
MEETING December 18, 2018

DATE / TIME: 1:00 PM

PLACE: Connecticut Department of Transportation Headquarters (HQ)
Newington, CT

SUBJECT: Project No. 0093-0218
Newington/New Britain/Wethersfield Proposed Coordinated Traffic
Signal System (CTSS) Utility Coordination Meeting

ATTENDEES: See attached list

PURPOSE: **Utility Coordination – Preliminary discussion on existing facilities, proposed project scope of work, and potential conflicts.**

A. Project Overview

1. Project No. 0093-0218 is being undertaken by the Connecticut Department of Transportation (CTDOT) to provide a coordinated traffic signal system along the Route 175, S.R. 505 (Fenn Rd), and Ella Grasso Boulevard corridors in New Britain, Newington and Wethersfield. The purpose of this project is to improve traffic flow along these corridors as well as improving safety, reducing travel time and reducing fuel consumption and emissions.
2. The project includes a total of seventeen (17) state-owned signalized intersections along Route 175 (Cedar St), S.R. 505 (Fenn Rd), and Ella Grasso Blvd. Out of these seventeen (17) signalized intersections, nine (9) will be full replacements which will include new signals and supports (mast arms or span poles), new traffic control cabinet and controller equipment, and additional traffic control equipment (e.g. cameras). Where there are pedestrian crossings, new pedestrian signal equipment will also be installed.
3. The remaining eight (8) signalized intersections will be partial upgrades which would consist of new traffic control equipment and controllers for interconnect. The signal equipment at these intersections will not be replaced, so there will be no modifications to the existing span poles, mast arm/span wires and signal heads, and there will be limited underground/excavation work.
4. Proposed span pole foundations will typically be three (3) feet in diameter and ten (10) feet deep, although the depth may be a few feet deeper based on the load requirements.
5. In addition to the improvements at the signalized intersections, a new fiber optic interconnect cable will be installed along the full length of the project. This interconnect cable will connect to the Newington Operations Center (NOC), and will

allow CTDOT to monitor and manage the signal operations at the seventeen (17) intersections. The new interconnect cable is proposed to be installed aerially (on existing utility poles) from S.R. 505 (Fenn Road), Int. #093-209, Pole SNET #3627) to Hawley Street (Int. #093-213, Pole FTR #585), with the exception of the area where Route 175 crosses the Amtrak Railroad west of Int. #093-210). At the railroad crossing the interconnect will be installed in an existing conduit within the bridge. Beyond these limits, the interconnect cable is proposed to be installed underground in existing or new conduit.

6. The installation of the new aerial interconnect cable will require adjustments to other existing overhead utilities on the pole line.
7. This project is currently at the 30% level of design. The next scheduled milestone is a 60% level design submission in June 2019. The intent is that all information required from the various utility companies will be provided in advance of this submission so that it can be incorporated into the plans and specifications. These design documents will be circulated to the utility companies at that time for review and final input.
8. The project is scheduled to be advertised in May 2020 and construction is expected to begin in late 2020. It is anticipated that the project will take approximately twelve (12) months to construct.

B. Signal Related Work

1. The Preliminary Design Traffic Signal Plans were reviewed in conjunction with the Utility Conflict Matrix (attached) for each intersection to identify any potential conflicts and missing or incorrect information. The following is a summary of the issues identified for each intersection. Refer to the attached Traffic Control Signal Plan Mark-Ups for additional information:
 - a. Dwg. TCS-01 (Int. #088-280, RTE 175 @ Paul Manafort Dr.) – Partial Upgrades
 1. Connecticut Natural Gas (CNG) has two (2) underground gas lines running up Paul Manafort Drive. CNG will provide service cards identifying locations of these lines.
 2. Eversource has underground facilities running from SNET #3079 up Paul Manafort Drive. Eversource will provide existing drawings identifying location of these lines. GF to coordinate through numaprequest@eversource.com
 3. This signal may be fully replaced.
 - b. Dwg. TCS-02 (Int. #088-232, RTE 175 @ Wells St. & Rte 9 SB Entrance Ramp) – Full Replacement
 1. CNG has two (2) underground gas lines at this intersection: one is a new high-pressure gas line and the second is an abandoned line. It was noted that any work that may be required on an abandoned line (e.g. cutting, adjusting, etc.) cannot be performed until CNG has confirmed that there are no environmental

issues or hazardous materials associated with the line. It is not likely that work on any gas lines will be required.

