

Stormwater Pollution Control Plan
1810 Transmission Line Upgrade Project
Bristol and Southington Connecticut

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January 28, 2016



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- A CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities Registration Form and General Permit
- B Identification of Contractor and Certification Statements
- C Site Plan
- D Wetland Report
- E Notice of Termination Form
- F Sedimentation and Erosion Control Inspection Report Form
- G Stormwater Monitoring Report Form (Turbidity Sampling Data)
- H Natural Diversity Data Base (NDDB) Areas
- I N.E. Utilities Transmission Group Best management Practices Manual: Connecticut

1 Introduction

This Stormwater Pollution Control Plan is required as part of the registration process under the *General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities* (General Permit), dated August 21, 2013.

The 1810 Transmission Line Upgrade Project, herein referred to as TLU, is considered a construction activity in accordance with the Connecticut Department of Energy and Environmental Protection (CT DEEP) General Permit. The purpose of this plan is to specify parameters to follow to minimize pollution caused by use of the project sites during and after construction is completed. Erosion and sediment control requirements are also shown on the plans. Location maps of the project sites along TLU can be found in *Attachment A* of the General Permit Registration Form, under *Appendix A* of this plan.

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

Throughout the construction process, the Permittee or Permittee's agent shall periodically inspect all erosion control measures. A monitoring program will be put in place to observe potential off-site impacts due to erosion. After construction, the Permittee shall be responsible for maintaining these erosion and sedimentation control measures. The 1810 Transmission Line Upgrade Project will not be considered complete until all disturbed areas have been satisfactorily stabilized for at least three months, all erosion has been repaired, and all temporary erosion control measures have been removed as called for on the plans.

The general contractor(s) and subcontractor(s) will be required to sign the certification statement located in *Appendix B* of this plan.

2 Site Description

The Eversource Energy Service Company (Eversource) will be performing construction activities along two sections of the transmission line 1810 in central Connecticut. These non-contiguous sections will be considered as a single linear upgrade project. The project includes re-conductoring the line, replacing 14 structures, and reinforcing 8 structures along line 1810. Work will be performed in the line segments from Forestville Junction to Lake Avenue Junction, (approximately 1.75 miles) and Southington Substation to structure 1815 (approximately 1.85 miles). Work areas, areas of occupation, and areas of selective and limited clearing are shown in the Construction Drawings found in *Appendix C*.

2.1 Scope of Construction Activities

The proposed construction activities at each work site along TLU include the following:

- Establishing erosion and sedimentation controls
- Establish staging areas
- Conducting selective/ limited clearing
- Installing access roads in locations where there are no existing roads
- Installing construction equipment stone work pads
- Replacing (14) existing structures
- Reinforcing (9) existing structures
- Re-conductoring
- Site stabilization

2.2 Area of Disturbance

The total disturbed area for the TLU project will be approximately 8.32 acres. Typical work sites will have a stone/gravel pad installed to create a stable surface for storage of construction equipment. Work pads will range from 35 by 75 feet to 150 by 100 feet depending on the construction activities associated with each structure. Up to seven pull pads, also consisting of stone and gravel, will be installed. The locations of all work pads and pull pads are shown on the attached site plans in Appendix C.

The total site area for the 1810 Transmission Line Upgrade Project is approximately 65.5 acres: all work will be performed along 3.6 noncontiguous miles of the transmission line within the 150 foot right-of-way.

2.3 Stormwater Discharge Information

The TLU project sites are all within the transmission line right-of-way. A typical average runoff coefficient for the project is $C=0.40$, this is consistent for each work site throughout the project.

The proposed construction will not alter the runoff coefficient of the project sites and will not promote channeled or areas of concentrated runoff. Existing drainage patterns will not change from pre to post construction activities. The majority of stormwater runoff generated at the sites infiltrates directly through the crushed stone of the transmission line right-of-way or construction area. Surface runoff that does not infiltrate will sheet flow down and along the transmission line embankment to abutting properties.

Portions of the relevant Flood Insurance Rate Maps for the areas of work can be found in *Figure 2* included in this plan.

2.4 Receiving Waters

The TLU project sites are located within the South Central Coast Major Basin and the Quinnipiac Regional Basin, as indicated within the *Public Water Supply Sources & Drainage Basins of Connecticut* mapping

provided in *Figure 1* of this plan. No directly channeled or concentrated flow is anticipated from the project to the receiving waters.

2.5 Wetlands on Site

A *Wetland Delineation and Description Technical Memorandum* for the 1810 Transmission Line Upgrade Project was prepared by Fuss & O'Neill, Inc., and is included as *Appendix D* of this plan.

3 Construction Sequencing

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.

The project entails upgrades to 23 transmission towers, each at a separate site, along the transmission line right-of-way starting at Lake Avenue Junction and working towards the Southing Substation. Work is anticipated to begin June 2016 and conclude June 2017. Each proposed tower construction site will disturb a maximum of 15,000 square feet (0.34 acres). Normal working hours for the site shall be Monday through Friday, 7:00 AM to 7:00 PM.

Pre-construction activities include obtaining required permits, authorizations, and approvals from State authorities. In addition, notifications to regulatory authorities will be made and copies of such permits, authorizations, approvals, and notifications will be provided to the Engineer.

The general sequence of construction will proceed as follows, but may vary depending on various circumstances:

- Installation of sediment and erosion controls and construction flagging (limits of project and wetland boundaries)
- Installation of construction entrance/anti-tracking pads
- Preparation of upland staging and lay down areas
- Clearing of vegetation.
- Construction of gravel access roads, placement of construction mats in wetland areas, or temporary stream crossing installation as shown on the Construction Drawings in *Appendix C*
- Preparation of work areas at sites around designated replacement structures – placing gravel in upland areas or construction mats/temporary stream crossings in wetland areas
- Modification/reinforcement or replacement of poles
- Reconductoring
- Restoration of pre-construction contours in areas of rutting and soil displacement, top dressing with clean topsoil as needed
- Stabilization of the upland construction areas
- Removal of construction mats, temporary stream crossings, erosion and sediment controls, and construction signage once disturbed areas have been stabilized

Crushed stone access roads shall typically be 16-20 feet in width except for passing points, where necessary. Sub-grading shall not extend beyond the limits of the finished road and normal side slopes.

Access roads should conform to the contours of the land, avoiding grades steeper than 10 percent and creating side slopes no steeper than a ratio of 2:1. Use of engineered slope stabilization methods will be required for sides slopes steeper than 2:1.

Work will begin at the Lake Avenue Junction in Bristol transmission line section and end at the Southington substation transmission line section in Southington. Work is to be completed and the sites stabilized within each line section prior to start of construction within the next section.

The construction sequence is subject to change based on construction methods or due to other unforeseen circumstances.

4 Control Measures

The following paragraphs address the controls and measures to be implemented on the work site both during and after construction to minimize stormwater pollution to the waters of the State of Connecticut. Control measures during construction activities are shown on the Erosion and Sedimentation Control Plan sheets within the Construction Drawings included as *Appendix C*.

4.1 Erosion and Sediment Controls

The goal of this plan is to control erosion on the site and to control movement of sediment into adjacent wetlands, watercourses or storm sewer systems. Note that erosion and sediment controls shall conform to the requirements of the *Connecticut Guidelines for Soil Erosion and Sediment Control*, dated May 2002, which will hereafter be referred to as the “Guidelines”, and the *2004 Connecticut Stormwater Quality Manual*, which will hereafter be referred to as the “Standards”. To meet these goals, stabilization, structural and maintenance practices shall be implemented by the Contractor as outlined below.

Protective measures will also comply with the *Best Management Practices Manual: Connecticut*, which is attached as Appendix I. The document is the in-house best management practices manual for Eversource transmission projects. If conflicts exist between this manual and Guidelines or Standards, measures from the Guidelines and Standards will be used as the default.

4.1.1 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 both during and after construction. Existing vegetation shall be preserved to the maximum extent practicable.

The contractor shall maintain temporary erosion and sediment control measures until seeding/stabilization. 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 in accordance with the Standards. 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 Standards.

When construction activities have permanently ceased or when final grades are reached in portions of the site, stabilization and protection practices shall be implemented within seven days. Areas that will remain disturbed but inactive for at least 30 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 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 Guidelines.

