Community Outreach and Notification.
- (b) Immediately after commencement of this Contract, the CCL shall participate in a program of Orientation and Training conducted by the DDC Office of Community Outreach and Notification. The following topics shall be Included in this orientation: Introduction to DDC; Review of NYC Charter, Site Safety, Maintenance and Protection of Traffic, Intergovernmental Networking/Notification, Plans and Contracts; City Government; Community Relations, and Media Relations.
- (c) Immediately after commencement of this Contract, the CCL shall review the plans and specifications for the construction contract(s). Within five (5) business days of completing the contract review, the CCL

- shall organize and arrange for a walk through of the Project to assess its impact on the community. Notification of the walk through shall be given to the District Manager of the Community Board, other interested community representatives, and representatives of DDC.
- (d) Water Service Interruption Notification: If the Project involves any water main replacement and related work, to assess the negative impact on the community, the CCL shall conduct a door to door survey of each commercial/residential property within the area of influence of water service interruption. The CCL shall notify the Resident Engineer and keep him abreast of persons, businesses, and properties which may require additional planning and coordination to minimize water service interruption impacts. The CCL will assist in the distribution and posting of notices and shall secure from DDC translations of notices/flyers for use on specific projects within targeted communities where and when indicated.
- (e) The CCL shall develop, maintain and keep a current calendar of significant community events including: Ethnic/Religious Festivals, Street Fairs, Marathons, Parades, Play Street Closing and Block Parties/Celebrations.
- (f) Community Notification Network/Record Keeping: With input and information provided from sources including the DDC Office of Community Outreach and Notification, the Community Board and elected officials, the CCL shall develop a Community Notification Network, identifying key community institutions and organizations by name, association and address. The CCL shall keep field office records regarding community interaction, including without limitation, complaints received and all correspondence, meetings, and task force minutes.
- (g) Construction Notification Email Requirements – The Engineer shall, if directed by the commissioner, provide an email notification system with the following minimum specifications:
- i. Must support multiple formats (plain text, rich text, and HTML) and accept attachments of 500kb minimum and any file type (e.g. Word, Publisher, Excel, Adobe Acrobat, etc.)
 - ii. Web driven application. Users need internet and e-mail access to subscribe and/or view updated information. Clients and administrators should not require any special mail list software.
 - iii. Platform independent (accessible through Windows, Linux or Mac, etc.).
 - iv. Dedicated email list for each construction project (i.e. update@wallstreet.com, update@madisonave.com)
 - v. Dedicated and secure database for email list subscriptions. E-mail lists cannot be sold or distributed under any circumstances.
 - vi. Ease of end users subscription modification. Must provide the options to subscribe and unsubscribe to email lists via web and e-mail.
 - vii. CCL to act as list moderator. The moderator is responsible for the preparation and dissemination of email updates. The moderator will be required to validate his/her email address with the server prior to sending out any notifications to the list which provides an additional anti-spamming measure.
 - viii. Requires Double Opt-In process for both subscription and removal from the list.
 - ix. List Server must be incorporated into a website that is capable of being linked to the DDC or other NYC agency websites.
 - x. Easily expandable. Lists for new construction must be able to be added within 12 hours of notification by the city.
 - xi. Message Forum for CCL to post messages for public viewing only. No posting allowed by end users.
 - xii. Event calendar with message forum integration, such as:
 - 1) Supports multiple private and public calendars
 - 2) Viewable public and private events
 - 3) Weekly, monthly and yearly views
 - 4) Jump to Today option
 - 5) Add single, ranged or recurring events
 - 6) Add all day events
 - 7) Option to show calendar event on forum home page
 - 8) Show events to specific user groups
 - 9) Calendar Moderation
 - 10) Private events reminder
 - 11) Ability to add custom fields
- (h) Payment for the email notification system will be made through “Reimbursable Services”

6.3.40 Perform such other Project related services as may from time to time be directed by the Commissioner.

6.4 Services During Post Construction Phase: The services to be provided by the Engineer during the Post-Construction Phase shall include without limitation the services set forth below. All post construction services set forth below must be completed by the Engineer within ninety (90) days after Substantial Completion of the construction work for the Project, unless otherwise authorized by the Commissioner.

6.4.1 Final Payment Package: The final payment package shall be submitted to the Commissioner within one (1) month after the date of final inspection of the construction contract.

6.4.2 Contract Cost Summary/Close-out Report: During the performance of the work, the Engineer shall keep labor, equipment and material use (Time & Material) records to be used to report on the T&M used for every major facet of the work. The items of work shall include, but not be limited to, the installation of water mains and appurtenances, installation of various types and depths of sheeting systems, installation of sewers, fluming of sewers, catch basins, manholes/chambers and appurtenances, dewatering systems, curbs, roadway pavement (concrete and asphalt), sidewalks, etc. Within one month of Substantial Completion of the construction work, the Engineer shall submit to the Commissioner four (4) printed copies of a contract T&M summary/close-out report summarizing these construction activities. In addition, the Engineer shall submit a copy of the report and all back up data used to generate the report using Microsoft Office (i.e., Excel Spreadsheet, Word, etc.) software. The report shall include without limitation the items set forth below:

- (a) Summary of the average time per unit quantity expended to perform such work and shall note the hours expended for each labor class and type of equipment utilized along with the amount and type of material and total quantity of work. No cost data is required.
- (b) The report shall also include maximum, minimum and average rates of production and all circumstances that affected production rates for each facet of work.
- (c) Summary description of the actual versus original contract duration/schedule, including mobilization. Any significant changes (including delays or time savings) to the original schedule are to be detailed (i.e. incentives, weather, utilities, etc.).
- (d) Summary description of all change orders and large overruns.

6.4.3 Record "As-Built" Drawings: The Engineer shall prepare and submit all record "as-built" drawings for the Project. The record drawings shall accurately show all items and components of the work installed pursuant to the construction contract(s). Such record drawings shall be signed, stamped and sealed by a Professional Engineer. Such record drawings shall be in accordance with DDC standards and requirements, as set forth in Exhibit D.

6.4.4 Project Records: Upon completion of the required construction work for the Project, the Engineer shall submit to the Commissioner originals of all Project records, including without limitation, (1) all reports for the Project, including inspector's reports, as well as laboratory and plant testing reports; (2) all certificates and guarantees from manufacturers; (3) survey field books; (4) daily job diary or log book; (5) all records with respect to payment, including monthly and final estimates of quantities; (6) record "as-built" drawings in conformance with DDC requirements; (7) photographs of the various phases of construction, supplied by the construction contractor, and (8) all other data which may be required to complete the Project records.

6.4.5 Microfilming of Project Documents: The Engineer shall prepare, furnish, and index a complete and accurate set of the following Project documents on microfilm: (1) shop drawings; (2) working drawings; (3) record as-built drawings, which shall show the work as actually installed; (4) catalog sheets; (5) technical bulletins; (6) manuals; (7) diagrams, and (8) other printed matter as required. The microfilming of Project documents by the Engineer shall comply with DDC's requirements for microfilming, which shall be furnished to the Engineer upon request. Payment for the microfilming of project records shall be made through the Allowance for Reimbursable Services.

6.5 Reimbursable Services: The Engineer may be directed to provide reimbursable services. Reimbursable services shall be such services determined by the Commissioner to be necessary for the expeditious completion of the Project, and may include without limitation, the items specified below. The Engineer shall provide reimbursable services, if so directed in writing by the Commissioner. No reimbursable services shall be performed by the Engineer, or paid from the Allowance for Reimbursable Services, unless expressly authorized in advance in writing by the Commissioner. With respect to reimbursable services, the Engineer shall utilize the method of procurement and form of payment directed by the

Commissioner. Payment for reimbursable services shall be in accordance with Article 7.4.

- 6.5.1 Microfilming of Project documents and records, as specified in Article 6
- 6.5.2 Printing of contract documents
- 6.5.3 Express mail postage, except as otherwise provided in Article 6.1.3 and excluding mail from the Engineer's main or home office to the Field Office
- 6.5.4 Laboratory services for detailed testing of materials and items of work
- 6.5.5 Purchase of long lead items for the construction work
- 6.5.6 Long distance travel, i.e., travel which is in excess of 75 miles from whichever of the following is closer to the destination: (1) Columbus Circle, or (2) Engineer's home office. Long distance travel shall not include travel expenses for the Engineer and/or any Subconsultants that are not located in New York City or its vicinity.
- 6.5.7 Services of Corrosion Control Specialist for water main projects.
- 6.5.8 Any other services, determined by the Commissioner to be necessary for the Project.

6.6 Communications in Writing: All recommendations and communications by the Engineer to the Commissioner that will affect the cost of the Project shall be made or confirmed by it in writing. The Commissioner may also require other recommendations and communications by the Engineer to be made or confirmed by it in writing. All recommendations relating to proposed changes in the work, work schedules, instructions to contractor(s) and all other matters requiring action by the Commissioner and the contractor(s) shall be made directly to the Commissioner, unless otherwise directed by the Commissioner. After approval by the Commissioner, the Engineer shall issue instructions directly to the contractor(s).

6.7 Ownership of Documents: As set forth in the General Provisions (Exhibit H: Appendix A), any reports, documents, data, photographs, deliverables, and/or other materials produced pursuant to this Agreement, and any and all drafts and/or other preliminary materials in any format related to such items produced pursuant to this Agreement, shall upon their creation become the exclusive property of the City.

During the term of this Contract and at any time within the retention period set forth in the General Provisions (Exhibit H: Appendix A), the Engineer shall, upon demand, promptly deliver such material, records or documents to the Commissioner, or make such records available to the Commissioner or his/her authorized representative for review and reproduction at such place as may be designated by the Commissioner. Thereafter, the City may utilize such material, records or documents in whole or in part or in modified form and in such manner or for such purposes or as many times as it may deem advisable without employment of or additional compensation to the Engineer. Should such documents prepared under this Contract be re-used by the City for other than the Project originally created, it is understood that the Engineer bears no responsibility whatsoever for such re-use except in those instances where he is re-employed for re-use of the documents.

6.8 Patented and Proprietary Items: The Engineer shall not, without the prior written approval of the Commissioner, specify for the Project, or necessarily imply the required use of any article, product, material, fixture or form of construction, the use of which is covered by a patent, or which is otherwise exclusively controlled by a particular firm or group of firms.

ARTICLE 7 - Payment Terms and Conditions

7.1 General

7.1.1 Total Payments: Total payments for all services performed and all expenses incurred pursuant to this Agreement shall not exceed the amount set forth in Exhibit A.

7.1.2 Executory Only: This Agreement shall be deemed executory only to the extent of the moneys appropriated and available for the purpose of the Agreement and no liability or account thereof shall be incurred beyond the amount of such moneys. It is therefore understood that neither this Agreement nor any representation by any public employee or officer creates any legal or moral obligation to request, appropriate or make available moneys for the purpose of this Agreement.

