MTA Capital Construction

CONTRACT #6240

DESIGN-BUILD SERVICES
FOR
LIRR EXPANSION PROJECT
FROM FLORAL PARK TO HICKSVILLE

CONFORMED DOCUMENTS

VOLUME 3
TECHNICAL PROVISIONS
APPENDICES

December 27, 2017

Appendices

Table of Contents

END

A1.1.A ACRONYMS AND DEFINITIONS

A1.1.1 Acronyms

AADWP	Asbestos Abatement and Disposal Work Plan
AASHTO	American Association of State Highway and Transportation Officials
ABIH	American Board of Industrial hygiene
ACGIH	American Conference of Government Industrial Hygienists
ACI	American Concrete Institute
ACM	Asbestos Containing Materials
ADA	Americans with Disabilities Act
AGCA	Associated General Contractors of America, Inc.
AHA	Activity Hazard Analysis
AHERA	Asbestos Hazard Emergency Response Act
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AL	Action Level
AMTS	Automated Motorized Total Station
ANSI	American National Standards Institute
APTA	American Public Transportation Association
AREMA	American Railway Engineering and Maintenance of Way Association
ARNE	Accident Report Non - Employee
AST	Aboveground storage tanks
ASTM	American Society for Testing and Materials
AVPS	Audio-Visual Paging Systems
AWS	American Welding Society
AWWA	American Water Works Association
BCNYS	Building Code New York State
BODR	Basis of Design Report
BSD	Better Site Design
BUD	Beneficial use Determination
CAPWAP	Case Pile Wave Analysis Program
CARB	California Air Resources Board
CCTV	Closed Circuit Television
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act

CFC	Chlorofluorocarbons
CFR	Code of Federal Regulations
CG	Grid Crack Gauges
CIB	Communications Infrastructure Backbone
CIH	Certified Industrial Hygienist
CISPI	Cast Iron Soil Pipe Institute
CPESC	Certified Professional in Erosion and Sediment Control
CQCM	Construction Quality Control Manager
CSI	Construction Specification Institute
CW	Vibrating Wire Crack Gauges
DBCQP	Design-Builder's Construction Quality Plan
DBDQP	Design-Builder's Design Quality Plan
DBQP	Design-Builder's Quality Program
DIN	Deutsches Institut für Normung
DPF	Diesel particulate filters
EDM	Electro- Optical Distance Measuring Instrument
ELAP	Environmental Laboratory Accreditation Program
ESCP	Erosion and Sediment Control Plan
FEIS	Final Environmental Impact Statement
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
GFCI	Ground Fault Circuit Interrupter
GUI	Graphical User Interfaces
HAZWOPER	Hazardous Waste Operations and Emergency Response
HEPA	High Efficiency Particulate Air
HVAC	Heating, Ventilation, and Air Conditioning
ICM	Interface Control Manual
ITA	Independent Testing Agency
ITS	Intelligent Transportation System
IS	Inclinometers in Soil
LBP	Lead Based Paint
LED	Light Emitting Diode
LEED	Leadership in Energy and Environmental Design
LID	Low Impact Development

LIPA	Long Island Power Authority
LIWP	Long Island Well Permit
LNTP	Limited Notice to Proceed
LRFD	Load and resistance factor design
MEP	Mechanical, Electrical and Plumbing
MEP	Maximum Extent Practicable
MPT	Maintenance and Protection of Traffic
MSDS	Material Safety Data Sheets
MUTCD	Manual of Uniform Traffic Control Devices
MV	Medium Voltage
NAAQS	National Ambient Air Quality Standards
NCDPW	Nassau County Department of Public Works
NFPA	National Fire Protection Association
NGS	National Geodetic Survey
NIOSH	National Institute of Occupational Safety and Health
NIST	National Institute of Standards and Technology
NOB	Non-organically Bound
NOI	Notice of Intent
NOT	Notice of Termination
NTP	Notice to Proceed
NVLAP	National Voluntary Laboratory Accreditation Program
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOL	New York State Department of Labor
NYSDOT	New York State Department of Transportation
OSHA	Occupational Safety and Health Administration, or Occupational Safety and Health Act
PA	Public Address
PAT	Proficiency Analytical Testing
PCB	Polychlorinated Biphenyls
PCM	Phase Contrast Microscopy
PDA	Pile Driving Analyzer
PEL	Permissible Exposure Limit

PID	Photo- Ionization Detector
PLM	Polarized Light Microscopy
PMP	Project Management Plan
PO	Open Standpipe Piezometers
POC	Pollutants of Concern
PPE	Personal Protective Equipment
PSE&G	Public Service Electric and Gas [Public Service Enterprise Group]
PSEG-LI	Public Service Enterprise Group – Long Island
QCP	Quality Check Points
QO	Quality Oversight
QoS	Quality of Service
RCRA	Resource Conservation and Recovery Act
RFCD	Release for Construction Documents
RLA	Registered Landscape Architect
ROW	Right of Way
RWIC	Roadway Worker in Charge
RWP	Roadway Worker Protection
SAP	Sampling and Analysis Plan
SCADA	Supervisory Control and Data Acquisition
SCL	Soil Cleanup Levels
SCO	Soil Cleanup Objectives
SHECP	Safety, Health and Environmental Control Plan
SOQ	Statement of Qualifications
SP	Target Prisms
SPCC	Spill Prevention, Countermeasure, and Control
SPDES	New York State Pollutant Discharge Elimination System
SSCP	Site Security Control Plan
SSPC	The Society for Protective Coatings
SSV	Site Specific Variance
SVOC	Semi Volatile Organic Compounds
SWP	Safe Work Plan
SWPPP	Storm water Pollution Prevention Plan
TAL	Target Analyte List
TEM	Transmission Electron Microscopy

TIA	Time Impact Analysis/es
TCL	Target Compound List
TCLP	Toxicity Characteristics Leaching Procedures
TOGS	Technical and Operational Guidance Series
TSCA	Toxic Substances Control Act
TSD	Treatment, Storage and Disposal
TVM	Ticket Vending Machine
TWA	Time Weighted Average
UL	Underwriters Laboratory
ULSD	Ultra-low sulfur diesel fuel
USDA	U.S. Department of Agriculture
USDOT	US Department of Transportation
UST	Underground Storage Tank
VOC	Volatile Organic Compounds
XRF	X-Ray Fluorescence

A1.1.2 Definitions

Abatement: Procedures to control or decrease fiber release from asbestos containing building materials or insulation material containing asbestos. Includes removal, enclosure, encapsulation, and repair.

Action Level Plan: Design-Builder-produced plan for corrective measures to be implemented should the Response Levels be reached.

Air Lock: A system for permitting ingress or egress to the work area while permitting minimal air movement between a contaminated area and an uncontaminated area. It consists of two curtained doorways separated by a distance of at least three feet such that one passes through a doorway into the airlock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, thereby preventing flow-through contamination.

Air Monitoring: The process of measuring the fiber content of a specific volume of air in a stated period of time. The procedure utilized for air sampling for asbestos follows the National Institute of Occupational Safety and Health (NIOSH) Standard Analytical Method, or the Transmission Electron Microscopy (TEM) methods developed by the United States Environmental Protection Agency (USEPA), which are utilized for lower detectability and specific fiber identification. Personal air sampling results shall be calculated to reflect the employee's eight-hour time weighted average (TWA) exposure. Area sampling results are reported directly, without calculating the TWA.

Alert Level: The instrumentation value range above which will halt the construction and necessitate mitigative action to prevent damages to surrounding facilities and changes to the groundwater regime. The action must be such as to ensure the Alert Level is not exceeded in subsequent construction.

Amended Water: Water to which a surfactant has been added.

Applicable Variance (AV): Any of the existing asbestos related Applicable Variances providing relief from specific requirements of Part 56 of Title 12 of the New York State Compilation of Codes, Rules, and Regulations (12 NYCRR 56), as approved by the New York State Department of Labor (NYSDOL), Division of Safety and Health, Asbestos Control Bureau.

Asbestos Abatement: Procedures to control or decrease fiber release from asbestos-containing building materials or insulation material containing asbestos. This includes removal, enclosure, encapsulation, and repair.

Asbestos-Containing Material (ACM): Any material or product that contains more than 1 percent asbestos.

Asbestos Handler: An individual, who disturbs, removes, repairs, or encloses ACM. This individual shall have completed an approved training course and be certified by the NYSDOL.

Asbestos Handling Certificate: A certificate issued by the NYSDOL to an individual who has satisfactorily completed an approved asbestos safety and health program.

Authority Having Jurisdiction: means an organization, office or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure. The term “Authorities Having Jurisdiction” refers to more than one such organization, office or individual.

Authorized Visitor: The LIRR and their authorized representatives, or representatives of any regulatory or other agency having jurisdiction over the Project.

Calendar Day: Every day shown on the calendar, beginning at 12- 00 a.m. (midnight) Eastern Time (standard or daylight as applicable).

Certified Industrial Hygienist (CIH): One certified in the comprehensive practice of industrial hygiene by the American Board of Industrial Hygiene.

Competent Person: Definition and responsibilities as set down in 29 Code of Federal Regulations (CFR) 1926.1101 and as outlined herein.

Datalogger: Data collection unit to collect, pre-evaluate, and transfer data readings from various instruments. The datalogger transfers these data to an Intermediate Data Storage (IDS) unit via direct connection (short-haul modem) or telephone modem.

Day: Calendar Day unless otherwise designated.

Decontamination Enclosure System: A series of connected rooms separated from the work area, for the decontamination of workers (a Personal Decontamination Enclosure System) or of materials and equipment (Waste Decontamination Enclosure System).

Design-Builder's Data: Data resulting from the Design-Builder's monitoring of any instrument including those installed by the Design-Builder in addition to those specified herein.

Design-Builder's Project Manager: The individual duly authorized representative of the Design-Builder responsible for overall project management.

Design Professionals: Licensed professional engineers and/or registered architects engaged by the Design-Builder to perform any design Work forming part of the Work under the Project.

Encapsulant (Sealant): A liquid material which can be applied to ACM and which controls the possible release of asbestos fibers from the material, either by creating a membrane over the surface (bridging Encapsulant) or by penetrating into the material and binding its components together (penetrating Encapsulant). This may be used to seal surfaces from which ACM has been removed.

Encapsulation: Application of an Encapsulant to asbestos containing building materials to control the possible release of asbestos fibers into the ambient air.

Enclosure: Procedures necessary to completely enclose ACM behind airtight, impermeable, permanent barriers or any other appropriate procedure that prevents the release of asbestos fibers, as determined by the NYSDOL.

Equal: A product or material which is equivalent to those specified by name or model number, and which matches or surpasses those specified products or materials in terms of quality and durability of fabrication, inherent features and properties, reliability, operating costs, maintenance costs, life expectancy, and cost of replacement. In addition, the product or material shall be compatible with all associated products, materials, and systems.

Equivalent: A product, material, or process that functions and performs as well as or better than the specified product, material, or process.

Final Acceptance: The Railroad's written notification to the Design-Builder that it accepts the Work performed by the Design-Builder under the Contract

Fixed Object: A unit of equipment or furniture in the work area that cannot be removed from the work area.

Friable: Any material which, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure.

Furnish: The planning, design, development, procurement, fabrication, delivery, unloading, handling, storage, and associated activities required in order to have an item available on site.

Governmental Approvals: all permits, licenses, consents, concessions, grants, franchises, authorizations, waivers, variances or other approvals, guidance, protocol(s), mitigation agreement(s), or memoranda of agreement/understanding, and any amendment(s) or modification(s) of any of them provided by Governmental Entities including State, local, or federal regulatory agencies, agents, or employees, which authorize or pertain to the Project or the Work.

Hazardous Materials: Include pesticides, biocides, and carcinogens as listed by recognized authorities, such as the EPA and the ARC.

HEPA Filter: A high efficiency particulate air filter capable of trapping and retaining 99.97-percent of the fibers of 0.3-micrometer or larger in diameter.

HEPA Vacuum Equipment: High efficiency particulate air filtered vacuuming equipment having a UL 586 filter system capable of collecting and retaining 99.97- percent of the fiber of 0.3 micrometer or larger in diameter.

In-service Tracks: Tracks that are in service or shall be put back in service for the next Peak Period.

Indicate: Shown on the Contract Drawings and or Directive Drawings, written in other Contract Documents, or both.

Initial Baseline Schedule: The baseline schedule submitted with the Proposal.

Install: The preparation, handling, placement, erection, assembly, connection, startup & testing, and associated activities required in order for an item to be complete, in place, and ready for operation or use.

Key Personnel: The Design-Builder's Project Executive, Design-Builder's Project Manager, Design Manager, General Superintendent, and Quality Manager.

Limited Notice to Proceed (LNTP): Written notice from the Railroad's Procurement Officer to the Design-Builder authorizing commencement of Pre-construction Work in accordance with the Contract Documents.

Lockdown: Procedure of applying an Encapsulant as a protective coating or sealant to a surface from which ACM has been removed in order to control and minimize airborne asbestos fiber generation that might result from residual asbestos-containing debris.

Maintenance and Protection of Traffic (MPT): the comprehensive effort to maintain traffic.

Manifest: A chain of custody document duly authorized by parties attesting to the quantities, travel route, and disposition (off-site disposal) of the ACM waste materials.

Monitoring Well: A well-used primarily for sampling groundwater and may also be used to monitor groundwater levels.

Movable Object: A unit of equipment or furniture that can be removed from the work area.

Notice of Asbestos Abatement: A notification sign or letter addressing the residential or business occupants of an ACM abatement project in accordance with the requirements of 12 NYCRR 56.

Notice to Proceed (NTP): Written notice from the Railroad's Procurement Officer to the Design-Builder authorizing the Design-Builder to proceed with all Work subject to compliance with the Contract Documents.

Out of Service Tracks: Tracks that will not be put back in service for the next Peak Period.

Peak Period – Business rush periods for weekdays as set out in LIRR timetables. (Trains scheduled to arrive in NYC terminals between approximately 6 and 10 AM or depart NYC terminals between approximately 4 and 8 PM.)

Permissible Exposure Limit (PEL): The PEL is an airborne concentration of ACM to which no employee shall be exposed when not using respiratory protection. The Occupational Safety and Health Administration (OSHA) PEL is 0.1-f/cc expressed on an 8-hour time weighted average (TWA).

Piezometer: A well primarily used to monitor groundwater levels and may also be used for sampling groundwater.

Post-Consumer Recycled Content: Post-consumer materials are taken from finished consumer or industrial products that have served their intended use and have been discarded for disposal in municipal waste streams and recovered through various private or public collection programs.

Post-Industrial Recycled Content: Post-industrial recycled materials are taken from manufacturing waste streams following various industrial processes involved in the creation of products. Post- industrial recycled materials may also be the waste product of production process (e.g., fly ash from energy production, slag from metals production, gypsum from stack scrubbers, culls and scrap woods in forestry, etc.).

Primary Dewatering System: is a system designed for general drawdown of groundwater levels and installed outside of an excavation area prior to excavation.

Project**:** The improvements to be designed and constructed by the Design-Builder and all other Work product to be provided by the Design-Builder in accordance with the requirements of the Contract Documents.

Project Element: means a component of the Project that, when completed, can be tested, commissioned, accepted by the Railroad, and can be placed into service. For example, a complete undergrade crossing installation, a complete pedestrian bridge, and a complete track interlocking installation could be Project Elements.

Project Manager: A duly authorized representative of the Railroad responsible for overall project management.

Provide: Furnish and install.

Quality Assurance: All those planned and systematic actions necessary to provide adequate confidence to the management that a product or service will satisfy given requirements for quality. QA includes ensuring the project requirements are developed to meet the needs of all relevant internal and external agencies, planning the processes needed to assure quality of the project, ensuring that equipment and staffing is capable of performing tasks related to project quality, ensuring that contractors are capable of meeting and do carry out quality requirements, and documenting the quality efforts.

Quality Control: The operational techniques and activities that are used to fulfill requirements for quality. Generally, QC refers to the act of taking measurements, testing, and inspecting a process or product to assure that it meets specification. It also includes actions by those

performing the work to control the quality of the work. Products may be design drawings or specifications, manufactured equipment, or constructed items. QC also refers to the process of witnessing or attesting to, and documenting such actions.

Quality Oversight: Quality oversight verifies the execution of the quality program.

Railroad: Long Island Rail Road, including staff and managers who have been delegated certain contractual and technical authority by the Commissioner. The Railroad maintains a website at www.mta.info/lirr.

Recycling: Activities defined by infrastructure which includes collection, separation, and processing, by which products or materials are recovered from industrial or consumer waste streams for use in the form of raw material in the manufacture of new products.

Regulated Area: An area established by the employer to demarcate areas where Class I, II, and III asbestos work is conducted, and any adjoining area where debris and waste from such asbestos work accumulate; and a work area within which airborne concentrations of asbestos, exceed or there is a reasonable possibility they may exceed the permissible exposure limit.

Removal: The act of removing and transporting asbestos containing waste or ACM from the work area to a suitable disposal site in accordance with 40 CFR 61. Removal shall also mean the stripping of any ACM from surfaces or components of a facility or taking out structural components in accordance with 40 CFR 61 and/or 12 NYCRR 56.

Required: Indicated; inherent to the performance of the Work in accordance with customary industry practices; incidental to the performance of the Work in accordance with indicated requirements and customary industry practices, or; mandatory, pursuant to provision of law, code, ordinance, rule, regulation, or statutory order.

Response Levels: These are “Alert Levels” and “Review Levels”. Response Level movements for Railroad tracks and bridge piers are specified elsewhere herein.

Review Level: The instrumentation value range above which will trigger the evaluation of current construction methodology and if necessary, implementation of mitigative action to avoid detrimental effect on the surrounding facilities and groundwater regime.

Right Of Way (ROW):

For Railroad related work, the land acquired to provide for the Railroad roadway and for Railroad facilities.

For highway and street related work, a general term denoting land, property, or interests therein (including easements), usually in a strip or parcel acquired for or devoted to a highway.

Roadway:

For Railroad related work, the area between Right Of Way fence lines.

For highway and street related work, the portion of a highway included between the outside edges of the shoulders.

Secondary Dewatering System: is a system installed within an excavated area during excavation operations, if necessary.

Sediment: Soil and other debris that has been eroded and transported by storm or well-production runoff water.

Site Specific Variance (SSV): Any asbestos related Site Specific Variance providing relief from specific requirements of 12 NYCRR 56 as approved by the NYSDOL, Division of Safety and Health, Asbestos Control Bureau.

Surfactant: A chemical wetting agent added to water to improve penetration, thus reducing the quantity of water required for a given operation or area.

The Work: That which is portrayed on the Contract Drawings, Directive Drawings, and as directed inother Contract Documents, or otherwise required, and is not specifically indicated as "by the Railroad" or "by others."

Third Party: means Nassau County, Village of Floral Park, Village of Garden City, Village of New Hyde Park, Village of North Hempstead, Village of Westbury, Private Railroad Company, New York & Atlantic Railway, and any other person specifically designated by owner as a Third Party.

Utility: A service and/or system (including, but not limited to, natural gas, gasoline, diesel fuel, electric power, steam, water, compressed air, telecommunications, fiber optics, microwave, lube oil, oil-water separators, and sewer) owned and/or operated by a public utility, the Railroad, and/or others.

Utility Owner: The owner or operator of any Utility (including private and public utilities).

Waste Decontamination Enclosure System: A decontamination system for waste materials and equipment, typically consisting of a designated area of the work area, a washroom, and a holding area, with an air lock between any two adjacent rooms and a curtained doorway between the holding area and the non- work area. Not to be used for personnel entry/exit.

Wet Cleaning: The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning tools which have been dampened with amended water or asbestos abatement Encapsulant and by afterwards disposing of these cleaning tools as asbestos-contaminated waste.

Work Area: Designated rooms, spaces, or areas of the Project where asbestos abatement actions are to be undertaken or which may become contaminated as a result of such abatement actions. A contained work area has been sealed, plasticized, and equipped with an airlock entrance or a decontamination enclosure system. A non-contained work area is an isolated or controlled-access area that has not been plasticized.

Work Day or Working Day: For purposes of performance of construction Work hereunder, a day on which weather and other conditions not under the control of the Design-Builder will permit construction operations to proceed for the major part of the day on the principal item or items of Work which would normally be in progress at that time, excluding any holidays and other days on which the Design-Builder is specifically prohibited from working as specified in a Project Labor Agreement. Work days may include days on which the Design-Builder is prohibited from closing a lane or lanes or impeding traffic.

For all other purposes, including determining allowable time periods for submittals, notices, reviews, approvals and payments, the term "work day" means each day, exclusive of Saturdays, Sundays and State recognized public holidays.

END

A1.22A PRE-TRIP CHECKLIST

Long Island Rail Road

SAFE-007
Attachment A

PRE-TRIP CHECK LIST
WORK VEHICLE INSPECTION FORM TC-01
FASTEN YOUR SEAT BELT

VEHICLE NUMBER: _____

INSIDE

- ☐ Parking Brake Apply

START ENGINE

- ☐ Oil Pressure (Light or Gauge)
- ☐ Air Pressure or Vacuum (Gauge)
- ☐ Low Air Warning Device (Air pressure below 40-psi check on pressure build-up. (Air pressure above 60-psi deplete air until warning device works.)
- ☐ Instrument Panel (Telltale lights or buzzers)
- ☐ Horn
- ☐ Windshield Wiper and Washer
- ☐ Heater – Defroster
- ☐ Mirrors
- ☐ Steering Wheel – (Excessive play)
- ☐ Apply Trailer Brakes in EMERGENCY (If applicable)
- ☐ Turn on all Lights including 4-way Flasher
- ☐ Fire Extinguisher and Warning Devices

OUTSIDE

FRONT

- ☐ Headlights
- ☐ Clearance Lights
- ☐ Identification Lights
- ☐ Turn Signals and 4-way Flasher
- ☐ Leaks

LEFT SIDE

- ☐ Fuel Tank and Cap
- ☐ Side Marker Lights
- ☐ Reflectors
- ☐ Tires and Wheels (Lugs)
- ☐ Cargo Tie-downs/or Doors
- ☐ Leaks

REAR

- ☐ Tail Lights
- ☐ Stop Lights
- ☐ Turn Signals and 4-way Flasher
- ☐ Clearance Lights
- ☐ Identification Lights
- ☐ Reflectors
- ☐ Rear End Protection (Bumper)
- ☐ Cargo Tie-downs/or Doors
- ☐ Leaks

RIGHT SIDE

- ☐ Fuel Tank and Cap
- ☐ Side Marker Lights
- ☐ Reflectors
- ☐ Tires and Wheels (Lugs)
- ☐ Cargo Tie-downs/or Doors
- ☐ Leaks

ON COMBINATIONS

- ☐ Hoses and Couplers
- ☐ Electrical Connector
- ☐ Couplings (Fifth Wheel, Tow Bar, Safety Chains, Locking Devices)

ON VEHICLES TRANSPORTING HAZARDOUS MATERIALS

- ☐ Marking or Placards
- ☐ Proper Shipping Papers

INSIDE

STOP ENGINE

- ☐ Release Trailer Emergency Brakes (If applicable)
- ☐ Apply Service Brakes-Air loss should not exceed -
  3 psi per minute on single vehicles
  4 psi per minute on combinations

DRIVER'S NAME: _____ **DATE:_____** **EMPLOYEE #_____**

Driver Comments: (Damage, Exceptions, Malfunctions)

_____

_____

END

A1.22B MINIMUM RAILWAY CLEARANCE

END

A1.22C VEHICLE OPERATION SAFETY PROGRAM

I. PURPOSE

The purpose of this corporate policy and procedure (Policy) is to set forth the Long Island Rail Road (LIRR) Vehicle Operations Safety Program (Program) regarding the authorized employee use of LIRR owned/leased passenger and work vehicles (Vehicles) and personal vehicles for LIRR business.

