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May 2018

Stormwater Pollution Control Plan

General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (Permit No. DEEP-WPED-GP-015)

Greater Hartford–Central Connecticut Reliability Project (GHCCRP)
115-kV Underground/Overhead Transmission Line and Substation Upgrades
Newington, West Hartford and Hartford, Connecticut

Submitted to:
Connecticut Department of Energy and Environmental Protection
Water Permitting and Enforcement Division
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1.0 Introduction

To improve the reliability of the electric transmission system in the Greater Hartford and Central Connecticut area, the Connecticut Light and Power Company doing business as Eversource Energy (Eversource or the Company) will construct, operate, and maintain a new 115-kilovolt (kV) transmission line and make related improvements to two existing substations and an existing 115-kV line tap into one of the substations in Hartford County. These improvements, referred to collectively as the Greater Hartford-Central Connecticut Reliability Project (the Project or GHCCRP; refer to the locus map included in the Project mapping in Attachment F), will consist of the following:

- A new approximately 3.7-mile 115-kV transmission line (designated by Eversource as the 1346 Line), consisting of both overhead and underground segments, which will extend between Eversource's existing Newington Substation in the Town of Newington, through the Town of West Hartford, to Eversource's existing Southwest Hartford Substation in the City of Hartford. The new transmission line will be aligned almost entirely along existing linear corridors, including an Eversource right-of-way (ROW), Amtrak Railroad ROW, and state and local road ROWs. Approximately 2.4 miles of the new transmission line will be in an overhead configuration, while approximately 1.3 miles (consisting of a 1.16-mile segment in the Town of Newington and a 0.17-mile segment in the City of Hartford) will be underground.

- Modifications to both Newington and Southwest Hartford substations, including the expansion of each substation's fenced area by approximately 0.3 acre, to connect the new 115-kV line to the transmission system.

- Reconfiguration and reconductoring of a short (0.01-mile) section of an existing overhead 115-kV transmission line (referred to as the Newington Tap or Tap) that connects to Newington Substation.

The U.S. Environmental Protection Agency (EPA) requires a National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from construction sites that disturb more than one acre of land or from smaller sites that are part of a larger, common plan of development. For the purposes of the NPDES program, construction activities include, but are not limited to clearing and grubbing, excavating, grading, and dewatering.

In the State of Connecticut, the EPA has delegated this permit program to the Connecticut Department of Energy and Environmental Protection (CT DEEP). Pursuant to Section 22a-430b of the Connecticut General Statutes (CGS), construction projects that will involve the disturbance of one or more total acres of land area must submit a completed *General Permit Registration Form for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities* (DEEP-WPED-REG-015; "Registration Form") to CT DEEP and

must comply with DEEP's *General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* (DEEP-WPED-GP-015; General Permit, effective October 1, 2013 ["GP"]).

Coverage under the GP is obtained by submitting the Registration Form to the CT DEEP prior to the commencement of construction activities. This Stormwater Pollution Control Plan (SWPCP) is required as part of the Project registration process under the GP. The Registration Form has been submitted electronically and CT DEEP has assigned eFile ID number 38777 to the Project. A printed copy of the CT DEEP Registration form is included as Attachment A in the hardcopy version of this SWPCP to be kept onsite during construction (the Registration Form has been excluded from the electronic filing of this SWPCP per CT DEEP ezFile instructions).

The purpose of stormwater management is to prevent soil erosion at construction sites and subsequent discharge of pollutants, (including, but not limited to, sediment), to adjacent properties and receiving waters, such as wetlands and watercourses. This is generally accomplished through soil stabilization, diversion of runoff, and stormwater structural control practices. Stormwater management also addresses pollution prevention through use of measures to control and reduce sources of pollutants and turbidity, as well as the use of good housekeeping practices on the construction site.

This SWPCP is intended for use by Eversource and its contractor(s) during and after Project construction. The SWPCP establishes requirements and instructions for the management of stormwater discharges specific to this site. The SWPCP has been prepared in accordance with sound engineering practices, and is consistent with the *CT DEEP 2002 Connecticut Guidelines for Soil Erosion and Sediment Control* (Connecticut Guidelines) and the 2004 Connecticut Stormwater Quality Manual (Connecticut Standards) available at http://www.ct.gov/deep/stormwater. Eversource has developed their *Best Management Practices Manual for Massachusetts and Connecticut (Construction and Maintenance Requirements), September 2016* (BMP Manual) document for implementation during construction, which incorporates, and is consistent with the Connecticut Guidelines. To facilitate regulatory review, Eversource's BMP Manual has been omitted from the SWPCP, and specific erosion and sediment (E&S) control measures and engineering typical detail drawings from the BMP Manual have been referenced and/or excerpted in this SWPCP and supporting attachments. As necessary during construction to control soil erosion on the Project site, Eversource's contractor may implement additional E&S control measures detailed in the Eversource BMP Manual that have not been included in this SWPCP. Eversource's BMP Manual is available for regulatory agency review upon request.

During construction, the contractor(s) shall be responsible for implementing all elements of the E&S control measures as defined on the drawings and in this SWPCP. Major construction activities will be phased to minimize areas of disturbance, and E&S controls will be implemented, maintained and adjusted as needed to minimize soil erosion throughout construction.

Throughout the construction process, the Registrant (Eversource) or Registrant's agent shall regularly inspect all erosion control measures for structural integrity and effectiveness in order to minimize the potential for erosion or sediment transport. After construction, the Permittee shall be responsible for maintaining these E&S control measures as necessary until areas disturbed by construction have been stabilized.

Any contractor hired to perform earth-disturbing activities (e.g., clearing, grading, excavating) will be required to certify that they will comply with the terms and conditions of the SWPCP and perform his/her operations in strict conformance with the GP. Personnel responsible for implementation of the SWPCP are identified in the Project Contact List located in Attachment C. Certification statements are located in Attachment D.

The Project shall be considered complete when all post-construction measures are installed, cleaned and functioning, all disturbed areas have been satisfactorily stabilized for at least three months following the cessation of construction activities, and all temporary erosion control measures have been removed as required by this plan. All conditions and requirements in this plan have been derived from the text of the GP. A copy of the GP can be found in Attachment B of the hardcopy version of this SWPCP to be kept onsite during construction (the GP has been excluded from electronic filing of this SWPCP per CT DEEP ezFile instructions).

2.0 General Project Description

Eversource proposes to construct a new approximately 3.7-mile 115-kV transmission line from its existing Newington Substation in the Town of Newington, through the eastern portion of the Town of West Hartford, to its Southwest Hartford Substation in the City of Hartford. Eversource also proposes to expand and perform associated upgrades to the Newington and Southwest Hartford substations, and to modify a 0.01-mile section of an existing overhead 115-kV transmission line (the 1783 Line) connection to Newington Substation (referred to as the Newington Tap). A locus map is included in the Project mapping in Attachment F.

2.1 115-kV Transmission Line

The new 3.7-mile 115-kV transmission line between Newington and Southwest Hartford substations (designated by Eversource as the 1346 Line) will be aligned almost entirely within existing linear ROWs. The line will be comprised of two underground cable segments, connected by an overhead segment within the Amtrak ROW, along the Proposed Route as illustrated on Project Mapping (Attachment F) and described briefly as follows:

- ***Underground Route Segment: Newington***. This 1.16-mile underground segment will extend from Newington Substation east/northeast to the Amtrak

ROW. For approximately 0.81 mile between Newington Substation and State Route 173 (Willard Avenue), the underground cable will be located on Eversource's property and within an existing Eversource ROW. This ROW is presently occupied by five 23-kV distribution circuits, including one underground circuit and four overhead circuits supported, in a double-circuit configuration, on two sets of approximately 40-foot-tall wood poles. Near the existing distribution circuits, Eversource manages the ROW in low-growth vegetation consistent with utility use; however, outside of these areas, the ROW is not maintained and is characterized by a variety of vegetative types, including mature trees. An Eversource distribution switching station is located on Eversource property adjacent to and west of State Route 173; the new 115-kV cable will extend beneath the southern portion of this station.

From the intersection of the Eversource ROW, the cable will extend east across State Route 173 and then will traverse north for approximately 0.14 mile within the state road ROW to Shepard Drive[1], a town road. From there, the cable will extend for approximately 0.21 mile east to the Amtrak ROW, first aligned along the south side of Shepard Drive before traversing beneath a small unnamed tributary to Piper Brook and then across a paved and graveled parking area for Shepard Steel, a privately-owned, industrial use property. The underground cable segment will terminate at a transition structure to be located on the Shepard Steel property, west of and adjacent to the Amtrak ROW. At the transition structure, the 115-kV line will switch to an overhead configuration.

- ***Overhead Route Segment: Newington, West Hartford, and Hartford***. Approximately 2.4 miles of the proposed 115-kV line will be overhead, along the east side of the Amtrak ROW. From the transition structure located at the end of the underground cable segment in Newington, the overhead portion of the line will span the CT*fastrak* and Amtrak's two existing rail lines and then will extend north within the east side of the Amtrak ROW. South of Interstate 84 (I-84), the overhead line will turn west, again spanning the Amtrak rail lines and CT*fastrak* to another transition structure, proposed for location on Amtrak property north of a movie theater parking lot.

- ***Underground Route Segment: Hartford***. This 0.17-mile underground segment will extend from a transition structure located at the north end of the overhead line segment to Southwest Hartford Substation. From the transition structure located

[1] From the intersection with the Eversource ROW and State Route 173, the cable route will extend diagonally beneath the state road and then will be aligned along the east side of the state ROW, within the unpaved road shoulder.

on commercial property adjacent to Amtrak ROW, the underground cable will extend west for approximately 0.1 mile across the lawn area adjacent to the paved parking lot for the Bow Tie Cinema (a multiplex movie theater), which is situated directly south of Interstate 84 (I-84), and then will turn north along New Park Avenue (a City of Hartford road), crossing beneath I-84, to Southwest Hartford Substation.

As part of the cable system, three buried splice vaults will be required for interconnecting the cable sections and subsequently maintaining the underground portion of the 115-kV transmission line. The three splice vaults will be located along the underground cable segment in Newington; no splice vaults will be required along the short underground cable segment in Hartford. Along the underground segment in Newington, two of the splice vaults are proposed for location in upland areas along the Eversource ROW, while the third is planned for location along Shepard Drive. Additionally, cables for communications, temperature monitoring, and ground continuity will be installed within the duct bank system. The ground continuity conductor and temperature monitoring fibers will be pulled into and spliced within the transmission vaults, and the fiber optic cables will be pulled into and spliced within a pre-cast handhole located near each splice vault location. The outside dimensions of the handholes will be approximately 5 feet long by 5 feet wide by 5 feet high. The handholes will be installed below grade with a single access hole, or manhole cover, of approximately 30 inches in diameter.

The location of the cable system (duct bank and two splice vaults) within Eversource's ROW is depicted on the Attachment F maps, which also illustrate the general location of the cable system within the road ROWs and the parking lots near the Amtrak ROW. The exact location of the cable within and adjacent to public road ROWs, as well as the location of the splice vault along Shepard Drive, will be determined based on final engineering design, taking into consideration any constraints posed by existing buried utilities, the location of other physical features, and the requirements and preferences of the entity that maintains each road.

The overhead segment of the 115-kV line will consist of 49 galvanized steel monopole structures, placed at intervals of approximately 250- to 300-feet along the Amtrak ROW, and two galvanized transition structures. The steel monopoles will be approximately 95 to 110 feet in height above ground and will be arranged in a vertical configuration. Each of the two transition structures will be a steel monopole, between 95 and 105 feet in height above ground.

2.2 Substation Modifications

Modifications to both Newington and Southwest Hartford substations are required to connect the new 115-kV line to the transmission system. The new 115-kV line will enter both substations in an underground configuration. To accommodate the equipment for the new 115-kV line connection, Eversource proposes to expand each substation by approximately 0.3 acre, extending the existing fence at each facility. Each substation, and the modifications proposed as part of the Project, are described as follows:

- **Newington Substation** occupies approximately 1.7 acres of an 11.4-acre Eversource property located at 185 Cherry Hill Drive in the northwestern portion of Newington. The Eversource property is bordered by residential uses. Newington Substation, which has been in operation for approximately 60 years, includes both a 115-kV yard and a 23-kV distribution yard. Eversource ROWs, occupied by overhead transmission lines and overhead and underground distribution lines, extend from the substation to the north, south, east, and west. The proposed Project modifications will involve an expansion of the developed portion of Newington Substation by approximately 0.3 acre and the addition of a cast-in-place concrete retaining wall on the south and west sides of the substation fence line to maintain the grade for the expanded portion of the substation. Within the substation, the existing 1783 Line position will be relocated to accommodate the connection of the new 115-kV line to the existing 1783 Line position. Other modifications include a new, approximately 65-foot-tall deadend structure for the relocation of the 1783 Line, the construction of a new battery enclosure to house new protection and control equipment, and the extension of the substation ground grid.

- **Southwest Hartford Substation**, which occupies approximately 2.1 acres of a 7.1-acre Eversource property at 219 New Park Avenue, is located in a commercial area in southwestern Hartford. The site is bordered on the south by I-84, on the east by New Park Avenue, to the north by a tributary to the South Branch of the Park River; and to the west by commercial areas. Two 115-kV underground cables (the 1722 Line and the 1704 Line) and nine 23-kV distribution lines presently connect to the substation. To accommodate the Project facilities required for the new 115-kV line, Eversource will expand the eastern substation fenced area by approximately 65 feet to the east and to modify the existing access road and gate off New Park Avenue. As part of the Project, grading will be performed, as required. The existing 115-kV yard will be reconfigured into a ring bus, with two new 115-kV circuit breakers, and a portion of the 1722 Line and related substation equipment will be relocated. Other Project modifications will include the installation of four new 65 foot-tall deadend structures within the substation, the extension of the substation ground grid, as well as the relocation or removal of certain existing interconnection piping and a valve cabinet.

2.3 Newington Tap Modifications

Eversource's 115-kV overhead 1783 Line extends from Farmington Substation (in the Town of Farmington) to East New Britain Substation (in the City of New Britain), passing adjacent to Newington Substation. A 0.01-mile segment of the 1783 Line connects to Newington Substation. This connection, referred to as the Newington Tap (Tap), will be modified as part of the Project. Specifically, the existing 0.01-mile Tap transmission line will be relocated and rebuilt with larger conductors. These modifications will provide space within the substation to accommodate the new 1346 Line termination and will avoid overloads on the Tap line under certain contingencies, such as when Newington

Substation tries to simultaneously supply both East New Britain and Farmington substations.

2.4 Scope of Construction Activities

Eversource will construct, operate, and maintain the Project facilities in accordance with all regulatory approvals and standard Company practices, as well as in conformance with its license agreement with Amtrak (for the overhead portion of the transmission line). The Project will be constructed in full compliance with the national electrical codes and standards, good utility practice, and the Connecticut Department of Energy and Environmental Protection (CT DEEP), Public Utilities Regulatory Authority (PURA) regulations covering the method and manner of high voltage line construction. Construction details are provided in the Project's Development and Management (D&M) Plan[2], which must be submitted to and approved by the Connecticut Siting Council prior to the start of construction.

2.4.1 115-kV Transmission Line

The construction of the new 115-kV line will require temporary contractor yards, material/equipment staging sites, offices, and similar support facilities. Different procedures will be used to construct the underground and overhead segments of the new 115-kV transmission line, as summarized below.

2.4.1.1 Overhead Segment

Eversource will construct the overhead transmission line in accordance with the conditions of its license agreement with Amtrak, as well as Company and industry specifications for overhead 115-kV lines. Eversource's license agreement with Amtrak is expected to specify certain construction methods and schedules, including the performance of Project activities in accordance with time frames established by Amtrak to avoid or minimize conflicts with rail operations. As such, construction along the Amtrak ROW is expected to include night-time work.

Construction activities will be concentrated on the Amtrak ROW and adjacent support sites as needed for material and equipment staging and storage. Additional detail on the construction sequence and methods for the overhead transmission line segment is included in Section 4.3.

[2] The Project D&M Plan will include specifications for Project construction, operation, and maintenance, including environmental mitigation measures. A D&M Plan is a pre-requisite condition of the Council's issuance of authorization to construct the Project.

2.4.1.2 Underground Segments

The installation of the underground line segments will typically require a minimum width of 30- to 40- feet[3] to accommodate the excavation of the cable trench, access for construction equipment, and space for the temporary storage of equipment and materials. For the installation of the cable segment within the Eversource ROW, some of the overhead distribution circuits will have to be temporarily relocated to taller poles to be installed adjacent to existing distribution poles to allow for adequate clearance between the conductors and construction equipment. Some additional work space will be required to accomplish the relocation (refer to the Attachment F maps).

As part of the final design for the location of the cable system within public roads, Eversource will coordinate with other underground and overhead utility companies, with the Newington and Hartford Departments of Public Works, and with CT DOT regarding the location of the cable facilities, as well as the methods and schedule to be used to install the cable system. During construction, primary consideration will be given to public safety, traffic control, adherence to approved work hours, conformance to regulatory commitments, and outreach to municipalities and the public. Additional detail on the construction sequence and methods for the underground cable segments is included in Section 4.2.

During normal operation, the 115-kV line will be monitored and maintained in accordance with Eversource's standard procedures. The location of the new transmission line will provide ready access in the event that maintenance is required.

2.4.1.3 Substation Modifications

The modifications at Newington and Southwest Hartford substations will require similar construction activities, such as establishment of construction support/staging or material laydown areas; site preparation; foundation construction; installation of equipment; wiring, testing, and interconnections; and final site clean-up, restoration, and security. In addition, the proposed substation expansions will involve vegetation removal and earth-moving activities, such as grading and filling. No blasting will be required for the substation modifications. The actual sequence of activities will vary for each substation, based on the site-specific modifications. See Section 4.4 for additional detail on the construction sequence and methods for the substation modifications.

Further, at Newington Substation, due to the earth-moving activities (cut and fill) required to create a level area for the substation expansion, a cast-in-place concrete retaining wall

[3] A minimum 40-foot-wide work space width will be required along the underground segment within the Eversource distribution line ROW.

will be constructed along the expanded south and west substation fenced areas, behind which imported fill will be used to create a suitable sub-base for the expanded substation area. The expansion area will be graded to meet the elevation of the existing substation (refer to the Project Mapping in Attachment F). In addition, a new drainage system will be installed along the proposed retaining wall and will collect runoff for the yard expansion. The existing drainage system is to remain in place. The new drainage will not be tied to the existing drainage system and will flow into the existing scour hole, which will be expanded to accommodate increase flow due to the expansion.

The 0.3-acre Newington Substation expansion will be contained within upland areas. However, the site preparation work around the western and southern side of the substation fence to provide ingress/egress for construction activities will require temporary construction activities in wetland N-1. To perform the substation expansion activities while minimizing impacts to this wetland, an access road (consisting primarily of temporary timber matting) will be extended as depicted on the maps in Attachment F. These timber mats may be installed in conjunction with the Newington Tap modifications (refer to Section 2.4.1.4) and left in place for use during the substation expansion.

2.4.1.4 Newington Tap

The modifications to the Newington Tap will require the removal of two existing 115-kV transmission line structures and the installation of one new structure, as well as the development of a new termination point for the 1783 Line within Newington Substation. Standard overhead transmission line construction procedures, as generally summarized below, will be used to perform these activities[4]:

- Survey and stake the relocated structure locations and mark/flag the boundaries of the previously delineated wetlands.
- Clear vegetation from work sites, pursuant to the vegetation removal limits depicted on the Project Mapping in Attachment F.
- Install E&S controls, as required, in accordance with the Project Mapping and E&S Control Details (Attachment F) and Eversource's BMP Manual.
- Install temporary access to work sites and prepare work pads.
    - Access to Structure 8001 will be from Quincy Lane.

[4] Construction staging and support for the Newington Tap work is expected to be co-located within the same areas identified for the Newington Substation modifications (refer to Attachment F). The sequence in which some standard construction activities (e.g., installation of E&S controls) may vary, depending on conditions at the time of construction.

  - Access to structures 16072, 16073 and 16074 will be from Cherry Hill Drive to the existing access on the west side of the Newington Substation fence, and then via the use of temporary timber matting (refer to the Project Mapping in Attachment F).

  - Work pad installation will involve the installation of a stable base (consisting of timber mats, or equivalent) to support foundation drilling and other structure installation equipment.

- Construct the new foundation, install new Structure 16702, shield wires, optical groundwire (OPGW), and conductors.

- Reposition guy wires on Structures 16073 and 8001.

- Remove temporary construction matting and construction debris and restore disturbed sites.

- Maintain temporary E&S controls until sites are re-stabilized (e.g., revegetated).

2.4.2 Access Roads, Staging Areas and Contractor Yards

2.4.2.1 Access Roads

No new permanent access roads are proposed for construction of the Project. For work on the proposed substation expansions, Eversource will utilize existing onsite paved or graveled access roads/driveways on the substation facility properties. At the Newington Substation, access is off Cherry Hill Drive in Newington. Access for the Southwest Hartford Substation is off New Park Avenue in Hartford.

Access for the proposed Newington Tap modifications will be via the existing gravel access road on the west side of the Newington Substation facility. The installation of timber matting around structures 16072, 16073 and 16074 for work space and access will be necessary. For access to structure 8001, Eversource will install a temporary access road from Quincy Lane to access a timber mat work pad around this structure. When construction of the Newington Tap modifications is complete, Eversource will remove the temporary access road off Quincy Lane and the timber matting around structures 16072, 16073 and 16074, restore the ROW to pre-construction grades and contours to the extent practicable, and revegetate the areas.

For access to and along the underground segments of the Project, Eversource will access the cable alignment from their substation facility properties and from public roadways. To facilitate access along the cable route for construction equipment and personnel, Eversource will temporarily install a crushed stone/gravel base in uplands and timber matting in wetlands that will serve as both a work pad and access road. In Newington, the public road crossings include access off Avery Road, West Hartford Road, Willard Avenue (State Route 173), and Shepard Drive. At the end of Shepard Drive, Eversource will access the duct bank alignment through the existing gravel parking lot for the Shepard

Steel commercial property. In Hartford, access will be from New Park Avenue and the existing parking area at the northern end of the Bow Tie Cinemas property. Additionally, to access their ROW west of the Switching Station off Willard Avenue in Newington, Eversource proposes to utilize an existing off-ROW access road/driveway off Willard Avenue through private property (See Project Mapping in Attachment F). After construction of the duct bank is complete, Eversource will remove the areas of crushed stone/gravel work surface and timber matting in both uplands and wetlands, and restore the work spaces to their pre-construction grades and contours to the extent practicable, and revegetate all areas disturbed as a result of underground construction.

For construction of the overhead segment of the Project, Eversource will access the proposed work spaces within the Amtrak corridor by travelling along an existing onsite gravel access road immediately east of the railroad tracks (see Project Mapping in Attachment F). Additionally, Eversource will access the Amtrak corridor from several existing access roads and points along the Project alignment as depicted on the Project Mapping.

2.4.2.2 Staging Areas and Contractor Yards

Eversource may utilize any existing cleared, upland areas of the Newington and Southwest Hartford substation properties for temporary equipment staging and laydown areas, spoil / topsoil stockpiling, construction office trailers and for construction personnel vehicle parking. Additionally, Eversource plans to utilize several existing paved and/or crushed stone/gravel areas immediately adjacent to the Amtrak corridor along the Project alignment for equipment and materials staging areas during construction (see Project Mapping in Attachment F).

Eversource is also planning to use four other larger areas for temporary equipment and materials staging and as contractor yards during construction of the Project. These areas predominantly exist as paved and/or crushed stone/gravel yards that will be used for equipment staging and laydown areas, spoil / topsoil stockpiling, construction office trailers and for construction personnel vehicle parking. These large equipment and materials staging areas and contractor yards are at the following locations as depicted on the Project Mapping in Attachment F:

1. 90 Day Street, Newington (with additional access off Jansen Court, West Hartford);
2. 223 Newfield Avenue, Hartford;
3. Flatbush Avenue, Hartford; and
4. Dexter Avenue, West Hartford (two separate areas on either side of Dexter Avenue).

After construction of the Project is complete, Eversource and their contractor will demobilize from these equipment and materials staging areas, and contractor yards. All equipment

and materials will be removed and the areas will be returned to their pre-construction condition (including revegetation as applicable) and land use to the extent practicable.

2.5 Area of Disturbance

The Project's total disturbed area will be approximately 9.48acres. This includes 0.5 acre of expanded substations (0.24 acre expansion for Newington Substation; 0.26 acre expansion for Southwest Hartford Substation) and 1.32 acres of additional disturbance during construction , 3.57 acres of temporary impervious areas for access roads and work pads (to be improved with crushed stone/gravel), 1.86 acres of disturbance associated with the duct bank trench in non-paved areas and other minor areas of disturbance adjacent to access road and work pads, and 2.23 acres of staging areas that will require soil disturbance for use. Additionally, there is approximately and 3.37 acres of temporary construction matting (both in wetlands and uplands, and 20.82 acres of existing paved, crushed stone/gravel, or otherwise stabilized areas that will be utilized for access roads, construction work pads, temporary work space, or equipment staging areas / contractor yards. These areas of temporary timber matting and existing paved, crushed stone/gravel, or otherwise stabilized areas have not been included in the overall disturbance footprint for the Project as no soil disturbance will occur in these areas, are already stabilized surfaces for all intents and purposes of the SWPCP and the General Permit registration, and will effectively be used "as is".

Typical new work sites in uplands will require a crushed stone/gravel pad or work surface to be installed to create a stable surface for use by construction equipment. Timber construction matting, or equivalent, will be used for work pads located in wetland areas. The locations of all work spaces are shown on the attached site plans in Attachment F. All work will be performed entirely within Eversource's fee-owned property, existing transmission line ROW, or areas where Eversource has obtained ROW or license agreement from the underlying property owner.

2.6 Stormwater Discharge Information

The linear portions of the Project area will be restored to pre-construction conditions. As a result, the proposed construction will not significantly alter the runoff coefficient of the Project sites and will not promote channeling, or areas of concentrated runoff as existing drainage patterns will not significantly change between pre- and post-construction site conditions.

For the Newington Substation and Southwest Hartford Substation properties, the existing average runoff coefficient has been calculated at 0.33 for Newington Substation and 0.46 for Southwest Hartford Substation, using a runoff coefficient of 0.9 for all areas of existing processed aggregate, and runoff coefficients of 0.12 - 0.21 for all pervious areas, depending on the existing soil type and slope (see Table 6-3 from Chapter 6 of the Connecticut Department of Transportation [CT DOT] Drainage Manual).

The proposed substation expansion areas will contain a processed aggregate base and ¾-inch gravel surface, resulting in a total new semi-pervious cover of include 0.23 acre at the

Newington Substation, and 0.23 acre at the Southwest Hartford Substation. The post construction drainage areas have been calculated to have a weighted average runoff coefficient of 0.35 for the Newington Substation and 0.49 for the Southwest Hartford Substation using a runoff coefficient of 0.9 for all areas proposed to be improved with processed aggregate, and runoff coefficients of 0.12 - 0.21 for all pervious areas, depending on the existing soil type and slope. Runoff calculations are provided in Attachment E.

3.0 Existing Conditions

3.1 Existing Rights-of-Way

The majority of the Project has been sited within existing developed utility and transportation ROWs. The underground segments of the new line will be aligned within existing ROWs, including an approximately 0.8-mile, Eversource distribution line ROW in Newington, as well as local and state public road ROWs in Newington and Hartford. The width of the existing Eversource ROW is typically 100 to 200 feet, although the existing cleared ROW where vegetation is managed for low-growth species varies from 55 feet to 80 feet wide. The overhead portion of the proposed transmission line will be situated along the eastern side of Amtrak's New Haven-Hartford-Springfield railroad ROW, the western portion of which contains the CT DOT's CT*fastrak* busway.

3.2 Land Use

Lands in the Project area are characterized by a variety of uses and types, including transportation and utility corridors (state and local roadways, Amtrak railroad corridor, the CT*fastrak* busway, Eversource's overhead transmission and distribution line ROWs) and residential, commercial, and industrial developments. Recreational greenways and trails are located in the vicinity of the Proposed Route, but no recreational areas, trails, or other community facilities will be crossed by the proposed transmission line.

To identify and assess existing and future land uses and conditions in the Project area, Eversource consulted published resources utilizing a geographic information system (GIS); analyzed aerial photography and maps; examined state, local, and regional land use plans; and reviewed data concerning public and private recreational resources, including the CT DEEP's watershed summary sheets. In addition, Eversource consulted with Amtrak to determine future railroad development plans. Research was conducted to identify whether any parcels preserved by local land trusts (e.g., West Hartford Land Trust) will be crossed by or are located near the Proposed Route.

Based on this research, Eversource determined that the Project is not located near any Connecticut Heritage Areas, national scenic or historic trails, state- or federally-designated scenic highways, or CT DOT scenic land strips.[5] Similarly, no land trust parcels are located along or in the immediate vicinity of the Proposed Route. However, the state-recognized Piper Brook Flood Control Greenway (part of the Newington Greenway System) and the Park River Greenway are located within 0.5 mile of the Proposed Route, as is the town-designated Trout Brook Greenway in West Hartford.

As shown on the Project mapping, several dominant land uses are evident within the Project area. These general land uses include utility and transportation corridors, commercial/industrial, and residential. The following summarizes primary land use patterns, by municipality, in the Project area.

- **Town of Newington:** The Project will traverse approximately 1.3 miles in the northwestern portion of Newington (1.1 miles in an underground configuration and 0.2 mile overhead along the Amtrak ROW). Specifically, the Project will extend east from Newington Substation along Eversource's ROW, crossing Avery Road and West Hartford Road, turning north onto Willard Avenue (State Route 173), then east onto Shepard Drive, before crossing the CT*fastrak* corridor and ultimately being collocated within and along the east side of the Amtrak ROW. Adjacent to the Eversource ROW and neighboring roads in Newington, land use consists primarily of single-family residences (located generally between Newington Substation and Shepard Drive). In addition, commercial/industrial developments are located along Shepard Drive near the Amtrak/CT*fastrak* corridor.
- **Town of West Hartford:** The Project traverses approximately 1.6 miles through the eastern portion of West Hartford. From the Newington border to the Hartford border, the Project will be aligned overhead along the east side of the Amtrak ROW. In West Hartford, land uses in the vicinity of the Project include commercial/industrial developments.
- **City of Hartford:** An approximately 0.7-mile segment of the Project will be located in southwestern Hartford (approximately 0.5 mile in an overhead configuration along the Amtrak ROW; 0.2 mile in an underground configuration). Land uses along this segment consist of industrial and commercial areas. The overhead transmission line will diverge from the Amtrak ROW south of I-84, spanning west across both the railroad tracks and the busway to a planned transition structure located on Amtrak property immediately adjacent to the Bow Tie Cinemas parking lot. From this structure, the new 115-kV line will transition to

[5] http://ctecoapp1.uconn.edu/simpleviewer/ezviewer.htm. Accessed 07/2015

an underground configuration, extending adjacent to the movie theatre parking lot before intersecting with New Park Avenue and traversing along New Park Avenue, beneath I-84, to Southwest Hartford Substation.

Additionally, Eversource has sited equipment and materials staging areas and contractor yards at various locations along the Project alignment. The selected staging areas and yards primarily consist of existing paved and/or graveled parking lots or idle commercial/industrial properties; however, some areas consist of undeveloped commercial/industrial properties with lawn or other herbaceous vegetation ground cover.

3.3 Threatened and Endangered Species Review

Eversource consulted the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) mapping database as recently as July 31, 2017 to determine whether the Project area coincides with the known habitat or potential habitat of species identified by federal authorities as threatened, endangered or species of concern, or if critical habitat for these species is provided. The IPaC data indicated that the northern long-eared bat (*Myotis septentrionalis;* NLEB) is the only federally listed species potentially occurring in the Project area. However, according to the USFWS IPaC correspondence and Connecticut Natural Diversity Data Base[6], critical habitat (e.g., roosting sites, caves) is not known or has not been designated for this species in the Project area. The preferred habitat for this bat species includes caves or mines, where the bats hibernate in the winter, and within cavities or in crevices of both live and dead trees, where the bats roost in the summer.

The USFWS issued a final rule regarding the NLEB under Section 4(d) of the federal Endangered Species Act (ESA) prohibiting certain activities that could result in an incidental take of NLEB occurring within 0.25-mile of a known hibernacula or within 150 feet of known, occupied maternity roost trees during the pup season (June 1 to July 31). Given that the Project does not occur within 0.25-mile of a known hibernacula or within 150 feet of any known, occupied maternity roosts, the proposed tree clearing associated with the Project is an excepted activity under the Programmatic Biological Opinion issued by the USFWS on the final 4(d) rule. For federal agency actions (including permit authorizations for non-federal projects) that may affect the NLEB, the U.S. Army Corps of Engineers (ACOE) must provide a copy of the USFWS' NLEB 4(d) Rule Streamlined Consultation Form to the appropriate USFWS Field Office describing the activities associated with the action (i.e., permit authorization) that are excepted from incidental take prohibitions. Eversource provided a courtesy copy of this form to the ACOE filled out

[6] http://www.ct.gov/deep/lib/deep/endangered_species/images/nleb_approved2_16.pdf

with the applicable information for use with consultation requirements with the USFWS for authorization of the Project under the ACOE Connecticut General Permit (ACOE CT GP).

In addition, Eversource reviewed the CT DEEP's publicly available Natural Diversity Database (NDDB), which provides general polygons that depict approximate locations of state- and federally-listed species occurrences and significant natural communities. This research, using the most recent available CT DEEP mapping[7], indicates that there are no CT DEEP NDDB-mapped polygons or known species along the Project corridor. The closest mapped CT DEEP NDDB polygon is located in the vicinity of tributaries to Bass Brook approximately 1,100 feet west of the Project area in Newington.

In accordance with the CT DEEP's requirements for application submittal under the GP, Eversource submitted a Request for NDDB State Listed Species Review to the CT DEEP NDDB. On August 1, 2017, the CT NDDB provided correspondence (Determination No. 201705377) identifying that there are known populations of State-listed Special Concern turtles (*Clemmys guttata* and *Terrapene carolina carolina*) occurring along the most southwestern portion of the Project. Additionally, the CT NDDB provided best management practices that are required to be implemented during construction of the project to avoid unnecessary impacts to these species.

3.4 Historic Preservation Review

Eversource conducted National Historic Preservation Act (NHPA) Section 106 consultations with the Connecticut Department of Economic and Community Development, which serves as the Connecticut State Historic Preservation Office (SHPO). Additionally, Eversource consulted with the Tribal Historic Preservation Offices (THPOs) of the Mashantucket Pequot Tribal Nation, and the Mohegan Tribe of Indians of Connecticut, as required by the ACOE CT GP. The SHPO is responsible for reviewing projects to ensure that significant cultural resources would be protected or otherwise preserved.

To evaluate historic and archaeological resources in the Project area, Eversource retained Heritage Consultants, LLC (Heritage), a firm specializing in cultural resource analyses. Heritage conducted baseline desktop research and subsequent field reconnaissance to assess the known historic and archaeological resources along the Proposed Route specifically and in the Project area in general. The results of Heritage's cultural resource analyses are presented in the following reports prepared by Heritage:

- *Cultural Resources Review of the Project Region Associated with the Greater Hartford Connecticut Reliability Project* dated May 19, 2015;

[7] http://www.depdata.ct.gov/naturalresources/endangeredspecies/nddbpdfs.asp

- *Cultural Resources Review Report Addendum* dated November 4, 2016; and,
- *Phase IB Cultural Resources Reconnaissance Survey of the Greater Hartford – Central Connecticut Reliability Project Corridor in Newington, Connecticut* dated April 2017.

Eversource provided the above referenced relevant cultural resource investigation reports to the SHPO for review and concurrence. The SHPO responded on August 17, 2017 concurring with the results of Heritage's survey reports and assessments and concluding that the Project would have no adverse effect on any cultural or historic resources. No response has been received to date from the Mashantucket Pequot Tribal Nation or the Mohegan Tribe of Indians of Connecticut.

Although not required, Eversource has included the Mashpee Wampanoag Tribe in the consultation process as well. A representative of the Mashpee Wampanoag Tribe responded on July 26, 2017, concurring with Heritage's survey results and assessments.

3.5 Coastal Zone Consistency

The Project is not located within the CT DEEP-mapped Coastal Boundary; therefore, a consistency determination with the Coastal Zone Management Act (CGS Section 22a-92) is not required.

3.6 Public Drinking Water Supply Watersheds and Aquifer Protection Areas

The Project is not located within any public drinking water supply watersheds or CT DEEP-mapped Aquifer Protection Areas or Wellhead Protection Areas; therefore, additional notification requirements under Section 4(*g*) of the GP do not apply, and compliance with the Aquifer Protection Regulations (Section 22a-354i(1)-(10) of the Regulations of Connecticut State Agencies [RCSA]) is not required.

3.7 Wetlands, Watercourses and FEMA Flood Zones

Water resources, including wetlands, watercourses, and Federal Emergency Management Agency (FEMA) 100-year flood zones and flood ways are shown on the Project Mapping in Attachment F. Seven wetlands were identified and delineated within the Project area. Wetland classifications, according to Cowardin et al 1979, include palustrine emergent wetlands, palustrine forested wetlands, and palustrine scrub-shrub wetland. No tidal or fresh-tidal wetlands occur in the Project area.

Five watercourses are located within the Project area (see Table 3.3-1 below). The Project area is located within the Connecticut River Major Drainage Basin. Within the Connecticut River Basin, the Project area is located in the Park River and Trout Brook Regional Basins. The northernmost portion of Eversource's property at Newington Substation is located within Trout Brook watershed and the proposed alignment involves an overhead crossing of Trout Brook within this watershed, along the Amtrak/CT*fastrak* corridor in West Hartford. Trout Brook and its associated FEMA 100-year and 500-year floodplain is the only named watercourse crossed by the Project. The Park River

Regional Basin is comprised of three subregional basins: Bass Brook, Piper Brook, and Park River. The Bass Brook basin is an upstream basin and is not crossed by the Project. The southern portion of the Project is located within the Piper Brook subregional basin and the Project crosses two watercourses (IS-2, and PS-1) within this basin. The northern portion of the Project is located within the Park River subregional basin. The Project will not cross any streams within this basin; however, an unnamed tributary to the South Branch of the Park River is located in the northern portion of the Eversource's Southwest Hartford Substation parcel.

Timber construction matting or equivalent will be used to construct temporary access roads and work pads in wetland areas. Temporary stream crossings for equipment will consist of timber construction mat bridges as described in Section 5.6. Proposed open cut crossings of the two watercourses (IS-2 and PS-1) will be conducted utilizing either a "dam-and-pump" or a "dam-and-flume" dry crossing technique described further in Section 4.2.3.

TABLE 3.3-1 PROJECT AREA WATERCOURSES

Location	Feature ID	Watercourse Name	Flow Regime (P or I)[1]	CT DEEP Water Quality Classification[2] (Where Applicable)	Crossing Type
Newington Substation / Tap	IS-1	Unnamed tributary to Piper Brook	I	A	NA
Underground Segment	IS-2	Unnamed tributary to Piper Brook	I	A	Open Cut
Underground Segment	PS-1	Unnamed tributary to Piper Brook	P	A	Open Cut
Overhead Segment	PS-2	Trout Brook	P	A	Aerial Span
Southwest Hartford Substation	PS-3	Unnamed tributary to the South Branch of the Park River	P	A	NA

1 : P = Perennial; I = Intermittent

2 : State Water Quality Designations Use Description

A: Known or presumed to meet water quality criteria that support potential drinking water supply, fish and wildlife habitat, recreational use, agricultural and industrial supply, and other legitimate uses, including navigation. Surface waters which are not specifically classified shall be considered Class A or Class AA (CTDEEP 2013). None of the waterbodies crossed by the Project are listed in CT DEEP fisheries management activities.

3.7.1 Impaired Waters

The Project will directly discharge to Trout Brook (Waterbody Segment ID: CT4403-00_01), which is listed as an impaired waterbody in the most recent CT DEEP report identifying impaired waters pursuant to Section 303(d) of the federal Clean Water Act[8].

Trout Brook is impaired for recreation with a total maximum daily limit (TMDL) established for *Escherichia coli*. Additionally, the waterbody is impaired for providing habitat for fish, other aquatic life and wildlife due to unknown causes, though potential causes identified by the CT DEEP in their most recent report include industrial discharges, illicit discharges, remediation sites, and groundwater impacts.

Per Section 3(*b*)(12) of the Construction General Permit, discharges to Trout Brook as a result of the Project are not subject to the provisions of Section 5(*b*)(3) of the Construction General Permit, as the watercourse is not impaired for Sedimentation/Siltation, and the cause of impairment for habitat is not a result of Site Clearance (Land Development or Redevelopment) or Post-Development Erosion and Sedimentation.

3.7.2 Wild and Scenic Rivers

The Project does not discharge to any watercourses that have been designated as Wild and Scenic under the federal Wild and Scenic River Act (16 U.S.C. 1271-1287); therefore, construction activities will not have a direct nor adverse effect on any wild and/or scenic rivers, additional notification requirements under Section 4(g) of the GP do not apply, and consistency with the Wild and Scenic River Act is not required.

3.8 Municipal Separate Storm Sewer Systems

Given the linear nature of the Project and the overall length of the transmission line, portions of the Project within or crossing public roadway ROWs will discharge to municipal separate storm sewer system (MS4) owned and operated by the Town of Newington and City of Hartford. Therefore, in accordance with Section 4(g) of the GP, Eversource is concurrently submitting a copy of this GP registration and attachments to the Town of Newington and City of Hartford MS4 owner and operators.

[8] (http://www.ct.gov/deep/lib/deep/water/water_quality_management/305b/2016_iwqr_final.pdf)

4.0 Construction Sequencing

4.1 Construction Sequence and Methods

This document serves as a supplement to the BMP Manual for Eversource transmission projects. The Contractor shall be aware that grubbing, stripping, and associated earthwork operations all have significant potential to cause erosion and sedimentation until complete stabilization of the site has occurred. Work is anticipated to begin in August 2018, and conclude during the 4th quarter of 2019.

4.2 Construction Procedures for the Underground Transmission Cable Segment

The following typical construction activities will be performed to install the 115-kV underground cable segments. As noted below, certain activities will vary, depending on the alignment of the cable system beneath paved or un-paved areas.

- Survey and stake work space boundaries, vegetation clearing boundaries, and underground utilities.
- Mark the boundaries of previously-delineated wetlands and watercourses, as well as environmentally-sensitive areas to be avoided or otherwise protected (e.g., habitat for the state-listed species in Newington).
- Establish construction field offices and yards, typically including space for an office trailer, equipment storage and maintenance, sanitary facilities, and parking.
- Establish traffic control procedures to minimize traffic disruption and provide a safe working environment (for cable installation in or adjacent to roads, or that otherwise involves construction activities that will impact traffic on roads).
- Remove vegetation, as required, from work areas. Vegetation removal (tree and brush clearing, mowing, side tree trimming) will be required along the Eversource ROW, within temporary work areas adjacent to State Route 173,, at the crossing of the un-named tributary to Piper Brook at the end of Shepard Drive, and along portions of the underground segment in Hartford. Other vegetation removal will be performed as necessary to provide access for construction equipment to install the cable system in paved areas.
- Establish a construction access road/work spaces along the Eversource ROW in Newington.
- Relocate (temporarily) the distribution lines within the Eversource ROW.
- Install splice vaults and handholes.
  - Excavate for splice vaults and handholes. For the vault and handhole located along Shepard Drive, pavement saw cutting and removal will be performed as needed. For the two vaults to be located within Eversource's ROW, topsoil will be segregated for subsequent reuse during restoration.