7.1.3 Allowances: In the event the allowance amounts set forth in this Article 7 are not sufficient, as

determined by the Commissioner, to cover the cost of required services for which allowance amounts are specified, the Commissioner will increase the amounts of such allowances. Notwithstanding the specific amounts allocated for such allowances, the Commissioner may, by issuance of a No Cost Change Order to the Engineer, reallocate such specific allowance amounts within this Article 7.

7.2 Staffing Expenses

7.2.1 Allowance: An allowance in the amount set forth in Exhibit A is established for payment of the Engineer's staffing expenses for those engineering personnel who have been assigned to the Project and are identified in the Staffing Plan approved by the Commissioner (the "Assigned Personnel" or the "Assigned Employee"). After commencement of the Contract, the allowance for staffing expenses shall be broken down into an amount for each of the following phases: Pre-Construction, Construction and Post Construction. The Engineer shall not be entitled to payment for staffing expenses for: (1) any Project Executive(s), and (2) any personnel not included in the approved Staffing Plan.

7.2.2 Payment: For any week during which an Assigned Employee performs services for the Project, payment to the Engineer for such employee's services for that week shall be calculated as follows: Multiply the amount set forth in paragraph (a) by the number set forth in paragraph (b), and then multiply the result by the Multiplier for Overhead and Profit set forth in Exhibit A; provided, however, the Multiplier shall **NOT** apply to any increase in the Assigned Employee's Direct Salary Rate per hour for services performed during other than regular business hours.

- (a) Assigned Employee's Direct Salary Rate per hour, determined and approved in writing by the Commissioner in accordance with this Article 7. If the Engineer receives written authorization from the Commissioner to have an Assigned Employee perform services during other than regular business hours, the employee's Direct Salary Rate per hour may be subject to an increase, as provided below.
- (b) Total number of hours set forth on time sheets completed by the Assigned Employee for the week(s) in question during which the Assigned Employee actually performed services for this Project. This total number of hours shall **NOT** include the following: (1) any hours the Assigned Employee spent commuting; (2) any non-billable hours, as defined below; (3) any hours during which the Assigned Employee performed services for any other project, and (4) any hours other than regular business hours, unless otherwise authorized in advance, in writing by the Commissioner.
- (c) Non-billable hours shall be defined as any hours set forth time sheets completed by the Assigned Employee which have been allocated to any category or function other than services performed for this Project. Non-billable hours shall include without limitation: (1) compensated absence time, including without limitation vacation time, sick time, personal time and holidays; (2) performance of administrative tasks, or (3) any other time keeping category consistent with standard accounting practices.
- (d) The costs deemed included in the Multiplier are set forth in Article 7.3 below.

7.2.3 Retainage: Partial payments of staffing expenses are subject to retainage of five (5%) percent. The amount retained shall be paid to the Engineer upon completion of all post construction services, as set forth in Article 6.

7.2.4 Equitable Reduction: The amount of payment to the Engineer for services performed for the Project by an Assigned Employee, calculated as set forth above, shall be subject to an equitable reduction if, for the week during which an Assigned Employee performed services for the Project, the total number of hours for which the Assigned Employee was actually paid by the Engineer for that week, less any non-billable hours, is less than the total number of hours actually billed by the Engineer to all entities for the Assigned Employee's services for that week, including the number of hours billed for the Project. In such event, the amount of payment to the Engineer for services performed by an Assigned Employee for the week in question, calculated as set forth above, shall be reduced by multiplying such amount by the following: the fractional number resulting from the division of the number set forth in paragraph (a) below by the number set forth in paragraph (b).

- (a) Total number of hours for which the Assigned Employee was actually paid by the Engineer for the week in question, less any non-billable hours, as defined above.
- (b) Total number of hours actually billed by the Engineer to all entities for the Assigned Employee's services for the week in question, including the number of hours billed for the Project.

7.2.5 Direct Salary Rates: The Direct Salary Rate per hour for each Assigned Employee shall be determined and approved by the Commissioner in accordance with the provisions set forth below. Upon approval by the

Commissioner, the Direct Salary Rate per hour for each Assigned Employee shall be included in the Staffing Plan.

- (a) For each Assigned Employee, the Commissioner shall determine and approve in writing the Direct Salary Rate per hour to be paid for such employee. An Assigned Employee's Direct Salary Rate per hour shall be whichever of the following is **LESS**: (1) Actual Annual Direct Salary Rate per hour for the Assigned Employee, computed as described below, or (2) Maximum Allowable Direct Salary Rate per hour for the Assigned Employee's title, as set forth in Exhibit B.
- (b) Actual Direct Salary Rate Per Hour
 - (1) Key Personnel: Actual Direct Salary Rates per hour for employees identified as Key Personnel were submitted by the Engineer as its Fee Proposal for the Contract and are set forth in Exhibit B. If the Engineer increases the actual annual direct salary of an employee identified as Key Personnel, the employee's Actual Direct Salary Rates per hour set forth in Exhibit B shall be subject to an increase as of the commencement date (i.e., the date on which the Contract is registered by the Comptroller), subject to the limitations set forth below.
 - (i) Any increase in an employee's Actual Direct Salary Rate per hour set forth in Exhibit B shall be based on whatever increase may have occurred in the Employment Cost Index for Professional, Specialty and Technical Occupations, published by the U.S. Department of Labor, Bureau of Labor Statistics (the "Index") for the period of time commencing as of the date on which the Engineer submitted its Fee Proposal for the Contract and ending as of the commencement date (i.e., the date on which the Contract is registered by the Comptroller).
 - (ii) An employee's Actual Direct Salary Rate per hour set forth in Exhibit B shall not be increased unless the total amount of such increase is actually paid in full by the Engineer to the Assigned Employee, as determined by the Commissioner. The Engineer shall submit its payroll register to verify the amount actually paid by the Engineer to the Assigned Employee.
 - (2) Non-Key Personnel: For each Assigned Employee, the Engineer shall submit such employee's actual annual direct salary, as well as such salary computed on an hourly basis, as described below. The Engineer shall also submit any records or documentation requested by the Commissioner to verify the Assigned Employee's actual annual direct salary, including without limitation, the Engineer's payroll register for the past twelve (12) months.
 - (i) An Assigned Employee's actual annual direct salary shall be the salary amount directly payable to such employee on an annual basis and shall **NOT INCLUDE** any amount for the following costs or payments: (1) any payments for services performed during other than regular business hours (i.e., premium for Night Differential and/or Overtime); (2) any employer payments mandated by law, including without limitation, social security and Medicare taxes, insurance (Worker's Compensation, Employers Liability, Unemployment); (3) any employer contributions to retirement plans, including without limitation pension and/or deferred compensation plans, and (4) any costs for any other fringe and/or supplemental benefits.
 - (ii) To compute an Assigned Employee's actual annual direct salary on an hourly basis, the Assigned Employee's actual annual direct salary, as defined above, shall be divided by 2080.
- (c) Once determined and approved by the Commissioner as set forth above, the Assigned Employee's Direct Salary Rate per hour shall not be eligible for any increase whatsoever, except for the increase described in Article 7.2.6 below. Any such increase must be approved in writing by the Commissioner.
- (d) The Direct Salary Rate per hour for an Assigned Employee, determined and approved by the Commissioner, may be adjusted in accordance with Article 7.2.7 below, in the event the Engineer receives written authorization from the Commissioner in the particular instance to have the Assigned

Employee perform services during other than regular business hours.

7.2.6 Increases in Direct Salary Rates: If the Engineer increases the actual annual direct salary of an Assigned Employee, the employee's approved Direct Salary Rate per hour, as indicated in the Staffing Plan, shall be subject to an increase, subject to the limitations set forth below. An employee's approved Direct Salary Rate per hour shall be eligible for an increase at the following times: one (1) year after the commencement date (i.e., the date on which the Contract is registered by the Comptroller), and thereafter, for the remainder of the base term of the Contract, on a yearly basis, on the anniversary of commencement date.

- (a) Any increase in an employee's approved Direct Salary Rate per hour shall be based on whatever increase may have occurred in the Index (described above) for the **PRIOR YEAR ONLY**. If for the prior year, the Index showed an increase, the Direct Salary Rate shall be increased. If, for the prior year, the Index declined or showed no increase, the Direct Salary Rate shall remain unchanged. Any increase in an employee's approved Direct Salary Rate shall be applied on a prospective basis only.
- (b) Throughout the base term of the Contract, as set forth in Exhibit A, increase(s) to an Assigned Employee's Direct Salary Rate per hour shall only be permitted to the extent such increase(s) do not result in a Direct Salary Rate per hour that exceeds the Maximum Allowable Direct Salary Rate per hour for the employee's title, as set forth in Exhibit B. Increase(s) to an Assigned Employee's Direct Salary Rate per hour shall not be permitted if such increase(s) would result in a Direct Salary Rate per hour that exceeds the Maximum Allowable Direct Salary Rate per hour for the employee's title, as set forth in Exhibit B.
- (c) The Maximum Allowable Direct Salary Rates per hour set forth in Exhibit B shall apply to the base term of the Contract. If the base term of the Contract is extended, the City may issue a change order to the Engineer revising the Maximum Allowable Direct Salary Rates per hour. If no such change order is issued, the Maximum Allowable Direct Salary Rates per hour applicable to the base term shall remain in effect throughout the extension of the base term.
- (d) An employee's Direct Salary Rate per hour shall not be increased unless the total amount of such increase is actually paid in full by the Engineer to the Assigned Employee, as determined by the Commissioner. The Engineer shall submit its payroll register to verify the amount actually paid by the Engineer to the Assigned Employee.

7.2.7 Night Differential / Overtime: The Commissioner may authorize the Engineer in advance in writing to have an Assigned Employee perform services during other than regular business hours. In the event of such authorization, the Engineer shall be entitled to payment of a premium or increase in the Assigned Employee's Direct Salary Rate per hour for such services, subject to the limitations set forth below:

- (a) The Engineer's policy is subject to approval by the Commissioner in accordance with Article 5.
- (b) The premium for Night Differential shall not exceed ten (10%) percent of the Assigned Employee's Direct Salary Rate per hour, and the premium for Overtime shall not exceed fifty (50%) percent of such Direct Salary Rate.
- (c) The Engineer shall not be entitled to payment of any premium unless the total amount of such premium is actually paid in full by the Engineer to the Assigned Employee, as evidenced by the Engineer's payroll register.
- (d) The premium payment shall not be subject to any multiplier whatsoever.

7.2.8 Representations: With respect to staffing expenses, the Engineer covenants and represents the following: (1) it shall incur only those staffing expenses which are necessary and reasonable, based on standard practice in the construction industry, to complete the Project, and (2) it shall ensure that staffing expenses do not exceed the Allowance for Staffing Expenses. Any deviations or anticipated deviations from the Allowance for Staffing Expenses, even those deviations which do not involve an increase in such allowance, will not be paid, unless approved in advance in writing by the Commissioner.