II. SCOPE

This Policy pertains to every LIRR employee driver/operator who uses a LIRR Vehicle to conduct company business on public or private roads on a daily or intermittent basis. In addition, it covers employees, as well as outside contractors and consultants hired by the LIRR who use their personal vehicles to conduct LIRR business.

III. ESSENTIAL FUNCTIONS

A. Corporate Safety and Training (CST)

1. Provide oversight and manage compliance with the Program.
2. Develop and provide all training programs deemed necessary by the Program.
3. Maintain data files pertaining to drivers and incident activity.
4. Provide reporting, as requested, to Senior Management and in compliance with Federal and State regulations.
5. Manage and process changes related to employees and vehicles received from departments.
6. Oversee vehicle safety committees to ensure compliance with the Program.

B. Corporate Safety & Compliance Administrator (CSC)

1. Perform audits.
2. Establish corporate goals.
3. Communicate safety standards to all drivers of LIRR owned and/or leased and to outside contractors utilizing their personal vehicles for LIRR business.
4. Provide guidance as to State and Federal regulations.
5. Report accident activity to Senior Management on a monthly basis.

C. Departments

1. Department Heads coordinate Program issues on a departmental level.
2. Implement the required changes to their Internal Control procedures according to Program requirements.
3. Participate in and support the Driver Qualification Review Committee and the Accident Review Committee and respond in a timely manner to schedules set forth by CST.
4. Vehicle Coordinators identify and coordinate driver training requirements for all drivers in their department.

5. Vehicle Coordinators forward documentation, forms etc. as required.

D. Employees

1. Become familiar with their responsibilities as described herein.
2. Operate all vehicles in compliance with the Program and all applicable Federal, State and local laws and ordinances, etc., and in accordance with General Safety Rules for Motor Vehicles.

E. Vehicle Fleet Office (VFO)

1. Receive all applicable documentation related to vehicle defects as reported by drivers.
2. Remove from service any vehicle with defects affecting its safe operation and arrange for repairs as needed.
3. Coordinate towing of Vehicles involved in accidents, as needed.
4. Retain motor vehicle maintenance records.

IV. PROCEDURES

A. Driver Selection and Requirements

1. General

There are several classes of Vehicles that an employee with a valid driver's license can be assigned to operate for which the employee must be qualified. Employees with a valid driver's license are automatically be qualified for any lighter class vehicle e.g. an employee qualified to drive a truck is also qualified to drive pick-ups, but not tractor-trailers. (Refer to CP&P PL-004, LIRR Passenger and Work Vehicle Assignment and Use).

2. Driver Criteria

In order to qualify to operate a Vehicle an employee must:

a. Have a valid state driver's license and meet other applicable license requirements depending on the type of vehicle being operated.

b. Pass a medical exam every two years to ensure the driver has met all physical qualifications required to drive the class of motor vehicle needed to perform their responsibilities. Drivers who fail to complete the medical exam in the required time frame will be disqualified from their driving position by LIRR Medical with concurrence from their Department Head until they pass said exam.

c. Attend and complete all required training applicable to the Vehicle(s) being operated.

3. Driver Training

a. Department Vehicle Coordinators (Coordinators) are responsible for identifying and coordinating driver training requirements ensuring that each driver receives the necessary training or the Vehicles they operate.

b. There are several classes of vehicles for which operation shall require minimum qualification. CST will provide driver training specifically applicable to each class of vehicle and employees shall receive training pertinent to the particular vehicle they are expected to operate.

c. CST will provide special instruction on the use of special machinery or equipment that is part of or mounted on the vehicle for which the driver is qualified to drive.

d. Defensive Driving Course (DDC): All LIRR employees classified as authorized drivers by their department, whose job requires them to operate a Vehicle, shall be required to attend the National Safety Council's 7-hour, Defensive Driving Course administered by LIRR within the following time frames:

i. Once every three years for current LIRR drivers.

ii. Within 90 days of hire or transfer for an employee entering into an authorized driving position.

The DDC shall be provided to all employees as per existing labor agreements, with priority given to authorized LIRR vehicle operators as determined by CST.

e. Specialty Vehicles: CST will provide, monitor and document all completed on-the-job training for specialty vehicles (see Commercial Vehicles below) and equipment every two years or on an as-needed basis if the department determines the operator requires skills training.

f. Commercial Vehicles: The following commercial vehicles require a Commercial Driver's License (CDL):

i. Boom Truck

ii. Line Truck (Digger Derrick)

iii. Aerial Device (Bucket Truck)

iv. Front End Loader (Pay-loader/Bobcat)

v. Crane - Mobile and High-Rail

vi. Tractor Trailer

CST will provide CDL training and, at its sole discretion, based on the employee's ability to demonstrate knowledge and proficiency to operate safely, shall determine and document when an employee has been provided sufficient training to pass the CDL written and driving test administered by the NYS Department of Motor Vehicles (DMV). Thereafter, any additional training will be at the discretion and sole responsibility of the employee. The cost of any additional training will not be reimbursed to the employee.

g. Categories and duration of classroom and/or refresher training shall be required as follows (CST will conduct field evaluations when training is completed):

CATEGORY	EQUIP. / CERTIFICATION	DURATION	COMMENTS
Defensive Driving Course	N/A	Seven hours over 1 day	3-year Re-certification required
CDL Training and Inspection	Boom Truck; Line Truck; Aerial Device; Front End Loader; Grabbler; Bucket Trucks;	21 hours over 3 days	
	Crane: Mobile/High-Rail	21 hours over 3 days	
Article 19A Bus Driver Certification	N/A	Four hours over 1/2 day	2-year Re-certification required
Endorsement Training	HazMat Certification	Four hours over 1/2 day	Licensee Requirements
	Wire Coil Training Certification	N/A	

Course applicability, objectives & content can be obtained through CST.

4. **Driver Responsibility: General**

   a. Maintain a valid driver's license specific to the Vehicle they operate.

   b. Ensure the current copy of their driver's license is provided to their Coordinator. Drivers with a CDL shall also provide an annual driver history on DMV form MV-900 and forward to their Coordinator.

   c. Immediately notify CSC and their Coordinator of any and all permanent or temporary changes in the status of their license (i.e. restrictions, revocation, suspensions, surrenders, change of class, etc.). Drivers must provide an updated copy of their license subsequent to each notice of change.

   d. Make certain vehicle contains all required documentation (e.g. vehicle inspection report (where applicable), registration, insurance documentation, gas card).

   e. Be personally and financially responsible for all summonses and citations, such as moving and parking violations.

   f. Be cognizant of all Federal, State and local laws pertaining to the safe operation and use of any Vehicle, commercial or otherwise. Federal or State regulations may be less restrictive than the LIRR Program as set forth herein. In which case, the more restrictive Program will govern.

5. **Driver Responsibility: Operational**

   a. Must perform pre-trip vehicle inspections to ensure the vehicle and associated safety features are in good working order.

b. For work vehicles only, including but not limited to, trucks, vans and CDL vehicles, drivers must complete the Pre-Trip Checklist Inspection Form (TC-01) – **Attachment A** and leave the form in the vehicle's cab.

c. Retain current and prior day's TC-01 in the vehicle. At the end of the tour submit the prior day's TC-01 to their Department Coordinator or Supervisor. Supervisors should forward the report to the Coordinator.

d. Drivers using their personal motor vehicles to conduct LIRR business shall not be responsible for filing inspection reports; however, they shall be responsible for maintaining their vehicles in good working order.

e. Immediately report any vehicle defects, mechanical or otherwise, including those identified by the Police or NYSDOT inspectors, to the VFO, their direct supervisor and Coordinator. The vehicle should be removed from service if the defect will affect the safe operation of that vehicle. Otherwise, the driver should confer with his/her Supervisor to make arrangements for the defect to be repaired once scheduling permits. Original document(s) e.g. TC-01, DOT inspection report must be sent to VFO within 24 hours.

f. Utilize appropriate safety equipment e.g. seat belts at all times when the Vehicle is in motion.

g. Ensure that equipment and materials in/on the Vehicle are properly secured.

h. Operate Vehicles to conduct LIRR business only.

i. Shall not operate Vehicles/equipment with which they are not familiar or in an unsafe way (i.e., surpassing load limits).

j. Ensure that only authorized passengers are carried in Vehicles and in personal vehicles being used for business use.

k. Call emergency number to report any problems (see Section E. 6).

l. Must refrain from any activity that would distract from the proper operation of the Vehicle (e.g. cell phone use during the operation of any vehicle is prohibited).

6. Department Responsibility

Each Department Head shall assign a Vehicle Coordinator to be familiar with the Program. The Coordinator will:

a. Obtain and provide driver information to the CSC.

b. Identify, schedule and ensure all drivers attend required and recommended training.

c. Schedule & ensure that drivers have physical examinations as required.

d. Ensure that vehicles are serviced and inspected on a timely basis, as scheduled by VFO.

e. On a daily basis, ensure that drivers submit TC-01's and that these reports are reviewed.

f. On a weekly basis, the Coordinator should forward to VFO only TC-01's that note vehicle defects.

g. Responsible for all other vehicle-related issues for their departments.

h. Ensure that accident reports are sent to the CSC as defined in CP&P SAFE-005, Employee Safety Policy and Procedures.

i. By June 1st of every year, provide the CSC with a copy of each current, authorized driver's license.

j. For employees with an "out-of-state" license, have the driver complete a Disclosure and Authorization for Release of Motor Vehicle Record Information form and submit to the CSC.

k. On an annual basis, ensure CDL holders complete an MV-900 form and provide a copy of their recent medical CDL certification to the CSC.

7. CSC Responsibility

a. Driver License Review: Conduct daily monitoring and an annual review of all drivers' licenses to ensure they are current, valid and meet the requirements for the type of vehicles being operated.

b. Driver File: In accordance with Federal regulations the CSC must maintain a file on every driver. Included in each file is a copy of each driver's license. Departments may maintain their own files; however, all original documentation e.g. pertaining to vehicle defects required for Federal and State audits must be sent to the CSC on an annual basis.

c. Attend vehicle safety meetings, in order to keep drivers and supervisors informed of safety issues and policies.

d. Perform audits and follow-up inspections to ensure Vehicle and employee compliance with all State and Federal rules and regulations, applicable statutes, and all laws governing motor vehicle operations e.g. seat belts, pre-trip inspections, safety equipment.

B. Accident Reporting, Investigation & Review

1. General

a. All persons involved in on-scene or post-accident activities shall obey the law and LIRR corporate policies. This section describes the responsibilities of individuals involved in and the corporate procedure for reporting motor vehicle accidents or incidents on LIRR and DMV accident forms.

b. For accidents involving serious injuries or fatalities, the scene shall remain intact and undisturbed until the arrival of police, fire, EMS and LIRR supervision.

2. Driver Responsibility

a. STOP – All employees must stop at the scene of an accident in which they are involved. It is against the law and LIRR procedure to leave the scene of an accident involving a Vehicle, unless necessary driver/vehicle information has been exchanged and/or police activities have been concluded.

b. REQUEST MEDICAL AID - Request emergency response equipment, if necessary. If hazardous material (spill/release) is involved, report the type of material, location and nature of the problem to the 911 Operator and CHEMTREC (1-800-424-9300).

c. REPORT – All employees must immediately report any accident or incident involvement to their department supervision as well as the MTA Police or local Police agency, if involved with another vehicle, pedestrian or fixed object.

All accidents occurring at ANY LOCATION, including, but not limited to, highways, roads, parking lots, shops, yards, sidings or right-of-way must be reported immediately.

d. Obtain statements from all LIRR employees and witnesses involved at the accident scene if supervision is not on-scene.

e. Prepare documentation pertinent to any motor vehicle accident within 24 hours, providing originals to the CSC. Thoroughly complete and/or provide all forms, as follows:

i. MV-104: NYS DMV Vehicle Incident Report (form is provided by CST).

ii. TC-01: Copy of LIRR Daily Inspection Log for day of accident.

iii. AR-1: Initial Report of Employee Accident/Incident, if injured (form is available on the Intranet).

f. If time will be lost from work, an employee shall report to the LIRR Medical Facility, and comply with all provisions of CP&P MED-001, Medical Assessment and SAFE-005, LIRR Corporate Employee Safety.

g. Drivers shall cooperate with Supervisors in the investigation and proper evaluation of the accident, including providing statements of fact, as necessary.

h. Submit to drug testing, as required.

3. Supervisor Responsibility

a. Departmental supervision shall notify the CSC of the accident/incident.

b. LIRR supervisory personnel who are first to arrive on the scene of an accident are responsible for identifying and obtaining statements from all LIRR employees and witnesses involved at the accident scene, except from those persons requiring medical aid who have been removed from the scene.

c. On-scene supervisors shall coordinate all activities and obtain any necessary medical attention, assist emergency response personnel and provide all information relative to the vehicle and any transported materials to all accident investigators.

d. Coordinate vehicle towing with VFO, if required (see Section E. 6).

e. Ensure accident forms are submitted to the CSC. In the event of an injury or circumstance preventing the driver from personally reporting the accident, the employee's immediate supervisor shall ensure the accident forms detailed in section B.2.e are provided as soon as possible. The supervisor is also responsible for completing and submitting a(n):

i. AR-20/AR-21: Accident/Incident Investigation/Findings

ii. Witness Statement(s)

iii. LIRR Hazardous Materials Incident Report

f. Prepare and submit all statements of fact and photographs within 3 business days of the accident to the CSC, either in person or by mail.

g. Ensure all data pertaining to Vehicle accidents/incidents are entered into the LIRR Accident Control System (ACS).

4. CSC Responsibility

a. Maintain and make available files of all forms, reports, documents, etc. provided by departments relating to vehicle accidents/incidents.

b. Report and coordinate on-going investigations of all motor vehicle accidents, incidents or accident involvement using data input into ACS.

c. Coordinate the reporting of all motor vehicle accident information to all State and Federal agencies.

d. On a monthly basis, notify Senior Management of major motor vehicle accidents and investigations as reported by departmental supervisors.

e. File claims with necessary reports and data relating to motor vehicle accidents.

f. Provide monthly reports on motor vehicle accidents in the President's Safety Report package.

5. Post-Accident Substance & Alcohol Testing

a. Post-accident testing for substances and alcohol shall be required under federal guidelines and this corporate policy.

b. Transportation to and from the collection facility shall be provided by the LIRR, or if necessary, by ambulance.

c. Post-accident testing shall be required when a driver is involved in a NYC Department of Transportation (DOT) reportable accident i.e. where there is bodily injury, damages greater than $1,000 or one or more vehicles are towed from the scene and is cited for a moving violation having caused an accident.

C. Substance & Alcohol Screening

1. General

a. The LIRR Vehicle Operations Safety Program shall adhere to the rules and regulations issued by the United States Department of Transportation, Federal Highway Administration (USDOT - FHWA), and applicable statutes, ordinances, rules and guidelines issued by New York State Motor Vehicles and Traffic Law.

b. All drivers are considered to be in safety-sensitive positions and are subject to LIRR CP&P MED-005, Alcohol & Substance Abuse, which covers the use of drugs or alcohol, on or off the job, by drivers, the effects of which could affect the quality, efficiency, and safety of vehicle operations.

c. Use, possession, sale, or transfer of illegal drugs by any driver when reporting to duty or performing safety-sensitive functions, or otherwise performing his or her job-related duties, is prohibited.

2. Commercial Drivers

Commercial vehicle drivers, as per Federal mandate, shall randomly be screened as required by their job descriptions as follows:

a. Vehicles with a gross weight over 26,000 lbs.

b. Vehicles with a combination gross weight of 26,001 lbs. or more, including towed unit with a gross weight of 10,000 lbs. or more.

c. Vehicles designed to carry 16 or more passengers, including the driver.

d. Vehicles transporting any quantity of hazardous materials, which would require placarding.

3. Awareness Training

a. LIRR shall provide an educational program on drug awareness to all drivers. The program shall be included as a one-hour segment of the Defensive Driving Program.

b. A separate class shall be administered as part of the supervisor-training program, and shall be required for all supervisors of drivers.

D. Record Keeping & Statistical Analysis

1. General

The CSC will prepare reports, statistics, and evaluations on data captured from:

a. Employee and supervisor accident reports.

b. Police reports.

c. Accident investigations.

d. Witness statements.

e. Accident claims & risk management data.

f. Vehicle maintenance records.

g. Training records.

h. Data residing in the corporate database.

2. Record Keeping Requirements

a. The CSC will retain all data pertaining to accidents and driver histories for one year after retirement, resignation or termination of the employee from LIRR, or until any cases in open status have been closed by the General Claim Agent.

b. VFO will retain motor vehicle maintenance records on vehicles owned, leased and/or rented by LIRR for up until one year after the vehicle is removed from service.

c. On an annual basis the CSC will update all driver qualification files.

d. As required, the CSC will retain all Federal and State mandated reports as required by current regulation.

3. Internal Control Review

All Departments shall include Motor Vehicle Accident/Incident Reporting and all vehicle administrative and operating procedures cited herein (as applicable) in their vulnerability assessments for annual review and testing as per LIRR CP&P RIC-003 Management Control Review.

E. Transportation of Hazardous Material

1. General

LIRR complies with all New York State regulations governing highway and railroad operations pertaining to the transportation of hazardous material. To protect drivers, passengers and the public, these rules and regulations instruct shippers, LIRR Stores employees, handlers and drivers how to package, load/unload, and transport hazardous materials, and unload bulk tanks.

2. Applicability

This section shall apply to all involved in safety-sensitive functions involving the transportation of hazardous materials, including, but not limited to:

a. Drivers of any quantity of hazardous materials, which would require placarding.

b. Operators of special equipment to handle hazardous materials.

c. Employees involved in the receipt, shipment, and/or loading/unloading of hazardous materials.

3. Responsibility

No employee shall offer or accept hazardous material for transportation unless:

a. Driver is in conformance with federal requirements by receiving the proper training (see section E.5, Training, below).

b. The hazardous material is properly classed, described, packaged, marked, labeled, and in condition for shipment, as dictated or authorized by the applicable regulatory requirements.

4. Licensing Requirements

A CDL with a hazardous materials endorsement must be obtained by a driver/operator before he/she is permitted to drive a vehicle with hazardous materials, including, but not limited to, those which would require placarding**.**

5. Training

a. Before a LIRR employee obtains a CDL with a hazardous material endorsement he/she must:

i. Receive training in LIRR's Training department to qualify for the CDL and HAZMAT endorsement.

ii. Receive special training pertaining to Right-to-Know and Transporting Hazardous Materials by Highway.

iii. Receive specific training in Hazardous Materials Receipt/Handling and Emergency Response if involved in shipping, receipt of shipment and/or loading/unloading of hazardous material. Supervisors of those employees must also receive similar training.

b. All employees described herein shall be provided with federal regulations on compliance and emergency response manuals.

c. Refresher training shall be required every two years.

6. Emergency Response Numbers

CHEMTREC (24 hours)	800-424-9300
MTA Police	718-558-3300 / 888-682-9117
LIRR Fire Marshall	347-494-6031; Nextel 347-682-0054
LIRR VFO, Fleet Manager	718-558-3234/4727; Nextel 516-369-8626 / 631-433-4370
LIRR Safety & Training Vehicle Compliance	718-558-3006

F. Automated Vehicle Location Monitoring System (AVLM)

1. General

a. The AVLM system is a technology allowing each LIRR user department to have real-time information about any vehicle being utilized by their department including, but not limited to: location, operation, and condition. AVLM also provides critical information necessary for improving LIRR dispatching capability.

b. AVLM provides essential information necessary to comply with maintenance and driver license requirements, while also providing information on daily fuel consumption and vehicle wear and tear.

c. AVLM provides important information necessary for improving employee driving behavior and reducing driving accidents.

d. The uses and benefits of AVLM as they pertain to a department's operation are detailed in the AVLM Handbook available on Procurement & Logistics' intranet.

2. Driver Responsibilities

All employees who drive LIRR vehicles will be required to use their employee pass to swipe into the identification system in the vehicle at the start of each and every trip.

3. Departmental/Supervisor Responsibilities

a. Department Coordinators should review exception reports, emails, and electronic notifications from the AVLM system. These reports may include:

i. Failure to Swipe

ii. Unauthorized Drivers

iii. Out of Class Drivers

b. Upon review of the exception reports, the supervisors must take the necessary administrative action, including the use of warning letters or discipline as appropriate to foster compliance with LIRR policies and procedures.

4. AVLM Data for Accident & Other Investigations

a. User Department shall not release information from the AVLM system to any non-MTA Agencies without the express permission of the Law Department.

b. Information from the AVLM system will be provided to MTA Police and other MTA Agencies upon request.

5. AVLM Reports for Eligible Driver Compliance Review

CSC will periodically review information from the AVLM system to ensure compliance with various federal, state, and local driving licensing requirements.

V. RELATED POLICIES

PL-004 - Passenger and Work Vehicle Assignment and Use
SAFE-005 - Corporate Employee Safety Policy
MED-001 - Medical Assessment Policy
MED-005 - Alcohol & Substance Abuse
RIC-003 - Management Control Review
AVLM Handbook

VI. FORMS & ATTACHMENTS

Attachment A – Pre-Trip Checklist Inspection Form (TC-01)

VII. REVISION TRACKING

Effective: June 1998
Revised: February 2000
January 2003
December 2007
May 2012 - Scheduled Revision;
Removal of L.E.N.S;
Added requirement for the driver with an out-of-state license to complete and submit a Disclosure and Authorization for Release of Motor Vehicle Record Information form.

