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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 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.

4.2 GENERAL

Utilities that may be affected by the Project and the disposition of those utilities are shown in Appendix A. The Design-Builder shall be responsible for resolving any and all utility conflicts that may arise on the Project, except as otherwise specified.

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

The Design-Builder shall utilize a single dedicated person responsible for managing all utility coordination. This person shall be referred to as the Utility Coordination Manager. The Design-Builder’s Utility Coordination Manager shall be responsible for managing all utility coordination, including, but not limited to, the following:

A) Ensuring that all utility coordination and activities are conducted in accordance with the requirements of the Contract Documents;

B) Identifying all existing utilities and coordinating any new utility installations;

C) Reviewing Department prepared proposed utility permit application packages and commenting on each permit application as related to the Design-Builder’s utility relocation drawings;

D) Attending utility meetings, preparing and distributing minutes of all utility meetings, and ensuring expedient follow-up on all unresolved issues;

E) Distributing all plans, conflict matrixes and changes that affect utility owners and making sure this information is properly coordinated;

F) Coordinating the execution and performance of Work required for any utility Work needed within the Project;

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

H) Assisting with the resolution of utility conflicts;

I) Providing periodic Project updates to the Department’s Project Manager as requested; and

J) Coordination with the Department on any issues that arise concerning reimbursement of utility work costs.

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; and
B) Identified potential utility conflicts

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 § 107-15, 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.
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 DB § 111).

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.

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 §104-4.2.7(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 DB §§ 111 and 112.

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 DB §111, 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 DB §111.
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 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 DB §111.

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 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**

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<tr>
<th>Deliverable</th>
<th>Number of Copies</th>
<th>Submittal Schedule</th>
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<td>Hardcopy</td>
<td>Electronic</td>
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<tr>
<td>Utility Tracking Report</td>
<td>3</td>
<td>1 (PDF)</td>
</tr>
<tr>
<td>Utility Design Sheet</td>
<td>3</td>
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</tr>
<tr>
<td>DB Utility Work</td>
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</tr>
<tr>
<td>Agreements</td>
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</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Utility Owner</th>
<th>Contact</th>
<th>Contact #</th>
<th>E Mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>TELECOM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verizon Comm.</td>
<td>NAME</td>
<td>845-452-9345</td>
<td><a href="mailto:william.lenhart@verizon.com">william.lenhart@verizon.com</a></td>
</tr>
<tr>
<td></td>
<td>William Lenhart</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carl Runowich</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELECTRIC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISTRIBUTION</td>
<td>NAME</td>
<td>845-577-3125</td>
<td><a href="mailto:wabanker@oru.com">wabanker@oru.com</a></td>
</tr>
<tr>
<td>Orange &amp; Rockland</td>
<td>Wayne Banker</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jim Heady</td>
<td>845-577-3618</td>
<td><a href="mailto:headyj@oru.com">headyj@oru.com</a></td>
</tr>
<tr>
<td>NATURAL GAS</td>
<td>NAME</td>
<td>845-486-5559</td>
<td><a href="mailto:bfuoco@cenhud.com">bfuoco@cenhud.com</a></td>
</tr>
<tr>
<td>Central Hudson</td>
<td>Brian Fuoco</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dennis Haney</td>
<td>845-595-6819</td>
<td><a href="mailto:dhaney@cablevision.com">dhaney@cablevision.com</a></td>
</tr>
<tr>
<td>CABLE</td>
<td>NAME</td>
<td>845-344-9652</td>
<td><a href="mailto:anthony.alpi@ftr.com">anthony.alpi@ftr.com</a></td>
</tr>
<tr>
<td>Altice</td>
<td>Dennis Haney</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>845-567-6367</td>
<td><a href="mailto:jweishaupt@lightower.com">jweishaupt@lightower.com</a></td>
</tr>
<tr>
<td>TELECOM</td>
<td>NAME</td>
<td>845-928-9514</td>
<td><a href="mailto:info@townofwoodbury.com">info@townofwoodbury.com</a></td>
</tr>
<tr>
<td>Frontier Comm.</td>
<td>William</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alpi</td>
<td>845-344-9652</td>
<td><a href="mailto:anthony.alpi@ftr.com">anthony.alpi@ftr.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TELECOM</td>
<td>NAME</td>
<td>845-783-4421</td>
<td><a href="mailto:harrimandpw@frontiernet.net">harrimandpw@frontiernet.net</a></td>
</tr>
<tr>
<td>Lightower Comm.</td>
<td>Jack Weishaupt</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>845-567-6367</td>
<td><a href="mailto:jweishaupt@lightower.com">jweishaupt@lightower.com</a></td>
</tr>
<tr>
<td>LOCAL WATER / SEWER</td>
<td>NAME</td>
<td>845-928-9514</td>
<td><a href="mailto:info@townofwoodbury.com">info@townofwoodbury.com</a></td>
</tr>
<tr>
<td>Town of Woodbury</td>
<td>William</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>McClennan</td>
<td>845-567-6367</td>
<td><a href="mailto:jweishaupt@lightower.com">jweishaupt@lightower.com</a></td>
</tr>
<tr>
<td>LOCAL WATER / SEWER</td>
<td>NAME</td>
<td>845-783-4421</td>
<td><a href="mailto:harrimandpw@frontiernet.net">harrimandpw@frontiernet.net</a></td>
</tr>
<tr>
<td>Village of Harriman</td>
<td>John Mulligan</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>845-783-4421</td>
<td><a href="mailto:harrimandpw@frontiernet.net">harrimandpw@frontiernet.net</a></td>
</tr>
</tbody>
</table>
A-2 UTILITY INVENTORY