The stabilization practices to be implemented during the construction of the proposed linear project are as follows:

- **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 seven days, or stockpiles not to in us for 30 days, during the planting season of March 15 to July 1 and August 1 to October 15. This temporary vegetative cover shall consist of perennial rye grass. The rye grass shall be planted at a rate of 2 lbs./1,000 sq. ft. at a depth of ½ inch. Limestone (equivalent to be 50% calcium plus magnesium oxide) shall be applied as seedbed prepared at a rate of 90 lbs./1,000 sq. ft. Where grass predominates, fertilize according to a soil test at a minimum application rate of 1 lb. of nitrogen per ton, areas to be left bare before finish grading and seeding outside of planting seasons shall receive an air-dried woodchip mulch, free of coarse matter, treated with 12 lbs. of nitrogen per ton, applied at a rate of 185—275 lbs./1,000 sq. ft.
- **Permanent Vegetative Cover:** Once the planting season begins, temporary stabilization measures shall be removed and slopes shall be prepared and seeded. After the removal of temporary stream crossings and erosion control blankets, the disturbed area shall be scarified and seeded. Seeding shall be in accordance with the technical specifications for the project. Seeding shall only occur between April 1 and June 15 and August 15 and October 1.
- **Limitation of Disturbance:** Disturbed earth surfaces will typically be stabilized with crushed stone for construction of work pads. Other areas will be temporarily stabilized until final stabilization can be achieved..
- **Temporary Mulching:** Temporary mulching shall be used to temporarily stabilize areas that will be inactive for 30 days or more, or 14 days for stockpiles, and cannot be seeded within the recommended planting dates. In addition, temporary mulching shall be conducted following temporary or permanent seeding in order to aid the growth of vegetation. Temporary mulch shall consist of straw or hay overlay applied at a rate of 70 to 90 pounds per 1,000 square feet (two tons per acre). This mulch shall be spread uniformly by hand or mulch blower and shall be bonded with a non-asphaltic tackifier or other approved method after spreading.

4.1.2 Structural Measures

Structural practices shall be implemented to control the movement of sediment and minimize any discharge of pollutants from the site, divert flows away from exposed soils, store flows, and limits runoff. The structural practices to be implemented during construction are as follows:

- **Geotextile Sediment Filter Fence (Silt Fence):** To minimize the transport of sediment from the disturbed areas to receiving wetlands, geotextile sediment filter fence shall be utilized at select areas around the site to filter runoff from the disturbed areas. Geotextile sediment filter fence details and locations are provided on the drawings. 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.
- **Haybale Barriers:** To reduce velocity of stormwater traveling across the site, haybale barriers may be installed across the direction of high runoff flows. Haybale 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 use geotextile sediment filter fence.
- **Construction Entrance/ Anti-Tracking Pad:** To prevent soil or sediment from being carried off site by construction equipment, a construction entrance will be installed before construction traffic into and out of the project area. The width of the anti-tracking pad shall not be less than the width of the ingress or egress. Adjacent roadways shall be swept daily to remove material that may be tracked onto pavement.
- **Temporary Erosion Control Blankets:** To provide temporary surface protection, temporary erosion control blankets will be installed in sensitive areas, as indicated on the plans. Temporary erosion control blankets shall comply with the Guidelines.
- **Temporary Stream Crossing:** Temporary stream crossings may be used as an alternative to matting in order to provide a means for construction traffic to cross streams without causing turbidity and to keep sediment generated by construction traffic out of the stream. Temporary crossings may be either bridges or culverts and associated rock fill and comply with the Guidelines.
- **Water Bars:** A channel with a supporting berm on the downslope side constructed across a construction access road to minimize the concentration of sheet flow and to divert run-off into stable areas of the road.

4.1.3 Maintenance

The erosion and sediment controls must be maintained in a condition that will protect waters of the State from pollution during site construction. The Contractor shall conduct the following maintenance to promote the proper performance of erosion and sediment control measures.

- **Temporary and Permanent Vegetation:** At any eroded areas, repair by filling to finished grades, replace vegetative support material and seed, fertilizer and lime, as specified for temporary and permanent stabilization. Add additional mulch as required.

- **Pavement Sweeping:** Sweep paved surfaces adjacent to the construction entrances, the soil management areas, and designated haul routes when required due to tracking. Properly dispose of sediment or debris collected during sweeping.
- **Silt Fence and Haybales:** Inspect silt fence and haybales after each rainfall and at least daily during prolonged rainfall. Any required repairs should be made promptly.. Should the barrier decompose or become ineffective while the barrier is still needed, the barrier shall be replaced promptly. Sediment deposits should be removed when they reach approximately one-half the height of the barrier. Sediment shall be disposed of on-site as non-structural fill. Sediment deposits remaining in place after the silt fence or haybales is no longer required shall be removed and placed in a stockpile surrounded by silt fence in a location suitable to the Permittee.
- **Temporary Erosion Control Blankets:** Inspect the blankets 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 failures. If failures are discovered, re-install the blanket after regrading and re-seeding, ensuring that blanket installation still meets the design specifications. When repetitive failures are observed at the same location, review conditions and limitations for use and determine if diversions, stone check dams, or other measures are needed to reduce failure rate.
- **Temporary Stream Crossings:** Inspect temporary stream crossings daily. When the crossing is not used for a week or more, inspect at least once a week and within 24 hours after any rainfall greater than 0.5 inch. Check for washouts at culverts, crossing approaches and failing associated controls. Promptly repair all damage. Where structural damage or repeated washouts of the temporary stream crossing occur, an engineering review is required to determine the cause of the failures and adjustments made to the structure of erosion and sediment controls as needed to prevent future failures. When the crossing is no longer needed, remove all structures, associated fill materials, and geotextile materials keeping in-stream work to a minimum. Shape the stream to its original cross section, protect the banks from erosion, and remove all construction materials and apply soil protection measures to unstable soils.
- **Construction Entrances:** Maintain the entrance in a condition which will prevent tracking and washing sediment onto paved surfaces. Provide periodic top dressing with additional stone of additional length as conditions demand. Repair any measures used to trap sediment as needed. Remove all sediment spilled, dropped, washed or tracked onto paved surfaces. Adjacent roadways shall be left clean at the end of each day. If the construction 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 either (1) increase the length of the construction entrance, (2) modify the construction access road surface, or (3) install washing racks and associated settling area or similar devices before the vehicle enters a paved surface.
- **Temporary Mulching:** Inspect temporary soil protection area 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. Where soil protection falls below 100%, reapply mulch within 48 hours. Determine the cause of failure. If mulch failure was the result of wind, consider applying tackifier or netting. If mulch failure was caused by concentrating water, install additional measures to control water and

sediment movement, repair erosion damage, re-apply mulch with anchoring or use Temporary Erosion Control Blankets. Inspections should take place until work resumes.

4.2 Dewatering Wastewaters

Limited dewatering on this site is anticipated associated with foundation construction. Where dewatering is necessary, wastewater from dewatering pumps will be infiltrated into the ground, where possible. Where this is impracticable, proper methods and devices will be utilized to the extent permitted by law, such as pumping water into a temporary sedimentation depression, providing surge protection at the inlet and outlet of pumps, floating the intake of the pump, or other methods to minimize and retain the suspended solids. These wastewaters will not be discharged directly without treatment. If a pumping operation causes turbidity problems beyond the control of these measures, the operation will cease until feasible means of controlling turbidity (e.g. discharge to the sanitary sewer) are determined and implemented.

4.3 Post-Construction Stormwater Management / Best Management Practices

4.3.1 Standards

Detailed erosion and sedimentation controls in accordance with the Standards have been proposed for this site. This system will protect the wetlands during and after construction until the site is stabilized. Best Management (BMP's) shall be implemented to minimize the discharge of litter, debris, building materials, hardened concrete waste, or similar materials to receiving waters.

4.3.2 Control Measures

At the end of construction, areas disturbed by construction activities shall be stabilized. As a result, the potential for erosion at this site after construction is minimal. Crushed stone areas will also serve as a filter to remove sediment from runoff if permanently stabilized areas are properly maintained. Perimeter controls (i.e., silt fence) will be actively maintained until final stabilization of those portions of the site up-gradient of the perimeter control. Temporary perimeter controls will be removed after final stabilization.

No channeled or concentrated flow of runoff is expected to leave the project sites. The water quality rain event will infiltrate through the crushed stone of the right-of-way and infiltrate into the ground, thus providing 100% removal of the total suspended solids (TSS) from stormwater runoff.