7.2.9 Deduction for Delay: If the Project is not completed within the time frame set forth in Exhibit A and the Commissioner, in accordance with Article 4, determines that Engineer, as a result of its actions or inactions, is responsible

for the delay, or any portion thereof, the Commissioner shall deduct, from any amount due and owing to the Engineer under this Contract, the total amount of staffing expenses paid to the Engineer for the period of the delay, or any portion thereof, for which the Commissioner determines the Engineer is responsible. For the purpose of this deduction, staffing expenses shall mean the Direct Salary Rates for all Assigned Employees times the Multiplier for Overhead and Profit. If the amount due and owing to the Engineer under this Contract is less than the total amount of the deduction described herein, the Engineer shall be liable for and agrees to pay the difference upon demand by the Commissioner.

7.3 Multiplier: The Multiplier for Overhead and Profit set forth in Exhibit A shall include the items set forth below:

7.3.1 Profit

7.3.2 Overhead: Overhead shall include all costs and expenses incurred by the Engineer in connection with providing services for the Project, including expenses for management and administration. The Engineer agrees to make no claim for overhead expenses in excess of the Multiplier provided for herein. Overhead shall include, without limitation, the items set forth below:

- (a) All expenses for compensation paid to personnel of the Engineer (other than personnel identified in the approved Staffing Plan, except for the Project Executive). Such other personnel of the Engineer shall include without limitation all officers, principals, employees and personnel of the Engineer, serving in whatever capacity, including any Project Executive(s). Compensation for such other personnel is deemed included in the Multiplier. Compensation shall include without limitation: (1) wages and/or salaries; (2) all payments mandated by law, including without limitation, social security and medicare taxes, insurance (Worker's Compensation, Employers Liability, Unemployment); (3) employer contributions, if any, to retirement plans, including without limitation pension and/or deferred compensation plans; (4) all payments for compensated absence time, including without limitation vacation time, sick time, personal time and holidays, and (5) costs for any and all other fringe and/or supplemental benefits.
- (b) All expenses for compensation paid to engineering personnel identified in the approved Staffing Plan that are in excess of compensation for such personnel payable hereunder. Compensation for such personnel shall include without limitation the items listed in item (a) above.
- (c) All expenses in connection with the performance of services, including without limitation: (1) expenses for non-reimbursable services, as set forth in Article 6, (2) meals, and (3) lodging.
- (d) All expenses for home office general facilities, including, but not limited to, rental cost or depreciation factor, light, heat and water, telephone charges, including all charges for calls to the job site and DDC (except for long distance calls to other locations as specifically required by the Commissioner), sales, accounting fees and bookkeeping expenses, electronic data processing services, including programming and rental equipment, dues and subscriptions, stationery, printing, copying, postage, and any other office expenses or overhead costs, except as otherwise expressly provided in this Agreement.
- (e) All expenses for applicable taxes of any kind whatsoever, including without limitation, federal, state and local income tax and any franchise or other business taxes.
- (f) All expenses for insurance coverage determined by the Engineer to be necessary for the performance of all required services hereunder, including without limitation: (1) all insurance required by this Contract; (2) all insurance required by law, and (3) all other insurance maintained by the Engineer, including without limitation, burglary and theft, general fidelity and payroll insurance.
- (g) All expenses in connection with losses due to theft or robbery sustained by Engineer.
- (h) All expenses in connection with fixed capital or moneys borrowed, including interest.
- (i) All expenses incurred by the Engineer with respect to routine legal services for the firm.
- (j) All management, administrative or overhead expenses of any kind whatsoever, including such expenses in connection with providing Reimbursable Services.

7.4 Allowance for Reimbursable Services

7.4.1 Allowance: An allowance in the amount set forth in Exhibit A is established for reimbursement of expenses actually incurred by the Engineer in providing Reimbursable Services. Reimbursable Services are defined in Article 6.5. No Reimbursable Services shall be provided by the Engineer, or reimbursed from this allowance, unless expressly authorized in a written directive from the Commissioner. For Reimbursable Services in excess of \$150, such written authorization must be provided in advance of the expenditure.

7.4.2 Procurement: With respect to Reimbursable Services, the Engineer shall utilize the method of

procurement directed by the Commissioner. If so directed by the Commissioner, the Engineer shall conduct a competitive bid and/or proposal process for the specified Reimbursable Service. In general, such competitive process will be required if the cost of the specified Reimbursable Service exceeds \$5,000.

7.4.3 Form of Payment: With respect to Reimbursable Services, the Engineer shall utilize the form of payment directed by the Commissioner. Payment for Reimbursable Services shall be in accordance with one of the following methods: (a) lump sum; (b) unit price, or (c) actual cost, except as otherwise provided in Article 7.4.4 below.

7.4.4 Long Distance Travel: Payment for long distance travel, as set forth in Article 6, shall be in accordance with the normal travel allowances of the City of New York for its own employees as provided in Comptroller's "Directive #6, Travel, Meals, Lodging and Miscellaneous Agency Expenses."

7.4.5 The Engineer shall not be entitled to any mark-up with respect to Reimbursable Services.

7.4.6 In the event the Commissioner directs the Engineer to provide Reimbursable Services and such Reimbursable Services require the Engineer, through its personnel, to provide technical or professional services, the Engineer shall be reimbursed for staffing expenses for its personnel through the Allowance for Staffing Expenses.

7.4.7 In the event the Engineer is directed, as a Reimbursable Service, to purchase any items and/or equipment, such items and/or equipment shall, unless otherwise directed by the Commissioner, be the sole property of the City upon delivery to the designated location. The Engineer shall prepare and maintain an accurate inventory of all items and/or equipment which it is directed to purchase pursuant to the Allowance for Reimbursable Services. Such inventory shall be provided to the City upon request. Upon completion of the required work, as directed by the Commissioner, the Engineer shall turn such items and/or equipment over to the City.

7.4.8 Payment: Payment for Reimbursable Services shall be as set forth below.

- (a) If payment is on a lump sum basis, payment shall be based upon the percentage of completion.
- (b) If payment is on a unit price basis, payment shall be based upon the number of completed units.
- (c) If payment is based on actual cost, payment shall be the actual and reasonable cost, as indicated by receipted bills or any other data required by the Commissioner.

7.5 Requisitions for Payment

7.5.1 Requisitions for payment may be submitted as the work progresses, but not more often than once a month. Requisitions shall be in the authorized form and shall set forth the services performed by the Engineer and the total amount of partial payment requested. The total amount of partial payment requested shall be broken down into the following categories: (1) Staffing Expenses, and (2) Reimbursable Services. The Engineer shall submit one original and three (3) copies of each requisition for payment. Requisitions for payment shall be accompanied by the following:

- (a) Project Progress Report: The Engineer shall submit a statement indicating the percentage of completion of all required work for the Project.
- (b) Staffing Expenses: For any period for which the Engineer is requesting payment for staffing expenses for an Assigned Employee, the Engineer shall submit the documentation set forth below:
 - (1) Assigned Employee's name and title;
 - (2) Commissioner approval of the Assigned Employee, either approved Staffing Plan or documentation approving the Assigned Employee as a replacement.
 - (3) Assigned Employee's Direct Salary Rate per hour determined and approved by the Commissioner and included in the Staffing Plan.
 - (4) Multiplier for Overhead and Profit set forth in Exhibit A.
 - (5) Number of hours worked each day by the Assigned Employee for the week(s) in question. The number of hours per day shall be broken down to indicate the number of regular business hours and the number of non-regular business hours. The Multiplier shall not apply to any increase in the Assigned Employee's Direct Salary Rate per hour for authorized services performed during other than regular business hours.

- (6) Detailed time sheets completed by the Assigned Employee for the week(s) in question. Such detailed time sheets shall reflect all hours of service by the Assigned Employee, including without limitation: (1) actual hours during the employee performed services for this Project; (2) actual hours during which the employee performed services for other projects, and (3) non-billable hours, as defined above.
 - (7) Copy of the Engineer's payroll register for the week(s) in question reflecting the amount actually paid by the Engineer to the Assigned Employee for that week.
 - (8) Applicable only if services were performed during other than regular business hours: (i) copy of authorization by Commissioner for such services, and (ii) copy of Commissioner's approval of the Engineer's policy regarding payment of a premium for services performed during other than regular business hours.
- (c) Reimbursable Services: For any period for which the Engineer is requesting payment for Reimbursable Services, the Engineer shall submit the documentation set forth below:
- (1) Description of the Reimbursable Service the Engineer was directed to provide.
 - (2) If payment is on a lump sum basis, a report on the progress of the work, indicating the percentage of completion of all required services.
 - (3) If payment is on a unit price basis, a report indicating the number of completed units.
 - (4) If payment is based on actual cost, receipted bills or any other data required by the Commissioner.

7.5.3 All payments hereunder are contingent upon the Engineer's satisfactory performance of the required services. The Engineer shall not be entitled to any compensation for services or reimbursement for costs or expenses with respect to any such obligations not properly performed by it hereunder. The Commissioner is authorized to make deductions for any services performed hereunder which he/she determines to be unsatisfactory.

7.5.4 Following the receipt of a satisfactory requisition for payment, the Commissioner will approve a voucher in the amount certified for partial payment, less any and all deductions authorized to be made by the Commissioner under any terms of this Agreement or by law. This voucher will thereupon be filed with the Comptroller, with a copy thereof available to the Engineer if requested.

7.6 Monies Withheld: When the Commissioner shall have reasonable grounds for believing that: (1) the Engineer will be unable to perform this Contract fully and satisfactorily within the time fixed for performance; or (2) a meritorious claim exists or will exist against the Engineer or the City arising out of the negligence of the Engineer or the Engineer's breach of any provision of this contract; then the Commissioner or the Comptroller may withhold payment of any amount otherwise due and payable to the Engineer hereunder. Any amount so withheld may be retained by the City for such period as it may deem advisable to protect the City against any loss and may, after written notice to the Engineer, be applied in satisfaction of any claim herein described. This provision is intended solely for the benefit of the City, and no person shall have any right against the Commissioner or claim against the City by reason of the Commissioner's failure or refusal to withhold monies. No interest shall be payable by the City on any amounts withheld under this provision. This provision is not intended to limit or in any way prejudice any other right of the City.

ARTICLE 8 Services Furnished by the City

8.1 The City, through the personnel of the Department of Design and Construction, or by retaining the services of an architect or consultant, or through provisions in the construction contract(s), shall furnish for the use of the Engineer pile driving inspection, topographic surveys, inspection of concrete materials at mix plant and at job-site and such other services as the Commissioner, in his sole discretion, deems appropriate.

8.2 At the request of the Engineer, the City shall furnish, at its own expense, off-site inspections and tests of steel, cement asphalt aggregates, concrete sewer and drainage pipe, and such other materials.

8.3 The Engineer shall be entitled to the use and occupancy of the contractor's Field Office with associated services as provided for in the standard DDC specifications during the progress of the construction contract(s) and to the completion and acceptance of the work by the Commissioner.

8.4 The Commissioner may direct the Engineer to provide any of the above described services as Reimbursable Services in accordance with Article 6 hereof.