A-2.1 Telecommunications
A-2.1.1 Verizon Communications

A-2.1.1.1 – Route 32
Underground telephone line located along the west side of N.Y.S. Route 32.

A-2.1.2 Altice
A-2.1.2.1 N.Y.S. Route 17
Overhead cable lines are located along the south side of Route 17 (East of Route 32).
A-2.1.2.2 N.Y.S. Route 32
Overhead cable lines are located along the East and West sides of Route 32.
A-2.1.2.3 Nininger Road
Overhead cable lines are located along the South side of Nininger Road.
A-2.1.2.4 Larkin Drive
Overhead cable lines are located along the North and South sides of Larkin Drive.
A-2.1.2.5 Locey Lane
Overhead cable lines are located along the South side of Locey Lane.

A-2.1.3 Frontier Communications
A-2.1.3.1 N.Y.S. Route 17
Overhead telephone lines are located along the south side of Route 17 (East of Route 32).
A-2.1.3.2 N.Y.S. Route 32
Overhead telephone lines are located along the East and West sides of Route 32.
A-2.1.3.3 Nininger Road
Overhead telephone lines are located along the South side of Nininger Road.
A-2.1.3.4 Larkin Drive
Overhead telephone lines are located along the North and South sides of Larkin Drive.

**A-2.1.3.5 – LOCEY LANE**

Underground telephone line located along south side of Locey Lane.

**A-2.1.4 Lightower**

**A-2.1.4.1 N.Y.S. Route 17**

Overhead telecommunication lines are located along the south side of Route 17 (East of Route 32).

**A-2.1.4.2 N.Y.S. Route 32**

Overhead telecommunication lines are located along the East and West sides of Route 32.

**A-2.1.4.3 Nininger Road**

Overhead telecommunications lines are located along the South side of Nininger Road.

**A-2.1.4.4 Larkin Drive**

Overhead telecommunication lines are located along the North and South sides of Larkin Drive.

**A-2.1.4.5 Locey Lane**

Overhead telecommunication lines are located along the South side of Locey Lane.

**A-2.2 Electric**

**A-2.2.1 Orange and Rockland Utilities**

**A-2.2.1.1 Distribution:**

**A-2.2.1.1.1 N.Y.S. Route 17**

Overhead Electric Distribution lines are located along the south side of Route 17 (East of Route 32).

**A-2.2.1.1.2 N.Y.S. Route 32**

Overhead Electric Distribution lines are located along the east and west sides of Route 32.

**A-2.2.1.1.3 Nininger Road**

Overhead Electric Distribution lines are located along the South side of Nininger Road.

**A-2.2.1.1.4 Larkin Drive**
Overhead Electric Distribution lines are located along the North and South sides of Larkin Drive.

A-2.2.1

A-2.2.1.2 Transmission:

Overhead Electric Transmission lines are located from substation on Melody Lane, going East, crossing Larkin Drive, Route 6, Route 17, and Nininger Road, along the north side of Nininger Road, along the west side of Route 32, crossing Route 32 and Woodbury Commons Parking lots. Going west from substation, Transmission lines are located along the south side of Route 17.