The contractor will be responsible for cleaning all post-construction stormwater structures and removal of remaining silt fence before filing a termination notice, a copy of which is included as *Appendix E*. After filing the termination, maintenance and cleaning of the structures shall become the responsibility of the Eversource Energy Service Company.

The design will meet the requirements of the *Connecticut Stormwater Quality Manual, the Guidelines and Standards for Soil Erosion and Sediment Control, Best Management Practices Manual: Connecticut*, and federal stormwater regulations

4.3.3 Redevelopment Project Performance Standards

Under existing and proposed conditions, the TLU site surfacing consists of crushed stone along the transmission line access ways. Post-construction stormwater quality is not expected to degrade as a result of the proposed 1810 transmission line upgrades. Post-construction ground surface conditions will mimic pre-construction conditions.

For linear redevelopment projects, the General Permit allows sites that will not increase effective impervious cover within a given watershed to implement the stormwater treatment measures discussed above, but be exempt from retaining half the water quality volume. No new stabilization or retention structures are proposed for the TLU project since the project is exempt from the stormwater retention requirement of the General Permit. However, the water quality rain event will infiltrate through the existing crushed stone into the underlying soil of the construction areas and meet stormwater treatment requirements.

4.4 Other Controls

Good housekeeping will be maintained to minimize impacts of protected areas by pollutants, soil, and fugitive sediment.

4.4.1 Waste Disposal

The following BMPs shall be implemented to minimize the discharge of litter, debris, construction materials, hardened concrete waste, or similar materials to waters of the State.

- Construction waste will be removed from the site and disposed of legally.
- Waste will be removed from the site as soon as practical.
- Containers will be appropriate for the material stored.
- Where necessary, containers will be sealed/covered to prevent waste from escaping the container.
- Containers will only be located where approved by the engineer or regulatory agency.
- Waste storage areas shall be located, designed, and operated to prevent polluted runoff from leaving the waste storage area.
- Fences or covers shall be provided to prevent waste from blowing out of the waste storage area.

4.4.2 Construction Materials

Construction materials needed for this project will be properly stored in a neat and orderly manner until used. Construction materials shall be stored outside of any buffers and at least 50 feet from any stream, wetland, or other sensitive resource.

4.4.3 Washout Areas

Washout of applicators, containers, vehicles, and equipment for concrete, paint, and other materials shall be conducted in a manner consistent with the provisions of the General Permit. There shall be no surface discharge of washout wastewaters from this area. To eliminate overflows during rainfall or after snowmelt, all wash-water shall be directed into a pit. This area shall be outside of any buffers and at least 50 feet from any stream, wetland, or other sensitive resource. The area shall be completely self-contained and clearly marked.

In addition, dumping of liquid wastes in storm sewers is prohibited. All wastes including hardened concrete waste from washouts shall be disposed of legally at an off-site location. 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 $\frac{1}{2}$ the height of the container or pit.

4.4.4 Vehicle Tracking and Dust Control

As shown on the plans, construction entrances shall be installed and maintained to prevent vehicles from tracking sediments onto adjacent roads. The Contractor shall be responsible for performing dust suppression techniques during construction, including but not limited to:

- 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 shall contain or cause visible oil sheen, floating solids, visible discoloration, or foaming. Calcium chloride may also be used to control dust.
- Sweeping surfaces adjacent to the construction entrances and the soil management areas when required due to tracking. The designated haul routes will be swept as required.

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.

4.4.5 Chemical 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.

On-site vehicles shall be monitored for leaks and receive maintenance as needed.

4.4.6 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. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

4.4.7 Spill Control Practices

The following practices shall be implemented during construction activities to mitigate spills of material and prevent their release to the waters of the State.

- Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area on-site. Equipment and materials will include but not be limited to brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- Spills will be cleaned up immediately after discovery.
- Spills of toxic or hazardous material will be reported to the appropriate State and local government agency, regardless of size.

5 Runoff Reduction and Low Impact Development (LID) Information

The majority of stormwater runoff generated at the sites infiltrates directly through the crushed stone of the transmission line right-of-way and construction areas, into the underlying soil. Surface runoff that does not infiltrate will sheet flow down and along the transmission line embankment to abutting properties. The proposed construction will not alter the runoff coefficient of the project sites and will not promote channeled or areas of concentrated runoff. Existing drainage patterns will not change from pre to post construction activities. There will be no significant impacts to runoff peak flow rate or volume leaving the post construction site.

The *Wetland Delineation and Description Technical Memorandum* included in *Appendix D* of this plan provides a list of field delineated wetlands along the transmission right-of-way.. The Construction Drawings found in *Appendix C* of this report show the locations of the identified wetlands. Temporary impacts to the surroundings described in this report will be minimal. Limited vegetation clearing is required to access a portion of the TLU work site. Ten feet of clearing will occur along the west side of the ROW along the Southington portion of the property.. No permanent impacts are anticipated from this project.

6 Inspections

6.1 Plan Implementation Inspections

Within the first 30 days following commencement of the construction activity on the sites, the permittee shall contact the District, a qualified soil erosion and sediment control professional, or qualified professional engineer, as defined by the General Permit, to inspect and properly document the implementation of control designated in the Construction Drawings. The sites 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 sites for the initial phase of construction.

6.2 Routine Inspections

The Permittee shall routinely inspect the sites for compliance with the General Permit and the Plan 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 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. For storms of less than 0.5 inches, an inspection shall occur upon the start of the subsequent normal working hours. 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 General Permit.

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 erosion and sediment control measures
- All structural control measures
- Stockpile areas
- Washout areas
- Drainage control facilities including diversion and perimeter drainage ditches
- Locations where vehicles enter or exit the site

Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants leaving the work site. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be visually inspected to ascertain whether erosion control measures are effective in preventing significant impacts, such as turbidity to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking.

Based on the results of the inspection, the description of potential sources and pollution prevention measures identified in the plan shall be revised as appropriate by the Permittee or his agent as soon as practicable after such inspection.

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

- The scope of the inspection
- Name(s) and qualifications of personnel making the inspection
- Date(s) of the inspection
- Weather conditions including precipitation information
- Major observations relating to the implementation of the storm water pollution control plan
- Descriptions of the stormwater discharge(s) from the site
- Any water quality monitoring performed during the inspection
- Statement that, in the judgment of the qualified inspector(s), the site is either in compliance or out of compliance with the terms and conditions of the Plan and General Permit.

The report shall be signed by both the qualified inspector and the permittee or his/her authorized representative in accordance with the General Permit. A blank copy of the inspection report is provided in *Appendix F*.

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. 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 to the site.

6.3 Corrective Actions

If at any time an inspection determines that the site is out of compliance with the terms and conditions of this Plan and the General Permit, corrective actions shall be taken. Non-engineered corrective actions (as identified in the Standards) shall be implemented on site within 24 hours and incorporated into a revised Plan within three calendar days of the date of inspection unless another schedule is specified in the Standards. Engineered corrective actions (as identified in the Standards) shall be implemented on site within seven days and incorporated into a revised Plan within ten calendar days of the date of inspection unless another schedule is specified in the Standards.

7 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 areas associated with each outfall is achieved. Sampling shall continue on a monthly basis 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 General Permit. 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, lightning, 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.

7.1 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.

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 Erosion and Sedimentation Control Plans found in the Construction Drawings of *Appendix C* and shall be identified in the field with a flag, stake, or other visible marker.

7.2 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. A blank copy of the stormwater monitoring report for submitting turbidity sampling data is provided in *Appendix G*.

Monitoring reports shall be submitted to CT DEEP in accordance with the provisions outlined in the General Permit.

7.3 Sampling Points

The plans showing the proposed sampling points are provided in *Appendix C*. The project is considered a linear project according to the General Permit. 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 channeled or concentrated flow. Therefore, sampling points have been designated adjacent to work pads and along roads where there is some chance of measurable runoff being generated. Representative sampling points have been designated work pads that are not located adjacent to wetlands. For pads adjacent to wetlands, individual sampling locations have been designated, so the areas are monitored regularly. One exception is that a sampling location for the pad at structure 1847 is designated as a representative location for the pad at structure 1848, as conditions are substantially identical.

Based on similarities of exposed soils, slope, and stormwater controls used, the project has 24 sampling points. Each sampling point was determined based on areas down gradient of proposed work areas. Where there are wetlands located downgradient of work pads, sampling points are located close to the wetland. Sampling points located proximate to wetlands are indicated in parenthesis below. The monitor will review each work site and take a sample if concentrated runoff is observed leaving the work area.

