Department of Transportation

VAN WYCK EXPRESSWAY (VWE) CAPACITY AND ACCESS IMPROVEMENT TO JFK AIRPORT – CONTRACT 3

PIN X735.84, Contract D900053

DB CONTRACT DOCUMENTS

REQUEST FOR PROPOSALS

PART 4

UTILITY REQUIREMENTS

Final August 20, 2021

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PART 4 - UTILITY REQUIREMENTS

4-1 SCOPE

This Part 4 - Utility Requirements provides information on the Design-Builder's overall responsibilities as they relate to existing and/or new utilities, the manner in which utilities are to be protected, relocated, upgraded, constructed or incorporated into the construction, and who will be responsible for the Work.

The Design-Builder's attention is directed to the fact that during the life of this Contract the owners and operators of utilities may make changes to their facilities. These changes may be made by the utility employees or by contract within the Project limits of, or adjacent to, this Contract and may involve temporary and/or permanent Work(s).

Potential utility conflicts shall be identified by the Design-Builder and brought to the attention of the Department and utility owners. Reference is made to the New York State Department of Transportation Highway Design Manual, and NYSDOT Standard Specifications and Construction Materials and all applicable NYSDOT Standards.

The Design-Builder shall abide by this Part 4. The Design-Builder shall also abide by and fulfill the requirements related to utility facilities or systems included in other Contract Documents.

This Part 4 applies to existing and proposed underground, structure mounted, and overhead utilities.

The Design-Builder shall be responsible to verify all utility information provided and to coordinate with the utilities regarding any necessary modification to the Preliminary DB Utility Work Agreements (if provided) based on any new information and any further utility work required beyond that indicated in the Preliminary DB Utility Work Agreements (if provided).

If the Design-Builder’s design requires additional utility relocations beyond those identified in the Preliminary DB Utility Work Agreements presented in Appendix C, it is the responsibility of the Design-Builder to suggest revised Preliminary DB Utility Work Agreements in coordination with the utility owners and submit the revised Preliminary DB Utility Work Agreements to the Department for approval.

At points where the Design-Builder’s operations are adjacent to utilities, damage to which might result in considerable expense, loss, or inconvenience, Work shall not begin until all arrangements necessary for the protection thereof have been made by the Design-Builder and the utility owner. The Design-Builder shall cooperate with all utility owners (including owners of underground or overhead utility lines and owners of utilities attached to existing Department structures) in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, that duplication of rearrangement Work may be reduced to a

minimum, and that services rendered by those parties will not be unnecessarily interrupted. See also DB §107-07 addressing Work near underground facilities.

4-2 GENERAL

The Department's interaction with Utilities located within the Highway Right Of Way (ROW) is governed by 17 NYCRR (Official Compilation of Codes, Rules and Regulations of the State of New York) Part 131.

The Department has notified all Utilities, pipeline owners, or other parties who seemingly are affected by the proposed construction based on the preliminary design plans and endeavor to have Preliminary DB Utility Work Agreements executed with potentially affected Utilities prior to the Award of the Contract.

The Design-Builder, in coordination with the Department's Project Manager (or his designee), shall meet with all the affected Utility owners or operators for the purpose of discussing the effect on the utility facilities and to agree on a plan to maintain, protect, relocate, reinstall, or other action that may be necessary for the work to progress.

Reference is made to General Obligations Law §11-102 which concerns the liability of a Utility for compensation for damages caused by interference with and/or delay of progress of work under a State public construction contract.

4-2.1 Utility Coordination

The Design-Builder shall coordinate its design and construction efforts with utility owners as set forth in Part 2 - General Provisions of the Contract. All design and construction work performed by the Design-Builder shall be coordinated with the utility owners and shall be subject to the Preliminary DB Utility Work Agreements, utility standards and applicable provisions of the Contract Documents.

The Design-Builder shall notify the Department at least five working days in advance of each meeting with a utility owner's representative scheduled by the Design-Builder and shall allow the Department the opportunity to participate in each meeting. The Design-Builder shall also provide the Department with copies of all correspondence between the Design-Builder and any utility owner, within seven days after receipt or sending, as applicable.

4-2.2 Utility Coordination Manager

Refer to Part 3, Section 3.2.5.2.

4-2.3 Utility Relocation Design

The Responsibility for design of relocations covered by a DB Utility Work Agreement (DB-HC140) shall be as set forth in each such DB Utility Work Agreement. The DB Utility Work

Agreements shall allocate responsibility for the design of utility relocations that are subject to such DB Utility Work Agreements. The Design-Builder shall clearly indicate the allocation of responsibility for the design of utility relocations on the Utility Relocation Plans.

4-2.4 Scheduling Utility Relocation Work

The Design-Builder shall allow in its Baseline Progress Schedule and monthly updates, the time required for utility owners to accomplish the tasks and activities for which they are responsible, as specified in the Preliminary DB Utility Work Agreements (if applicable), Relocation Plans, and in this Part 4.

4-2.5 Utility Design and Construction Constraints

All utilities (whether designed and/or constructed by the Design-Builder or the utility owner) within the Project Limits that are to be newly installed temporarily or permanently, relocated or upgraded shall be placed in accordance with the NYSDOT's utility regulations and policies, unless otherwise approved by the Department.

For each relocation, or installation, the Design-Builder, in coordination with the utility owner, shall be responsible for verifying that the relocated utility, as designed and constructed, is compatible with and interfaces properly with the Project. The Design-Builder shall be responsible for protecting any and all utilities that must be protected in order to permit construction of the Project.

4-2.6 Standard of Care Applicable to Utility Work

The Design-Builder shall be responsible for complying with 16 NYCRR Part 753 ("Part 753"), and requesting mark outs for utilities that are not members of the One Call System as defined in Part 753. A list of known utility operators that are not members of the One Call System with facilities within the Project area is included in Appendix B. The Design-Builder shall carry out its work carefully, and skillfully, and shall support and secure utilities so as to avoid damage and keep them satisfactorily maintained and functional. The Design-Builder shall not move or remove any utility without the utility owner's written consent unless otherwise directed by the Department.

The Design-Builder shall be responsible for the cost of repair of any utilities damaged by the Design-Builder. In the event of any such damage, the Design-Builder shall notify the affected utility owners and the Department, and shall enter into an agreement with such utility owner allocating responsibility for design and construction of any such repairs, and the schedule for completing the repairs. All such repairs made by the Design-Builder shall be performed in a good and workmanlike manner. If the utility owner undertakes the repairs and the Design-Builder fails to make any required payment within 30 days after the repairs have been completed and the Design-Builder's receipt of the utility owner's invoice therefore, the Department will have the right to pay the utility owner from the Department's funds and/or

deduct an amount sufficient to cover the cost from any moneys due or that may become due the Design-Builder under this Contract.

The Design-Builder shall include provisions for its obligations with respect to utilities in its Quality Control Plan.

4-2.7 Coordination with Utility Owners

The Design-Builder shall make diligent effort to obtain the cooperation of each utility owner as necessary for the project. If the Design-Builder becomes aware that a utility owner is not cooperating in providing needed work or approvals, the Design-Builder shall notify the Department immediately of such problem. After such notice, the Design-Builder shall continue to diligently seek to obtain the utility owner's cooperation, and the Department and Design-Builder each shall assist the other party as reasonably requested by such other party with regard to the problem.

4-3 AFFECTED UTILITIES

4-3.1 Design-Builder's Responsibilities

With respect to utilities for which the Department has identified a specific utility owner and conflict, the Design-Builder's responsibilities shall include:

A) Verifying utility locations;

B) Identifying potential conflicts not previously identified;

C) Coordinating and/or designing/constructing utility relocations and/or new utilities and the protection of existing utilities in accordance with this Part 4 and any additional requirements of the utility owner(s) as set forth in the relevant Preliminary DB Utility Work Agreement(s) included in Appendix C hereto; and

D) Preparing and coordinating the execution of Final DB Utility Work Agreements between the Design-Builder, Department, and utility owners.

With respect to any unknown utilities that are subsequently identified by the Design-Builder, the Design-Builder shall be responsible for identifying the ownership of each facility or line identified which requires either relocation or protection, and for all those responsibilities set forth in A through D, above; provided, however, that with respect to item C, the Design-Builder shall be responsible for negotiating and entering into a DB Utility Work Agreement with the Department and the Utility Owner for such previously unknown utilities and/or utilities for which no owner had been previously identified, and the Design-Builder's responsibilities in item C shall apply with respect to each such DB Utility Work Agreement.

4-4 COORDINATION REQUIREMENTS

The Design-Builder shall make diligent effort to obtain the cooperation of each utility owner as necessary for the Project. If the Design-Builder becomes aware that a utility owner is not cooperating in providing needed work or approvals, the Design-Builder shall notify the Department immediately of such situation. After such notice, the Design-Builder shall continue to diligently seek to obtain the utility owner's cooperation, and the Department and Design-Builder each shall assist the other party as reasonably requested by such other party with regard to the situation.

The Design-Builder shall provide information as required and maintain close coordination with the Department and utility owners to achieve timely relocations, new installations and new service connections necessary as part of the Design-Builder's design and construction.

4-4.1 Prior Department Actions

The Department has coordinated its efforts with all known utility owners and has:

A) Developed a contact list;

B) Identified potential utility conflicts; and

C) Developed Preliminary DB Utility Work Agreements as set forth in Appendix C hereto.

4-4.2 Design Builder's Coordination Requirements

The Design-Builder shall be responsible for coordination with utility owners. It is important that Utility Owners be kept informed of the Design-Builder's activities and schedule. In addition to satisfying any requirements set forth in applicable Governmental Rules and Standards, including but not limited to Part 753, the One-Call notification requirements referenced in DB § 107-07, and in any DB Utility Work Agreements that may have been executed, the Design-Builder shall undertake the following activities, which have been identified by the Department as important to utility owners:

A) Keep utility owners well informed of construction schedules and notify the utility owners at least twenty-four hours in advance of any work in the vicinity of the utility owners' facilities, that will not impact service;

B) Keep utility owners well informed of changes that affect their facilities;

C) In addition to any required notice, give the utility owners a minimum of 48 hours notice of potential impacts to service, unless longer notification times are specified elsewhere in this Part 4 or any DB Utility Work Agreements that may have been executed;

D) Ensure utility owners are involved in making the decisions that affect their own facilities and services;

E) Cooperate with the utility owners to solve relocation/installation issues to the extent that such relocations/installations are consistent with the Design-Builder's Scope of Work as otherwise set forth in the Contract Documents and without causing the Department to incur any unnecessary expense to the Project, or causing the utility owners to incur unnecessary expense;

F) Act diligently in continuing the positive relationship that the Department has developed with the utility owners; and

G) Coordinate with those utility owners who perform their own work by scheduling adequate time to accomplish their work.

In the event of interruption to utility services as a result of accidental breakage or as a result of being exposed or unsupported, the Design-Builder shall promptly notify the proper authority regarding the restoration of service. If any essential service (including water, gas, electric fiber-optic, cable, telephone or other utility) is interrupted, the Design-Builder shall provide continuous repair Work until the service is restored. No Work shall be undertaken around fire hydrants until provision for service has been approved by the local fire authority.

4-4.3 Design Reviews

The Design-Builder shall invite affected utility owners to participate in all pertinent Design-Builder's and Department's Design Reviews (see Part 3, Section 5).

Some utility owners may design and/or construct any required utility relocations and revisions for their utilities. The Design-Builder shall be required to incorporate these utility designs into its own design prior to the Design Review.

4-4.4 Meetings and Coordination

The Design-Builder shall schedule meetings with each utility owner, the Design-Builder and the Department. These meetings are for the purpose of reviewing all items related to the utility Work, including all items which affect the Baseline Progress Schedule, the time required to procure construction material and the period of time utility service may be curtailed. These meetings will also be used to reach concurrence on the number and extent of known affected utility lines or issues, to discuss the possible elimination of conflicts, to establish the methods to be used at each specific location and procedures for addressing conflicts discovered during design and/or construction.

The Design-Builder shall jointly schedule at least monthly utility meetings with the Department or their duly authorized representative to discuss project progress, issues, and planned work for all phases of utility work including design and construction. These meetings shall include the

Design-Builder's and the Department's personnel with responsibilities for utilities. The Design-Builder and the Department will jointly develop the agenda for these meetings. The Design-Builder shall be responsible for providing meeting facilities unless otherwise agreed. The Design-Builder shall keep minutes of the coordination meetings and distribute copies of the minutes to participants, including representatives of utility owners (even if not present) who have facilities in the areas reviewed, within five working days after the meeting date.

4-5 STANDARDS AND REFERENCES

The Design-Builder shall perform the utility work in accordance with the Contract Requirements, including this Part 4, the applicable Standards, Codes and Manuals listed in Part 3 – Project Requirements and the standards required by the various utility companies affected by the work.

The Design-Builder shall obtain clarification of any unresolved ambiguity prior to proceeding with design or construction.

The Department will make available to the Design-Builder upon request all information obtained from utilities, pipeline owners, and other parties that the Department has notified concerning the proposed construction. Such information will be considered Reference Documents.

4-6 DESIGN BUILDER RESPONSIBILITIES

The Design-Builder shall be responsible for coordinating its design and construction work with utility work as indicated herein, consistent with and subject to the terms and conditions set forth in DB §104.

The Design-Builder shall identify and resolve all utility conflicts, and shall coordinate the construction, relocation, removal and/or protection of each affected utility with the applicable utility owner. If the Design-Builder discovers utilities not identified in Appendix A of this Part 4 that are affected by the construction, the Design-Builder shall immediately suspend construction operations at the site affected by such utility and shall notify the Department within 24 hours of discovery of such previously unknown utilities. The Design-Builder and the Department shall cooperate in identifying and notifying the utility owner.

4-6.1 Cost of Temporary Relocations

The Design-Builder shall be responsible for the cost of temporary utility relocations, including the cost of obtaining temporary easements, necessary to accommodate its own construction operations and/or methods, other than temporary relocations that are necessary for the construction of the Project permanent works.

4-6.2 Relocation Permits

Where the Design-Builder is performing utility relocation construction Work, the Design-Builder shall obtain utility permits, roadway permits, and work permits and comply with all applicable

utility regulations. If the Design-Builder has reasonable cause to believe that a utility owner does not have necessary approvals, or is in violation of the approvals, the Design-Builder shall notify the Department immediately after discovery.

4-6.3 Point of Contact

The Design-Builder shall coordinate, cooperate, and work with the contact person designated by the utility owner. Table A-1 in Appendix A of this Part 4 presents contact details by utility owner.

4-6.4 Instructions and Authorizations

The Design-Builder shall be responsible for obtaining specific written instructions and authorization from the utility owner, for any design or construction the Design-Builder performs on behalf of the utility owner, and for verifying that they are consistent and compatible with the Design-Builder's design.

4-6.5 Verification of Utility Locations and Marking of Locations in the Field

The Design-Builder shall be responsible for verifying the exact location of each affected utility on the Project regardless of the information that has been provided by the Department or the utility owner.

The Design-Builder shall comply with NYCRR 16 Part 753 to mark utility locations.

4-6.6 Components of Utilities

The Design-Builder shall consider necessary appurtenances to each utility facility (such as the utility source, guide poles, feeder service lines, supports, etc.) as part of the utility.

4-6.7 Utility Owner's Right to Inspect

The utility owner has the right to inspect the work on its facilities that is to be performed by the Design-Builder.

4-6.8 Design-Builder-Caused Changes to Utility Owner Work

If the utility owner maintains responsibility for the design and/or construction and the Design-Builder revises the conditions, the Design-Builder shall be responsible for the costs and schedule delays related to the change.

4-6.9 Abandoned Utilities

Unless otherwise directed by the Department, and the utility owners, the Design-Builder shall remove abandoned utilities and utilities proposed for abandonment within the New York State Department of Transportation's Right Of Way. Any work to remove or abandon in place any

utilities shall be considered “Incidental Utility Work” and subject to the provisions of DB §104-04.B.7(e).

4-6.10 Quality Control

The Design-Builder shall provide Quality Control for all the utility relocation work, performed by the Design-Builder, in accordance with Part 3, Sections 5 and 6.

4-6.11 Changes to Design

All changes to designs that have received the Department's or utility owner's consultation and written comment and/or utility owner’s approval shall be dealt with in accordance with Part 3, Section 5, including obtaining the Department's and utility owner's consultation and written comment and/or approval for the change.

4-6.12 Design-Builder Design and/or Construction

The Design-Builder shall be responsible for the utility relocation design and/or construction as provided in Part 2 - General Provisions. The Utility Work set forth in Appendix A and the Preliminary DB Utility Work Agreements set forth in Appendix C (if any) indicate the allocation of responsibility between the Design-Builder and the identified utility owners for relocation design and/or construction of the utility facilities. Subject to Part 2 - General Provisions, Design-Builder is responsible for all relocation costs and the Contract Price includes the price for such Work.

4-6.13 Design Review

The Design-Builder shall submit its utility relocation plans to the Department's Design Quality Assurance Engineer and to the utility owner for work performed by the Design-Builder, for consultation and written comment. See also Part 3, Section 5. The Design-Builder shall include in their schedule 30 calendar days for each design unit submission for consultation and written comment by the utility owners (NYCDEP Sewer, NYCDEP Water, National Grid, FDNY, Verizon, Charter, Consolidated Edison Inc., Port Authority…).

4-6.14 Construction Record

The Design-Builder shall maintain a record of the design and construction activities of all utility facilities that have been performed by the Design-Builder, and have been designed and released for construction after Notice to Proceed. Individual files shall include a record of the following information:

A) Design Plans that have been reviewed by the utility owner and received consultation and written comment by the Department;

B) Notification of construction dates;

C) Record of meetings with utility owner;

D) Signature of utility owner inspector on Design Plans (optional);

E) Record of utility owner inspector present at any time;

F) Any revisions to the Design Plans;

G) Dates of construction completion;

H) All other as-built requirements stipulated in this Part 4;

I) Any executed Final DB Utility Work Agreements (three-party agreements).

4-6.15 Utility Damage Reports

In the event that the Design-Builder damages an existing utility, the Design-Builder shall complete a utility damage report within 24 hours of damage and submit it to the Department. The Design-Builder shall report any utility facilities damaged immediately to the utility owner and the Department. The Design-Builder is responsible for developing a utility damage report form to use in the event a utility is damaged. The report shall be submitted to the Department's Project Manager. The following information shall be included:

A) Utility Damage Information

1. Exact location;
2. Date and time of incident;
3. Date and time reported;
4. The weather the day of incident;
5. Description of the incident;
6. Who the damage was reported to;
7. Who the damage was repaired by;
8. Representative digital color photographs.

B) Utility Owner Information

1. Utility owner;
2. Utility owner contact;
3. Time utility owner was contacted.

C) Locator Information

1. Locator service;
2. Date of locate request;
3. Locate expiration date;
4. Locate log number;
5. If damaged utility line was marked;
6. Distance from damage to mark.

D) Design-Builder Information

1. Name of supervisor;
2. Name of foreman;
3. Name of witness.

E) Signatures

1. Design-Builder's supervisor;
2. Utility owner;
3. Locator service.

4-6.16 Protection of Utility Facilities

The Design-Builder shall prepare a protection plan for all utility facilities to be left in place and protected. The Design-Builder shall also obtain written approval of the plan from each utility owner of the specific facility to be protected.

4-6.17 Utility Relocation Master Plan

The Design-Builder shall coordinate with the utilities to prepare a utility relocation master plan after the Design Builder has advanced the Project design sufficiently to clearly define utility impacts. The Design Builder shall update the plan at least quarterly throughout the duration of the Contract. Updates shall be submitted to the Department for consultation and written comment.

4-6.18 Betterments

The Preliminary DB Utility Work Agreements set forth in Appendix C, if any, address any Betterments that have been agreed to by the Department and utility owners whose facilities are subject to a DB Utility Work Agreement.

If the Department agrees to the addition of any Betterments to the Work with respect to facilities covered by the DB Utility Work Agreements, the Department will issue a Change Order pursuant

to DB §104-02 with respect thereto. The Design-Builder shall not be entitled to an increase in the Contract Price with respect to any Betterments except as allowed under DB §104-04.B.3 and this DB §104-04.B.4.

If any utility owners whose facilities are subject to a Preliminary DB Utility Work Agreement request that the Design-Builder design or construct Betterments that are not addressed in the relevant Preliminary DB Utility Work Agreement, the Design-Builder shall be solely responsible for any Betterments that the Design-Builder agrees to provide that are not addressed in the relevant Preliminary DB Utility Work Agreement. Some utility owners with whom the Design-Builder and the Department will be entering into a DB Utility Work Agreement may request Betterments to their facilities as a result of required relocations of their lines. The costs of any such Betterments shall be resolved between the Department, the Design-Builder and the utility owners in their respective DB Utility Work Agreements. The forms of DB Utility Work Agreements attached hereto as Appendix C, if any, provide a template provision addressing agreed upon Betterments. The Department shall have no responsibility, actual or implied, with respect to any Betterments, and all Betterments shall be subject to the Department's permitting process.

4-7 DESIGN AND APPROVAL OF THE UTILITY RELOCATION PLANS

After the Design-Builder has advanced the Project design sufficiently to clearly define utility impacts, the Utility Relocation Plans shall be prepared by the Design-Builder. If the utility owner is preparing the design, the Design-Builder and the Department shall review the Utility Relocation Plans to be sure that they are consistent with the Design-Builder's design. Upon review by the utility owner and the Design-Builder, and consultation and written comment by the Department, the utility relocations may be constructed. Any subsequent revisions to the Utility Relocation Plans will require the review of the affected utility owner and the Department's consultation and written comment.

4-8 SUBMITTALS

4-8.1 Design

All design Work shall be coordinated between the utility owners and the Design Builder. If the relocation plans are to be developed by the Design-Builder, the Design-Builder shall furnish to the Department prior to the start of construction of each utility relocation, Utility Relocation Plans and Project Specifications completed to the levels of design and stages of design development and reviewed and certified per Part 3, Section 5.

Designs prepared by the utility owner shall be reviewed and approved by the Design-Builder and receive the Department's consultation and written comment, for consistency and compatibility with the Design-Builder's design. Prior to construction, the Department will review all designs, whether by the Design-Builder or the utility owner.

4-8.2 Construction

The Design-Builder shall provide two sets of As-Built Utility Relocation Plans to the Department and each utility owner for utility relocation work constructed by the Design-Builder. The Design-Builder should also reflect in the As-Built plans any work that is performed by the utility companies within the project limits. The As-Built Utility Relocation Plans shall comply with As-Built requirements stipulated in the Department's Utility Standards and shall include any utilities abandoned and not removed. The As-Built Utility Relocation Plans shall be part of the Project As-Built Plans.

4-9 DB UTILITY WORK AGREEMENTS

4-9.1 General

If Preliminary DB Utility Work Agreements have been executed, they will be identified in *Part 4 – Utility Requirements*.

Utilities which may be impacted by the Project have been identified in *Part 4 – Utility Requirements*.

If Preliminary DB Utility Work Agreements have not been executed and included in the Contract Documents, the Department, in conjunction with the Design-Builder, shall negotiate with each affected utility for Relocation of the utility's facilities after Award and enter into a DB Utility Work Agreement. The Design-Builder agrees to cooperate as reasonably requested by the Department in pursuing and executing DB Utility Work Agreements after Award, including attendance at negotiation sessions and review of DB Utility Work Agreements. The Department and the Design-Builder shall exercise due diligence and good faith efforts in coming to an agreement with each affected utility. Each DB Utility Work Agreement shall be executed by the Department, the Design-Builder and the Utility Owner. The Design-Builder shall remain responsible for the coordination between itself and the utility owner after DB Utility Work Agreements have been executed in order to maintain the Project schedule.

Issues to be addressed in the DB Utility Work Agreements may include the following:

A) Responsibility for design and/or construction of the relocations;

B) Design requirements and construction specifications;

C) Betterments, including the approach to determining whether an item is a betterment;

D) Notifications to the involved parties;

E) Review of designs and/or cost estimates by the Utility or the Design-Builder, including timeliness;

F) Emergency response actions and timing;

G) Limitations on timing of construction or interruption of service;

H) Damage repair;

I) Inspections and testing by the Utility and/or Design-Builder;

J) Approvals (including provisions for early start of construction); and

K) Payment for relocation.

If a utility owner requests the Design-Builder to design and/or construct a Betterment, or advises the Design-Builder that the utility owner intends to design and construct a Betterment, the Design-Builder shall promptly analyze the impact of such Betterment on the Baseline Progress Schedule and notify the Department if it appears the Betterment may affect the Critical Path. The Design-Builder shall use its best efforts to negotiate arrangements with the utility owner that avoid potential Critical Path impacts.

4-9.2 Utilities Not Covered by DB Utility Work Agreements

If public or private utility lines or pipelines or other appurtenances are encountered during the course of the Work, which may be impacted by the Work, and which are not covered by an existing DB Utility Work Agreement, the Design-Builder shall immediately suspend construction operations at the site of the utility in question. The Design-Builder shall then provide the Department with a written assessment of the potential impacts to the Utilities and Contract Work, including options, time impacts, schedule impacts, and a proposed action plan. Construction Operations at the site of the utility in question shall remain suspended until such time that the Department and utility owner negotiate an agreement for the required action, or the Department provides written authorization allowing Work to proceed without such an agreement. Subject to DB §104-04.B.1, the Design-Builder will not be allowed adjustments for delays or extra expense with respect to any such suspension.

4-10 DELIVERABLES

Unless otherwise indicated, all deliverables shall be submitted in both electronic format and hardcopy format. Acceptable electronic formats include Microsoft Word®, Microsoft Excel®, Bentley MicroStation version V8, or searchable portable document format (PDF) files, unless otherwise indicated.

At a minimum, the Design-Builder shall submit the items listed in Table 4.9-1 to the Department.

Table 4.9-1 – Deliverables

Deliverable	Number of Copies	Submittal Schedule

	Hardcopy	Electronic	
Utility Tracking Report	3	1 (PDF)	Weekly until Physical Completion.
Utility Design Sheet	3	1 (PDF)	Two days prior to initial meeting with utility owner
DB Utility Work Agreements	2	1 (PDF)	Seven days after construction of the utility identified

APPENDIX A UTILITY REQUIREMENTS

The Department has reviewed the Project limits and has made a preliminary assessment of which utility facilities located within the Project limits may be impacted by the Project

The Department has conducted advanced utility coordination with the utility companies listed below.

A-1 UTILITY COMPANIES

Table A-1 lists the utility companies with facilities located on, under or above the Project roadways and/or structures:

Table A-1 Utility Contacts

Utility Owner	Contact	Contact #	E Mail
Port Authority	AJ Piechnik	973-289-7164	apiechnik@panynj.gov
Crown Castle Fiber	Mr. John T. Adams District Manager Fiber Engineering	631-300-3720	john.adams@crowncastle.com
MCI Communications, Inc.	Mr. Howard Tran – Global Transport Engineering & Implementation	646-529-1502	Howard.Tran@Verizon.com
Altice USA, Inc.	Mr. Al Clark – Director, Bronx Construction Operations	718-861-7382	Al.clark@alticeusa.com
Charter Communications, Inc.	Mr. John Piazza – Construction Manager – Municipal Interference	718-888-4261	John.piazza@charter.com
Calpine Corporation	Mr. Michael O-Brien – General Plant Manager	718-955-0547	michael.obrien2@calpine.com

Verizon New York, Inc.	Mr. Rohan Eccles, P.E. – Pre-Engineering, Project Manager	516-758-3742	rohan.o.eccles@verizon.com
Consolidated Edison, Inc.	Mr. Calmore Alman Engineering Supervisor Public Improvement Planning and Engineering	929-237-8227	almanc@coned.com
National Grid US	Mr. Ross Gao Engineer City/State Construction	347-675-4185	Rosset.Gao@nationalgrid.com
Fire Department City of New York – Bureau of Facilities Management, Plant Operations Engineering Unit	Mr. Ed Durkin Associate Project Manager	718-281-3933	Edward.Durkin@fdny.nyc.gov
New York City Police Department	Detective Christopher Decker	646-235-0973	CHRISTOPHER.DECKER@nypd.org
New York City Department of Environmental Protection	Mr. Guo Zhan Wu, P.E. – Chief, Regulatory Review	718-595-5191	gzwu@dep.nyc.gov
AT&T - TC Systems, Inc	Mr. Brian Kerr – OSP - Engineer	347-366-2155	bk267n@att.com

AT&T Core	Mr. Louis J. Marello – OSP - Engineer & Field Operations	914-397-3744	lmarello@att.com

A-2 UTILITY INVENTORY

The types, sizes and approximate locations of utilities present in the immediate Project area are described below.

A-2.1 Telecommunications

A-2.1.1 Verizon New York, Inc.

Verizon near 135th over Van Wyck Expressway

- 4-4” multiple tile ducts (MTD) run E-W under the Van Wyck Expressway between Verizon MH-344A and Verizon MH-345B
- 2-3.5” Transite ducts run N-S along the east fascia of the three arch bridges
- 2-4” ducts transition from the Transite ducts running along the east fascia of the three arch bridges and continue south to Verizon MH-346D
- 2-3.5” abandoned Transite ducts run N-S along the west side of Northbound Van Wyck Expressway towards the east abutment of BIN 1075630 Nassau Expressway over Van Wyck Mainline
- 2-4” ducts transition from the Transite ducts running along the west side Northbound Van Wyck Expressway toward east abutment of BIN 1075630 and continue to Verizon MH-C
- 2-4” abandoned multiple tile ducts (MTD) run N-S along the east side of Northbound Van Wyck Expressway and continue south along the east edge of pavement of the Nassau Expressway – Northbound Van Wyck Expressway entrance ramp
- 4” Transite ducts run N-S along the east side of Northbound Van Wyck Expressway and continue south along the east edge of pavement of the Nassau Expressway – Northbound Van Wyck Expressway entrance ramp
- 2-4” multiple tile ducts (MTD) run N-S along the east side of Northbound Van Wyck Expressway and continue south along the east edge of pavement of the Nassau Expressway – Northbound Van Wyck Expressway entrance ramp

Verizon near 133rd over Van Wyck Expressway

- 8-4” PVC ducts (fiberglass ducts on bridge), comprising of 7-Verizon ducts and 1-FDNY ducts, run E-W along the south side of 133rd Avenue, passing through the bridge, and continue outside of the project limits

Verizon between 133rd and Rockaway over Van Wyck Expressway

- Overhead telephone lines run N-S along the west side of Southbound Service Road between 130th Avenue and Sutter Avenue
- Overhead telephone lines run N-S along the west side of Southbound Service Road between and Sutter Avenue and Alwick Road to south of Rockaway Boulevard and Southbound Service Road intersection
- Unknown telephone duct runs N-S in the middle of Northbound Service Road between 133rd Avenue and 131st Avenue

Verizon near Rockaway over Van Wyck Expressway

- 6-4” spare fiberglass ducts run E-W towards the south side of Rockaway Boulevard Bridge
- Fiberglass trough runs E-W towards the south side of Rockaway Boulevard Bridge
- 5-4” PVC ducts run E-W from Verizon MH-185 toward the Southbound Service Road then turn south on to the south sidewalk of Rockaway Boulevard
- 4-1.25” PVC ducts run E-W from Verizon MH-185 toward the Southbound Service Road then turn south on to the south sidewalk of Rockaway Boulevard
- 2-4” unknown duct lines run N-S in the intersection of Southbound Service Road and Rockaway Boulevard
- 1-2” PVC conduit runs E-W from the intersection of Northbound Service Road and Rockaway Boulevard from Verizon MH-186 located east of the intersection of Northbound Service Road and Rockaway Boulevard

Verizon between Rockaway and Foch over Van Wyck Expressway

- Overhead telephone lines run N-S along the west side of Southbound Service Road near 120th Avenue
- Overhead telephone lines run N-S along the east side of Northbound Service Road from 120th Avenue to the intersection of Northbound Service Road and Foch Boulevard

Verizon near Foch over Van Wyck Expressway

- 12-4” PVC-Fiberglass hybrid ducts run E-W toward the south fascia of Foch Boulevard Bridge from Verizon MH-358 located on the south sidewalk of Foch Boulevard west of Southbound Service Road to Verizon MH-156A located on the south sidewalk of Foch Boulevard east of the intersection of Northbound Service Road and Foch Boulevard
- Utility trough runs E-W toward the south fascia of Foch Boulevard Bridge
- Unknown duct runs E-W on Foch Boulevard roadway from Verizon MH-155 located west of Southbound Service Road
- 6-4” abandoned multiple tile ducts (MTD) and Transite ducts run E-W from Verizon MH-358 on south sidewalk of Foch Boulevard, west of Southbound Service Road and dead end just west of the Foch Boulevard and Southbound Service Road intersection

- 1-4” unknown duct runs E-W from Verizon MH-358 on south sidewalk of Foch Boulevard, west of Southbound Service Road and continues past the project limits
- 1 MTD / Transite duct runs E-W from Verizon MH-358 on south sidewalk of Foch Boulevard, west of Southbound Service Road and continues past the project limits
- 4-4” MTD ducts run E-W from Verizon MH-358 on south sidewalk of Foch Boulevard, west of Southbound Service Road and continue past the project limits
- 1-4” Transite duct runs E-W from Verizon MH-358 on south sidewalk of Foch Boulevard, west of Southbound Service Road and continues past the project limits
- 6 multiple tile ducts (MTD) run N-S between Verizon MH-358 located on south sidewalk and Verizon MH-155 located in roadway of Foch Boulevard on south side of Foch Boulevard, west of the Southbound Service Road
- 2 unknown ducts run E-W from Verizon MH-358 and dead end just west of the Foch Boulevard and Southbound Service Road intersection
- 12 abandoned multiple tile ducts run E-W from Verizon MH-358 and continue west past the project limits
- 3-4” multiple clay ducts run E-W from Verizon MH-358 and continue west past the project limits
- 5-4” PVC conduits on Southbound Service Road and Foch Boulevard intersection run E-W toward the west bridge approach from Verizon MH-155 west of Southbound Service Road to the south of Foch Boulevard and tie into PVC-Fiberglass hybrid ducts
- 5-4” PVC conduits on Northbound Service Road and Foch Boulevard intersection run E-W toward the east bridge approach from Verizon MH-156 located east of Northbound Service Road and ties into PVC-Fiberglass hybrid ducts
- 6-4” multiple tile ducts (MTD) run N-S between Verizon MH-156A located on south sidewalk of Foch Boulevard and Verizon MH-156 located in roadway on the south side of Foch Boulevard, east of the Northbound Service Road
- 2-4” unknown ducts run N-S between Verizon MH-156A located on south sidewalk of Foch Boulevard and Verizon MH-156 located in roadway on the south side of Foch Boulevard, east of the Northbound Service Road
- 3-4” PVC multiple tile & multiple clay ducts run E-W from Verizon MH-156A on south sidewalk of Foch Boulevard, east of the Northbound Service Road and Foch Boulevard intersection
- 2-4” unknown ducts run E-W from Verizon MH-156A on south sidewalk of Foch Boulevard, east of the Northbound Service Road and Foch Boulevard intersection
- 1-4” PVC duct runs E-W from Verizon MH-156A on south sidewalk of Foch Boulevard, east of the Northbound Service Road and Foch Boulevard intersection
- 1 abandoned MCD-PVC duct runs E-W from Verizon MH-156A on south sidewalk of Foch Boulevard, east of the Northbound Service Road and Foch Boulevard intersection

Verizon between Foch and Linden over Van Wyck Expressway

- Unknown telephone duct runs E-W into Southbound Service Road from a pullbox between 115th Avenue and Linden Boulevard

Verizon near Linden over Van Wyck Expressway

- 4-4” fiberglass conduits run E-W towards the south fascia of Linden Boulevard and continue outside of the project limits
- 6-4” split fiberglass conduits run E-W towards the south fascia of Linden Boulevard, passing through the bridge, between Verizon MH-406 and Verizon MH-407 located east of the Northbound Service Road and west of the Southbound Service Road
- 1 Creosote wood duct runs E-W then N-S across Linden from Verizon MH-406 located west of the Southbound Service Road and Linden Boulevard intersection
- 2 concrete ducts run E-W then N-S across Linden from Verizon MH-406 located west of the Southbound Service Road and Linden Boulevard intersection
- 1-4” PVC duct runs E-W then N-S across Linden from Verizon MH-406 located west of the Southbound Service Road and Linden Boulevard intersection
- 4-4” PVC ducts run west from the same Verizon MH-406 located west of the Southbound Service Road and Linden Boulevard intersection
- 2 creosote wood ducts run N-S across Linden Boulevard from Verizon MH-407 east of Northbound Service Road and Linden Boulevard intersection
- 1-4” PVC duct runs N-S across Linden Boulevard from Verizon MH-407 east of Northbound Service Road and Linden Boulevard intersection
- 1 creosote wood duct runs east from Verizon MH-407 east of Northbound Service Road and Linden Boulevard intersection
- 2-4” PVC ducts run east from Verizon MH-407 east of Northbound Service Road and Linden Boulevard intersection
- 2 concrete ducts run east from Verizon MH-407 east of Northbound Service Road and Linden Boulevard intersection

Verizon near 109th over Van Wyck Expressway

- 8-4” conduits (fiberglass under the bridge, PVC in the approaches) run N-E from Verizon MH-273G located west of the Southbound Service Road and 109th Avenue intersection on the south side of 109th Avenue, toward the north fascia of the 109th Avenue Bridge and cross S-E over the east approach to Verizon MH-234 located on the south sidewalk east of the Northbound Service Road
- 2-4” PVC ducts run east from a dead-ended point west of Southbound Service Road to the Southbound Service Road and 109th Avenue intersection
- 8-1.25” PVC ducts run east from a dead-ended point west of Southbound Service Road to the Southbound Service Road and 109th Avenue intersection
- 2-4” PVC ducts run west to a pole on the southeast corner of Northbound Service Road
- 2-4” PVC ducts run west to a dead-ended point in the roadway, from Verizon MH-234 on south sidewalk of 109th Avenue, east of Northbound Service Road

Verizon between 109th and Liberty over Van Wyck Expressway

- Unknown overhead telephone lines run N-S along the west side of Southbound Service Road between 109th Avenue and 107th Avenue
- Unknown overhead telephone lines run N-S along the west side of Southbound Service Road between 107th Avenue and 105th Avenue
- Unknown overhead telephone lines run N-S along the west side of Southbound Service Road between 105th Avenue and Liberty Avenue
- 1-2” PVC conduit runs N-S on the southwest corner of Southbound Service Road and Liberty Avenue, turns onto Liberty Avenue and continues west outside of the project limits
- 2-4” PVC conduits run N-S along the west side of Northbound Service Road from Verizon MH-328 located south of the intersection of Northbound Service Road and Liberty Avenue on the west side of Northbound Service Road
- Multiple unknown ducts run N-S along the west side of Northbound Service road from Verizon MH-328

Verizon near Liberty over Van Wyck Expressway

- 4-4” Fiberglass conduits run E-W towards the south fascia of Liberty Avenue, passing through the bridge, and continue past the project limits
- 6-4” Fiberglass conduits run E-W towards the south fascia of Liberty Avenue, passing through the bridge, to Verizon manholes beyond the east and west project limits
- 1-2” PVC conduit runs N-S on the southwest corner of Southbound Service Road and Liberty Avenue, turns onto Liberty Avenue and continues west outside of the project limits

Verizon near 101st over Van Wyck Expressway

- 4-4” fiberglass ducts run E-W toward the south fascia of the 101st Avenue Bridge

Verizon between 101st and 94th over Van Wyck Expressway

- Unknown overhead lines run N-S along the west side of Southbound Service Road from the south of 97th Avenue to the south of 95th Avenue on the west side of Southbound Service Road
- 3-utility poles (1, 2, and 3) located along the west sidewalk of the Southbound Service Road between 97th Avenue and 95th Avenue

Verizon near Jamaica Avenue over Van Wyck Expressway

- 24 multiple tile ducts (MTD) run E-W on Jamaica Avenue between Verizon MH-157 and Verizon MH-156 beyond the Northbound and Southbound Service Roads, with cables

housed in two fiberglass boxes on the Jamaica Avenue Bridge housed in two fiberglass boxes on the Jamaica Avenue Bridge

- 36 multiple tile ducts (MTD) run E-W on Jamaica Avenue between Verizon MH-157 and Verizon MH-156 beyond the Northbound and Southbound Service Roads, with cables housed in two fiberglass boxes on the Jamaica Avenue Bridge housed in two fiberglass boxes on the Jamaica Avenue Bridge
- Spare empty duct bank of at least 6 conduits runs E-W on Jamaica Avenue between Verizon MH-157 and Verizon MH-156 beyond the Northbound and Southbound Service Roads, with cables housed in two fiberglass boxes on the Jamaica Avenue Bridge housed in two fiberglass boxes on the Jamaica Avenue Bridge
- 16-4” fiberglass duct bank runs E-W on the Jamaica Avenue bridge toward the south fascia
- Spare PVC duct bank runs E-W on the Jamaica Avenue bridge toward the south fascia
- 4 multiple tile ducts (MTD) run E-W from Verizon MH-156 west of Southbound Service Road towards the intersection turning N-S on Southbound Service Road
- 6-4” PVC ducts run E-W from Verizon MH-156 west of Southbound Service Road towards the intersection turning south onto west sidewalk of Southbound Service Road
- 6-4” multiple tile ducts (MTD) run E-W from Verizon MH-156 west of Southbound Service Road towards the intersection turning N-S on Southbound Service Road to Verizon MH-218 then continue N-W along the north side of Kew Gardens Road and continue outside of the project limits
- 18 multiple tile ducts (MTD) run E-W from Verizon MH-155 east of Northbound Service
- 24 multiple tile ducts (MTD) run E-W from Verizon MH-155 east of Northbound Service
- 21 multiple tile ducts (MTD) run E-W from Verizon MH-155 east of Northbound Service
- 1 creosote wood duct runs E-W from Verizon MH-155 east of Northbound Service
- 6-4” PVC ducts run E-W from Verizon MH-155 east of Northbound Service then turn N-S to Verizon MH-155A on the east sidewalk of the Northbound Service Road

Verizon near Hillside Avenue over Van Wyck Expressway

- Overhead telephone lines run N-S over Hillside Avenue from a utility pole on the North side of Hillside Avenue west of Southbound Service Road and continue west outside of the project limits
- Unknown conduits run E-W from MH-FD24 to the intersection of Northbound Service Road and Hillside Avenue toward the south side of Hillside Avenue

Verizon near Queens Boulevard over Van Wyck Expressway

- Duct line runs E-W along the south side of Queens Boulevard and continues east past the project limits
- 12-4” PVC conduits run E-W across Queens Boulevard from a manhole located in the intersection of Queens Boulevard and the Southbound Van Wyck Expressway entrance ramp and continue N-S along the east side of Queens Boulevard and cross back over

Queens Boulevard toward the west side of Queens Boulevard before continuing southeast along the west side of Queens Boulevard past the project limits
- Unknown duct runs in a loop through 2 manholes located near the entrance ramp from Queens Boulevard to Southbound Van Wyck Expressway on the east side of the ramp

Verizon near Hoover Avenue over Van Wyck Expressway

- 22 Transite and multiple clay ducts run E-W towards the south fascia of Hoover Avenue from Verizon MH-352 and continue east past the project limits.
- 6-4” Transite ducts run E-W towards the south fascia of Hoover Avenue from Verizon MH-352 and continue east past the project.
- 6-4” multiple tile ducts and 1-3.5 Transite duct run west from Verizon MH-352 and continue past the project limits.
- 2-4” PVC ducts run west from Verizon MH-352 manhole and continue past the project limits.

A-2.1.2 Charter Communications, Inc.

133rd Avenue Over Van Wyck Expressway

- On the Northbound Service Road and 133rd Avenue intersection, 2-4” PVC conduits (0.500 cable) run E-W underground located on the south sidewalk of 133rd Avenue

Northbound and Southbound Service Road between North Conduit Avenue and 133rd Avenue

- Unknown overhead cables run E-W on the Southbound Service Road and 130th Avenue intersection, from pole# 86891 located on the south sidewalk of 130th Avenue and continue north on the Southbound Service Road until it ends south of the intersection of Southbound Service Road and Rockaway Boulevard
- 2-4” PVC conduits run N-S on the Northbound Service Road to a manhole between 131st Avenue and 132nd Avenue

Rockaway Boulevard Over Van Wyck Expressway

- 2-4” steel conduits running E-W toward the south fascia of the Rockaway Boulevard Bridge, that transition to 2-4” steel conduits then to 2-4” schedule 40 PVC conduits in fill 10’ beyond the abutments. These conduits extend up to the CATV vaults, one near utility pole #52556 on the southeast corner of the Northbound Service Road and Rockaway Boulevard intersection, and one near utility pole #52557 on the southwest corner of the Southbound Service Road and Rockaway Boulevard intersection
- One overhead line on the southwest corner of the 140th Street and Rockaway Boulevard intersection runs N-S on 104th Street from utility pole #36362
- 2 overhead fiber cables run E-W toward the west Rockaway Boulevard Bridge approach

- 4 overhead fiber cables run E-W from utility pole #36362 toward the east Rockaway Boulevard Bridge approach
- Unknown overhead cables run N-S on the Southbound Service Road between Rockaway Boulevard and 120th Avenue

Foch Boulevard Over Van Wyck Expressway

- Overhead cable to the west of the Southbound Service Road and Foch Boulevard intersection running west from utility pole #89648 on the south sidewalk of Foch Boulevard
- Overhead cable east of the Northbound Service Road and Foch Boulevard intersection from utility pole #3237 which runs east to utility pole #3238 located on the southeast corner of the 139th Street and Foch Boulevard intersection where it branches to multiple Charter (Spectrum) facilities
- Overhead cable runs east on Foch Boulevard from the utility pole #3238
- 4” PVC conduit housing a 0.500 underground cable runs east on Foch Boulevard from the utility pole #3238

Linden Boulevard Over Van Wyck Expressway

- 1-4” steel conduit runs E-W toward the north fascia of the Linden Boulevard Bridge and transitions to 4” schedule 40 PVC conduit in fill 10’ beyond each abutment. These conduits extend up to the CATV vaults on the northeast corner of the Northbound Service Road and Linden Boulevard intersection and the north sidewalk of Linden Boulevard, west of the Southbound Service Road and Linden Boulevard intersection.
- Overhead telephone cable runs E-W on Linden Boulevard from utility pole #94541 on the north sidewalk toward pole #7496 and continues west
- 4” PVC cable TV conduit on Southbound Service Road and Linden Boulevard runs E-W on the north sidewalk of Linden Boulevard then turns south and continues south on Southbound Service Road
- Overhead cable runs E-W from utility pole #T337, outside the Northbound Service Road and Linden Boulevard intersection on the north sidewalk of Linden Boulevard

Northbound and Southbound Service Road between Linden Boulevard and 109th Avenue

- Unknown overhead cable runs E-W across the Southbound Service Road over the north side of 111th Avenue
- Unknown overhead cable runs E-W across the Northbound Service Road over the north side of 111th Avenue
- Unknown overhead cable runs E-W over the north side of Lakewood Avenue east of Northbound Service Road

109th Avenue over Van Wyck Expressway

- 2-4” fiber glass (PVC in fill) conduits that carry 4 fiber optic cables underground run between utility pole #NYT141 on the south sidewalk outside the Southbound Service Road and 109th Avenue intersection and utility pole #T145 on the south sidewalk outside the Northbound Service Road and 109th Avenue intersection. These 2-4” conduits run across the intersections and run toward the north fascia of the 109th Avenue Bridge
- 4 overhead fiber optic cables run E-W from utility pole #NYT141 on the south sidewalk of 109th Avenue west of the Southbound Service Road and 109th Avenue intersection to utility pole #14629
- 4 overhead fiber optic cables run E-W from utility pole #T145 on the south sidewalk of 109th Avenue east of the Northbound Service Road and 109th Avenue intersection to utility pole #NYT146

Northbound and Southbound Service Road between Linden Boulevard and 109th Avenue

- Unknown overhead cable runs N-S between 109th and 107th Avenue on the west side of Southbound Service Road
- Unknown overhead cable runs N-S between 107th and 105th Avenue on the west side of Southbound Service Road
- Unknown overhead cable runs N-S between 105th and Liberty Avenue on the west side of Southbound Service Road
- Unknown overhead cable runs E-W from the intersection of 107th Avenue and Northbound Service Road along the south side of 107th Avenue
- Unknown overhead cable runs E-W from the intersection of 106th Avenue and Northbound Service Road along the north side of 107th Avenue

Liberty Avenue over Van Wyck Expressway

- 1-4” steel conduit runs E-W toward the north fascia of the Liberty Avenue Bridge and transitions to 4” schedule 40 PVC conduit in fill 10’ beyond each bridge abutment and extends up to the CATV vaults. One vault is near the utility pole #NYT130 on the north sidewalk on Liberty Avenue, west of the Southbound Service Road And another vault is on the north sidewalk on Liberty Avenue, east of the Northbound Service Road
- Overhead cable is carried via pole #NYT130 on the north side of Liberty Avenue outside the Southbound Service Road and Liberty Avenue intersection
- Overhead cable runs N-S from pole #92657 just south of the Liberty Avenue Bridge, along the Southbound Service Road toward 107th Avenue
- Cable outside the Northbound Service Road and Liberty Avenue intersection is carried via pole #T20

Northbound Service Road between Liberty Avenue and 101st Avenue

- Unknown overhead cable runs E-W between from the intersection of Northbound Service Road and Lloyd Road on the south side of Lloyd Road
- Unknown overhead cable runs E-W between from the intersection of Northbound Service Road and 102nd Avenue on the north side of 102nd Avenue

101st Avenue over Van Wyck Expressway

- 2-4" steel conduits toward the south side of the 101st Avenue Bridge transition to 2-4" schedule 40 PVC conduits in fill beyond each bridge abutment and extend up to CATV vaults. One vault is near the utility pole #LO-79PL1 located on the southeast corner of the Northbound Service Road and 101st Avenue intersection and another vault is near the utility pole #LO-79PL2 located on the southwest corner of the Southbound Service Road and 101st Avenue intersection
- Overhead cable runs along Remington Street through the utility pole T13 on Remington Street and 101st Avenue intersection
- 3 overhead fiber optic cables run E-W from an existing utility pole on the southwest corner of Southbound Service Road and 101st Avenue intersection and continue west past the project limits
- 3 overhead fiber optic cables run E-W from an existing utility pole on the southeast corner of Northbound Service Road and 101st Avenue intersection and continue east past the project limits

Southbound Service Road between 101st Avenue and Atlantic Avenue and 94th Avenue

- Unknown overhead lines run N-S along the west side of Southbound Service Road from the south of 97th Avenue to the south of 95th Avenue on the west side of Southbound Service Road
- 2-utility poles (NT-0 & NT-1) located along the west sidewalk of the Southbound Service Road between 97th Avenue and 101st Avenue

Long Island Railroad over Van Wyck Expressway

- Cable runs E-W through a 4" dia. RGS steel conduit towards the north fascia of the Atlantic 6 Bridge (BIN 7076810) to Manhole 235 on the east side of the bridge and up a riser to utility pole in the LIRR property. The cable continues east aerially out of the project limits
- Unknown conduit runs N-S out of vault, located on the south-east corner of Archer Avenue and Northbound Van Wyck Service road intersection, and connects to an unknown conduit running in the E-W direction towards the north side of Archer Avenue. This conduit ends at the intersection of Archer Avenue and the Northbound Service Road and continues east outside of the project limits

Hillside Avenue over Van Wyck Expressway

- 1.5” cable in conduit runs along the south sidewalk of Hillside Avenue west of the Southbound Service Road and Hillside Avenue intersection then turns south onto the Southbound Service Road

Queens Boulevard over Van Wyck Expressway

- 1-2” galvanized steel pipe attached to the west side pedestrian tunnel wall runs E-W across the Van Wyck Expressway and south of Queens Boulevard where it continues past the north side of Queens Boulevard
- 1-1.5” unknown conduit runs N-S across Queens Boulevard and the southern portion of the conduit terminates above the Northbound side of the Van Wyck

A-2.1.3 Crown Castle Fiber

Crown Castle near Rockaway Boulevard over Van Wyck Expressway

- 144 pair fiber conduit west of Southbound Service Road and Rockaway Boulevard intersection run E-W from pole #73091 on the south side of Rockaway Boulevard to Verizon manhole #185
- 4” PVC conduit west of Southbound Service Road and Rockaway Boulevard intersection runs E-W from pole #73091 on the south side of Rockaway Boulevard to Verizon manhole #185
- 3-1.25” ID Crown Castle facilities west of Southbound Service Road and Rockaway Boulevard intersection run E-W from pole #73091 on the south side of Rockaway Boulevard to Verizon manhole #185
- 144 pair fiber runs N-S from Verizon manhole #185 to Verizon manhole #244 located on 135th Place
- 2 unknown Crown Castle facilities run N-S from Verizon manhole #185 to Verizon manhole #244 located on 135th Place
- 144 pair fiber conduit east of Northbound service road and Rockaway Boulevard intersection runs E-W from pole #36362 on the southwest corner of Rockaway Boulevard and 140th Street to Verizon manhole #186
- 2 unknown Crown Castle facilities east of Northbound service road and Rockaway Boulevard intersection run E-W from pole #36362 on the southwest corner of Rockaway Boulevard and 140th Street to Verizon manhole #186
- 144 pair fiber run E-W from Verizon manhole #186 to Verizon manhole #188 located at the intersection of Rockaway Boulevard and 142nd Street, outside of the project limits
- 2 unknown Crown Castle facilities run E-W from Verizon manhole #186 to Verizon manhole #188 located at the intersection of Rockaway Boulevard and 142nd Street, outside of the project limits
- 1-4" fiberglass conduit runs E-W from Crown Castle Utility vault towards the south of the Rockaway Boulevard Bridge and ties into Crown Castle Utility vaults. One vault is located on the east side of the Southbound Service Road and Rockaway Boulevard

intersection, which rises up the Utility pole #52557 and one is located on the west side of the Northbound Service Road and Rockaway Boulevard intersection, which rises up Utility pole #52556

A-2.1.4 MCI Communications, Inc.

MCI Communications near LIRR Bridge over Van Wyck Expressway

- 216-pair fiber optic cable active in the vicinity of the LIRR Bridge runs down LIRR utility pole 'A' located to the northwest of the LIRR Mainline 1/3 Bridge, where its fiber cable is exposed, and is direct buried. The cable then runs towards the abutment wingwall where it enters a 4'' RGS conduit attached to the west abutment wall. The cable continues south along the west abutment wall of the LIRR Bridges through a 4'' RGS conduit and into a pull box just north of the Atlantic 6 LIRR Bridge. Then it runs into a 4'' dia. RGS conduit and continues N-S along the west abutment face to box (JB-1) located just north of the Atlantic 6 Bridge. Next, the cable goes into a 4" RGS conduit, continues E-W to a precast pull box (HH-2), travels in the E-W direction to junction box (JB-2). Then it runs through a 4'' RGS steel conduit, continues E-W from the west abutment of the Atlantic 6 Bridge to junction box (JB-4) near the east abutment, runs S-E to precast pull box (HH-3), and continues in the N-S direction to precast pull box (HH-4). Finally, the cable runs in the E-W direction to utility pole (#U-3), runs up the pole and becomes aerial, and continues east past the project limits

A-2.1.5 Altice USA, Inc.

Altice near Rockaway Boulevard over Van Wyck Expressway

- 2-4" steel conduits run E-W along the north fascia of the Rockaway Boulevard Bridge and transition to 2-4" galvanized steel conduits then to 2-4" Schedule 40 PVC conduit beyond each bridge abutment. These conduits tie into Altice vaults. One vault is located on the north sidewalk of Rockaway Boulevard west of utility pole #52556 and one vault is on the north sidewalk of Rockaway Boulevard east of the intersection of Northbound Service Road and Rockaway Boulevard
- 1 fiber optic overhead line, containing 432 pair fiber line, runs E-W along the south side of Rockaway Boulevard west of the bridge and continues past the project limits
- 1 fiber optic overhead line, containing 432 pair fiber line, runs E-W along the south side of Rockaway Boulevard east of the bridge and continues past the project limits

Altice near Atlantic Avenue over Van Wyck Expressway

- 288-count transatlantic fiber optic cable is active in the vicinity of the LIRR Bridges. This fiber optic cable runs from LIRR utility pole 'A' located northwest of the LIRR Mainline 1/3 Bridge, where the exposed fiber cable projects down the pole and is direct buried, and runs towards the abutment wingwall where the cable enters a 4'' RGS

conduit attached to the west abutment wall. The cable continues south along the west abutment wall of the LIRR Bridges through a 4'' RGS conduit (installed under the Atlantic 6 Project) and into a pull box just north of the Atlantic 6 LIRR Bridge. It then continues into a 4'' dia. RGS conduit running in the N-S direction along the west abutment face to box (JB-1) located just north of the Atlantic 6 Bridge. The cable then goes into a 4" RGS conduit continuing E-W to a precast pull box (HH-2). Then it travels in the E-W direction to junction box (JB-2). The cable continues through a 4'' RGS steel conduit in the E-W direction from the west abutment of the Atlantic 6 Bridge to junction box (JB-4) near the east abutment. The cable then continues in the S-E direction to precast pull box (HH-3). Then it runs in the N-S direction to precast pull box (HH-4), continues in the E-W direction to utility pole (#U-3), runs up the pole and becomes aerial, and continues east out of the project limits

A-2.1.6 AT&T Inc.

AT&T near Rockaway Boulevard over Van Wyck Expressway

- 1-4'' fiberglass conduit runs E-W towards the south fascia of the Rockaway Boulevard Bridge constructed under Contract D900048

AT&T near Jamaica Avenue over Van Wyck Expressway

- AT&T facilities are located within existing Verizon duct banks that run E-W across the middle of the Jamaica Avenue Bridge constructed under Contract D900048

AT&T near Queens Boulevard over Van Wyck Expressway

- All AT&T existing cables in this vicinity are located within Verizon ducts.

A-2.2 Electric

A-2.2.1 Consolidated Edison, Inc.

Con Edison between Nassau Expressway and North Conduit Avenue over Van Wyck Expressway

- 6-4" concrete duct conduits run E-W along the south side of South Conduit Avenue between MH #M-19099, MH #M-18896, and MH #M-19105
- 4-4" concrete conduits run N-S towards the west fascia of the three arch bridges from adapter A to adapter B
- 4-4" concrete conduit run N-S towards the west fascia of the three arch bridges from adapter C to adapter D
- 4-5" concrete conduits run N-S along the east side of Northbound Van Wyck Expressway from MH #M-19105 to MH #M-21798

Con Edison Southbound Service Road between North Conduit Avenue and 133rd Avenue over Van Wyck Expressway

- 4-5” concrete conduits run N-S along the east side of Van Wyck Expressway from MH #M-21798 to MH #M-19107 to adapter A to MH #M-19108
- 1-4" concrete conduit runs N-S along the west side of 135th street from Box #43006 to Box #49002 to Box #49001
- 1-4” fiber conduit runs N-S along the west side of Southbound Service Road from Box #49001 to Box #49000 to Box #48999 to Box #48998 to Box #48997 to Box #48983 to Box #48982 to MH #M-5506

Con Edison Northbound Service Road between North Conduit Avenue and 133rd Avenue over Van Wyck Expressway

- 2-4" conduits run N-S from vaults #V-8479 and #V-8696 to MH #M-18987
- 10-4" concrete conduits run N-S from vaults #V-8203, #V-8325, #BC-8203 and vault “D” to MH #M-18986
- 4-4" concrete conduits run N-S along the west side of Northbound Service Road from MH #M-18987 to MH #M-19109 to MH #M-19108
- 2-4" concrete conduits run N-S along east side of Northbound Service Road from MH #M-18986 to Box #48993
- 2-4” concrete conduits run N-S along east side of Northbound Service Road from MH #M-18982 to Box #48991 to Box #48990 to MH #M-5507 to Box #48989 to Box #48989 to Box #48988 to Box #50424
- 1-4" conduit runs E-W along north side of 134th Avenue from Box #48989 to Box #72012 to Box #49049 to Box #49050

Con Edison near 133rd Avenue over Van Wyck Expressway

- 6-5” steel conduits run in E-W direction between adapters “A” and “B” toward the north fascia on 133rd Avenue. Bridge. The conduits contain 2 Primary Feeders and 4 vacant conduits
- Overhead line runs E-W along south edge of 133rd Avenue from a utility pole east of Northbound Service Road
- 6-5” concrete ducts run east from MH #M-8090 to adapter “A” on west approach of the 133rd Avenue Bridge
- 2-4” concrete ducts run east from MH #M-8090 to Box #50451 at the west approach of the Bridge
- 2-4” concrete ducts run east from MH #M-8090 and turn south to MH # M-5506 at the west approach of the Bridge
- 6-5” concrete ducts run east from adapter “B” on the east approach of the 133rd Avenue. Bridge to MH #M-8091 on 133rd Avenue

On the west side of the Southbound Service Road

- 2-4” concrete ducts run parallel to these conduits, from MH #M-8157 to Box #30613 and from Box #50451 to MH #M-5506
- 1-4” concrete duct runs from Box #30613 to Box #50451
- 1-4” concrete duct runs from Box #50451 to Box #31599 to Box #31600 to Box #30613
- 2-4” concrete ducts run from MH #M-8157 to MH #M-5506
- 1-2” steel conduit runs east from MH #M-5506 to NYC Box
- 1-2” steel conduit runs west from MH #M-5506 to Building 133-04
- 4-4” concrete ducts run south from MH #M-5506 to Dead End
- 1-4” concrete duct runs south from MH #M-5506 to Box #48982
- 1-2” steel conduit runs north and turns east from Box #50451 to a streetlight pole at NE corner of Southbound Service Road and 133rd Avenue intersection
- 1-2” steel conduit runs west and turns north from Box #50451 to a streetlight pole at NW corner of Southbound Service Road and 133rd Avenue intersection
- 1-2” steel conduit runs west and turns south from Box #50451 to a streetlight pole at SW corner of Southbound Service Road and 133rd Avenue intersection
- 1-2” steel conduit runs north from MH #M-8091 to Building 132-19
- 1-4” concrete duct on the south sidewalk of 133rd Avenue provides a service feed from MH #M-8091, located east of intersection, to a pole riser.
- 2-4” concrete ducts run between Box #48988, Box #50424, MH #M-8146 and MH #M-8147
- 1-2” steel conduit runs east and turns north from Box #50424 to streetlight pole at NE corner of Northbound Service Road and 133rd Avenue
- 2-4” concrete duct conduits run north from Box #32210, located at the intersection of 133rd Avenue and the Northbound Service Road, to Box #32211 to Box #33497 to Box #32212 located at the 132nd Avenue and Northbound Service Road intersection
- 2-4” concrete duct conduits run on the north side of 133rd Ave from Box #32210 to Box #50424 to MH #M-8091
- 1-2” steel conduit runs south from Box #32210 to a streetlight pole at SW corner of Northbound Service Road and 133rd Avenue
- 1-2” steel conduit runs west and turns south from Box #32210 to NYC Box on south side of 133rd Avenue

Con Edison Southbound Service Road between 133rd Avenue and Rockaway Boulevard over Van Wyck Expressway

- 1-4” fiber runs N-S along the west side of the Southbound Service Road from Box #50451 to Box #31599 to Box #31600 to Box #30613 to MH #M-8157 to Box #30612 to Box #30611 to Box #30610 to Box #29494 to MH #M-8154 to Box #50452 to Box #50453 to Box #50454 to MH #M-8155 to Box #50455 to MH #M-8156 to Box #50458 to MH #M-8158 to Box #50457 to MH #M-8321 to Box #45146

- 2-4” concrete duct conduits run N-S along the west side of the Southbound Service Road from MH #M-5506 to MH #M-8157 to MH #M-8154
- 2-4” concrete duct conduits run E-W along north side of 130th Avenue and Southbound Service Road intersection from MH #M-8154 to MH #M-3898 to Box #30566
- Overhead line runs E-W along south side of 130th Avenue and Southbound Service Road intersection
- Overhead line runs E-W along south side of Sutter Avenue and Southbound Service Road intersection
- 1-4” concrete duct conduit runs E-W along north side of Sutter Avenue and Southbound Service Road intersection from MH #M-8155
- Overhead line runs E-W along the south side of Alwick Road and Southbound Service Road intersection
- Overhead line runs N-S along west side of Southbound Service Road near Alwick Road

Con Edison Northbound Service Road between 133rd Avenue and Rockaway Boulevard over Van Wyck Expressway

- 1-4” concrete conduit runs N-S along west side of Northbound Service Road from Box #32210 to Box #32211 to Box #33497 to Box #32212 to Box #35237 to Box #35556 to adapter J to Box #35927 to Box #36585
- 2-4” concrete duct conduits run N-S along east side of Northbound Service Road from Box #50424 to MH #M-8146 to MH #M-8147 to MH #M-8148 to Box #50430 to Box #40582 to Box #49581 to MH #M-8149 to Box #50432 to MH #M-8150 to Box #50433 to Box #50434 to Box #51689
- 2-4” concrete duct conduits run E-W along north side of 132nd Avenue from Box #32212 to MH #M-8147 to Box #32213 to Box #34042 to Box #34043 to Box #34977
- 3 electrical services run from Box #35556 across Northbound Service Road between 132nd Avenue and 131st Avenue
- 1-4” concrete conduit runs E-W along north side of 131st Avenue from Box #35927 to Box #50426 to Box #49345
- 1-2” iron conduit runs E-W across Northbound Service Road from Box #36585 to Box #50428
- 2-4” concrete conduits run N-S along east side of Northbound Service Road from Box #50426 to Box #50428 to Box #8148
- 4-4” concrete duct conduits run E-W along south side of 130th Avenue from MH #M-8148 to adapter B to MH #M-17894 to Box #88624
- Overhead line runs E-W along south side of 130th Avenue
- Overhead line run E-W along south side of Sutter Avenue
- 2-4” concrete conduits run E-W along north side of Sutter Avenue from adapter A to Box #50431between Box #49581 to MH #M-8149

Con Edison near Rockaway Boulevard over Van Wyck Expressway

- 2-4” concrete ducts run E-W along north side of Rockaway Boulevard from Box #51688 to Adapter “A”
- 2-4” concrete ducts run E-W along south side of Rockaway Boulevard from Box #45146 to Adapter “E”
- 2-4” concrete ducts run E-W along south side of Rockaway Boulevard from MH #M-5661 to Adapter “E”
- 2-4” concrete ducts run E-W along north side of Rockaway Boulevard, crossing Van Wyck mainline from MH #M-5661 to MH #M-5662
- 2-4” concrete ducts run E-W along northwest corner of Rockaway Boulevard and Southbound Service Road intersection from Box #38625 to MH #M-5858
- 2-4” concrete ducts run N-S along west side of Southbound Service Road between MH #M-8321, Box #45146, Box #51688, Box #49644, and MH #M-5658
- 1-4” concrete conduit runs E-W along south side of Rockaway Boulevard from Box #45146 to Pole #52557
- 4-5” steel conduits run E-W along south side of Rockaway Boulevard, across Van Wyck mainline from MH #M-5639 and MH #M-5663
- 2-4” concrete ducts run N-S along west side of Southbound Service Road from MH #M-8321 to MH #M-5658
- 4-5” precast concrete ducts run N-S across Rockaway Boulevard from MH #M-5639 and MH #M-5661
- 4-5” steel conduits run E-W along south side of Rockaway Boulevard, across Van Wyck mainline from MH #M-5661 and MH #M-5662
- 2-4” concrete ducts run E-W along north side of Rockaway Boulevard from adapter “B” to Box #51840
- 2-4” concrete ducts run E-W along north side of Rockaway Boulevard from adapter “D” to MH #M-5663
- 2-4” concrete ducts run E-W along north side of Rockaway Boulevard from adapter “F” to Box #51689
- 2-4” concrete ducts run N-S along east side of Northbound Service Road between Box #50434, Box #51689, Box #51840, and MH #M-8320
- 1-4” concrete duct runs E-W along south side of Rockaway Boulevard from MH #M-5662 and runs N-S along east side of Northbound Service Road to MH #M-8320
- 5-4” concrete ducts run E-W along south side of Rockaway Boulevard from MH #M-5662 to Dead End “X”
- 2-4” concrete ducts run E-W along north side of Rockaway Boulevard from MH #M-5663 to Box #51840
- 2-4” concrete ducts run E-W along north side of Rockaway Boulevard and run N-S along east side of Northbound Service Road from MH #M-5663 to MH #M-8320
- 1-2” steel conduit runs E-W across Northbound Service Road from MH #M-8320 to NYC box
- 1-2” steel conduit runs E-W across Northbound Service Road along south side of Rockaway Boulevard from MH #M-5662 to a streetlight pole at S/E/C

- 1-2” steel conduit runs E-W along south side of Rockaway Boulevard from MH #M-5662 to riser to Pole P52556
- 1-3” steel conduit runs E-W along south side of Rockaway Boulevard from Box #51689 to NYC box
- 1-2” steel conduit runs along southwest corner of Northbound Service Road and Rockaway Boulevard intersection from Box #51689 to FR NYSDOT box
- 3-3” wood conduits run N-S across Rockaway Boulevard east of Northbound Service Road from MH #M-5662 to Bldgs. 137-26, 137-28, 137-30, 137-32
- 1-4” steel conduit runs E-W across Northbound Service Road from MH #M-8320 to Dead End “G”
- 1-4” steel conduit runs N-S along east side of Northbound Service Road from MH #M-8320 to Dead End “Z”
- 4-5” precast concrete ducts run E-W along south side of Rockaway Boulevard, across Van Wyck mainline from MH #M-5663 and MH #M-5662

Con Edison Southbound Service Road between Rockaway Boulevard and Foch Boulevard over Van Wyck Expressway

- 1-4” fiber conduit runs N-S along west edge of Southbound Service Road between Box #51688, MH #M-5658, Box #49644, Box #49643, MH #M-5657, Box #49666, Box #49642, Box #63553, Box #49641, MH #M-5656, Box #49640, and Box #49665
- 2-4” concrete duct conduits run E-W along north edge of 120th Avenue from MH #M-49666 to MH #M-56043
- Overhead primary line runs E-W along south edge of 120th Avenue from a utility pole west of 120th Avenue and Southbound Service Road intersection
- 2-4" concrete conduit runs west then north between an electric box and MH #M-49665, south of Foch Boulevard and Southbound Service Road intersection

Con Edison Northbound Service Road between Rockaway Boulevard and Foch Boulevard over Van Wyck Expressway

- 2-4” concrete duct conduits run N-S along the east edge of Northbound Service Road between Box #51840, MH #M-8320, MH #M-8151, Box #50440, Box #50871, Box #50441, MH #M-8152, and Box #50445
- 2-4” concrete duct conduits run N-S along the east edge of 135th Street between MH #M-8152, Box #50869, Box #50442, Box #50443, Box #50444
- 2-4” concrete duct conduits run along the north edge of 120th Avenue between transformer vault VS-1631 and Box #50440
- 2-5” concrete conduits run N-S along east edge of Northbound Service Road and across 120th Avenue between MH #M-8151 and transformer vault VS-1631
- Overhead primary line runs N-S along east edge of Northbound Service Road and 139th Street between utility poles

Con Edison near Foch Boulevard over Van Wyck Expressway

- 6-5” steel conduits run E-W along north fascia of Foch Boulevard Bridge from Adapter “A” at the west approach to “B” at the east approach
- 4-4” concrete duct conduits run E-W along the north side of Foch Boulevard from MH #M-8159 to Adapter “A” on the west approach of the Foch Boulevard Bridge
- 2-4” concrete conduits run E-W along the north side of Foch Boulevard from Box #51704 to MH #M-8159
- 2-4” concrete ducts run E-W along the south edge of Foch Boulevard from MH #M-15876 to Box #49665
- 2-4” concrete ducts run N-S along the west side of Southbound Service Road from MH #M-5655 to Box #49665 to Box #49640
- 2-4” concrete duct conduits run E-W on the south side of Foch Boulevard from MH #M-15876 to MH #M-5655
- 1-2” steel conduit runs E-W on the south side of Foch Boulevard from Box #49665 to a streetlight pole
- 1-4” concrete duct conduit runs N-S on the east side of Southbound Service Road from Box #49665 to NYC Box
- 1-2” steel conduit runs E-W on the south side of Foch Boulevard from Box #49665 to a streetlight pole
- 1-2” steel conduit runs N-S on the east side of Southbound Service Road from MH #M-5655 to a streetlight pole
- 1-2” steel conduit runs N-S on the east side of Southbound Service Road from Box #50455 to a streetlight pole
- 1-2” steel conduit runs E-W on the north side of Foch Boulevard from MH #M-8159 to a streetlight pole
- 4-4” concrete conduits run E-W on the north side of Foch Boulevard from MH #M-8159 to MH #M-5655
- Overhead line runs E-W on the south side of Foch Boulevard
- 4-5” steel ducts run E-W along the north fascia of Foch Boulevard Bridge from Adapter “B” to MH #M-8322
- 2-4” concrete ducts run E-W along the north side of Foch Boulevard from MH #M-8322 to Box #50445 to Box #50444
- 4-4” concrete ducts run E-W along the south side of Foch Boulevard from MH #M-8323 to MH #M-15877
- 2-4” concrete ducts run E-W along the south side of Foch Boulevard from Dead End “C” to MH #M-15877
- 4-4” concrete ducts run N-S along the east side of Northbound Service Road from MH #M-8152 to MH #M-8160
- 2-4” concrete ducts run N-S on the east side of Northbound Service Road from MH #M-8323 to MH #M-8160

- 1-5” concrete duct runs E-W then N-S on the south side of Foch Boulevard from MH #M-15876 to MH #M-8159

Con Edison Southbound Service Road between Foch Boulevard and Linden Boulevard over Van Wyck Expressway

- 1-4” fiber conduit runs N-S along the west edge of Southbound Service Road between MH #M-5655, Box #49639, Box #49638, MH #M-5654, Box #49672, Box #49637, Box #49663, MH #M-5653, Box #49636, MH #M-5652, Box #49635, Box #49634, Box #51646, MH #M-5672, Box #49697, Box #49696, MH #M-5686, and Box #49773
- Overhead line runs N-S along west edge of Southbound Service Road between two utility poles south of 116th Avenue
- 2-4” concrete conduits run E-W along north edge of 116th Avenue to the west of Southbound Service Road between MH #M-5653 and MH #M-60506
- Overhead primary line runs E-W along north edge of 116th Avenue through several utility poles
- Overhead primary line runs E-W along north edge of 115th Avenue through two utility poles
- 2 existing electrical services run E-W across Southbound Service Road south of Linden Boulevard from Box #49773 to utility boxes on southeast corner of Southbound Service Road and Linden Boulevard intersection

Con Edison Northbound Service Road between Foch Boulevard and Linden Boulevard over Van Wyck Expressway

- 2-4” concrete duct conduits run N-S along the east edge of Northbound Service from Box #50445 to MH #M-8160 MH #M-8161 to MH #M-8162 to MH #M-5684, Box #49695, MH #M-5683, Box #49720, Box #49693, and Box #49774
- Overhead line runs E-W along north edge of 116th Avenue and turns southwest to a utility pole on south edge of 116th Avenue
- 2-4” concrete duct conduits run E-W along north edge of 115th avenue from MH #M-5591 to MH #M-5590
- 4-4” concrete conduits run along Northbound Service Road between MH #M-5684, MH #M-5683, and MH #M-5682
- 2-5” concrete duct conduits run along Northbound Service Road between MH #M-5684, MH #M-5683, and MH #M-5682
- 2-4" concrete conduits run west along 115th Avenue and turn north along east pavement edge of Northbound Service Road between DM #71990 and Box #49695

Con Edison between Foch Boulevard and Linden Boulevard over Van Wyck Expressway

- 2-4” concrete/steel conduits run E-W across the Van Wyck Mainline between MH #M-5590 and MH #M-5749

Con Edison near Linden Boulevard over Van Wyck Expressway

- 6-5” steel conduits run E-W along the north side of Linden Boulevard Bridge between Linden Boulevard and Southbound Service Road intersection and Northbound Service Road and Linden Boulevard intersection MH #M-5718 to MH #M-5681
- 4-5” steel conduits run E-W along the south side of Linden Boulevard Bridge between Linden Boulevard and Southbound Service Road intersection and Northbound Service Road and Linden Boulevard intersection MH #M-20112 to MH #M-20113
- 2-4" concrete conduits run N-S along the west side of the intersection of Linden Boulevard and Southbound Service road between Box #55655 and an unknown manhole south of Linden Boulevard
- 2-4" concrete conduits run E-W along the north side of Linden Boulevard between Box #55655 and MH #M5718
- 6-5” precast concrete ducts run N-S along the west side of the intersection of Linden Boulevard and Southbound Service Road between MH #M-20112 and MH #M-5718
- 2-4" concrete conduits run E-W along the south side of Linden Boulevard between Box #49773 and MH #M-20112
- 4” fiber conduits run N-S along the west side of Southbound Service Road between MH #M-5685, Box #49772, Box #49773 and MH #M-5686
- 1-2” steel conduit runs west from Box #49772 to traffic signal
- 2-2” steel conduits run south from Box #49773 to NYC Box and Service Road at southeast corner of Southbound Service Road
- 4-4” concrete ducts run N-S along the west side of Southbound Service Road between MH #M-5686, Box 49773, Box 49772, and MH #M-5685
- 4-4” concrete ducts run N-S along the west side of Northbound Service Road between MH #M-5683, Box 49720, Box 49693, Box 49774 and MH #M-5682
- 6-5” precast concrete ducts run NE-SW along the intersection of Linden Boulevard and Northbound Service Road between MH #M20113 and MH #M-5681
- 4-4” concrete ducts run E-W along the intersection of Linden Boulevard and Northbound Service Road between Box #51876 and MH #M-5681
- 2-4” concrete ducts run N-S along the east side of Northbound Service Road between MH #M-5682, Box #49774 and Box #49693
- 2-5” concrete ducts run N-S along the east side of Northbound Service Road between MH #M-5682, Box #49774 and Box #49693
- 4-4” concrete ducts run N-S along the east side of Northbound Service Road between MH #M-5682, Box #49774 and Box #49693
- 2-5” concrete ducts run N-S at the northeast corner of Linden Boulevard and Northbound Service Road between MH #M5681 and MH #5682
- 4-4” concrete ducts run N-S at the northeast corner of Linden Boulevard and Northbound Service Road between MH #M5681 and MH #5682
- 2-4" concrete conduits run E-W from Box #49774 along south of Linden Boulevard
- 1-2” steel conduit runs south from box #49774 to traffic signal on North Service Road