  - Install pre-cast splice vaults and handholes.
  - Backfill over top of the splice vaults and handholes with excavated spoils and/or other approved material. Restore topsoil over the vault locations along the Eversource ROW.
  - Restore disturbed areas (revegetate or repave, depending on vault location).
- Construct duct bank system.
  - Excavate trench, including saw cutting and pavement removal for location in roads or other paved areas. Within non-paved areas, topsoil will be segregated for subsequent reuse during restoration.
  - Install conduits in trench.
  - Encase the conduits in concrete.
  - Backfill trench with approved material, including subsoil and topsoil, as appropriate in non-paved areas.
  - Restore affected areas, by repaving (roads, parking lots) or by revegetating with an appropriate seed mix and stabilizing with mulch, as appropriate.
- Install cable system.
  - Pull the transmission cables, fiber optic cables, and ground continuity conductor into the conduits.
  - Splice the cables within the splice vaults or hand holes as appropriate, or terminate cables at substations.
- As necessary, return the temporarily-relocated Eversource distribution lines to permanent configuration along the Eversource ROW and remove any temporary poles.
- Remove temporary construction access roads and work spaces.
- Complete any remaining site restoration work (e.g., pave affected road ROWs and parking lots; revegetate non-paved or graveled areas, such as those along the Eversource ROW).

4.2.1 Work Site Boundary Demarcation and Vegetation Removal

The first step in the construction process will be to flag or otherwise demarcate work space boundaries, as well as previously-delineated environmental resources (e.g., wetlands, streams, state-listed species habitat). Along the Eversource ROW and in other areas where the new 1346 Line will not be installed beneath paved or graveled areas (e.g., the Piper Brook tributary crossing at the end of Shepard Drive), the next step in the underground cable construction process will be to remove vegetation from the areas needed for construction, including access roads and work spaces. The Attachment F maps identify vegetation clearing limits for construction along the underground cable

route. In addition, where the cable duct bank will be installed beneath paved roads or road shoulders (e.g., State Route 173, Shepard Drive, New Park Avenue), some adjacent trees and ornamental landscaping may have to be trimmed or removed to provide clearance from construction equipment.

In general, within the vegetation removal limits, vegetation will be cleared or mowed as required to allow the installation of the duct bank and splice vaults. Over and in the general vicinity of the duct bank and splice vault excavation areas, tree stumps and roots will be grubbed and removed. In other areas, stumps will typically be cut flush with the ground surface and left in place.

Temporary E&S controls may be installed before vegetation removal, depending on site-specific characteristics. After vegetation removal, soil E&S controls typically will be installed as needed around work limits (e.g., access roads, work spaces) in or near wetlands and streams. (Refer to the typical drawings of E&S control measures in Attachment F).

4.2.2 Access Roads and Work Spaces

The Attachment F maps illustrate the access and work locations planned for use in constructing the underground cable segments. The public road network will provide the principal means for transporting equipment and materials to construction work sites.

Where the cable system is routed along roads or through parking lots, the existing roads and paved parking areas will provide both direct access and work space for construction activities. The work spaces established within road ROWs will provide space for the construction equipment required to excavate the cable trench and install the duct bank, as well as for material staging. An approximately 30 foot-wide construction area will be required to install the cable system within paved areas. A slightly wider work space (up to 50 feet) will be needed in the vicinity of the planned splice vault adjacent to Shepard Drive. To accommodate construction activities while maintaining traffic flow on State Route 173 Eversource has obtained easements from private property owners for the temporary work space abutting the road ROW.

Along the Eversource ROW, temporary access roads/work spaces will be established to provide ingress and egress along the underground cable route, as well as to provide space for the excavation and installation of the duct bank and splice vaults. As illustrated on the Attachment F maps, these on-ROW roads/work spaces will be accessible via Eversource's Newington Substation property, as well as from Avery Road, West Hartford Road, and State Route 173. Along the Eversource ROW, a typical work space width of 40 feet will be required; this width will be needed to accommodate an access road, the cable trench, and space for the temporary storage or topsoil/subsoil (in upland areas) and the installation of E&S controls.

At intersections with public roads, access roads/work spaces will typically be wider to accommodate equipment turning radii. In upland areas, access roads/work spaces will typically be graveled.

Through wetland areas along the Eversource ROW, access roads/work spaces will be constructed using timber construction mats. Within and near wetlands and watercourses, E&S controls will be installed as necessary adjacent to such access roads/work spaces.

Eversource will require the underground cable system construction contractors to use BMPs as warranted by site-specific conditions to maintain access road stability and minimize the potential for erosion and sedimentation.

Along the cable segment within non-paved areas, after vegetation removal and access road installation, topsoil will be removed, as needed, from the cable trench and splice vault excavation areas. Topsoil will be stockpiled separately for future use during restoration.

4.2.3 Duct Bank and Splice Vault/Handhole Installation

4.2.3.1 General Procedures

Trenching, duct bank/conduit installation, and backfilling will proceed in a similar fashion along the portions of the underground cable system both within the Eversource ROW and along paved areas. The following describes the procedures common to the installation of underground cable system along both segments of the Project. Information pertinent to cable system installation in paved areas vs. non-paved areas is provided following this discussion.

In general, specialized construction crews will proceed progressively along the cable route such that relatively short sections of trench (typically 200 feet per crew) will be open at any specific time and location. Construction work along the trench area usually occupies a linear work space that ranges from approximately 600 to 800 feet.

During non-work hours, temporary cover (steel plates) will be installed over the open trench within paved roads to maintain traffic flow over the work space. Similar plates may be installed over open trench areas in paved parking areas; alternatively, temporary fencing may be erected around such locations if traffic flow does not need to be maintained.

Along the cable segment within the Eversource ROW, open trench areas will be protected by steel plates or plywood sheets during non-work hours.

At three upland locations (two on Eversource property and one within the ROW shoulder adjacent to Shepard Drive), pre-cast concrete splice vaults and hand holes will be installed below ground. The outside dimensions of each splice vault are approximately 8 feet wide by 8 feet high by 24 feet long, and each handhole are approximately 5 feet wide by 5 feet high by 5 feet long. Therefore, the installation of each splice vault will typically

require an excavation area approximately 12 feet wide by 12 feet deep and 28 feet long, and each handhole will typically require an excavation area approximately 7 feet wide by 8 feet deep and 7 feet long adjacent to the splice vault. The actual burial depth of each vault and handhole may vary, depending on topography and the depth of the adjacent cable sections that will connect to the vault (the depth of the cables will depend on factors such as the avoidance of other buried utilities). Each vault will have two entry points, via manholes, to the surface; and each handhole will have one. After the area above a splice vault or handhole is backfilled and restored, only the manhole covers will be visible; these covers will be set flush with the ground or road surface.

Within the excavated trench, the PVC conduit will be installed in sections, each of which will be about 10 to 20 feet long and will have a bell and spigot connection. After installation in the trench, the conduits will be placed into spacers that hold the conduit in the desired configuration and then encased in concrete.

After the installation of the duct bank, the trench will be backfilled with approved material, over which topsoil will be placed. Wetland topsoils removed during trenching in wetland areas will be returned after installation of the duct bank is complete. Within existing paved areas, the trench will be repaved using an asphalt patch or equivalent as part of final restoration.

After the vaults and duct bank are in place, the conduits will be swabbed and tested (proofed), using an internal inspection device (mandrel), to check for defects.

4.2.3.2 Methods Specific to Installation in Paved Areas

Along the cable segments within roads and other paved areas, the initial step in preparing for the duct bank, splice vault and hand hole excavations will be to saw cut and remove pavement. Prior to pavement sawcutting, appropriate E&S controls, such as catch basin inlet protection, will be installed, as needed.

To install the duct bank, a trench will be excavated approximately 6 to 10 feet deep and approximately 5 feet wide (for trench depths requiring shoring to stabilize the sidewalls). Excavated material (e.g., pavement, subsoil) will be placed directly into dump trucks and transported to either a suitable disposal site or a temporary storage site. At the temporary storage site, materials will be screened/tested prior to final off-site disposal or to re-use as backfill in the cable system excavations. If groundwater is encountered, dewatering will be performed in accordance with authorizations from applicable regulatory agencies and may involve discharge to catch basins, temporary settling basins, filter bags, temporary holding tanks (frac tanks), or vacuum trucks.

4.2.3.3 Methods Specific to Installation within Eversource ROW: Work near Distribution Circuits

To provide electrical clearance necessary for the construction equipment to operate safely along the Eversource ROW, some temporary modifications to the existing overhead distribution lines will be performed. Wood poles ranging in height from approximately 60 to

80 feet will be installed near the existing 23-kV overhead poles as needed to temporarily increase the height of the distribution circuits and facilitate the construction of the underground cable. These poles will be removed after the cable system installation is complete. Similarly, east of West Hartford Road (including within wetland N-3) where the cable will be aligned on the south side of the Eversource ROW, access to the northern distribution poles will be required if the southern 23-kV circuits need to be temporarily relocated to facilitate cable system construction. Some additional work space will be required to accomplish this relocation (refer to the Attachment F maps).

4.2.3.4 Methods Specific to Installation across Wetlands and Watercourses

In Newington, the underground segment of the proposed 115-kV transmission line will cross five wetlands, an intermittent stream along the Eversource ROW, and an unnamed perennial tributary to Piper Brook located at the end of Shepard Drive (this tributary includes a linear wetland south of Shepard Drive). All construction activities involving these water resources will be performed in accordance with the conditions of the Connecticut Siting Council Decision and Order, as well as pursuant to the conditions of water resource permits issued by the CT DEEP and the U.S. Army Corps of Engineers (USACE), Eversource's BMP Manual, as well as to the other Project-specific plans included in Attachment F.

Eversource will install the cable system through the five wetlands within the ROW using an "open cut" method, which will minimize the time required to install the duct bank. This construction technique will require trenching to a minimum depth of approximately 6 feet for installation of the duct bank and subsequent backfill. Generally, a temporary construction area approximately 40 feet wide will be required to install the duct bank in wetlands. This 40-foot-wide area will accommodate access/work space for the equipment required to excavate and install the duct bank (approximately 20 feet), the duct bank trench (approximately 10 feet), and temporary spoil/topsoil storage and/or work space for materials/equipment staging, as needed (approximately 10 feet). Upon completion of the duct bank installation, the duct bank trench will be backfilled, temporary timber mats will be removed, and wetland and watercourse areas will be restored.

Within wetlands, the wetland boundaries along the ROW would be clearly flagged prior to the commencement of work. When working in or traversing wetlands, Eversource will:

- Develop access across wetlands to avoid interference with surface water flow or wetland functions.
- Install temporary construction matting or equivalent for access roads across wetlands or to establish safe and stable construction work spaces within wetlands, where necessary.
- Install and maintain E&S controls and other applicable construction best management practices in and around wetlands (see Project Mapping and E&S Control Details in Attachment F and Eversource BMP Manual, Appendix A Section 1.6).

- Conduct vegetation clearing in wetlands to minimize adverse effects (e.g., by using low-impact equipment and installing temporary timber mats [or equivalent] to minimize rutting).
- Pile cut woody vegetation in upland areas, or on matting in wetlands, so as not to block surface water flows within wetlands or otherwise to adversely affect the wetland integrity.
- Cut forested wetland vegetation without removing stumps, except over the cable trench and in other areas unless it is determined that intact stumps pose a safety concern for personnel or the movement of equipment.
- Remove and segregate the topsoil layer that must be removed for the cable trench excavation. The wetland topsoil layer would be stockpiled separately from the subsoil layer and, after the installation of the duct bank, would be replaced to promote revegetation using the existing seed bank contained in the topsoil layer.
- If groundwater is encountered, dewatering would be performed in accordance with authorizations from applicable regulatory agencies and may involve discharge to catch basins, temporary settling basins, wetland filter bags, temporary holding tanks (frac tanks), or vacuum trucks.
- Implement procedures for petroleum product management to avoid or minimize the potential for spills into wetlands. For example, to the extent practical, Eversource and their construction contractor would store petroleum products in upland areas more than 25 feet from wetlands; refuel construction equipment, except for equipment that cannot be practically moved, in upland areas and if refueling must occur within a wetland, provide temporary containment. Equipment, except for equipment that cannot be practically moved, would not typically be parked overnight on access roads or work pads in wetlands. If equipment must be parked overnight on construction matting in wetlands temporary containment will be required.
- Restore sites and temporary access ways in and through wetlands following the completion of cable installation activities.
- Restore wetlands to pre-construction grades and contours to the extent practicable. If necessary, stabilization by seeding with annual ryegrass or native seed equivalent will be required; otherwise, native vegetation can be expected to recolonize (see Project Mapping and E&S Control Details in Attachment F and Eversource's BMP Manual Section 5 for details on wetland restoration measures).
- Temporary E&S controls installed at the limit of work within and adjacent to wetlands will remain in place until all disturbed areas have been stabilized through revegetation or other final stabilization measures (i.e., paving or installation of gravel surface).

Two watercourses will be crossed by the underground segment of the proposed transmission line. These watercourse crossings are depicted on the attached Project Mapping (see Attachment F). Eversource would utilize a conventional "dry open cut" trenching method to install the underground cable and duct bank across these watercourses. To isolate the proposed work space within the streams and allow for trenching to occur under dry conditions, Eversource would temporarily bypass stream flows around the work space using either a coffer dam and stream bypass pumping method (i.e., "dam-and-pump") or a cofferdam and stream bypass via gravity method (i.e., "dam-and-flume"). These streamflow bypass methods are described in detail within the Eversource BMP manual (see BMP Manual Section 3.4.4 and BMP Manual Appendix A Sections 2.2 and 2.3) and are briefly described below.

To implement a dam-and-flume streamflow bypass, a temporary flume pipe (or pipes) would be laid linearly within the stream bed at the crossing location and temporary cofferdams (likely consisting of sand bags or equivalent) would be installed at the upstream and downstream ends of the flume pipe to direct stream flow (if any) through the pipe(s). The interior of the work space between the upstream and downstream cofferdams would then be dewatered as necessary and the underground cable and duct bank trench would be excavated beneath the flume pipe(s). The temporary coffer dam height, as well as the number and size of the flume pipes needed are based on the hydrologic characteristics of the watercourse at the point of crossing. Additional detail on this dry crossing method as well as an engineering typical detail drawing are included in the Project Mapping and E&S Control Details (Attachment F) and Eversource's BMP Manual (Appendix A Section 2.3)

For a dam-and-pump method, the work space across the stream would be isolated by temporarily damming both the upstream and downstream side of the work space using cofferdams of sandbags (or equivalent) and the streamflow would then be pumped from the upstream side to the downstream side of the work space. This would create a dry area within the stream bed in which the trench would be excavated and duct bank would be installed. The temporary coffer dam height, as well as the number and size of the bypass pumps needed are based on the hydrologic characteristics of the watercourse at the point of crossing. Additional detail on this dry crossing method as well as an engineering typical detail drawing are included in the Project Mapping and E&S Control Details (Attachment F) and Eversource BMP Manual (Appendix A Section 2.2)

Eversource will attempt to time the crossing of intermittent Watercourse IS-2 during a period of low flow or no flow to prevent storm flows from overtopping temporary cofferdams. There are no USGS-mapped streams in the vicinity of this intermittent drainage channel, thus hydrologic and hydraulic calculations could not readily be conducted for the unmapped intermittent drainage channel using desktop methods and software tools. This intermittent drainage originates from a culvert behind residential homes on Barnard Drive, and it is believed to convey stormwater drainage from roadway catch basins within the adjacent residential development. Therefore, Eversource will attempt to cross the intermittent stream "in the dry" and install appropriately sized

temporary cofferdams, as determined by the contractor and environmental inspector based on field conditions at the time of construction.

When working in or traversing watercourses, Eversource would:

- Install temporary construction matting or equivalent for equipment access across the watercourse or to establish safe and stable construction work areas, where necessary.
- Install and maintain E&S controls and other applicable construction best management practices in and around watercourses (see Project Mapping and E&S Control Details [Attachment F] and Eversource's BMP Manual Appendix A Section 1.6).
- Conduct vegetation clearing on the banks of watercourses and immediately adjacent without removing stumps except over the cable trench and in other areas unless it is determined that intact stumps pose a safety concern for personnel or the movement of equipment.
- Pile cut woody vegetation in upland areas, or on matting in wetlands, so as not to block surface water flows within watercourses or otherwise to adversely affect the watercourse integrity.
- If suitable gravel and cobble stream bed substrates are present over the trench line, remove and segregate the top 12 inches of stream bed substrates. These native stream bed substrates would be preserved separately from the subsoils and, after the installation of the duct bank and backfilling, would be replaced for the upper 12 inches of trench backfill within the watercourse.
    - If suitable gravel and cobble stream bed substrates are not present over the trench line, Eversource would use clean gravel and cobble for the upper 12 inches of trench backfill within the stream bed.
- If groundwater is encountered, dewatering would be performed in accordance with authorizations from applicable regulatory agencies and may involve discharge to catch basins, temporary settling basins, wetland filter bags, temporary holding tanks (frac tanks), or vacuum trucks.
- Implement procedures for petroleum product management to avoid or minimize the potential for spills into watercourses. For example, to the extent practical, Eversource and their construction contractor would store petroleum products in upland areas more than 25 feet from watercourses; refuel construction equipment, except for equipment that cannot be practically moved, in upland areas and if refueling must occur within 25 feet of a watercourse, provide temporary containment. Equipment except for equipment that cannot be practically moved, would not typically be parked overnight within 25 feet of a watercourse. If equipment must be parked overnight within 25 feet of a watercourse temporary containment will be required.

- Backfill trench with excavated spoils and/or other approved material. Other approved material may include fluidized thermal backfill (FTB).
- Restore watercourse bed and banks to pre-construction grades and contours to the extent practicable.
- Disturbed stream bed will be stabilized using Eversource's BMPs included in the Project Mapping and E&S Control Details (Attachment F) and Eversource's BMP Manual Appendix A Section 1.12 (pg A1-30). Previously segregated stream bed substrates or clean gravel and cobble will be backfilled for the upper 12 inches to restore pre-construction stream bed elevations.
- Stream banks will be seeded and, if necessary stabilized with an erosion control fabric to facilitate re-establishment of stream bank vegetation as detailed in the Project Mapping and E&S Control Details (Attachment F) and Eversource's BMP Manual Appendix A Section 1.6 (pg A1-14).
- Temporary E&S controls installed at the watercourse top of bank will remain in place until all disturbed areas have been stabilized through revegetation or other final stabilization measures (i.e., paving or installation of gravel surface).

Eversource will require the construction contractor(s) to adhere to such conditions and plans during the construction of the Project.

4.2.4 Cable Installation

After the conduits have been tested successfully, the transmission cables, fiber optic cables, and ground continuity conductors will be installed and spliced.

To install each transmission cable, a large cable reel will be set up over the splice vault, and a winch will be set up at one of the adjacent splice vault locations. The cables will then be inserted in the conduits by winching a pull rope attached to the ends of each cable.

The splice vaults will also be used as points for installing the fiber optic cables and ground continuity conductor under a separate pulling operation. The communications fiber optic cables will be spliced and pulled into a pre-cast handhole located near each splice vault location, and the temperature sensing fiber optic cable and ground continuity conductor will be pulled into the transmission cable splice vaults.

After the transmission cables, fiber optic cables and ground continuity conductors are pulled into their respective conduits, the ends will be spliced together in the vaults. Because of the time-consuming and precise nature of splicing high-voltage transmission cables, the sensitivity of the cables to moisture (which reduces cable life), and the need to maintain a clean working environment, splicing cables involves a complex procedure that requires a controlled atmosphere. This "clean room" atmosphere will be provided by an enclosure or vehicle that must be located over the manhole access points during the splicing process. It is expected to take approximately five to seven days to complete the splices in each splice vault

At Newington and Southwest Hartford substations, terminations will be connected to the ends of the cables. These terminations will link the underground cables to switches and bus work within the substations.

All temporary access roads will be restored in accordance with local, state, or federal specifications, or if on private easements, by agreement with the property owner.

4.2.5 Rock Removal

Since underground cable installation will involve both the excavation of a continuous trench and areas for splice vaults, rock could be encountered in some areas. Rock will typically be removed using mechanical methods, or mechanical methods supplemented by controlled drilling. Geotechnical investigation will be performed to confirm the presence/absence of rock and to determine the preferred removal method.

4.2.6 Cleanup and Restoration

After the installation of the duct bank and splice vaults, restoration will be performed. Restoration activities will include the removal of any remaining construction debris, signs, flagging, temporary access roads and work space, and other materials. Along the Eversource ROW, within unpaved areas of road ROW, at the un-named tributary to Piper Brook, and within the Bow-Tie Cinema property, areas affected by construction will be restored to approximate pre-construction grade and seeded, as needed, to promote revegetation. Temporary E&S controls will remain in place, as needed, until stabilization is achieved. Along the cable route within roads and parking lots, the areas affected by construction will be repaved.

All temporary access roads and work space areas will be removed from wetlands and watercourse crossings, as well as from uplands (including residential and commercial areas) as identified on the Attachment F maps. After removal of the access road materials, the affected areas will be re-graded (back-bladed), if necessary, to match the approximate contours of the land outside the construction zone. In some areas (e.g., slopes), construction activities may affect localized topography such that original contours cannot be restored. In such situations, the affected areas will be stabilized as warranted based on site-specific conditions.

After grading, upland areas affected by construction will be seeded with the appropriate seed mix and fertilized, if necessary. Seed mix(es) will be selected by Eversource to provide a quick vegetative cover until vegetation recolonizes the ROW. Along the Eversource ROW, shrub and herbaceous vegetative communities are expected to re-establish; however, Eversource will maintain all vegetation in an herbaceous or scrub-shrub cover type within 15 feet of the duct bank centerline for operations and maintenance purposes. In conjunction with the seeding, E&S controls (e.g., erosion control blankets, mulch) will be installed or maintained, as appropriate based on site-specific conditions and the time-of-year in which final grading is performed. Steep areas may be stabilized with bio-degradable, pre-made E&S control fabric containing seed,

mulch, and fertilizer, or the equivalent. Temporary E&S controls will be left in place and maintained until final stabilization is achieved.

If necessary, wetland areas affected by construction will be stabilized with annual rye grass, a wetland seed mix, or an equivalent mix (40 pounds/acre, unless standing water is present), which will serve to provide a temporary vegetative cover until wetland species become re-established. No fertilizer, lime, or mulch will be applied in wetlands unless allowed per the Project's regulatory approvals from the USACE or CT DEEP.

Flagging (or equivalent markers) denoting wetlands, streams, and other environmentally sensitive resource avoidance or protection areas will be maintained (and reflagged or marked as needed), typically until the completion of ROW restoration activities.

Restoration typically will be deemed successful, based on the effectiveness of stabilization measures (such as paving, revegetation), as defined in accordance with Project-specific permits and certificates. After appropriate stabilization is achieved, Eversource will remove temporary erosion controls.

Along the Eversource ROW in Newington, vegetative species compatible with the use of the ROW for transmission and distribution line purposes are expected to regenerate naturally over time. Eversource will promote the re-growth of desirable species (i.e., native vegetation that is compatible with the underground cable operation) by implementing its vegetation management practices to control tall-growing trees and, where practicable, undesirable invasive species, thereby enabling native plants to dominate the ROW.

4.3 Construction Procedures for the Overhead Transmission Cable Segment

Eversource will construct the 2.4-mile overhead segment of the Project in accordance with the conditions of its license agreement with Amtrak, as well as with Company and industry specifications for overhead 115-kV lines.

In general, the overhead transmission line will be constructed in several stages, some overlapping in time. The following summarizes the activities, materials, and equipment expected to be involved in the construction of the overhead transmission line segment:

- Survey and stake the proposed structure locations, ROW boundaries and monument line (where necessary), and the limited areas of clearing (as needed).
- Mark the boundaries of Trout Brook (the only watercourse crossing along the overhead line segment), and any other areas to be avoided or where mitigation measures are to be implemented.
- Establish the construction yards/field offices, including space for office trailer(s), equipment storage and maintenance, sanitary facilities, and parking. The locations are shown on the Project mapping included in Attachment F.

- Prepare the material staging sites (e.g., storage, staging, and laydown areas) to support the construction effort. The locations are shown on the Project mapping included in Attachment F.
- Perform vegetation clearing or mowing, where necessary, as shown on the Project mapping included in Attachment F.
- Install E&S controls, as needed, in accordance with Amtrak specifications and (as appropriate to urban areas).
- Identify and if necessary, improve or construct, access to work sites along the ROW. Amtrak maintains an existing access road east of the railroad tracks, adjacent to portions of the Project's overhead segment. As part of its license agreement with Amtrak, Eversource anticipates that this access road, or other Amtrak access points, will be used for Project construction activities to the extent practical. With Amtrak approval, the existing railroad access roads may be upgraded (using gravel or timber mats) for Project construction. In addition, various public roads and private driveways and parking lots abut the Amtrak ROW, and Eversource will use such areas to provide access to Project work sites, if needed.
- Prepare level work pads as necessary at each proposed 115-kV structure site, as well as at conductor pulling sites, and (if necessary) at guard structure/boom truck sites[9]. Work pad installation may involve grading and requires the installation of a stable base (consisting of gravel, timber mats, or equivalent) for drilling and other structure installation equipment.
- Construct structure foundations and erect/assemble new structures. These activities require flat-bed trucks for hauling new structure components, new hardware, and augers, other trucks for hauling reinforcing rods, drill rigs, cranes, concrete trucks for structures that require concrete for foundations, dump trucks for structures that require crushed rock backfill, and bucket trucks. Dump trucks also will be needed for foundation work for the removal of excavated material from the ROW. If groundwater is encountered during foundation excavation, pumping (vacuum) trucks or other suitable equipment will be used to pump water from the excavated areas. The water then will be discharged in accordance with applicable regulatory requirements.
- Install counterpoise, where needed. Depending on site-specific soil conductivity, supplemental grounding will be installed.

[9] Temporary guard structures or boom trucks with "bat wings" will be located at road and other crossings as a safety measure during conductor and OPGW installation.

- Install shield wires, OPGW, and conductors. The equipment required for these activities will include conductor reels, conductor pulling and tensioner rigs, and bucket trucks. Helicopters also may be used to install the initial pulling lines for the conductors or shield wires.
- Restore construction sites. Construction materials and debris will be removed from temporary access roads, work pads, and staging areas; such sites will then be re-graded or otherwise restored and stabilized. In the urban Project area, gravel or paving will typically be used for site restoration/stabilization. Construction debris will be removed from the Project area for proper disposal.
- Maintain temporary E&S controls until vegetation is re-established or disturbed areas are otherwise suitably stabilized with gravel or paved. After site stabilization is achieved, all temporary E&S controls will be removed from construction sites and disposed of properly.

4.3.1 Clearing and Vegetation Removal

Prior to commencing the civil work, vegetation removal will be performed. The Attachment F maps identify vegetation clearing limits for construction along the ROW. Within these limits, tall-growing tree species will be removed to meet the established minimum vegetation clearances from the new transmission line conductors.

Within the vegetation clearing limits for construction, other types of vegetation (e.g., shrubland, lawn, landscaping) also will be removed, as needed. As a result, some vegetation removal will be performed within presently managed portions of the ROW. Outside of the vegetation clearing limits shown on the Attachment F maps, trees and herbaceous or low-growing scrub/shrub species will only be cleared as needed to facilitate Project construction activities along on- and off-ROW access roads. Further, after initial vegetation removal (particularly after the new conductors are installed), trees adjacent to cleared areas may need to be selectively removed or pruned to achieve required clearances from conductors.

Temporary E&S controls may be installed before vegetation removal, depending on site-specific characteristics. After vegetation removal, soil E&S controls typically will be installed around work limits (e.g., access roads, work pads) in or near wetlands, streams, and other water resources.

In addition, during this phase of construction, flagging, exclusion fencing, or other types of boundary markings will typically be installed, if necessary, to demarcate areas of restricted construction access or environmental resource sensitivity.

4.3.2 Access Roads

Access to each transmission structure site will be required during construction. The existing Amtrak access road that is aligned east of and parallel to the railroad tracks will be used for construction to the extent practical, as will other existing access presently used by Amtrak

for rail line maintenance. Eversource will coordinate with Amtrak to determine the existing access that could be used during the transmission line construction.

Where no access road is available to a specific structure location within the Amtrak ROW, Eversource will identify appropriate access to work sites from public road crossings or from properties adjoining the railroad corridor. Such access may include travel along private roads, through the parking areas of commercial/industrial facilities that border the Amtrak ROW, or the creation of new access. Access to the transition structures on either end of the overhead line segment will be via public roads and the parking areas of commercial/industrial facilities that border the Amtrak ROW. Eversource will negotiate appropriate easements for access across private properties.

The existing Amtrak access roads may need to be improved, widened, or otherwise modified for use during the 115-kV transmission line construction. For example, to safely support the heavy construction equipment (e.g., flat-bed trailers, cranes, drill rigs, and concrete trucks) required to install the 115-kV transmission line foundations and structures, access roads must be sufficiently wide, with a stable base and grades that typically must be 10% or less.

Depending on site-specific conditions, grading may be required to develop or to improve access roads. Access road improvements typically will include widening roads as needed to provide a travel surface approximately 16 feet wide with 2-foot-wide shoulders on either side (additional width will be needed at turning or passing locations). Access roads will be graveled.

In addition, where Project access roads intersect with public roads, rock aprons or equivalent will typically be installed to minimize tracking of dirt from construction equipment onto the public road. Public roads in the vicinity of access roads may also be periodically swept to remove dirt that is tracked from construction activities.

4.3.3 Work Pads

Level areas (i.e., work pads) will be required at each transmission line structure site, as well as at conductor and OPGW pulling sites (if not collocated with the structure work pads) and at locations where temporary equipment (boom trucks) must be placed at road and other crossings during conductor and OPGW installation. These work pads will be used to provide a safe, level work base for construction equipment to install structure foundations and erect the structures; in addition, work pads will be used to stage structure components for final on-site assembly.

At the proposed transition structure location in a paved/gravel parking area in Newington, no work pad will likely be needed since construction equipment could safely operate on the level pavement/gravel; however, a work pad will be required for the transition structure site in Hartford, which is located in a lawn area near the movie theater parking lot. Similarly, along the Amtrak ROW where there is a stable gravel base from which the transmission line construction equipment can operate, work pads also may not be required. However, the

installation of the proposed 115-kV line within the comparatively narrow space along Amtrak ROW represents an atypical situation and poses certain constraints for the use of typically-sized 115-kV line work pads. As a result, with Amtrak's approval, all unoccupied portions of the Amtrak ROW may be used during the construction of the overhead line segment.

The specific locations and configurations of work pads will be determined during final Project design and coordinated with Amtrak. In general, however, work pads for the line construction along the Amtrak ROW are expected to range from 3,000 to 5,000 square feet for tangent structures and 10,000 to 20,000 square feet for angle and deadened structures. Work pads will be sized to accommodate the equipment required to excavate the structure foundations, install the transmission line structures, and string conductor.

Pulling pads, which will be required in certain locations along the Amtrak ROW for conductor and OPGW installation, will be designed in accordance with Eversource requirements, factoring in the constraints posed by the width of the Amtrak ROW. The exact locations and configurations of pulling pads (which may be collocated with structure work pads) will be determined during final Project design. (Refer to Section 4.3.5 for a discussion on how pulling pads are located.)

During conductor and OPGW installation, temporary work space to accommodate a boom truck with arms (which will serve as a "guard" to prevent the conductors and OPGW from sagging or reaching the ground) will be required at road crossings, as well as the overhead line crossings of the Amtrak rail lines and CT*fastrak* busway. Typically, such temporary guard equipment work space is estimated to be approximately 50 feet by 80 feet.

4.3.4 Foundations and Structure Installation

4.3.4.1 Foundation Types and Excavation

The proposed 115-kV transmission line structures will be either direct embed or supported on drilled shaft foundations. Tangent structures will typically be direct embedded. Angle, deadend, and transition structures will typically have a drilled shaft foundation. Excavations for line-structure foundations are expected to be accomplished using mechanical excavators (drill rigs) and pneumatic hammers.

Blasting is not expected to be required to install the new 115-kV structures. However, if site-specific subsurface conditions (as determined by borings) warrant the use of blasting, a controlled drilling and blasting plan will be developed by a certified blasting contractor in conformance with Amtrak approval and procedures, and in compliance with state and local regulations. Owners of nearby properties will be contacted in advance of the blasting, and pre-blast surveys will be performed as appropriate. (Refer to Section 4.4.2 for details regarding blasting protocols.)

4.3.4.2 Structure Assembly

The transmission line structures will be delivered to staging areas/work pads in sections, then assembled, and installed using a crane. Insulators and connecting hardware will be installed on most structures at this time.

4.3.4.3 Structure Grounding

In addition to the natural grounding of the transmission line structures that is provided by their foundation contacts with the earth, a ground ring and ground rods will be buried around each foundation. The ground ring will be installed after the completion of the foundation and the installation of the structure, but before shield wires are installed. Additionally, lightning arresters shall be installed on the new 115-kV transmission line structures as appropriate to provide additional protection. The lightning arresters shall be affixed to the transmission line structure with a chain and ground wire and will not increase the above ground structure height.

The need for and location of counterpoise or additional ground rods at specific structure sites will be determined based on soil resistivity and/or footing resistance testing, which will be performed as part of the construction process. Where required, counterpoise wires will extend longitudinally from the ground rings around the transmission line structures. Small equipment (e.g., a ditch witch, small excavator, or equivalent) will typically be used to bury the counterpoise wires; such equipment will excavate a narrow (approximately 12 inches wide) trench, into which the counterpoise wire will be fed. Ground rods, which may be used in conjunction with counterpoise, will typically be buried between or near the ground rings.

4.3.5 Conductor Installation

The installation of overhead line conductors and shield wires requires the use of special pulling and tensioning equipment, which will be positioned at pre-determined locations along the overhead transmission line segment. Helicopters also may be used to install the initial pulling lines at the commencement of the conductor/shield wire pulling processes.

The wires will be pulled under tension to avoid contacting the ground and other objects. The insulators and hardware will then be installed on all structures. Finally, in accordance with industry standards and design specifications, the conductors and shield wires will be pulled to their design tensions and attached to the hardware by linemen in bucket trucks.

The selection of conductor pulling sites will be based on a variety of factors, including: accessibility, angles within the line sections where the conductors will be pulled, the locations of deadend structures (which keep installed conductors under high tension), the length of conductors and OPGW to be pulled, puller capacity, and snub structure loads. Other considerations include the placement of pullers, tensioners, conductor anchors, and other associated pulling equipment, including the installation of a temporary grounding system. Conductor pulling sites will be determined based on the consideration of these factors, the design load of the structures, and the avoidance or minimization of environmental effects. The Attachment F maps identify the locations of the pulling pads.

4.3.6 Cleanup and Restoration

ROW cleanup will include the removal of temporary access roads and temporary work pads, as well as construction debris (including E&S controls), signs, flagging, and fencing. Such materials will be removed from the ROW and will either be properly disposed of or

otherwise re-purposed. Some areas affected by construction will be re-graded as practical and stabilized by seeding or with gravel or paving, depending on the location.

All temporary access roads and temporary work pads will be removed from wetland areas and watercourse crossings, as well as from upland areas (including residential and commercial areas). After removal of the work pad and access road materials, the affected areas will be re-graded (back-bladed), if necessary, to match the approximate contours of the land outside the construction zone. In some areas (e.g., slopes), construction activities affect localized topography such that original contours cannot be restored. In such situations, the affected areas will be stabilized as warranted based on site-specific conditions.

After grading, upland areas affected by construction will be seeded with the appropriate seed mix and fertilized, if necessary. Seed mix(es) will be selected by Eversource to provide a quick vegetative cover until vegetation recolonizes the ROW. In most locations along the ROW, shrub and herbaceous vegetative communities are expected to re-establish. In conjunction with the seeding, E&S controls (e.g., erosion control blankets, mulch) will be installed or maintained, as appropriate based on site-specific conditions and the time-of-year in which final grading is performed. Steep areas may be stabilized with bio-degradable, pre-made E&S control fabric containing seed, mulch, and fertilizer, or the equivalent. Temporary E&S controls will be left in place and maintained until final stabilization is achieved.

Where warranted to stabilize the ROW, permanent E&S controls, such as water diversion bars or crushed stone, will be installed.

If necessary, wetland areas affected by construction will be stabilized with annual rye grass, a wetland seed mix, or an equivalent mix (40 pounds/acre, unless standing water is present), which will serve to provide a temporary vegetative cover until wetland species become reestablished. No fertilizer, lime, or mulch will be applied in wetlands unless allowed per the Project's regulatory approvals from the USACE or CT DEEP.

Flagging (or equivalent markers) denoting wetlands, streams, and other environmentally sensitive resource avoidance or protection areas will be maintained (and reflagged or marked as needed), typically until the completion of ROW restoration activities.

Restoration typically will be deemed successful, based on the effectiveness of stabilization measures (such as revegetation), as defined in accordance with Project-specific permits and certificates. When segments of the ROW are appropriately revegetated or otherwise stabilized, Eversource will remove temporary erosion controls.

In the long-term, vegetative species compatible with the use of the ROW for transmission line purposes are expected to regenerate naturally over time. Eversource will promote the re-growth of desirable species (i.e., native vegetation that is compatible with overhead transmission line operation) by implementing its standard vegetation management practices

to control tall-growing trees and, where practicable, undesirable invasive species, thereby enabling native plants to dominate the ROW.

4.4 Construction Procedures for the Substations

Eversource will construct the Newington and Southwest Hartford substation modifications in several stages, some overlapping in time. The following lists the typical sequence of construction activities for the substation modifications. The actual sequence of activities will vary for each substation, based on the site-specific modifications.

- Survey and stake vegetation clearing boundaries and limits of disturbance for Project substation modification activities.
- Mark the boundaries of previously delineated wetland areas.
- Identify and mark areas to be avoided or otherwise protected (e.g., sensitive environmental resource areas).
- Identify other areas, as appropriate, where special construction considerations will apply.
- Perform vegetation clearing and site preparation (grading or filling).
- Install E&S controls.
- Prepare material staging sites (e.g., storage, staging and laydown areas) to support the construction effort.
- Establish construction field office area(s), typically including space for office trailers, equipment storage and maintenance, sanitary facilities, and parking. These areas will be within the substation sites or on adjacent Eversource property.
- Construct new access roads or improve existing roads.
- Construct foundations and erect/assemble new equipment.
- Install grounding systems.
- Install control cable, and test all new equipment
- Remove temporary roads and construction debris and restore disturbed sites.

Maintain temporary E&S controls until sites are re-stabilized (e.g., paved, re-graveled, or revegetated).

4.4.1 Vegetation Removal

Vegetation removal, consisting of tree/shrub clearing and mowing, will be required on Eversource's Newington and Southwest Hartford substation properties. Vegetation will be removed within the planned substation expansion areas, as well as within the limits of disturbance depicted on the Project Mapping in Attachment F.

All vegetation removal/clearing activities will be performed in accordance with Eversource specifications, the requirements of the Connecticut Siting Council Development and Management (D&M) Plans submitted for the Project, and all other relevant regulatory approvals, including permits from the USACE and CT DEEP.

Vegetation clearing at the substations will typically be accomplished using mechanical methods, although manual methods also may be employed. At Newington Substation, to provide access and a stable work base for clearing crews working near the substation expansion area in wetland N-1, timber mats or equivalent will be used. Such timber mats will be deployed in accordance with Eversource's BMP Manual and relevant USACE and CT DEEP regulatory requirements. For additional information regarding vegetation removal requirements in and near water resources, refer to Section 4.2.3.4 above.

Temporary E&S controls may be installed before or after vegetation removal, depending on site-specific conditions at the time of construction. After vegetation removal, soil E&S controls will be installed and maintained throughout construction around work limits. The Project clearing contractor will be responsible for properly disposing of any vegetative materials cut on Eversource property. Refer to the typical drawings of E&S control measures in the Eversource BMP Manual.

4.4.2 Site Preparation

The type of site preparation work required at each substation will vary, in accordance with the characteristics of each facility, the locations of the facility modifications, and the location of staging areas required to support the work (refer to the plans for the modifications to each substation in Attachment F). Site preparation may include the following activities or best management practices (BMPs):

a. Deploy temporary construction storage containers, and related equipment and materials to the substations or associated staging areas and setting up temporary services required to support construction (e.g., portable toilets).

b. Establish designated parking areas for construction workers.

c. Erect "construction zone" warning signs on the public roads that intersect with substation access roads.

d. Install temporary fence around work sites as needed.

e. Install and maintain, as necessary, temporary soil E&S controls (e.g., silt fence, straw bales, wattles) near areas of planned pavement/soil disturbance that are in proximity to water resources (located outside the substation fence lines). Such controls will be maintained and replaced, as necessary, throughout construction. The primary objective of these controls will be to minimize the potential for erosion and sediment migration away from construction activities and into water resources.

f. Clear vegetation, grade, and otherwise prepare the substation expansion areas and any other work areas and equipment staging locations located outside the substation fence lines.

g. Improve existing access, as needed.

No blasting will be required for the substation modifications. In general, site preparation work typically will involve the use of construction equipment such as backhoes, excavators, trucks (various sizes), compressors, and flatbed trailers.

4.4.2.1 Newington Substation

At Newington Substation, site preparation work will include cutting, filling and grading as necessary within the 0.3-acre expansion area adjacent to the southern and western portions of the existing substation fence. In addition, an access road (consisting primarily of temporary timber matting) will be extended around the western and southern side of the substation fence to provide ingress/egress for construction activities.

Imported fill will be used to create a suitable sub-base for the expanded substation area. The expansion area will be graded to meet the elevation of the existing substation (refer to the Project Mapping in Attachment F). The new drainage system will be installed along the proposed retaining wall and will collect runoff for the yard expansion, directing flow to the existing scour hole located at the southeast corner of the substation facility. The existing scour hole will be expanded to accommodate the increased flows due to the expansion, as show on the Project Mapping (Attachment F).

The 0.3-acre substation expansion will be contained within upland areas. However, this site preparation work will require temporary construction activities in wetland N-1, which is a scrub-shrub wetland located south and west of Newington Substation, within the 1783/1785 line ROW. To perform the substation expansion activities while minimizing impacts to this wetland, Eversource will install temporary timber mats as depicted on the maps in Attachment F.

The cast-in-place concrete retaining wall will be installed as the part of the site preparation work.

4.4.2.2 Southwest Hartford Substation

The 0.3-acre expansion area at Southwest Hartford Substation is generally flat and consists of a lawn area with six trees. As a result, only limited tree and vegetation removal and grading will be required.

Access to the substation will be via the existing access road from New Park Avenue. No additional access will be required.

4.4.3 Erosion and Sediment Controls and Water Resource Protection

To minimize the potential for erosion and sediment migration during construction, the following general construction BMPs will be used:

a. Temporary erosion control structures will be installed as necessary to protect nearby water resources, and will be inspected on a routine basis, in accordance with regulatory requirements (Attachment G).

b. Trench dewatering will not be conducted within 25 feet of a wetland or watercourse, unless a fractionization tank (“frac tank”) or similar engineering controls for sediment containment is employed.

c. Equipment will not be refueled within 25 feet of any wetland or watercourse, unless appropriate containment procedures are in place.

d. Petroleum products will not be stored, mixed, or loaded within 25 feet of a wetland or watercourse.

e. In case of an on-site reportable spill, the construction contractor will adhere to Eversource's Spill Prevention and Control Plan.

In addition to these BMPs, all construction activities will comply with Eversource's BMP Manual, which is consistent with the Connecticut Guidelines, as well as to the water resource protection protocols and erosion/sedimentation control details. Additional information related to sediment and erosion controls at the substation sites is provided in Section 5.2.

4.4.4 Foundation and Equipment Installation

The process for installing structure and equipment foundations within each substation will generally involve excavating, concrete form work, steel reinforcement, and concrete placement. No blasting is expected to be required for this work.

Excavated material will either be reused on-site or disposed of off-site in accordance with the regulatory requirements. All excess material from excavations will ultimately be hauled off-site for disposal. Temporary spoil stockpiles will be protected with appropriate E&S controls as required.