A-2.3 Natural Gas

A-2.3.1 Central Hudson Gas and Electric

Underground Gas lines are located along the East and West sides of Route 32.

A-2.4 Water

A-2.4.1 Town of Woodbury

There are existing water facilities along Route 32 within the project limits.

A-2.4.2 Village of Harriman

There are existing water facilities along Route 32 within the project limits.

A-2.5 Sanitary Sewer

A-2.5.1 Village of Harriman

Village confirmed that there are two sewer mains located beneath Map 59, Parcel 86 which is to be acquired from the County of Orange.

A-2.6 Utility Service Connections

There are existing service connections from all of the above listed utility companies to properties located along the Route 32 corridor.

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

Verizon Communications shall relocate their existing underground telephone lines to a new location outside the project limits. The approximate timeframe for construction for this work is three (3) weeks after Frontier completes their work for each Relocation #1 and Relocation #2 as listed below under Section A-3.2.1.1

Verizon shall remove and dispose of all vacated poles.

Verizon is also responsible to install new cables on the bridge (BIN 1003340) after the conduit system is available on August 1, 2018. The approximate timeframe for this work is two (2) weeks.

A-3.1.2 Altice

Altice shall relocate their existing overhead cable to the new poles to be set by Orange and Rockland Utilities. The approximate timeframe for this work is two (2) weeks after Orange and Rockland Utilities completes their work for each Relocation #1 and Relocation #2 as listed below under Section A-3.2.1.1.

Altice is also responsible to install new cables on the bridge (BIN 1003340) after the conduit system is available on August 1, 2018. The approximate timeframe for this work is two (2) weeks.

A-3.1.3 Frontier Communications

Frontier shall relocate their existing overhead cable to the new poles to be set by Orange and Rockland Utilities. The approximate timeframe for this work is two (2) weeks after Lightower completes their work for each Relocation #1 and Relocation #2 as listed below under Section A-3.2.1.1.

Frontier is also responsible to install new cables on the bridge (BIN 1003340) after the conduit system is available on August 1, 2018. The approximate timeframe for this work is two (2) weeks.

A-3.1.4 Lightower

Lightower shall relocate their existing overhead cable to the new poles to be set by Orange and Rockland Utilities. The approximate timeframe for this work is two (2) weeks after Altice completes their work for each Relocation #1 and Relocation #2 as listed below under Section A-3.2.1.1.

Lightower is also responsible to install new cables on the bridge (BIN 1003340) after the conduit system is available on August 1, 2018. The approximate timeframe for this work is two (2) weeks.
A-3.2 Electric

A-3.2.1 Orange and Rockland Utilities

A-3.2.1.1 Distribution

Orange and Rockland Utilities shall be responsible for the installation of the new utility poles and relocating their existing overhead lines to the new poles as listed below:

Relocation #1 - All distribution lines between Route 6 and Ramp H from Pole # H TEL CO 28 through Pole # Frontier 31 55453\47940 140K, and Pole # Frontier 31 55453\47940 140K to Pole # 55462\47934 321 140K must be relocated by December 31, 2017.

Relocation #2 - All remaining distribution lines north of Ramp H must be relocated by November 1, 2018.

Orange and Rockland is also responsible to install new cables on the bridge (BIN 1003340) after the conduit system is available on August 1, 2018. The approximate timeframe for this work is two (2) weeks.

A-3.2.1.2 Transmission

Orange and Rockland Utilities shall be responsible for the installation of new transmission lines into an underground system installed by the Design Builder. Orange and Rockland Utilities shall be responsible for the removal of the existing overhead transmission system. All final connections shall be performed by Orange and Rockland.

The approximate timeframe for this work is four (4) months after the underground system is available on August 1, 2018. Orange and Rockland Utilities shall be responsible for removal of existing poles after new transmission conduit system is active.

A-3.3 Natural Gas

A-3.3.1 Central Hudson Gas and Electric

Central Hudson Electric and Gas shall relocate their existing underground gas mains to a location not in conflict with the project limits. The approximate timeframe for this work is four (4) weeks after agreement on a utility relocation plan.

The work shall include maintaining and restoring any existing service connections.