Con Edison Southbound Service Road between Linden Boulevard and 109th Avenue over Van Wyck Expressway

- 4-4” concrete conduits run N-S along west edge of Northbound Service Road between MH #M-5685, MH #M-5692, and MH #M-5691
- 2-4” concrete conduits run N-S along west edge of Northbound Service Road between MH #M-5685, MH #M-5692, and MH #M-5691
- 1-4” fiber conduit runs N-S along west edge of Northbound Service Road between MH #M-5685, Box #45167, Box #49708, Box #61395, MH #M-5692, Box #49707, Box #49724, MH #M-5691, Box #49752, Box #49751, Box #49750, Box #63168, MH #M-5710, Box #49749, Box #61065, Box #49748, and Box #49719
- 2-4" concrete conduits run E-W along north edge of 111th Avenue between MH #M5691 and Box #50930
- Overhead primary line runs E-W along north edge of 111th Avenue through two utility poles
- 4-4” concrete conduits run N-S along east edge of Northbound Service Road between MH #M-5681, MH #M-5682, Box #49709, Box #49723, and MH #M-5688
- 2-5” concrete conduits run N-S along east edge of Northbound Service Road between MH #M-5681, MH #M-5682, Box #49709, Box #49723, and MH #M-5688
- 2-4” concrete conduits run N-S along east edge of Northbound Service Road between MH #M-5682, Box #49709, Box #49834, Box #49722, Box #49721, MH #M-5688, MH #M-5589, Box #69500, Box #69501 and Box #49771
- 4-4” fiber runs E-W just south of 111th Avenue between MH #M-5687 and the Dunton Substation
- 8-4” concrete conduits run N-S across 111th Avenue between MH #M-5688 and the Dunton Substation
- Overhead line runs N-S along east edge of Northbound Service Road south of 111th Avenue between two utility poles
- Overhead primary line runs E-W along north edge of 111th Avenue through utility poles and continues east of 111th Avenue and Northbound Service Road intersection
- 6-4” concrete conduits run N-S along west edge of Northbound Service Road between starting at MH #M 5588 on 111th Avenue and continuing on to MH #M-5687, MH #M-5708, MH #M-15920, MH #M-15916 and MH #M-15915
- 3-5” concrete conduits run N-S along west edge of Northbound Service Road between starting at MH #M 5588 on 111th Avenue and continuing on to MH #M-5687, MH #M-5708, MH #M-15920, MH #M-15916 and MH #M-15915
- 4-4” concrete conduits run N-S along west edge of Northbound Service Road between starting at MH #M 5588 on 111th Avenue and continuing on to MH #M-5687, MH #M-5708, MH #M-15920, MH #M-15916 and MH #M-15915
- 4-4” concrete conduits run N-S along east edge of Northbound Service Road between MH #M-5709 and MH #M-5708

- 2-5” concrete conduits run N-S along east edge of Northbound Service Road between MH #M-5709 and MH #M-5708
- 2-4” concrete conduits run N-S along east edge of Northbound Service Road between MH #M-5709 and MH #M-5708
- 2-4” concrete conduit runs N-S along east edge of Northbound Service Road between Box #49771 and MH #M-5708
- Overhead line runs E-W along north edge of Lakewood Avenue through utility poles

Con Edison near 109th Avenue over Van Wyck Expressway

- 6-5” steel conduits run E-W along north side of 109th Avenue from MH #M-NEWA to MH #M-NEWB
- 6-5” steel conduits run E-W along north side of 109th Avenue, across Van Wyck mainline from MH #M-5697 to MH #M-5579
- 4-4” concrete duct conduits run E-W across Van Wyck mainline from Dead End “A” to Dead End “F”
- 4-4” concrete ducts run E-W along north side of 109th Avenue from MH #M-5697 to Adapter “A”
- 2-4” concrete ducts run E-W along south side of 109th Avenue from Dead End “C” to adapter “E”
- 1-2” concrete conduit runs south and turns east from Box #49748 to NYC Box
- 4-4” concrete ducts run N-S along west side of Southbound Service Road from MH #M-5695 to MH #M-5696
- 4-5” concrete ducts run N-S along west side of Southbound Service Road from MH #M-5695 to MH #M-5696
- 2-4” concrete ducts run N-S along west side of Southbound Service Road from Box #49748 to Box #49719, to MH #M-5696, to Box #49718, to Box #70345, to Box #49717, to MH #M-5695
- 1-2” steel conduit runs west from Box #49719 to a streetlight pole
- 6-4” concrete ducts run N-S along east side of Southbound Service Road from MH #M-17003 to Dead End “A”
- 1-2” steel conduit runs E-W along south side of 109th Avenue and Southbound Service Road intersection from MH #M-5697 to a streetlight pole
- 1-2” HDPE conduit runs north and turns west from MH #M-5696 to Building 107-46 along west side of Southbound Service Road
- 2-4” concrete conduits run south and turn west from MH #M-5696 to Bldgs. 107-50 and 107-52 along west side of Southbound Service Road
- 4-4” concrete ducts run E-W along north side of 109th Avenue then run N-S along west side of Southbound Service Road from MH #M-5697 to MH #M-17003
- 6-4" concrete ducts run N-S across 109th Avenue and continue east from Northbound Service Road from MH #M-15915 to MH #M-5579

- 4-5" concrete ducts run N-S across 109th Avenue and continue east from Northbound Service Road from MH #M-15915 to MH #M-5579
- 1-4" concrete conduit runs N-S across 109th Avenue from MH #M-5579 to pole T-145, pole riser
- 4-4” concrete ducts run N-S along east side of Northbound Service from MH #M-5709 to MH #M-5708
- 2-5” concrete ducts run N-S along east side of Northbound Service from MH #M-5709 to MH #M-5708
- 2-4” concrete ducts run from Box #49744 to MH #M-5708
- 2-4" concrete ducts run N-S along east side of Northbound Service Road from MH #M-5708 to Box #50509
- 6-5” precast concrete conducts run E-W along north side of 109th Avenue from MH #M-NEWB to MH #M-5579
- 4-4" concrete ducts run E-W along north side of 109th Avenue and then run N-S along east side of Northbound Service Road from MH #M-5579 to MH #M-5708 to MH #M-8167
- 2-5" concrete ducts run E-W along north side of 109th Avenue and then run N-S along east side of Northbound Service Road from MH #M-5579 to MH #M-5708 to MH #M-8167
- 1-4” concrete conduit runs west from MH #M-5708 to NYC Box along Northbound Service Road
- 1-2” steel conduit runs E-W across 109th Avenue from MH #M-5579 to a streetlight pole
- 2-4” concrete duct conduits run across Van Wyck mainline from Dead End “A” to MH #M-5708

Con Edison between 109th Avenue and Liberty Avenue over Van Wyck Expressway

- 4-4” concrete conduits, containing 1 primary feeder and 3 vacant conduits, run E-W across the Van Wyck Mainline between MH #M-5706 and MH #M-8165
- 1-4” iron conduit runs E-W across the Van Wyck Mainline between MH #M-5706 and MH #M-8165
- 2-4” vacant wood conduits run E-W across the Van Wyck Mainline between Box #23448 and Box #23449

Con Edison Southbound Service Road between 109th Avenue and Liberty Avenue over Van Wyck Expressway

- 1-4” fiber conduit runs N-S along the west side of Southbound Service Road between MH #M-5696, Box #49718, Box #70345, Box #49717, MH #M-5695, Box #49716, Box #49715, Box #23448, MH #M-5694, Box #10304, Box #31043, Box #10307, Box #49789, Box #32464, MH #M-5717, Box #31195, Box #49788, Box #28062, Box #28063, Box #28064, MH #M-5716, Box #23246, Box #49787, and MH #M-2918

- 6-4” concrete conduits run N-S along east side of Southbound Service Road from MH #M-5697, MH #M-17003, MH #M-17002, MH #M-17001, MH #M-17000, MH #M-22050, and MH #M-16999
- 2-4” concrete conduits run N-S along east side of Southbound Service Road from MH #M-5697, MH #M-17003, MH #M-17002, MH #M-17001, MH #M-17000, MH #M-22050, and MH #M-16999
- 4-5” PVC run N-S along east side of Southbound Service Road from MH #M-5697, MH #M-17003, MH #M-17002, MH #M-17001, MH #M-17000, MH #M-22050, and MH #M-16999
- 4-5” concrete conduits run N-S along Southbound Service Road between MH #M-5696 and MH #M-5695, north of 109th Avenue
- 2-4” concrete conduits run N-S along Southbound Service Road between MH #M-5696 and MH #M-5695, north of 109th Avenue
- 4-5” concrete conduits run N-S along west side Southbound Service Road between MH #M-5695 and MH #M-5694
- 2-4” concrete conduits run N-S along west side Southbound Service Road between MH #M-5695 and MH #M-5694
- Overhead line runs N-S along west side of Southbound Service Road north of 109th Avenue
- 2-4” concrete conduits run N-S along west side of Southbound Service Road between MH #M-5694 and MH #M-5717, north of 107th Avenue
- 2-4” wood conduits run N-S along west side of Southbound Service Road between MH #M-5694 and MH #M-5717, north of 107th Avenue
- Overhead line runs N-S along west side of Southbound Service Road through utility poles between 107th Avenue and 105th Avenue
- 4-4” concrete conduits run E-W along north side of 107th Avenue through MH #M-5706
- 2 overhead primary lines run E-W along north side of 107th Avenue from T-163 and continues west along 107th Avenue
- 2-4” abandoned wood conduits run E-W along south side of 107th Avenue between Box #69857, Box #23447, and Box #23448
- 2-4” concrete conduits run E-W along north side of 105th Avenue between MH #M-28064 and Box #50998
- 1-5" HDPE conduit runs E-W along north side of 105th Avenue to DM-71992
- Overhead primary line runs E-W along south side of 105th Avenue through utility poles
- 1-4" concrete conduit runs E-W across Southbound Service Road from transformer vault VS-8280, south of Liberty Avenue

Con Edison Northbound Service Road between 109th Avenue and Liberty Avenue over Van Wyck Expressway

- 2-4” concrete conduits run N-S along east side of Northbound Service Road between MH #M-5708, Box #50509, Box #50508, MH #M-8167, Box #23449 and Box #23450

- 4-4” concrete conduits run N-S along east side of Northbound Service Road from MH #M-5708, and MH #M-8167
- 2-5” concrete conduits run N-S along east side of Northbound Service Road from MH #M-5708, and MH #M-8167
- 2-4” concrete conduits run N-S along east side of Northbound Service Road from MH #M-5708, and MH #M-8167
- 4-4” concrete conduits run N-S along east side of Northbound Service Road between MH #M-8167 and MH #M-8166
- 2-5” concrete conduits run N-S along east side of Northbound Service Road between MH #M-8167 and MH #M-8166
- 1-4” wood conduit runs E-W along south side of 107th Avenue and continues N-S along Northbound Service Road between Box #37807, R #23452, R #23451, Box #23450, MH #M-8166, Box #50955, and Box #50932
- 2-4” concrete conduits run E-W along south side of 106th Avenue and continues N-S along east side of Northbound Service Road between Box #50963, Box #50932, MH #M-8207, MH #M-8206, Box #23346, Box #51390, and MH #M8281
- Overhead line runs E-W along south side of 107th Avenue through utility poles
- Overhead line runs E-W along north side of 106th Avenue through utility poles
- 6-4" concrete conduits run N-S along east side of Northbound Service Road between 106th Avenue and 104th Avenue
- Overhead line runs NW-SE along northeast side of 142nd Street
- Overhead line runs SW-NE along southeast side of 104th Avenue
- Electrical service runs E-W across Northbound Service Road between MH #M-51390 and a manhole along west side of Northbound Service Road

Con Edison near Liberty Avenue over Van Wyck Expressway

- 4-5” steel conduits run E-W along north side of Liberty Avenue between MH #M-8807 and MH #M-2919
- 4-5” steel conduits run E-W along south side of Liberty Avenue from MH #M-14506 across the bridge and dead end 10’ past the approach slab
- 2-4” concrete ducts run E-W along northwest corner of Liberty Avenue and Southbound Service Road intersection between MH #M-8807 to MH #M-2918
- 2-5” concrete ducts run E-W along northwest corner of Liberty Avenue and Southbound Service Road intersection between MH #M-8807 to MH #M-2918
- 7-4” fiber conduits run E-W along northwest corner of Liberty Avenue and Southbound Service Road intersection between MH #M-8807 to MH #M-2918
- 6-5” precast concrete ducts run N-S along Southbound Service Road from MH #M-16999 to MH #M-New1
- 10-5” concrete ducts run N-S along east side of Southbound Service Road from MH #M-22050 to MH #M-14231

- 9-4” fiber conduits run N-S along west side of Southbound Service Road from MH #M-2918 to MH #M-14231
- 2-4” vacant concrete ducts run E-W along north side of Liberty Avenue from Box #51389 to MH #M-2919
- 6-4” concrete ducts run N-S along east side of Northbound Service Road from MH #M-8281 north to MH #M-8280
- 2-4” concrete ducts run N-S along east side of Northbound Service Road from MH #M-8281 to Box #51858 to Box #51389 to MH #M-8280
- 2-4” concrete duct conduits run from MH #M-8281 to Dead End “E” at the Liberty Avenue Bridge east approach
- 2-4” concrete duct conduits run from Box #51858 to Dead End “E” at the southwest corner of Liberty Avenue and Northbound Service Road intersection
- 2-4” concrete duct conduits run from MH #M-2919 to MH #M-12943
- 2-4” concrete duct conduits run from MH #M-2919 to MH #M-8280
- 1-2” steel conduit runs E-W at northwest corner of Liberty Avenue and Southbound Service Road intersection from MH #M-2918 to the streetlight pole at the northwest corner
- 1-2” steel conduit runs east and turns south from MH #M-14506 to a streetlight pole
- 1-2” steel conduit runs E-W from Box #51389 to the streetlight pole at the northeast corner of the Northbound Service Road
- 1-2” steel conduit runs west from Box #51389 to NYC Box
- 2-2” steel conduits run from Box #51858 to Bldgs. 142-02 and 142-06
- 1-2” steel conduit runs south from MH #M-8281 to the streetlight pole
- 1-2” steel conduit runs north from MH #M-2919 to the streetlight pole

Con Edison Southbound Service Road between Liberty Avenue and 101st Avenue over Van Wyck Expressway

- 1-4” fiber conduit runs N-S along the west side of Southbound Service Road between MH #M-2918, Box #14231, Box #19132, Box #19131, Box #19130, Box #19129, Box #19128, Box #19127, Box #19126, Box #10307, MH #M-14409, Box #19124, MH #M-3766, and MH #M-703
- 6-5” precast concrete ducts run N-S along west side of Southbound Service Road from MH #M-16999 to M-NEW1
- 6-5” precast concrete ducts run N-S along west side of Southbound Service Road from M-NEW1 to M-NEW2
- 6-4” wood conduits run N-S along west side of Southbound Service Road from MH #M-14409 to MH #M-3766
- 2-5” concrete ducts run N-S along west side of Southbound Service Road from MH #M-14409 to MH #M-3766
- 2-4” wood conduits run N-S along west side of Southbound Service Road from Box #19124 to MH #M-3766

- 3-4” wood conduits run N-S along west side of Southbound Service Road from Box #19124 to MH #M-14409
- 3-4” wood conduits run N-S along west side of Southbound Service Road from MH #M-14409 to Box #19126
- 1-2” steel conduit runs E-W across west side of Southbound Service Road from MH #M-3766 to NYC Box
- 1-2” steel conduit runs N-S along west side of Southbound Service Road from MH #M-3766 to a streetlight
- 1-2” steel conduit runs E-W across Southbound Service Road from Box #19124 to a streetlight
- 1-2” steel conduit runs N-S along west side of Southbound Service Road then runs E-W from Box #19124 to Building 102-02
- 1-2” steel conduit runs E-W from MH #M-14409 to Building 102-04
- 9-4” concrete ducts run E-W across 102nd Avenue from MH #M-14409 to Vault VS-9623
- 3-4” wood conduits run N-S along west side of Southbound Service Road from Box #19126 to Box #19127
- 3-4” wood conduits run N-S along west side of Southbound Service Road from Box #19127 to Box #19128
- 3-4” wood conduits run N-S along west side of Southbound Service Road from Box #19128 to Box #19129
- 3-4” wood conduits run N-S along west side of Southbound Service Road from Box #19129 to Box #19130
- 3-4” wood conduits run N-S along west side of Southbound Service Road from Box #19130 to Box #19131
- 3-4” wood conduits run N-S along west side of Southbound Service Road from Box #19131 to Box #19132
- 3-4” wood conduits run N-S along west side of Southbound Service Road from Box #19132 to MH #M-14231
- 1-2” steel conduit runs E-W from Box #19132 to Building 102-32
- 1-2” steel conduit runs E-W from Box #19132 to a streetlight
- 1-2” steel conduit runs E-W from Box #19131 to Building 102-28
- 1-2” steel conduit runs E-W from Box #19130 to Building 102-24
- 1-2” steel conduit runs E-W from Box #19129 to Building 102-20
- 1-2” steel conduit runs E-W from Box #19128 to Building 102-16
- (3) 1-2” steel conduits run west from Box #19127 to Building 102-14 and 102.12 and a streetlight
- 1-2” steel conduit runs west from Box #19126 to Building 102-10

Con Edison Northbound Service Road between Liberty Avenue and 101st Avenue over Van Wyck Expressway

- 4-5” precast concrete ducts run N-S along east side of Northbound Service Road from MH #M-8281 and MH #M-8280
- 6-5” precast concrete ducts run N-S along east side of Northbound Service Road from MH #M-8280 to MH #M-8279
- 6-5” precast concrete ducts run N-S along east side of Northbound Service Road from MH #M-8279 and MH #M-12945
- 2-4” concrete ducts run N-S along east side of Northbound Service Road from Box #51389 to MH #M-8280
- 2-4” concrete ducts run N-S along east side of Northbound Service Road from MH #M-8280 to Box #51385
- 2-4” concrete ducts run N-S along east side of Northbound Service Road from Box #51385 to Box #51384
- 1-2” steel conduit runs E-W across east side of Northbound Service Road from Box #51384 to a streetlight
- 2-4” concrete ducts run N-S along east side of Northbound Service Road from Box #51384 to Box #51383
- 1-2” steel conduit runs east from Box #51383 to a streetlight
- 2-4” concrete ducts run N-S along east side of Northbound Service Road from Box #51383 to MH #M8279
- 2-4” concrete ducts run N-S along east side of Northbound Service Road from MH #M8279 to Box #51372
- 1-2” steel conduit runs south and turns east from M-8279 to a streetlight
- 2-4” concrete ducts run north from Box #51372 to Box #51371
- 1-2” steel conduit runs east from Box #51372 to a streetlight
- 1-2” steel conduit runs east from Box #51371 to a streetlight
- 6-4” concrete conduits run N-S along east side of Northbound Service Road from MH #M-8279 to MH #M-8275

Con Edison near 101st Avenue over Van Wyck Expressway

- 4-5” steel conduits run E-W along north side of 101st Avenue from MH #M-703 to MH #M-8278
- 4-5” steel conduits run E-W along south side of 101st Avenue from MH #M-8659 to MH #M-8660
- 2-4” concrete ducts run E-W along south side of 101st Avenue from Box #7984 to MH #M-8659
- 1-4” fiber conduit runs N-S along west side of Southbound Service Road from Box #43853 to MH #M-703
- 4-4” concrete ducts run NW-SE across 101st Avenue from MH #M-3766 to MH #M-703
- 2-5” concrete ducts run NW-SE across 101st Avenue from MH #M-3766 to MH #M-703
- 2-4” concrete ducts run N-S along from MH #M-703 to Box #49783 to MH #M-3766

- 4-4” concrete ducts run E-W along northwest corner of Southbound Service Road and 101st Avenue intersection from MH #M-14189 and MH #M-703 to MH #M-3732
- 4-4” wood conduits run E-W along north side of 101st Avenue and Southbound Service road intersection from MH #M-3732 to MH #M-703
- 4-4” fiber conduits run E-W along 101st avenue from TM-5853 to MH #M-703
- 1-4” retired fiber conduit runs N-S along west side of Southbound Service Road from Dead End “C” to MH #M-703
- 1-4” retired wood conduits run N-S along west side of Southbound Service Road and then E-W along north side of 101st Avenue from MH #M-3766 to MH #M-3732
- 1-4” fiber conduit runs N-S along west edge of Southbound Service Road from MH #M-703 to Box #51407
- 7-4” fiber conduits, including 2 retired conduits, run N-S along west side of Southbound Service Road from MH #M-703 to MH #M-702
- 2-4” fiber conduits run from MH #M-8659 to MH #M-703 along 101st Avenue and Southbound Service Road intersection
- 1-2” steel conduit runs south from Box #49783 and turns west to a streetlight
- 1-4” retired wood conduit runs N-S across 101st Avenue from MH #M-3766 to Dead End “D”
- 2-4” concrete ducts run E-W along north edge of 101st Avenue and Northbound Service Road intersection from Box #51371 to MH #M-8278
- 2-4” concrete ducts run N-S along east side of Northbound Service Road from Box #51372 to Box #51371
- 2-4” concrete ducts run N-S along east side of Northbound Service Road from Box #51371 to MH #M-8275 to Box #51362
- 1-2” steel conduit runs E-W across Northbound Service Road from Box #51372 to NYC Box
- 5-4” fiber conduits run E-W along north edge of 101st Avenue from MH #M-1200 to MH #M-8278
- 2-4” concrete conduits run N-S along east side of Northbound Service Road from MH #M-8275 to MH #M-8660
- 2-4” concrete conduits run N-S along west side of Northbound Service Road from MH #M-12945 to MH #M-8278
- 2-4” concrete conduits run E-W across northwest corner of 101st Avenue and Northbound Service Road intersection from MH #M-8275 to MH #M-8278
- 4-4” concrete conduits run N-S along east side of Northbound Service Road from Dead End “D” to MH #M-8278
- 2-4” fiber conduits run N-S along east side of Northbound Service Road from Dead End “D” to MH #M-8278
- 1-2” steel conduit runs south from MH #M-8278 to Building 137-22

Con Edison Southbound Service Road between 101st Avenue and Atlantic Avenue/94th Avenue over Van Wyck Expressway

- 1-4” fiber conduit runs N-S along west side of Southbound Service Road from MH #M-703 to Box #51407
- 1-4” fiber conduit runs N-S along west side of Southbound Service Road from Box #43853 to Box #51407
- 1-4” fiber conduit runs N-S along west side of Southbound Service Road from MH #M-703 to Box #43853
- 1-4” fiber conduit runs N-S along west side of Southbound Service Road from Box #51407 to MH #M-702
- 7-4” fiber conduits run N-S along west side of Southbound Service Road from MH #M-703 to MH #M-702
- 2-2” steel conduits run E-W across west side of Southbound Service Road from Box #51407 to Building 97-26 and a streetlight
- 6-4” abandoned concrete ducts run N-S along the east side of Southbound service road from MH #M-14189 to MH #M-14188
- 1-4” steel conduit runs south and turns west from Box #51407 to Building 97-24
- 1-2” steel conduit runs N-S across Southbound Service Road from Box #12098 to a streetlight
- 1-4” concrete conduit runs E-W across Southbound Service Road from Box #12098 to NYC Box
- 1-4” concrete conduit runs north and turns east from Box #12098 to NYC Box
- 1-4” steel conduit runs N-S across Southbound Service Road from Box #12098 to utility pole riser
- 1-2” steel conduit runs E-W across 97th Avenue and Southbound Service Road intersection from MH #M-702 to a streetlight
- 7-4” fiber conduits, including 2 retired conduits, run N-S along west side of Southbound Service Road from MH #M-702 to MH #M-701
- 1-4” fiber conduit runs from Dead End “A” located near 97th Avenue and Southbound Service Road intersection to MH #M-702
- 1-4” fiber conduit runs from MH #M-702 to Dead End “A” along Southbound Service Road
- 1-4” concrete duct runs from Box #39341 to MH #M-702
- 6-4” abandoned concrete ducts run along the east side of Southbound service road from MH #M-14188 to MH #M-14184
- 2-4” fiber conduits run E-W along north side of 97th Avenue from Box #27950 to MH #M-702
- 1-4” fiber conduit runs from Dead End “D” to MH #M-702 along 97th Avenue
- 2- 4” fiber conduits run from Dead End “D” to Dead End “E” along 97th Avenue
- 2- 4” concrete conduits run from M-19819 to Dead End “C” along 97th Avenue
- 1-4” fiber conduit runs N-S along west side of Southbound Service Road from Box #12098 to MH #M-702
- 1-4” fiber conduit runs from MH #M-701 to Dead End “A” located near 97th Avenue and Southbound Service Road intersection

- 2-4” fiber conduits run N-S along west side of Southbound Service Road from MH #M-701 to Box #15793
- 5-4” fiber conduits run N-S along west side of Southbound Service Road from MH #M-701 to MH #M-146
- 2-4” concrete ducts run E-W along north edge of 95th Avenue from Box #60073 to MH #M-701
- 1-2” steel conduit runs E-W across west side of Southbound Service Road from Box #39341 to a streetlight
- 1-2” steel conduit runs E-W across west side of Southbound Service Road from Box #39341 to Building 95-30
- 1-2” steel conduit runs E-W across west side of Southbound Service Road from Box #39341 to utility pole riser
- 1-2” steel conduit runs N-S along west side of Southbound Service Road then runs E-W from Box #39341 to Building 95-24
- 4” fiber conduits run N-S along west side of Southbound Service Road from Box #53712 to MH #M-146.
- 2-4” fiber conduits run N-S along west side of Southbound Service Road from Box #15795 to Box #53712
- 10-4” fiber conduits, including 5 retired conduits, run N-S along west side of Southbound Service Road from MH #M-146 to MH #M-145
- 2-4” concrete conduits run N-S along west side of Southbound Service Road then runs E-W along south side of Atlantic Avenue from MH #M-146 to MH # M-8292
- 2-4” fiber conduits run N-S along west side of Southbound Service Road from Box #15793 to Box #15794
- 2-4” fiber conduits run N-S along west side of Southbound Service Road from Box #15794 to Box #15795
- 1-4” fiber conduit runs N-S along west side of Southbound Service Road from Box #39341 to Box #70360
- 1-4” fiber conduit runs N-S along west side of Southbound Service Road from Box #51425 to Box #19911
- 1-4” fiber conduit runs N-S along west side of Southbound Service Road from Box #19911 to MH #M-701
- 1-4” fiber conduit runs N-S along west side of Southbound Service Road from Box #70360 to Box #51425
- 1-4” fiber conduit runs N-S along west side of Southbound Service Road from Box #51407 to Box #12098
- 1-2” steel conduit runs south from Box #53712 to a streetlight along Southbound Service Road
- 1-4” concrete conduit runs west from Box #53712 to Building 134-26 along Southbound Service Road
- 1-4” concrete conduit runs west from MH #M-146 to Building 134-26 along Southbound Service Road

- 2-4” fiber conduits run E-W along west side of Southbound Service Road from Dead End “C” to MH #M-146
- 4-2” plastic conduits run south and west from Box #70360 to Bldgs. 95-20, 95-18, 95-16, 95-14 along Southbound Service Road
- 1-2” plastic conduit runs south and turns west from Box #51425 to Building 95-12 along Southbound Service Road
- 1-2” plastic conduit runs south and turns west from Box #51425 to Building 95-08 along Southbound Service Road
- 1-3" steel conduit runs south and turns west from Box #51425 to Building 95-06
- 1-4" concrete conduit runs west from Box #51425 to Building 95-04 along Southbound Service Road
- 1-2” steel conduit runs north and turns west from Box #51425 to Building 95-02 along Southbound Service Road
- 1-2” steel conduit runs south and turns west from Box #51425 to a streetlight along Southbound Service Road
- 1-2” steel conduit runs south from Box #19911 to a streetlight along Southbound Service Road
- 1-2” steel conduit runs west from Box #15793 to Building 94-34 along Southbound Service Road
- 3-2” steel conduits run west from Box #15794 to Bldgs. 94-28, 94-30 and a streetlight along Southbound Service Road
- 2-2” steel conduits run north and turn west from Box #15795 to Bldgs. 94-24 and 94-20 along Southbound Service Road
- 1-2” steel conduit runs west from MH #M-146 to a streetlight along Southbound Service Road
- 6-5” precast concrete ducts run N-S along west side of Southbound Service Road between M-NEW2 and M-NEW3
- 6-5” precast concrete ducts run N-S along west side of Southbound Service Road between M-NEW3 and M-NEW4
- 6-5” precast concrete ducts run N-S along west side of Southbound Service Road between M-NEW4 and M-NEW5
- 4-5” abandoned concrete conduits run N-S from MH #M-14184 to MH #M-17273
- 6-4” abandoned concrete conduits run N-S from MH #M-14184 to MH #M-17273
- 10-5” precast concrete ducts run N-S along west side of Southbound Service Road between M-NEW2 and MH #M-17273
- 2-utility poles (2508 & 11256) located along the west sidewalk of the Southbound Service Road between 95th Avenue and 101st Avenue

Con Edison Northbound Service Road between 101st Avenue and Atlantic Avenue/94th Avenue over Van Wyck Expressway

- 2-4” concrete conduits run N-S along east side of Northbound Service Road from M-8275 to Box #51362 to Box #51361 to Box #51360 to MH #M-8270 to Box #51358 to Box #51357 to Box #51356 to Box #51355 to MH # M-8263, to Box #51321, to Box #51320
- 6-4” concrete conduits run N-S along east side of Northbound Service Road from MH #M-8275 to MH #M-8270 to MH #M-8263
- 6-4” concrete conduits run N-S along west side of Northbound Service Road from MH #M-12945 to MH #M-12946 to MH #M-12947 to MH M-NEW 11
- 1-2” steel conduit runs E-W from Box #51356 to a streetlight along Northbound Service Road
- 1-2” steel conduit runs south then east from MH #M-8270 to a streetlight along Northbound Service Road
- 1-4” concrete conduit runs south and turns east from MH #M-8270 to utility pole riser along Northbound Service Road
- 1-4” steel conduit runs south and turns east from MH #M-8270 to utility pole riser along Northbound Service Road
- 1-4” fiber conduit runs south and turns east from MH #M-8270 to utility pole riser along Northbound Service Road
- 1-2” steel conduit runs E-W from Box #51360 to a streetlight along Northbound Service Road
- 1-2” steel conduit runs E-W from Box #51361 to a streetlight along Northbound Service Road
- 2-4” wood conduits run E-W along south side 95th Avenue from MH #M-51355 to Box #19913

Con Edison near Atlantic Avenue and 94th Avenue over Van Wyck Expressway

- 2-5” precast concrete duct conduits run E-W along southwest corner of Atlantic Avenue
- 4-5” steel conduits run E-W along south side of 94th Avenue and across Van Wyck mainline from MH #M-8292 to MH #M-11217 and transition to 4-5” precast concrete ducts beyond approach slab
- 6-5” steel conduits run E-W along north side of 94th Avenue across Van Wyck mainline from MH #M-8291 to MH #8262 and transition to 6-5” precast concrete ducts beyond approach slab
- 2-4” concrete ducts run E-W along south side of Atlantic Avenue from MH #M-8292 to Box #52048
- 2-4” fiber conduits N-S along west side of Southbound Service Road between Box #53712, Box #52048, and MH #M-145
- 10-4” fiber conduits run N-S along west side of Southbound Service Road from MH #M-146 to MH #M-145
- 11-4” fiber conduits run E-W along north side of Atlantic Avenue from MH #M-8291 to MH #M-145

- 2-5” precast concrete ducts run N-S along west side of Southbound Service Road from MH #M-NEW5 and run NW-SE across Atlantic Avenue to MH #M-8291
- 8-5” precast concrete ducts run N-S along west side of Southbound Service Road from MH #M-NEW5 to MH #M-NEW6
- 2-5" precast concrete ducts run along north corner of Southbound Service and Atlantic Avenue intersection from MH #M-8291 to MH #M-NEW6
- 16-5" precast concrete ducts run along north corner of Southbound Service and Atlantic Avenue intersection from MH #M-8291 to MH #M-NEW6
- 4-5” precast concrete ducts run N-S across Atlantic Avenue from MH #M-8292 to MH #M-NEW6
- 6-5” precast concrete ducts run N-S along west side of Southbound Service Road from MH #M-NEW5 to MH #M-NEW6
- 2-4” concrete conduits run E-W along south side of Atlantic Avenue between MH #M-11216, VS-361, MH #M-11216, MH #M-19847, and MH #M-8292
- 4-4” concrete conduits run E-W along north side of Atlantic Avenue between Box #29006, Box #48426, Box #3787, and MH #M-8291
- Overhead line runs E-W along northside of Atlantic Avenue from a utility pole west of Southbound Service Road and Atlantic Avenue intersection
- 2-4” concrete ducts run N-S along east side of Northbound Service Road between Box #51321, Box #51320, MH #M-8261, and Box #51319
- 6-4” concrete ducts run N-S along east side of Northbound Service Road between MH #M-8263 to MH #M-8261
- 2-4” concrete conduits run N-S across 94th Avenue from MH #M-11217 to transformer vault TM-4222
- 1-4” concrete conduit runs N-S across 94th Avenue from MH #M-11217 to MH #M-8262
- 8-5” precast concrete ducts run N-S across 94th Avenue from MH #M-NEW11 to MH #M-8327

Con Edison Between Atlantic Avenue and Jamaica Avenue over Van Wyck Expressway

- 4-4” concrete conduits run E-W across Van Wyck mainline from MH #M-8036 to MH #M-8037
- 1-4” iron conduit runs E-W across Van Wyck mainline from MH #M-8036 to MH #M-8037
- 5-4” retired fiber conduits run E-W across Van Wyck mainline from MH #M-142 to Dead End “Y”
- 9-4” fiber conduits run E-W across Van Wyck mainline from MH #M-1427 to MH #M-NEW13 to MH #M-652
- 4-4” fiber conduits run E-W across 91st Avenue and Van Wyck mainline from MH #M-279 to MH #M-652
- 8-4” fiber conduits run E-W across Van Wyck mainline from MH #M-652 to MH #M-646
- 3-4” fiber conduits run E-W across Van Wyck mainline from MH #M-652 to dead end “B”

- 2-8” HPP Con Ed critical facilities run E-W across Van Wyck mainline from MH #M-7076 to Jamaica Substation
- 13-4” fiber conduits run E-W across Van Wyck mainline from MH #M-143 to MH #M-8085
- 2-4” fiber conduits run E-W across Van Wyck mainline from MH #M-143 to MH Box #51560
- 1-4” retired fiber conduit runs E-W across Van Wyck mainline from MH #M-143 to Dead End “M”
- 5-4” retired fiber conduits run E-W across Van Wyck mainline from MH #M-143 to Dead End “N”
- 1-4” iron conduit duct runs E-W across Van Wyck mainline and continues along north side of 90th Avenue between MH #M-645 and MH #M-5750
- 4-4” conduit duct runs E-W across Van Wyck mainline and continues along north side of 90th Avenue between MH #M-645 and MH #M-5750

Con Edison Southbound Service Road between Atlantic Avenue and 91st Avenue over Van Wyck Expressway

- 1-4” fiber conduit runs N-S along west side of Southbound Service Road from MH #M-146 to Dead End “A”
- 17-4” fiber conduits, including 9 retired conduits, run N-S along west side of Southbound Service Road from MH #M-145 to MH #M-144
- 10-5” precast concrete ducts run N-S along west side of Southbound Service Road from MH #M-NEW6 to MH #M-NEW7
- 2-8” HPP Con Ed critical facilities run N-S along east side of Southbound Service Road from MH #M-7076 to MH #M-7075
- 4” retired fiber conduits run E-W across Southbound Service Road from MH #M-144 to Dead Ends “F”, “A”, “C”, and “B”
- 17-4” fiber conduits, including 9 retired conduits, run N-S along west side of Southbound Service Road from MH #M-144 to MH #M-143
- 13-4” fiber conduits, including 5 retired conduits, run N-S along west side of Southbound Service Road from MH #M-143 to MH #M-8036
- 4” retired fiber conduits run N-S from MH #M-143 to Dead End “J”
- 6-4” fiber conduits run N-S from MH #M-143 to Dead End “E”
- 1-2” iron conduit runs E-W across west side of Southbound Service Road rom MH #M-143 to NYC Lighting
- 3-4” retired fiber conduits run N-S from MH #M-142 to Dead End “K”
- 12-4” retired fiber conduits run N-S from MH #M-142 to Dead End “J”
- 17-4” fiber conduits, including 10 retired conduits, run N-S along west side of Southbound Service Road from MH #M-646 to MH #M-142
- 15-4” fiber conduits, including 5 retired, run N-S along west side of Southbound Service Road from MH #M-8036 to MH #M-142

- 8-4” precast concrete ducts run E-W along west side of Southbound Service Road from MH #M-NEW12 to MH #M-142
- 4-5” precast concrete ducts run N-S along west side of Southbound Service Road from MH #M-NEW7 to MH #M-8036
- 6-5” precast concrete ducts run N-S along west side of Southbound Service Road from MH #M-NEW7 to MH #M-NEW13
- 4-4” retired fiber conduits run E-W across 91st Avenue, west of Southbound Service Road from MH #M-646 to Dead End “A”
- 12-4” concrete encased fiber conduits run from MH #M-19461 to MH #M-646 at the intersection of 91st Avenue and Southbound Service Road
- 13-4” retired fiber conduits run N-S along west side of Southbound Service Road from MH #M-646 to Dead End “B”
- 7-4” retired fiber conduits run E-W along 91st Avenue from MH #M-279 to Dead End “C”
- 6-5” precast concrete ducts run E-W along north side of 91st Avenue from MH #M-NEW8 to MH #M-279
- 2-5” precast concrete ducts run N-S along west side of Southbound Service Road, north of 91st Avenue from MH #M-NEW8 to VS-9104 to VS-8779

Con Edison Northbound Service Road between Atlantic Avenue and 91st Avenue over Van Wyck Expressway

- 8-5” concrete ducts run N-S along west side of Northbound Service Road from MH #M-NEW11 to MH #M-NEW9
- 6-4” concrete conduits run N-S along east side of Northbound Service Road from MH #M-8263 to MH #M-8261
- 2-4” concrete conduits run N-S along east side of Northbound Service Road from MH #M-8263 to Box #51321 to Box #51320 to MH #M-8261 to Box #51319 to Box #60890 to Box #51318
- 4-4” concrete conduits run E-W along north side of 94th Avenue then run N-S along east side of Northbound Service Road from MH #M-8262 to MH #M-8261
- 1-4” concrete conduit runs N-S along east side of Northbound Service Road from MH #M-8261, Box #51319, to VS-1281
- 6-5” precast concrete ducts run N-S along east side of Northbound Service Road from MH #M-8262 to MH #M-8327 to MH #M-NEW14
- 2-4” precast concrete ducts run N-S along east side of Northbound Service Road from MH #M-8327 to Box #51318
- 4-4” concrete conduits run north then east along east side of Northbound Service Road from Box #51319 to MH #M-23431
- 2-4” concrete conduits run N-S across 94th Avenue from MH #M-11217 to MH #M-8262
- 5-4” concrete conduits, including 1 retired conduit, run N-S across 94th Avenue from MH #M-11217 to TM-4222

- 4-5” precast concrete ducts run N-S along west side of Northbound Service Road from MH #M-8327 to MH #M-NEW10
- 8-5” precast concrete ducts run N-S along east side of Northbound Service Road from MH #M-8261 to MH #M-8327
- 2-4” concrete conduits run N-S along east side of Northbound Service Road from MH #M-8327, to Box #51560 to MH #M-8037
- 4-4” concrete conduits run N-S along east side of Northbound Service Road and then run E-W along south side of Archer Avenue from MH #M-8327, to Box #51560, to MH #M-8085
- 2-4” concrete conduits run N-S along east side of Northbound Service Road from MH #M-8327, to Box #51560, to MH #M-72003, to MH #M-19219
- 4-4” fiber conduits run N-S along west side of Northbound Service Road from MH #M-12949 to MH #M-NEW9
- 4-4” fiber conduits run E-W along south side of Archer Avenue from MH #M-8035 and turn north to MH #M-NEW10
- 4-4” concrete conduits run E-W along north side of 91st Avenue and then run N-S along east side of Northbound Service Road from MH #M-1427 to MH #M-8197
- 4-4” concrete conduits run N-S along east side of Northbound Service Road from Dead End “H” to MH #M-8197
- 2-5” concrete conduits run N-S along east side of Northbound Service Road from Dead End “L” to MH #M-8197
- 2-5” concrete conduits run N-S along east side of Northbound Service Road and then run E-W north of Archer Avenue from MH #M-8327 to MH #M-8037
- 2-4” concrete conduits run N-S along east side of Northbound Service Road from MH #M-19219 to Box #50928
- 2-4” concrete conduits run from Box #50928 to MH #M-8197
- 4-5” concrete conduits run N-S along east side of Northbound Service Road from MH #M-19219, Box #50928, to MH #M-8197
- 8-5” concrete conduits run N-S along east side of Northbound Service Road from MH #M-19219 to MH #M-8197
- 6-5” concrete conduits run south then east along Northbound Service Road from MH #M-8197 to MH #M-8036
- 4-5” HDPE conduits run E-W along south side of Archer Avenue and then run N-S along east side of Northbound Service Road from MH #M-8085, to Box #51560, to MH #M-72003
- 2-4” concrete conduits run N-S along east side of Northbound Service Road from MH #M-8327 to MH #M-72003
- 4-5” HDPE conduits run N-S along east side of Northbound Service and then run E-W along north side of 91st Avenue from MH #M-72003 to MH #M-1427
- 6-5” precast concrete ducts run N-S along east side of Northbound Service Road from MH #M-NEW13 to MH #M-NEW14

- 2-4” concrete conduits run N-S along east side of Northbound Service Road from MH #M-72003 to MH #M-19219
- 2-4” concrete conduits run E-W from Dead End “D” to MH #M-19219
- 4-5” concrete conduits run E-W from MH #M-19219 to MH #M-8034
- 1-8” HPP Con Ed critical facility runs N-S along west side of Northbound Service Road from MH #M-12440 to MH #M-7103
- 1-8” HPP Con Ed critical facility runs E-W along south side of 91st Avenue and then runs N-S along Northbound Service Road from MH #M-7102 to MH #M-7103

Con Edison Southbound Service Road between 91st Avenue and Jamaica Avenue over Van Wyck Expressway

- 2-8” HPP Con Ed critical facilities conduits run N-S along the west side of Southbound Service Road between MH #M-7076 and MH #M-7075 located on the northwest intersection of Metropolitan Ave and Jamaica Avenue
- 2-5” precast concrete duct conduits run N-S along the east side of Southbound Service Road between VS-8779 and MH #M-NEW13
- 1-4" concrete conduit runs E-W along the north side of 91st Avenue between VS-9104 and MH #M-19461
- 1-4" concrete conduit runs E-W along the north side of 91st Avenue between VS-8779 and MH #M-19461
- 4-4" concrete conduits run E-W along the north side of 91st Avenue between MH #M-19464 and MH #M-19461
- 1-4" concrete conduit runs E-W along the north side of 91st Avenue between Con Ed transformer vault VS-8587 and MH #M-19461
- 1-2” iron conduit runs E-W to north of 91st Avenue between Box 52451 and streetlight pole located on the on-ramp of Southbound Van Wyck Expressway
- 3-4” Fiber conduits run E-W to north of 91st Avenue near on-ramp of Southbound Van Wyck Expressway and Box 52450
- 1-4” fiber conduit runs N-S along the west side of Southbound Service Road between Box 52450, MH #M-645, MH #M19451, MH #M-21631, Box 52648/52446, MH #M-8199 and MH #M-643
- Overhead electric line runs N-S along the west side of Southbound Service Road through streetlight poles between 91st Avenue and 89th Avenue
- 9-4" concrete conduits run N-S along the west side of Southbound Service Road between MH #M19451 and Con Ed transformer vault VS-7974
- 5-4” concrete duct conduits run NW-SE south of Jamaica Avenue between MH #M8199 and Con Ed transformer vault TM-6609
- 1-2" steel conduit runs E-W south of Jamaica Avenue between MH #M-8199 and streetlight pole
- 8-4" concrete conduits run NE-SW south of Jamaica Avenue between BC-417 and MH #M-8199

- 2-4” concrete conduits run E-W along north side of 89th Avenue
- 6-4” concrete conduits run E-W along north side of 89th Avenue
- 8-4” concrete conduits run E-W along south side of 89th Avenue

Con Edison Northbound Service Road between 91st Avenue and Jamaica Avenue over Van Wyck Expressway

- 2-8” HPP Con Ed critical facilities run N-S along the west side of Southbound Service Road
- 2-4” concrete duct Con Ed critical facilities run along the east side of Southbound Service Road between MH #M-8197, MH #M-50940, MH #M-50941, MH #M-50942, MH #M-18469, MH #M-8200, Box #50944, Box #50945, MH #MH-18468, MH #M-8201, Box #50946, MH #M-8202 and MH #M-8236
- 2-4” concrete ducts run N-S along the east of Southbound Service Road between MH #M-8197, Box 50946 and MH #M-8202
- 2-4" concrete conduits run N-S along the east of Southbound Service Road at MH #M-18469 and continue E-W along Southbound Service Road near Box #50942
- 1-2” Plastic/PVC service connection runs E-W along the north of 90th Avenue between MH #M-8200 and above ground transformer box CM5
- 1-2” Iron conduit duct runs E-W along the Southbound Service Road between streetlight pole and MH #M-8201
- 1-2” Iron conduit duct runs E-W along the south side of Jamaica Ave between MH #M-8202 and streetlight pole

Con Edison near Jamaica Avenue over Van Wyck Expressway

- 4-5” steel conduits run E-W across Van Wyck mainline along north side of Jamaica Avenue between MH #M-3786, MH #M-8203
- 2-4” concrete ducts run E-W along north side of Jamaica Avenue west of Southbound Service Road from Box #23711 and MH #M-3786
- 4-5” concrete ducts run E-W along north side of Jamaica Avenue west of Southbound Service Road between MH #M-21736, and MH #M-3786
- 2-4” concrete ducts run E-W along south side of Jamaica Avenue west of Southbound Service Road between Box #69613, Box #69697, and MH #M-643
- 6-4” concrete ducts run N-S across Southbound Service Road from MH #M-642 to MH #M-3786
- 2-4" concrete ducts run N-S across Jamaica Avenue from MH #M-643 to Box #23711
- 2-4" fiber conduits run N-S across Jamaica Avenue from MH #M-643 to Box #23711
- 4-5” concrete duct conduits run N-S along west side of Southbound Service Road between MH #M-8199, MH #M-643, and MH #M-642
- Transformer vaults VS #417 and BC 417 are located along west side of Southbound Service Road, south of Jamaica Avenue

- Transformer vault TM 6609 is located along east side of Southbound Service Road, south of Jamaica Avenue
- 5-4” concrete ducts run NW-SE across Southbound Service Road from transformer vault TM-6609 to MH #M-8199
- 2 service connections run E-W across Southbound Service from MH #M-8199 to a light pole along west side of Southbound Service Road and to BC-417
- 1-2” steel conduit runs E-W along northeast corner of Southbound Service Road and Jamaica Avenue intersection from MH #M-3786 to a streetlight pole
- 1-8” HPP conduit runs N-S along west side of Northbound Service Road from MH #M-7102 to MH #M-7103
- 1-8” HPP conduit runs N-S along west side of Northbound Service Road MH #M-12440 to MH #M-7103
- 6-4” concrete ducts run N-S along east side of Northbound Service Road between MH #M-8311, MH #M-8236, MH #M-8202, and MH #M-8201
- Several unknown conduits run E-W along north side of Jamaica Avenue and branch out and provide service to various light pole near Northbound Service Road from MH #M-8203
- 2-4” concrete duct conduits run N-S along east side of Northbound Service Road between MH #M-8202, Box #50946, and MH #M-8201 and continue SW-NE across Jamaica Avenue from MH #M-8203
- 1-2” steel conduit runs E-W across Northbound Service Road from MH #M-8202 to a streetlight pole
- 1-2” steel conduit runs E-W along north side of Jamaica Avenue from MH #M-8203 to a streetlight pole, east of Northbound Service Road

Con Edison Southbound Service Road between Jamaica Avenue and Hillside Avenue over Van Wyck Expressway

- 1-4” fiber conduit runs N-S along west side of Southbound Service Road between Box #23711, MH #M-642, Box #51641, Box #51640, Box #51639, and MH #M-8315
- Transmission line runs E-W along south side of Metropolitan Avenue between MH #M-7075 and dead end “A”
- 1-4” wood conduit runs E-W along south side of Metropolitan Avenue between MH #M-23710 and MH #M-23711
- 2-4” fiber conduits run E-W along south side of Kew Gardens Road between MH #M-641 and MH #M-642
- 6-4” concrete duct conduits run E-W along Southbound Service Road between MH #M-642 and MH #M-3786
- 2-4" concrete conduits run N-S from MH #M-642 between Kew Gardens Road and Southbound Service Road
- 1-4” fiber conduit runs E-W along Southbound Service Road between custom manhole near MH #M-8315 to VS #-9232

- 8-4" concrete conduits run E-W across Southbound Service Road from CUST manhole to VS-9232
- 1-4" concrete conduit runs E-W across west side of Southbound Service Road from MH #M-8315
- 4-4” concrete duct critical facility run NW-SE across Northbound Service Road from adapter “A” to MH #M-8236
- 2-4” concrete conduits run N-S along west side of Northbound Service Road between MH #M-8236 to MH #M-8310
- 2-8” HPP ConEdison critical facility run N-S along west side of Northbound Service Road across Jamaica Avenue and Hillside Avenue

Con Edison near Hillside Avenue over Van Wyck Expressway

- 4-5” steel conduits run E-W across Van Wyck mainline along south side of Hillside Avenue from “A” to “B”
- 4-5” steel conduits run E-W across Van Wyck mainline along north side of Hillside Avenue from MH #M-8598 and MH #M-8610
- Service connections to streetlights run from Box #52873 to the northwest and southwest corners of Hillside Avenue and Southbound Service Road intersection
- 2-4” concrete duct conduits run along northwest corner of Hillside Avenue and Southbound Service Road intersection from Box #52873 to MH #M-8598 to MH #M-8315 to Box #52954
- 2-4” concrete ducts (critical facilities) run N-S along west side of Southbound Service Road between MH #M-8315, Box #52873, and Box #52954
- 1-2” steel conduit runs north and turns west from MH #M-8315 to a streetlight pole along west side of Southbound Service Road
- 2-4" concrete conduits run E-W along south side of Hillside Avenue, west of Southbound Service Road from Box #83443
- 2-4" concrete conduits run NW-SE across Southbound Service Road and Hillside avenue intersection from Box 52873 to Box 52954
- 5-4” concrete conduits run E-W along north side of Hillside Avenue, south of Northbound Service Road between to MH #M-8610 to Box #52898 to MH #M-8134
- 2-5” concrete conduits run N-S along east side of Northbound Service Road from MH #M-8310 and runs E-W along north side of Hillside Avenue to MH #M-8610
- 4-4” concrete duct conduits run E-W along north side of Hillside Avenue from Box #52898 to VS-9050, east of Northbound Service Road
- 2-8” HPP conduits run N-S along west side of Northside Service Road between MH #M-7102, MH #M-7103, and MH #M-12440 located inside Jamaica Substation
- 2-4” concrete duct conduits run N-S along east side of Northbound Service Road from Box #52898 to Box #52933
- 1-4” Korduct retired conduit runs N-S along east side of Northbound Service Road from Box #52898 to Box #52933

- 6-4” concrete duct conduits run SW-NE along east side of Northbound Service Road from MH #M-8311 to MH #M-8310
- 2-4” concrete duct conduits run N-S along east side of 138th Street from Box #51631 to MH #M-8310
- 1-2” steel conduit runs north and turns east from MH # M-8610 to traffic signal pole
- 1-4” concrete duct conduit runs E-W along north side of Hillside Avenue from Box #52898 to NYC Box
- 1-2” steel conduit runs E-W across east side of Hillside Avenue and Northbound Service Road intersection from MH #M-8310 to a streetlight pole
- 2-4” concrete conduits run E-W along south side of Hillside Avenue from a light pole located at southeast corner of Hillside Avenue and Northbound Service Road intersection to MH #M-29726

Con Edison between Hillside Avenue and Hoover Avenue over Van Wyck Expressway

- 2-8” HPP transmission line run N-S between MH #M-7102 and MH M#-7104
- 4-4” concrete conduits run E-W across the Van Wyck Expressway Mainline and 87th Avenue between MH #M-8546 and MH #M-8308
- 2-4” concrete conduits run E-W across the Van Wyck Expressway Mainline and 86th Avenue between MH #M-24027 and MH #M-24029
- 1-4” concrete duct conduit runs E-W across the Van Wyck Expressway Mainline between MH #M-24027 and HTV 5918
- 1-4” concrete conduit runs E-W across the Van Wyck Expressway Mainline between HTV 5918 and Box #M-2953
- 6-5” steel conduits run E-W across the Van Wyck Expressway Mainline between MH #M-83464 and MH #M-71689

Con Edison Southbound Service Road between Hillside Avenue and Hoover Avenue over Van Wyck Expressway

- 2-5” fiber optic conduits run N-S along west side of Southbound Service Road between Box #52873, Box #52954, Box #52955, Box #51636, MH #M-8314, Box #51635, Box #52499, Box #52669, Box #52670 and Box #71873
- 2-5” concrete conduits run N-S along west side of Southbound Service Road between Box #71873, Box #71691, Box #83463, and Box #28140
- 2-4” concrete duct conduits run E-W along south side of 87th Avenue between MH #M-53359 and MH #M-8546
- 4-4” concrete conduits run E-W along south side of 87th Avenue from MH #M-8546 to Box #52499
- Overhead line runs N-S along west side of Southbound Service Road north of 87th Avenue
- Overhead lines run across Southbound Service Road and Southbound Van Wyck Expressway, south of Queens Boulevard

- 6-5” conduits run E-W along bypass section from Van Wyck Boulevard to Queens Boulevard from MH #M-83463 to MH #M-83464
- 1-4” concrete duct conduit runs N-S along west side of Southbound Service Road between Box #-28140 and MH #M-71688
- 1-4” concrete duct conduit runs E-W across Southbound Service Road between Box #-28140 and Box #-28141
- 6-5" concrete/steel conduits run N-S along east side of Southbound Service Road from MH #M-71688 to MH #M-54786

Con Edison Northbound Service Road between Hillside Avenue and Hoover Avenue over Van Wyck Expressway

- 2-4” concrete duct critical facility conduits run N-S along east side of Northbound Service Road between Box #52933, MH #M-8309, Box #51628, Box #5126, Box #51625, MH #M-8307, and MH #M-8982
- 2-4” concrete duct conduits run N-S along east side of Northbound Service Road between MH #M-8982, Box #54775, MH #M-8981, and MH #M-10342
- 4-4” concrete duct conduits run N-S along east side of Northbound Service Road between MH #M-8982, Box #54775, MH #M-8981, and MH #M-10342
- 2-4" concrete conduit run E-W along the north side of 87th Avenue on the Northbound Service Road section, across Van Wyck Expressway between MH #M-8308 to Box #52499
- 1-4" concrete conduit runs E-W across Northbound Service Road between MH #M-8309 to MH #M-7103
- 4-4" concrete conduits run E-W along south side of 87th Avenue on the Northbound Service Road section, between DM 71591 and MH #M-8307
- 9-4" concrete conduits run E-W from Con Edison transformer vault VS #-7661 to MH #M-8308 on Northbound Service Road and 87th Avenue
- 4-4" concrete conduits run E-W along the north side of 87th Avenue on the Northbound Service Road, Van Wyck main line and Northbound Service Road between MH #M-8308 to MH #M-8546
- 1-4" concrete conduit runs E-W cross Northbound Service Road between MH #M-51624 and existing box near overhead sign structure
- 2-4" concrete conduits run E-W across Northbound Service Road from MH #M-8306 and Box #24029 and Box #24027
- 2-4" concrete conduits run N-S along east side of Northbound Service Road between MH #M-24029 and MH #M-24028
- 1-4” concrete duct conduit runs E-W along north side of 86th Avenue between MH #M-16655, P-2953, P-2989 and HTV-5918

Con Edison near Hoover Avenue over Van Wyck Expressway

- 8-5” concrete duct conduits run E-W along south fascia of Hoover Avenue between MH #M-13282 and MH #M-12013
- 8-5” iron (on bridge) conduits run E-W along south fascia of Hoover Avenue between MH #M-13282 and MH #M-12013
- 4-4” concrete duct conduits run E-W along north fascia of Hoover Avenue between MH #M-11206 and MH #M-10320
- 8-5" concrete conduits run diagonally across Hoover Avenue between end terminal “B” and MH #M-10320
- 8-5" steel conduits run E-W along south side of Hoover Avenue between location near end terminal “B1” to location near end terminal “C” and then runs across Hoover Avenue to the north side
- 1-2” concrete conduit runs diagonally N-S on east side of Hoover Avenue
- 4-4" conduits run diagonally N-S on east side of Hoover Avenue
- 4-4” concrete conduits run N-S along west side of 132nd Street from MH #M-12013 and MH #M-22551
- 5-4” concrete conduits run N-S along 132ns Street from MH #M-22551 to TMH #TM-1610

A-2.2.2 Port Authority of New York and New Jersey

PANYNJ – Telecom

PANYNJ - Telecom between Federal Circle and Nassau Expressway

- Manhole is located on the east edge of federal circle approximately at station SB2 15+62.82
- Manhole is located on the west edge of federal circle approximately at station SB2 15+68.66
- Manhole is located on the east edge of federal circle approximately at station SB2 16+32.51
- Manhole is located west of federal circle in island approximately at station NB 13+58.76
- Manhole is located east of northbound Van Wyck expressway in island approximately at station NB 16+69.00
- Manhole MHC NYT-8 is located west of Federal Circle and southbound Van Wyck Expressway located approximately at station NB 18+49.25
- Manhole is located east of northbound Van Wyck Expressway and ramp FCN1 at approximately station FCN1 13+18.01
- Manhole C-109 is located west of SB2 Van Wyck Expressway at approximately station SB2 23+13.86
- Manhole C-109B is located west of SB2 Van Wyck Expressway at approximately station SB2 24+36.88
- Manhole is located on SB3 Van Wyck Expressway at approximately station SB3 25+99.58

- Manhole is located on northbound Van Wyck Expressway at approximately station NB 26+25.66
- Manhole is located west of northbound Van Wyck Expressway and east of SB3 Van Wyck Expressway at approximately station NB 26+65.79
- Manhole C-111 is located on SB3 Van Wyck Expressway at approximately station SB3 27+45.92
- Manhole C-110 I located west of SB2 Van Wyck Expressway at approximately station SB2 26+64.48
- Manhole is located east of SB2 at approximately station SB2 27+33.55
- Manhole is located east of SB2 at approximately station SB2 27+37.47
- Manhole is located east of SB2 at approximately station SB2 28+04.03
- Manhole CH-3 is located southeast of northbound Van Wyck Expressway at approximately station NB 29+89.21
- Manhole C-112 is located in the island east of SB2 Van Wyck Expressway at approximately station SB2 30+77.49
- Manhole C-113 is located in the island east of SB2 Van Wyck Expressway at approximately station SB2 34+48.70
- Manhole is located along the west edge of southbound Van Wyck Expressway at approximately station SB 38+20.80
- Manhole CMH 116A is located southeast of northbound Van Wyck Expressway exit ramp to Nassau Expressway at approximately station NEN2 13+53.26
- Manhole C-114 is located southeast of northbound Van Wyck Expressway exit ramp to Nassau Expressway at approximately station NEN2 13+90.86
- 1-1" steel conduit runs N-S in the island of west of south bound Van Wyck Expressway between an unknown location approximately at station SB2 11+09.52 and a manhole located approximately at station SB2 14+80.98
- 1-2" steel conduit runs NW-SE in the island west of south bound Van Wyck Expressway between manholes located approximately at station SB2 14+80.98 and CMH C-53 located on the east edge of federal circle
- 1-2" steel conduit runs E-W across Federal Circle between CMH C-53 and CMH C-52
- 1-2" steel conduit runs N-S along the west edge of Federal Circle between CMH C-52 and CMH C-51
- 1-2" steel conduit runs E-W along south edge Bergen Road between CMH C-51 and CMH C-50
- 1-2" conduit runs N-S in the island east of north bound Van Wyck Expressway between an unknown location approximately at station NB 11+03.65 and a manhole located approximately at station NB 18+68.53
- 2-3" conduits run NE-SW in the island of north bound Van Wyck expressway and Federal Circle between an unknown location approximately at station NB 11+03.65 and MHC NYT-7 (MH 8)

- Unknown conduit runs E-W across Federal Circle and Cargo Service Road between MHC NYT-7 (MH 8) and a manhole located on the southwest corner of the intersection of Cargo Service Road and Northbound Service Road
- 24-4” communication conduits run E-W north of Federal Circle, across the Van Wyck Expressway between manhole NYT-8 and manhole NYT-7
- Unknown conduit runs E-W across Federal Circle and along the southern edge of Cargo Service Road between MHC NYT-7 (MH 8) and an unknown location east of the intersection of Cargo Service Road and Northbound Service Road
- Unknown conduit runs NE-SW west of southbound service road between MHC NYT-8 and the southern corner of the JFK training center
- 2-4" PVC conduit runs E-W across the entrance ramp from Federal circle onto north bound Van Wyck Expressway connecting to a manhole at the east edge of the ramp approximately at station NB 21+40.00
- 1-4" PVC conduit runs N-S along the east edge of entrance ramp from Federal Circle onto north bound Van Wyck expressway connecting to a manhole at the east edge of the ramp approximately at station NB 21+40.00 and an unknown location approximately at station NB 21+83.00
- Unknown conduit runs E-W across north bound Van Wyck expressway between a manhole located on the east edge of north bound Van Wyck expressway approximately at station NB 25+38.00 and a manhole west of north bound Van Wyck expressway approximately at station SB3 26+00
- Unknown conduit runs N-S under Air train Viaduct between a manhole located west of north bound Van Wyck expressway approximately at station SB3 26+00.00 and a manhole east of south bound Van Wyck expressway approximately at station 27+33.63
- Unknown conduit runs N-S across northbound Van Wyck Expressway connecting to CMH C-111 and turns E-W at approximately station NB 25+97.82
- Unknown conduit runs NE-SW across SB2 Van Wyck Expressway at station SB2 26+03.98, then turns E-W across SB3 Van Wyck Expressway at station SB3 27+62.88, and northbound Van Wyck Expressway, at station NB 27+68.12, then turns NW-SW traveling roughly along the alignment of the air train above
- 8-4" conduits run E-W across SB2 Van Wyck Expressway and turn NE-SW across SB3 Van Wyck Expressway between MHC C-110 and CMH C-111
- Unknown conduit runs NE-SW across SB2 Van Wyck and SB3 Van Wyck Expressway between CMH C-109B and CMH C-111
- 8-4" conduits run N-S east of SB2 Van Wyck Expressway CMH C-111 and CMH C-113
- Unknown conduit runs N-S across Van Wyck expressway mainlines running from south of approximately station NEN2 10+14.10 unknown location to unknown location terminating along the west edge of SB2 Van Wyck expressway approximately at station SB2 51+74.16
- 4-4" C conduits run NW-SE across northbound Van Wyck Expressway and SB3 Van Wyck Expressway between CMH C-114 and CMH C-112 and then transition to 6-4" conduits and further runs N-S and connects to CMH C-113

- 1-2" C emergency phone conduit runs NW-SE in the island east of SB2 Van Wyck Expressway between CMH C-113 and then turns E-W to an unknown location at approximately station SB2 35+84.58
- 1-3" C conduit runs N-S east of SB2 Van Wyck Expressway in the island between CMH C-113 and an unknown location on the east edge of SB2 Van Wyck expressway at approximately station SB2 38+12.51
- Unknown conduit runs N-S in the island east of SB2 Van Wyck Expressway between CMH C-113 and a manhole located east of southbound Van Wyck expressway approximately at station SB 38+21.80

PANYNJ - Electric between Federal Circle and Nassau Expressway

PANYNJ - Electric 5kV

- Manhole 21A is located to the west of existing Northbound Van Wyck Expressway at approximately Station SB3 26+50RT
- Manhole 21 is located to the west of existing Northbound Van Wyck Expressway at approximately Station SB3 27+00RT
- Manhole is located to the west of existing Northbound Van Wyck Expressway at approximately Station SB3 26+25RT
- Manhole ELA -27 is located west of federal circle approximately at station SB2 15+21.08
- Manhole ELA -25 is located west of southbound service road approximately at station SB2 18+16.30
- Manhole EL-182 is located west of southbound service road approximately at station SB2 18+87.67
- Manhole is located west of southbound service road approximately at station SB2 19+00.00
- Manhole ELA 22 is located west of southbound service road approximately at station SB2 23+23.51
- Manhole ELA 23A is located west of southbound service road approximately at station SB2 23+26.95
- Manhole ELA 20 is located west of southbound service road approximately at station SB2 26+94.52
- Manhole MHE is located west of southbound service road in electric chamber approximately at station SB2 27+27.30
- Manhole ELA-20A is located west of southbound service road approximately at station SB2 28+39.54
- Manhole ELA-15A is located west of southbound service road approximately at station SB2 28+43.47
- Manhole ELA-18 is located west of southbound service road approximately at station SB2 30+68.93

- Manhole ELA-15 is located west of southbound service road approximately at station SB2 31+23.00
- Manhole is located east of southbound service road approximately at station SB2 30+87.70
- Manhole is located east of southbound service road approximately at station SB2 31+18.62
- Manhole is located east of southbound service road approximately at station SB2 32+32.01
- Manhole is located east of southbound service road approximately at station SB2 33+30.92
- Manhole is located east of southbound service road approximately at station SB2 33+30.92
- Manhole ELA-14 is located west of southbound service road approximately at station SB2 34+01.37
- Manhole ELA-6 is located west of southbound service road approximately at station SB2 34+13.75
- Manhole ELA-5 is located west of southbound service road approximately at station SB2 34+36.87
- Manhole is located west of southbound service road approximately at station SB2 34+80.22
- Manhole is located west of southbound service road approximately at station SB2 39+26.65
- Manhole is located east of southbound service road in island approximately at station SB2 36+27.20
- Manhole is located east of southbound service road in gore area approximately at station SB2 38+50.00
- Manhole is located east of southbound Van Wyck expressway in gore area approximately at station SB2 45+07.60
- Manhole MHE is located east of northbound Van Wyck expressway in gore area approximately at station NB 45+34.99
- Manhole is located east of northbound Van Wyck expressway in gore area approximately at station NB 43+36.30
- Manhole is located west of southbound Van Wyck expressway in island approximately at station NB 37+50.00
- Manhole EL-7 is located east of southbound Van Wyck expressway in island approximately at station NB 35+00.50
- Manhole EL-8 is located east of southbound Van Wyck expressway in island approximately at station NB 34+83.71
- Manhole EL-10 is located east of northbound Van Wyck expressway exit to Nassau Expressway approximately at station NEN2 13+60.05
- Manhole EL-9 is located east of northbound Van Wyck expressway exit to Nassau Expressway approximately at station NEN2 13+68.19

- Manhole ELA-23 is located east of North Conduit Ramp to northbound Van Wyck expressway exit approximately at station FCN1 14+52.76
- 10-5" 5kV conduits run N-S across the intersection of Northbound Service Road and Cargo Service Road between an unknown location south of Cargo Service Road ELA-28A1, and ELA-28
- Unknown 5kV conduit runs N-S across the intersection of Northbound Service Road and Cargo Service Road between an unknown location south of Cargo Service Road and ELA-28
- Unknown 5kV conduit runs NE-SW across the intersection of Northbound Service Road and Cargo Service Road and then turns NW-SE between an unknown location south of Cargo Service Road and ELA-28
- Unknown 5kV conduit runs NW-SE across the intersection of Northbound Service Road and Cargo Service Road between ELA-28A1 and ELA-28A
- Unknown 5kV conduit runs N-S across Cargo Service Road and then turns NW-SE between ELA-28A and ELA-28
- 4-5" 5 kV FRE conduits run N-S east of Northbound Service Road between ELA-28 and ELA-23A1
- 10-5" 5 kV C conduits run N-S east of Northbound Service Road between ELA-28 and an unknown electrical structure located approximately at station NB 21+25
- 10-5" 5 kV C conduits run N-S east of Northbound Service Road, between ELA-28 and ELA-23
- 8-5" 5 kV ASB conduits run N-S along the east side of Northbound Service Road, between an electrical structure located approximately at station NB 21+25 and ELA-23
- 2-4" ASB 5 kV conduits run N-S along the east side of Northbound Service Road, between an electrical structure located approximately at station NB 21+25 and ELA-23
- 4-5" 5 kV ASB conduits run E-W across north bound and south bound Van Wyck Expressway between ELA-23 and ELA-23A
- 4-4" 5 kV PVC conduits run N-S east of north bound Van Wyck Expressway and then turns NW-SE across north bound Van Wyck Expressway between ELA-23A1 and ELA-21A
- 10-5" 5 kV ASB electrical lines run N-S east of north bound Van Wyck Expressway and then cut across north bound and south bound Van Wyck Expressway between ELA-23 and ELA-19
- 4-5" 5 kV ASB electrical lines run NW-SE east of south bound Van Wyck Expressway between ELA-21A and ELA-19A
- 10-5" 5 kV ASB conduits run N-S and then turn E-W across south bound Van Wyck Expressway between ELA-19 and ELA-15
- 10-5" 5kV C conduits run N-S west of south bound Van Wyck Expressway between ELA-20 and ELA-14
- 4-5" 5 kV ASB conduits run N-S west of south bound Van Wyck Expressway between ELA-15A and ELA-15

- 10-5" 5 kV ASB conduits run N-S west of SB Van Wyck Expressway between ELA-15 and ELA-13
- 6-5" 5 kV C conduits run E-W across south bound Van Wyck Expressway and then turn NW-SE across north bound Van Wyck Expressway between EL-6 and EL-10
- 6-5" 5 kV ASB conduits run E-W across south bound Van Wyck Expressway between EL-5 and EL-7
- 1-2" 5 kV C conduit runs NW-SE across north bound Van Wyck Expressway between EL-9 and EL-7
- 6-5" 5 kV C conduits run NW-SE across north bound Van Wyck Expressway between EL-9 and EL-7

PANYNJ - Drainage

PANYNJ - Drainage between Federal Circle and Nassau Expressway

- 1-15" RCP drainage pipe runs NW-SE west of southbound service road in grass area connecting a manhole with catch basin approximately at station SB2 18+57.41
- 1-15" RCP drainage pipe runs E-W west of southbound service road connecting a catch basin on the east edge of the road with catch basin on west edge of the road approximately at station SB2 24+14.84
- 1-15" RCP drainage pipe runs E-W east of southbound service road connecting between two catch basin approximately at station SB2 27+00.00
- 1-15" RCP drainage pipe runs N-S east of southbound service road connecting a catch basin on west edge of Air train viaduct and a catch basin on the east edge of the southbound service road at station SB2 27+88.49
- 1-15" RCP drainage pipe runs E-W east of southbound service road connecting a manhole on the east edge of the southbound service road and catch basin in island and further runs E-W connecting to another catch basin in the island station SB2 29+65.76
- 1-15" RCP drainage pipe runs E-W east of southbound service road connecting a manhole on the east edge of the southbound service road and catch basin in island and further runs E-W connecting to another catch basin in the island station SB2 32+45.35
- 1-24" RCP drainage pipe runs E-W west of southbound service road connecting a manhole in the island to another catch basin in the island east of southbound service road
- 1-15" RCP drainage pipe runs NE-SW east of southbound service road connecting two manholes and then transitions into 18" RCP and runs NW-SE and transitions to 15" RCP connecting to manhole in the island east of southbound service road
- 1-15" RCP drainage pipe runs N-S east of southbound service road connecting a catch basin and manholes and then runs E-W connects to catch basin in the island east of southbound service road
- 1-4" PVC drainage pipe runs NW-SE east of southbound service road connecting two manholes in the island east of southbound service road

- Unknown drainage pipe runs N-S east of southbound service road connecting two manholes in the island approximately at station SB3 29+11.86
- 1-18" RCP drainage pipe runs E-W east of southbound service road connecting two manholes in the island approximately at station SB3 30+00.00 and then transitions into an 8" PVC and connects to another manhole west of northbound Van Wyck Expressway under Air train viaduct
- 1-15" RCP drainage pipe runs N-S west of Northbound Van Wyck Expressway service road connecting two manholes in the island approximately between station NB 29+90.79 and station NB 30+58.80.
- 1-10" PVC PANYNJ drainage pipe runs NW-SE west of Northbound Van Wyck Expressway service road connecting two manholes in the island approximately between station NB 30+58.80 and station NB 30+42.46
- 1-15" RCP PANYNJ drainage pipe runs E-W west of Northbound Van Wyck Expressway service road connecting a manholes in the island approximately at station NB 30+58.80 to a catch basin on the west edge of North bound Van Wyck Expressway and then runs NW-SE to unknown location

PANYNJ - Sewer

PANYNJ - Sewer between Federal Circle and Nassau Expressway

- 1-15" RCP Sewer line runs N-S across Cargo Service Road between a manhole located at the southwest corner of the intersection of Cargo Service Road and Northbound Service Road at approximately station NB 13+50.40 and a manhole north of the intersection at approximately station NB 17+60.36
- 1-4" Sewer line runs NE-SW along the west edge of Federal Circle south of Bergen Road between manhole located approximately at station SB2 16+25.73 and extends south to an unknown location
- 1-8" Sewer line runs NW-SE across Bergen Road between a manhole located south of intersection approximately at station SB2 16+20 and a manhole north of the intersection located approximately at station SB2 17+05
- Unknown sewer line runs west of Southbound Service Road between a manhole at approximately station SB2 18+05.41 and a manhole at approximately station SB2 23+70.72
- MHS Sewer manhole is located east of south bound Van Wyck Expressway at approximately station SB3 29+60
- MHS Sewer manhole is located west of south bound Van Wyck Expressway at approximately station SB3 31+90
- MHS Sewer manhole is located west of south bound Van Wyck Expressway at approximately station SB3 34+65
- MHS Sewer manhole located on south bound Van Wyck Expressway at approximately station SB 37+65

PANYNJ - Water

PANYNJ - Water between Federal Circle and Nassau Expressway

- 1-20" LP Water main runs NE-SW on the east edge of the Southbound Van Wyck Expressway - Federal Circle Exit ramp connects to a manhole on the curb east of federal circle approximately at station SB2 15+61.30
- Unknown water main runs E-W from manhole on the curb east of federal circle to water valve L143-1
- Unknown water main runs E-W from water valve L143-1 and runs NW-SE connecting to water valve L138-1 west of federal circle in grass area
- 1-1" LP water main runs NE-SW west of federal circle from water valve L138-1 connecting to unknown water valve in grass area
- 1-1" water meter is located west of federal circle in grass area approximately at station SB2 15+07+60
- Unknown water valve is located east of federal circle in grass area approximately at station SB2 14+07.25
- Water hydrant HYD-L20 is located east of federal circle on the curb approximately at station SB2 14+07.25
- Unknown water main runs E-W connecting a water valve east of federal circle in grass area to a water Hydrant HYD-L20 east of federal circle on curb
- Unknown water main runs NE-SW from manhole on the curb of east edge of federal circle connecting to a manhole west of southbound service road ramp approximately at station SB2 18+27.73
- Unknown PANYNJ water main runs NW-SE east of southbound service road connecting to water valve west of southbound service road approximately at station SB2 21+56.67

Port Authority - Electric 138Kv Northbound Service Road Between Rockaway Boulevard and 91st Avenue

- Manhole MH-1 is located just south of 91st Avenue on the Northbound Service Road, in front of Jamaica Substation
- Manhole MH-2 is located south of 97th Avenue on the west side of Northbound Service Road
- Manhole MH-3 is located north of 106th Avenue in the gore area between Exit ramp to Liberty Avenue and Northbound Service Road
- Manhole MH-4 is located north of 111th Avenue on the west side of Northbound Service Road
- Manhole MH-5 is located south of 115th Avenue on the west side of Northbound Service Road
- Manhole MH-6 is located just south of 120th Avenue on the west side of Northbound Service Road

- 1-8” HPP Steel conduit with 138 kV conductor (gas filled) runs E-W on Rockaway Boulevard to the east of the Rockaway Boulevard/Northbound Service Road intersection, turns north onto the Northbound Service Road continues north along the Northbound Service Road towards 91st Avenue, and turns into Jamaica Substation
- 2-3” PVC conduits run E-W on Rockaway Boulevard to the east of the Rockaway Boulevard/Northbound Service Road intersection, turn north onto the Northbound Service Road, continue north along the Northbound Service Road towards 91st Avenue, and turn into Jamaica Substation

A-2.3 Natural Gas

A-2.3.1 National Grid Gas

National Grid near Federal Circle over Van Wyck Expressway

- 1-2” steel pipe runs E-W north of Federal Circle, across the Van Wyck Expressway
- 1-4” plastic pipe runs N-S along the east side of the Northbound ramp from Federal Circle to Van Wyck Expressway to a valve and turns east
- 1-2” steel pipe runs N-S along the east side of the Northbound ramp from Federal Circle to the Van Wyck Expressway, turns N-E, and runs outside of project limits

National Grid between Nassau Expressway and North Conduit Avenue

- 1-12” retired steel pipe runs N-S in the median of Van Wyck Expressway starting south of Nassau Expressway, runs N-E under the Van Wyck Mainline at BIN 1075630 Nassau Expressway over Van Wyck Mainline, transitions to a retired 8” steel pipe at BIN 1076489 Van Wyck Expressway over South Conduit Avenue, splits into two parallel 8” steel pipes running N-S towards the east fascia of the three arch briges, and terminates at the north abutment of BIN 1076499
- Under BIN 1075630 Nassau Expressway over Van Wyck Mainline, the gas pipe runs N-E under the Van Wyck Mainline.
- At BIN 1076489 Van Wyck Expressway over South Conduit Ave, the gas main transitions to a retired 8” steel, then splits into two parallel 8” steel pipes running N-S towards the east fascia of the three arch bridges, terminating at the north abutment of BIN 1076499.