END

A1.22D TRUCK INSPECTIONS

Long Island Rail Road

Contractor Truck Inspection

MW Repair Shop

718-558-7606

Contractor Name:_____ Date: _____

Manufacturer Name:_____ License Plate:_____

VIN / Serial #: _____ Supervisor Phone : _____

Condition of:	S	U	N/A	Remarks:
Head Lights				
Turn Signals				
Running Lights				
Backup Lights				
Reverse Running Lights				
Service/ Parking Brakes				
Horn				
Steering Wheel Lock Out				
Steering				
Front Axle Locking Device				
Rail Wheels				
Tires				
Windows				
Mirrors				
Hydraulic Hoses				
Special Equipment				
Outriggers				
Beacon (360° Strobe)				
Fusees				
Safety Equipment				
Fire Extinguisher				
First Aid Kit				
State Inspection				
Insurance Card				
Valid Hi-rail Inspection (Exp. Date)				
Rail to underbody - 2 3/4" min.				

TC#: _____

Mechanic: _____ Operator: _____

END

A1.23A PROPERTY TAKING

NOTE : The "AVAILABLE FOR CONST." date refers to the last day of the month indicated.

TRN	AVAILABLE FOR CONST.	ADDRESS	COMMERCIAL PROPERTY	DIST-SEC-BLK-LOT	TYPE OF TAKING	WORK	APPROXIMATE AREA OF TAKING IN S.F.
Covert Avenue							
6	Sep-18	[redacted]		[redacted]	TE	For work area for retaining wall construction and driveway reconstruction	800 SQ. FT.
1	Jul-18		X		FEE Partial Take & TE*	For utility relocation	15077 SQ. FT.
	Apr-18					Access for testing	
2	Sep-18				TE	For work area for retaining wall construction	585 SQ. FT.
3	Sep-18				TE	For work area for retaining wall construction and grading	754 SQ. FT.
4	Sep-18				TE	For work area for retaining wall construction and grading	519 SQ. FT.
5	Sep-18				TE	For work area for retaining wall construction	453 SQ. FT.
30	Sep-18			[redacted]	TE	For work area for retaining wall construction	378 SQ. FT.
35	Sep-18	[redacted]		[redacted]	TE	For grading	154 SQ. FT.

* FEE Partial Take is for the 15 foot wide strip along the western edge of the property required for utility relocation. The remainder of the property is TE. The TE area shall not be used for utility relocation or for any drainage facilities or solutions, but may be used as a temporary work area.

New Hyde Park Road

7	Feb-19	[redacted]	X	[redacted] -	PE & TE	PE needed for retaining wall with tie backs on New Hyde Park Rd and TE needed for retaining wall on Plaza Ave, driveway relocation and utility services relocation	PE=4401 SQ. FT. T.E.=12726 SQ. FT.
8	Feb-19			- o	TE	For work area for retaining wall construction	300 SQ. FT.
9	Sep-18		X	-	FEE - Full Take	For drainage, parking lot construction and utility corridor	56648 SQ. FT.
10	Feb-19				TE	For work area for retaining wall construction	779 SQ. FT.
MAIN STREET							
40	Nov-19		X	,	FEE & TE	Fee is for access road, TE is for construction of access road	Fee=195 SQ. FT. TE=497 SQ. FT.
84	Nov-19		X		FEE & TE	Fee is for access road, TE is for construction of access road	Fee= 157 SQ. FT. TE=201 SQ. FT.
					nue		
14	Sep-20		X		TE, or TE & PE	For parking/driveway access and utility services relocation PE for retaining wall and walkway	TE = 3499 SQ. FT., or TE = 1234 SF & PE = 1887 SF
16	Sep-20		X		TE, or TE & PE	For retaining wall and parking lot reconstruction PE for retaining wall and walkway	TE = 2452 SQ. FT., or TE = 687 SF & PE = 1766 SF

17	Sep-20	[redacted]	X	[redacted]	FEE & PE	For elevator and stairs at new pedestrian bridge	FEE=925 SQ. FT. PE= 796 SQ. FT.
18	Sep-20		X		FEE	For roadway widening	1823 SQ. FT.
48	Sep-20		X		TE	For utility services relocation	19044 SQ. FT. Building T.E.=21,119
49	Sep-20		X		TE	For commercial driveway reconstruction	2602 SQ. FT.
85	Sep-20		X		TE	For parking lot reconstruction	1933 SQ. FT.
School Street							
19	Jun-20		X		FEE	For roadway construction	FEE=1840 SQ. F.T
20	Dec-19		X		FEE - FULL TAKE	Constructibility and possible drainage	24518 SQ. FT.
21	Jun-20				TE	For driveway and retaining wall construction	1075 SQ. FT.
22	Jun-20		X		T.E., or TE & PE	TE For driveway and utility services relocations PE for retaining wall	TE = 34,986 SQ. FT. Or TE = 33,966 SF & PE = 2526 SF
23	Jun-20		X		T.E., or TE & PE	TE For driveway and parking lot reconstruction PE for retaining wall and walkway	TE = 16,639 SQ. FT., or TE = 7825 SF & PE = 8821 SF
24	Jun-20		X		T.E., or TE & PE	For retaining wall, driveway and parking lot reconstruction and utility services relocation	TE = 7334 SQ. FT., or TE = 4985 SF & PE = 2362 SF

54	Jun-20	[redacted]	X	[redacted] -	TE	For parking lot reconstruction	4172 SQ. FT.
55	Jun-20		X	0 -	FEE, or FEE, PE & TE	FEE for roadway construction PE for retaining wall TE for driveway reconstruction and grading	FEE = 2398 SQ. FT., or FEE = 2398 SQ. FT., TE = 4056 SQ. FT. & PE = 2763 SF
86	Jun-20		X	-	T.E.	For driveway relocation and utility services relocation	20743 SQ. FT.
			Urban Avenue				
25	Sep-18		X		TE	For driveway reconstruction	900 SQ. FT.
26	Sep-18		X		TE	TE for retaining wall construction, driveway reconstruction and utility services relocation	1200 SQ. FT.
27	Sep-18		X		FEE - Full Take	Constructibility and possible drainage	9480 SQ. FT.
	Apr-18					Access for testing	
28	Sep-18		X		TE	For driveway reconstruction	1668 SQ. FT.
29	Sep-18				TE	For driveway relocation and utility services relocation	10,147 SQ. FT.
53	Sep-18		X		FEE	For driveway reconstruction	2500 SQ. FT.

65	Sep-18	[redacted]	X	[redacted]	TE	For driveway reconstruction, staging and curb cut	1618 SQ. FT.
66	Sep-18		X		TE	For driveway reconstruction and staging	2264 SQ. FT.
67	Sep-18		X		TE	For driveway reconstruction and staging	2615 SQ. FT.
70	Sep-18		X		TE	For driveway curb cut	1380 SQ. FT.
76	Sep-18		X		TE	For driveway reconstruction	834 SQ. FT.

END

A1.23B DRIVEWAY RELEASE AGREEMENTS

NOTE : The "AVAILABLE FOR CONST." date refers to the last day of the month indicated.

TRN	PROJECTED ACQUISITION DATES	AVAILABLE FOR CONST.	ADDRESS	DIST-SEC-BLK-LOT	DRIVEWAY RELEASE
Covert Avenue					
2	To be obtained by MTA or Design-Builder	Sep-18	[redacted]		**X**
3	To be obtained by MTA or Design-Builder	Sep-18			**X**
4	To be obtained by MTA or Design-Builder	Sep-18			**X**
5	To be obtained by MTA or Design-Builder	Sep-18			**X**
30	To be obtained by MTA or Design-Builder	Sep-18			**X**
31	To be obtained by MTA or Design-Builder	Sep-18			**X**
32	To be obtained by MTA or Design-Builder	Sep-18			**X**
33	To be obtained by MTA or Design-Builder	Sep-18			**X**
34	To be obtained by MTA or Design-Builder	Sep-18			**X**
35	To be obtained by MTA or Design-Builder	Sep-18			**X**

TRN	PROJECTED ACQUISITION DATES	AVAILABLE FOR CONST.	ADDRESS	DIST-SEC-BLK-LOT	DRIVEWAY RELEASE
New Hyde Park Road					
7	To be obtained by MTA or Design-Builder	Feb-19	[redacted]		**X**
10	To be obtained by MTA or Design-Builder	Feb-19			**X**
11	To be obtained by MTA or Design-Builder	Feb-19			**X**
Willis					
85	To be obtained by MTA or Design-Builder	Sep-20			**X**
Urban					
28	To be obtained by MTA or Design-Builder	Sep-20			**X**

END

A1.23C LIRR PROPERTIES

NOTE : The "AVAILABLE FOR CONST." date refers to the last day of the month indicated.

TRN	AVAILABLE FOR CONST.	ADDRESS	COMMERCIAL PROPERTY	DIST-SEC-BLK-LOT	TYPE OF TAKING	COMMENTS	APPROXIMATE AREA OF TAKING IN S.F.
56	Sep-19	[redacted]	X	[redacted]	FEE Partial Take	FEE Taking for LIRR 3rd Track Project, New Platforms at New Hyde Park Station	699 SQ. FT. ±
57	Sep-19		X		FEE Partial Take	FEE Taking for LIRR 3rd Track Project, New Platforms at New Hyde Park Station	402 SQ. FT. ±
63	Jun-21				TE	Assumed 15' around existing garages to be rebuilt	17,853 SQ. FT. ±
74	May-19		X		PE	Required for Access to LIRR Equipment	4147 SF
104	May-19		X		FEE Partial Take	Required for LIRR Equipment	854 SF

END

A1.23D VILLAGE – MUNICIPAL OWNED

NOTE : The "AVAILABLE FOR CONST." date refers to the last day of the month indicated.							
TRN	AVAILABLE FOR CONST.	ADDRESS	COMMERCIAL PROPERTY	DIST-SEC-BLK-LOT	TYPE OF TAKING	COMMENTS	APPROXIMATE AREA OF TAKING IN S.F.
New Hyde Park Road							
64	Feb-18	[redacted]		[redacted]	MOU or PE	Retaining wall and Sidewalk construction	2,264 SQ. F.T.
87	Feb-18			[redacted]	MOU or PE	Retaining wall and roadway construction	6,654 SQ. F.T.
59	Feb-18			[redacted]	MOU or Fee and PE	For roadway widening, utility corridor, station platform and stairs	FEE=12,316 SQ. FT. PE= 16,804 SQ. FT.
Willis Avenue							
15	Dec-18	Second Avenue	X	[redacted]	TE	For Work Area: For retaining wall	357 SQ. FT.
LIRR Expansion - Proposed 3rd Track							
60	Feb-18	3rd Avenue		New Hyde Park 3rd Avenue	MOU or Fee	For LIRR 3rd Track Project	701 SQ. FT. ±
61	Mar-18	3rd Avenue		New Hyde Park 3rd Avenue	MOU or FEE	For LIRR 3rd Track Project includes New Hyde Park Station impact	13,820 SQ. FT. ±
62	Jul-18	Station Road		[redacted]	MOU or Fee	For Mineola Station Platform Stairs	782 SQ. FT. ±
78	Jun-18	[redacted]		[redacted]	MOU or Fee Partial	FEE Taking for LIRR 3rd Track Project, New Platforms at Mineola Station	1,268 SQ. FT. ±

TRN	AVAILABLE FOR CONST.	ADDRESS	COMMERCIAL PROPERTY	DIST-SEC-BLK-LOT	TYPE OF TAKING	COMMENTS	APPROXIMATE AREA OF TAKING IN S.F.
79	Jul-18	Mineola Blvd.		2822-9	MOU or Fee	For Mineola Station Platform Stairs Mineola Blvd. to retain aerial rights	777 SQ. FT. ±
80	Jul-18	Mineola Blvd.		2822-9	MOU or Fee	For LIRR 3rd Track Project	339 SQ. FT. ±
81	Jul-18	Herricks Road		Section 33 Block A, Lot 8E	MOU or P.E.	For LIRR Equipment	14,388 SQ. FT. ±
102	Sep-18	2nd Avenue		New Hyde Park 2nd Avenue	MOU or Fee	For LIRR 3rd Track Project includes New Hyde Park Station impact	188 SQ. FT. ±
101	Sep-18	Station Plaza north		Village of Mineola Station Plaza north	MOU or Fee	For LIRR 3rd Track Project includes Mineola Station impact	627 SQ. FT. ±
103	Sep-18	Stonehinge Lane		Town of North Hempstead (Carle Place) Atlantic Avenue	MOU or Fee	For LIRR 3rd Track Project includes Carle Place Station impact	540 SQ. FT. ±
100	Sep-18	2nd Avenue		10-229-4	MOU or Fee	For LIRR 3rd Track Project includes Westbury Station impact	6,025 SQ. FT. ±

END

A1.23E PARKING GARAGES

NOTE : The "AVAILABLE FOR CONST." date refers to the last day of the month indicated.

TRN	AVAILABLE FOR CONST.	ADDRESS	COMMERCIAL PROPERTY	DIST-SEC-BLK-LOT	TYPE OF TAKING	COMMENTS	APPROXIMATE AREA OF TAKING IN S.F.
				Main Street			
41	* ** Aug-20	[redacted]	X	[redacted]	MOU or FEE-Full Take	Parking Garage	12685 SQ. FT.
42	* ** Aug-20		X		MOU or FEE-Full Take	Parking Garage	30,679 SQ. FT.
90	* ** May-21		X		MOU or FEE-Full Take	Parking Garage	124,382 SQ. FT.
91	* ** Jan-19		X		MOU or FEE-Full Take	Parking Garage	95,193 SQ. FT.
92	* ** Sep-18		X		MOU or FEE-Full Take	Parking Garage	41,257 SQ. FT.
93	* **		X		MOU or FEE-Full Take	Parking Garage	57,604 SQ. FT.
94	* ** Sep-18		X		MOU or FEE-Full Take	Parking Garage	63,382 SQ. FT.

* Provide a minimum of 60 Calendar Days notice to the Railroad.

** Request access in accordance with work sequence requirements.

END

A2.7A CONTRACTOR-SUBCONTRACTOR SWPPP CERTIFICATION STATEMENT

Signature Page: Contractor/Subcontractor SWPPP Certification Statement

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the owner or operator must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

NAME: _____ DATE: _____

_____
Printed Name and Title

COMPANY: _____

COMPANY ADDRESS: _____

_____

TELEPHONE NUMBER: _____

NAME AND TITLE OF TRAINED CONTRACTOR RESPONSIBLE FOR SWPPP IMPLEMENTATION:

_____ Signature

_____
Printed Name and Title

SPECIFIC ELEMENTS OF THE SWPPP CONTRACTOR/SUBCONTRACTOR WILL BE RESPONSIBLE FOR:

_____

_____

_____

_____

PROJECT TITLE: _____

PROJECT ADDRESS: _____

_____

LIRR PROJECT MANAGER: _____

END

A2.7B HAZARDOUS WASTE LABEL

"Hazardous Waste" Label - 6 x 6"

Clearly identify containers of waste for transport.

- Meets EPA requirements.
- Customers in CA order S-17655 to comply with state and federal regulations.
- Customers in NJ order S-17666 to comply with state and federal regulations.
- Yellow litho paper with permanent adhesive.

END

A2.10A SSI STATEMENT OF ACKNOWLEDGEMENT AND COMPLIANCE

SECURITY SENSITIVE INFORMATION

STATEMENT OF ACKNOWLEDGEMENT AND COMPLIANCE

ACKNOWLEDGEMENT:

By signing below, **<Insert Design-Builder Name>** the Design-Builder acknowledges all required staff (Design-Builders, employees, consultants, contractors, sub-contractors, suppliers and others) have received, read, understand and agree to comply with the requirements in the MTA Security Sensitive Information Handbook, Version 3.

SECURITY SENSITIVE INFORMATION MANAGEMENT REQUIREMENTS

Reference handbook section titles:

- PROCEDURES FOR HANDLING MTA SECURITY SENSITIVE INFORMATION
- ACCESS TO MTA SECURITY SENSITIVE INFORMATION
- SAFEGUARDING MTA SECURITY SENSITIVE INFORMATION
- MARKING OF DOCUMENTS
- AUTHORIZED PERSONNEL LISTINGS
- DOCUMENT CONTROL SYSTEM
- INFORMATION TECHNOLOGY SYSTEMS
- PROCUREMENT PROCEDURES
- MTA AUDIT PROGRAM

Note additional requirements to exceed those listed in the MTA Security Sensitive Information Handbook below. If not applicable, please indicate “Meets current requirements”.

(if additional space is needed, please submit an attachment).

REQUIRED ATTACHMENTS:

☐ Non-Disclosure and confidentiality Agreement – Company

☐ Non-Disclosure and confidentiality Agreement – Individual (Design-Builder Document Control Officer)

☐ Employment History – Individual (Design-Builder Document Control Officer)

Contract Name: _____ Contract number: _____

< **Insert Design-Builder company name and contact information** >

Title: _____ Name: _____

Signature: _____

END

A2.17A QUALITY PROGRAM – LIST OF NYSDOT FORMS

Specification Section	QC Inspection Requirements	Documentation Form(s)
All - General	• Location and type of Work • Personnel and Equipment • Weather and Site conditions • Checks for Compliance with Design Plans and Project Specifications • Extent of Work • Problems encountered	MURK 1d (DB CQC), MURK 2b (DB-CQC), Design-Builder's Daily QC Project Diary
201 – Clearing and Grubbing	• Clearing and grubbing limits • Disposal • Salvage of marketable timber • Protection and restoration	MURK 1d (DB CQC)
202 – Removal of Structures and Obstructions	• Safety • Engineering survey • Utilities (capping and protection) • Unauthorized entry • Hazardous Materials occurrence • Exterminations • Dust control • WZTC • Disposal of Materials • Salvage	MURK 1d (DB CQC)
203 – Excavation and Embankment	General Requirements: Stated in the Standard Specifications, CIM and MURK Part 1B.	General: IR's GEB Manuals
	Select Materials	Forms are found in the appropriate GEB manual. Also refer to MURK-1 (DB CQC), Inspector's Daily Report
	Expanded Polystyrene Fill	Forms are found in the appropriate GEB manuals including GTP-7 and GEM-24. Also refer to MURK-1 (DB CQC), Inspector's Daily Report
	Drilling and blasting operations	Form GE-469 (DB), Blasting Report Geotechnical Engineering Manual GEM-22 Procedures

		for Blasting
	Settlement measurement	Form GE-435, Settlement Report – Manometer Gage Form GE-436, Settlement Report – Rod Gage Form GE-437, Settlement Report – Pipe Gage
	Pore water pressures	Form GE-264, Pore Pressure Report/Vibrating Wire Piezometer
	Slope movements	Form GE-422, Slope Indicator Data Sheet
204 - Controlled Low Strength Material (CLSM)	• Materials: Flow test, Cylinder breaks • Placement	MURK 1d (DB CQC)
206 - Trench, Culvert and Structure Excavation	• Safety • Support and protective systems • Test pits • Trench and Culvert excavation • Disposal of excavated Material	MURK 1d (DB CQC)
207 - Geosynthetics	Brand name and type	MURK-1 (DB CQC), Inspector's Daily Report MURK 14
208 – Stormwater Management Facilities	Conformance to special specification and environmental permit requirements	MURK-1 (DB CQC), Inspector's Daily Report and forms required by regulations
209 - Soil Erosion and Sediment Control	Checks, tests, and activity relating to mulching, temporary seeding, check dams, strawbales, haybales, sediment traps, turbidity curtains, silt fences, and fence removal	MURK-1 (DB CQC), Inspector's Daily Report
210 - Removal and Disposal of Asbestos-Containing Material (Buildings, Bridges, and Highways)	• Compliance with regulatory standards • Air quality monitoring • Disposal	MURK 1d (DB CQC) and forms as required by regulations
211 - Internally Stabilized Cut Structures	• Materials • Certified Mill Test Results • Certified Mix Design for grout and shotcrete	Soil Nail Tendon Installation: GEM-21 Grouted Tieback Installation: GEM-17

	• Jack and Pressure Gauge Calibration • Geotextile Approved List • Gout Cube Tests • Nail Tests • Shotcrete	
212 - Rock Slope Reinforcement and Catchment Systems	Materials • Certified Mill Test Results • Test Results demonstrating capability • Approved List • Grout Cube Tests • Anchor Proof Tests • Rock Bolt Tensioning • Gradation Test for Cushion Sand	MURK 1d (DB CQC), Inspector's Daily Report
302 -, Bituminous Stabilized Course	Results of stockpile sampling and testing • Bituminous materials and stabilized course • Pugmill calibration • Additional Inspection/documentation • Approved Material incorporated, including source • and stockpile • Weather and time of year restrictions met • Placement and compaction	Form GE-454, Granular Material Documentation Form Form GEB-352b (DB), Project Inspection Report-Bituminous Stabilized Course Form BEB-423b (DB), Bituminous Pugmill Calibration Form MURK-1d (DB CQC), Inspector's Daily Report
303 – Optional Flexible Shoulder	Inspect and document the following dependant on material type: • HMA items per 402 • PCC items per 502	MURK 1d (DB CQC), Inspector's Daily Report Per §402 and MP 402-2 for HMA MURK 3, Concrete Pavement Daily Field Inspection Report for PCC
304 - Subbase Course	• Information documented on MURK 1d • Equipment used for compaction and number of • passes • Lift thickness prior to compaction • Thickness of subbase Material placed • Addition of water to subbase • Construction of stockpiles • Only Material from approved source or stockpile • incorporated in Work	MURK 1d (DB CQC), Inspector's Daily Report Form GE-454M, Granular Material Documentation Form SM-15B, Sieve Analysis Data

	• Results of stockpile sampling and testing, in • accordance with the requirements of GCP-17	
307 - Hydrated Lime Stabilized Subgrade	Inspect and document the following: • Equipment used • Moisture added • Preparation of foundation • Scarifying • Lime application • Mixing (primary and secondary) • Compaction, shaping, and finishing • Curing • Compliance with weather limitations • Safety and protection	MURK 1d (DB CQC), Inspector's Daily Report
308 - Soil Cement Course	• Inspect and document the following: • Material source and stockpile construction • Preparation, application of cement, mixing, • spreading, placement, compaction, and finishing in • accordance with Project Specifications • Curing and surface treatment • Compliance with weather limitations • Stockpile sampling and testing	MURK 1d (DB CQC), Inspector's Daily Report GE-454M, Granular Material Documentation Form
401 - Plant Production	Materials • HMA design • Aggregates • Aggregate source • Mineral filler • PG binder • Recycled asphalt pavement • • Construction • Determination of lots and sublots • Mixing and holding time • Production control	MURK 1d (DB CQC) Form BR-162, Bituminous Materials Certified Shipment Notice Per §401 and MP 401

