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ENERGY & ENVIRONMENTAL PROTECTION**  
**OFFICE OF ENVIRONMENTAL REVIEW**  
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**Subject:** Route 71 Infrastructure/Roadway Improvements, New Britain

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The Department of Energy and Environmental Protection has received the Notice of Scoping for proposed state funding for infrastructure and roadway improvements along Hartford Road and the Route 9 off-ramp in New Britain to support construction of a Costco Wholesale facility. The following comments are submitted for your consideration.

The project area is located in the upper watershed of an unnamed tributary to Bass Brook, which has had a history of flooding issues. The stormwater collection system for the project should be designed so that there will be no increased peak flows from the site that would exacerbate downstream flooding.

The Department strongly supports the use of low impact development (LID) practices such as water quality swales and rain gardens for infiltration of stormwater on site. Key strategies for effective LID include: managing stormwater close to where precipitation falls; infiltrating, filtering, and storing as much stormwater as feasible; managing stormwater at multiple locations throughout the landscape; conserving and restoring natural vegetation and soils; preserving open space and minimizing land disturbance; designing the site to minimize impervious surfaces; and providing for maintenance and education. Water quality and quantity benefits are maximized when multiple techniques are grouped together. Consequently, we typically recommend the utilization of one, or a combination of, the following measures:

- the use of pervious pavement or grid pavers (which are very compatible for parking lot and fire lane applications), or impervious pavement without curbs or with notched curbs to direct runoff to properly designed and installed infiltration areas,
- the use of vegetated swales, tree box filters, and/or infiltration islands to infiltrate and treat stormwater runoff (from building roofs and parking lots),
- the minimization of access road widths and parking lot areas to the maximum extent possible to reduce the area of impervious surface,
- if soil conditions permit, the use of dry wells to manage runoff from the building roofs,
- the use of vegetated roofs (green roofs) to reduce the runoff from buildings,
- proper treatment of special activity areas (e.g. loading docks, covered maintenance and service areas),
- the installation of rainwater harvesting systems to capture stormwater from building roofs for the purpose of reuse for irrigation, and

- providing for pollution prevention measures to reduce the introduction of pollutants to the environment.

The effectiveness of various LID techniques that rely on infiltration depends on the soil types present at the site. According to the Natural Resources Conservation Service's Soil Web Survey, the soils at the site are rated as most suitable for dry and wet basins but least suitable for their capacity for stormwater management practices involving pervious paving or infiltration. However, infiltration practices may be suitable at this site. Soil mapping consists of a minimum 3 acres map unit and soils may vary substantially within each mapping unit. Test pits should be dug in areas planned for infiltration practices to verify soil suitability and/or limitations. Planning should insure that areas to be used for infiltration are not compacted during the construction process by vehicles or machinery. The siting of areas for infiltration must also consider any existing soil or groundwater contamination.

The Department has compiled a listing of web resources with information about watershed management, green infrastructure and LID best management practices. It may be found on-line at: [LID Resources](#). The *Low Impact Development Appendix* to the *Connecticut Stormwater Quality Manual* also includes a section on urban retrofits and redevelopment. It is available on-line at: [LID Appendix](#).

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. The general permit also requires that post-construction control measures incorporate runoff reduction practices, such as LID techniques, to meet performance standards specified in the permit. For further information, contact the division at 860-424-3018. A copy of the general permit as well as registration forms may be downloaded at: [Construction Stormwater GP](#).

The discharge of stormwater from certain commercial areas with more than five acres of contiguous impervious surface is covered by a *General Permit for the Discharge of Stormwater Associated with Commercial Activity* issued by the Department. The commercial activities that are covered by the permit are defined in the regulations by Standard Industrial Classifications and include food, general merchandise, and home furnishing stores as well as wholesale trade and miscellaneous retail establishments. Registration describing the facility and the stormwater discharge must be submitted to the Department prior to the initiation of the commercial activity. A stormwater management plan, including measures such as sweeping, controls for outside storage of materials, spill control plan, maintenance and inspection, employee training and recordkeeping, must be prepared. For further information, contact the Permitting & Enforcement Division at 860-424-3018. A copy of the general permit as well as registration forms may be downloaded at: [Commercial Stormwater GP](#).

The Natural Resources Conservation Service's soil survey depicts lobes of Wilbraham silt loam on the Costco parcel and further south on the existing golf course as well as an area of Scarborough muck in the southerly portion of the parcel to be conveyed by ConnDOT. It is recommended that a certified soil scientist perform a reconnaissance of the site in order to confirm that there are not any areas which would be regulated as wetlands or watercourses as defined by section 22a-38 (15) and (16) of the Connecticut General Statutes (CGS), respectively. If the reconnaissance identifies regulated areas, they should be delineated. Any development should avoid regulated areas to the maximum extent practicable. 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.

In order to protect wetlands and watercourses 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](#). A *Low Impact Development Appendix* to the Guidelines has been prepared to provide specific guidance on low impact development techniques. It is also available on-line at: [LID Appendix](#).

The proposed project improvements are not within the 100-year flood zone on the communities' Flood Insurance Rate Maps. The Costco site is a Balanced Priority Funding Area on the Locational Guide Map for the *Conservation and Development: The Plan for Connecticut 2013 - 2018*, due to the presence of agricultural soils.

It appears that the Costco facility will include a gasoline station. The installation of underground storage tanks must comply with the provisions of section 22a-449(d)-102 of the Regulations of Connecticut State Agencies. For further information, contact the Bureau of Materials Management & Compliance Assurance, Underground Storage Tank Program at 860-424-3374. A fact sheet explaining the Underground Storage Tank Regulations are available on-line at: [UST Regulations](#).

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](#).

The Natural Diversity Data Base, maintained by DEEP, contains no records of extant populations of 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 in the project area. This information is not the result of comprehensive or site-specific field investigations. Also, be advised that this is a preliminary review. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEEP for the proposed site. Consultation with the Natural Diversity Data Base should not be substituted for on-site surveys required for environmental assessments. The extent of investigation by competent biologist(s) of the flora and fauna found at the site would depend on the nature of the existing habitat(s). If field investigations reveal any Federal or State listed species, please contact the DEEP Geologic & Natural History Survey at 860-424-3540.

For large 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.

In order to reduce the impact to air quality from mobile source emissions, the Department encourages developers to provide accommodations for alternative modes of transportation, such as mass transit and bicycles. Options to encourage mass transit could include providing "pull-out" lanes for buses to safely load and unload passengers outside of the main travel lane, providing a central location within the proposed development for transit facilities such as bus shelters. To accommodate bicyclists, the proposed development can include bike storage facilities, bike paths (that may connect to a larger network) or wide shoulders on roadways for added bicycle safety.

In keeping with the Department's interest in furthering the use of alternate fuels for transportation purposes, we recommend that Level 2 electric vehicle charging stations be included at 3% of the parking spaces in the project design. Increasing the availability of public charging stations will facilitate the introduction of the electric vehicle technology into the state and serve to alleviate the present energy dependence on petroleum and improve air quality.

Thank you for the opportunity to review this proposal. If you have any questions concerning these comments, please contact me.

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