ARTICLE 9 Participation by Minority-Owned and Women-Owned Business Enterprises in City Procurement

NOTICE TO ALL PROSPECTIVE CONTRACTORS

ARTICLE I. M/WBE PROGRAM

Local Law No. 129 of 2005 added Section 6-129 to the Administrative Code of the City of New York. The local law creates a program for participation by minority-owned and women-owned business enterprises (MBEs and WBEs) in City procurement. As stated in the Section 6-129, the intent of the program is to address the impact of discrimination on the City's procurement process, and to promote the public interest in avoiding fraud and favoritism in the procurement process, increasing competition for City business, and lowering contract costs. The contract provisions contained herein are made pursuant to Local Law 129, and the rules of the Department of Small Business Services ("DSBS") promulgated thereunder.

If this Contract is subject to the Minority-Owned and Women-Owned Business Enterprise ("M/WBE") program created by Local Law 129, the specific requirements of M/WBE participation for this Contract are set forth in the Subcontractor Utilization Plan, and are detailed below.

The Contractor must comply with all applicable M/WBE requirements for this Contract. Article I, Part A, below, sets forth provisions related to the participation goals for construction and professional services contracts. Article I, Part B, below, sets forth miscellaneous provisions related to the M/WBE program.

PART A: PARTICIPATION GOALS FOR CONSTRUCTION AND PROFESSIONAL SERVICES CONTRACTS

1. The Target Subcontracting Percentage applicable to this Contract is set forth in the Subcontractor Utilization Plan (Part I) [see First Page, line (1)]. (The Subcontractor Utilization Plan is included in the Request for Proposals.)

The "Target Subcontracting Percentage" is the percentage of the total Contract which Agency anticipates that the prime contractor for this Contract would in the normal course of business award to one or more subcontractors for amounts under \$1 million for construction and professional services.

A prospective contractor may seek a full or partial pre-award waiver of the Target Subcontracting Percentage in accordance with Local Law 129 and Part A, Section 10 below. To apply for the a full or partial waiver of the Target Subcontracting Percentage, a prospective contractor must complete the Subcontractor Utilization Plan (Part III), and must submit such request no later than seven (7) days prior to the date and time the bids or proposals are due, in writing to the Agency by e-mail at poped@ddc.nyc.gov or via facsimile at (718) 391-1885. Bidders/proposers who have submitted requests will receive a response by no later than two (2) calendar days prior to the date bids or proposals are due, provided, however, that if that date would fall on a weekend or holiday, a response will be provided by close-of-business on the business day before such weekend or holiday date.

2. The Subcontractor Participation Goals established for this Contract are set forth in the Subcontractor Utilization Plan (Part I) [see First Page, line (2) and/or line (3)]. (The Subcontractor Utilization Plan is included in the RFP.)

The Subcontractor Participation Goals represent a percentage of the total dollar value of all construction and/or professional services subcontracts under this Agreement for amounts under \$1 million.

3. If Subcontractor Participation Goals have been established for this Contract, Contractor agrees or shall agree as a material term of the Agreement that, with respect to the total amount of the Agreement to be awarded to one or more subcontractors pursuant to subcontracts for amounts under \$1 million, Contractor shall be subject to the Subcontractor Participation Goals, unless the goals are modified by Agency in accordance with Local Law 129 and Part A, Section 11 below.

4. If Subcontractor Participation Goals have been established for this Contract, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Subcontractor Utilization Plan (Part II) (see Second

and Third Pages) indicating: (a) the percentage of work it intends to subcontract; (b) the percentage of work it intends to award to subcontractors for amounts under \$1 million; (c) in cases where the prospective contractor intends to award subcontracts for amounts under \$1 million, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs; and (d) the general time frames in which such work by MBEs and/or WBEs is scheduled to occur. In the event that this Subcontractor Utilization Plan indicates that the bidder or proposer, as applicable, does not intend to award the Target Subcontracting Percentage, the bid or proposal, as applicable, shall be deemed non-responsive, unless Agency has granted the bidder or proposer, as applicable, a pre-award waiver of the Target Subcontracting Percentage in accordance with Local Law 129 and Part A, Section 10 below.

THE BIDDER/PROPOSER MUST COMPLETE THE SUBCONTRACTOR UTILIZATION PLAN (PART II) INCLUDED IN THE RFP. SUBCONTRACTOR UTILIZATION PLANS WHICH DO NOT INCLUDE THE REQUIRED AFFIRMATIONS WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE TARGET SUBCONTRACTING PERCENTAGE IS GRANTED (SUBCONTRACTOR UTILIZATION PLAN, PART III). IN THE EVENT THAT THE CITY DETERMINES THAT VENDOR HAS SUBMITTED A SUBCONTRACTOR UTILIZATION PLAN WHERE THE REQUIRED AFFIRMATIONS ARE COMPLETED BUT OTHER ASPECTS OF THE PLAN ARE NOT COMPLETE, OR CONTAIN A COPY OR COMPUTATION ERROR THAT IS AT ODDS WITH THE AFFIRMATION, THE VENDOR WILL BE NOTIFIED BY THE AGENCY AND WILL BE GIVEN FOUR (4) CALENDAR DAYS FROM RECEIPT OF NOTIFICATION TO CURE THE SPECIFIED DEFICIENCIES AND RETURN A COMPLETED PLAN TO THE AGENCY. FAILURE TO DO SO WILL RESULT IN A DETERMINATION THAT THE BID/PROPOSAL IS NON-RESPONSIVE. RECEIPT OF NOTIFICATION IS DEFINED AS THE DATE NOTICE IS EMAILED OR FAXED (IF THE VENDOR HAS PROVIDED AN EMAIL ADDRESS OR FAX NUMBER), OR NO LATER THAN FIVE (5) DAYS FROM THE DATE OF MAILING OR UPON DELIVERY, IF DELIVERED.

5. Where a Subcontractor Utilization Plan has been submitted, the Contractor shall, within 30 days of issuance by Agency of a notice to proceed, submit a list of proposed persons or entities to which it intends to award subcontracts within the subsequent 12 months. In the case of multi-year contracts, such list shall also be submitted every year thereafter. In the event that the Contractor's selection of a subcontractor is disapproved, the Contractor shall have a reasonable time to propose alternate subcontractors.

6. M/WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the M/WBE participation goals. Such certification must occur prior to the firms' commencement of work as subcontractors. A list of M/WBE firms may be obtained from the DSBS website at www.nyc.gov/getcertified, by emailing DSBS at MWBE@sbs.nyc.gov, by calling the DSBS certification hotline at (212) 513-6311, or by visiting or writing DSBS at 110 William St., New York, New York, 10038, 7th floor. Eligible firms that have not yet been certified may contact DSBS (as indicated above) in order to seek certification.

7. Where a Subcontractor Utilization Plan has been submitted, the Contractor shall, with each voucher for payment, and/or periodically as Agency may require, submit statements, certified under penalty of perjury, which shall include, but not be limited to, the total amount paid to subcontractors (including subcontractors that are not MBEs or WBEs); the names, addresses and contact numbers of each MBE or WBE hired as a subcontractor pursuant to such plan as well as the dates and amounts paid to each MBE or WBE. The Contractor shall also submit, along with its voucher for final payment, the total amount paid to subcontractors (including subcontractors that are not MBEs or WBEs); and a final list, certified under penalty of perjury, which shall include the name, address and contact information of each subcontractor that is an MBE or WBE hired pursuant to such plan, the work performed by, and the dates and amounts paid to each.

8. If payments made to, or work performed by, MBEs or WBEs are less than the amount specified in the Contractor's Subcontractor Utilization Plan, Agency shall take appropriate action, in accordance with Local Law 129 and Article II below, unless the Contractor has obtained a modification of its Subcontractor Utilization Plan in accordance with Local Law 129 and Part A, Section 11 below.

9. Where a Subcontractor Utilization Plan has been submitted, and the Contractor requests a change order the value of which exceeds 10 percent of the Agreement, Agency shall establish participation goals for the work to be performed pursuant to the change order.

10. Pre-award waiver of Target Subcontracting Percentage. Agency may grant a full or partial waiver of the Target Subcontracting Percentage to a bidder or proposer, as applicable, who demonstrates—before submission of the bid or proposal—that it has legitimate business reasons for proposing the level of subcontracting in its Subcontractor Utilization Plan. In making its determination, Agency shall consider factors that shall include, but not be limited to, whether the bidder or proposer, as applicable, has the capacity and the bona fide intention to perform the Contract without any subcontracting, or to perform the Contract without awarding the amount of subcontracts for under one million dollars represented by the Target Subcontracting Percentage. In making such determination, Agency may consider whether the Subcontractor

Utilization Plan is consistent with past subcontracting practices of the bidder or proposer, as applicable, and whether the bidder or proposer, as applicable, has made good faith efforts to identify portions of the Contract that it intends to subcontract.

11. Modification of Subcontractor Utilization Plan. A Contractor may request a modification of its Subcontractor Utilization Plan (Subcontractor Participation Goals) after award of this Contract. The Agency may grant such request if it determines that the Contractor has established, with appropriate documentary and other evidence, that it made reasonable, good faith efforts to meet the Subcontractor Participation Goals. In making such determination, Agency shall consider evidence of the following efforts, as applicable, along with any other relevant factors:

- (a) The Contractor advertised opportunities to participate in the contract, where appropriate, in general circulation media, trade and professional association publications and small business media, and publications of minority and women's business organizations;
- (b) The Contractor provided notice of specific opportunities to participate in the contract, in a timely manner, to minority and women's business organizations;
- (c) The Contractor sent written notices, by certified mail or facsimile, in a timely manner, to advise MBEs and WBE's that their interest in the contract was solicited;
- (d) The Contractor made efforts to identify portions of the work that could be substituted for portions originally designated for participation by MBEs and/or WBEs in the contractor utilization plan, and for which the Contractor claims an inability to retain MBE's or WBE's;
- (e) The Contractor held meetings with MBEs and/or WBEs prior to the date their bids or proposals were due, for the purpose of explaining in detail the scope and requirements of the work for which their bids or proposals were solicited;
- (f) The Contractor made efforts to negotiate with MBEs and/or WBEs as relevant to perform specific subcontracts;
- (g) Timely written requests for assistance made by the Contractor to Agency's M/WBE liaison officer and to DSBS;
- (h) Description of how recommendations made by DSBS and Agency were acted upon and an explanation of why action upon such recommendations did not lead to the desired level of participation of MBEs and/or WBE's.

Agency's M/WBE officer shall provide written notice to the Contractor of the determination.

12. If Subcontractor Participation Goals have been established for this Contract, Agency shall evaluate and assess the Contractor's performance in meeting those goals, and such evaluation and assessment shall become part of the Contractor's overall contract performance evaluation.

PART B: MISCELLANEOUS

1. The Contractor shall take notice that, if this solicitation requires the establishment of a Subcontractor Utilization Plan, the resulting contract may be audited by DSBS to determine compliance with Section 6-129. See 6-129(e)(10). Furthermore, such resulting contract may also be examined by the City's Comptroller to assess compliance with the Subcontractor Utilization Plan.

2. Pursuant to DSBS rules, construction contracts that include a requirement for a Subcontractor Utilization Plan shall not be subject to the law governing Locally Based Enterprises set forth in Administrative Code Section 6-108.1.