	• Production quantities • Plant and Equipment, including Inspection facilities	
402 – Hot Mix Asphalt (HMA) Pavements	Inspect and document the following: • Composition of mixtures • Weather and seasonal limitations • Type and grade of bituminous Material • Equipment, including hauling Equipment • Paver and Equipment cleaning • Condition of existing surface • Spreading and finishing • Compaction/pavement density • Joints • Surface and thickness tolerances	MURK 1d (DB CQC), Inspector's Daily Report Per §402 and MP 402-2
407 - Tack Coat	Inspect and document: • Bituminous material • Randomly sample and test 1 sample per 5000 gal, • minimum once per project. • Preparation of tack coat • Time to paving (curing/breaking) • Maintenance of traffic • Application	Form BR-162c 9DB), Bituminous Material Certified Shipment Notice Form BR-170 (DB), Bitumen or Mix Sample MURK 1d (DB CQC), Inspector's Daily Report
410 - Bituminous Surface Treatment - Single Course	Inspect and document: • Bituminous material • • • Aggregate compatibility with bitumen • Compliance with weather and seasonal limitations • Surface preparation • Application • Bitumen • Cover aggregate • Cleanup	Form BR-162c 9DB), Bituminous Material Certified Shipment Notice Form BR-170 (DB), Bitumen or Mix Sample MURK 1d (DB CQC), Inspector's Daily Report
490 - Cold Milling	Inspect and Document: • Controls	MURK 1d (DB CQC), Inspector's Daily Report

	• Equipment • Cleaning • Milling	
501 - Portland Cement Concrete - General	Inspect and document: • Plant • • • • • • Materials • • • • • For Structural Concrete, information required on • MURK 5d (DB CQC)	• BR 316a, Daily Concrete Batch Plant Report (onand • off-site plants) with Materials Acceptance • Records • Plant Inspector's Diary • Copy of mix design or Form BR-329, Concrete • Mix Design Sheet • Cement shipment certifications or cement • shipment authorization and cement sample logs • BR 342, Materials certification (certified batches • only) • Delivery tickets • MURK 5d (DB CQC), Design-Builder's Structural • Concrete Inspector's Daily Report
502 - Portland Cement Concrete Pavement	Inspect and document information required on specified form, including: • High & low ambient temperature during placement • Mixer type • Slump • Air content • Concrete specifications • BR 316 Report number • Concrete Mixing, Transporting & Discharging • checks five (5) times each production day: • Central Mix – Time, End of discharge • Truck mix – time, begin and end of mixing, end of • discharge and mixing revolutions • Transit Mix – Time, begin and end of discharge	MURK 3, Concrete Pavement Daily Field Inspection Report

	and • mixing revolutions • Thickness Tolerance • Compliance with weather and seasonal limitations • Equipment • Forms • Preparation of subbase • Placing and spreading concrete • Finishing and texturing • Joints • Curing • Removing Forms (fixed form paving) • Protection of pavement • Surface test • Sealing joints	
503 - Portland Cement Concrete Foundation for Pavement	Inspect and Document: • Materials – See 501 • Surface tolerance • Texturing • Curing	MURK 3, Concrete Pavement Daily Field Inspection Report
551 - Piles and Pile Driving Equipment	• Inspect equipment and prepare Form BD 138M, Pile • and Pile Driving Equipment Data • Pile material deliveries • Complete Pile Driving Record • • Inspect and document: • Storage and handling of piles • Preparation of piles • Shoes • Splices • Driving method(s) • Length of piles • Variation in pile alignment	Form BD 138M, Pile and Pile Driving Equipment MURK 1d (DB CQC), Inspector's Daily Report Form BD-25M, Pile Driving Record Form BD-26M, Pile Driving Record Daily Summary MURK 1d (DB CQC), Inspector's Daily Report

	• Cutting off piles and pile casings • Painting exposed piles • Reject defective piles and document reason and • disposition	
Drilled Shafts	Drilling • Concreting • Integrity Testing • Shaft Plumbness • Shaft Soil Field Log • Rebar Cage (Centralizers, Access Tubes) • Load Testing	Drilled Shafts: GEM-18 Static Pile Load Test: GCP-18
Micropiles	Drilling • Grouting • Reinforcement • Load Testing	Micropiles: GEM-25 Static Pile Load Test: GCP-18
552 – Externally Stabilized Cut Structures	Materials • Safety • Permanent Sheeting • Temporary sheeting • Interim sheeting • Excavation protective systems	MURK 1d (DB CQC), Inspector's Daily Report
553 – Cofferdams and Waterway Diversion Structures	Materials • Cofferdams • Structure • Dewatering Equipment • Sediment removal areas • Temporary water diversion structure • Removal	MURK 1d (DB CQC), Inspector's Daily Report
554 – Fill Type Retaining Walls	• Materials • Construction • Placement area • Facing units • Structure erection • Methods & Equipment	Backfill sampling and testing is addressed under GCP- 17.

	• Leveling pad • Backfill • Reinforcing Approved List Materials Methods Foundation Area Erection Tolerances Backfill Material Reinforcing Elements Equipment Movements Subsurface Drainage System Identification Markers Coping Units Aesthetic Treatment •	
555 - Structural Concrete	Inspect and document: • Reinforcing bars: (See also 556) • Handling and storage • Installation • Plan clearances • Forming operations • Form support • Joints • Wall layout for waterstops • Construction joints • Concrete operations • Prior to placing • Placing sequence • Adequacy of personnel and equipment • Concrete supply • Conveyance system • Forms • Curing materials • Admixtures	MURK 1d (DB CQC), Inspector's Daily Report

	• Prewetting • Placing • Finishing • Curing • Mass concrete operations – special provisions • Cold weather concreting • Verify permission • Ambient temperature • Maintaining temperature • Safety/ventilation • Insulation • External heat and enclosures • Hot weather concreting • Underwater concrete placements	
556 - Reinforcing Steel for Concrete Structures	Inspect and document: • Storing and handling • Placing and fastening • Field bending • Field repair • Splices • Placement in structural slabs • Stud shear connectors for bridges	MURK 1d (DB CQC), Inspector's Daily Report
557 – Superstructure Slabs, Sidewalks on Bridges, and Structural Approach Slabs	Inspect and document: • Compliance with specified restrictions • Forming • Forms • Support Systems • Haunch depths • Permanent corrugated metal forms • Joints • Drainage • Placing and fastening reinforcing steel • Concreting Operations (see 555) • Finishing Integral Wearing Surfaces	MURK 1d (DB CQC), Inspector's Daily Report

558 - Longitudinal Sawcut Grooving of Structural Slab Surface	Inspect and document: • Grooving layout • Grooving geometry • Grooving operations	MURK 1d (DB CQC), Inspector's Daily Report
560 - Masonry	• Inspect and document: • Materials • Dimension stone masonry • Split face concrete masonry • Stone masonry • Rubble stone masonry • Precast concrete coping • Mortar • Compliance with weather limitations • Construction (See Section 560, Part IX) • Dimension stone masonry • Split face concrete masonry • Stone masonry • Rubble stone masonry • Rubble stone masonry laid dry • Precast concrete coping	MURK 1d (DB CQC), Inspector's Daily Report
563 – Prestressed Concrete Units (Structural)	Inspect and document: • When receiving units: • Inspector's stamp of approval • Units against Report of Acceptance of Structural • Concrete • Damage during shipment • Camber • Dimensional tolerance • Visual defects • Erection • Repair	MURK 1d (DB CQC), Inspector's Daily Report
564 - Structural Steel	Inspect and Document: • Materials • Field Fabrication • Field Welding	MURK 1d (DB CQC), Inspector's Daily Report

	• Repairs • Erection • Site storage & handling	
565 - Bridge Bearings	Materials • Fabrication • Protective coatings • Bearing surface preparation • Anchor bolts • Pad installation • Welding • Grouting	MURK 1d (DB CQC), Inspector's Daily Report
566 – Modular Expansion Joint Systems	Materials-System • Fabrication • Installation	MURK 1d (DB CQC), Inspector's Daily Report
567 – Bridge Joint Systems	Materials • Fabrication • Cleaning • Assembly • Installation • Preparation • Handling and Storage	MURK 1d (DB CQC), Inspector's Daily Report
568 – Bridge Railing	Materials • Erection • Cement Mortar Pads	MURK 1d (DB CQC), Inspector's Daily Report
569 – Permanent Concrete Traffic Barrier for Structures	Materials • Fabrication • Tolerances • Precast • Cast-in-Place	MURK 1d (DB CQC), Inspector's Daily Report
570 – Paint Removal Operations	Materials • Ground Protection • Waste materials • Air filtering • Removal and disposal of waste	MURK 1d (DB CQC), Inspector's Daily Report

	• Waterway Protection • Collections • Floating waste containment & disposal	
571 - Treatment and Disposal of Paint Removal Waste	Containers • Labeling • Documentation Preparation • Waste Composition • Stabilization	MURK 1d (DB CQC), Inspector's Daily Report
572 – Structural Steel Painting: Shop Applied	Materials • Abrasive • Paint • Paint Inspection Equipment • Cleaning • Painting – General • Painting – Application Methods • Shop Painting • Field Painting	MURK 1d (DB CQC), Inspector's Daily Report
576 - Bridge Drainage System	• Materials • Fabrication • Erection	MURK 1d (DB CQC), Inspector's Daily Report
578 - Bonded Concrete Overlay for Structural Slabs	Materials • Blast cleaning • Preplacement wetting • Bonding grout placement • Handling and placing concrete • Finishing and curing slab reconstruction concrete • Finishing bonded concrete overlay • Curing bonded concrete overlay	MURK 1d (DB CQC), Inspector's Daily Report *See* also documentation for Section 501
579 - Structural Slab Reconstruction Preparation	Materials • Equipment • Scarification • Reinforcing Bar Exposure • Full Depth Patches • Hydrodemolition Equipment	MURK 1d (DB CQC), Inspector's Daily Report

	• Water filtration and disposal • Water retention • Debris removal	
582 - Removal and Replacement of Structural Concrete	Materials • Removal of Unsound Concrete • Preparation of Surface • Placement • Form Removal • Curing	MURK 1d (DB CQC), Inspector's Daily Report
583 - Shotcrete	Materials • Equipment • Qualification Test • Preparation of Surfaces • Preparation of Materials • Placement • Weather • Quality Control • Test Panels • Coring • Finishing • Curing	MURK 1d (DB CQC), Inspector's Daily Report
584 - Specialized Overlays for Structural Slabs	Materials • Manufacture of Class DP Concrete • Manufacture of Microsilica Concrete • Equipment • Limitations of Operations • Blast Cleaning • Preplacement Wetting • Bonding Grout Placement • Handling and Placing Concrete • Finishing and Curing • Construction Joints • Defective or Damaged Concrete	MURK 1d (DB CQC), Inspector's Daily Report *See* also documentation for Section 501
585 - Structural Lifting	Lifting Equipment	MURK 1d (DB CQC), Inspector's Daily Report

Operations	• Lifting Operations	
587 - Bridge Railing Reconstruction	• Materials • Bridge Railing Removal • Bridge railing Storage • Bridge Railing Installation (see Section 568) • Trie Beam Installation • Direct Attachment • Separate Post Installation	MURK 1d (DB CQC), Inspector's Daily Report
589 - Removal of Existing Steel	• Work Plan • Paint Removal • Cutting • Fastener Removal • Disassembly of Welded Connections	MURK 1d (DB CQC), Inspector's Daily Report
590 - Adjustment of Bridge Appurtenances	Materials • Galvanized Parts and Repairs • Welding	MURK 1d (DB CQC), Inspector's Daily Report
594 - Timber and Lumber	Materials • Erection • Treatment after Fabrication • Permits	MURK 1d (DB CQC), Inspector's Daily Report
596 - Open Steel Floor	Materials • Fabrication • Shop Painting • Placement • Field Welding • Field Painting	MURK 1d (DB CQC), Inspector's Daily Report
597 - Timber Bridge Railing and Transitions	Materials • Fabrication • Galvanizing • Railing • Field Repair • Installation/Erection	MURK 1d (DB CQC), Inspector's Daily Report
602 - Rehabilitation of Culvert and Storm Drain Pipe	• Materials • Existing Pipe Preparation	MURK 1d (DB CQC), Inspector's Daily Report

	• Handling and Installing Relining Materials • Installation • Curing • Workmanship • Lateral Connections • Damaged Pipe and Repairs	
603 - Culverts and Storm Drains	• Materials • Excavation • Laying Pipe • Bedding and Backfill • Damaged Pipe and Repairs • Field Strutting of Corrugated Structural Plate • Pipe • Joints • Concrete Paving for Corrugated Structural • Plate Pipe • Relaying Pipe • Anchor Bolts	MURK 1d (DB CQC), Inspector's Daily Report
604 - Drainage Structures	• Materials • Excavation • Installation • Backfill – See GCP-17	MURK 1d (DB CQC), Inspector's Daily Report
605 - Underdrains	• Materials • Bed Preparation • Placement • Pipe Installation • Backfill and Compaction – see GCP-17	MURK 1d (DB CQC), Inspector's Daily Report
606 - Guide Railing	• Materials • Equipment • Rail Elements • Field Repair • Field Welding • Erection/Installation • Anchor Units	MURK 1d (DB CQC), Inspector's Daily Report

	• End Terminals and Assemblies • Concrete • Dimensional Tolerances • Joints • Concrete Placement • Form Removal and Finishing • Curing • Reinforcement • Defects • Repair	
607 - Fences	• Materials • Clearing and Grubbing • Grounding (where required) • Post Placement and Spacing • Post Foundations • Installation/Erection	MURK 1d (DB CQC), Inspector's Daily Report
608 – Sidewalks, Driveways, Bicycle Paths, and Vegetation Control Strips	• Concrete (see 501 and 502) • Wire Reinforcement • Construction Joints • Finishing • Asphalt (see 402) • Brick, Stone and Concrete Block • Paving Pattern • Installation • Curing	MURK 1d (DB CQC), Inspector's Daily Report
609 - Curb and Curb & Gutter	• Materials • Alignment and Grade • Preparation of Mixture • Preparation of Surface • Placing • Curing	MURK 1d (DB CQC), Inspector's Daily Report
611 – Planting, Transplanting and Post-Planting Care	• Materials • Location • Delivery	MURK 1d (DB CQC), Inspector's Daily Report

	• Storage • Ground Preparation • Setting Plants • Restoration • Care of Plantings	
613 – Wildlife and Ecology	• protection, preservation, restoration and management of • terrestrial habitat, aquatic habitat and wetlands per special • specifications. • Materials • Location • Delivery • Storage • Installation • Restoration	MURK 1d (DB CQC), Inspector's Daily Report and any forms required by regulations
614 – Pruning, Improving and Removing Existing Vegetation	• Materials • Care of Trees • Equipment • Pruning • Fertilizing • Cleanup and Disposal • Selective Thinning • Tree Removal • Procedures • Disposal of Wood	MURK 1d (DB CQC), Inspector's Daily Report
615 - Landscape Appurtances	• Per Special Specification requirements • Materials • Location • Delivery • Storage • Installation • Restoration	MURK 1d (DB CQC), Inspector's Daily Report
616 – Soil	• Per Special Specification requirements	MURK 1d (DB CQC), Inspector's Daily Report and

Bioengineering	• Materials • Location • Procedures • Care during Construction	any forms required by regulations
617 - Invasive Species Management	• Per Special Specification requirements • Materials • Location • Procedures • Care during Construction	MURK 1d (DB CQC), Inspector's Daily Report and any forms required by regulations
619 - Work Zone Traffic Control (WZTC)	• Materials • Surface Condition • Drainage • Bus Stops • Protection and maintenance of Pedestrian Traffic • Intersecting Traffic • Dust Control and Spillages • Flaggers • Repairs • Snow and Ice Control • Delineation and Guiding Devices • Project Site Patrol • Shadow and Barrier Vehicles • Construction Signs, Temporary Barriers, Temporary barrier end treatments, Construction Barricades and Lighting • Temporary Structures and Approaches • Interim Pavement Markings • Temporary Pavement markings • Temporary Traffic Signals • Railroad Protection • Mailboxes • Maintenance of Traffic Signal Equipment • Flashing Arrow Board • WZTC during Nighttime Operations	MURK 1d (DB CQC), Inspector's Daily Report

	• Cleaning • Dust Control • Channelization, Delineation and Pavement Dropoff • Protection • Signs and Sign Covers • Existing Pavement Markings • Exposed Guide Railing, Median Barriers and Rail • Ends • Maintain access to abutting property, business signs • Portable Variable Message signs	
	• Traffic Control Supervisor • Materials • Ground Surface Preparation • Bedding Material • Stone Filling • Riprap (Plain and Grouted) • Concrete Block Paving • Gabions	MURK 1d (DB CQC), Inspector's Daily Report
622 – Buildings and Miscellaneous Structures	• Materials • Equipment • Procedures • certifications • Compliance with local building codes • Permits	MURK 1d (DB CQC), Inspector's Daily Report and any forms required by regulations, local building codes, and per OGS permit requirements
623 - Screened Gravel, Crushed Gravel, Crushed Stone, Crushed Slag	• Materials • Placement • Material is on Approved List •	MURK 1d (DB CQC), Inspector's Daily Report
624 - Paved Gutters	• Materials • AC Gutters • Preparation of Bed • Placing • Sealing	MURK 1d (DB CQC), Inspector's Daily Report

	• Conventional Formed Concrete Gutters • Forming and Placement • Construction Joints • Curing • Machine-Formed Gutter (see 609) • Precast Gutters (see 609) • Cobble Gutters • Construction • Joints	
630 - Barricades	• Materials • Excavation • Erection • Backfill	MURK 1d (DB CQC), Inspector's Daily Report
633 – Conditioning Existing Pavement Prior to Hot Mix Asphalt (HMA) Overlay	• Materials • Cleaning Pavement and Shoulders • Cleaning, Sealing and Filling Joints and Cracks	MURK 1d (DB CQC), Inspector's Daily Report
635 - Cleaning and Preparation of Pavement Surfaces for Pavement Markings	• Materials • WZTC and Safety • Cleaning Method • Dust Control • Protection of Pavements and Seals • Limits of Work • Cleaning Concrete Curing Compounds • Cleaning Existing Pavement Markings • Replacement of Pavement Markings	MURK 1d (DB CQC), Inspector's Daily Report
638 - White Synthetic Resin Binder Concrete	• Materials • Weather Limitations • Preparation of Mixture • Preparation of Surface • Paving • Compaction	MURK 1d (DB CQC), Inspector's Daily Report
640 - Reflectorized Pavement Marking	• Materials	MURK 1d (DB CQC), Inspector's Daily Report

Paints	• WZTC • Preparation • Application	
643 – Noise Barrier	• Materials • Equipment • Procedures	MURK 1d (DB CQC), Inspector's Daily Report
644 – Overhead Sign Structures	• Materials • Fabrication • Transportation • Excavation • Foundations • Erection	MURK 1d (DB CQC), Inspector's Daily Report
645 - Signs	•	MURK 1d (DB CQC), Inspector's Daily Report
646 - Delineators, Reference Markers and Snowplowing Markers	• Materials • Fabrication • Location • Erection • Damage • Marker Relocation	MURK 1d (DB CQC), Inspector's Daily Report
647 - Removing, Storing and Relocating Signs	• Materials • Removal • Storage of Signs • Removal of Concrete Footings • Relocation of Signs	MURK 1d (DB CQC), Inspector's Daily Report
650 – Trenchless Installation of Casing	• Materials • Jacking Procedures • subContractor Qualifications • Designed Drill Path • CODE 753 Clearance Ticket • Equipment List • Installation Method • Design of Entrance and Exit Pits • Thrust Block Design • Monitoring Plan	MURK 1d (DB CQC), Inspector's Daily Report

	• Method of Grouting; Certified Mix Design • Spread Diameter Field Test Results • Cylinder Break Test Results • MSDS • Steering and Tracking Equipment	
652 - Furnishing and Applying Salts	• Materials • Stabilized Gravel Surface Course • Dust Control	MURK 1d (DB CQC), Inspector's Daily Report
654 – Impact Attenuators - Permanent	• Materials • Traffic Protection • Foundations • Excavation • Foundation Slab • Pavement Restoration • Anchorage • Installation • Removal and Disposal • Removal and Storage • Relocation • Refurbishing	MURK 1d (DB CQC), Inspector's Daily Report
655 - Frames, Grates and Covers	• Materials • Installation • Field Repairs	MURK 1d (DB CQC), Inspector's Daily Report
656 - Miscellaneous Metals	• Materials • Welding • Galvanizing • Painting	MURK 1d (DB CQC), Inspector's Daily Report
659 - Telecommunication Utilities	• Materials • Installation and Testing • Schedule • Excavation • Backfill	MURK 1d (DB CQC), Inspector's Daily Report
660 - Utilities	• Materials • Installation and Testing	MURK 1d (DB CQC), Inspector's Daily Report

	• Schedule • Excavation • Backfill	
661 - Electric Utilities	• Materials • Installation and Testing • Schedule • Excavation • Backfill	MURK 1d (DB CQC), Inspector's Daily Report
662 - Gas, Oil & Steam Utilities	• Materials • Installation and Testing • Schedule • Excavation • Backfill	MURK 1d (DB CQC), Inspector's Daily Report
663 - Water Supply Utilities	• Materials • Permits • Notifications • Removals • Asbestos Containing Materials (Special • Requirements) • Shut Downs/Approvals • Temporary Water Supplies • Excavation and Backfill • Thrust Restraints • Pipe Installation • Polyethylene Encasement Installation • Valves and Valve Boxes • Hydrants • Fittings • Water Service Connections • Water Meter Pits • Adjusting Valve Box Elevations • Disconnect and Cut Water Mains • Hydrostatic Testing • Disinfection	MURK 1d (DB CQC), Inspector's Daily Report

664 - Sanitary Sewer Utilities	• Materials • Installation and Testing • Schedule • Excavation • Backfill	MURK 1d (DB CQC), Inspector's Daily Report
670 - Highway Lighting System	• Materials • Excavation and Miscellaneous Work • Foundations • Grounding • Light Standards, Breakaway Transformer Bases and • Arms • Conduit • Pull Boxes • Junction Boxes • Luminaries • Photoelectric Control • Cable • Ground Cable • Tests • Removal and Disposal or Storage of Lighting • Equipment • Relocation of Lighting Equipment • High Mast Poles • Portable Power Drives for High Mast Poles	MURK 1d (DB CQC), Inspector's Daily Report
680 - Traffic Signals	• Materials • Underground Facilities • Test Holes • Schedule • Excavation • Pole Excavation and Concrete Foundations • Poles • Grounding • Conduit and Direct Burial Cable	MURK 1d (DB CQC), Inspector's Daily Report

	• Pull Boxes • Signal Control Cable & Shielded Communications • Cable • Cable Splices • Span Wire Assemblies • Messenger Assemblies • Guy Assemblies • Riser Assemblies • Signal Heads • Wiring Color Code • Pedestrian Push Button and Sign • Fire Pre-Emption Tell-Tale Light • Flashing Beacon Sign Assembly • Inductance Loop Installation • Concrete Base for Controller Assembly • Power Meter Base • Overhead Traffic Signs • Filed Galvanizing • Cast Iron Junction Boxes • Tests • Fiber optic Pedestrian Signal Heads • Pedestrian countdown timers • Fiber optic Dual Indication Arrow • Strobing Signal Section • LED Traffic & Pedestrian Signal Modules	
685 - Epoxy Reflectorized Pavement Markings	• Materials • General Requirements • Atmospheric Conditions • Surface Preparation • Epoxy Application Equipment • Application of Pavement Markings • Defective Pavement Markings	MURK 1d (DB CQC), Inspector's Daily Report
687 - Thermoplastic Reflectorized	• Materials • Equipment	MURK 1d (DB CQC), Inspector's Daily Report

Pavement Markings	• Application • Atmospheric Conditions • Materials Application Requirements • Surface Cleaning and Preparation of Pavement • Application of Thermoplastic Pavement Markings	
688 - Preformed Reflectorized Pavement Markings	• Materials • General Requirements • Methods • Weather and Seasonal Limitations • Equipment • Rollers • Primer Requirements • Surface Cleaning and Preparation of Pavement • Surfaces • Application of Markings	MURK 1d (DB CQC), Inspector's Daily Report

END

A2.19A TRAINING PROCEDURES

FROM: **LIRR TRAINING DEPARTMENT**

Long Island Rail Road

SafetyTraining@lirr.org
Phone: (718) 558-3095

All Contractors who perform any type of work on Long Island Rail Road property are required to

CONTRACTOR SAFETY TRAINING

annually attend **LIRR Contractor Safety Training;** the program includes **Roadway Worker Protection Training**. This course is a 3 hour session held weekly on **Wednesdays at 3:30 p.m.** in the Training Center at the Long Island Rail Road Hillside Support Facility, located at 93-59 183rd Street, Hollis Queens.

