



State of Connecticut

RECORD OF ENVIRONMENTAL CONSIDERATION

(Connecticut Environmental Policy Act Applicability)



Department of Public Works

PROPOSED PROJECT/ACTION INFORMATION:

Project Title: Broadband Technologies Opportunities Program (BTOP) Statewide Fiber Optic Network
Project Address: N/A, multiple sites across the state.
Sponsoring Agency: CT Department of Information Technology (DOIT)
Sponsoring Agency Representative: Richard R. Bailey Sr., Acting CIO
DPW Project Manager: N/A
DPW Project Number: N/A
Project/Action Description: See attached Project Description

CONNECTICUT ENVIRONMENTAL POLICY ACT (CEPA) APPLICABILITY:

Environmental Classification Document (ECD): No new building structures or parking spaces are being proposed under this project; therefore, none of the ECD threshold-based criteria are applicable. Other ECD categories (historic and other potential environmental impacts) have been assessed and documented in the Draft Environmental Assessment (2/18/11) prepared pursuant to the National Environmental Policy Act (NEPA).

Determination of Environmental Significance: Based on the review of Draft EA and the criteria set forth in Section 22a-1a-3 of the Regulations of Connecticut State Agencies, the potential project impacts do not rise to the level of significance. The attached CTDPH comments received during the scoping period were reviewed and are not substantive in the determination of Environmental Significance.

Was early public scoping conducted? Yes
If yes, list date: January 18, 2011 to February 18, 2011

Was the proposed project/action covered under an existing CEPA document? No

BASED ON THE ABOVE INFORMATION THE PROPOSED PROJECT:

- is excluded or exempt from the requirements of CEPA; or
- has been adequately assessed in existing documents (environmental review) and has been determined not to be environmentally significant; therefore, an Environmental Impact Evaluation under CEPA is not necessary at this stage of the project. However, if the project scope should significantly change, then an updated review should be conducted.

Prepared by:

Jeffrey S. Bolton
 Supervising Environmental Analyst
 DPW Technical Services – Environmental Planning

Date

3.3.11

Broadband Technologies Opportunities Program (BTOP) Statewide Fiber Optic Network

Project Description

The National Telecommunications and Information Administration has awarded a grant to the Connecticut Department of Information Technology (DOIT), through the Broadband Technology Opportunities Program, for upgrades to and expansion of Connecticut's existing broadband infrastructure to improve public safety, library, and educational services across the state. DOIT has partnered with the Connecticut Department of Public Safety (DPS), the Connecticut Education Network (CEN), and Connecticut Public Broadcasting, Inc. The proposed project involves locations throughout the entire State of Connecticut, with installation of new fiber and upgraded connections in all 169 municipalities in the State.

The proposed project consists of upgrades to approximately 5,990 fiber miles over approximately 1,627 route miles of existing (on-net) fiber optic lines and installation of an estimated 880 miles of new (off-net) fiber optic lines, directly connecting approximately 660 community anchor institutions (CAI) (public safety facilities, K-12 schools, libraries, and two community colleges) to the statewide fiber optic network. These CAIs fall within the purview of the following three major entities/existing programs within the State:

- Connecticut Public Safety Services Data Network
- Connecticut Education Network – Expanded Connectivity
- Connecticut Department of Information Technology second Point of Presence (POP2) Installation

The primary activity associated with the Proposed Action is placement of new aerial fiber upon existing utility poles within existing transportation rights-of-way (ROW) or the pulling of new fiber through existing conduit systems at network locations. Based on initial site reviews, it is anticipated that no new poles or conduits would be necessary; however, in the event of such activities, potential impacts are assessed in this Environmental Assessment. In addition, the Proposed Action includes the actual connection to the subject CAI sites.

At current off-net locations where fiber is to be installed, the project would result in a single additional cable added to the "communication space" on existing utility poles along existing transportation ROW. The cable that encloses the fiber is less than an inch in diameter (between 0.51 and 0.73 inches), and it is black so that it is similar in appearance to the utility lines and equipment that are already present on the existing utility poles. No repeater cabinets or similar equipment enclosures would be mounted to any pole or support structure. In underground installations, the aerial fiber runs down the pole and then routes inside the existing underground conduit that is located next to the pole.

DOIT's contractor will be responsible for making application requests to the applicable pole/conduit owner to install new fiber. In the event the owner determines a pole or conduit needs to be replaced, such work and any associated activities will be conducted by the owner and its contractors and not DOIT or its contractor.

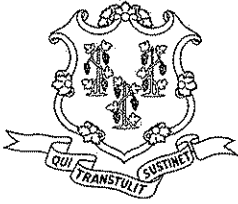
No construction activity (i.e., new or replacement poles/conduits or ground disturbance), other than installation of new fiber, is proposed along the existing or proposed fiber optic network segments. A splice connection would be made where a proposed fiber segment meets an existing fiber segment by installing a splice enclosure on the line or using an existing splice enclosure if one exists near the proposed connection. In the upgrades to an estimated 5,990 fiber miles, the existing lines would be "activated" - a signal would run through the existing inactivated on-net lines.

Although it is anticipated that the entire project would be aerial, using existing utility poles and ROW, underground using existing conduit, or existing conduit systems associated with bridge crossings, there may be an occasional need for replacement of a utility pole. This need would be determined by the owner/operator of the pole when an application is made by a lessee to affix additional fiber or cable. Utility poles are typically replaced by the owner/operator when they have deteriorated or when they have insufficient capacity to accept additional utilities. When replacing a pole due to deterioration or to accommodate a newly proposed fiber cable, it is standard practice to remove the existing pole and place a new pole in the same hole. If the existing pole cannot be removed, then an alternative method is to auger a new hole as close to the existing pole as is practical, place the new replacement pole, transfer the affected infrastructure to the new pole and then remove the existing pole, most commonly by cutting it above the surface and leaving the buried segment in place.