3. DSBS is available to assist contractors and potential contractors in determining the availability of MBEs and WBEs to participate as subcontractors, and in identifying opportunities that are appropriate for participation by MBEs and WBEs in contracts.

4. Prospective contractors are encouraged to enter into joint ventures with MBEs and WBEs.

5. By submitting a bid or proposal the Contractor hereby acknowledges its understanding of the M/WBE requirements set forth herein and the pertinent provisions of Local Law 129 of 2005, and any rules promulgated thereunder, and if awarded this Contract, the Contractor hereby agrees to comply with the M/WBE requirements of this Contract and pertinent provisions of Local Law 129 of 2005, and any rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract. The Contractor hereby agrees to make all reasonable, good faith efforts to solicit and obtain the participation of M/WBE's to meet the required Subcontractor Participation Goals.

ARTICLE II.

ENFORCEMENT

1. If Agency determines that a bidder or proposer, as applicable, has, in relation to this procurement, violated Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, Agency may disqualify such bidder or proposer, as applicable, from competing for this Contract and the Agency may revoke such bidder's or proposer's prequalification status, if applicable.

2. Whenever Agency believes that the Contractor or a subcontractor is not in compliance with Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements Section 6-129, including, but not limited to any Subcontractor Utilization Plan, Agency shall send a written notice to the Contractor describing the alleged noncompliance and offering an opportunity to be heard. Agency shall then conduct an investigation to determine whether such Contractor or subcontractor is in compliance.

3. In the event that the Contractor has been found to have violated Section 6-129, the DSBS rules promulgated pursuant to Section 6-129, or any provision of this Contract that implements this Section 6-129, including, but not limited any Subcontractor Utilization Plan, Agency may determine that one of the following actions should be taken:

- (a) entering into an agreement with the Contractor allowing the Contractor to cure the violation;
- (b) revoking the contractor's pre-qualification to bid or make proposals for future contracts;
- (c) making a finding that the contractor is in default of the contract;
- (d) terminating the contract;
- (e) declaring the contractor to be in breach of contract;
- (f) withholding payment or reimbursement;
- (g) determining not to renew the contract;
- (h) assessing actual and consequential damages;
- (i) assess liquidated damages or reduction of fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the program established by Section 6-129, or in meeting the purposes of the contract, the costs of meeting utilization goals through additional procurements, the administrative costs of investigation and enforcement, or other factors set forth in the contract;
- (j) exercise rights under the contract to procure goods, services or construction from another contractor and charge the cost of such contract to the contractor that has been found to be in noncompliance; or
- (k) take any other appropriate remedy.

4. Whenever Agency has reason to believe that an MBE or WBE is not qualified for certification, or is participating in a contract in a manner that does not serve a commercially useful function (as defined in Section 6-129), or has violated any provision of Section 6-129, Agency shall notify the commissioner of DSBS who shall determine whether the certification of such business enterprise should be revoked.

5. Statements made in any instrument submitted to Agency pursuant to Section 6-129 shall be submitted under penalty of perjury and any false or misleading statement or omission shall be grounds for the application of any applicable criminal and/or civil penalties for perjury. The making of a false or fraudulent statement by an MBE or WBE in any instrument submitted pursuant to Section 6-129 shall, in addition, be grounds for revocation of its certification.

6. The Contractor's record in implementing its Subcontractor Utilization Plan shall be a factor in the evaluation of its performance. Whenever a contracting agency determines that a contractor's compliance with a Subcontractor Utilization Plan has been unsatisfactory, the agency shall, after consultation with the city chief procurement officer, file an advice of caution form for inclusion in VENDEX as caution data.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in triplicate, the day and year first above written, one copy to remain with the Commissioner, one copy to be filed with the Comptroller of the City of New York and one copy to be delivered to the Engineer.

THE CITY OF NEW YORK

By: _____
Deputy Commissioner

ENGINEER:

By: _____

Print Name: _____

Title: _____

EIN: _____

Approved as to Form and Certified
as to Legal Authority

Acting Corporation Counsel

Date: _____

ACKNOWLEDGMENT BY CORPORATION

State of _____ County of _____ ss:

On this ____ day of _____, _____ before me personally came _____, who being by me duly sworn, did depose and say that he/she resides in the City of _____ that he is the _____ of _____, the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation; and that he signed his name thereto by like order.

Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT BY COMMISSIONER

State of _____ County of _____ ss:

On this ____ day of _____, _____ before me personally came _____, to me known and known to me to be the Deputy Commissioner of the Department of Design and Construction of The City of New York, the person described as such in and who as such executed the foregoing instrument and he acknowledged to me that he executed the same as Deputy Commissioner for the purposes therein mentioned.

Notary Public or Commissioner of Deeds

EXHIBIT A

CONTRACT INFORMATION

- Project: MED-609, Resident Engineering Inspection Services for the Construction of Trunk Water Mains at West 60th Street from West End Avenue to Columbus Avenue, Borough of Manhattan

- Subconsultant(s): _____

- **Base Term of the Contract:** This Contract shall commence as of the date of registration by the Comptroller and shall remain in effect until Final Acceptance of all required construction work for the Project and completion of all required services hereunder, including Post Construction Services, as set forth in Article 6.4. The anticipated time frame for completion of all required services is set forth below. All time frames below are in consecutive calendar days (“CCDs”).
 - Anticipated time frame for Completion of all Required Services: 1643 CCDs

 - Anticipated time frame for Pre-Construction Services: 30 CCDs
 - Anticipated time frame for Construction Services: 1460 CCDs
 - Anticipated time frame for Post Construction Services: 153 CCDs

- **Insurance Requirements:** General Provisions governing the Contract, including insurance coverage the Engineer is required to provide, are set forth in Appendix A. Appendix A is included as Exhibit H to the Contract.

- Multiplier for Overhead and Profit: _____

- Allowance for Staffing Expenses: Not to Exceed \$ _____

- Allowance for Reimbursable Services: Not to Exceed \$200,000

- Total Amount of Contract: Not to Exceed \$ _____

EXHIBIT B

PERSONNEL FOR THE PROJECT

Key Personnel: The Engineer specifically agrees to assign to the Project for its entire duration, the individuals identified below as Key Personnel. These individuals were identified by the Engineer in its Proposal for the Contract. The Actual Direct Salary Rate per Hour for each individual was submitted by the Engineer in its Fee Proposal for the Contract.

Title	Name	Actual Direct Salary Rate per Hour
Project Executive:	_____	Not Applicable
Resident Engineer:	_____	_____
Office Engineer:	_____	_____
Senior Inspector:	_____	_____

Staffing Requirements: Staffing requirements for the Project are set forth below, including: (1) required titles of personnel for the Project, (2) qualification requirements per title, (3) total estimated hours per title, and (4) Maximum Allowable Direct Salary Rate per hour per title. Additional qualification requirements for Key Personnel are set forth in Exhibit C.

Personnel: Titles and Qualification Requirements	Number of Staff	Maximum Allowable Direct Salary Rate Per Hour		Total Estimated Hours Per Title	Total Estimated Amount per Title
Resident Engineer, A-V:	1	_____ x		9,504	= _____
Office Engineer, A-III / N-IV:	1	_____ x		9,504	= _____
Senior Inspector, A-II / N-III:	1	_____ x		8,448	= _____
Inspector, A-I / N-II:	1	_____ x		8,448	= _____
Inspector, A-I / N-II:	1	_____ x		8,448	= _____
Draftsman, N-I:	1	_____ x		880	= _____
Community Liaison:	1	_____ x		8,624	= _____
Total Estimated Amount for All Titles: (Addition of Total Estimated Amount per Title for all titles)					_____
Total with Multiplier set forth in Exhibit A:					_____

EXHIBIT C

QUALIFICATION REQUIREMENTS

RESIDENT ENGINEER:

- Qualified for ASCE Grade V
- Baccalaureate degree in engineering from an accredited college
- Valid NYS P.E. License
- Five years of experience in construction inspection or management on infrastructure construction projects (highway/sewer/water)
- Working knowledge of the following: (1) DDC policies and procedures, (2) DEP specifications (for Sewer and Water projects), and (3) DOT specifications (for Highway projects)
- Excellent written, communication, organization and time management skills
- Proficiency in Microsoft Word and Excel
- Valid driver's license
- Certified for OSHA 10-hour safety and confined space training

ASSISTANT RESIDENT ENGINEER:

- Qualified for ASCE Grade III
- Baccalaureate degree in engineering from an accredited college
- Five years of experience in construction inspection or management on infrastructure construction projects (highway/sewer/water)
- Working knowledge of the following: (1) DDC policies and procedures, (2) DEP specifications (for Sewer and Water projects), and (3) DOT specifications (for Highway projects)
- Excellent written, communication, organization and time management skills
- Proficiency in Microsoft Word and Excel
- Valid driver's license
- Certified for OSHA 10-hour safety and confined space training

OFFICE ENGINEER:

- Qualified for ASCE Grade III, or NICET Grade IV
- Baccalaureate degree from an accredited college
- Five years of experience in construction inspection or management on infrastructure construction projects (highway/sewer/water)
- Working knowledge of the following: (1) DDC policies and procedures, (2) DEP specifications (for Sewer and Water projects), and (3) DOT specifications (for Highway projects)
- Working knowledge of DDC record keeping, payment, and change order procedures
- Proficiency in Microsoft Word, Excel, Project and PowerPoint
- Effective oral, written, organization, and time management skills
- Valid driver's license
- Certified for OSHA 10-hour safety and confined space training

SENIOR INSPECTOR:

- Qualified for ASCE Grade II, or NICET Grade III
- Baccalaureate degree from an accredited college or four years high school diploma or its educational equivalent and ten years of experience in construction inspection or management on infrastructure construction projects (highway/sewer/water)
- Three years of experience in construction inspection or management on infrastructure construction projects (highway/sewer/water)
- Working knowledge of the following: (1) DDC policies and procedures, (2) DEP specifications (for Sewer and Water projects), and (3) DOT specifications (for Highway projects)

- Working knowledge of DDC record keeping, payment, and change order procedures
- Effective oral, written, organization, and time management skills
- Valid driver's license
- Certified for OSHA 10-hour safety and confined space training

OTHER ENGINEERING PERSONNEL: Qualification requirements for other engineering personnel are set forth in Exhibit B.

NOTES:

1. **ASCE:** The applicable requirements for the title in question shall be the most current requirements promulgated by the American Society of Civil Engineers (ASCE), as of the date on which the Engineer submitted its Proposal for the Contract.
2. **NICET:** The applicable requirements for the title in question shall be the most current requirements promulgated by the National Institute For Certification In Engineering Technologies (NICET), as of the date on which the Engineer submitted its Proposal for the Contract.