National Grid between Belt Parkway and 133rd Avenue

- 1-12” steel pipe runs E-W across the Van Wyck Expressway at 135th Avenue
- 1-12” retired steel pipe runs N-S to the east of the Van Wyck Expressway, north of the North Conduit Avenue

National Grid Southbound Service Road between Belt Parkway and 133rd Avenue

- 1-6” SDR-11 plastic pipe, a portion of which has a 12” steel casing, runs E-W along the north side of 135th Avenue
- 1-6” retired cast iron pipe runs N-S along the east side of 135th Place
- 1-8” plastic pipe runs N-S along the east side of 135th Place
- 1-6” plastic pipe runs N-S along the west side of the Southbound Service Road between 135th Place and 133rd Avenue
- 1-4” retired steel pipe runs N-S along the west side of the Southbound Service Road between 135th Place and 133rd Avenue

National Grid Northbound Service Road between Belt Parkway and 133rd Avenue

- 1-12” retired steel pipe runs E-W along the north side of 135th Avenue
- 1-12” steel pipe runs E-W along the south side of 135th Avenue
- 1-12” plastic pipe runs E-W along the south side of 135th Avenue and transitions to a steel pipe to the west
- 1-6” plastic pipe runs N-S along the east side of the Northbound Service Road and terminates at 134th Avenue
- 1-4” retired steel pipe segment runs N-S on the east side of the Northbound Service Road south of 134th Avenue
- 1-4” retired steel pipe runs E-W along the south side of 134th Avenue
- 1-6” plastic drisco pipe runs E-W along the south side of 134th Avenue, then runs north along the east side of the Northbound Service Road, and terminate at the intersection of Northbound Service Road and 133rd Avenue

National Grid near 133rd Avenue over Van Wyck Expressway

- 1-4” steel pipe which is capped on both ends, runs E-W near the southwest corner of the intersection of the Southbound Service Road and 133rd Avenue
- Unknown pipe runs west from the southwest corner of the intersection of the Southbound Service Road and 133rd Avenue
- 1-6” steel pipe runs along the west edge of the Southbound Service Road starting from 130th Avenue and continues past 133rd Avenue where it transitions to a 4” PE pipe
- 1-4” retired steel pipe runs N-S on the Southbound Service Road to the south of 133rd Avenue along the west curb line of the Southbound Service Road
- 1-6” steel pipe, which is capped at one end, runs E-W along the south side of 133rd Avenue at the intersection of the Northbound Service Road and 133rd Avenue (this pipe has been removed from the bridge)
- Retired pipe of unknown size and material is present and runs N-S on 133rd Avenue
- 1-6” plastic drisco pipe runs N-S along the east side of the Northbound Service Road and transitions to a 4” steel pipe near the intersection and continues north along the Northbound Service Road

National Grid Southbound Service Road between 133rd Avenue and Rockaway Boulevard

- 1-6” steel pipe runs N-S along the west side of the service road, transitions to a 4” steel pipe at 130th Avenue, transitions to a 6” steel pipe at Sutter Avenue, transitions to a 6” plastic pipe North of Alwick Road, transitions to a 4” plastic pipe just south of Rockway Boulevard and Southbound Service Road intersection, and terminates at Rockaway Boulevard
- 1-4" plastic pipe runs N-S from a valve just north of Alwick Road and connects to a 4" plastic pipe just south of Rockaway Boulevard and Southbound Service Road
- 1-4” steel pipe runs E-W along the north side of 130th Avenue and transitions to 4” PE before it connects with a 4” steel pipe running N-S along the west side of the Service Road
- 1-4” retired cast iron pipe runs E-W on the north side of Sutter Avenue
- 1-6” plastic pipe runs E-W along the north side of Sutter Avenue and transitions to 6” steel pipe before tying into the 6” steel pipe running N-S along the Service Road
- 1-4” retired LP steel pipe splits from the 6” PE near Alwick Road and splits again with the east branch terminating immediately while the west branch runs down Alwick Road
- 1-6” PE pipe runs E-W along south side of Alwick Road before it transitions to a 6” steel pipe and connects to a 6” PE pipe running N-S
- Unknown line runs E-W along the south sidewalk of Alwick Road and connects to a 6” PE pipe running N-S along the Service Road

National Grid Northbound Service Road between 133rd Avenue and Rockaway Boulevard

- 1-4” steel pipe runs N-S along the east side of the Northbound Service Road, transitions to 6” plastic pipe between 131st Avenue and 130th Avenue, transitions to 4” cast iron pipe just north of 130th Avenue and continues north towards Sutter Avenue, transitions to a 6” plastic pipe at Sutter Avenue, and runs east along south sidewalk of Sutter Avenue
- 1-4” steel pipe runs E-W along south curb line of 132nd Avenue
- Two unknown gas lines run N-S across 132nd Avenue
- 1-4” steel pipe runs E-W along south curb line of 131st Avenue
- Short segment of 1-4” retired steel pipe runs N-S at the northeast corner of Northbound Service Road and 130th Avenue intersection
- 1-4” retired cast iron pipe runs E-W along the north side of 130th Avenue
- 1-4” cast iron/steel pipe runs E-W along the north side of 130th Avenue and connects to 4” cast-iron pipe running N-S along the east side of the Northbound Service Road
- 1-6” plastic pipe runs E-W along the south curb line of 130th Avenue
- 1-6” retired steel pipe runs N-S to the east side of Northbound Service Road and Sutter Avenue intersection and connects to a retired 4” cast iron pipe running E-W along the north curb line of Sutter Avenue

National Grid near Rockaway Boulevard over Van Wyck Expressway

- 2-20” steel gas mains run towards the south fascia of the bridge and across the Northbound Service Road, combine and transition to a 24” 15 PSI cast iron pipe past the

east and west abutments of the bridge, and continue along the south side of Rockaway Boulevard outside of project limits

- 1-12” steel pipe runs E-W towards the south fascia of the bridge, transitions to 12” cast iron pipe past the east and west bridge abutments, and continues along the south side of Rockaway Boulevard outside of project limits
- 1-6” retired plastic pipe runs E-W on the north sidewalk of Rockaway Boulevard at the Southbound Service Road and Rockaway Boulevard intersection
- 1-6” cast iron pipe runs E-W towards the north curb line of Rockaway Boulevard at the Southbound Service Road and Rockaway Boulevard intersection and connects to a 6” retired plastic pipe near the Southbound Service Road and Rockaway Boulevard intersection
- 1-4” low pressure plastic pipe runs N-S along Southbound Service road pipe starting from the Southbound Service Road and Rockaway Boulevard intersection and continues north on the Southbound Service Road toward Foch Boulevard
- 1-4” retired steel pipe runs N-S along Southbound Service road pipe starting from the Southbound Service Road and Rockaway Boulevard intersection and continues north on the Southbound Service Road toward Foch Boulevard

National Grid Southbound Service Road between Rockaway Boulevard and Foch Boulevard

- 1-4” retired steel pipe runs N-S between Rockaway Boulevard and Foch Boulevard on the west side of the service road
- 1-6” retired steel pipe segment branches from the retired 4” steel pipe at 120th Avenue
- 1-4” low pressure plastic pipe runs N-S between Rockaway Boulevard and Foch Boulevard on the west side of the service road
- 1-6” steel pipe runs along the north side of 120th Avenue, transitions to 6” plastic pipe, and connects to a 4” low pressure plastic pipe
- 1-6” retired cast iron pipe runs E-W along the south side of 120th Avenue and connects to a 4” low pressure plastic pipe
- 1-1.5” retired pipe runs E-W along the south side of 120th Avenue
- 2 unknown pipes run N-S across 120th Avenue

National Grid Northbound Service Road between Rockaway Boulevard and Foch Boulevard

- 1-6” cast iron pipe runs E-W along the south side of 120th Avenue, runs north along the east side of the Service Road, transitions to 6” plastic pipe at the intersection of the Northbound Service Road and 139th Street, transitions to 6” cast iron pipe just north of the intersection of the Northbound Service Road and 139th Street, and continues along east curb line of 139th Street

National Grid near Foch Boulevard over Van Wyck Expressway

- 1-6” wrapped steel pipe runs E-W towards the north fascia of the Foch Boulevard Bridge
- 1-6” DB-FS-MD-LP plastic gas pipe runs E-W on the north side of the west bridge approach and ties into 4" plastic pipe running N-S on southbound Service Road at the intersection of the Southbound Service Road and Foch Boulevard
- 1-24” 350 PSI high pressure steel transmission main runs E-W on Foch Boulevard and continues north along east side of the Southbound Service Road
- 1-6” retired UNK DB-FS-PE-LP and 1- 6” retired low pressure steel pipe run parallel to each other on the south side of west approach on Foch Boulevard
- 1-4” low pressure plastic pipe and a retired 1-4” retired low pressure steel pipe run parallel to each other on the west side of the Southbound Service Road and continue past Foch Boulevard
- 1-6” DB-FS-MD-LP plastic gas pipe runs E-W along north side of Foch Boulevard at the Northbound Service Road and Foch Boulevard intersection

National Grid between Foch Boulevard and Linden Boulevard

- 1-24” steel transmission main runs E-W under the Van Wyck Expressway Mainline from a manhole located on Southbound Service Road and 116th Avenue intersection, runs east across Van Wyck Mainline, and continues on 116th Avenue

National Grid Southbound Service Road between Foch Boulevard and Linden Boulevard

- 1-24” steel transmission main runs N-S from Foch Boulevard to 116th Avenue on the east side of the Service Road and connects into a manhole located on Southbound Service Road and 116th Avenue intersection
- 1-26” steel transmission main runs E-W in the middle of 116th Avenue, reduces to a 24” steel transmission main west of the 116th Ave and Southbound service road intersection, and connects into a manhole located on Southbound Service Road and 116th Avenue intersection
- 1-6” retired steel gas main, which is capped at both sides, runs E-W at the southwest corner of Southbound Service Road and 116th Avenue intersection
- 1-4” retired steel pipe runs N-S between Foch Boulevard and Linden Boulevard on the west side of the service road
- 1-4” low pressure plastic pipe runs N-S between Foch Boulevard and Linden Boulevard on the west side of the service road
- 1-4” retired plastic pipe running N-S connects to a 4” low pressure plastic pipe at 116th Avenue
- 1-16” steel pipe runs E-W along 116th Avenue and connects to a 4” low pressure plastic pipe
- 1-4” retired steel pipe segment at 115th Avenue connects to a 4” low pressure plastic pipe

- 1-12” cast iron pipe runs E-W along 115th Avenue, connects to an 8” plastic pipe, transitions to 4” plastic pipe, and connects to a 4” low pressure plastic pipe
- 1-3” plastic pipe connects to 4” low pressure plastic pipe south of Linden Boulevard

National Grid Northbound Service Road between Foch Boulevard and Linden Boulevard

- 1-6” cast iron pipe runs N-S between 116th Avenue and Linden Boulevard on the east side of the service road, transitions into 6” steel pipe just south of 115th Avenue, and transitions to 6” cast iron pipe north of 115th Avenue
- 1-6” cast iron pipe runs E-W along 116th Avenue and connects to a 6” cast iron pipe running N-S
- 1-6” steel pipe runs E-W along 115th Avenue and connects to a 6” steel pipe running N-S

National Grid near Linden Boulevard

- 1-12” steel pipe runs E-W towards the north fascia of the Linden Boulevard Bridge
- 1-4” low pressure plastic pipe and 1-4” retired low pressure steel pipe run in parallel on the west side of the Southbound Service Road coming from the south and merge into a 4” steel pipe, the 4” steel pipe splits into a retired 4” steel pipe and a 4” plastic pipe north of the intersection, and both pipes continue north toward 111th Avenue
- 1-6” cast iron gas pipe runs E-W along the south curb line of Linden Boulevard to west of the intersection of the Southbound Service Road and Linden Boulevard
- 1-6” cast iron pipe runs N-S on the east side of the Northbound Service Road.
- 1-6” cast iron gas pipe runs E-W along the south curb line of Linden Boulevard to east of the intersection of the Northbound Service Road and Linden Boulevard

National Grid Southbound Service Road between Linden Boulevard and 109th Avenue

- 1-4” retired steel pipe runs N-S from Linden Boulevard on the west side of the service road and is capped just south of 111th Avenue
- 1-4” low pressure plastic pipe runs N-S from Linden Boulevard on the west side of the service road and is capped just south of 111th Avenue
- 1-4” plastic service line runs E-W and connects to 4” low pressure plastic pipe
- 1-2” plastic service line runs E-W and connects to 4” low pressure plastic pipe
- 1-6” steel pipe runs E-W along the south side of 111th Avenue and terminates to the west of the Southbound Service Road
- 1-12” cast iron pipe runs N-S along west side of Southbound Service Road starting at Lincoln Street and 111th Avenue intersection, transitions to 12” steel pipe at 111th Avenue, continues north, transitions to 12” cast iron pipe just south of 109th Avenue, and continues past 109th Avenue
- 1-12” retired cast iron pipe segment runs N-S along the west side of Southbound Service Road between 111th Avenue and 109th Avenue

- 1-12” retired steel pipe and 1-6” retired cast iron pipe run N-S parallel to each other along the east edge of Southbound Service Road between 111th Avenue and 109th Avenue
- 1-12” retired steel pipe runs N-S under the west sidewalk of Southbound Service Road between 111th Avenue and 109th Avenue

National Grid Northbound Service Road between Linden Boulevard and 109th Avenue

- 1-6” cast iron pipe runs N-S along the east side of Northbound Service Road, between Linden Boulevard and 109th Avenue, transitions into 6" steel pipe just north of 111th Avenue, transitions into 6” plastic south of Northbound Service Road and Lakewood Avenue intersection, splits at the intersection, turns east, continues running E-W along the north side of Lakewood Avenue, connects to a 6” cast iron pipe at Northbound Service Road and Lakewood Avenue intersection, and continues north towards 109th Avenue
- 1-6” retired cast iron pipe runs E-W along the south side of 111th Avenue, transitions to 6” steel pipe to the east of the Northbound Service Road, and connects to 6” cast iron pipe running N-S
- 1-6” steel pipe runs E-W along the north side of 111th Avenue and connects to 6” cast iron pipe running N-S
- Unknown pipe runs E-W along the north side of 111th Avenue and connects to the 6” cast iron pipe running N-S

National Grid near 109th Avenue over Van Wyck Expressway

- 1-12” steel pipe runs E-W towards the north fascia of the 109th Avenue Bridge
- 1-6” cast iron pipe runs E-W near the south side of 109th Avenue at the Southbound Service Road and 109th Avenue intersection
- 1-12” retired steel pipe and 1-6” retired cast iron pipe run N-S parallel to each other along the east edge of Southbound Service Road between 111th Avenue and 109th Avenue
- 1-12” cast iron pipe runs N-S, with a 1-12” retired steel pipe running parallel, on the west sidewalk of the Southbound Service Road
- 6” DB-FS-MD-LP pipes running eastward East of the Northbound Service Road and 109th Avenue intersection, under the north and south sidewalks of 109th Avenue
- 1-6” retired cast iron pipe runs east on 109th Avenue from the east bridge approach
- 1-6” cast iron pipe runs N-S along east curb line of the Northbound Service Road and passes through the 109th Avenue intersection with the portion of 6” cast iron pipe at the Northbound Service Road and 109th Avenue intersection being retired

National Grid Southbound Service Road between 109th Avenue and Liberty Avenue

- 1-12” retired steel pipe runs N-S along the west sidewalk of the Southbound Service Road between 109th Avenue and 107th Avenue
- 1-12” cast iron pipe runs N-S along the west side of the Southbound Service Road between 109th Avenue and Liberty Avenue and is retired between 105th Avenue and Liberty Avenue
- 1-8” cast iron pipe runs N-S along the east edge of Southbound Service Road between 109th Avenue and 107th Avenue and transitions to 8” steel pipe and back to 8” cast iron pipe for two short stretches. The 8” cast iron pipe transitions to 12” cast iron pipe after 107th avenue, continues north towards 105th avenue, and splits into two branches at the northwest corner of 105th Avenue and Southbound Service Road intersection. The 1-4” retired cast iron pipe east branch runs N-S and terminates just south of Liberty Avenue and the 1-12” steel pipe west branch runs N-S and terminates just south of Liberty Avenue
- 1-6” cast iron pipe runs E-W along the north side of 107th Avenue
- 1-6” plastic pipe runs E-W under the north sidewalk of 107th Avenue
- 1-8” retired plastic pipe runs E-W along the north sidewalk of 105th Avenue
- 1-6” cast iron pipe runs E-W along 105th Avenue
- Unknown line runs N-S across 105th Avenue to the west of 105th Avenue and Southbound Service Road intersection
- 1-2” retired pipe runs N-S along the west side of the Service Road from 105th Avenue to Liberty Avenue
- 1-12” plastic pipe runs E-W across the Service Road just south of Liberty Avenue

National Grid Northbound Service Road between 109th Avenue and Liberty Avenue

- 1-6” cast iron runs N-S along the east side of the Northbound Service Road from 109th Avenue to 107th Avenue and continues east along south edge of 107th Avenue. The pipe transitions to 6” plastic and transitions back to 6” cast iron
- 1-6” retired cast iron runs N-S along the west side of the Northbound Service Road from 107th Avenue to 106th Avenue and continues east along north side of 106th Avenue
- 1-8” steel pipe runs N-S towards the center of 142nd Street and splits at the intersection of Northbound Service Road and 142nd Street
- 1-8” steel main splits into a pair of retired 8” steel pipes which run N-S along the Service Road from 142nd Street. One terminates just north of 104th Street, the other continues north towards Liberty Avenue
- 1-8” plastic pipe runs E-W across 142nd Street at the intersection, runs N-S across 104th Avenue, and continues north along the Service Road
- 1-8” plastic pipe transitions to 8” steel pipe to the north of 104th Avenue and continues north towards Liberty Avenue

National Grid near Liberty Avenue over Van Wyck Expressway

- 1-12” steel pipe runs E-W towards the north fascia of the Liberty Avenue bridge, turns south to the east of Northbound Service Road and Liberty Avenue interaction, and ties into 8” steel pipe running E-W under the south sidewalk of Liberty Avenue
- 1-4” retired steel pipe and 1-6” retired steel pipe to the west of Southbound Service Road and Liberty Avenue intersection run on the north side of Liberty Avenue
- 1-6” retired cast iron pipe runs west along the south side of Liberty Avenue from the west approach of the bridge
- 1-12” PE gas main runs N-S along the west side of the Southbound Service Road passing through the intersection and continues north toward 102nd Avenue
- 1-8” steel pipe runs E-W at the intersection of the Northbound Service Road and Liberty Avenue along south side of Liberty Avenue
- 1-6” retired cast iron pipe runs E-W at the intersection of the Northbound Service Road and Liberty Avenue along north side of Liberty Avenue to the west approach of the bridge
- 1-8” retired steel pipe runs E-W at the intersection of the Northbound Service Road and Liberty Avenue from the Liberty Avenue and Northbound Service Road intersection
- 1-8” retired steel pipe runs N-S along the east side of the Northbound Service Road
- 1-8” steel pipe runs N-S along the east side of the Northbound Service Road

National Grid between Liberty Avenue and 101st Avenue

- 1-4” retired pipe runs E-W under the Van Wyck Expressway Mainline at Lloyd Road
- Unknown retired pipe runs E-W under the Van Wyck Expressway Mainline at Lloyd Road

National Grid Southbound Service Road between Liberty Avenue and 101st Avenue

- 1-12” retired steel pipe runs N-S along the along the west side of the Service Road between Liberty Avenue and 101st Avenue and transitions into an active 12” cast iron pipe just north of Liberty Avenue
- 1-6” retired steel pipe runs north from Liberty Avenue then junctions into a retired 12” steel pipe
- 1-12” plastic pipe runs N-S along the west side of Southbound Service Road from Liberty Avenue and terminates south of 102nd Avenue
- 1-12” retired steel pipe runs N-S along east side of Southbound Service Road from Liberty Avenue to 101st Avenue
- 1-2” retired RL pipe runs N-S along east side of Southbound Service Road from Liberty Avenue and terminates south of 101st Avenue
- 1-8” cast iron pipe runs N-S under the west side walk of Southbound Service Road to north of Liberty Avenue and ties into a 6” cast iron pipe just south of 102nd Avenue

National Grid Northbound Service Road between Liberty Avenue and 101st Avenue

- 1-6” steel pipe, capped near the Northbound Service Road and Lloyd Road intersection, runs E-W along Lloyd Avenue
- 1-6” steel pipe, capped near the Northbound Service Road and 102nd Avenue intersection, runs E-W along 102nd Avenue

National Grid near 101st Avenue over Van Wyck Expressway

- 1-12” steel pipe runs E-W towards the north fascia of 101st Avenue Bridge which connects to 12” steel pipe on the west side of the bridge and a 12” cast iron pipe on the east side of the bridge
- 2-20” steel pipes run E-W towards the south fascia of the 101st Avenue Bridge, combine, and connect to 24” steel main past the abutments on east and west side of the bridge
- 1-12” steel pipe runs E-W along the south side of 101st Avenue, from the southeast corner of the Southbound Service Road and 101st Avenue intersection
- 1-24” 15 PSI cast iron pipe runs E-W along the north side of 101st Avenue, to the east of the Southbound Service Road and 101st Avenue intersection
- 1-12” retired cast iron pipe runs E-W along the north side of 101st Avenue, to the east of the Southbound Service Road and 101st Avenue intersection and connects to an active 12” cast iron pipe to east of the Southbound Service Road and 101st Avenue intersection
- Multiple lines run N-S along the Southbound Service Road to north of the intersection
- 1-12” steel pipe runs N-S and stops just north of the intersection
- 1-30” steel pipe runs on the west side of the Southbound Service Road, north of 101st Avenue
- 1-2” retired RL pipe runs on the west side of the Southbound Service Road, north of 101st Avenue
- 1-6” retired cast iron pipe runs on the east side
- 1-12” steel pipe south of the intersection of the Southbound Service Road and 101st Avenue runs to the south from the intersection along the west side of the Southbound Service Road and connects to a 12” cast iron pipe
- 1-24” steel pipe runs N-S across 101st Avenue to the west of the Southbound Service Road
- 1-12” steel pipe runs N-S across 101st Avenue to the west of the Southbound Service Road
- 1-24” steel pipe runs E-W along north side of 101st Avenue to the west of the Northbound Service Road and 101st Avenue intersection
- 1-12” cast iron pipe runs E-W along north side of 101st Avenue to the west of the Northbound Service Road and 101st Avenue intersection

National Grid Southbound Service Road between 101st Avenue and 94th Avenue/Atlantic Avenue

- 1-2” retired plastic pipe runs N-S along west side of Southbound Service Road from 101st Avenue and terminates between 97th Avenue and 95th Avenue
- 1-30” steel pipe runs N-S towards middle of the Southbound Service Road from 101st Avenue, continues past Atlantic Avenue, and transitions to 30” cast iron pipe at 97th Avenue
- 1-12” steel pipe runs N-S along the east side of Southbound Service Road and continues past Atlantic Avenue
- 1-6” BS pipe runs E-W along the south side of 97th Avenue and connects to the 12” steel pipe running N-S
- 1-24” cast iron pipe runs E-W along 97th Avenue and connects to the 12” steel pipe running N-S
- 1-6” retired cast iron pipe runs N-S along the east edge of the Southbound Service Road, starting north of 101st Avenue and terminating near 97th Avenue
- 1-2” retired RL pipe runs N-S along the Entrance Ramp to Southbound Van Wyck Mainline from 97th Avenue to 95th Avenue
- 1-4" retired steel pipe runs N-S along the west side of Southbound Service Road from south of 95th Avenue to south of Atlantic Avenue
- 1-12” steel pipe runs E-W across the Southbound Service Road just north of 97th Avenue, turns north under the west sidewalk of Southbound Service Road, and continues north till 95th Avenue
- 1-6” retired steel pipe runs E-W across the Southbound Service Road and 95th Avenue intersection, continues west on 95th Avenue, and connects to an active 6” cast iron pipe to the west of the intersection
- 1-8” plastic pipe runs E-W under the sidewalk south of 95th Avenue, crosses to the north side of 95th Avenue, and continues north towards Atlantic Avenue under the west sidewalk of Southbound Service Road
- 1-6” retired plastic pipe runs N-S across 95th Avenue, turns north, and continues north towards Atlantic Avenue along the west side of Southbound Service Road
- 1-12” steel 6 WC pipe runs N-S from south of 95th Avenue to just north of 95th Avenue
- 1-12” retired cast iron pipe runs from south 95th Avenue and terminates in the Southbound Service Road and 95th Avenue intersection
- 1-12” steel pipe runs E-W across the Southbound Service Road to south of 95th Avenue
- 1-3” retired plastic pipe runs E-W across the Service Road just north of 95th Avenue

National Grid Northbound Service Road between 101st Avenue and 94th Avenue/Atlantic Avenue

- 1-6” plastic pipe runs E-W under the south sidewalk of 97th Avenue
- 1-6” retired cast iron pipe runs E-W along the south side of 97th Avenue
- 1-6” plastic pipe runs E-W under the south sidewalk of 95th Avenue
- 1-6” retired cast iron pipe runs E-W along the south side of 95th Avenue

National Grid near 94th Avenue and Atlantic Avenue

- 2-12” steel mains run E-W parallel to each other towards the north fascia of the 94th Avenue & Atlantic Avenue Bridge
- 1-8” plastic pipe runs E-W along the southside of Atlantic Avenue and terminates at the Southbound Service Road and Atlantic Avenue intersection
- 1-6” steel pipe runs E-W along the north side of Atlantic Avenue and terminates at the Southbound Service Road and Atlantic Avenue intersection
- 1-6” MD pipe runs E-W under the north sidewalk of Atlantic Avenue and terminates at the Southbound Service Road and Atlantic Avenue intersection
- 1-12” steel pipe runs N-S along the west side of Southbound Service Road and crosses Atlantic Avenue
- 1-30” steel pipe runs N-S along the west side of Southbound Service Road and crosses Atlantic Avenue
- 1-12” steel pipe segment runs E-W near the southwest corner of the intersection of the Southbound Service Road and Atlantic Avenue
- 1-12" retired steel pipe runs N-S along east side of the Northbound Service Road and 94th Avenue intersection
- 1-8” plastic pipe runs E-W along the north side of 94th Avenue and terminates near the northeast corner of 94th Avenue and the Northbound Service Road
- 1-6” retired cast iron runs E-W on the south side of 94th Avenue to east of the bridge, transitions to 6” steel pipe, transitions to 6” cast iron pipe, and terminates at the south east corner of Northbound Service Road and 94th Avenue intersection

National Grid Southbound Service Road between 94th Avenue/Atlantic Avenue and Jamaica Avenue

- 1-30” steel/CI 15 PSI pipe runs N-S along the Southbound Service Road between Atlantic Avenue and Jamaica Avenue
- 1-12” steel/CI pipe runs N-S on the west side of the Service Road between Atlantic Avenue and Jamaica Avenue
- 1-3” retired steel pipe runs E-W across the Southbound Service Road to the south of 91st Avenue
- 1-6” steel pipe runs E-W along the north side of 91st Avenue
- 1-3” plastic pipe runs E-W and then N-S north of the Southbound Service Road and 91st Avenue intersection
- 1-6” steel pipe runs E-W across the Southbound Service Road to the north of 91st Avenue
- 1-4” direct burial pipe runs E-W across the Southbound Service Road to the north of 91st Avenue
- 1-6” retired steel runs E-W across the Southbound Service Road to the south of 89th Avenue

- 1-3” plastic pipe runs E-W across the Southbound Service Road to the south of 89th Avenue
- 1-6” plastic pipe runs E-W under the south sidewalk of 89th Avenue
- 1-6” steel pipe runs E-W along the north side of 89th Avenue
- 1-6” steel pipe runs E-W under the north sidewalk of 89th Avenue
- 1-12” and 1-16” retired steel pipes run N-S parallel to each other under the west sidewalk of Southbound Service road between 89th Avenue and Jamaica Avenue
- 1-3” retired steel pipe runs E-W across the Southbound Service Road to the south of Jamaica Avenue
- 1-3” retired steel pipe runs E-W across the Southbound Service Road to the south of Jamaica Avenue

National Grid Northbound Service Road between 94th Avenue/Atlantic Avenue and Jamaica Avenue

- 1-6” gas main inside an 8” steel casing runs N-S under the east sidewalk of Northbound Service Road between 94th Avenue and LIRR Johnson Yard entrance
- 1-6” retired plastic pipe runs N-S along the Northbound Service Road between 94th Avenue and LIRR Johnson Yard entrance
- 1-6” retired plastic runs E-W across the Northbound Service Road and goes towards LIRR Johnson Yard to north of 94th Avenue
- 1-4” steel pipe runs E-W across the Northbound Service Road and goes towards LIRR Johnson Yard to north of 94th Avenue
- Unknown line runs E-W on the south side of 91st Avenue, turns north at the Northbound Service Road and 91st Avenue intersection, runs N-S along the east curb line of North bound Service Road, and terminates at 90th Avenue
- 1-4” steel pipe runs E-W along the south side of 90th Avenue
- 1-4” retired low pressure steel pipe runs N-S along the east side of Northbound Service Road from 90th Avenue and terminates to the south of Jamaica Avenue
- 1-6” low pressure plastic pipe runs N-S under east sidewalk of Northbound Service Road from 90th Avenue and terminates to the south of Jamaica Avenue
- 1-3” plastic pipe runs E-W across the east side walk of Northbound Service Road south of Jamaica Avenue

National Grid near Jamaica Avenue over Van Wyck Expressway

- 1-12” low pressure wrapped steel pipe runs E-W toward the south fascia of the Jamaica Avenue Bridge
- 1-12” wrapped steel (15 PSI) pipe runs E-W toward the north fascia of the bridge
- Multiple National Grid facilities are located at the intersection of the Southbound Service Road and Jamaica Avenue
- 2-8” retired gas mains run along Jamaica Avenue, west of the intersection at the north and south sidewalks

- 1-4" steel pipe and 1-8” steel pipe run N-S across Jamaica Avenue from a manhole on the south sidewalk of Jamaica Avenue and merge to one line on the north sidewalk
- 1-12” steel pipe runs west on Jamaica Avenue, west of the intersection
- Multiple facilities are connected to a manhole located in the northwest of the Southbound Service Road and Jamaica Avenue intersection
- 1-30" cast iron (15 PSI) pipe running along the south edge of Metropolitan Avenue
- 1-12" steel (15 PSI) pipe running toward Metropolitan Avenue that connects to a 4" steel pipe
- 1-6” retired steel pipe runs N-S along Southbound Service Road and connects to a manhole
- 1-30” steel pipe runs N-S along the Southbound Service Road, connects to a manhole, runs past the intersection, and continues south along Southbound Service Road
- 1-12” steel pipe runs N-S along the west side of the Southbound Service road, south of the intersection
- 1-12” retired steel pipe and 1-16” steel pipe run N-S parallel to each other along the west sidewalk of the Southbound Service Road south of the intersection
- 1-12” steel pipe runs from East of the Northbound Service Road and Jamaica Avenue intersection on the south sidewalk of Jamaica Avenue west toward the intersection, turns south, connects to a 12” low pressure abandoned pipe crossing the Northbound Service Road, then turns north, and runs toward the east approach of the bridge
- 1-12” steel pipe at the north sidewalk of Jamaica Avenue at the intersection of Northbound Service Road and Jamaica Avenue runs west to the intersection then continues north on the east sidewalk of the Northbound Service Road
- 1-12” retired pipe runs in the E-W direction on the north side of Jamaica Avenue
- 1-12” retired pipe runs in the E-W direction on the south side of Jamaica Avenue
- 1-12” steel pipe runs E-W across the Northbound Service Road, north of the intersection

National Grid Southbound Service Road between Jamaica Avenue and Hillside Avenue

- 1-6” retired steel pipe runs N-S along the center of the Southbound Service Road between Jamaica Avenue and Hillside Avenue
- 1-6” retired steel pipe runs N-S under the west sidewalk of Southbound Service Road between Kew Gardens Road and Hillside Avenue
- 1-6” steel pipe runs E-W near the intersection of Kew Gardens Road, Metropolitan Avenue, and Southbound Service Road
- 1-8” cast iron pipe runs E-W along the north side of Metropolitan Avenue
- 1-8” low pressure steel pipe runs E-W along the north side of Metropolitan Avenue

National Grid Northbound Service Road between Jamaica Avenue and Hillside Avenue

- 1-12” retired steel pipe runs north from Jamaica Avenue on the east side of the Service Road

- 1-16” steel pipe runs N-S along the west side of 138th Street, crossing the Northbound Service Road and 138th Street intersection
- 1-12” steel pipe runs N-S along the east side of 138th Street, crossing the Northbound Service Road and 138th Street intersection

National Grid near Hillside Avenue over Van Wyck Expressway

- 2-12” steel pipes run toward the south fascia of the Hillside Avenue Bridge
- 2-12” steel pipes are connected to each other by 2” jumpers at the east and west approaches of the bridge
- 1-6” retired cast iron pipe runs N-S at the west abutment of the Hillside Avenue Bridge
- 1-6” steel pipe, near the intersection of the Southbound Service Road and Hillside Avenue, runs east on the south side of Hillside Avenue toward the Southbound Service Road and Hillside Avenue intersection where it branches into two lines. The first line is a 6” steel retired gas main that turns south a short distance to gas valve #2022 before running to the south along the west sidewalk of the Southbound Service Road. The second line is a 6” steel gas main that turns south at the Southbound Service Road and runs toward Jamaica Avenue
- 1-6” steel pipe runs N-S along the Southbound Service Road north of the intersection
- 2-6” retired steel pipes that run N-S along the Southbound Service Road north of the intersection
- 1-6” retired cast iron pipe runs east from the west bridge approach toward the north fascia of the Hillside Avenue Bridge across the Northbound Service Road/138th Street and continues on Hillside Avenue
- 1-6” steel pipe near the intersection of the Northbound Service Road/138th Street and Hillside Avenue runs E-W on the north side of Hillside Avenue
- 1-8" direct burial fuse near the intersection of the Northbound Service Road/138th Street and Hillside Avenue runs on the south sidewalk of Hillside Avenue
- 1-6” retired steel pipe near the intersection of the Northbound Service Road/138th Street and Hillside Avenue runs E-W to the east of bridge on the south side of Hillside Avenue
- 1-12” steel pipe gas line runs in the N-S direction on the east side of the Northbound Service Road/138th Street at the intersection of the Northbound Service Road/138th Street and Hillside Avenue
- 1-16” steel pipe gas line runs southward from the intersection at the intersection of the Northbound Service Road/138th Street and Hillside Avenue

National Grid between Hillside Avenue and Queens Boulevard

- 1-6” retired steel bypass pipe runs E-W across the Van Wyck Expressway to the north of Hillside Avenue
- 1-6” retired cast iron pipe runs E-W across the Van Wyck Expressway at 87th Avenue

National Grid Southbound Service Road between Hillside Avenue and Queens Boulevard

- 2-6” retired steel pipes run N-S parallel to each other along the west side of the Southbound Service Road to the north of Hillside Avenue
- 1-6” plastic pipe runs N-S along the west side of the Southbound Service Road from Hillside Avenue to 87th Avenue
- 1-6” plastic pipe runs E-W on the north side of 87th Avenue
- 1-6” retired cast iron pipe runs E-W on the north side of 87th Avenue
- 1-6” cast iron pipe runs N-S along the east side of the Southbound Service Road from 87th Avenue and terminates to the north of 86th Avenue Pedestrian Bridge
- 5-unknown ducts run E-W across the Southbound Service and connect to 6” cast iron pipe running N-S

National Grid Northbound Service Road between Hillside Avenue and Queens Boulevard

- 1-12” steel pipe runs N-S along the east side of the Service Road just north of Hillside Avenue, crosses to the west side of the Service Road, continues north along the eastside of the Northbound Service Road, transitions into 12” cast iron pipe at 87th Avenue, and transitions back to 12” steel pipe just north of 86th Avenue
- 1-6” retired steel pipe runs N-S along the west side of the Service Road north of Hillside Avenue
- 1-6” retired cast iron pipe runs E-W along north side of 87th Avenue
- 1-8” plastic pipe runs E-W under the north sidewalk of 87th Avenue
- 1-6” retired cast iron pipe segment runs N-S along the east edge of the Northbound Service Road between 87th Avenue and the 86th Avenue Pedestrian Bridge
- 1-6” steel pipe runs E-W across the Northbound Service Road just north of 87th Avenue
- 1-3” service line runs E-W across the Northbound Service Road just north of 87th Avenue
- 1-3” service line runs E-W across the Northbound Service Road just south of 86th Avenue
- 1-8” steel pipe runs E-W along the south side of 86th Avenue
- 1-4” retired steel pipe runs N-W along the south side of Queens Boulevard

National Grid near Queens Boulevard over Van Wyck Expressway

- 1-12” retired steel pipe runs E-W towards the middle of Queens Boulevard Bridge across the Van Wyck Expressway, turns north at the west abutment of the bridge, continues NW, and transitions to 6” steel pipe towards the north side of Queens Boulevard

National Grid near Hoover Avenue over Van Wyck Expressway

- 1-12” retired steel pipe runs E-W towards the south fascia of the Hoover Avenue Bridge
- 2-12” steel pipes inside 16” sleeves run parallel to each other in the E-W direction towards the north fascia of the Hoover Avenue Bridge
- 1-6” steel pipe runs N-S along the west side of 132nd Street
- 1-8” retired steel pipe runs N-S across the east side of the bridge

- 1-8” retired plastic pipe runs E-W near the southeast side of the bridge
- 1-12” retired steel pipe runs E-W near the southeast side of the bridge
- 1-6” retired steel pipe and 1-12” plastic pipe run N-S parallel to each other along the west side of 134th Street
- 1-8” plastic pipe runs E-W along the north side of Hoover Avenue to the east side of the bridge
- 1-6” retired plastic pipe runs E-W along the south side of Hoover Avenue to the east side of the bridge
- 1-6” retired steel pipe runs E-W along the south side of Hoover Avenue to the east side of the bridge

A-2.4 Water

A-2.4.1 New York City Department of Environmental Protection

Van Wyck Expressway between South Conduit Avenue and North Conduit Avenue

- 1-48” ductile iron water main runs E-W across Van Wyck Expressway between Belt Parkway and South Conduit Avenue
- 1-48” ductile iron water main runs E-W across Van Wyck Expressway between Belt Parkway and Conduit Avenue
- 1-brick water conduit runs E-W across Van Wyck Expressway between Belt Parkway and North Conduit Avenue
- 1-48” steel water main runs E-W across Van Wyck along under North Conduit Avenue, towards the south side

Northbound and Southbound Service Road between North Conduit Avenue and 133rd Avenue Southbound Service Road

- 1-8” lined cylinder pipe runs N-S along the west side of 135th Street south of 135th Avenue
- 1-12” lined cylindrical pipe runs N-S along western sidewalk of the Southbound Service Road
- Fire hydrant is located west of the Southbound Service Road and 135th Avenue intersection on the northern sidewalk of 135th Avenue
- Fire hydrant is located on the western sidewalk of Southbound Service Road

Northbound Service Road

- 1-12” lined cylindrical pipe runs N-S along east side of the Northbound Service Road from 135th Avenue splitting into two parallel pipes between 133rd Avenue and 134th Avenue
- 1-8” ductile iron pipe runs E-W along the south side of 134th Avenue to a manhole in the intersection of Northbound Service Road and 134th Avenue

- Fire hydrant is located south of the Northbound Service Road and 134th Avenue intersection on the eastern sidewalk of Northbound Service Road

133rd Avenue Over Van Wyck Expressway

- 1-12” steel water main runs E-W along north fascia of 133rd Avenue Bridge
- 1-12” lined-cylinder pipe water main travels in the N-S direction along the west sidewalk of the SB Service Road to a water valve in the southwest corner of the SB Service Road and 133rd Avenue intersection and continues past the intersection
- Expansion chamber is located at the north side of the Southbound Service Road and 133rd Avenue intersection
- 1-12” ductile iron pipe water main runs E-W along the north side of 133rd Avenue towards the east approach of the bridge

Northbound and Southbound Service Roads Between 133rd Avenue and Rockaway Boulevard Southbound Service Road

- 1-12” lined cylindrical pipe water main travels N-S from the southwest corner of the Southbound Service Road and 133rd Avenue intersection to the intersection of Southbound Service Road and Rockaway Boulevard
- 1-6” lined cylindrical pipe water main runs E-W along the south side of 130th Avenue from the Southbound Service Road and 130th Avenue intersection
- 1-6” cast iron water main runs E-W along the south side of Sutter Avenue from the Southbound Service Road and Sutter Avenue intersection
- 1-8” lined cylindrical pipe water main runs E-W along the north side of Alwick Road from the Southbound Service Road and Alwick Road intersection
- Fire hydrant is located at the northwest corner of Southbound Service Road and 133rd Avenue intersection
- Fire hydrant is located at the southwest corner of Southbound Service Road and 130th Avenue intersection
- Fire hydrant is located south of Southbound Service Road and 130th Avenue intersection, on the western sidewalk of the Southbound Service Road
- Fire hydrant is located south of Southbound Service Road and Sutter Avenue intersection, on the western sidewalk of the Southbound Service Road
- Fire hydrant is located south of Southbound Service Road and Alwick Road Avenue intersection, on the western sidewalk of the Southbound Service Road
- Fire hydrant is located north of Southbound Service Road and Alwick Road Avenue intersection, on the western sidewalk of the Southbound Service Road

Northbound Service Road

- 1-8” lined-cylinder pipe water main runs N-S from the west side of the Northbound Service Road and 133rd Avenue intersection to 131st Avenue, turns east just north of

131st Avenue, crosses the service road, transitions into a 12" lined cylindrical water main, and continues along the east side of Northbound service road towards the Northbound Service Road and Sutter Avenue intersection

- 1-8" ductile iron water main runs E-W along the south side of 132nd Avenue into a manhole on the east side of the Northbound Service Road and 132nd Avenue intersection
- 1-8" ductile iron water main runs E-W along the south side of 131st Avenue into a manhole on the east side of the Northbound Service Road and 131st Avenue intersection
- 1-8" ductile iron water main runs E-W along the south side of 130th Avenue into a manhole on the east side of the Northbound Service Road and 130th Avenue intersection
- 1-8" ductile iron water main runs E-W along the south side of Sutter Avenue the east side of the Northbound Service Road and Sutter Avenue intersection
- Fire hydrant is located at the northeast corner of Northbound Service Road and 133rd Avenue intersection
- Fire hydrant is located at the west side of the Northbound Service Road and 132nd Avenue intersection
- Fire hydrant is located at the southeast corner of Northbound Service Road and 132nd Avenue intersection
- Fire hydrant is located to the west of the Northbound Service Road and 131st Avenue intersection, along the west side of Northbound Service Road
- Fire hydrant is located at the southeast corner of Northbound Service Road and 130th Avenue intersection
- Fire hydrant is located north of Northbound Service Road and 130th Avenue intersection, on the eastern sidewalk of the Northbound Service Road

Rockaway Boulevard Over Van Wyck Expressway

- 1-20" steel water main runs E-W toward the north fascia of the Rockaway Boulevard Bridge
- Expansion chamber is located on the northeast corner of the Southbound Service Road and Rockaway Boulevard intersection
- 1-8" lined-cylinder pipe water main runs E-W along the north side of Rockaway Boulevard to west of the intersection
- 1-12" ductile iron pipe runs E-W along the south side of Rockaway Boulevard, to the southwest of the intersection
- 1-20" ductile iron pipe water main runs E-W along the north side of Rockaway Boulevard to east of the Northbound Service Road and Rockaway Boulevard intersection
- 1-12" ductile iron pipe runs E-W along the south side of Rockaway Boulevard to east of the Northbound Service Road and Rockaway Boulevard intersection

- Fire hydrant is located west of Southbound Service Road and Rockaway Boulevard intersection on the northern sidewalk of Rockaway Boulevard
- Fire hydrant is located east of Northbound Service Road and Rockaway Boulevard intersection on the northern sidewalk of Rockaway Boulevard

Northbound and Southbound Service Roads between Rockaway Boulevard and Foch Boulevard Southbound Service Road

- 1-12” lined-cylinder pipe water main runs N-S on the west side of Southbound Service Road, from the intersection of Rockaway Boulevard and Southbound Service Road towards Foch Boulevard, and transitions to a 12” ductile iron pipe just south of the Southbound Service Road and Foch Boulevard
- 1-8” lined cylindrical water main runs E-W from the Southbound Service Road and 120th Avenue intersection
- Fire hydrant is located west of the Southbound Service Road and 120th Avenue intersection on the northern sidewalk of 120th Avenue
- Fire hydrant is located north of Southbound Service Road and Rockaway Boulevard intersection, on the western sidewalk of Southbound Service Road
- Fire hydrant is located between 120th Avenue and Foch Boulevard intersection, on the western sidewalk of Southbound Service Road
- Fire hydrant is located south of the intersection of Southbound Service Road and Foch Boulevard on the western sidewalk of Southbound Service Road

Northbound Service Road

- 1-6” cast iron pipe water main runs N-S from the intersection of Northbound Service Road and 120th Avenue to the intersection of Northbound Service Road and Foch Boulevard
- Fire hydrant is located north of the Northbound Service Road and 120th Avenue intersection on the eastern sidewalk

Foch Boulevard Over Van Wyck Expressway

- 2-12” steel water mains run E-W from the Southbound Service Road and Northbound Service Road crossing Van Wyck Expressway, toward the north bridge fascia
- Expansion Chamber is located on the northeast corner of the intersection of Southbound Service Road and Foch Boulevard
- Expansion Chamber is located on the northwest corner of the intersection of Northbound Service Road and Foch Boulevard
- 1-12” ductile iron pipe water main runs E-W along the north side of Foch Boulevard, on Southbound Service Road and Foch Boulevard intersection, and connects to a 12” lined cylinder pipe water main west of intersection

- 1-20” ductile iron pipe runs E-W from east of Foch Boulevard to Northbound Service Road intersection along the north side of Foch Boulevard and connects to an 8” cast iron pipe water main
- Fire hydrant is located at the northwest corner of Southbound Service Road and Foch Boulevard intersection
- Fire hydrant is located at the northeast corner of Southbound Service Road and Foch Boulevard intersection, on the east side of Southbound Service Road
- Fire hydrant is located at the northeast corner Southbound Service Road and Foch Boulevard intersection, on the north side of Foch Boulevard intersection
- Fire hydrant is located on the northwest corner of Northbound Service Road and Foch Boulevard intersection

Northbound and Southbound Service Roads between Foch Boulevard and Linden Boulevard Southbound Service Road

- 1-20” ductile iron pipe runs N-S along the west side of the Southbound Service Road from Foch Boulevard, connects to a 12” lined cylindrical pipe water main north of 116th Avenue, then transitions to an 8” cast iron pipe north of 115th Avenue towards Linden Boulevard
- 1-12” lined cylindrical pipe runs E-W along 116th Avenue into a manhole west of the Southbound Service Road and 116th Avenue intersection
- 1-8” cast iron pipe runs E-W along 115th Avenue towards the west side of the Southbound Service Road and 115th Avenue intersection
- 2-Fire hydrants are located on the western sidewalk between Foch Boulevard and 116th Avenue
- Fire hydrant is located on the northwest corner of the Southbound Service Road and 116th Avenue
- Fire hydrant is located on the western sidewalk of the Southbound Service Road between 116th Avenue and 115th Avenue
- Fire hydrant is located on the northwest corner of the Southbound Service Road and 115th Avenue intersection
- 2-Fire hydrants are located on the western sidewalk of Southbound Service Road between 115th Avenue and Linden Boulevard

Northbound Service Road

- 1-6” cast iron pipe water main runs N-S along the west side of Northbound Service Road from 116th Avenue to Linden Boulevard
- 1-8” cast iron pipe runs E-W along the north side of 116th Avenue towards the Northbound Service Road and 116th Avenue intersection
- 1-12” cast iron pipe runs E-W along the north side of 115th Avenue towards the Northbound Service Road and 115th Avenue intersection

- Unknown water pipe runs E-W across Northbound Service Road to a fire hydrant on the eastern sidewalk between 115th Avenue and Linden Boulevard
- Unknown water pipe runs E-W across Northbound Service Road to a fire hydrant on the eastern sidewalk south of the Northbound Service Road and Linden boulevard intersection
- Fire hydrant is located on the northeast corner of the Northbound Service Road and 116th Avenue intersection
- 2-Fire hydrants are located on the western side of Northbound Service Road between 116th Avenue and 115th Avenue
- Fire hydrant is located on the northeast corner of the northbound Service Road and 115th Avenue intersection

Linden Boulevard Over Van Wyck Expressway

- 1-12” steel water main runs E-W toward the north fascia of the Linden Boulevard bridge, between the Southbound Service Road and the Northbound Service Road
- Expansion Chamber is located on the northwest corner of the Northbound Service Road and Linden Boulevard intersection
- 1-8” cast iron pipe water main runs E-W along the north side of Linden Boulevard to the west of the Southbound Service Road and Linden Boulevard Intersection
- 1-8” cast iron pipe water main runs E-W along the north side of Linden Boulevard to the east of the Northbound Service Road and Linden Boulevard Intersection
- Fire hydrant is located at the northwest corner of the Southbound Service Road and Linden Boulevard intersection
- Fire hydrant is located north of the Northbound Service Road and Linden Boulevard intersection on the east side of Northbound Service Road

Northbound and Southbound Service Road between Linden Boulevard and 109th Avenue

Southbound Service Road

- 1-8” cast iron pipe water main runs N-S along the west sidewalk of the Southbound Service Road, transitions into a 12” lined-cylinder pipe water main north of Linden Boulevard, and continues towards the Southbound Service Road and 109th Avenue intersection
- 1-12” lined cylindrical water main runs NE-SW along Lincoln Street and connects to a 12” lined cylindrical water main at the Southbound Service Road and 111th Avenue intersection
- 1-8” lined cylindrical water main runs E-W along the northern side of 111th towards the Southbound Service Road and 111th Avenue intersection
- Fire hydrant is located on the western sidewalk of Southbound Service Road between Linden Boulevard and 111th Avenue

- 2-Fire hydrants are located on the western sidewalk of Southbound Service Road between 111th Avenue and 109th Avenue

Northbound Service Road

- 1-6” cast iron pipe water main runs N-S along the west side of Northbound Service Road from the intersection of Northbound Service Road and Linden Boulevard to 111th Avenue
- 1-12” cast iron water main runs E-W along the north side of 111th Avenue towards the Northbound Service Road and 111th Avenue intersection
- Unknown water pipe runs N-S along Northbound Service Road
- 1-6” cast iron water main runs N-S along the west side of Northbound Service Road towards the Northbound Service Road and 109th Avenue intersection
- Fire hydrant is located at the Southeast corner of Northbound Service Road and 111th Avenue intersection
- Fire hydrant is located at the west side of the Northbound Service Road and Lakewood Avenue intersection
- Fire hydrant is located at the west side of Northbound Service Road between Lakewood Avenue and 109th Avenue
- Fire hydrant is located at the southwest corner of Northbound Service Road and 109th Avenue intersection

109th Avenue over Van Wyck Expressway

- 1-12” steel water main runs E-W toward the north fascia of the 109th Avenue Bridge
- Expansion Chamber is located at the northwest corner of Northbound Service Road and 109th Avenue intersection
- 1-16” cast iron pipe water main runs E-W along the north side of 109th Avenue to west of Southbound Service Road and 109th Avenue intersection, transitions into a 20” ductile iron pipe water main, and continues towards the west of the bridge approach
- 1-12” lined-cylinder pipe water main runs N-S along the west side of Southbound Service Road and 109th Avenue Intersection
- 1-6” cast iron pipe runs N-S along the west side of Southbound Service Road north of the Southbound Service Road and 109th Avenue intersection
- 2-16” cast iron pipe water mains run parallel to each other in the E-W direction along the north side of 109th Avenue towards the Northbound Service Road and 109th Avenue intersection
- 1-20” ductile iron pipe water main runs E-W at the east bridge approach
- Fire hydrant is located east side of Southbound Service Road at the northeast corner of Southbound Service Road and 109th Avenue intersection
- Fire hydrant is located north side of 109th Avenue at the northeast corner of Southbound Service Road and 109th Avenue intersection

- Fire hydrant is located at the northwest corner of Northbound Service Road and 109th Avenue intersection
- Fire hydrant is located on the west side of Northbound Service Road at the southwest corner of the Northbound Service Road and 109th Avenue intersection

Van Wyck Expressway Mainline (I-678) between 109th Avenue and Liberty Avenue

- 1-12” lined cylindrical pipe runs E-W crossing Van Wyck Expressway north of 106th Avenue
- 1-48” steel water main runs E-W crossing Van Wyck Expressway at 104th Avenue

Northbound and Southbound Service Road between Linden Boulevard and 109th Avenue

Southbound Service Road

- 1-8” cast iron pipe runs N-S along the west side of the Southbound Service Road from the Southbound Service Road and 109th Avenue intersection to the Southbound Service Road and 105th Avenue Intersection, transitions to an 8” ductile iron water main, and continues to the Southbound Service Road and Liberty Avenue intersection
- 1-48” reinforced concrete water main runs N-S in the middle of Southbound Service Road north of 105th Avenue
- 1-6” cast iron water main runs E-W along the north side of 107th Avenue towards the northwest corner of the Southbound Service Road and 107th Avenue intersection
- 1-6” cast iron water main runs E-W along the south side of 105th Avenue towards the Southbound Service Road and 105th Avenue intersection
- Fire hydrant is located along the northern sidewalk of 107th Avenue at the northwest corner of the Southbound Service Road and 107th Avenue intersection
- Fire hydrant is located along the western sidewalk of Southbound Service Road north of the Southbound Service Road and 107th Avenue intersection
- Fire hydrant is located along the western sidewalk of Southbound Service Road south of the Southbound Service Road and 105th Avenue intersection
- 2-Fire hydrants are located along the western sidewalk of the Southbound Service Road south of the Southbound Service Road and Liberty Avenue intersection

Northbound Service Road

- Unknown water main runs N-S along the east side of Northbound Service Road from north of the 109th Avenue and Northbound Service Road to the Northbound Service Road and 107th Avenue intersection
- Unknown water main runs E-W along the middle of 107th Avenue from the Northbound Service Road and 107th Avenue intersection and continues on 107th Avenue
- Unknown water main runs E-W along the middle of 106th Avenue from the Northbound Service Road and 106th Avenue intersection and continues on 106th Avenue

- 1-12” lined cylindrical pipe runs N-S along the east side of Northbound Service Road from the 106th Avenue to 142nd Street intersection and then transitions to 12” ductile iron pipe
- 1-8” ductile iron pipe water main runs N-S along the middle of 142nd Street towards the Northbound Service Road, 142nd Street and 104th Avenue intersection
- Unknown water main runs N-S along the middle of 142nd Street towards the Northbound Service Road, 142nd Street and 104th Avenue intersection
- 1-12” ductile iron pipe runs N-S along the middle of Northbound Service Road from the Northbound Service Road and 104th Avenue intersection towards Liberty Avenue
- 1-12” cast iron pipe runs N-S along the east side of Northbound Service Road from the Northbound Service Road and 104th Avenue intersection towards Liberty Avenue
- Unknown water main runs N-S along the west side of Northbound Service Road from the Northbound Service Road and 104th Avenue intersection, connects to a 12” cast iron water main, and continues towards Liberty Avenue
- Fire hydrant is located along the eastern sidewalk of Northbound Service Road north of the Northbound Service Road and 109th Avenue intersection
- Fire hydrant is located along the eastern sidewalk of Northbound Service Road on the northeast corner of the Northbound Service Road and 107th Avenue intersection
- Fire hydrant is located along the northern sidewalk of 106th Avenue east of the Northbound Service Road and 106th Avenue intersection
- Fire hydrant is located along the eastern sidewalk of 142nd Street on the southeast corner of Northbound Service Road, 142nd Street and 104th Avenue intersection

Liberty Avenue over Van Wyck Expressway

- 1-12” steel water main runs E-W toward the north fascia of the Liberty Avenue Bridge
- 1-12” steel water main runs E-W toward the south fascia of the Liberty Avenue Bridge
- Expansion Chamber is located on the northeast corner of the intersection of Southbound Service Road and Liberty Avenue.
- Expansion Chamber is located on the southeast corner of the intersection of Southbound Service Road and Liberty Avenue
- 1-12” ductile iron pipe water main runs E-W along the north side toward the north side of Liberty Avenue
- 1-20” ductile iron pipe runs E-W along the north side of Liberty Avenue towards the west approach of the Southbound Service Road and Liberty Avenue intersection and connects to a 48” reinforced concrete pipe
- 1-48” reinforced concrete pipe runs E-W along Liberty Avenue and turns onto Southbound Service Road
- 1-8” unknown water main runs E-W along Liberty Avenue and connects to a 12” cast iron pipe water main in the Southbound Service Road and Liberty Avenue intersection
- 1-12” unknown water main runs E-W along Liberty Avenue and connects to a 12” cast iron pipe water main in the Southbound Service Road and Liberty Avenue intersection

- 1-6” cast iron pipe water main runs E-W toward the south side of Liberty Avenue that connects to a 48” reinforced concrete pipe water main in the intersection
- 1-12” cast iron pipe water main runs E-W along the north side of Liberty Avenue towards the east approach of the Liberty Avenue bridge
- 1-20” ductile iron pipe water main runs E-W along the south side of Liberty Avenue towards the south of the Liberty Avenue and Northbound Service Road intersection
- 1-8” cast iron pipe water main runs N-S from northwest corner to the southwest corner of the Northbound Service Road and Liberty Avenue intersection

Northbound and Southbound Service Road between Liberty Avenue and 101st Avenue

Southbound Service Road

- 1-12” unknown water main runs N-S along the west side of Southbound Service Road between Liberty Avenue and 102nd Avenue
- 1-12” abandoned cast iron pipe runs N-S along the west side of Southbound Service Road, transitions to 12” lined cylindrical pipe, and connects to an 8” lined cylindrical pipe water main between Liberty Avenue and 102nd Avenue
- 1-12” abandoned lined cylindrical pipe water main runs N-S along the west side of Southbound Service Road between 102nd Avenue and 101st Avenue
- 1-8” unknown water main runs E-W along the northern side of 102nd Avenue
- 1-12” unknown water main runs N-S along the west side of Southbound Service Road between 102nd and 101st Avenue
- 1-12” unknown water main runs E-W along the south side of 101st Avenue
- Fire hydrant is located north of the intersection of Southbound Service Road and Liberty Avenue intersection on the western sidewalk of Southbound Service Road
- Fire hydrant is located on the northwest corner of the intersection of Southbound Service Road and 102nd Avenue intersection

Northbound Service Road

- 1-8” cast iron pipe runs E-W from the Northbound Service Road and Lloyd Road intersection to the Remington Street and Lloyd Road intersection
- 1-6” cast-iron-pipe runs E-W from the Northbound Service Road and 102nd Avenue intersection to the Remington Street and 102nd Avenue
- Fire hydrant is located on the northwest corner of the Lloyd Road and Remington Street intersection
- Fire hydrant is located on the northwest corner of the 102nd Avenue and Remington Street intersection

101st Avenue over Van Wyck Expressway

- 1-12” unknown water main runs E-W along 101st Avenue in the Southbound Service Road and 101st Avenue intersection
- 1-6” lined-cylinder pipe water main runs E-W on 101st Avenue to the Southbound Service Road intersection
- 1-6” cast iron pipe water main runs E-W along the north side of 101st Avenue towards the east approach of the Northbound Service Road and 101st Avenue intersection
- Fire hydrant is located at the northwest corner of the 101st Avenue and Remington Street intersection

Northbound and Southbound Service Road between 101st Avenue and Atlantic Avenue and 94th Avenue

Southbound Service Road

- 1-12” abandoned lined-cylinder pipe water main runs N-S along the west side from 101st Avenue to Atlantic Avenue
- 1-12” unknown water main runs N-S along the west side of Southbound Service Road between 101st Avenue and 97th Avenue
- 1-8” unknown water main runs E-W along the north side of 97th Avenue and connects to a 12” unknown water main in the Southbound Service Road and 97th Avenue intersection
- 1-6” cast iron pipe water main runs E-W along the north side of 97th Avenue towards the 97th Avenue and Southbound Service Road intersection
- 1-12” unknown water main runs N-S along the west side of Southbound Service Road between 97th Avenue and 95th Avenue
- 1-8” unknown water main runs E-W along the north side of 95th Avenue and connects to a 12” unknown water main in the Southbound Service Road and 95th Avenue intersection
- 1-8” cast iron pipe water main runs E-W along the south side of the 95th Avenue towards the 95th Avenue and Southbound Service Road intersection
- 1-12” unknown water main runs N-S along the west side of Southbound Service Road between 95th Avenue and Atlantic Avenue
- Fire hydrant is located south of the intersection of Southbound Service Road and 95th Avenue intersection, on the western sidewalk of Southbound Service Road
- Fire hydrant is located south of the intersection of Southbound Service Road and 97th Avenue intersection, on the western sidewalk of Southbound Service Road
- Fire hydrant is located north of the intersection of Southbound Service Road and 101st Avenue intersection, on the western sidewalk of Southbound Service Road

Northbound Service Road

- 1-6” cast-iron-pipe water main runs E-W along the north side of 97th Avenue from the Northbound Service Road and 97th Avenue intersection to the Remington Street and 97th Avenue intersection
- 1-8” cast-iron-pipe water main runs E-W along the south side of 95th Avenue from the Northbound Service Road 95th Avenue intersection, where the pipe is capped, past the Remington Street and 95th Avenue
- Fire hydrant is located at the southeast corner of Northbound Service Road and 94th Avenue intersection

Atlantic Avenue and 94th Avenue over Van Wyck Expressway

- 1-12” steel water main runs E-W toward the north fascia of Atlantic Avenue and 94th Avenue Bridge on the east and west approaches of the bridge
- Expansion Chamber is located on the northwest corner of the intersection of Northbound Service Road and 94th Avenue
- 1-8” cast iron pipe water main runs E-W along the north side of the Atlantic Avenue and Southbound Service Road intersection
- 1-8” unknown water main runs E-W along the north side of Atlantic Avenue and connects to a 12” unknown water main to the north of the Southbound Service Road and Atlantic Avenue intersection
- 1-8” cast iron pipe water main runs E-W along the south side of 94th Avenue
- 1-12” ductile iron pipe water main runs N-S along west side of Southbound Service Road in the intersection of Southbound Service Road and Atlantic Avenue
- 1-12” cast iron pipe water main runs N-S along the east in the intersection of Northbound Service Road and 94th Avenue

Atlantic Avenue and 94th Avenue over Van Wyck Expressway

- 1-12” ductile iron pipe water main runs E-W crossing Van Wyck Expressway north of 91st Avenue

Northbound and Southbound Service Roads between Atlantic Avenue and 94th Avenue and Jamaica Avenue

Southbound Service Road

- 1-12” ductile iron pipe water main runs N-S along Southbound Service Road between Atlantic Avenue and Jamaica Avenue
- Unknown water main runs E-W along the north sidewalk of 91st Avenue
- 1-12” ductile iron water main runs E-W along the north side of 91st Avenue
- 1-12” ductile iron water main runs E-W along the north side of 89th Avenue
- Fire hydrant is located on the northwest corner of the intersection of Southbound Service Road and Atlantic Avenue

- Fire hydrant is located north of the Long Island Railroad bridges on the western sidewalk of the Southbound Service Road
- Fire hydrant is located south of the intersection of Southbound Service Road and 91st Avenue on the western sidewalk of Southbound Service Road
- Fire hydrant is located on northwest corner of the Southbound Service Road and 91st Avenue intersection
- Fire hydrant is located north of the intersection of Southbound Service Road and 91st Avenue on the west sidewalk of Southbound Service Road
- Fire hydrant is located south of the intersection of Southbound Service Road and 89th Avenue on the west sidewalk of Southbound Service Road
- Fire hydrant is located west of the intersection of Southbound Service Road and 89th Avenue on the north sidewalk of 89th Avenue
- Fire hydrant is located along the west sidewalk south of the intersection of Southbound Service Road and Jamaica Avenue

Northbound Service Road

- 1-12” ductile iron water main runs N-S along the east side between 94th Avenue and 90th Avenue, transitions to a 12” lined cylindrical water main, continues along the eastern sidewalk on Northbound Service Road from 90th Avenue, transitions to a 12” ductile iron water main, and continues to Jamaica Avenue
- 1-6” cast iron water main runs E-W along the northern side of Archer Avenue, transitions to a 6” ductile iron water main, and continues to the Northbound Service Road and Archer Avenue intersection
- 1-8” lined cylindrical water main runs E-W along the northern side and sidewalk towards the Northbound Service Road and 91st Avenue intersection
- 1-12” lined cylindrical water main runs E-W along the northern side of 90th Avenue towards the Northbound Service Road and 90th intersection
- Fire hydrant is located on the northwest corner of the intersection of Northbound Service Road and 94th Avenue
- 2-Fire hydrants are located along the eastern sidewalk between 94th Avenue and Archer Avenue
- Fire hydrant is located at the northeast corner of the Northbound Service Road and Archer Avenue intersection
- Fire hydrant is located along the eastern sidewalk north of the Northbound Service Road and Archer Avenue intersection
- Fire hydrant is located at the northern sidewalk of 91st Avenue east of the Northbound Service Road and 91st Avenue intersection
- Fire hydrant is located along the eastern sidewalk north of the Northbound Service Road and 91st Avenue intersection
- Fire hydrant is located along the eastern sidewalk north of the Northbound Service Road and 90th Avenue intersection

- Fire hydrant is located along the eastern sidewalk south of the Northbound Service Road and Jamaica Avenue intersection
- Fire hydrant is located at the southwest corner of the Northbound Service Road and Jamaica Avenue intersection
- Fire hydrant is located at the southeast Corner of the Northbound Service Road and Jamaica Avenue intersection

Jamaica Avenue over Van Wyck Expressway

- 1-12” steel pipe water main runs E-W toward the north fascia of Jamaica Avenue Bridge, between manholes on east and west approaches of the bridge
- 1-12” steel pipe water main runs E-W along the south fascia between manholes on the east and west approaches of the bridge
- Expansion Chamber is located on the northeast corner of the intersection of Southbound Service Road and Jamaica Avenue
- Expansion Chamber is located on the southeast corner of the intersection of Southbound Service Road and Jamaica Avenue
- Unknown water main runs E-W along the southern side of Jamaica Avenue towards the Southbound Service Road and Jamaica Avenue intersection, transitions to a 12” ductile iron pipe, and continues toward the west approach of the bridge
- 1-12” ductile iron water main runs E-W along the southern side of Jamaica Avenue towards the southeast corner of the Northbound Service Road and Jamaica Avenue intersection

Northbound and Southbound Service Road between Jamaica Avenue and Hillside Avenue

Southbound Service Road

- 1-12” ductile iron pipe water main runs N-S along the west side of Southbound Service Road between Jamaica Avenue and Hillside Avenue
- Fire hydrant is located at the southeast corner of Northbound Service Road and Jamaica Avenue intersection
- Fire hydrant is located along the western sidewalk north of the intersection of Southbound Service Road and Kew Gardens Road

Northbound Service Road

- 1-16” lined cylindrical pipe water main runs N-S along the east side of the Northbound Service Road between a manhole at the intersection of Northbound Service Road and Jamaica Avenue intersection and the intersection of Northbound Service Road and Hillside Avenue

Hillside Avenue over Van Wyck Expressway

- 2-12” steel pipe water mains run E-W along south fascia of the Hillside Avenue Bridge
- 1-12” steel pipe water main runs E-W along north fascia of the Hillside Avenue Bridge
- Expansion Chamber is located on the northwest corner of the intersection of Northbound Service Road and Hillside Avenue
- 2-Expansion Chambers are located on the southwest corner of the intersection of Northbound Service Road and Hillside Avenue
- 1-12” lined-cylindrical pipe runs E-W along the south side of Hillside Avenue towards the west of the Southbound Service Road and Hillside Avenue intersection
- 1-12” cast iron pipe runs E-W along the northern sidewalk of Hillside Avenue towards the Southbound Service Road and Hillside Avenue intersection
- 1-12” lined cylindrical water main runs E-W along the northern sidewalk of Hillside Avenue towards the Northbound Service Road and Hillside Avenue intersection
- Unknown water main runs E-W along the southern sidewalk of Hillside Avenue towards the Northbound Service Road and Hillside Avenue intersection
- Fire hydrant is located at the northeast corner of the Southbound Service Road and Hillside Avenue intersection
- Fire hydrant is located at the northwest corner of the Southbound Service Road and Hillside Avenue intersection
- Fire hydrant is located at the southeast corner of the Southbound Service Road and Hillside Avenue intersection
- Fire hydrant is located at the southeast corner of the Northbound Service Road and Hillside Avenue intersection
- Fire hydrant is located at the southwest corner of the Northbound Service Road and Hillside Avenue intersection

Van Wyck Expressway Mainline (I-678) between Hillside Avenue and Queens Boulevard

- 1-48” steel pipe water main runs NW-SE crossing Van Wyck Expressway north of 87th Avenue

Northbound and Southbound Service Road between Hillside Avenue and Queens Boulevard

Southbound Service Road

- 1-12” cast iron water main runs N-S along the middle of Southbound Service Road, transitions to a 6” cast iron water main between Hillside Avenue and 87th Avenue, transitions to an 8” lined cylindrical water main between 87th Avenue and Queens Boulevard, and continues to the Southbound Service Road and Queens Boulevard intersection
- 1-6” cast iron main runs E-W along the north side of 87th Avenue into the Southbound Service Road and 87th Avenue intersection

- 1-8” lined cylindrical water main runs E-W connecting from an 8” lined cylindrical water main to a 48” steel water main on the Southbound Service Road near 86th Avenue
- 1-48” steel water main runs N-S between the 87th Avenue and Southbound Service Road, shifting from the entrance ramp to the Southbound Service Road, and continues toward the Southbound Service Road and Queens Boulevard intersection
- Unknown water main runs E-W across Southbound Service Road and connects from a fire hydrant to a 48” steel water main south of Southbound Service Road and Queens Boulevard intersection
- 1-12” ductile iron water main runs E-W across Southbound Service between the southwest corner and southeast corner of the Southbound Service Road and Queens Boulevard intersection
- 1-48” steel water main runs E-W across Southbound Service between the southwest corner and southeast corner of the Southbound Service Road and Queens Boulevard intersection
- Fire hydrant is located along the western sidewalk south of the Southbound Service Road and 87th Avenue intersection
- 4-fire hydrants are located along the western sidewalk between 87th Avenue and Queens Boulevard

Northbound Service Road

- 1-6" cast iron main runs N-S along the east side of the Northbound Service Road from north of Hillside Avenue to 87th Avenue
- 1-6" cast iron main runs E-W along the north side of 87th Avenue across the Northbound Service Road and 87th Avenue intersection
- 1-48” steel water main runs E-W along the middle of 87th Avenue across the Northbound Service Road and continues towards the Van Wyck Expressway
- Unknown water main runs N-S along the west side to the corner of Northbound Service Road and 87th Avenue intersection
- 1-8” cast iron pipe runs N-S along the middle of Northbound Service Road between 87th Avenue and 86th Avenue and transitions to a 6” cast iron pipe, a 6” lined cylindrical pipe, and 8” lined cylindrical pipe along its length
- 1-8” lined cylindrical pipe runs E-W along 86th Avenue
- Fire hydrant is located along the eastern sidewalk north of the Northbound Service Road and Hillside Avenue intersection
- Fire hydrant is located along the eastern sidewalk across from the entrance ramp to Van Wyck Expressway
- Fire hydrant is located along the eastern sidewalk south of the Northbound Service Road and 87th Avenue intersection
- Fire hydrant is located at the southwest corner of the Northbound Service Road and 87th Avenue intersection

- Fire hydrant is located at the southeast corner of the Northbound Service Road and 87th Avenue intersection
- 3-fire hydrants are located along the eastern sidewalk between 86th Avenue and 87th Avenue
- Fire hydrant is located northeast corner of the Northbound Service Road and 86th Avenue intersection

Queens Boulevard over Van Wyck Expressway

- 1-12” steel water main runs E-W across the Van Wyck Expressway and under Queens Boulevard, transitions to a 12” ductile iron water main, and continues on Queens Boulevard
- 1-12” lined cylindrical water main runs N-S across the Queens Boulevard on the west approach of the bridge and continues on the north side of Queens Boulevard
- Fire hydrant is located at the northwest corner of the Queens Boulevard and Main Street intersection

Hoover Avenue over Van Wyck Expressway and Surrounding Area

- 1-12” steel pipe runs E-W along the north fascia of the bridge and transitions to a 12” lined cylindrical pipe at the bridge approaches
- 1-12” lined cylindrical pipe runs N-S along the west side of 132nd Street and continues past the project limit
- Fire hydrant is located at the northeast corner of the 132nd Street and Hoover Avenue intersection
- Fire hydrant is located at the northwest corner of the 132nd Street and Hoover Avenue intersection
- Fire hydrant is located at the southern sidewalk of the 132nd Street and Hoover Avenue intersection

A-2.5 Storm and Sanitary

A-2.5.1 New York City Department of Environmental Protection

Refer to New York City Department of Environmental Protection’s NYSDOT Preliminary HC-140 utility work agreement found in Appendix C of this document.