The Sampling Points are numbered as follows:

Bristol Section

- 1 North of structure 1860—sheet 1
- 2 South of structure 1860 on road (wetland 2)-sheet 2
- 3 North of structure 1859A on road (wetland 2)-sheet 2
- 4 East of structure 1858 (wetland 3)-sheet 2
- 5 East of structure 1855-sheet 4
- 6 East of structure 1854 (wetland 4)-sheet 5
- 7 West of structure 1853 (wetland 4)-sheet 5
- 8 Southeast of structure 1852 (wetland 5)-sheet 6
- 9 South of structure 1847-sheet 8
- 10 Northwest of structure 1845 (wetland 11)-sheet 10

Southington Section

- 11 Southeast of structure 1813 (un-numbered wetland)-sheet 12
- 12 East of structure 1811 (wetland 12)—sheet 13
- 13 North of structure 1810 (wetland 13)-sheet 14
- 14 East of structure 1807 (wetland 14)-sheet 16
- 15 South of structure 1806-sheet 16
- 16 East of structure 1803 (wetland 15)-sheet 17

8 Contractors

8.1 General

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 form in *Appendix B*.

8.2 Certification Statement

All contractors and subcontractors must sign the certification included in *Appendix B*. The certification will be available for inspection prior to construction.

9 Additional Requirements

9.1 Endangered and Threatened Species

A Natural Diversity Data Base (NDDDB) review was requested by Eversource Energy Service Company to confirm that the project sites are not located within areas known to contain State and Federal Listed Species and Significant Natural Communities. Results from the maps titled NDDDB Areas in Bristol and Southington, CT dated December 2013 published by the Connecticut Department of Energy and Environmental Protection, verified that the project sites are not located within areas known to contain endangered and threatened species.

The CT DEEP and Eversource reviewed NDDDB maps and locations of known occurrences within proximity to the 1810 line. Although no species are known to occur within the rights-of-way, eastern box turtle and Peregrine falcon occur within the area. As a result, Eversource will institute a number of voluntary measures to ensure protection of species. Final confirmation of agreed upon measures was relayed in an email dated December 2, 1015.

10 Termination

Once the site has been stabilized and all final inspections have occurred, the registrant shall file a termination notice. Prior to filing for termination, all temporary erosion and sediment control measure shall be removed. A blank copy of the Notice of Termination Form is provided in *Appendix E*.

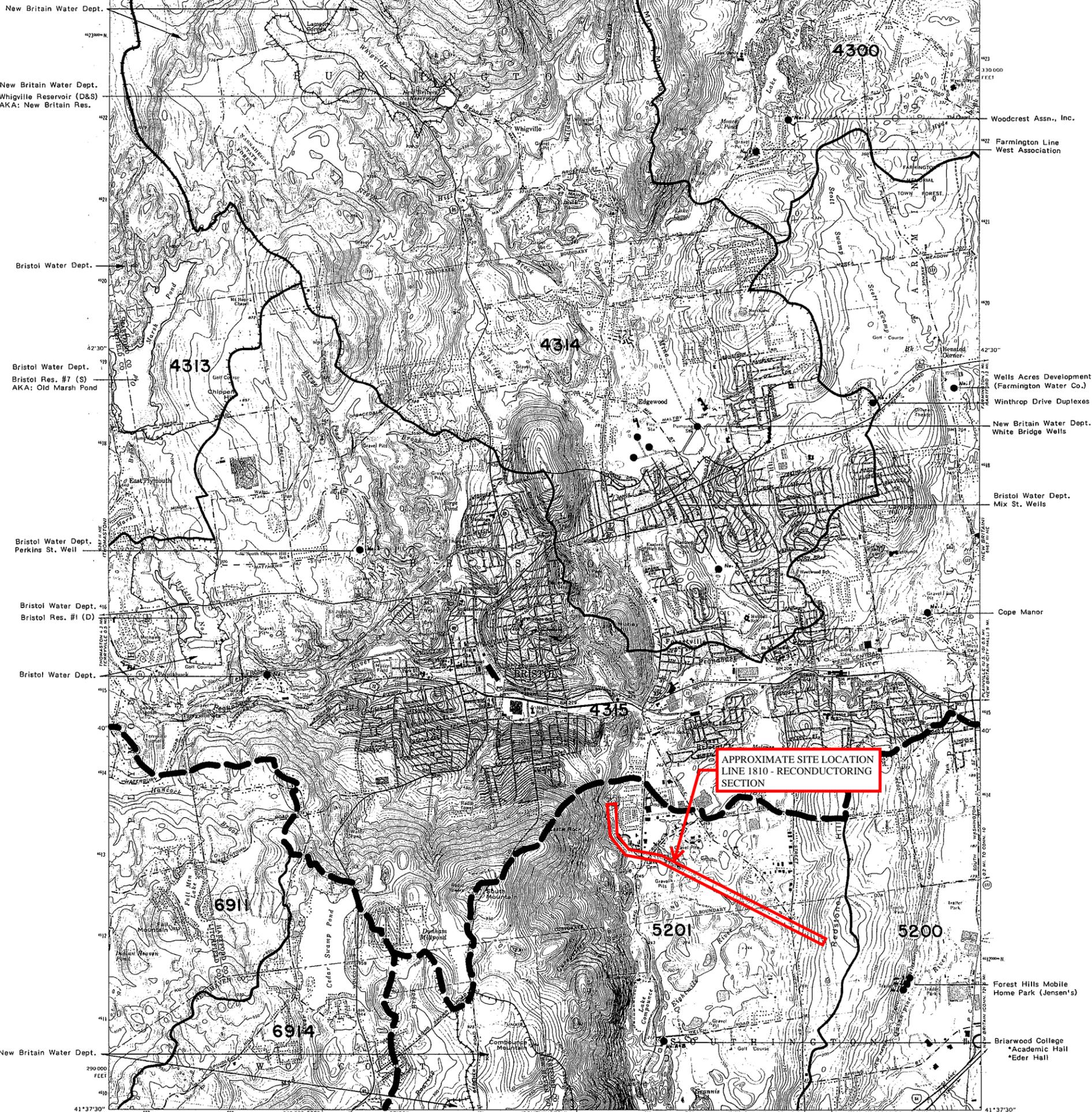
Figures

Figure 1

Drainage Basin Maps

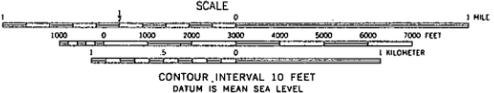
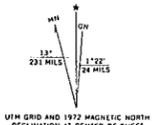
4311

4300



APPROXIMATE SITE LOCATION
LINE 1810 - RECONDUCTORING
SECTION

Mapped, edited, and published by the Geological Survey
Revised in cooperation with Connecticut Highway Department
Control by USGS, USC&GS, and Connecticut Geodetic Survey
Topography by photostereoscopic surveys 1943. Revised 1966
Polyconic projection. 1927 North American datum
10,000-foot grid based on Connecticut coordinate system
1000-meter Universal Transverse Mercator grid ticks, zone 18,
shown in blue
Fine red dashed lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is unchecked
Red tint indicates areas in which only landmark buildings are shown



CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

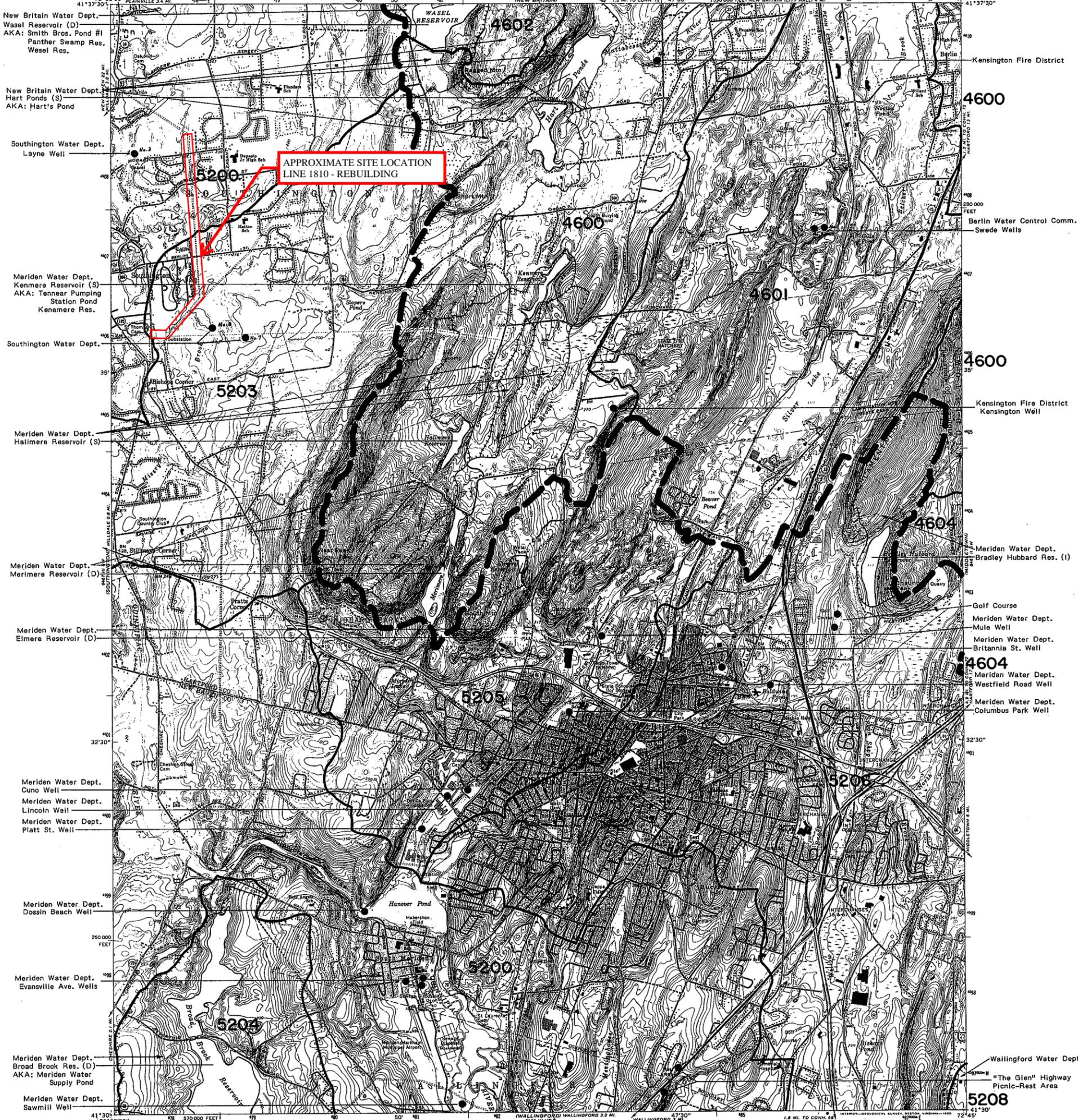


ROAD CLASSIFICATION

Heavy-duty	Light-duty
Medium-duty	Unimproved dirt
○ Interstate Route	○ U.S. Route
	○ State Route

BRISTOL, CONN. - 50
N4137.5—W7252.5/7.5
1966
PHOTOREVISED 1972
AMS 6467 III NW—SERIES V816

PROJ. No.: 1999549.C20
DATE: November 2015
Figure 1
(1 of 2)



New Britain Water Dept.
Wesel Reservoir (D)
AKA: Smith Bros. Pond #1
Panther Swamp Res.
Wesel Res.

New Britain Water Dept.
Hart Ponds (S)
AKA: Hart's Pond

Southington Water Dept.
Layne Well

Meriden Water Dept.
Kenemere Reservoir (S)
AKA: Teneer Pumping
Station Pond
Kenemere Res.

Southington Water Dept.

Meriden Water Dept.
Hallmere Reservoir (S)

Meriden Water Dept.
Merimere Reservoir (D)

Meriden Water Dept.
Elmire Reservoir (D)

Meriden Water Dept.
Cuno Well

Meriden Water Dept.
Lincoln Well

Meriden Water Dept.
Platt St. Well

Meriden Water Dept.
Dossin Beach Well

Meriden Water Dept.
Evansville Ave. Wells

Meriden Water Dept.
Broad Brook Res. (D)
AKA: Meriden Water
Supply Pond

Meriden Water Dept.
Sawmill Well

Kensington Fire District

4600

Berlin Water Control Comm.
Swede Wells

4600

Kensington Fire District
Kensington Well

Meriden Water Dept.
Bradley Hubbard Res. (I)

Golf Course

Meriden Water Dept.
Mule Well

Meriden Water Dept.
Britannia St. Well

4604

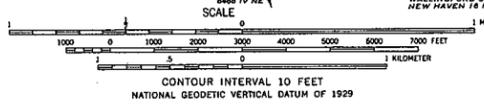
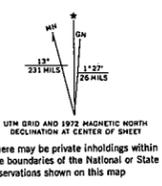
Meriden Water Dept.
Westfield Road Well

Meriden Water Dept.
Columbus Park Well

Wallingford Water Dept.
"The Glen" Highway
Picnic-Rest Area

5208

Mapped, edited, and published by the Geological Survey
Revised in cooperation with Connecticut Highway Department
Control by USGS, USC&GS, and Connecticut Geodetic Survey
Topography by plane-table surveys 1943-1944. Revised from
aerial photographs taken 1966. Field checked 1967
Polyconic projection. 10,000-foot grid ticks based on
Connecticut coordinate system
1000-meter Universal Transverse Mercator grid ticks, zone 18,
shown in blue. 1927 North American Datum
To place on the predicted North American-Datum 1983 move the
projection lines 5 meters south and 38 meters west as shown by
dashed corner ticks
Fine red dashed lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is unchecked
Red tint indicates area in which only landmark buildings are shown



ROAD CLASSIFICATION
Primary highway, all weather, Light-duty road, all weather,
hard surface improved surface
Secondary highway, all weather, Unimproved road, fair or dry
hard surface weather

○ Interstate Route ○ U. S. Route ○ State Route

MERIDEN, CONN. - 66
N4130-W7245/7.5
PHOTOINSPECTED 1978
1967
PHOTOREVISED 1972
AMS 6487 III SE-SERIES V816

PROJ. No.: 1999549.C20
DATE: November 2015

Figure 1
(2 of 2)

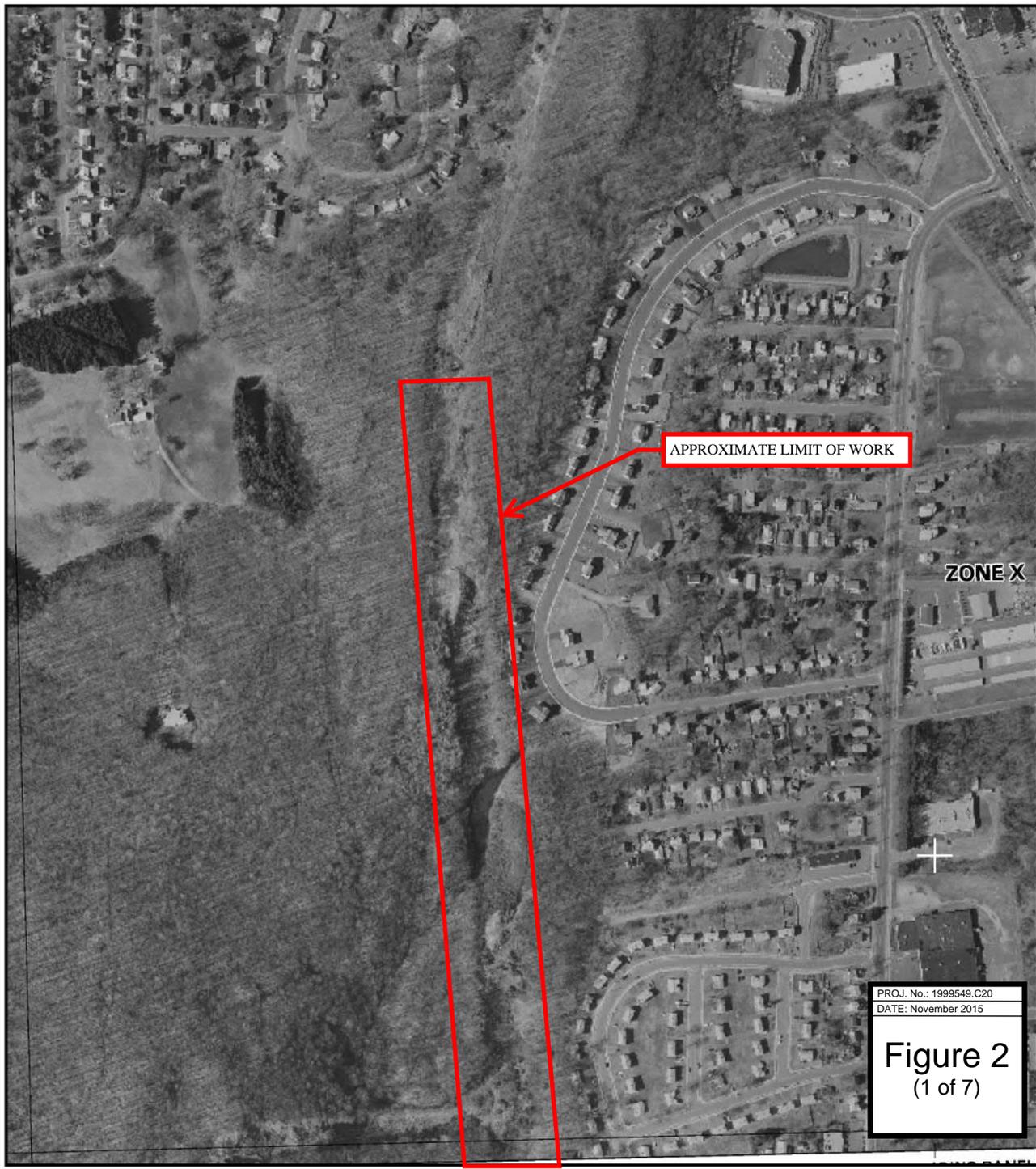
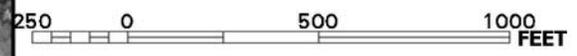
Figure 2

