



STATE OF CONNECTICUT

DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION

OFFICE OF ENVIRONMENTAL REVIEW

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To: Eric McPhee - Supervising Environmental Analyst
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From: David J. Fox - Senior Environmental Analyst **Telephone:** 860-424-4111

Date: October 21, 2016 **E-Mail:** david.fox@ct.gov

Subject: Mulberry Point Water Main Extension, Guilford

The Department of Energy & Environmental Protection has reviewed the Notice of Scoping for the proposed installation of a water main to serve the Mulberry Point area of Guilford. The following comments are submitted for your consideration.

The Natural Resources Conservation Service's Soil Survey depicts a band of Wilbraham and Menlo extremely stony soils, a regulated wetland soil, which will be crossed by the water main installation between Sachem Head and Lower Roads. Wetland areas are also crossed by Daniel Avenue and Tuttle Point Road. At these locations, it is unknown whether the main will be installed under the roadway or shoulders, with no direct wetland impacts, or beyond previously filled areas. Existing wetlands and watercourses should be delineated by a certified soil scientist and their functional values should be evaluated. Any inland wetlands or watercourses at the site are regulated by the local inland wetlands agency, pursuant to section 22a-42 of the CGS. Many local agencies have established setback or buffer areas and require review and approval of activities within these upland areas adjacent to wetlands or watercourses. The local agency should be contacted regarding permit requirements.

Where the pipeline route along roads traverses wetlands or watercourses, the pipe should be installed beneath the roadway to avoid direct impacts. The wetland areas crossed by Daniel Avenue and Tuttle Point Road also include tidal wetlands as defined by section 22a-29 (2) of the CGS. Any work or construction activity within tidal wetlands at the site (whether or not such wetlands have been mapped) will require a permit from the Land & Water Division (LWRD) pursuant to section 22a-32 of the CGS.

Any work or construction activity within tidal, coastal or navigable waters requires authorization from LWRD pursuant to the Structures, Dredging and Fill Act, section 22a-359 through 22a-363f of the CGS. The regulatory jurisdiction limit is the area up to and including the elevation of the coastal jurisdiction line (CJL) as determined for the State's major tidal waterbodies. The CJL for Long Island Sound in Guilford is 4.0' NAVD88. Certificates of Permission can be issued for certain minor activities involving dredging, erection of structures, or fill in any tidal, coastal or navigable waters of the state in accordance with sections 22a-361 through 22a-363c of the CGS. The specific activities eligible under this program are listed in CGS section 22a-363b and include minor alterations or amendments of authorized or pre-jurisdiction structures, such as the creek crossings of Daniel Avenue and Tuttle Point Road. Installing the pipeline within the existing road footprint would likely be eligible for a Certificate

of Permission. Any work outside of the road footprint in the creek or wetland would most likely require review under a full permit application. Additional information concerning coastal permitting programs may be found on-line at: [Coastal Permitting](#)

In order to further protect wetlands and watercourses on and adjacent to the site, strict erosion and sediment controls should be employed during construction. The *Connecticut Guidelines for Soil Erosion and Sediment Control* prepared by the Connecticut Council on Soil and Water Conservation in cooperation with DEEP is a recommended source of technical assistance in the selection and design of appropriate control measures. The 2002 revised edition of the Guidelines is available online at: [Erosion Control Guidelines](#).

The project can be considered to be a municipal improvement according to section 8-24 of the CGS. Therefore, a Coastal Site Plan Review, in accordance with sections 22a-105 through 22a-109 of the CGS, must be included in the review by the local planning commission.

Portions of the water main route, including Lower Road, Daniels Avenue, Tuttle Point Road and several of the residences to be served by the water main, are within the 100-year flood zone on the community's Flood Insurance Rate Map. Because it is a State action, the project must be certified by DPH as being in compliance with flood and stormwater management standards specified in section 25-68d of the CGS and section 25-68h-1 through 25-68h-3 of the Regulations of Connecticut State Agencies (RCSA) and receive approval from the Department. A fact sheet regarding floodplain management and the certification form can be downloaded at: [Flood Management](#).

Stormwater discharges from construction sites where one or more acres are to be disturbed, regardless of project phasing, require an NPDES permit from the Permitting & Enforcement Division. The *General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* (DEEP-WPED-GP-015) will cover these discharges. The construction stormwater general permit dictates separate compliance procedures for Locally Approvable projects and Locally Exempt projects (as defined in the permit). Locally Exempt construction projects disturbing over 1 acre must submit a registration form and Stormwater Pollution Control Plan (SWPCP) to the Department. Locally Approvable construction projects with a total disturbed area of one to five acres are not required to register with the Department provided the development plan has been approved by a municipal land use agency and adheres to local erosion and sediment control land use regulations and the *CT Guidelines for Soil Erosion and Sediment Control*. Locally Approvable construction projects with a total disturbed area of five or more acres must submit a registration form to the Department prior to the initiation of construction. This registration shall include a certification by a Qualified Professional who designed the project and a certification by a Qualified Professional or regional Conservation District who reviewed the SWPCP and deemed it consistent with the requirements of the general permit. The SWPCP for Locally Approvable projects is not required to be submitted to the Department unless requested. The SWPCP must include measures such as erosion and sediment controls and post construction stormwater management. A goal of 80 percent removal of total suspended solids from the stormwater discharge shall be used in designing and installing post-construction stormwater management measures. Stormwater treatment systems must be designed to comply with the post-construction stormwater performance management requirements of the permit. These include post-construction performance standards requiring retention of the water quality volume and incorporating control measures for runoff reduction