Registration Procedure:

- Download the registration form here: **LIRR Contractor Safety Training Registration Form**. The registration form is also available on MTA.info under Doing Business With Us > Procurement Long Island Rail Road > Required Vendor Forms.
- Complete the registration form and submit in original Microsoft Excel format via email to SafetyTraining@lirr.org to pre-register for the session of your choice.
- Registrations will be accepted up to 12:00 Noon on the Wednesday of the week you wish to attend. (SPACE PERMITTING) We recommend to registering early!
- Registrations are only valid after a confirmation e-mail from **LIRR Safety Training**.
- To be admitted to the course, all participants must possess a government or company photo ID.
- Do not substitute employees, only registered employees will be admitted.
- Sign-in begins at 3:15 p.m. Students arriving after 3:30 pm will not be admitted.

Transportation:

On-site parking is not available. Street parking in the area is limited. Travel to the Hillside Support Facility is best accomplished utilizing rail service to the facility. See Page 2 for an area map and suggested rail service to the Hillside Support Facility

Safety & Emergency Response Training
Employee Training & Corporate Department
Hillside Support Facility
***93-59 183rd Street • Mail Code 3149A* • Hollis, NY 11473**

Should you have any questions regarding course registration, please contact:
Frank Osso, Manager-Safety & Roadway Worker Protection Training
safetytraining@lirr.org or (516) 523-1593

THIS DOCUMENT HAS BEEN REDACTED FOR PUBLIC DISTRIBUTION

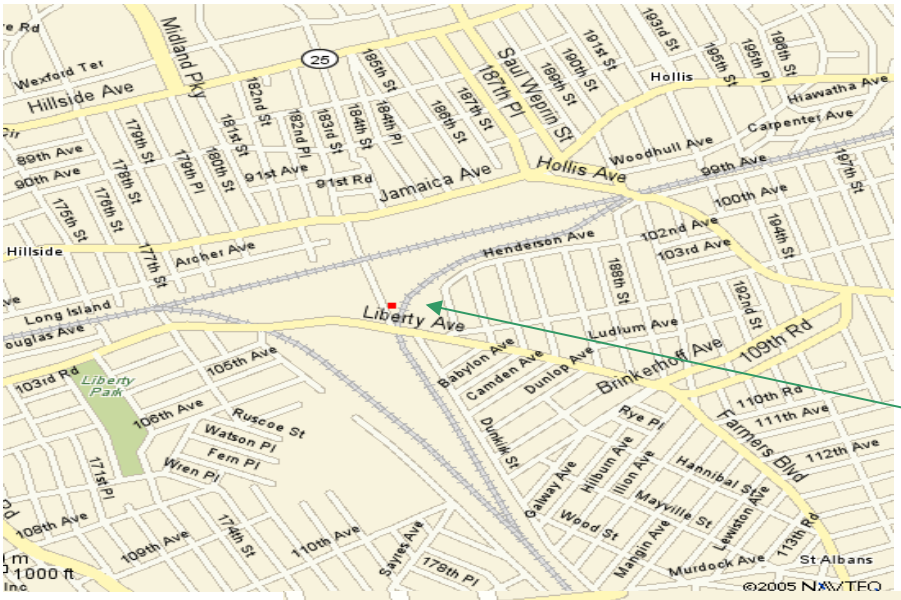
Directions via Long Island Rail Road

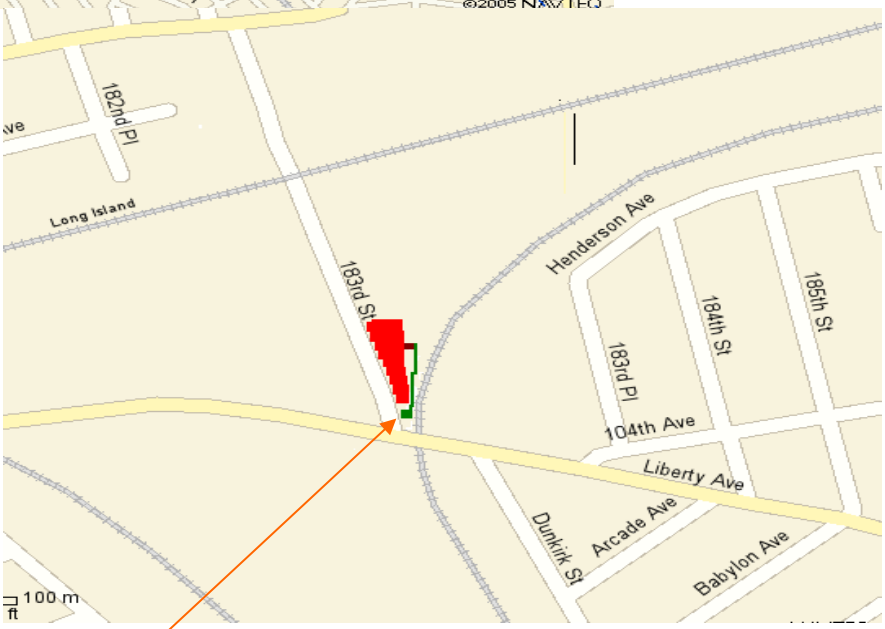
If you are taking the LIRR, you must take a train that stops at the Hillside Support Facility *"for Railroad Employees only."*

East bound from Penn or Atlantic, connect at **Jamaica Station:**
Take the 3:13 PM Huntington Train, Arrive at **Hillside Support Facility** at 3:17 PM

West bound on the **Ronkonkoma Branch:**
Take the train leaving **Hicksville at 2:42 PM,** Arrive **at Hillside Support Facility at 3:07 PM**

Use overpass at center of platform and proceed to Security Desk. They will direct you to classroom.





North

Hillside Support Facility
93-59 183rd Street
Hollis, NY 11423

Hillside Support Facility
Follow driveway (green) from Guard Booth on 183rd Street and Liberty Avenue
Hillside Support Facility Building #2 - Indicated by red area.
Enter Building at the brown awning. Check in at the Security Desk.

END

A2.19B CONTRACTOR SAFETY TRAINING REGISTRATION FORM

Long Island Rail Road
Employee Training & Corporate Development

LIRR CONTRACTOR SAFETY TRAINING REGISTRATION FORM

Name Last, First	Birth Month & Day & Last 2 SS# (xxx-xx-xx28) Example: MMDD-SS	Employer Name	Please do not MODIFY this document Do not Split cells or add columns. Please return it in EXCEL format (DO NOT .PDF)
Doe, John	1122-33	ABC COMPANY	

END

TPA2.33A SSI HANDBOOK

MTA SECURITY SENSITIVE INFORMATION HANDBOOK

BIDDER EXTRACT

TABLE OF CONTENTS

Section 1 SUMMARY

The procedures identified in this manual are intended for use by Contractors and Vendors in the Bid process for LIRR Capital and Technical Projects. This condensed guide has been extracted from the MTA Security Sensitive Information Handbook. Its purpose is to prescribe requirements, restrictions and other safeguards necessary to prevent unauthorized disclosure of MTA Security Sensitive Information and to control authorized disclosure of such Information. In all instances, the safeguarding of MTA Security Sensitive Information is subject to law and may be superseded by, the Freedom of Information Law, Article 6 New York State Public Officers Law Sections 84 to 90 (See Section 3.7), requiring the disclosure of certain information. However; MTA may decide not to disclose under section 87 (2) (f) of the FOIL law (See Section 3.7) and under the provisions of49 CFR subpart 1520 (See Section 3.8) which states that MTA may deny access to material containing MTA Security Sensitive Information that if disclosed could endanger the life or safety of any person and will adversely affect the security of the MTA. The procedures outlined herein, employ safeguarding requirements of control and accountability, storage, disclosure, reproduction, transmission, document shipment, disposition, and labeling. All bidders are also required to complete the form attachments included herein to certify their understanding of the security requirements identified within and required the safeguards to protect MTA Security Sensitive Information.

The Handbook consists of the following components:

- Procedures for Handling MTA Security Sensitive Information: Identifies the requirements for safeguarding against unauthorized disclosure of MTA Security Sensitive Information. It includes procedures for handling, caring, reproducing, storing, shipping, marking and labeling of MTA Security Sensitive Information.

- Roles and Responsibilities: defines and lists the responsibilities and roles of the individuals and employees of MTA and vendors who are authorized to work on projects containing MTA Security Sensitive Information and who play an important role in the implementation of the procedures of the MTA Security Sensitive Information Handbook. (Refer to Main MTA Handbook)

- MTA Evaluation Guide: Is a guide that is used to identify the types of information that require protection. This guide applies to all design, development, construction and/or maintenance contract documents. (Refer to Main MTA Handbook)

- Information Technology: Information systems require protection and all electronic media shall be destroyed by third party software to insure complete erasure. The focus is on stored and distributed design and construction documents. Protection requires a balanced approach that includes administrative, operational, and physical and personnel controls.

- **Company Non-Disclosure and Confidentiality Agreements:** Establishes the contractual agreement between MTA and the vendors (Consultants, sub-consultants,

contractors, sub-contractors, suppliers and others) for acknowledgement by the vendor of its understanding that it shall be required to strictly treat as confidential and privileged all MTA Security Sensitive Information whether provided by the MTA or developed by the vendor as their work product.

- **MTA Non-Disclosure and Confidentiality Agreement for Individuals:** Establishes an agreement between the MTA and the individuals (both internally within the MTA organizations as well as outside entities such as vendors) gaining access to MTA Security Sensitive Information. It requires the individual not to disclose Sensitive and Privileged MTA Security Sensitive Information to an unauthorized person. Additionally, this agreement informs the individual that the trust has been placed in them by providing them access to MTA Security Sensitive Information and their responsibility to protect that information from unauthorized disclosure.

- **Employee Employment and Resume Verification:** Each employee involved with MTA Security Sensitive Information has his/her employment and resume verified by the MTA Security Officer or Agency Document Control Officer. A form is filled out by the employee to identify his/her education and employment history. The form includes the employee's educational background, company names and addresses employee has worked for, and professional references not related to the employee whom he/she has known for at least one year.

- **Procurement Procedures (including Vendor's Non-Disclosure and Confidentiality Agreement):** This section contains requirements and responsibilities of the MTA when disclosing MTA Security Sensitive Information to vendors (prime consultant/Vendor as well as sub-consultants/sub-contractors, suppliers and others) during the solicitation process. A vendor's Non-Disclosure and Confidentiality Agreement is incorporated in the solicitation process.

Section 2 PROCEDURES FOR HANDLING MTA SECURITY SENSITIVE INFORMATION

The purpose of this document is to safeguard MTA Security Sensitive Information as related to the Security Program of the Metropolitan Transportation Authority. It describes the requirements, evaluation criteria, restrictions, and other safeguards necessary to prevent unauthorized disclosure of MTA Security Sensitive Information and to implement control mechanisms for the authorized access and disclosure of information released by the Metropolitan Transportation Authority to its employees, vendors and their employees.

The handbook will enhance the successful management and protection of MTA Security Sensitive Information while meeting the needs of MTA employees including their affiliate agency employees, vendors and their employees.

SECTION 3 ACCESS TO MTA SECURITY SENSITIVE INFORMATION

All MTA and their affiliate agency employees, vendors (consultants, sub-consultants, contractors, sub-contractors, suppliers, and others) and their employees performing work, shall safeguard all MTA Security Sensitive Information in accordance with the MTA Security Sensitive Information handbook. Contractors and consultants shall provide training to all employees authorized to access MTA Security Sensitive Information and, upon the request of the MTA, provide employee employment and resume verification as to an individual's suitability to have access. Vendor employees found by MTA to be unsuitable or whose employment is deemed contrary to the public interest may be prevented from performing work under a contract containing MTA Security Sensitive Information.

Only authorized personnel, organizations and vendors will be given access to MTA Security Sensitive Information. Disclosure of MTA Security Sensitive Information should only be authorized as necessary, to meet fulfillment or performance of official duties, tasks, or service, and on a need-to-know basis. All vendors must complete the MTA Security Program Non-Disclosure and Confidentiality Agreement and original copies of the completed MTA security program Non-Disclosure and Confidentiality Agreement shall be provided to the MTA Project Manager and Agency Document Control Officer. Employment and resume verification may be sponsored by MTA to verify the employment history, educational background and personal information of employees involved with MTA Security Sensitive Information.

Each vendor shall appoint an employee (US citizen or Permanent resident of US who is a legal alien resident of the United States) to be the Vendor Document Control Officer. The Vendor Document Control Officer shall sign a Non-Disclosure Confidentiality Agreement and shall have an MTA employment and resume verification form (see Section 7.0 of the MTA Security Sensitive Information Handbook) filled out to verify his/her resume, educational background and past history employment record including all references known to him/her for the past two years. The Vendor Document Control Officer is responsible for implementing and overseeing programs and procedures in compliance with the MTA Security Sensitive Information Handbook.

In order to retain control of the employees of MTA as well as employees of vendors involved with MTA Security Sensitive Information, an Authorized Personnel Project List shall be developed by both the Agency and Vendor Document Control Officers. This list shall provide information about the employees in terms of their names, addresses, and name of security officer they report to.

The vendor shall ensure that employees provided access to sensitive and privileged MTA Security Sensitive Information are either a citizen of the United States of America or an alien who has been lawfully admitted for permanent residence or employment (indicated by immigration status) as evidenced by US Citizenship and Immigration Services documentation. The vendor shall also ensure that these employees have executed the MTA Non-Disclosure and Confidentiality Agreement.

The vendor must include the above requirements in any subcontract/agreement awarded that will require access to MTA Security Sensitive Information. If an employee (MTA or Vendors) refuses to execute the agreement, access to sensitive and privileged MTA Security Sensitive Information must be denied.

The dissemination of MTA Security Sensitive Information shall only be made upon the determination that the recipient is authorized to receive it. The measure for determining authorization is a need-to-know and the execution of MTA Non-Disclosure and Confidentiality Agreement.

All vendors shall monitor their security programs on a continuing basis and shall also provide control and accountability of documents containing MTA Security Sensitive Information by tracking the location and number of copies. A document control system in terms of logging documents shall be developed to track, identify and protect all documents related to contracts involved with MTA Security Sensitive Information.

Security requirements shall be made a material condition of MTA contracts that will require access to MTA Security Sensitive Information. Contracts shall be subject to termination for default, when it has been determined that a failure to comply with security requirements resulted from willful misconduct or a lack of good faith.

Section 4 SAFEGUARDING MTA SECURITY SENSITIVE INFORMATION

All individuals authorized to access MTA Security Sensitive Information are responsible for safeguarding information in their custody or under their control. Vendors shall ensure that all authorized employees are aware of the prohibition against discussing MTA Security Sensitive Information in public conveyances or places, or in any other manner that permits interception by unauthorized persons. Individuals that work with MTA Security Sensitive Information shall be personally responsible for taking utmost care and precautions to ensure that it remains protected from the unauthorized persons.

Use and Storage

All MTA Security Sensitive Information shall be stored in environments with password protection or in a secure container such as locked file cabinet, locked desk, or a safe-type file container. It is recommended that MTA Security Sensitive Information for each agency of the MTA be gathered and stored in a minimum number of office locations. The cabinets should be strong enough to resist vandalism. Containers shall bear no external markings indicating storage of MTA security sensitive material therein. A list should be maintained as to which individuals have access to which container. The Vendor Document Control Officer(s) are responsible to ensure that he/she maintains an updated and timely list of personnel who have access to documents

containing MTA Security Sensitive Information. It is strongly suggested that more than one employee has access to each storage container. Authorized individuals must protect passwords, keys, and/or combinations used to secure the MTA Security Sensitive Information. Documents containing MTA Security Sensitive Information may not be removed from the work premises by the vendors unless authorized by MTA. At the end of each project, all documents containing MTA Security Sensitive Information shall be stored at locations where card readers shall be installed to track who has been in and out of the location, particularly if it is accessible after business hours and on weekends.

Reproduction

Contractors and employees shall establish a reproduction control system to ensure that reproduction of MTA Security Sensitive Information is held to a minimum and is consistent with contractual and operational requirements. MTA Security Sensitive Information reproduction shall be accomplished by authorized employees. All unauthorized reproduction of MTA Security Sensitive Information should be prevented. All copies of MTA Security Sensitive Information shall be marked in the same way as the original material. After the reproduction process is complete, the material shall be reviewed to ensure the markings are legible.

Disposal

All MTA Security Sensitive Information must be destroyed by cross cut shredding or any other method that prevents unauthorized retrieval. After material containing MTA Security Sensitive Information reaches its disposal date, MTA Security representatives will notify all authorized individuals, handling MTA Security Sensitive Information, that such material is now eligible for disposal. The destruction of all documents will be logged through the document control system as described in Section 3.6. Procedures for the disposal of electronic media are covered in Section 5 (Information Technology Systems) of the MTA Security Sensitive Information Handbook.

Transmission

MTA Security Sensitive Information shall be transmitted in a manner that prevents loss or unauthorized access. The transmission can be sent via any service with a receipt attached to or enclosed in the package. The receipt will identify the sender, the addressee and the document, but shall contain no sensitive information. The documents shall be packaged in a way that does not disclose its contents or the fact that it contains MTA Security Sensitive Information. All packages addressed to authorized individuals shall be treated with proper security although there is no indication that the package includes any MTA Security Sensitive Information. The

package must be addressed only to authorized individuals previously identified on the approved list of individuals. All packages have to be opened by the authorized recipients. If the authorized recipients are not present upon delivery all materials will be returned to the sender and will not be left unattended.

Safeguarding Oral Discussions

The policies of the MTA Security Sensitive Information Handbook shall be observed and enforced so as to prohibit vendors from discussing MTA Security Sensitive information in public conveyances or places, or in any other manner that permits interception by unauthorized persons.

The use of wireless communications and radios falls under the same criteria as Safeguarding Oral Communications. Discussing MTA Security Sensitive Information in any manner that permits interception by unauthorized persons is not permitted. Cell phones and wireless phones should not be used for transmitting MTA Security Sensitive Information. Phone connections that are hard wired, or considered a land line or wire line are secure enough for discussions regarding MTA Security Sensitive Information. In addition, persons discussing MTA Security Sensitive Information through teleconferencing or use of speaker phones are responsible to limit eavesdropping exposure. Speaker phones should be used only in locations at which all doors are closed. This will limit the risk of eavesdropping by unauthorized individuals in earshot proximity to the conversation.

"Need-to-Know Basis"

Who should be allowed access to MTA Security Sensitive Information? The answer is determined through the application of several criteria: Is the information necessary? Have the requestor(s) read and understand the procedures for safeguarding MTA Security Sensitive Information? Have they signed the Confidentiality and Non-Disclosure Agreement? Failure of any of the above is grounds for denying access to MTA Security Sensitive Information

Section 5 MARKING OF DOCUMENTS

It is essential that all MTA Security Sensitive Information be marked to clearly convey to the holder the level of protection assigned to the information. Physically marking MTA Security Sensitive Information with protective markings serves to warn and inform

holders that the document contains MTA Security Sensitive Information and needs to be protected. Each page of the document that contains MTA Security Sensitive Information shall be marked with the protective marking **"CONFIDENTIAL AND PRIVILEGED• MTA SECURITY SENSITIVE INFORMATION NON-FOILABLE"** or with the protective marking **"LIMITED DISTRIBUTION - MTA SECURITY SENSITIVE INFORMATION NON-FOILABLE"** where appropriate. The markings shall appear in **ALL CAPS, BOLD** on the top and bottom of each page. Only those pages that contain MTA Security Sensitive Information shall be marked. For drawings, the required protective markings shall appear in the title block. Sets of documents large enough to be folded or rolled shall be marked so that the marking is visible on the outside of the set when it is folded or rolled.

The overall marking "This document is the property of the MTA. Further reproduction and/or distribution outside the authorized personnel team are prohibited without the express written approval of The Metropolitan Transportation Authority" shall be conspicuously marked or stamped on the outside of the front cover, and on the title page. If the document does not have a back cover, the outside of the back or last page, which may serve as a cover, may also be marked at the top and bottom with overall classification of the document.

