

## CONNECTICUT DEPARTMENT OF

## **ENERGY & ENVIRONMENTAL PROTECTION**

## OFFICE OF ENVIRONMENTAL REVIEW

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**To:** Mark W. Alexander - Transportation Assistant Planning Director

DOT - Office of Environmental Planning, 2800 Berlin Turnpike, Newington

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Date: June 29, 2016 E-Mail: david.fox@ct.gov

**Subject:** Route 136 Bridge, Westport

The Department of Energy & Environmental Protection (DEEP) has reviewed the Notice of Scoping for proposed major rehabilitation or replacement of the Route 136 bridge over the Saugatuck River in Westport. The following comments are submitted for your consideration.

ConnDOT has already been in contact with the Permitting & Enforcement Section of the Office of Long Island Sound Programs (OLISP). Micheal Grzywinski has provided preliminary resource information and identified permitting issues. To supplement this information, I have included some preliminary comments concerning design considerations as well as general recommendations to minimize construction impacts.

As you know, the proposed project is within Connecticut's coastal boundary as defined by section 22a-94 of the Connecticut General Statutes (CGS) and is subject to the provisions of the Connecticut Coastal Management Act (CCMA), sections 22a-90 through 22a-112. In accordance with CGS section 22a-100, state actions within the coastal boundary that may significantly affect the environment must be consistent with the standards and policies of the CCMA.

The site of the bridge crossing has abundant coastal resources, both to the north and south, including coastal waters, intertidal flats and tidal wetlands. Tidal wetlands exist on the east bank, both north and south of the bridge, and a large intertidal flat is just to the southeast. As the project proceeds towards design, these resources should be protected to the maximum extent practicable, with remaining impacts to be fully mitigated. Siting of staging and equipment storage areas should also minimize impacts.

Managing for water quality protection will be an important consideration. Construction practices for replacement or repair represent significant potential adverse impacts to water quality during construction and all best management practices to minimize and mitigate for such impacts should be incorporated as design proceeds. Details of construction sequencing and measures to avoid discharge of any foreign material into the water column would be required.

The opportunity to introduce treatment measures to the stormwater collection system for a new bridge should be explored. Constraints involved in this location, including soil suitability, groundwater elevation, space limitations (particularly on the west bank), conflicts with existing

utilities, and maintenance requirements, are recognized. However, emerging technologies may provide workable solutions. The feasibility of using new techniques and/or best management practices for the stormwater drainage system for a new bridge such that stormwater is not discharged directly to the river but is retained and treated prior to entering the river should be explored. Additional treatment measures in handling stormwater would aid in reducing nonpoint source pollutants (bacteria, sediment, chemicals, metals, salt, debris, etc.) that wash off bridges.

The bridge is near several active water-dependent uses, including a marina and rowing club north of the bridge, which rely on navigation through the project area. The relevant CCMA policy is "preserve and protect water-dependent uses by managing uses in the coastal boundary giving highest priority and preference to water-dependent uses and facilities in shorefront areas" [CGS section 22a-92(b)(1)(A)]. Every effort must be made to preserve navigation access during the construction period.

The project may involve new dredging and other benthic impacts if piers are built in new locations, so there will be long-term habitat issues to examine. Depending on the methods used to demolish the piers, measures will be recommended to protect anadromous fish and perhaps other species from excessive noise, pressure waves, or other demolition effects. Also, dredging projects are routinely evaluated for effects on winter flounder reproduction during the period February 1 through May 15 and anadromous fish migration from April 1 through June 30; seasonal restrictions would be required, as appropriate.

In designing a new bridge, the effects of climate change, in particular sea level rise and increased storm surges, should be considered. Given that the age of the existing structure is over 130 years, it is likely that the replacement bridge will be expected to be in service throughout the century. It should be designed to withstand projected conditions for its anticipated lifespan.

The extent of any existing pedestrian and bicycle network in the neighborhood of the project is not known. Providing such access across a new bridge should be considered during design.

The Natural Diversity Data Base (NDDB) had been consulted in 2013 to determine whether a project to repair the mechanical drive system of the bridge would affect Federally listed endangered or threatened species or species listed by the State, pursuant to section 26-306 of the CGS, as endangered, threatened or special concern, that occur within the project corridor. In a letter to Christopher Samorajczyk dated February 28, 2013 the NDDB reported extant populations of two listed species in the project vicinity: the state threatened peregrine falcon (*Falco peregrinus*) nesting under the I-95 bridge south of the site and the species of special concern blueback herring (*Alosa aestivalis*). The NDDB reports that the falcon has again nested at the I-95 bridge and that the standard protocol to mitigate potential impacts to peregrine falcons developed by the Office of Environmental Planning should be observed for the project. The Inland Fisheries Division will provide appropriate mitigation measures during the permitting process.

The NDDB response includes all information regarding critical biological resources available 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 Natural History Survey and cooperating units of DEEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substitutes 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 into the Data Base as it becomes available. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits.

The extent of land side construction along the roadway approaches is not known. Given the urban location, the discovery of hazardous materials, hazardous waste and/or contaminated soils is likely. It is assumed that ConnDOT's standard procedures, such as preparing Land Use Evaluation reports (Task 110) and Preliminary Evaluation reports (Task 120), would be employed to evaluate the potential to encounter contamination. A site-specific hazardous materials management plan should be developed prior to commencement of construction and a health and safety plan for construction workers should also be prepared.

The Department's standard comments concerning construction projects in urban areas are submitted for your information:

Development plans in urban areas that entail soil excavation should include a protocol for sampling and analysis of potentially contaminated soil. Soil with contaminant levels that exceed the applicable criteria of the Remediation Standard Regulations, that is not hazardous waste, is considered to be special waste. The disposal of special wastes, as defined in section 22a-209-1 of the Regulations of Connecticut State Agencies (RCSA), requires written authorization from the Waste Engineering and Enforcement Division prior to delivery to any solid waste disposal facility in Connecticut. If clean fill is to be segregated from waste material, there must be strict adherence to the definition of clean fill, as provided in Section 22a-209-1 of the RCSA. In addition, the regulations prohibit the disposal of more than 10 cubic yards of stumps, brush or woodchips on the site, either buried or on the surface. A fact sheet regarding disposal of special wastes and the authorization application form may be obtained at: Special Waste Fact Sheet.

The Waste Engineering & Enforcement Division has issued a *General Permit for Contaminated Soil and/or Sediment Management (Staging & Transfer)* (DEP-SW-GP-001). It establishes a uniform set of environmentally protective management measures for stockpiling soils when they are generated during construction or utility installation projects where contaminated soils are typically managed (held temporarily during characterization procedures to determine a final disposition). Temporary storage of less than 1000 cubic yards of contaminated soils (which are not hazardous waste) at the excavation site does not require registration, provided that activities are conducted in accordance with the applicable conditions of the general permit. Registration is required for on-site storage of more than 1000 cubic

yards for more than 45 days or transfer of more than 10 cubic yards off-site. A fact sheet describing the general permit, a copy of the general permit and registration forms are available on-line at: Soil Management GP.

For construction projects, the Department typically 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 proposal. If you have any questions concerning these comments, please contact me.

cc: Priti S. Bhardwaj, ConnDOT Lou Corsino, DEEP/APSD John Gaucher, DEEP/OLISP Micheal Grzywinski, DEEP/OLISP Robert Hannon, DEEP/OPPD Mark Johnson, DEEP/IFD Dawn McKay, DEEP/NDDB