A-2.6 Other Utilities

A-2.6.1 Fire Department of the City of New York - Communications

FDNY near 133rd Avenue over Van Wyck Expressway

- 2-4” wrought iron/galvanized FDNY conduits run in the E-W direction under the south fascia roadway deck of the 133rd Avenue Bridge in a Verizon duct bank. The 4” FDNY conduit runs east on the west approach of the 133rd Avenue Bridge, connects to a 3” FDNY conduit toward the west approach of the 133rd Avenue Bridge, and continues to a FDNY manhole in the southbound Service Road and 133rd Avenue intersection
- 1-4” FDNY PVC conduit runs from FDNY manhole in the intersection of the Southbound Service Road and 133rd Avenue to a FDNY fire alarm post on the southwest corner of the intersection of 133rd Avenue and the Southbound Service Road
- 1-3” FDNY conduit runs from a utility pole on the southeast sidewalk of 133rd Avenue to a FDNY manhole located outside the Northbound Service Road and 133rd Avenue intersection
- 1-3” FDNY conduit runs west from the above FDNY manhole, connects to the 4" wrought iron galvanized steel FDNY conduit, and runs in the E-W direction toward the east approach of the 133rd Avenue Bridge

FDNY near Rockaway Boulevard over Van Wyck Expressway

- 1-4” FDNY galvanized steel conduits runs E-W toward the south fascia of the bridge, carrying 1-4 pair and 1-10 wire cable, transitions to PVC conduits beyond bridge abutments, and run into a slotted manhole on the southwest corner of the Rockaway Boulevard and the Southbound Service Road
- 1-3” FDNY conduit runs to a Verizon manhole in the 135th Place and Rockaway Boulevard intersection
- 1-3” FDNY conduit runs from a Verizon manhole in the 135th Place and Rockaway Boulevard intersection to a FDNY fire alarm post in the southeast corner of the 135th Place and Rockaway Boulevard intersection
- 1-FDNY conduit runs from a Verizon manhole in the 135th Place and Rockaway Boulevard intersection to a utility pole riser southeast of the Verizon manhole
- 1-3” FDNY conduit runs toward the east approach of the Rockaway Boulevard Bridge
- 1-3” FDNY conduit runs to a FDNY fire alarm post on the southeast corner of the Northbound Service Road and Rockaway Boulevard intersection from an existing FDNY manhole
- 3-6” pair fire alarm cables run to a FDNY fire alarm post on the southeast corner of the Northbound Service Road and Rockaway Boulevard intersection from an existing FDNY manhole
- 1-3” FDNY conduit runs west on Rockaway Boulevard from a Verizon manhole located at the 140th Street and Rockaway Boulevard intersection to a FDNY manhole outside the Northbound Service Road and Rockaway Boulevard intersection

FDNY near Foch Boulevard over Van Wyck Expressway

- 1-3” galvanized steel FDNY conduit crosses the bridge under south sidewalk deck, runs E-W toward the south fascia, and transitions to 3” PVC beyond the abutments

- 1-3” FDNY conduit runs between a FDNY fire alarm post and a FDNY manhole located outside the Southbound Service Road and Foch Boulevard intersection
- 1-3” FDNY conduit runs east from a FDNY manhole on the southwest side of Foch Boulevard toward the west bridge approach
- 1-3” FDNY conduit runs toward the east bridge approach, crosses back to the south side of Foch Boulevard, and runs to a FDNY manhole in the street east of the 139th Street and Foch Boulevard intersection
- 2-3” conduits branch to the south of FDNY manhole east of 139th Street and Foch Boulevard. One branch goes to an FDNY fire alarm post and the other to a utility pole

FDNY near Linden Boulevard over Van Wyck Expressway

- 1-4” galvanized steel FDNY conduit runs E-W toward the middle of the Linden Boulevard Bridge and transitions to 4” PVC beyond the abutments
- 1-3” FDNY conduit runs between the 135th Street and Linden Boulevard intersection to the Southbound Service Road and Linden Boulevard intersection
- 1-3” FDNY conduit runs north from a FDNY manhole west of the Southbound Service Road and Linden Boulevard intersection to a utility pole and south to a FDNY fire alarm post
- 1-3” FDNY conduit runs toward the west approach of the Linden Boulevard Bridge
- 1-3” FDNY conduit runs east to the Verizon manhole toward the east bridge approach
- 1-3” FDNY conduit runs north to a utility pole located on the north sidewalk of Linden Boulevard from the Verizon manhole

FDNY near 109th Avenue over Van Wyck Expressway

- 1-4” galvanized steel FDNY conduit runs E-W on the south fascia of the 109th Avenue Bridge and transitions to 4” PVC beyond the abutments
- 1-3” wrought iron/galvanized steel FDNY conduit connects from an existing FDNY manhole to a FDNY fire alarm post located in the southwest corner of 109th Avenue and Southbound Service Road intersection
- 1-3” wrought iron/galvanized steel FDNY conduit runs east to the FDNY manhole from east 109th Avenue Bridge approach
- 1-2” FDNY conduit runs south from FDNY manhole located east of the Northbound Service Road and 109th Avenue intersection to a utility pole on the south sidewalk

FDNY near Liberty Avenue over Van Wyck Expressway

- 1-4” Steel spare FDNY conduit runs E-W on the south fascia of the Liberty Avenue Bridge and transitions to 4” PVC beyond the abutments
- 2-sets of FDNY cables within 4” Verizon conduits run across the Southbound Service Road intersection and west on the south side of Liberty Avenue

- 1-3” FDNY conduit runs north on the Northbound Service Road from a FDNY manhole at the Northbound Service Road and Liberty Avenue intersection.
- 1-3” conduit runs from a FDNY manhole at the Northbound Service Road and Liberty Avenue intersection east to a Verizon manhole in the Henry Grate Sr. Place and Liberty Avenue intersection
- 1-3” conduit runs south to a FDNY fire alarm post on the southeast corner of the Northbound Service Road intersection

FDNY on Northbound Service Road between Liberty Avenue and 101st Avenue

- 1-3” FDNY conduit runs N-S under the sidewalk on the east side of the Northbound Service Road

FDNY near 101st Avenue over Van Wyck Expressway

- 1-4” galvanized steel FDNY conduit runs E-W on the south fascia of the 101st Avenue Bridge and transitions to 4” PVC beyond the abutments
- 1-4” PVC FDNY conduit runs E-W across the intersection of Southbound Service Road and 101st Avenue and connects to a FDNY fire alarm post on the southwest corner of the intersection
- 1-3” FDNY conduit runs in the N-S direction on the Northbound Service Road from 97th Avenue to Liberty Avenue and passes through the 101st Avenue and Northbound Service Road intersection

FDNY on Northbound Service Road between 101st Avenue and 94th Avenue and Atlantic Avenue

- 1-3” FDNY conduit runs N-S under the sidewalk on the east side of the northbound Service Road

FDNY near 94th Avenue and Atlantic Avenue

- 1-4” galvanized steel FDNY conduit runs E-W towards the south fascia of the Atlantic/94th Avenue Bridge and transitions to 4” PVC beyond the abutments
- 1-4” PVC conduit runs from a manhole at the southwest corner of the 94th Avenue and Southbound Service Road intersection to a fire alarm post at the southwest corner of the 94th Avenue and Southbound Service Road intersection
- 1-4” FDNY conduit at the intersection of Southbound Service Road and Atlantic Avenue runs east from an FDNY fire alarm post towards the west approach of the bridge

FDNY on Northbound Service Road between 94th Avenue and Atlantic Avenue and Archer Avenue

- 1-3” FDNY conduit runs N-S under the sidewalk on the east side of the Northbound Service Road into a manhole on the east side of the intersection of Archer Avenue and Northbound Service Road
- 1-4” PVC FDNY conduit runs from manhole on the east side of the intersection of Archer Avenue and Northbound Service Road to a fire alarm pole at the southeast corner of the Archer Avenue and Northbound Service Road intersection

FDNY on Northbound Service Road between Archer Avenue and Jamaica Avenue

- 1-3” FDNY conduit runs N-S under the sidewalk on the east side of the Northbound Service Road between Archer Avenue and Jamaica Avenue and runs through a manhole in the east side of the 90th Avenue and Northbound Service Road intersection
- 1-3” FDNY conduit runs from manhole on the east side of the 90th Avenue and Northbound Service Road intersection to a fire alarm pole on the southeast side of the sidewalk of the 90th Avenue and Northbound Service Road intersection

FDNY near Jamaica Avenue over Van Wyck Expressway

- 2-3” wrought iron/galvanized steel FDNY conduits, carrying 1-12 wire feeder cable and 1-1 pair feeder cable, run E-W toward the south fascia of the Jamaica Avenue Bridge from a FDNY manhole on the south-west corner of the Southbound Service Road and Jamaica Avenue intersection to a FDNY manhole on the southeast corner of Northbound Service Road and Jamaica Avenue intersection
- 2-FDNY conduits within 4” Verizon multiple tile ducts (24 duct bank), carrying 1-50 pair feeder cable, 1-40 pair feeder cable, and 1-15 pair feeder cable, run E-W from a Verizon manhole outside the Southbound Service Road and Jamaica Avenue intersection to a Verizon manhole outside the Northbound Service Road and Jamaica Avenue intersection
- Multiple conduits run in different directions from a FDNY manhole located at the southwest corner of the intersection of the Southbound Service Road and Jamaica Avenue
- 1-4” PVC conduit runs E-W to the west of manhole to a FDNY Fire alarm post
- 2-3” FDNY conduits run to a Verizon manhole a short distance to the northwest
- 1-3” conduit runs N-S along Southbound Service Road toward 89th Avenue to a manhole in the intersection of the 89th Avenue and Southbound Service Road
- 2-3” FDNY conduits run from manhole at the intersection of 89th Avenue and Southbound Service Road south to a fire alarm post
- 1-3” FDNY conduit runs E-W direction along 89th Avenue
- 1-4” PVC FDNY conduit runs northwest from the FDNY manhole in the sidewalk on the southeast corner of the intersection of Northbound Service Road and Jamaica Avenue to a manhole in the roadway at the south of the intersection of Jamaica Avenue and Northbound Service Road

- 1-3” FDNY conduit runs N-S on the east sidewalk of the Northbound Service Road, between FDNY manhole in the Northbound Service Road and 90th Avenue intersection and FDNY manhole on the southeast corner of Northbound Service Road and Jamaica Avenue intersection

FDNY near Hillside Avenue

- 2-3” wrought iron/galvanized steel FDNY conduits, carrying 25 pair and 50 pair vital feeder cables, run E-W toward the south fascia of the Hillside Avenue Bridge from a FDNY manhole on the Southbound Service Road and Hillside Avenue intersection to a FDNY manhole to the east of Northbound Service Road and Hillside Avenue intersection
- 1-4” galvanized steel FDNY conduit runs E-W towards the south fascia of the Hillside Avenue Bridge, transitions into 4” PVC conduits beyond the abutments, and runs E-W from a FDNY manhole at the southwest corner of the Hillside Avenue and Southbound Service Road intersection to a FDNY manhole at the southwest intersection of Hillside Avenue and Northbound Service Road
- 2-3” FDNY conduits near the intersection of Southbound Service Road and Hillside Avenue run E-W to the east of FDNY manhole on 136th Street

FDNY near 87th Avenue over Van Wyck Expressway

- 1-3” unknown FDNY conduit runs E-W under the Van Wyck Expressway at 87th Avenue
- 1-3” unknown FDNY conduit runs E-W west of the Southbound Service Road on 87th Avenue
- 1-3” unknown FDNY conduit runs E-W east of the Northbound Service Road on 87th Avenue to a manhole on the southeast corner of the Northbound Service Road and 87th Avenue intersection
- 1-3” unknown FDNY conduit runs from a manhole on the southeast corner of the Northbound Service Road and 87th Avenue intersection to a Fire alarm pole
- 1-3” FDNY conduit runs E-W on the east side of the Northbound Service Road on the southside of 87th Avenue

FDNY near Queens Boulevard over Van Wyck Expressway

- 1-4” PVC FDNY conduit runs E-W through the Queens Boulevard Bridge into a manhole on the north sidewalk of Queens Boulevard above the east abutment
- 1-4” PVC FDNY conduit runs E-W under the south sidewalk of Queens Boulevard
- 1-4” PVC FDNY conduit runs N-S from the middle of Queens Boulevard towards the middle of the Southbound Service Road into a manhole at the east sidewalk of the Southbound Service Road
- 1-4” PVC FDNY runs E-W under the south sidewalk of Queens Boulevard to a manhole in the road at the southeast corner of the Queens Boulevard and Southbound Service Road intersection

- Unknown conduit runs from manhole in the road at the southeast corner of the Queens Boulevard and Southbound Service Road intersection to a fire alarm pole at the southeast corner of the Queens Boulevard and Southbound Service Road intersection
- 1-4” PVC FDNY conduit runs from a manhole on the north sidewalk of Queens Boulevard above the east abutment across the Queens Boulevard into a manhole on the west abutment of the Queens Boulevard and Main Street
- 1-4” PVC FDNY conduit runs from manhole on the west abutment at Queens Boulevard and Main Street to a manhole to the south corner of Northbound Service Road and Queens Boulevard intersection
- 2-3” Unknown FDNY conduits run from manhole on the south corner of Northbound Service Road and Queens Boulevard intersection to a light pole in the middle of Queens Boulevard and 84th Drive intersection and then run to a fire alarm pole on the sidewalk on the southwest side of the queens Boulevard and 84th Drive intersection
- 1-4” PVC FDNY conduit runs under the sidewalk of Queens Boulevard into a manhole at the south corner of the Queens Boulevard and Northbound Service Road intersection

FDNY near Hoover Avenue

- Unknown FDNY conduit runs E-W towards the south fascia of the Hoover Avenue bridge
- Unknown FDNY conduit runs east at the Hoover Avenue and 132nd intersection, turns towards the northeast direction, runs northwest along the Southbound Van Wyck Expressway, crosses the Van Wyck Expressway at 82nd Avenue, and continues on the Northbound Van Wyck Expressway.

A-2.6.2 New York City Police Department

NYPD near Federal Circle

- JFK emergency call box JFK #587 is located along the east shoulder of the Northbound Service Road to the right of a bus stop
- Unnumbered emergency call box is located along the west shoulder of the Van Wyck Expressway at the Exit Ramp towards the Operation Center

NYPD near Belt Parkway

- NYPD emergency call box VWE #5350 is located along the west shoulder of the Southbound Van Wyck Expressway exit ramp from Eastbound Belt Parkway
- NYPD emergency call box VWE #5351 is located along the east shoulder of the entrance ramp from Nassau Expressway to Northbound Van Wyck Expressway
- NYPD emergency call box BPW #5311 is located along the south shoulder of the Eastbound Belt Parkway shoulder between 134th Place and 135th Street
- NYPD emergency call box BPW #5312 is located along the north shoulder of the Westbound Belt Parkway shoulder between 134th Place and 135th Street

- NYPD emergency call box VWE #5340 is located along the east shoulder of the Southbound Service Road exit ramp towards Westbound Belt Parkway
- NYPD emergency call box VWE #5342 is located along the east shoulder of the Northbound Service Road between the Exit 1B ramp and Exit 2 ramp

NYPD near Rockaway Boulevard

- NYPD emergency call box VWE #5345 is located along the east shoulder of the Northbound Van Wyck Expressway, just north of the Exit 2 ramp

NYPD near Liberty Avenue

- NYPD emergency call box VWE #5358 is located south of the Southbound Service Road and 105th intersection along the west shoulder of the Southbound Van Wyck Expressway
- NYPD emergency call box VWE #5359 is located north of the Northbound Service Road and 106th intersection along the east shoulder of the Northbound Van Wyck Expressway

NYPD near 101st Avenue

- NYPD emergency call box VWE #5360 is located south of the Southbound Service Road and 97th intersection along the west shoulder of the Southbound Van Wyck Expressway
- NYPD emergency call box VWE #5361 is located north of the Northbound Service Road and 97th intersection along the east shoulder of the Northbound Van Wyck Expressway

NYPD near Archer Avenue

- NYPD emergency call box VWE #5362 is located south of the Southbound Service Road and 90th intersection along the west shoulder of the Southbound Van Wyck Expressway
- NYPD emergency call box VWE #5363 is located north of the Northbound Service Road and 90th intersection along the east shoulder of the Northbound Van Wyck Expressway

A-2.7 Utility Service Connections

This section is not used.

A-3 UTILITY RELOCATIONS BY OTHERS

The Design-Builder shall be aware that all time frames for utility relocation work presented in this section are approximate and are predicated on the assumption of a single relocation to the new, permanent utility locations. Should the Design-Builder's design, means and methods require interim utility relocations, the Design-Builder shall be responsible for coordinating with the affected utilities to determine the time frames required for any and all interim relocations.

A-3.1 Telecommunications

A-3.1.1 Verizon Communications Incorporated
Refer to Verizon Communications Incorporation NYSDOT Preliminary HC-140 utility work agreement found in Appendix C of this document.

A-3.1.2 Charter Communications, Inc.
Refer to Charter Communications Incorporation's NYSDOT Preliminary HC-140 utility work agreement found in Appendix C of this document.

A-3.2 Electric

A-3.2.1 Consolidated Edison, Inc.
Refer to Consolidated Edison, Incorporation's NYSDOT Preliminary HC-140 utility work agreement found in Appendix C of this document.

A-3.2.2 Port Authority of New York and New Jersey
Refer to Port Authority of New York and New Jersey's NYSDOT Preliminary HC-140 utility work agreement found in Appendix C of this document.

A-3.3 Natural Gas

A-3.3.1 National Grid US
Refer to National Grid US's NYSDOT Preliminary HC-140 utility work agreement found in Appendix C of this document.

A-3.4 Water

A-3.4.1 Local Water Company
Describe any water facility relocations to be performed by the local water company, including time frames and other requirements.

A-3.4.2 Other Utilities
A-3.4.3 Fire Department of the City of New York - Communications
Describe any relocations of other utilities to be performed by the utility(ies), including time frames and other requirements.

A-3.4.4 New York City Police Department
Refer to New York City Police Department's NYSDOT Preliminary HC-140 utility work agreement found in Appendix C of this document.

A-4 UTILITY RELOCATIONS BY THE DESIGN-BUILDER

The Design-Builder shall be responsible for coordinating the relocation of all utility services which are impacted by the Project, including the maintenance and protection of those utilities not listed below, participation in all meetings, preparing minutes of meetings, performing plan

reviews, ground preparation, performing survey and markout required for utility relocations as well as excavating test pits as necessary to facilitate resolution of design utility conflict tables to final conflict resolution tables. The following sections describe the anticipated Work to be performed and coordination required with each utility owner.

A-4.1 Telecommunications

A-4.1.1 Verizon Communications Incorporated

Refer to Verizon Communications Incorporation NYSDOT Preliminary HC-140 utility work agreement found in Appendix C of this document.

A-4.1.2 Charter Communications, Inc.

Refer to Charter Communications Incorporation's NYSDOT Preliminary HC-140 utility work agreement found in Appendix C of this document.

A-4.2 Electric

A-4.2.1 Consolidated Edison Incorporated

Refer to Consolidated Edison, Incorporation's NYSDOT Preliminary HC-140 utility work agreement found in Appendix C of this document.

A-4.2.2 Port Authority of New York and New Jersey

Refer to Port Authority of New York and New Jersey's NYSDOT Preliminary HC-140 utility work agreement found in Appendix C of this document.

A-4.3 Natural Gas

A-4.3.1 National Grid

Refer to National Grid US's NYSDOT Preliminary HC-140 utility work agreement found in Appendix C of this document.

A-4.4 Water Mains

A-4.4.1 New York City Department of Environmental Protection

Refer to New York City Department of Environmental Protection's NYSDOT Preliminary HC-140 utility work agreement found in Appendix C of this document.

A-4.5 Storm and Sanitary

A-4.5.1 New York City Department of Environmental Protection

Refer to New York City Department of Environmental Protection's NYSDOT Preliminary HC-140 utility work agreement found in Appendix C of this document.

A-4.6 Other Utilities

A-4.6.1 Fire Department of the City of New York - Communications

Refer to Fire Department of the City of New York's NYSDOT Preliminary HC-140 utility work agreement found in Appendix C of this document.

A-5 DESIGN BUILD UTILITY DOCUMENTS

The Design-Builder shall provide documentation regarding the coordination and locations of the impacted utilities to the Department's Project Manager, and the Department's Project Manager shall coordinate with Regional Utility Engineer. The required documents are: utility conflict/resolution table with proposed locations, utility plans, and Special Note of Utility Coordination.

The documentation shall be used to secure the Final DB Utility Work Agreements (DB-HC140) with each impacted utility company and any required Municipal Agreements.

APPENDIX B NON-PARTICIPATING AGENCIES

The Design-Builder shall be aware that the following agencies which are not participants in the One-Call System may have facilities located within the project limits:

- The New York State Department of Transportation
- Metropolitan Transportation Authority
- New York City Department of Transportation

Contact information, known facilities, and required lead times are indicated in the Table B-1 on the following page. The Design-Builder shall contact each of these agencies to obtain mark-outs of their facilities.

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Table B - 1: Contact Information for Non-Participating Agencies

Agency	Callout Contact	Contact PH#	Contact E-mail	Known Facilities	Required Lead Time for mark out
New York State Department of Transportation	Asfak B. Shaikh, P.E.	718-482-4768	asfak.shaikh@dot.ny.gov	NYSDOT ITS	7 days minimum
Metropolitan Transportation Authority (MTA)	Jesse Heimowitz	718-558-3764	jheimow@lirr.org	Long Island Railroad	7 days minimum
New York State Department of Transportation	Edward Campbell	212-839-9643	ecampbell@dot.nyc.gov	Streetlights, Traffic Signals	7 days minimum

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APPENDIX C PRELIMINARY DB UTILITY WORK AGREEMENTS

The work described in this Appendix C (if provided) includes known relocation(s) and other utility work required to remove known interference(s) with Project elements. The Design-Builder shall design, locate, and construct the Work in accordance with utility provider(s) details as detailed in this Appendix C (if provided). The Design-Builder shall consider providing, where possible and if applicable, a common trench in which to construct the utilities in accordance with the utility providers' requirements. The Design-Builder shall determine the location of any and all trenches relevant to the requirements of the Design-Builder's design, as applicable. The Design-Builder shall include in its Baseline Project Schedule appropriate time as required for all utilities work. The Design-Builder shall comply with the Work Zone Traffic Control requirements contained in Part 3 of the Contract Documents at all times when performing the work described herein.

Any Agreements provided in this Appendix are Preliminary and are between the Department and utility owner(s). The Design-Builder is expected to coordinate with any and all affected utility owner(s) and the Department to negotiate and execute 3-party Final Utility Work Agreements between the Design-Builder, utility owner(s), and Department.

APPENDIX C PRELIMINARY DB UTILITY WORK AGREEMENTS

The work described in this Appendix C (if provided) includes known relocation(s) and other utility work required to remove known interference(s) with Project elements. The Design-Builder shall design, locate, and construct the Work in accordance with utility provider(s) details as detailed in this Appendix C (if provided). The Design-Builder shall consider providing, where possible and if applicable, a common trench in which to construct the utilities in accordance with the utility providers' requirements. The Design-Builder shall determine the location of any and all trenches relevant to the requirements of the Design-Builder's design, as applicable. The Design-Builder shall include in its Baseline Project Schedule appropriate time as required for all utilities work. The Design-Builder shall comply with the Work Zone Traffic Control requirements contained in Part 3 of the Contract Documents at all times when performing the work described herein.

Any Agreements provided in this Appendix are Preliminary and are between the Department and utility owner(s). The Design-Builder is expected to coordinate with any and all affected utility owner(s) and the Department to negotiate and execute 3-party Final Utility Work Agreements between the Design-Builder, utility owner(s), and Department.

Since the construction, reconstruction, or maintenance of the transportation project described below, identified as:

Project Identification No.:X735.84	F.A. Project No.:
ROW Declaration No.:	Map Nos.:
Parcel Nos.:	County of: Queens
Contract No.: D900053	

Project Description: Van Wyck Expressway Capacity and Access Improvement to JFK Airport (Contract 3)

necessitates the adjustment of utility facilities as hereinafter described (the "Project"), the owner, **Verizon New York Incorporated**, of said facilities herewith agrees with the State of New York acting through the Commissioner of Transportation that this agreement shall apply to the accommodation of these utility facilities. Any adjustment of said facilities will be accomplished under the terms of this agreement, in accordance with the Rules and Regulations Governing the Accommodation of Utilities within the State Highway Right-of-Way and in accordance with the contract plans, specifications, proposal, amendment(s) or change order(s). The work described herein is subject to change pending the design details and schedule developed by New York State Department of Transportation's design-build contractor. The said contractor will coordinate with the owner in developing a Final Utility Work Agreement to be entered by the owner, the contractor and New York State Department of Transportation utilizing the fixed price lump sum shown on page 1.

The final utility work agreement shall be consistent with the Design-Builder's proposal and their reuse/replacement of super structure elements.

The existing **Verizon New York Incorporated** facilities are to be abandoned, removed, protected/supported or replaced as defined in this agreement.

I. Existing Facilities

The existing Verizon New York Incorporated facilities presently located in Queens County; New York within the New York State Right of Way as shown on the plans for the proposed transportation project are to be adjusted as follows for a fixed price lump sum: $115,851.37

Queens

Van Wyck Expressway (I-678) between Exit 1 ramp and 135th Avenue

Existing Facilities:

- Abandoned DL 198' 4-4" multiple tile ducts (MTD) run N-S along the west side of entrance ramp from Nassau Expressway to Northbound Van Wyck Expressway and continue north along the east edge of Northbound Van Wyck Expressway and connect to abandoned Verizon Manhole-C.

- Abandoned DL 94' 2-3.5" transite ducts run north from Verizon Manhole-C towards the east abutment of BIN 1075630 Nassau Expressway over Van Wyck Mainline and are dead ended just south of BIN 1076499 Van Wyck Expressway over South Conduit Avenue Bridge.

- Abandoned DL 769' 2-3.5" transite ducts run north from NYPD manhole on west median of the Van Wyck alignment and cross over to the east side of Van Wyck continuing north in fill, then in the east side concrete sidewalk of BIN 1076499, 1076489, 1055619 Van Wyck over South Conduit, Belt Parkway, North Conduit Ave Bridges and connects to Verizon Manhole-345.

- Abandoned 4-4" multiple tile ducts (MTD), run E-W under the Van Wyck Expressway between Verizon Manhole-345 and Verizon Manhole-344.

NYSDOT Design-Builder Scope:

a. **The NYSDOT Design-Builder shall permanently remove approximately 450' of the existing abandoned DL 759' 2-3.5" transite ducts located in the east sidewalk of the existing three (3) arch bridges (BIN 1076499, 1076489, 1055619) along the Van Wyck over South Conduit, Belt Parkway, North Conduit Ave.**

b. **The NYSDOT Design-Builder shall permanently remove any encountered existing abandoned 2-3.5" transite ducts located on the south approach to the proposed bridge as necessary to construct the south approach roadways and the center pier for the Nassau Expressway bridge structure (BIN 1075630) over the VWE.**

c. **The NYSDOT Design-Builder shall permanently remove existing Manhole 345, located towards the east sidewalk (northeast approach) of the Van Wyck Expressway Bridge over Belt Parkway.**

d. **The NYSDOT Design-Builder shall permanently remove, as needed, approximately 40' of the existing 4-4" MTD ducts running E-W north of the Van Wyck Expressway Bridge over Belt Parkway. These abandoned ducts are to be removed as needed during roadway/retaining wall construction.**

e. **Removal of the existing transite materials shall follow the project hazardous material specifications.**

f. **Disposal of any existing cables found in the existing ducts shall be coordinated with Verizon New York Incorporated.**

Southbound Service Road between 101st Avenue and 94th Avenue

Existing Facilities:

- Overhead cables run N-S along the west side of Southbound Service Road from 97th Avenue to south of 95th Avenue on the west side of Southbound Service Road.
- Three (3) utility poles are located along the west sidewalk of the Southbound Service Road between 97th Avenue and 95th Avenue.
- Overhead cables are also mounted on an existing Con Edison pole located along the west sidewalk of the SB Service Road between 95th Avenue and 97th Avenue.

Verizon New York Inc. Scope:

a. **Verizon New York Incorporated shall install three (3) new permanent utility poles along the new west sidewalk of the Southbound Service Road from 97th Avenue to 95th Avenue.**

b. **Verizon New York Incorporated shall relocate existing cables to the newly installed Verizon and Con Edison utility poles along the sidewalk between 97th Avenue and 95th Avenue.**

c. **Verizon New York Incorporated shall be responsible for supplying and installing new utility poles, removal and disposal of existing poles, all cable splicing and testing of the new system.**

d. **Cable and pole relocations shall also be coordinated with Charter (Spectrum) and Con Edison as they have cables mounted on poles owned by Verizon New York Incorporated, and Verizon New York Incorporated have cables mounted on poles owned by Con Edison.**

e. **Anticipated timeframe for new pole installation, aerial cable installation and splicing, removal of existing poles: ninety (90) days.**

NYSDOT Design-Builder Scope:

a. **The Design-Builder shall support, protect and maintain Verizon New York Incorporated poles and aerial facilities along the west side of the Southbound Service Road between 97th Avenue and 95th during installation of new curb, sidewalk, hydrants, catch basins, chutes, roadway, etc.**

b. **The Design-Builder shall coordinate with Verizon New York Incorporated to schedule pole and cable relocation work to be done by Verizon forces.**

c. **The Design-Builder shall also coordinate jointly with Con Edison, Charter (Spectrum) and Verizon New York Incorporated when cables owned by Verizon New York Incorporated are mounted on poles requiring relocation by Con Edison or Charter (Spectrum).**

d. **The Design-Builder shall provide at least two (2) weeks notice to Verizon New York Incorporated prior to beginning construction activities requiring the presence of field inspection personnel and crews for relocation work.**

II. **Financial Responsibility** (check appropriate boxes):

☒ The facilities to be adjusted under the terms of this agreement are subject to Section 52 of the State Highway Law, and the cost of this adjustment is the sole responsibility of the owner.

☐ Subdivision 24 of Section 10 of the State Highway Law enables the Commissioner of Transportation to provide at the expense of the State, for adjustment to a municipally owned utility when such work is necessary as a result of State highway work. (Municipal Agreement required.)

☐ Subdivision 24-b of Section 10 of the State Highway Law enables the Commissioner of Transportation to participate in the necessary expenses incurred for adjustment of privately, publicly or cooperatively owned facilities, municipal utility facilities, or facilities of a corporation organized pursuant to the State Transportation Corporations Law. (Privately Owned Property Agreement or Reimbursement Agreement required.)

☐ Subdivision 27 of Section 10 of the State Highway Law enables the Commissioner of Transportation upon the request of a municipality, to perform for and at the expense of such municipality specified work to be included within a State-let contract. (Betterment Resolution required.)

☒ Subdivision 33 of Section 10 of the State Highway Law enables the Commissioner of Transportation, upon the request of a public utility corporation, to perform for and at the expense of such public utility corporation specified work to be included within a State-let contract.

☐ Subdivision 13 of Section 30 of the State Highway Law enables the Commissioner of Transportation to enter into an agreement to reimburse with public funds the owner for necessary expenses incurred as a result of this adjustment, or to replace the facilities in kind.

☐ The owner will develop and keep a record of costs in accordance with the New York State Department of Transportation (NYSDOT) Reimbursement Procedures, and when federal funds participate in the cost, the Federal Highway Administration (FHWA) Federal-Aid Policy Guide Part 645, or as indicated below:

_____

_____

_____

III. **Physical Adjustment Method** (check appropriate boxes):

The actual adjustment or design engineering will be performed by the following method (s):

☒ Contract let by the Commissioner.

☐ Contract let by the Owner, (check applicable statement, i.e., a or b)

☐ a. Best Interests of State.
☐ b. Utility not sufficiently staffed or equipped.

☒ By the Owner's forces. (For Inspection Work)

IV. **Betterment, Salvage, and Depreciation Credits Due the Project** (check appropriate boxes):

☒ There will be no extension of service life, improved capacity nor any other betterment of the facility (as defined by the NYSDOT Utility Reimbursement Procedures and by FHWA Federal-Aid Policy Guide Part 645) as a result of the adjustments made pursuant to this agreement.

☐ There is betterment described as follows:

☐ The owner will not claim reimbursement for that betterment portion of the work but will duly account for it as required by applicable NYSDOT and FHWA procedures.

☐ The owner hereby agrees to deposit with the Comptroller of the State of New York the amount of $_____ to cover the cost of the retrofit options as described above.

☐ The owner agrees to comply with the requirements of the NYSDOT Utility Reimbursement Procedure and FHWA Federal-Aid Policy Guide Part 645 with the respect to salvage and depreciation credits when applicable.

V. **General Covenants**

The owner hereby agrees to accept full title and responsibility for the adjusted facility in writing upon satisfactory completion of the work. Such acceptance will acknowledge the owner's responsibility to maintain the facility in accordance with all applicable codes, standards and regulations, including his obligation, where applicable, to remove any or all of the facility from the highway at the order of the Commissioner of Transportation, all in accordance with the Rules and Regulations Governing the Accommodation of Utilities within the State Highway Right-of-Way. All compensable claims covered by this agreement will be included in one of the following:

A. Privately Owned Property Agreement executed prior to the performance of the work.
B. Municipal Agreement executed prior to performance of the work.
C. Reimbursement Agreement executed prior to performance of the work.
D. Such other agreement as approved by NYSDOT Office of Legal Affairs.

VI. **References**

The following documents are herewith incorporated in this agreement be reference (check appropriate boxes)

☐ Federal Highway Administration's Federal-Aid Policy Guide Part 645.

☒ Contract documents: Contract number D900053
PIN X735.84
Plan sheets No. UTL-01 to UTL-40

☐ Owner's plan sheets _____

☐ Owner's estimate sheets form No. _____

☐ Resolution dated _____, by _____

- ☐ Granting the State of New York authority to perform the adjustment for the owner.
- ☐ Agreeing to maintain facilities adjusted via State-let contract.
- ☐ Authorizing deposit of funds by the owner.

☒ Certification by the owner or his agent that he has the legal authority to enter into this agreement.

Robert Connolly	Robert Connolly	Director	07/20/2021
(Print/Type Name) Utility Owner or Agent	(Signature)	Title	Date

	Main Office Utilities Engineer	
For NYSDOT Commissioner of Transportation	Title	Date

Since the construction, reconstruction, or maintenance of the transportation project described below, identified as:

Project Identification No.:X735.84	F.A. Project No.:
ROW Declaration No.:	Map Nos.:
Parcel Nos.:	County of: Queens
Contract No.: D900053	

Project Description: Van Wyck Expressway Capacity and Access Improvement to JFK Airport (Contract 3)

necessitates the adjustment of utility facilities as hereinafter described (the "Project"), the owner, **New York City Police Department (NYPD)**, of said facilities herewith agrees with the State of New York acting through the Commissioner of Transportation that this agreement shall apply to the accommodation of these utility facilities. Any adjustment of said facilities will be accomplished under the terms of this agreement, in accordance with the Rules and Regulations Governing the Accommodation of Utilities within the State Highway Right-of-Way and in accordance with the contract plans, specifications, proposal, amendment(s) or change order(s). The work described herein is subject to change pending the design details and schedule developed by New York State Department of Transportation's design-build contractor. The said contractor will coordinate with the owner in developing a Final Utility Work Agreement to be entered by the owner, the contractor, and New York State Department of Transportation.

I. Existing Facilities

The existing New York City Police Department facilities presently located in Queens County; New York within the New York State Right of Way as shown on the plans for the proposed transportation project are to be adjusted as follows:

Queens

Northbound Service Road between 130th Place and Cargo Service Road

Existing Facilities:

- A JFK emergency call box JFK #587 is located along the east shoulder of the Northbound Service Road to the right of a bus stop.

All NYPD facilities listed above are unaffected by the reconstruction of the Van Wyck Expressway.

Northbound Service Road between 150th Avenue and Bergen Road

Existing Facilities:

- An unnumbered emergency call box is located along the west shoulder of the Van Wyck Expressway at the Exit Ramp towards the Operation Center.

All NYPD facilities listed above are unaffected by the reconstruction of the Van Wyck Expressway.

Van Wyck Expressway (I-678) between 150th Place and Belt Parkway

Existing Facilities:

- A NYPD emergency call box VWE #5350 is located along the west shoulder of the Southbound Van Wyck Expressway exit ramp from Eastbound Belt Parkway.
- A NYPD emergency call box VWE #5351 is located along the east shoulder of the entrance ramp from Nassau Expressway to Northbound Van Wyck Expressway.

NYSDOT Design-Builder Scope:

a. **The NYSDOT Design-Builder shall call Detective Christopher Decker at (646) 235-0973 30 days prior to construction for NYPD to remove their existing callbox VWE #5351.**

b. **The NYSDOT Design-Builder shall call Detective Christopher Decker at (646) 235-0973 after construction is completed for NYPD to replace the removed call box.**

NYPD Scope:

a. **NYPD shall remove existing callbox VWE #5351 before the construction begins.**

b. **NYPD shall install new callbox, if required, to replace callbox VWE #5351 after the construction is completed.**

Belt Parkway between 134th Place and 135th Street

Existing Facilities:

- A NYPD emergency call box BPW #5311 is located along the south shoulder of the Eastbound Belt Parkway shoulder between 134th Place and 135th Street.
- A NYPD emergency call box BPW #5312 is located along the north shoulder of the Westbound Belt Parkway shoulder between 134th Place and 135th Street.

All NYPD facilities listed above are unaffected by the reconstruction of the Van Wyck Expressway.

Van Wyck Expressway (I-678) between Belt Parkway and 133rd Avenue

Existing Facilities:

- A NYPD emergency call box VWE #5340 is located along the east shoulder of the Southbound Service Road exit ramp towards Westbound Belt Parkway.
- A NYPD emergency call box VWE #5342 is located along the east shoulder of the Northbound Service Road between the Exit 1B ramp and Exit 2 ramp.

All NYPD facilities listed above are unaffected by the reconstruction of the Van Wyck Expressway.

Van Wyck Expressway (I-678) between Sutter Ave and Rockaway Boulevard

Existing Facilities:

- A NYPD emergency call box VWE #5345 is located along the east shoulder of the Northbound Van Wyck Expressway, just north of the Exit 2 ramp.

NYSDOT Design-Builder Scope:

a. **The NYSDOT Design-Builder shall call Detective Christopher Decker at (646) 235-0973 30 days prior to construction for NYPD to remove their existing callbox VWE #5345.**

b. **The NYSDOT Design-Builder shall call Detective Christopher Decker at (646) 235-0973 after construction is completed for NYPD to replace the removed call box.**

NYPD Scope:

a. **NYPD shall remove existing callbox VWE #5345 before the construction begins.**

b. **NYPD shall install new callbox, if required, to replace callbox VWE #5345 after the construction is completed.**

Van Wyck Expressway (I-678) between 106th and 105th Avenue

Existing Facilities:

- A NYPD emergency call box VWE #5358 is located south of the Southbound Service Road and 105th intersection along the west shoulder of the Southbound Van Wyck Expressway.
- A NYPD emergency call box VWE #5359 is located north of the Northbound Service Road and 106th intersection along the east shoulder of the Northbound Van Wyck Expressway.

NYSDOT Design-Builder Scope:

a. **The NYSDOT Design-Builder shall call Detective Christopher Decker at (646) 235-0973 30 days prior to construction for NYPD to remove their existing callboxes VWE #5358 and VWE #5359.**

b. **The NYSDOT Design-Builder shall call Detective Christopher Decker at (646) 235-0973 after construction is completed for NYPD to replace the removed call boxes.**

NYPD Scope:

a. **NYPD shall remove existing callboxes VWE #5358 and VWE #5359 before the construction begins.**

b. **NYPD shall install new callbox, if required, to replace callboxes VWE #5358 and VWE #5359 after the construction is completed.**

Van Wyck Expressway (I-678) at 97th Avenue

Existing Facilities:

- A NYPD emergency call box VWE #5360 is located south of the Southbound Service Road and 97th intersection along the west shoulder of the Southbound Van Wyck Expressway.
- A NYPD emergency call box VWE #5361 is located north of the Northbound Service Road and 97th intersection along the east shoulder of the Northbound Van Wyck Expressway.

NYSDOT Design-Builder Scope:

a. **The NYSDOT Design-Builder shall call Detective Christopher Decker at (646) 235-0973 30 days prior to construction for NYPD to remove their existing callboxes VWE #5360 and VWE #5361.**

b. **The NYSDOT Design-Builder shall call Detective Christopher Decker at (646) 235-0973 after construction is completed for NYPD to replace the removed call boxes.**

NYPD Scope:

a. **NYPD shall remove existing callboxes VWE #5360 and VWE #5361 before the construction begins.**

b. **NYPD shall install new callbox, if required, to replace callboxes VWE #5360 and VWE #5361 after the construction is completed.**

Van Wyck Expressway (I-678) at 90th Avenue

Existing Facilities:

- A NYPD emergency call box VWE #5362 is located south of the Southbound Service Road and 90th intersection along the west shoulder of the Southbound Van Wyck Expressway.
- A NYPD emergency call box VWE #5363 is located north of the Northbound Service Road and 90th intersection along the east shoulder of the Northbound Van Wyck Expressway.

NYSDOT Design-Builder Scope:

c. **The NYSDOT Design-Builder shall call Detective Christopher Decker at (646) 235-0973 30 days prior to construction for NYPD to remove their existing callboxes VWE #5362 and VWE #5363.**

d. **The NYSDOT Design-Builder shall call Detective Christopher Decker at (646) 235-0973 after construction is completed for NYPD to replace the removed call boxes.**

NYPD Scope:

c. **NYPD shall remove existing callboxes VWE #5362 and VWE #5363 before the construction begins.**

d. **NYPD shall install new callbox, if required, to replace callboxes VWE #5362 and VWE #5363 after the construction is completed.**

Payment ... no cost to NYSDOT

II. **Financial Responsibility** (check appropriate boxes):

☐ The facilities to be adjusted under the terms of this agreement are subject to Section 52 of the State Highway Law, and the cost of this adjustment is the sole responsibility of the owner.

☐ Subdivision 24 of Section 10 of the State Highway Law enables the Commissioner of Transportation to provide at the expense of the State, for adjustment to a municipally owned utility when such work is necessary as a result of State highway work. (Municipal Agreement required.)

☒ Subdivision 24-b of Section 10 of the State Highway Law enables the Commissioner of Transportation to participate in the necessary expenses incurred for adjustment of privately, publicly or cooperatively owned facilities, municipal utility facilities, or facilities of a corporation organized pursuant to the State Transportation Corporations Law. (Privately Owned Property Agreement or Reimbursement Agreement required.)

☐ Subdivision 27 of Section 10 of the State Highway Law enables the Commissioner of Transportation upon the request of a municipality, to perform for and at the expense of such municipality specified work to be included within a State-let contract. (Betterment Resolution required.)

☐ Subdivision 33 of Section 10 of the State Highway Law enables the Commissioner of Transportation, upon the request of a public utility corporation, to perform for and at the expense of such public utility corporation specified work to be included within a State-let contract.

☐ Subdivision 13 of Section 30 of the State Highway Law enables the Commissioner of Transportation to enter into an agreement to reimburse with public funds the owner for necessary expenses incurred as a result of this adjustment, or to replace the facilities in kind.

☐ The owner will develop and keep a record of costs in accordance with the New York State Department of Transportation (NYSDOT) Reimbursement Procedures, and when federal funds participate in the cost, the Federal Highway Administration (FHWA) Federal-Aid Policy Guide Part 645, or as indicated below:

_____

_____

_____

III. **Physical Adjustment Method** (check appropriate boxes):

The actual adjustment or design engineering will be performed by the following method (s):

☒ Contract let by the Commissioner.

☐ Contract let by the Owner, (check applicable statement, i.e., a or b)

☐ a. Best Interests of State.
☐ b. Utility not sufficiently staffed or equipped.

☒ By the Owner's forces. (For Inspection and Relocation Work)

IV. **Betterment, Salvage, and Depreciation Credits Due the Project** (check appropriate boxes):

☒ There will be no extension of service life, improved capacity nor any other betterment of the facility (as defined by the NYSDOT Utility Reimbursement Procedures and by FHWA Federal-Aid Policy Guide Part 645) as a result of the adjustments made pursuant to this agreement.

☐ There is betterment described as follows:

☐ The owner will not claim reimbursement for that betterment portion of the work but will duly account for it as required by applicable NYSDOT and FHWA procedures.

☐ The owner hereby agrees to deposit with the Comptroller of the State of New York the amount of $_____ to cover the cost of the betterment as described above.

☐ The owner agrees to comply with the requirements of the NYSDOT Utility Reimbursement Procedure and FHWA Federal-Aid Policy Guide Part 645 with the respect to salvage and depreciation credits when applicable.

V. **General Covenants**

The owner hereby agrees to accept full title and responsibility for the adjusted facility in writing upon satisfactory completion of the work. Such acceptance will acknowledge the owner's responsibility to maintain the facility in accordance with all applicable codes, standards and regulations, including his obligation, where applicable, to remove any or all of the facility from the highway at the order of the Commissioner of Transportation, all in accordance with the Rules and Regulations Governing the Accommodation of Utilities within the State Highway Right-of-Way. All compensable claims covered by this agreement will be included in one of the following:

A. Privately Owned Property Agreement executed prior to the performance of the work.
B. Municipal Agreement executed prior to performance of the work.
C. Reimbursement Agreement executed prior to performance of the work.
D. Such other agreement as approved by NYSDOT Office of Legal Affairs.

VI. References

The following documents are herewith incorporated in this agreement be reference (check appropriate boxes)

☐ Federal Highway Administration's Federal-Aid Policy Guide Part 645.

☒ Contract documents: Contract number D900053
PIN X735.84
Plan sheets No. UTL-01 to UTL-38

☐ Owner's plan sheets _____

☐ Owner's estimate sheets form No._____

☐ Resolution dated _____, by _____

- ☐ Granting the State of New York authority to perform the adjustment for the owner.
- ☐ Agreeing to maintain facilities adjusted via State-let contract.
- ☐ Authorizing deposit of funds by the owner.

☐ Certification by the owner or his agent that he has the legal authority to enter into this agreement.

DET. DECKER Det. Decker Detective 4/7/21
(Print/Type Name) Utility Owner or Agent (Signature) Title Date

Main Office Utilities Engineer
For NYSDOT Commissioner of Transportation Title Date

#1 As stated, NYPD will remove call Boxes when directed by Contractor. 30 Days Notice.
Det. Decker

NEW YORK STATE DEPARTMENT OF TRANSPORTATION
PRELIMINARY UTILITY WORK AGREEMENT – CHARTER COMMUNICATIONS, INC. (SPECTRUM)
DESIGN-BUILD CONTRACT

Since the construction, reconstruction, or maintenance of the transportation project described below, identified as:

Project Identification No.:X735.84	F.A. Project No.:
ROW Declaration No.:	Map Nos.:
Parcel Nos.:	County of: Queens
Contract No.: D900053	

Project Description: Van Wyck Expressway Capacity and Access Improvement to JFK Airport (Contract 3)

necessitates the adjustment of utility facilities as hereinafter described (the "Project"), the owner, **Charter (Spectrum) Communications, Incorporated ("Charter (Spectrum)" or "Owner"),** of said facilities herewith agrees with the State of New York acting through the Commissioner of Transportation that this agreement shall apply to the accommodation of these utility facilities. Any adjustment of said facilities will be accomplished under the terms of this agreement, in accordance with the Rules and Regulations Governing the Accommodation of Utilities within the State Highway Right-of-Way and in accordance with the contract plans, specifications, proposal, amendment(s) or change order(s). The work described herein is subject to change pending the design details and schedule developed by New York State Department of Transportation's design-build contractor. The said contractor will coordinate with the owner in developing a Final Utility Work Agreement to be entered by the owner, the contractor and New York State Department of Transportation.

The final utility work agreement shall be consistent with the Design-Builder's proposal and their reuse/replacement of super structure elements.

The existing **Charter (Spectrum)** facilities are to be abandoned, removed, protected/supported or replaced as defined in this agreement.

I. Existing Facilities

The existing Charter (Spectrum) Communications Incorporated facilities presently located in Queens County; New York within the New York State Right of Way as shown on the plans for the transportation project are to be adjusted as follows for a fixed price lump sum: $0

Queens

Southbound Service Road between 101st Avenue and Atlantic/94th Avenue

Existing Facilities:

- Overhead cables run N-S along the west sidewalk of the Southbound Service Road from the south of 97th Avenue to the south of 95th Avenue.
- 2 utility poles (NT-1 & NT-0) along the west sidewalk of Southbound Service Road between 97th Avenue and 101st Avenue.
- Overhead cables are also mounted on existing poles located along the west sidewalk of the SB Service Road between 95th Avenue and 101st Avenue that are owned by either Verizon or Con Edison.

Charter (Spectrum) Scope:

a. **Charter (Spectrum) shall temporarily support, as needed, the existing aerial cables running between the utility poles from 101st Avenue to 95th Avenue.**

b. **Charter (Spectrum) shall relocate existing cables to newly installed utility poles along the sidewalk between 101st Avenue and 95th Avenue.**

c. **Charter (Spectrum) shall be responsible for supplying and installing new utility poles, pole removals, disposing of poles, all fiber splicing, energize/de-energizing, supplying and installing fiber optic cable, and testing of the new system.**

d. **Cable and pole relocations shall also be coordinated with Con Edison and Verizon when relocating Charter (Spectrum) cables mounted on poles owned by Con Edison and Verizon.**

e. **Anticipated Timeframe for removal of existing poles, installation of proposed poles, relocation of cables and equipment mounted on poles, and aerial line installation, splicing, de-energizing, and energizing: 1 week.**

NYSDOT Design-Builder Scope:

a. **The NYSDOT Design-Builder shall coordinate with Charter (Spectrum) to schedule cable relocation, pole relocation (NT-1 and NT-0), and any temporary relocation work to be done by Charter forces.**

b. **Cable and pole relocations shall also be coordinated with Con Edison and Verizon when relocating Charter (Spectrum) cables mounted on poles owned by Con Edison and Verizon.**

c. **The NYSDOT Design-Builder shall provide at least 30 days' notice to Charter (Spectrum) prior to beginning any construction activities.**

II. **Financial Responsibility** (check appropriate boxes):

☒ The facilities to be adjusted under the terms of this agreement are subject to Section 52 of the State Highway Law, and the cost of this adjustment is the sole responsibility of the owner.

☐ Subdivision 24 of Section 10 of the State Highway Law enables the Commissioner of Transportation to provide at the expense of the State, for adjustment to a municipally owned utility when such work is necessary as a result of State highway work. (Municipal Agreement required.)

☐ Subdivision 24-b of Section 10 of the State Highway Law enables the Commissioner of Transportation to participate in the necessary expenses incurred for adjustment of privately, publicly or cooperatively owned facilities, municipal utility facilities, or facilities of a corporation organized pursuant to the State Transportation Corporations Law. (Privately Owned Property Agreement or Reimbursement Agreement required.)

☐ Subdivision 27 of Section 10 of the State Highway Law enables the Commissioner of Transportation upon the request of a municipality, to perform for and at the expense of such municipality specified work to be included within a State-let contract. (Betterment Resolution required.)

☒ Subdivision 33 of Section 10 of the State Highway Law enables the Commissioner of Transportation, upon the request of a public utility corporation, to perform for and at the expense of such public utility corporation specified work to be included within a State-let contract.

☐ Subdivision 13 of Section 30 of the State Highway Law enables the Commissioner of Transportation to enter into an agreement to reimburse with public funds the owner for necessary expenses incurred as a result of this adjustment, or to replace the facilities in kind.

☐ The owner will develop and keep a record of costs in accordance with the New York State Department of Transportation (NYSDOT) Reimbursement Procedures, and when federal funds participate in the cost, the Federal Highway Administration (FHWA) Federal-Aid Policy Guide Part 645, or as indicated below:

_____

_____

_____

III. **Physical Adjustment Method** (check appropriate boxes):

The actual adjustment or design engineering will be performed by the following method (s):

☒ Contract let by the Commissioner.

☐ Contract let by the Owner, (check applicable statement, i.e., a or b)

☐ a. Best Interests of State.
☐ b. Utility not sufficiently staffed or equipped.

☒ By the Owner's forces. (For Inspection, Cable Relocation Work, Fiber Installation, and all Splicing, Energizing/De-energizing)

IV. **Betterment, Salvage, and Depreciation Credits Due the Project** (check appropriate boxes):

☒ There will be no extension of service life, improved capacity nor any other betterment of the facility (as defined by the NYSDOT Utility Reimbursement Procedures and by FHWA Federal-Aid Policy Guide Part 645) as a result of the adjustments made pursuant to this agreement.

☐ There is betterment described as follows:

☐ The owner will not claim reimbursement for that betterment portion of the work but will duly account for it as required by applicable NYSDOT and FHWA procedures.

☐ The owner hereby agrees to deposit with the Comptroller of the State of New York the amount of $_____ to cover the cost of the betterment as described above.

☐ The owner agrees to comply with the requirements of the NYSDOT Utility Reimbursement Procedure and FHWA Federal-Aid Policy Guide Part 645 with the respect to salvage and depreciation credits when applicable.

V. **General Covenants**

The owner hereby agrees to accept full title and responsibility for the adjusted facility in writing upon satisfactory completion of the work. Such acceptance will acknowledge the owner's responsibility to maintain the facility in accordance with all applicable codes, standards and regulations, including his obligation, where applicable, to remove any or all of the facility from the highway at the order of the Commissioner of Transportation, all in accordance with the Rules and Regulations Governing the Accommodation of Utilities within the State Highway Right-of-Way. All compensable claims covered by this agreement will be included in one of the following:

A. Privately Owned Property Agreement executed prior to the performance of the work.
B. Municipal Agreement executed prior to performance of the work.

C. Reimbursement Agreement executed prior to performance of the work.
D. Such other agreement as approved by NYSDOT Office of Legal Affairs.

VI. **References**

The following documents are herewith incorporated in this agreement be reference (check appropriate boxes)

☐ Federal Highway Administration's Federal-Aid Policy Guide Part 645.

☒ Contract documents: Contract number D900053
PIN X735.84
Plan sheets No. UTL-01 to UTL-40

☐ Owner's plan sheets _____

☐ Owner's estimate sheets form No._____

☐ Resolution dated _____, by _____

☐ Granting the State of New York authority to perform the adjustment for the owner.
☐ Agreeing to maintain facilities adjusted via State-let contract.
☐ Authorizing deposit of funds by the owner.

☒ Certification by the owner or his agent that he has the legal authority to enter into this agreement.

WAJEEHA AZIZ		AVP Field Operations	7/22/2021
(Print/Type Name) Utility Owner or Agent	(Signature)	Title	Date

	Main Office Utilities Engineer	
For NYSDOT Commissioner of Transportation	Title	Date

ALIGNMENT

STYLE	NAME	DESCRIPTION
	AC	CONTROL (CENTERLINE)
	AD_P	DETOUR
	AT_P	TRANSITION CONTROL

BRIDGE

STYLE	NAME	DESCRIPTION
	BR	RAIL
	BSHT	SHEET PILING

CONTROL

STYLE	NAME	DESCRIPTION
	CB	BASELINE
	CBPR	BASELINE, PROJECTION

DRAINAGE

STYLE	NAME	DESCRIPTION
ST	DCP	CULVERT PIPE
ST	DCP_P	CULVERT PIPE (DIR)
	DDG_P	DITCH, GRASS LINED
	DDP_P	DITCH, PAVED INVERT
	DDS_P	DITCH, STONE LINED
	DFL_P	FLOW LINE
	DSSD	SLOTTED DRAIN
UD	DUD_P	UNDERDRAIN

ENVIRONMENTAL

STYLE	NAME	DESCRIPTION
S	EBLHS	BALE, STRAW
	ECT	CURTAIN, TURBIDITY
	EDMC	DAM, COFFER
	EDMEC_P	DAM, EARTHEN CHECK
	EDMGSC_P	DAM, GRAVEL BAG/SAND BAG CHECK
	EDMPC_P	DAM, PREFABRICATED CHECK
	EDMSC_P	DAM, STONE CHECK
	EFNS	FENCE, SILT
	EFNSV	FENCE, SILT & VEGETATION
	EFNV	FENCE, VEGETATION
AA	EWAA_P	WETLAND, ADJACENT AREA
	EWF	WETLAND, FEDERAL
FW SW	EWFS	WETLAND, FEDERAL AND STATE
SW	EWM	WETLAND, MITIGATION AREA
SW	EWS	WETLAND, STATE
		FILTER PROTECTION

LANDSCAPE

STYLE	NAME	DESCRIPTION
	LABL	AREA, BRUSH LINE
	LAHR	AREA, HEDGE ROW
	LAPB	AREA, PLANTING BED
	LAWA	AREA, WOODED AREA OUTLINE
	LAWE	AREA, WATERS EDGE
	LCUT_P	CUT LIMIT
	LFILL_P	FILL LIMIT
	LFNC	FENCE
	LTRC	TREE ROW, CONIFEROUS
	LTRD	TREE ROW, DECIDUOUS
	LWH	WALL, H PILE
	LWR	WALL, RETAINING
	LWS	WALL, STONE

ROW MAPPING

STYLE	NAME	DESCRIPTION
	MDL	DEED LINE
PE	MEE	EASEMENT, EXISTING
PE	MEP_P	EASEMENT, PERMANENT
APE	MEPA_P	EASEMENT, PERMANENT, APPROX.
TE	MET_P	EASEMENT, TEMPORARY
ATE	META_P	EASEMENT. TEMPORARY, APPROX.
FEE	MF_P	FEE ACQUISITION, W/ ACCESS
AFEE	MFA_P	FEE ACQUISITION, APPROXIMATE
	MFS_P	FEE ACQUISITION, SHAPE
FEE W/OA	MFWOA_P	FEE ACQUISITION, W/O ACCESS
	MHA	HISTORICAL, ACQUISITION
HB	MHB	HIGHWAY BOUNDARY
AHB	MHBA	HIGHWAY BOUNDARY, APPROX.
	MHBW	HWY BOUNDARY, FACE OF WALL
HB W/OA	MHBWOA	HIGHWAY BOUNDARY, W/O ACCESS
	MJC	JURISDICTION, CITY
	MJCY	JURISDICTION, COUNTY
	MJHD	JURISDICTION, HISTORIC DISTRICT
	MJLL	JURIS., (GREAT, MILITARY) LOT LINE
	MJN	JURISDICTION, NATION
	MJPB	JURISDICTION, PUBLIC LANDS
	MJS	JURISDICTION, STATE
	MJT	JURISDICTION, TOWN
	MJV	JURISDICTION, VILLAGE
	MPL	PROPERTY LOT LINE
	MPLA	PROPERTY LOT LINE, APPROXIMATE
	MSL	SUB LOT LINE

ROADWAY

STYLE	NAME	DESCRIPTION
CZ	RCZ_P	CLEAR ZONE
	RG	GUIDE RAIL, MISCELLANEOUS
	RGB	GUIDE RAIL, BOX BEAM
	RGBM	GUIDE RAIL, BOX BEAM, MEDIAN
	RGC	GUIDE RAIL, CABLE
	RGCB	GUIDE RAIL, CONCRETE BARRIER
	RGP_P	GUIDE POST
		IMPACT ATTENUATOR
		CONCRETE CURB SYMBOL
	RGW	GUIDE RAIL, W BEAM
	RGWM	GUIDE RAIL, W BEAM, MEDIAN
	RPB	PARKING BUMPER
	RRC	RAIL ROAD, CATENARY
3R	RRER	RAIL ROAD, 3RD RAIL
	RRPLS_P	RAIL, PHOTO, LARGE SCALE
	RRPSS	RAIL, PHOTO, SMALL SCALE
	RRS	RUMBLE STRIP
	RRSLS_P	RAIL, SURVEY, LARGE SCALE
	RRSSS	RAIL, SURVEY, SMALL SCALE

SIGNS

STYLE	NAME	DESCRIPTION
	SBLB	BILLBOARDS
	SM	MULTIPLE POST
	SSO	STRUCTURE, OVERHEAD
	SSOC	STRUCTURE, OVHD. CANTILEVER

STRIPING

STYLE	NAME	DESCRIPTION
	STB•	BROKEN LINE
	STDB•	DOUBLE BROKEN LINE
	STDL•	DOTTED LINE LONG
	STDS•	DOTTED LINE SHORT
	STFB•	FULL BARRIER LINE
	STH•	HATCH LINE
	STPB•	PARTIAL BARRIER LINE
	STRCT	ROUNDABOUT, CAT TRACKS
	STRYL	ROUNDABOUT, YIELD LINE
	STSB	STOP BAR
	STSE•	SOLID, EDGE
	STXL	X WALK, LADDER LINE
	STXLB	X WALK, LADDER BAR LINE

• = W (WHITE) OR Y (YELLOW)

TRAFFIC CONTROL

STYLE	NAME	DESCRIPTION
	TCSW	SIGNAL, SPAN WIRE

TRAFFIC WORK ZONE

		EXISTING SAND BARRIER
	TWZBT_P	BARRIER, TEMPORARY
	TWZBTWL_P	BARRIER, TEMPORARY, W/ WARNING LIGHTS
	TWZCD_P	CHANNELIZING DEVICE
	TWZPMRC_P	PAVEMENT MARKING REMOVAL OR COVERING

UTILITIES

STYLE	NAME	DESCRIPTION
C	UC	CONDUIT, UNDERGROUND
]C[	UCH	CONDUIT, HANGING
OC	UCO	CONDUIT, OVERHEAD
E	UE	ELECTRIC LINE, UNDERGROUND
]E[	UEH	ELECTRIC LINE, HANGING
OE	UEO	ELECTRIC LINE, OVERHEAD
OET	UETO	ELECTRIC TRANSMISSION, OVERHEAD
	UESS	ELECTRIC, SUBSTATIONS
FO	UFO	FIBER OPTIC, UNDERGROUND
]FO[	UFOH	FIBER OPTIC, HANGING
OFO	UFOO	FIBER OPTIC, OVERHEAD
G	UG	GAS, UNDERGROUND
]G[	UGH	GAS, HANGING
OG	UGO	GAS, OVERHEAD
IC	UIC	INFORM CABLE, UNDERGROUND
]IC[	UICH	INFORM CABLE, HANGING
O	UO	OIL LINE, UNDERGROUND
]O[	UOH	OIL LINE, HANGING
	UPBP	POLE, BRACE, PUSH BRACE
	UPGW	POLE, GUY WIRE
SA	USA	SANITARY SEWER, UNDERGROUND
]SA[	USAH	SANITARY SEWER, HANGING
SAF	USAF	SANITARY SEWER, FORCE MAIN, UGND
]SAF[	USAFH	SANITARY SEWER, FORCE MAIN, HANG
T	UT	TELEPHONE, UNDERGROUND
]T[	UTH	TELEPHONE, HANGING
OT	UTO	TELEPHONE, OVERHEAD
CTV	UTV	CABLE TV, UNDERGROUND
]CTV[	UTVH	CABLE TV, HANGING
OCTV	UTVO	CABLE TV, OVERHEAD
UU	UUU	UNKNOWN, UNDERGROUND
]UU[	UUH	UNKNOWN, HANGING
OUU	UUO	UNKNOWN, OVERHEAD
W	UW	WATER LINE, UNDERGROUND
]W[	UWH	WATER LINE, HANGING
OW	UWO	WATER LINE, OVERHEAD

NOTES:

1. THE LEGEND ILLUSTRATES MAPPING FEATURES (EXISTING AND PROPOSED).
2. FEATURES ARE SHOWN AS EITHER LINEAR (ROADWAY GUIDERAIL, ROADWAY SIDEWALK, UTILITY LINES, ETC.) OR POINT (SIGN, UTILITY POLE, ETC.).
3. FEATURES SHOWN ON THE LEGEND AS EXISTING FEATURES ALSO HAVE CORRESPONDING PROPOSED FEATURES.
4. PROPOSED FEATURE SYMBOLOGY IS IDENTICAL TO EXISTING FEATURE SYMBOLOGY EXCLUDING LINE WEIGHT. LINE WEIGHT FOR PROPOSED FEATURES IS THICKER (0.015 in ON B SIZE DRAWINGS).
5. MAPPING FEATURES NOT INCLUDED ON THE LEGEND SHEET DO NOT HAVE A UNIQUE SYMBOLOGY (SUCH AS THE PAVEMENT EDGE, PAVEMENT EDGE OF TRAVEL WAY) AND SHOULD BE LABELED ON THE PLANS.
6. FEATURES SHOWN AT THE HEAVIER WEIGHT ARE PROPOSED ONLY AND DO NOT HAVE CORRESPONDING EXISTING FEATURES.

PROJECT MANAGER
Y. SHAYER
CHECK
T. SOKOLOWSKI
DRAFTING
R. HENKE
CHECK
DESIGN
JOB MANAGER
DESIGN SUPERVISOR

FILE NAME = x73584_cph_leg_1.dgn
DATE/TIME = 21-MAY-2021 13:30
USER = nlambros

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

LEGEND, LINE AND POINT SYMBOLOGY - 1

CONTRACT NUMBER
D900053

DRAWING NO. LEG-01
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
CHECK
DRAFTING
CHECK
DESIGN
JOB MANAGER
DESIGN SUPERVISOR

ALIGNMENT

CELL	NAME	DESCRIPTION
	ACC	CENTER OF CURVATURE
	ACOGO	COGO
	ACS	CURVE TO SPIRAL
	ADPI_P	DETOUR, POINT OF INTERSECT.
	ADPL_P	DETOUR, POINT ON LINE
	AEQN	EQUATION
	AEQNAHD	EQUATION AHEAD
	AEQNBK	EQUATION BACK
	AEVT	EVENT STATION
	APC	POINT OF CURVATURE
	APCC	POINT OF COMPOUND CURVATURE
	API	POINT OF INTERSECTION
	APOB	POINT OF BEGINNING
	APOC	POINT OF CURVATURE
	APOE	POINT OF END
	APOL	POINT ON LINE
	APOS	POINT ON SPIRAL
	APOT	POINT ON TANGENT
	APOVC	POINT ON VERTICAL CURVE
	APOVT	POINT ON VERTICAL TANGENT
	APORC	POINT ON REVERSE CURVE
	APT	POINT OF TANGENCY
	APVC	POINT OF VERTICAL CURVATURE
	APVCC	POINT OF VERT. CMPND CURVE
	APVI	POINT OF VERT. INTERSECTION
	APVRC	POINT OF VERT. REVERSE CURVE
	APVT	POINT OF VERTICAL TANGENCY
	ASC	SPIRAL TO CURVE
	ASPI	SPIRAL POINT OF INTERSECTION
	ASTS	SPIRAL TO SPIRAL
	AST	SPIRAL TO TANGENT
	ATS	TANGENT TO SPIRAL
	AVEVT	VERTICAL EVENT POINT
	AVHIGH	VERTICAL HIGH POINT
	AVLOW	VERTICAL LOW POINT

BRIDGE

	BSC	BRIDGE, SCUPPER

CONTROL

	CBP	BASELINE, POINT
	CBPOL	BASELINE, POINT ON LINE
	CBSP	BASELINE, SPUR POINT
	CBTP	BASELINE, TIE POINT
	CPBM	BENCHMARK
	CPH	POINT, HORIZ. PHOTOGRAMMETRY
	CPSM	POINT, SURVEY MARKER, PERM.
	CPSV	POINT, VERT., PHOTOGRAMMETRY

DRAINAGE

CELL	NAME	DESCRIPTION
	DINV	INVERT
	DS	STRUCTURE, RECTANGULAR
	DSI	STRUCTURE, INVERT
	DSM	STRUCTURE, MANHOLE
	DSMTXX_P	STRUCTURE, MANHOLE, TYPE "XX" "XX" = 48, 60, 72, 96
	DSR	STRUCTURE, ROUND
	DST"X"CB P	STRUCTURE, RECT., WITH CURB TYPE "X" "X" = F, G, N, O, P, R
	DST"X" P	STRUCTURE, RECT., TYPE "X" "X" = I, K, L, M, O, P, U

ENVIRONMENTAL

CELL	NAME	DESCRIPTION
CULV	EIOP_P	STR., INLET, OUTLET PROT.
GB	EIPGB_P	STR., INLET PROT., GRAVEL BAG
H/S	EIPHS_P	STR., INLET PROT., HAY/STRAW
PRFB	EIPP_P	STR., INLET PROT., PREFAB.
SF	EIPSF_P	STR., INLET PROT., SILT FENCE
	ERCB	RISER, CONCRETE BOX
	ETRS_P	TRAP, SEDIMENT
	EWFG	WETLAND FLAG

GEOTECHNICAL

	GDH	DRILL HOLE

LANDSCAPE

	LELS	ELEVATION, SPOT
	LFP	FLAG POLE
	LMB	MAILBOX
	LPB	PAPER BOX
	LPST	POST, SINGLE
	LRB	ROCK, BOULDER
	LSHC	SHRUB, CONIFEROUS
	LSHD	SHRUB, DECIDUOUS
	LTC	TREE, CONIFEROUS
	LTD	TREE, DECIDUOUS
	LTS	TREE, STUMP
	LTW P	TREE, WELL OR WALL
	LUKP	UNKNOWN POINT

ITS

CELL	NAME	DESCRIPTION
	IANT P	ANTENNAS
AID	IASCTS	ACCOU. SPEED/COUNT SNSR.S
P	ICABPAD	CABINET & PAD
	ICCTV	CCTV SITE
CDPD	ICDPD	CDPD TRANSCEIVER
	ICELLT	CELL PHONE TOWER
	ICJB	CONDUIT JACK OR BORING
	ICNTLCAB	CONTROLLER CABINET
	ICPB	COMMUNICATION PULL BOX
	ICTD	CONDUIT TURNING DOWN
	ICTU	CONDUIT TURNING UP
	ICVTRT	COMM. VEH. ROAD TRANSCEIVER
	IDEFAULT	DEFAULT
EZ	IEZR	E-ZPASS READER
EZ-T	IEZTR	TRANSMITTAL READER
XC	IFOXCAB	FIBER OPTIC X-CONNECT CABINET
	IFUSSPL	FUSION SPLICE
	IHARADV	HAR ADVISORY SIGN
	IHARST	HAR SITE
LC	ILC	LOAD CENTER
	IMECSPL	MECHANICAL SPLICE
PM	IMSCS	PORT. SPEED & COUNT SENSOR
M	IMSCTS	MICRO SPEED & COUNT SENSOR
M	IMT	MICROWAVE TRANSCEIVER
VMS	IOVHVMS	PERM. OVERHEAD VMS
PA	IPASCS	PORT. ACCOU. SPD & CNT. SENSOR
	IPEDS	PEDESTRIAN SIGNAL HEAD
	IPSS	PAVEMENT SURFACE SENSOR
PVMS	IPVMS	PERM. VMS
RM	IRM	RAMP METER
RWIS	IRWIS	RDWY WEATHER INFO. SENSOR
	ISP	SOLAR PANEL
SS	ISST	SPREAD SPECT. TRANSCEIVER
TC	ITDB	TELEPHONE DEMARCATION BLK
TP	ITP	SUBSURFACE TEMP. PROBE
	IVTRT	VEHICLE TO RDWY TRANSCEIVER
WIM	IWIMD	WEIGHT IN MOTION DETECTOR
WVR	IWVR	WIRELESS VIDEO REPEATER
V	IWVRC	WIRELESS VIDEO RECEIVER
V	IWVTT	WIRELESS VIDEO TRANSMITTER

ROW MAPPING

CELL	NAME	DESCRIPTION
	MDL1P	DEED LINE, TYPE 1
	MDL2P	DEED LINE, TYPE 2
	MDL3P	DEED LINE, TYPE 3
	MDL4P	DEED LINE, TYPE 4
	MDL5P	DEED LINE, TYPE 5
	MEEP	EASEMENT, EXISTING
	MEPAP_P	EASEMENT, PERM., APPROX.
	MEPP_P	EASEMENT, PERM., BACK LINE
	MEPSP_P	EASEMENT, PERM., SHAPE
	MFAP_P	FEE ACQUISITION, APPROX.
	MFP_P	FEE ACQUISITION, BACK LINE
	MFSP_P	FEE ACQUISITION, SHAPE
	MHBAP	HIGHWAY BNDRY., APPROX.
	MHBCP	HISTORICAL, BLDG. CORNERS
	MHBP	HIGHWAY BNDRY, PT.
	MJCP	PT., JURIS. CITY
	MPBC	PT., BUILDING CORNER
	MPCC	PT., CROSS CUT
	MPDH	PT., DRILL HOLE
	MPF	PT., FENCE LOCATION
	MPIP	PT., IRON PIPE
	MPIR	PT., IRON ROD
	MPM	PT., MONUMENT
	MPMM	PT., MONUMENT, MISC.
	MPN	PT., NAIL
	MPRS	PT., RAILROAD SPIKE
	MPSP	PT., SPIKE
	MPST	PT., STAKE
	MPTW	PT., TREE W/ WIRE
	MPWL	PT., WALL LOCATION

ROW ACQUISITION

MI PT FEE	MFS_P_T	FEE ACQUISITION
MI PT PE	MEPS_P_T	EASEMENT, PERMANENT
MI PT TE	METS_P_T	EASEMENT, TEMPORARY
MI PT TO	METS_P_T	OCCUPANCY, TEMPORARY
MI PT FEE WO/A	MFS_P_T	FEE ACQUISITION W/O ACCESS

ROADWAY

	RES P	ELEVATION, SPOT
	RGA	GUIDE RAIL, ANCHOR
	RGP	GUIDE POST, SINGLE

SIGNS

CELL	NAME	DESCRIPTION
	S	SINGLE POST
	S_P	SINGLE POST, PROPOSED
	SB_P	BACK TO BACK, PROPOSED
	SDEL	DELINEATORS
	SPM	PARKING METER
RFM	SRM	REFERENCE MARKERS
	SRSC3	SHLD, CTY, 123 DIG.
	SRSC4	SHLD, CTY, 4 DIG.
	SRSCT2	SHLD, CTY TOUR, 1-2 DIG.
	SRSCT4	SHLD, CTY TOUR, 3-4 DIG.
	SRSI	SHLD, INTERSTATE
	SRSN2	SHLD, NATIONAL, 2 DIG.
	SRSN3	SHLD, NATIONAL, 3 DIG.
	SRSS2	SHLD, STATE, 2 DIG.
	SRSS3	SHLD, STATE, 3 DIG.
	SRSS4	SHLD, STATE, 4 DIG.

TRAFFIC CONTROL

	TCBJ	BOX, JUNCTION
	TCBP	BOX, PULL BOX
	TCBS	BOX, SPLICE
	TCMC	MICROCOMPUTER CABINET
	TCPP	PED POLE
	TCSH	SIGNAL HEADS
	TCSP	SIGNAL POLE

TRAFFIC WORK ZONE

	TWZAP_P	ARROW PANEL
	TWZAPC_P	ARROW PANEL, CAUTION MODE
	TWZAPT_P	ARROW PANEL, TRAILER OR SUPPORT
	TWZBCD_P	BARRICADE (TYPE III)
	TWZCMS_P	CHANGEABLE MESSAGE SIGN (PVMS)
	TWZFLG_P	FLAGGER
	TWZFT_P	FLAG TREE
	TWZIA_P	IMPACT ATTENUATOR / CRASH CUSHION (TEMPORARY)
	TWZLUM_P	LUMINAIRE (TEMPORARY)
	TWZSDT_P	SYMBOL, DIRECTION OF TRAFFIC
	TWZSDTD_P	SYMBOL, DIRECTION OF TEMPORARY TRAFFIC DETOUR
	TWZSGN_P	SIGN (TEMPORARY)
	TWZSIG_P	SIGNAL, TRAFFIC OR PEDESTRIAN (TEMPORARY)
	TWZWL_P	WARNING LIGHT
	TWZWV_P	WORK VEHICLE
	TWZWVA_P	WORK VEHICLE WITH TRUCK MOUNTED ATTENUATOR

UTILITIES

CELL	NAME	DESCRIPTION
E	UEB	ELECTRIC, BOX
E	UEM	ELECTRIC, METER
E	UEMH	ELECTRIC, MANHOLE
E	UEPT	ELECTRIC, POLE, TRANS.
G	UGM	GAS, METER
G	UGMH	GAS, MANHOLE
	UGLM	GAS, LINE MARKER
FP	UGP	GAS/FUEL PUMP
	UGV	GAS, VALVE
	UGVT	GAS, VENT
	ULP	LIGHTING, POLE
	ULPP	LIGHTING, POLE, PED.
	UMFC	MISC. FILLER CAP
	UOLM	OIL, LINE MARKER
	UP	POLE, WITH UTILITY
	UPD	POLE, DEAD (NO UTILITY)
	UPL	POLE, WITH LIGHT
S	USMH	SANITARY SEWER MANHOLE
P	UTB	TELEPHONE, BOOTH
	UTLM	TELEPHONE, LINE MARKER
T	UTMH	TELEPHONE, MANHOLE
	UTVLM	CABLE TV, LINE MARKER
	UTVPB	CABLE TV, PULL BOX
	UUB	UNKNOWN, BOX
	UUJB	UNKNOWN, JUNCTION BOX
	UUMH	UNKNOWN, MANHOLE
	UUPB	UNKNOWN, PULL BOX
	UUVL	UNKNOWN, VALVE
	UUVT	UNKNOWN, VENT
W	UUW	UNKNOWN, WELL
	UWFH	WATER, FIRE HYDRANT
W	UWM	WATER, METER
W	UWMH	WATER, MANHOLE
	UWV	WATER, VALVE
W	UWW	WATER, WELL

NOTES:

1. THE LEGEND ILLUSTRATES MAPPING FEATURES (EXISTING AND PROPOSED).
2. FEATURES ARE SHOWN AS EITHER LINEAR (ROADWAY GUIDERAIL, ROADWAY SIDEWALK, UTILITY LINES, ETC.) OR POINT (SIGN, UTILITY POLE, ETC.).
3. FEATURES SHOWN ON THE LEGEND AS EXISTING FEATURES ALSO HAVE CORRESPONDING PROPOSED FEATURES.

NOTES: (CONT'D)

4. PROPOSED FEATURE SYMBOLOGY IS IDENTICAL TO EXISTING FEATURE SYMBOLOGY EXCLUDING LINE WEIGHT. LINE WEIGHT FOR PROPOSED FEATURES IS THICKER (0.015 in ON B SIZE DRAWINGS).
5. MAPPING FEATURES NOT INCLUDED ON THE LEGEND SHEET DO NOT HAVE A UNIQUE SYMBOLOGY (SUCH AS THE PAVEMENT EDGE, PAVEMENT EDGE OF TRAVEL WAY) AND SHOULD BE LABELED ON THE PLANS.
6. FEATURES SHOWN AT THE HEAVIER WEIGHT ARE PROPOSED ONLY AND DO NOT HAVE CORRESPONDING EXISTING FEATURES.

