Route 17 at Route 32 (Exit 131) Reconstruction
PIN 8006.84; Contract No. D900038

Design-Build Utility Meeting
June 30, 2017
Utility Requirements & Coordination

In accordance with Part 4 – Utility Requirements, the Design-Builder is responsible for:

- Verifying utility facility locations
- Identifying and resolving any conflicts not yet documented
- Coordinating with utility owners for utility relocations
- Providing stakeout and final layout of utility relocations
- Protecting existing utilities
- Cost to repair damages to utilities caused by the Design-Builder
- Informing the Department of all meetings and correspondence with utility owners
Existing Utility Inventory - Underground

- **Verizon Communications – Telephone**
  Route 32 and across bridge (BIN 1003340)

- **Central Hudson Gas and Electric – Gas Line**
  Route 32 east to west side

- **Village of Woodbury & Village of Harriman – Water Mains**
  Route 32 west side

- **Village of Woodbury – Sewer Mains**
  Route 32 west and middle of roadway and along north side of Nininger Road to Dunderberg Road
Existing Utility Inventory – Overhead Transmission

Orange and Rockland Electric Transmission

Overhead Electric Transmission lines are located from the substation on Melody Lane, going east, crossing Larkin Drive, Route 6, Route 17, and Nininger Road. Then continues along the north side of Nininger Road, crossing Route 32 into the Woodbury Common.
Utility Inventory – Overhead Distribution

There are approximately thirty-five (35) existing poles along Route 32 that will be in conflict with the project. The following companies are present on the poles:

- **Orange and Rockland** - electrical distribution facilities
- **Altice USA (formerly Cablevision)** - cable television & communication facilities
- **Charter Communications (formerly Time Warner Cable)** - cable television and communication facilities
- **First Light Fiber** - communication facilities
- **Lightower** - communications facilities
- **Frontier Communications** – telephone and communications facilities

South of Route 17, the overhead utility lines are located along the west side of Route 32. North of Route 17 the overhead utility lines are primarily located along the east side of Route 32. There are also overhead utility lines along Nininger Road and Larkin Drive.
Distribution Relocation – Determination of Relocation

Route 17 is slated to become Interstate 86 in the future, therefore overhead utilities will no longer be permitted within the footprint of the Interstate 86 highway boundary, which is defined as approximately one hundred fifty (150) feet on each side of the highway.

In addition, due to the presence of major signalized intersections, highway lighting and extensive signage on the Route 32 corridor, it is the consensus of the Department and the Utility companies that an underground conduit system should be extended on Route 32 for the length of the project. This option would negate extensive overhead conflicts; reduce visual clutter and simplify constructability issues.
Distribution Relocation – Determination of Relocation

The conduit system should run along the west side of Route 32 and extend from a point immediately south of the Route 6 Extension overpass (at the south end of the project) to the north of the proposed Route 32/Monroe-Woodbury School/Woodbury Common signalized intersection.

The system shall also include three conduits (one each for First Light Fiber, Frontier Communications and Lightower) which will cross Route 32 and run adjacent to the Route 32 eastbound on-ramp to Route 17 (towards the New York State Thruway) with the three conduits rising on the existing pole located approximately four hundred forty (440) feet from Route 32.
Distribution Relocation — To Be Performed By the Design -Builder

The Design Builder will be responsible for designing and constructing the entire underground conduit system, both on and off of the new bridge, for all utilities. This underground system will replace and allow the thirty-five (35) poles in conflict as previously mentioned, to be removed.
Distribution Relocations – To Be Performed By the Design-Builder

This conduit work will include, but is not limited to, the following:

- All conduits needed by the utilities within the relocation limits defined previously. The conduits will terminate at either the new riser poles, new utility manholes, or existing utility manholes as defined by the utility companies.

- All riser assemblies on utility poles.

- All manholes, hand holes, pull boxes or other appurtenances (concrete mounting pads, etc.) necessary for the utility companies to occupy and place their facilities into the new underground system.

- All conduits crossing Route 32 to provide services.
Utility Relocations - To Be Performed By the Design -Builder

While the Design Builder is responsible for supplying all materials needed to build the conduit system, the utility companies will be responsible for supplying and installing all materials pertinent to their system including but not limited to: Cable, fiber, switches, splices, and other necessary equipment.

The Design Builder will consult each utility company as to their needs and incorporating their company details into designing the underground system. The Design Builder will also be responsible for taking the Department’s needs into account, such as power needs for traffic signals, lighting and ITS elements.