If groundwater is encountered in excavations, the water will be pumped from the excavated area and discharged in accordance with applicable requirements. The water may be discharged on-site into an appropriate sediment control basin or into a dewatering bag; pumped into a temporary frac tank and then discharged into the municipal stormwater system, or pumped into a tanker truck for disposal at appropriate wastewater treatment facilities. Catch basin inlet protection will be installed as needed to prevent disturbed soils and construction debris from entering storm water systems.

After the foundations are installed, construction activities will shift to the erection of structures and equipment as specified for each station modification. Such structures and equipment include steel structures, bus and insulators, circuit breakers, switches, CCVTs, lightning masts, wave traps, cable trench, ground grid, surge arresters, conduits and cables. In addition, new relay panels, communications equipment, and cable trays will be installed within existing control enclosures, where required.

4.4.5 Testing and Interconnection

Substation equipment and associated control cable will be installed, as necessary, to connect the new 115-kV transmission line at Newington Substation and at Southwest Hartford Substation. All of the substation equipment (and the new 115-kV line) will be tested and commissioned prior to putting into service.

4.4.6 Cleanup and Restoration

The final steps of the construction process at each substation will be the collection and removal of all remaining construction debris, stabilization/restoration of disturbed areas,

completion of site security measures, and demobilization of temporary office trailers and other materials from the sites.

Construction debris will be properly disposed of in accordance with local, state, and federal regulations. The contractor will remove all excess soil and rock and dispose of it in accordance with local, state and federal regulations.

Within each substation, areas affected by Project construction are expected to be stabilized using trap rock or gravel. Temporary staging and support areas will typically be restored to pre-construction conditions, with stabilization (revegetation or gravel) appropriate to each site.

Temporary E&S controls will be left in place and maintained until final stabilization is achieved. Steep areas may be stabilized with biodegradable, pre-made E&S control fabric containing seed, mulch, and fertilizer, or the equivalent. Flagging denoting environmentally or culturally sensitive resource protection areas will remain in place as needed, typically until the completion of stabilization / restoration activities.

Restoration typically will be deemed successful, based on the stabilization measures as defined in accordance with Project-specific permit and certificate requirements.

5.0 Erosion and Sediment Control Procedures

Section 5.0 identifies vegetation removal and erosion control measures, and soil and groundwater handling procedures for compliance with the Connecticut Guidelines and the conditions of the GP. The Project will also be constructed, operated, and maintained in accordance with established industry practices and in accordance with the Eversource BMP Manual. If conflicts exist between this manual and the Connecticut Guidelines or Standards, measures from the Connecticut Guidelines will be used as the default.

5.1 Vegetation Removal Measures

Clearing will typically be accomplished using mechanical methods, although manual methods (e.g., climbing crews with chain saws) may be used in certain areas. Vegetation removal activities typically require flatbed trucks, brush hogs or other types of mowing equipment, skidders, forwarders, bucket trucks for canopy trimming, feller bunchers for mechanical tree cutting, wood chippers, log trucks, and chip vans.

Low-impact mowing/vegetation removal methods will be utilized, where possible, to maintain vegetation and to protect wetlands and watercourses. Low-impact mowing/vegetation removal incorporates a variety of approaches, techniques, and equipment to minimize site disturbance. Eversource will require the clearing contractor to use some, or all, of the following low-impact tree clearing methods, depending on site-specific considerations:

- Take into consideration soil and weather conditions, such as heavy rainfall, when scheduling vegetation removal activities;
- Fell trees directionally (parallel to and within the ROW) to minimize impacts to residual vegetation, where practical;
- Adhere to BMPs, as described in the Best Management Practices for Water Quality while Harvesting Forest Products, 2007 Connecticut Field Guide (also referenced in the Eversource BMP Manual) (http://www.ct.gov/deep/cwp/view.asp?a=2697&q=379248&deepNav_GID=1631);
- Use clearing methods appropriate to site-specific features (e.g., terrain, environmental resources and land uses) to minimize impacts to the extent practicable;
- Temporarily stockpile cut timber and brush only in uplands while awaiting removal and disposal from work spaces;
- Maximize the use of uplands for clearing access routes; and
- Cut shrubs and trees close to the ground, leaving root systems and stumps, where practical, to provide additional soil stability.

During vegetation removal, construction mats will be used to provide a stable base for clearing equipment across watercourses or within wetlands. Such temporary support will minimize rutting in wetlands and in some cases will remain in place to facilitate structure replacement construction activities.

The disposition of timber and brush cut within the ROW on privately owned properties will be in accordance with Eversource's property owner agreements, consistent with any applicable siting and regulatory approvals. Other than when wood is to be left for the property owner, all vegetative materials not requested by a property owner or chipped for use as mulch on the ROW or on Eversource property will be removed from Project construction areas. Eversource's clearing contractor will be responsible for properly disposing of such vegetative materials. Further, no timber or brush will be stockpiled or left as chips in wetlands or watercourses.

5.2 Sediment Barriers

A sediment barrier is a temporary barrier installed across or at the toe of a slope or upslope of a wetland or waterbody to intercept and retain small amounts of sediment from disturbed or unstabilized areas. Sediment barriers will be utilized in the following situations:

- Locations where sedimentation can pollute or degrade adjacent wetland and/or watercourses;
- At the outlet of a slope breaker when vegetation is not adequate to control erosion;
- Along banks of waterbodies between the construction ROW and waterbody after clearing and before grading;
- Around any stockpiled soil;
- At the base of slopes adjacent to road crossings until disturbed vegetation has been re-established;

- At side slope and downslope boundaries of the construction area where run-off is not otherwise directed by a slope breaker (a.k.a. water bar or diversion terrace);
- Within the construction ROW at boundaries between wetlands and adjacent disturbed upland areas;
- As necessary to prevent siltation of ponds, wetlands, or other waterbodies adjacent to/downslope of the construction ROW; and
- At the edge of the construction ROW as needed to contain spoil and sediment.

Sediment barriers will be installed in accordance with Eversource's BMP Manual. After final stabilization, post-construction stormwater structures will be cleaned of construction sediment and any remaining sediment barriers shall be removed.

Sediment barrier locations are depicted on the Project mapping provided in Attachment F. Sediment barriers will be maintained in accordance with the Connecticut Guidelines and will be inspected during each compliance monitoring inspection as required under the GP. Any required repairs will be promptly reported by the qualified inspector to the Project owner and their construction contractor for correction. Should the barrier decompose or become ineffective while the barrier is still needed, the barrier will be promptly replaced. Sediment deposits will be removed when they reach approximately one-half the height of the barrier and will be disposed of on-site as non-structural fill or off-site at an appropriate receiving facility.

5.2.1 Geotextile Sediment Filter Fence (Silt Fence)

To minimize the transport of sediment from the disturbed areas to receiving wetlands or watercourses, geotextile sediment filter fence (a.k.a. silt fence) shall be utilized at select areas around the site to filter runoff from the disturbed areas. Silt fence may be used to control runoff from small disturbed areas when runoff is in the form of sheet flow and the discharge is to a stable area. Only those fabric types specified for such use by the manufacturer will be used. Additional information regarding the use of silt fence is provided in the Project Mapping and E&S Control Details (Attachment F) and Eversource's BMP Manual. A row of geotextile sediment filter fence shall be placed around stockpiles during stockpiling operations. Geotextile sediment filter fence shall be removed only when the entire site has been permanently stabilized.

5.2.2 Hay/Straw Bale Barriers

Hay/straw bale barriers may be used to control runoff from small disturbed areas provided that runoff is in the form of sheet flow. Hay/straw bales will be considered a short-term control measure on this Project because they tend to deteriorate within approximately three (3) months after installation. To reduce velocity of stormwater traveling across the site, hay/straw bale barriers may be installed across the direction of high runoff flows. Hay/straw bale barriers shall remain as temporary measures during construction to protect downgradient disturbed surfaces during establishment. Where control measures are required for more than 60 days geotextile sediment filter fence will be used.

5.2.3 Straw/Compost Wattles

Wattles filled with straw or compost (a.k.a. straw wattles and compost filter sock) are used as an erosion control device to slow runoff velocities, entrain suspended sediments, and promote vegetation growth until an area is stabilized. They are not generally intended for steep slopes, but rather, to stabilize low to moderate grades where there is a broad area of disturbance. Straw/compost wattles may also be used along small stream banks to protect areas before vegetation has stabilized the soils. The wattles are constructed from a biodegradable netting sock stuffed with straw or compost and may be left to biodegrade in place once a project is complete.

Wattles should be placed lengthwise, perpendicular to the direction of runoff. The wattles are typically spaced about 10 to 40 feet apart, depending on the slope angle. Additionally, the soil texture should be considered – for soft, loamy soils, wattles should be placed closer together; for coarse, rocky soils, they may be placed further apart.

Woody vegetation and tall grasses may need to be removed before installing the berm to prevent voids that allow sediment under the berm. Wattles can also be planted with woody vegetation and seeded with legumes for additional stability. Additional information regarding the use of straw/compost wattles is provided in Eversource's BMP Manual.

5.2.4 Wood Chip Bags

Wood chip bags (a.k.a. mulch filter sock) are perimeter barriers that intercept, filter, and reduce the velocity of stormwater run-off. They may be used separately or in conjunction with hay/straw bales and are installed and maintained in a similar manner. Wood chip bags should be staked in a line around perimeters of disturbed areas, especially those adjacent to wetlands, waterways, roadways or at the base of slopes.

Wood chip bags can stabilize soils in a number of applications. They may be left in place as they eventually photo-degrade, as long as they do not pose a barrier to small animal movements. Additional information regarding the use of wood chip bags is provided in Eversource's BMP Manual.

5.2.5 Coir Log Use for Bank Stabilization

The use of coir logs as a sediment barrier for E&S control is limited to stream bank stabilization during wetland and watercourse restoration activities. The coir logs are installed along the toe-of-slope at the intersection of the stream bank and bed to stabilize the stream bank from erosion due to water flowing in the watercourse. Additionally, the coir logs capture any sediment in stormwater runoff originating from the disturbed stream bank and adjacent area until adequate stabilization is achieved through vegetative or other means. Additional information regarding the use of coir logs is provided in the Project Mapping and E&S Control Details (Attachment F) and Eversource's BMP Manual.

5.3 Waterbars

Waterbars will be installed across sloping areas on access roads and work spaces to minimize the concentration of sheet flow across and down disturbed soil areas or stabilized road or work surfaces subject to rill erosion due to sheet flow. Waterbars will be spaced in accordance with the Connecticut Guidelines as detailed in Table 5.3-1. Waterbar locations are depicted on the Project mapping provided in Attachment F.

TABLE 5.3-1 SPACING OF WATERBARS

% Slope of access road	Spacing (feet)
1%	400
2%	245
5%	125
10%	78
15%	58
> 20%	25

5.4 Drainage Swales

Existing open riprap lined drainage swales and underground culvert piping along and within the Amtrak ROW will be maintained and protected during construction to allow for normal operation and unimpeded flow of stormwater. Where access and work space are required around, though, or over existing drainage swales, Eversource and their construction contractor will temporarily "bridge" the swale with timber matting to allow construction equipment and personnel to work over the swale while allowing for continued stormwater flow within the swale. Alternatively, Eversource and their construction contractor may temporarily install a suitably sized culvert with fill material overtop to allow for unimpeded flow of stormwater through the culvert within the swale alignment beneath the access and work space surfaces. After construction is complete, Eversource will remove the temporary bridge or culvert from the drainage swale to allow for continued normal operation for stormwater conveyance.

If permanent relocation of the existing drainage swale is required to accommodate proposed overhead structures or foundations, Eversource will coordinate with Amtrak to develop modifications that maintain existing flows and velocities within the drainage swale. Modifications may include design and implementation of an open rip-rap lined drainage swale around a proposed structure and connected to the existing drainage swale at the upstream and downstream ends, or installation of appropriately sized, underground culvert piping around the structure connected to the existing drainage swale at the upstream and downstream ends. Eversource will amend this SWPCP as necessary to document changes that may become necessary.

5.5 Temporary Erosion Control Blankets

To provide temporary surface protection, temporary erosion control blankets will be installed and maintained in sensitive areas, as needed, in accordance with the Connecticut Guidelines.

If failures are discovered during inspections, blankets will be re-installed after regrading and re-seeding, ensuring that blanket installation still meets the design specifications. When repetitive failures are observed at the same location, Eversource and their construction contractor will review conditions and limitations for use and determine if diversions, stone check dams, or other measures are needed to reduce failure rate.

5.6 Wetland and Watercourse Crossings

Specific measures applicable to construction across wetlands and watercourses, are detailed in Section 4.2.3 above, including impact avoidance, minimization and restoration measures. Timber matting or equivalent will be used to construct temporary access through wetlands and as temporary equipment bridges across watercourses to provide a means for construction traffic to cross and construct the Project within these areas. Following completion of construction, the timber matting will be removed by backing out of the site, removing mats one at a time and regrading soils to pre-existing contours while taking care not to compact soils. Simultaneously, these areas will, if necessary, be re-seeded with a wetland seed mix to promote re-establishment of wetland vegetation species within disturbed areas. Similarly, watercourse beds and banks will be restored to pre-construction grades and contours as necessary, and banks will be re-seeded and, if needed, protected from erosion through placement of erosion control blankets in accordance with the Connecticut Guidelines and Eversource's BMP Manual.

To minimize the potential for erosion and sediment migration during construction in the vicinity of wetlands and watercourses, the following general construction BMPs will be used:

- Temporary erosion control structures consistent with the Connecticut Guidelines will be installed as necessary to protect nearby water resources, and will be inspected on a routine basis, in accordance with regulatory requirements (refer to Section 7.0).
- Excavation dewatering will not be discharged within 25 feet of a wetland or watercourse, unless a frac tank or similar engineering controls for sediment containment is employed.
- Excavation dewatering may be discharged on-site into an appropriate sediment control basin or into a dewatering bag; pumped into a temporary frac tank and then discharged into the municipal stormwater system, or pumped into a tanker truck for disposal at appropriate wastewater treatment facilities.
- Equipment will not be refueled within 25 feet of any wetland or watercourse, unless appropriate containment procedures are in place.
- Petroleum products will not be stored, mixed, or loaded within 25 feet of a wetland or watercourse.

5.7 Dust Control

Dust control measures are practices that help reduce surface and air movement of dust from disturbed soil surfaces. The Contractor shall be responsible for performing dust suppression techniques during construction, including but not limited to:

- Spraying – Spraying water or calcium chloride as necessary to control dust from construction activities. The volume of water sprayed for controlling dust shall be minimized so as to prevent runoff of water. No discharge of dust control water from the Project limits shall contain or cause visible oil sheen, floating solids, visible discoloration, or foaming in the receiving stream.
- Sweeping – Sweeping surfaces adjacent to the construction entrances when required due to tracking of sediments onto paved surfaces.
- Mulch – The Contractor may elect to mulch an area to control dust. Mulching will be applied in accordance with this Plan.
- Stone – The Contractor will be required to install stone construction entrances at all paved road crossings to prevent sediment transport onto the pavement surface, as further described below. As shown on the plans, construction entrances shall be installed and maintained to minimize the tracking of sediments onto adjacent roads.

If at any time fugitive dust is observed to be generated from the construction site, the Contractor shall be responsible for employing additional dust suppression techniques to remedy the situation. Dust control will be performed in accordance with the Connecticut Guidelines and the GP.

5.8 Construction Entrances

In accordance with the GP, Eversource will minimize off-site vehicle tracking of sediments by installing construction entrance pads at locations where construction traffic will access the ROW from a public roadway or other paved surface. An entrance pad is intended to reduce off-site sedimentation by eliminating the tracking of excess soil onto paved roadways. The entrance pad serves as the designated point at which all construction traffic can access and exit the ROW. The pad is typically constructed of stone or gravel placed on top of a durable geotextile fabric. The underlying fabric facilitates stone or gravel removal to more easily restore the area to its pre-construction condition. Topsoil will be stripped and segregated from access points prior to entrance pad installation. Entrance pads will be installed and maintained in accordance with the Connecticut Guidelines.

Eversource will maintain entrances in a condition which will prevent tracking and washing sediment onto paved surfaces. Periodic top dressing with additional stone will be provided as conditions demand. Sediment deposited or tracked onto paved surfaces will be removed. Adjacent roadways will be left clean at the end of each day. If the construction entrance pad is properly maintained and the action of a vehicle traveling over the stone pad is not sufficient to remove the majority of the sediment then Eversource will either: (1)

increase the length of the construction entrance; or (2) modify the construction access road surface.

5.9 Stabilization Practices and Protection

Both temporary and permanent stabilization practices shall be implemented throughout the Project to minimize erosion of soil from the disturbed site. Temporary and permanent stabilization measures are proposed to provide protection against erosion during and after construction. Existing vegetation shall be preserved to the maximum extent practicable.

The contractor shall maintain temporary E&S control measures until seeding and final stabilization has been achieved. When construction activities have permanently ceased, stabilization and protection practices shall be implemented. Areas that will remain disturbed but inactive for at least 30 days shall receive temporary seeding or soil protection within 7 days of suspension of work in accordance with the Connecticut Guidelines. Stockpiles that are not to be used within 29 consecutive days will be seeded and mulched immediately after formation of the stockpile. Areas that will remain disturbed beyond the seeding season shall receive long term non-vegetative stabilization and protection measures sufficient to protect the site through the winter. In all cases, stabilization and protection measures shall be implemented as soon as possible in accordance with the Connecticut Guidelines.

Temporary and permanently stabilized areas will be maintained in accordance with the Connecticut Guidelines. Eversource will repair any eroded areas by restoring to finished grades, replacing mulch and seed, and applying fertilizer and lime, as specified for temporary and permanent stabilization. Additional mulch will be added, as required.

5.9.1 Temporary Vegetative Cover

Temporary vegetative cover shall be established on all exposed areas, and areas that have not reached finish grade that will be inactive for more than 29 consecutive days and for stockpiles not in use for more than 29 consecutive days. Temporary mulch cover (see Section 5.9.3 below) will also be applied to help facilitate germination of the temporary seed mix. Temporary seed mixes and application rates specific to the location and/or soil characteristics of the disturbed area are identified in the Connecticut Guidelines.

The temporary vegetative cover shall be applied within seven days of the suspension of grading activities.

5.9.2 Permanent Vegetative Cover

Once the planting season begins, any temporary stabilization measures shall be removed (including areas of wood chips, gravel, crushed stone, or other aggregate materials used to provide temporary stabilized working surfaces) and disturbed soils shall be prepared and seeded for permanent vegetative cover. Over the duct bank trench in wetlands and in other areas where topsoil was purposely stripped and segregated for later re-use, the topsoil will be returned to the soil surface during restoration and cleanup activities. At the same time as the removal of temporary equipment crossing at streams and timber matting within

wetlands, the disturbed wetland and riparian areas shall be seeded if necessary. Wetland areas shall be reseeded with an appropriate wetland seed mix, while all other upland areas shall be reseeded in accordance with the technical specifications for the Project (as applicable) or the Connecticut Guidelines.

Permanent vegetative cover shall be applied within seven days of establishment of final grade for the disturbed area.

5.9.3 Temporary Mulching

Temporary mulching may be used to temporarily stabilize areas that will be inactive for more than 29 consecutive days. In addition, temporary mulching shall be conducted following temporary or permanent seeding in order to aid the growth of vegetation. Temporary mulch can consist of a number of different material types as detailed in Eversource's BMP Manual, but typically consists of straw or hay overlay spread uniformly by hand or mulch blower. Application rates also vary based on the specific material used and can be found in the BMP Manual.

Mulched areas will be maintained in accordance with the Connecticut Guidelines. Eversource's qualified inspector will inspect temporary soil protection areas at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for mulch movement and erosion. If failures occur, mulch will be reapplied as soon as practical and the cause of failure will be determined. If it is determined to be necessary, additional measures appropriate to the cause of the failure will be implemented within 48 hours. Inspections will take place until work resumes.

5.10 Dewatering Wastewaters

If groundwater is encountered during excavations for the transmission line cable system or structure foundations, the water will be pumped from the excavated areas and discharged in accordance with applicable local and state requirements. Depending on regulatory authorizations, the water may be discharged on-site into an appropriate sediment control basin/filter bag or directly into municipal storm water catch basins, if available. Sediment-laden dewatering wastewaters may be pumped into a temporary frac tank for settling prior to being discharged to upland areas, to private stormwater systems or to the municipal separate storm sewer system. Residual silt/sediment collected at the bottom of the frac tanks will be disposed off-site at an appropriately designated disposal facility.

Contaminated groundwater, if encountered, will be handled and disposed of in accordance with all regulatory requirements.

5.11 Catch Basin Inlet Protection

When working in or adjacent to roadways improved with stormwater catch basins and a stormwater management system, proper catch-basin inlet protection will be installed as needed to prevent disturbed soils and construction debris from entering stormwater systems. Additional information regarding the types and use of catch basin inlet protection

is provided in the Project Mapping and E&S Control Details (Attachment F) and Eversource's BMP Manual.

5.12 Other Pollution Control Measures

Good housekeeping will be maintained to minimize impacts to protected areas by pollutants, soil, and fugitive sediment. Construction materials needed for this Project will be properly stored in a neat and orderly manner until used.

5.12.1 Waste Disposal

Waste materials, such as excess duct bank or overhead structure components (i.e., wood from the existing Newington Tap structures, excess PVC conduit, grounding wire, associated hardware, etc.) and any other construction debris will be disposed of in accordance with Eversource's BMP Manual, applicable regulations, and disposal facility policies. Waste will be removed from the site as soon as practical and containers will be appropriate for the material stored. Where necessary, containers will be sealed/covered to prevent waste from spilling from the container. Containers will only be located where approved by the Eversource Project Manager or Construction Manager in consultation with the qualified inspector. Fences or covers shall be provided if necessary to prevent waste from blowing out of the waste storage area.

Excess soils and water will be managed in accordance with the Connecticut Guidelines, Eversource's BMP Manual, applicable regulations and disposal facility policies. Soils that are generated during construction activities will not be stored or stockpiled inside of a wetland or immediately adjacent to a watercourse.

5.12.2 Spill Prevention and Response

Eversource has developed a Spill Prevention and Control Plan (SPCP) for the Project that will be provided to the construction contractor for implementation during construction. The SPCP has not been included in this SWPCP but is available for review upon request.

5.12.3 Washout Areas

In accordance with the GP, washout of applicators, containers, vehicles and equipment for concrete, paint and other materials will be conducted in designated washout areas. There shall be no surface discharge of washout wastewaters. Washout will be conducted in designated upland areas only. Areas designated to be used for washout will be clearly flagged off, and washout activities will only be conducted in these areas. Wash out tubs or other entirely self-contained washout systems will be utilized as necessary when working in proximity to wetlands and watercourses. All wastes including hardened concrete waste from washouts shall be disposed of at an off-site location in accordance with applicable regulations. At least once per week, all containers or pits used for washout should be inspected for structural integrity, adequate holding capacity, and to check for leaks or overflows. If any deficiencies are discovered, corrective action shall be taken immediately. Washout areas shall be emptied when levels reach ½ the height of the container or pit.

5.12.4 Chemicals and Petroleum Products

All chemical and petroleum product containers stored on the site (excluding those contained within vehicles and equipment) shall be provided with impermeable containment which will hold at least 110% of the volume of the largest container, or 10% of the total volume of all containers in the area, whichever is larger, without overflow from the containment area. All chemicals and their containers shall be stored under a roofed area. Containers of 100 gallon capacity or more may be stored without a roof only if stored in a double-walled tank.

Eversource and its contractors will monitor their on-site vehicles for leaks and conduct maintenance as needed.

5.12.5 Fertilizers

Fertilizers, if used in conjunction with the seeding operation, will be applied only in the amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered area.

5.13 Post-Construction Control Measures

After construction, Eversource will remove all areas of temporary stone/gravel access roads and work pad areas and permanently stabilize and revegetate all previously vegetated areas disturbed by construction activities. As a result, the potential for erosion at the site after construction is minimal and no post-construction stormwater structures are required for the proposed transmission line facilities. Erosion and sedimentation controls will be actively maintained until final stabilization of disturbed areas. No new channelized or concentrated flow of runoff is anticipated to occur on the Project sites.

Site modifications for the Newington Substation expansion include installation of a new drainage system along the proposed retaining wall to collect runoff for the yard expansion. The new drainage will not be tied to the existing drainage system at the facility, but will flow into the existing scour hole, which will be expanded to accommodate increase flow due to the expansion. Details on the proposed drainage system and the modifications to the existing scour hole at the Newington Substation are included in the Project Mapping (Attachment F).

An analysis of the Southwest Hartford Substation modifications and stormwater runoff characteristics was performed, and it was determined that there was no significant different between the pre- and post-construction runoff coefficient and characteristics for the site (see Attachment E). Therefore, no permanent post-construction stormwater control measures are required for the site.

5.14 Redevelopment Project Performance Standards

Under existing and proposed conditions, the Project site will consist of vegetated ROW in areas where vegetation previously existed, and all previously non-vegetated areas with the ROW or proposed for Project-related work space and access will be maintained during construction and used “as is” or will be restored to its pre-existing non-vegetated and

stabilized surface type during restoration activities. Site modifications at the proposed substation expansions areas will not significantly alter runoff conditions at these sites (see runoff calculations included in Attachment E), and drainage for the Newington Substation expansion area will direct runoff to an existing scour hole structure that receives drainage for the facility. Post-construction stormwater structures are not required for the Southwest Hartford Substation expansion. Post-construction stormwater quality is not expected to degrade as a result of the proposed Project. Post-construction ground surface conditions will mimic pre-construction conditions.

For linear projects that are underdeveloped or are currently developed with less than forty percent effective impervious cover, Section 5(b)(2)(C)(i)(b) of the GP allows sites on which the runoff characteristics will not significantly differ from existing conditions within a given watershed to be exempt from retaining half the water quality volume. No new stabilization or retention structures are proposed for the Project since the Project is exempt from the stormwater retention requirement of the GP.

6.0 Runoff Reduction and Low Impact Development (LID) Information

The proposed construction activities and structures will not significantly alter the runoff coefficient of the Project site and will not promote channelized or areas of concentrated runoff. Existing drainage patterns will not change from pre- to post-construction conditions. There will be no significant impacts to runoff peak flow rate or volume leaving the post construction site. As previously stated, linear redevelopment projects are allowed by the GP exemption from the standard requiring retention of the water quality volume.

7.0 Inspection, Reporting, and Record Keeping

7.1 Plan Implementation Inspections

In accordance with the GP, within the first 30 days following commencement of the construction activity on the site, Eversource will contact a qualified soil erosion and sediment control professional or qualified professional engineer to inspect the site. The inspector will be someone who is not an Eversource employee and has no ownership interest of any kind in the Project. The site shall be inspected at least once and no more than three times during the first 90 days to confirm compliance with the general permit and proper initial implementation of all controls measures designated in the SWPCP for the site for the initial phase of construction. A copy of the SWPCP review certification will be maintained with this SWPCP document.

7.2 Routine Inspection

The Permittee shall routinely inspect the sites for compliance with the GP and the SWPCP until a Notice of Termination has been submitted. Inspection procedures for routine inspections shall be addressed and implemented in the following manner:

- The Permittee shall maintain a rain gauge on-site to document rainfall amounts;
- The Permittee shall engage a qualified inspector, as defined in Section 2 of the GP, to inspect the site at least once a week and within 24 hours of the end of a storm that generates a discharge;
- For storms that equal or exceed 0.5 inches that end on a weekend, holiday or other time after which normal working hours will not commence within 24 hours, an inspection is required within 24 hours; and
- For storms of less than 0.5 inches, an inspection shall occur upon the start of the subsequent normal working hours.

The items to be inspected shall include, at a minimum, the following:

- Disturbed areas of the construction activity that have not been permanently stabilized;
- All E&S control measures;
- All structural control measures;
- Stockpile areas;
- Washout areas;
- Drainage control facilities including diversion and perimeter drainage ditches; and
- Locations where vehicles enter or exit the site

The need to perform inspections will be aided by reviewing local electronic data available from local weather stations/observers. Once it has been determined that a precipitation threshold has been triggered, inspections will be completed as required.

Where sites have been temporarily or finally stabilized, an inspection shall be conducted at least once every month for three months to confirm compliance with the GP. For the purposes of determining inspection frequency, a stabilized site will contain suitable vegetative cover or other mechanical or structural stabilization to prevent substantial soil movement or the development of rills based on the characteristics of the site (slope, soil type, land use, etc.).

After the inspection, a report documenting the effectiveness of the E&S controls, a description of potential sources of erosion, sedimentation and pollution, and the need for the maintenance, repair or installation of additional controls will be completed (see Attachment G for example inspection forms). The example form included may not be the actual inspection form used for the Project; though the ultimate form will include the same primary information, including inspector statements and signature. All maintenance, repair and installation of additional controls shall be implemented by the Permittee or its agent as soon as practicable after such inspection.

During protracted durations of cold weather, frozen ground and/or heavy snow cover, routine inspections of some portions of the Project may be suspended. Ground conditions during these periods are inherently stable and thus the risk for erosion and/or sedimentation to occur is low. Further access to some Project areas by inspection personnel will be extremely limited and in some cases only by foot. On these occasions worker safety is a primary concern.

7.3 Reports

A report shall be prepared for every inspection and retained as part of the plan. The report shall, at a minimum, summarize the following:

- The scope of the inspection;
- The date and time of inspection;
- Names, titles, and qualifications of personnel making the inspection;
- Weather conditions including precipitation information;
- Major observations relating to the implementation of this SWPCP;
- Descriptions of the stormwater discharge(s) from the site;
- Any water quality monitoring performed during the inspection;
- A statement that, in the judgment of the qualified inspector, the site is either in compliance or out of compliance with the terms and conditions of the SWPCP and permit; and,
- A signature of either the qualified inspector, the permittee, or his/her authorized representative in accordance with the General Permit.

If the site inspection indicates that the site is out of compliance, the inspection report shall include a summary of the remedial actions required to bring the site back into compliance. A template Site Inspection Report in included in Attachment G.

7.4 Corrective Actions

During the period in which any corrective actions are being developed and have not yet been fully implemented, interim measures will be implemented to minimize the potential for the discharge of pollutants from the site.

Non-engineered corrective actions (as identified in the Connecticut Guidelines and Eversource's BMP Manual) shall be implemented on site within 24 hours and incorporated into a revised SWPCP within three calendar days of the date of inspection unless another schedule is specified in the Connecticut Guidelines. Engineered corrective actions (as identified in the Connecticut Guidelines and the BMP Manual) shall be implemented on site within seven days and incorporated into a revised SWPCP within ten (10) calendar days of the date of inspection unless another schedule is specified in the Connecticut Guidelines.

7.5 Recordkeeping

In accordance with Section 5(d) of the GP, Eversource or its representative will:

- For a period of at least five (5) years from the date that construction is complete, retain copies of this SWPCP and all reports required by the GP, and records of all data used to complete the registration for the GP, unless the commissioner specifies another time period in writing. Inspection records will be retained as part of this SWPCP for a period of five (5) years after the date of inspection; and
- Retain an updated copy of this SWPCP at the construction site from the date construction is initiated at the site until the date construction at the site is completed.

7.6 Changes and Amendments to the SWPCP

This SWPCP will be amended and updated as appropriate during the term of the Project. At a minimum, this SWPCP will be amended whenever:

- There is a change in contractors or subcontractors at the site;
- A change in design, construction, operation, or maintenance at the site which has the potential for the discharge of pollutants to the waters of the state and which has not otherwise been addressed in this SWPCP; or
- If the actions identified by the SWPCP fail to prevent pollution.

If notified by the commissioner that the SWPCP and/or the site do not meet one or more of the minimum requirements of this GP, within seven (7) days of such notice, or such other time as the commissioner may allow, Eversource will make the required changes to the SWPCP and perform all actions required by such revised SWPCP. Within 15 days of such notice, or such other time as the commissioner may allow, Eversource will submit to the commissioner a written certification that the requested changes have been made and implemented and such other information as the commissioner requires.

8.0 Monitoring

Stormwater sampling is required for monitoring turbidity. Sampling shall occur on a monthly basis during storm events that generate a discharge of stormwater from the site while construction activity is ongoing until final stabilization of the drainage area associated with each outfall is achieved.

Sampling is only required during normal working hours, as defined by the GP. If sampling is discontinued due to the end of normal working hours, it shall be resumed the next working day as long as the discharge continues. Sampling may be temporarily suspended if at any time conditions exist that may reasonably pose a threat to the safety of the person taking the sample (e.g., high winds, lighting, flooding, intense rainfall, etc.). Sampling shall

resume once the unsafe conditions are no longer present. If there is no stormwater discharge during a month, sampling is not required.

8.1 Monitoring Requirements

All samples shall be collected from discharges resulting from a storm event that occurs at least 24 hours after any previous storm event that generated a discharge. Sampling of snow or ice melt in the absence of a storm event is not a valid sample.

Samples shall be grab samples taken at least three separate times during a storm event. The samples shall be representative of the flow and characteristics of the discharge. The first sample shall be taken within the first hour of stormwater discharge from the site. In cases where discharges begin outside of normal working hours, the first sample shall be taken at the start of normal working hours. Unless otherwise prohibited, normal working hours for the site shall be Monday through Saturday, 7:00 AM to 7:00 PM, while daylight permits.

Sampling is required of areas of concentrated runoff of stormwater from disturbed areas. Sampling shall be done in accordance with 40 CFR Part 136/ASTM D1889-00. Sampling locations are shown on the Project Mapping found in Attachment F and shall be identified in the field with a flag, stake, or other visible marker.

8.2 Monitoring Reports

The stormwater turbidity value for each sampling point shall be determined by taking the average of the turbidity values of all samples at that sampling point during a given storm. Any samples containing snow or ice melt must be noted. Monitoring reports shall be submitted to CT DEEP in accordance with the provisions outlined in the GP. Signatures of both the qualified inspector and the permittee or his/her authorized representative are required on the Stormwater monitoring report in accordance with the General Permit. A blank copy of the stormwater monitoring report for submitting turbidity sampling data is provided in Attachment G.

8.3 Sampling Points

The Project is considered a linear project according to the GP. As such, "…*up to 10 substantially identical outfalls may be identified for one representative discharge*". The proposed work does not create new outfalls and will not promote channelized or concentrated flow. Therefore, sampling points have been designated adjacent to work spaces and along access roads where there is some chance of measurable runoff being generated.

Ten potential sampling points were identified for the Project. Each sampling point was determined based on the presence of wetlands and/or watercourses down gradient of proposed work spaces. Sample locations are listed in Table 8.3-1 and depicted on the Project mapping in Attachment F. One of these locations will be selected each month for the required sampling.

The qualified inspector (a.k.a. Environmental Inspector ["EI"]) will review each sampling location and take a sample if concentrated runoff is observed leaving the work area. After commencement of construction, if a more appropriate sampling location for the purposes of stormwater monitoring is identified by the EI other than the locations identified in Table 8.3-1, the EI may update the potential sampling points and proposed sampling locations and will submit revised mapping showing the locations of any revised potential sampling points and the proposed sampling locations with the first Stormwater Monitoring Report. In accordance with the GP, the sample location will rotate between the potential sampling points identified in Table 8.3-1 twice a year so different sampling locations will be sampled every six months.

TABLE 8.3-1 STORMWATER SAMPLING LOCATIONS

Sampling Point	Map Sheet	Project Facility[1]	Location Description
1	1	CP	Line 1783 structure 8001 construction pad
2	1	CP	Line 1783 structure 16072 construction pad
3	2	CP	Line 1346 duct bank construction pad in Wetland N-2 at Stream IS-2
4	3	CP	Line 1346 duct bank construction pad in Wetland N-3 west
5	3	CP	Line 1346 duct bank construction pad in Wetland N-3 east
6	3	CP	Line 1346 duct bank construction pad in Wetland N-4
7	4	CP	Line 1346 duct bank crossing of Stream PS-1
8	13	CP	Line 1346 overhead line structure 47 construction pad and staging area / contractor yard stormwater ditch
9	13	AR	Line 1346 overhead line access road to structure 48 at Wetland WH-3
10	16	Substation	Southwest Hartford Substation limit of work adjacent to South Branch Park River

1: CP = Construction Pad; AR = Access Road
Note: All 11 locations will not be sampled during sampling events. One location will be selected for sampling to comply with the one representative discharge per 10 substantially identical outfalls requirement.

9.0 Contractors

All contractors and subcontractors who will perform actions on-site that may reasonably be expected to cause or have the potential to cause pollution of waters of the State will be identified prior to construction and listed on the contractor list included in Attachment C. All contractors and subcontractors must sign the certification statement included in Attachment D.

10.0 Termination

10.1 Final Stabilization Inspection

A project shall be considered complete once all post-construction stormwater measures have been installed in accordance with the Post-Construction Stormwater Management section (subsection 5(b)(2)(C)) of the GP, are cleaned of any construction sediment or debris and are functioning, AND the site has been stabilized for at least 3 months following the cessation of construction activities. A site is considered stabilized when there is no active erosion or sedimentation present and no disturbed areas remain exposed. At this time Eversource will have the site inspected by a qualified inspector to confirm final stabilization. The registrant shall indicate compliance with this requirement on the Notice of Termination form (Attachment G).

10.2 Notice of Termination

At the completion of the Project, a Notice of Termination shall be filed with the CT DEEP commissioner. The Project shall be considered complete after the site has been stabilized for at least three (3) months following cessation of construction activities. It shall not be considered stabilized until there is no active erosion or sedimentation present or no disturbed areas remain exposed. The Notice of Termination, included in Attachment G, shall be completed by the Contractor, signed by the Permittee, and filed with the CT DEEP commissioner at the following address:

Permit Coordinator
Bureau of Materials Management & Compliance Assurance
Department of Energy & Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Note: This page intentionally left blank

ATTACHMENT A

General Permit Registration Form

(Included only in Hardcopy SWPCP)

Note: This page intentionally left blank

Connecticut Department of
Energy & Environmental Protection
Bureau of Materials Management & Compliance Assurance
Water Permitting & Enforcement Division

General Permit Registration Form for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, effective 10/1/13 (electronic form)

Prior to completing this form, you **must** read the instructions for the subject general permit at **DEEP-WPED-INST-015**.
This form must be filled out electronically before being printed.
You must submit the registration fee along with this form.

The status of your registration can be checked on the DEEP's ezFile. Portal. Please note that DEEP will no longer mail certificates of registration.

CPPU USE ONLY

App #: _____

Doc #: _____

Check #: _____

Program: **Stormwater**

Part I: Registration Type

Select the appropriate boxes identifying the registration type and registration deadline.

Registration Type			Registration Timeline	
☐	**Re-registration** **Existing Permit No. GSN** _____		**On or before February 1, 2014*** *Note: Failure to renew a permit by this date will require submission of new registration. Re-registrants must only complete Parts I, II, III, IV - Question 1, VII and submit Attachment A.	
☑	**New Registration** (Refer to Section 2 of the permit for definitions of Locally Exempt and Locally Approvable Projects)	☐ **Locally Approvable** **Size of soil disturbance:** _____	**New registration - Sixty (60) days prior to the initiation of the construction activity for:** For sites with a total soil disturbance area of 5 or more acres	
		☑ **Locally Exempt** **Size of soil disturbance:** 9.48	☑	**New registration - Sixty (60) days prior to the initiation of the construction activity for:** Sites with a total disturbance area of one (1) to twenty (20) acres except those with discharges to impaired waters or tidal wetlands
			☐	**New registration - Ninety (90) days prior to the initiation of the construction activity for:** (i) Sites with a total soil disturbance area greater than twenty (20) acres, or (ii) Sites discharging to a tidal wetland (that is not fresh-tidal and is located within 500 feet), or (iii) Sites discharging to the impaired water listed in the "Impaired Waters Table for Construction Stormwater Discharges"

Part II: Fee Information

1. New Registrations

   a. Locally approvable projects (registration only):

☐ $625

   b. Locally exempt projects (registration and Plan):

☑ $3,000 total soil disturbance area ≥ one (1) and < twenty (20) acres.

☐ $4,000 total soil disturbance ≥ twenty (20) acres and < fifty (50) acres.

☐ $5,000 total soil disturbance ≥ fifty (50) acres.

2. Re-Registrations

☐ $625 (sites previously registered prior to September 1, 2012)

☐ $0 (sites previously registered between to September 1, 2012 and effective date of this permit)

Total Fee: $3,000.00

The fees for municipalities shall be half of those indicated in subsections (a), (b) and (c) above pursuant to Section 22a-6(b) of the Connecticut General Statutes. State and Federal agencies shall pay the full fees specified in this subsection. The registration will not be processed without the fee. The fee shall be non-refundable and shall be paid by certified check or money order payable to the Department of Energy and Environmental Protection.

Part III: Registrant Information

- If a registrant is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of the State. If applicable, the registrant's name shall be stated **exactly** as it is registered with the Secretary of the State. This information can be accessed at **CONCORD**
- If a registrant is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).

1. Registrant /Client Name: EVERSOURCE ENERGY SERVICE COMPANY

   Registrant Type: Business Entity

   Secretary of the State business ID #: 0033981

   Mailing Address: 107 Selden St

   City/Town: Berlin State: CT Zip Code: 06037

   Business Phone: (800) 286-2000 ext.:

   Example:(xxx) xxx-xxxx

   Contact Person: MARK PAPPALARDO Title :

   E-Mail: MARK.PAPPALARDO@EVERSOURCE.COM

2. List billing contact:

   Name: EVERSOURCE ENERGY SERVICE COMPANY

   Mailing Address: 107 Selden St

   City/Town: Berlin State: CT Zip Code: 06037

   Business Phone: (800) 286-2000 ext.:

   Contact Person: ROBERT DEPTULA Title :

3. List primary contact for departmental correspondence and inquiries:
   Name: EVERSOURCE ENERGY SERVICE COMPANY
   Mailing Address: 107 Selden St
   City/Town: Berlin State: CT Zip Code: 06037
   Business Phone: (800) 286-2000 ext.
   Contact Person: ROBERT DEPTULA Title:

4. List owner of the property on which the activity will take place:
   Name: EVERSOURCE ENERGY SERVICE COMPANY
   Mailing Address: 107 Selden St
   City/Town: Berlin State: CT Zip Code: 06037
   Business Phone: (800) 286-2000 ext.
   Contact Person: ROBERT DEPTULA
5. List preparer:
   Name: AECOM, INC.
   Mailing Address: 500 Enterprise Dr
   City/Town: Rocky Hill State: CT Zip Code: 06067
   Business Phone: (860) 263-5800 ext.
   Contact Person: CHRISTOPHER NEWHALL Title:
6. List design professional:
   Name: AECOM, INC.
   Mailing Address: 500 Enterprise Dr
   City/Town: Rocky Hill State: CT Zip Code: 06067
   Business Phone: (860) 263-5800 ext.
   Contact Person: Fraser Walsh Title: Sr. Eng.
7. List Reviewing Qualified Professional (for locally approvable projects only):
   Name:
   Mailing Address:
   City/Town: State: Zip Code:
   Business Phone: ext.
   Contact Person: Title:

Part IV: Site Information

1. Site Name: Greater Hartford-Central CT Reliability Project
   Street Address or Description of Location: Linear Electric Transmission Line Project
   City/Town: Newington, West Hartford, Hartford State: CT Zip Code: 06111
   Brief Description of construction activity:
   Linear electric transmission line project involving installation of both overhead line and pole structures, as well as underground cable and duct bank system for the 1346 Line. Modifications to existing Newington and Southwest Hartford substations is required as well as reconfiguration of the existing overhead 1782 transmission line tap.
   Project Start Date: 1 Aug 2018 Anticipated Completion Date: 31 Dec 2019
   Normal working hours: 7 AM to 7 PM

Additional Contacts

1. Name: BURNS & MCDONNELL ENGINEERING COMPANY, INC.
   Mailing Address: 108 Leigus Rd
   City/Town: Wallingford State: CT Zip Code: 06492
   Business Phone: (203)284-8590 ext.
   Contact Person: Robbyn Reed, P.E. Title: Section Manager
   Association (e.g. developer, general or site contractor, etc.): Professional Engineer
2. Name:
   Mailing Address:
   City/Town: State: Zip Code:
   Business Phone: ext.
   Contact Person: Title:
   Association (e.g. developer, general or site contractor, etc.):
3. Name:
   Mailing Address:
   City/Town: State: Zip Code:
   Business Phone: ext.
   Contact Person: Title:
   Association (e.g. developer, general or site contractor, etc.):
4. Name:
   Mailing Address:
   City/Town: State: Zip Code:
   Business Phone: ext.
   Contact Person: Title:
   Association (e.g. developer, general or site contractor, etc.):
5. Name:
   Mailing Address:
   City/Town: State: Zip Code:
   Business Phone: ext.
   Contact Person: Title:
   Association (e.g. developer, general or site contractor, etc.):
6. Name:
   Mailing Address:
   City/Town: State: Zip Code:
   Business Phone: ext.
   Contact Person: Title:
   Association (e.g. developer, general or site contractor, etc.):
7. Name:
   Mailing Address:
   City/Town: State: Zip Code:
   Business Phone: ext.
   Contact Person: Title:
   Association (e.g. developer, general or site contractor, etc.):

2. **MINING** : Is the activity on the site in question part of mining operations (i.e. sand and gravel)? ☐Yes ☑No

If yes, mining is not authorized by this general permit. You must submit the Registration Form for the General Permit for the Discharge of Stormwater Associated with Industrial Activity.