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DATE/TIME = 21-MAY-2021 13:46
USER = nlambros

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

LEGEND LINE AND POINT SYMBOLOGY - 2

CONTRACT NUMBER
D900053

DRAWING NO. LEG-02
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

LEGEND:

CON EDISON	E
CALPINE KENNEDY (PORT AUTHORITY)	PA
NATIONAL GRID GAS	G
NYCDEP SANITARY SEWER	SA
NYCDEP STORM SEWER	ST
NYCDEP COMBINED SEWER	COMB
NYCDEP WATER	W
VERIZON	T
FDNY	FDNY
ALTICE(CABLEVISION), AT&T, CROWN CASTLE	FO
CHARTER (TWC)	CTV
NYSDOT ITS	
SIGNAL, COMM. OR LIGHTING CONDUIT	C
PROPOSED NYCDDC TWIN BARREL SEWER SE885A CONTRACT	
PANYNJ ELECTRIC	PA-E
PANYNJ ELECTRIC 27 KV	PA-E-27KV
PANYNJ ELECTRIC 5 KV	PA-E-5KV
PANYNJ SANITARY SEWER	PA-SA
PANYNJ STORM SEWER	PA-ST
PANYNJ TELECOM	PA-T
PANYNJ WATER	PA-W
PANYNJ WATER HIGH PRESSURE	PA-W-HP
PANYNJ WATER LOW PRESSURE	PA-W-LP
PANYNJ GAS	PA-G
PANYNJ GAS HIGH PRESSURE	PA-G-HP

PROPOSED CON EDISON	E
PROPOSED CALPINE KENNEDY (PORT AUTHORITY)	PA
PROPOSED NATIONAL GRID GAS	G
PROPOSED NYCDEP SANITARY SEWER	SA
PROPOSED NYCDEP STORM SEWER	ST
PROPOSED NYCDEP COMBINED SEWER	COMB
PROPOSED NYCDEP WATER	W
PROPOSED VERIZON	T
PROPOSED FDNY	FDNY
PROPOSED ALTICE(CABLEVISION), AT&T, CROWN CASTLE	FO
PROPOSED CHARTER (TWC)	CTV
PROPOSED NYSDOT ITS	
PROPOSED SIGNAL, COMM. OR LIGHTING CONDUIT	C
PROPOSED PANYNJ ELECTRIC	PA-E
PROPOSED PANYNJ ELECTRIC 27 KV	PA-E-27KV
PROPOSED PANYNJ ELECTRIC 5 KV	PA-E-5KV
PROPOSED PANYNJ SANITARY SEWER	PA-SA
PROPOSED PANYNJ STORM SEWER	PA-ST
PROPOSED PANYNJ TELECOM	PA-T
PROPOSED PANYNJ WATER	PA-W
PROPOSED PANYNJ WATER HIGH PRESSURE	PA-W-HP
PROPOSED PANYNJ WATER LOW PRESSURE	PA-W-LP
PROPOSED PANYNJ GAS	PA-G
PROPOSED PANYNJ GAS HIGH PRESSURE	PA-G-HP
EXISTING UTILITIES TO BE REMOVED/ABANDONED	/// /// ///

PROJECT MANAGER
CHECK
DRAFTING
CHECK
DESIGN SUPERVISOR
JOB MANAGER
DESIGN
CHECK

FILE NAME = X73584_cph_leg_001.DGN
DATE/TIME = 21-JUL-2021 17:38
USER = nlambros

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY LEGEND

CONTRACT NUMBER
D900053

DRAWING NO. LEG-01
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER XXX
CHECK XXX
DRAFTING XXX
CHECK XXX
DESIGN XXX
JOB MANAGER XXX
DESIGN SUPERVISOR XXX

GENERAL UTILITY NOTES (ROADWAY LEVEL):

1. EXISTING ACTIVE UTILITIES ARE SHOWN FROM RECORD UTILITY MAPS, SUE SURVEY, AND WHERE DATA IS AVAILABLE AT THE STREET SURFACE. THE LOCATIONS ARE NOT GUARANTEED TO BE ACCURATE OR COMPLETE.
2. EXISTING UTILITY INFORMATION PROVIDED REPRESENTS ACTIVE UTILITY SYSTEMS. UTILITY SYSTEMS ABANDONED IN PLACE MAY NOT BE SHOWN.
3. ALL EXCAVATION SHALL BE PERFORMED BY HAND WITHIN ONE FOOT (1'-0") OF ALL EXISTING UTILITY SERVICES UNLESS OTHERWISE NOTED.
4. PROVIDE ACCESS TO THE CONSTRUCTION AREA AT ALL TIMES FOR ALL UTILITY OWNERS TO MAINTAIN THEIR FACILITIES. ALSO PROVIDE ACCESS FOR INSPECTION AND APPROVAL OF THE CONSTRUCTION BY THE UTILITY OWNERS.
5. STORM CATCH BASIN AND/OR DRAINS WITHIN THE CONTRACT LIMITS SHALL BE MAINTAINED FREE OF DEBRIS.
6. THE RULES AND REGULATIONS OF NEW YORK STATE INDUSTRIAL CODE RULE 753 SHALL APPLY.
7. AFFECTED UTILITY OWNERS SHALL BE ALERTED BY THE DESIGN-BUILD CONTRACTOR TO THE DISCOVERY OF CONTAMINATED OR HAZARDOUS MATERIALS ASSOCIATED WITH THEIR FACILITIES AND SHALL ALLOW FOR THE MITIGATION BY THE UTILITY OWNER.
8. EXISTING ELEVATIONS SHOWN ON THE UTILITY PLANS SHALL BE CONSIDERED APPROXIMATE AND MUST BE FIELD VERIFIED.
9. ADJUST ALL UTILITY SURFACE FEATURES INCLUDING BUT NOT LIMITED TO MANHOLES, VAULTS, COVERS, AND VALVE BOXES TO MATCH THE GROUND ELEVATION DURING ALL CONSTRUCTION STAGES.
10. UNLESS NOTIFIED BY THE UTILITY OWNERS, ALL EXISTING CABLES, GAS MAINS, AND WATER MAINS SHALL BE CONSIDERED ACTIVE OR LIVE. ALL SHUTDOWNS OF EXISTING FACILITIES SHALL BE COORDINATED WITH THE UTILITY OWNERS.
11. ALL DIMENSIONS FOR EXISTING UTILITY STRUCTURES SHALL BE VERIFIED BY THE DESIGN-BUILD CONTRACTOR IN THE FIELD AT THE TIME OF CONSTRUCTION.
12. FOR GROUND WATER AND SOIL PROPERTIES REFER TO GEOTECHNICAL BASELINE REPORT AND GEOTECHNICAL DATA REPORT.
13. NEW YORK CITY FIRE DEPARTMENT (FDNY) POSTS SHALL BE MAINTAINED DURING CONSTRUCTION UNLESS NOTED OTHERWISE. INTERIM LOCATIONS, IF NECESSARY, SHALL BE COORDINATED WITH FDNY.
14. NEW YORK CITY POLICE DEPARTMENT (NYPD) CALL BOXES SHALL BE MAINTAINED DURING CONSTRUCTION. IF CALL BOX IMPACTED, DESIGN BUILDER TO COORDINATE RELOCATION WITH NYPD.
15. NATIONAL GRID GAS MAINS ARE TO BE INSTALLED AT A MINIMUM VERTICAL AND HORIZONTAL CLEARANCE OF 12" FROM OTHER UTILITIES.
16. TELECOM SERVICES AND ELECTRICAL SERVICES THAT ARE INSTALLED WITHIN THE PROJECT LIMITS ARE TO BE INSTALLED AT A MINIMUM OF 12" FROM OTHER UTILITIES.
17. THE EXISTING CALPINE (PORT AUTHORITY OWNED) ELECTRICAL CABLES ARE TO BE MAINTAINED AND PROTECTED IN PLACE. INSTALLATIONS MUST BE AT A MINIMUM OF 1'-4" FROM THE CONDUIT TRENCH (REFER TO DWG. "SK-CLEARANCE") UNLESS COORDINATED WITH PORT AUTHORITY/CALPINE. A PORT AUTHORITY/CALPINE INSPECTOR WILL BE PRESENT DURING ANY CONSTRUCTION THAT WILL RESULT IN THE EXPOSURE OF THE EXISTING CALPINE FACILITIES.
18. INSTALLATION OF ELECTRICAL CONDUITS MUST BE A MINIMUM OF 48" FROM FDNY CONDUITS.
19. THE DESIGN-BUILD CONTRACTOR SHALL COORDINATE WITH UTILITY OWNERS DURING CONSTRUCTION FOR VIBRATION CRITERIA AND INSPECTION REQUIREMENTS.
20. FIRE DEPARTMENT CABLES RUN IN FIRE DEPARTMENT'S CONDUIT SYSTEMS UNDERGROUND. THESE FACILITIES MUST BE SUPPORTED AND PROPERLY PROTECTED DURING CONSTRUCTION. IF THIS CANNOT BE ACHIEVED, RELOCATION MUST BE PERFORMED PRIOR TO CONSTRUCTION.
21. REFER TO NATIONAL GRID GAS DRAWINGS FOR PROPOSED TIE-IN PIT AND WELDING PIT LOCATIONS. SEE NATIONAL GRID HC-140 FOR MORE INFORMATION.
22. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER SO AS TO NOT DAMAGE ANY BURIED UTILITIES. THIS INCLUDES BUT IS NOT LIMITED TO CRANE PLACEMENTS, MATERIAL HANDLING, AND EXCAVATION. IN DEVELOPING AND EXECUTING HIS WORK PLAN, THE CONTRACTOR SHALL ENSURE THAT THE SURFAVE PRESSURE WITHIN A LATERAL DISTANCE OF 10 FEET FROM THE CENTER LINE OF ANY BURIED UTILITY DOES NOT EXCEED THE LIMITS SPECIFIED:

    A. ELECTRIC DUCTS: 3.50 KSF
    B. 345KV FEEDER AND RETURN LINES: 3.50 KSF

23. NATIONAL GRID LOADING REQUIREMENT: THE CONTRACTOR SHALL INSTALL ALL NEW GAS MAINS AT A MINIMUM OF 4' OF COVER FOR ANY MAIN UNDER THE ROADWAY IN THE AREA WITHIN 100 FEET NORTH OF THE LIRR BRIDGES.
24. FOR NYCDEP WATER AND SEWER PIPE LOADING REQUIREMENTS, REFER TO THE NYCDEP WATER AND SEWER SPECIFICATIONS AND STANDARDS.
25. THE DESIGN-BUILD CONTRACTOR SHALL REFER TO THE NYSDOT HC-140 DB UTILITY AGREEMENTS WHICH IDENTIFY THE UTILITY SCOPE OF WORK FOR ALL PROPOSED UTILITY RELOCATIONS AND/OR UTILITY MAINTENANCE AND PROTECTION OF THE UTILITY FACILITIES WITHIN THE PROJECT LIMITS.
26. FOR ADDITIONAL STREET LIGHTING AND TRAFFIC SIGNAL INFORMATION REGARDING PROPOSED REPLACEMENT OF EXISTING FACILITIES REFER TO THE "LIGHTING PLANS" & TRAFFIC SIGNAL PLANS" IN THE REFERENCE DOCUMENTS SECTION OF THE RFP.
27. FOR ADDITIONAL ITS INFORMATION REGARDING PROPOSED REPLACEMENT OF EXISTING FACILITIES REFER TO THE "ITS PLANS" IN THE REFERENCE DOCUMENTS SECTION OF THE RFP.
28. THE DESIGN-BUILD CONTRACTOR SHALL RESTORE ALL UTILITY TRENCHES, INCLUDING PAVEMENT COURSES, IN ACCORDANCE WITH THE LATEST NYSDOT STANDARD SPECIFICATIONS. PAVEMENT COURSE THICKNESS SHALL MATCH THE EXISTING ADJACENT PAVEMENT.
29. FOR TRENCHING DETAILS, REFER TO NYCDOT DWG. NO. H-1042A.
30. THE EXISTING 8" CALPINE/PORT AUTHORITY PIPE CONTAINING 138kV LINE AND HAS A PROTECTIVE EXTERIOR COATING AND INCLUDES CATHODIC PROTECTION. THE EXISTING PIPE COATING SHALL BE PROTECTED DURING CONSTRUCTION.
31. REFER TO PART 4 OF THE RFP FOR CALPINE/PORT AUTHORITY VIBRATION CRITERIA AND THE PORT AUTHORITY HC-140 DOCUMENT FOR ALL CALPINE/PORT AUTHORITY UTILITY REQUIREMENTS.
32. REFER TO DRAWING SK-CLEARANCE IN THE REFERENCE DOCUMENTS SECTION OF THE RFP FOR CALPINE/PORT AUTHORITY CLEARANCE REQUIREMENT INFORMATION.

NYCDEP DESIGN REQUIREMENTS:

1. THE FOUNDATION OF A PROPOSED RETAINING WALL SHOULD BE DESIGNED AS A BRIDGING STRUCTURE OVER DEP'S WATER MAIN/SEWER WITH A MINIMUM VERTICAL CLEARANCE OF 18 INCHES MAINTAINED BETWEEN THE BOTTOM OF THE WALL FOUNDATION AND TOP OF DEP'S SEWER/WATER MAIN.
2. THE PILES FOR THE BRIDGING SECTION OF A PROPOSED RETAINING WALL OR PROPOSED RAMP FOUNDATION SHOULD BE LOCATED AT LEAST 6'-0" AWAY (EDGE TO EDGE) FROM DEP'S SEWER/WATER MAIN AND SHOULD BE INSTALLED BY DRILLING (NO HAMMERING IS ALLOWED). THE SELECTION OF THE PROPOSED RAMP/WALL'S BOTTOM ELEVATION AND DESIGN OF THE PILES ADJACENT TO DEP'S SEWER/WATER MAIN INFRASTRUCTURE SHOULD BE DONE PROPERLY SO DEP WILL BE ABLE TO DO ANY EXCAVATION CLOSE TO THE PILES WITHOUT REQUIRING UNDERPINNING OF THE BARRIER WALL FOR FUTURE SEWER/WATER MAIN RECONSTRUCTION.
3. NYCDEP REQUIRES A NON-VIBRATORY METHOD (NO HAMMER DRIVEN) TO BE USED TO INSTALL SHEET PILES. ALSO, VIBRATIONS SHOULD BE MONITORED AS PER DEP SPECIFICATIONS.

NYCDEP STANDARD DRAWINGS:

10240-A-Z	VALVE BOX SKIRT, CAST IRON
10241-A-Z	HYDRANT VALVE BOX, CAST IRON
11576-A-Z	FOUNDATIONS FOR VALVE BOXES
13547-B-Z	WIDE FLANGE MANHOLE HEAD & COVER, CAST IRON
18581-B-Z	STANDARD HYDRANT CONNECTIONS FOR STEEL AND DUCTILE FROM WATER MAINS
18583-Z	LARGE MANHOLE FRAME AND COVER
22809-Z	HYDRANT DRAIN BASE
22810-Z	STANDARD METHOD OF SETTING HYDRANT ON DRAIN BASE
35310-C-Y	JOINTS FOR STEEL WATER MAINS
38226-Y-A	STANDARD FABRICATED CONNECTIONS FOR STEEL MAINS
38336-Y-A	JOINTS SHALL BE FORGED STEEL SLIP-ON FLANGES
42063-Y	SHALLOW CROSSING FOR WATER MAINS 24"D AND SMALLER
42160-Z	ACCESS MANHOLE FOR TRUNK MAINS ON PIPES 6' TO 12' MAXIMUM COVER
44292-B-Z	GRAVEL OR BROKEN STONE BEDDING & FILTER FABRIC INSTALLATION FOR DUCTILE IRON PIPE
45353-A-Z	SLAB TYPE MANHOLE HEAD AND COVER
45161-A-Z	STANDARD STEEL HYDRANT FENDER
46006-X	STANDARD BLOWOFFS, DETAILS OF VALVE AND BLOWOFF MANHOLES
46104-W	INSULATED FLANGE JOINTS FOR REDUCTION OF ELECTROLYSIS IN TRUCK MAINS
46464-Z	METHOD FOR PROTECTING D.I. WATER MAINS WITH SHALLOW (LESS THAN 24') COVER
48359	3" TO 20" STANDARD VALVES WITH VARIOUS END CONNECTIONS

NYCDEP WATERMAIN NOTES:

1. ALL WATER MAIN WORK AND MATERIALS SHALL BE DONE IN ACCORDANCE WITH THE CONTRACT PLANS AND IN CONFORMANCE WITH THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NYCDEP) STANDARD WATER MAIN SPECIFICATIONS; APPLICABLE STANDARD DRAWINGS, AND SPECIFIC CONTRACT REQUIREMENTS.
2. THE CONTRACTOR SHALL NOTIFY THE FIRE DEPARTMENT (FDNY) AND NYCDEP OF CONSTRUCTION AT LEAST 72 WORKING HOURS IN ADVANCE PRIOR TO SHUTTING OFF VALVES. NO REMOVAL SHALL TAKE PLACE BEFORE SHUT-OFF VALVES HAVE BEEN CLOSED BY THE NYCDEP PERSONNEL.
3. THE ALIGNMENT OF THE WATER MAINS AND THE LOCATION OF THE VALVES AND HYDRANTS ARE SHOWN SCHEMATICALLY. THE EXACT ALIGNMENTS SHALL BE DETERMINED IN THE FIELD AS THE ENGINEER, AS WORK PROGRESSES.
4. ALL DUCTILE IRON WATER MAINS UP TO AND INCLUDING 24" DIAMETER SHALL HAVE RESTRAINED JOINTS AND SHALL BE CEMENT LINED AS PER NYCDEP STANDARD "SPECIFICATIONS FOR DUCTILE IRON PIPE WITH PUSH-ON JOINTS AND DUCTILE IRON FITTINGS WITH MECHANICAL JOINTS 6" THROUGH 48" IN DIAMETER", LATEST REVISION. ALL FITTINGS SHALL EMPLOY FULL BODY TYPE MECHANICAL JOINTS WITH RETAINER GLANDS AND SHALL CONFORM TO THE REQUIREMENTS OF NYCDEP STANDARD SPECIFICATIONS FOR "DUCTILE-IRON AND GRAY-IRON FITTINGS, 3" THROUGH 48" IN DIAMETER", LATEST REVISION.
5. ALL WATER MAIN VALVES SHALL BE DUCTILE IRON GATE VALVES IN ACCORDANCE WITH NYCDEP STANDARD SPECIFICATIONS FOR GATE VALVES 3" THROUGH 20" IN DIAMETER, LATEST REVISION. ACCESS TO WATER VALVES WITHIN THE WORK AREA SHALL BE MAINTAINED AT ALL TIMES.
6. PRIOR TO CONNECTING THE NEW MAINS TO THE EXISTING ONES, IT MUST BE MADE ABSOLUTELY CERTAIN THAT ALL THE REPLACEMENT/RESTRAINT REQUIREMENTS DUE TO NEWLY INSTALLED VALVES AND FITTINGS ARE FULLY MET. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGE TO PROPERTY AND FOR PERSONNEL INJURY CAUSED BY NEGLIGENCE OR OMISSION REGARDING COMPLIANCE WITH THE REPLACEMENT/RESTRAINT REQUIREMENTS.

   FOR TYPICAL MINIMUM LENGTHS OR REQUIRED REPLACEMENT/RESTRAINT, SEE TABLE A8-2 IN "STANDARD SPECIFICATIONS FOR DUCTILE IRON PIPE WITH PUSH-ON JOINTS AND DUCTILE-IRON FITTINGS WITH MECHANICAL JOINTS 6" THROUGH 48", LATEST REVISION.
7. PRIOR TO BEGINNING ANY WATER MAIN WORK, THE CONTRACTOR MUST IDENTIFY THE LOCATION, SIZE, AND TYPE OF ALL EXISTING UTILITIES, INCLUDING ALL SEWER AND WATER HOUSE/SERVICE CONNECTIONS.
8. ALL WATER AND SEWER HOUSE SERVICES SHOULD BE MAINTAINED AND PROTECTED AGAINST FREEZING DURING CONSTRUCTION.
9. ALL TAPS AND WET CONNECTIONS ON THE EXISTING WATER MAIN SHOULD BE TRANSFERED TO THE NEW MAIN, AND ALL SERVICES SHOULD BE INSTALLED PERPENDICULAR TO THE DISTRIBUTION MAIN.
10. ALL HYDRANTS SHALL BE MAINTAINED IN SERVICE AS PER NEW YORK CITY FIRE DEPARTMENT REQUIREMENTS. HYDRANTS SHALL BE "BREAKAWAY" TYPE, AND SHALL HAVE HYDRANT FENDERS AS PER NYCDEP STANDARDS.
11. ALL EXCAVATION SHALL BE DONE BY HAND WITHIN ONE FOOT (1'-0") OF EXISTING WATER MAINS, SEWERS, HOUSE CONNECTIONS, DRAINS AND OTHER UTILITIES.

12A. FOR WATER MAINS INSTALLED PARALLEL TO SEWERS:

   WHERE THE DEPTH TO THE BOTTOM OF THE SEWER CRADLE IS LESS THAN TEN (10) FEET, THE CLEARANCE BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE CENTERLINE OF THE EXISTING SEWER SHOULD NOT BE LESS THAN SIX (6) FEET PLUS ONE-HALF THE SEWER DIAMETER.

   WHERE THE DEPTH TO THE BOTTOM OF THE SEWER CRADLE IS TEN (10) FEET OR MORE, THE CLEARANCE BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE CENTERLINE OF THE EXISTING SEWER SHALL BE INCREASED ONE (1) FOOT FOR EACH ADDITIONAL FIVE (5) FEET OF DEPTH OVER TEN (10) FEET, OR PORTION THEREOF.

12B. FOR WATER MAINS CROSSING SEWERS:

   WHEREVER THE CLEARANCE BETWEEN THE TOP OF AN EXISTING SEWER AND THE BOTTOM OF THE PROPOSED WATER MAIN, AT THEIR CROSSING, IS LESS THAN ONE (1) FOOT, THE WATER MAIN IS TO BE SUPPORTED BY A TRUSS ARRANGEMENT AND THE CLEARANCE SPACE IS TO BE FILLED WITH LAYERS OF COMPRESSIBLE MATERIAL TO AVOID EXCESSIVE BEARING PRESSURE ON THE SEWER PIPE. IN NO CASE, HOWEVER, SHOULD THIS CLEARANCE BE LESS THAN SIX (6) INCHES.

13. ALL WATER MAINS WITH A COVER LESS THAN 2'-6" SHALL BE PROTECTED BY SHALLOW COVER PROTECTION. TYPE AND SIZE OF THE SHALLOW COVER PROTECTION SHALL BE AS SPECIFIED ON THE CONTRACT PLANS.
14. STEEL WATER MAINS SHALL BE USED WHERE SPECIFIED IN THE PLANS AND AS ORDERED BY THE ENGINEER. THE STEEL MAINS SHALL BE FABRICATED, TESTED, LINED, COATED, AND INSTALLED IN ACCORDANCE WITH "NYCDEP STANDARD SPECIFICATIONS FOR FURNISHING DELIVERING AND LAYING STEEL PIPES AND APPURTENANCES", LATEST REVISION, ALL APPLICABLE NYCDEP STANDARD DRAWINGS, AND AS ORDERED BY THE ENGINEER.
15. CONTRACTOR SHALL SUBMIT GEOMETRY DRAWINGS FOR FABRICATION AND LAYING OF STEEL PIPE, INCLUDING PIPE SUPPORTS AND SHALLOW COVER PROTECTION, TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
16. CONTRACTOR SHALL SUBMIT ALL STEEL WATER MAIN FABRICATION SHOP DRAWINGS AND CATALOG CUTS FOR THE WATER MAIN(S) AND APPURTENANCES, ALL IN ACCORDANCE WITH APPROVED/ACCEPTED GEOMETRY OF THE PIPE, AND ALL APPLICABLE NYCDEP STANDARDS, TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
17. ALL STEEL WATER MAINS UP TO AND INCLUDING 24" IN DIAMETER SHALL HAVE FLANGED JOINTS, UNLESS OTHERWISE NOTED ON THE PLANS. JOINTS SHALL BE FORGED STEEL SLIP-ON FLANGES, CLASS E, AS PER NYCDEP STANDARD DRAWING NO. 38336-Y-A, LATEST REVISION.
18. ALL BENDS ON STEEL WATERMAINS SHALL BE STANDARD WEIGHT LONG-RADIUS ELBOWS OR SHALL BE SHOP FABRICATED FROM PIPE SEGMENTS AS PER NYCDEP STANDARD SPECIFICATIONS FOR FURNISHING DELIVERING AND LAYING STEEL PIPES AND APPURTENANCES, LATEST REVISION.
19. THE CONNECTION BETWEEN STEEL AND DUCTILE IRON WATER MAINS SHALL BE ACCOMPLISHED BY INSULATED FLANGED JOINTS, AS SHOWN ON NYCDEP STANDARD DRAWINGS NO. 46104-W, LATEST REVISION.
20. AFTER WATER MAIN WORK UNDER THE CONTRACT IS SATISFACTORILY COMPLETED, THE CONTRACTOR SHALL SUBMIT FIVE (5) COMPLETE SETS OF AS-BUILT DRAWINGS, APPROVED BY THE RESIDENT ENGINEER, FOR THE BUREAU'S FILES.
21. CONTRACTOR SHALL MAINTAIN 4 FEET OF COVER OVER ALL WATER MAINS AND THE COVER SHALL NOT BE LESS THAN 2 FEET. DUE TO FIELD CONDITIONS, IF WATER MAINS HAVE LESS THAN 3 FEET OF COVER, BUT MORE THAN OR EQUAL TO 2 FEET OF COVER, PIER AND PLATE THE WATER MAIN IN ACCORDANCE WITH NYCDEP STANDARD DRAWING NUMBERS: 46464-Z, 42063-Y, AND 22785. IF ADJACENT UTILITY INTERFERENCES RESTRICT THE CONSTRUCTION OF PIER AND PLATE AS PER NYCDEP STANDARD DRAWINGS, THE CONTRACTOR SHALL SUBMIT CUSTOMIZED SHOP DRAWINGS FOR PIER AND PLATE DETAILS FOR THE WATER MAIN CONSTRUCTION FOR NYCDEP APPROVAL.
22. ALL WATER SERVICE CONNECTIONS TO EXISTING WATER MAINS TO BE REPLACED/RELOCATED SHOULD BE TRANSFERED TO THE NEW WATER MAIN IN ACCORDANCE WITH NYCDEP STANDARDS AND SPECIFICATIONS.
23. HYDRANT VALVES SHOULD BE INSTALLED CLOSE TO THE NEW WATER MAINS ON 3-WAY TEE CONNECTIONS. THE DESIGN-BUILD CONTRACTOR SHALL REMOVE ALL CASTING AND HYDRANTS AS PER NYCDEP STANDARDS AND SPECIFICATIONS.
24. ALL PROPOSED WATER MAIN REPLACEMENT WORK TO BE PERFORMED WITHIN THE PROJECT LIMITS SHOULD MEET ALL REQUIRED RESTRAINT LENGTH CRITERIA AS PER NYCDEP STANDARDS AND SPECIFICATIONS WITH NO COST TO NYCDEP.
25. ALL PROPOSED WATER MAINS ON THE ATLANTIC AVENUE BRIDGE MUST BE STEEL WELDED PIPES WITH 2" THERMAL INSULATION AND CORRUGATED ALUMINUM JACKETING.
26. THE DESIGN-BUILDER SHALL PROVIDE EXPANSION JOINTS FOR THE NEW WATER MAIN AS PER NYCDEP STANDARDS.
27. THE DESIGN-BUILDER SHALL INSTALL VALVES ON THE OUTSIDE OF BOTH ABUTMENTS WITH A HYDRANT BETWEEN THEM FOR THE WATER MAIN.
28. THE DESIGN-BUILDER SHALL INSTALL INSULATED FLANGE JOINTS BETWEEN THE STEEL AND DUTILE IRON WATER MAINS OUTSIDE THE BRIDGE IN AN EXPANSION JOINT CHAMBER.
29. SHALLOW COVER PROTECTION MUST BE PROVIDED FOR THE WATER MAIN WITH A COVER OF 2'-6" AND LESS.
30. PRIOR TO THE START OF CONSTRUCTION, THE DESIGN-BUILDER SHALL DETERMINE BY TEST PITS, TV INSPECTION, OR ANY OTHER MEANS NECESSARY, FOR EACH AND EVERY HOUSE WITHIN THE LIMITS OF THE PROPOSED WATER MAIN, THE LOCATION AND ELEVATION OF THE HOUSE TRAPS, HOUSE CONNECTION, ETC, AND THE LOCATION OF THE EXISTING SEWER TO WHICH THEY ARE CONNECTED. BASED ON THE FINDINGS, THE DESIGN-BUILDER SHALL INFORM THE ENGINEER IN WRITING, OF ANY ANTICIPATED DIFFICULTIES HE/SHE MIGHT ENCOUNTER IN RECONNECTING THESE EXISTING HOUSE CONNECTIONS TO THE PROPOSED AND EXISTING SEWERS.
31. ALL EXISTING SEWERS AND SEWER HOUSE CONNECTIONS SHALL BE CONTINUOUSLY MAINTAINED DURING CONSTRUCTION OF THE WATER MAIN. IF ANY SEWER OR SEWER HOUSE CONNECTION IS TO BE DISCONNECTED FOR CONSTRUCTION PURPOSES, FLOW SHALL BE MAINTAINED BY FLUMING OR OTHER SUITABLE MEANS AS DIRECTED BY THE ENGINEER AND IN SUCH A MANNER THAT NO BACK-UPS OCCUR. EXISTING SEWERS, HOUSE CONNECTIONS OR OTHER SEWER APPURTENANCES WHICH ARE TO REMAIN, AND WHICH MIGHT BE DISTURBED FOR CONSTRUCTION PURPOSES, SHALL BE RESTORED TO THEIR PRESENT CONDITION AFTER COMPLETION OF THE WORK, AND DAMAGE DONE AS A RESULT OF THE WORK SHALL BE REPAIRED AT NO EXTRA COST TO THE CITY OR STATE.

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AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

GENERAL UTILITY NOTES
SHEET 1 OF 2

CONTRACT NUMBER
D900053

DRAWING NO. UTL-GN1
SHEET NO. 2

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

DRAINAGE NOTES:

1. ALL PROPOSED DRAINAGE WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST STANDARDS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION. (NYCDEP)

2. ALL EXISTING SEWER MANHOLES TO BE RETAINED WITHIN THE CONTRACT LIMITS SHOULD BE ADJUSTED AS NECESSARY, SO THAT THEY WILL BE FLUSH WITH THE FINISHED GRADES AFTER COMPLETION OF THE WORK. ANY OF THESE MANHOLES WHICH HAVE DAMAGED, WORN OR NON-STANDARD FRAMES AND COVERS SHOULD BE PROVIDED WITH NEW 27" CASTINGS IN ACCORDANCE WITH THE LATEST STANDARDS OF NYCDEP INCLUDING ANY NECESSARY MODIFICATIONS OF THE MANHOLE MASONRY. ANY DAMAGE TO THE MANHOLES CAUSED BY THIS WORK SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER, AND AT NO COST TO THE CITY.

3. CARE SHALL BE TAKEN NOT TO DAMAGE EXISTING SEWERS DURING CONSTRUCTION. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER, AT NO EXTRA COST TO THE CITY.

4. WHERE THE HEIGHT OF AN EXISTING MANHOLE PERMITS MORE THAN ONE BASIN CONNECTION TO BE MADE ON THE SAME WALL, SPECIAL PRECAUTION SHALL BE TAKEN TO PROTECT THE STRUCTURAL INTEGRITY OF THE MANHOLE. THE MINIMUM CLEARANCE BETWEEN THE OUTSIDE WALLS OF ANY TWO BASIN CONNECTIONS OR BETWEEN A BASIN CONNECTION AND A SEWER, VERTICALLY OR HORIZONTALLY, SHALL BE 12 INCHES.

5. THE COST OF RAISING OR LOWERING CITY-OWNED MANHOLES, BASINS AND INLET HEADS TO PROPOSED GRADES WILL BE DEEMED INCLUDED IN THE PRICES BID FOR ALL THE SCHEDULED ITEMS WHEN THE VERTICAL UPWARD MOVEMENT OF ALL HEADS IS TWENTY-FOUR (24) INCHES OR LESS, WHEN THE VERTICAL DOWNWARD MOVEMENT OF BASIN OR INLET HEADS IS THREE (3) INCHES OR LESS, UNLESS OTHERWISE PROVIDED OR DIRECTED, AND WHERE THE ADJUSTMENT IS WITHIN THE BRICK WORK LIMIT. WHEN THE EXISTING STRUCTURE CONSISTS OF A BRICK CHIMNEY OR A CONCRETE ROOF SLAB OR BRICK ON CONCRETE WALLS, THE MAXIMUM ALLOWABLE HEIGHT OF BRICK AFTER ADJUSTMENT SHALL BE TWENTY-FOUR (24) INCHES. ALL OTHER ADJUSTMENTS WILL BE PAID FOR UNDER THE APPROPRIATE MANHOLE, BASIN OR INLET MODIFICATION ITEMS.

6. ALL EXISTING INLETS, BASINS AND CONNECTIONS WITHIN THE LIMITS OF THIS CONTRACT AND CONTIGUOUS THERETO ARE TO BE CLEANED, FLUSHED AND OTHERWISE MADE OPERABLE TO THE SATISFACTION OF THE ENGINEER. WHERE THE EXISTING BASIN CONNECTIONS ARE FOUND TO BE DAMAGED OR IN DETERIORATING CONDITION, THEY SHOULD BE REPLACED WITH NEW 12" DIAMETER DUCTILE IRON PIPE, CLASS 56, IN ACCORDANCE WITH THE LATEST NYCDEP STANDARDS. ALL DAMAGED AND NON-STANDARD CASTINGS SHOULD BE REPLACED WITH NEW STANDARD CASTINGS. ALL EXISTING NON-STANDARD BASINS AT LOCATIONS WHERE BASINS ARE REQUIRED, SHALL BE REPLACED WITH NEW STANDARD BASINS. THE COST IS TO BE INCLUDED IN THE RESPECTIVE ITEMS.

7. ALL ABANDONED BASINS, INLETS AND DRAINAGE STRUCTURES AS SHOWN ON THE CONTRACT PLANS ARE TO BE BULK-HEADED AND CUT DOWN TO TWO (2) FEET BELOW THE SUGRADE AND FILLED WITH COMPACTED CLEAN SAND. BASIN CONNECTIONS NOT REQUIRED SHALL BE PLUGGED AT BOTH ENDS. COST FOR THIS WORK SHALL BE DEEMED INCLUDED IN PRICES BID FOR ALL SCHEDULED ITEMS.

8. CATCH BASINS SHALL NOT, UNDER ANY CIRCUMSTANCES, BE CONNECTED TO SANITARY SEWERS.

9. ALL NEW CATCH BASIN CONNECTIONS SHALL BE CONNECTED TO EXISTING SEWERS AT MANHOLES, WITH 12" DUCTILE IRON PIPE, CLASS 56, WITH INTERNALLY LOCKED "PUSH-ON" JOINTS LAID ON 6" OF BROKEN STONE FOR THE ENTIRE WIDTH OF THE TRENCH AND FOR ONE-HALF THE PIPE DIAMETER. THE BROKEN STONE SHALL BE HARD UNWEATHERED STONE UNIFORMLY GRADED FROM 1/4" TO 3/4" IN DIAMETER. IT SHALL CONFORM TO COMMERCIAL 1/4" TO 3/4" STONE. ALL NEW CATCH BASINS SHALL HAVE A HOOD ON THE OUTLETTING PIPE.

10. CATCH BASINS SHALL NOT BE LOCATED WITHIN PEDESTRIAN CROSSWALK LIMITS. CATCH BASINS NEAR BUS STOP PADS SHALL BE LOCATED EITHER ENTIRELY WITHIN OR OUTSIDE OF BUS STOP PADS.

11. SLOPE ON ALL NEW CATCH BASIN CONNECTIONS SHALL BE A MINIMUM OF 1/2% AND A MAXIMUM OF 4% PROVIDED THE TOTAL DROP BETWEEN THE BASIN AND THE BASIN/MANHOLE IS AT LEAST 6 INCHES.

12. CATCH BASINS IN THE PROJECT AREA SHALL BE MAINTAINED OPERABLE AT ALL TIMES. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO AVOID FILLING THE CATCH BASINS WITH DEBRIS WITHIN THE CONSTRACT LIMITS DURING THE CONTRACT OPERATIONS. IF, AS A RESULT OF CONSTRUCTION, A FLOODING CONDITION OCCURS OR IIN THE EVENT THE CONTRACTOR'S OPERATIONS DAMAGE OR BLOCK THE DRAINAGE SYSTEM, THE CONTRACTOR SHALL AT HIS/HER OWN EXPENSE IMMEDIATELY REPAIR OR RESTORE THE DRAINAGE SYSTEM AS DIRECTED BY THE ENGINEER AT NO EXTRA COST TO THE CITY.

13. IN ACCORDANCE WITH PARAGRAPH #1.06.27 OF THE GENERAL PROVISIONS OF THE STANDARDS SPECIFICATIONS, ALL CASTING AND HARDWARE FROM THE EXISTING MANHOLES AND BASINS WHENEVER FOUND TO BE IN GOOD CONDITION, UPON EXAMINATION BY THE ENGINEER, SHALL REMAIN THE PROPERTY OF THE CITY AND SHALL BE DELIVERED BY THE CONTRACTOR TO A DESIGNATED CITY-OWNED YARD.

14. CONTRACTOR SHALL PROVIDE TEMPORARY MEANS (PIPES, PUMPS, ETC.) TO DRAIN ANY STORM WATER WHICH MAY DEVELO WITHIN THE PROJECT LIMITS FOR THE DURATION OF CONSTRUCTION. CONTRACTOR SHALL SUBMIT A DRAINAGE SCHEME WHICH MUST BE APPROVED BY THE ENGINEER, PRIOR TO THE START OF EACH CONSTRUCTION STAGE. COST OF THIS WORK WILL BE DEEMED TO HAVE BEEN INCLUDED IN THE PRICE BID FOR ALL SCEDULED ITEMS.

15. ALL EXISTING SEWERS AND SEWER HOUSE CONNECTIONS SHOULD BE CONTINUOUSLY MAINTAINED DURING CONSTRUCTION. IF ANY SEWER OR SEWER HOUSE CONNECTION IS TO BE DISCONNECTED FOR CONSTRUCTION PURPOSES, FLOW SHALL BE MAINTAINED BY FLUMING OR OTHER SUITABLE MEANS AS DIRECTED BY THE ENGINEER AND IN SUCH A MANNER THAT NO BACK-UPS OCCUR. EXISTING SEWERS, HOUSE CONNECTIONS OR OTHER SEWER APPURTENANCES WHICH ARE TO REMAIN, AND WHICH MIGHT BE DISTURBED FOR CONSTRUCTION PURPOSES, SHALL BE RESTORED TO THEIR PRESENT CONDITION AFTER COMPLETION OF THE WORK, AND DAMAGE DONE AS A RESULT OF THE WORK SHALL BE REPARED AT NO EXTRA COST TO THE CITY.

16. PRIOR TO THE START OF CONSTRUCTION, THE CONSTRACTOR SHALL DETERMINE BY TEST PITS, TELEVISION INSPECTION, OR ANY OTHER MEANS NECESSARY, FOR EACH AND EVERY HOUSE WITHIN THE LIMITS OF THE PROPOSED CONSTRUCTION, THE LOCATION AND ELEVATION OF THE HOUSE TRAPS, HOUSE CONNECTION, ETC, AND THE LOCATION OF THE EXISTING SEWER TO WHICH THEY ARE CONNECTED. BASED ON THE FINDING, THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING, OF ANY ANTICIPATED DIFFICULTIES HE/SHE MIGHT ENCOUNTER IN RECOONECTING THESE EXISTING HOUSE CONNECTIONS TO THE PROPOSED AND EXISTING SEWERS.

17. IN THE EVENT THAT A PROPOSED WALL AND/OR RAMP STRUCTURE CROSSES ABOVE DEP'S EXISTING SEWER/WATER MAIN FACILITIES, THE FOUNDATION OF THE WALL SHALL BE DESIGNED AS A BRIDGING STRUCTURE OVER DEP INFRASTRUCTURE WITH A MINIMUM OF 18 INCHES VERTICAL CLEARANCE MAINTAINED BETWEEN THE BOTTOM OF THE WALL FOUNDATION AND TOP OF DEP'S SEWER/WATER MAIN. THE PILES FOR THE BRIDGING SECTION OF THE WALL OR RAMP FOUNDATION SHALL BE LOCATED AT LEAST 6'-0" AWAY (EDGE TO EDGE) FROM DEP'S SEWER/WATER MAIN AND SHOULD BE INSTALLED BY DRILLING (NO HAMMERING IS ALLOWED). THE SELECTION OF THE PROPOSED RAMP/WALL'S BOTTOM ELEVATION AND DESIGN OF THE PILES ADJACENT TO DEP SEWER/WATER MAIN INFRASTRUCTURE SHOULD BE DONE PROPERLY SO DEP WILL BE ABLE TO DO ANY EXCAVATION CLOSE TO THE PILES WITHOUT REQUIRING UNDERPINNING OF THE BARRIER WALL FOR FUTURE SEWER/WATER MAIN RECONSTRUCTION.

HOUSE CONNECTION AND SEWER NOTES WITH RESPECT TO WATER MAIN INSTALLATIONS:

1. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL DETERMINE BY TEST PITS, TELEVISION INSPECTION, OR ANY OTHER MEANS NECESSARY, FOR EACH AND EVERY HOUSE WITHIN THE LIMITS OF THE PROPOSED WATER MAIN, THE LOCATION AND ELEVATION OF THE HOUSE TRAPS, HOUSE CONNECTION, ETC, AND THE LOCATION OF THE EXISTING SEWER TO WHICH THEY ARE CONNECTED. BASED ON THE FINDING, THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING, OF ANY ANTICIPATED DIFFICULTIES HE/SHE MIGHT ENCOUNTER IN RECONNECTING THESE EXISTING HOUSE CONNECTIONS TO THE PROPOSED AND EXISTING SEWERS.

2. ALL EXISTING SEWERS AND SEWER HOUSE CONNECTIONS SHOULD BE CONTINUOUSLY MAINTAINED DURING CONSTRUCTION OF THE WATER MAIN. IF ANY SEWER OR SEWER HOUSE CONNECTION IS TO BE DISCONNECTED FOR CONSTRUCTION PURPOSES. FLOW SHALL BE MAINTAINED BY FLUMING OR OTHER SUITABLE MEANS AS DIRECTED BY THE ENGINEER AND IN SUCH A MANNER THAT NO BACK-UPS OCCUR. EXISTING SEWERS, HOUSE CONNECTIONS OR OTHER SEWER APPURTENANCES WHICH ARE TO REMAIN, AND WHICH MIGHT BE DISTURBED FOR CONSTRUCTION PURPOSES, SHALL BE RESTORED TO THEIR PRESENT CONDITION AFTER COMPLETION OF THE WORK, AND DAMAGE DONE AS A RESULT OF THE WORK SHALL BE REPAIRED AT NO EXTRA COST TO THE CITY.

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AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED GENERAL UTILITY NOTES SHEET 2 OF 2	CONTRACT NUMBER D900053 DRAWING NO. UTL-GN2 SHEET NO. XX

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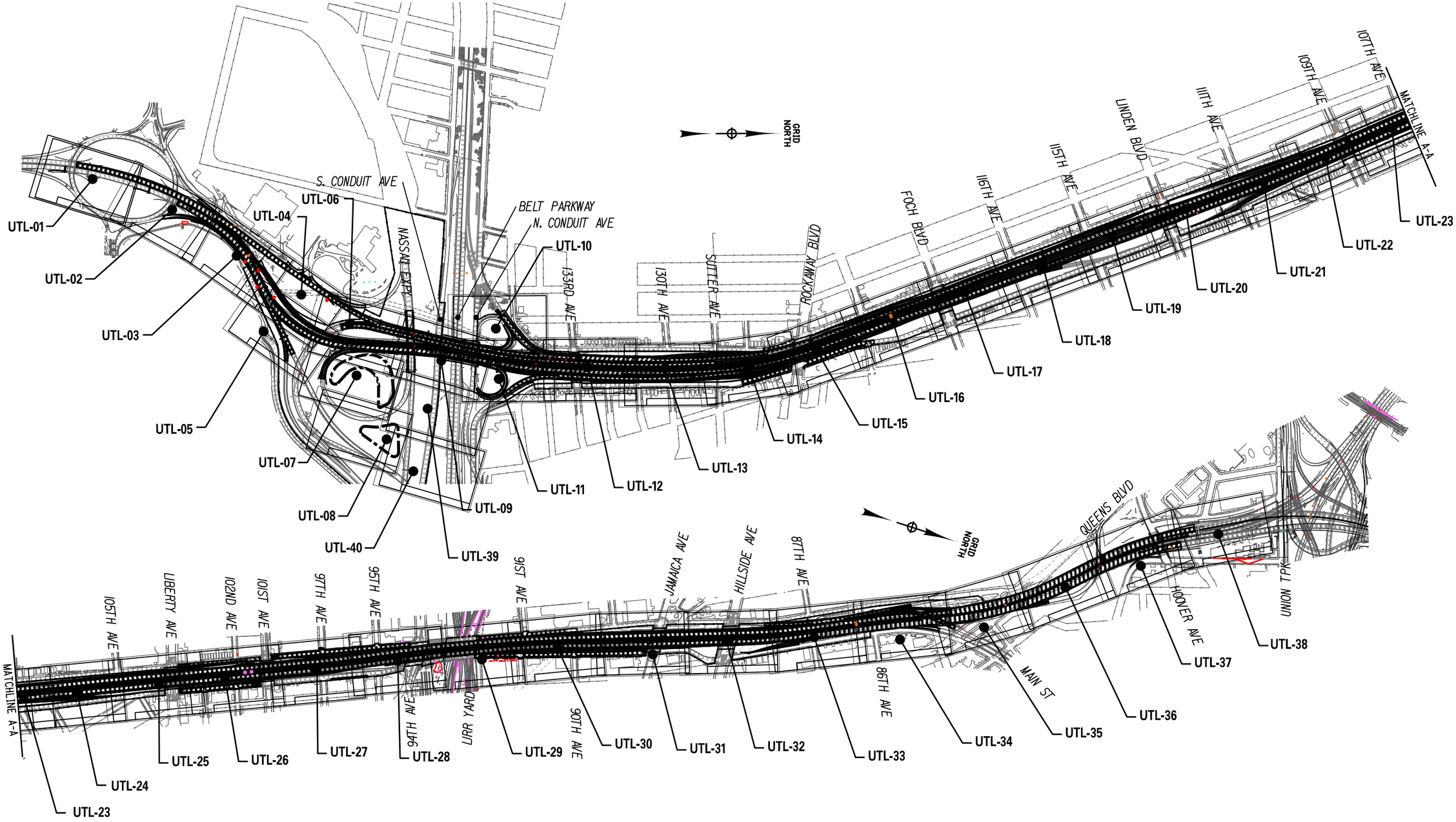

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FEDERAL CIRCLE

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PA-T

EX. COMMUNICATION DUCT TO REMAIN (PORT AUTHORITY)

EX. COMMUNICATION MANHOLE TO REMAIN (PORT AUTHORITY)

EX. 15" CONC. STORM SEWER TO REMAIN (NYCDEP)

EX. 8" SANITARY SEWER TO REMAIN (NYCDEP)

EX. 15" CONC. STORM SEWER TO REMAIN (NYCDEP)

EX. 168"X72" CONC. STORM SEWER TO REMAIN (NYCDEP)

EX. COMMUNICATION DUCTS TO REMAIN (PORT AUTHORITY)

EX. 30" CONC. STORM SEWER TO REMAIN (NYCDEP)

EX. 36" CONC. STORM SEWER TO REMAIN (NYCDEP)

EX. 36" CONC. STORM SEWER TO REMAIN (NYCDEP)

EX. 24" CONC. STORM SEWER TO REMAIN (NYCDEP)

EXIT RAMP FROM VWE

EX. 18" CONC. STORM SEWER TO REMAIN (NYCDEP)

EX. COMMUNICATION DUCT TO REMAIN (PORT AUTHORITY)

FEDERAL CIRCLE

MATCHLINE SEE DRAWING NO. UTL-02

25 0 25 50'
1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

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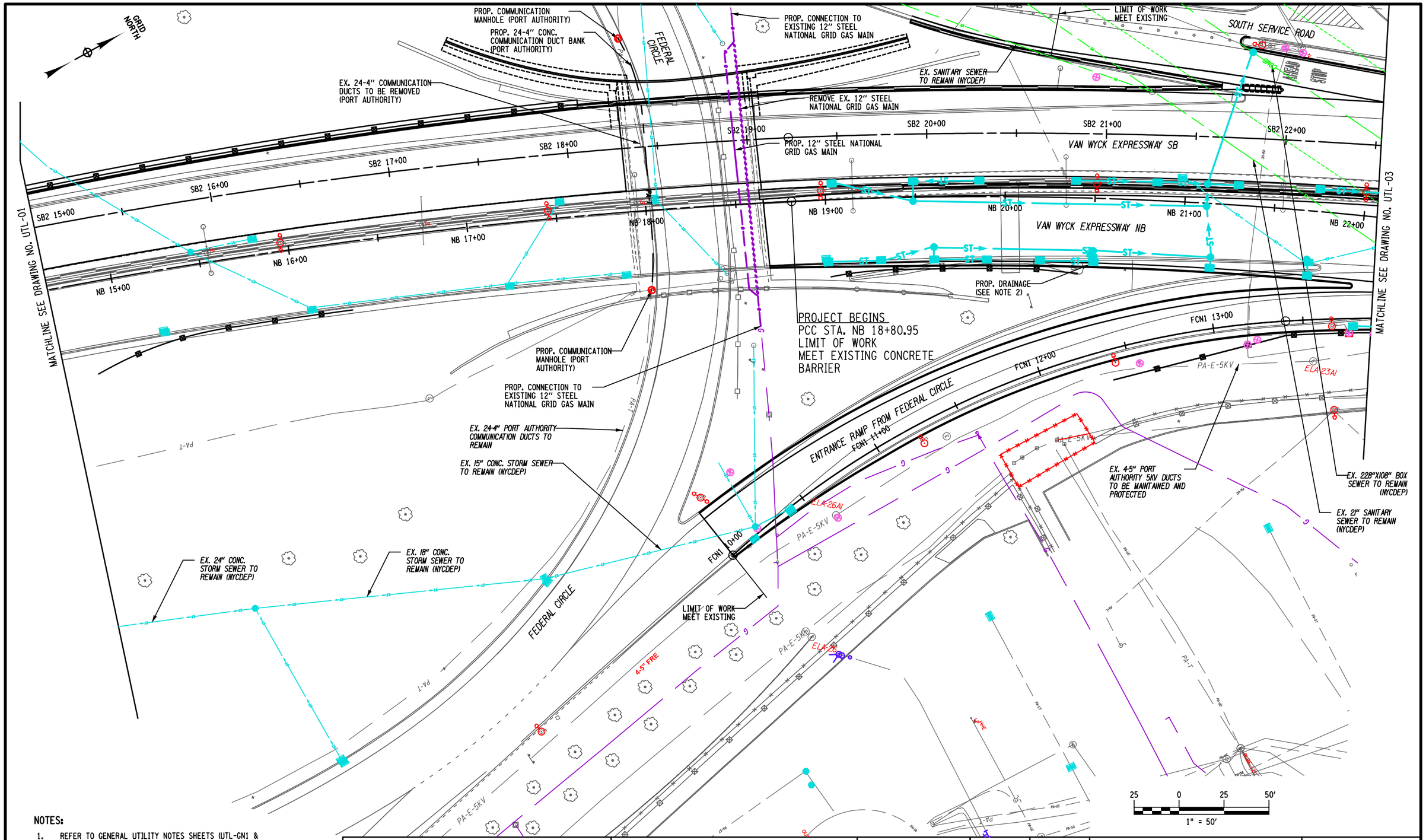

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 02

CONTRACT NUMBER
D900053

DRAWING NO. UTL-02
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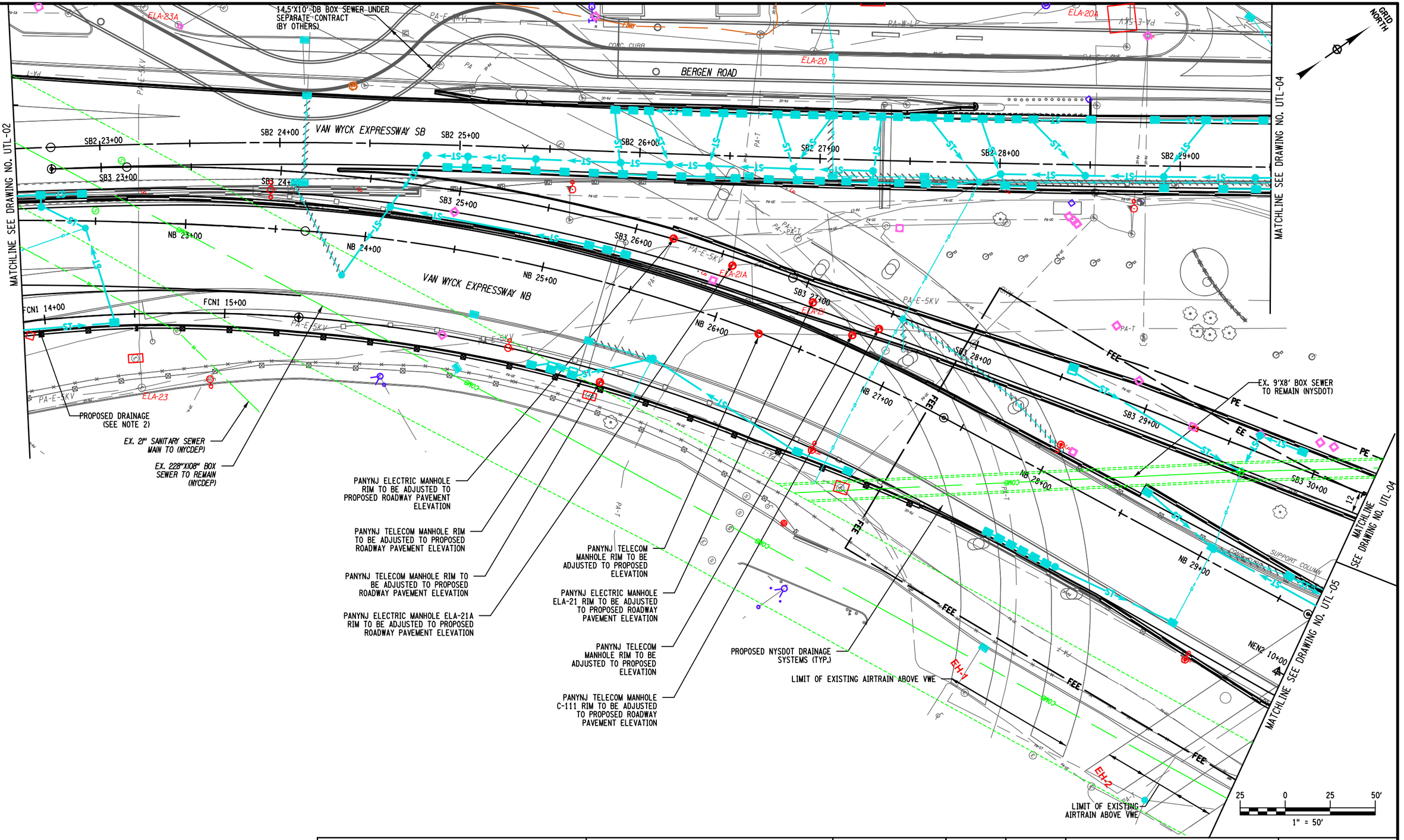

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 03	CONTRACT NUMBER D900053 DRAWING NO. UTL-03 SHEET NO.

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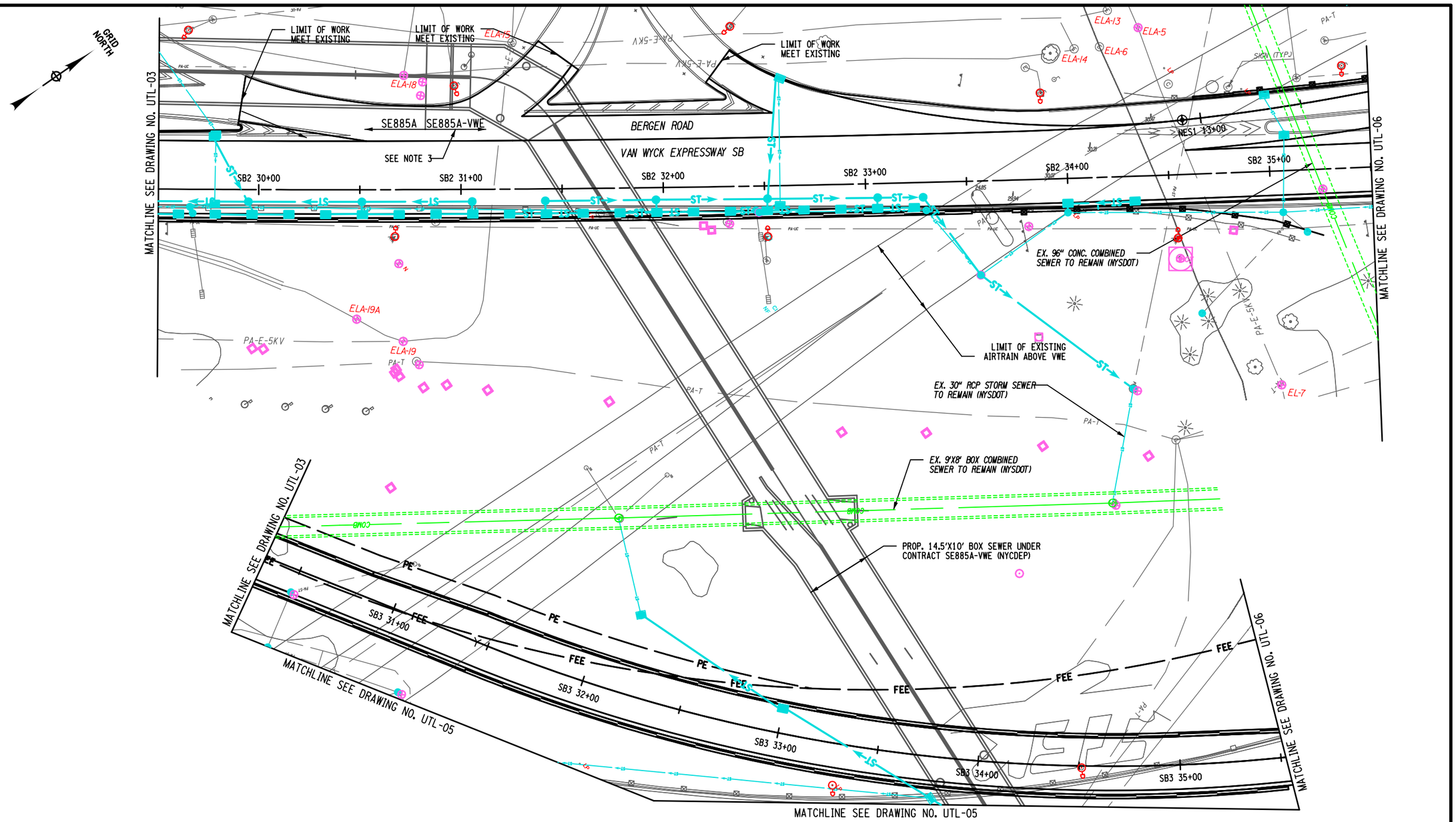

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.
3. PROPOSED BOX CULVERT SE885A-VWE PORTION TO BE CONSTRUCTED UNDER THIS CONTRACT. SEE SE885A-VWE PLANS FOR MORE INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 04	CONTRACT NUMBER D900053 DRAWING NO. UTL-04 SHEET NO.

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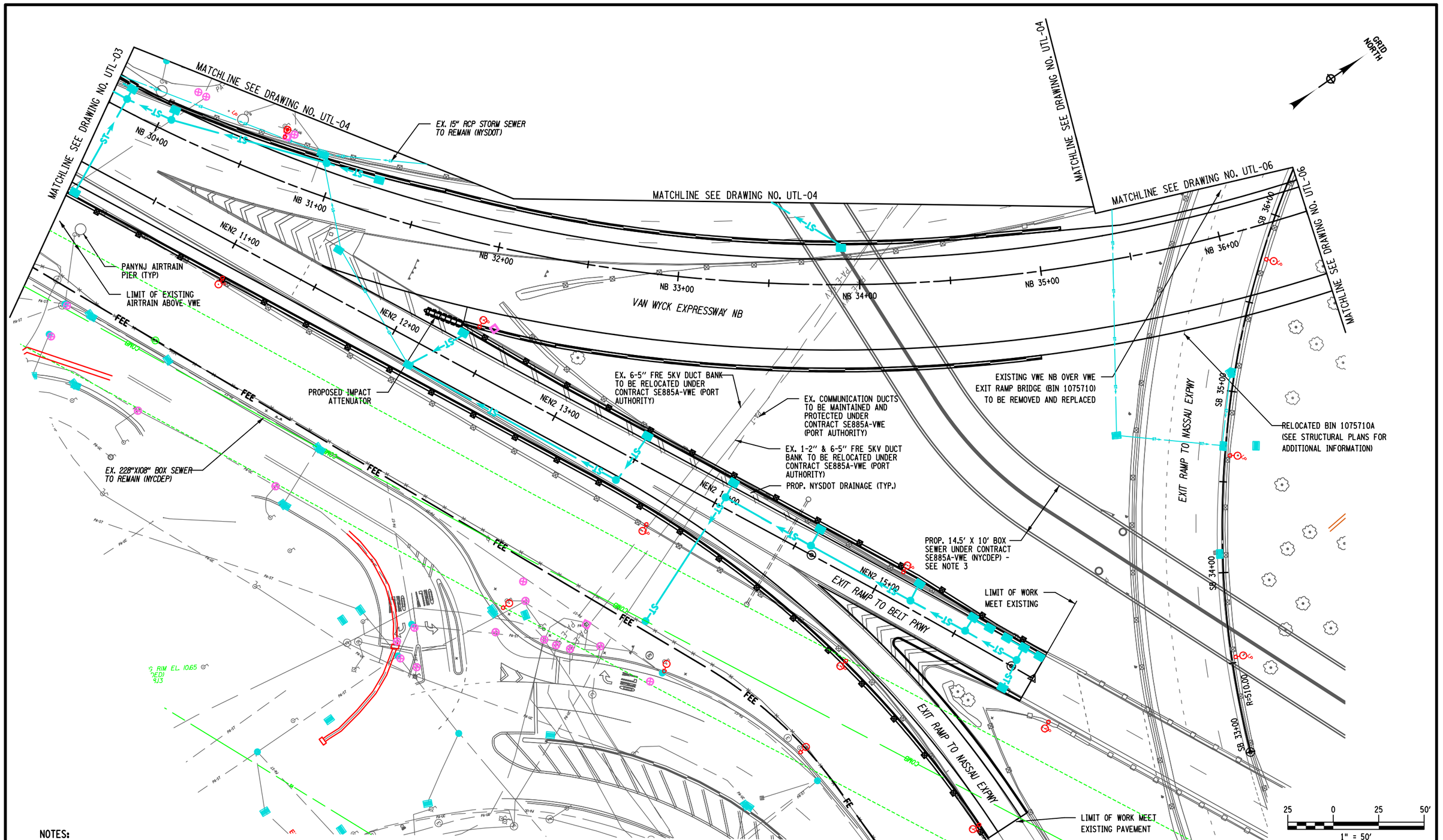

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.
3. PROPOSED BOX CULVERT SE885A-VWE PORTION TO BE CONSTRUCTED UNDER THIS CONTRACT. SEE SE885A-VWE PLANS FOR MORE INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 05	CONTRACT NUMBER D900053 DRAWING NO. UTL-05 SHEET NO.

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PROJECT MANAGER
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JOB MANAGER
DESIGN SUPERVISOR

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GRID NORTH

MATCHLINE SEE DRAWING NO. UTL-04

NES1 12+00
NES1 11+00
NES1 10+00
ENTRANCE RAMP FROM NASSAU EXPWY
LIMIT OF WORK MEET EXISTING
FEE
SB2 36+00
SB2 37+00
SB2 38+00
SB2 39+00
SB2 40+00
SB2 41+00
VAN WYCK EXPRESSWAY SB
EX. 96" CONC. COMBINED SEWER TO REMAIN (NYCDEP)
EXISTING VWE NB OVER VWE EXIT RAMP BRIDGE (BIN 1075710) TO BE REMOVED AND REPLACED
SB 43+00
SB 42+00
SB 41+00
SB 40+00
SB 39+00
EX. MANHOLE TO REMAIN (NYPD)
EX. UNK ABANDONED DUCTS (NYPD)
EX. 12" STEEL GAS MAIN TO BE ABANDONED (NATIONAL GRID)
EX. MANHOLE TO REMAIN (NYPD)
MATCHLINE SEE DRAWING NO. UTL-09
SB 38+00
LIMIT OF WORK MEET EXISTING
EX. 9'X8' CONC. COMBINED SEWER TO REMAIN (NYSDOT)
NEW BRIDGE - BIN 1075710B (SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION
EXIT RAMP TO NASSAU EXPWY
PROP. NYSDOT DRAINAGE (SEE NOTE 2)
SB3 43+00
SB3 42+00
SB3 41+00
SB3 40+00
SB3 39+00
SB3 38+00
SB3 37+00
SB3 36+00
SB 37+00
NB 42+00
NB 41+00
NB 40+00
NB 39+00
NB 38+00
NB 37+00
VAN WYCK EXPRESSWAY NB
MATCHLINE SEE DRAWING NO. UTL-05
MATCHLINE SEE DRAWING NO. UTL-05
EX. UNK LIGHTING CONDUIT TO BE REMOVED (PORT AUTHORITY)
NEN1 15+00
NEN1 14+00
ENTRANCE RAMP FROM NASSAU EXPWY
13+00
MATCHLINE SEE DRAWING NO. UTL-07
MATCHLINE SEE DRAWING NO. UTL-07
PROPOSED STORMWATER INFILTRATION BASIN 1 (SEE DRAINAGE PLANS FOR ADDITIONAL INFORMATION)

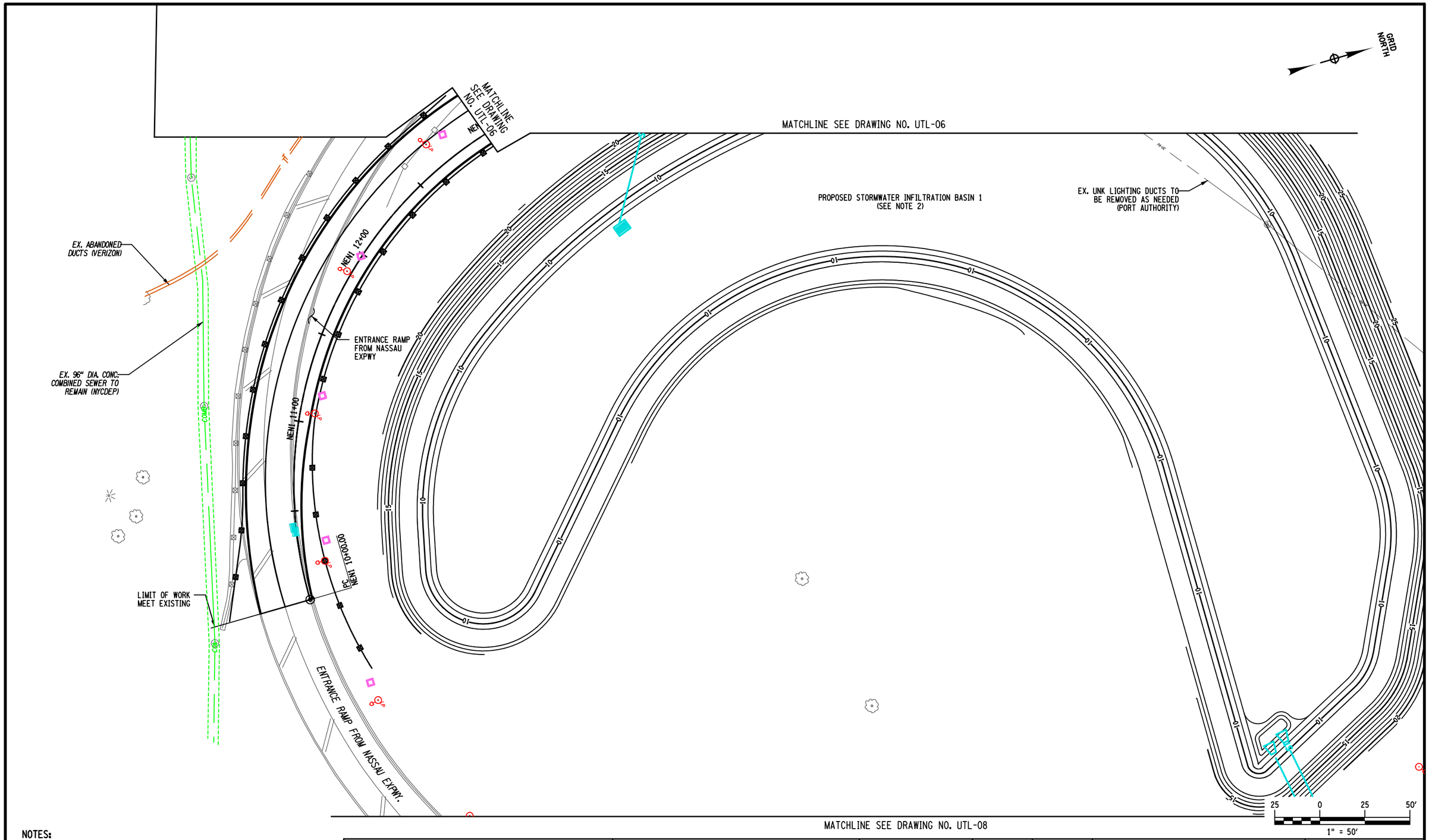
25 0 25 50'
1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 06	CONTRACT NUMBER D900053 DRAWING NO. UTL-06 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation



PROJECT MANAGER
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USER = nlambros

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 07	CONTRACT NUMBER D900053 DRAWING NO. UTL-07 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

MATCHLINE SEE DRAWING NO. UTL-07

ENTRANCE RAMP FROM NASSAU EXPWY.

PROP. 14.5'X10' BOX SEWER UNDER CONTRACT SE885A-VWE (NYCDEP) - SEE NOTE 3

EX. 228"X108" BOX SEWER TO REMAIN (NYCDEP)

EXIT RAMP TO BELT PKWY.

EXIT RAMP TO BELT PKWY.

EXIT RAMP TO NASSAU EXPWY.