The Design Builder will be responsible for re-establishing all privately owned utility service connections within the project limits.
Distribution Relocations - To Be Performed By the Design - Builder

The Utility companies have indicated that they will need the following number of conduits in the Route 32 corridor. These numbers are for estimating purposes. The final system design will be completed and agreed upon by the Design Builder and the utility companies:

- Orange and Rockland electric distribution – four (4) six (6) inch conduits (encased in concrete)
- Altice USA (Cablevision) – two (2) four (4) inch conduits
- Charter Communications (Time Warner Cable) – one (1) four (4) inch conduit
- First Light Fiber – one (1) four (4) inch conduit
- Lightower – one (1) four (4) inch conduit
- Frontier Communications – four (4) four (4) inch conduits
- Verizon Communications – two (2) four (4) inch conduits
Distribution Relocations - To Be Performed By Others

Orange and Rockland will be responsible for setting all riser poles at each end of the conduit system. The Design Builder working with the Utility companies in designing the conduit system, together will establish where the riser poles will be installed at each end and which companies will rise where.

Generally, electric will rise on the first two (2) poles at each end with communications rising thereafter. With a standard of three (3) risers per pole allowed and nine (9) communications conduits rising, three additional riser poles will be set, therefore a total of (5) riser poles at each end of the project will be required.

Verizon will not rise on any pole as they are presently, and will remain, underground throughout the project limits.
Distribution Relocations - To Be Performed By Others

Orange and Rockland will require three (3) weeks to set the ten (10) riser poles. The average distance between riser poles will be one hundred twenty (120) feet with one hundred eighty (180) feet between the Orange and Rockland riser poles. Orange and Rockland’s time frame begins once:

- The Design-Builder marks out all right-of-way lines, proposed roadside appurtenances including but not limited to curbing, sidewalks, guide rail locations, slopes, retention ponds and proposed traffic signal poles and equipment locations.

- The new pole stake-outs have been approved by the Department’s CQAE, the Design-Builder and the utility companies. (Note: deflection distances for proposed guide rail locations should be taken in account)

- The grades in the vicinity of the proposed pole locations have been brought up to within six (6) inches of the final grades or the Design-Builder gives Orange and Rockland the proposed ground elevation at the stakeout location.

- Any vegetation and trees impeding the placement of the new pole is cleared by the Design-Builder.
Distribution Relocations - To Be Performed By Others

The Design-Builder will construct the conduit systems during 2018 with an expected completion date of August 1, 2018.

Upon completion of the systems and approval by the utility companies, the utility companies commit to an immediate relocation into the new underground systems.

For the most part, the utility companies can work independently in completing their relocations as they will each have their own conduits and pull boxes.

All utility companies commit to completing their relocations within five (5) months of their start date which is expected to be August 1, 2018.

Note that all existing utilities on Route 32 (Verizon underground and all others overhead) will remain in place and in service until they relocate into the new underground systems being built by the Design Builder in 2018 and activate those new facilities. At that point, the utility will remove their old cables and vacated poles.

The Design Builder will be responsible for re-establishing all privately owned utility services within the project limits.
Transmission Relocation - To Be Performed By the Design - Builder

Orange and Rockland Transmission Lines

The Design-Builders 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 directive plan in the Final RFP - Part 6 shows the proposed alignment of the relocated underground transmission lines. If the proposers solution deviates from the plan as shown, a revised 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.
Transmission Relocations - To Be Performed by Others

Orange and Rockland Electric 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, including the transition station, 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.
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Water Relocations - To Be Performed By the Design-Build

- **Village of Woodbury & Village of Harriman – Water Mains**

The Village of Woodbury and Village of Harriman water facilities shall be relocated as necessary to avoid conflict with the projects proposed roadway reconstruction. The approximate timeframe allowed for this relocation work is six (6) months from time of contract award. The work shall include maintaining and restoring any existing service connections.
Sewer Relocations - To Be Performed By the Design -Builder

- **Village of Woodbury – Sewer Mains**

  Village of Woodbury sanitary sewer facilities shall be relocated as necessary to avoid conflict with the projects proposed roadway reconstruction. The approximate timeframe allowed for this relocation work is six (6) months from time of contract award.

  The work shall include maintaining and restoring any existing service connections.
Gas Relocations - To Be Performed by Others

- Central Hudson Gas (if needed)

Depending on the extent of gas relocations required by the Design-Builder’s proposed design, Central Hudson may require up to four (4) weeks to design the relocations and procure materials followed by up to six (6) weeks of construction time.