3. **COMBINED OR SANITARY SEWER:** Does all of the stormwater from the proposed activity discharge to a combined or sanitary sewer (i.e. a sewage treatment plant)? ☐ Yes ☑No

If yes, this activity is not regulated by this permit. Contact the Water Permitting & Enforcement Division at 860-424-3018.

4. **INDIAN LANDS:** Is or will the facility be located on federally recognized Indian lands? ☐ Yes ☑No

5. **COASTAL BOUNDARY:** Is the activity which is the subject of this registration located within the coastal boundary as delineated on DEEP approved coastal boundary maps? ☐ Yes ☑No

The coastal boundaries fall within the following towns: Branford, Bridgeport, Chester, Clinton, Darien, Deep River, East Haven, East Lyme, Essex, Fairfield, Greenwich, Groton (City and Town), Old Lyme, Guilford, Hamden, Ledyard, Lyme, Madison, Milford, Montville, New London, New Haven, North Haven, Norwalk, Norwich, Old Saybrook, Orange, Preston, Shelton, Stamford, Stonington (Borough and Town), Stratford, Waterford, West Haven, Westbrook and Westport.

If "yes", and this registration is for a new authorization or a modification of an existing authorization where the physical footprint of the subject activity is modified, you must provide documentation to the DEEP Office of Long Island Sound Programs or the local governing authority has issued a coastal site plan approval or determined the project is exempt from coastal site plan review. Provide this documentation with your registration as Attachment B. See guidance in Appendix D of the general permit. Information on the coastal boundary is available at the local town hall or on the **Connecticut Coastal Resources Map** . Additional DEEP Maps and Publications are available by contacting DEEP Staff at 860-424-3555.

6. **ENDANGERED OR THREATENED SPECIES:**

In order to be eligible to register for this General permit, each registrant must either perform a self-assessment, obtain a limited one-year determination, or obtain a safe-harbor determination regarding threatened and endangered species. This may include the need to develop and implement a mitigation plan. While each alternative has different limitations, the alternatives are not mutually exclusive; a registrant may register for this General Permit using more than one alternative, See Appendix A of the general Permit. Each registrant must complete this AND Attachment C to this Registration form and a registrant who does not or cannot do so is not eligible to register under this General Permit.

Each registration must perform a review of the Department's Natural Diversity Database maps to determine if the site of the construction activity is located within or in proximity (within ¼ mile) to a shaded area.

a. Provide the date of the NDDB maps were reviewed: 18 May 2018 (Print a copy of the NDDB map you viewed since it must be submitted with this registration as part of Attachment C.)

b. For a registrant using a limited one-year determination or safe harbor determination to register for this General Permit, provide the Department's Wildlife Division NDDB identification number for any such determination:

_____ (The number is on the determination issued by the Department's Wildlife Division).

For more information on threatened and endangered species requirements, refer to Appendix A and section 3(b)(2) of this General Permit, Visit the DEEP website at **Natural Diversity Data Base** or call the NDDB at 860-424-3011.

c. I verify that I have completed Attachment C to this Registration Form. ☐ Yes

7. **WILD AND SCENIC RIVERS:** Is the proposed project within the watershed of a designated Wild and Scenic River? (See Appendix H for guidance) ☐ Yes ☑ No

8. **AQUIFER PROTECTION AREAS:** Is the site located within a mapped **Aquifer Protection Area** , as defined in Section 22a-354h of the CT General Statutes? (For additional guidance, please refer to Appendix C of the General Permit) ☐ Yes ☑ No

9. **Connecticut Guidelines for Soil Erosion and Sediment Control Guidelines:** Is the activity in accordance with Connecticut Guidelines for Soil Erosion and Sediment Control Guidelines and local erosion & sediment control ordinances, where applicable? ☑ Yes ☐ No

10. **HISTORIC AND/OR ARCHAEOLOGICAL RESOURCES:**

Has the site of the proposed activity been reviewed (using the process outlined in Appendix G of this permit) for historic and/or archaeological resources? ☑ Yes ☐ No

a. The review indicates the proposed site does not have the potential for historic/ archaeological resources, OR ☑ Yes ☐ No

b. The review indicated historic and/ or archaeological resource potential exists and the proposed activity is being or has been reviewed by the Offices of Culture and Tourism, OR ☐ NA ☐ Yes ☑ No

c. The proposed activity has been reviewed and authorized under an Army Corps of Engineers Section 404 wetland permit. ☐ NA ☐ Yes ☑ No

11. **CONSERVATION OR PRESERVATION RESTRICTION:**

Is the property subject to a conservation or preservation restriction? ☐ Yes ☑ No

If Yes, proof of written notice of this registration to the holder of such restriction or a letter from the holder of such restriction verifying this registration is in compliance with the terms of the restriction, must be submitted as Attachment D.

Part V: Stormwater Discharge Information

Table 1

Outfall #	a) Type	b) Pipe Material	c) Pipe Size	d) Note: To find lat/long, go to: CT ECO . A decimal format is required here. Directions on how to use CT ECO to find lat. /long. and conversions can be found in in Part V, section d of the DEEP-WPED-INST-015 .		e) What method was used to obtain your latitude/longitude information?
				Longitude *(Format: -xx.xxxxx)*	Latitude *(Format: xx.xxxxx)*	
1	Other(Please fill in below) Sheet flow			-72.752494	41.717214	ezFile Portal Map
2	Other(Please fill in below) Sheet flow			-72.750205	41.716998	ezFile Portal Map
3	Other(Please fill in below) Sheet Flow			-72.747019	41.718051	ezFile Portal Map
4	Other(Please fill in below) Sheet Flow			-72.741912	41.718337	ezFile Portal Map
5	Other(Please fill in below) Sheet Flow			-72.739597	41.718772	ezFile Portal Map

Part V: Stormwater Discharge Information Continued

Table 2

2. Provide the following information about the receiving water(s)/wetland(s) that receive stormwater runoff from your site, either directly or through the storm sewer system:							
Outfall #	**Dates when this outfall will be active:**	**a) To what system or receiving water does your stormwater runoff discharge? either "storm sewer or wetlands" or "waterbody" (If you select storm sewer or wetlands, columns c.1&2 of this table are not required to be completed)**	**b) What is your watershed ID (freshwater) or 305b ID (estuary)? (Section 3.b, of the DEP-GP-INST-015 explains how to find this information)**	**c.1) Is your receiving water identified as an impaired water in the "Impaired Waters Table for Construction Stormwater Discharges"?**	***If you answered yes to question c.1, then answer the question below*** **c.2) Has any Total Maximum Daily Load (TMDL) been approved for your receiving waterbody?**	**For the drainage area associated with each outfall: Effective Impervious Area Before Construction (sq ft)**	**For the drainage area associated with each outfall: Effective Impervious Area After Construction (sq ft)**
1	Start: 1 Aug 2018 End: 31 Dec 2019	Waterbody	412	☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	0	0
2	Start: 1 Aug 2018 End: 31 Dec 2019	Waterbody	412	☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	0	0
3	Start: 1 Aug 2018 End: 31 Dec 2019	Storm Sewer or Wetlands		☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	0	0
4	Start: 1 Aug 2018 End: 31 Dec 2019	Storm Sewer or Wetlands		☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	0	0
5	Start: 1 Aug 2018 End: 31 Dec 2019	Storm Sewer or Wetlands		☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	0	0
Provide the total effective impervious area for the entire site(sq ft):						186165	207935

Part V: Stormwater Discharge Information

Table 1

Outfall #	a) Type	b) Pipe Material	c) Pipe Size	d) Note: To find lat/long, go to: CT ECO . A decimal format is required here. Directions on how to use CT ECO to find lat. /long. and conversions can be found in in Part V, section d of the DEEP-WPED-INST-015 .		e) What method was used to obtain your latitude/longitude information?
				Longitude *(Format: -xx.xxxxx)*	Latitude *(Format: xx.xxxxx)*	
6	Other(Please fill in below) Sheet Flow			-72.737803	41.719078	ezFile Portal Map
7	Other(Please fill in below) Sheet Flow			-72.734152	41.720782	ezFile Portal Map
8	Other(Please fill in below) Sheet Flow			-72.716396	41.740895	ezFile Portal Map
9	Other(Please fill in below) Sheet Flow			-72.715504	41.741762	ezFile Portal Map
10	Other(Please fill in below) Sheet Flow			-72.711314	41.750694	ezFile Portal Map

Part V: Stormwater Discharge Information Continued

Table 2

2. Provide the following information about the receiving water(s)/wetland(s) that receive stormwater runoff from your site, either directly or through the storm sewer system:							
Outfall #	**Dates when this outfall will be active:**	**a) To what system or receiving water does your stormwater runoff discharge? either "storm sewer or wetlands" or "waterbody" (If you select storm sewer or wetlands, columns c.1&2 of this table are not required to be completed)**	**b) What is your watershed ID (freshwater) or 305b ID (estuary)? (Section 3.b, of the DEP-GP-INST-015 explains how to find this information)**	**c.1) Is your receiving water identified as an impaired water in the "Impaired Waters Table for Construction Stormwater Discharges"?**	***If you answered yes to question c.1, then answer the question below*** **c.2) Has any Total Maximum Daily Load (TMDL) been approved for your receiving waterbody?**	**For the drainage area associated with each outfall: Effective Impervious Area Before Construction (sq ft)**	**For the drainage area associated with each outfall: Effective Impervious Area After Construction (sq ft)**
6	Start: 1 Aug 2018 End: 31 Dec 2019	Storm Sewer or Wetlands		☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	0	0
7	Start: 1 Aug 2018 End: 31 Dec 2019	Waterbody	412	☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	0	0
8	Start: 1 Aug 2018 End: 31 Dec 2019	Storm Sewer or Wetlands		☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	0	0
9	Start: 1 Aug 2018 End: 31 Dec 2019	Storm Sewer or Wetlands		☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	0	0
10	Start: 1 Aug 2018 End: 31 Dec 2019	Waterbody	610412	☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	111350	122502
Provide the total effective impervious area for the entire site(sq ft):						186165	207935

Part V: Stormwater Discharge Information

Table 1

Outfall #	a) Type	b) Pipe Material	c) Pipe Size	d) Note: To find lat/long, go to: CT ECO . A decimal format is required here. Directions on how to use CT ECO to find lat. /long. and conversions can be found in in Part V, section d of the DEEP-WPED-INST-015 .		e) What method was used to obtain your latitude/longitude information?
				Longitude *(Format: -xx.xxxxx)*	Latitude *(Format: xx.xxxxx)*	
11	Pipe	Plastic	her (Please fill in belo 12"	-72.750347	41.717630	ezFile Portal Map

Part V: Stormwater Discharge Information Continued

Table 2

2. Provide the following information about the receiving water(s)/wetland(s) that receive stormwater runoff from your site, either directly or through the storm sewer system:							
Outfall #	**Dates when this outfall will be active:**	**a) To what system or receiving water does your stormwater runoff discharge? either "storm sewer or wetlands" or "waterbody" (If you select storm sewer or wetlands, columns c.1&2 of this table are not required to be completed)**	**b) What is your watershed ID (freshwater) or 305b ID (estuary)? (Section 3.b, of the DEP-GP-INST-015 explains how to find this information)**	**c.1) Is your receiving water identified as an impaired water in the "Impaired Waters Table for Construction Stormwater Discharges"?**	***If you answered yes to question c.1, then answer the question below*** **c.2) Has any Total Maximum Daily Load (TMDL) been approved for your receiving waterbody?**	**For the drainage area associated with each outfall: Effective Impervious Area Before Construction (sq ft)**	**For the drainage area associated with each outfall: Effective Impervious Area After Construction (sq ft)**
11	Start: 31 Dec 2019 End: 1 Jan 2020	Storm Sewer or Wetlands		☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	74815	85433
	Start: End:	Select One		Y N NA	Y N NA		
	Start: End:	Select One		Y N NA	Y N NA		
	Start: End:	Select One		Y N NA	Y N NA		
	Start: End:	Select One		Y N NA	Y N NA		
Provide the total effective impervious area for the entire site(sq ft):						186165	207935

Part V: Stormwater Discharge Information (continued)

Impaired waters: If you answered "yes" to Table 2, question 2.c.1, **verify** that the project's Pollution Control Plan (Plan) addresses the control measures below in Question 1 or 2, as appropriate.

1. **If the impaired water does not have a TMDL,** confirm compliance by selecting 1.a. or 2.b. below:

a. No more than 3 acres is disturbed at any time; ☐ Yes

OR

b. Stormwater runoff from a 2 yr, 24 rain event is **retained.** ☐ Yes

2. **If the impaired water has a TMDL,** confirm compliance by selecting 2.a. and 2.b. below and either question 2.c.1. or 2.c.2. below:

a. The Plan documents there is sufficient remaining Waste Load Allocations (WLA) in the TMDL for the proposed discharge, ☐ Yes

AND

b. Control measures shall be implemented to assure the WLA will not be exceeded, ☐ Yes

AND

c. 1. Stormwater discharges will be monitored for the indicator pollutant identified in the TMDL, ☐ Yes

OR

2. The Plan documents specific requirements for stormwater discharges specified in the TMDL. ☐ Yes

Part VI: Pollution Control Plan Availability (check one of the following four categories)

☑ I am registering a Locally Exempt project and submitting the required electronic Plan (in Adobe™ PDF or similarly publically available format) pursuant to Section 3(c)(2)(E) of this permit.

- ☑ Plan is attached to this registration form
- ☐ Plan is available at the following Internet Address (URL): _____

☐ I am registering a Locally Approvable project and have chosen not to submit the Plan with this registration pursuant to Section 3(c)(1) of this permit.

☐ I am registering a Locally Approvable project and have chosen to make my Plan electronically available pursuant to Section 4(c)(2)(N) of this permit.

- ☐ Plan is attached to this registration form
- ☐ Plan is available at the following Internet Address (URL): _____

☐ I am registering a Locally exempt project and do not have the capability to submit the Plan electronically. Therefore, I am submitting a paper copy with this registration as Attachment E.

Part VII: Registrant Certification

The registrant *and* the individual(s) responsible for actually preparing the registration must sign this part. A registration will be considered incomplete unless all required signatures are provided.

For New Registrants:

"I hereby certify that I am making this certification in connection with a registration under such general permit, submitted to the commissioner by EVERSOURCE ENERGY SERVICE COMPANY for an activity located at Linear Electric Transmission Line Project, Newington, West Hartford, Hartford, CT 06111 and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify that I have made an affirmative determination in accordance with Section 3(b) (8) (B) of this general permit. I understand that the registration filed in connection with such general permit is submitted in accordance with and shall comply with the requirements of Section 22a-430b of Connecticut General Statutes, as amended by Public Act 12-172. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."

For Re-registrants:

"I hereby certify that I am making this certification in connection with a registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by _____ for an activity located at _____ and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that all designs and plans for such activity meet the current terms and conditions of the general permit in accordance with Section 5(b)(5)(C) of such general permit and that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I verify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this verification is based is true, accurate and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and an other applicable law."

Signature of Registrant	
MARK PAPPALARDO	
Name of Registrant (print or type)	Title (if applicable)
Signature of Preparer and Date (if different than above)	
CHRISTOPHER NEWHALL	
Name of Preparer (print or type)	Title (if applicable)

Part VIII: Professional Engineer (or Landscape Architect, where appropriate) Design Certification (for publically approvable and exempt projects)

The following certification must be signed by a Professional Engineer, or Landscape Architect where appropriate.

"I hereby certify that I am a licensed in the State of Connecticut.
I am making this certification in connection with a registration under such general permit, submitted to the commissioner by EVERSOURCE ENERGY SERVICE COMPANY for an activity located at Linear Electric Transmission Line Project, Newington, West Hartford, Hartford, CT 06111 .
I certify that I have thoroughly and completely reviewed the Stormwater Pollution Control Plan for the project or activity covered by this certification. I further certify, based on such review and on the standard of care for such projects, that the Stormwater Pollution Control Plan has been prepared in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, the Stormwater Quality Manual, as amended, and the conditions of the general permit, and that the controls required for such Plan are appropriate for the site. I further certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement in this certification may subject me to sanction by the Department and/or be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."

Signature of Design Professional and Date	
Fraser Walsh	Fraser Walsh
Name of Professional (print or type)	License Number

Affix P.E/L.A Stamp Here

Part IX: Reviewing Qualified Professional Certification

The following certification must be signed by a) a Conservation District reviewer OR, b) a qualified soil erosion and sediment control and/ or professional engineer

☐ **Review Certification by Conservation District:**

1.) District: _____

Date of Affirmative Determination: _____

" I am making this certification in connection with a registration under General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by _____ for an activity located at _____.

I have personally examined and am familiar with the information that provides the basis for this certification, and I affirm, based on the review described in Section 3(b)(11)(C) of this general permit and on the standard of care for such projects, that the Stormwater Pollution Control Plan is adequate to assure that the activity authorized under this general permit will comply with the terms and conditions of such general permit and that all stormwater management systems: (i) have been designed to control pollution to the maximum extent achievable using measures that are technologically available and economically practicable and that conform to those in the Guidelines and the Stormwater Quality Manual; (ii) will function properly as designed; (iii) are adequate to ensure compliance with the terms and conditions of this general permit; and (iv) will protect the waters of the state from pollution."

_____

Signature of District Professional and Date

_____ _____

Name of District Professional License Number (if applicable)

Or

☐ **Review Certification by Qualified Professional:**

Company Name: _____

Name: _____

License #: _____

Level of independency of professional:

Required for all projects disturbing over 1 acre:

1. I verify I am not an employee of the registrant. ☐ Yes
2. I verify I have no ownership interest of any kind in the project for which the registration is being submitted. ☐ Yes

Required for projects with 15 or more acres of site disturbance (in addition to questions 1&2):

3. I verify I did not engage in any activities associated with the preparation, planning, designing or engineering of the soil erosion and sediment control plan or stormwater management systems plan for this registrant.

☐ Yes

4. I verify I am not under the same employ as any person associated with the preparation, planning, designing or engineering of the soil erosion and sediment control plan or stormwater management systems plan for this registrant.

☐ Yes

Part IX: Reviewing Qualified Professional Certification (continued)

"I hereby certify that I am a qualified professional engineer or qualified soil erosion and sediment control professional, or both, as defined in the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and as further specified in Sections 3(b)(11)(A) and (B) of such general permit. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by _____ for an activity located at _____ .
I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(11)(C) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify, based on my review of all information described in Section 3(b)(11)(C) of such general permit and on the standard of care for such projects, that I have made an affirmative determination in accordance with Sections 3(b)(11)(D)(i) and (ii) of this general permit. I understand that this certification is part of a registration submitted in accordance with Section 22a-430b of Connecticut General Statutes, as amended by Public Act 12-172, and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."

_____

Signature of Reviewing Qualified Professional

_____ _____

Name of Reviewing Qualified Professional License No.

Affix P.E./ L.A. Stamp Here

Note: Please submit the fee along with a completed, printed and signed Registration Form and all additional supporting documents to:

CENTRAL PERMIT PROCESSING UNIT
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

Bureau of Materials Management and Compliance Assurance

Notice of Permit Authorization

August, 24 2018

MARK PAPPALARDO
EVERSOURCE ENERGY SERVICE COMPANY
107 Selden St
Berlin, CT 06037-1616

Subject: General Permit Registration for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities
Application NO.: 201807320

MARK PAPPALARDO:

The Department of Energy and Environmental Protection, Water Permitting and Enforcement Division of the Bureau of Materials Management and Compliance Assurance, has completed the review of the Greater Hartford-Central CT Reliability Project (located at Linear Electric Transmission Line Project, Newington, West Hartford, Hartford) registration for the **General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, effective 10/1/13 (general permit)** . The project is compliant with the requirements of the general permit and the discharge(s) associated with this project is (are) authorized to commence as of the date of this letter. Permit No. GSN003318 has been assigned to authorize the stormwater discharge(s) from this project.

Questions can be emailed to deep.stormwater@ct.gov.

ATTACHMENT B

General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities

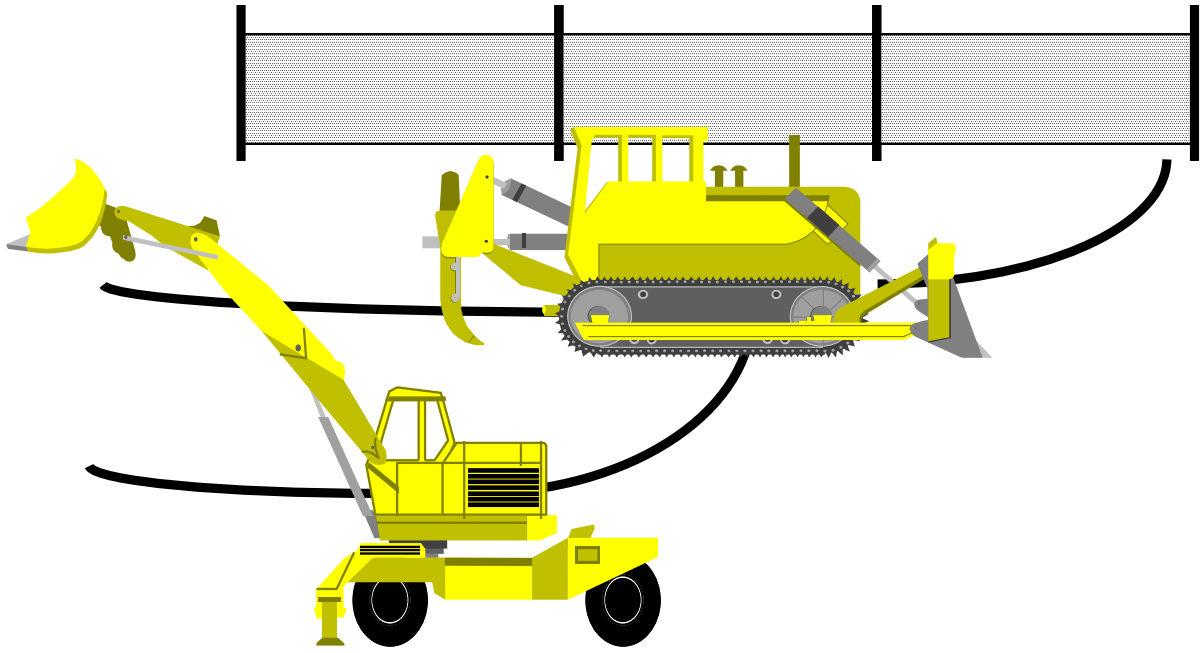
(*Included only in Hardcopy SWPCP*)

Note: This page intentionally left blank

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities



Issuance Date: August 21, 2013
Effective Date: October 1, 2013

Printed on recycled paper

General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

Table of Contents

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

Section 1. Authority

This general permit is issued under the authority of section 22a-430b of the Connecticut General Statutes.

Section 2. Definitions

The definitions of terms used in this general permit shall be the same as the definitions contained in section 22a-423 of the Connecticut General Statutes and section 22a-430-3(a) of the Regulations of Connecticut State Agencies. As used in this general permit, the following definitions shall apply:

"*x-year, 24-hour rainfall event*" means the maximum 24-hour precipitation event with a probable recurrence interval of once in the given number of years (i.e. x=2, 25 or 100), as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

"*Annual sediment load*" means the total amount of sediment carried by stormwater runoff on an annualized basis.

"*Aquifer protection area*" means aquifer protection area as defined in section 22a-354h of the Connecticut General Statutes.

"*Best engineering practices*" means the design of engineered control measures to control pollution to the maximum extent achievable using measures that are technologically available and economically practicable.

"*CFR*" means the Code of Federal Regulations.

"*Coastal area*" means coastal area as defined in section 22a-93(3) of the Connecticut General Statutes.

"*Coastal waters*" means coastal waters as defined in section 22a-93(5) of the Connecticut General Statutes.

"*Commissioner*" means commissioner as defined in section 22a-2(b) of the Connecticut General Statutes.

"*Construction activity*" means any activity associated with construction at a site including, but not limited to, clearing and grubbing, grading, excavation, and dewatering.

"*Department*" means the Department of Energy & Environmental Protection.

"*Developer*" means a person who or municipality which is responsible, either solely or partially through contract, for the design and construction of a project site.

"*Dewatering wastewater*" means wastewater associated with the construction activity generated from the lowering of the groundwater table, the pumping of accumulated stormwater or uncontaminated groundwater from an excavation, the pumping of surface water from a cofferdam, or pumping of other surface water that has been diverted into a construction site.

"*District*" means a soil and water conservation district established pursuant to section 22a-315 of the Connecticut General Statutes. Appendix E lists the Districts, their geographic delineations, and contact information.

"*Disturbance*" means the execution of any of the construction activity(ies) defined in this general permit.

"*Effective Impervious Cover*" is the total area of a site with a Rational Method runoff coefficient of 0.7 or greater (or other equivalent methodology) from which stormwater discharges directly to a surface water or to a storm sewer system.

"*Engineered stormwater management system*" means any control measure and related appurtenances which requires engineering analysis and/or design by a professional engineer.

"*Erosion*" means the detachment and movement of soil or rock fragments by water, wind, ice and gravity.

"*Fresh-tidal wetland*" means a tidal wetland with an average salinity level of less than 0.5 parts per thousand.

"*Grab sample*" means an individual sample collected in less than fifteen minutes.

"*Groundwater*" means those waters of the state that naturally exist or flow below the surface of the ground.

"*Guidelines*" means the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, established pursuant to section 22a-328 of the Connecticut General Statutes.

"*High Quality Waters*" means those waters defined as high quality waters in the Connecticut Water Quality Standards published by the Department, as may be amended.

"*Impaired water(s)*" means those surface waters of the state designated by the commissioner as impaired pursuant to Section 303(d) of the Clean Water Act and as identified in the most recent State of Connecticut Integrated Water Quality Report.

"*In Responsible charge*" means professional experience for which the Commissioner determines that a professional's primary duties consistently involve a high level of responsibility and decision making in the planning and designing of engineered stormwater management systems or in the planning and designing of soil erosion and sediment controls for residential and commercial construction projects. The Commissioner shall consider the following in determining whether a professional's experience qualifies as responsible charge experience:

(i) the level of independent decision-making exercised;

(ii) the number of individuals and the disciplines of the other professionals that the professional supervised or coordinated;

(iii) the extent to which a professional's responsibilities consistently involved the review of work performed by other professionals involved the planning and designing of engineered stormwater management systems or the planning and designing of soil erosion and sediment controls for residential and commercial construction projects;

(iv) the extent to which a professional's responsibilities consistently involved the planning and designing of engineered stormwater management systems or the planning and designing of soil erosion and sediment controls for residential and commercial construction projects and whether such responsibilities were an integral and substantial component of the professional's position;

(v) the nature of a professional's employer's primary business interests and the relation of those interests to planning and designing of engineered stormwater management systems or to planning and designing of soil erosion and sediment controls for residential and commercial construction projects;

(vi) the extent to which a professional has engaged in the evaluation and selection of scientific or technical methodologies for planning and designing of engineered stormwater management systems or for planning and designing of soil erosion and sediment controls for residential and commercial construction projects;

(vii) the extent to which a professional drew technical conclusions, made recommendations, and issued opinions based on the results of planning and designing of engineered stormwater management systems or of planning and designing of soil erosion and sediment controls for residential and commercial construction projects; or

(viii) any other factor that the Commissioner deems relevant.

"*Individual permit*" means a permit issued to a specific permittee under section 22a-430 of the Connecticut General Statutes.

"*Inland wetland*" means wetlands as defined in section 22a-38 of the Connecticut General Statutes.

"*Landscape Architect*" means a person with a currently effective license issued in accordance with chapter 396 of the Connecticut General Statutes.

"*Linear Project*" includes the construction of roads, railways, bridges, bikeways, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area.

"*Locally approvable project*" means a construction activity for which the registration is not for a municipal, state or federal project and is required to obtain municipal approval for the project.

"*Locally exempt project*" means a construction activity for which the registration is for a project authorized under municipal, state or federal authority and may not be required to obtain municipal approval for the project.

"*Low Impact Development*" or "*LID*" means a site design strategy that maintains, mimics or replicates pre-development hydrology through the use of numerous site design principles and small-scale treatment practices distributed throughout a site to manage runoff volume and water quality at the source.

"*Minimize*", for purposes of implementing the control measures in Section 5(*b*)(2) of this general permit, means to reduce and/or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice.

"*Municipal separate storm sewer system*" or "*MS4*" means conveyances for stormwater (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) owned or operated by any municipality and discharging to surface waters of the state.

"*Municipality*" means a city, town or borough of the state as defined in section 22a-423 of the Connecticut General Statutes.

"*Nephelometric Turbidity Unit*" or "*NTU*" means a unit measure of turbidity from a calibrated nephelometer.

"*Normal Working Hours*", for the purposes of monitoring under Section 5(*c*) of this general permit, are considered to be, at a minimum, Monday through Friday, between the hours of 8:00 am and 6:00 pm, unless additional working hours are specified by the permittee.

"*Permittee*" means any person who or municipality which initiates, creates or maintains a discharge in accordance with Section 3 of this general permit.

"*Person*" means person as defined in section 22a-423 of the Connecticut General Statutes.

"*Phase*" means a portion of a project possessing a distinct and complete set of activities that have a specific functional goal wherein the work to be completed in the phase is not dependent upon the execution of work in a later phase in order to make it functional.

"*Point Source*" means any discernible, confined and discrete stormwater conveyance (including but not limited to, any pipe, ditch, channel, tunnel, conduit, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft) from which pollutants are or may be discharged.

"*Professional Engineer*" or *"P.E.*" means a person with a currently effective license issued in accordance with chapter 391 of the Connecticut General Statutes.

"*Qualified Inspector*" means an individual possessing either (1) a professional license or certification by a professional organization recognized by the commissioner related to agronomy, civil engineering, landscape architecture, soil science, and two years of demonstrable and focused experience in erosion and sediment control plan reading, installation, inspection and/or report writing for residential and commercial construction projects in accordance with the Guidelines; or (2) five years of demonstrable and focused experience in erosion and sediment control plan reading, installation, inspection and/or report writing for residential and commercial construction projects in accordance with the Guidelines; or (3) certification by the Connecticut Department of Transportation (DOT).

"*Qualified professional engineer*" means a professional engineer who has, for a minimum of eight years, engaged in the planning and designing of engineered stormwater management systems for residential and commercial construction projects in accordance with the Guidelines and the Stormwater Quality Manual including, but not limited to, a minimum of four years in responsible charge of the planning and designing of engineered stormwater management systems for such projects.

"*Qualified soil erosion and sediment control professional*" means a landscape architect or a professional engineer who: (1) has for a minimum of eight years engaged in the planning and designing of soil erosion and sediment controls for residential and commercial construction projects in accordance with the Guidelines including, but not limited to, a minimum of four years in responsible charge of the planning and designing of soil erosion and sediment controls for such projects; or (2) is currently certified as a professional in erosion and sediment control as designated by EnviroCert International, Incorporated (or other certifying organization acceptable to the commissioner) and has for a minimum of six years experience engaged in the planning and designing of soil erosion and sediment controls for residential and commercial construction projects in accordance with the Guidelines including, but not limited to, a minimum of four years in responsible charge in the planning and designing of soil erosion and sediment controls for such projects.

"*Registrant*" means a person or municipality that files a registration.

"*Registration*" means a registration form filed with the commissioner pursuant to Section 4 of this general permit.

"*Regulated Municipal Separate Storm Sewer System*" or "*Regulated MS4*" means the separate storm sewer system of the City of Stamford or any municipally-owned or -operated separate storm sewer system (as defined above) authorized by the most recently issued General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 general permit) including all those located partially

or entirely within an Urbanized Area and those additional municipally-owned or municipally-operated Small MS4s located outside an Urbanized Area as may be designated by the commissioner.

"*Retain*" means to hold runoff on-site to promote vegetative uptake and groundwater recharge through the use of runoff reduction or LID practices or other measures. In addition, it means there shall be no subsequent point source release to surface waters from a storm event defined in this general permit or as approved by the commissioner.

"*Runoff reduction practices*" means those post-construction stormwater management practices used to reduce post-development runoff volume delivered to the receiving water, as defined by retaining the volume of runoff from a storm up to the first half inch or one inch of rainfall in accordance with Sections 5(b)(2)(C)(i)(a) or (b), respectively. Runoff reduction is quantified as the total annual post-development runoff volume reduced through canopy interception, soil amendments, evaporation, rainfall harvesting, engineered infiltration, extended filtration or evapo-transpiration.

"*Sediment*" means solid material, either mineral or organic, that is in suspension, is transported, or has been moved from its site of origin by erosion.

"*Site*" means geographically contiguous land on which a construction activity takes place or on which a construction activity for which authorization is sought under this general permit is proposed to take place. Non-contiguous land or water owned by the same person shall be deemed the same site if such land is part of a linear project (as defined in this section) or is otherwise connected by a right-of-way, which such person controls.

"*Soil*" means any unconsolidated mineral and organic material of any origin.

"*Stabilize"* means the use of measures as outlined in the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, or as approved by the commissioner, to prevent the visible movement of soil particles and development of rills.

"*Structural measure*" means a measure constructed for the temporary storage and/or treatment of stormwater runoff.

"*Standard Industrial Classification Code*" or "*SIC Code*" means those codes provided in the Standard Industrial Classification Manual, Executive Office of the President, Office of Management and Budget 1987.

"S*tandard of care*", as used in Section 3(b), means to endeavor to perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

"*Stormwater*" means waters consisting of rainfall runoff, including snow or ice melt during a rain event.

"*Stormwater Quality Manual*" means the 2004 Connecticut Stormwater Quality Manual published by the Connecticut Department of Energy & Environmental Protection, as amended.

"*Surface water*" means that portion of waters, as the term "waters" is defined in section 22a-423 of the Connecticut General Statutes, located above the ground surface.

"*Tidal wetland*" means a wetland as that term is defined in section 22a-29(2) of the Connecticut General Statutes.

"*Total disturbance*" means the total area on a site where soil will be exposed or susceptible to erosion during the course of all phases of a project.

"*Total Maximum Daily Load*" or "*TMDL*" means the maximum capacity of a surface water to assimilate a pollutant as established by the commissioner, including pollutants contributed by point and non-point sources and a margin of safety.

"*Upland soils*" means soils which are not designated as poorly drained, very poorly drained, alluvial, or flood plain by the National Cooperative Soils Survey, as may be amended, of the Natural Resources Conservation Service of the United States Department of Agriculture and/or the inland wetlands agency of the municipality in which the project will take place.

"*Water company*" means water company as defined in section 25-32a of the Connecticut General Statutes.

"*Water Quality Standards or Classifications*" means those water quality standards or classifications contained in the Connecticut Water Quality Standards published by the Department, as may be amended.

"*Water Quality Volume*" or "*WQV*" means the volume of runoff generated by one inch of rainfall on a site as defined in the 2004 Connecticut Stormwater Quality Manual, as amended.

Section 3. Authorization Under This General Permit

(a) Eligible Activities

This general permit authorizes the discharge of stormwater and dewatering wastewaters to surface waters from construction activities on a site, as defined in this general permit, with a total disturbance of one or more acres of land area on a site, *regardless of project phasing*.

In the case of a larger plan of development (such as a subdivision), the estimate of total acres of site disturbance shall include, but is not limited to, road and utility construction, individual lot construction (e.g. house, driveway, septic system, etc.), and all other construction associated with the overall plan, regardless of the individual parties responsible for construction of these various elements.

(b) Requirements for Authorization

This general permit authorizes the construction activity listed in the "Eligible Activities" section (Section 3(*a*)) of this general permit provided:

(1) Coastal Management Act

Such construction activity must be consistent with all applicable goals and policies in section 22a-92 of the Connecticut General Statutes, and must not cause adverse impacts to coastal resources as defined in section 22a-93(15) of the Connecticut General Statutes. Please refer to the Appendix D for additional guidance.

(2) Endangered and Threatened Species

Such activity must not threaten the continued existence of any species listed pursuant to section 26-306 of the Connecticut General Statutes as endangered or threatened and must not result in the destruction or adverse modification of habitat designated as essential to such species. See Appendix A.

(3) Aquifer Protection Areas

Such construction activity, if it is located within an aquifer protection area as mapped under section 22a-354b of the General Statutes, must comply with regulations adopted pursuant to section 22a-354i of the General Statutes. Please refer to the Appendix C for additional guidance.

For any construction activity regulated pursuant to sections 8(c) and 9(b) of the Aquifer Protection Regulations (section 22a-354i(1)-(10) of the Regulations of Connecticut State Agencies), the Stormwater Pollution Control Plan (Plan) must assure that stormwater run-off generated from the regulated construction activity (i) is managed in a manner so as to prevent pollution of groundwater, and (ii) complies with all the requirements of this general permit.

(4) Mining Operations Exception

The stormwater discharge resulting from an activity classified as Standard Industrial Classification 10 through 14 (the mining industry) is not authorized by this general permit and is regulated under the most recently issued General Permit for the Discharge of Stormwater Associated with Industrial Activity.

(5) Discharge to POTW

The stormwater is *not* discharged to a Publicly Owned Treatment Works (POTW).

(6) Discharge to Groundwater

The stormwater is *not* discharged entirely to groundwater, meaning a stormwater discharge to a surface water will not occur up to a 100-year, 24-hour rainfall event.

(7) Such construction activity must be consistent with the Wild and Scenic Rivers Act (16 U.S.C. 1271-1287) for those river components and tributaries which have been designated as Wild and Scenic by the United States Congress. Further, such construction activities must not have a direct and adverse effect on the values for which such river designation was established. Please refer to Appendix H for additional guidance.

(8) Certification Requirements for Registrants and other Individuals

As part of the registration for this general permit, the registrant and any other individual or individuals responsible for preparing the registration submits to the commissioner a written certification which, at a minimum, complies with the following requirements:

(A) The registrant and any other individual or individuals responsible for preparing the registration and signing the certification has completely and thoroughly reviewed, at a minimum, this general permit and the following regarding the activities to be authorized under such general permit:

(i) all registration information provided in accordance with Section 4(*c*)(2) of such general permit;

(ii) the project site, based on a site inspection;

(iii) the Stormwater Pollution Control Plan; and

(iv) any plans and specifications and any Department approvals regarding such Stormwater Pollution Control Plan;

(B) The registrant and any other individual or individuals responsible for preparing the registration and signing the certification pursuant to this general permit has, based on the review described in section 3(*b*)(8)(A) of this general permit, made an affirmative determination to:

(i) comply with the terms and conditions of this general permit;

(ii) maintain compliance with all plans and documents prepared pursuant to this general permit including, but not limited to, the Stormwater Pollution Control Plan;

(iii) properly implement and maintain the elements of the Stormwater Pollution Control Plan; and

(iv) properly operate and maintain all stormwater management systems in compliance with the terms and conditions of this general permit to protect the waters of the state from pollution;

(C) Such registrant and any other individual or individuals responsible for preparing the registration certifies to the following statement: "I hereby certify that I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY] and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(*b*)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify that I have made an affirmative determination in accordance with Section 3(*b*)(8)(B) of this general permit. I understand that the registration filed in connection with such general permit is submitted in accordance with and shall comply with the requirements of Section 22a-430b of Connecticut General Statutes. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

(9) The registrant has submitted to the commissioner a written certification by a professional engineer or, where appropriate, a landscape architect licensed in the State of Connecticut for the preparation, planning and design of the Stormwater Pollution Control Plan and stormwater management systems:

(A) The professional engineer or landscape architect shall certify to the following statement:

"I hereby certify that I am a [professional engineer][landscape architect] licensed in the State of Connecticut. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I certify that I have thoroughly and completely reviewed the Stormwater

Pollution Control Plan for the project or activity covered by this certification. I further certify, based on such review and on the standard of care for such projects, that the Stormwater Pollution Control Plan has been prepared in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, the Stormwater Quality Manual, as amended, and the conditions of the general permit, and that the controls required for such Plan are appropriate for the site. I further certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement in this certification may subject me to sanction by the Department and/or be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

(B) Nothing in this section shall be construed to authorize a professional engineer or a landscape architect to engage in any profession or occupation requiring a license under any other provision of the general statutes without such license.

(10) Plan Review and Certification by a District for Locally Approvable Projects

For those Plans not reviewed in accordance with Section 3(*b*)(11), below, the registrant has submitted to the commissioner a written certification by the appropriate regional District for the review of the Stormwater Pollution Control Plan pursuant to Appendix F, which, at a minimum, complies with the following requirements:

(A) the Plan Review Certification must be signed by the District. Information on the District review process is outlined in the Memorandum of Agreement provided in Appendix F. In cases where the District is unable to complete review of the Plan within the time limits specified in the Memorandum of Agreement in Appendix F, a notice to that effect signed by the District may be submitted in lieu of the certification.

(B) the Stormwater Pollution Control Plan has been prepared in accordance with the requirements of Section 5(*b*) of the general permit.

(C) Nothing in this subsection shall be construed to authorize District personnel to engage in any profession or occupation requiring a license under any other provision of the general statutes without such license.

(11) Plan Review and Certification by a Qualified Soil Erosion and Sediment Control Professional and Qualified Professional Engineer for Locally Approvable Projects

For those Plans not reviewed in accordance with Section 3(*b*)(10), above, the registrant has submitted to the commissioner a written certification by a qualified professional engineer or a qualified soil erosion and sediment control professional in accordance with the following requirements:

(A) for projects disturbing more than one acre and less than fifteen (15) acres, such qualified soil erosion and sediment control professional or qualified professional engineer:

(i) is not an employee, as defined by the Internal Revenue Service in the Internal Revenue Code of 1986, of the registrant; and

(ii) has no ownership interest of any kind in the project for which the registration is being submitted.

(B) for projects disturbing fifteen (15) acres or more, such qualified soil erosion and sediment control professional or qualified professional engineer:

(i) is not an employee, as defined by the Internal Revenue Service in the Internal Revenue Code of 1986, of the registrant;

(ii) did not engage in any activities associated with the preparation, planning, designing or engineering of such plan for soil erosion and sediment control or plan for stormwater management systems on behalf of such registrant;

(iii) is not under the same employ as any person who engaged in any activities associated with the preparation, planning, designing or engineering of such plans and specifications for soil erosion and sediment control or plans and specifications for stormwater management systems on behalf of such registrant; and

(iv) has no ownership interest of any kind in the project for which the registration is being submitted.

(C) The qualified professional engineer or qualified soil erosion and sediment control professional signing the certification has, at a minimum, completely and thoroughly reviewed this general permit and the following regarding the discharges to be authorized under such general permit:

(i) all registration information provided in accordance with Section 4(*c*)(2) of such general permit;

(ii) the site, based on a site inspection;

(iii) the Stormwater Pollution Control Plan;

(iv) the Guidelines;

(v) the Stormwater Quality Manual, if applicable; and

(vi) all non-engineered and engineered stormwater management systems, including any plans and specifications and any Department approvals regarding such stormwater management systems.