PROPOSED STORMWATER INFILTRATION BASIN 2 (SEE NOTE 2)

GRID NORTH

SEE DRAWING NO. UTL-40

25 0 25 50'

1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.
3. PROPOSED BOX CULVERT SE885A-VWE PORTION TO BE CONSTRUCTED UNDER THIS CONTRACT. SEE SE885A-VWE PLANS FOR MORE INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 08	CONTRACT NUMBER D900053 DRAWING NO. UTL-08 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
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JOB MANAGER
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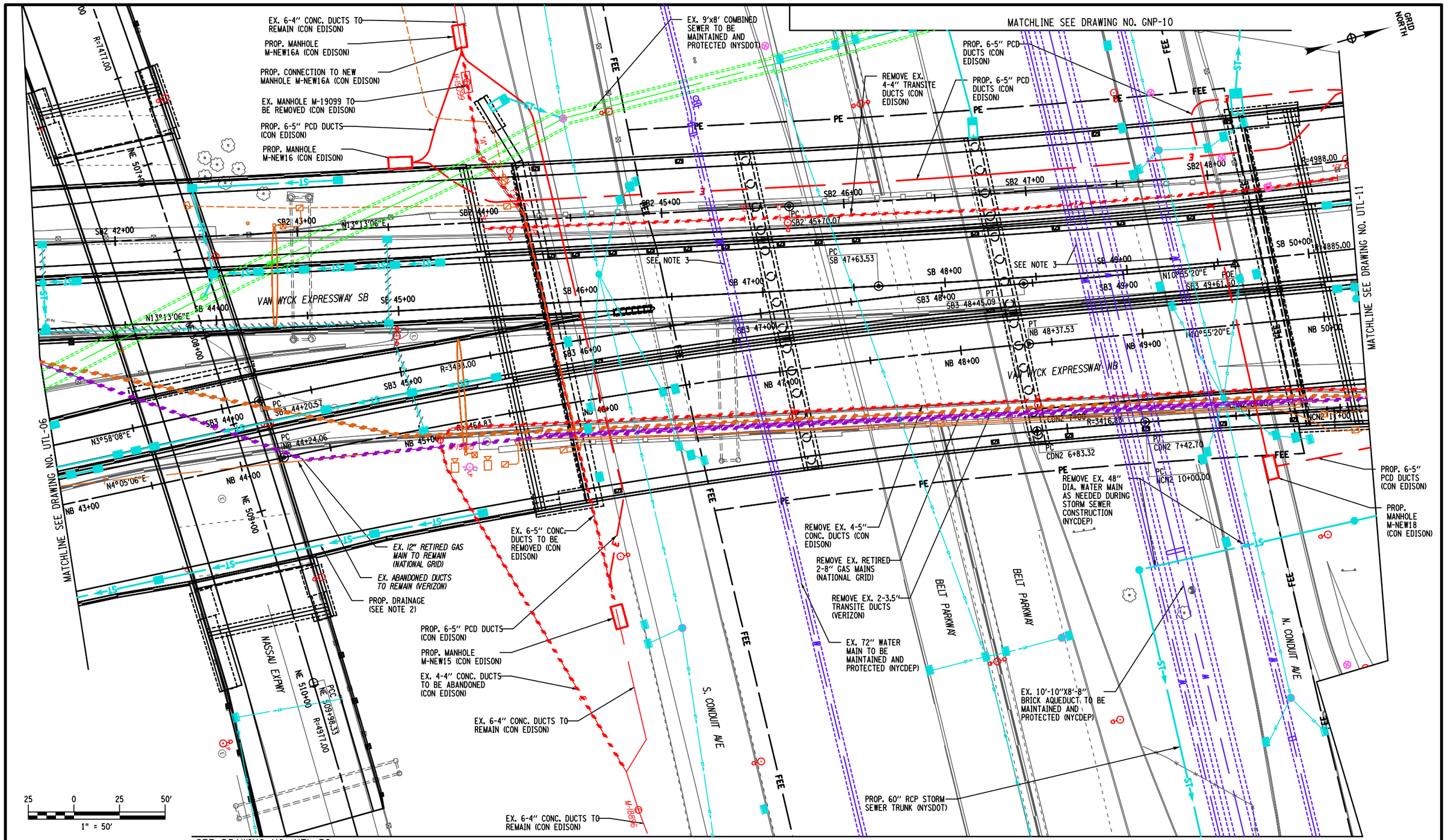

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 09	CONTRACT NUMBER D900053 DRAWING NO. UTL-09 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
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JOB MANAGER
DESIGN SUPERVISOR

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DATE/TIME = 21-JUL-2021 17:24
USER = nlambros

PROJECT MANAGER
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JOB MANAGER
DESIGN SUPERVISOR

EX. 48" WATER MAIN TO REMAIN (NYCDEP)

EX. 48" WATER MAIN TO REMAIN (NYCDEP)

EX. 8'-8" X 10'-10" AQUEDUCT TO REMAIN (NYCDEP)

LIMIT OF WORK MEET EXISTING

LIMIT OF WORK MEET EXISTING (2 RIGHT LANES)

LIMIT OF EXISTING AIRTRAIN ABOVE VWE

EX. 4-4" MTD DUCTS TO BE REMOVED AS NEEDED DURING RETAINING WALL CONSTRUCTION (VERIZON)

LIMIT OF WORK MEET EXISTING

EX. ABANDONED 4-4" MTD DUCTS (VERIZON)

EX. 9'x8' COMBINED SEWER TO REMAIN (NYSDOT)

EX. 12" LCP WATER MAIN TO REMAIN (NYCDEP)

BELT PARKWAY

N. CONDUIT AVE

135TH AVE

EXIT RAMP TO N. CONDUIT

ENTRANCE RAMP FROM N. CONDUIT

NCS2 17+00

NCS2 16+00

NCS2 15+00

NCS2 14+25.11

NCS2 14+00

NCS2 13+00

NCS1 11+00

POB NCS1 10+00.00

PCC NCS1 10+83.84

PCC

FEE

AHB

COMB

ST

GRID NORTH

MATCHLINE SEE DRAWING NO. UTL-09

MATCHLINE SEE DRAWING NO. UTL-11

MATCHLINE SEE DRAWING NO. UTL-11

25 0 25 50'

1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 10

CONTRACT NUMBER
D900053

DRAWING NO. UTL-10
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

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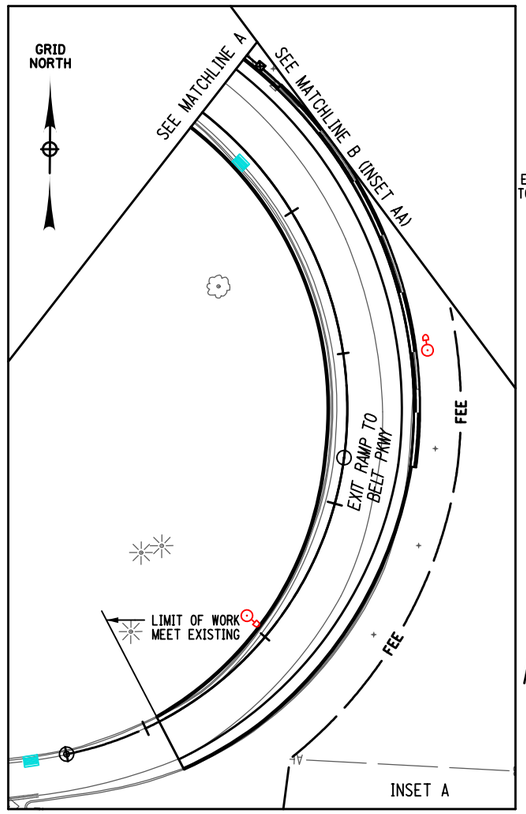

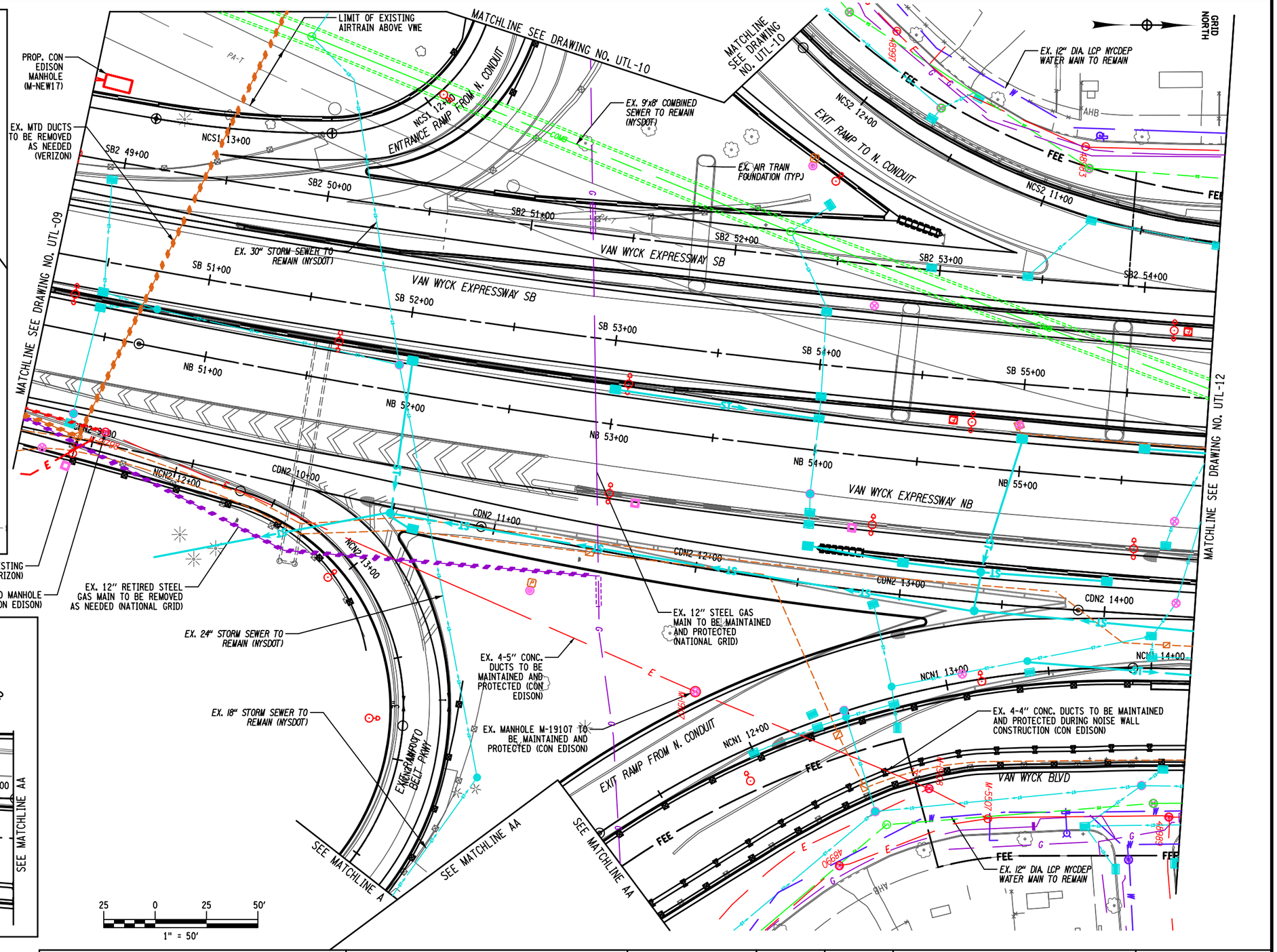

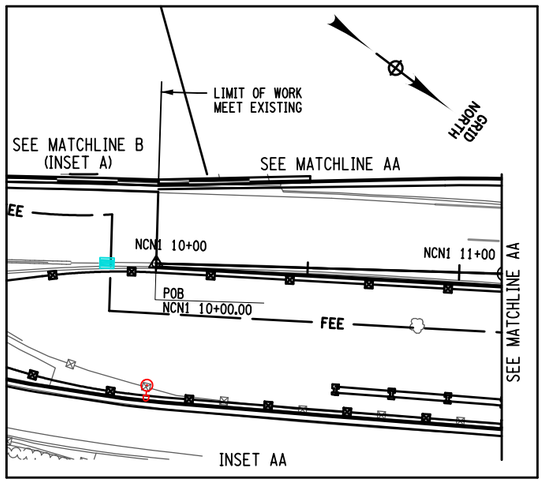

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 11

CONTRACT NUMBER
D900053

DRAWING NO. UTL-11
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
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JOB MANAGER
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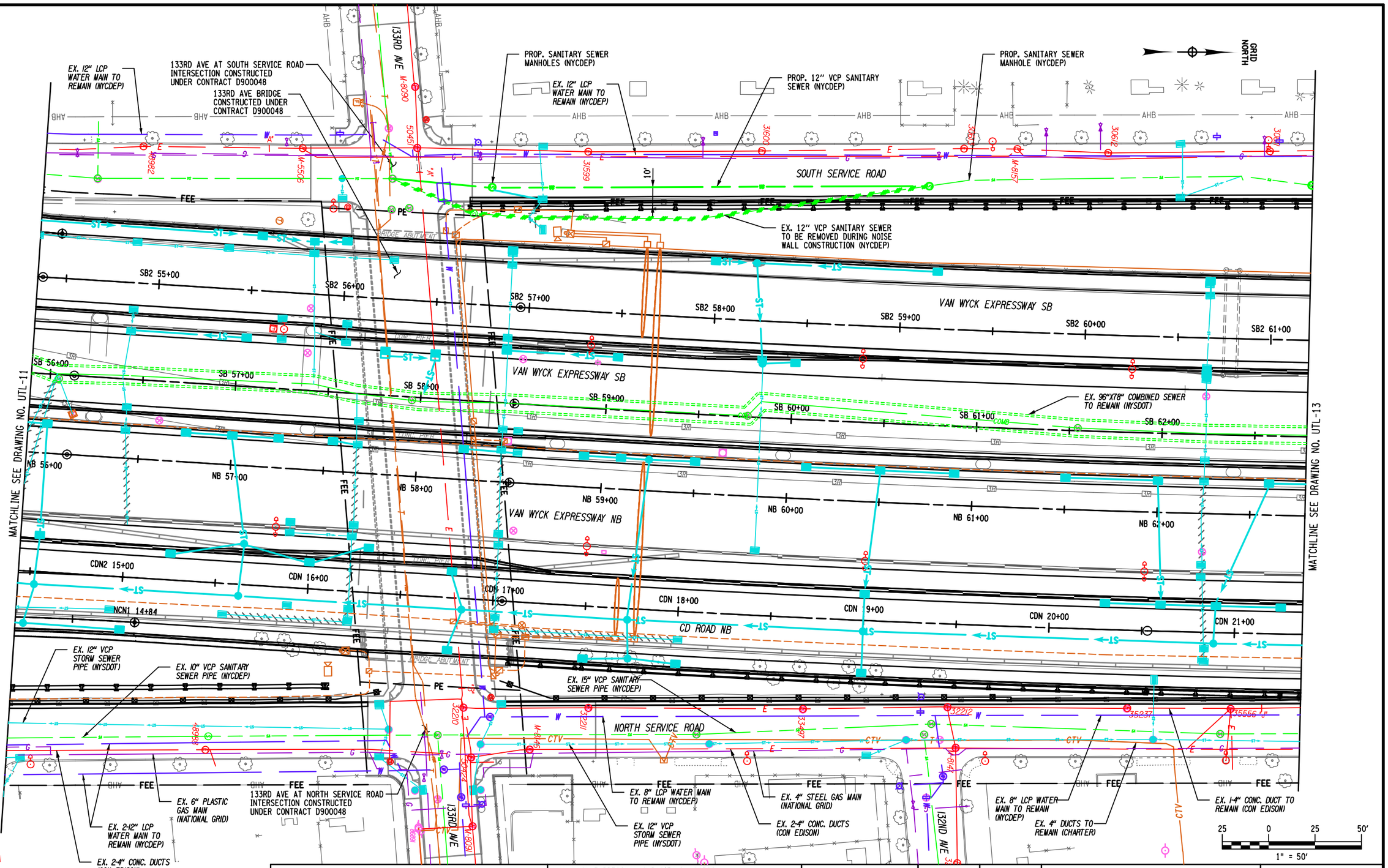

NOTE:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER D900053
	COUNTY: QUEENS REGION: 11				UTILITY PLAN - 12	DRAWING NO. UTL-12 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER | CHECK | DRAFTING | DESIGN | JOB MANAGER | DESIGN SUPERVISOR

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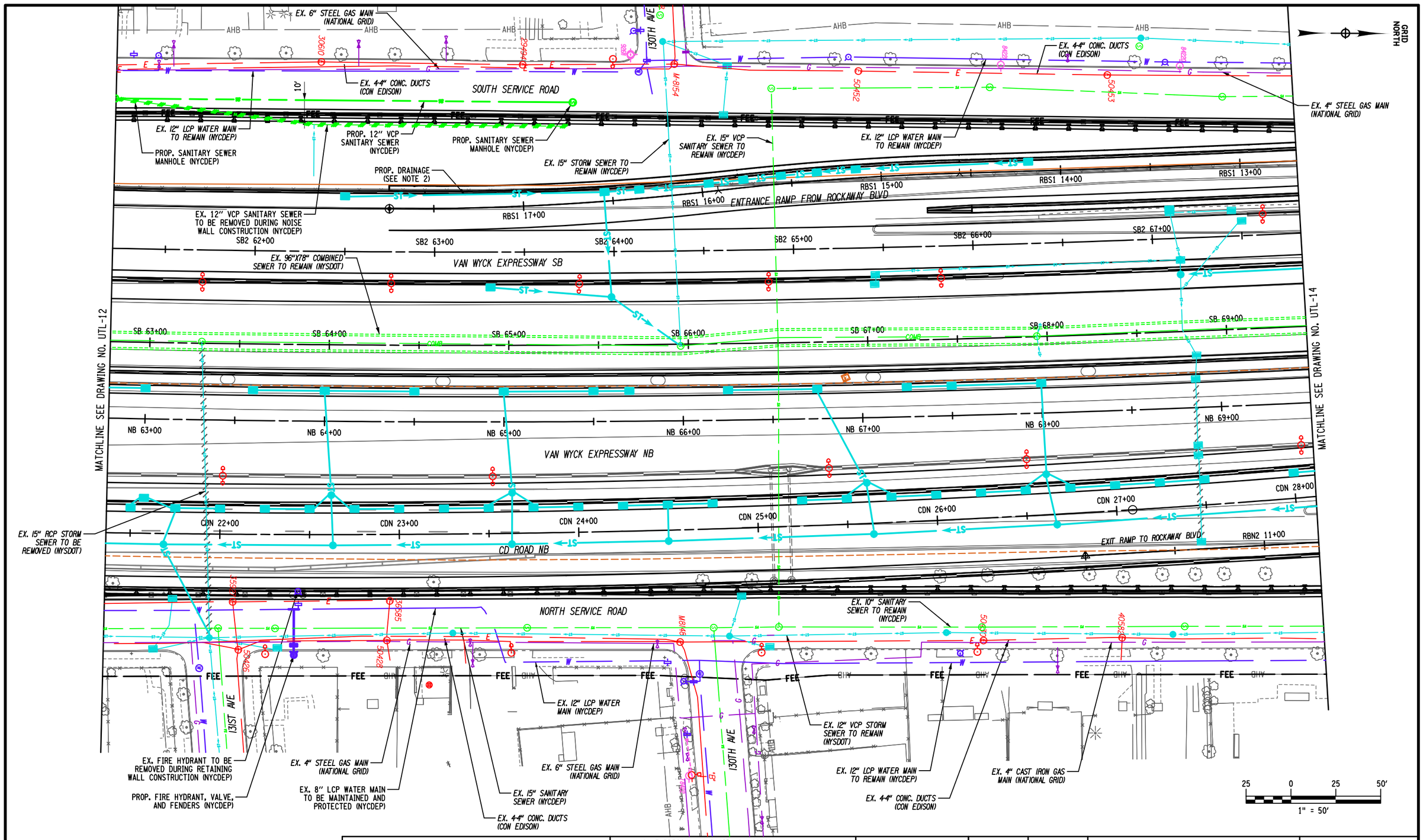

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 13	CONTRACT NUMBER D900053 DRAWING NO. UTL-13 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
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JOB MANAGER
DESIGN SUPERVISOR

FILE NAME = x735.84_rplt_utl_013.DGN
DATE/TIME = 20-JUL-2021 16:15
USER = nlambros

EX. 4" STEEL GAS MAIN (NATIONAL GRID)
EX. 12" LCP WATER MAIN TO REMAIN (NYCDEP)
EX. 15" VCP SANITARY SEWER (NYCDEP)
EX. 6" STEEL GAS MAIN (NATIONAL GRID)
EX. 4-4" CONC. DUCTS TO REMAIN (CON ED)
PROP. 15" VCP SANITARY SEWER (NYCDEP)
PROP. SANITARY SEWER MANHOLE (NYCDEP)
PROP. CATCH BASIN CONNECTION
EX. RETIRED 4" PLASTIC GAS MAIN TO REMAIN (NATIONAL GRID)
REMOVE EX. 15" VCP SANITARY SEWER (NYCDEP)
EX. 4" PLASTIC GAS MAIN TO REMAIN (NATIONAL GRID)
EX. 4-4" CONC. DUCTS TO REMAIN (CON ED)
PROP. 15" VCP SANITARY SEWER (NYCDEP)
EX. 15" VCP STORM SEWER TO REMAIN (NYCDEP)
EX. 12" LCP WATER MAIN TO REMAIN (NYCDEP)
REMOVE EX. 15" VCP SANITARY SEWER (NYCDEP)
REMOVE EX. SANITARY SEWER MANHOLE (NYCDEP)
EX. 96" CONC. COMBINED SEWER TO REMAIN (NYSDOT)
EX. 4-4" CONC. DUCTS TO BE MAINTAINED AND PROTECTED (CON EDISON)
LIMIT OF WORK MEET EXISTING PAVEMENT
EX. 4-4" CONC. DUCTS TO REMAIN (CON EDISON)
EX. 4-4" CONC. DUCTS TO BE MAINTAINED AND PROTECTED (CON EDISON)

SUTTER AVE
ALWICK ROAD
SOUTH SERVICE ROAD
ENTRANCE RAMP FROM ROCKAWAY BLVD
VAN WYCK EXPRESSWAY SB
VAN WYCK EXPRESSWAY NB
EXIT RAMP TO ROCKAWAY BLVD
NORTH SERVICE ROAD
MATCHLINE SEE DRAWING NO. UTL-13
MATCHLINE SEE DRAWING NO. UTL-15
GRID NORTH

25 0 25 50'
1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE (DRP-01 TO DRP-41) PLANS AND DETAILS (DRD-01 TO DRD-06) FOR MORE INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER D900053
	COUNTY: QUEENS REGION: 11				UTILITY PLAN - 14	DRAWING NO. UTL-14 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
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JOB MANAGER
DESIGN SUPERVISOR
DRAFTING
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FILE NAME = x735841_gnh_utl_0l4.DGN
DATE/TIME = 19-JUL-2021 16:30
USER = nlambros

EX. 6-4" CONC. DUCTS (CON EDISON)

EX. 15" VCP STORM SEWER TO REMAIN (NYSDOT)

EX. 4" PLASTIC GAS MAIN (NATIONAL GRID)

EX. 15" VCP SANITARY SEWER (NYCDEP)

EX. 12" LCP WATER MAIN TO REMAIN (NYCDEP)

ROCKAWAY BLVD AT SOUTH SERVICE ROAD INTERSECTION CONSTRUCTED UNDER CONTRACT D900048

ROCKAWAY BLVD BRIDGE CONSTRUCTED UNDER CONTRACT D900048

EX. 12" VCP STORM SEWER TO REMAIN (NYSDOT)

EX. 12" LCP WATER MAIN TO REMAIN (NYCDEP)

EX. RETIRED 4" STEEL GAS MAIN (NATIONAL GRID)

EX. 4" PLASTIC GAS MAIN (NATIONAL GRID)

EX. 6-4" CONC. DUCTS (CON EDISON)

EX. 15" VCP SANITARY SEWER TO REMAIN (NYCDEP)

GRID NORTH

LIMITS OF WORK MEET EXISTING

ROCKAWAY BLVD

SOUTH SERVICE ROAD

EXIT RAMP TO ROCKAWAY BLVD

RBS2 18+00

BRIDGE ABUTMENT

MATCHLINE SEE DRAWING NO. UTL-14

SB 76+00

SB 77+00

SB 78+00

SB 79+00

SB 80+00

SB 81+00

SB 82+00

VAN WYCK EXPRESSWAY SB

EX. 96"X78" COMBINED SEWER TO REMAIN (NYSDOT)

COMB. PIER

NB 76+00

NB 77+00

NB 78+00

NB 79+00

NB 80+00

NB 81+00

NB 82+00

VAN WYCK EXPRESSWAY NB

CDN1 35+00

CDN1 36+00

CDN1 37+00

CDN1 38+00

CDN1 39+00

CDN1 40+00

CDN1 41+00

RBN1 11+00

RBN1 12+00

ENTRANCE RAMP FROM ROCKAWAY BLVD

NORTH SERVICE ROAD

MATCHLINE SEE DRAWING NO. UTL-16

PROP. DRAINAGE (SEE NOTE 2)

EX. 4-4" CONC. DUCTS (CON EDISON)

EX. 1-8" GAS-FILLED STEEL & 2-3" PVC CONDUITS TO REMAIN (PORT AUTHORITY)

ROCKAWAY BLVD AT NORTH SERVICE ROAD INTERSECTION CONSTRUCTED UNDER CONTRACT D900048

25 0 25 50'

1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

PROJECT MANAGER
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JOB MANAGER
DESIGN SUPERVISOR

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AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

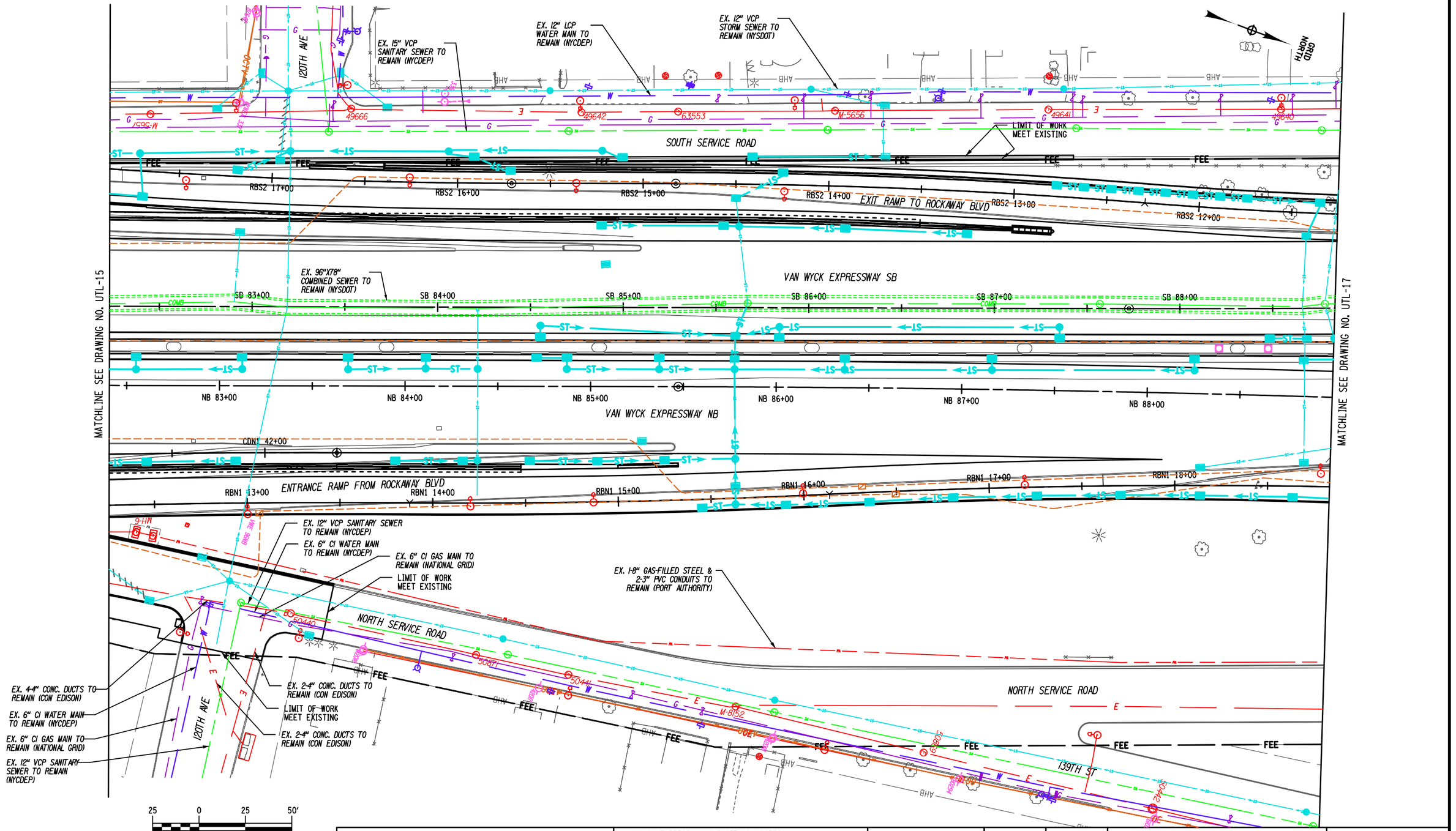
UTILITY PLAN - 15

CONTRACT NUMBER D900053

DRAWING NO. UTL-15

SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation



NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3
COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 16

CONTRACT NUMBER D900053

DRAWING NO. UTL-16

SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
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JOB MANAGER
DESIGN SUPERVISOR

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DATE/TIME = 10-JUL-2021 16:44
USER = nlambros

PROJECT MANAGER
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DESIGN
JOB MANAGER
DESIGN SUPERVISOR

FILE NAME = x73584_cph_utl_017.DGN
DATE/TIME = 19-JUL-2021 16:57
USER = nlambros

MATCHLINE SEE DRAWING NO. UTL-16

MATCHLINE SEE DRAWING NO. UTL-18

GRID NORTH

FOCH BLVD

FOCH BLVD AT SOUTH SERVICE ROAD INTERSECTION CONSTRUCTED UNDER CONTRACT D900048

FOCH BLVD BRIDGE CONSTRUCTED UNDER CONTRACT D900048

EX. 15" VCP SANITARY SEWER TO REMAIN (NYCDEP)

EX. 20" DIP WATER MAIN TO REMAIN (NYCDEP)

EX. 24" STEEL GAS MAIN TO REMAIN (NATIONAL GRID)

SOUTH SERVICE ROAD

BRIDGE ABUTMENT

RBS2 11+00

VAN WYCK EXPRESSWAY SB

SB 89+00 SB 90+00 SB 91+00 SB 92+00 SB 93+00 SB 94+00 SB 95+00

EX. 96"X78" COMBINED SEWER TO REMAIN (NYSDOT)

CONC. PIER

NB 89+00 NB 90+00 NB 91+00 NB 92+00 NB 93+00 NB 94+00 NB 95+00

VAN WYCK EXPRESSWAY NB

RBN1 19+00

BRIDGE ABUTMENT

FOCH BLVD AT NORTH SERVICE ROAD INTERSECTION CONSTRUCTED UNDER CONTRACT D900048

FIRE HYDRANT INSTALLED UNDER DB CONTRACT D900048

EX. 6-4" CONC. DUCTS (CON EDISON)

EX. 1-8" GAS-FILLED STEEL & 2-3" PVC CONDUITS TO REMAIN (PORT AUTHORITY)

NORTH SERVICE ROAD

FOCH BLVD

25 0 25 50'
1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 17

CONTRACT NUMBER
D900053

DRAWING NO. UTL-17
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
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DRAFTING
DESIGN
CHECK
JOB MANAGER
DESIGN SUPERVISOR

FILE NAME = x735f4_cph_utl_0118.DGN
DATE/TIME = 20-JUL-2021 16:49
USER = rlambros

GRID NORTH

EX. GAS FACILITIES TO BE MAINTAINED AND PROTECTED DURING NOISE WALL CONSTRUCTION (NATIONAL GRID)

EX. 12" VCP SANITARY SEWER TO REMAIN (NYCDEP)

EX. 12" LCP WATER MAIN TO REMAIN (NYCDEP)

EX. 6-4" CONC. DUCTS TO REMAIN (CON EDISON)

EX. 2-4" RETIRED GAS MAINS (NATIONAL GRID)

116TH AVE

SOUTH SERVICE ROAD

ENTRANCE RAMP FROM LINDEN BLVD

LINS1 17+00

LINS1 16+00

LINS1 15+

EX. 96"X78" COMBINED SEWER TO REMAIN (NYSDOT)

VAN WYCK EXPRESSWAY SB

SB 96+00 SB 97+00 SB 98+00 SB 99+00 SB 100+00 SB 101+00 SB 102+00

MATCHLINE SEE DRAWING NO. UTL-17

MATCHLINE SEE DRAWING NO. UTL-19

NB 96+00 NB 97+00 NB 98+00 NB 99+00 NB 100+00 NB 101+00 NB 102+00

VAN WYCK EXPRESSWAY NB

SEE NOTE 2

LINN2 10+00 LINN2 11+00 LINN2 12+00 LINN2 13+00 LINN2 14+00 LINN2 15+00

EXIT RAMP TO LINDEN BLVD

LIMIT OF EXISTING AIRTRAIN ABOVE VWE

LIMIT OF WORK MEET EXISTING

EX. 18" RCP STORM SEWER TO BE MAINTAINED AND PROTECTED (NYSDOT)

EX. 24" GAS MAIN TO BE MAINTAINED AND PROTECTED (NATIONAL GRID)

EX. 10" SANITARY SEWER TO BE MAINTAINED AND PROTECTED (NYCDEP)

EX. 1-8" GAS-FILLED STEEL & 2-3" PVC CONDUITS TO REMAIN (PORT AUTHORITY)

EX. 4-4" CONC. DUCTS TO REMAIN (CON EDISON)

NORTH SERVICE ROAD

EX. 6" CAST IRON WATER MAIN TO REMAIN (NYCDEP)

EX. 10" VCP SANITARY SEWER TO REMAIN (NYCDEP)

EX. 6-4" CONC. DUCTS TO REMAIN (CON EDISON)

EX. 6" CAST IRON GAS MAIN TO REMAIN (NATIONAL GRID)

25 0 25 50'
1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 18	CONTRACT NUMBER D900053 DRAWING NO. UTL-18 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

EX. 12" VCP STORM SEWER TO REMAIN (NYSDOT)

EX. 12" VCP STORM SEWER TO REMAIN (NYSDOT)

EX. 12" LCP WATER MAIN TO REMAIN (NYCDEP)

EX. 12" VCP SANITARY SEWER TO REMAIN (NYCDEP)

EX. 6-4" CONC. DUCTS (CON EDISON)

EX. 2-4" RETIRED GAS MAINS (NATIONAL GRID)

GRID NORTH

115TH AVE

LIMIT OF WORK MEET EXISTING

SOUTH SERVICE ROAD

LINS1 14+00

LINS1 13+00

LINS1 12+00

LINS1 11+00

ENTRANCE RAMP FROM LINDEN BLVD

LINS1 10+00

EX. 30" CONC. STORM SEWER TO REMAIN (NYCDEP)

VAN WYCK EXPRESSWAY SB

SB 103+00 SB 104+00 SB 105+00 SB 106+00 SB 107+00 SB 108+00 SB 109+00

MATCHLINE SEE DRAWING NO. UTL-18

MATCHLINE SEE DRAWING NO. UTL-20

EX. 96"X78" COMBINED SEWER TO REMAIN (NYSDOT)

EX. 96"X78" COMBINED SEWER TO REMAIN (NYSDOT)

NB 103+00 NB 104+00 NB 105+00 NB 106+00 NB 107+00 NB 108+00 NB 109+00

VAN WYCK EXPRESSWAY NB

EX. 24" CONC. STORM SEWER TO REMAIN (NYCDEP)

EX. 2-4" PCD DUCTS TO BE MAINTAINED AND PROTECTED (CON EDISON)

BIORETENTION-2

25

30

EX. 6" CI WATER MAIN TO REMAIN (NYCDEP)

EX. 1-8" GAS-FILLED STEEL & 2-3" PVC CONDUITS TO REMAIN (PORT AUTHORITY)

EX. 6-4" CONC. DUCTS TO REMAIN (CON EDISON)

EX. 8" VCP SANITARY SEWER TO REMAIN (NYCDEP)

NORTH SERVICE ROAD

115TH AVE

EX. 8" VCP SANITARY SEWER TO REMAIN (NYCDEP)

EX. 6-4" CONC. DUCTS TO REMAIN (CON EDISON)

EX. 4" PLASTIC GAS MAIN TO REMAIN (NATIONAL GRID)

EX. 2-4" CONC. DUCTS TO REMAIN (CON EDISON)

25 0 25 50'

1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 19

CONTRACT NUMBER
D900053

DRAWING NO. UTL-19
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
CHECK
DRAFTING
CHECK
DESIGN
JOB MANAGER
DESIGN SUPERVISOR

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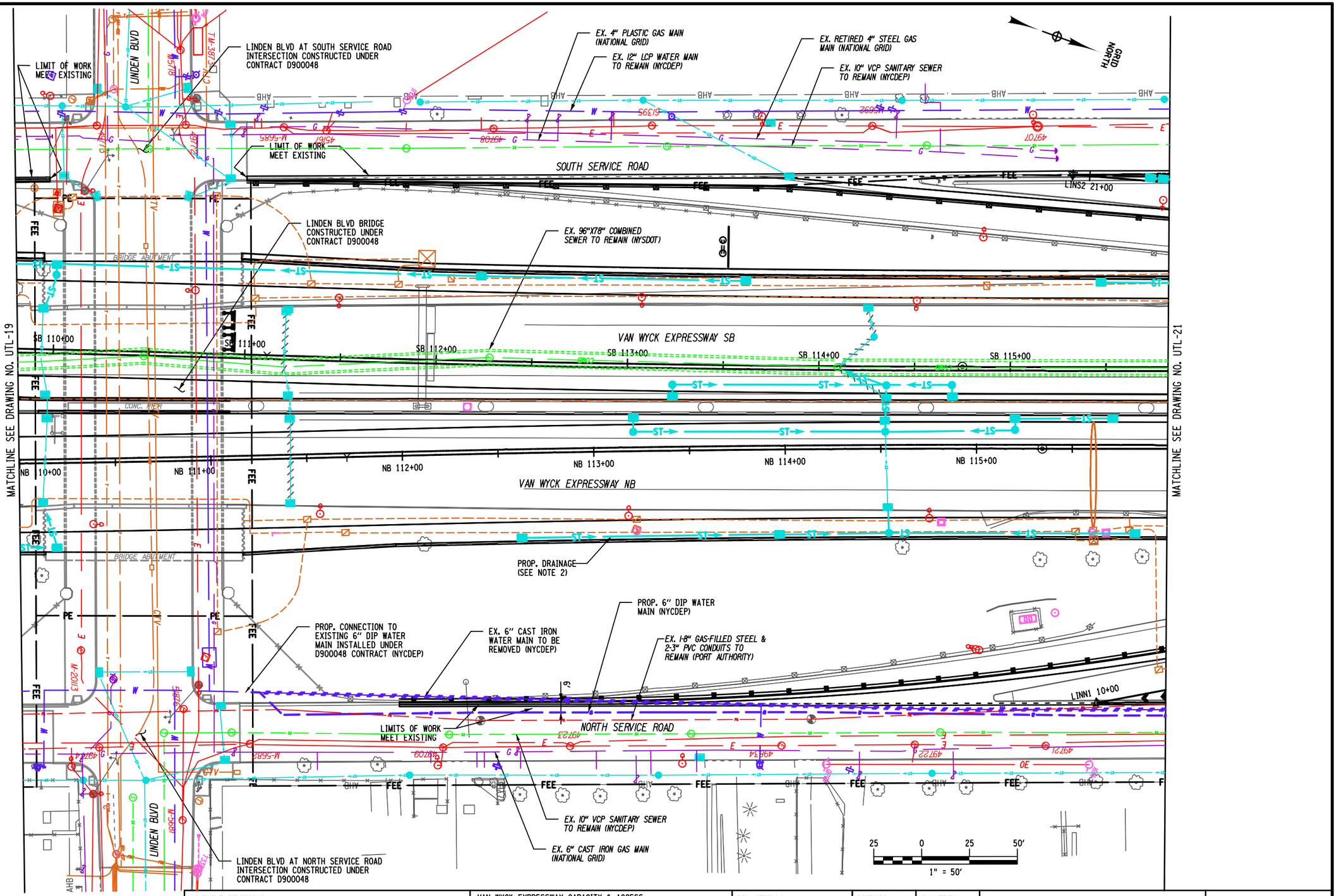

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 20

CONTRACT NUMBER
D900053

DRAWING NO. UTL-20
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
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DRAFTING
DESIGN
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JOB MANAGER
DESIGN SUPERVISOR

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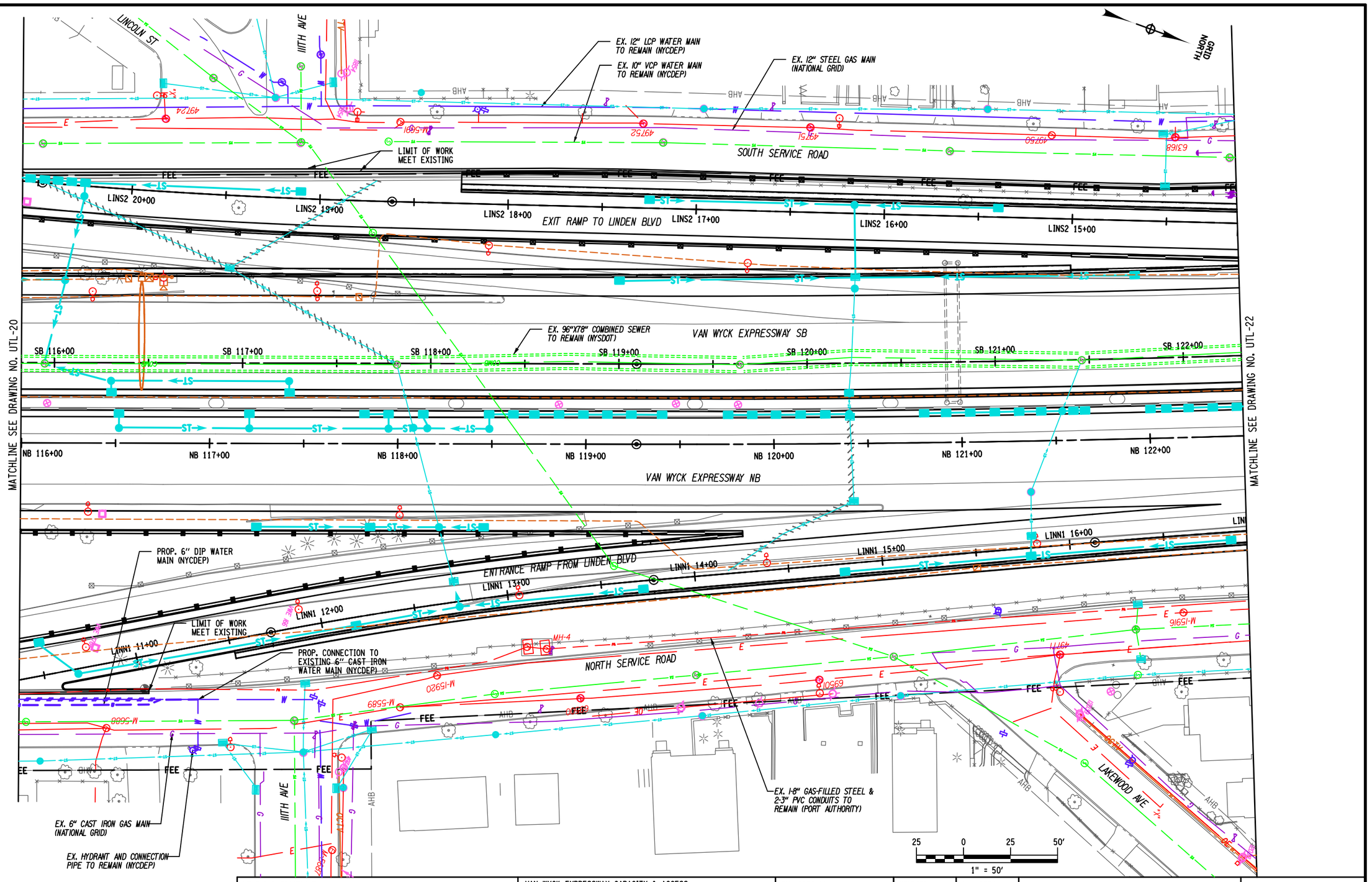

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 21

CONTRACT NUMBER
D900053

DRAWING NO. UTL-21
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
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DESIGN
JOB MANAGER
DRAFTING
DESIGN SUPERVISOR

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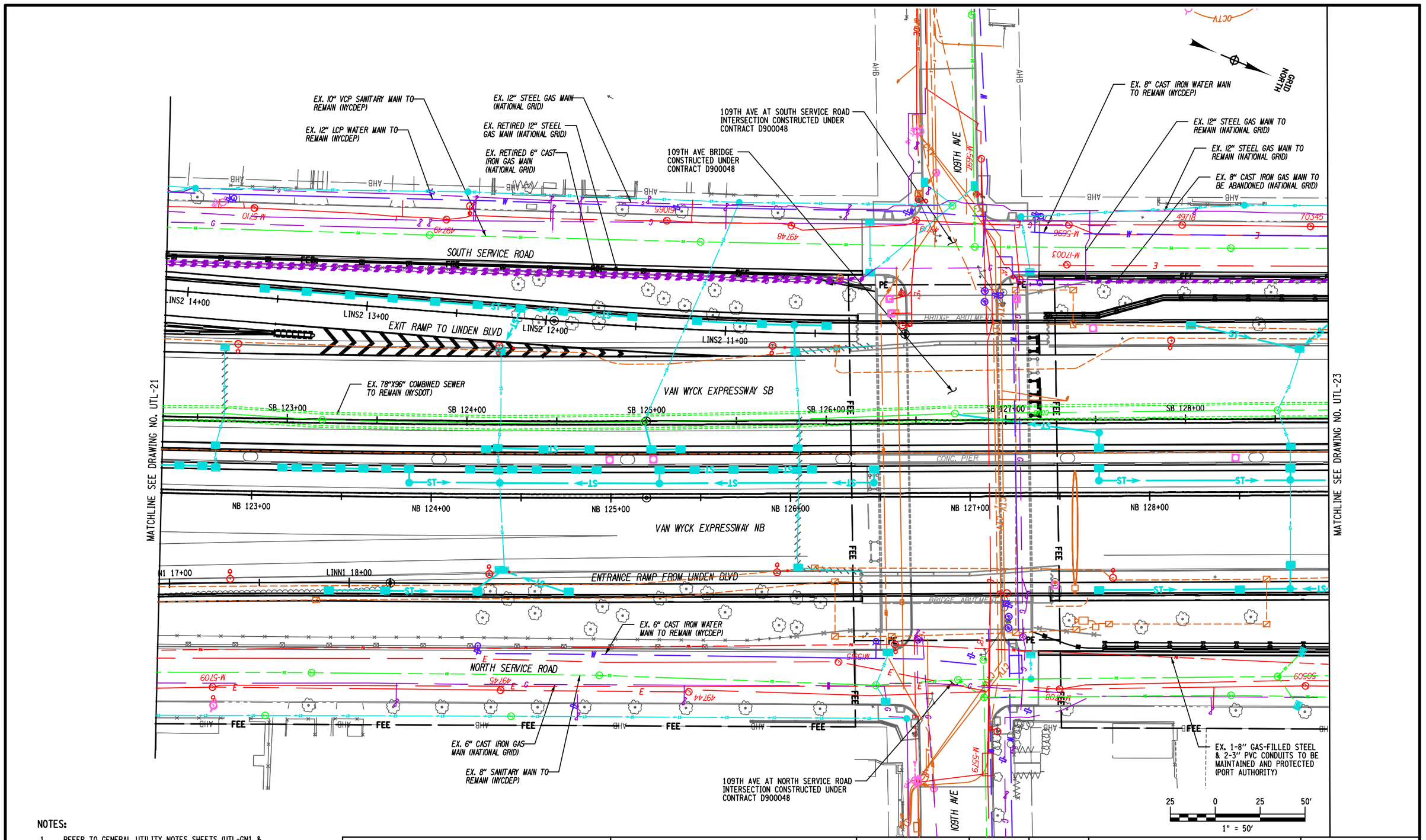

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS AND DETAILS FOR FURTHER INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 22	CONTRACT NUMBER D900053 DRAWING NO. UTL-22 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
CHECK
DRAFTING
DESIGN
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JOB MANAGER
DESIGN SUPERVISOR

FILE NAME = x735841_gnl_utl_022.DGN
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USER = mlambros

PROJECT MANAGER
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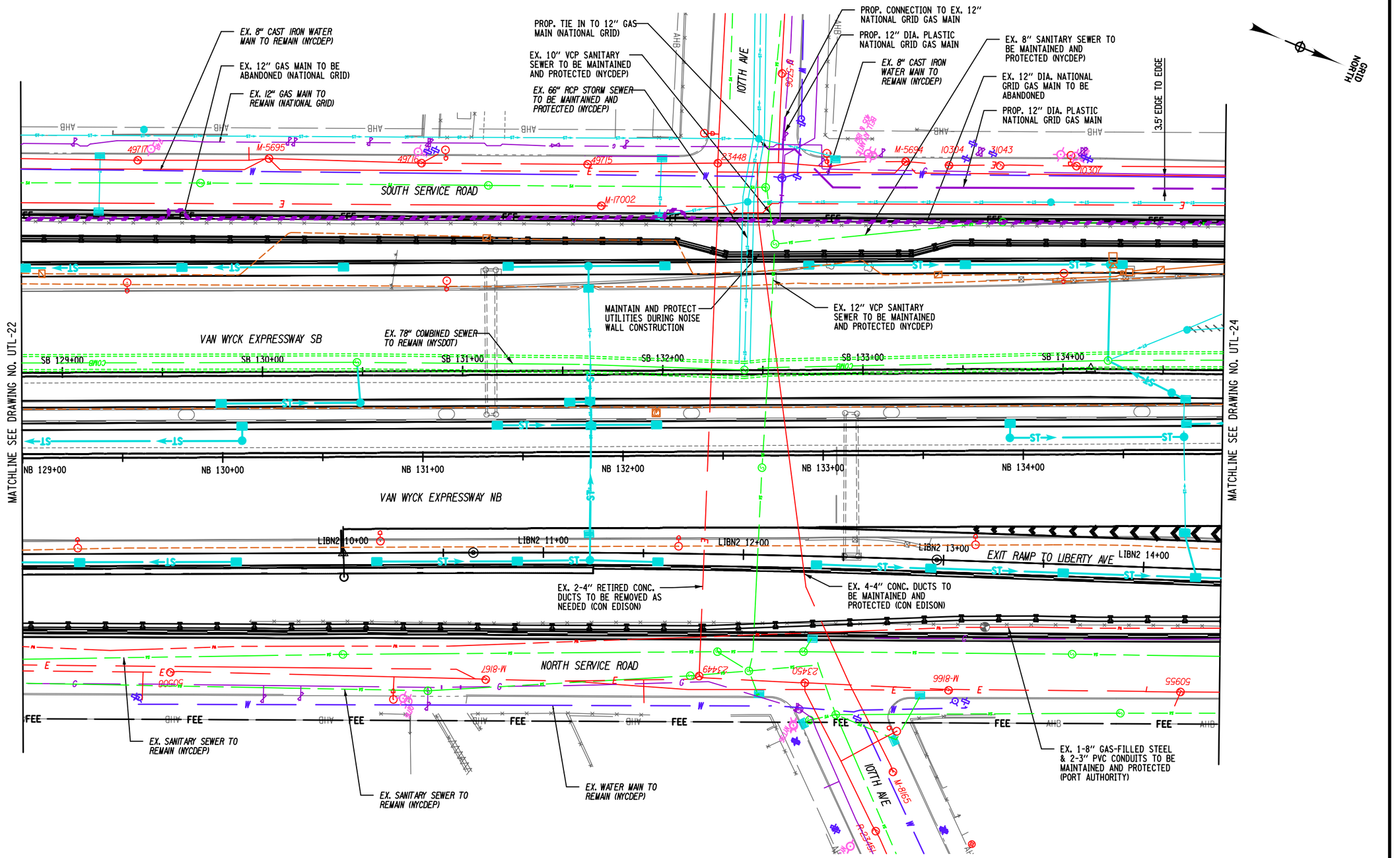
DRAFTING
CHECK
DESIGN
JOB MANAGER
DESIGN SUPERVISOR



NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 23	CONTRACT NUMBER D900053 DRAWING NO. UTL-23 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

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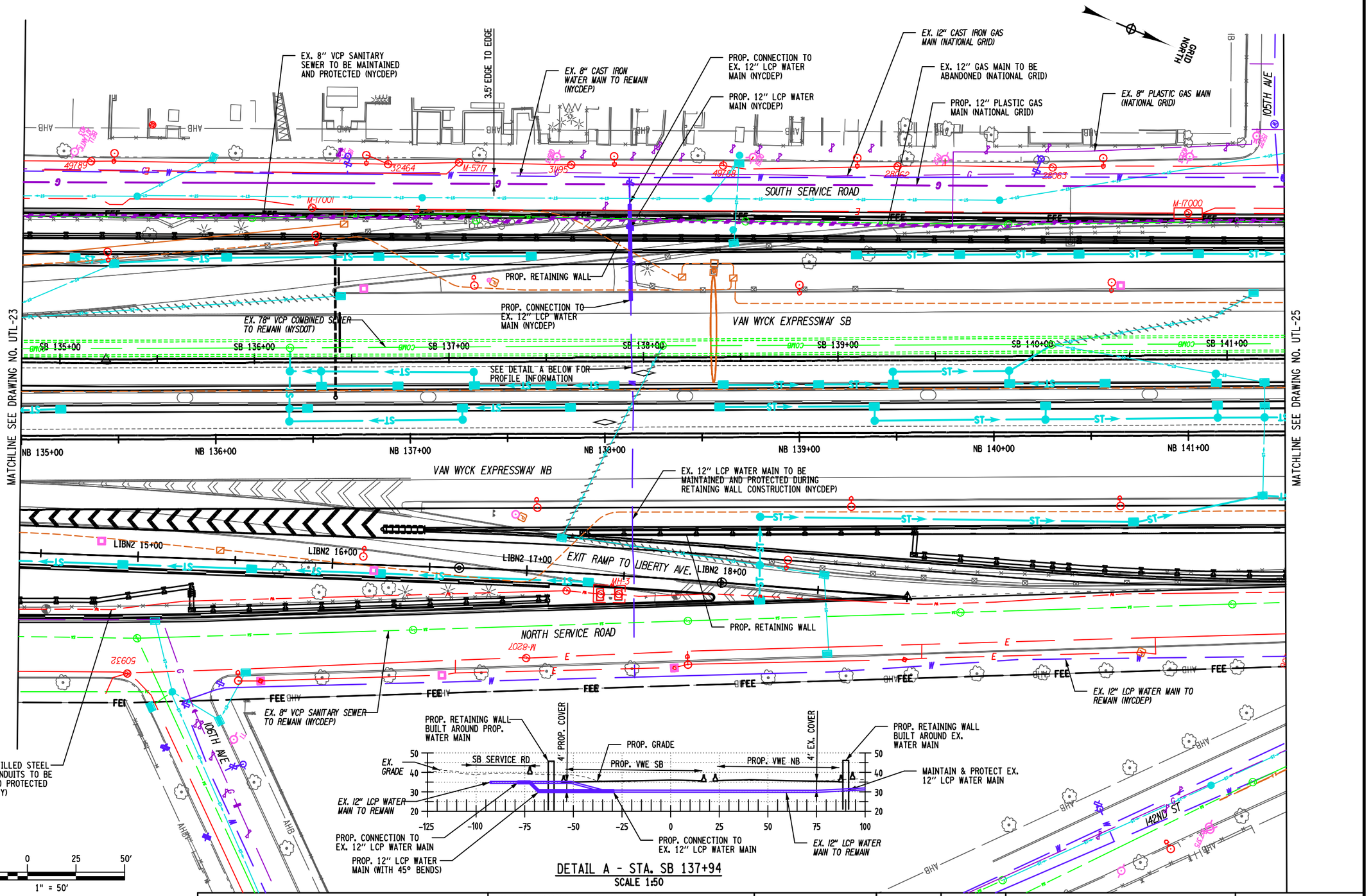

DETAIL A - STA. SB 137+94
SCALE 1:50

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER D900053
	COUNTY: QUEENS REGION: 11				UTILITY PLAN - 24	DRAWING NO. UTL-24 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
CHECK
DRAFTING
CHECK
DESIGN
JOB MANAGER
DESIGN SUPERVISOR

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DATE/TIME = 15-JUL-2021 14:25
USER = nlambros

PROJECT MANAGER
CHECK
DRAFTING
DESIGN
CHECK
JOB MANAGER
DESIGN SUPERVISOR

PROP. 8" PLASTIC GAS MAIN CONNECTION TO EXISTING SYSTEM (NATIONAL GRID)

EX. 10-4" CONC. DUCTS TO REMAIN (CON EDISON)

PROP. 12" PLASTIC GAS MAIN (NATIONAL GRID)

PROP. 2" PLASTIC GAS MAIN CONNECTION TO EXISTING SYSTEM (NATIONAL GRID)

PROP. FIRE HYDRANT, VALVE, AND FENDERS (NYCDEP)

PROP. WATER MAIN VALVE ACCESS CHAMBER (NYCDEP)

EX. RETIRED 12" CAST IRON GAS MAIN TO BE REMOVED AS NECESSARY (NATIONAL GRID)

PROP. 48" STEEL WATER MAIN (NYCDEP) - SEE NOTE 3

EX. 1-4" CONC. DUCTS (CON EDISON)

REMOVE EXISTING FIRE HYDRANT (NYCDEP)

EX. 12" DIP WATER MAIN TO REMAIN (NYCDEP)

EX. RETIRED 2" GAS MAIN (NATIONAL GRID)

EX. 8" TILE SANITARY SEWER TO BE MAINTAINED AND PROTECTED (NYCDEP)

EX. 48" CONC. WATER MAIN TO REMAIN (NYCDEP)

EX. 6-5" PCD DUCTS TO BE MAINTAINED AND PROTECTED (CON EDISON)

LIBERTY AVE AT SOUTH SERVICE ROAD INTERSECTION CONSTRUCTED UNDER CONTRACT D900048

LIBERTY AVE BRIDGE CONSTRUCTED UNDER CONTRACT D900048

EX. ABANDONED 12" DIP WATER MAIN TO REMAIN (NYCDEP)

EX. 12" DIP WATER MAIN TO REMAIN (NYCDEP)

GRID NORTH

MATCHLINE SEE DRAWING NO. UTL-24

MATCHLINE SEE DRAWING NO. UTL-26

105TH AVE

LIBERTY AVE

SOUTH SERVICE ROAD

VAN WYCK EXPRESSWAY SB

VAN WYCK EXPRESSWAY NB

NORTH SERVICE ROAD

142ND ST.

104TH AVE

LIBERTY AVE

REMINGTON ST.

BRIDGE ABUTMENT

CONC. PIER

ENTRANCE RAMP FROM 105ST AVE

ENTRANCE RAMP FROM LIBERTY AVE

SSRB 11+00

NSRA 11+00

R101S1 15+00

R101S1 16+00

R101S1 17+00

SB 142+00

SB 143+00

SB 144+00

SB 145+00

SB 146+00

SB 147+00

NB 142+00

NB 143+00

NB 144+00

NB 145+00

NB 146+00

NB 147+00

EX. 12" CAST IRON GAS MAIN TO BE ABANDONED (NATIONAL GRID)

PROP. CONNECTION TO EX. 12" STEEL GAS MAIN (NATIONAL GRID)

EX. 12" STEEL GAS MAIN TO REMAIN (NATIONAL GRID)

EX. 30" RCP SEWER PIPE TO BE MAINTAINED AND PROTECTED DURING RETAINING WALL CONSTRUCTION (NYSDOT)

PROP. TIE IN POINT (SEE NOTE 3)

EX. 48" STEEL WATER MAIN TO BE MAINTAINED AND PROTECTED DURING RETAINING/NOISE WALL CONSTRUCTION (NYCDEP)

PROP. WATER MAIN ACCESS MANHOLE (NYCDEP)

EX. 48" STEEL WATER MAIN (NYCDEP)

LIBERTY AVE AT NORTH SERVICE ROAD INTERSECTION CONSTRUCTED UNDER CONTRACT D900048

PROP. CONNECTION TO EXISTING MANHOLE (FDNY)

PROP. 3" PVC CONDUIT (FDNY)

REMOVE EX. 3" PVC CONDUIT (FDNY)

EX. 12-5" CONC. DUCTS (CON EDISON)

EX. 1-8" GAS-FILLED STEEL & 2-3" PVC CONDUITS TO REMAIN (PORT AUTHORITY)

25 0 25 50'

1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.
3. SEE DETAIL DRAWING WM-1 FOR MORE INFORMATION ON THE PROPOSED 48" DIA. STEEL WATER MAIN WORK.

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USER = mlambros

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

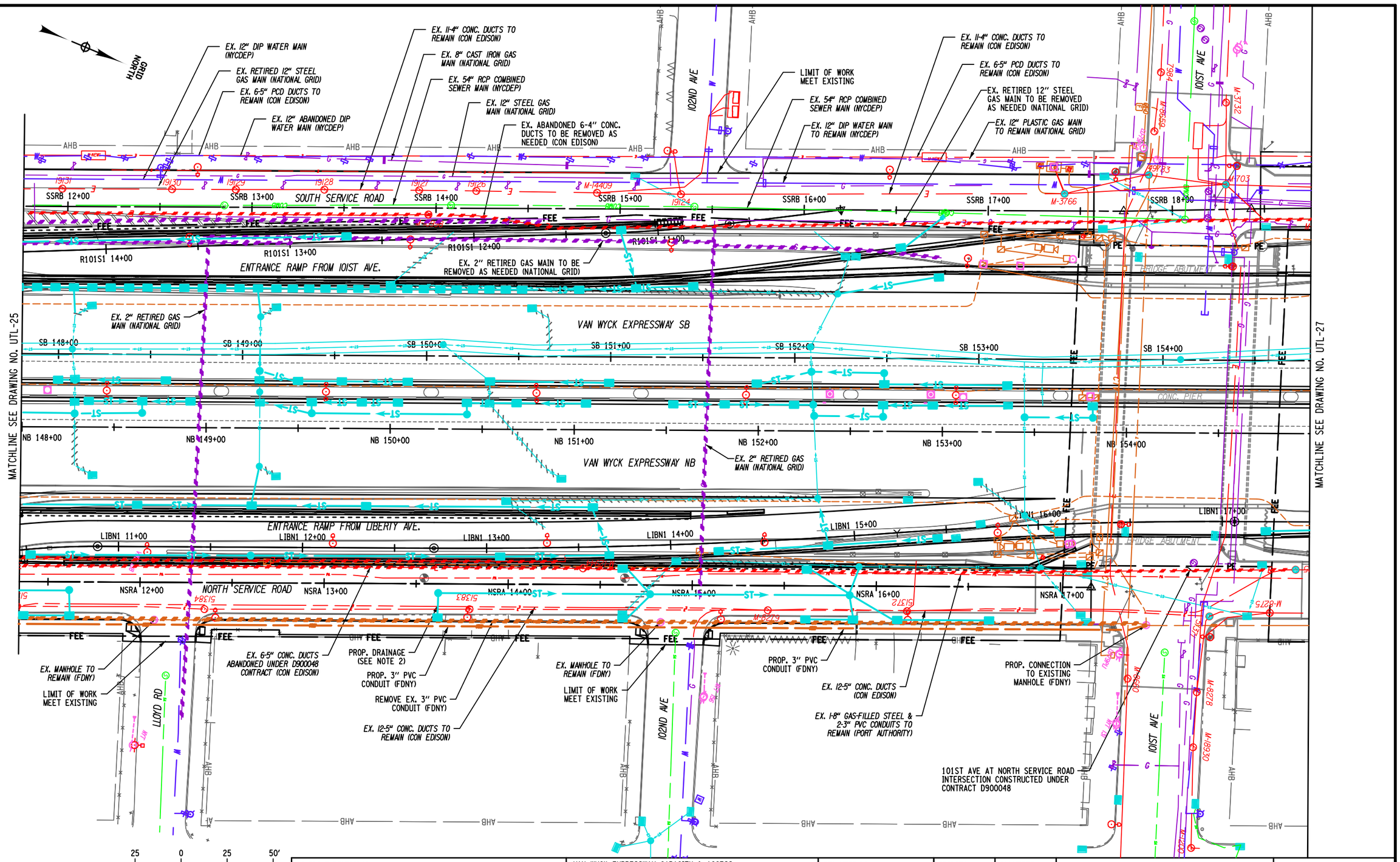
ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 25

CONTRACT NUMBER
D900053

DRAWING NO. UTL-25
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation



NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 26

CONTRACT NUMBER D900053

DRAWING NO. UTL-26

SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
CHECK
DRAFTING
CHECK
DESIGN
JOB MANAGER
DESIGN SUPERVISOR

FILE NAME = x73584_cph_utl_026.DGN
DATE/TIME = 10-JUL-2021 15:03
USER = mlambros

PROJECT MANAGER
CHECK
DRAFTING
DESIGN
JOB MANAGER
DESIGN SUPERVISOR

GRID NORTH

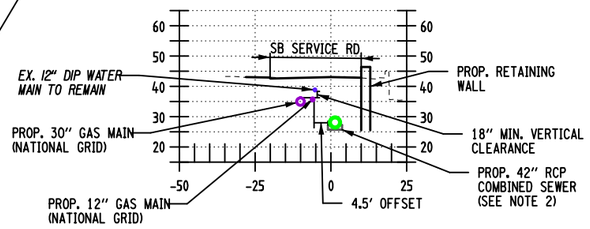
PROP. FIRE HYDRANT, VALVE, AND FENDERS (NYCDEP)
PROP. UTILITY POLE (CHARTER)
EX. 6-5" PCD DUCTS TO BE MAINTAINED AND PROTECTED (CON EDISON)
EX. 12" DIP ABANDONED WATER MAIN TO BE REMOVED AS NEEDED (NYCDEP)
EX. 12" DIP WATER MAIN TO REMAIN (NYCDEP)
PROP. FIRE HYDRANT, VALVE, AND FENDERS (NYCDEP)
PROP. UTILITY POLE (CHARTER)
PROP. UTILITY POLE (CON EDISON)
EX. 30" STEEL GAS MAIN TO REMAIN (NATIONAL GRID)
EX. 54" RCP COMBINED SEWER TO REMAIN (NYCDEP)
LIMIT OF WORK MEET EXISTING
PROP. CONNECTION TO EX. 30" STEEL GAS MAIN (NATIONAL GRID)
PROP. 42" RCP COMBINED SEWER (NYCDEP)
PROP. CONNECTION TO EX. 12" STEEL GAS MAIN (NATIONAL GRID)
EX. FIRE HYDRANT TO BE REMOVED (NYCDEP)
97TH AVE
REMOVE EX. UTILITY POLE #1 (VERIZON)
PROP. UTILITY POLE (VERIZON)
REMOVE EX. 12" PLASTIC GAS MAIN (NATIONAL GRID)
REMOVE EX. 30" CI GAS MAIN (NATIONAL GRID)
PROP. FIRE HYDRANT, VALVE, AND FENDERS (NYCDEP)
EX. 12" DIP ABANDONED WATER MAIN TO BE REMOVED (NYCDEP)
PROP. UTILITY POLE (CON EDISON)
REMOVE EX. UTILITY POLE 11256 (CON EDISON)
PROP. 12" STEEL GAS MAIN (NATIONAL GRID)
PROP. COMBINED SEWER MANHOLE (NYCDEP)
PROP. 30" STEEL GAS MAIN (NATIONAL GRID)
PROP. UTILITY POLE (VERIZON)
REMOVE EX. 2" PLASTIC GAS MAIN (NATIONAL GRID)
REMOVE EX. UTILITY POLE #2 (VERIZON)
REMOVE EX. COMBINED SEWER DURING RETAINING WALL CONSTRUCTION TYP. (NYCDEP)

SSRB 19+00
SSRB 20+00
SSRB 21+00
SSRB 22+00
SSRB 23+00
SSRB 24+00
SSRB 25+00
SOUTH SERVICE ROAD
R101S2 18+00
R101S2 17+00
EXIT RAMP TO 101ST AVE
R101S2 16+00
R101S2 15+00
REMOVE EX UTILITY POLES NT-1 & NT-0 (CHARTER)
REMOVE EX. RETIRED GAS MAIN (NATIONAL GRID)
REMOVE EX. UTILITY POLE 2508 (CON EDISON)
REMOVE EX. DUCT BANK (CON EDISON)
VAN WYCK EXPRESSWAY SB
SEE DETAIL A BELOW FOR SECTION DETAIL
REMOVE EX. 12" STEEL GAS MAIN (NATIONAL GRID)
PROP. 42" RCP COMBINED SEWER (NYCDEP)
PROP. COMBINED SEWER MANHOLE (NYCDEP)

SB 155+00
SB 156+00
SB 157+00
SB 158+00
SB 159+00
SB 160+00
SB 161+00
NB 155+00
NB 156+00
NB 157+00
NB 158+00
NB 159+00
NB 160+00
NB 161+00
VAN WYCK EXPRESSWAY NB

MATCHLINE SEE DRAWING NO. UTL-26
MATCHLINE SEE DRAWING NO. UTL-28

NORTH SERVICE ROAD
MH-2
97TH AVE
MAINTAIN AND PROTECT EX. 3" PVC CONDUIT (FDNY)
EX. 8-4" CONC. DUCTS TO REMAIN (CON EDISON)
EX. 6-4" CONC. DUCTS TO REMAIN (CON EDISON)
EX. 1-8" GAS-FILLED STEEL & 2-3" PVC CONDUITS (PORT AUTHORITY)
EX. 8-4" CONC. DUCTS TO REMAIN (CON EDISON)
EX. 3" PVC CONDUIT TO REMAIN (FDNY)
EX. 6-4" CONC. DUCTS TO REMAIN (CON EDISON)
EX. 1-8" GAS-FILLED STEEL & 2-3" PVC CONDUITS (PORT AUTHORITY)



DETAIL A - STA. SSRB 23+15
SCALE 1:50

25 0 25 50'
1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 27	CONTRACT NUMBER D900053 DRAWING NO. UTL-27 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

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PROJECT MANAGER
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DRAFTING
CHECK
DESIGN
JOB MANAGER
DESIGN SUPERVISOR

FILE NAME = x735584_cph_utl_028.DGN
DATE/TIME = 11-AUG-2021 12:47
USER = nlambros

PROP. FIRE HYDRANT, VALVE, FENDERS (NYCDEP)
EX. RETIRED 6" GAS MAIN (NATIONAL GRID)
EX. 8" GAS MAIN (NATIONAL GRID)
EX. 2-4" CONC. DUCTS TO BE MAINTAINED AND PROTECTED (CON EDISON)
PROP. CONNECTION POINT TO EX. 8" GAS MAIN (NATIONAL GRID)
EX. 12" DIP WATER MAIN TO BE MAINTAINED AND PROTECTED (NYCDEP)
PROP. 8" GAS MAIN (NATIONAL GRID)
REMOVE EX. 6" GAS MAIN (NATIONAL GRID)
REMOVE EX. UTILITY POLE #3 (VERIZON)
REMOVE EX. FIRE HYDRANT (NYCDEP)
PROP. UTILITY POLE (VERIZON)
PROP. COMBINED SEWER MANHOLE (NYCDEP)
EX. RETIRED GAS MAIN TO BE REMOVED AS NEEDED (NATIONAL GRID)
EX. 6-5" PCD DUCTS TO BE MAINTAINED AND PROTECTED (CON EDISON)
PROP. 30" STEEL GAS MAIN (NATIONAL GRID)
PROP. 12" STEEL GAS MAIN (NATIONAL GRID)
REMOVE EX. RETIRED 3" PLASTIC GAS MAIN (NATIONAL GRID)
REMOVE EX. 30" STEEL GAS MAIN (NATIONAL GRID)
PROP. FIRE HYDRANT, VALVE, FENDERS (NYCDEP)
EX. 12" DIP WATER MAIN TO BE MAINTAINED AND PROTECTED (NYCDEP)
REMOVE EX. 8" PLASTIC GAS PIPE (NATIONAL GRID)
EX. 12" DIP ABANDONED WATER MAIN TO BE REMOVED AS NEEDED (NYCDEP)
EX. ABANDONED DUCT BANKS TO BE REMOVED (CON EDISON)
REMOVE EX. RETIRED 4" PLASTIC RETIRED GAS MAIN (NATIONAL GRID)
PROP. CONNECTION TO EX. 30" GAS MAIN (NATIONAL GRID)
PROP. COMBINED SEWER MANHOLE (NYCDEP)
EX. HYDRANT, VALVE, AND FENDERS TO BE MAINTAINED AND PROTECTED (NYCDEP)
EX. 12" DIP WATER MAIN ABANDONED UNDER CONTRACT D900050 (NYCDEP)
PROP. CONNECTION TO EX. 12" GAS MAIN (NATIONAL GRID)
EX. 12" DIP WATER MAIN INSTALLED UNDER CONTRACT D900050 (NYCDEP)
REMOVE EX. 12" STEEL GAS MAIN (NATIONAL GRID)
PROP. 36" RCP COMBINED SEWER (NYCDEP)
PROP. 42" RCP COMBINED SEWER (NYCDEP)
PROP. COMBINED SEWER MANHOLE (NYCDEP)
PROP. COMBINED SEWER MANHOLE (NYCDEP)
EX. 6-4" CONC. DUCTS TO REMAIN (CON EDISON)
EX. 1-8" TRANSMISSION DUCT & 2-3" PVC CONDUITS TO REMAIN (PORT AUTHORITY)
EX. 8-4" CONC. DUCTS TO REMAIN (CON EDISON)
EX. 3" PVC CONDUIT TO BE MAINTAINED AND PROTECTED DURING NOISE WALL CONSTRUCTION (FDNY)
LIMIT OF EXISTING AIRTRAIN ABOVE

95TH AVE
ATLANTIC AVE
94TH AVE
SOUTH SERVICE ROAD
NORTH SERVICE ROAD
EXIT RAMP JOIST AVE
VAN WYCK EXPRESSWAY SB
VAN WYCK EXPRESSWAY NB
BRIDGE ABUTMENT
CONC. PIER

SSRB 26+00
SSRB 27+00
SSRB 28+00
SSRB 29+00
SSRB 30+00
SSRB 31+00
SSRB 32+00
R101S2 14+00
R101S2 13+00
R101S2 12+00
R101S2 11+00
SB 162+00
SB 163+00
SB 164+00
SB 165+00
SB 166+00
SB 167+00
SB 168+00
NB 162+00
NB 163+00
NB 164+00
NB 165+00
NB 166+00
NB 167+00
NB 168+00
NSRB 11+00
NSRB 12+00
NSRB 13+00
NSRB 14+00
NSRB 15+00

MATCHLINE SEE DRAWING NO. UTL-27
MATCHLINE SEE DRAWING NO. UTL-29

NOTE:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

25 0 25 50'
1" = 50'

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3
COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

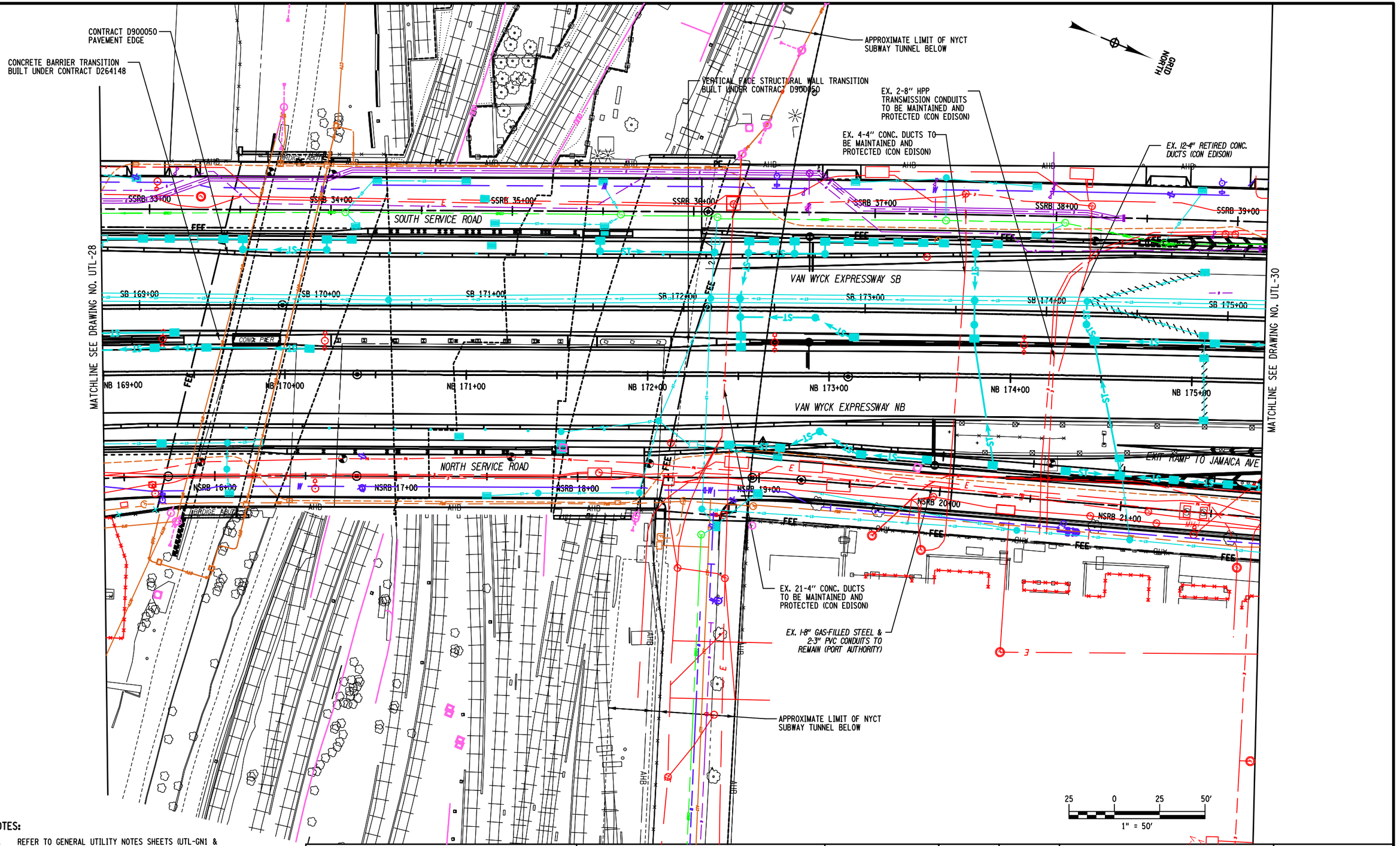
ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 28

CONTRACT NUMBER
D900053
DRAWING NO. UTL-28
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
CHECK
DRAFTING
DESIGN
CHECK
JOB MANAGER
DESIGN SUPERVISOR



NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 29

CONTRACT NUMBER
D900053

DRAWING NO. UTL-29
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

FILE NAME = x73584_cph_utl_029.DGN
DATE/TIME = 16-AUG-2021 12:57
USER = nlambros
DESIGN SUPERVISOR

PROJECT MANAGER
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JOB MANAGER
DESIGN SUPERVISOR

FILE NAME = x73584_cph_utl_030.DGN
DATE/TIME = 16-AUG-2021 12:20
USER = nlambros

MATCHLINE SEE DRAWING NO. UTL-29

MATCHLINE SEE DRAWING NO. UTL-31

GRID NORTH

91ST AVE

90TH AVE

SOUTH SERVICE ROAD

NORTH SERVICE ROAD

VAN WYCK EXPRESSWAY SB

VAN WYCK EXPRESSWAY NB

EXIT RAMP TO ATLANTIC AVE

EXIT RAMP TO JAMAICA AVE

ENTRANCE FROM JAMAICA AVE

EX. 12-4" CONC. DUCTS TO REMAIN (CON EDISON)

EX. COMBINED SEWER TO REMAIN (NYCDEP)

EX. SEWER MANHOLE TO BE REMOVED AND REPLACED (NYCDEP)

EX. 12" DIP WATER MAIN TO BE MAINTAINED AND PROTECTED (NYCDEP)

EX. 15" VCP COMBINED SEWER TO BE REMOVED AND REPLACED WITH NEW 18" RCP SEWER (NYCDEP)

EX. 12" DIP WATER MAIN TO REMAIN (NYCDEP)

EX. 15" VCP COMBINED SEWER TO BE REMOVED (NYCDEP)

PROP. 18" RCP COMBINED SEWER (NYCDEP)

EX. SEWER MANHOLE TO BE REMOVED AND REPLACED (NYCDEP)

PROP. 18" RCP COMBINED SEWER (NYCDEP)

EX. 15" VCP SEWER TO BE REMOVED (NYCDEP)

EX. SEWER MANHOLE TO BE REMOVED AND REPLACED (NYCDEP)

LIMIT OF WORK MEET EXISTING

EX. 4-4" CONC. RETIRED DUCTS TO BE REMOVED AS NEEDED (CON EDISON)

SSRB 40+00
SSRB 41+00
SSRB 42+00
SSRB 43+00
SSRB 44+00
SSRB 45+00

AAS2 13+00
AAS2 12+00
AAS2 11+00
AAS2 10+00

SB 176+00
SB 177+00
SB 178+00
SB 179+00
SB 180+00
SB 181+00
SB 182+00

NB 176+00
SEE DETAIL A BELOW FOR PROFILE INFORMATION
NB 177+00
NB 178+00
NB 179+00
NB 180+00
NB 181+00
NB 182+00

NSRB 22+00
NSRB 23+00
NSRB 24+00
NSRB 25+00
NSRB 26+00
NSRB 27+00
NSRB 28+00

JAN1 11+00

EX. 9-4" CONC. DUCTS TO REMAIN (CON EDISON)

PROP. CONNECTION TO EX. 12" DIP WATER MAIN (NYCDEP)

PROP. CONNECTION TO EXISTING MANHOLE (FDNY)

LIMIT OF WORK MEET EXISTING

PROP. 3" PVC CONDUIT (FDNY)

PROP. CONNECTION TO EX. 12" WATER MAIN (NYCDEP)

MAINTAIN AND PROTECT EX. 2-10" OIL-O-STATIC TRANSMISSION DUCTS (CON EDISON)

PROP. FIRE HYDRANT, REMOVE EXISTING (NYCDEP)

PROP. 12" DIP WATER MAIN (NYCDEP)

EX. 12" CAST IRON WATER MAIN TO BE REMOVED (NYCDEP)

PROP. CONNECTION TO EXISTING MANHOLE (FDNY)

PROP. CONNECTION TO EX. 12" DIP WATER MAIN (NYCDEP)

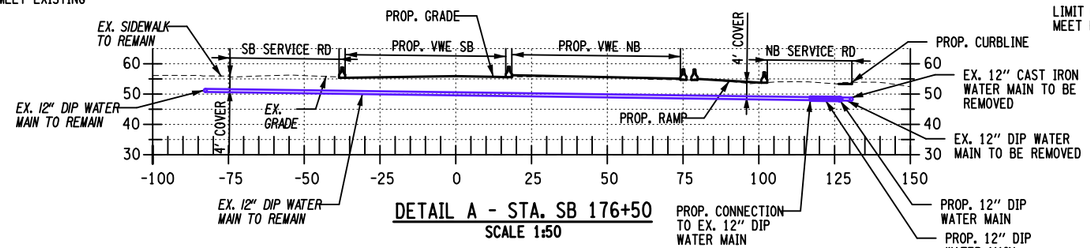
LIMIT OF WORK MEET EXISTING

EX. 2-10" TRANSMISSION DUCTS TO BE MAINTAINED AND PROTECTED (CON EDISON)

EX. 8-5" PCD DUCTS TO REMAIN (CON EDISON)

EX. 12" DIP WATER MAIN (NYCDEP)

DETAIL A - STA. SB 176+50
SCALE 1:50



25 0 25 50'
1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 30

CONTRACT NUMBER
D900053

DRAWING NO. UTL-30
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
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DESIGN
JOB MANAGER
DESIGN SUPERVISOR
DRAFTING
DGN
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FILE NAME =
DATE/TIME =
USER =

GRID NORTH

89TH AVE

JAMAICA AVE

SOUTH SERVICE ROAD

NORTH SERVICE ROAD

VAN WYCK EXPRESSWAY SB

VAN WYCK EXPRESSWAY NB

ENTRANCE FROM JAMAICA AVE

EX. 15" VCP SANITARY SEWER TO REMAIN (NYCDEP)

EX. 12" DIP WATER MAIN TO REMAIN (NYCDEP)

APPROXIMATE LIMIT OF NYCT SUBWAY TUNNEL BELOW

JAMAICA AVE AT SOUTH SERVICE ROAD INTERSECTION CONSTRUCTED UNDER CONTRACT D900048

EX. 15" RCP STORM SEWER TO REMAIN (NYSDOT)

JAMAICA AVE BRIDGE CONSTRUCTED UNDER CONTRACT D900048

EX. RETIRED 6" GAS MAIN TO REMAIN (NATIONAL GRID)

EX. 6" PLASTIC GAS MAIN TO REMAIN (NATIONAL GRID)

EX. 12" DIP WATER MAIN TO REMAIN (NYCDEP)

EX. MANHOLE TO REMAIN (FDNY)

EX. 12-4" CONC. DUCTS TO REMAIN (CON EDISON)

EX. 12" SANITARY SEWER TO REMAIN (NYCDEP)

EX. 3" PVC CONDUIT TO REMAIN (FDNY)

EX. 2-10" TRANSMISSION DUCTS TO BE MAINTAINED AND PROTECTED (CON EDISON)

EX. 8-4" CONC. DUCTS TO REMAIN (CON EDISON)

JAMAICA AVE AT NORTH SERVICE ROAD INTERSECTION CONSTRUCTED UNDER CONTRACT D900048

EX. 16" LCP WATER MAIN TO REMAIN (NYCDEP)

MATCHLINE SEE DRAWING NO. UTL-30

MATCHLINE SEE DRAWING NO. UTL-32

25 0 25 50'
1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 31

CONTRACT NUMBER
D900053

DRAWING NO. UTL-31
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
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DESIGN
JOB MANAGER
DRAFTING
CHECK
DESIGN SUPERVISOR

FILE NAME = x75584_cph_utl_032.DGN
DATE/TIME = 21-JUL-2021 12:16
USER = nlambros

MATCHLINE SEE DRAWING NO. UTL-31

MATCHLINE SEE DRAWING NO. UTL-33

GRID NORTH

EX. 12" DIP WATER MAIN TO REMAIN (NYCDEP)

EX. 10" DIP SANITARY SEWER TO REMAIN (NYCDEP)

EX. 6" STEEL GAS MAIN TO REMAIN (NATIONAL GRID)

HILLSIDE AVE AT SOUTH SERVICE ROAD INTERSECTION CONSTRUCTED UNDER CONTRACT D900048

APPROXIMATE LIMIT OF NYCT SUBWAY TUNNEL BELOW

EX. 6" STEEL GAS MAIN TO REMAIN (NATIONAL GRID)

EX. 8" VCP SANITARY SEWER TO REMAIN (NYCDEP)

EX. 12" CIP WATER MAIN TO REMAIN (NYCDEP)

LIMIT OF WORK MEET EXISTING

SOUTH SERVICE ROAD

HILLSIDE AVE

EX. 54" RCP STORM SEWER TO REMAIN (NYSDOT)

BRIDGE ABUTMENT

VAN WYCK EXPRESSWAY SB

MSS1 29+00

MSS1 28+00

MSS1 27+00

MSS1 26+00

ENTRANCE RAMP FROM CD ROAD SB

SB 190+00

SB 191+00

SB 192+00

SB 193+00

SB 194+00

SB 195+00

SB 196+00

SB 197+00

CONC. PIER

NB 191+00

NB 192+00

NB 193+00

NB 194+00

NB 195+00

NB 196+00

NB 197+00

VAN WYCK EXPRESSWAY NB

BRIDGE ABUTMENT

EX. 54" RCP STORM SEWER TO REMAIN (NYSDOT)

EX. 2-10" OIL-O-STATIC TRANSMISSION LINES TO BE MAINTAINED AND PROTECTED (CON EDISON)

EX. 2-10" OIL-O-STATIC TRANSMISSION LINES TO REMAIN (CON EDISON)

EX. 6-4" CONC. DUCTS TO REMAIN (CON EDISON)

EX. 16" LCP WATER MAIN TO REMAIN (NYCDEP)

HILLSIDE AVE

NORTH SERVICE ROAD

NORTH SERVICE ROAD

HAWT HCL & TGL

EX. 6" CIP WATER MAIN TO REMAIN (NYCDEP)

EX. 8" SANITARY SEWER TO REMAIN (NYCDEP)

APPROXIMATE LIMIT OF NYCT SUBWAY TUNNEL BELOW

HILLSIDE AVE AT NORTH SERVICE ROAD INTERSECTION CONSTRUCTED UNDER CONTRACT D900048

25 0 25 50'

1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 32	CONTRACT NUMBER D900053 DRAWING NO. UTL-32 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
CHECK
DRAFTING
CHECK
DESIGN
JOB MANAGER
DESIGN SUPERVISOR

GRID NORTH

EX. 6-4" CONC. DUCTS TO REMAIN (CON EDISON)
EX. 8" VCP SANITARY SEWER TO REMAIN (NYCDEP)
EX. 6" CAST IRON WATER MAIN TO REMAIN (NYCDEP)
EX. 6" PLASTIC GAS MAIN TO REMAIN (NATIONAL GRID)
87TH AVE
EX. 12" VCP SANITARY SEWER TO BE MAINTAINED AND PROTECTED (NYCDEP)
EX. 8" LCP WATER MAIN TO REMAIN (NYCDEP)
EX. 6" GAS MAIN TO REMAIN (NATIONAL GRID)
EX. 2-5" CONC. DUCTS TO REMAIN (CON EDISON)
EX. 48" WATER MAIN TO BE MAINTAINED AND PROTECTED (NYCDEP)
SOUTH SERVICE ROAD
CD ROAD SB
R=1955.00
MSS1 25+00
MSS1 24+00
MSS1 23+00
MSS 22+00
MSS 21+00
MSS 20+00
HAS2 19+00
MSS2 19+00
EXIT RAMP TO HILLSIDE AVE
ENTRANCE RAMP FROM MAIN ST
EX. 2-10" OIL-O-STATIC DUCTS TO BE MAINTAINED AND PROTECTED (CON EDISON)
VAN WYCK EXPRESSWAY SB
SB 198+00
SB 199+00
SB 200+00
SB 201+00
SB 202+00
SB 203+00
SB 204+00
NB 198+00
NB 199+00
NB 200+00
NB 201+00
NB 202+00
NB 203+00
NB 204+00
PROP. 86TH AVE PEDESTRIAN BRIDGE FOUNDATION
MATCHLINE SEE DRAWING NO. UTL-32
MATCHLINE SEE DRAWING NO. UTL-34
VAN WYCK EXPRESSWAY NB
PROP. SLOTTED MANHOLE (FDNY)
HAN1 14+00
HAN1 13+00
HAN1 12+00
HAN1 11+00
ENTRANCE RAMP FROM HILLSIDE AVE.
EX. 8" SANITARY SEWER TO REMAIN (NYCDEP)
EX. 6" CAST IRON WATER MAIN TO REMAIN (NYCDEP)
REMOVE EXISTING AND INSTALL NEW FIRE HYDRANT, VALVE, AND FENDERS (NYCDEP)
REMOVE EXISTING AND INSTALL NEW 3" PVC CONDUIT (FDNY)
PROP. SLOTTED MANHOLE (FDNY)
EX. 48" WATER MAIN TO BE MAINTAINED AND PROTECTED (NYCDEP)
EX. 6" WATER MAIN TO BE MAINTAINED AND PROTECTED (NYCDEP)
EX. 4-4" DUCTS TO BE MAINTAINED AND PROTECTED (CON EDISON)
EX. 6" CAST IRON WATER MAIN TO REMAIN (NYCDEP)
EX. 48" STEEL WATER MAIN TO BE MAINTAINED AND PROTECTED (NYCDEP)
EX. 8" CAST IRON WATER MAIN TO REMAIN (NYCDEP)
EX. 8" SANITARY SEWER TO REMAIN (NYCDEP)
EX. 6-4" CONC. DUCTS TO REMAIN (CON EDISON)

25 0 25 50'
1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3
COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 33

CONTRACT NUMBER
D900053
DRAWING NO. UTL-33
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

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USER = mlambros
DESIGN SUPERVISOR

PROJECT MANAGER
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JOB MANAGER
DESIGN SUPERVISOR

FILE NAME = U
DATE/TIME =
USER =
DGN

MATCHLINE SEE DRAWING NO. UTL-33

MATCHLINE SEE DRAWING NO. UTL-35

MAINTAIN AND PROTECT EX. 2-10" CON EDISON OIL STATIC LINES

EX. 8" VCP SANITARY SEWER TO BE MAINTAINED AND PROTECTED (NYCDEP)

APPROXIMATE LIMIT OF NYCT SUBWAY TUNNEL BELOW

SOUTH SERVICE ROAD

LIMIT OF WORK MEET EXISTING

EX. 8" VCP SANITARY SEWER TO BE MAINTAINED AND PROTECTED (NYCDEP)

NORTH SERVICE ROAD

HAS2 18+00 HAS2 17+00 HAS2 16+00 HAS2 15+00 HAS2 14+00 HAS2 13+00 HAS2 12+00

MSS2 18+00 MSS2 17+00 MSS2 16+00 MSS2 15+00 MSS2 14+00 MSS2 13+00

ENTRANCE RAMP FROM MAIN ST.