and low impact development practices. For further information, contact the division at 860-424-3018. The construction stormwater general permit registrations can now be filed electronically through DEEP's e-Filing system known as ezFile. Additional information can be found on-line at: [Construction Stormwater GP](#).

If the water mains are to be tested and disinfected, the discharge would be covered by the *General Permit for the Discharge of Hydrostatic Pressure Testing Wastewater* (DEP-PERD-GP-011). This general permit applies to all discharges of waters used to test the structural integrity of new or used tanks and pipelines that hold or transfer drinking water, sewage, or natural gas. The general permit contains pH, chlorine, oil and grease, and suspended solids limits which will need to be complied with during the testing and verified through monitoring. Registration is required to be submitted to the Department in order for the discharges to be authorized by this general permit. A fact sheet, the general permit which includes the registration form, titled Notice of Coverage, and the Application Transmittal form may be downloaded at: [Hydrostatic GP](#)

Development plans for utilities in urban areas that entail soil excavation should include a protocol for sampling and analysis of potentially contaminated soil. A soil management plan should be developed for the project to deal with soils during construction. The Department's *Guidance for Utility Company Excavation* should be used as a guide in developing the plan. The guidance is available on-line at: [Utility Guidance](#) .

The Natural Diversity Data Base reports that there are documented records of snowy egret (*Egretta thula*), a species listed by the State pursuant to section 26-306 of the CGS as State threatened, within the proposed project area. The snowy egret is a bird that nests and forages in colonies mixed with other species of wading birds. Foraging habitats preferred by this species include marshes, swamps, ponds, shores, and tidflats with a diet consisting of mainly fish and crustaceans. Its foraging efficiency is greatly reduced if foraging individually.

The area of most concern is Lower Road and Daniel Avenue, where the roadway is immediately adjacent to a critical foraging wetland area for snowy egret. The following mitigation measures must be employed to protect this threatened species.

- Do not disturb flocks of foraging herons and egrets.
- Do not introduce new excessive or unpredictable noise or activity to wetland complexes that will cause birds to flush during April-August, especially before 10am, when largest flocks will form.
- Any construction that will include explosives needs to be outside of April-August.
- Apply best practices to protect ecological function and water quality of wetlands to preserve food sources.
- Ensure that all work along roadways adjacent to wetland areas does not encroach on wetland habitat. All staging of equipment, vehicle, and human traffic should be outside of the wetland.

This determination is valid for two years. Please submit an updated NDDDB Request for Review if the scope of the proposed work changes or if work has not begun by October 3, 2018.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Bureau of Natural Resources and cooperating units of DEEP, independent conservation groups, and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the NDDB should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated in the NDDB as it becomes available.

In order to mitigate potential air quality impacts from construction activities, the Department recommends the following measures.

For construction projects, the Department encourages the use of newer off-road construction equipment that meets the latest EPA or California Air Resources Board (CARB) standards. If that newer equipment cannot be used, equipment with the best available controls on diesel emissions including retrofitting with diesel oxidation catalysts or particulate filters in addition to the use of ultra-low sulfur fuel would be the second choice that can be effective in reducing exhaust emissions. The use of newer equipment that meets EPA standards would obviate the need for retrofits.

The Department also encourages the use of newer on-road vehicles that meet either the latest EPA or California Air Resources Board (CARB) standards for construction projects. These on-road vehicles include dump trucks, fuel delivery trucks and other vehicles typically found at construction sites. On-road vehicles older than the 2007-model year typically should be retrofitted with diesel oxidation catalysts or diesel particulate filters for projects. Again, the use of newer vehicles that meet EPA standards would eliminate the need for retrofits.

Additionally, Section 22a-174-18(b)(3)(C) of the Regulations of Connecticut State Agencies (RCSA) limits the idling of mobile sources to 3 minutes. This regulation applies to most vehicles such as trucks and other diesel engine-powered vehicles commonly used on construction sites. Adhering to the regulation will reduce unnecessary idling at truck staging zones, delivery or truck dumping areas and further reduce on-road and construction equipment emissions. Use of posted signs indicating the three-minute idling limit is recommended. It should be noted that only DEEP can enforce Section 22a-174-18(b)(3)(C) of the RCSA. Therefore, it is recommended that the project sponsor include language similar to the anti-idling regulations in the contract specifications for construction in order to allow them to enforce idling restrictions at the project site without the involvement of the Department.

Thank you for the opportunity to review this project. If there are any questions concerning these comments, please contact me.

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