(D) Affirmative Determination

(i) The qualified soil erosion and sediment control professional signing the certification must have made an affirmative determination, based on the review described in section 3(*b*)(11)(C) of this general permit that:

(a) the Stormwater Pollution Control Plan prepared and certified pursuant to the registration is adequate to assure that the project or activity authorized under this general permit, if implemented in accordance with the Stormwater Pollution Control Plan, will comply with the terms and conditions of such general permit; and

(b) all non-engineered stormwater management systems:

(*1*) have been designed to control pollution to the maximum extent achievable using measures that are technologically available and economically

practicable and that conform to those in the Guidelines and the Stormwater Quality Manual;

(*2*) will function properly as designed;

(*3*) are adequate to ensure compliance with the terms and conditions of this general permit; and

(*4*) will protect the waters of the state from pollution.

(ii) The qualified professional engineer signing the certification must have made an affirmative determination, based on the review described in section 3(*b*)(11)(C) of this general permit that:

(a) the Stormwater Pollution Control Plan prepared and certified pursuant to the registration is adequate to assure that the activity authorized under this general permit, if implemented in accordance with the Stormwater Pollution Control Plan, will comply with the terms and conditions of such general permit; and

(b) all non-engineered and engineered stormwater management systems:

(*1*) have been designed to control pollution to the maximum extent achievable using measures that are technologically available and economically practicable and that conform to those in the Guidelines and the Stormwater Quality Manual;

(*2*) will function properly as designed;

(*3*) are adequate to ensure compliance with the terms and conditions of this general permit; and

(*4*) will protect the waters of the state from pollution.

(E) The qualified professional engineer or qualified soil erosion and sediment control professional shall, provided it is true and accurate, certify to the following statement:

"I hereby certify that I am a qualified professional engineer or qualified soil erosion and sediment control professional, or both, as defined in the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and as further specified in sections 3(*b*)(11)(A) and (B) of such general permit. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(*b*)(11)(C) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I further certify that I have made the affirmative determination in accordance with Sections 3(*b*)(11)(D)(i) and (ii) of this general permit. I understand that this certification is part of a registration submitted in accordance with Section 22a-430b of Connecticut General Statutes and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be

punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

(F) Nothing in this subsection shall be construed to authorize a qualified soil erosion and sediment control professional or a qualified professional engineer to engage in any profession or occupation requiring a license under any other provision of the general statutes without such license.

(12) New Discharges to Impaired Waters

New stormwater discharges directly to an impaired water, as indicated in the State's Integrated Water Quality Report, must be in accordance with the following conditions:

(A) Stormwater discharges that go directly to impaired waters seeking authorization under this general permit shall comply with the requirements of this subsection (B) below if the indicated cause or potential cause of the impairment is one of the following:

- Site Clearance (Land Development or Redevelopment)
- Post-Development Erosion and Sedimentation
- Source Unknown (if cause of impairment is Sedimentation/Siltation)

(B) Such stormwater discharge is authorized if the permittee complies with the requirements of Section 5(*b*)(3) of this permit and receives a written affirmative determination from the commissioner that the discharge meets the requirements of that section. In such case, the permittee must keep a copy of the written determination onsite with the Plan. If the permittee does not receive such affirmative determination, the construction activity is not authorized by this general permit and must obtain an individual permit.

(c) Registration

Pursuant to the "Registration Requirements" section (Section 4) of this general permit, a completed registration with respect to the construction activity shall be filed with the commissioner as follows:

(1) Locally Approvable Projects

The registration must:

(A) Be electronically submitted, along with all required elements in subsections (B), (C) and (D), below, at least sixty (60) days prior to the planned commencement of the construction activity.

(B) Include the Registration Form (available at www.ct.gov/deep/stormwater).

(C) Include any additional forms and information regarding compliance and/or consistency with the Coastal Management Act, Impaired Waters (including TMDL requirements), Endangered and Threatened Species, and Aquifer Protection Areas that may be required pursuant to the "Requirements of Authorization" section (Section 3(*b*)).

(D) Include a Plan Review Certification in accordance with the "Plan Review Certification" (Section 5(*b*)(8)).

Locally Approvable projects may also choose to make their Plan electronically available in accordance with Section 4(*c*)(2)(N) of this general permit. The 60 day period cited in subsection

(A), above, will not begin until all required elements have been submitted. Failure to include any of these required submissions shall be grounds to reject the registration.

(2) Locally Exempt Projects

The registration must:

(A) Be electronically submitted, along with all required elements in subsections (B), (C) and (D), below, at least:

(i) sixty (60) days prior to the planned commencement of the construction activity if the site has a total disturbed area of between one (1) and twenty (20) acres; ***or***

(ii) ninety (90) days prior to the planned commencement of construction activity if the site:

(a) has a total disturbed area greater than twenty (20) acres;

(b) discharges to a tidal wetland (that is not a fresh-tidal wetland) within 500 feet of the discharge point; ***or***

(c) is subject to the impaired waters provisions of Section 3(*b*)(12).

(B) Include the Registration Form (available at www.ct.gov/deep/stormwater).

(C) Include any additional forms and information regarding compliance and/or consistency with the Coastal Management Act, Impaired Waters (including TMDL requirements), Endangered and Threatened Species, and Aquifer Protection that may be required pursuant to the "Requirements of Authorization" section (Section 3(*b*)).

(D) Include an electronic copy of the Stormwater Pollution Control Plan (Plan) (or a web address where the electronic Plan can be downloaded) for the commissioner's review. The electronic Plan shall be in Adobe™ PDF format or similar publicly available format in common use. **DO NOT INCLUDE** in this electronic copy any pages or other material that do not pertain to stormwater management or erosion and sedimentation control (such as electrical and lighting plans, boundary or lot surveys, building plans, non-stormwater related detail sheets, etc.).

The 60 or 90 day periods cited in subsections (A), above, will not begin until all required elements have been submitted. Failure to include any of these required submissions shall be grounds to reject the registration.

(3) Re-Registration of Existing Projects

For sites previously registered under any previous version of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and for which no Notice of Termination has been submitted pursuant to the "Termination Requirements" section (Section 6), a Re-Registration Form (available at www.ct.gov/deep/stormwater) pursuant to Section 4(*c*)(3) shall be submitted on or before February 1, 2014. The re-registration fee is payable (or waived) in accordance with Section 4(c)(1)(A)(iii). Resubmission of the permittee's Plan is not required unless specifically requested by the commissioner.

(d) Small Construction

For construction projects with a total disturbance of between one and five acres, the permittee shall adhere to the erosion and sediment control land use regulations of the municipality in which the construction activity is conducted, as well as the Guidelines and the Stormwater Quality Manual.

No registration or Plan review and certification shall be required for such construction activity provided a land-use commission of the municipality (i.e. planning/zoning, wetland, conservation, etc) reviews and issues a written approval of the proposed erosion and sediment control measures, pursuant to the requirements of section 22a-329 of the Connecticut General Statutes. In the absence of such municipal commission approval, the permittee shall register with the DEEP under the requirements for a Locally Exempt Project and comply with all applicable conditions of this general permit.

(e) Geographic Area

This general permit applies throughout the State of Connecticut.

(f) Effective Date and Expiration Date of this General Permit

The registration provisions of Section 3(*c*) and 4 of this General Permit, including any applicable definitions or provisions referred to in those sections insofar as they facilitate submission of a registration, shall be effective September 1, 2013. All remaining provisions of this General Permit shall be effective on October 1, 2013. The provisions of this General Permit shall expire on September 30, 2018.

(g) Effective Date of Authorization

A construction activity is authorized by this general permit at such time as specified in subsections (1) and (2), below.

(1) Authorization Timelines

The activity is authorized based on the following timelines unless superseded by subsection (2), below:

(A) for locally approvable projects, sixty (60) days after the submission of the registration form required by Section 4(*c*), or

(B) for locally exempt projects under 20 acres, sixty (60) days after the submission of the registration form required by Section 4(*c*), or

(C) for locally exempt projects over 20 acres, ninety (90) days after the submission of the registration form required by Section 4(*c*).

(2) Alternate Authorization Timelines

If one of the following conditions for authorization applies, that condition shall supersede those of subsection (1), above:

(A) for sites for which the registration and Plan availability and review provisions of Section 4(e) are completed prior to the authorization periods in subsection (1), above, the commissioner may authorize the activity upon such completion, or

(B) for sites subject to the conditions of Section 3(b)(2), 3(*b*)(12) and/or Section 5(*a*)(2), the activity is authorized on the date of the commissioner's affirmative determination and/or approval, or

(C) for sites authorized by any previous version of this general permit and for which no Notice of Termination has been submitted pursuant to the "Termination Requirements" section (Section 6), the activity is authorized effective October 1, 2013. Authorization under this general permit shall cease if a re-registration form is not submitted on or before February 1. 2014.

(h) Revocation of an Individual Permit

If a construction activity is eligible for authorization under this general permit and such activity is presently authorized by an individual permit, the existing individual permit may be revoked by the commissioner upon a written request by the permittee. If the commissioner revokes such individual permit in writing, such revocation shall take effect on the effective date of authorization of such activity under this general permit.

(i) Issuance of an Individual Permit

If the commissioner issues an individual permit under section 22a-430 of the Connecticut General Statutes, authorizing a construction activity authorized by this general permit, this general permit shall cease to authorize that activity beginning on the date such individual permit is issued.

Section 4. Registration Requirements

(a) Who Must File a Registration

With the exception noted in the "Small Construction" section (Section 3(*d*)) of this general permit, any person or municipality which initiates, creates, originates or maintains a discharge described in the "Eligible Activities" section (Section 3(*a*)) of this general permit shall file with the commissioner a registration form that meets the requirements of the "Contents of Registration" section (Section 4(*c*)) of this general permit (or a re-registration form) and the applicable fee within the timeframes and in the amounts specified in Sections 3(*c*) and 4(*c*)(1)(A), respectively. Any such person or municipality filing a registration remains responsible for maintaining compliance with this general permit.

(b) Scope of Registration

Each registration shall be limited to the discharge at or from one site; no registration shall cover discharges at or from more than one site.

(c) Contents of Registration

(1) Fees

(A) Registration Fee

A registration, if required, shall not be deemed complete unless the registration fee has been paid in full.

(i) Locally Approvable Projects

A registration fee of $625.00 shall be submitted to the Department with the registration form.

(ii) Locally Exempt Projects

A registration fee shall be submitted with a registration form as follows:

(a) For sites with total disturbance of between one (1) and twenty (20) acres, the fee shall be $3,000.

(b) For sites with total disturbance equal to or greater than twenty (20) acres and less than fifty (50) acres, the fee shall be $4,000.

(c) For sites with total disturbance equal to or greater than fifty (50) acres, the fee shall be $5,000.

The fees for municipalities shall be half of those indicated in subsections (a), (b) and (c) above pursuant to section 22a-6(b) of the Connecticut General Statutes. State and Federal agencies shall pay the full fees specified in this subsection.

(iii) Re-registration

(a) For sites that registered under the previous version of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities prior to September 1, 2012 and for which no Notice of Termination has been submitted pursuant to the "Termination Requirements" section (Section 6), the re-registration fee shall be $625 payable with submission of the re-registration form within one hundred twenty (120) days from the effective date of this general permit. If a Notice of Termination is submitted prior to that time, no registration or fee are required.

(b) For sites that registered under the previous version of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities on or after September 1, 2012 and for which no Notice of Termination has been submitted pursuant to the "Termination Requirements" section (Section 6), the re-registration fee is waived.

(B) The registration fee shall be paid electronically or by check or money order payable to the Department of Energy & Environmental Protection.

(C) The registration fee is non-refundable.

(2) Registration Form

A registration shall be filed electronically on forms prescribed and provided by the commissioner (available at: www.ct.gov/deep/stormwater) and shall include, but not be limited to, the following:

(A) Legal name, address, and telephone number of the registrant. If the registrant is a person (as defined in Section 2 of this permit) transacting business in Connecticut and is registered with the Connecticut Secretary of the State, provide the exact name as registered with the Connecticut Secretary of the State.

(B) Legal name, address and telephone number of the owner of the property on which the construction activity will take place.

(C) Legal name, address and telephone number of the primary contact for departmental correspondence and inquiries, if different from the registrant.

(D) Legal name, address and telephone number of the developer of the property on which the construction activity is to take place.

(E) Legal name, address and daytime and off-hours telephone numbers of the general contractor(s) or other representative(s), if different from the developer.

(F) Legal name, address and telephone number of any consultant(s), engineer(s) or landscape architect(s) retained by the permittee to prepare the registration and Stormwater Pollution Control Plan.

(G) Location address or description of the site for which the registration is filed.

(H) The estimated duration of the construction activity.

(I) Indication of the normal working hours of the site.

(J) A brief description of the construction activity, including, but not limited to:

(i) Total number of acres to be disturbed, regardless of phasing.

(ii) Assurance that construction is in accordance with the Guidelines and local erosion and sediment control ordinances, where applicable.

(iii) For sites in the Coastal Boundary, documentation that the DEEP Office of Long Island Sound Programs or local governing authority has issued a coastal site plan approval or a determination that the project is exempt from coastal site plan review (see Appendix D) in accordance with section 22a-92 and 22a-93(15) of the Connecticut General Statutes.

(iv) Documentation that the construction activity will not threaten the continued existence of any species listed pursuant to section 26-306 of the Connecticut General Statutes as endangered or threatened and will not result in the destruction or adverse modification of habitat designated as essential to such species (see Appendix A).

(v) For sites discharging to certain impaired waters, as specified in Section 3(*b*)(12), documentation that the construction activity meets the requirements of that section and Section 5(*b*)(3) for authorization under this general permit.

(vi) Assurance that the construction activity is not located within an aquifer protection area (see Appendix C) as mapped under section 22a-354b of the Connecticut General Statutes or, if it is located within an aquifer protection area, that the construction activity will comply with regulations adopted pursuant to section 22a-354i of the Connecticut General Statutes.

(vii) For a proposed locally approvable project, a plan review certification from the appropriate District, qualified soil erosion and sediment control professional, and/or qualified professional engineer in accordance with Section 5(*b*)(10) or (11) or a notice from the District that they were unable to complete the Plan review within the time limits specified in the Memorandum of Agreement in Appendix F.

(K) A brief description of the stormwater discharge, including:

(i) The name of the municipal separate storm sewer system or immediate surface water body or wetland to which the stormwater runoff will discharge;

(ii) Verification of whether or not the site discharges to a tidal wetland (that is not a fresh-tidal wetland) within 500 feet of the discharge point, to a high quality water or to an impaired water with or without a TMDL;

(iii) The name of the watershed or nearest waterbody to which the site discharges.

(iv) Location of the stormwater discharge(s) including latitude and longitude.

(L) The total effective impervious cover for the site before and after the proposed construction activity.

(M) Documentation that the proposed construction activity has been reviewed for consistency with state Historic Preservation statutes, regulations, and policies including identification of any potential impacts on property listed or eligible for listing on the Connecticut Register of Historic Places. A review conducted for an Army Corps of Engineers Section 404 wetland permit would meet this qualification. Refer to Appendix G for guidance on conducting the required review.

(N) Registrants for locally approvable projects may, if they choose, attach an electronic copy of their Plan to their registration or provide a web address where their Plan may be downloaded. If an electronic plan is not provided, the registrant is still subject to the requirements for submission of a Plan to the commissioner or a member of the public pursuant to the "Plan Availability" section (Section 4(e)(2)). An electronic Plan shall be in Adobe™ PDF format or similar publicly available format in common use. **DO NOT INCLUDE** in the Plan any pages or other material that do not pertain to stormwater management or erosion and sedimentation control (such as electrical and lighting plans, boundary or lot surveys, building plans, non-stormwater related detail sheets, etc.).

(O) Registrants for all locally exempt projects must submit an electronic copy of their Plan or a web address where the electronic Plan can be downloaded. The electronic Plan shall be in Adobe™ PDF format or similar publicly available format in common use. **DO NOT INCLUDE** in this Plan any pages or other material that do not pertain to stormwater management or erosion and sedimentation control (such as electrical and lighting plans, boundary or lot surveys, building plans, non-stormwater related detail sheets, etc.).

(P) The certification of the registrant and of the individual or individuals responsible for actually preparing the registration, in accordance with Section 3(*b*)(8).

(Q) For all registrations, a design certification must be signed by a professional engineer in accordance with Section 3(*b*)(9).:

(R) For registrations for locally approvable projects a review certification must be signed by either: (i) a District in accordance with Section 3(*b*)(10), or (ii) a qualified soil erosion and sediment control professional and/or qualified professional engineer in accordance with either Section 3(*b*)(11).

If the registrant is not capable of submitting electronically, a paper form may be submitted in accordance with Section 4(*d*).

(3) Re-Registration Form

For sites previously registered under any previous version of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and for which no Notice of Termination has been submitted pursuant to the "Termination Requirements" section (Section 6), a re-registration shall be filed electronically pursuant to Sections 3(*c*)(3) and 3(*g*) on forms prescribed and provided by the commissioner (available at: www.ct.gov/deep/stormwater) and shall include, but not be limited to, the following:

(A) Legal name, address, and telephone number of the registrant. If the registrant is a person (as defined in Section 2 of this permit) transacting business in Connecticut and is registered with the Connecticut Secretary of the State, provide the exact name as registered with the Connecticut Secretary of the State.

(B) The previously issued permit number (beginning with GSN).

(C) Legal name, address and telephone number of the owner of the property on which the construction activity will take place.

(D) Legal name, address and telephone number of the primary contact for departmental correspondence and inquiries, if different from the registrant.

(E) Legal name, address and telephone number of the developer of the property on which the subject construction activity is to take place.

(F) Legal name, address and daytime and off-hours telephone numbers of the general contractor(s) or other representative(s), if different from the developer.

(G) Legal name, address and telephone number of any consultant(s) or engineer(s) retained by the permittee to prepare the registration and Stormwater Pollution Control Plan.

(H) Location address or description of the site for which the re-registration is filed.

(I) Indication of the normal working hours of the site.

(J) The estimated duration of the construction activity.

(K) The signature of the registrant and of the individual or individuals responsible for actually preparing the re-registration, each of who shall certify in writing as follows:

"I hereby certify that I am making this certification in connection with a registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY] and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that all designs and plans for such activity meet the current terms and conditions of the general permit in accordance with Section 5(b)(5)(C) of such general permit and that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section

3(*b*)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

If the registrant is not capable of submitting electronically, a paper form may be submitted in accordance with Section 4(*d*).

(d) Where to File a Registration

A registration (available at: www.ct.gov/deep/stormwater) shall be filed electronically with the commissioner in accordance with Section 3(*c*)(2) or (3). If the registrant does not have the capability to submit electronically, a paper registration may be filed at the following address:

CENTRAL PERMIT PROCESSING UNIT
DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

(e) Availability of Registration and Plan

By the fifteenth (15th) day of each month, the commissioner shall post on the DEEP website a list of registrations submitted in the previous month.

(1) Registration Availability

On or before fifteen (15) days from the date of posting by the commissioner, members of the public may review and comment on a registration. Any electronically available Plans will be posted with the corresponding registration.

(2) Plan Availability

(A) Electronic Plan Availability

For an electronically available Plan, on or before fifteen (15) days from the date of posting by the commissioner, members of the public may review and comment on a registrant's Plan.

(B) Non-Electronic Plan Availability

For any Plan that is not electronically available, on or before fifteen (15) days from the date of a registration posting by the commissioner, members of the public may submit a written request to the commissioner to obtain a copy of a registrant's Plan. The commissioner shall inform the registrant of the request and the name of the requesting party. If the commissioner does not already have access to a copy of the requested Plan, the registrant shall submit a copy of their Plan to the commissioner within seven (7) days of their receipt of such request. On or before fifteen (15) days from the date the commissioner makes a Plan available to the requesting party, they may submit written comments on the Plan to the commissioner.

(f) Additional Information

The commissioner may require a permittee to submit additional information that the commissioner reasonably deems necessary to evaluate the consistency of the subject construction activity with the requirements for authorization under this general permit.

(g) Additional Notification

For discharges authorized by this general permit to a regulated municipal separate storm sewer system, a copy of the registration and all attachments thereto shall also be submitted to the owner and operator of that system.

For discharges authorized by this general permit to a DOT separate storm sewer system, a copy of the registration and all attachments thereto shall also be submitted to the DOT upon request.

For discharges within a public drinking water supply watershed or aquifer area, a copy of the registration and the Plan described in subsection 5(*b*) of this general permit shall be submitted to the water company.

For discharges to river components and tributaries which have been designated as Wild and Scenic under the Wild and Scenic Rivers Act, a copy of the registration and the Plan described in 5(*b*) of this general permit shall be submitted to the applicable Wild and Scenic Coordinating Committee. Please refer to Appendix H for additional guidance

In addition, a copy of this registration and the Plan shall be available upon request to the local inland wetlands agency established pursuant to section 22a-42 of the Connecticut General Statutes, or its duly authorized agent.

(h) Action by Commissioner

(1) The commissioner may reject without prejudice a registration if it does not satisfy the requirements of the "Contents of Registration" section (subsection 4(*c*)) of this general permit. Any registration refiled after such a rejection shall be accompanied by the fee specified in the "Fees" subsection (subsection 4(*c*)(1)) of this general permit.

(2) The commissioner may disapprove a registration if is inconsistent with the requirements for authorization under the "Requirements for Registration" section (Section 3(*b*)) of this general permit, or for any other reason provided by law.

(3) Disapproval of a registration under this subsection shall constitute notice to the registrant that the subject construction activity must be authorized under an individual permit.

(4) Rejection or disapproval of a registration shall be in writing.

(i) Transition to New General Permit

On or after August 1, 2013, up until and including August 31, 2013, a person filing a new registration for a site may file such registration: (a) under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities that expires on September 30, 2013; or (b) this general permit. A person filing a new registration for a site shall <u>not</u> register under both the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities that expires on September 30, 2013 and this general permit. After August 31, 2013, a person filing a new registration for a site shall only register under this general permit and shall be authorized pursuant to Section 3(*g*) of this general permit.

(Note: Any person who, on or after August 1, 2013, up until and including August 31, 2013, files a new registration for a site under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities that expires on September 30, 2013 shall, after October 1, 2013, re-register such site pursuant to Section 3(*c*)(3) and Section 4(*c*)(3) of this general permit.)

A person re-registering a site pursuant to Section 3(*c*)(3) and Section 4(*c*)(3) of this general permit may submit the required re-registration information anytime on or after August 1, 2013.

(j) Latest Date to Submit a Registration Under this General Permit

No person shall submit a registration under this general permit after June 30, 2018.

Section 5. Conditions of this General Permit

The permittee shall meet all requirements of this general permit at all times. In addition, a permittee shall be responsible for conducting authorized construction activities in accordance with the following conditions:

(a) Conditions Applicable to Certain Discharges

(1) Structures and Dredging in Coastal and Tidal Areas

Any person who or municipality that discharges stormwater into coastal tidal waters for which a permit is required under section 22a-361 of the Connecticut General Statutes (structures and dredging) or section 22a-32 of the Connecticut General Statutes (Tidal Wetlands Act), shall obtain such permit(s) from the commissioner. A tidal wetland permit is required for the placement of any sediment upon a tidal wetland, whether it is deposited directly or indirectly.

(2) Discharges to Tidal Wetlands

Any site which has a post-construction stormwater discharge to a tidal wetland (that is not a fresh-tidal wetland) where such discharge is within 500 feet of the tidal wetland, shall discharge such stormwater through a system designed to retain and infiltrate the volume of stormwater runoff generated by 1 inch of rainfall on the site. If there are site constraints that would prevent retention of this volume on-site (e.g., brownfields, capped landfills, bedrock, elevated groundwater, etc.), documentation must be submitted, for the commissioner's review and written approval, which explains the site limitations and offers an alternative retention volume. In such cases, the portion of 1 inch that cannot be retained must be provided with additional stormwater treatment so as to protect water quality. Any such treatment shall be designed, installed and maintained in accordance with the Stormwater Quality Manual.

For sites unable to comply with this section, the commissioner, at the commissioner's sole discretion, may require the submission of an individual permit in lieu of authorization under this general permit.

(3) Toxicity to Aquatic and Marine Life

The discharge shall not cause pollution due to acute or chronic toxicity to aquatic and marine life, impair the biological integrity of aquatic or marine ecosystems, or result in an unacceptable risk to human health.

(4) Water Quality Standards

The stormwater discharge shall not cause or contribute to an exceedance of the applicable Water Quality Standards in the receiving water.

(5) High Quality Waters

Any new or increased stormwater discharge to high quality waters shall be discharged in accordance with the Connecticut Anti-Degradation Implementation Policy in the Water Quality Standards.

(b) Stormwater Pollution Control Plan

All registrants shall develop and maintain on-site a Stormwater Pollution Control Plan (Plan) for the construction activity authorized by this general permit. Once the construction activity begins, the permittee shall perform all actions required by such Plan and shall maintain compliance with the Plan thereafter. The Plan shall be designed to minimize (as defined in Section 2): (1) pollution caused by soil erosion and sedimentation during and after construction; and (2) stormwater pollution caused by use of the site after construction is completed.

(1) Development and Contents of Plan

(A) The Plan shall consist of site plan drawings and a narrative. The Plan shall be prepared in accordance with sound engineering practices, and shall be consistent with the Guidelines and the 2004 Connecticut Stormwater Quality Manual (available at http://www.ct.gov/deep/stormwater). The Plan shall also be consistent with any remedial action plan, closure plan or other plan required by any other DEEP permit.

(B) The Plan shall include, at a minimum, the following items:

(i) Site Plan

Site drawings indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, the location of major structural and non-structural controls (as specified in subsection 5(*b*)(2), below), the location of areas where stabilization practices are expected to occur, areas which will be vegetated following construction, monitored outfalls, surface waters, impaired waters (identifying those with and without a TMDL), high quality waters, inland wetlands, tidal wetlands, fresh-tidal wetlands, and locations where stormwater will be discharged to a surface water (both during and post-construction);

(ii) Site Description

(a) A narrative description of the nature of the construction activity;

(b) An estimate of the total area of the site and the total area of the site that is expected to be disturbed by construction activities;

(c) An estimate of the average runoff coefficient of the site after construction activities are completed;

(d) The name of the immediate receiving water(s) and the ultimate receiving water(s) of the discharges authorized by this general permit; and

(e) Extent of wetland acreage on the site.

(iii) Construction Sequencing

The Plan shall clearly identify the expected sequence of major construction activities on the site and corresponding erosion and sediment controls and shall include an estimated timetable for all construction activities, which shall be revised as necessary to keep the Plan current. Wherever possible, the site shall be phased to avoid the disturbance of over five acres at one time (or a lesser area of disturbance as required in the "Impaired Waters" section (Section 5(*b*)(3)). The Plan shall clearly show the limits of disturbance for the entire construction activity and for each phase.

(iv) Control Measures

The Plan shall include a description, in narrative and on the site plan drawings, of appropriate control measures that will be performed at the site to minimize the discharge of pollutants to waters of the state. Control measures shall be implemented in accordance with Section 5(*b*)(2) below. In addition, the following information shall be provided:

(a) Calculations supporting the design of sediment and floatables removal controls pursuant to Section 5(*b*)(2)(C)(ii)(b).

(b) Calculations supporting the design of velocity dissipation controls pursuant to Section 5(*b*)(2)(C)(ii)(c).

(v) Runoff Reduction and Low Impact Development (LID) Information

Where runoff reduction practices and/or LID measures are utilized, the following information shall be included in the site plan and narrative:

(a) The location of the site's streams, floodplains, all wetlands, riparian buffers, slopes 3:1 and steeper, and vegetation identified for preservation and non-disturbance during construction such as forested areas, hay fields, and old fields;

(b) Natural drainage patterns, swales, and other drainage ways, that are not streams, floodplains, or wetland areas;

(c) The location of all areas with soils suitable for infiltration[1] and areas of the site best suited for infiltration for the siting of runoff reduction practices and LID design measures;

(d) The location of all areas unsuitable or least suitable for infiltration for the siting of areas of development/building;

(e) The location of all post-construction stormwater management measures, runoff reduction practices and LID design measures developed pursuant to subsection 5(*b*)(2)(C)(i) below;

(f) Identification of areas inappropriate for the infiltration of stormwater runoff from land uses with a significant potential for groundwater pollution;

1 Infiltration rates must be measured by a field permeability test. The measured field design infiltration rate is equal to one-half the field-measured infiltration rate.

(g) A narrative describing the nature, purpose, implementation and long-term maintenance of the post-construction measures, runoff reduction practices and LID design measures;

(h) Calculations, for measures developed pursuant to Section 5(*b*)(2)(C)(i), illustrating the retention of the water quality volume or half the water quality volume for the site, as applicable, including a discussion of the impact of any runoff reduction and/or LID practices on these calculations.

(i) A narrative describing any site constraints that prevent retention of the appropriate volume specified in Section 5(*b*)(2)(C)(i) including: an explanation of the site limitations; a description of the runoff reduction practices implemented; an explanation of why the amount retained constitutes the maximum extent achievable; an alternative retention volume; and a description of the measures used to provide additional stormwater treatment for sediment, floatables and nutrients above the alternate volume up to the water quality volume.

(j) Calculations showing the proposed effective impervious cover for the site and, where necessary or appropriate for measures developed for linear projects pursuant to Section 5(*b*)(2)(C)(i), each outfall drainage area.

(vi) Inspections

The Plan shall include a narrative of all inspection personnel conducting the routine inspections, their responsibilities and procedures pursuant to subsection 5(*b*)(4)(B) below. The Plan shall also include documentation of the qualifications of the inspector(s) and the findings, actions and results of all inspections conducted at the site.

(vii) Monitoring

The Plan shall provide a narrative of the stormwater monitoring procedures pursuant to Section 5(*c*). This narrative shall include documentation of the monitoring frequency, personnel conducting monitoring, identification of monitored outfalls, methodology for monitoring, provisions for monitoring a linear project (if applicable), the site's normal working hours, the method for measuring turbidity and a copy of all monitoring records.

(viii) Contractors

(a) The Plan shall clearly identify each contractor and subcontractor that will perform construction activities on the site that have the potential to cause pollution of the waters of the State. The Plan shall include a copy of the certification statement in the "Contractor Certification Statement" section, below, signed by each such contractor and subcontractor.

(b) Contractor Certification Statement

The Plan shall include the following certification signed by each contractor and subcontractor identified in the Plan as described above:

"I certify under penalty of the law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. I understand that as a contractor or

subcontractor at the site, I am authorized by this general permit, and must comply with the terms and conditions of this general permit, including, but not limited to, the requirements of the Stormwater Pollution Control Plan prepared for the site."

The certification shall include the name and title of the person providing the signature; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

(c) Subdivisions

Where individual lots in a subdivision or other common plan of development are conveyed or otherwise the responsibility of another person or municipality, those individual lot contractors shall be required to comply with the provisions of this general permit and the Stormwater Pollution Control Plan, and shall sign the certification statement in the "Contractor Certification Statement" section, above, regardless of lot size or disturbed area. In such cases, the permittee shall provide a copy of the Plan to each individual lot contractor, obtain signed certifications from such contractors and retain all signed certifications in the Plan.

(ix) Impaired Waters

For construction activities that discharge to impaired waters, as specified in "New Discharges to Impaired Waters" (Section 3(*b*)(12)), the Plan shall include a description of the provisions for controlling the construction and post-construction stormwater discharges to these waters pursuant to subsection 5(*b*)(3) below.

(2) Stormwater Control Measures

Control Measures are required Best Management Practices (BMPs) that the permittee must implement to minimize the discharge of pollutants from the permitted activity. The term "minimize" means reduce and/or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice.

Control Measures shall be designed in accordance with the Guidelines, the Stormwater Quality Manual or the DOT Qualified Products List (http://www.ct.gov/dot/lib/dot/documents/dresearch/conndot_qpl.pdf). Use of controls to comply with the "Erosion and Sediment Controls" section (subsection (A) below) of this general permit that are not included in those resources must be approved by the commissioner or the commissioner's designated agent. The narrative and drawings of controls shall address the following minimum components:

(A) Erosion and Sediment Controls

(i) Soil Stabilization and Protection

The Plan shall include a narrative and drawings of interim and permanent soil stabilization practices for managing disturbed areas and soil stockpiles, including a schedule for implementing the practices. The Permittee shall ensure that existing vegetation is preserved to the maximum extent practicable and that disturbed portions of the site are minimized and stabilized.

Where construction activities have permanently ceased or when final grades are reached in any portion of the site, stabilization and protection practices as specified in Chapter 5 of the Guidelines or as approved by the commissioner or his/ her designated agent shall be implemented within seven days. Areas that will remain disturbed but inactive for at least thirty days shall receive temporary seeding or soil protection within seven days in accordance with the Guidelines.

Areas that will remain disturbed beyond the seeding season as identified in the Guidelines, shall receive long-term, non-vegetative stabilization and protection sufficient to protect the site through the winter. In all cases, stabilization and protection measures shall be implemented as soon as possible in accordance with the Guidelines or as approved by the commissioner or his/ her designated agent.

A reverse slope bench is required for any slope steeper than 3:1 (horizontal: vertical) that exceeds 15 feet vertically, except when engineered slope stabilization structures or measures are included or a detailed soil mechanics analysis has been conducted to verify stability. Engineered analyses and measures must be designed by a CT licensed Professional Engineer with experience in geotechnical engineering or soil mechanics.

(ii) Structural Measures

The Plan shall include a narrative and drawings of structural measures to divert flows away from exposed soils, store flows or otherwise limit runoff and minimize the discharge of pollutants from the site. Unless otherwise specifically approved in writing by the commissioner or his/ her designated agent, or if otherwise authorized by another state or federal permit, structural measures shall be installed on upland soils.

For points of discharge from disturbed sites with a total contributing drainage area of between two to five acres, a temporary sediment trap must be installed in accordance with the Guidelines. For points of discharge from disturbed sites with a total contributing drainage area greater than five acres, a temporary basin must be designed and installed in accordance with the Guidelines. Such trap(s) or basin(s) must be maintained until final stabilization of the contributing area as defined in "Notice of Termination" (Section 6(a)).

The requirement for sediment traps or basins shall not apply to flows from off-site areas and flows from the site that are either undisturbed or have undergone final stabilization where such flows are diverted around the temporary sediment trap or basin. Any exceptions must be approved in writing by the commissioner or his/ her designated agent.

(iii) Maintenance

The Plan shall include a narrative of the procedures to maintain in good and effective operating conditions all erosion and sediment control measures, including vegetation, and all other protective measures identified in the site plan. Maintenance of all erosion and sediment controls shall be performed in accordance with the Guidelines, or more frequently as necessary, to protect the waters of the state from pollution.

(B) Dewatering Wastewaters

Dewatering wastewaters shall be managed in accordance with the Guidelines. Dewatering wastewaters discharged to surface waters shall be discharged in a manner that minimizes the discoloration of the receiving waters. The Plan shall include a narrative and drawings of the

operational and structural measures that will be used to ensure that all dewatering wastewaters will not cause scouring or erosion or contain suspended solids in amounts that could reasonably be expected to cause pollution of surface waters of the State. Unless otherwise specifically approved in writing by the commissioner or his/ her designated agent, or if otherwise authorized by another state or federal permit, dewatering measures shall be installed on upland soils.

No discharge of dewatering wastewater(s) shall contain or cause a visible oil sheen, floating solids, or foaming in the receiving water.

(C) Post-Construction Stormwater Management

The Plan shall include a narrative and drawings of measures that will be installed during the construction process to minimize the discharge of pollutants in stormwater discharges that will occur after construction operations have been completed. Post-construction stormwater management measures shall be designed and implemented in accordance with the Stormwater Quality Manual, the DOT Qualified Products List or as approved by the commissioner or his/ her designated agent in writing. Unless otherwise specifically provided by the commissioner in writing, or authorized by another state or federal permit, structural measures shall be placed on upland soils. The Plan shall include provisions to address the long-term maintenance of any post-construction stormwater management measure installed.

(i) Post-Construction Performance Standards

The permittee shall utilize runoff reduction practices (as defined in Section 2) to meet runoff volume requirements based on the conditions below. For sites unable to comply with these conditions, the commissioner, at the commissioner's sole discretion, may require the submission of an individual permit in lieu of authorization under this general permit.

(a) Redevelopment

For sites that are currently developed with an effective impervious cover of forty percent or more and for which the permittee is proposing redevelopment, the permittee shall design the site in such a manner as to retain on-site half the water quality volume (as defined in Section 2) for the site and provide additional stormwater treatment without retention for discharges up to the full water quality volume for sediment, floatables and nutrients to the maximum extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice. In cases where the permittee is not able to retain half the water quality volume, the permittee shall design the redevelopment to retain runoff volume to the maximum extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice. In such cases, additional stormwater treatment up to the full water quality volume is still required. Any such treatment shall be designed, installed and maintained in accordance with the Stormwater Quality Manual. If retention of the half the water quality volume is not achieved, the permittee shall submit a report to the commissioner describing: the measures taken to maximize runoff reduction practices on the site; the reasons why those practices constitute the maximum extent achievable; the alternative retention volume; and a description of the measures used to provide additional stormwater treatment above the alternate volume up to the water quality volume. In the case of linear redevelopment projects (e.g. roadway reconstruction or widening) for the developed portion of

the right of way: (1) for projects that may be unable to comply with the full retention standard, the alternate retention and treatment provisions may also be applied as specified above, or (2) for projects that will not increase the effective impervious cover within a given watershed, the permittee shall implement the additional stormwater treatment measures referenced above, but will not be required to retain half of the water quality volume.

(b) Other Development

The following performance standard applies to all sites that are currently undeveloped or are currently developed with less than forty percent effective impervious cover. For these sites, the permittee shall design the site to retain the water quality volume for the site. If there are site constraints that would prevent retention of this volume on-site (e.g., brownfields, capped landfills, bedrock, elevated groundwater, etc.), documentation must be submitted, for the commissioner's review and written approval, which: explains the site limitations; provides a description of the runoff reduction practices implemented; provides an explanation of why this constitutes the maximum extent achievable; offers an alternative retention volume; and provides a description of the measures used to provide additional stormwater treatment for sediment, floatables and nutrients above the alternate volume up to the water quality volume. Any such treatment shall be designed, installed and maintained in accordance with the Stormwater Quality Manual. In the case of linear projects that do not involve impervious surfaces (e.g. electrical transmission rights-of-way or natural gas pipelines), retention of the water quality volume is not required as long as the post-development runoff characteristics do not differ significantly from pre-development conditions.

(ii) Post-Construction Control Measures

(a) Runoff Reduction and Low Impact Development ("LID") Practices

The site design shall incorporate runoff reduction practices, low impact development ("LID") practices or other measures to meet the performance standards in subsection (i) above, promote groundwater recharge and minimize post-construction impacts to water quality. Please refer to Appendix B for additional guidance information.

(b) Suspended Solids and Floatables Removal

The permittee shall install post-construction stormwater management measures designed to minimize the discharge of suspended solids and floatables (e.g. oil and grease, other floatable liquids, floatable solids, trash, etc.) from stormwater. A goal of 80 percent removal of the annual sediment load from the stormwater discharge shall be used in designing and installing stormwater management measures. The Plan shall provide calculations supporting the capability of such measures in achieving this goal and any third-party verification, as applicable, of the sediment removal efficiencies of such measures. This goal is not intended to limit local approval authorities from requiring a higher standard pursuant to local requirements.

(c) Velocity Dissipation

Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow to the receiving watercourse so that the natural physical and biological characteristics and functions are maintained and protected.

(D) Other Controls

The following additional controls shall be implemented:

(i) Waste Disposal: Best management practices shall be implemented to minimize the discharge of litter, debris, building materials, hardened concrete waste, or similar materials to waters of the State. A narrative of these practices shall be provided in the Plan.

(ii) Washout Areas

Washout of applicators, containers, vehicles and equipment for concrete, paint and other materials shall be conducted in a designated washout area. There shall be no surface discharge of washout wastewaters from this area. Such washout shall be conducted: (1) outside of any buffers and at least 50 feet from any stream, wetland or other sensitive resource; or (2) in an entirely self-contained washout system. The permittee shall clearly flag off and designate areas to be used for washing and conduct such activities only in these areas. The permittee shall direct all washwater into a container or pit designed such that no overflows can occur during rainfall or after snowmelt.

In addition, dumping of liquid wastes in storm sewers is prohibited. The permittee shall remove and dispose of hardened concrete waste consistent with practices developed for the "Waste Disposal" section (subparagraph 5(*b*)(2)(D)(i), above). At least once per week, the permittee must inspect any containers or pits used for washout to ensure structural integrity, adequate holding capacity, and to check for leaks or overflows. If there are signs of leaks, holes or overflows in the containers or pits that could lead to a discharge, the permittee shall repair them prior to further use. For concrete washout areas, the permittee shall remove hardened concrete waste whenever the hardened concrete has accumulated to a height of ½ of the container or pit or as necessary to avoid overflows. A narrative of maintenance procedures and a record of maintenance and inspections shall be included in the Plan.

(iii) Off-site vehicle tracking of sediments and the generation of dust shall be minimized. Wet dust suppression shall be used, in accordance with section 22a-174-18(b) of the Connecticut General Statutes, for any construction activity that causes airborne particulates. The volume of water sprayed for controlling dust shall be minimized so as to prevent the runoff of water. No discharge of dust control water shall contain or cause a visible oil sheen, floating solids, visible discoloration, or foaming in the receiving stream.

(iv) All post-construction stormwater structures shall be cleaned of construction sediment and any remaining silt fence shall be removed upon stabilization of the site.

(v) All chemical and petroleum product containers stored on the site (excluding those contained within vehicles and equipment) shall be provided with impermeable containment which will hold at least 110% of the volume of the largest container, or

10% of the total volume of all containers in the area, whichever is larger, without overflow from the containment area. All chemicals and their containers shall be stored under a roofed area except for those chemicals stored in containers of 100 gallon capacity or more, in which case a roof is not required. Double-walled tanks satisfy this requirement.

(3) Additional Control Measures for Impaired Waters

For construction activities that discharge directly to impaired waters, as specified in "New Discharges to Impaired Waters" (Section 3(*b*)(12)), the Plan shall include the following provisions:

(A) In lieu of the provisions of "Construction Sequencing" (Section 5(*b*)(1)(B)(iii)), no more than 3 acres may be disturbed at any one time. For those areas for which construction activity will be temporarily suspended for a period of greater than 14 days, temporary stabilization measures shall be implemented within 3 days of such suspension of activity. For all areas, permanent stabilization shall be implemented within 30 days of disturbance; ***or***

(B) The Plan shall document that measures are in place to ensure that there will be no discharge to the impaired water from rain events up to a 2-year, 24-hour rain event while construction activity is occurring; ***or***

(C) For discharges to impaired waters with an established TMDL:

(i) the Plan shall document that there is sufficient remaining Waste Load Allocation (WLA) in the TMDL to allow the discharge, ***and***

(ii) measures shall be implemented to ensure the WLA will not be exceeded, ***and***

(iii) stormwater discharges shall be monitored, if applicable, for any indicator pollutant identified in the TMDL for every rain event that produces a discharge to ensure compliance with the WLA. Such monitoring shall be in addition to the requirements specified in Section 5(*c*), ***or***

(iv) the specific requirements for stormwater discharges specified in the TMDL are met.

Construction activities discharging to impaired waters that do not comply with this subsection are not authorized by this general permit.

(4) Inspections

All construction activities submitting a registration for this general permit shall be inspected initially for Plan implementation and then weekly for routine inspections.