EXIT RAMP TO HILLSIDE AVE

PROPOSED RELOCATED NYCT VENT STRUCTURE. SEE NOTE 3.

SB 205+00 SB 206+00 SB 207+00 SB 208+00 SB 209+00 SB 210+00 SB 211+00

VAN WYCK EXPRESSWAY SB

NB 205+00 NB 206+00 NB 207+00 NB 208+00 NB 209+00 NB 210+00 NB 211+00 NB 212+00

PROP. DRAINAGE SYSTEM (SEE NOTE 2)

EX. ELECTRICAL DUCTS TO REMAIN

VAN WYCK EXPRESSWAY NB

138TH STREET

86TH AVE

EX. 8" LCP NYCDEP WATER MAIN TO REMAIN

EX. ELECTRICAL DUCTS TO REMAIN

EX. 12" GAS MAIN TO REMAIN (NATIONAL GRID)

EX. 6-4" CONC. DUCTS TO REMAIN (CON EDISON)

EX. 8" VCP SANITARY SEWER TO REMAIN (NYCDEP)

EX. 6-4" CONC. DUCTS TO REMAIN (CON EDISON)

EXISTING MAIN STREET BRIDGE BIN 1076449

LIMIT OF WORK MEET EXISTING PAVEMENT

TRANSITION CURB AND RAISED SHOULDER TO HALF SECTION BARRIER

25 0 25 50′
1" = 50′

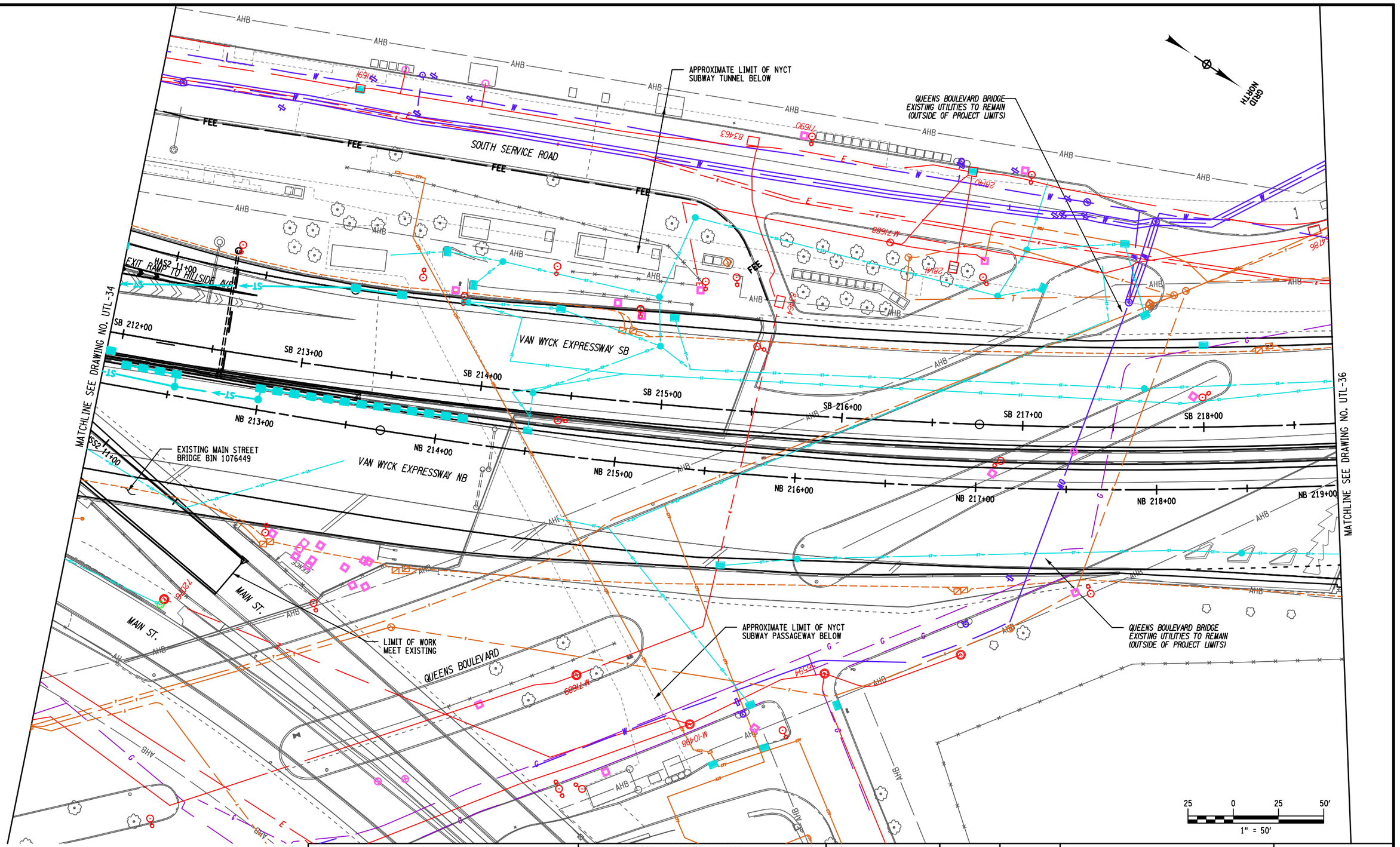
NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.
3. REFER TO GENERAL PLAN (GNP-34) FOR MORE INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 34	CONTRACT NUMBER D900053 DRAWING NO. UTL-34 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
CHECK
DRAFTING
CHECK
DESIGN
JOB MANAGER
DESIGN SUPERVISOR



NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 35

CONTRACT NUMBER
D900053

DRAWING NO. UTL-35
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

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DATE/TIME = 14-JUL-202115:27
USER = nlambros

PROJECT MANAGER
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DRAFTING
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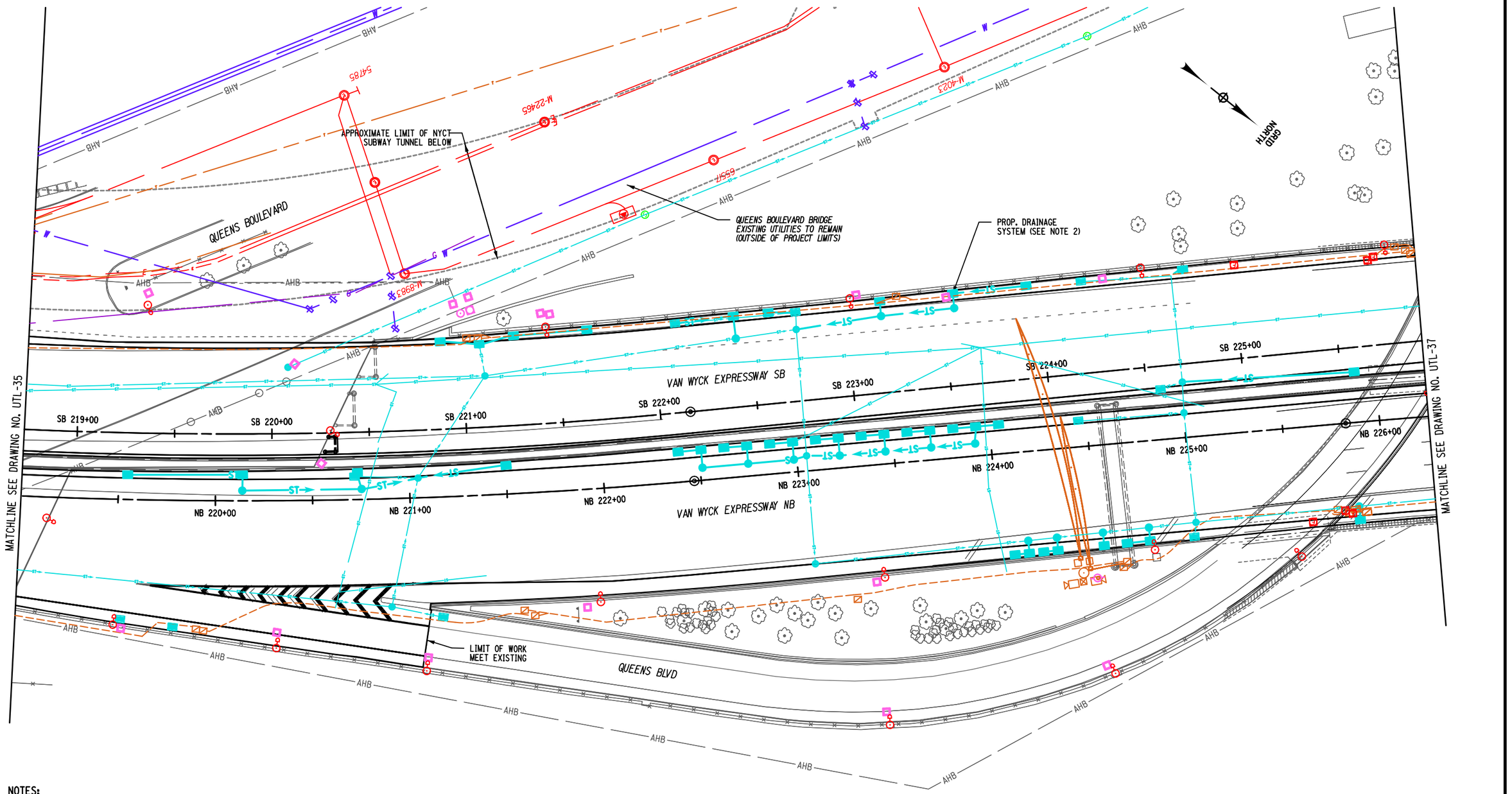
DESIGN
JOB MANAGER
DESIGN SUPERVISOR

FILE NAME = x735841_gph_utl_036.DGN
DATE/TIME = 14-JUL-2021 16:47
USER = mlambros



NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

25 0 25 50′
1" = 50′

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 36	CONTRACT NUMBER D900053 DRAWING NO. UTL-36 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
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DESIGN
JOB MANAGER
DESIGN SUPERVISOR
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DATE/TIME =
USER =
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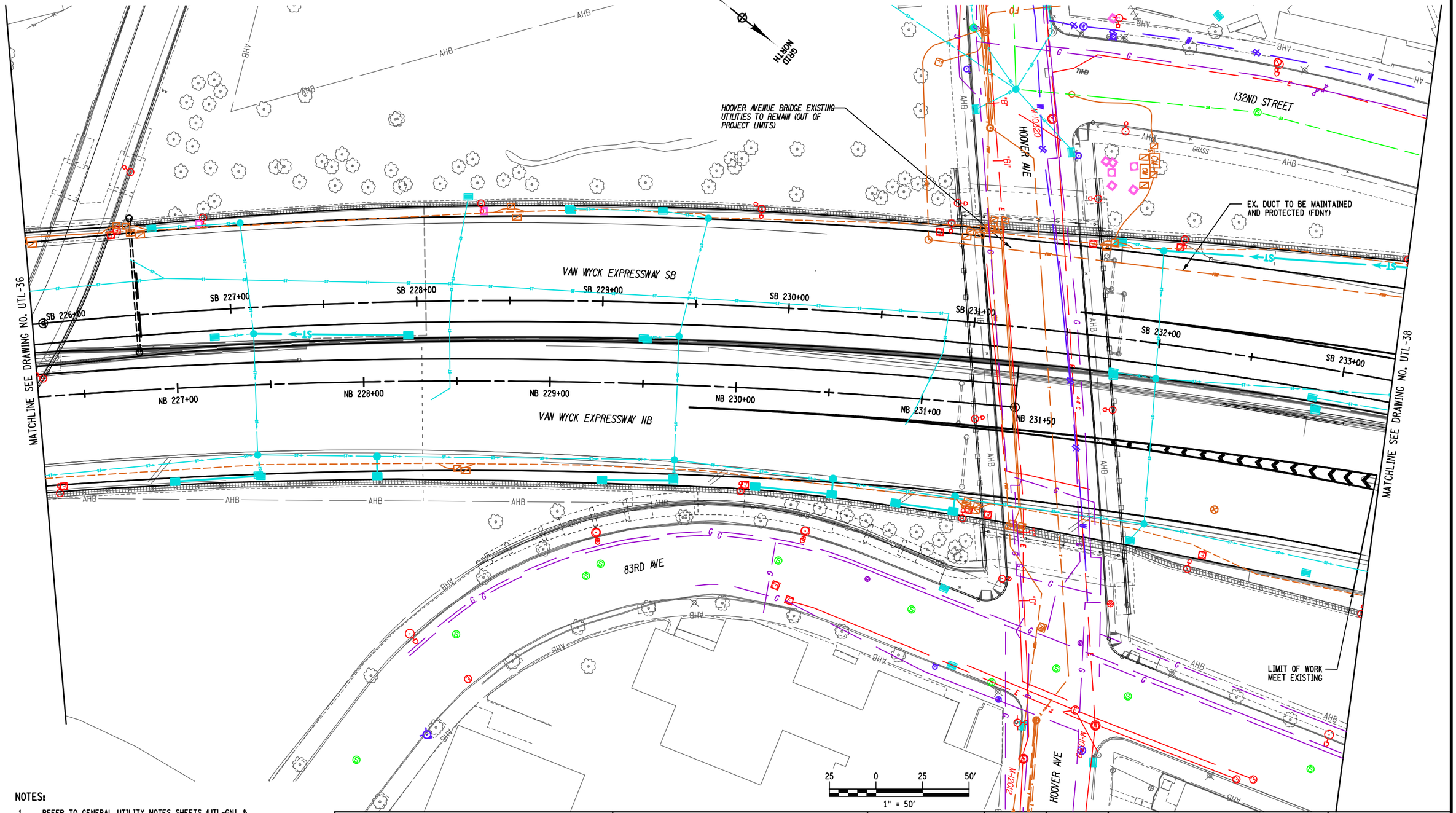


NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 37	CONTRACT NUMBER D900053 DRAWING NO. UTL-37 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
CHECK
DRAFTING
CHECK
DESIGN
JOB MANAGER
DESIGN SUPERVISOR

FILE NAME = x735bl_cpb_utl_038.DGN
DATE/TIME = 15-JUL-2021 09:30
USER = mlambros

PARKING GARAGE COURT
CANOPY
GRID NORTH
STEEL FACE CONC CURB
M-2251
T.M.-610
PROP. DRAINAGE SYSTEM (SEE NOTE 2)
132ND STREET
AHB
GRASS
RAILING
EX. 48" STEEL NYCDEP WATER MAIN TO REMAIN (OUTSIDE OF PROJECT LIMITS)
EX. DUCT TO BE MAINTAINED AND PROTECTED (FDNY)
LIMITS OF WORK MEET EXISTING
VAN WYCK EXPRESSWAY SB
ASPHALT
SB 234+00
PT
SB 234+02.53
RAMP FROM EB GCP
RAMP TO WB GCP
MATCHLINE SEE DRAWING NO. UTL-37
VAN WYCK EXPRESSWAY NB
25 0 25 50'
1" = 50'

NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

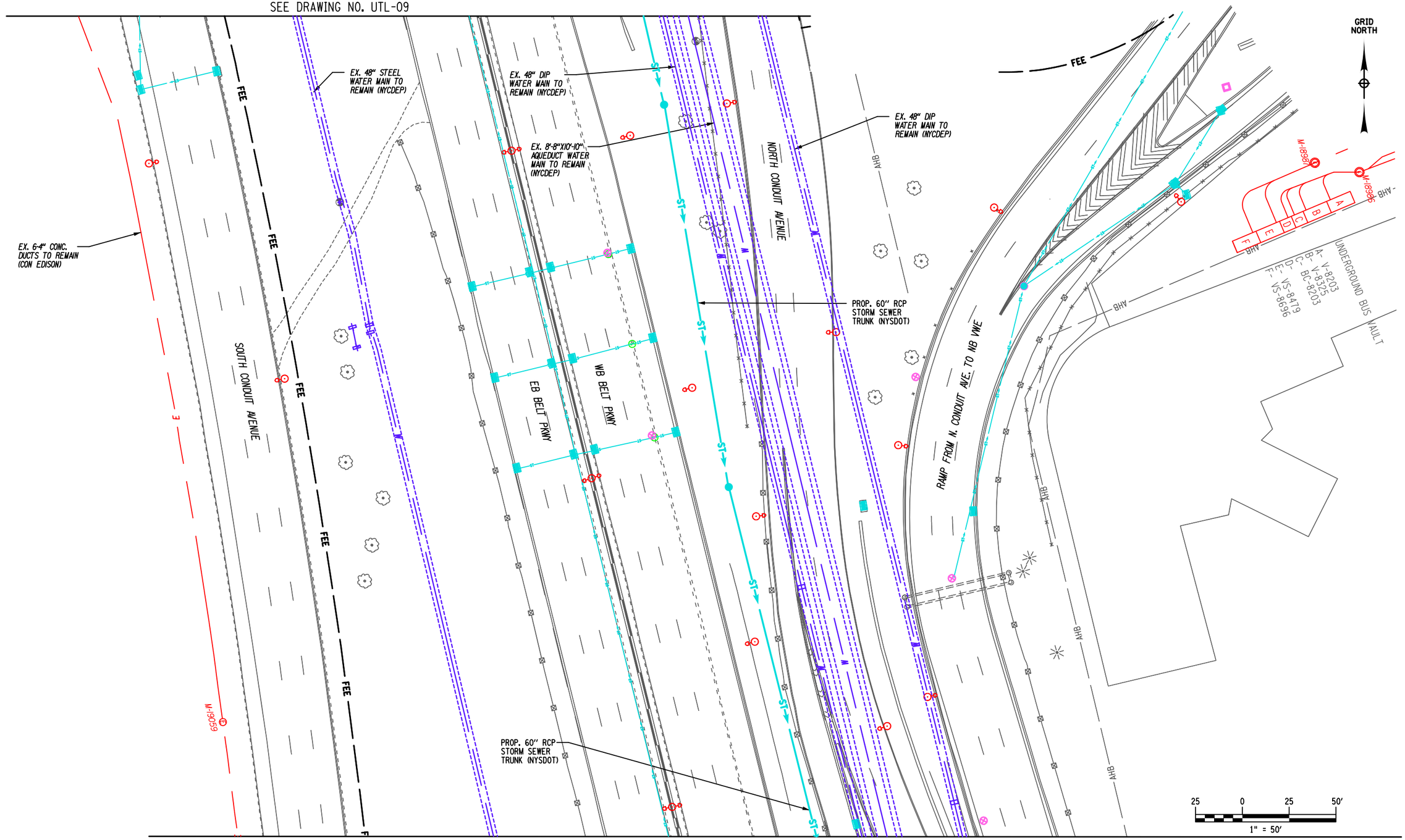
CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 38

CONTRACT NUMBER
D900053
DRAWING NO. UTL-38
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation



NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

VAN WYCK EXPRESSWAY CAPACITY & ACCESS
IMPROVEMENTS TO JFK AIRPORT PROJECT
CONTRACT 3

COUNTY: QUEENS REGION: 11

PIN X735.84

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

UTILITY PLAN - 39

CONTRACT NUMBER
D900053

DRAWING NO. UTL-39
SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
CHECK
DRAFTING
DESIGN
JOB MANAGER
DESIGN SUPERVISOR

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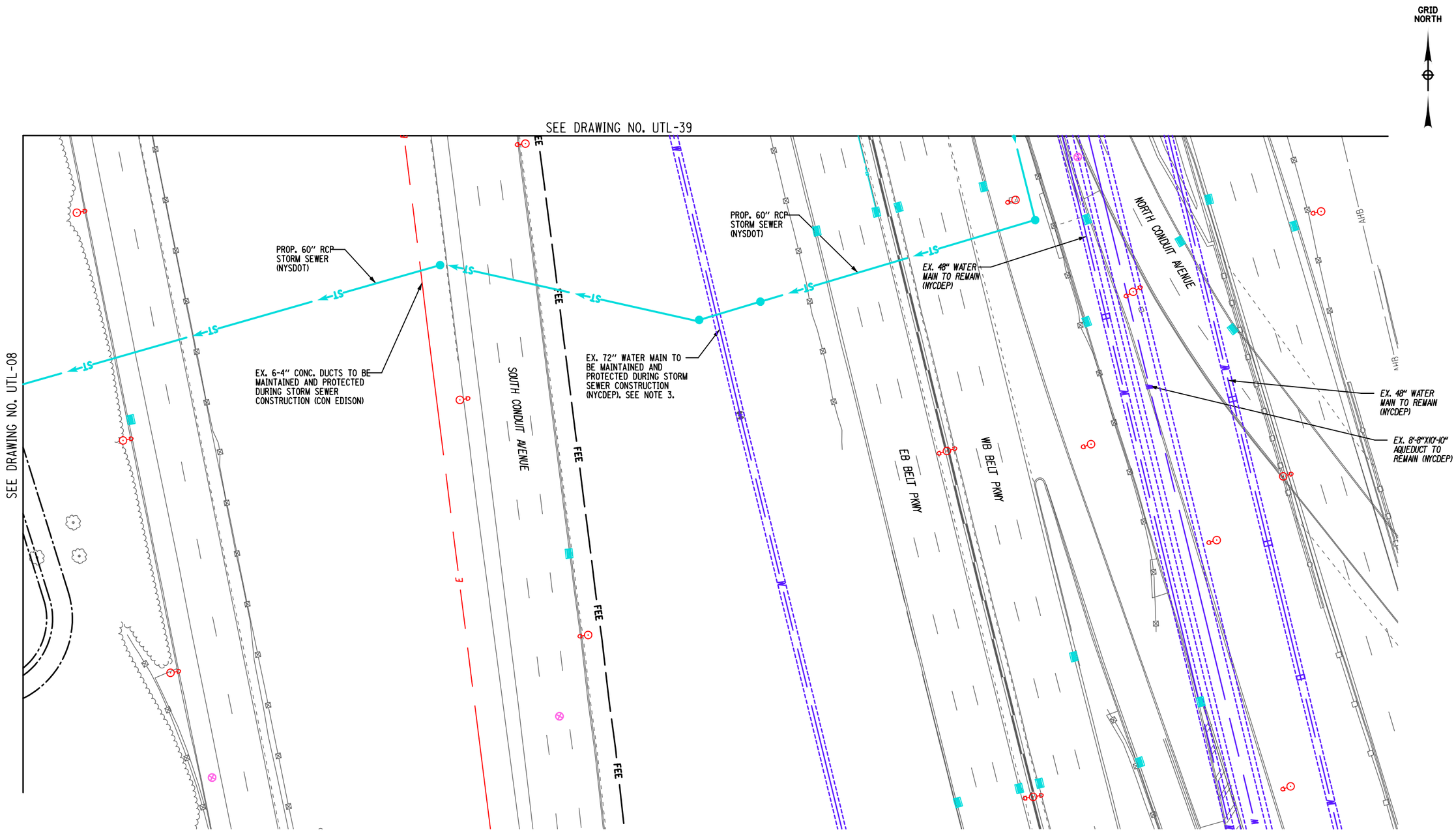
DATE/TIME = 15-JUL-2021 09:54
USER = nlambros



NOTES:

1. REFER TO GENERAL UTILITY NOTES SHEETS (UTL-GN1 & UTL-GN2) FOR MORE INFORMATION.
2. REFER TO PROPOSED DRAINAGE PLANS (DRP-01 TO DRP-41) AND DETAILS (DRD-01 TO DRD-06) FOR FURTHER INFORMATION.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED UTILITY PLAN - 40	CONTRACT NUMBER D900053 DRAWING NO. UTL-40 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER
CHECK
DRAFTING
DESIGN
JOB MANAGER
DESIGN SUPERVISOR

FILE NAME = x735b4_cpln_utl_040.DGN
DATE/TIME = 21-JUL-2021 17:29
USER = mlambros

PROJECT MANAGER

CHECK

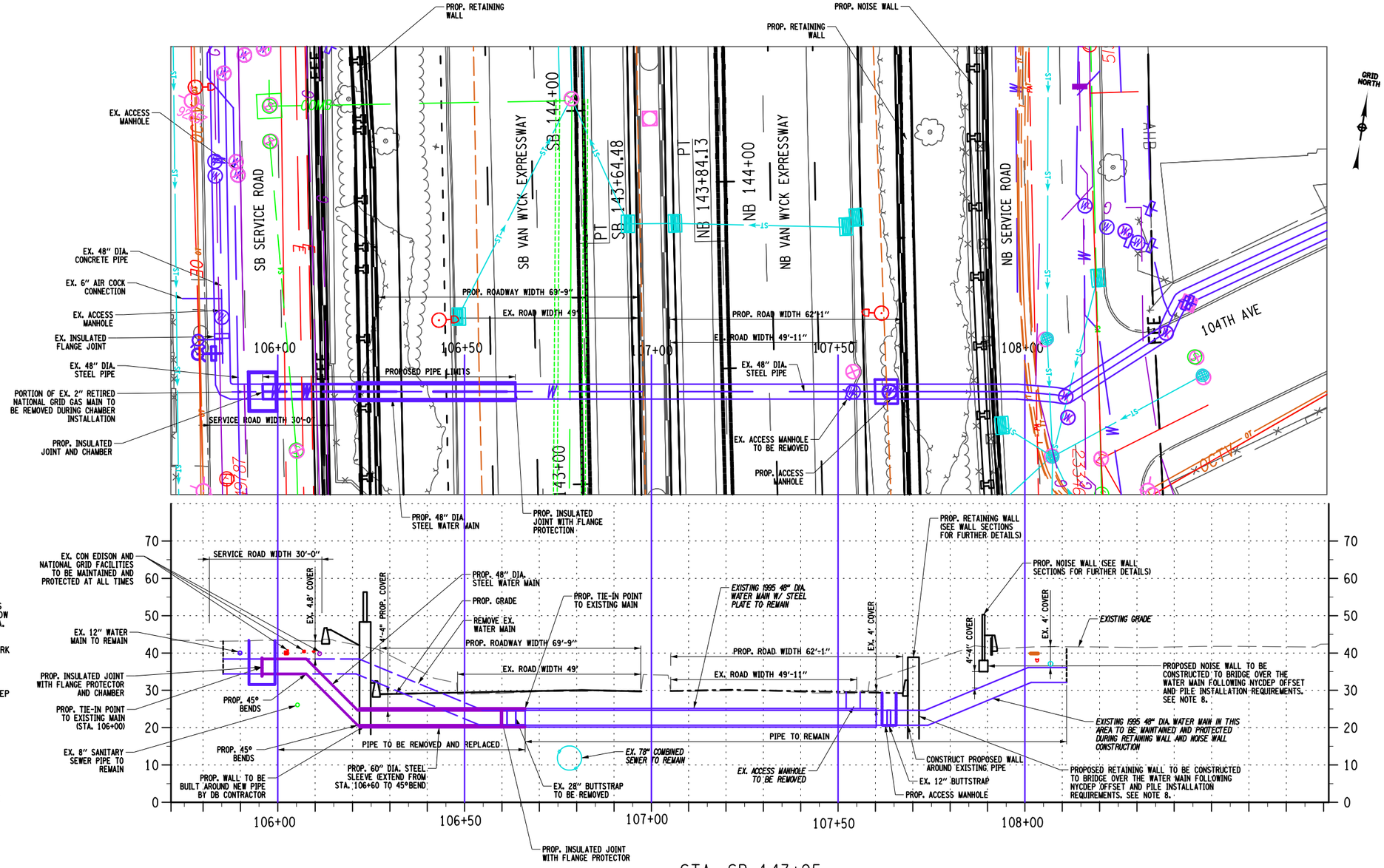
DRAFTING

CHECK

DESIGN

JOB MANAGER

DESIGN SUPERVISOR



STA. SB 143+25

NOTES:

1. ALL PROPOSED 48" STEEL WATER MAIN SHALL BE 0.5" THICKNESS AND ASTM A36 DESIGNATION. CONCRETE ENCASEMENT SHALL FOLLOW SPECIFICATIONS FOR ITEM 555.0104, FOOTING CONCRETE, CLASS A.
2. EXISTING 48" STEEL WATER PIPE SHALL BE REMOVED AS NECESSARY TO COMPLETE THE CONTRACT WORK. PIPE REMOVAL WORK SHALL FOLLOW NYSDOT STANDARD SPECIFICATION SECTION 663. EXACT LIMITS OF PIPE REMOVAL SHALL BE A.O.B.E.
3. ALL STEEL BENDS FOR 48" STEEL PIPE SHALL FOLLOW THE MINIMUM RADIUS = 2.5 X PIPE DIA. AND SHALL CONFORM TO NYCDEP SPECIFICATIONS FOR TRUNK MAIN WORK.
4. ALL EXISTING UTILITIES ENCOUNTERED DURING 48" WATER MAIN INSTALLATION SHALL BE MAINTAINED AND PROTECTED (UNLESS SPECIFIED IN THE CONTRACT PLANS TO BE REMOVED).
5. CORROSION CONTROL/CATHODIC PROTECTION SHALL BE IN ACCORDANCE WITH PART IV OF THE NYCDEP "SPECIFICATION FOR FURNISHING, DELIVERING, AND LAYING STEEL PIPE AND APPURTENANCES," LATEST REVISION.
6. PROPOSED WATER MAIN RECONSTRUCTION WORK SHALL TAKE PLACE DURING SHUTDOWN PERIOD STATED BY NYCDEP (SEPT. 15 TO MAY 15).
7. PRIOR TO INSTALLING THE PILES/SHEET PILES, THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES TO PREVENT ACCIDENTAL DAMAGE. ANY DAMAGE TO NYCDEP SEWERS AND WATER MAINS DUE TO CONSTRUCTION ACTIVITY MUST BE REPAIRED AT NO COST TO NYCDEP.
8. ALL PROPOSED WALLS SHALL SPAN OVER EXISTING WATER MAIN AND MEET ALL NYCDEP VERTICAL (18") AND HORIZONTAL (6') OFFSET REQUIREMENTS TO PROPOSED WALL FOUNDATIONS/PILES.
9. THE CONTRACTOR SHALL CONSTRUCT ACCESS MANHOLES IN ACCORDANCE WITH NYCDEP STANDARD DRAWINGS 38338-Y AND M38226-Y-A.
10. THE CONTRACTOR SHALL CONSTRUCT THE INSULATED JOINTS AND INSULATED JOINT MANHOLE IN ACCORDANCE WITH THE NYCDEP STANDARD DRAWINGS 46104-W AND 46105-X.
11. THE CONTRACTOR SHALL CONSTRUCT THE INSULATED JOINT FLANGE PROTECTOR ON ALL DIRECT BURY INSULATED JOINTS IN ACCORDANCE WITH THE NYCDEP REQUIREMENTS.
12. ELECTRIC COVER DEPTH ASSUMED AT 24". GAS MAIN COVER DEPTH ASSUMED AT 30".
13. THE DEPTH SHOWN FOR THE 48" WATER MAIN IS BASED ON ENGINEERING JUDGEMENT, NYCDEP FIELD CARDS.

FILE NAME = 48 WaterMain 14325.dgn
DATE/TIME = 10-JUN-2021 11:31
USER = nlambros

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	VAN WYCK EXPRESSWAY CAPACITY & ACCESS IMPROVEMENTS TO JFK AIRPORT PROJECT CONTRACT 3 COUNTY: QUEENS REGION: 11	PIN X735.84	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED PROPOSED 48" DIA. WATER MAIN REPLACEMENT - 104TH AVENUE	CONTRACT NUMBER D900053 DRAWING NO. WM-1 SHEET NO.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

Department of Design and Construction

DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PROJECT ID: SE885A-VWE

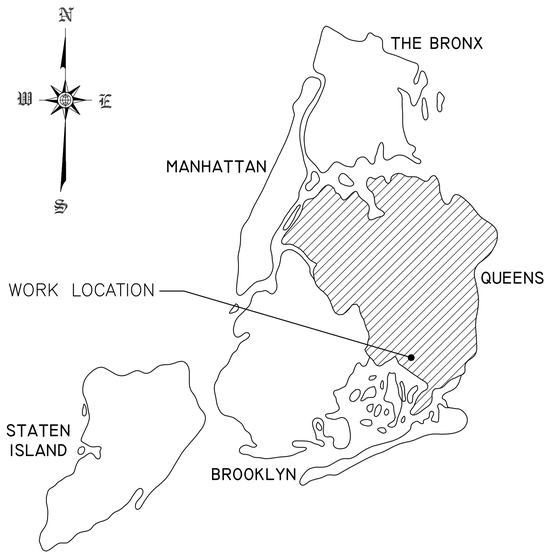
UTILITY SET

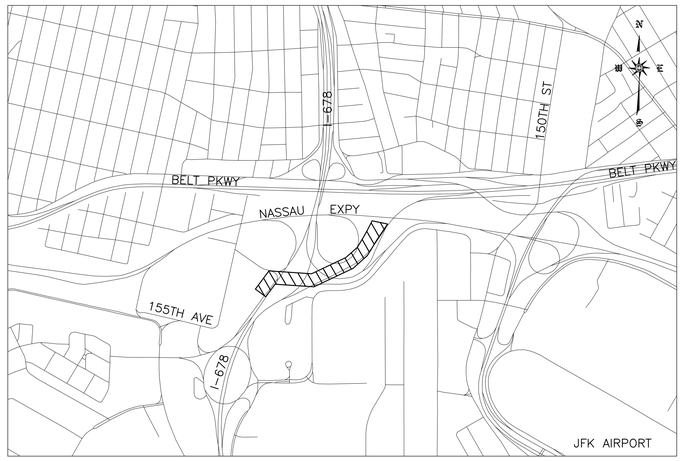
SOUTHEAST QUEENS 150TH STREET SPINE DRAINAGE IMPROVEMENTS

IN ASSOCIATION WITH VAN WYCK EXPRESSWAY CAPACITY
& ACCESS IMPROVEMENTS TO JFK AIRPORT

PHASE II TRUNK STORM SEWER
INCLUDING DOUBLE BARREL STORM SEWER
TOGETHER WITH ALL WORK INCIDENTAL THERETO

BOROUGH OF QUEENS
CITY OF NEW YORK





LOCATION PLAN
N.T.S.

PROJECT SITE

QUEENS COMMUNITY BOARD: NO. 12 & 13

S. MacFarlane — 8.2.2021
ERIC MACFARLANE, P.E.
DEPUTY COMMISSIONER
DATE

Mohsen Zargarelahi — 7/26/21
MOHSEN ZARGARELAHI, P.E.
ASSOCIATE COMMISSIONER
DATE

K Gal — 7/26/21
KLARA SIGAL, P.E.
EXECUTIVE DIRECTOR
DATE

REVIEWED AND APPROVED BY:

A Chadda — 7/26/21
ANAND CHADDA, P.E.
SENIOR PROJECT EXECUTIVE
DATE

R. Castelli — 7/26/21
ROBERT CASTELLI, P.E.
DIRECTOR
DATE

FINAL DESIGN PREPARED BY:

P.E. NO. DATE

0 1 2 3 4
ORIGINAL SIZE IN INCHES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

PROJECT ID: SE885A-VWE | DATE: AUG 11, 2021 | SHEET 1 OF 108 | CV01 | CV01

PROJECT ID SE885A-VWE

CONSULTANT DESIGN

TABLE OF CONTENTS

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

PARSONS

FINAL DESIGN PREPARED BY:
PARSONS TRANSPORTATION GROUP
NAME OF CONSULTANT
SIGNATURE DATE

DRAWN BY_____
CADD FILE_____

SCALE AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TABLE OF CONTENTS

SOUTHEAST QUEENS 150TH STREET SPINE DRAINAGE IMPROVEMENTS
BOROUGH OF QUEENS

PROJECT ID: SE885A-VWE | DATE: AUG 11, 2021 | SHEET 2 OF 108 | TC01 TC01

CONSULTANT DESIGN

ABBREVIATIONS

ABANDONED	ABDN.
APARTMENT	APT.
ASPHALT	ASPH.
BASEMENT	BSMT.
BITUMINOUS	BIT.
BLOCK	BLK.
BLUESTONE	B.S.
BLUESTONE CURB	B.S.C.
BLUESTONE WALK	B.S.W.
BOTTOM OF CURB	B.C.
BRICK	BRK.
BUILDING	BLDG.
BUILT	BLT.
CAST IRON	C.I.
CENTER LINE	C.L.
CHAIN LINK FENCE	C.L.F.
CHAMBER	CH.
CLASS NUMBER	CL. #
COMBINED	COMB.
COMMERCIAL	COMM.
CONCRETE	CONC.
CONCRETE CURB	C.C.
CONCRETE WALK	C.W.
DIAMETER	DIA.
DOUBLE BARREL	D.B.
DOWN	DN.
DRAWING	DWG.
DUCTILE IRON PIPE	D.I.P.
EXISTING	EXIST.
EXPRESSWAY	EXPY.
EXTRA STRENGTH VITRIFIED PIPE	E.S.V.P.
FIRE ALARM	F.A.
FIRE DEPARTMENT	F.D.
FLAT TOP REINFORCED CONCRETE	F.T.R.C.
FRAME	FR.
GRANITE	GRAN.
GRANITE CURB	GRAN. C.
INTERCEPTOR	INT.
INVERT ELEVATION	INV.
IRREGULAR	IRR.
MANHOLE	MH
NOT IN CONTRACT	N.I.C.
NOT TO SCALE	N.T.S.
PARKWAY	PKWY
PAVEMENT	PVMT.
POINT OF CURVATURE	P.C.
POINT OF INTERSECTION	P.I.
POINT OF TANGENCY	P.T.
PRECAST REINFORCED CONCRETE	P.R.C.
RADIUS	R
REINFORCED CONCRETE PIPE	R.C.P.
ROADWAY	RDWY.
SANITARY	SAN.
SEWER	SWR.
SIDEWALK	SW.
STANDARD	STD.
STEAM	ST.
STEEL	STL.
STEEL FACED CURB	SFC
STEEL NOSED CURB	S.N.C.
STONE	STN.
STORM	STM.
STORY	STY.
TOP OF CURB	T.C.
TRAFFIC SIGN	T.S.
VACANT	VAC.
WORKING POINT	W.P.
TRIPLE BARREL	T.B.
VAN WYCK EXPRESSWAY	V.W.E.

LEGEND

	EXISTING	PROPOSED
MANHOLES		
ELECTRIC	(E) [E]	
CABLE TV	[C]	
TELEPHONE	(T)	
TRAFFIC	[Tf]	
NYC MH	□NYC	
GAS	(G)	
WATER	(W)	
FIRE DEPT.	(F)	
SUBWAY	(Su)	
COAL CHUTE	○CC	
STORM SEWER	(S)STM	●STM
COMBINED SEWER	(S)COMB	●COMB
SANITARY SEWER	(S)SAN	●SAN
INTERCEPTOR SEWER	(S)INT	●INT
UNIDENTIFIED MANHOLE (NO RECORD AVAILABLE)	(M)	
BUILT MANHOLE REPLACED BY NEW MANHOLE		◉
RECORD MANHOLE	(S)	
HARDWARE RIM EL. & INV. EL. (SEWER, ETC.)	(S)61.23 INV.47.89	
BASINS		
CATCH BASIN WITH CURB PIECE – TYPE 1	1	
CATCH BASIN WITHOUT CURB PIECE – TYPE 2	2	
CATCH BASIN WITHOUT CURB PIECE – TYPE 3	3	
EXISTING CATCH BASIN TO BE REMOVED		
TO BE ABANDONED		A
TO BE MODIFIED		M
TO BE ADJUSTED		A
CATCH BASIN – NON-STANDARD		N
NEW CATCH BASIN TO BE CONSTRUCTED IN SAME LOCATION AS OLD BASIN		
INLET	▨	
SEEPAGE BASIN	○SB	●SB
HYDRANTS		
LOW PRESSURE HYDRANT		
HIGH PRESSURE HYDRANT		
LOW PRESSURE HYDRANT TO BE RELOCATED		R
HIGH PRESSURE HYDRANT TO BE RELOCATED		R
LOW PRESSURE HYDRANT TO BE ADJUSTED (VERTICALLY)		A
HIGH PRESSURE HYDRANT TO BE ADJUSTED (VERTICALLY)		A
SIAMESE CONNECTION		
STREET LIGHTING AND TRAFFIC SIGNALS		
WOOD UTILITY POLE		
WOOD UTILITY POLE WITH STREET LIGHT		
WOOD UTILITY POLE WITH TRAFFIC SIGNAL		T
WOOD UTILITY POLE WITH STREET LIGHT AND FIRE ALARM BOX		F
WOOD UTILITY POLE WITH FIRE ALARM BOX		F
WOOD UTILITY POLE WITH PEDESTRIAN SIGNAL		PS
WOOD UTILITY POLE WITH TRAFFIC AND PEDESTRIAN SIGNAL		TPS
WOOD UTILITY POLE WITH STREET LIGHT AND TRAFFIC AND PEDESTRIAN SIGNAL		TPS
WOOD UTILITY POLE WITH STREET LIGHT AND PEDESTRIAN SIGNAL		PS
STREET LIGHT (METAL POLE)		
STREET LIGHT AND TRAFFIC SIGNAL		T
STREET LIGHT AND TRAFFIC SIGNAL WITH PEDESTRIAN SIGNAL		TPS
STREET LIGHT WITH PEDESTRIAN SIGNAL		PS
STREET LIGHT WITH FIRE ALARM BRACKET		F
TRAFFIC SIGNAL POST		T
TRAFFIC SIGNAL CONTROL BOX		
STANCHION WITH TRAFFIC SIGNAL		T
STANCHION W/PEDESTRIAN SIGNAL		TPS
TRAFFIC SIGNAL POST W/PEDESTRIAN SIGNAL		TPS

LEGEND

	EXISTING	PROPOSED
VALVE BOXES		
GAS	□G	
WATER	□W	
STEAM	□St	
TREES		
EXISTING TREE (SIZE AS LABELED)	7"	
EXISTING TREE TO BE REMOVED		7"
NEW TREE TO BE PLANTED		⊗
SHRUB		
HEDGE (HEIGHT AS LABELED)		
MISCELLANEOUS		
VAULT (SIDEWALK)	V	
CELLAR WINDOW GRATING		
CELLAR DOOR	CD	
SUBWAY GRATING		
SURFACE WATER FLOW		
TRAFFIC DIRECTION		
PARKING METER		
OIL FILL CAP OR OIL VENT	◎ OR ○FILL	
FIRE ALARM POST	□F	
POLICE CALL BOX	□P	
MAIL BOX, PUBLIC PHONE	□MB □TEL.	
COLUMN – FOUNDATION (OF ELEVATED STRUCTURES)	⊠ OR ▣	
HEADER		
AREA OF ADJUSTMENT		
LIMIT OF NEW PAVEMENT		
BUS PAD		
SIGN (GROUND MOUNTED)		
SIGN (OVERHEAD)		
TRAIN STATION ENTRANCE	DOWN	
SHAFT TO BUILDING BASEMENT	SH	
PEDESTRIAN RAMP		
CURB (CONCRETE UNLESS OTHERWISE INDICATED)		
CURB WITH DROP CURB (DRIVEWAY)	DC	DC
EDGE OF PAVEMENT WITHOUT CURB		
PROPOSED CONSTRUCTION (TOP OF CURB) ELEVATION AND STATION		T.C. 13.8 STA. 26+33
ROCK OUTCROP		
NORTH ARROW		
BARRIERS		
BEAM TYPE MALL BARRIER		
PORTABLE PRECAST CONCRETE BARRIER		
CAST IN PLACE CONCRETE BARRIER		
RETAINING WALL (W/TYPE)	RW (STN.)	
RAILROAD/TROLLEY TRACK		
FENCE (WITH HEIGHT AND TYPE)		
CHAIN LINK FENCE	6'	
IRON PICKET FENCE	5'	
WIRE FENCE	5'	
IRON ON CONCRETE COPING		
WOOD PICKET FENCE	4'	
GUARD POST	GP	
BUILDINGS		
HOUSE INFORMATION — HOUSE NUMBER, BLDG TYPE, FIRST FLOOR ELEV. (CE) CELLAR ENTR. (GE) GARAGE ENTR.	95-02 2-STY.FR. ▼ FF 25.3 G.E.17.5	
STAIRS OR STOOPS		
CANOPY	CANOPY	

LEGEND

	EXISTING	PROPOSED
CONDUITS		
6" WATER MAIN		
8" WATER MAIN		
12" WATER MAIN		
16" WATER MAIN		
20" WATER MAIN		
24" WATER MAIN		
30" WATER MAIN		
36" WATER MAIN		
42" WATER MAIN		
48" WATER MAIN		
54" WATER MAIN		
60" WATER MAIN		
66" WATER MAIN		
72" WATER MAIN		
84" WATER MAIN		
96" WATER MAIN		
STORM SEWER (WITH SIZE – LESS THAN 24")	15" STM. SEWER	15" STM. SEWER
STORM SEWER (WITH SIZE – 24" AND GREATER)*	24" STM. SEWER	24" STM. SEWER
SANITARY SEWER (WITH SIZE – LESS THAN 24")	15" SAN. SEWER	15" SAN. SEWER
SANITARY SEWER (WITH SIZE – 24" AND GREATER)*	24" SAN. SEWER	24" SAN. SEWER
COMBINED SEWER (WITH SIZE – LESS THAN 24")	15" COMB. SEWER	15" COMB. SEWER
COMBINED (WITH SIZE – 24" AND GREATER)*	24" COMB. SEWER	24" COMB. SEWER
INTERCEPTOR SEWER (WITH SIZE – LESS THAN 24")	15" INTERCEPTOR SEWER	15" INTERCEPTOR SEWER
INTERCEPTOR SEWER (WITH SIZE – 24" AND GREATER)*	24" INTERCEPTOR SEWER	24" INTERCEPTOR SEWER
CATCH BASIN CONNECTION		
GAS LINE (WITH SIZE)	4" GAS	
STEAM (WITH SIZE)	16" STEAM	
ELECTRIC	ELECTRIC	
TELEPHONE	TELEPHONE	
CABLE	CABLE	
FIRE ALARM	FIRE ALARM	
OVERHEAD (AERIAL) UTILITY LINE	A/E,T,F	
TA SUBWAY CONDUIT	Su	
LEGAL DATA		
LOT & BLOCK NUMBER	39 BLOCK 2109	
ESTABLISHED/LEGAL GRADE	0.00	
ANGLE	86°30'48"	
BLOCK LENGTH	167.01' (65.75 m)	
INTERPOLATED/CALCULATED ANGLE OR LENGTH	[86°30'48"] [167.01'(65.75 m)]	
PROPERTY POSSESSION LINE		
MAPPED PROPERTY LINE (RIGHT-OF-WAY LINE)		
LOT LINE		
SURVEY MONUMENT (CITY) – IDENTIFY BY TOPO NUMBER	⊞M#	
BENCH MARK (LABEL)	BM#	
SURVEY CONTROLS		
CONTROL SURVEY TRAVERSE		
CENTER LINE BASE LINE	10+00 10+50	

* LINE SPACING IN SYMBOL TO BE SCALED TO CONDUIT SIZE

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

PARSONS

FINAL DESIGN PREPARED BY:
PARSONS TRANSPORTATION GROUP
NAME OF CONSULTANT
SIGNATURE DATE

DRAWN BY
CADD FILE

SCALE AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

LEGEND AND ABBREVIATIONS

SOUTHEAST QUEENS 150TH STREET SPINE DRAINAGE IMPROVEMENTS
BOROUGH OF QUEENS

PROJECT ID: SE885A-VWE | DATE: AUG 11, 2021 | SHEET 3 OF 108 | LA01 LA01

CONSULTANT DESIGN

GENERAL NOTES:

1. ALL ELEVATIONS SHOWN REFER TO THE NAVD 88 DATUM WHICH IS 1.10 FEET ABOVE THE MEAN SEA LEVEL AT SANDY HOOK, NEW JERSEY AS ESTABLISHED BY THE U.S.C.&G. SURVEY, AND 1.625 FEET BELOW THE QUEENS HIGHWAY DATUM. THE COORDINATE SYSTEM USED FOR THIS CONTRACT IS NEW YORK STATE PLANE COORDINATES NAD 83.

2. BLOCK INTERIOR ANGLES, BLOCK LENGTHS AND LEGAL GRADES WERE OBTAINED FROM THE FINAL MAPS OF THE BOROUGH OF *QUEENS*.

3. EXISTING UNDERGROUND AND OVERHEAD UTILITIES AS SHOWN HERE HAVE BEEN DETERMINED BY STANDARD SURVEYING METHODS AND AVAILABLE RECORDS. NEITHER THE EXACT LOCATION NOR THE INFORMATION OF THESE EXISTING UTILITIES IS GUARANTEED TO BE COMPLETE OR CORRECT. THE APPROXIMATE LOCATIONS OF EXISTING UNDERGROUND UTILITY LINES ARE AS SHOWN ON THE UTILITY IMPACT PLANS AND ELECTRICAL PLANS. THE DESIGN-BUILDER'S ATTENTION IS SPECIFICALLY DIRECTED TO THE SPECIAL NOTES FOR THE EXISTING 96" DIAMETER INTERCEPTOR, 9'X8' STORM SEWER AND HIGH VOLTAGE ELECTRICAL CONDUITS.

4. BUS ROUTES AFFECTED BY THE PROJECT WILL OR MAY REQUIRE COORDINATION. ARRANGEMENTS FOR BUS DIVERSIONS SHALL BE MADE THROUGH:

   MS. SARAH WYSS
   DIRECTOR, SHORT RANGE BUS SERVICE PLANNING
   MTA NEW YORK CITY TRANSIT
   2 BROADWAY, ROOM A17.50
   NEW YORK, NY 10004
   Sarah.Wyss@NYCT.com

5. ALL COMMUNICATIONS AND COORDINATION MEETINGS RELATIVE TO THIS PROJECT BETWEEN THE DESIGN-BUILDER AND ANY AGENCY, UTILITY COMPANY OR ORGANIZATION SHALL BE CONDUCTED BY THE DESIGN BUILDER.

6. NEW YORK CITY MAINTENANCE NOTE:

   NEW SEWER WORK DONE UNDER THIS CONTRACT WHEN COMPLETED WILL BE MAINTAINED BY THE CITY OF NEW YORK IN ACCORDANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION AGREEMENT WITH THE CITY OF NEW YORK FOR MAINTENANCE OF IMPROVEMENTS OF THE STATE ARTERIAL HIGHWAYS SYSTEM FUNDED UNDER THE NEW YORK FAUS, TOPICS, TITLE II PROGRAMS DATED FEBRUARY 3, 1977, OR ANY OTHER FEDERAL AID MADE AVAILABLE BY TITLE 23, U.S.C.

   ALL EXISTING SANITARY AND OTHER SEWERS NOT DEEMED TO BE PART OF THE PROJECT BY THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION COMMISSIONER, WATER MAINS, HYDRANTS, AND OTHER MUNICIPALLY OR PRIVATELY OWNED FACILITIES WITHIN THE LIMITS OF THE RIGHT-OF-WAY WHICH REMAIN IN SERVICE UNCHANGED, AND ALL SUCH FACILITIES RELOCATED OR PROTECTED AS PART OF THE WORK PERFORMED UNDER THE PROJECT, WHETHER CROSSING, LOCATED WITHIN OR ADJACENT TO THE R.O.W. WILL BE MAINTAINED, AS THE CASE MAY BE, BY THE MUNICIPALITY, OR BY THE AGENCY OR UNIT HAVING CONTROL OR JURISDICTION THEREOF, AT NO COST OR EXPENSE TO THE STATE.

7. THE DESIGN-BUILDER IS HEREBY NOTIFIED THAT THE CITY OF NEW YORK DOES NOT PRESENTLY HAVE TITLE TO THE VAN WYCK EXPRESSWAY RIGHT-OF-WAY, WHICH IS OWNED BY THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION.

8. ALL SHEETING PLACED SHALL BE REMOVED.

9. THE FOLLOWING SHALL PERTAIN TO ALL ITEMS HAVING BACKFILL AS PART OF THE WORK: "THE BACKFILLING SHALL COMPLY WITH SUBSECTION 206 OF THE NYSDOT STANDARD SPECIFICATIONS, UNLESS OTHERWISE SPECIFICALLY NOTED ON DRAWINGS."

10. ALL HYDRANTS, LIGHT POLES, TREES OR OTHER FIXED OBJECTS THAT ARE TO BE CONSTRUCTED, PLANTED, RESET, OR RELOCATED AS A RESULT OF THE PROJECT SHALL BE CONSTRUCTED OR PLANTED SO AS TO MEET THE MINIMUM REQUIRED CLEAR ZONE WIDTH AS PER CHAPTER 10 OF THE NYSDOT HIGHWAY DESIGN MANUAL, OR ARE PROTECTED BY ROADSIDE BARRIER OR GUIDERAIL WITH PROPER DEFLECTION CLEARANCES.

11. AS A RESULT OF THE NEW SEWER WORK, EXISTING CURB, GUIDE RAIL, CONCRETE BARRIERS, PAVEMENT, GRASS AND APPURTENANCES RESTORATION WITHIN THE CONTRACT LIMITS, SHALL BE RESTORED IN KIND EXCEPT WHERE THERE IS NEW ROADWAY WORK SHOWN ON ROADWAY CONSTRUCTION PLANS. THE DESIGN-BUILDER SHALL PROVIDE A SMOOTH UNIFORM TRANSITION WHERE NEW PAVEMENTS MEET EXISTING PAVEMENTS.

12. SERVICES MUST BE MAINTAINED BY INSTALLING AND ENERGIZING NEW APPURTENANCES OR BY USING TEMPORARY APPURTENANCES, AS DIRECTED BY THE STATE. UNLESS OTHERWISE PROVIDED FOR, ALL TEMPORARY APPURTENANCES SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE STATE.

DRAINAGE WORK

1. ALL PROPOSED DRAINAGE WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST STANDARDS OF THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NYCDEP) BUREAU OF SEWERS.

2. ALL EXISTING SEWER MANHOLES WITHIN THE CONTRACT LIMITS SHALL BE ADJUSTED, AS NECESSARY, SO THAT THEY WILL BE FLUSH WITH THE FINISHED GRADES AFTER COMPLETION OF THE WORK. ANY MANHOLES WHICH HAVE DAMAGED, WORN OR NON-STANDARD FRAMES AND COVERS SHALL BE PROVIDED WITH NEW TWENTY-SEVEN (27) INCH CASTINGS IN ACCORDANCE WITH THE LATEST STANDARDS OF N.Y.C.D.E.P. BUREAU OF SEWERS.

3. ANY DAMAGE TO EXISTING SEWERS, MANHOLES, BASINS AND CONNECTIONS CAUSED BY THE DESIGN-BUILDER'S OPERATION SHALL BE REPAIRED OR REPLACED BY THE DESIGN-BUILDER AT NO COST TO THE STATE.

4. WHERE THE HEIGHT OF AN EXISTING MANHOLE PERMITS MORE THAN ONE BASIN CONNECTION TO BE MADE ON THE SAME WALL, SPECIAL PRECAUTION SHALL BE TAKEN TO PROTECT THE STRUCTURAL INTEGRITY OF THE MANHOLE. THE MINIMUM CLEARANCE BETWEEN THE OUTSIDE WALLS OF ANY TWO BASIN CONNECTIONS OR BETWEEN A BASIN CONNECTION AND SEWER, VERTICALLY OR HORIZONTALLY, SHALL BE 12 INCHES.

5. THE COST OF RAISING OR LOWERING MANHOLE, BASIN, AND INLET HEADS TO PROPOSED GRADES WILL BE DEEMED INCLUDED IN THE PRICES BID FOR ALL THE SCHEDULED ITEMS WHEN THE VERTICAL UPWARD MOVEMENT OF ALL HEADS IS TWENTY FOUR (24) INCHES OR LESS, WHEN THE VERTICAL DOWNWARD MOVEMENT OF MANHOLE HEADS IS SIX (6) INCHES OR LESS, AND WHEN THE VERTICAL DOWNWARD MOVEMENT OF BASIN HEADS IS THREE (3) INCHES OR LESS, UNLESS OTHERWISE PROVIDED OR DIRECTED, AND WHERE THE ADJUSTMENT IS WITHIN THE BRICK WORK LIMIT. WHEN THE EXISTING STRUCTURE CONSISTS OF A BRICK CHIMNEY OR A CONCRETE ROOF SLAB OR BRICK ON CONCRETE WALLS, THE MAXIMUM ALLOWABLE HEIGHT OF BRICK, AFTER ADJUSTMENT, SHALL BE TWENTY-FOUR (24) INCHES. ALL OTHER ADJUSTMENTS WILL BE PAID FOR UNDER THE APPROPRIATE MANHOLE, BASIN, OR INLET MODIFICATION ITEMS.

6. ALL EXISTING SEWERS, MANHOLES, BASINS, AND CONNECTIONS WITHIN THE LIMITS OF THIS CONTRACT AND CONTIGUOUS THERETO ARE TO BE REPAIRED, IF DAMAGED. ALL EXISTING BASINS AND CONNECTIONS WITHIN THE LIMITS OF THIS CONTRACT AND CONTIGUOUS THERETO ARE TO BE CLEANED, FLUSHED AND OTHERWISE MADE OPERABLE TO THE SATISFACTION OF THE REQUIREMENTS. WHERE THE EXISTING BASIN CONNECTIONS ARE FOUND TO BE DAMAGED OR IN DETERIORATING CONDITION THEY SHOULD BE REPLACED WITH NEW 12" DIAMETER DUCTILE IRON PIPE IN ACCORDANCE WITH THE N.Y.C.D.E.P. BUREAU OF SEWERS STANDARDS.

7. ALL ABANDONED BASIN, DRAINAGE STRUCTURES AS SHOWN ON THE CONTRACT PLANS ARE TO BE BULKHEADED AND CUT DOWN TO TWO (2) FEET BELOW THE SUBGRADE AND FILLED WITH COMPACTED CLEAN SAND. BASIN CONNECTIONS NOT REQUIRED SHALL BE PLUGGED AT BOTH ENDS.

8. ALL NEW CATCH BASIN CONNECTIONS SHALL BE MADE TO EXISTING SEWERS AT MANHOLES, WITH 12" DIAMETER DUCTILE IRON PIPE, CLASS 56, WITH INTERNALLY LOCKED "PUSH-ON" JOINTS LAID ON 6" OF BROKEN STONE FOR THE ENTIRE WIDTH OF THE TRENCH AND FOR ONE-HALF THE PIPE DIAMETER. THE BROKEN STONE SHALL BE HARD, UN-WEATHERED STONE, UNIFORMLY GRADED FROM 1/4" TO 3/4" IN DIAMETER. IT SHALL CONFORM TO COMMERCIAL 1/4" TO 3/4" STONE. ALL NEW CATCH BASINS SHALL HAVE A HOOD ON THE OUTLET PIPE.

9. SLOPE ON ALL NEW CATCH BASIN CONNECTIONS SHALL BE A MINIMUM OF 1/2% AND A MAXIMUM OF 4%, PROVIDED THE TOTAL DROP BETWEEN BASIN AND BASIN/ MANHOLE IS AT LEAST SIX (6) INCHES.

10. CATCH BASINS IN THE PROJECT AREA SHALL BE MAINTAINED OPERABLE AT ALL TIMES. THE DESIGN-BUILDER SHALL TAKE THE NECESSARY PRECAUTIONS TO AVOID CLOGGING CATCH BASINS WITH DEBRIS DURING THE DESIGN-BUILDER'S OPERATIONS. IF, AS A RESULT OF CONSTRUCTION, A FLOODING CONDITION OCCURS OR IN THE EVENT THE DESIGN-BUILDER'S OPERATIONS DAMAGE OR BLOCK THE DRAINAGE SYSTEM, THE DESIGN-BUILDER SHALL AT HIS/HER OWN EXPENSE IMMEDIATELY REPAIR OR RESTORE THE DRAINAGE SYSTEM.

11. DESIGN-BUILDER SHALL PROVIDE TEMPORARY MEANS (PIPES, PUMPE, ETC.) TO DRAIN ANY STORM WATER WITHIN THE PROJECT LIMITS FOR THE DURATION OF CONSTRUCTION. DESIGN-BUILDER SHALL SUBMIT A DRAINAGE BYPASS SCHEME TO THE STATE AND NYCDEP FOR APPROVAL PRIOR TO THE START OF EACH CONSTRUCTION STAGE OF DIVERSION CHAMBER. NO STORM WATER SHALL BE DRAINED TO PA NY/NJ JFK AIRPORT DRAINAGE SYSTEM.

12. DESIGN-BUILDER IS DIRECTED TO PAY SPECIAL ATTENTION TO THE PROPOSED SEWER TO BE CONSTRUCTED OVER THE EXISTING 96" INTERCEPTOR. EXTREME CAUTION SHOULD BE USED AND CARE BE TAKEN NOT TO DAMAGE EXISTING INTERCEPTOR DURING SEWER CONSTRUCTION AND REMOVAL OF EXISTING INTERCEPTOR PROTECTION . ANY DAMAGE TO THE EXISTING INTERCEPTOR SHALL BE IMMEDIATELY REPAIRED AT NO COST TO NYCDEP, NYCDOT, NYSDOT, OR PANYNJ.

ELECTRICAL NOTES

1. ALL PROPOSED ELECTRICAL WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST STANDARDS OF THE PANYNJ OR NYSDOT AS REQUIRED.

2. THE DESIGN-BUILDER'S ATTENTION IS DIRECTED TO THE FACT THAT THERE ARE BURIED UNDERGROUND ELECTRICAL LINES WITHIN THE PROJECT AREA. EXTREME CAUTION SHOULD BE USED DURING THE CONSTRUCTION OF THIS PROJECT. IN THE EVENT CONFLICTS ARE IDENTIFIED WITH ANY TYPE OF ELECTRICAL CONDUITS, THE DESIGN-BUILDER SHALL COORDINATE WITH PANYNJ JFK AIRPORT PRIOR TO THE START OF SEWER WORK. ANY DAMAGE TO THESE UNDERGROUND ELECTRICAL LINES SHALL BE IMMEDIATELY REPAIRED AT NO COST TO NYCDEP, NYCDOT, NYSDOT, OR PANYNJ.

3. SEE 5KV ELECTRICAL RELOCATION PLANS FOR ADDITIONAL NOTES.

STRUCTURAL AND GEOTECHNICAL NOTES

1. ALL PROPOSED SEWER STRUCTURAL WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST STANDARDS OF NYCDEP BUREAU OF SEWERS.

2. ALL SOIL DENSITY TESTING, CONSISTING OF BOTH PROCTOR ANALYSIS OF SOIL SAMPLES AND IN-PLACE SOIL DENSITY TESTS, TO BE PERFORMED DURING THE BACKFILLING OF SEWER TRENCHES SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SEWER SPECIFICATIONS.

3. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL NOTES.

PANYNJ JFK AIRPORT, NYSDOT, AND NYC OCMC GENERAL NOTES

1. DESIGN-BUILDER SHALL COORDINATE WITH JFK LANDSIDE OPERATIONS FOR ANY AND ALL LANE CLOSURE ON THE VAN WYCK EXPRESSWAY SOUTH OF NYS-27 (N. CONDUIT AVENUE), AND OBTAIN APPROVED LANE CLOSURES BY JFK OPS AT LEAST ONE WEEK PRIOR TO THE START OF EACH INDIVIDUAL LANE CLOSURE.

2. PRIOR TO THE START OF CONSTRUCTION, DESIGN-BUILDER SHALL COORDINATE WITH PANYNJ CMD JFK RESIDENT ENGINEERS OFFICE,PANYNJ CENTRAL SURVEYS, BOMBARDIER (JFK AIRTRAIN), AND JFK OPERATIONS FOR ANY EXCAVATION WORK THAT WILL BE PERFORMED WITHIN JFK AIRPORT PROPERTY.

3. DESIGN-BUILDER SHALL PROVIDE AS-BUILT SURVEY DATA FOR ALL INSTALLATIONS OF SEWER LINE WITHIN PANYNJ AND NYSDOT PROPERTY LIMITS. THE DESIGN-BUILDER SHALL COORDINATE WITH PANYNJ CENTRAL SURVEYS GROUP AND NYSDOT REGION 11 SURVEY GROUP ACCORDINGLY.

4. DESIGN-BUILDER SHALL SPECIFY THE LOCATION OF ACCESS TO THE AREAS OF WORK WITHIN THE I-678 MEDIAN SOUTH OF NYS-27. ADDITIONALLY, DESIGN-BUILDER SHALL PROVIDE FOR FLAGGING AND MAINTENANCE OF TRAFFIC (MOT) RELATED TO CONSTRUCTION VEHICLE ENTRANCE WITHIN THE WORK SITE.

5. DESIGN-BUILDER SHALL COORDINATE WITH NYSDOT OR PANYNJ FOR STAGING AREA AND LAYDOWN AREA, IF VEHICLES, EQUIPMENT, ETC. WILL BE STORED WITHIN PROPERTY OWNED/OPERATED BY EITHER AGENCY. PANYNJ APPROVAL IS REQUIRED PRIOR TO THE DESIGN-BUILDER'S USE OF ANY SPACE OR LOTS WITHIN PANYNJ PROPERTY FOR LAYDOWN OR STORAGE FOR THE DURATION OF THE PROJECT NOT EXPRESSLY DELINEATED IN THE PANYNJ REQUIREMENTS FOR THE PERFORMANCE OF WORK (RPW) OR IN THE CONTRACT DOCUMENTS.

6. DESIGN-BUILDER SHALL PROVIDE RESTORATION OF IMPACTED GROUND AREAS WITHIN AIRPORT PROPERTY AND NYSDOT PROPERTY LIMITS TO THEIR ORIGINAL CONDITION, SUCH AS RESTORATION OF CONCRETE BARRIERS, ROADWAYS, SIDEWALKS, AND LANDSCAPING. FOR GROUND AREAS WITHIN AIRPORT PROPERTY LIMITS THAT CANNOT BE RESTORED TO THEIR ORIGINAL CONDITION, SUCH AS LANDSCAPED/PLANTED AREAS, DESIGN-BUILDER SHALL COORDINATE WITH PANYNJ JFK AIRPORT.

7. ALL LANE SHIFTS AND MOT PLANS SHALL BE SUBMITTED TO PANYNJ TRAFFIC ENGINEERING AN NYC OCMC FOR REVIEW AND APPROVAL PRIOR TO CHANGES TO ANY EXISTING APPROVALS.

8. DESIGN-BUILDER SHALL SPECIFY LIMITS OF LANDSCAPE, GROUND, UTILITY, AND ROADWAY RESTORATION IN AREAS IMPACTED BY SEWER CROSSINGS.

9. DESIGN-BUILDER SHALL PROVIDE DEWATERING PLAN DUE TO THE HIGH WATER TABLE IN THE PROJECT AREA. DESIGN-BUILDER SHALL PROVIDE A PLAN TO STORE OR TRANSPORT IN-SITU WATER/SOIL EXCAVATED WITHIN AIRPORT PROPERTY LIMITS. LOCATION OF SOIL STORAGE ON-SITE SHALL BE APPROVED, TESTED, AND MONITORED. AS PER PANYNJ ENVIRONMENTAL AND NYCDEP REQUIREMENTS. DESIGN BUILDER SHALL BE REQUIRED TO SUBMIT TO PANYNJ ENVIRONMENTAL ENGINEERING FOR REVIEW AND APPROVAL, ENVIRONMENTAL MANAGEMENT PLAN (EMP) FOR ALL AREAS LOCATED ON AIRPORT PROPERTY THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES.

10. DESIGN-BUILDER SHALL COORDINATE WITH PANYNJ/BOMBARDIER (JFK AIRTRAIN) FOR ALL WORK WITHIN THE ENVELOPE OF THE AIRTRAIN SUPPORT COLUMNS PER THE APPROVED COORDINATION AGREEMENT.

11. DESIGN-BUILDER SHALL PROVIDE ADEQUATE PROTECTION IN THE FORM OF SLOPE STABILIZATION, SHEET-PILE WALLS, OR SIMILAR PROTECTION, DESIGNED AND APPROVED BY A LICENSED PROFESSIONAL ENGINEER, ALONG THE NORTHBOUND (NB) AND SOUTHBOUND (SB) VAN WYCK EXPRESSWAY (I-678) LANES ADJACENT TO THE EXCAVATION SHOWN FOR THE DOUBLE-BOX SEWER.

12. DESIGN-BUILDER SHALL PROVIDE DETAIL PLAN FOR DETOURED MAINLINE LANES AROUND THE SEWER CLOSURE WITHIN THE LIMITS OF WORK ON THE SB AND NB VAN WYCK EXPRESSWAY (I-678) LANES.

13. DESIGN-BUILDER SHALL PROVIDE DETAIL FOR THE WORK AREAS NEEDED TO CONSTRUCT THE TEMPORARY ROADWAY AND DEFINE ACCESS, HAUL ROUTES, AND CONSTRUCTION ENTRANCES .

14. DESIGN-BUILDER SHALL PROVIDE RESTORATION PROCEDURE OF BACKFILL AND COMPACT SUBSURFACE PRIOR TO THE RECONSTRUCTION OF IMPACTED ROADWAY SECTIONS.

15. DESIGN-BUILDER SHALL COORDINATE LANE CLOSURES WITH NYC OCMC AND JFK OPERATIONS DURING CONSTRUCTION TO ENSURE THAT BOTH, OCMC AND THE AIRPORT, IS INFORMED OF TRAFFIC PATTERNS. A WEEKLY SCHEDULE OF AVAILABLE LANES SHALL BE SUBMITTED TO BOTH, NYC OCMC AND PANYNJ JFK AIRPORT OPERATIONS.

16. ALL CRANES MUST BE REVIEWED BY PANYNJ PRIOR TO ERECTION OF A CRANE ON THE PROJECT SITE, WHETHER ON-AIRPORT OR OFF-AIRPORT.DESIGN-BUILDER SHALL BE REQUIRED TO NOTIFY PANYNJ CMD JFK REO AND JFK AIRPORT OPERATIONS AT LEAST 72 HOURS PRIOR TO RAISING A CRANE. NO CRANE WILL BE PERMITTED TO BE ERECTED OR RAISED WITHOUT APPROVAL FROM PANYNJ AND APPROVED FAA 7460 FROM FAA.

17. DESIGN-BUILDER SHALL UNDERSTAND THE AIRTRAIN LIMITS OF APPROACH FOR WORK AROUND THE AIRTRAIN GUIDEWAY. REFER TO PERFORMANCE OF WORK (RPW) FOR ADDITIONAL REQUIREMENTS.

18. ALL WORK THAT IMPACTS THE VAN WYCK EXPRESSWAY MUST FOLLOW NYSDOT STANDARDS. PERMANENT RESTORATION OF OFF ROAD AREAS UNDER PANYNJ JURISDICTION SHALL FOLLOW PANYNJ STANDARDS.