2. The Utility Conflict Matrix identified Conflict No. 1 as a potential Eversource conflict. It was agreed that the conduits in question are related to the existing traffic signal equipment which will be removed. A test pit is not needed for the traffic signal related conduit.
3. Eversource does have facilities at this intersection and will provide existing drawings identifying locations of these lines. Once this data is received, GF will determine if any test pits for Eversource facilities will be required.

c. Dwg. TCS-03 (Int. #093-250, S.R. 505 (Ella Grasso Blvd) @ Rte 9 SB Off Ramp) – Full Replacement

1. Frontier has underground conduit running down the median from Pole CL&P#8060 to S.R. 505 (Fenn Road) to the east.
2. The Utility Conflict Matrix identified Conflict No. 2 as a potential Eversource conflict. It was agreed that the conduits in question are related to the existing traffic signal equipment, which will be removed. A test pit is not needed for the traffic signal related conduit.
3. Eversource does have facilities at this intersection and will provide existing drawings identifying locations of these lines.

d. Dwg. TCS-04 (Int. #093-251, S.R. 505 (Fenn Rd) @ Ella Grasso Blvd & Holly Dr.) – Full Replacement

1. The Utility Conflict Matrix identified Conflict No. 3 as a potential CNG conflict along Holly Drive near proposed pedestrian pedestal. A Test Pit will be required here.
2. The Utility Conflict Matrix identified Conflict No. 4 as a potential Eversource conflict. It was agreed that the conduits in question are related to the existing traffic signal equipment which will be removed. A test pit is not needed for the traffic signal related conduit.
3. Eversource does have facilities at this intersection and will provide existing drawings identifying locations of these lines.

e. Dwg. TCS-05 (Int. #092-252, S.R. 505 (Fenn Rd) @ Fenn Rd. Plaza Driveway) – Full Replacement

1. The Utility Conflict Matrix identified Conflict No. 5 as a potential CNG conflict in S.R. 505 (Fenn Road) where the proposed interconnect conduit will cross. CNG has an 8" main here that is approximately four (4) feet deep. Proposed conduit for interconnect cable will typically be installed at a depth of 24" to 30" below grade. It was agreed that the conduit installation can be adjusted, as necessary to maintain any minimum clearance from the gas line. A test pit is not needed for this location.