(A) Plan Implementation Inspections

Within the first 30 days following commencement of the construction activity on the site, the permittee shall contact: (1) the appropriate District; or (2) a qualified soil erosion and sediment control professional or a qualified professional engineer to inspect the site. The site shall be inspected at least once and no more than three times during the first 90 days to confirm compliance with the general permit and proper initial implementation of all controls measures designated in the Plan for the site for the initial phase of construction. For sites not inspected by District personnel, the following conditions shall apply:

(i) for projects disturbing more than one acre and less than fifteen (15) acres, the inspector shall be someone who:

(a) is not an employee, as defined by the Internal Revenue Service in the Internal Revenue Code of 1986, of the registrant, and

(b) has no ownership interest of any kind in the project for which the registration is being submitted.

(ii) for projects disturbing fifteen (15) acres or more, the inspector shall be someone who:

(a) is not an employee, as defined by the Internal Revenue Service in the Internal Revenue Code of 1986, of the registrant, and

(b) has not engaged in any activities associated with the preparation, planning, designing or engineering of such plan for soil erosion and sediment control or plan for engineered stormwater management systems on behalf of such registrant, and

(c) is not under the same employ as any person who engaged in any activities associated with the preparation, planning, designing or engineering of such plans and specifications for soil erosion and sediment control or plans and specifications for engineered stormwater management systems on behalf of such registrant, and

(d) has no ownership interest of any kind in the project for which the registration is being submitted.

The permittee may use, if they wish, the same person(s) that provided the Plan Review Certification pursuant to Section 5(*b*)(11).

(B) Routine Inspections

The permittee shall routinely inspect the site for compliance with the general permit and the Plan for the site until a Notice of Termination has been submitted. Inspection procedures for these routine inspections shall be addressed and implemented in the following manner:

(i) The permittee shall maintain a rain gauge on-site to document rainfall amounts. At least once a week and within 24 hours of the end of a storm that generates a discharge, a qualified inspector (provided by the permittee), as defined in the "Definitions" section (Section 2) of this general permit, shall inspect, at a minimum, the following: disturbed areas of the construction activity that have not been finally stabilized; all erosion and sedimentation control measures; all structural control measures; soil stockpile areas; washout areas and locations where vehicles enter or exit the site. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and impacts to the receiving waters. Locations where vehicles enter or exit the site shall also be inspected for evidence of off-site sediment tracking. For storms that end on a weekend, holiday or other time after which normal working hours will not commence within 24 hours, an inspection is required within 24 hours only for storms that equal or exceed 0.5 inches. For storms of less than 0.5 inches, an inspection shall occur immediately upon the start of the subsequent normal working hours. Where sites have been temporarily or finally stabilized, such inspection shall be conducted at least once every month for three months.

(ii) The qualified inspector(s) shall evaluate the effectiveness of erosion and sediment controls, structural controls, stabilization practices, and any other controls implemented

to prevent pollution and determine if it is necessary to install, maintain, or repair such controls and/or practices to improve the quality of stormwater discharge(s).

(iii) A report shall be prepared and retained as part of the Plan. This report shall summarize: the scope of the inspection; name(s) and qualifications of personnel making the inspection; the date(s) of the inspection; weather conditions including precipitation information; major observations relating to erosion and sediment controls and the implementation of the Plan; a description of the stormwater discharge(s) from the site; and any water quality monitoring performed during the inspection. The report shall be signed by the permittee or his/her authorized representative in accordance with the "Certification of Documents" section (subsection 5(*i*)) of this general permit.

The report shall include a statement that, in the judgment of the qualified inspector(s) conducting the site inspection, the site is either in compliance or out of compliance with the terms and conditions of the Plan and permit. If the site inspection indicates that the site is out of compliance, the inspection report shall include a summary of the remedial actions required to bring the site back into compliance. Non-engineered corrective actions (as identified in the Guidelines) shall be implemented on site within 24 hours and incorporated into a revised Plan within three (3) calendar days of the date of inspection unless another schedule is specified in the Guidelines. Engineered corrective actions (as identified in the Guidelines) shall be implemented on site within seven (7) days and incorporated into a revised Plan within ten (10) days of the date of inspection, unless another schedule is specified in the Guidelines or is approved by the commissioner. During the period in which any corrective actions are being developed and have not yet been fully implemented, interim measures shall be implemented to minimize the potential for the discharge of pollutants from the site.

(iv) Inspectors from the DEEP and the appropriate District may inspect the site for compliance with this general permit at any time construction activities are ongoing and upon completion of construction activities to verify the final stabilization of the site and/or the installation of post-construction stormwater management measures pursuant to Section 6(*a*).

(v) Additional inspections, reports and documentation may also be required to comply with the "Monitoring Requirements" section (Section 5(*c*)).

(5) Keeping Plans Current

The Permittee is responsible for keeping their Plan in compliance with this general permit at all times. This may involve any or all of the following:

(A) The permittee shall amend the Plan if the actions required by the Plan fail to prevent pollution or fail to otherwise comply with any other provision of this general permit. The Plan shall also be amended whenever there is a change in contractors or subcontractors at the site, or a change in design, construction, operation, or maintenance at the site which has the potential for the discharge of pollutants to the waters of the state and which has not otherwise been addressed in the Plan.

(B) The commissioner may notify the permittee at any time that the Plan and/or the site do not meet one or more of the minimum requirements of this general permit. Within 7 days of such notice, or such other time as the commissioner may allow, the permittee shall make the required changes to the Plan and perform all actions required by such revised Plan. Within 15 days of such notice, or such other time as the commissioner may allow, the permittee shall submit to the commissioner a written certification that the requested changes have been

made and implemented and such other information as the commissioner requires, in accordance with the 'Duty to Provide Information" and "Certification of Documents" sections (subsections 5(*h*) and 5(*i*)) of this general permit.

(C) For any stormwater discharges authorized under any previous version of this general permit, the existing Plan shall be updated by February 1, 2014, as applicable, in accordance with the "Development and Contents of the Plan" (subsection 5(*b*)(1)), "Stormwater Control Measures" (subsection 5(*b*)(2)), "Routine Inspections" (subsection 5(*b*)(4)(B)), and "Monitoring" (subsection 5(*c*)) sections of this general permit, except for the post-construction measures in subsection 5(*b*)(2)(C)(i)(a) & (b) and 5(*b*)(2)(C)(ii)(a). The permittee shall maintain compliance with such Plan thereafter. For previously authorized sites discharging to impaired waters or other sensitive areas, the commissioner may require additional control measures or provide authorization under an individual permit pursuant to Sections 4(*h*) and 3(*i*).

(6) Failure to Prepare, Maintain or Amend Plan

In no event shall failure to complete, maintain or update a Plan, in accordance with the "Development of Contents of the Plan" and "Keeping Plans Current" sections (subsections 5(*b*)(1) and 5(*b*)(5)) of this general permit, relieve a permittee of responsibility to implement any actions required to protect the waters of the state and to comply with all conditions of the permit.

(7) Plan Signature

The Plan shall be signed and certified as follows:

(A) The Plan shall be signed by the permittee in accordance with the "Certification of Documents" section (subsection 5(*i*)) of this general permit.

(B) The Plan shall include certification by all contractors and subcontractors in accordance with the "Contractors" section (subsection 5(*b*)(1)(B)(viii)) of this general permit.

(C) The Plan shall include a copy of the certification by a professional engineer or landscape architect made in accordance with Section 3(*b*)(9) of this general permit.

(8) Plan Review Certification

For a locally approvable project pursuant to Section 3(*c*) of this general permit, a copy of the Plan review certification made in accordance with either Section 3(*b*)(10) or (11) shall be maintained with the Plan. Note that construction activities reviewed and certified pursuant to those sections are still subject to the local erosion and sediment control and stormwater management regulations of the municipality in which the activity is conducted.

(9) Plan Submittal

The Plan shall be submitted to the commissioner and other certain parties under the following conditions:

(A) All Locally Exempt Projects with greater than one acre of soil disturbance shall submit an electronic copy of the Plan and a completed Registration Form to the commissioner.

(B) For all other projects, the permittee shall provide a copy of the Plan, and a completed Registration Form for this general permit to the following persons immediately upon request:

(i) The commissioner at his or her request or at the request of a member of the public during the registration and Plan availability period pursuant to Section 4(*e*);

(ii) The municipal planning commission, zoning commission and/or inland wetlands agency, or its respective enforcement officer or designated agent;

(iii) In the case of a stormwater discharge through a municipal separate storm sewer system, the municipal operator of the system;

(iv) In the case of a stormwater discharge located within a public drinking water supply watershed or aquifer area, the water company responsible for that water supply.

DO NOT SUBMIT any pages or other material that do not pertain to stormwater management or erosion and sedimentation control (such as electrical and lighting plans, boundary or lot surveys, building plans, non-stormwater related detail sheets, etc.).

(c) Monitoring Requirements

The primary requirements for monitoring turbidity are summarized in the table below:

Table 1

Area of Soil Disturbance	*Monitoring Required?*	*Monitoring Frequency*	*Sample Method*
Sites which disturb 1 acre or more, but less than 5 acres	Only IF a Registration is required	Monthly IF a Registration is required	Procedure consistent with 40 CFR Part 136
Sites which disturb 5 acres or more	Yes	Monthly	Procedure consistent with 40 CFR Part 136

(1) Turbidity Monitoring Requirements

(A) Monitoring Frequency

(i) Sampling shall be conducted in accordance with Table 1, above, at least once every month, when there is a discharge of stormwater from the site while construction activity is ongoing, until final stabilization of the drainage area associated with each outfall is achieved.

(ii) The permittee is only required to take samples during normal working hours as defined in Section 2. The site's normal working hours must be identified in the Plan pursuant to Section 5(*b*)(1)(B)(vii). If sampling is discontinued due to the end of normal working hours, the permittee shall resume sampling the following morning or the morning of the next working day following a weekend or holiday, as long as the discharge continues.

(iii) Sampling may be temporarily suspended any time conditions exist that may reasonably pose a threat to the safety of the person taking the sample. Such conditions may include high winds, lightning, impinging wave or tidal activity, intense rainfall or other

hazardous condition. Once the unsafe condition is no longer present, sampling shall resume.

(iv) If there is no stormwater discharge during a month, sampling is not required.

(B) Sample Collection

(i) All samples shall be collected from discharges resulting from a storm event that occurs at least 24 hours after any previous storm event generating a stormwater discharge. Any sample containing snow or ice melt must be identified on the Stormwater Monitoring Report form. Sampling of snow or ice melt in the absence of a storm event is not a valid sample.

(ii) Samples shall be grab samples taken *at least* three separate times during a storm event and shall be *representative* of the flow and characteristics of the discharge(s). Samples may be taken manually or by an in-situ turbidity probe or other automatic sampling device equipped to take individual turbidity readings (i.e. not composite). The first sample shall be taken within the first hour of stormwater discharge from the site. In cases where samples are collected manually and the discharge begins outside of normal working hours, the first sample shall be taken at the start of normal working hours.

(C) Sampling Locations

(i) Sampling is required of all point source discharges of stormwater from disturbed areas except as may be modified for linear projects under subparagraph (ii) below. Where there are two or more discharge points that discharge substantially identical runoff, based on similarities of the exposed soils, slope, and type of stormwater controls used, a sample may be taken from just one of the discharge points. In such case, the permittee shall report that the results also apply to the substantially identical discharge point(s). No more than 5 substantially identical outfalls may be identified for one representative discharge. If such project is planned to continue for more than one year, the permittee shall rotate twice per year the location where samples are taken so that a different discharge point is sampled every six months. The Plan must identify each outfall authorized by this permit and describe the rationale for any substantially identical outfall determinations.

(ii) Linear Projects

For a linear project, as defined in Section 2, the protocols of subparagraph (i), above, shall apply except that up to 10 substantially identical outfalls may be identified for one representative discharge.

(iii) All sampling point(s) shall be identified in the Plan and be clearly marked in the field with a flag, stake, or other visible marker.

(D) Sampling and analysis shall be prescribed by 40 CFR Part 136.

(E) Turbidity Values

The stormwater discharge turbidity value for each sampling point shall be determined by taking the average of the turbidity values of all samples taken at that sampling point during a given storm.

(2) Stormwater Monitoring Reports

(A) Within thirty (30) days following the end of each month, permittees shall enter the stormwater sampling result(s) on the Stormwater Monitoring Report (SMR) form (available at www.ct.gov/deep/stormwater) and submit it in accordance with the NetDMR provisions in subsection F, below, or, if the permittee has opted out of NetDMR, to the following address:

Bureau of Materials Management and Compliance Assurance
Water Permitting and Enforcement Division (Attn: DMR Processing)
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

(B) If there was no discharge during any given monitoring period, the permittee shall submit the form as required with the words "no discharge" entered in place of the monitoring results.

(C) If the permittee monitors any discharge more frequently than required by this general permit, the results of this monitoring shall be included in additional SMRs for the month in which the samples were collected.

(D) If sampling protocols are modified due to the limitations of normal working hours or unsafe conditions in accordance with Section 5(c)(1)(A)(ii) or (iii) above, a description of and reason for the modifications shall be included with the SMR.

(E) If the permittee samples a discharge that is representative of two or more substantially identical discharge points, the permittee shall include the names or locations of the other discharge points.

(F) NetDMR Reporting Requirements

(i) Prior to one-hundred and eighty (180) days after the issuance of this permit, the Permittee may either submit monitoring data and other reports to the Department in hard copy form or electronically using NetDMR, a web-based tool that allows Permittees to electronically submit stormwater monitoring reports through a secure internet connection. Unless otherwise approved in writing by the commissioner, no later than one-hundred and eighty (180) days after the issuance of this permit the Permittee shall begin reporting electronically using NetDMR. Specific requirements regarding subscription to NetDMR and submittal of data and reports in hard copy form and for submittal using NetDMR are described below:

(a) Submittal of NetDMR Subscriber Agreement

On or before fifteen (15) days after the issuance of this permit, the Permittee and/or the person authorized to sign the Permittee's discharge monitoring reports ("Signatory Authority") as described in RCSA Section 22a-430-3(b)(2) shall contact the Department at deep.netdmr@ct.gov and initiate the NetDMR subscription process for electronic submission of Stormwater Monitoring Report information. Information on NetDMR is available on the Department's website at www.ct.gov/deep/netdmr. On or before ninety (90) days after issuance of this permit the Permittee shall submit a signed and notarized copy of the *Connecticut DEEP NetDMR Subscriber Agreement* to the Department.

(b) Submittal of Reports Using NetDMR

Unless otherwise approved by the commissioner, on or before one-hundred and eighty (180) days after issuance of this permit, the Permittee and/or the Signatory Authority shall electronically submit SMRs required under this permit to the Department using NetDMR in satisfaction of the SMR submission requirements of Sections 5(*c*)(2)(A) of this permit.

SMRs shall be submitted electronically to the Department no later than the 30th day of the month following the completed reporting period. Any additional monitoring conducted in accordance with 40 CFR 136 shall be submitted to the Department as an electronic attachment to the SMR in NetDMR. Once a Permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of SMRs to the Department. NetDMR is accessed from: http://www.epa.gov/netdmr.

(c) Submittal of NetDMR Opt-Out Requests

If the Permittee is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for electronically submitting SMRs, the commissioner may approve the submission of SMRs in hard copy form ("opt-out request"). Opt-out requests must be submitted in writing to the Department for written approval on or before fifteen (15) days prior to the date a Permittee would be required under this permit to begin filing SMRs using NetDMR. This demonstration shall be valid for twelve (12) months from the date of the Department's approval and shall thereupon expire. At such time, SMRs shall be submitted electronically to the Department using NetDMR unless the Permittee submits a renewed opt-out request and such request is approved by the Department.

All opt-out requests and requests for the NetDMR subscriber form should be sent to the following address or by email at deep.netdmr@ct.gov:

Attn: NetDMR Coordinator
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

(d) Reporting and Record Keeping Requirements

(1) For a period of at least five years from the date that construction is complete, the permittee shall retain copies of the Plan and all reports required by this general permit, and records of all data used to complete the registration for this general permit, unless the commissioner specifies another time period in writing. Inspection records must be retained as part of the Plan for a period of five (5) years after the date of inspection.

(2) The permittee shall retain an updated copy of the Plan required by this general permit at the construction site from the date construction is initiated at the site until the date construction at the site is completed.

(e) Regulations of Connecticut State Agencies Incorporated into this General Permit

The permittee shall comply with sections 22a-430-3 and 22a-430-4 of the Regulations of Connecticut State Agencies which are hereby incorporated into this general permit, as if fully set forth herein.

(f) Reliance on Registration

In evaluating the registrant's registration, the commissioner has relied on information provided by the registrant. If such information proves to be false or incomplete, any authorization reliant on such information may be suspended or revoked in accordance with law, and the commissioner may take any other legal action provided by law.

(g) Duty to Correct and Report Violations

Upon learning of a violation of a condition of this general permit, unless otherwise specified in this general permit, a permittee shall immediately take all reasonable action to determine the cause of such violation, correct and mitigate the results of such violation, prevent further such violation, and report in writing such violation and such corrective action to the commissioner within five (5) days of the permittee's learning of such violation. Such information shall be filed in accordance with the "Certification of Documents" section (Section 5(*i*)) of this general permit.

(h) Duty to Provide Information

If the commissioner requests any information pertinent to the construction activity or to compliance with this general permit or with the permittee's authorization under this general permit, the permittee shall provide such information within fifteen (15) days of such request or other time period as may be specified in writing by the commissioner. Such information shall be filed in accordance with the "Certification of Documents" section (Section 5(*i*)) of this general permit.

(i) Certification of Documents

Unless otherwise specified in this general permit, any document, including but not limited to any notice, information or report, which is submitted to the commissioner under this general permit shall be signed by the permittee, or a duly authorized representative of the permittee, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with section 22a-6 of the Connecticut General Statutes, pursuant to section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

(j) Date of Filing

For purposes of this general permit, the date of filing with the commissioner of any document is the date such document is received by the commissioner. The word "day" as used in this general permit means the calendar day; if any date specified in the general permit falls on a Saturday, Sunday, or legal holiday, such deadline shall be the next business day thereafter.

(k) False Statements

Any false statement in any information submitted pursuant to this general permit may be punishable as a criminal offense, in accordance with section 22a-6 of the Connecticut General Statutes, pursuant to section 53a-157b of the Connecticut General Statutes.

(l) Correction of Inaccuracies

Within fifteen (15) days after the date a permittee becomes aware of a change in any information in any material submitted pursuant to this general permit, or becomes aware that any such information is inaccurate or misleading or that any relevant information has been omitted, such permittee shall correct the inaccurate or misleading information or supply the omitted information in writing to the commissioner. Such information shall be filed in accordance with the certification requirements prescribed in Section 5(*i*) of this general permit.

(m) Transfer of Authorization

Any authorization issued by the commissioner under this general permit is transferable only in accordance with the provisions of section 22a-6o of the General Statutes. Any person or municipality proposing to transfer any such authorization shall submit a license transfer form to the commissioner. The transferee is not authorized to conduct any activities under this general permit until the transfer is approved by the commissioner (typically 30 days). The transferee may adopt by reference the Plan developed by the transferor. The transferee shall amend the Plan as required by the "Keeping Plans Current" Section 5(b)(5) of this general permit).

(n) Reopener

At such time as the USEPA may institute a new rule for post-construction stormwater management or modify the requirements for their National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Construction Activities (CGP) to institute a numeric Effluent Limitation Guideline (ELG) for turbidity in stormwater discharges from construction activities, the commissioner may reopen this general permit pursuant to the Section 40 Part 122.62(a) of the Code of Federal Regulations for implementation of these elements.

(o) Other Applicable Law

Nothing in this general permit shall relieve the permittee of the obligation to comply with any other applicable federal, state and local law, including but not limited to the obligation to obtain any other authorizations required by such law.

(p) Other Rights

This general permit is subject to and does not derogate any present or future rights or powers of the State of Connecticut and conveys no rights in real or personal property nor any exclusive privileges, and is subject to all public and private rights and to any federal, state, and local laws pertinent to the property or construction activity affected by such general permit. In conducting any construction activity authorized hereunder, the permittee may not cause pollution, impairment, or destruction of the air, water, or other natural resources of this state. The issuance of this general permit shall not create any presumption that this general permit should or will be renewed.

Section 6. Termination Requirements

(a) Notice of Termination

At the completion of a construction project registered pursuant to the "Registration Requirements" section (Section 4) of this general permit, a Notice of Termination must be filed with the commissioner. A project shall be considered complete after all post-construction measures are installed, cleaned and functioning and the site has been stabilized for at least three months following the cessation of construction activities. A site is considered stabilized when there is no active erosion or sedimentation present and no disturbed areas remain exposed **for all phases**.

(1) Post-Construction Inspection

For locally approvable projects, once all post-construction stormwater measures have been installed in accordance with the Post-Construction Stormwater Management section (subsection 5(*b*)(2)(C)) and cleaned of any construction sediment or debris, the registrant shall contact the appropriate Conservation District or a qualified soil erosion and sediment control professional and/or a qualified professional engineer, as appropriate, who will inspect the site to confirm compliance with these post-construction stormwater measures. This person(s) shall not be an employee, as defined by the Internal Revenue Service in the Internal Revenue Code of 1986, of the permittee and shall have no ownership interest of any kind in the project for which the site's registration was submitted.

(2) Final Stabilization Inspection

For all projects, once the site has been stabilized for at least three months, the registrant shall have the site inspected by a qualified inspector to confirm final stabilization. The registrant shall indicate compliance with this requirement on the Notice of Termination form.

(b) Termination Form

A termination notice shall be filed on forms prescribed and provided by the commissioner and shall include the following:

(1) The permit number as provided to the permittee on the permit certificate.

(2) The name of the registrant as reported on the general permit registration form (DEEP-PED-REG-015).

(3) The address of the completed construction site.

(4) The dates when:

(A) All storm drainage structures were cleaned of construction debris pursuant to the "Other Controls" section (subsection 5(*b*)(2)(D)) of this general permit; and

(B) The post-construction inspection was conducted pursuant to subsection 6(*a*)(1), above; and

(C) The date of completion of construction; and

(D) The date of the final stabilization inspection pursuant to subsection 6(*a*)(2), above.

(5) A description of the post-construction activities at the site.

(6) Signatures of:

(A) The permittee; and

(B) The person certifying the post-construction inspection pursuant to subsection 6(*a*)(1), above.

(c) Where to File a Termination Form

A termination form shall be filed with the commissioner at the following address:

CENTRAL PERMITS PROCESSING UNIT
BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE
DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

Section 7. Commissioner's Powers

(a) Abatement of Violations

The commissioner may take any action provided by law to abate a violation of this general permit, including but not limited to penalties of up to $25,000 per violation per day under Chapter 446k of the Connecticut General Statutes, for such violation. The commissioner may, by summary proceedings or otherwise and for any reason provided by law, including violation of this general permit, revoke a permittee's authorization hereunder in accordance with sections 22a-3a-2 through 22a-3a-6, inclusive, of the Regulations of Connecticut State Agencies. Nothing herein shall be construed to affect any remedy available to the commissioner by law.

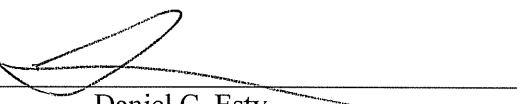
(b) General Permit Revocation, Suspension, or Modification

The commissioner may, for any reason provided by law, by summary proceedings or otherwise, revoke or suspend this general permit or modify to establish any appropriate conditions, schedules of compliance, or other provisions which may be necessary to protect human health or the environment.

(c) Filing of an Individual Permit Application

If the commissioner notifies a permittee in writing that such permittee must obtain an individual permit if he wishes to continue lawfully conducting the construction activity, the permittee shall file an application for an individual permit within thirty (30) days of receiving the commissioner's notice. While such application is pending before the commissioner, the permittee shall continue to comply with the terms and conditions of this general permit. Nothing herein shall affect the commissioner's power to revoke a permittee's authorization under this general permit at any time.

Issued: August 21, 2013



Daniel C. Esty
Commissioner

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

APPENDIX A

Endangered and Threatened Species

In order to be eligible for coverage under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities ("GP" or "the GP"), under section 3(*b*)(2) of the GP, a registrant must ensure that the construction activity, which includes, but is not limited to, excavation, site development or other ground disturbance activities, and stormwater flow, discharges and control measures ("construction activity"), does not threaten the continued existence of any state or federal species listed as endangered or threatened ("listed species") or result in the destruction or adverse modification of any habitat associated with such species.

In order to prevent significant, unforeseen delays in the processing of a registration under the GP, registrants should assess compliance with section 3(*b*)(2) early in the planning stages of a project. The Department of Energy and Environmental Protection ("the Department") strongly recommends that this assessment *be initiated up to one year, or more,* prior to the projected construction initiation date, and even before the purchase of the site of the construction activity. At a minimum, registrants must assess compliance with section 3(*b*)(2) prior to submission of the Registration Form for the GP.

This Appendix describes the ways that a registrant can comply with section 3(*b*)(2) of the GP. In connection with the filing of a registration a registrant can perform a self-assessment described in Section 1, seek a limited one-year determination or a safe harbor determination from the Department's Wildlife Division under Sections 2 or 3, respectively, or stipulate in writing to the presence of listed species or any habitat associated with such species and develop a mitigation plan pursuant to Section 5 of this Appendix. While some means of compliance are more limited than others, the options set out in this Appendix are not mutually exclusive and all options remain available to a registrant. For example, a registrant may perform a self-assessment under Section 1 and seek a safe harbor determination under Section 3 of this Appendix. Provided the requirements of this Appendix are met, the choice of how to proceed is the registrant's.

Section 1. Self Assessment through Natural Diversity Database Map Review and Screening

Before submission of a registration for coverage under this GP, a registrant must review the current versions of the Department's Natural Diversity Data Base ("NDDB") maps. Except as provided for in Sections 2, 3 or 5 of this Appendix, such review must occur no more than six months before such submission. Such review provides a method for screening whether the Department is already aware of listed species that may be present on the site of the construction activity. These maps can be viewed at the following locations:

1. Online at the following links:

   CT DEEP Natural Diversity Data Base Maps
   CTECO Webpage (in the interactive Simple Map Viewer)

2. At the DEEP Public File Room at 79 Elm Street in Hartford.

Screening

The site of the construction activity must be compared to the shaded areas depicted on the NDDB map to determine if the site is entirely, partially, or within ¼ mile of a shaded area. If the site is entirely, partially or within a ¼ mile of a shaded area for a listed species a registrant can only achieve compliance with section 3(*b*)(2) of the GP by obtaining a limited one-year determination under Section 2, a safe harbor determination under Section 3, or an approved mitigation plan under Section 5 of this Appendix from the Department's Wildlife Division.

If the site of the construction activity is not entirely, partially or within ¼ mile of a shaded area, then the Department is not aware of any listed species at the site of the construction activity. Based upon this screening, and provided the registrant has no reasonably available verifiable, scientific or other credible information that the construction activity could reasonably be expected to violate section 3(b)(2) of the GP, when completing the Registration Form for this GP a registrant may check the box that indicates that the construction activity will not impact federal or state listed species.

A registrant using only self-assessment under this section may utilize the results of any such self assessment for up to, but no more than, six months from the date of such assessment. Note, however, that the NDDB maps are not the result of comprehensive state-wide field investigations, but rather serve as a screening tool. Using such maps as a screening tool does not provide a registrant with an assurance that listed species or their associated habitat may not be encountered at the site of the construction activity. Notwithstanding the NDDB screening results, if a listed species is encountered at the site of the construction activity, the registrant shall promptly contact the Department and may need to take additional action to ensure that the registrant does not violate section 3(b)(2) of the GP.

Section 2. Obtaining a Limited One-Year Determination

A registrant may seek a written determination from the Department's Wildlife Division, good for one-year, that the proposed construction activity complies with section 3(b)(2) of the GP. To obtain this limited one-year determination, a registrant must, in addition to conducting the NDDB map review in Section 1 of this Appendix, provide the Department's Wildlife Division with (1) any reasonably available verifiable, scientific or other credible information about whether the construction activity could reasonably be expected to result in a violation of section 3(b)(2) of the GP, and (2) limited information about the site of the proposed construction activity, but less information than would be necessary for a safe harbor determination under Section 3 of this Appendix. The limited information necessary for a one-year determination is on the current "Request for Natural Diversity Database (NDDB) State Listed Species Review" form on the Department's website. The form and instructions for seeking such a limited one-year determination are available at www.ct.gov/DEEP/nddbrequest.

Provided the registrant's information is accurate and the Department's Wildlife Division determines that the construction activity will not violate section 3(b)(2) of the GP, the registrant shall receive a limited one-year determination from the Department. Any such determination may indicate that the construction activity will not impact listed species or their associated habitat, or it may include specific conditions to be implemented to avoid or significantly minimize any impacts that may be encountered at the site of the construction activity. For purposes of submitting a registration for the GP, any such limited one-year determination can be relied upon by the person receiving such determination for one-year from the date of such determination. Like, however, the NDDB screening procedure in Section 1 of this Appendix, a limited one-year determination does not provide a registrant with an assurance that listed species or their associated habitat may not be encountered at the site of the construction activity. If a listed species is encountered, the registrant shall promptly contact the Department

and may need to take additional action to ensure that the construction activity does not violate section 3(b)(2) of the GP.

If a registrant receives a limited one-year determination from the Department, the registrant should check the limited one-year determination box on the GP registration form and include the Department's one-year limited determination letter if requested on the GP Registration form. Checking the limited one-year determination box on the registration form and failing to provide the determination letter from the Department's Wildlife Division, if requested on the GP Registration form, will delay and may prevent processing of a registration.

If based upon the information provided by a registrant seeking a limited one-year determination the Department's Wildlife Division determines that the construction activity could impact listed species or their associated habitat, or that the Department needs additional information to make a limited one-year determination, the registrant may still achieve compliance with section 3(b)(2) of the GP through providing additional information pursuant to Section 4 or developing a mitigation plan pursuant to Section 5 of this Appendix.

A registrant may request one or more one-year extensions to a limited one-year determination under this section. If the Department's Wildlife Division has prescribed a form for requesting an extension, any such request shall be made using the prescribed form. There is a presumption that requests for a one-year extension of a limited one-year determination shall be granted. However, this presumption can be rebutted if the Department determines that a change in any of the following has occurred since an initial limited one-year determination or any extension was granted: the construction activity affecting or potentially affecting listed species or their associated habitat; the NDDB maps for the site of the construction activity; the limited information upon which a limited one-year determination or any extension was granted; or other information indicative of a change in circumstance affecting listed species or their associated habitat. Any one-year extension granted under this paragraph shall run from the date the Department's Wildlife Division issues its determination to grant an extension and shall be treated as a limited one-year determination as provided for in this section. Any letter granting a one-year extension shall be included with a registration along with the original limited one-year determination as provided for in this section.

Section 3. Obtaining a Safe Harbor Determination

A registrant may seek a written determination from the Department's Wildlife Division, good for three years, with the potential to be extended for an additional year, that proposed construction activity complies with section 3(b)(2) of the GP. Any such determination shall constitute a "safe harbor" for purposes of section 3(b)(2) of the GP.

To obtain a safe harbor determination, a registrant must, in addition to conducting the NDDB review in section 1 of this Appendix, provide the Department's Wildlife Division with any reasonably available verifiable, scientific or other credible information about whether the construction activity could reasonably be expected to result in a violation of section 3(b)(2) of the GP and specific information about the site of the construction activity. The specific information necessary for a safe harbor determination is listed in Attachment A to this Appendix. This information must be sufficient to allow the Wildlife Division to adequately assess the site for potential risks to listed species and their associated habitat. While the Department recognizes certain information is necessary to make a safe harbor determination, it also recognizes that a registrant may need to obtain a safe harbor determination early in its project's approval process in order to make prudent business decisions about purchasing a site or proceeding to final project designs. The form and instructions for seeking a safe harbor determination are available at www.ct.gov/DEEP/nddbrequest.

Provided the registrant's information is accurate and the Department's Wildlife Division determines that the construction activity will not violate section 3(b)(2) of the GP, the registrant shall receive a safe harbor determination from the Department. A safe harbor determination may indicate that the construction activity will not impact listed species or their associated habitat, or it may include specific conditions to be implemented to avoid or significantly minimize any impacts that may be encountered at the site of the construction activity. The Department shall honor the safe harbor determination for three years from the date it is issued, meaning that unlike the NDDB review in Section 1 or the limited one-year determination in Section 2 of this Appendix, if the Department makes a safe harbor determination and a registrant remains in compliance with any conditions in any such determination, irrespective of what may be found at the site of the construction activity, a registrant shall be considered in compliance with section 3(b)(2) of the GP. However, a safe harbor determination shall not be effective if a construction activity may threaten the continued existence of any federally listed species or its critical habitat under federal law. If a federally listed species or its critical habitat is encountered on the site of the construction activity, the registrant shall promptly contact the Department and may need to take additional action to ensure that the construction activity does not violate federal law or section 3(b)(2) of the GP.

If a registrant receives a safe harbor determination from the Department, the registrant should check the safe harbor determination box on the GP registration form and include the Department's safe harbor determination if requested on the GP Registration form. Checking the safe harbor box on the registration form and failing to provide the safe harbor determination letter from the Department's Wildlife Division, if requested on the GP Registration form, will delay and may prevent processing of a registration.

If based upon the information provided by a registrant seeking a safe harbor determination the Department's Wildlife Division determines that the construction activity could impact listed species or their associated habitat, or that the Department needs additional information to make a safe harbor determination, the registrant may still achieve compliance with section 3(b)(2) of the GP through providing additional information pursuant to Section 4 or developing a mitigation plan pursuant to Section 5 of this Appendix.

If a registrant receives a safe harbor determination from the Department's Wildlife Division, anytime during the third year of such safe harbor, a registrant may request a one-year extension of that safe harbor. If the Department's Wildlife Division has prescribed a form for requesting an extension, any such request shall be made using the prescribed form. There is a presumption that a request for a one-year extension of a safe harbor shall be granted. However, this presumption can be rebutted if the Department determines that a change in any of the following has occurred since the safe harbor was granted: the construction activity affecting or potentially affecting listed species or their associated habitat; the NDDB maps for the site of the construction activity; the information upon which the safe harbor was granted; or other information indicative of a change in circumstance affecting listed species or their associated habitat. A registrant may seek only one extension, for one-year, to a safe harbor determination. Any one-year extension granted under this paragraph shall run from the date of the Department's Wildlife Division issues its determination to grant an extension and shall be honored by the Department in the same manner as a safe harbor determination noted above. Any letter granting a one-year extension shall be included with a registration along with the original limited safe harbor determination as provided for in this section.

Section 4. Providing Additional Information

For the Department's Wildlife Division to make a limited one-year determination under Section 2 or a safe harbor determination under section 3 of this Appendix, limited additional information may be required to determine if the construction activity would impact listed species or their associated habitat. If the species in question is a state listed endangered or threatened species under section 26-306 of the general statutes, a registrant shall, in consultation with the Department's Wildlife Division, provide the limited additional

information requested by the Department's Wildlife Division. Such information may include, but is not limited to, a survey of specific listed species in question. If the species in question is a federally listed threatened or endangered species, in addition to the Department's Wildlife Division, a registrant shall also consult with the U.S. Fish and Wildlife Service and shall provide any additional information requested by that agency. A registrant that initially sought or obtained a limited one-year determination may, after providing the additional information required under this section request a safe harbor determination under Section 3 of this Appendix.

At any time, as an alternative to proceeding under Section 2, 3 or 4 of this Appendix, a registrant may stipulate, in writing, to the presence of one or more listed species or their associated habitat. A registrant choosing this alternative shall proceed to develop a mitigation plan under Section 5 of this Appendix.

If based upon any additional information provided to the Department's Wildlife Division, and as applicable, the U.S. Fish & Wildlife Service, the Department's Wildlife division determines that construction activity will be in compliance with section 3(b)(2) of the GP, a registrant shall receive a limited one-year determination under Section 2 or a safe harbor determination under Section 3 of this Appendix, as applicable.

If the Department's Wildlife Division determines that additional information is necessary to determine if the construction activity has the potential to impact listed species or their associated habitat, and a registrant chooses to not provide such information, a registrant shall proceed with the self assessment through an NDDB review under Section 1 of this Appendix, or stipulate to the existence of a listed species or associated habitat and develop a mitigation plan under Section 5 or such registrant shall not be eligible to register under the GP.

Section 5. Developing a Mitigation Plan

The Department's Wildlife Division may determine that the construction activity has the potential to adversely impact listed species or their associated habitat. However, it may be possible to modify the construction activity or undertake certain on-site measures to avoid or significantly minimize such impacts. If the species or associated habitat in question is a state listed endangered or threatened species under section 26-306 of the general statutes, a registrant shall consult with the Department's Wildlife Division to determine if an acceptable mitigation plan can be developed so impacts can be avoided or minimized such that a registrant remains in compliance with section 3(b)(2). If the species in question is a federally listed threatened or endangered species, any such consultation shall also include the U.S. Fish and Wildlife Service.

If a registrant in consultation with the Department's Wildlife Division, and as applicable, the U.S. Fish & Wildlife Service, develops a mitigation plan that is approved by the Department's Wildlife Division, or as applicable, the U.S. Fish & Wildlife Service, the registrant shall receive a limited one-year determination under Section 2 or a safe harbor determination under Section 3 of this Appendix. In this situation, in addition to checking the one-year determination box or the safe harbor determination box, as applicable, on the registration form, the registrant shall also check the box on the registration form indicating that it has an approved mitigation plan and provide a status update on the registration form as to whether it has completed or is still in the process of implementing the approved mitigation plan.

If an approved mitigation plan has not been fully implemented by the time a registration is submitted, completing all remaining tasks in the plan shall become an enforceable condition of any registration issued to the registrant.

If the Department determines that the construction activity has the potential to adversely impact listed species or their associated habitat and the registrant and the Department, and as applicable, the U.S. Fish & Wildlife Service, are not able to agree on an acceptable mitigation plan that is approved by the Department, and as applicable, the U.S. Fish & Wildlife Service, any such registrant shall not be eligible to register under the GP.

APPENDIX A
ATTACHMENT A

Specific Information Needed to Apply for a Safe Harbor Determination

A Safe Harbor Determination will be made upon the submission of a detailed report that fully addresses the matters noted below. For the Department's Wildlife Division to make a safe harbor determination, the report should synthesize and analyze this information, not simply compile information. Those providing synthesis and analysis need appropriate qualifications and experience. A request for a safe harbor determination shall include:

1) Habitat Information, including GIS mapping overlays, identifying:

- wetlands, including wetland cover types;
- plant community types;
- topography;
- soils;
- bedrock geology;
- floodplains, if any;
- land use history; and
- water quality classifications/criteria.

2) Photographs - The report should also include photographs of the site, including all reasonably available aerial or satellite photographs and an analysis of such photographs.

3) Inspection - The report should include a visual inspection(s) of the site, preferably when the ground is visible. This inspection can also be helpful in confirming or further evaluating the items noted above.

4) Biological Surveys - The report should include all biological surveys of the site where construction activity will take place that are reasonably available to a registrant. A registrant shall notify the Department's Wildlife Division of biological studies of the site where construction activity will take place that a registrant is aware of but are not reasonably available to the registrant.

5) Based on items #1 through 4 above, the report shall include a Natural Resources Inventory of the site of the construction activity. This inventory should also include a review of reasonably available scientific literature and any recommendations for minimizing adverse impacts from the proposed construction activity on listed species or their associated habitat.

6) In addition, to the extent the following is available at the time a safe harbor determination is requested, a request for a safe harbor determination shall include and assess:

- Information on Site Disturbance Estimates/Site Alteration information

- Vehicular Use

- Construction Activity Phasing Schedules, if any; and

- Alternation of Drainage Patterns

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

APPENDIX B

Connecticut Department of Energy & Environmental Protection
Inland Water Resources Division Fact Sheet
Considering Low Impact Development Principles in Site Design

In order to reduce the impact of development and address stormwater quality issues, the Department strongly encourages the use of Low Impact Development (LID) measures. LID is a site design strategy intended to maintain or replicate predevelopment hydrology through the use of small-scale controls, integrated throughout the site, to manage stormwater runoff as close to its source as possible. Infiltration of stormwater through LID helps to remove sediments, nutrients, heavy metals, and other types of pollutants from runoff.

Key Strategies for LID

Key strategies for effective LID include: infiltrating, filtering, and storing as much stormwater as feasible, managing stormwater close to where the rain/snow falls, 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. In areas of compacted and/or possibly contaminated soils, soil suitability should be further investigated prior to selecting optimum treatment and/or remediation measures. Where soil conditions permit, the DEEP encourages 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, roads, 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;
- the use of dry wells to manage runoff from building roofs;
- incorporation of proper physical barriers or operational procedures for special activity areas where pollutants could potentially be released (e.g. loading docks, maintenance and service areas, dumpsters, etc.);
- the installation of rainwater harvesting systems to capture stormwater from building roofs for the purpose of reuse for irrigation (i.e. - rain barrels for residential use and cisterns for larger developments);
- the use of residential rain gardens to manage runoff from roofs and driveways;
- the use of vegetated roofs (green roofs) to detain, absorb, and reduce the volume of roof runoff; and
- providing for pollution prevention measures to reduce the introduction of pollutants to the environment.

The 2004 Stormwater Quality Manual LID Appendix and the 2002 Erosion and Sediment Control Guidelines LID Appendix both provide guidance on implementing LID measures. A guide to LID resources can also be found in the DEEP Low Impact Development Resources Factsheet (PDF).

LID in Urban Areas

If the proposed site is located in a highly urbanized area, it is likely underlain by urban land complex soils. The Natural Resources Conservation Service (NRCS) Soil Web Survey (http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm) provides information on soil textures, parent materials, slopes, height of seasonal high water table, depth to restrictive layer, and permeability. In highly developed areas, infiltration may be limited due to the high percentage of impervious cover. However, infiltration practices may be suitable at urban sites depending on:

- Potential contamination of soils in historically industrialized areas. The siting of areas for infiltration must consider any existing soil or groundwater contamination.

- Site specific soil conditions. NRCS 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.

- Investigation of areas of compacted soils and the utilization of proper construction staging. Planning should insure that areas to be used for infiltration are not compacted during the construction process by vehicles or machinery.

Even if infiltration is limited at a site, it is still possible to implement LID practices. Specifically, potential exists for the installation of green roofs on buildings and/or the use of cisterns to capture and reuse rainwater.

LID in Areas with a High Seasonal Water Table or Hardpan Layer

- The impact of stormwater runoff to any streams and/or wetlands near the site should be considered. Water quality treatment is influenced by hydraulic conductivity and time of travel. If stormwater infiltration is limited by an impermeable layer close to the surface, the water may run laterally through the ground and discharge to the stream or wetlands, providing limited water quality treatment. However, a longer time of travel may provide sufficient treatment. Proper soil testing for infiltration potential will increase the likelihood of successful BMP design.

- In areas with a high seasonal water table, bioretention areas/rain gardens should be planted with water tolerant/wetland plants. The presence of a high seasonal water table suggests that water may drain slowly or not at all during certain parts of the year. Planting native wetland vegetation will help to ensure plant survival and increase the effectiveness of bioretention practices. Information on native plantings that are both drought tolerant and tolerant of wet conditions can be found in The UConn Cooperative Extension System's guide to building a rain garden at http://nemo.uconn.edu/publications/rain_garden_broch.pdf. Native plant lists for Connecticut can also be found at http://www.fhwa.dot.gov/environment/rdsduse/ct.htm.

LID Guidance for Federal Projects

- LID techniques have been utilized by Department of Defense (DoD) agencies during the last several years. The effectiveness of these projects in managing runoff as well as reducing construction and maintenance costs has created significant interest in LID. The DoD has created a Unified Facilities Criteria document, Low Impact Development that provides guidelines for integrating LID planning and design into a facility's regulatory and resource protection programs. It is available on-line at: http://www.wbdg.org/ccb/DOD/UFC/ufc_3_210_10.pdf.