Flood Insurance Rate Maps

Insurance is available in this community, contact your local Flood Insurance Program at (800) 638-6620.



MAP SCALE 1" = 500'



APPROXIMATE LIMIT OF WORK

ZONE X

PROJ. No.: 1999549.C20
DATE: November 2015

Figure 2
(1 of 7)

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0466F

FIRM
FLOOD INSURANCE RATE MAP
HARTFORD COUNTY,
CONNECTICUT
(ALL JURISDICTIONS)

PANEL 466 OF 675

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BRISTOL, CITY OF	080023	0466	F

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

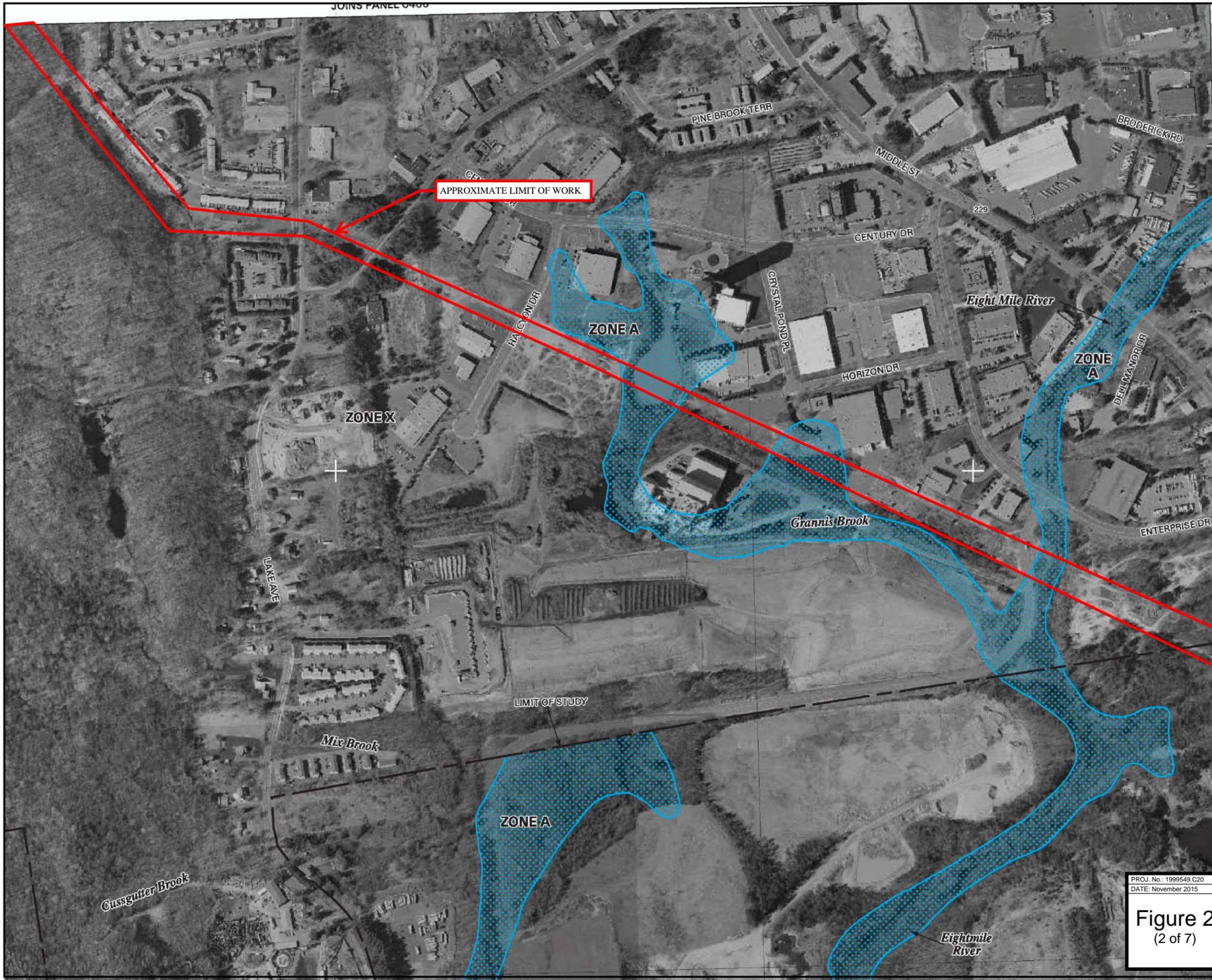


MAP NUMBER
09003C0466F

EFFECTIVE DATE:
SEPTEMBER 26, 2008

Federal Emergency Management Agency

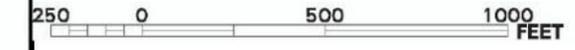
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



If flood insurance is available in this community, contact your local Flood Insurance Program at (800) 638-6620.



MAP SCALE 1" = 500'



NFP PANEL 0468F

FIRM
FLOOD INSURANCE RATE MAP
 HARTFORD COUNTY,
 CONNECTICUT
 (ALL JURISDICTIONS)

PANEL 468 OF 675
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BRISTOL, CITY OF	090023	0468	F
SOUTHINGTON, TOWN OF	090037	0468	F

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
09003C0468F

EFFECTIVE DATE:
SEPTEMBER 26, 2008

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

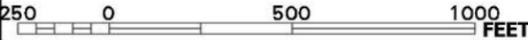
PROJ. No.: 1999549.C20
 DATE: November 2015

Figure 2
 (2 of 7)

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



...d insurance is available in this community, contact your local Flood Insurance Program at (800) 638-6620.


MAP SCALE 1" = 500'


PANEL 0469F

**FIRM
FLOOD INSURANCE RATE MAP**
HARTFORD COUNTY,
CONNECTICUT
(ALL JURISDICTIONS)

PANEL 469 OF 675
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BRISTOL, CITY OF	090023	0469	F
PLAINVILLE, TOWN OF	090034	0469	F
SOUTHWINGTON, TOWN OF	090037	0469	F

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

**MAP NUMBER
09003C0469F**
**EFFECTIVE DATE:
SEPTEMBER 26, 2008**

Federal Emergency Management Agency

PROJ. No.: 1999549.C20
DATE: November 2015

**Figure 2
(3 of 7)**

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

If flood insurance is available in this community, contact your local Flood Insurance Program at (800) 638-6620.



