



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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August 14, 2017

TO: Parties and Intervenors

FROM: Melanie Bachman, Executive Director *MAB*

RE: **DOCKET NO. 474** - The Connecticut Light & Power Company d/b/a Eversource Energy application for a Certificate of Environmental Compatibility and Public Need for the Greater Hartford-Central Connecticut Reliability Project that traverses the municipalities of Hartford, West Hartford, and Newington, which consists of (a) construction, maintenance and operation of a new 115-kilovolt (kV) electric transmission line within existing Eversource, Amtrak and public road rights-of-way and associated facilities extending overhead approximately 2.4 miles and underground approximately 1.3 miles between Eversource's existing Newington Substation in the Town of Newington and existing Southwest Hartford Substation in the City of Hartford; (b) modifications to a .01 mile section within existing Eversource right-of-way of the existing overhead 115-kV electric transmission line connection to the Newington Substation (Newington Tap); and (c) related modifications to Newington Substation and Southwest Hartford Substation.

Comments have been received from the Department of Transportation, dated August 14, 2017. A copy of the comments is attached for your review.

MB/MP/laf

c: Council Members

Enclosure



STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION



2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546

Phone: (860) 594-3262

August 14, 2017

Ms. Melanie Bachman
Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Dear Ms. Bachman:

Subject: Docket 474 (Eversource)
115-Kilovolt Electric Transmission Facility
Towns of Hartford, Newington and West Hartford

Thank you for your letter dated July 21, 2017, requesting written comments on the above referenced application. The Connecticut Department of Transportation (CTDOT) has reviewed the application and associated documents and offers the following comments:

Division of Facilities and Transit

1. The Eversource preferred route (Route) uses the Amtrak rail corridor for a portion of the installation. As part of the New Haven-Hartford-Springfield (NHHS) Rail program, CTDOT will be adding commuter rail service to the same Amtrak rail corridor. The new service, called the **CTrail** Hartford Line (Hartford Line), is scheduled to launch in May 2018 and will increase the number of corridor trains passing through the Route area. Initially, the number of trains will increase from 6 to 17 daily roundtrips (22 additional trains) which will operate from 5:30 a.m. until midnight.
 - a. The CTDOT is concerned that the proposed Route construction could impact the newly established service at a critical time. We request that Eversource be required to perform the construction in such a manner and at such times that will not interrupt the newly established commuter rail service. This will require the Route construction within the Amtrak corridor be largely performed during night hours (approx. midnight until 5:30 a.m.). With this qualification and subject to the following comments, CTDOT generally endorses the preferred route as proposed.
2. Additionally, as part of the NHHS program, CTDOT is proposing to construct a new railroad station at Flatbush Avenue in the Town of West Hartford (Station). The Station is currently under design and is scheduled for construction in 2020. The 30 percent (30%) design plans for the Station will be available in 1-2 months and should be used by Eversource to provide a design compatible with the Station. The Route in the area of the Station (see Volume 3, Sheet 10) depict steel monopoles No. 47 and No. 48 to be installed at either end of the Station with the aerial transmission lines spanning directly over the overpass and east side pedestrian platform.

The CTDOT has questions and concerns with the Route in the area of the Station as follows:

- a. The Route locates transmission lines directly over portions of the Station. Does Eversource believe permanently locating transmission lines over occupied portions of the Station pose any safety concerns? If so, consider either undergrounding the segment through the Station proper, developing an alternate aerial route that avoids passing over the Station, or lastly further developing the design in a manner that mitigates safety concerns.
 - b. The proposed locations of steel monopole structures No. 47 and No. 48 may conflict with the Station design. The exact location of these structures needs to be closely coordinated by Eversource with the 30 percent (30%) design to avoid conflict.
 - c. The plan and profile sheet 4 of 6 in Volume 3 appears to indicate that the lowest conductor at mid-span over the Station is approximately 50' above top of rail. However, the roof top elevation of the Station is approximately 53' above top of rail. Wire profiles in the Station area will need to be raised significantly (and monopole structure height) to provide sufficient clearance to the Station. The minimum wire height would need to accommodate Station construction as well as future maintenance and repairs. Absent sufficient wire clearance and depending on the scope and nature of Station work, the existence of energized overhead transmission lines would require transmission line outages.
 - d. Eversource provided a potential route variation at the Station location as described in Volume 1 Section 11.4.3. The route variation attempts to avoid the Station by locating the transmission lines to the east overhead through the Station parking lot. This route variation is not recommended as CTDOT is planning a multi-story parking garage at this location. The parking garage plans are concept level documents and currently do not provide sufficient detail to allow Eversource the ability to produce a compatible design.
3. As depicted in Volume 1, Exhibit C, Sheets 3 and 4, the proposed underground transmission line is within Route 173 (Willard Avenue) from Spring Street to Shepard Drive. The alignment as depicted does not propose any vaults within the state highway right of way, and as such is acceptable. As the design is further developed, and in the event vaults within the Route 173 segment become necessary, every effort must be made to locate vaults outside the state highway right of way.
 4. As depicted in Volume 1, page 3-15, the typical cross section provides 30" minimum bury depth from existing grade to the top concrete encasement for the duct bank. Per the CTDOT's Utility Accommodation Manual, underground utility facilities shall be installed at a minimum depth of 36" from top of facility to existing pavement or ground surface. Eversource should revise the buried depth to 36" minimum for the segments of the underground installations located within highway right of way.
 5. General Comment: In the course of designing highway projects, CTDOT regularly engages with utility companies to expose and accurately locate their underground facilities in an effort to produce highway designs that minimize the impacts to existing utility facilities. On many occasions, CTDOT has experienced the challenges of utility companies to expose and accurately locate existing buried electric transmission facilities in conjunction with the design of highway projects. We believe that, at least partially, the challenge can be attributed to the use of flow fill to expedite the restoration of trench excavations. The use of flow fill makes locating the limits of the