- Section 438 of the Energy Independence and Security Act (EISA) of 2007 requires federal agencies to reduce stormwater runoff from federal development projects to protect water resources. In December 2009, the EPA developed a technical guidance document on implementing the stormwater runoff requirements for federal projects under Section 438 of EISA. The document contains guidance on how compliance with Section 438 can be achieved, measured and evaluated and can be found at: http://www.epa.gov/owow/NPS/lid/section438/pdf/final_sec438_eisa.pdf.

For more information contact the CT DEEP Watershed Management/Low Impact Development Program:

Name	Area	Telephone
MaryAnn Nusom Haverstock	Program Oversight/ Low Impact Development	(860) 424-3347
Chris Malik	Watershed Manager	(860) 424-3959
Susan Peterson	Watershed Manager	(860) 424-3854
Eric Thomas	Watershed Manager	(860) 424-3548

List of Runoff Reduction/LID Practices

Re-Forestation
Disconnection of Rooftop Runoff
Disconnection of Non-Rooftop Runoff
Sheetflow to Conservation Areas
Green Roof
Permeable Pavement
Rainwater Harvesting
Submerged Gravel Wetlands
Micro-Infiltration
Rain Gardens
Bioretention
Landscape Infiltration
Grass Swales
Bio-swales
Wet Swales
Stormwater Ponds
Stormwater Wetlands
Stormwater Filtering Systems
Stormwater Infiltration

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

APPENDIX C

AQUIFER PROTECTION AREAS AND OTHER GROUNDWATER DRINKING SUPPLY AREAS GUIDANCE INFORMATION

The Pollution Control Plan ("the Plan") should consider measures to reduce or mitigate potential impacts to both ground water (aquifers) and surface waters, taking into consideration both quantity and quality of the runoff. The emphasis should be to minimize, to the extent possible, changes between pre-development and post-development runoff rates and volumes.

The basic stormwater principals for Aquifer Protection Areas (and other groundwater drinking supply areas) are to prevent inadvertent pollution discharges/releases to the ground, while encouraging recharge of stormwater where it does not endanger groundwater quality. Measures include:

- prevent illicit discharges to storm water, including fuel/chemical pollution releases to the ground;
- minimize impervious coverage and disconnect large impervious areas with natural or landscape areas;
- direct paved surface runoff to aboveground type land treatment structures – sheet flow, surface swales, depressed grass islands, detention/retention and infiltration basins, and wet basins. These provide an opportunity for volatilization of volatile organic compounds to the extent possible before the stormwater can infiltrate into the ground;
- provide necessary impervious pavement in high potential pollutant release areas. These "storm water hot spots" include certain land use types or storage and loading areas, fueling areas, intensive parking areas and roadways (see table below);
- only use subsurface recharge structures such as dry wells, galleries, or leaching trenches, to directly infiltrate clean runoff such as rooftops, or other clean surfaces. These structures do not adequately allow for attenuation of salts, solvents, fuels or other soluble compounds in groundwater that may be contained in runoff; and
- restrict pavement deicing chemicals, or use an environmentally suitable substitute such as sand only, or alternative de-icing agents such as calcium chloride or calcium magnesium.

Infiltration of stormwater should be **restricted** under the following site conditions:

- ***Land Uses or Activities with Potential for Higher Pollutant Loads:*** Infiltration of stormwater from these land uses or activities (refer to Table 7-5 below), also referred to as stormwater "hotspots," can contaminate public and private groundwater supplies. Infiltration of stormwater from these land uses or activities may be allowed by the review authority with appropriate pretreatment. Pretreatment could consist of one or a combination of the primary or secondary treatment practices described in the Stormwater Quality Manual provided that the treatment practice is designed to remove the stormwater contaminants of concern.

- ***Subsurface Contamination:*** Infiltration of stormwater in areas with soil or groundwater contamination such as brownfield sites and urban redevelopment areas can mobilize contaminants.

- ***Groundwater Supply and Wellhead Areas:*** Infiltration of stormwater can potentially contaminate groundwater drinking water supplies in immediate public drinking water wellhead areas.

Land Uses or Activities with Potential for Higher Pollutant Loads
Table 7-5 of the 2004 Stormwater Quality Manual

Land Use/Activities	
• Industrial facilities subject to the DEEP Industrial Stormwater General Permit or the U.S. EPA National Pollution Discharge Elimination System (NPDES) Stormwater Permit Program • Vehicle salvage yards and recycling facilities • Vehicle fueling facilities (gas stations and other facilities with on-site vehicle fueling) • Vehicle service, maintenance, and equipment cleaning facilities • Fleet storage areas (cars, buses, trucks, public works) • Commercial parking lots with high intensity use (shopping malls, fast food restaurants, convenience stores, supermarkets, etc.) • Public works storage areas	• Road salt storage facilities (if exposed to rainfall) • Commercial nurseries • Flat metal rooftops of industrial facilities • Facilities with outdoor storage and loading/unloading of hazardous substances or materials, regardless of the primary land use of the facility or development • Facilities subject to chemical inventory reporting under Section 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA), if materials or containers are exposed to rainfall • Marinas (service and maintenance) • Other land uses and activities as designated by the review authority

For further information regarding the design of stormwater collection systems in Aquifer Protection Areas, contact the Aquifer Protection Area Program at (860) 424-3020 or visit www.ct.gov/deep/aquiferprotection.

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

APPENDIX D

Coastal Management Act Determination Form

For sites within the Coastal Boundary, please attach this form and written approval from the local governing authority (or verification of exemption) to the Registration Form for the Discharge of Stormwater and Dewatering Wastewaters From Construction Activities.

SITE INFORMATION

Future Permittee _____

Mailing Address _____

Business Phone _____ ext.: _____ Fax: _____

Contact Person _____ Title: _____

Site Name _____

Site Address/ Location _____

Site Latitude and Longitude _____

Receiving Water (name, basin) _____

Project Description _____

_____

STATEMENT OF REVIEW:

The above referenced project is consistent with the goals and policies in section 22a-92 of the Connecticut General Statutes and will not cause adverse impacts to coastal resources as defined in section 22a-93(15) of the Connecticut General Statutes.

Date of Coastal Site Plan Approval: _____

☐ Copy of written approval attached, or

☐ Verification of exemption attached

APPENDIX E
(Exhibit 3 of District/DEEP Memorandum of Agreement)

Conservation Districts of Connecticut
Regional Delineations and Contact Information

Northwest Conservation District
1185 New Litchfield Street
Torrington, CT 06790
Ph: 860-626-7222
Fax: 860-626-7222
Email: ncd@conservect.org

Eastern Connecticut Conservation District
238 West Town Street
Norwich, CT 06360-2111
Ph**:** 860-887-4163 x 400 Fax**:** 860-887-4082
Email: kate.johnson.eccd@comcast.net

Connecticut River Coastal Conservation District, Inc.
deKoven House Community Center
27 Washington Street
Middletown, CT 06457
Ph: 860-346-3282 Fax: 860-346-3284
Email: ctrivercoastal@conservect.org

Southwest Conservation District
51 Mill Pond Road
Hamden, CT 06514
Ph: 203-287-8179 Fax: 203-288-5077
Email: swcd43@sbcglobal.net

North Central Conservation District
24 Hyde Avenue
Vernon, CT 06066
Ph: 860-875-3881 Fax: 860-870-8973
Email: tollandc@snet.net

NORTHWEST	SOUTHWEST	NORTH CENTRAL	CT RIVER COASTAL	EASTERN
Barkhamsted	Ansonia	Avon	Berlin	Andover
Bethel	Beacon Falls	Bloomfield	Chester	Ashford
Bethlehem	Bethany	Bolton	Clinton	Bozrah
Bridgewater	Branford	Bristol	Colchester	Brooklyn
Brookfield	Bridgeport	Burlington	Cromwell	Canterbury
Canaan	Cheshire	Canton	Deep River	Chaplin
Colebrook	Darien	Coventry	Durham	Columbia
Cornwall	Derby	East Granby	East Haddam	Eastford
Danbury	East Haven	East Hartford	East Hampton	East Lyme
Goshen	Easton	East Windsor	Essex	Franklin
Hartland	Fairfield	Ellington	Haddam	Griswold
Harwinton	Greenwich	Enfield	Hebron	Groton
Kent	Guilford	Farmington	Killingworth	Hampton
Litchfield	Hamden	Glastonbury	Lyme	Killingly
Morris	Meriden	Granby	Madison	Lebanon
New Fairfield	Middlebury	Hartford	Marlborough	Ledyard
New Hartford	Milford	Manchester	Middlefield	Lisbon
New Milford	Monroe	Plainville	Middletown	Mansfield
Newtown	Naugatuck	Simsbury	Newington	Montville
Norfolk	New Canaan	Somers	New Britain	New
North Canaan	New Haven	South Windsor	Old Lyme	London
Plymouth	North Branford	Stafford	Old Saybrook	North
Roxbury	North Haven	Suffield	Portland	Stonington
Salisbury	Norwalk	Tolland	Rocky Hill	Norwich
Sharon	Orange	Vernon	Salem	Plainfield
Sherman	Oxford	West Hartford	Westbrook	Pomfret
Southbury	Prospect	Wethersfield		Preston
Thomaston	Redding	Willington		Putnam
Torrington	Ridgefield	Windsor		Scotland
Warren	Seymour	Windsor Locks		Sprague
Washington	Shelton			Sterling
Watertown	Southington			Stonington
Winchester	Stamford			Thompson
Woodbury	Stratford			Union
	Trumbull			Voluntown
	Wallingford			Waterford
	Waterbury			Windham
	West Haven			Woodstock
	Weston			
	Westport			
	Wilton			
	Wolcott			
	Woodbridge			

APPENDIX F

Memorandum of Agreement
Between
The Connecticut Department of Energy & Environmental Protection
and the
Conservation Districts of Connecticut

WHEREAS, the Commissioner of the Department of Energy and Environmental Protection ("Department" or "DEEP ") is authorized by section 22a-6(2)(3) and (4) of the Connecticut General Statutes ("CGS") to enter into this Agreement; and

WHEREAS, the five Conservation Districts of Connecticut (collectively, the "Districts"), are not-for-profit corporations duly authorized, organized and existing under the laws of the State of Connecticut and are authorized by section 22a-315 of the CGS and section 22a-315-14 of the Regulations of Connecticut State Agencies to enter into this Agreement; and

WHEREAS, section 22a-430b of the Connecticut General Statutes requires the Department to regulate stormwater discharges from construction activities under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities ("the Construction General Permit" or "CGP"), which has been or shall be issued on October 1, 2013. The Construction General Permit requires the implementation of erosion and sedimentation controls to control the discharge of sediment from construction and post-construction discharges; and

WHEREAS, Construction General Permits require the preparation and implementation of a Stormwater Pollution Control Plan ("Plan" or "SWPCP") to prevent erosion and the discharge of sediment to the waters of the state; and

WHEREAS, pursuant to section 22a-315 of the CGS, soil and water conservation districts and boards were established to advise the Commissioner on matters of soil and water conservation and erosion and sedimentation control and to assist the Commissioner in implementing programs related to soil and water conservation and erosion and sediment control; and

WHEREAS, pursuant to section 22a-315 of the CGS, the soil and water conservation districts and boards may receive funds from private sources for services provided to promote soil and water conservation and to assist the Commissioner in the implementation of related programs; and

WHEREAS, section 22a-326 of the CGS declares the policy of the state "to strengthen and extend its erosion and sediment control activities and programs and to establish and implement, through the Council on Soil and Water Conservation, soil and water conservation districts, the municipalities and the Commissioner of Energy and Environmental Protection, a state-wide coordinated erosion and sediment control program which shall reduce the danger from storm water runoff, minimize nonpoint sediment pollution from land being developed and conserve and protect the land, water, air and other environmental resources of the state;" and

WHEREAS, the Districts have understanding and experience in reviewing erosion and sediment control plans because of their longstanding participation in the municipal approval process, as required by section 22a-329 of the CGS; and

WHEREAS, DEEP and the Districts are jointly dedicated to protecting the waters of the state by controlling the discharge of sediment and the pollution resulting from stormwater runoff.

NOW, THEREFORE, in consideration of the mutual covenants and conditions hereinafter stated, the Parties agree as follows:

I. RESPONSIBILITIES OF THE CONSERVATION DISTRICTS.

For locally approvable projects, as defined in the Construction General Permit, with five (5) or more acres of soil disturbance, the appropriate District (as specified in Appendix E of the Construction General Permit, appended hereto as Exhibit 3) shall review Stormwater Pollution Control Plans submitted to the District in accordance with Section 3(*b*)(10) of the CGP, shall determine whether each such SWPCP is consistent with the requirements of the CGP, and shall advise the Commissioner in writing of its determination regarding the SWPCP's consistency.

A. Components of the SWPCP Review by the Districts

1. Requirements for Conducting a Review:

(a) SWPCP review shall be conducted by a District representative having one or more of the following minimum qualifications: (i) a bachelor's degree in hydrology, engineering (agricultural, civil, environmental, or chemical), landscape architecture, geology, soil science, environmental science, natural resources management, or a related field and two years of professional and field experience, or (ii) the EnviroCert International, Inc. designation as a Certified Professional in Erosion and Sediment Control, or a Certified Professional in Storm Water Quality.

(b) All SWPCP reviews undertaken by a District shall be conducted in accordance with the guidelines and procedures established by DEEP in consultation with the Districts, as further described below, and shall include at least one inspection, and no more than 3 inspections, of the project site.

(c) The District shall begin a SWPCP review upon the receipt of the all of following: the developer's request for review, two copies of the proposed SWPCP, the payment of required fee in the amount specified in Exhibit 1 and the written permission of the developer to enter onto and inspect the project site. Once the District is in receipt of all the documents and the fee as delineated above, the developer's SWPCP shall be considered submitted to the District.

2. Determinations of Consistency by the District after Review of the SWPCP and Subsequent Procedures

(a) If the District determines the developer's SWPCP is:

(i) Consistent with the requirements of the Construction General Permit, the District shall issue an affirmative determination notice to both the developer or such developer's designee and to DEEP in order to advise them of the adequacy of the SWPCP. The District shall also provide a copy of the SWPCP to DEEP if requested by the Commissioner.

(ii) Not consistent with the requirements of the Construction General Permit, the District shall provide a written notice of such inconsistency to the developer or such developer's designee; such notice shall include a list of the SWPCP's deficiencies and any appropriate explanatory comments.

(b) If the developer's SWPCP is found to be inconsistent with the CGP, the developer may revise the SWPCP (the "Revised SWPCP") to address any deficiencies noted by the District and resubmit its Revised SWPCP to the District for review.

(c) If the District receives a Revised SWPCP in accordance with subsection (b) above, the District shall perform a review of the Revised SWPCP. If the Revised SWPCP is deemed:

(i) Consistent with the requirements of the Construction General Permit, the District shall (1) issue an affirmative determination notice to both the project developer or such project developer's designee and to DEEP to advise them of the adequacy of the SWPCP and (2) provide a copy of the SWPCP to the DEEP if requested by the Commissioner; or

(ii) Not consistent with the requirements of the CGP after this review, the District shall provide a written notice of such inconsistency to the developer or such developer's designee. This notice shall include a list of all remaining SWPCP deficiencies and any explanatory comments as appropriate.

(d) In the event the District determines after review of the Revised SWPCP in accordance with subsection (c), above, that the Revised SWPCP remains inconsistent with the requirements of the Construction General Permit, and the developer resubmits its Revised SWPCP *within 180 calendar days* of the District's original determination of inconsistency, the resubmitted Revised SWPCP shall be considered a Resubmission. As such, the resubmitted Revised SWPCP shall be reviewed by the District in accordance with the timeframes set forth in Section I.B., and other applicable sections of this document, and the fee shall be in accordance with Section II, below, and the Resubmission Fee in Exhibit 1.

(e) In the event the District determines after review of the Revised SWPCP in accordance with subsection (c), above, that the Revised SWPCP remains inconsistent with the requirements of the Construction General Permit, and the developer resubmits its Revised SWPCP *more than 180 calendar days after* the District's original determination of inconsistency, the resubmitted Revised SWPCP shall be considered a new submission. The newly submitted Revised SWPCP shall be reviewed by the District in accordance with the timeframes set forth in Section I.B., and other applicable sections of this document, and the fee shall be in accordance with Section II, below, and the SWPCP Review Fee in Exhibit 1.

(f) Revisions to a SWPCP subsequent to the District's prior approval of developer's SWPCP

(i) In the event the developer revises a SWPCP after the District has determined that the developer's SWPCP, prior to this revision, was consistent with the requirements of the Construction General Permit, and the developer submits the revised SWPCP to the District for review *within 180 calendar days* of the District's original determination of consistency, the SWPCP shall be considered a Post-Approval Resubmission. As a Post-Approval Resubmission, the SWPCP shall be reviewed by the District in accordance with the timeframes set forth in Section I.B., and other applicable sections of this document, and the fee shall be in accordance with Section II, below, and the Post-Approval Resubmission Fee in Exhibit 1.

(ii) In the event the developer revises a SWPCP after the District has determined that the developer's SWPCP, prior to this revision, was consistent with the requirements of the Construction General Permit, and the developer submits the revised SWPCP to the District for review *more than 180 calendar days after* the District's original determination of consistency, the SWPCP shall be considered a new submission. The newly submitted SWPCP shall be reviewed by the District in accordance with the timeframes set forth in Section I.B., and other applicable sections of this document, and the fee shall be in accordance with Section II, below, and the SWPCP Review Fee in Exhibit 1.

B. Plan Review Timeframes

1. The District shall review a new submission of a SWPCP submitted by a developer or such developer's designee and provide review comments within thirty (30) calendar days of the date of a complete submission as specified in Section I.A.1.(c).

2. If the District identifies deficiencies in the SWPCP, the District shall allow the developer or such developer's designee the opportunity to revise their SWPCP and resubmit it to the District within fifteen (15) calendar days after the date of mailing or delivery of the District's written comments to the developer or such developer's designee.

3. The District shall review any SWPCP revised in accordance with subsection I.B.2., above, and provide a written determination of the SWPCP's consistency or inconsistency within fifteen (15) calendar days after the submission of the revised SWPCP.

4. At the request of the District or the developer and with the agreement of both the District and the developer, the deadlines stated in subsections 1. – 3., above, may be extended. However, any such extensions shall be limited to no more than double the original amount of time allowed above for the relevant action.

5. Express review of a SWPCP may be requested by a developer. However, the Districts shall have complete discretion to accept or decline such request for an express review based on the District's circumstances, including, but not limited to: their existing workload, vacation schedules and staffing. If a District grants an express review, the timeframe shall be reduced to no more than one third of the timeframes noted in subsection 1. – 3., above, and the fee shall be in accordance with the Express Reviews fee in Exhibit 1.

6. In the event a District does not complete the review of the SWPCP within sixty (60) days (or within the time allowed under any authorized extension pursuant to subsection B.4, above, but in no circumstance later than 120 days) of the date the SWPCP was initially submitted to the District, and provided such delay is not the result of the developer's or such developer's designee's failure to address SWPCP deficiencies as noted in subsection B.2, above, the District shall:

(a) not later than three (3) days after the District's deadline, notify the DEEP that the developer shall be initiating the registration process for the Construction General Permit in accordance with section I.B of this Agreement, for completion of the SWPCP review, and;

(b) provide to the DEEP, upon request, the District's complete file, including supporting documentation the developer's SWPCP consistency determination, including, but not limited to, the SWPCP, any other documentation submitted to the District by or on behalf of a developer, and any analysis already performed by the District; and

(c) not later than seven (7) days after the District's deadline, in accordance with section I.B of this Agreement, for completion of the SWPCP review, transfer to the DEEP, up to a maximum of $4,500, the fees that were originally submitted by the developer.

C. Inspections of the Project Site

1. Prior to the commencement of project construction and during the course of the SWPCP review process, the District shall conduct at least one inspection of the project site.

2. Once the construction of the project has begun, a District shall make at least one, but not more than three, inspection(s) of the project site to verify that the developer's SWPCP is being

implemented as approved by the District. A District shall report the results of the inspection(s) to the developer or such developer's designee and to DEEP in a manner prescribed by the Commissioner.

3. Upon notification from the developer or developer's designee, in accordance with Section 6(a)(1) of the CGP, that construction of the stormwater collection and management system is complete, the District shall conduct one inspection of the project site to verify that the post-construction stormwater management measures were completed in accordance with the approved SWPCP. The District shall report the results of this inspection to DEEP in a manner prescribed by the Commissioner.

D. Audits

The District agrees that all records pertaining to this Agreement shall be maintained for a period of not less than five (5) years. Such records shall be made available to the DEEP and to the state auditors upon request. For the purposes of this Agreement, "Records" are all working papers and such information and materials as may have been accumulated by the District in performing the Agreement, including, but not limited to, documents, data, analysis, plans, books, computations, drawings, specifications, notes, reports, records, estimates, summaries and correspondence, kept or stored in any form.

II. FEE SCHEDULE.

A. A District may assess fees for the services it renders in conjunction with its SWPCP reviews. Such fees shall be paid as follows:

1. All fees, except those described in subsection II.A.2, below, shall be submitted by the developer to the District with the developer's request for review. These fees are non refundable.

2. The fee for Post-Approval Resubmission, as designated in Exhibit 1, shall be submitted by the developer to the District upon completion of the District's review, prior to release of the determination notice, and is non refundable.

B. The Fee Schedule shall be reviewed annually by the Parties. The Fee Schedule may be adjusted as warranted, without a formal amendment to this Agreement, by mutual agreement between the Districts and the Commissioner.

III. RESPONSIBILITIES OF DEEP.

A. In accordance with the Construction General Permit requirements for SWPCP reviews by a third party, DEEP shall conduct outreach to inform the development community that a District may review SWPCPs for consistency with the requirements of the Construction General Permit. DEEP shall also inform the development community that a registration form for authorization under the Construction General Permit may only be submitted to DEEP if: the District, or other third party in accordance with Section 3(b)(11) of the CGP, determines that the SWPCP is consistent with the requirements of the CGP, or in the event the time schedule is exceeded for a District review as described in section I.B.6, above.

B. In order to institute standard SWPCP review guidelines and procedures, DEEP shall coordinate with the Districts to prepare a SWPCP checklist. The standard review guidelines and procedures established shall be consistent with the requirements of the Construction General Permit, the 2002 CT Guidelines for Soil Erosion and Sedimentation Control, and the 2004 Stormwater Quality Manual. The Commissioner shall have final approval of the review guidelines and procedures.

C. DEEP shall provide initial training regarding SWPCP requirements for District staff involved in SWPCP reviews. The frequency of subsequent training shall be determined by the Commissioner.

D. DEEP shall retain final decision making authority regarding the determination that a SWPCP is or is not consistent with the requirements of the Construction General Permit and shall oversee the permitting process for Construction General Permit coverage.

E. Once a SWPCP has been approved, DEEP shall oversee any subsequent compliance and/or enforcement matters related to a developer's adherence to the requirements of the Construction General Permit.

F. DEEP shall have the discretion to review any of the Districts' records pertaining to any aspect this Agreement.

IV. POINTS OF CONTACT.

The following shall be points of contact for this Agreement unless otherwise agreed to by all Parties, notwithstanding section VI. All notices, demands, requests, consents, approvals or other communications required or permitted to be given or which are given with respect to this Agreement (for the purpose of this section collectively called "Notices") shall be deemed to have been effected at such time as the notice is placed in the U.S. mail, first class and postage prepaid, return receipt requested, or, placed with a recognized, overnight express delivery service that provides for a return receipt. All such Notices shall be in writing and shall be addressed as follows:

A. DEEP
Director
Water Permitting & Enforcement Division
Bureau of Material Management & Compliance Assurance
Department of Energy & Environmental Protection
79 Elm St.
Hartford, CT 06106
Phone: 860-424-3018
Fax: 860-424-4074

B. Conservation District
Board Chairperson
Address & Phone of appropriate District:

Northwest Conservation District
1185 New Litchfield Street
Torrington, CT 06790
Ph: 860-626-7222
Fax: 860-626-7222
Email: ncd@conservect.org

Eastern Connecticut Conservation District
238 West Town Street
Norwich, CT 06360-2111
Ph**:** 860-887-4163 x 400 Fax**:** 860-887-4082
Email: kate.johnson.eccd@comcast.net

Connecticut River Coastal Conservation District, Inc.
deKoven House Community Center
27 Washington Street
Middletown, CT 06457
Ph: 860-346-3282 Fax 860-346-3284
Email: ctrivercoastal@conservect.org

Southwest Conservation District
51 Mill Pond Road
Hamden, CT 06514
Ph: 203-287-8179 Fax: 203-288-5077
Email: swcd43@sbcglobal.net

North Central Conservation District
24 Hyde Avenue
Vernon, CT 06066
Ph: 860-875-3881 Fax: 860-870-8973
Email: tollandc@snet.net

V. EXECUTIVE ORDERS AND ANTI-DISCRIMINATION. The Districts shall comply with the additional terms and conditions hereto attached as Exhibit 2.

VI. AMENDMENTS. Either the DEEP or the Districts may recommend revisions to this Agreement as circumstances may warrant; however, any revisions must be upon mutual agreement of DEEP and all five Conservation Districts. Unless otherwise stated in this Agreement, formal written amendment is required for changes to any of the terms and conditions specifically stated in the Agreement, including Exhibit 2 of the Agreement, any prior amendments to the Agreement, and any other Agreement revisions determined material by the Department.

VII. SEVERABILITY. The provisions of this Agreement are severable. If any part of it is found unenforceable, all other provisions shall remain fully valid and enforceable, unless the unenforceable provision is an essential element of the bargain.

VIII. SOVEREIGN IMMUNITY. The Parties acknowledge and agree that nothing in the Agreement shall be construed as a modification, compromise or waiver by the State of any rights or defenses of any immunities provided by federal law or the laws of the State of Connecticut to the State or any of the State's, which they may have had, now have or shall have with respect to all matters arising out of the Agreement. To the extent that this section conflicts with any other section, this section shall govern.

IX. FORUM AND CHOICE OF LAW. The Agreement shall be deemed to have been made in the City of Hartford, State of Connecticut. Both Parties agree that it is fair and reasonable for the validity and construction of the Agreement to be, and it shall be, governed by the laws and court decisions of the State of Connecticut, without giving effect to its principles of conflicts of laws. To the extent that any immunities provided by federal law or the laws of the State of Connecticut do not bar an action against the State or the Districts, and to the extent that these courts are courts of competent jurisdiction, for the purpose of venue, the complaint shall be made returnable to the Judicial District of Hartford only or shall be brought in the United States District Court for the District of Connecticut only, and shall not be transferred to any other court, provided, however, that nothing here constitutes a waiver or compromise of the sovereign immunity of the State of Connecticut. The Districts waive any objection which they may now have or shall have to the laying of venue of any Claims in any forum and further irrevocably submits to such jurisdiction in any suit, action or proceeding.

X. TERMINATION. Notwithstanding any provisions in this Agreement, DEEP, through a duly

authorized employee, may terminate the Agreement whenever the Agency makes a written determination that such Termination is in the best interests of the State. The Agency shall notify the Districts in writing sent by certified mail, return receipt requested, which notice shall specify the effective date of Termination and the extent to which the Districts must complete its Performance under the Agreement prior to such date; or (b) The Districts may terminate the Agreement for good cause. The Districts shall notify DEEP by written notice at least one hundred eighty (180) days prior to the effective date of termination. In order for the Districts to terminate this Agreement, (1) there must be a consensus between all five Conservation Districts that each District shall be terminating this Agreement with the DEEP; (2) such proof of consensus shall be submitted to the DEEP in the form of a letter signed by the duly authorized agent for each District by certified mail, return receipt requested, at least one hundred eighty (180) days prior to the Districts' intention to cancel or terminate. Upon the Termination of this Agreement by either Party, the Districts shall deliver to the Agency copies of all Records no later than thirty (30) days after the Termination of the Agreement, or fifteen (15) days after the Non-terminating Party receives a written request from the Terminating Party for the Records. The Districts shall deliver those Records that exist in electronic, magnetic or other intangible form in a non-proprietary format, such as, but not limited to, PDF, ASCII or .TXT. Upon receipt of a written notice of Termination from the Agency, the Districts shall cease operations as the Agency directs in the notice, and take all actions that are necessary or appropriate, or that the Agency may reasonably direct, for the protection, and preservation of records. Except for any work which the Agency directs the Districts to Perform in the notice prior to the effective date of Termination, and except as otherwise provided in the notice, the Districts shall terminate or conclude all existing subcontracts and purchase orders and shall not enter into any further subcontracts, purchase orders or commitments. Upon Termination of the Agreement, all rights and obligations shall be null and void, so that no Party shall have any further rights or obligations to any other Party, except with respect to the sections which survive Termination. All representations, warranties, agreements and rights of the Parties under the Agreement shall survive such Termination to the extent not otherwise limited in the Agreement and without each one of them having to be specifically mentioned in the Agreement. Termination of the Agreement pursuant to this section shall not be deemed to be a breach of Agreement by the Agency.

XI. DURATION OF AGREEMENT. This Agreement shall be effective on July 1, 2013 or on the date of the last signature below, whichever is later, and shall continue in force unless canceled or terminated by either party in accordance with paragraph X above.

XII. VOID AB INITIO. Notwithstanding paragraphs X and XI, the Agreement shall be void *ab initio* if the Construction General Permit is reissued, revoked or modified to eliminate the need for the Districts to review the SWPCP pursuant to such general permit's terms and conditions or if the Construction General Permit expires and is not reissued.

XIII. INTERPRETATION. The Agreement contains numerous references to statutes and regulations. For purposes of interpretation, conflict resolution and otherwise, the content of those statutes and regulations shall govern over the content of the reference in the Agreement to those statutes and regulations.

XIV. ENTIRETY OF AGREEMENT. This Agreement is the entire agreement between the Parties with respect to its subject matter, and supersedes all prior agreements, proposals, offers, counteroffers and understandings of the Parties, whether written or oral. The Agreement has been entered into after full investigation, neither Party relying upon any statement or representation by the other unless such statement or representation is specifically embodied in the Agreement.

XV. PROTECTION OF STATE CONFIDENTIAL INFORMATION. *(mandatory language required for all PSAs effective 12/1/11)*

A. The Districts or District Parties, at their own expense, have a duty to and shall protect from a

Confidential Information Breach any and all Confidential Information which they come to possess or control, wherever and however stored or maintained, in a commercially reasonable manner in accordance with current industry standards.

B. Each District or District Party shall develop, implement and maintain a comprehensive data-security program for the protection of Confidential Information. The safeguards contained in such program shall be consistent with and comply with the safeguards for protection of Confidential Information, and information of a similar character, as set forth in all applicable federal and state law and written policy of the Department or State concerning the confidentiality of Confidential Information. Such data-security program shall include, but not be limited to, the following:

1. A security policy for employees related to the storage, access and transportation of data containing Confidential Information;

2. Reasonable restrictions on access to records containing Confidential Information, including access to any locked storage where such records are kept;

3. A process for reviewing policies and security measures at least annually;

4. Creating secure access controls to Confidential Information, including but not limited to passwords; and

5. Encrypting of Confidential Information that is stored on laptops, portable devices or being transmitted electronically.

C. The District and District Parties shall notify the Department and the Connecticut Office of the Attorney General as soon as practical, but no later than twenty-four (24) hours, after they become aware of or suspect that any Confidential Information which Parties have come to possess or control has been subject to a Confidential Information Breach. If a Confidential Information Breach has occurred, the District shall, within three (3) business days after the notification, present a credit monitoring and protection plan to the Commissioner of Administrative Services, the Department and the Connecticut Office of the Attorney General, for review and approval. Such credit monitoring or protection plan shall be made available by the District at its own cost and expense to all individuals affected by the Confidential Information Breach. Such credit monitoring or protection plan shall include, but is not limited to, reimbursement for the cost of placing and lifting one (1) security freeze per credit file pursuant to Connecticut General Statutes §36a-701a. Such credit monitoring or protection plans shall be approved by the State in accordance with this Section and shall cover a length of time commensurate with the circumstances of the Confidential Information Breach. The District's costs and expenses for the credit monitoring and protection plan shall not be recoverable from the Department, any State of Connecticut entity or any affected individuals.

D. The District shall incorporate the requirements of this Section in all subAgreements requiring each District Party to safeguard Confidential Information in the same manner as provided for in this Section.

E. Nothing in this Section shall supersede in any manner the District's and/ or the District Parties' obligations pursuant to HIPAA or the provisions of this Agreement concerning the obligations of the District as a Business Associate of the Department.

XVI. AMERICANS WITH DISABILITIES ACT *(Mandatory)*. The Districts shall be and remain in compliance with the Americans with Disabilities Act of 1990 ("Act"), to the extent applicable, during the term of the Agreement. The DEEP may cancel the Agreement if the District and District Parties fail to comply with the Act.

XVII. ADA PUBLICATION STATEMENT. The following statement shall be incorporated into all **publications** prepared under the terms of this Agreement:

"The Department of Energy and Environmental Protection is an affirmative action/equal opportunity employer and service provider. In conformance with the Americans with Disabilities Act, DEEP makes every effort to provide equally effective services for persons with disabilities. Individuals with disabilities who need this information in an alternative format, to allow them to benefit and/or participate in the agency's programs and services, should call DEEP's Human Resources Office at (860) 424-3006, send a fax to (860) 424-3896, or email DEEP.MedRecs@ct.gov. Persons who are hearing impaired should call the State of Connecticut relay number 711."

When advertising any **public meetings** conducted under the terms of this Agreement, the above publications language should be used as well as the following statement:

"Requests for accommodations must be made at least two weeks prior to the program date."

All **videos** produced under the terms of this Agreement must be made available with closed captioning.

XVIII. PUBLICATION OF MATERIALS. The District must obtain written approval from the State of Connecticut prior to distribution or publication of any printed material prepared under the terms of this Agreement. Unless specifically authorized in writing by the State, on a case by case basis, the District shall have no right to use, and shall not use, the name of the State of Connecticut, its officials, agencies, or employees or the seal of the State of Connecticut or its agencies: (1) in any advertising, publicity, promotion; or (2) to express or to imply any endorsement of District's products or services; or (3) to use the name of the State of Connecticut, its officials agencies, or employees or the seal of the State of Connecticut or its agencies in any other manner (whether or not similar to uses prohibited by (1) and (2) above), except only to manufacture and deliver in accordance with this Agreement such items as are hereby contracted for by the State. In no event may the Districts use the State Seal in any way without the express written consent of the Secretary of State.

XIX. CHANGES IN PRINCIPAL PROJECT STAFF. Any changes in the principal project staff must be requested in writing and approved in writing by the Commissioner at the Commissioner's sole discretion. In the event of any unapproved change in principal project staff, the Commissioner may, in the Commissioner's sole discretion, terminate this Agreement.

XX. FURTHER ASSURANCES. The Parties shall provide such information, execute and deliver any instruments and documents and take such other actions as may be necessary or reasonably requested by the other Party which are not inconsistent with the provisions of this Agreement and which do not involve the vesting of rights or assumption of obligations other than those provided for in the Agreement, in order to give full effect to the Agreement and to carry out the intent of the Agreement.

XXI. ASSIGNMENT. The Districts shall not assign any of their rights or obligations under the Agreement, voluntarily or otherwise, in any manner without the prior written consent of the Agency. The Agency may void any purported assignment in violation of this section and declare the District in breach of this Agreement. Any termination by the Agency for a breach is without prejudice to the Agency's or the State's rights or possible Claims.

XXII. EXHIBITS. All exhibits referred to in, and attached to, this Agreement are incorporated in this Agreement by such reference and shall be deemed to be a part of it as if they had been fully set forth in it.

XXIII. FORCE MAJEUR. Events that materially affect the cost of the Goods or Services or the time schedule within which to Perform and are outside the control of the party asserting that such an event has

occurred, including, but not limited to, labor troubles unrelated to District(s), failure of or inadequate permanent power, unavoidable casualties, fire not caused by a District, extraordinary weather conditions, disasters, riots, acts of God, insurrection or war.

XXIV. INDEMNIFICATION. The Districts shall indemnify, defend and hold harmless the State and its officers, representatives, agents, servants, employees, successors and assigns from and against any and all (1) Claims arising, directly or indirectly, in connection with the Agreement, including the acts of commission or omission (collectively, the "Acts") of the District or District Parties; and (2) liabilities, damages, losses, costs and expenses, including but not limited to, attorneys' and other professionals' fees, arising, directly or indirectly, in connection with Claims, Acts or the Agreement. The Districts obligations under this section to indemnify, defend and hold harmless against Claims includes Claims concerning confidentiality of any part of or all of the Districts' Records, any intellectual property rights, other proprietary rights of any person or entity, copyrighted or uncopyrighted compositions, secret processes, patented or unpatented inventions, articles or appliances furnished or used in the Performance. The Districts shall not be responsible for indemnifying or holding the State harmless from any liability arising due to the negligence of the State or any other person or entity acting under the direct control or supervision of the State. The Districts shall reimburse the State for any and all damages to the real or personal property of the State caused by the Acts of the Districts or any District Parties. The State shall give the Districts reasonable notice of any such Claims. The Districts shall carry and maintain at all times during the term of the Agreement, and during the time that any provisions survive the term of the Agreement, sufficient general liability insurance to satisfy its obligations under this Agreement. The Districts shall name the State as an additional insured on the policy and shall provide a copy of the policy to the Agency prior to the effective date of the Agreement. The Districts shall not begin Performance until the delivery of the policy to the Agency. The Agency shall be entitled to recover under the insurance policy even if a body of competent jurisdiction determines that the Agency or the State is contributorily negligent. This section shall survive the Termination of the Agreement and shall not be limited by reason of any insurance coverage.

XXV. DISTRICT PARTIES. A District's members, directors, officers, shareholders, partners, managers, principal officers, representatives, agents, servants, consultants, employees or any one of them or any other person or entity with whom the District is in privity of oral or written contract and the District intends for such other person or entity to Perform under the Agreement in any capacity

XXVI. CAMPAIGN CONTRIBUTION RESTRICTION. For all State contracts as defined in P.A. 07-1 having a value in a calendar year of $50,000 or more or a combination or series of such agreements or contracts having a value of $100,000 or more, the authorized signatory to this Agreement expressly acknowledges receipt of the State Elections Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice. See SEEC Form 11.

Authorizing Signatures

For DEEP: _____ 8/21/13
Commissioner — Date

For Northwest Conservation District: _____ 6/5/13
Signature — Date

Chairman
Title

For Eastern Connecticut Conservation District: _____ 6/12/13
Signature — Date

Chair
Title

For Connecticut River Coastal Conservation District, Inc.: _____ 5/22/13
Signature — Date

Chair
Title

For Southwest Conservation District: _____ 5/13/13
Signature — Date

Vice-Chairperson SWCD
Title

For North Central Conservation District: _____ 5/23/13
Signature — Date

Chairman
Title

EXHIBIT 1

Connecticut Conservation District
Stormwater Pollution Control Plan Review Fee Schedule

Single Family Residential Developments Disturbing 5 or more Acres

Number of Lots	Standard Fee
1	$1,500
2	$1,665
3	$1,830
4	$1,995
5	$2,160
6	$2,325
7	$2,490
8	$2,655
9	$2,820
10	$2,985
11	$3,150
12	$3,315
13	$3,480
14	$3,645
15	$3,810
16	$3,975
17	$4,140
18	$4,305
19	$4,470
20	$4,635
21	$4,800
22	$4,965
23	$5,130
24	$5,295
25	$5,460

Number of Lots	Standard Fee
26	$5,625
27	$5,790
28	$5,955
29	$6,120
30	$6,285
31	$6,450
32	$6,615
33	$6,780
34	$6,945
35	$7,110
36	$7,275
37	$7,440
38	$7,605
39	$7,770
40	$7,935
41	$8,100
42	$8,265
43	$8,430
44	$8,595
45	$8,760
46	$8,925
47	$9,090
48	$9,255
49	$9,420
50	$9,585

Over 50 lots:
$9,585 + $20 x number of lots over 50

SW PCP Review: Standard Fee (as shown above)

Resubmission: Standard Fee minus 50%

Post-Approval Resubmission: $85 per hour, up to a maximum of the Standard Fee minus 50%

Express Reviews: The specified fee for an SW PCP Review, a Resubmission, or a Post-Approval Resubmission; plus 50% of the applicable fee and/or limit

Policies:

1. Payment due upon submission of SW PCP, with the exception of Post-Approval Resubmissions.
2. Payment for Post-Approval Resubmission review is due upon completion of review.
3. Written permission to enter onto and inspect the site: Due upon submission of SW PCP.

EXHIBIT 1

Connecticut Conservation District
Stormwater Pollution Control Plan Review Fee Schedule

Commercial and Multi Family Developments

Number of Disturbed Acres	Standard Fee
5	$2,200
6	$2,365
7	$2,530
8	$2,695
9	$2,860
10	$3,025
11	$3,190
12	$3,355
13	$3,520
14	$3,685
15	$3,850
16	$4,015
17	$4,180
18	$4,345
19	$4,510
20	$4,675
21	$4,840
22	$5,005
23	$5,170
24	$5,335
25	$5,500
26	$5,665
27	$5,830

Number of Disturbed Acres	Standard Fee
28	$5,995
29	$6,160
30	$6,325
31	$6,490
32	$6,655
33	$6,820
34	$6,985
35	$7,150
36	$7,315
37	$7,480
38	$7,645
39	$7,810
40	$7,975
41	$8,140
42	$8,305
43	$8,470
44	$8,635
45	$8,800
46	$8,965
47	$9,130
48	$9,295
49	$9,460
50	$9,625

Over 50 acres:
$9,625 + $25 x number of disturbed acres over 50

SW PCP Review: Standard Fee (as shown above)

Resubmission: Standard Fee minus 50%

Post-Approval Resubmission: $85 per hour, up to a maximum of the Standard Fee minus 50%

Express Reviews: The specified fee for an SW PCP Review, a Resubmission, or a Post-Approval Resubmission; plus 50% of the applicable fee and/or limit

Policies:

1. Payment due upon submission of SW PCP, with the exception of Post-Approval Resubmissions.
2. Payment for Post-Approval Resubmission review is due upon completion of review.
3. Written permission to enter onto and inspect the site: Due upon submission of SW PCP.

EXHIBIT 2

EXECUTIVE ORDERS

The Agreement is subject to the provisions of Executive Order No. Three of Governor Thomas J. Meskill, promulgated June 16, 1971, concerning labor employment practices, Executive Order No. Seventeen of Governor Thomas J. Meskill, promulgated February 15, 1973, concerning the listing of employment openings and Executive Order No. Sixteen of Governor John G. Rowland promulgated August 4, 1999, concerning violence in the workplace, all of which are incorporated into and are made a part of the Contract as if they had been fully set forth in it. At the Districts' request, the Client Agency shall provide a copy of these orders to the Districts. The Agreement may also be subject to Executive Order No. 7C of Governor M. Jodi Rell, promulgated July 13, 2006, concerning contracting reforms and Executive Order No. 14 of Governor M. Jodi Rell, promulgated April 17, 2006, concerning procurement of cleaning products and services, in accordance with their respective terms and conditions.

NONDISCRIMINATION

(a) For purposes of this Section, the following terms are defined as follows:

i. "Commission" means the Commission on Human Rights and Opportunities;
ii. "Contract" and "contract" include any extension or modification of this Agreement or contract;
iii. "Districts" and "districts" include the Districts and any successors or assigns of the Districts or districts;
iv. "Gender identity or expression" means a person's gender-related identity, appearance or behavior, whether or not that gender-related identity, appearance or behavior is different from that traditionally associated with the person's physiology or assigned sex at birth, which gender-related identity can be shown by providing evidence including, but not limited to, medical history, care or treatment of the gender-related identity, consistent and uniform assertion of the gender-related identity or any other evidence that the gender-related identity is sincerely held, part of a person's core identity or not being asserted for an improper purpose.
v. "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations;
vi. "good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements;
vii. "marital status" means being single, married as recognized by the State of Connecticut, widowed, separated or divorced;
viii. "mental disability" means one or more mental disorders, as defined in the most recent edition of the American Psychiatric Association's "Diagnostic and Statistical Manual of Mental Disorders", or a record of or regarding a person as having one or more such disorders;
ix. "minority business enterprise" means any small contractor, District or supplier of materials fifty-one percent or more of the capital stock, if any, or assets of which is owned by a person or persons: (1) who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise, and (3) who are members of a minority, as such term is defined in subsection (a) of Connecticut General Statutes § 32-9n; and
x. "public works contract" means any agreement between any individual, firm or corporation and the State or any political subdivision of the State other than a municipality for construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, or which is financed in whole or in part by the State, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.