MAP SCALE 1" = 500'



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0601F

FIRM FLOOD INSURANCE RATE MAP
 HARTFORD COUNTY, CONNECTICUT
 (ALL JURISDICTIONS)

PANEL 601 OF 675
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:
 COMMUNITY NUMBER PANEL SUFFIX
 SOUTHINGTON, TOWN OF 090037 0601 F

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER 09003C0601F
EFFECTIVE DATE: SEPTEMBER 26, 2008

Federal Emergency Management Agency

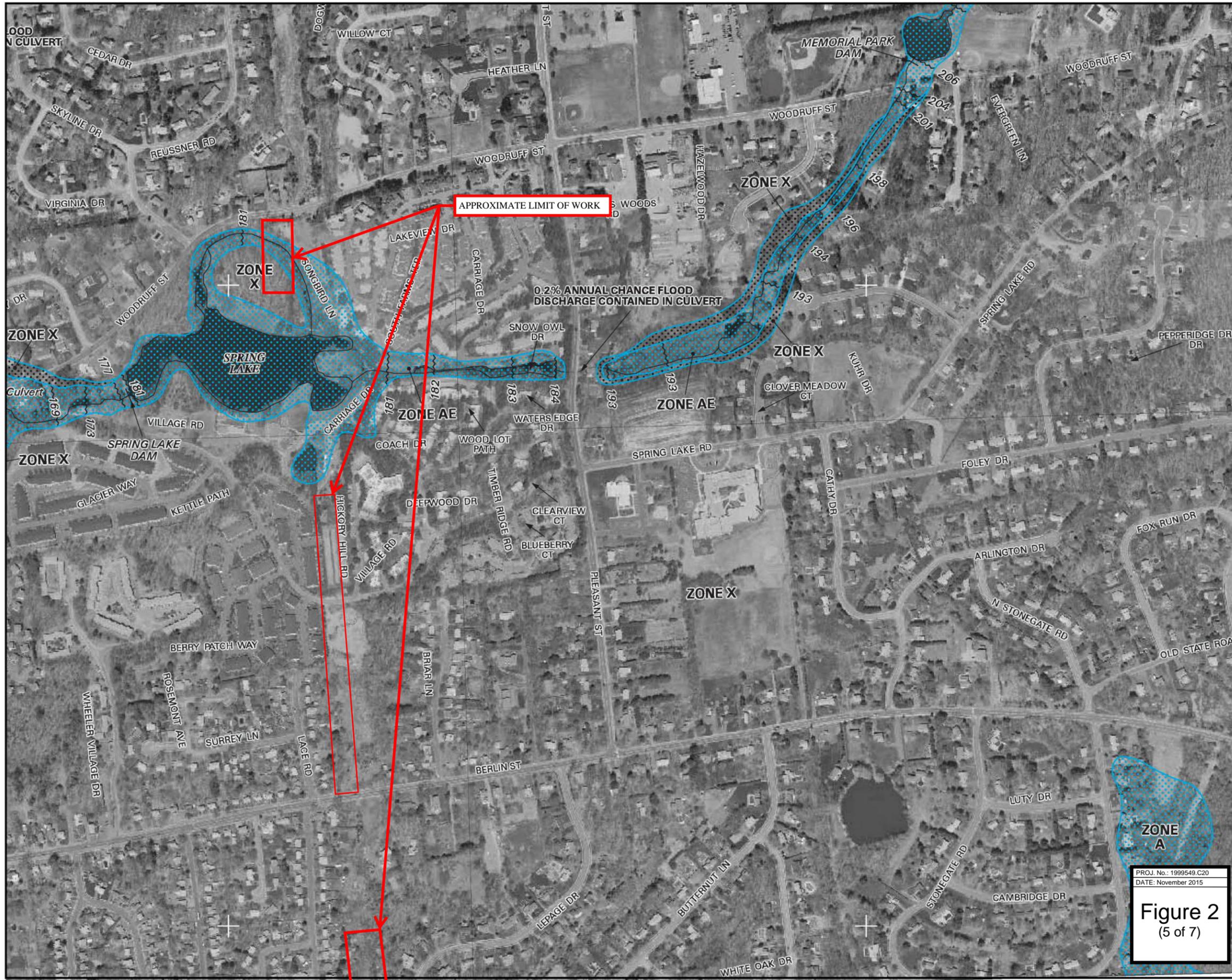
PROJ. No.: 1999549.C20
 DATE: November 2015
Figure 2
 (4 of 7)

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Flood insurance is available in this community, contact your local Flood Insurance Program at (800) 638-6620.



MAP SCALE 1" = 500'



NFP PANEL 0601F

FIRM FLOOD INSURANCE RATE MAP
HARTFORD COUNTY, CONNECTICUT
(ALL JURISDICTIONS)

PANEL 601 OF 675
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:
COMMUNITY NUMBER PANEL SUFFIX
SOUTHINGTON, TOWN OF 090037 0601 F

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

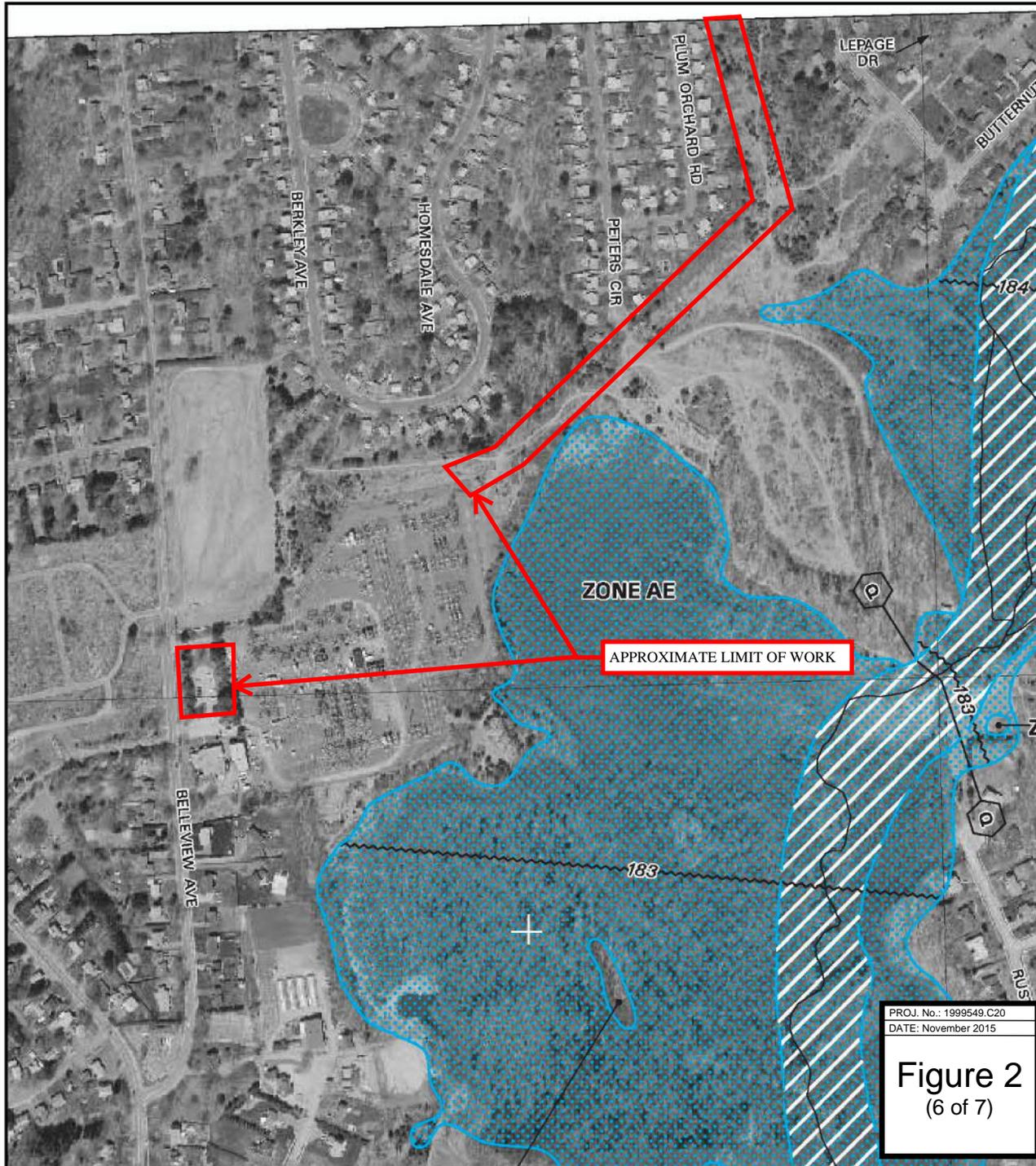
MAP NUMBER 09003C0601F
EFFECTIVE DATE: SEPTEMBER 26, 2008

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

PROJ. No.: 1999549.C20
DATE: November 2015
Figure 2
(5 of 7)

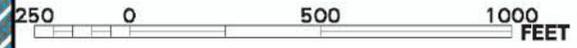
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



...d insurance is available in this community, contact yo
 ...nal Flood Insurance Program at (800) 638-6620.