SECTION 6 AUTHORIZED PERSONNEL LISTINGS

In order to retain necessary control, a listing of authorized individuals must be maintained by MTA, its affiliate agencies, and its vendors, for their employees who are provided access to MTA Security Sensitive Information. Such listings shall be maintained by MTA Security Sensitive Information and/or on a project basis. MTA Security Officer(s) and Agency Document Control Officer(s) are responsible for developing, updating and retaining such lists for MTA employees having access to MTA Security Sensitive Information. Each vendor shall also designate a Document Control Officer (subject to MTA approval) who will be responsible for developing, updating, and retaining a listing of their employees having access to MTA Security Sensitive Information. Vendor Document Control Officers shall be responsible for transmitting such updated listing to MTA Agency Document Security Officer(s) at an agreed upon intervals or when requested by MTA. The Vendor Documents Control Officer may also be requested to share such listings with other vendors' Security Officers when interaction between these vendors are expected during the performance of their contract work. Vendor Security Officers are responsible for the accuracy of the listing and must notify the MTA immediately of any and all changes to authorized individuals on the listings.

The listings' will be used to authenticate all individuals that are authorized to have access to MTA Security Sensitive Information. If a name does not appear on the listing, the individual must be denied access to MTA Security Sensitive Information.

The listing must be updated as frequently as deemed necessary. The individuals identified as no longer having a need to have access to MTA Security Sensitive Information shall be removed from the listing.

A central filing system shall be developed for all personnel who have or had access to MTA Security Sensitive Information for investigative use later if necessary.

The listing shall include the following minimum information (See sample MTA Security Sensitive Information Handbook):

- Vendor's Name and Address and contract information
- Name and contact information for the vendor's Security Officer
- Names, title, function, and contact information for the authorized individuals needing access to MTA Security Sensitive Information
- Dates the individuals signed the Non-Disclosure/Confidentiality Agreement and the employee employment and resume verification forms
- Date the privilege has been revoked, if any
- Initial listing creation date and last update date
- Revision history as an attachment

Section 7 DOCUMENT CONTROL SYSTEM

The implementation of a document control system will provide control and accountability of MTA Security Sensitive Information by tracking the location, number of copies, and authorized participants who are responsible for creating and handling the documents containing MTA Security Sensitive Information. The document control system shall be such that it facilitates easy retrieval of the MTA security Sensitive Information from the individuals when the information is no longer required by those individuals. The document control system includes a log book that creates a paper trail of the material that is marked as MTA Security Sensitive Information. The log book also creates a trail of all authorized individuals who have created and handled such documents. Security and Document Control Officers along with the project managers of the MTA, its affiliate agencies, and vendors should be responsible for developing separate document control systems in cooperation with the authorized individuals of the MTA, its affiliate agencies, and vendors working on projects containing MTA Security Sensitive Information. All documents for MTA, its affiliate agencies and vendors are subject to an audit review by the MTA Security Officer at any time.

The log book shall include at a minimum:

- The date that a document was created or received
- The identity of the creator or s e n d e r

- A very brief description of the document
- Transmission history (sent to who, when and how many copies)
- Notification that the document has been destroyed or returned to MTA
- An identification document control number assigned to MTA Sensitive Information for tracking, the number is structured as follows:
  CCC-PPPP-XXXX-mm-dd-yy (Company Name) (Contract#)

  This code is the unique number of the document maintained by the document control system. The letter C is utilized for the number of copies. The letter P is the total number of pages in the document, the letter X is a sequential number assigned to information newly determined to MTA Sensitive Information. The following numbers are the date the document control number was logged into the system.

This log book shall be submitted to the Agency Document Control Officer periodically for review or upon request.

Section 8 INFORMATION TECHNOLOGY SYSTEMS

Information Technology (IT) Systems that are utilized to electronically create, capture, process, store and/or transmit MTA Security Sensitive Information must be managed to protect against unauthorized access, interception, or disclosure of such information. The focus is on stored and distributed design and construction documents. Protection from unauthorized fabrication or modification of electronic media without knowledge is also a concern and, should be dramatically mitigated by following the procedures described in this section. Protection requires a balanced approach that includes operational, physical and personnel controls. The approach will initially focus on protecting Information Technology Systems containing MTA Security Sensitive Information pertaining to the present work at MTA. MTA may gradually undertake steps necessary to identify and protect MTA Security Sensitive Information that currently exists on the IT systems that are not pertaining to present work at MTA.

The major objectives of managing IT systems to protect MTA Security Sensitive Information include:

Restrict access to MTA security sensitive information exclusively to authorized users

Complete removal of all MTA security sensitive information from the IT systems when it is no longer needed to be on it

The procedures for protecting Information Technology Systems shall include the following:

Physical

Physical security safeguards shall be established by the use of user ID's and passwords to prevent unauthorized access to networked computers utilized in the day to day operations related to projects containing MTA Security Sensitive Information.

Physical security safeguards shall be established by the use of User ID's and passwords to prevent any unauthorized modification of the Automated Information Systems hardware and software related to MTA Security Sensitive Information. During overnight and non-working hours, when an Automated Information System is processing information unattended, or when MTA Security Sensitive Information remains on an unattended Automated Information system, the Automated Information Systems shall be located in a locked office space to prevent unauthorized entry into the space.

Operational

The following operational issues must be addressed:

- Security awareness training must be provided prior to assigning the individual access to Automated Information Systems and updated as needed.
- Users shall be required to authenticate their identities at "logon" time by supplying their password in conjunction with their user ID.
- MTA Security Sensitive Information files must be stored on a file system with a fire wall security (e.g. NTFS drives for Windows)
- All passwords and User ID of authorized employees shall be secured by the vendor.
- Successive logon attempts shall be controlled by denying access after multiple unsuccessful attempts on the same user ID.
- The individuals who are employees of MTA or vendors and who have authorized access to MTA Security Sensitive Information and who will control, restrict and evaluate the Information Technology Systems, shall ensure that all user ID's are revalidated at least within 30 days and all necessary information is updated as necessary.
- All data Files containing MTA Security Sensitive Information shall be access restricted to individuals listed on the authorized personnel listing.
- Unauthorized modification of the Automated Information System hardware and software containing MTA Security Sensitive Information shall be protected through user ID's and passwords. All accessories and storage media of systems hardware and software such as floppy disks and CO's will be kept in approved locked cabinets or locked areas/rooms which can be accessed through card readers or keys that are distributed to all authorized employees listed on the authorized personnel listings.
- All computer terminals containing MTA security sensitive Information shall be used by authorized individuals only and shall be networked among all other terminals used by authorized individuals who are listed on the authorized personnel listings. All such terminals shall be accessed through individual used ID's and passwords.
- All authorized employees of MTA, its affiliate agencies, and vendors shall have

their own access rights expeditiously removed the minute they no longer work for their firms.

- Remote access to all servers and computers used by vendors working on projects containing MTA Security Sensitive Information shall be through a VPN or through a secured firewall specific to the vendors' authorized individuals listed on the authorized personnel listings.
- All electronic media that has stored information deemed MTA Security Sensitive Information at the time of disposition must be erased or destroyed.
- Access to protective-design software is restricted. Project-specific data is internally segregated and access is restricted to authorized users. Backup procedures and storage preserve security while also providing redundancy.
- Project-specific data transfer between MTA and the Vendor offices shall be encrypted using the necessary software.

Personnel

Only individuals including MTA, its affiliate agencies and vendors listed on the authorized personnel listing are authorized to access, create, transmit or modify files containing MTA Security Sensitive Information.

The vendors shall be required to develop and submit to MTA their Information Technology (IT) System Management Plan for approval. At a minimum, the Management Plan must include measures developed and implemented by the vendor to address the objectives outlined in this section including physical, operational and personal procedures. The Management Plan shall also describe the IT Systems proposed to be used (both hardware and software)."

Section 9 PROCUREMENT PROCEDURES

Before releasing bid documents deemed to contain MTA Security Sensitive Information, the MTA shall require all bidders to fill out a company Non-Disclosure and Confidentiality Agreement Form and an Information and Responsibility Request form revised to include security questions. All bids and proposal information containing MTA Security Sensitive Information must be protected by the contractors from unauthorized disclosure. No person or other entity, who has been authorized to handle MTA Security Sensitive Information, may

disclose vendor bid or proposal information to any person other than an authorized MTA person. If the MTA deems a vendor unauthorized, that vendor should be denied bid documents containing MTA Security Sensitive Information.

The procurement procedures shall address all type of procurements:

- RFP for professional services
- RFP for construction and operation/maintenance contracts

Biddings, request for quotes, for construction and operation/maintenance contracts, as well as supply contracts.

No person or other entity may disclose Vendor bid or proposal information or MTA Security Sensitive Information other than a person who will sign an individual Non-Disclosure and Confidentiality Agreement and hence become authorized to handle MTA Security Sensitive Information. Bid or proposal information and MTA Security Sensitive Information must be protected from unauthorized disclosure. Individuals unsure if particular information is MTA Security Sensitive Information, should consult with the Security Officers of MTA and its affiliate agencies as necessary and mark the cover page and each page that the individual believes contains MTA Security Sensitive Information.

The following procedures are developed to provide guidance and are recommended to be incorporated into MTA procurement contracts containing MTA Security Sensitive Information for the MTA, upon approval from the respective legal departments. These procedures represent recommended language and concepts to ensure security in the procurement process at MTA. All awarded contract wording should include these procedures under the review and approval of the agency's legal department.

1. The vendor shall provide appropriate and reasonable physical and logical security for all data, files and programs containing MTA Security Sensitive Information of the MTA. The vendor shall ensure that similar, and equally adequate, procedures are employed by any party that will store, handle, use or examine any of the MTA Security Sensitive Information data.
2. The vendor shall take steps reasonably necessary to provide logical security for the computer-stored an off-line records, data, files and programs of the MTA. Such logical security shall be in accordance with the highest standards in use in accordance with mutually agreed upon specifications with MTA.
3. No MTA Security Sensitive Information may be sent, shipped, mailed, e-mailed in any fashion whether manually or electronically or digitally to any site outside the borders of the United States. Within the borders of the United States, all senders and receivers of material containing MTA Security Sensitive Information will have signed a Non-Disclosure Confidentiality Agreement to authorize access to MTA Security Sensitive Information.
4. The vendor acknowledges that all MTA Security Sensitive Information is the exclusive property of MTA and is not to be shared with any third party other than what is required in order to perform the obligations under the awarded contracts.
5. The vendor shall take and continue to take during the term of this Contract, the

appropriate employee confidentiality measures, by way of non-disclosure agreements, for the employees of the vendors who have access to MTA Security Sensitive Information.

6. The vendor shall not disclose the MTA Security Sensitive Information to a third party government, person or firm of representative thereof without prior consent of the MTA Security Officer and MTA Project Manager.
7. The vendor shall not use MTA Security Sensitive Information for any other purpose other than for which it was provided or generated, without the prior written consent of the MTA Security Officer and MTA Project Manager.
8. All MTA Security Sensitive Information and material containing MTA Security Sensitive Information provided or generated under awarded contracts will continue to be protected in the event of withdrawal by the recipient party or upon termination of the contract.
9. The vendor shall fully relinquish to MTA at the end of the project all original documents containing MTA Security Sensitive Information pertaining to the Work. The vendor warrants that its employees shall retain and return any original document containing MTA Security Sensitive Information and shall destroy all copies of such materials after the completion of the project. MTA Security Sensitive Information includes notes, photographs, renderings whether manual or electronic and digitally, sketches, scans or diagrams that may have been created by the vendor and its employees.
10. The vendor agrees to include similar procedures in each subcontract under any awarded contract.
11. The vendors shall inform the Security Officer of the MTA of the location where all MTA Security Sensitive Information will be kept during the duration of the work, and will have signed a Non-Disclosure Confidentiality Agreement stating the vendor's commitment towards and awareness of handling MTA Security Sensitive Information according to the MTA Security Sensitive Information handbook stated herein.
12. There shall be no dissemination or publication, except within and between the vendor and any subcontractors, of MTA Security Sensitive Information developed herein or contained in the reports to be furnished pursuant to these procedures without the prior written approval of the MTA Security Officer.
13. The vendor is prohibited from posting, modifying, copying, reproducing, republishing, uploading, transmitting or distributing in any way images, photographs, or renderings of the MTA property on any electronic media that can be accessed by accessed by an authorized individual listed on the authorized personnel listings without signing a Non-Disclosure Confidentiality Agreement and without the prior written consent and approval of the MTA.
14. All contractors shall provide MTA with their existing protocols for procedures to ensure security in . the procurement process and in handling MTA security Sensitive Information. Such protocols shall be reviewed and certified by MTA Security Officer for compliance with procedures included in the MTA Security Sensitive Information Handbook.

Section 10 MTA SECURITY SENSITIVE INFORMATION AUDIT PROGRAM

The MTA Audit Program evaluates compliance with the requirements set forth in the MTA Security Sensitive Handbook by the consultants and vendors working on MTA projects. Audits are conducted on an ongoing basis. Consultants and vendors working on MTA projects shall conduct documented, formal self-inspections at intervals consistent with risk management principles.

The audit program includes:

- Compliance verification with MTA Security Sensitive Handbook requirements.
- Assess vendor's facility physical security relative to spaces where where MTA Security Sensitive Information is stored and worked on.
- Evaluate procedures at the vendor's facility for handling and identification of MTA Security Sensitive Information.
- Conduct staff interviews as necessary.

END

TPA2.33B NON-DISCLOSURE AND CONFIDENTIALITY AGREEMENT

NON-DISCLOSURE AND CONFIDENTIALITY AGREEMENT-VENDOR Solicitation I

Contract No. ___ ___ ___

THE METROPOLITAN TRANSPORTATION AUTHORITY

1. This Confidentiality Agreement shall govern the disclosure and use by _____ ("Vendor"), of all MTA Security Sensitive Information Materials provided by the Metropolitan Transportation Authority ("The MTA"), as well as any work product developed by the Vendor including conclusions of security assessments, evaluations and/or recommendations.

2. For purposes of this Agreement, "The MTA" may designate, as Security Sensitive those documents and materials that are marked "MTA Security Sensitive Information", to be confidential or sensitive in nature and not releasable to the public. Such documents may include but not limited to, plans, drawings, specifications, photographs, videotapes, or other such documents of any nature or description, that pertain to "The MTA" owned and/or operated facilities.

3. These Protected Materials are to be disclosed by the Vendor only to those persons or entities as explicitly authorized to view these Protected Materials on behalf of the Vendor as set forth in Appendix A (Solicitation) or Appendix B (Contract Performance) respectively, which are attached and made a part of this agreement. A complete Appendix A of this agreement shall be submitted with your Bid Proposal in the second phase of the solicitation and Appendix B shall be submitted after the contract is awarded for a finalized list of vendors performing the work.

4. Vendor agrees to the following:

    a) That all "The MTA" documents marked "MTA Security Sensitive Information" and made available to the Vendor and its employees, shall be kept safe, secure, and confidential at all times.

b) Vendor represents that all such "The MTA" documents pertaining to the solicitation, shall be relinquished to "The MTA" within five (5) business days after the Bid Administration Unit has taken action at the end of the solicitation. The three (3) apparent lowest vendors may be directed in writing by the Contract Manager to not relinquish these documents until further notice. After the contract is awarded, the vendor warrants that all MTA Security Sensitive Information pertaining to the contract shall be relinquished to the MTA at the completion of the contract unless it has been requested by MTA to be retained by the vendor. Vendor further warrants that its employees, consultants, sub-consultants, subcontractors and agents shall not retain any of the materials containing MTA Security Sensitive Information or copies of such materials from the Solicitation or after the end of the Project Work. This includes any notes, photographs, renderings whether manual or electronic, sketches, scans, or diagram that may have been made by the Vendor or its consultants, sub-consultants, contractors, subcontractors and agents using "The MTA" documents.

c) Within seven (7) days after execution of this agreement, Vendor shall state in writing, to "The MTA" Security Officer where the documents used for the solicitation process or used during the Project Work are kept and the methods and safeguards the Vendor will undertake in order to prevent any unauthorized access or duplication of the "The MTA" documents, during the time period that these materials containing MTA Security Sensitive Information are in the possession of the Vendor.

5. In the event that any unauthorized persons or entities to whom the MTA Security Sensitive Information is disclosed is no longer engaged during the bidding process or during the Project Work, access to MTA Security

Sensitive Information shall be terminated by the Vendor and the "The MTA" shall be notified of the same in writing Vendor shall ensure that such a person returns and relinquishes all MTA Security Sensitive Information to the Vendor.

6. "The MTA" shall create an inventory of all Materials containing MTA Security Sensitive Information being provided to the Vendor for control purposes. After completion of the Solicitation, all materials relinquished to the "The MTA" (to Bid Administration Mgr.) by the Vendor shall be checked against the inventory. During the Project Work, all material containing MTA Security Sensitive Information used by the vendor shall periodically checked by MTA against the inventory list. At the end of the contract, all material relinquished to MTA will be checked against the inventory.

7. Nothing contained in this Agreement shall create any relationship between the "The MTA" and any Third Party. Further, nothing in this Agreement shall create any rights for any third party or any obligation on the part of the "The MTA" to any third party, including but not limited to the Vendors.

8. The MTA reserves the right to periodically audit the vendors' security practices during the solicitation process or during the Project Work to ensure that they are in compliance with the procedures outlined in the MTA Security Sensitive Information Handbook.

The contents of the materials that contain MTA Security Sensitive Information shall not be disclosed to anyone other than in accordance with this Agreement.

THIS AGREEMENT HAS BEEN DULY EXCECUTED THIS _____day of _____

By: _____ On behalf of _____ (Vendor)_____

_____

Print name and title of Authorized Officer

_____

Vendor Federal ID number (EIN)

On the _____ day of _____ before me personally came and appeared by me known to be said person, who swore under oath as follows:

1. He/she is _____ (print title)

   Of_____(firm I entity).

2. He/she is duly authorized to sign this Confidentiality Agreement on behalf of

_____(firm I entity), and duly signed this document pursuant to said authorization.

Sworn to before me the _____ day of

.

NOTARY STAMP AND
SIGNATURE _____ _____

END

TPA2.33C INDIVIDUAL ACCESS TO SSI

REQUEST FOR INDIVIDUAL ACCESS TO SECURITY SENSITIVE INFORMATION

Request date: _____

Project Name: _____

Requestor's Name: _____

Company Name: _____

Document Tracking #: _____

- Is providing this SSI information to this individual required to complete project tasks?
  - If no, deny request.
  - If yes, continue review
- Is the individual currently on the MTA Agency List of Authorized Personnel?
  - If no, deny request and schedule SSI training session
  - If yes, continue review
- Is a signed individual NDA on file with the MTA ADCO?
  - If no, deny request and forward blank NDA
  - If yes, review is complete, approve request
- Retain review documentation

NOTE: A response of no to any of the three screening questions requires the reviewer to deny the request for access to SSI.

Approved_____ **Denied**_____

ADCO / VDCO Reviewer

- Name_____ Company Name _____
- Signature_____ Date_____

END

TPA2.33D ACKNOWLEDGEMENT OF RECEIPT

ACKNOWLEDGEMENT OF RECEIPT

SECURITY SENSITIVE INFORMATION HANDBOOK – BIDDER EXTRACT

In connection with this Request For Proposal and the MTA Security Program, you will require access to documents that are marked as Security Sensitive Information. Procedures for handling MTA Security Sensitive Information throughout the bid process are provided in the attached MTA Security Sensitive Information Handbook Bidder Extract.

In order to retain control of documents containing Security Sensitive Information, Authorized Personnel Project Lists shall be maintained of persons who have received copies of the Handbook and signed this acknowledgement. These lists are intended to keep track of the employees who have authorization to access MTA Security Sensitive Information. If a person's name does not appear on the Project List, the individual will not be able to access MTA Security Sensitive Information relevant to that project.

I have received a copy of, carefully read, understand and will abide by the information outlined in the Security Sensitive Information Handbook.

Employee's Signature_____ Date: _____

Employee's Name (Please Print)._____

Company_____Project_____

END

TPA2.33E RETURN OF INFORMATION AGREEMENT

RETURN OF INFORMATION AGREEMENT

All Bidders shall fully relinquish to MTA at the end of the bid process all original documents containing MTA Security Sensitive Information shall be returned to MTA or destroyed in accordance with the following provisions. MTA Security Sensitive Information includes notes, photographs, and renderings whether manual or electronic and digitally, sketches, scans or diagrams that may have been created by the vendor and its employees.

MTA SSI Disposal Guidelines

MTA Security Sensitive Information and MTA Limited Distribution Information are to be disposed of with the same level of care and security that was maintained during the life of the material. It is important that the sensitive information be safeguarded against loss, unauthorized access, use or disclosure during the process of destruction. While material should never be destroyed while there is still a need for it, it is important to remember that MTA Security Sensitive Information is to be destroyed when it is no longer needed. Destruction of MTA Security Sensitive Information and MTA Limited Distribution Information shall be accomplished by cross cut shredding of paper/ hardcopies, and physically destroying CD's, deleting and removing files from the electronic recycling bins, and removing material from computer hard drives using permanent erase utility or similar software.

- While certain information does not meet the criteria for protection as "sensitive information" it is, however, mandatory that project information on high-profile projects be handled prudently and with reasonable care regarding distribution, storage and disposal. This information shall be handled in a manner that provides reasonable assurance that unsanctioned persons do not gain access to it. While not held to the same degree of accountability as "MTA Security Sensitive Information, it shall be protected in a manner consistent with the protection provided other items of value such as computers, phones, corporate and human resources information, financial records, etc.

MTA Document Disposal Process

- Prior to the proposed destruction of MTA SSI, the applicable agency security officer and the MTACC security officer (if applicable) must be informed. The agency security officer and/or the MTACC security officer will then determine whether to collect the information or authorize destruction.
- If authorization is received, MTA SSI shall be destroyed using a cross-cut shredder only by the applicable agency security office.
- A Document Destruction Certificate (DDC) shall be issued for each instance in which one or more documents have been shredded.
- A DDC shall contain the name of the person shredding the document, document number, date, location and any other pertinent information.
- The original DDC shall be retained by the security officer and a copy shall be sent to the MTACC security officer.
- The SIMS database shall be updated accordingly as necessary

Signature: _____ Date: _____

END

A3.1A CODES AND INDUSTRY STANDARDS

A3.1A.1 CODES

Work performed shall comply with all applicable standards required by statute, comply with good industry practice, and comply with the version of standard in place at the time the proposal was submitted. Responsibility for design remains with the Design-Builder in accordance with the terms and conditions of the Contract.

All work shall conform to current versions of the following documents. In the event of a conflict between the codes and reference documents listed below, the more stringent requirements shall apply.