EXHIBIT D

RECORD "AS-BUILT" DRAWINGS

(A) Record "As-Built" Drawings: The Engineer shall prepare and submit a complete set of record "as-built" drawings (hereinafter referred to as the "record drawings"). The record drawings shall accurately show all items and components of the work installed pursuant to the construction contract(s), including without limitation: (1) highways, including retaining walls and pedestrian bridges, (2) water mains, (3) seawalls, (4) sewers (newly constructed, replaced or rehabilitated) including catch basins, seepage basins and trench restorations, (5) new structures, (6) utilities, (7) underground facilities, and (8) construction that differs from that of the contract drawings. Such record drawings must be signed, stamped and sealed by a Professional Engineer, and shall be in accordance with the standards and requirements set forth in this Exhibit.

(B) Time Frame for Preparation and Submission: The Engineer shall complete and submit record drawings within 90 days of Substantial Completion of the construction contract(s). The Engineer is advised that all field survey work, as well as the gathering of information necessary to prepare the record drawings, must be done throughout the progress of the work.

(C) Payment: For the preparation of record drawings, the Engineer shall be entitled to payment of staffing expenses in accordance with the contract for personnel identified in the approved staffing plan; provided, however, payment of staffing expenses shall only be made for the initial submission and one (1) revision. If further revisions are required, the Engineer shall not be entitled to payment for such revisions. In the event the Commissioner directs the Engineer to provide additional copies of the record drawings, above and beyond the requirements set forth Paragraph (D)(1) below, the Engineer shall be reimbursed for costs and expenses in connection with the printing of such additional copies through the Allowance for Reimbursable Services.

(D) General Requirements: The general requirements set forth below apply to all record drawings for projects involving highways, sewers, water mains, retaining walls and seawalls.

- (1) The Engineer shall submit to DDC one complete set of record drawings on Mylar and a duplicate set on CD/DVD(s), which accurately show all items and components of work installed pursuant to the construction contract(s), i.e., all such work and components thereof shall be reflected on the complete set of record drawings. In addition, the Engineer shall prepare a complete set of duplicate original record drawings on Mylar for submission to other city agencies and/or utilities. Such duplicate original record drawings shall bear the original signature, certification statements, stamp and seal of a Professional Engineer, as well as the date.
- (2) The record drawing shall be in digital format and in original Mylar, in a format to be approved by the Commissioner prior to preparation. DDC will provide sample formats to the Engineer.
- (3) All record drawings must be prepared by using the latest version of CADD software (AutoCAD) by following DDC CADD standards, which will be provided to the contractor/consultant upon request. The contractor/consultant must scan all sheets of the final approved record drawings (with all signatures) and save the cleaned images on CD/DVD. The consultant/contractor shall follow all the technical specifications and requirements for scanned images including cleaning.
- (4) Scanning Guidelines
 - (a) Black & White Images: The image should be saved in a TIFF Group 4- format. The minimum and preferred dpi requirement is 300dpi.
 - (b) Color Drawings Images: The image should also be saved in JPEG compression with no loss of information. The minimum and preferred dpi requirement is 200dpi. Multi-color drawings in which different colors represent different attributes should always be scanned in color.
 - (c) Grayscale Images: Scanning in grayscale should only be used when the scanning in 300dpi TIFF Group-format black & white does not produce a good image export. It is preferred that DDC receives all the images in 300dpi TIFF Group 4-format. When scanning in grayscale, the image should be saved in JPEG compression with no loss of information. The minimum and preferred dpi requirement is 200dpi. If images are scanned in grayscale, it is understood that some of the backgrounds of the scanned images will

remain dark due to the color of the media type; however, the scanning operator will try to lighten the gray background as much as possible without compromising the legibility of the drawing and without creating a washed out appearance.

- (d) Quality Control of Scanned Image: Images should be visually inspected using multiple zoom checks to assure the quality of the image. All images will undergo complete Quality Control Procedures and if necessary, perform the following post-process techniques to enhance the image display:

- Cropping to 1" of drawing border
- De-Skewing to under 1% horizontal
- Rotate image to proper orientation
- Filter/De-Speckle to remove excess noise (dirt) without affecting integrity of image
- Images will be delivered in positive polarity (if necessary)
- Images will be mirrored to right reading position (if necessary)

AutoCAD raster design software, or approved equal, is required to perform the editing of scanned record drawings. Raster Design is an add-on to AutoCAD application.

- (1) Further Notes: All scanned images must be in open flat form and can be viewed with virtually any imaging or viewing software.
- (2) Record Drawings: DDC will only accept images saved in a TIFF Group 4-format black & white, with 300 dpi minimum and preferred or color JPEG with 200 dpi minimum and preferred.
- (3) Record Drawings Name: All record drawings shall be scanned to a separate folder titled as As-built. All drawings shall be titled by drawing name. All pages of the record drawings shall be stamped "As-Built". All record drawings files shall be named according to the following naming convention:

Sample File name:
Project ID
Project Name
Drawing Number

SEQ001234_FlaggPI_001of100.dwg
(Project ID_Contract_Sheet###of###.dwg)

- (4) DVD/CD: Two-(2) copies of the original DVD/CD shall be required per project. The CD/DVD shall be labeled, using approved labeling software, with the Project ID, Contract Name, Project Registration #, Number of Drawings, As-Built Type (i.e., Sewer, Highway, etc.) Date Signed and the REI Consultant/Contractor Name.
- (5) The consultant/contractor shall provide a printed Document Index and the electronic file of the same, including an abstract of the document content for the central project file.

- (5) The title sheet for the record drawings shall include the items set forth below:

- (a) Original signature, stamp and seal of Professional Engineer, as well as the date.
The contract information set forth below:

CONTRACTOR:
BOROUGH DIRECTOR:
ENGINEER-IN-CHARGE:
RESIDENT ENGINEER:
ORDER TO WORK DATE:
SUBSTANTIAL COMPLETION DATE:
DRAWN BY:
CHECKED BY:

Legends, notes and box with revision information, i.e., number of sheets revised

- (6) The record drawings shall show all items that differ from what is shown on the contract drawings, i.e., field changes in location of utilities, changes in roadway alignments and/or sidewalk widths, etc.

(E) Requirements for Record Drawings for Highway Projects: In addition to the general requirements set forth in Paragraph (D) above, the requirements set forth below shall apply to all record drawings for projects involving highways.

- (1) Record drawings must show all as-built grades which differ from grades shown on the contract drawings. Information regarding grades and any changes therein shall be based upon a final survey prepared by the Engineer.
- (2) Record drawings shall conform to DOT Design Directive #83-S-5, except as modified herein. DDC shall provide a copy of such directive and other requirements to the Engineer upon request.
- (3) There shall be no erasures on the original record drawings. If revisions are necessary, the Engineer shall either (i) cross out the original record data (e.g. numbers/letters/etc.) and show changes nearby in red and bubbles, or (ii) provide supplementary record drawings to show the revision.
- (4) Upon approval of the record drawings by DDC, two (2) complete sets of duplicate originals and two (2) sets of CD/DVD(s) shall be transmitted to DDC for subsequent distribution to DOT Records Management Office.

(F) Requirements for Record Drawings for Sewer Projects: In addition to the general requirements set forth in Paragraph (D) above, the requirements set forth below shall apply to all record drawings for projects involving sewers. Sewer record drawings shall be so modified to show only sewer information on the roadway from curb to curb. All non-sewer related items must be removed from curb to curb of the plan; and from the profile views.

- (1) The record drawings shall show the following: (i) all new, replaced, repaired and existing sanitary sewers, storm sewers, combined sewers, encased sewers, and sewers on piles; (ii) lining or guniting; (iii) all new, replaced and existing catch basins, including type, and (iv) all drainage structures and appurtenances constructed under the contract. All such items shall be indicated with a different sewer legend.
- (2) Any existing sewers or appurtenances that were removed shall not be shown on the record drawings. Any existing sewers or appurtenances that were abandoned and left in place shall be so indicated on the record drawings.
- (3) For every sewer run between two manholes, the record drawings shall show the length between center lines of manholes, slopes, diameter, type of flow (sanitary, storm etc.), type of sewer (E.S.V.P., R.C.P., etc.) and the direction of flow.
- (4) The record drawings shall show the following: (i) all house connections for both new and reconnections, including house numbers; (ii) locations of connections; (iii) risers, including height, and (iv) spurs, measured from the nearest downstream manhole.
- (5) The record drawings shall include catch basin inventory information, including length of Catch Basin Connections, labeled as per the latest DEP requirements, a copy of which will be provided to the Engineer by DDC.
- (6) The record drawings shall show every manhole, including the type of manhole (A, B, etc.), rim elevation and invert elevation, as well as distance from center to center of each manhole. The Engineer shall obtain and utilize necessary data (i.e., previous as-built drawings, etc.) from the respective DEP borough office.
- (7) Upon approval of the record drawings by DDC, one complete set of duplicate originals shall be transmitted to DEP. A complete set of sewer record drawing shall consist of 1 Mylar, 5 paper copies and two (2) sets of unique CD(s) or DVD(s) for each project.
- (8) All sewer record drawings shall include a separate title sheet which will be created or modified as needed to conform to format set by the Agency. The sewer title page shall contain sewer legends, drawing description, number of pages included, datum information, and required certification statements. Actual formats and sample record drawings shall be distributed by DDC upon request.

(G) Requirements for Record Drawings for Water Main Projects: In addition to the general requirements set forth in Paragraph (D) above, the requirements set forth below shall apply to all record drawings for projects involving water mains.

- (1) The record drawings shall show the following: (i) all new and existing distribution and trunk mains; (ii) all replaced mains, lining methods and appurtenances, indicated with legend; (iii) for every run between two manholes or valves, the length, diameter and type of pipe, and (iv) all tap locations. The record drawings shall be in accordance with the latest DEP requirements, a copy of which will be provided to the Engineer by DDC.
- (2) All measurements indicated on the record drawings shall be made from curb lines. All appurtenances (pipes, valves, hydrants, offsets, hydrants valves, regulators, etc.) must be tied into the curb lines.
- (3) All depths of manholes and regulators, etc., indicated on the record drawings shall be made from final grades.
- (4) The Engineers shall prepare in-service sheets, tap cards and field cards as the project progresses. The Engineer

shall request from DEP current sample field cards.

- (5) The record drawings shall indicate the type of valves installed.
- (6) In preparing the record drawings, the Engineer shall obtain and utilize necessary data (i.e., previous as-built drawings, etc.) from the respective DEP borough office.
- (7) Upon approval of the record drawings by DDC, one complete set of duplicate originals shall be transmitted to DEP.

(H) Submittals: Once the record drawings are completed, one copy is to be submitted for review to DDC Infrastructure Construction Support Unit (CSU). Once approval is gained, the Resident Engineer/Engineer-In-Charge or the designate is to obtain all required signatures and seals, then submit the required Mylar; paper prints copies and electronic copy on CD(s) or DVD(s) to CSU. CSU will forward the record drawings to all applicable Agencies.