As mentioned before, the vast majority of the proposed network is aerial (approximately 99.4%), using infrastructure that is already in place, and only a very small portion would be underground using existing conduit systems. It is estimated that only 5.5 miles of the approximately 880 miles of new fiber is planned for installation within existing conduits. Therefore, damaged or crushed conduit is not anticipated on this project. However, in the event that crushed or damaged underground conduit is encountered, the conduit owner would be contacted by DOIT's contractor and attempts would be made to free the blockage. If the conduit owner is unsuccessful, an alternate route may be selected using existing aerial locations or other existing underground conduits. Based on initial site reviews, installation of new underground conduit is not anticipated to be necessary to make final connections to a particular CAI site.

In the event that DOIT's contractor or subcontractor has to perform installation of new or replace poles/conduits and ground disturbance is necessary, continued consultation with the Connecticut Department of Environmental Protection, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the State Historic Preservation Office, potentially affected Native American tribes, and other applicable resource agencies would occur. In these specific cases, DOIT has established project protocols in the event that ground disturbance is required.

DOIT has contracted with Fibertech Networks (Fibertech) to install and lease the underlying fiber backbone of the network. Once the construction is completed, DOIT would continue to be responsible for operation of the fiber network, as well as maintenance of the network through a lease agreement. DOIT would also arrange for additional future connections to the network.



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

February 18, 2011

Mr. Richard R. Bailey
Deputy Chief Information Officer
State of Connecticut
Department of Information Technology
101 East River Drive
East Hartford, CT 06108

RE: Scoping Notice for Broadband Technology Opportunities Program (BTOP) Statewide Fiber Optic Network

Dear Mr. Bailey:

The Department of Public Health Drinking Water Section's Source Water Protection Unit has reviewed the above scoping notice. Please refer to the attached report for our comments.

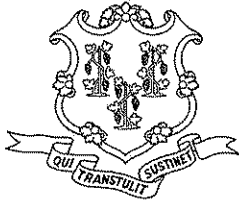
If you have any questions regarding these comments, please call Pat Bisacky of this office at (860) 509-7333.

Sincerely,

Eric McPhee
Supervising Environmental Analyst
Drinking Water Section



Phone: (860) 509-7333
Telephone Device for the Deaf (860) 509-7191
410 Capitol Avenue - MS # 51WAT
P.O. Box 340308 Hartford, CT 06134
Affirmative Action / An Equal Opportunity Employer



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

MEMORANDUM

From: Patricia Bisacky, Environmental Analyst 2 *PBB*
Source Water Protection Unit
Drinking Water Section

Subject: Scoping notice for Broadband Technology Opportunities Program (BTOP) Statewide Fiber Optic Network

Date: February 18, 2011

The Department of Public Health, Drinking Water Section (DWS) has reviewed the scoping notice regarding the Broadband Technology Opportunities Program (BTOP) Statewide Fiber Optic Network. The proposed project consists of upgrades to 5,990 on-net miles over 1,627 route miles of existing (on-net) fiber optic lines and installation of 880 miles of new (off-net) fiber optic lines, directly connecting approximately 660 community anchor institutions (public safety entities, K-12 schools, libraries, government facilities, and community colleges) to the statewide fiber optic network. A review of the statewide map provided with the notice indicates that the proposed work will span areas that are within multiple public water supply watersheds and aquifer protection areas. The notice indicates that the project goal is to install all the fiber optic lines on or in existing infrastructure located within existing transportation rights of way. It is unlikely that this method of installation will impact the quality or quantity of public drinking water sources of supply.

The notice indicated the possibility that new underground conduit may be installed if all options for locating line within suitable existing infrastructure are exhausted. The DWS should be contacted to confirm whether new conduit is proposed to be installed in public drinking water supply source water areas. Should the installation of new underground conduit be required within public drinking water supply source water areas, the following best management practices must be observed:

- **Emergency Response Plan:** Develop an Emergency Spill Response Plan before construction begins. Spill response equipment should be available on-site at all times along with personnel trained in the proper use of such equipment.
- **Hazardous Materials Storage:** Hazardous materials should be removed from the site during non-work hours or otherwise stored in a secure area to prevent vandalism. Place covered trashcans and recycling receptacles around the site. Cover and maintain dumpsters. Check frequently for leaks. Place dumpsters under a roof or cover with tarps or plastic sheeting. Never clean a dumpster by hosing it down on site.
- **Vehicles and Machinery:** A specific area of the project site should be designated for auto parking, vehicle refueling and routine equipment maintenance. Methods and locations of refueling, servicing, and storage of vehicles and machinery should be addressed and included as notes on the final site plans. All equipment fueling or minor repairs should occur on a fueling pad. Onsite fuel storage for heavy equipment should have containment and be located in a secure area where it will not be vandalized or struck by equipment or vehicles on the job site.
- **Notification:** Notification of the project start date should be sent to all affected public water systems as soon as it has been determined. The Drinking Water Section should be granted site access to review compliance with construction site best management practices. The Drinking Water Section must be notified immediately of any chemical/fuel spill at the construction site, along with the Department of Environmental Protection's Oil and Chemical Spill Response Unit. Emergency telephone numbers and a statement identifying the construction site as a sensitive public water supply area should be posted where they are readily visible to contractors and other on-site personnel. A note should be added to the site plans stating the sensitivity of the area.



Phone: (860) 509-7333
Telephone Device for the Deaf (860) 509-7191
410 Capitol Avenue - MS # 51WAT
P.O. Box 340308 Hartford, CT 06134
Affirmative Action / An Equal Opportunity Employer