concrete encased duct bank difficult and has resulted in conflicts only discovered once the highway project is in construction. In an effort to avoid costly delays in highway construction projects due to the inability to accurately locate the facility, CTDOT would ask that Eversource be required to develop standard means/methods to accurately locate the facility when installed in a public highway.

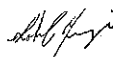
Division of Traffic Engineering

6. Coordination will be needed with CTDOT District 1 Maintenance for allowable work hours within CTDOT right of way.
7. Project No. 0155-0174 consists of the painting of Bridge No. 00477, the Amtrak Bridge over SR 529 (New Britain Avenue), in West Hartford. This project is currently in design and is anticipated to be advertised in January 2018 at this time. The project construction will include lane closures. Eversource should coordinate as necessary.
8. Enclosed are signal plans for the two signalized intersections (Intersection Nos. 155-225 and 155-226) in proximity to the proposed overhead crossing of SR 529 (New Britain Avenue) in West Hartford. These signals are part of a closed loop signal system and have a hard wire interconnect between them. It appears this interconnect is underground between CL&P Nos. 2717 and 2718. The interconnect is overhead to the east of CL&P No. 2718. Eversource should insure the interconnect facility is protected from damage during Route construction.
9. There is an existing at-grade railroad crossing with railroad gate devices at Oakwood Avenue No. 1 in West Hartford. Eversource should ensure the proposed structure (STR No. 40) and overhead crossing will not conflict with the existing railroad devices. The traffic signal plan (Intersection No. 155-264) for this at-grade railroad crossing is enclosed.

Bureau of Highway Operations

10. An encroachment permit will be required for work within CTDOT right of way. Highway restoration requirements may necessitate milling and paving of the roadway from curb to curb. Restoration requirements will be determined based on the plans submittal to the CTDOT District 1 Maintenance office.

Very truly yours,



Sohrab Afrazi
2017.08.14
11:35:09-04'00'

Sohrab Afrazi
Transportation Principal Engineer
Utilities Section
Bureau of Engineering and Construction

Enclosures

bcc: Michael G. Piteo:mab

Mark D. Rolfe

Scott A. Hill

Dennis Solensky

John DeCastro

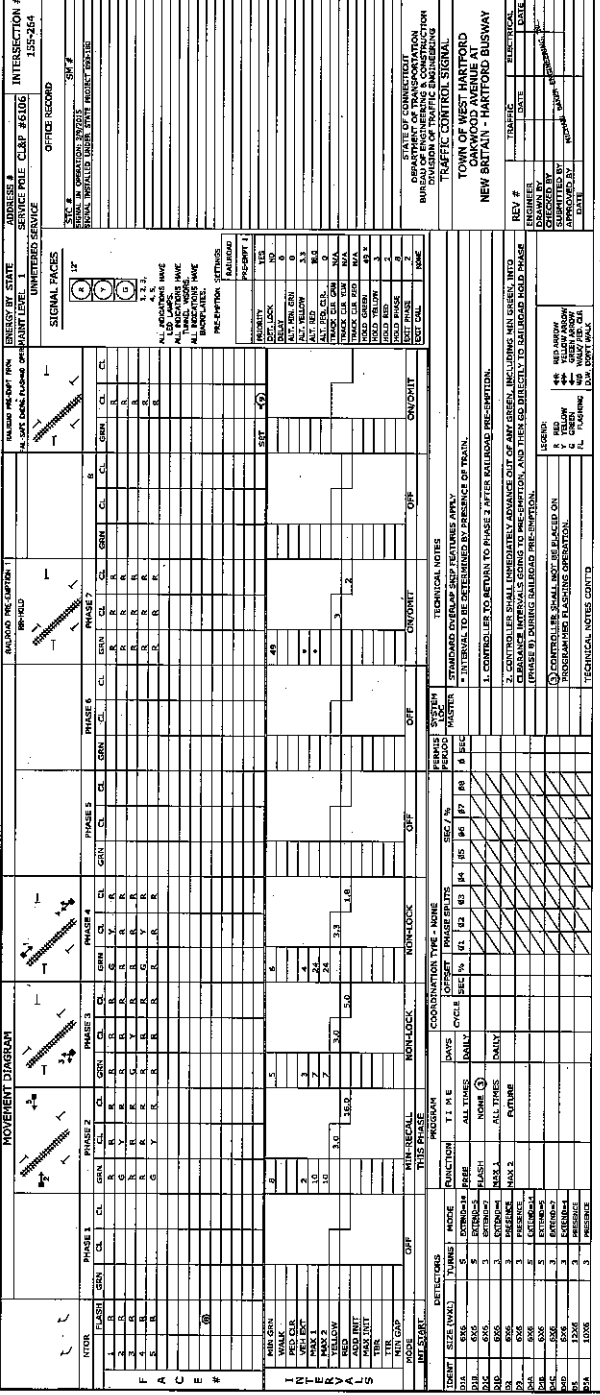
Mark Carlino-Tracy L. Fogerty-Gregory R. Palmer