For purposes of this Section, the terms "Contract" and "contract" do not include a contract where each District is (1) a political subdivision of the state, including, but not limited to, a municipality, (2) a quasi-public agency, as defined in Conn. Gen. Stat. Section 1-120, (3) any other state, including but not limited to any federally recognized Indian tribal governments, as defined in Conn. Gen. Stat. Section 1-267, (4) the federal government, (5) a foreign government, or (6) an agency of a subdivision, agency, state or government described in the immediately preceding enumerated items (1), (2), (3), (4) or (5).

(b) (1) The Districts agree and warrant that in the performance of the Agreement such Districts will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, mental retardation, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Districts that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut; and the Districts further agree to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, mental retardation, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by the Districts that such disability prevents performance of the work involved; (2) the Districts agree, in all solicitations or advertisements for employees placed by or on behalf of the Districts, to state that it is

an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the Commission; (3) the Districts agree to provide each labor union or representative of workers with which the Districts have a collective bargaining Agreement or other contract or understanding and each vendor with which the Districts have a contract or understanding, a notice to be provided by the Commission, advising the labor union or workers' representative of the Districts' commitments under this section and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) the Districts agree to comply with each provision of this Section and Connecticut General Statutes §§ 46a-68e and 46a-68f and with each regulation or relevant order issued by said Commission pursuant to Connecticut General Statutes §§ 46a-56, 46a-68e and 46a-68f; and (5) the Districts agree to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Districts as relate to the provisions of this Section and Connecticut General Statutes § 46a-56. If the contract is a public works contract, the Districts agree and warrant that they will make good faith efforts to employ minority business enterprises as Districts and suppliers of materials on such public works projects.

(c) Determination of the Districts' good faith efforts shall include, but shall not be limited to, the following factors: The Districts' employment and subcontracting policies, patterns and practices; affirmative advertising, recruitment and training; technical assistance activities and such other reasonable activities or efforts as the Commission may prescribe that are designed to ensure the participation of minority business enterprises in public works projects.

(d) The Districts shall develop and maintain adequate documentation, in a manner prescribed by the Commission, of its good faith efforts.

(e) The Districts shall include the provisions of subsection (b) of this Section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on the Districts, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Districts shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Connecticut General Statutes §46a-56; provided if such Districts become involved in, or is threatened with, litigation with the Districts or vendor as a result of such direction by the Commission, the Districts may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.

(f) The Districts agree to comply with the regulations referred to in this Section as they exist on the date of this Agreement and as they may be adopted or amended from time to time during the term of this Agreement and any amendments thereto.

(g) (1) The Districts agree and warrant that in the performance of the Agreement such Districts will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or the State of Connecticut, and that employees are treated when employed without regard to their sexual orientation; (2) the Districts agree to provide each labor union or representative of workers with which such Districts have a collective bargaining Agreement or other contract or understanding and each vendor with which such Districts have a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the Districts' commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (3) the Districts agree to comply with each provision of this section and with each regulation or relevant order issued by said Commission pursuant to Connecticut General Statutes § 46a-56; and (4) the Districts agree to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Districts which relate to the provisions of this Section and Connecticut General Statutes § 46a-56.

(h) The Districts shall include the provisions of the foregoing paragraph in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on the Districts, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Districts shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Connecticut General Statutes § 46a-56; provided, if such Districts become involved in, or is threatened with, litigation with the Districts or vendor as a result of such direction by the Commission, the Districts may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to the Connecticut Department of Energy and Environmental Protection (DEEP)."

Note: *Place on official Letterhead. Need to document registered name with CT Secretary of State C.O.N.C.O.R.D.*

CERTIFICATION

I, xxxxxxxxxxxxxxx, Chair of the xxxxxxxxxxxxxxx an entity lawfully organized and existing under the laws of Connecticut, do hereby certify that the following is a true and correct copy of a resolution adopted on the >>>>day of >>>>, 2011, by the governing body of the xxxxxx in accordance with all of its documents of governance and management and the laws of Connecticut and further certify that such resolution has not been modified, rescinded or revoked, and is a present in full force and effect.

RESOLVED: That the xxxxxxxxxxxx hereby adopts as its policy to support the nondiscrimination agreements and warranties required under Conn. Gen. Stat. § 4a-60(a)(1) and § 4a-60a(a)(1), as amended in State of Connecticut Public Act 07-245 and sections 9(a)(1) and 10(a)(1) of Public Act 07-142, as those statutes may be amended from time to time.

IN WITNESS WHEREOF, the undersigned has executed this certificate this >>>day of >>>>>, 2013.

_____

Signature

_____

Date

CONSERVATION DISTRICT PLAN REVIEW CERTIFICATION

Registrations submitted to DEEP for which a Conservation District has performed the Plan review pursuant to Section 3(*b*)(10) of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities shall include the following certification:

"I hereby certify that I am an employee of the [INSERT NAME OF DISTRICT] Conservation District and that I meet the qualifications to review Stormwater Pollution Control Plans as specified in the Memorandum of Agreement between the Connecticut Department of Energy & Environmental Protection and the Connecticut Conservation Districts. I am making this certification in connection with a registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify, based on my review of the requirements of such general permit and on the standard of care for such projects, that the Plan is in compliance with the requirements of the general permit. I understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

Registrations submitted to DEEP for which the District review was begun but ***could not be completed*** within the time limits specified in the Memorandum of Agreement shall include the following statement:

"I hereby certify that I am an employee of the [INSERT NAME OF DISTRICT] Conservation District and that I meet the qualifications to review Stormwater Pollution Control Plans as specified in the Memorandum of Agreement between the Connecticut Department of Energy & Environmental Protection and the Connecticut Conservation Districts. I am making this statement in connection with a registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I hereby state that the review of the Stormwater Pollution Control Plan (Plan) for such registration was not completed within the time frames specified in the Memorandum of Agreement. Consequently, I cannot certify that the Plan is in compliance with the requirements of the general permit."

General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities

APPENDIX G

Historic Preservation Review

Pursuant to Chapter 184a, Section 10-387 of the Connecticut General Statutes, the Department of Energy & Environmental Protection (DEEP) shall review, in consultation with the Connecticut Commission on Culture and Tourism, its policies and practices for consistency with the preservation and study of CT's archaeological and historical sites. Pursuant to this requirement, DEEP has outlined the following process for assessing the potential for and the presence of historic and/or archaeological resources at a proposed development site. DEEP advises a review for the resources identified below ***be initiated up to one year*** prior to registration for this permit *(or prior to property purchase if possible)* and in conjunction with the local project approval process. However, a review conducted for an Army Corps of Engineers Section 404 wetland permit would meet this requirement.

Step 1: Determine if the proposed site is within an area of significance by consulting the following resources:

1. CT Register of Historic Places found at the link below:
   http://www.nationalregisterofhistoricplaces.com/CT/state.html#pickem

2. The municipality of the proposed development site for its designations of local historic districts, including but not limited to, local Historic District and/or Property Statutes.

Step 2: Assess site characteristics to determine the presence of a potential archaeological site, sacred site, and/ or sacred object as described below:

Definitions:

1. "Archaeological site" means a location where there exists material evidence that is not less than fifty years old of the past life and culture of human beings in the state.

2. "Sacred site" or "sacred land" means any space, including an archaeological site, of ritual or traditional significance in the culture and religion of Native Americans that is listed or eligible for listing on the National Register of Historic Places (16 USC 470a, as amended) or the state register of historic places defined in section 10-410, including, but not limited to, marked and unmarked human burials, burial areas and cemeteries, monumental geological or natural features with sacred meaning or a meaning central to a group's oral traditions; sites of ceremonial structures, including sweat lodges; rock art sites, and sites of great historical significance to a tribe native to this state.

3. "Sacred object" means any archaeological artifact or other object associated with a sacred site.

Site Prescreening Criteria:

1. Does the proposed development site include lands within 300 feet of surface water features, such as streams, brooks, lakes, or marshes?
If "yes", proceed to Criterion 2. If the answer to Criterion 1 is "no", then there is a low potential for prehistoric period archaeological resources - Proceed to Criterion 3.

2. Does the area of anticipated construction or ground disturbance include soils classified by the Natural Resource Conservation Service as "Sandy Loam/ Loamy sand" or "Sandy Gravel Loam" not including "Fine Sandy Loam/ Loamy sand" with slopes less than or equal to 15%? (Soil mapping information is available for free from: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx)

If the answer to Criterion 2 is no, then there is a low potential for prehistoric period archaeological resources - Proceed to Criterion 3. If yes, the project site may contain significant prehistoric period archaeological resources

– *assess all other criteria and proceed to Step 3.*

3. Are there buildings or structures over 150 years in age with the project site?
If no, proceed to Criterion 4. If yes, the project site may contain significant historic period archaeological resources – assess all other criteria and proceed to Step 3.

4. Are there buildings or structures shown within or immediately adjacent to the project site on the 1850's Connecticut County maps?
Historic County maps are here:
Fairfield - http://www.flickr.com/photos/uconnlibrariesmagic/3387034755/
Hartford - http://www.flickr.com/photos/uconnlibrariesmagic/3386955421/
Litchfield - http://www.flickr.com/photos/uconnlibrariesmagic/3387765290/
Middlesex - http://www.flickr.com/photos/uconnlibrariesmagic/3386956185/
New Haven - http://www.flickr.com/photos/uconnlibrariesmagic/3386956345/
New London - http://www.flickr.com/photos/uconnlibrariesmagic/3387766080/
Tolland - http://www.flickr.com/photos/uconnlibrariesmagic/3386957013/
Windham - http://www.flickr.com/photos/uconnlibrariesmagic/3387766950/

To look for buildings and structures click on the appropriate county map link. From the "Actions" drop-down menu choose "View all sizes". On the "Photo/All sizes" page, choose "Original" to view the county map at an enlarged scale.

If no, there is a low potential for significant historic period archaeological resources. If yes, the site may contain significant historic period archaeological resources- assess all other criteria and proceed to Step 3.

Step 3: If you answered yes to Criterion 2, 3, or 4, please contact Daniel Forrest (860-256-2761 or daniel.forrest@ct.gov) or the current environmental review coordinator at the State Historic Preservation Office, Department of Economic and Community Development for additional guidance.

Step 4: Report in the Registration Form for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities that a review has been conducted and the results of the review (i.e. the proposed site does not have the potential for historic/ archaeological resources, or that such potential exists and is being or has been reviewed by the Connecticut Commission on Culture and Tourism).

Please note that DEEP will refer all proposed sites with a historic/ archaeological resource potential (as identified in Steps 1 & 2 above) to the State Historic Preservation Office at the Department of Economic and Community Development..

Appendix H
Wild & Scenic Rivers Guidance

Overview: Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act (WSRA) charges administration of rivers in the National Wild and Scenic Rivers System (National System) to four federal land management agencies (Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service, and U.S. Forest Service). However, to protect and enhance river values as directed in the WSRA, it is essential to use the authorities of a number of other federal agencies in administering the water column, river bed/bank, and upland river corridor.

Congress declared a policy to protect selected rivers in the nation through the WSRA. The river-administering agencies are to protect the river's identified values, free-flowing condition, and associated water quality. Specifically, each component is to be "administered in such manner as to protect and enhance the (outstandingly remarkable) values (**ORVs**) which caused it to be included in said system. . . ."

The WSRA also directs other federal agencies to protect river values. It explicitly recognizes the Federal Energy Regulatory Commission, Environmental Protection Agency, Army Corps of Engineers and any other federal department or agency with lands on or adjacent to designated (or congressionally authorized study) rivers or that permit or assist in the construction of water resources projects.

Pertinent Sections of the Wild and Scenic Rivers Act

The full Wild and Scenic Rivers Act can be found at the website: www.rivers.gov
Pertinent Sections related to the mandate to protect river values through coordinated federal actions is found in several sections of the WSRA:

Section 1(b)	Section 7(a)	Section 10(a)
Section 12(a)	Section 12(c)	

Designated Rivers under the Wild and Scenic Rivers Act and Contact Information

The full listing of designated rivers can be found on the website www.rivers.gov
As of the date of this publication, there are two designated rivers in Connecticut, both of which are managed under the Partnership Wild and Scenic Rivers Program, through a Coordinating Committee consisting of representatives from local communities and organizations, state government and the National Park Service. More information about these rivers, their watersheds, approved management plans, the Wild and Scenic Coordinating Committees and specific contact information can be found on the websites.

1. West Branch of the Farmington River: www.farmingtonriver.org
2. Eightmile River: www.eightmileriver.org

ATTACHMENT C

Project Contact List

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Attachment C - Greater Hartford-Central Connecticut Project Contact List

Name	Title	Company	Address	Phone Number
Robert Deptula	Supervisor Licensing and Permitting CT/WMA	Eversource Energy	107 Selden Street Berlin, CT 06037	(860) 665-3695
J. Patrick Holmes	Project Manager	Burns & McDonnell	108 Leigus Road Suite 1100 Wallingford, CT 06492	(203) 949-2349
Chris Fritz	Associate Environmental Scientist	Burns & McDonnell	108 Leigus Road Suite 1100 Wallingford, CT 06492	(203) 949-2310
Chris Newhall	Project Manager, PWS	AECOM	9 Jonathan Bourne Drive Pocasset, MA 02559	(508) 833-6952
Fraser Walsh	Project Manager, PE	AECOM	500 Enterprise Drive, Suite 3B Rocky Hill, CT 06067	(860) 990-6782

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ATTACHMENT D

Contractor Certification Statements

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EVERSOURCE ENERGY SERVICE COMPANY

Greater Hartford-Central Connecticut Reliability Project

General Contractor	Point of Contact	Phone
McPhee Electric, LTD.	David Miano	860-507-8713

Subcontractors	Point of Contact	Phone
Manafort Brothers, Inc.	Joe Nuzzolillo	860-229-4853

EVERSOURCE ENERGY SERVICE COMPANY
Greater Hartford-Central Connecticut ReliabilityProject

GENERAL CONTRACTOR

"I certify under penalty of law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. I understand that as a contractor at the site, I am authorized by this general permit, and must comply with the terms and conditions of this general permit, including, but not limited to, the requirements of the Stormwater Pollution Control Plan prepared for the site."

Signed: _____ Date: 11/29/2018

Printed Name: David Miano Telephone: 860-507-8713

Title: Project Manager

Firm: McPhee Electric, LTD.

Address: 505 Main Street

Farmington, CT 06032

EVERSOURCE ENERGY SERVICE COMPANY
Greater Hartford-Central Connecticut ReliabilityProject

SUBCONTRACTOR

"I certify under penalty of law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. I understand that as a subcontractor at the site, I am authorized by this general permit, and must comply with the terms and conditions of this general permit, including, but not limited to, the requirements of the Stormwater Pollution Control Plan prepared for the site."

Signed: _____ Date: 11/29/2018

Printed Name: Joe Nuzzolillo Telephone: 860-229-4853

Title: Project Manager

Firm: Manafort Brothers, INC.

Address: 414 New Britain Ave.

Plainville, CT 06062

EVERSOURCE ENERGY SERVICE COMPANY
Greater Hartford-Central Connecticut ReliabilityProject

GENERAL CONTRACTOR

"I certify under penalty of law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. I understand that as a contractor at the site, I am authorized by this general permit, and must comply with the terms and conditions of this general permit, including, but not limited to, the requirements of the Stormwater Pollution Control Plan prepared for the site."

Signed: _____ Date: October 16, 2018

Printed Name: Joe Nuzzolillo Telephone: 860-229-4853

Title: Project Manager cell 860-250-3011

Firm: Manafort Brothers Incorporated

Address: 414 New Britain Ave

Plainville, CT 06062

EVERSOURCE ENERGY SERVICE COMPANY
Greater Hartford-Central Connecticut Reliability Project

General Contractor	Point of Contact	Phone
Manafort Brothers Incorporated	Joe Nuzzolillo	860-250-3011

Subcontractors	Point of Contact	Phone
Northern Land Clearing	Red Bassett	413 427 5064

EVERSOURCE ENERGY SERVICE COMPANY
Greater Hartford-Central Connecticut Reliability Project

General Contractor	Point of Contact	Phone
Manafort Brothers Incorporated	Joe Nuzzolillo	860-250-3011

Subcontractors	Point of Contact	Phone
Soini Erosion control, Inc.	Gene Gravel Katrina Saengkheune	978 420 8925 978 345 0565

EVERSOURCE ENERGY SERVICE COMPANY
Greater Hartford-Central Connecticut ReliabilityProject

SUBCONTRACTOR

"I certify under penalty of law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. I understand that as a subcontractor at the site, I am authorized by this general permit, and must comply with the terms and conditions of this general permit, including, but not limited to, the requirements of the Stormwater Pollution Control Plan prepared for the site."

Signed: Katrina Saengkheune Date: 10/16/18

Printed Name: Katrina Saengkheune Telephone: 9783450505

Title: Manager

Firm: Soil Erosion Control, Inc.

Address: 419 Ashby West Rd

Fitchburg MA 01420

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ATTACHMENT E

Runoff Calculations

Stormwater Reports with Hydrology Calculations Available for Review Upon Request

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ATTACHMENT F

Project Mapping and E&S Control Details

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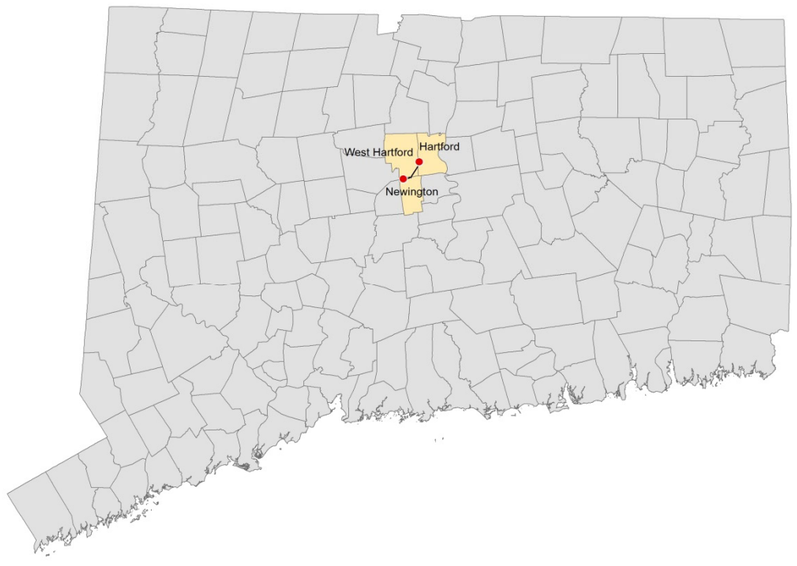
GREATER HARTFORD-CENTRAL CONNECTICUT RELIABILITY PROJECT

STORMWATER POLLUTION CONTROL PLAN

ATTACHMENT F

PROJECT MAPPING
AND
EROSION & SEDIMENT
CONTROL DETAILS

MAY 2018
REVISED DECEMBER 2018



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GREATER HARTFORD-CENTRAL CONNECTICUT RELIABILITY PROJECT

STORMWATER POLLUTION CONTROL PLAN

ATTACHMENT F

TABLE OF CONTENTS

MAP SHEETS

DETAIL SHEETS

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Southwest Hartford Substation

Newington Substation

NEWINGTON TAP MODIFICATIONS

West Hartford

Hartford

Farmington

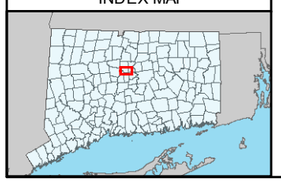
Newington

Wethersfield

New Britain

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

INDEX MAP



Legend

- Substation
- Overhead Eversource Line
- Underground Eversource Line
- Municipal Boundary
- 1 Map Sheet

N W E S

1 inch = 2,000 feet

0 1,000 2,000 4,000 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

EVERSOURCE

Greater Hartford-Central Connecticut Reliablity Project (GHCCRP)
Stormwater Pollution Control Plan
Newington, West Hartford, and Hartford, CT

Project Locus

5/2/2018 rev.12/14/2018

AECOM

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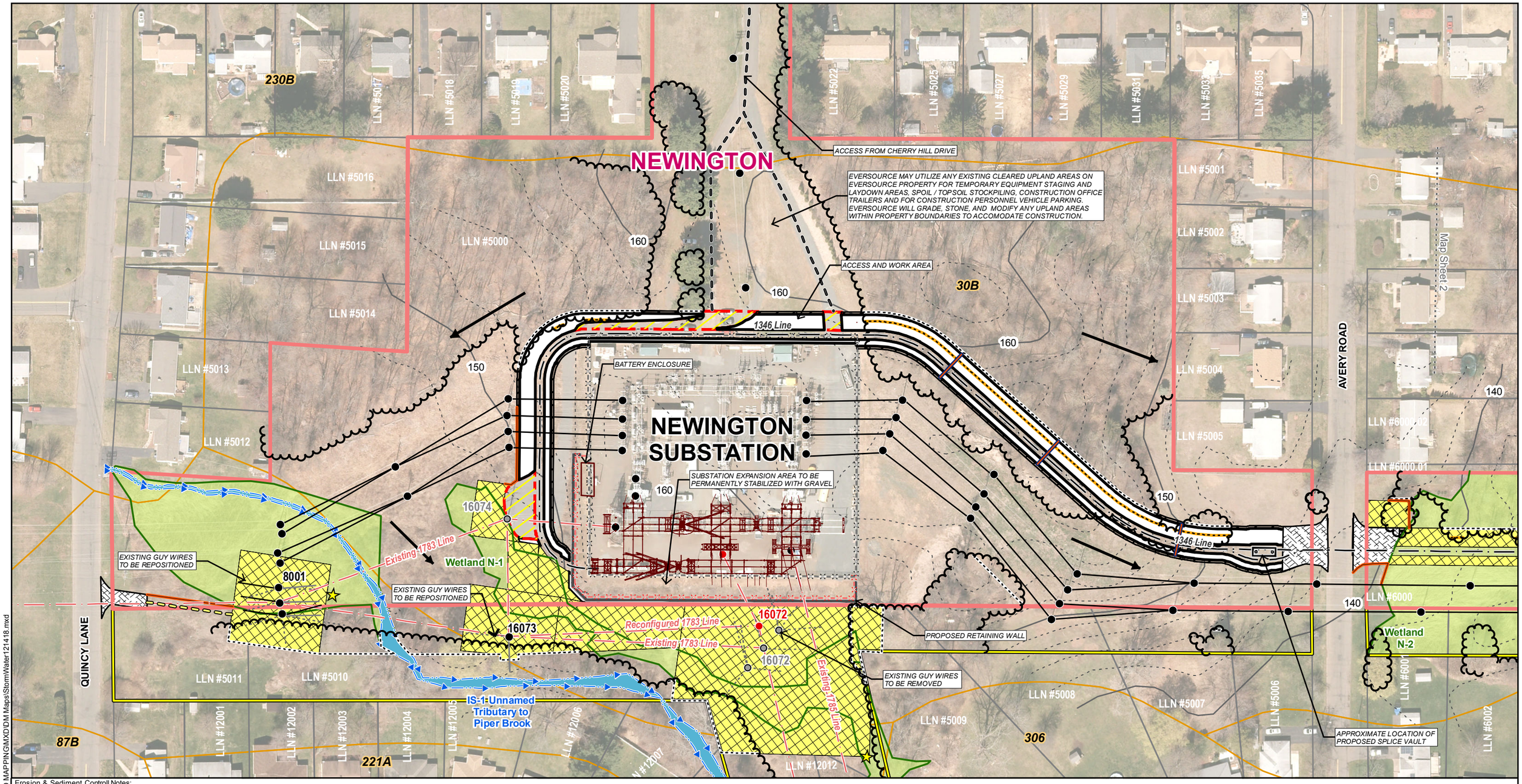
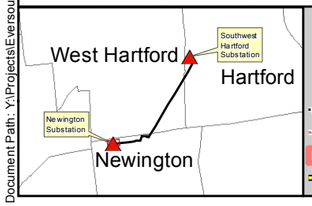


Erosion & Sediment Controll Notes:
1. The limits of tree clearing, as shown, define areas where vegetation removal and grubbing, grading, and excavation may occur. Minor deviations may be required in some locations. Additionally, danger or hazard tree removal may be required outside of the tree clearing limits.
2. All work will be conducted in accordance with the relevant portions of Eversource's "Best Management Practices Manual for Massachusetts and Connecticut (September 2016)" (BMP Manual), unless more stringent project-specific measures apply. All work will be conducted in accordance with the requirements of siting approvals from the Council and regulatory approvals from the U.S. Army Corps of Engineers and the Connecticut Department of Energy and Environmental Protection, and with all project protocols.
3. Erosion and Sedimentation Control Measures will be installed during construction, as required, to comply with the provisions, as applicable, of the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, Eversource's BMP Manual, and regulatory approvals.
4. Existing culverts will be protected, as deemed necessary, to prevent damage during construction. Inlet protection shall be installed for any stormwater catch basin within the work zone.
5. Paved surfaces shall be protected during construction as necessary and any damage to surfaces shall be repaired at the expense of the contractor. Safety signage to indicate construction work zones shall be installed along public roads as necessary and as required through coordination with state and local entities.
6. Spoils resulting from construction activities shall be stockpiled in designated areas and will be disposed of in accordance with regulatory requirements.
7. Erosion and sediment control barriers to be installed as necessary along wetland boundary and limits of work to prevent sedimentation to wetlands during and after construction and restoration activities.



- Proposed Structure (Str Label)
- Existing Structure to be Removed (Str Label)
- Existing Structure (Str Label)
- Culvert (centerpoint)
- 1346 Underground Eversource Line
- 1346 Overhead Eversource Line
- Eversource Owned Property
- Eversource Right of Way
- Amtrak Right-of-Way
- Proposed Fence
- Existing Fence
- Approximate Tree Line
- Vegetation Limit After Construction
- Proposed Tree Clearing Line
- Erosion and Sediment Control Barrier
- Water Bar
- Non-Jurisdictional Ditch
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Delineated Wetland Boundary Outline
- Field Delineated Wetland
- FEMA 100-Year Flood Zone
- Floodway
- Direction of Stormwater Runoff
- Potential Stormwater Sampling Location
- NRCS Soils *Map Unit Symbol*
- Existing Access
- Proposed Access
- Access Road to be Improved
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- 100 10 Foot Contour
- Parcel Boundary
- Municipal Boundary
- Historic District
- Construction Tracking Pad
- Temporary Construction Matting
- Stone Work Pad
- Area of Disturbance
- Temporary Workspace
- LLN # LLNs / Property Owner

* No Highly Erodible Soils Present in Plan View Extent

1" = 100' 5/3/2018 rev. 12/14/2018

0 50 100 Feet

N W E S

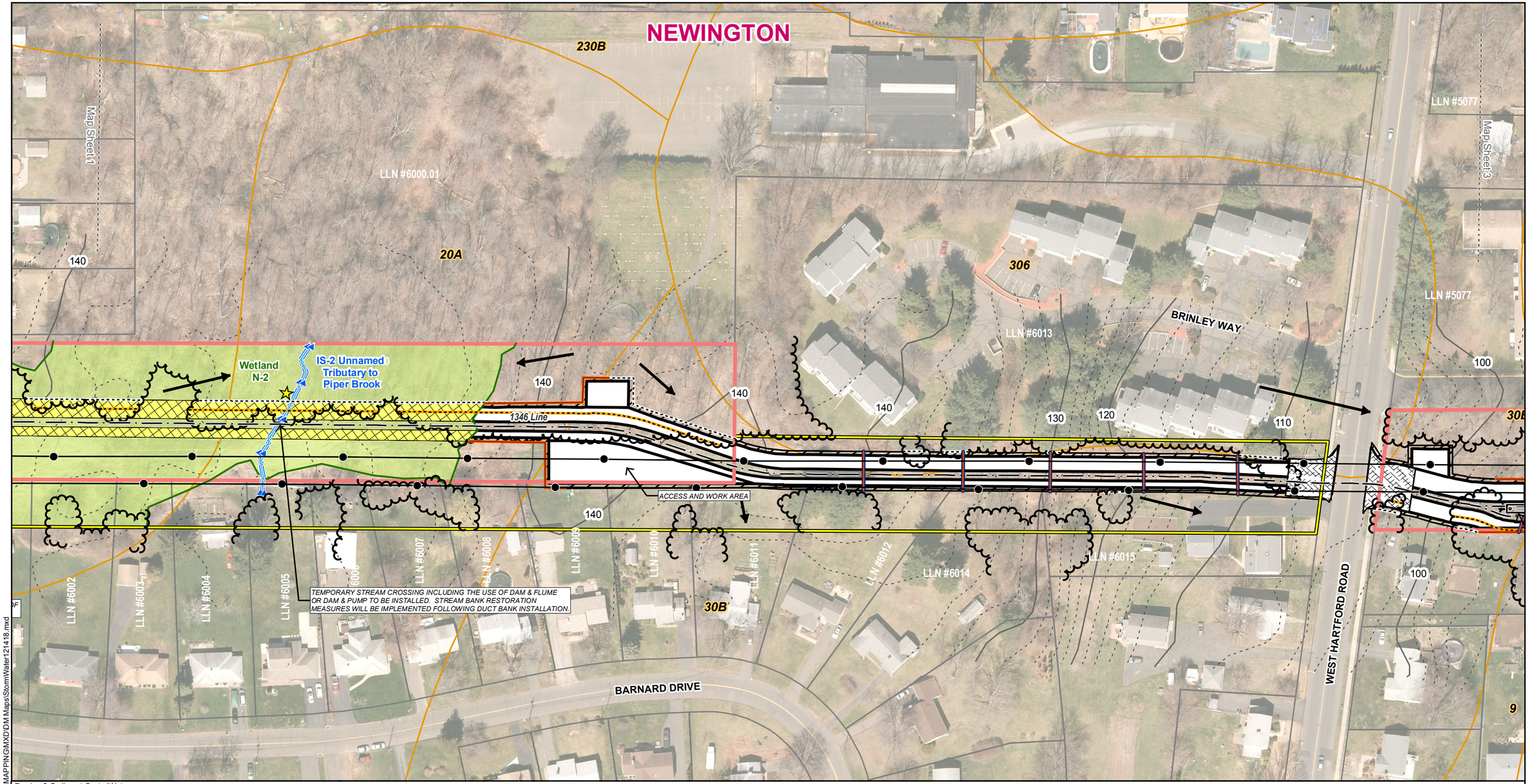
EVERSOURCE

Greater Hartford-Central Connecticut Reliability Project (GHCCRP)
Stormwater Pollution Control Plan
Newington, West Hartford, Hartford, CT

Project Mapping

AECOM

Document Path: Y:\Projects\Eversource\GHCC UPDATED MAPPING\MXD\DM Maps\StormWater121418.mxd



Erosion & Sediment Controll Notes:

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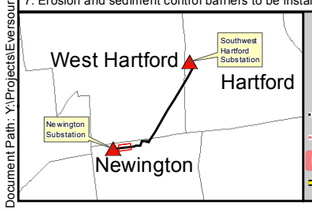
1" = 100' 5/3/2018 rev. 12/14/2018

0 50 100 Feet

N W E S



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EVERSOURCE

Greater Hartford-Central Connecticut Reliability Project (GHCCRP)
Stormwater Pollution Control Plan
Newington, West Hartford, Hartford, CT

Project Mapping

AECOM

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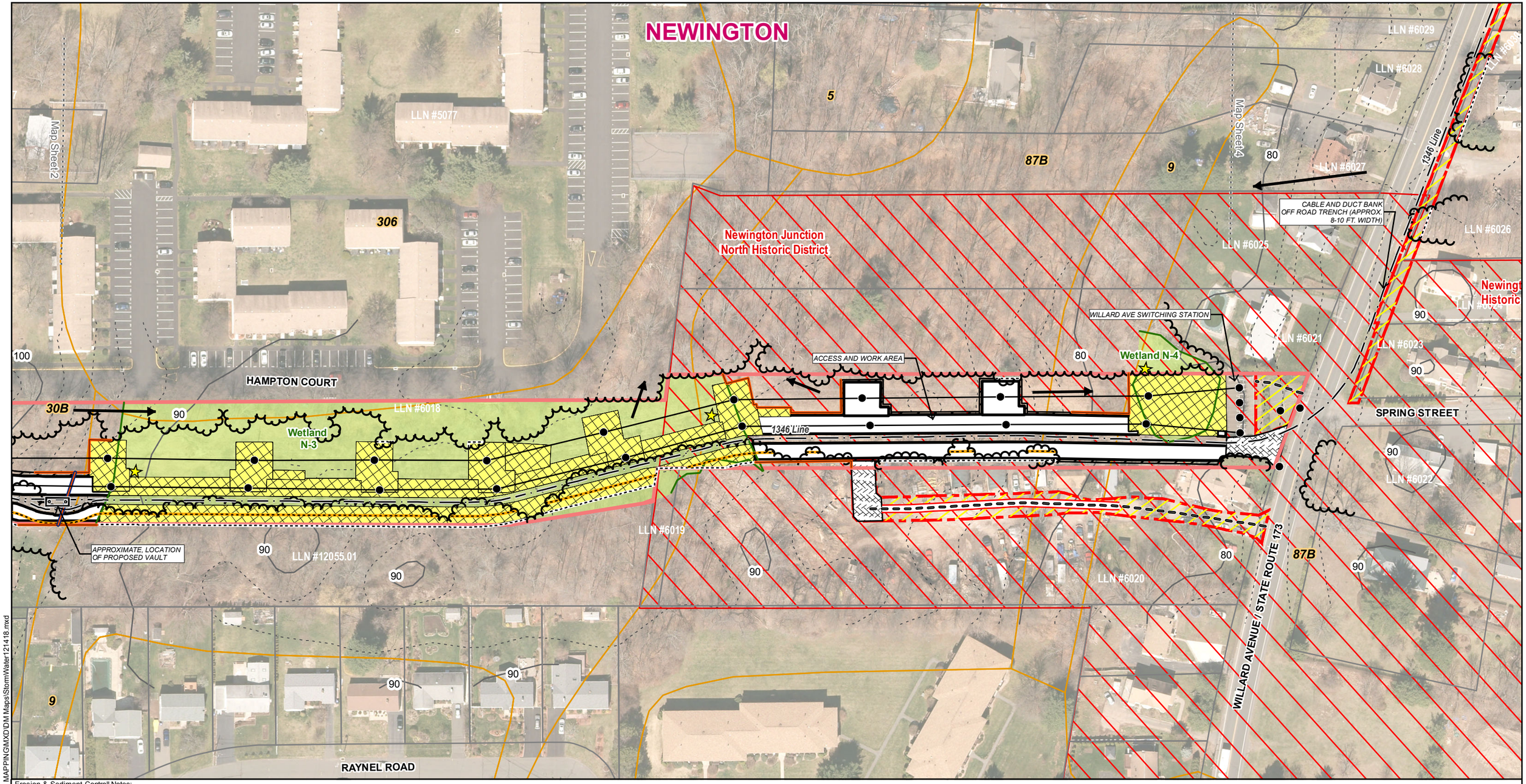

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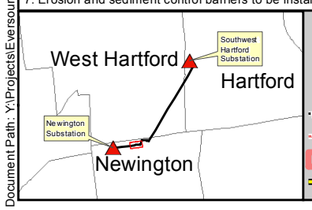

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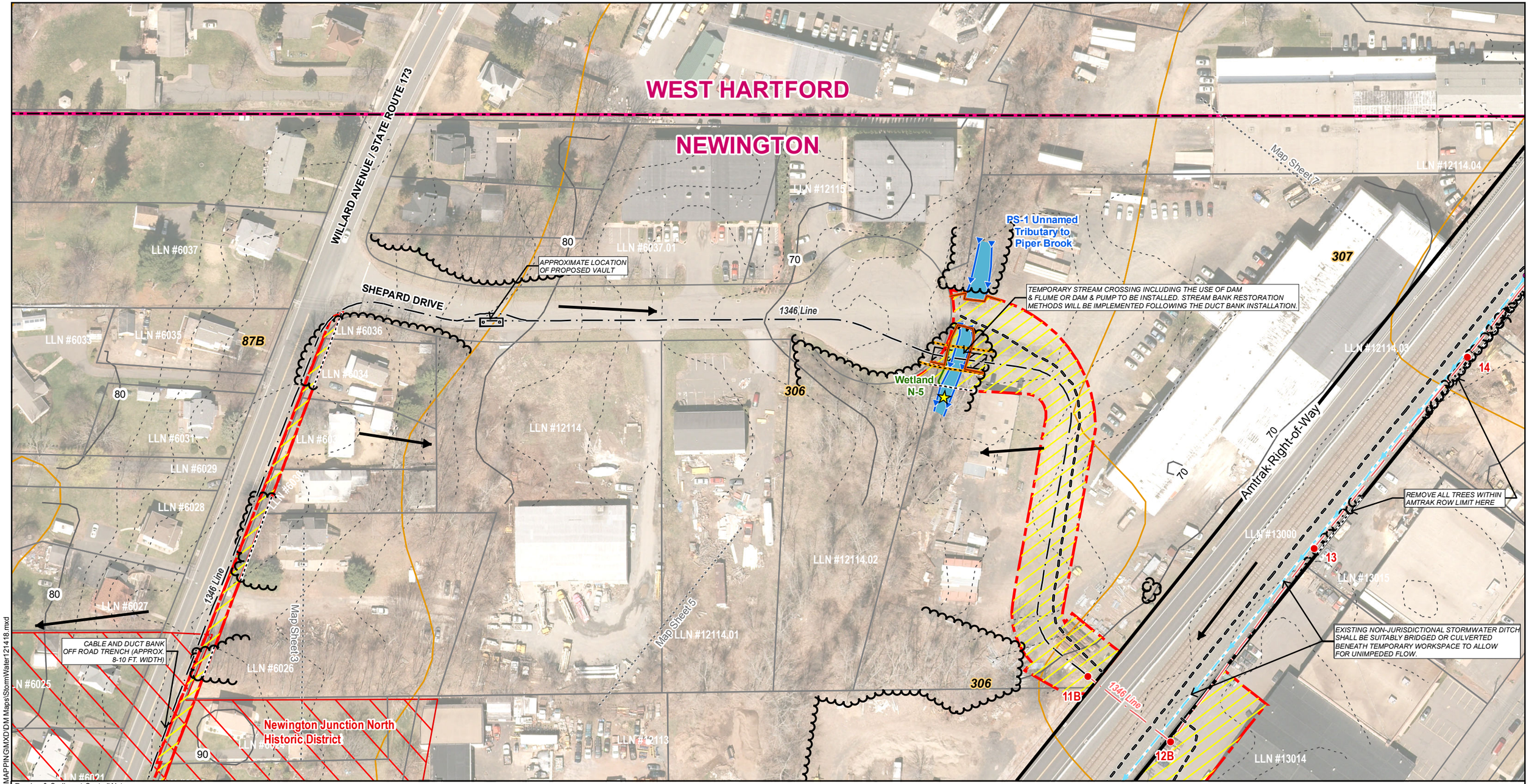

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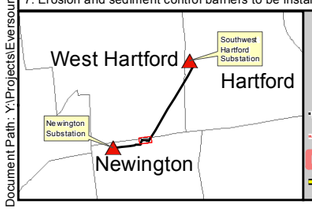

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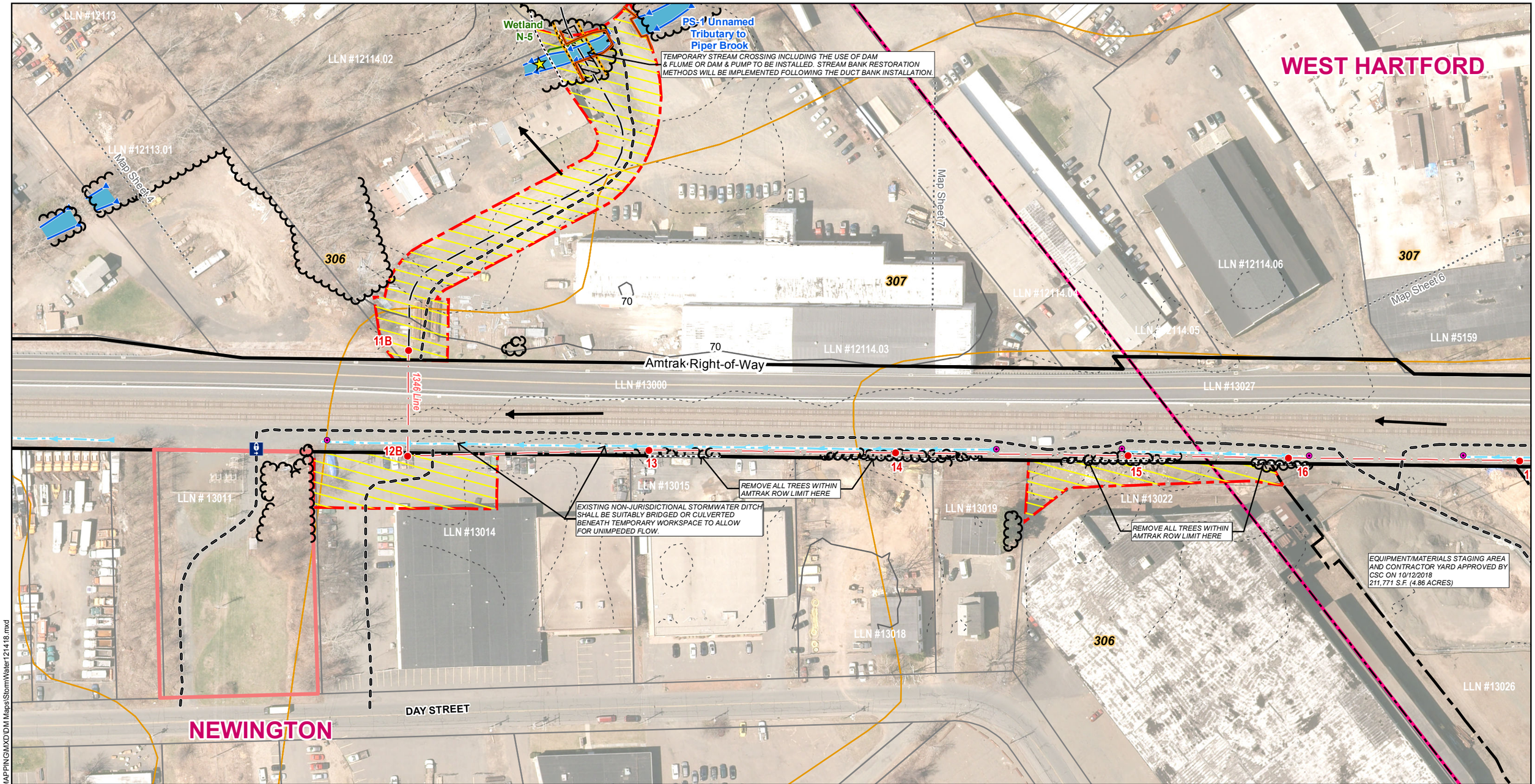

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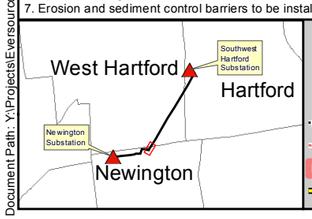

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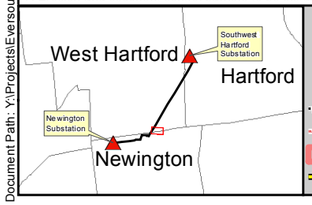

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