2. Eversource does have facilities at this intersection and will provide existing drawings identifying locations of these lines.
- f. Dwg. TCS-06 (Int. #093-259, S.R. 505 (Fenn Rd) @ Myra Cohen Way (Cedar Station)) – Partial Upgrades
 1. The Utility Conflict Matrix identified Conflict Nos. 6 & 7 as a potential water and communications conflicts, respectively. This is work related to the installation of new underground interconnect conduit and the depth of this conduit can be adjusted, as necessary to go over or under these facilities. A test pit is not needed for these locations
 2. It was noted that New Britain Water may have facilities running along Myra Cohen Way. GF to follow-up with New Britain Water.
 3. Frontier will review record information and field check to determine if any underground facilities exist across S.R. 505 (Fenn Road) in the vicinity of the driveway north of Myra Cohen Way.
- g. Dwg. TCS-07 (Int. #093-209, RTE 175 (East St. & Cedar St.) @ SR 505 (Fenn Rd) & Rte 9 NB Off Ramp) – Partial Upgrades
 1. The Utility Conflict Matrix identified Conflict Nos. 8 & 9 as a potential gas and water conflicts, respectively. This is work related to the installation of new underground interconnect conduit and the depth/location of this conduit can be adjusted, as necessary to avoid these parallel lines. A test pit is not needed for these locations.
 2. An additional CNG conflict was identified with the proposed pedestrian signal equipment on the NE corner. There are two CNG lines running parallel here – a four-inch (4") main and a twelve-inch (12") main. A Test Pit will be required here.
 3. An additional water line conflict (New Britain Water) was identified with the proposed pedestrian signal equipment on the NW corner. GF will evaluate adjustments to the location of the pedestrian crossing and pedestrian signal equipment to avoid this. It is anticipated that a test pit will not be needed for this.
- h. Dwg. TCS-08 (Int. #093-210, RTE 175 @ Drives to Turbine Engine Components and Crest Pontiac) – Full Replacement
 1. The Utility Conflict Matrix identified Conflict No. 10 as a potential CNG conflict with the proposed span pole on the NW corner. CNG has a service line running to the former Crest Pontiac site
 2. –The Gas linelocation on the NW corner of the intersection as shown on the plans may not be accurate. CNG to provide service cards for this location, but a Test Pit may be required here.
 3. The Amtrak railroad bridge is to the west of this intersection. The intent is to run the interconnect cable underground/in bridge conduit between Pole SNET

#3666 and SNET #3665. Risers will be needed on these poles – Frontier to determine if there is space available to install these risers.

4. There is a water service line running to the former Crest Pontiac site from the NW corner of the intersection. This is located one hundred thirty nine (139) feet west of the existing hydrant, which is potentially in conflict with the proposed span pole on that corner. The span pole may need to be adjusted. A Test Pit is suggested for this.
5. The Town of Newington requested that proposed span poles along the north side of Route 175 (Cedar Street) be located with consideration for future sidewalk installation.
 - i. Dwg. TCS-09 (Int. #093-211, RTE 175 @ Maple Hill Ave & Old Farm Dr.) – Partial Upgrades
 1. The Utility Conflict Matrix identified Conflict No. 11 as a potential waterline conflict. Since this is a partial signal upgrade, all existing signal equipment will remain (cabinet is incorrectly shown as proposed – GF to revise). Based on this, it was agreed that there are no potential conflicts. A test pit is not needed for this.
 2. The Town of Newington requested that proposed span poles along the north side of Route 175 (Cedar Street) be located with consideration for future sidewalk installation.
 - j. Dwg. TCS-10 (Int. #093-254, RTE 175 (Cedar St. @ Vincent Dr.) – Full Replacement
 1. CNG will forward information on gas service lines running from the main along Rte 175 (Cedar Street) to house #55 and #61 along the north side of the road.
 2. The Town of Newington requested that proposed span poles along the north side of Route 175 (Cedar Street) be located with consideration for future sidewalk installation.
 - k. Dwg. TCS-11 (Int. #093-204, RTE 175 (Cedar St.) @ RTE 173 (Willard Ave.)) – Partial Upgrades
 1. MDC is currently doing construction at this intersection. Existing and proposed facilities are not expected to be in conflict with proposed work. MDC provided a plan of the proposed work – GF will incorporate into plans.
 - l. Dwg. TCS-12 (Int. #093-212, RTE 175 (Cedar St.) @ Mill St. Ext.) – Full Replacement
 1. The Utility Conflict Matrix identified Conflict Nos. 11 & 12 as a potential Eversource conflicts. It was agreed that the conduits in question are related to the existing traffic signal equipment which will not present any issues. A test pit is not needed for these locations.