A-3.4 Water

A-3.4.1 Town of Woodbury

There are no anticipated utility relocations required by the Town at this time.
A-3.4.2 Village of Harriman

There are no anticipated utility relocations required by the Village at this time.

A-3.5 Sanitary Sewer

A-3.5.1 Village of Harriman

There are no anticipated utility relocations required by the Village at this time.

A-4 UTILITY WORK TO BE PERFORMED 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

The Design-Builder shall provide eight (8) conduits on the new bridge. This work shall include, but is not limited to any work needed to carry the conduits through the abutment backwalls, hangers, and sleeves. The conduit runs shall terminate at pullboxes beyond the approach slab outside the traveled way. The Design-Builder shall complete this work by August 1, 2018.

A-4.1.2 Altice

The Design-Builder shall provide four (4) conduits on the new bridge. This work shall include, but is not limited to any work needed to carry the conduits through the abutment backwalls, hangers, and sleeves. The conduit runs shall terminate at pullboxes beyond the approach slab outside the traveled way. The Design-Builder shall complete this work by August 1, 2018.

A-4.1.3 Frontier Communications

The Design-Builder shall provide four (4) conduits on the new bridge. This work shall include, but is not limited to any work needed to carry the conduits through the abutment backwalls, hangers, and sleeves. The conduit runs shall terminate at pullboxes beyond the approach slab outside the traveled way. The Design-Builder shall complete this work by August 1, 2018.

A-4.1.4 Lightower

The Design-Builder shall provide four (4) conduits on the new bridge. This work shall include, but is not limited to any work needed to carry the conduits through the abutment backwalls,
hangers, and sleeves. The conduit runs shall terminate at pullboxes beyond the approach slab outside the traveled way. The Design-Builder shall complete this work by August 1, 2018.

A-4.2 Electric

A-4.2.1 Orange and Rockland Utilities

The Design-Builder shall be responsible for installing the conduit banks, 48 inch steel casing pipe under Route 17, and vaults to accommodate the relocation of the existing overhead transmission lines. The indicative plan in Part 7 shows the preliminary alignment of the relocated underground transmission lines. The final relocation plan must be completed by December 31, 2017 to accommodate lead time for material procurement by Orange and Rockland Utilities.

New utility conduit system shall not be deeper than 8 feet from final grade. The underground system shall be completed and available for Orange and Rockland to use by August 1, 2018.

The Design-Builder shall provide four (4) – 6 inch fiberglass conduits on the new bridge (BIN 1003340) for distribution lines. This work shall include, but is not limited to any work needed to carry the conduits through the abutment backwalls, hangers, and sleeves. The conduit runs shall terminate at pullboxes beyond the approach slab outside the traveled way. The Design-Builder shall complete this work by August 1, 2018.

A-4.3 Natural Gas

A-4.3.1 Central Hudson Gas and Electric

There are no anticipated utility relocations required by the Design-Builder at this time.

A-4.4 Water Mains

A-4.4.1 Town of Woodbury

There are no anticipated utility relocations required by the Design-Builder at this time.

A-4.4.2 Village of Woodbury

There are no anticipated utility relocations required by the Design-Builder at this time.

A-4.5 Sanitary Sewer

A-4.5.1 Village of Woodbury

There are no anticipated utility relocations required by the Design-Builder at this time.

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.
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

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

<table>
<thead>
<tr>
<th>Agency</th>
<th>Callout Contact</th>
<th>Contact PH#</th>
<th>Contact E-mail</th>
<th>Known Facilities</th>
<th>Required Lead Time for mark out</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYSDOT</td>
<td>Mark Neumann</td>
<td>845-206-7961</td>
<td><a href="mailto:Mark.Neumann@dot.ny.gov">Mark.Neumann@dot.ny.gov</a></td>
<td>Highway lighting and traffic signals - Columbia, Dutchess, Orange and Ulster counties</td>
<td>7 days minimum</td>
</tr>
<tr>
<td>NYSDOT</td>
<td>Mr. Rana Barua</td>
<td>914.742.6780</td>
<td><a href="mailto:Rana.Baru@dot.ny.gov">Rana.Baru@dot.ny.gov</a></td>
<td>ITS traffic cameras, sensors, variable message signs, underground power and communications</td>
<td>7 days minimum</td>
</tr>
</tbody>
</table>
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.