- (1) For projects involving highways, the Engineer shall submit a complete set of duplicate original Mylar record drawings for the Department of Transportation (“DOT”), Records Management Office. Specifically, the Engineer shall submit two (2) Mylars of a complete set of original record drawings and two (2) sets of unique project CD(s) or DVD(s).
- (2) For projects involving sewers, the Engineer shall submit a complete set of sewer record Mylar drawings plus five (5) paper copies and two (2) sets of unique project CD(s) or DVD(s) for distribution to DDC and Department of Environmental Protection (“DEP”).
- (3) For projects involving water mains, the engineer shall submit a complete set of duplicate original record drawings to the Department of Environmental Protection. In addition, an electronic copy on CD(s) or DVD(s) should be submitted to CSU.

EXHIBIT E

PROJECT DESCRIPTION / ADDITIONAL REI SERVICES

Installation of Trunk Water Mains at West 60th Street from West End Avenue to Columbus Avenue, Etc., to connect Shaft 24B (Water Tunnel #3) to the Distribution System, Borough of Manhattan.

The project scope of work also included private utilities relocation and capital work.

EXHIBIT F

**CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
SAFETY REQUIREMENTS**

THE DDC SAFETY REQUIREMENTS INCLUDE THE FOLLOWING SECTIONS:

- I. POLICY ON SITE SAFETY**
- II. PURPOSE**
- III. DEFINITIONS**
- IV. RESPONSIBILITIES**
- V. SAFETY QUESTIONNAIRE**
- VI. SAFETY PROGRAM AND SITE SAFETY PLAN**
- VII. KICK-OFF/PRE-CONSTRUCTION MEETINGS AND SAFETY REVIEW**
- VIII. EVALUATION DURING WORK IN PROGRESS**
- IX. SAFETY PERFORMANCE EVALUATION**

I. POLICY ON SITE SAFETY

The City of New York Department of Design and Construction (DDC) is committed to a policy of injury and illness prevention and risk management for construction work that will ensure the safety and health of the workers engaged in the projects and the protection of the general public. Therefore, it is DDC's policy that work carried out by Contractors on DDC jobsites must, at a minimum, comply with applicable federal, state and city laws, rules and regulations, including without limitation:

- ❑ U. S. Department of Labor 29 Code of Federal Regulations (CFR) Part 1926 and applicable Sub-parts of Part 1910 – U.S. Occupational Safety and Health Administration (OSHA) including, but not limited to “Respiratory Protection” (29 CFR 1910.134), “Permit-Required Confined Spaces” (29 CFR 1910.146), and “Hazard Communication” (29 CFR 1910.1200);
- ❑ New York State Department of Labor Industrial Code Rule 23 – Protection in Construction, Demolition and Excavation;
- ❑ New York City Construction Codes, Title 28
- ❑ NYC Department of Transportation Title 34 Chapter 2 – Highway Rules
- ❑ New York State Department of Labor Industrial Code Rule 753
- ❑ NYC Local Law No. 113 (2005) Noise Control Code

In addition, all regulations promulgated by the NYC Department of Transportation, including requirements for Maintenance and Protection of Traffic (MPT), are applicable when contained in contract specifications. While MPT is a significant component of work in our Infrastructure Division, it does not supersede or exempt Contractors from complying with other applicable health and safety standards (for example, excavating and trenching standards, operation of heavy equipment and compliance with City environmental and noise regulations).

II. PURPOSE

The purpose of this policy is to ensure that Contractors perform their work and supervise their employees in accordance with all applicable federal, state and city rules and regulations. Further, Contractors will be expected to minimize or eliminate jobsite and public hazard, through a planning, inspection, auditing and corrective action process. The goal is to control risks so that injuries, illnesses and accidents to contractors' employees, DDC employees and the general public, as well as damage to city-owned and private property, are reduced to the lowest level feasible.

III. DEFINITIONS

Agency Chief Contracting Officer (ACCO): The ACCO shall mean the person delegated authority by the Commissioner to organize and supervise the procurement activity of subordinate Agency staff in conjunction with the CCPO.

Competent Person: As defined by OSHA, an individual who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees or the general public, and who has authorization to take prompt corrective measures to eliminate them.

Construction Safety Auditor: A representative of the QACS Construction Safety Unit who provides inspection and assessment services to enhance health and safety on all DDC construction projects. The activities of the Construction Safety Auditor include performing site surveys, reviewing health and safety plans, reviewing construction permits, and rendering technical advice and assistance to DDC Resident Engineers and Project Managers.

Construction Safety Unit: A part of QACS within the Division of Technical Support that assesses contractor safety on DDC jobsites and advises responsible parties of needed corrective actions.

Construction Superintendent: A representative of the contractor responsible for overseeing performance of the required construction work. This individual must engage in sound construction practices, and is responsible to maintain a safe work site. In the case of a project involving the demolition, alteration or new construction of buildings, the Construction Superintendent must be licensed by the NYC Department of Buildings.

Contractor: For purposes of these Safety Requirements, the term “Contractor” shall mean any person or entity that enters

into a contract for the performance of construction work on a DDC project. The term “Contractor” shall include any person or entity which enters into any of the following types of contracts: (1) a prime construction contract for a specific project, (2) a prime construction contract using the Job Order Contracting System (“JOCS Contract”), and (3) a subcontract with a CM/Builder (“First Tier Subcontract”).

Director - Quality Assurance and Construction Safety (QACS): Responsible for the operations of the QACS Construction Safety Unit and the DDC Site Safety management programs.

Job Hazard Assessment (JHA): A process of identifying site-specific hazards that may be present during construction and establishing the means and methods to reduce or eliminate those hazards.

Jobsite Safety Coordinator: A person designated by the Contractor to be onsite during all activities. This individual shall have received, at a minimum, the OSHA 10-hour construction safety program. Other examples of acceptable training are the 30-hour OSHA Safety and Health Standards for the Construction Industry training program (OSHA 510) or a degree/certificate in a safety and health from a college-level curriculum. This person does not necessarily have to be dedicated full-time to site safety, but must have sufficient experience and authority to undertake corrective action and must qualify to be a competent person. For certain projects, as defined in NYC Construction Codes – Title 28, this person may be required to have a Site Safety Manager’s License issued by the NYC DOB.

Qualified Person: As defined by OSHA, an individual who, by possession of a recognized degree, certificate, license or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his or her ability to solve problems relating to the subject matter, the work, or the project. Qualified Persons are required under regulation to address issues pertaining, but without limit, to fall protection, scaffold design and trenching and shoring, among others.

Resident Engineer (RE) / Construction Project Manager (CPM): Representative of the Commissioner duly designated by the Commissioner to be his/her representative at the site of the work. (The RE/CPM may be a third-party consultant, including a CM, retained by DDC.)

Safety Program: Established by the Contractor that covers all operations of that Contractor and establishes the Contractor’s overall safety policy, regulatory compliance plan and minimum safety standards. The Safety Program must be submitted prior to the commencement of work at the site and is subject to review and acceptance by the Construction Safety Unit.

Safety Questionnaire: Used by DDC to evaluate Contractor’s current and past safety performance. It is required to be completed by all Contractors initially when submitting bids for Construction work, or when being pre-qualified and updated annually or as requested by the DDC.

Site Safety Plan: A site-specific safety plan developed by the Contractor for a specific project. The Site Safety Plan must identify hazards associated with the project, and include specific safety precautions and training appropriate and necessary to complete the work. The Site Safety Plan must be submitted prior to the commencement of work at the site and is subject to review and acceptance by the Construction Safety Unit.

Unsafe or Unhealthy Condition: A condition that could be potentially hazardous to the health and safety of personnel or the public, and/or damaging to equipment, machinery, property or the environment.

Weekly Safety Meetings: Weekly documented jobsite safety meetings, given to all jobsite personnel by contractor, with the purpose of discussing general safety topics and job specific requirements encountered at the DDC work site.

IV. RESPONSIBILITIES

All persons who manage, perform, and provide support for construction projects shall conduct operations in compliance with the requirements identified in this Policy and all applicable governing regulatory agency requirements and guidelines pertaining to safety in construction.

A. Resident Engineer / Construction Project Manager / Construction Manager

- Monitors the issuance of safety- related permits, approvals and drawings and maintains copies on site.
- Monitors construction-related work activities to confirm that they are conducted in accordance with DDC policies and all applicable regulations that pertain to construction safety.
- Maintains documentation and periodically attends weekly safety meeting.
- Notifies the Construction Safety Unit and the ACCO's Insurance and Risk Management Unit of project- related accidents and emergencies, as per DDC's Construction Safety Emergency Protocol.
- Gathers facts related to all accidents and prepares DDC Accident Reports.
- Notifies the Construction Safety Unit of outside regulatory agency inspections and forwards a copy of the inspection report within three days of its receipt.
- Monitors the conditions at the site for conformance with the Site Safety Plan and DDC construction documents.
- Notifies the contractor and DDC in the event that any condition or activity exists that is not in compliance with the Site Safety Plan, applicable federal, state or local codes or any condition that presents a potential risk of injury to the public or workers or possible damage to property.
- Notifies DDC of any emergency condition and directs the contractor to provide such labor, materials, equipment and supervision to abate such conditions.
- Reports gross safety violations to the Construction Safety Unit immediately.

B. Contractors

- Complete a Safety Questionnaire and submit with its bid or as part of a pre-qualification package.
- Provide a Written Job Hazard Assessment (JHA) that identifies expected safety issues of the work to be performed. JHA shall be included with the Site Safety Plan submitted by the contractor.
- Submit a Site Safety Plan and Safety Program within 15 days of issuance of the Notice to Proceed, or as otherwise directed. The Site Safety Plan and Safety Program are subject to review and acceptance by the Construction Safety Unit prior to the commencement of work at the site. The Site Safety Plan shall be revised and updated as necessary.
- Ensure that all employees are aware of the hazards associated with the project through formal and informal training and/or other communications. Conduct and document weekly safety meetings for the duration of the project. Documentation to be provided to the RE/CPM/CM on a monthly basis.
- Name a Construction Superintendent, if required.
- Name a Job Site Safety Coordinator. The Contractor will be required to identify the Job Site Safety Coordinator in the Site Safety Plan.
- Comply with all mandated federal, state and local safety and health rules and regulations.
- Comply with all provisions of the Site Safety Plan.
- As part of the Site Safety Plan, prepare a site specific MPT (if not otherwise provided in the contract documents) and comply with all of its provisions.
- Conduct and document site-specific safety orientation for Contractor personnel to review the hazards associated with the project as identified in the Site Safety Plan and the specific safety procedures and controls that will be used to protect workers, the general public and property. The Job Site Safety Coordinator will conduct this training prior to mobilization and provide documentation to the RE/CPM/CM.
- Provide, replace and adequately maintain at or around the project site, suitable and sufficient signage, lights, barricades and enclosures (fences, sidewalk sheds, netting, bracing, etc.).
- Report unsafe conditions or hazards to the DDC RE/CPM/CM as soon as practical, but no more than 24 hours after discovery, and take action to remove or abate such conditions.
- Report any accident involving injuries to workers or the general public, as well as property damage, to the DDC RE/CPM/CM within two (2) hours.
- Notify the DDC RE/CPM/CM within two (2) hours of the start of an inspection by any regulatory agency personnel, including OSHA.
- Maintain all records pertaining to all required compliance documents and accident and injury reports.
- Respond to DDC recommendations on safety, which shall in no way relieve the Contractor of its responsibilities for safety on the project. The Contractor has sole responsibility for safety.