AASHTO:

- AASHTO GL-6 Roadway Lighting Design Guide.
- AASHTO Roadside Design Guide
- A Guide for Accommodating Utilities within Highway Right-of-Way
- A Policy on Design Standards - Interstate System
- A Policy on Geometric Design of Highways and Streets
- Bridge Security Guidelines
- Construction Handbook for Bridge Temporary Works
- Guide Design Specifications for Bridge Temporary Works
- Guide for the Design of Pavement Structures (with Supplement)
- Guide for the Development of Bicycle Facilities
- Guide for Park-and Ride Facilities
- Guide for the Planning, Design, and Operation of Pedestrian Facilities
- Guide Specifications for Structural Design of Sound Barriers
- Guide Specifications for Bridge Temporary Works.
- Guide Specifications for Design and Construction of Segmental Concrete Bridges
- Guide Specification for Highway Bridge Fabrication with HPS70W (HPS 485W) Steel
- Guide Specifications for Horizontally Curved Steel Girder Highway Bridges
- Guide Specifications for LRFD Seismic Bridge Design
- Guide Specifications for Seismic Isolation Design
- Guide Specifications - Thermal Effects in Concrete Bridge Superstructures
- LRFD Bridge Design Specifications
- LRFD Bridge Construction Specifications
- LRFD Guide Specifications for Design of Pedestrian Bridges
- Manual for Assessing Safety Hardware (MASH)

- Manual for Bridge Evaluation
- Manual on Subsurface Investigations
- Model Drainage Manual
- Mechanistic-Empirical Pavement Design Guide (MEPDG),
- Roadside Design Guide
- Standard Specification for Highway Bridges
- Standard specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals
- R896 Standard Recommended Practice for Evaluation of Transportation-Related Earthborne Vibrations
- Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals

ACI:

- 117 Specification for Tolerances for Concrete Construction and Materials
- 207 Guide to Mass Concrete
- 318 Building Code Requirements for Structural Concrete and Commentary
- 305 Guide to Hot Weather Concreting
- 306 Guide to Cold Weather Concreting
- 358 1R-92 Analysis and Design of Reinforced Concrete Guideway Structures.
- 365 Service-Life Prediction - State-of-the-Art Report
- 506R Guide to Shotcrete
- 530 Building Code Requirements and Specification for Masonry Structures and Related Commentaries

ADA:

- ADA standards for Transportation Facilities 2006
- ADA standards for Accessible Design 2010
- Americans with Disabilities Act Accessibility Guidelines (ADAAG)
- DOT ADA 10/19/2011 Final Rule - Summary of Major points 2011
- FTA ADA Regulations, Title 49, Subtitle A, Part 37 Transportation Services for Individuals with Disabilities Parts 27 and 37--Transportation for Individuals with Disabilities; Reasonable Modification of Policies and Practices (3/13/2015).
- U.S. Access Board, Americans with Disabilities Act (ADA) and Architectural Barriers Act (ABA) Accessibility Guidelines
- U.S. Department of Justice and U.S. Department of Transportation (DOT), Americans with Disabilities Act Accessibility Guidelines (ADAAG)

- U.S. Department of Transportation (DOT), Americans with Disabilities Act (ADA) Accessible Transportation Facilities

AEMA:

- Recommended Performance Guidelines.

AISC:

- AISC 341-10, American Institute of Steel Construction Seismic Provisions for Structural Steel Buildings.
- AISC 360-10, American Institute of Steel Construction Specification for Structural Steel Buildings.
- Seismic Design Manual
- Steel Construction Manual

AISI American Iron and Steel Institute:

- AISI S100-12, American Iron and Steel Institute North American Specification for Design of Cold-formed Steel Structural Members

ANSI:

- ANSI/AASHTO/AWS D1.5 Bridge Welding Code.
- ANSI/IEC 60529 Degrees of Protection Provided by Enclosures (IP Code).
- ANSI/IES Approved Recommended Practice for Roadway Lighting, RP-8-00.
- ANSI/IES Approved Recommended Practice for Roadway Sign Lighting, RP-19-01.
- ANSI C63.4
- ANSI C80.1 Electrical Rigid Steel Conduit (ERSC)
- ANSI S1.4; Specification for Sound Level Meters
- ANSI Z49.1 Standard- Safety in Welding and Cutting
- ANSI Z60.1 American Standard for Nursery Stock
- ANSI Z87.1 - Eye Protection
- ANSI Z88.2-80 - Practices for Respiratory Protection
- ANSI Z97.1 Safety Glazing Materials Using in Buildings – Safety Performance
- ANSI Z133.1 Safety Requirements for Pruning, Trimming, Repair, Maintaining and Removing Trees and for Cutting Brush
- American National Standards Institute/International Standard Organization/ American Society for Quality (ANSI/ISO/ASQ): 9001:2015 Quality Management Systems – Requirements
- 9001:2008 Quality Management Systems – Requirements.

- 10012:2003 Measurement Management Systems – Requirements for measurement processes and measuring equipment
- 17025:2005 General requirements for the competence of testing and calibration laboratories

AGCA Associated General Contractors of America, Inc:
- Manual of Accident Prevention in Construction

Aluminum Association:
- Aluminum Design Manual 2010.

APTA American Public Transportation Association:
- APTA SS-SIS-RP-001-10, APTA Security Lighting for Transit Passenger Facilities
- APTA SS-SIS-RP-002-10, APTA Security Lighting for Nonrevenue Transit Facilities
- Guidelines for Design of Rapid Transit Facilities
- RT-RP-FS-008-03 Heavy Duty Transportation System Elevator Design Guidelines

AREMA – American Railway Engineering and Maintenance of Way Association:
- AREMA Manual for Railway Engineering
- AREMA Portfolio of Trackwork Plans
- Recommendations of the American Railway Engineering and Maintenance of Way Association (AREMA).

ASCE:
- ASCE/SEI Standard 7, Minimum Design Loads for Buildings and Other Structures

ASME:
- A17.1 Safety Code for Elevators and Escalators
- A17.2 Guide for Inspection of Elevators, Escalators and Moving Walks
- A17.5 Elevator and Escalator Electrical Equipment, current version
- ASME/ANSI B16, Fittings and Valves package of standards
- ASME B16.10, Face-to-Face and End-to-End Dimensions of Valves
- ASME B31, Pressure Piping package of standards
- QEI-1 Standard for the Qualification of Elevator Inspectors, current version

ASHRAE American Society of Heating, Refrigerating, and Air Conditioning Engineers
- ASHRAE Handbook – HVAC Applications.
- ASHRAE 90.1 2013
- ASHRAE, ASHRAE Handbook – Fundamentals

- ASHRAE, Commissioning Process for Buildings and Systems
- ASHRAE 62, Ventilation for Acceptable Indoor Air Quality

Asphalt Institute:

- Drainage of Asphalt Pavement Structures

ASTM American Society of Testing Materials:

- A36 Specification for Carbon Structural Steel
- A53 Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
- A123 Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
- A153 Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
- A240 Specification for Chromium & Chromium-Nickel Stainless Steel Plate, Sheet & Strip for Pressure Vessels & for General Applications
- A276 Specification for Stainless Steel Bars and Shapes
- A385 Standard Practice for Providing High-Quality Zinc Coatings (Hot-Dip)
- A554 Specification for Welded Stainless Steel Mechanical Tubing Alloy-Coated (Galvannealed) by the Hot-Dip Process
- A865 Specification for Threaded Couplings, Steel, Black or Zinc-Coated (Galvanized) Welded or Seamless, for Use in Steel Pipe Joints
- ASTM B88, Standard Specification for Seamless Copper Water Tube
- ASTM C 150: Standard Specification for Portland Cement
- ASTM C 1157: Standard Performance Specification for Hydraulic Cement
- ASTM D 5116: Guide for Small Scale Environmental Chamber Determination of Organic Emissions from Indoor Materials/Products
- ASTM E2213-03 Standard Specifications for Telecommunications and Information Exchange ITE TMDD v3 Traffic Management Data Dictionary (TMDD) Requirements
- B108 Specification for Aluminum-Alloy Permanent Mold Castings
- B209 Specification for Aluminum and Aluminum-Alloy Sheet and Plate
- B211 Specification for Aluminum and Aluminum-Alloy Rolled or Cold-Finished Bar, Rod and Wire
- B221 Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
- E84 Standard Test Method for Surface Burning Characteristics of Building Materials
- E136 Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 C
- E 329 Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

ATC, Applied Technology Council:

- Applied Technology Council, ATC-32, Improved Seismic Design Criteria for California Bridges: Provisional Recommendations, 1996

AWS American Welding Society:

- AWS D1.4/D1.4M-2011, American Welding Society Structures Welding Code- Steel.
- D1.1 Structural Welding Code – Steel

AWWA American Water Works Association

- C704 - Flow Meters

Bellcore Blue Book:

- Communication Construction Standards

CFR Code of Federal Regulations:

- 23 CFR 630
- 23 CFR Part 650.2, National Bridge Inspection Standards
- 29 CFR 1910 - Occupational Safety and Health Standards (OSHA)
    i. 29 CFR 1910.120 - Hazardous Waste Operations and Emergency Response
    ii. 29 CFR 1910.146 – Confined Spaces
    iii. 29 CFR 1910.268- .269- Enclosed Spaces
    iv. 29 CFR 1910.1001 – Asbestos
- 29 CFR 1926 – OSHA Construction Standard
    i. 29 CFR 1926.62 – Lead Exposure in Construction
    ii. 40 CFR Part 61, Subpart M – National Emissions Standard for Hazardous Air Pollutants (NESHAP)
- 36 CFR 60 - National Register of Historic Places
- 36 CFR 68- The Secretary of the Interior's Standards for the Treatment of Historic Properties
- 36 CFR 800 - Advisory Council on Historic Resources
- 40 CFR 122 – National Pollutant Discharge Elimination System
- 40 CFR 260 – Hazardous Waste Management System: General
- 40 CFR 261 - Identification and Listing of Hazardous Waste
- 40 CFR 262 – Standards Applicable to Generators of Hazardous Waste
- 40 CFR 263 – Standards Applicable to Transporters of Hazardous Waste
- 40 CFR 264 – Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities

- 40 CFR 273 – Universal Waste Regulations
- 40 CFR 761 – Polychlorinated biphenyls (PCBs) - Toxic Substances Control Act (TSCA).
- 40 CFR 763 - Asbestos Hazard Emergency Response Act (AHERA)
- 47 CFR 2. Subpart B, Subsection 106, Table of Frequency Allocations
- 47 CFR 15 / FCC Part 15 Radio Frequency Devices
- 49 CFR Parts 12 and 1520, Protection of Sensitive Security Information
- 49 CFR 107, 110, 130, 171, 172, 173, 177, 178, 180 – Research and Special Programs Administration, US Department of Transportation (USDOT) (Hazardous Materials Regulations)
- 49 CFR 192 and 195
- 49 CFR 236, 270 – Train Control System and System Safety Program
- 49 CFR 397 – Federal Motor Carrier Safety Administration, USDOT (Transportation of Hazardous Materials)
- 49 CFR Part 659, Rail Fixed Guideway Systems, State Safety Oversight

County, Town, and Village Codes:

- Nassau County Department of Public Works (NCDPW) Drainage Criteria Requirements
- The Nassau County Department of Health Code
- Village of Garden City – Village Code Book
- Village of Mineola – Mineola Code Book
- Village of New Hyde Park – Village Code Book
- Village of Westbury – Code of the Village of Westbury

DIN Deutsches Institut für Normung:

- DIN 18723 - Field Procedure for Precision Testing of Surveying Instruments

FGCC Federal Geodeic Control Committee:

- Federal Geodetic Control Committee, Geometric Geodetic Accuracy Standards and Specifications for Using GPS and Relative Positioning Techniques, August 1989
- Federal Geodetic Control Committee, Standards and Specifications for Geodetic Control Networks, August 1, 1984

FGCC Federal Geodeic Control Subcommittee:

- Federal Geodetic Control Subcommittee, Specifications and Procedures to Incorporate Electronic Digital / Bar-Code Leveling Systems, FGCSVERT (ver. 4.1 5/27/2004)

Federal Geographic Data Committee:

- Federal Geographic Data Committee – Federal Geodetic Control Subcommittee, Geospatial Positioning Accuracy Standards, Part 1: Reporting Methodology, document FGDC-STD-007.1-1998
- Federal Geographic Data Committee – Federal Geodetic Control Subcommittee, Geospatial Positioning Accuracy Standards, Part 2: Standards for Geodetic Networks, document FGDC-STD-007.2-1998
- Federal Geographic Data Committee – Federal Geodetic Control Subcommittee, Geospatial Positioning Accuracy Standards, Part 3: National Standard for Spatial Data Accuracy, document FGDC-STD-007.3-1998
- GIS Standards

FHWA:

- FHWA-IF
- FHWA-IF-02-034, Geotechnical Engineering Circular No. 5 - Evaluation of Soil and Rock Properties.
- FHWA-IF-03-017, Geotechnical Engineering Circular No. 7 – Soil Nail Walls
- FHWA-IF-99-015, Geotechnical Engineering Circular No. 4 – Ground Anchors and Anchored Systems
- FHWA-HIF
- FHWA-HRT
- FHWA-HRT-11-022, Field-Cast UHPC Connections for Modular Bridge Deck Elements
- FHWA Lighting Handbook
- FHWA-NHI
- FHWA NHI-05-123, Soil Slope and Embankment Design
- FHWA-RD
- FHWA RD-82-046, Tiebacks, Executive Summary
- FHWA RD-82-047, Tiebacks
- FHWA-RD-89-93, Soil Nailing for Stabilization of Highway Slopes and Excavations
- FHWA-SA-93-068, Soil Nailing Field Inspectors Manual
- FHWA-SA-96-069, Manual for Design and Construction Monitoring of Soil Nail Walls, 1997
- FHWA-SA-96-071, Mechanically Stabilized Earth Walls and Reinforced Soil Slopes–Design and Construction Guidelines, 1996
- FHWA-SA
- Lateral Support Systems & Underpinning, Vols. I, II, III, FHWARD 75-128, -129, and -130
- Geotechnical Engineering Publications
- Hydraulic Publications

- Integrated Materials and Construction Practices for Concrete Pavement: A State of the Practice Manual
- Manual of Uniform Traffic Control Devices (MUTCD)
- Pavement Publications
- Pavement Subsurface Drainage Design, Reference Manual
- Seismic Retrofitting Manual for Highway Bridges
- Standard Highway Signs and Markings (SHSM) Book
- Steel Bridge Design Handbook
- Technical Advisory T6640.8A, 10/30/87 (environmental analyses)
- Traffic Monitoring Guide

FTA:

- DOT-FTA-MA-26-5005-00-01/DOT-VNTSC-FTA-00-01, Hazard Analysis Guidelines for Transit Projects
- DOT-FTA-MA-26-5019-03-01, Public Transportation System Security and Emergency Preparedness Planning Guide
- FTA Circular C 5800.1, Safety and Security Management Guidance for Major Capital Projects
- FTA Transit Noise and Vibration Impact Assessment; FTA-VA-90-1003-06 May 2006
- FTA-TRI-MA-26-7085-05, Transit Security Design Considerations
- FTA-MA-90-5006-02-01/DOT-VNTSC-FTA-02-01, Handbook for Transit Safety and Security Certification
- Transit Agency Security and Emergency Management Protective Measures
- TSA/FTA, Security and Emergency Management Action Items for Transit Agencies

Green Seal:

- GS-5: Environmental Standard for Compact Fluorescent Lamps
- GS-6: Environmental Standard for Water-Efficient Fixtures
- GS-11: Standard for Paints, Coatings, Stains and Sealers

IEC International Electronical Commission:

- 60529 Degrees of Protection Provided by Enclosures (IP Code)
- 61850, Communications Networks and Systems in Substations
- 62128-1:2003, Railway Applications – Fixed Installations – Part 1: Protective Provisions relating to electrical safety and earthing

IEEE:

- C2 National Electric Safety Code

- C63.14 – EMC, EMP, and ESD
- C95.1- Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
- C95.6- Standard for Safety Levels with Respect to Human Exposure to Electromagnetic Fields, 0-3 kHz
- IEEE C62.11, IEEE Standard for Metal-Oxide Surge Arresters for AC Power Circuits (>1 kV)
- IEEE 80, IEEE Guide for Safety in AC Substation Grounding
- IEEE 242, Recommended Practice for Protection and Coordination of Industrial and Commercial Power Systems
- IEEE 1455-1999 Standards for Message Sets for Vehicle/Roadside Communications
- 730 Software Quality Assurance
- 828 Software Configuration Management
- 1012 Software Verification and Validation
- 1558:2004 Standard for Software Documentation for Rail Equipment and Systems

IES:

- IES Guideline for the Application of General Illumination (“White”) Light-Emitting Diode (LED) Technologies G-2-10
- IES Recommended Lighting for Walkways and Class 1 Bikeways, DG-5-94

IESNA:

- IESNA G-1-03, Guideline on Security Lighting for People, Property, and Public Spaces
- IESNA - The Lighting Handbook
- IESNA LM-80, Approved Method for Measuring Lumen Maintenance of LED Light Sources.
- IESNA RP-8, Roadway Lighting
- Recommended Practice IESNA RP-20, Lighting for Parking Facilities

ISO:

- ISO 9533

LIRR:

- CE-1 Specifications.
- Design Guidelines document
- MTA Long Island Rail Road Station Design Guidelines (LIRR SDG)
- MTA sign Manual
- MTA Sensitive Security Information Handbook, latest version
- MW-2000 Part III, Recommended Practice for the Construction of Track, Special Trackwork and Miter Rails
- Railroad CADD Manual
- Roadway Worker Protection Manual
- Standard Drawings.
- Station Design Guidelines.
- System Safety Program Plan (SSPP)
- Vehicle Operation Safety Policy and General Safety Rules
- Standards CE-1 (Drawings and Specifications)
- Standard Drawings:
    i. LS-170: Plug Connector Assemblies
    ii. LS-513: Terminal Blocks
    iii. LS-528: Vital Cable Terminations
    iv. LS-529: Tags for Vital & Non-Vital Applications
    v. LS-530A: Standard Aluminum Instrument Case
    vi. TY-531: Instrument Case Layout
    vii. TY-534: Typical Transmitter Case Layout
    viii. TY-542Y: Typical Instrument Hut Layout
    ix. TY-532B: Battery Case Layout
    x. LS-539: Vital Terminal Detail
    xi. TY-548: Battery Hut Layout
    xii. TY-549: Hut Layout with Office Extension
    xiii. LS-550A: Case Grounding Plan
    xiv. LS-551A: Hut Grounding Plan
    xv. TY-900: Battery Tray
    xvi. TYTTBX: Title Box
    xvii. STD 01: Emergency Traffic Jumper Box Standard
    xviii. TY-CT: Signal Location Cable Sheet

xix. ISO Signal Engineering Operational Quality System Procedure

xx. Long Island Rail Road Rules of the Operating Department

- Standard Specifications:

  The Design-Builder shall provide cables and equipment in accordance with the LIRR specifications and drawings listed here-in.

  i. 16121: PC-101 SINGLE CONDUCTOR POWER CABLE

  ii. 16122: PC-102&102A MULTI-CONDUCTOR POWER CABLE

  iii. 16123: TRACK WIRE

  iv. 16124: SW-104A SIGNAL WIRE SPECIFICATION

  v. 16125: SHIELDED TWISTED PAIR SIGNAL CABLE

  vi. 16128: SC-106&106a SIGNAL CABLE

  vii. CSI-ULM: NICD BATTERY - ULTRA-LOW MAINTENANCE NICKEL–CADMIUM ALKALINE STORAGE BATTERY

  viii. ELP-100: 60HZ & 100HZ ELECTRIC SERVICE

  ix. 16110: UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL SYSTEMS

  x. 16120: ABOVE-GROUND RACEWAYS and boxes

  xi. SEQWI 1.1A: SIGNAL EQUIPMENT QUALITY WORK INSTRUCTION

  xii. VSA-101: VITAL SYSTEM ASSURANCE

MCEER:

- MCEER-98-005 Screening Guide for Rapid Assessment of Liquefaction Hazard to Highway Bridges
- Seismic Retrofitting Manual for Highway Structures: Part 1-Bridges

Military Standards:

- MIL STD 882E

NAAQS:

- National Ambient Air Quality Standards

NCEER National Center for Earthquake Engineering Research:

- National Center for Earthquake Engineering Research (NCEER), NCEER-97-0022, Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils.
- Youd, T. L., and Idriss, I. M., Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils, NCEER-97-0022, NCEER, 1997

NCHRP National Cooperative Highway Research Program:

- National Cooperative Highway Research Program (NCHRP), Report 350, Devices in Work Zones

NECA:

- NECA 1, Good Workmanship
- NECA 90, Commissioning Building Electrical Systems
- NECA 101, Installing Steel Conduits
- NECA 111, Installing Nonmetallic Raceways
- NECA 200, Temporary Electrical Power at Construction Sites
- NECA 230, Installing Electrical Motors and Controllers
- NECA 400, Installing Switchboards
- NECA 406, Installing Panelboards
- NECA 409, Installing Dry-Type Transformers
- NECA 420, Standards for Fuse Applications
- NECA 500, Installing Indoor Lighting
- NECA 501, Installing Exterior Lighting
- NECA 600 – Installing Medium Voltage Cable

NEMA

- NEMA ICS 18, Motor Control Centers
- NEMA LA 1, Surge Arresters
- NEMA SSL-3, High-Power White LED Binning for General Illumination
- NEMA 250, Enclosures for Electrical Equipment (1000 Volts Maximum)

NETA:

- International Electrical Testing Association (NETA), Standard for Acceptance Testing Specifications for Electrical Power Equipment and Systems

NFPA National Forest Products Association:

- National Design Specification for Wood Construction
- NFPA National Electric Code (NEC) Standards

NFPA National Fire and Protection Association:

- 1 Fire Code
- 30 Flammable and Combustible Liquids Code
- 70 – National Electrical Code (NEC)
- 70B Recommended Practice for Electrical Equipment Maintenance
- 70E Standard for Electrical Safety in the Workplace
- 72 National Fire Alarm and Signaling Code
- 90A Standard for the Installation of Air-Conditioning and Ventilating Systems
- 101 Life Safety Code
- 110 Standard for Emergency and Standby Power Systems
- 130 Standard for Fixed Guideway Transit and Passenger Rail Systems
- 502: Standard for Road Tunnels, Bridges, and Other Limited Access Highways
- 704 Hazard Warning System
- 780 Standard for the Installation of Lightning Protection Systems
- 1101 NTCIP Simple Transportation Management Framework
- 1102 NTCIP Octet Encoding Rules (OER)
- 1201 NTCIP Global Object (GO) Definitions
- 1203 NTCIP Object Definitions for Dynamic Message Signs
- NFPA 111, Standard on Stored Electrical Energy Emergency and Standby Power Systems
- NFPA 255, Standard Method of Test of Surface Burning Characteristics of Building Materials

NGS National Geodeic Survey:

- National Geodetic Survey (NGS), User Guidelines for Single Base Real Time GNSS Positioning, Version 3.1, April 2014

NYCDEC:

- Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, Division of Water Technical and Operational Guidance Series (TOGS)
- New York Standards and Specifications for Erosion and Sediment Control (Blue Book)
- New York State Stormwater Management Design Manual
- NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002)
- NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation
- NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations

- NYSDEC Commissioner Policy (CP) on Soil Cleanup Guidance (CP-51) Soil Cleanup Levels (SCLs)

NYCDEP:

- Sewer Design Standards
- Title 15 of the Rules of the City of New York Chapter 20, Rules Governing and Restricting the Use and Supply of Water
- Title 15 of the Rules of the City of New York Chapter 31, Rules Governing House/Site Connections to the Sewer System

NYCDOT:

- Bureau of Traffic (Division of System Engineering) Standard Details
- Department of Design and Construction Design Guidelines and Directives
- Street Design Manual
- Standard Details of Construction

NYCRR:

- 6 NYCRR 364 Waste Transporter Permits Program
- 6 NYCRR Part 371 Identification and Listing of Hazardous Waste
- 6 NYCRR Part 372 Hazardous Waste Manifest System and Related Standards for Generators, Transporters, and Facilities
- 6 NYCRR 373 & 374 Hazardous Waste Management Facilities and Management of Specific Hazardous Waste
- 6 NYCRR 375 Environmental Remediation Programs
- 6 NYCRR 376 Land Disposal Restrictions
- 6 NYCRR 630 – Solid Waste Management Facilities
- 12 NYCRR Part 56 Asbestos
- NYCRR Subpart 753-3, Duties of Excavators

NYCDOB:

- Building Code of the City of New York

New York Railroad Law:

- New York Railroad Law 51-a: Clearances.