- 2. The proposed controller cabinet symbol on the NW corner is shown larger than to scale. An easement is not required.
- m. Dwg. TCS-13 (Int. #093-231, RTE 175 (Cedar St. & E. Cedar St.) @ RTE 176 (Main St.)) – Partial Upgrades
 - 1. No issues identified.
- n. Dwg. TCS-14 (Int. #093-213, RTE 175 (Cedar St.) @ Hawley & Constance Leigh Dr.) – Full Replacement
 - 1. The Utility Conflict Matrix identified Conflict No. 14 as a potential waterline conflict with the proposed span pole. The proposed span pole has been located seven feet (7')+ from the waterline. A test pit is not needed for this.
 - 2. The Utility Conflict Matrix identified Conflict Nos. 15 & 16 as a potential MDC and CNG conflicts due to the installation of proposed guy wire anchors at Pole FTR #585. CNG noted that their facilities are at four feet. three inch (4'-3") deep. Frontier noted that they also have some underground facilities in this area and will send additional information for this location. A Test Pit for Gas and Water lines will be required here.
 - 3. The Town of Newington mentioned there is a brick walk along both sides of Constance Leigh Dr. and requested that the project include a special provision to reset brick walk disturbed by construction.
- o. Dwg. TCS-15 (Int. #093-237, RTE 175 (Cedar St.) @ Patricia M. Genova Dr.) – Full Replacement
 - 1. No issues identified.
- 2. Plans were not available for the remaining two (2) intersections located in the Town of Wethersfield:
 - a. Int #159-247 is the intersection of Route 175 and the Berlin Turnpike (Route 15) NB Exit Ramp. This will be a Partial Replacement that will include the installation of a new cabinet on the existing foundation and new controller equipment. There are no utility conflicts expected with this work.
 - b. Int #159-230 is the intersection of Route 175 and Goff Road. This will be a Partial Replacement that will only include the installation of new controller equipment within the existing cabinet. There are no utility conflicts expected with this work.
 - c. GF will forward copies of the plans for these two intersections to the Town of Wethersfield and the utility companies when they are available.

C. Proposed Fiber Communications Interconnect

- 1. The fiber optic interconnection cable is proposed to be installed aerially from Pole SNET #3627 at S.R. 505 (Fenn Road), Int. #093-209, to Pole FTR #585 at Hawley Street, Int. #093-213. Frontier and Eversource will coordinate a survey of the poles within these limits and provide information to GF and CTDOT to determine adjustments that will be needed. In addition, it was requested that a survey of the

poles along Fenn Road be conducted – this is currently proposed as underground, but the option of installing the new interconnection cable aerially is under consideration.

2. The work associated with this pole inventory can be billed after the PE's are submitted.
3. GF reiterated the importance of completing this inventory and receiving the information well in advance of the 60% submission milestone in June 2019 so that the information can be reviewed, coordinated and incorporated into the plans and specs.

D. Utility Reimbursements

1. Utility related costs are reimbursable on this contract as follows:
 - a. 50% for Private Utilities
 - b. 100% for Municipal/Public Utilities
2. Utility companies should submit PE's within two (2) weeks of the meeting to Derek Brown in the CTDOT Utility Section. Once these are submitted, CTDOT will prepare a PAL and Purchase Order. Engineering efforts can proceed through the design phase under these PAL's.
3. CNG and MDC do not anticipate submitting a PE.
4. Separate PAL's will be initiated for Construction Phase services when construction begins.

E. Test Pits

1. Locations requiring test pits will be identified on the Utility Conflict Matrix, to be updated by GF based on information provided during and subsequent to the meeting. Once this has been finalized, GF will prepare Test Pit Plans and submit to CTDOT.
2. CTDOT will conduct the survey for the Test Pits.
3. The District will develop the Test Pit Agreements and will notify the utilities at that time.

F. City of New Britain Project Coordination

1. At the conclusion of the meeting, the City of New Britain presented CTDOT with a conceptual plan for proposed signal improvements at the intersection of Ella Grasso Boulevard (S.R. 505) and Barbour Road (immediately west of the Rte 9 SB Off Ramp (Int. #093-250). The Town requested that a conduit be installed between the controller for Int. #093-250 and the intersection of Ella Grasso Boulevard (S.R. 505) and Barbour Road so that they an interconnect cable can be installed in the future between these two signals. GF to incorporate this into the final design.