V. SAFETY QUESTIONNAIRE

DDC requires that all Contractors provide information regarding their current and past safety and environmental performance and programs. This will be accomplished by the use of the DDC Safety Questionnaire. As a part of the bid submittal package, the contractor must submit a completed DDC Safety Questionnaire listing their workers' compensation

experience modification rating and OSHA Incidence Rates for the three (3) years prior to the date of the bid opening. DDC may request a Contractor to update its Questionnaire at any time or to provide more detailed information. The Contractor must provide the requested update within 30 days.

The following criteria will be used by DDC in reviewing the Contractor's responsibility, which will be based on the information provided on the questionnaire:

- Criteria 1: OSHA Injury and Illness Rates (I&IR) are no greater than the average for the industry (based on the most current Bureau of Labor Statistics data for the Contractors SIC code); and
- Criteria 2: Insurance workers compensation Experience Modification Rate (EMR) equal to or less than 1.0; and
- Criteria 3: Any willful violations issued by OSHA or NYC DOB within the last three years; and
- Criteria 4: A fatality (worker or member of public) experienced on or near Contractor's worksite within the last three (3) years; and
- Criteria 5: An unacceptable rating by QACS based on past performance on DDC projects; and
- Criteria 6: Contractor has in place an acceptable corporate safety program and its employees shall have completed all documented relative safety training; and
- Criteria 7: Contractor shall provide OSHA Injury Records (currently OSHA 300 Log) for the last three (3) years.

If the Contractor fails to meet the basic criteria listed above, the Construction Safety Unit may request, through the ACCO, more detail concerning the Contractor's safety experience. DDC may request the Contractor to provide copies of, among other things, OSHA records, OSHA and DOB citations, EPA citations and written Safety Programs.

VI. SAFETY PROGRAM AND SITE SAFETY PLAN

Within fifteen (15) days of issuance of the Notice to Proceed, or as otherwise directed, the Contractor shall submit the following: (1) Safety Program, and (2) Site Safety Plan. The Safety Program shall set forth the Contractor's overall safety policy, regulatory compliance plan and minimum safety standard, and the Site Safety Plan shall identify hazards associated with the project, and include specific safety precautions and training appropriate and necessary to complete the work. The Safety Program and the Site Safety Plan are subject to review and acceptance by the Construction Safety Unit prior to the commencement of work at the site. Failure by the contractor to submit an acceptable Site Safety Plan and Safety Program shall be grounds for default.

The Site Safety Plan shall apply to all Contractor and subcontractor operations, and shall have at a minimum, the following elements. Each element shall be described in a separate section in the written document. It may be necessary to modify the basic format for certain unique or high-risk projects (such as tunnels or high-rise construction). The basic elements are as follows:

1. **Responsibility and Organization:** Identify the person or persons with authority and responsibility for implementing the Site Safety Plan. Provide an organization chart and define levels of authority and responsibility. Identify the Competent Person, the Construction Superintendent (if required), the Job Safety Coordinator and the Qualified Person required for this project.
2. **Communication:** Establish a system for communicating with employees and subcontractors on matters relating to worker and public safety and health and environmental protection, including provisions designed to encourage employees to inform the employer of hazards at the worksite without fear of reprisal. An emergency response notification protocol is to be established that also includes after hours contact numbers. The plan must also include provisions for weekly safety meetings held by the Job Site Safety Coordinator.
3. **Job Hazard Assessment:** A written document submitted by the contractor, used to identify expected job hazards and public safety risks and state the specific means and methods to reduce, control or eliminate those hazards. This part of the Site Safety Plan must also include how on-going evaluations of those risks and hazards will be carried out, including plans for periodic inspections to identify unsafe conditions, work practices and public safety hazards.
4. **Accident/Exposure Investigation:** Establish a procedure to investigate and report occupational and public injury or illness, property damage, vehicle accidents or other mishaps.
5. **Hazard Correction:** Establish means, methods and/or procedures for correcting unsafe or unhealthy conditions that

might be exposing both the public and workers to hazards. Corrective actions must be taken immediately when observed or discovered. Should an imminent hazard exist which cannot be immediately abated without endangering employees, the public and/or property, remove or restrict all exposed persons from the area except those necessary to correct the existing condition. Employees necessary to correct the hazardous condition shall be provided the necessary safeguards. When corrective actions cannot be taken immediately, temporary measures should be taken until such time permanent measures are taken to eliminate the potential risks or hazards

6. Training: Describe site-specific hazard training programs. In addition to the required safety orientation, additional site specific training, in the form of required weekly safety meetings, will be required. Contractors must also initiate training when: a) new employees are hired; b) employees are given new job assignments for which training has not been previously received; c) new substances, processes, procedures or equipment are introduced that might represent a new public or worker hazard; d) the employee is made aware of a new or previously unrecognized hazard; e) new supervisors are assigned to familiarize themselves with the safety and health hazards to which employees under their immediate direction and control may be exposed; and f) after a jobsite incident or accident has occurred.
7. Recordkeeping: Establish procedures to maintain records of scheduled and periodic inspections, weekly safety meetings, and training records. Updated records shall be maintained at the jobsite, accessible to the Construction Safety Auditors and/or Quality Assurance Auditors/RE/CPM, and retained in accordance with DDC policy.

The most critical component of the Site Safety Plan is the Job Hazard Assessment section. This section must address specific hazards that are anticipated throughout the project. Each Site Safety Plan must address, at a minimum:

- Public and pedestrian safety
- Fall protection
- Electrical hazards
- Scaffolding
- Fire protection
- Emergency notification & response
- Housekeeping / debris removal
- Dust control
- Maintenance and protection of traffic
- Trenching and excavating
- Heavy equipment operations
- Material / equipment storage
- Environmental contamination
- Sheeting and shoring
- Alcohol and Drug Abuse Policy

The following additional hazards must be addressed, if applicable, based on the contract safety specifications and/or the results of the JHA (the list is not all-inclusive):

- Basic Personal Protective Equipment
- Compressed Air
- Compressed Gas Cylinders
- Cranes, Derricks and Hoists
- Demolition
- Electrical safety
- Excavations and Trenching
- Fall Protection – Floor openings/Stairways
- Fall Protection – Guardrails Toe boards etc
- Fall Protection – Leading Edge
- Fall Protection – Personal Fall Protection Devices
- Fire Protection and Fire Prevention
- Hazard Communication (RIGHT TO KNOW)
- Hazardous Energy & Lock Out / Tag Out
- Housekeeping/ Sanitation
- Maintenance and Protection of Traffic (MPT)
- Man Lifts /Aerial Lifts
- Marine Operations
- Motor Vehicle Safety
- Overhead Power lines

- Permit Required Confined Space
- Portable Ladders
- Powered Actuated Tools
- Powered Material Handling Equipment
- Scaffolds – Mobile
- Scaffolds – Stationary
- Scaffolds – Suspended
- Slings
- Steel Erection
- Welding and Cutting (Hot Work)
- Airborne Contaminants – Particulates – General
- Asbestos
- Blood borne Pathogens
- Hearing Protection
- Lead in Construction
- Mercury in Construction
- PCB's
- Respiratory Protection
- Silica
- Thermal Stress
- West Nile Virus
- Rodents and Vermin
- Noise Mitigation Plan

Certain DDC programs, such as Job Order Contracting System (JOCS), may not necessarily require Site Safety Plans. The JOCS contractor will be required to submit a Safety Program. In addition, certain DDC Operating Units may establish program or client-specific safety requirements. The contractor's Site Safety Plan must address such program or client specific safety requirements.

VII. KICK-OFF MEETINGS/PRE-CONSTRUCTION AND SAFETY REVIEW

As part of the construction kick-off meeting, a Site Safety Plan review will be part of the agenda. A QACS representative will participate in this meeting with the contractor prior to the start of the project for the purpose of:

- A. Reviewing the safety issues detailed in the contract.
- B. Reviewing the Site Safety Plan.
- C. Reviewing any new issues or information that was not previously addressed.
- D. Discussing planned inspections and audits of the site by DDC personnel.

VIII. EVALUATION DURING WORK IN PROGRESS

The Contractor's adherence to these Safety Requirements will be monitored throughout the project. This will be accomplished by the following:

- A. Use of a safety checklist by a representative of the Construction Safety Unit or other designated DDC representative or Consultant during regular, unannounced inspections of the job site. Field Exit Conferences will be held with the RE/CPM, Contractor Superintendents or Safety Representatives.
- B. The RE/CPM will continually monitor the safety and environmental performance of the contractor's employees and work methods. Deficiencies shall be brought to the attention of the contractor's representative on site for immediate correction. The DDC representative will maintain a written record of these deficiencies and forward them to the Construction Safety Unit on a weekly basis. Any critical deficiencies shall be immediately reported to QACS phone# (718) 391-1624 or (718) 391-1911.
- C. If the Contractor's safety performance during the project is not up to DDC standards (safety performance measure, accident/incident rate, etc.) the Director- QACS, or designee will meet with the Contractor's safety representative, the DDC project manager, the RE/CPM, or the DDC Environmental Specialist (if environmental issues are involved). The purpose of this meeting is to 1) determine the level of non-compliance; 2) explain and clarify the

safety/environmental provisions; 3) agree on a future course of action to correct the deficiencies.

- D. If the deficiencies continue to occur with inadequate attention by the contractor, this shall, among other remedies available, be grounds for default.
- E. The contractor shall inform the Construction Safety Unit and ACCO Insurance and Risk Management Unit of all medical injuries or illnesses that require doctors' treatment resulting from an on-the-job incident within 24 hours of the occurrence. The Construction Safety Unit shall also be immediately informed of all fatalities, catastrophic accidents with more than one employee hospitalized, any injuries to members of the general public and major equipment damage (e.g., property damage, equipment rollovers, loads dropped from crane). QACS shall maintain a record of all contractor injuries and illnesses during the project and provide regular reports to the Agency.
- F. The Construction Safety Unit shall be immediately notified at the start of any NYS-DOL/ NYC-COSH/ OSHA/ EPA inspections. The Director of Quality Assurance & Construction Safety shall maintain a log of all contractor OSHA/EPA inspections and citations during the project.

IX. SAFETY PERFORMANCE EVALUATION

The contractor's safety record, including all DDC inspection results, will be considered as part of the Contractor's performance evaluation at the conclusion of the project. Poor safety performance during the course of the project shall be a reason to rate a Contractor unsatisfactory which will be reflected in the City's Vendex system and will be considered for future procurement actions as set forth in the City's Procurement Policy Board Rules.

EXHIBIT G

M/WBE SUBCONTRACTOR UTILIZATION PLAN

M/WBE SUBCONTRACTOR UTILIZATION PLAN: The Engineer's M/WBE Subcontractor Utilization Plan is set forth on the following pages. Such M/WBE Subcontractor Utilization Plan was submitted by the Engineer as part of its proposal for the Contract.