NYS:

- 2016 New York State Uniform Fire and Building Code
- Energy Code Supplement 2016
- International Building Code (NY Edition) 2015
- International Energy Conservation Code (NY Edition) 2015
- International Existing Building Code (NY Edition) 2015
- International Fire Code (NY Edition) 2015
- International Fuel Gas Code (NY Edition) 2015
- International Mechanical Code (NY Edition) 2015
- International Plumbing Code (NY Edition) 2015
- International Property Maintenance Code (NY Edition) 2015
- New York State Public Service Law
- New York State Supplement for MUTCD
- New York State Industrial Code
- The Plumbing Code of New York State
- The New York State Fuel and Gas Code
- The New York State Department of Health Code
- Uniform Fire Prevention and Building Code, Title 19, of the New York Codes, Rules, and Regulations

NYSDEC:

- Environmental Laboratory Accreditation Program (ELAP)
- Rules Governing Design and Construction of Private Sewers or Private Drains
- Sewer Design Standards
- Standards and Specifications for Erosion and Sediment Control (SESC)
- Stormwater Management Design Manual (SMDM)

NYSDOT:

- Access Management Requirements
- Annual Report titled "Axle Factor Update"
- Approved Materials List
- Bridge Detail Sheets US Customary (NYSDOT BD Sheets)
- Bridge Inspection Manual
- Bridge Inventory Manual
- Bridge Manual

- Bridge Safety Assurance Seismic Vulnerability Manual
- CADD Standards and Procedure Manual
- Comprehensive Pavement Design Manual
- Consultant Instructions
- Design Consultant Manual
- Design and Construction Requirements for Underground bridge of Mainline Pavement and Shoulders
- Design Guide for Fiber Optic Installation on Freeway Right-of-Way
- Engineering Bulletins
- Engineering Instructions and Directives
- Environmental Procedures Manual (EPM) / The Environmental Manual (TEM)
- General Design and Construction Requirements for Occupancies
- Geotechnical Engineering Bureau Manuals and Publications
- Guidelines For Design and Construction of Expanded Polystyrene Fill as a Lightweight Soil Replacement GEM-24
- GCP-17, Procedure for the Control of Granular Materials
- Highway Design Manual
- Land Surveying Standards and Procedures Manual
- LRFD Bridge Design Specifications (LRFD Blue Pages)
- Manual for Uniform Record Keeping
- Manual of Uniform Traffic Control Devices
- Materials Bureau - Applicable Sampling and Testing Manuals, Inspection Manuals, and Materials Methods.
- New York State Supplement to the Manual on Uniform Traffic Control Devices
- Overhead Sign Structure Design Manual
- Policy on Highway Lighting
- Prestressed Concrete Construction Manual
- Project Development Manual
- Reference Marker Manual
- ROW Mapping Procedures Manual
- Rules and Regulations Governing the Accommodation of Utilities within the State Highway Right of Way
- Standard Specifications for Highway Bridges (NYSDOT Blue Pages)
- Special Specifications

- Standard Sheets
- Standard Specifications for Construction and Materials
- Steel Construction Manual (SCM)
- Structures Design Advisories
- Structures Technical Advisories
- Supplement to the Manual on Uniform Traffic Control Devices for Streets and Highways
- U.S. Customary Standard Sheets
- Work Zone Traffic Control Manual
- NYSDOT Engineering Instructions EI 05-044 – Special Specification for Building Condition Survey(s) and Vibration Monitoring (Nonblasting)

PCA Portland Cement Association:

- PCA, PCA Thickness Design for Concrete Highway and Street Pavement
- Portland Cement Association (PCA), Engineering Mass Concrete Structures

PCI Precast Concrete Association:

- Precast Concrete Institute (PCI), PCI Design Handbook: Precast and Pre stressed Concrete

PDI Plumbing and Drainage Institute:

- The Plumbing and Drainage Institute, PDI-G 101 Testing and Rating Procedure for Hydro Mechanical Grease Interceptors with Appendix of Installation and Maintenance

PHCCA Plumbing Heating and Cooling Contractors Association:

- National Standard Plumbing Code

PTI:

- Recommendations for Pre-stressed Rock and Soil Anchors
- Recommendations for Stay Cable Design, Testing and Installation

PROWAG Public Right of Way Accessibility Guidelines:

- US Access Board's Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Rights of Way, 2011, a.k.a Public Right of Way Accessibility Guidelines (PROWAG)

UL Underwriters Laboratories, Inc.:

- 360 Liquid-Tight Flexible Steel Conduit
- 1015 Hookup Wire
- 1581 Reference Standard for Electrical Wires, Cables, and Flexible Cords Style
- UL 723 (ASTM E84), Test for Surface Burning Characteristics of Building Materials
- UL 555, Standard for Fire Dampers
- UL 555S, Standard for Smoke Dampers
- UL 845, Motor Control Centers
- UL 1449, UL Standard for Safety for Surge Protective Devices
- UL 2196, Tests for Fire Resistive Cables
- Underwriters Laboratory, Inc. (UL) standards

USACE U.S. Army Corps of Engineers:

- U.S. Army Corps of Engineers, EM 1110-2-2901, Tunnels and Shafts in Rock
- U.S. Army Corps of Engineers, Unified Facilities Criteria 3-450-01, Noise and Vibration Control

USCG:

- 33 CFR 118- Bridge Lighting and Other Signals

U.S. Department of Housing and Urban Development:

- Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- HUD Guidelines

SAE:

- SAE J994

SPC:

- Society of Protective Coatings Standards

SMACNA Sheet Metal and Air Conditioning Contractor's National Association, Inc.:

- SMACNA HVAC Air Duct Leakage Test Manual
- SMACNA, HVAC Duct Construction Standards – Metal and Flexible
- SMACNA, HVAC Systems Duct Design
- SMACNA, Rectangular Industrial Duct Construction Standards

TSWG Transit Security Working Group:

- Transit Security Working Group (TSWG), Contract Number N4175-05-R-4828, Final Report, Bridge and Tunnel Report

USDOJ:

- ADA Accessibility Guidelines for Buildings and Facilities

USDOT:

- ADA Standards for Transportation Facilities
- U.S. DOT, Urban Mass Transportation Administration, Subway Environmental Design Handbook. Volume I. Principles and Applications. Second Edition

USEPA:

- Best Stormwater Management Practices
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 42 U.S.C. s/s 9601 et seq
- Resource Conservation and Recovery Act (RCRA) 42 U.S.C. s/s 321 et seq.
- US EPA Programs
    i. Energy Star
    ii. Green Lights
    iii. WasteWise

Miscellaneous Standards, Regulations and Requirements:

- Air Conditioning and Refrigeration Institute standards
- Air Diffusion Counsel standards
- Air Movement and Control Association standards
- American Boiler Manufacturers Association standards
- American Conference of Governmental Industrial Hygienists (ACGIH) standards
- Compressed Gas Association guidelines
- Executive order 88 2013
- Electronics Industries Association (EIA)
- FCC Highway Design Manual
- Insulated Cable Engineers Association requirements
- Mine Safety and Health Regulations
- MOSH regulations
- SAE Overhead Sign Structures, Dedicated Short Range Communications Message Set Dictionary
- The secretary of the Interior's Standards for the Treatment of Historic Properties
- United States Access Board standards
- Recommendations of the National Transportation Safety Board (NTSB)

A3.1A.2 INDUSTRY STANDARDS

- Standards published by:
  i. American Railway Engineering and Maintenance-of-way Association (AREMA) 1997
  ii. Alliance for Telecommunication Industry Solutions (ATIS)
  iii. American National Standards Institute (ANSI) S-56-434
  iv. American Society for Testing and Materials (ASTM)
  v. Electronics Industry Association (EIA)
  vi. Institute of Electrical and Electronic Engineers (IEEE)
  vii. National Committee for Information Technology Standards (NCITS)
  viii. National Electrical Contractors Association (NECA)
  ix. National Electrical Manufacturers Association (NEMA)
  x. Occupational Safety and Health Administration (OSHA)
  xi. Underwriters Laboratories (UL) 2024
  xii. TIA-569C for the installation of conduits and pathways
  xiii. National Fire Protection Association (NFPA) 72
- The Railroad conforms to the following Telecommunications Industry Association (TIA) standards relevant to TIA-455 - General requirements for standard test procedures for optical fibers, cables, connecting and terminating devices, and other fiber optic components:
  i. TIA-455-B
  ii. TIA-455-8
  iii. TIA-455-25C
  iv. TIA-455-31C
  v. TIA-455-33B
  vi. TIA-455-37A
  vii. TIA-455-41A
  viii. TIA-455-78A
  ix. TIA-455-81B
  x. TIA-455-82B
  xi. TIA-455-85A
  xii. TIA-455-104B
  xiii. TIA-455-168A

xiv. TIA-455-175B

xv. TIA-455-176A

xvi. TIA-455-178B

xvii. TIA-455-181

xviii. TIA-455-598A

END

A3.9A ALIGNMENT AND TRACK DESIGN EXCEPTIONS

Long Island Rail Road I Road

MTA Long Island Rail Road
LIRR Expansion Project from Floral Park to Hicksville
CE-1 & MW-2000 Clearance Compliance
DRAFT Confidential not subject to FOIL / Deliberative Process

Comment Number	Location	CE-1 & MW-2000 Criteria	Exception	Reason
[redacted]				

END

TPA3.12A RENDERINGS

Merillon Station
Platform view looking East

Conformed Documents
Technical Provisions
Appendices

Contract #6240
EP TPA13.12A 171227 RENDERINGS

TPA3.12A-3

Merillon Station
View from Nassau Blvd
Looking northwest

MIneola Station
Platform view looking East

Carle Place Station
View from Stonehinge Ln
Looking South

Westbury Station
View from Post Ave
Looking northeast

END

A4.3A ASSET DEFINITION AND DATA DICTIONARY DOCUMENT

Asset Definition and Data Dictionary Document for LIRR Engineering Infrastructure Assets

DRAFT

Contents

END

A4.5A TRAFFIC SIGNAL INSPECTION FORM

TE-260

DATE: ____/____/____

I.R. NO.: _____

Sheet No. _____ 0f _____

INSTALLATION CHECK LIST

SIGNAL NO.: _____

LOCATION: _____

CODE #

1.000 **POLES**
(Refer to Standard Sheets)

	ACCEPTABLE			
	YES	NO	DNA	
1.001				Are all poles plumb?
1.002				Do the poles have positive rake?
1.003				Are the poles properly oriented (check the base plates)?
1.004				Has **GROUT** (not mortar) been installed around/under base plates?
1.005				Have drain holes been provided in the grout/concrete bases?
1.006				Is there paint or galvanizing that needs repair?
1.007				Are the weather heads, couplings, and other fixtures properly placed?
1.008				Are pole caps, hand hole covers, and anchor bolt covers in place?
1.009				Are pole mounted cabinets properly secured by welding or banding?
1.010				Are there proper drip loops at the weather heads?
1.011				Are anchor bolts/nuts properly installed (full thread)?
1.012				Have base plates been stamped in accordance with Standard Specifications [Section 724-03 (page 7-234)].
1.013				Are the arm to pole attaching bolts secure (Mast Arm Poles)?
1.014				Have the poles been properly bonded to ground rods?
1.015				Has the span wire been bonded to the poles (grounding)?
1.016				Has the span wire been wrapped above the thru bolt and 3-bolt clamped back itself?
1.099				Other? (See Remarks)

2.000 **PULLBOXES**

(Refer to Standard Sheets M680-12, M680-16, and M680-17)

	ACCEPTABLE			
	YES	NO	DNA	
2.001				Were the pullboxes placed at the proper locations?
2.002				Are the covers and frames flush with the surrounding area?
2.003				Have the frames been mortared to the pullbox?

2.000 PULLBOXES (continued)

	ACCEPTABLE			
	YES	NO	DNA	
2.004				Do the covers have the proper legend (Traffic Signals)?
2.005				Has spilled concrete or asphalt been removed from the cover?
2.006				Have wire hangers been installed (2 each/pullbox)?
2.007				Are the signal/communication cables hung on the wire hangers?
2.008				Have the cables been properly identified (per Spec. Section 680-3.15)?
2.009				Are cable splices secure and water tight?
2.010				Has slack been provided in each of the cables?
2.011				Are metal conduits properly bonded?
2.012				Has a ground rod been installed properly in pullboxes near poles?
2.013				Have conduit entrance holes been mortared?
2.014				Are there any bottomless pullboxes in pavement areas?
2.015				Are the pullboxes free of excess water and debris?
2.016				On round pullboxes, are the frames installed with the wide flange up in unpaved areas?
2.099				Other? (See Remarks)

3.000 SPAN WIRE ASSEMBLY (including Signal Heads) (Refer to Standard Sheets M680-1, M680-2, and M680-3)

	ACCEPTABLE			
	YES	NO	DNA	
3.001				Has proper (5% minimum) sag been provided?
3.002				Is span connected to poles properly?
3.003				Is the span attached at proper height (at least 460mm down)?
3.004				Is signal cable attached to span with proper devices (wire hangers)?
3.005				Does the signal cable pass on the head side of pins (not on cotter pin side)?
3.006				Are disconnect hangers (signal heads) properly placed? (If required)
3.007				Are balance adjusters properly installed?(If required)
3.008				Are the red indications aligned (level) on each approach?
3.009				Are the signal heads plumb (hanging straight)?
3.010				Are the signal heads aimed properly?
3.011				Are overhead signs properly located?
3.012				Is the tether wire properly attached to the signal poles?
3.013				Are the signal heads and signs attached to the tether properly?
3.014				Is the spacing between the span and the upper tether as required (600mm min.)?

3.000 **SPAN WIRE ASSEMBLY (including Signal Heads) - (continued)**

	ACCEPTABLE			
	YES	NO	DNA	
3.015				Can the signal heads swing without banging into each other? (For non-tethered signals)
3.016				Are the pavement to signal head clearances at least 5.0 meters or per plan?
3.017				Is all mounting hardware securly fastened (tight)?
3.018				Are signal heads located in accordance with MUTCD requirements?
3.019				Do the heads and/or hardware need paint or galvanizing repair?
3.099				Other? (See Remarks)

4.000 **CONTROLLER CABINET AND CONTROLLER**
(Refer to Standard Sheet M680-4)

	ACCEPTABLE			
	YES	NO	DNA	
4.001				Is the cabinet properly mounted on a concrete base or signal pole?
4.002				Is the cabinet bottom 450mm to 600mm above grade?
4.003				Has a concrete work pad been provided?
4.004				Is the cabinet located in a paved area (not requiring a work pad)?
4.005				Is the cabinet bonded to a proper ground system?
4.006				Have all electrical test been performed (per Standard Specifications Section 680-
4.007				Is the wiring neat and orderly?
4.008				Have the cables been properly identified (per Spec. Section 680-3.15)?
4.009				Has excess signal/interconnect cable been pulled back from within the cabinet?
4.010				Does the wiring match the color code scheme provided?
4.011				Has the cabinet been welded or banded to the signal pole?
4.012				Are metal conduits properly bonded?
4.013				Are all components NYS approved?
4.014				Is the signal displaying proper indications?
4.015				Is the flash operation as specified?
4.016				Have proper cabinet locks been provided?
4.017				Has the cabinet been damaged?
4.018				Does the cabinet door open and close easily (no obstructions)?
4.019				Are cabinet gaskets in place (door and vent)?
4.020				Is the LB size adequate (not over 40% full)?
4.099				Other? (See Remarks)

5.000 DISCONNECT BOX AND/OR METER SOCKET
(Refer to Standard Sheet M680-4)

	ACCEPTABLE			
	YES	NO	DNA	
5.001				Is the meter socket at the proper height above grade (1.5M to center)?
5.002				Are there pipe straps 150mm above and below the meter?
5.003				Is the disconnect box at the proper height above grade?
5.004				Has grounding been provided in accordance with NEC and local codes?
5.005				Has a locking device been properly installed?
5.006				Is the disconnect at least 10 amps larger than the Main breaker in the controller
5.007				Is the NEMA Disconnect Box rain tight
5.008				Does the service conduit present a tripping hazard?
5.009				Has the disconnect box been damaged?
5.010				Has the service conduit been damaged?
5.011				Is paint or galvanizing in need of touchup?
5.012				Is metal conduit properly bonded to ground?
5.099				Other? (See Remarks)

6.000 DETECTORS
(Refer to Standard Sheets M680-7 and M680-9)

	ACCEPTABLE			
	YES	NO	DNA	
6.001				Are the detectors placed as shown on the plan sheet?
6.002				Are the detectors the type shown on the plan sheet?
6.003				Are they properly installed (per details on Standard Sheet)?
6.004				If loops, is the sealer bonded to the pavement?
6.005				If loops, is the sealer flush with the pavement?
6.006				Are all the vehicle detectors working properly?
6.007				Are the opticom detectors functioning properly?
6.099				Other? (See Remarks)

7.000 OVERHEAD CABLES (Shielded/Interconnect)

(Refer to Standard Sheet M680-10)

	ACCEPTABLE			
	YES	NO	DNA	
7.001				Are cables properly attached to poles?
7.002				Are cables properly attached to messenger cable?
7.003				Is there adequate clearance above grade (at least 5.5M above pavement or 3.7M elsewhere)?
7.099				Other? (See Remarks)

8.000 PEDESTRIAN SIGNALS (including pushbuttons)

(Refer to Standard Sheet M680-8)

	ACCEPTABLE			
	YES	NO	DNA	
8.001				Are the heads properly located (away from turning vehicles)?
8.002				Are the heads at the proper elevation?
8.003				Are the heads oriented properly (visible from other corner)?
8.004				Are the heads attached to the poles properly (banded if bracket mount)?
8.005				Have all fittings been tightened (including set screws)?
8.006				Are the indications operating properly?
8.007				Do the pushbuttons function?
8.008				Are pushbuttons ADA compliant?
8.009				Are the pushbuttons properly oriented?
8.010				Are the pushbuttons the correct height above grade(1.0M to 1.2M to center of button)?
8.011				Are the instructional signs in place and securely attached?
8.012				Do the signs have proper text (including directional arrows)?
8.013				Do the heads, hardware, or buttons need paint repair?
8.014				If a Ped Post (not pole) was provided, was it installed per the details on Standard
8.099				Other? (See Remarks)

9.000 **CONDUITS (including Risers)**
(Refer to Standard Sheets M680-4 and M680-12)

	ACCEPTABLE			
	YES	NO	DNA	
9.001				Do all metal conduit ends have insulated grounding bushings?
9.002				Do any conduits appear to have to many cables in them (over 40%)?
9.003				Are the metal conduits bonded to each other and to a ground rod?
9.004				Have metal bands been installed at 0.6M spacing on risers (wood poles)?
9.005				Have metal bands been installed at 1.2M spacing on risers (metal poles)?
9.006				Is all conduit exposed to the atmosphere rigid heavy metal (not IMC)?
9.007				Does any metal conduit need galvanizing repair?
9.008				Are all gaskets, screws and covers in place on condulets?
9.099				Other? (See Remarks)

10.000 **SIGNS (Overhead)**
(Refer to Standard Sheets M680-5, M680-6, and M680-8)

	ACCEPTABLE			
	YES	NO	DNA	
10.001				Have all new signs been provided as shown on the plans?
10.002				Have all signs been relocated as shown on the plans?
10.003				Should any additional signs be installed?
10.004				Are lane usage signs (arrows) at or near the center of the lanes?
10.005				Is the sign bracket TYPE as specified?
10.006				Are the pavement to bottom of sign clearances between 5.0 and 5.2 meters?
10.099				Other? (See Remarks)

10.500 **SIGNS (Ground/Pole Mounted)**
(Refer to Standard Sheets M645-50 thru M645-56)

	ACCEPTABLE			
	YES	NO	DNA	
10.501				Have all new signs been provided as shown on the plans?
10.502				Have all signs been relocated as shown on the plans?
10.503				Should any additional signs be installed?
10.504				Are the signs mounted at the correct height and offset (per the table on Standard Sheet)?
10.505				Are new and relocated signs on Type A post?
10.506				Have Type A post been assembled and installed in accordance with Materials Detail Sheets (See Approved Materials List also)?
10.507				Have stiffeners been installed properly where sign panels are greater than 460mm in width?
10.508				Have two (2) Type A post been installed for sign panels greater than 750mm in width?
10.599				Other? (See Remarks)

11.000 **MISCELLANEOUS**

	ACCEPTABLE			
	YES	NO	DNA	
11.001				Have disturbed areas been restored to match the surrounding area?
11.002				Are there any tripping hazards present?
11.003				Has removal of old equipment been completed?
11.099				Other? (See Remarks)

GO TO REMARKS (NEXT PAGE)

TE-260

DATE: ____/____/____

I.R. NO.: _____

Sheet No. _____ 0f _____

SIGNAL INSTALLATION CHECK LIST

SIGNAL NO.: _____

LOCATION: _____

CODE #	**REMARKS**

/ /

Date Accepted **Signature**

END