19. AUXILIARY LANE OF SB VAN WYCK EXPRESSWAY SERVES TRAFFIC FROM NASSAU EXPRESSWAY, BLDG. 111 AND 150TH STREET. DESIGN-BUILDER SHALL PROVIDE DETAILED PAVEMENT MARKING DRAWING AND SIGNING PLANS INCLUDING BUT NOT LIMITED TO HOW TRAFFIC CAN MERGE, DIVERGE AND TAPER ACCORDING TO NYSDOT, AASHTO, AND MUTCD GUIDELINES.

20. FOR SB VAN WYCK EXPRESSWAY SEWER CROSSING, DESIGN-BUILDER SHALL IDENTIFY IMPACTED AREAS (I.E., BLDG. 9) AND PROVIDE SUB STAGES AND REQUIRED MOT DEVICES TO DEMONSTRATE HOW TO MAINTAIN ACCESS.

21. DESIGN-BUILDER SHALL CONFIRM IF ACCESS FROM 150TH AVENUE TO SB VAN WYCK EXPRESSWAY WILL BE MAINTAINED OR PROVIDE PROPOSED DETOUR PLAN AND ASSOCIATED TRAFFIC ANALYSIS JUSTIFICATION IF ACCESS CANNOT BE MAINTAINED.

22. FOR CONSTRUCTION OF SEWER CROSSING ON SB VAN WYCK EXPRESSWAY , DESIGN-BUILDER SHALL PROVIDE ADEQUATE WIDTH AT 150TH STREET ON-RAMP FOR VEHICLES TO BYPASS STOPPED BUSES AT BUS STOP.

23. MINIMUM TRAVEL LANE AND SHOULDER WIDTHS SHALL BE IN ACCORDANCE WITH NYSDOT STANDARDS.

24. ALL SINGLE LANE ROADWAYS MUST HAVE WIDTH REQUIRED PER NYSDOT GUIDELINE.

25. DESIGN-BUILDER SHALL PROVIDE MERGING, DIVERGING, SHIFTING TAPERS AS PER MUTCD AND NYSDOT REQUIREMENT. ALL BLUNT ENDS OF BARRIER MUST BE PROTECTED WITH APPROPRIATE ATTENUATION MEETING NYSDOT REQUIREMENTS.

26. ALL EXCAVATION AND UTILITY CONSTRUCTION SHALL REQUIRE SUBMISSION VIA NY ONE-CALL AND NOTIFICATION TO PANYNJ CMD JFK REO / PA SURVEYS AT LEAST 72 HRS PRIOR TO THE START OF ANY EXCAVATION OF CONSTRUCTION ACTIVITY. SUCH TIME SHALL PERMIT PANYNJ AND OTHERS TO APPROPRIATELY MARK UTILITIES ON AIRPORT PROPERTY. PANYNJ SURVEYS SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO UTILITY INSTALLATION TO CAPTURE AS-BUILT SURVEY DATA. DESIGN-BUILDER SHALL SUBMIT UTILITY LOCATION DATA AS-BUILTS PER PORT AUTHORITY STANDARDS FOR UTILITY DATA COLLECTION.

27. THE DESIGN-BUILDER WILL BE REQUIRED TO PRODUCE ENGINEERED TRAFFIC DRAWINGS REVIEWED AND APPROVED BY NYSDOT'S DESIGNATED REVIEWER/QUALITY ASSURANCE ENTITY FOR REVIEW AT WEEKLY JFK AIRPORT LANDSIDE OPERATIONS LANE CLOSURE MEETINGS ON A WEEKLY BASIS FOR THE DURATION OF ANY CONSTRUCTION WHICH IMPACTS THE VAN WYCK EXPRESSWAY MAINLINE LANES IN THE VICINITY OF THE AIRPORT. FOR THE DURATION OF CONSTRUCTION, DESIGN-BUILDER SHALL PROVIDE REGULAR UPDATES TO JFK OPERATIONS ON THE SEQUENCE OF MOT, TEMPORARY DETOURS, LANE CLOSURES, OR ANY OTHER ALTERATIONS TO THE EXISTING TRAFFIC FLOW TO THE AIRPORT AT THE WEEKLY JFK LANDSIDE OPERATIONS LANE CLOSURE MEETING. ALL CLOSURES SHALL BE SUBMITTED AT LEAST ONE WEEK PRIOR TO THE START OF ANY TRAFFIC RECONFIGURATIONS ON OR WITHIN THE VICINITY OF THE AIRPORT BY JFK AIRPORT OPERATIONS.

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

PARSONS

FINAL DESIGN PREPARED BY:
PARSONS TRANSPORTATION GROUP
NAME OF CONSULTANT

SIGNATURE DATE

DRAWN BY_____
CADD FILE_____

SCALE
AS SHOWN

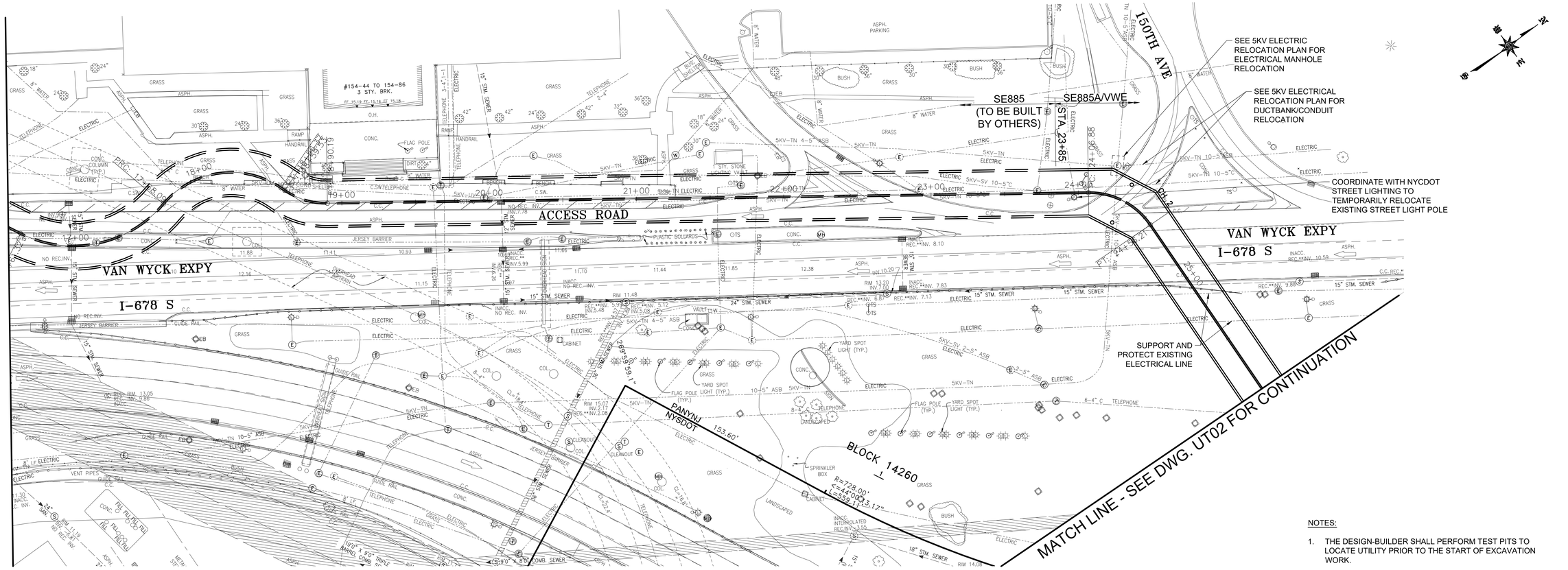
CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

GENERAL NOTES

SOUTHEAST QUEENS 150TH STREET SPINE
DRAINAGE IMPROVEMENTS
BOROUGH OF QUEENS

PROJECT ID: SE885A-VWE | DATE: AUG 11, 2021 | SHEET 4 OF 108 | GN01 | GN01

CONSULTANT DESIGN



PLAN

PROFILE

SCALE: 1"=30' HORIZ. 1"=5' VERT.

NOTES:

1. THE DESIGN-BUILDER SHALL PERFORM TEST PITS TO LOCATE UTILITY PRIOR TO THE START OF EXCAVATION WORK.

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

PARSONS

FINAL DESIGN PREPARED BY:
PARSONS TRANSPORTATION GROUP
NAME OF CONSULTANT
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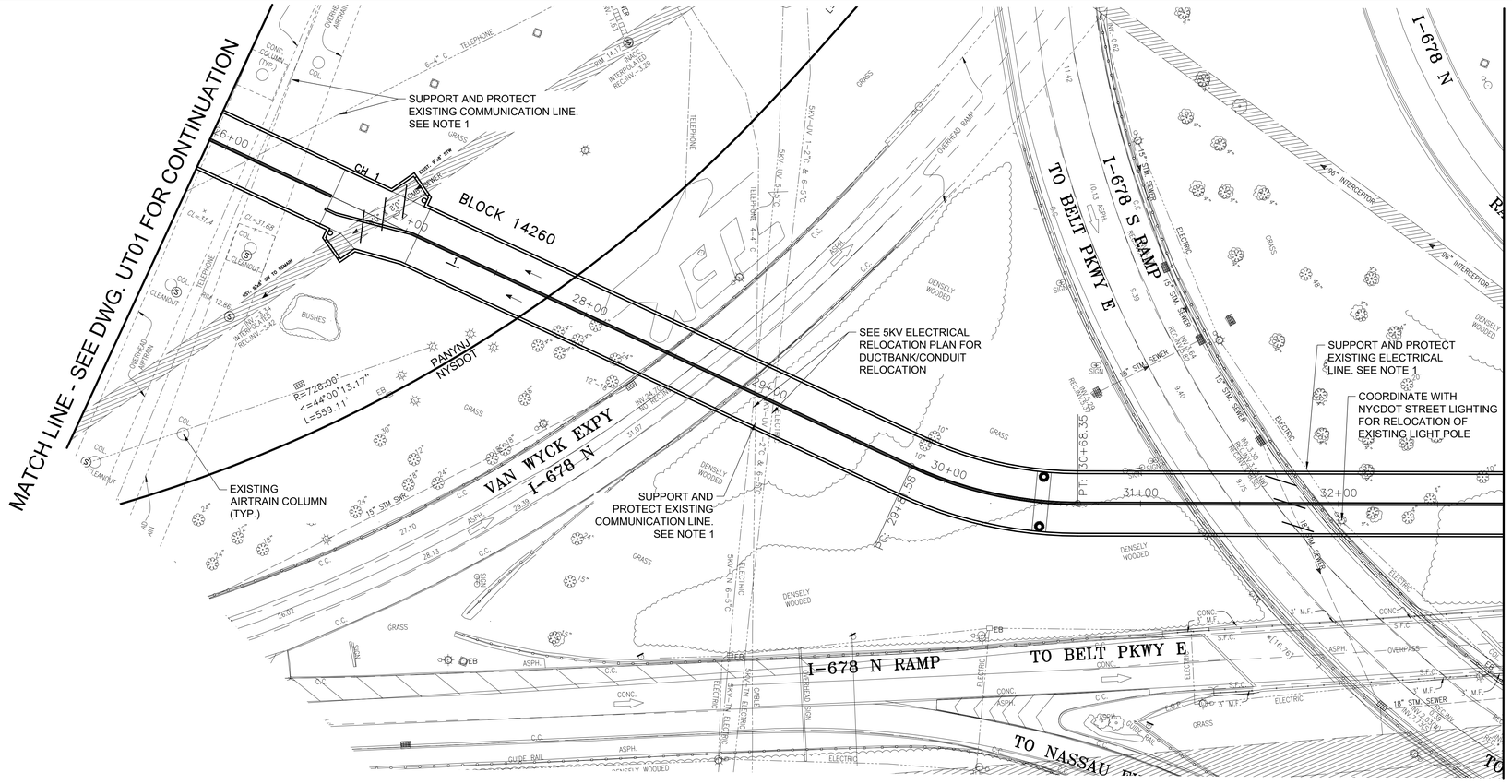
UTILITY IMPACT PLAN - 1

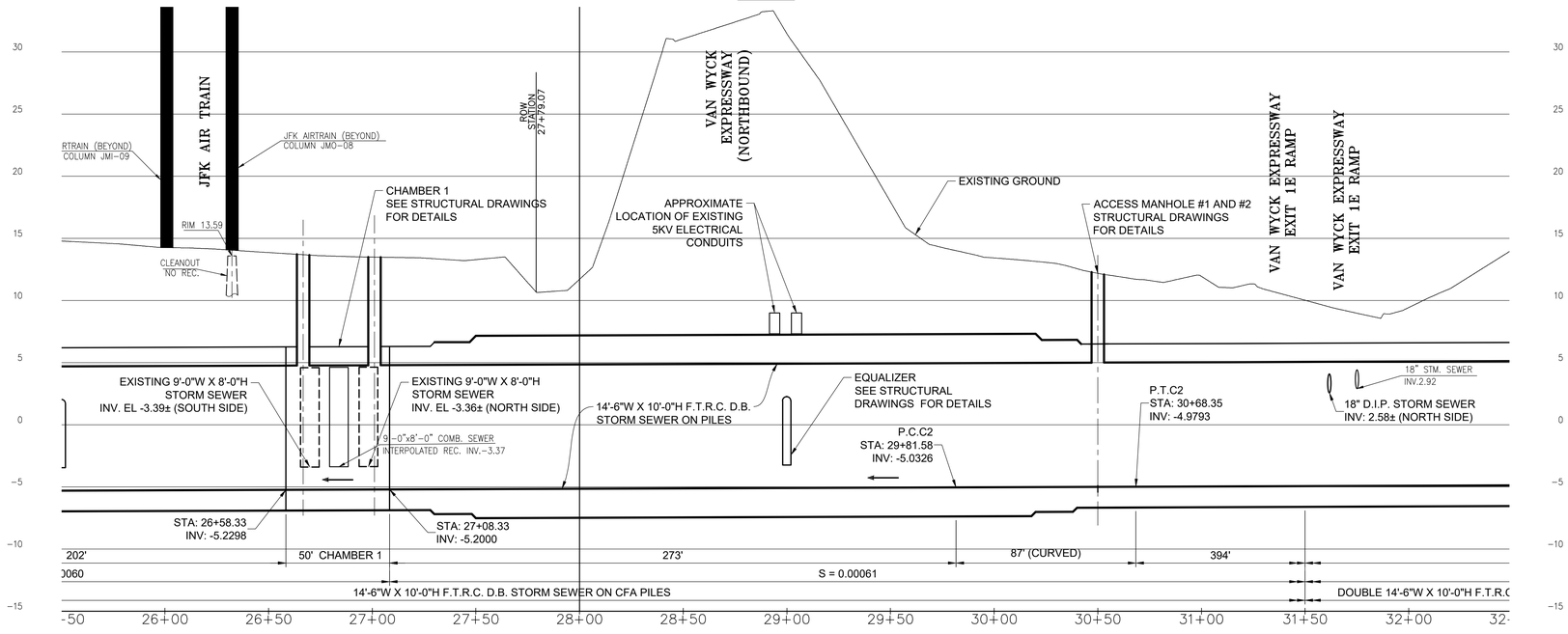
SOUTHEAST QUEENS 150TH STREET SPINE DRAINAGE IMPROVEMENTS
BOROUGH OF QUEENS

PROJECT ID: SE885A-VWE | DATE: AUG 11, 2021 | SHEET 78 OF 108 | UT01 UT04

CONSULTANT DESIGN



PLAN



PROFILE

SCALE: 1"=30' HORIZ. 1"=5' VERT.

NOTES:

1. THE DESIGN-BUILDER SHALL PERFORM TEST PITS TO LOCATE UTILITY PRIOR TO THE START OF EXCAVATION WORK.

NO.	DATE	DESCRIPTIONS	BY	APPR'D
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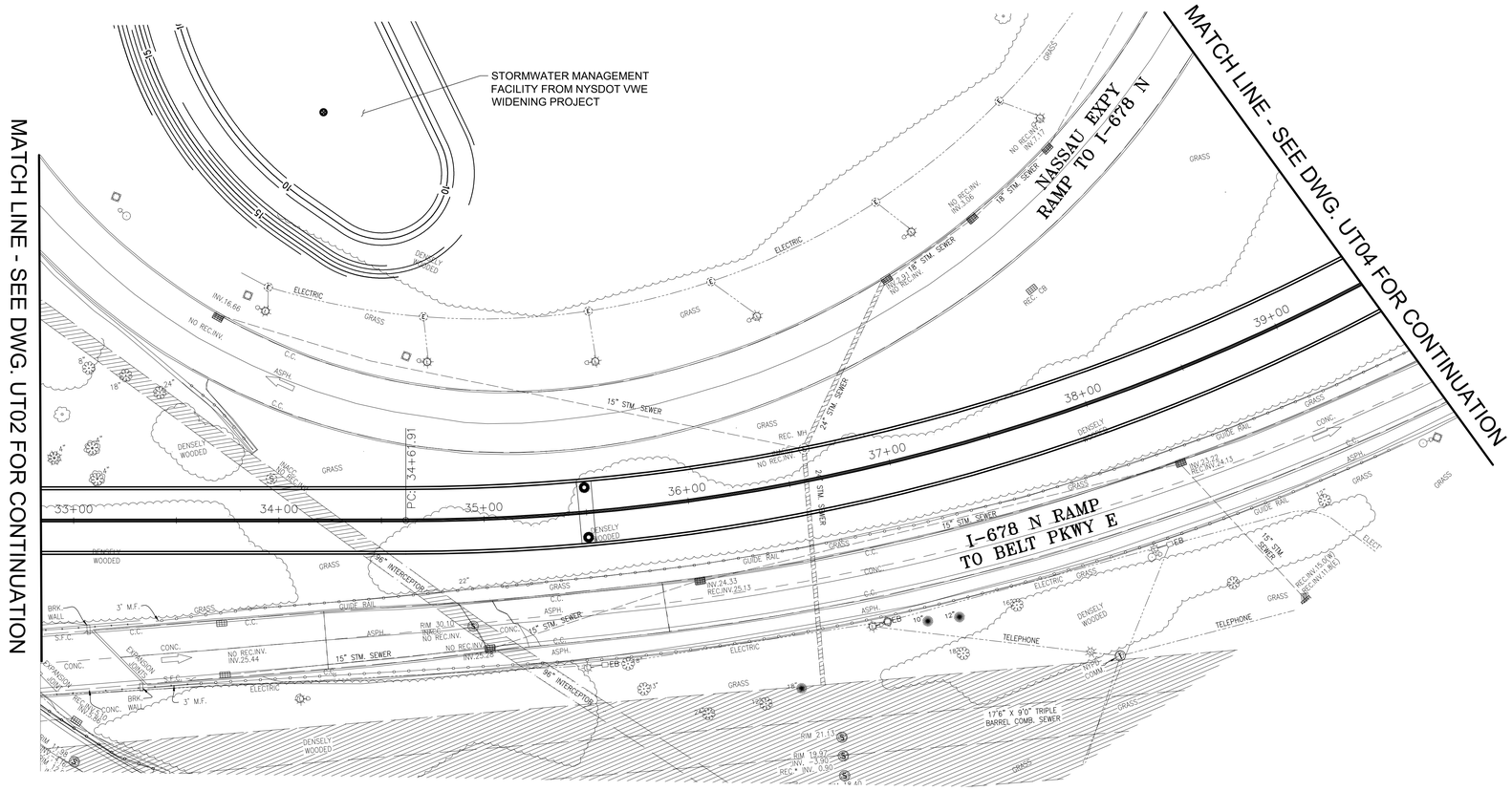
BUREAU OF DESIGN

UTILITY IMPACT PLAN - 2

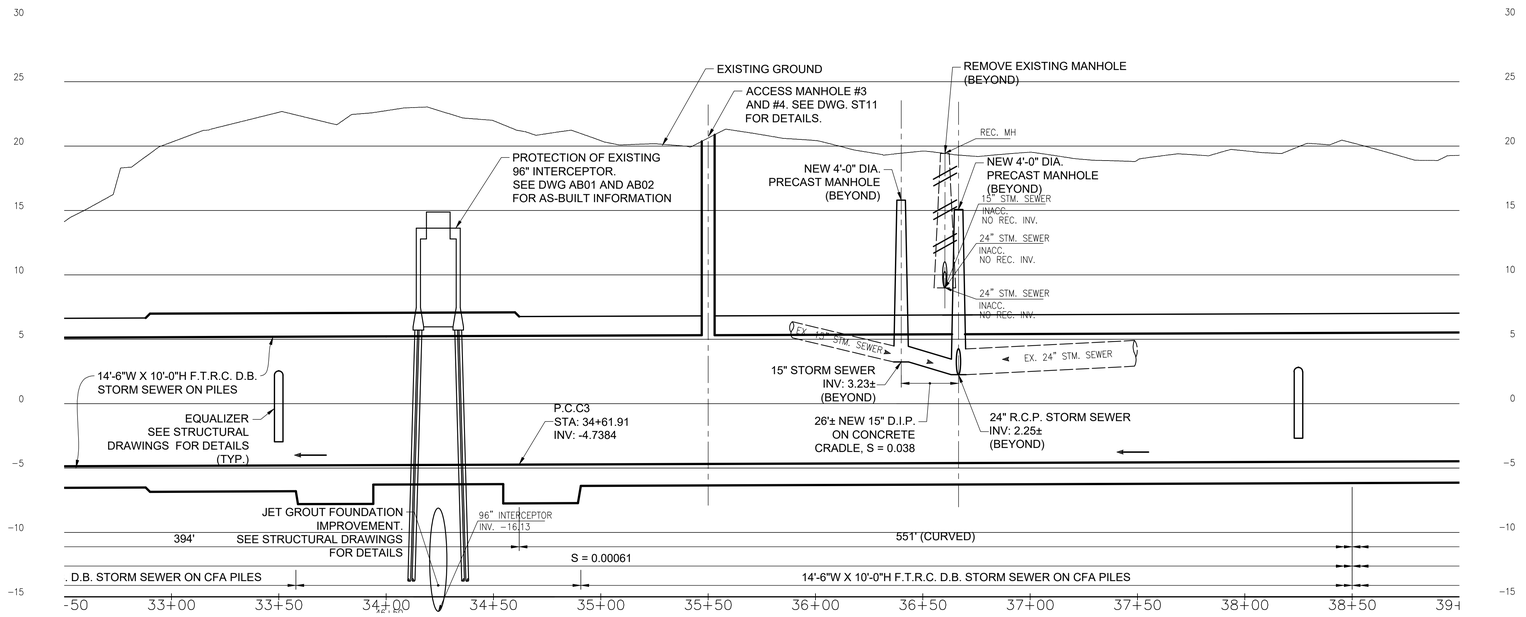
SOUTHEAST QUEENS 150TH STREET SPINE DRAINAGE IMPROVEMENTS
BOROUGH OF QUEENS

PROJECT ID: SE885A-VWE | DATE: AUG 11, 2021 | SHEET 79 OF 108 | UT02 UT04

CONSULTANT DESIGN



PLAN



PROFILE

SCALE: 1"=30' HORIZ. 1"=5' VERT.

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

PARSONS

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BUREAU OF DESIGN

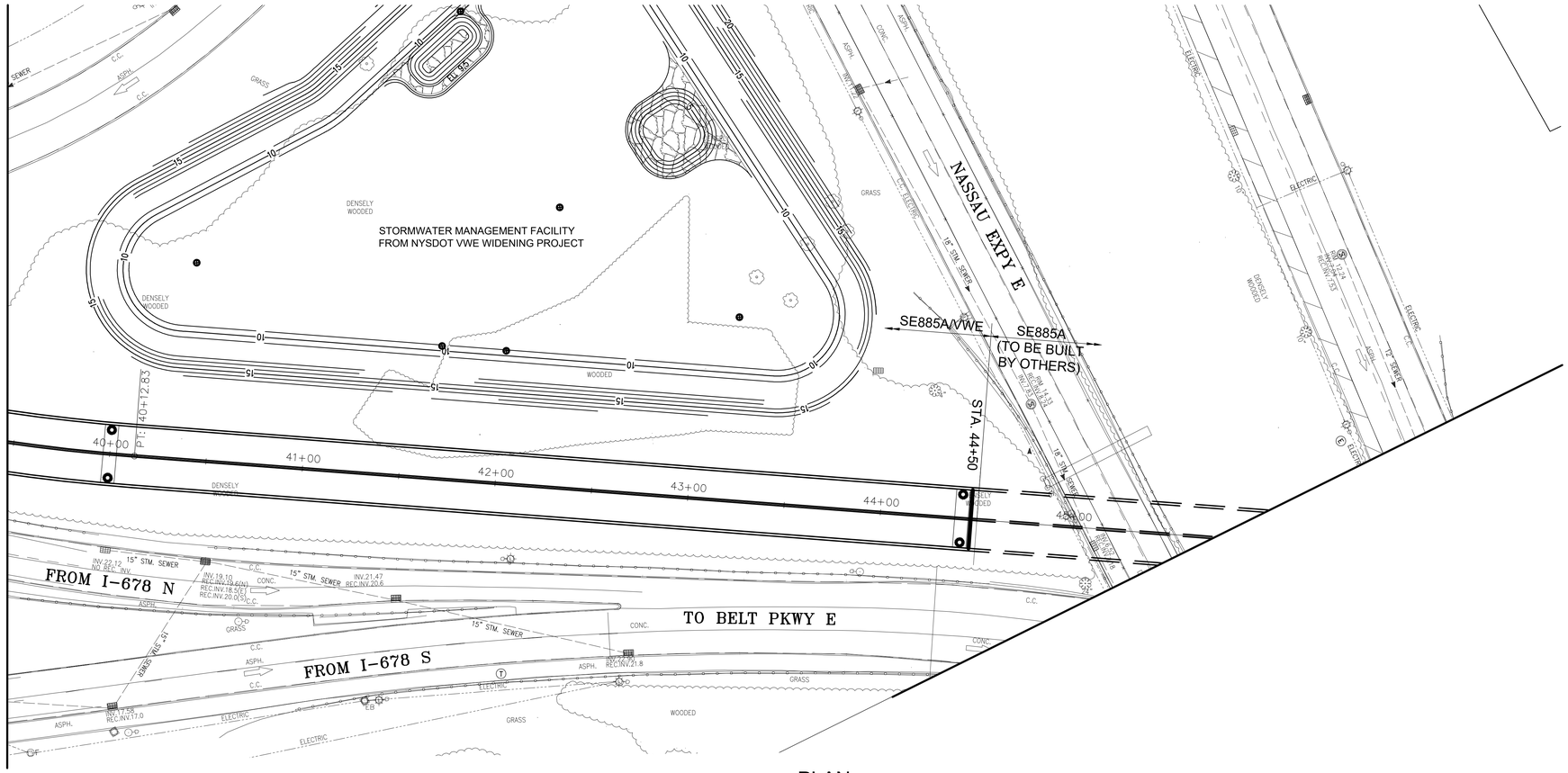
UTILITY IMPACT PLAN - 3

SOUTHEAST QUEENS 150TH STREET SPINE DRAINAGE IMPROVEMENTS
BOROUGH OF QUEENS

PROJECT ID: SE885A-VWE | DATE: AUG 11, 2021 | SHEET 80 OF 108 | UT03 UT04

CONSULTANT DESIGN

MATCH LINE - SEE DWG. UT04 FOR CONTINUATION



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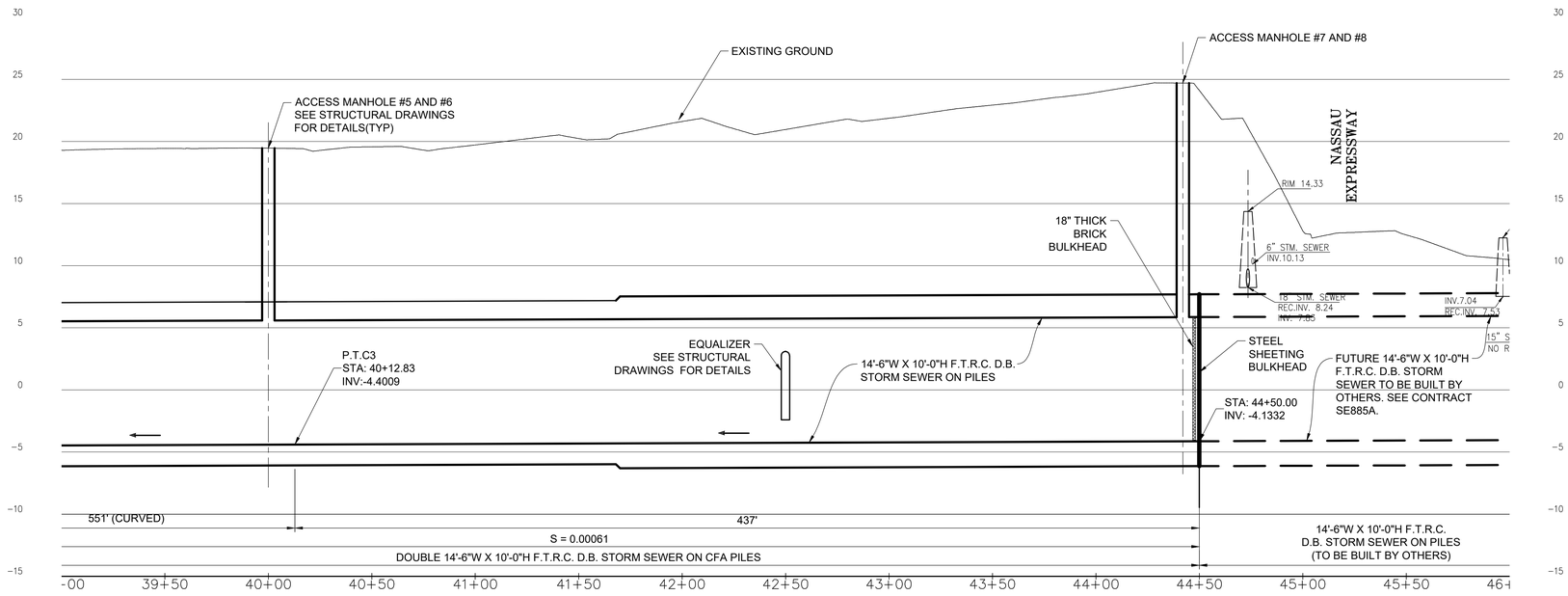

PROFILE

SCALE: 1"=30' HORIZ. 1"=5' VERT.

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

PARSONS

FINAL DESIGN PREPARED BY:
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NAME OF CONSULTANT

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BUREAU OF DESIGN

UTILITY IMPACT PLAN - 4

SOUTHEAST QUEENS 150TH STREET SPINE
DRAINAGE IMPROVEMENTS
BOROUGH OF QUEENS

PROJECT ID: SE885A-VWE

DATE: AUG 11, 2021

SHEET 81 OF 108

UT04
UT04

CONSULTANT DESIGN

GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, NATIONAL ELECTRICAL SAFETY CODE, NFPA, OSHA REGULATIONS, AND ALL OTHER EXISTING CODES AND REGULATIONS OF AUTHORITIES WHICH WOULD HAVE JURISDICTION IF THE AUTHORITY WERE A PRIVATE CORPORATION.

2. VERIFY FIELD CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK AND REPORT ANY DISCREPANCIES TO THE ENGINEER IN WRITING. VERIFY ALL DIMENSIONS IN THE FIELD. SHOP DRAWING PREPARATION AND FABRICATION OF ANY MATERIALS SHALL NOT COMMENCE UNTIL VERIFICATION OF FIELD CONDITIONS IS COMPLETED.

3. USE CARE IN PERFORMING THE WORK SO AS NOT TO DAMAGE ANY MATERIALS OR STRUCTURES WHICH ARE TO BE RETAINED OR REMAIN IN PLACE. REPAIR ANY DAMAGE TO MATERIALS OR THE EXISTING STRUCTURE TO REMAIN CAUSED BY THE DESIGN-BUILDER TO THE FULL SATISFACTION OF THE ENGINEER AND AT NO ADDITIONAL COST.

4. PREPARE AND SUBMIT DETAILED STAGING SEQUENCE INDICATING THE WORK SCHEDULE AND SHUTDOWNS REQUIRED. WORK SHALL BE PERFORMED ON ONE SYSTEM, FEEDER, ETC AT A TIME. STAGING SEQUENCE SHALL REFLECT THIS REQUIREMENT. FULL RESTORATION OF SERVICE INCLUDING RE-ENERGIZING FEEDERS SHALL BE PROVIDED FOLLOWING OUTAGES.

5. PERFORM ALL DISCONNECTIONS AND INTERRUPTIONS OF ELECTRICAL SERVICE ACCORDING TO THE CONSTRUCTION SCHEDULE SUBMITTED BY THE DESIGN-BUILDER AND APPROVED BY THE ENGINEER. ANY SCHEDULE OF INTERRUPTIONS AND SHUTDOWNS SHALL INDICATE AFFECTED AREAS AND SHALL BE KEPT TO A MINIMUM. THE SCHEDULE SHALL BE SUBMITTED A MINIMUM OF TWO WEEKS BEFORE ANY ANTICIPATED INTERRUPTION. THE SCHEDULE IS APPROVED BY THE ENGINEER BEFORE ANY INTERRUPTION SHALL BE PERMITTED.

6. FEEDERS SHALL NOT BE TAKEN OUT OF SERVICE DURING CONSTRUCTION, EXCEPT DURING PLANNED AND ENGINEER-APPROVED OUTAGES AND CUTOVERS.

7. PRIOR TO INSTALLATION, SUBMIT A SITE SPECIFIC WORK PLAN TO THE ENGINEER. THE PLAN SHALL INCLUDE THE FOLLOWING AT A MINIMUM:
   A. REMOVAL OF EXISTING CABLES AND EQUIPMENT..
   B. INSTALLATION OF CABLES AND EQUIPMENT.
   C. TYPE AND DURATION OF OPERATIONAL OUTAGES.
   D. CONTINGENCY PLAN TO ENSURE FULL OPERATIONAL POWER WILL BE AVAILABLE IN THE EVENT THAT PLANNED WORK IS NOT COMPLETED DURING OUTAGE.

8. PROCEED WITH THE INSTALLATION ONLY AFTER RECEIVING THE APPROVAL OF THE PLAN FROM THE ENGINEER.

9. ALL UNDERGROUND CONDUITS SHALL BE CONCRETE ENCASED AND INSTALLED AS A DUCTBANK. UNDERGROUND DUCTBANKS SHALL UTILIZE FRE CONDUIT 5" DIAMETER MINIMUM. CONDUITS SHALL BE CONCRETE ENCASED A MINIMUM OF 3" ALL AROUND. IF DUCTBANK IS INSTALLED UNDER ROADWAY, RUNWAY OR TAXIWAY, THEN RGS CONDUITS AND REINFORCED CONCRETE SHALL BE USED. ALL DUCTBANKS SHALL HAVE 30" COVER MINIMUM.

10. BETWEEN MANHOLES IN THE MEDIUM VOLTAGE POWER SYSTEM, THE TOTAL BENDING RADIUS FOR UNDERGROUND DUCT BANKS SHALL NOT EXCEED 90 DEGREES AND SHALL UTILIZE WIDE SWEEPS.

11. DUCTBANKS SHALL BE SLOPED TOWARD THE MANHOLES TO PROVIDE ADEQUATE DRAINAGE; NO LOW SPOTS ARE ALLOWED.

12. DUCTBANKS SHALL NOT BE INSTALLED WITHIN THE FOOTPRINT OF A STRUCTURE. EXISTING UTILITIES LOCATED WITHIN THE FOOTPRINT OF A STRUCTURE SHALL BE RELOCATED.

13. PROVIDE GROUNDING FOR MANHOLES AND COVERS. MANHOLES SHALL BE PROVIDED WITH GALVANIZED CABLE RACKS AS REQUIRED TO PROPERLY SUPPORT THE QUANTITY OF CABLES TO BE INSTALLED WITHIN THE MANHOLE INCLUDING ALL FUTURE CABLES. ALL CABLE RACKS SHALL BE GROUNDED. SEE STANDARD MANHOLE DETAILS.

14. FURNISH AND INSTALL PULLING HOOKS IN MANHOLES FOR INSTALLATION OF CABLES.

15. 5KV CABLES SHALL BE FLAT STRAP TYPE WITH EPR 133 PERCENT INSULATION LEVEL. MINIMUM WIRE SIZE SHALL BE 500 KCMIL WITH MINIMUM TAP SIZE #4/0 AWG FOR MEDIUM VOLTAGE POWER DISTRIBUTION.

16. PROVIDE UL LISTED SPLICE AND TERMINATION KITS FOR SPLICING AND TERMINATION OF MEDIUM VOLTAGE CABLES. ALL SPLICING SHALL BE LOCATED IN MANHOLES AND TESTED PER PORT AUTHORITY OF NEW YORK & NEW JERSEY SPECIFICATIONS. ONLY CERTIFIED SPLICERS WITH A MINIMUM OF TWO YEARS EXPERIENCE IN MEDIUM VOLTAGE SPLICING SHALL PERFORM SPLICING OF CABLES. QUALIFICATIONS SHALL BE SUBMITTED FOR APPROVAL, PRIOR TO SPLICING.

17. WHERE A MEDIUM VOLTAGE CABLE WILL BE PULLED THROUGH A MANHOLE WITHOUT A SPLICE, IT SHALL BE TRAINED AROUND THE MANHOLE WALLS ALLOWING FOR ENOUGH SLACK TO ALLOW A SPLICE IN THE FUTURE.

COORDINATION WITH JFK ELECTRICAL MAINTENANCE:

1. PERMIT FOR ELECTRICAL MANHOLES:
   - JFK EM WILL ISSUE PERMIT FOR WORK AT PORT AUTHORITY OWNED MANHOLES. DB MUST PROVIDE A TWO WEEKS ADVANCE NOTICE.

2. IDENTIFICATION OF CABLES:
   - JFK EM WILL BE RESPONSIBLE TO IDENTIFY EXISTING CABLES. THE IDENTIFICATION WILL BE VALID FOR THREE (3) DAYS.
   - DB MUST PROVIDE JFK EM A TWO WEEK ADVANCE NOTICE WITH REQUEST FOR THE CABLES IDENTIFICATION.

3. SPLICING OF CABLES:
   - JFK WILL ONLY BE RESPONSIBLE TO CUT THE EXISTING CABLES
   - DB WILL BE RESPONSIBLE FOR SPLICING CABLES.
   - JFK EM WILL RE-CERTIFY THE CABLES AFTER DB COMPLETED THE SPLICING.

4. SHUTDOWN AND LOAD SWITCHOVER COORDINATION:
   - JFK EM WILL COORDINATE ALL ELECTRICAL SHUTDOWN AND SWITCHOVER.
   - DB TO PROVIDE JFK EM A TWO WEEK'S NOTICE.

5. ACCEPTANCE TESTING AND COMMISSIONING:
   - JFK EM WILL WITNESS THE ACCEPTANCE TEST AND WILL BE INVOLVED WITH THE COMMISSIONING OF THE SUBSTATION.

6. ASBESTOS ABATEMENT:
   - DB IS RESPONSIBLE FOR ASBESTOS REMOVAL PER DB AGREEMENT.
   - JFK EM WILL DO PROTECTION OUTAGES PRIOR TO ABATEMENT AND ISSUE PERMITS.

MANHOLE DEMOLITION NOTES:

1. ONLY JFK MAINTENANCE IS AUTHORIZED TO SHUT OFF AND LOCK OUT ANY PORTIONS OF THE HIGH TENSION EQUIPMENT. ALL PERSONNEL WORKING ON HIGH TENSION EQUIPMENT, EVEN WHEN POWERED DOWN, MUST BE QUALIFIED TO DO SO AND WILL BE REQUIRED TO RECEIVE APPROVAL FOR WORK FROM JFK ELECTRICAL MAINTENANCE VIA AN ELECTRICAL WORK PERMIT.

2. TO ENSURE AREA IS CLEAR TO INSTALL THE NEW DOUBLE BARREL STORM SEWER, THE EXISTING MANHOLE STRUCTURE SHALL BE REMOVED IN ITS ENTIRETY AND RESTORED WITH APPROPRIATE BACKFILL, IN ACCORDANCE WITH APPLICABLE NYSDOT SPECIFICATIONS.

3. COORDINATION WITH CIVIL AND ENVIRONMENTAL ENGINEERS IS REQUIRED REGARDING DISPOSAL OF OLD CONCRETE AND SOIL BACKFILL THE MANHOLE.

LEGEND:

Ⓔ	PROPOSED ELECTRICAL MANHOLE
Ⓔ	EXISTING ELECTRICAL MANHOLE
×	REMOVE EXISTING 5KV MANHOLE
———	PROPOSED 5KV ELECTRICAL CONDUIT/DUCTBANK
//	ABANDON/REMOVE EXISTING 5KV CONDUIT/DUCTBANK
—— 5KV-TN ——	5KV ELECTRICAL CONDUIT/DUCTBANK (TONED)
—— 5KV-UV ——	5KV ELECTRICAL CONDUIT/DUCTBANK (UNVERIFIED)
—— E-TN ——	LOW VOLTAGE ELECTRICAL CONDUIT/DUCTBANK (TONED)
—— E-UV ——	LOW VOLTAGE ELECTRICAL CONDUIT/DUCTBANK (UNVERIFIED)
—— E-SV ——	LOW VOLTAGE ELECTRICAL CONDUIT/DUCTBANK (SURVEYED)
—— E-OU ——	LOW VOLTAGE ELECTRICAL CONDUIT/DUCTBANK

ABBREVIATIONS:

C	CONDUIT
FRE	FIBERGLASS REINFORCED EPOXY
KCMIL	THOUSAND CIRCULAR MILS
F.T.R.C.	FLAT TOP ROOF CONCRETE

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PARSONS TRANSPORTATION GROUP
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SIGNATURE DATE

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DIVISION OF INFRASTRUCTURE
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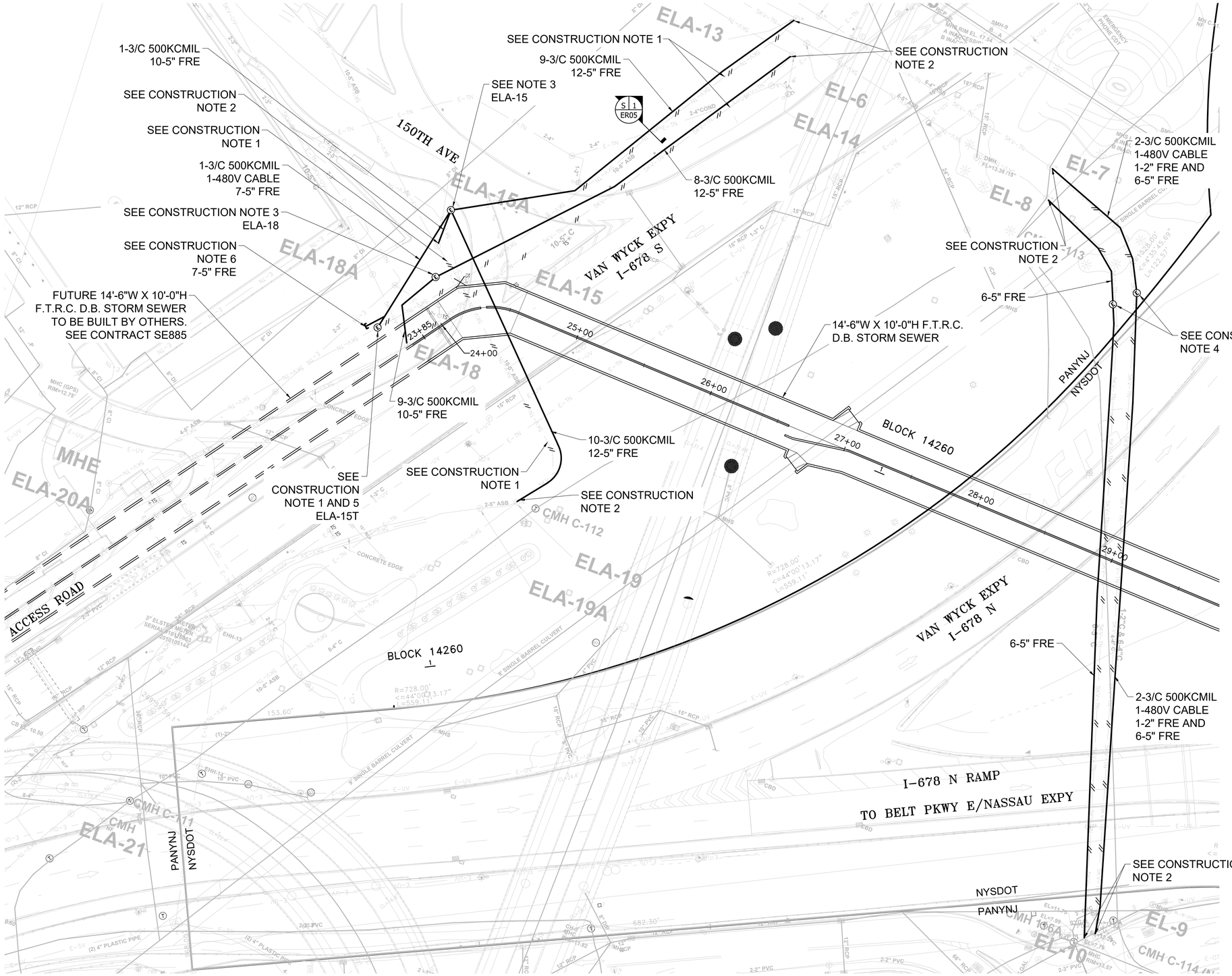
5KV ELECTRICAL RELOCATION - GENERAL NOTES

SOUTHEAST QUEENS 150TH STREET SPINE
DRAINAGE IMPROVEMENTS
BOROUGH OF QUEENS

PROJECT ID: SE885A-VWE | DATE: AUG 11, 2021 | SHEET 82 OF 108 | ER01 ER05

CONSULTANT DESIGN



LEGEND:

- PROPOSED 5KV ELECTRICAL CONDUIT/DUCTBANK
- ABANDON/REMOVE EXISTING 5KV CONDUIT/DUCTBANK
- REMOVE EXISTING 5KV MANHOLE

GENERAL NOTES:

1. SEE DRAWING ER01 FOR ELECTRICAL GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.
2. SEE DRAWING ER05 FOR MANHOLE RELOCATION BLOCK DIAGRAMS.
3. DESIGN-BUILDER SHALL ENSURE ACCESS SHALL BE OBTAINED FOR PORT AUTHORITY MANHOLES AND ELECTRICAL INSTALLATIONS VIA APPROPRIATE COORDINATION PER THE AGREEMENT AND SHALL SUBMIT UTILITY SHUTDOWN REQUESTS AND MAINTENANCE WORK REQUESTS.
4. THE ADJACENT UTILITIES NOT DISTURBED OR MODIFIED BY THIS PROJECT SHALL BE PROTECTED FROM DAMAGE FOR THE DURATION OF CONSTRUCTION ACTIVITIES. THE DESIGN-BUILDER SHALL PROTECT ADJACENT UTILITIES FROM DAMAGE VIA TEMPORARY STRUCTURAL SUPPORTS APPROVED BY THE DESIGN-BUILD - EOR AND DESIGN-BUILDER QUALITY ASSURANCE FIRM FOR THE DESIGN-BUILD PORTION OF WORK, ENGINEER OF RECORD FOR THE DESIGN PORTION OF WORK. ADJACENT SOIL SHALL BE STABILIZED FROM COLLAPSE AS APPROVED BY THESE ENTITIES. THESE DETAILS SHALL BE SHARED WITH PANYNJ CMD DURING CONSTRUCTION.
5. ALL UTILITY CONSTRUCTION SHALL REQUIRE NOTIFICATION TO PANYNJ - CMD JFK REO/PANYNJ SURVEYS AT LEAST 72 HOURS PRIOR TO ENSURE SURVEYS CAN CAPTURE UTILITY AS-BUILT DATA. THE DESIGN-BUILDER SHALL SUBMIT UTILITY LOCATION DATA AS-BUILTS PER PORT AUTHORITY STANDARDS FOR UTILITY DATA COLLECTION.

CONSTRUCTION NOTES:

1. DISCONNECT FEEDERS IN DUCTBANK AND PERFORM ASBESTOS ABATEMENT. REMOVE AND DISPOSE OF CABLES.
2. PENETRATE AND CONNECT TO EXISTING MANHOLE. CONDUITS AND/OR DUCTBANK PENETRATION INTO MANHOLE SHALL ONLY OCCUR ON THE SHORT WALLS. WHERE UNDERGROUND CONDUITS ARE TO BE CONNECTED TO AN EXISTING MANHOLE OR HANDHOLE, CORE DRILL OPENINGS AND PERFORM ALL REQUIRED PATCHWORK. SUBMIT PATCHING PROCEDURE AND DETAILS TO THE ENGINEER FOR APPROVAL PRIOR TO STARTING WORK.
3. FURNISH AND INSTALL OCTAGONAL MANHOLE. SEE DRAWING ER04 FOR DETAILS.
4. FURNISH AND INSTALL PANYNJ STANDARD MANHOLE. SEE DRAWING ER03 FOR DETAILS.
5. FURNISH AND INSTALL CAST IN PLACE PANYNJ STANDARD MANHOLE TO INTERCEPT EXISTING DUCTBANK. SEE DRAWING ER03 FOR DETAIL.
6. CONNECT TO STUBBED OUT CONDUIT/DUCTBANK.

PLAN

SCALE: 1" = 30'

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5KV ELECTRICAL RELOCATION PLAN

SOUTHEAST QUEENS 150TH STREET SPINE
DRAINAGE IMPROVEMENTS
BOROUGH OF QUEENS

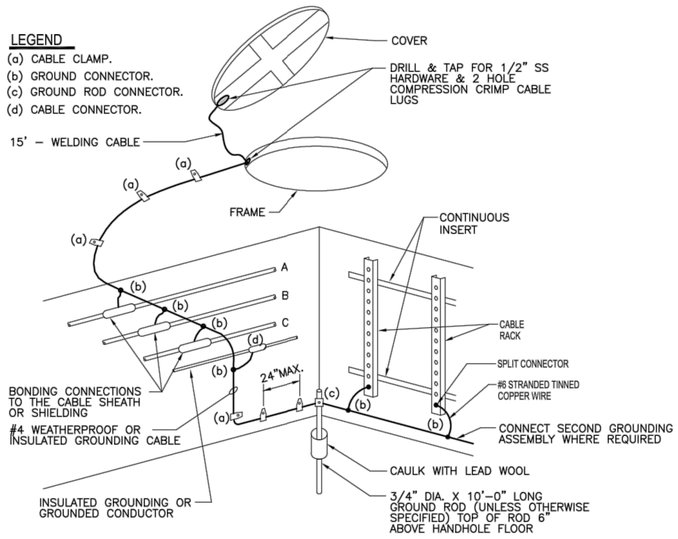
PROJECT ID: SE885A-VWE

DATE: AUG 11, 2021

SHEET 83 OF 108

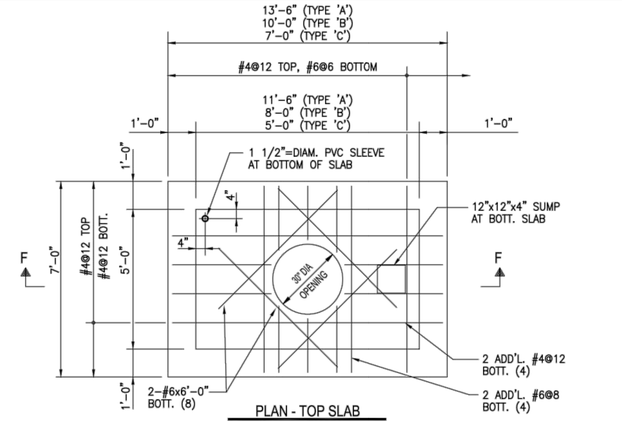
ER02
ER05

CONSULTANT DESIGN

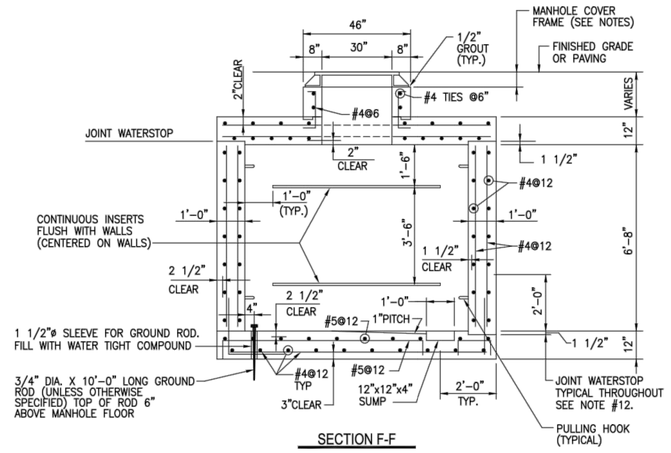


GROUNDING OF ELECTRICAL MANHOLES

N.T.S



PLAN - TOP SLAB



SECTION F-F

N.T.S

ELECTRICAL POWER AND COMMUNICATIONS MANHOLE

N.T.S

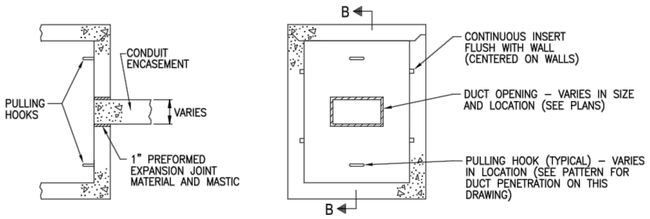
NOTES

1. MANHOLE FRAMES AND COVERS RATED TO SUPPORT HS25–44 TRUCK LOADS SHALL BE CAST IRON. COVER SHALL HAVE STAINLESS STEEL BOLTS (TYPE 304) AND NON–PENETRATING PICKHOLES. FOR COVER MARKINGS SEE DETAILS ON THIS DRAWING. MANHOLE FRAME AND COVER SHALL BE CAMPBELL FOUNDRY #1012 OR APPROVED EQUAL.

   MANHOLE FRAMES RATED TO SUPPORT AIRCRAFT LOADS SHALL BE CAST IRON. MANHOLE COVERS RATED TO SUPPORT AIRCRAFT LOADS SHALL BE DUCTILE IRON. COVER SHALL HAVE STAINLESS STEEL BOLTS (TYPE 304) AND NON–PENETRATING PICKHOLES. FOR COVER MARKINGS SEE DETAILS ON THIS DRAWING. MANHOLE FRAME AND COVER SHALL BE CAMPBELL FOUNDRY #1511 OR APPROVED EQUAL.
2. MINIMUM SPLICE LENGTHS REQUIRED FOR REINFORCING BARS: #4 BAR 1'–4"; #5 BAR : 1'–8"; #6 BAR : 2'–0".
3. INSERTS SHALL BE HOT DIPPED GALVANIZED STEEL UNISTRUT, (GALVANIZED IN ACCORDANCE WITH ASTM A123 AND A153,) SERIES P–3200, OR APPROVED EQUAL, COMPLETE WITH END CAPS OF SIMILAR MATERIAL AND FINISHED WITH PLASTIC COATED FILLER.
4. PULLING HOOK SHALL BE ASTM A36 STEEL, HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153. STEEL SHALL BE WELDED TO REINFORCING. WELDED AREA SHALL BE PREPARED AND CLEANED IN ACCORDANCE WITH SECTION 09910 PART 3.01E AND 3.02F.4 AND SHALL BE PAINTED WITH GALVANIZING ZINC RICH REPAIR PAINT IN ACCORDANCE WITH ASTM A780.
5. REINFORCING BARS SHALL BE ASTM A–615 GRADE 60.
6. INSTALL GROUNDING ASSEMBLY AS SHOWN ON THE DRAWING.
7. PAINT ALL GROUND CONNECTIONS WITH ASPHALT BASE PAINT.
8. ALL CAST-IN-PLACE CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF SPECIFICATION SECTIONS 03302 AND 03303 WITH A 28 DAY DESIGN COMPRESSIVE STRENGTH OF 4000 PSI. IN ADDITION WHERE SPECIFICALLY CALLED FOR ON THE PLANS, VERY HIGH EARLY STRENGTH CONCRETE SHALL HAVE A SIX HOUR DESIGN COMPRESSIVE STRENGTH OF 2000 PSI. THE CONTRACTOR HAS THE OPTION OF PRECASTING THE COMPONENTS OF THE MANHOLE. HOWEVER, THE REINFORCEMENT SHOWN ON THESE SHEETS IS THE MINIMUM THAT SHALL BE PROVIDED. SUBMIT DETAILS TO THE ENGINEER.
9. ALL PRE-CAST CONCRETE SHALL CONFIRM TO THE REQUIREMENTS OF SPECIFICATION SECTION 03420. CONCRETE SHALL BE HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
10. WHEN THE HEIGHT OF THE COLLAR THAT SUPPORTS THE MANHOLE COVER IS LESS THAN 4 INCHES, A SINGLE COURSE OF SOLID CONCRETE MASONRY MAY BE USED TO SUPPORT THE COVER. IF MASONRY IS USED, MASONRY SHALL BE 3 5/8" WIDE x 7 5/8" LONG x HEIGHT OF COLLAR. IF THE COLLAR IS GREATER THAN 4 INCHES HIGH, THE COLLAR SHALL BE POURED IN PLACE CONCRETE.
11. GROUT SHALL BE NON–SHRINK, NON–METALLIC GROUT IN CONFORMANCE WITH ASTM C1107, GRADE C. USE ONE OF THE FOLLOWING, OR AN APPROVED EQUAL:
    1. "MASTERFLOW 928" AS MANUFACTURED BY MASTER BUILDERS
    2. "FIVE STAR GROUT" AS MANUFACTURED BY FIVE STAR PRODUCTS. INC.
    3. "EUCO NS GROUT" AS MANUFACTURED BY THE EUCLID CHEMICAL COMPANY.
12. WATERSTOP:

    FOR CAST–IN–PLACE CONCRETE, WATERSTOP SHALL BE ONE OF THE FOLLOWING:
    1. "SWELLSEAL JOINT" AS MANUFACTURED BY DENEEF CONSTRUCTION CHEMICALS, INC., WALLER, TX.
    2. "HYDROTITE–CJ–1020" AS MANUFACTURED BY GREENSTREAK, ST. LOUIS, MO.
    3. "ADEKA ULTRA SEAL MC–2010MC" AS DISTRIBUTED BY OCM, Inc. CHICAGO, ILLINOIS

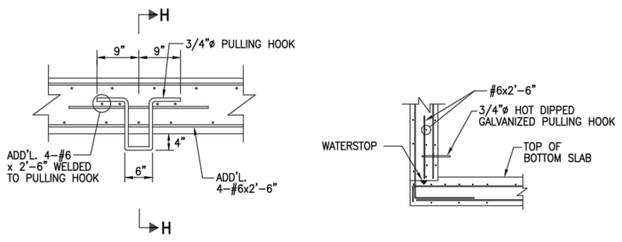
    FOR PRECAST CONCRETE, WATERSTOP SHALL BE ONE OF THE FOLLOWING:
    1. "SWELLSEAL JOINT" AS MANUFACTURED BY DENEEF CONSTRUCTION CHEMICALS, INC., WALLER, TX.
    2. "DUROSEAL GASKET TYPE U" AS MANUFACTURED BY BBZ USA, Inc CHICAGO, ILLINOIS
    3. "ADEKA ULTRA SEAL MC–2010MC" AS DISTRIBUTED BY OCM, Inc CHICAGO, ILLINOIS
13. DUCT BANKS SHALL PENETRATE THE NARROW WALLS OF A MANHOLE ONLY. WHERE PENETRATION OF THE WIDER WALL IS REQUIRED, SUCH PENETRATION IS SUBJECT TO THE REVIEW AND APPROVAL OF THE ENGINEER.
14. IF AN ORGANIC SOIL LAYER IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATION FOR THE MANHOLE, A MINIMUM OF 3 FEET OF OVER EXCAVATION OF THE SOIL LAYER SHALL BE REQUIRED. REPLACEMENT SHALL BE WITH I–12 MATERIAL IN ACCORDANCE WITH SPECIFICATION SECTION 02221. THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH NET COST PROVISIONS ON DWG G003.
15. THE SUBGRADE FOR THE MANHOLE AS WELL AS CONTROLLED BACKFILLING OF THE EXCAVATION SHALL BE INSPECTED BY THE ENGINEER IN ACCORDANCE WITH SPECIFICATION SECTION 02221. "EXCAVATION, BACKFILLING AND FILLING."
16. CONDUITS SHALL BE TERMINATED WITH END BELL FLUSH WITH INSIDE WALL.



SECTION B–B ELEVATION

TYPICAL DETAIL OF WINDOW & SIDING CONNECTION FOR DUCT

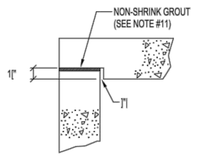
N.T.S.



PLAN SECTION H–H

TYPICAL DETAIL OF PULLING HOOK

N.T.S.



CORNER DETAIL

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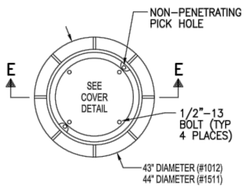

MANHOLE FRAME & COVER DETAIL

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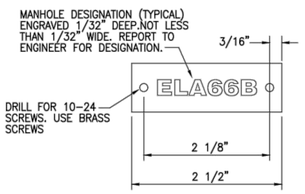
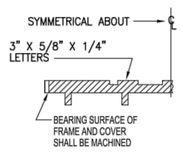
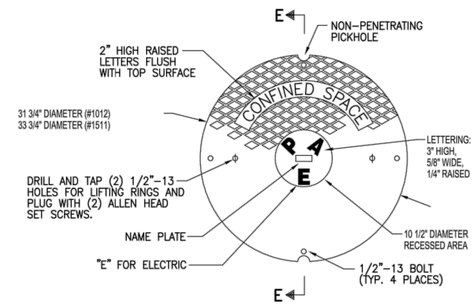


NAMEPLATE DETAIL

(BRASS–1/8" THICK)



SECTION E–E



MANHOLE COVER DETAIL

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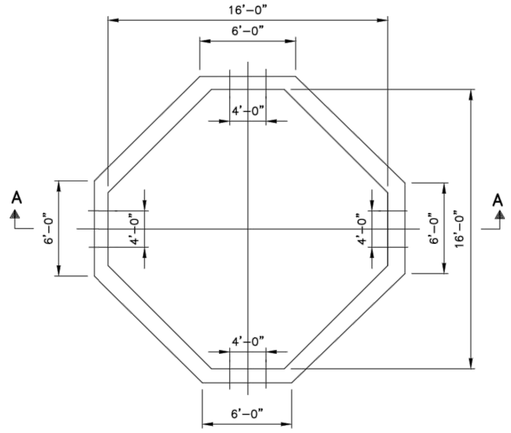
PANYNJ STANDARD MANHOLE DETAILS

SOUTHEAST QUEENS 150TH STREET SPINE DRAINAGE IMPROVEMENTS
BOROUGH OF QUEENS

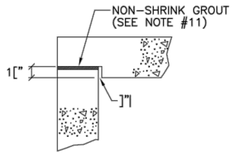
PROJECT ID: SE885A-VWE | DATE: AUG 11, 2021 | SHEET 84 OF 108 | ER03 ER05

CONSULTANT DESIGN



OCTOGONAL MANHOLE PLAN

N.T.S



CORNER DETAIL

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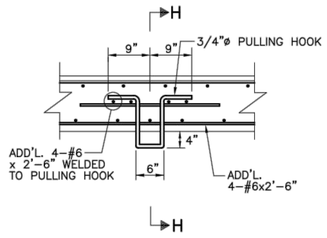
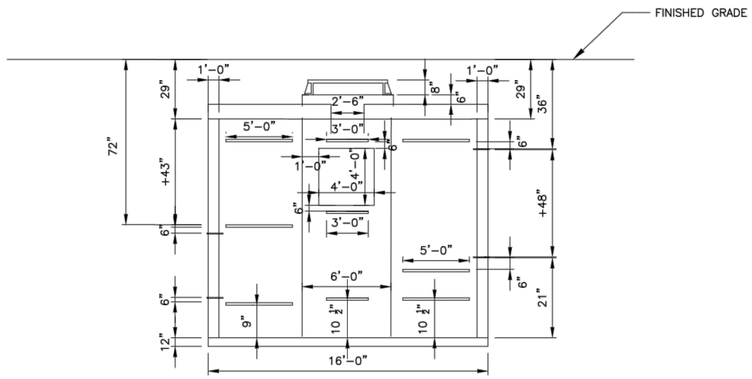
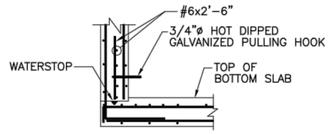


PLAN



SECTION A–A



RECESSED PULLING HOOK

NOTES:

1. REFER TO THE REQUIREMENTS OF ELECTRICAL WORK ON PANYNJ PROPERTY NOTED IN DRAWING ER01.
2. MANHOLE FRAMES AND COVERS RATED TO SUPPORT HS25–44 TRUCK LOADS SHALL BE CAST IRON. COVER SHALL HAVE STAINLESS STEEL BOLTS (TYPE 304) AND NON–PENETRATING PICKHOLES. FOR COVER MARKINGS SEE DETAILS ON THIS DRAWING. MANHOLE FRAME AND COVER SHALL BE CAMPBELL FOUNDRY #1012 OR APPROVED EQUAL.

   MANHOLE FRAMES RATED TO SUPPORT AIRCRAFT LOADS SHALL BE CAST IRON. MANHOLE COVERS RATED TO SUPPORT AIRCRAFT LOADS SHALL BE DUCTILE IRON. COVER SHALL HAVE STAINLESS STEEL BOLTS (TYPE 304) AND NON–PENETRATING PICKHOLES. FOR COVER MARKINGS SEE DETAILS ON THIS DRAWING. MANHOLE FRAME AND COVER SHALL BE CAMPBELL FOUNDRY #1511 OR APPROVED EQUAL.
3. MINIMUM SPLICE LENGTHS REQUIRED FOR REINFORCING BARS: #4 BAR 1'–4"; #5 BAR : 1'–8"; #6 BAR : 2'–0".
4. INSERTS SHALL BE HOT DIPPED GALVANIZED STEEL UNISTRUT, (GALVANIZED IN ACCORDANCE WITH ASTM A123 AND A153,) SERIES P–3200, OR APPROVED EQUAL, COMPLETE WITH END CAPS OF SIMILAR MATERIAL AND FINISHED WITH PLASTIC COATED FILLER.
5. PULLING HOOK SHALL BE ASTM A36 STEEL, HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153. STEEL SHALL BE WELDED TO REINFORCING. WELDED AREA SHALL BE PREPARED AND CLEANED IN ACCORDANCE WITH ASTM A780. PAINT WITH 2 COATS OF COLD GALVANIZING COMPOUND CONTAINING A MINIMUM OF 92% ZINC CONTENT IN DRY FILM. INSTALL GROUNDING ASSEMBLY AS SHOWN ON THE CONTRACT DRAWING.
6. REINFORCING BARS SHALL BE ASTM A–615 GRADE 60.
7. INSTALL GROUNDING ASSEMBLY AS SHOWN ON THE DRAWING.
8. PAINT ALL GROUND CONNECTIONS WITH ASPHALT BASE PAINT.
9. ALL CAST–IN–PLACE CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF SPECIFICATION SECTIONS 03302 AND 03303 WITH A 28 DAY DESIGN COMPRESSIVE STRENGTH OF 4000 PSI. IN ADDITION WHERE SPECIFICALLY CALLED FOR ON THE PLANS, VERY HIGH EARLY STRENGTH CONCRETE SHALL HAVE A SIX HOUR DESIGN COMPRESSIVE STRENGTH OF 2000 PSI. THE CONTRACTOR HAS THE OPTION OF PRECASTING THE COMPONENTS OF THE MANHOLE. HOWEVER, THE REINFORCEMENT SHOWN ON THESE SHEETS IS THE MINIMUM THAT SHALL BE PROVIDED. SUBMIT DETAILS TO THE ENGINEER.
10. ALL PRE–CAST CONCRETE SHALL CONFIRM TO THE REQUIREMENTS OF SPECIFICATION SECTION 03420. CONCRETE SHALL BE CATEGORY _} WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
11. WHEN THE HEIGHT OF THE COLLAR THAT SUPPORTS THE MANHOLE COVER IS LESS THAN 4 INCHES, A SINGLE COURSE OF SOLID CONCRETE MASONRY MAY BE USED TO SUPPORT THE COVER. IF MASONRY IS USED, MASONRY SHALL BE 3 5/8" WIDE x 7 5/8" LONG x HEIGHT OF COLLAR. IF THE COLLAR IS GREATER THAN 4 INCHES HIGH, THE COLLAR SHALL BE POURED IN PLACE CONCRETE.
12. GROUT SHALL BE NON–SHRINK, NON–METALLIC GROUT IN CONFORMANCE WITH ASTM C1107, GRADE C. USE ONE OF THE FOLLOWING, OR AN APPROVED EQUAL:

    "MASTERFLOW 928" AS MANUFACTURED BY MASTER BUILDERS
    "FIVE STAR GROUT" AS MANUFACTURED BY FIVE STAR PRODUCTS. INC.
    "EUCO NS GROUT" AS MANUFACTURED BY THE EUCLID CHEMICAL COMPANY.
13. WATERSTOP:

    FOR CAST–IN–PLACE CONCRETE, WATERSTOP SHALL BE ONE OF THE FOLLOWING:

    "SWELLSEAL JOINT" AS MANUFACTURED BY DENEEF CONSTRUCTION CHEMICALS, INC., WALLER, TX.
    "HYDROTITE–CJ–1020" AS MANUFACTURED BY GREENSTREAK, ST. LOUIS, MO.
    "ADEKA ULTRA SEAL MC–2010MN" AS MANUFACTURED BY MITSUBISHI INTERNATIONAL CORPORATION USA.

    FOR PRECAST CONCRETE, WATERSTOP SHALL BE ONE OF THE FOLLOWING:

    "SWELLSEAL JOINT" AS MANUFACTURED BY DENEEF CONSTRUCTION CHEMICALS, INC., WALLER, TX.
    "SWELLSTOP" AS MANUFACTURED BY GREENSTREAK, ST. LOUIS, MO.
    "ADEKA ULTRA SEAL P–201" AS MANUFACTURED BY MITSUBISHI INTERNATIONAL CORPORATION USA.
14. DUCT BANKS SHALL PENETRATE THE NARROW WALLS OF A MANHOLE ONLY. WHERE PENETRATION OF THE WIDER WALL IS REQUIRED, SUCH PENETRATION IS SUBJECT TO THE REVIEW AND APPROVAL OF THE ENGINEER.
15. IF AN ORGANIC SOIL LAYER IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATION FOR THE MANHOLE, A MINIMUM OF 3 FEET OF OVER EXCAVATION OF THE SOIL LAYER SHALL BE REQUIRED. REPLACEMENT SHALL BE WITH I–12 MATERIAL IN ACCORDANCE WITH SPECIFICATION SECTION 02221. THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH NET COST PROVISIONS ON DWG GXX.
16. THE SUBGRADE FOR THE MANHOLE AS WELL AS CONTROLLED BACKFILLING OF THE EXCAVATION SHALL BE INSPECTED BY THE ENGINEER IN ACCORDANCE WITH SPECIFICATION SECTION 02221. "EXCAVATION, BACKFILLING AND FILLING."
17. CONDUITS SHALL BE TERMINATED WITH END BELL FLUSH WITH INSIDE WALL.

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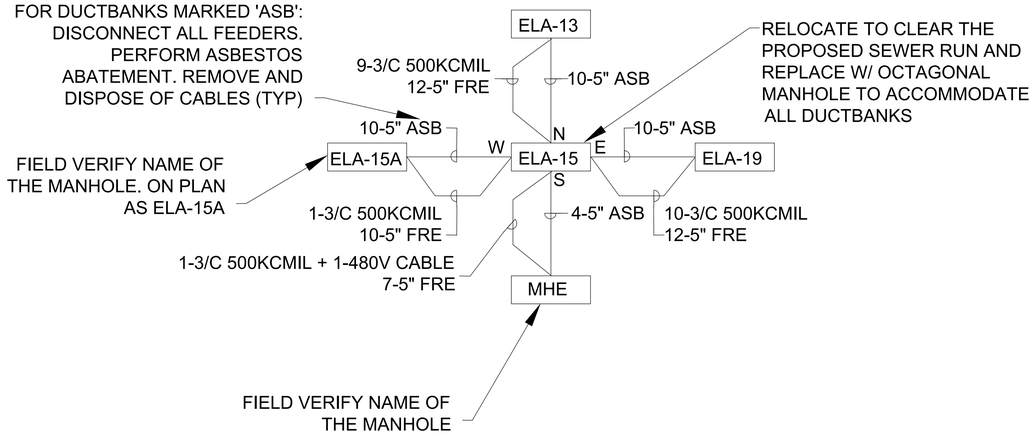
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PANYNJ STANDARD OCTAGONAL MANHOLE DETAILS

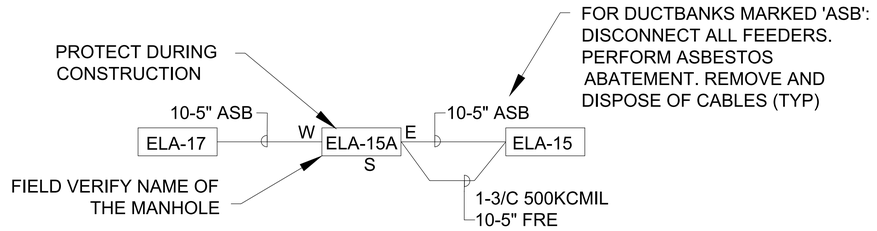
SOUTHEAST QUEENS 150TH STREET SPINE
DRAINAGE IMPROVEMENTS
BOROUGH OF QUEENS

PROJECT ID: SE885A-VWE | DATE: AUG 11, 2021 | SHEET 85 OF 108 | ER04 ER05

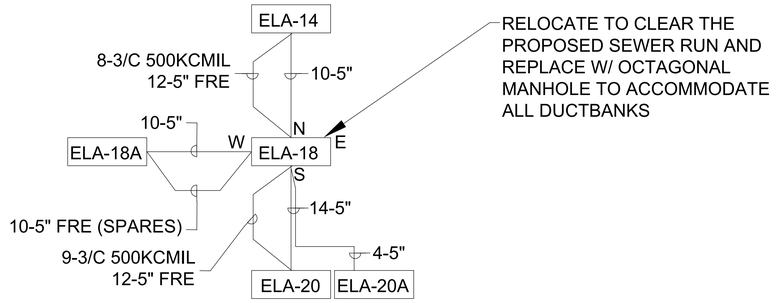
CONSULTANT DESIGN



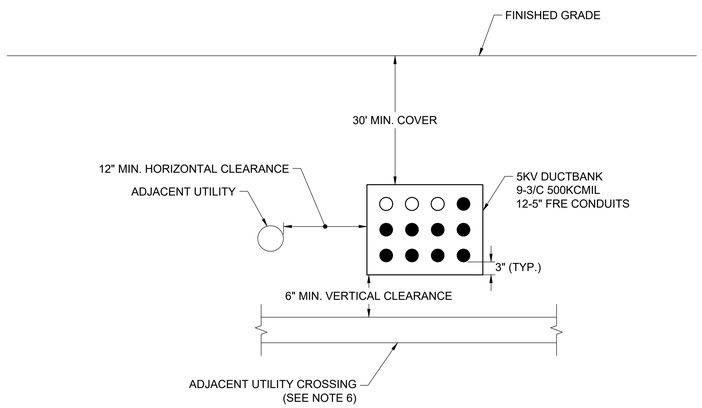
D 1 --- ELA-15 RELOCATION BLOCK DIAGRAM
NTS



D 2 --- ELA-15A RELOCATION BLOCK DIAGRAM
NTS



D 3 --- ELA-18 RELOCATION BLOCK DIAGRAM
NTS



S 1 ER02 TYPICAL PROPOSED 5KV DUCTBANK SECTION
NTS

NOTES:

1. BEFORE ANY WORK VERIFY WITH JFK FACILITY FOR AVAILABILITY OF THE FEEDERS ALTERNATIVE TO FEEDERS SCHEDULED FOR RELOCATION. OTHERWISE, PROVIDE A TEMPORARY POWER FOR ALL LOADS EFFECTED BY THE RELOCATION.
2. ALL REPLACEMENT 5 KV CABLES SHALL BE MV-105, 133% EPR INSULATED, FLAT STRAP CABLE (FSC), TRIPLEX 500 KCMILL.
3. U.O.N. RELOCATED DUCTBANKS SHALL CONTAIN 12-5" FRE CONDUITS.
4. SURVEY ALL MANHOLES SCHEDULED FOR RELOCATION AND RELOCATE ALL ACTIVE MEDIUM AND LOW VOLTAGE CABLES MAINTAINING EXISTING CABLES CONFIGURATION.
5. "ASB" - INDICATES PRESENCE OF ASBESTOS IN THE DUCTBANK MATERIAL. PERFORM ASBESTOS ABATEMENT BEFORE ANY WORK.
6. PARALLEL RUNS OF OTHER UTILITIES ABOVE OR BELOW DUCTBANKS ARE NOT ALLOWABLE.

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

PARSONS

FINAL DESIGN PREPARED BY:
PARSONS TRANSPORTATION GROUP
NAME OF CONSULTANT
SIGNATURE DATE

DRAWN BY_____
CADD FILE_____

SCALE
AS SHOWN

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

ELECTRICAL MANHOLE RELOCATION BLOCK DIAGRAM AND TYPICAL SECTION

SOUTHEAST QUEENS 150TH STREET SPINE DRAINAGE IMPROVEMENTS
BOROUGH OF QUEENS

PROJECT ID: SE885A-VWE | DATE: AUG 11, 2021 | SHEET 86 OF 108 | ER05 | ER05

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