John E. Bernick

James A. Fallon-Sohrab Afrazi-Michael G. Piteo-Craig Wallace

Christopher J. Bonsignore-Bruce A. Olmstead

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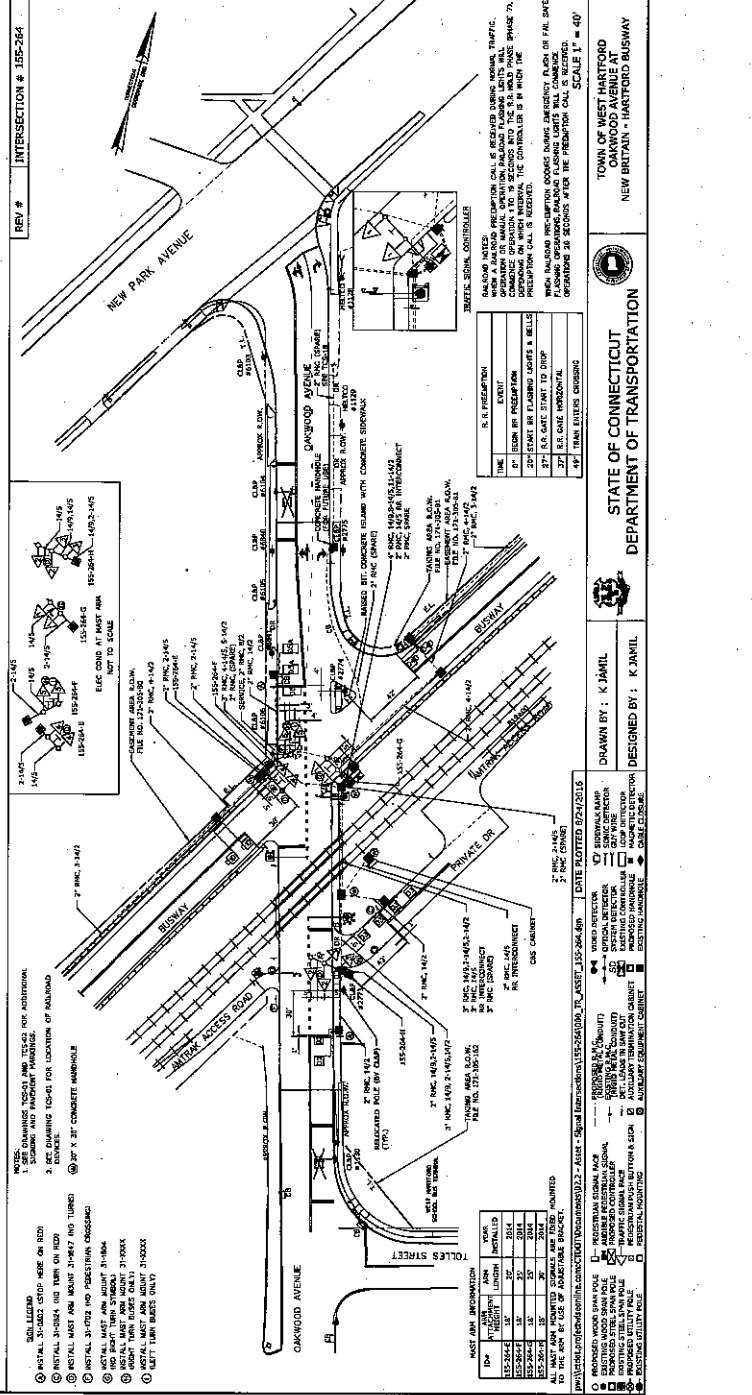
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CONSTRUCTION NOTES:

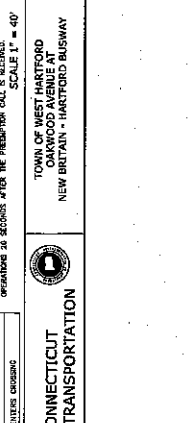
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REV #	INTERSECTION #	155-264



CONSTRUCTION NOTES:

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REV #	INTERSECTION #	155-264

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

DESIGNED BY: K. JAMIL

TOWN OF WEST HARTFORD
NEW BRITAIN - HARTFORD BUSWAY

DRAWING NO.: TCS-04
PROJECT NO.: WEST HARTFORD
SHEET NO.: 1A.14.04-L.09

CONTRACTOR: MICHAEL BAKER ENGINEERING, INC.

DATE: [DATE]

SCALE: 1" = 40'