MAP SCALE 1" = 500'



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0603F

FIRM
FLOOD INSURANCE RATE MAP
 HARTFORD COUNTY,
 CONNECTICUT
 (ALL JURISDICTIONS)

PANEL 603 OF 675

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
SOUTHINGTON, TOWN OF	08037	0603	F

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



MAP NUMBER
09003C0603F

EFFECTIVE DATE:
SEPTEMBER 26, 2008

Federal Emergency Management Agency

PROJ. No.: 1999549.C20
 DATE: November 2015

Figure 2
 (6 of 7)

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

LEGEND



SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

- ZONE A** No base flood elevations determined.
- ZONE AE** Base flood elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Area of special flood hazard formerly protected from the 1% annual chance flood event by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood event.
- ZONE A99** Area to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no base flood elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); base flood elevations determined.



FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.



OTHER FLOOD AREAS

- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.



OTHER AREAS

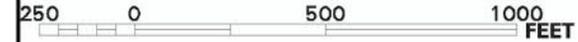
- ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D** Areas in which flood hazards are undetermined, but possible.



If flood insurance is available in this community, contact your local Flood Insurance Program at (800) 638-6620.



MAP SCALE 1" = 500'



COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS



OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or velocities.
- Base Flood Elevation line and value; elevation in 0'
- Base Flood Elevation value where uniform within zone; elevation in 0'

*Referenced to the North American Vertical Datum of 1988

- Cross Section Line
- Transect Line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 1000-meter Universal Transverse Mercator grid values, zone 18
5000-foot grid ticks
- Bench mark (see explanation in Notes to Users section of this FIRN panel).
- River Mile

MAP REPOSITORY
Refer to Repository Listing on Index Map

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
SEPTEMBER 26, 2008

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide map history table located in the Flood Insurance Study report for
PROJ. No.: 1999549.C20
DATE: November 2015

To determine if flood insurance is available in this community, contact your local Flood Insurance Program at (800) 638-6620.

This is an official copy of a portion of the above referenced map. This map does not include any amendments which may have been made subsequent to the date of this map. For the latest product information about the National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.fema.gov

Figure 2
(7 of 7)

Appendix A

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

Not included for E-Version

Appendix B

Identification of Contractor and Certification Statements

EVERSOURCE ENERGY SERVICE COMPANY
TRANSMISSION LINE 1810

General Contractor	Point of Contact	Phone

Subcontractors	Point of Contact	Phone

EVERSOURCE ENERGY SERVICE COMPANY
TRANSMISSION LINE 1810

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: _____

Printed Name: _____

Telephone: _____

Title: _____

Firm: _____

Address: _____

EVERSOURCE ENERGY SERVICE COMPANY
TRANSMISSION LINE 1810

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: _____

Printed Name: _____

Telephone: _____

Title: _____

Firm: _____

Address: _____

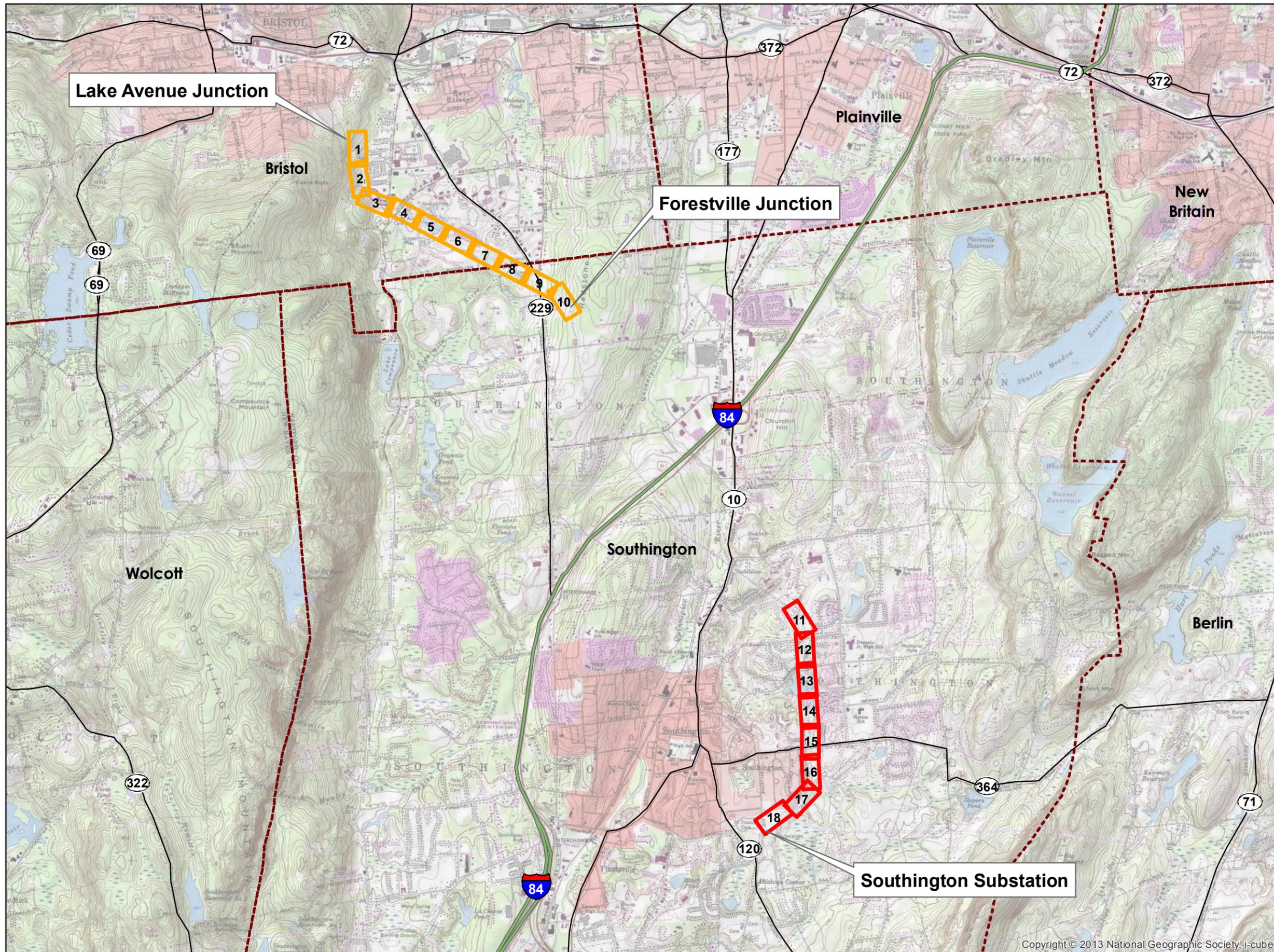
Appendix C

Construction Drawings

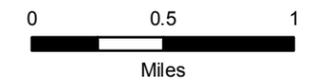
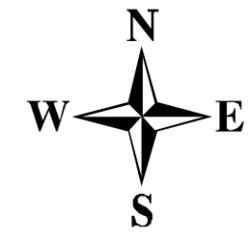
1810 TRANSMISSION LINE
UPGRADE PROJECT



Stormwater Pollution
Control Plan
INDEX SHEET



- Interstate
- State Route
- Towns
- Plan Sheets**
- Rebuilding Section
- Reconductoring Section



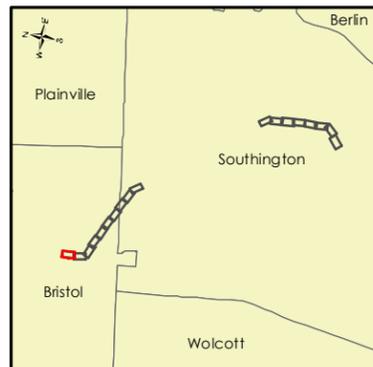
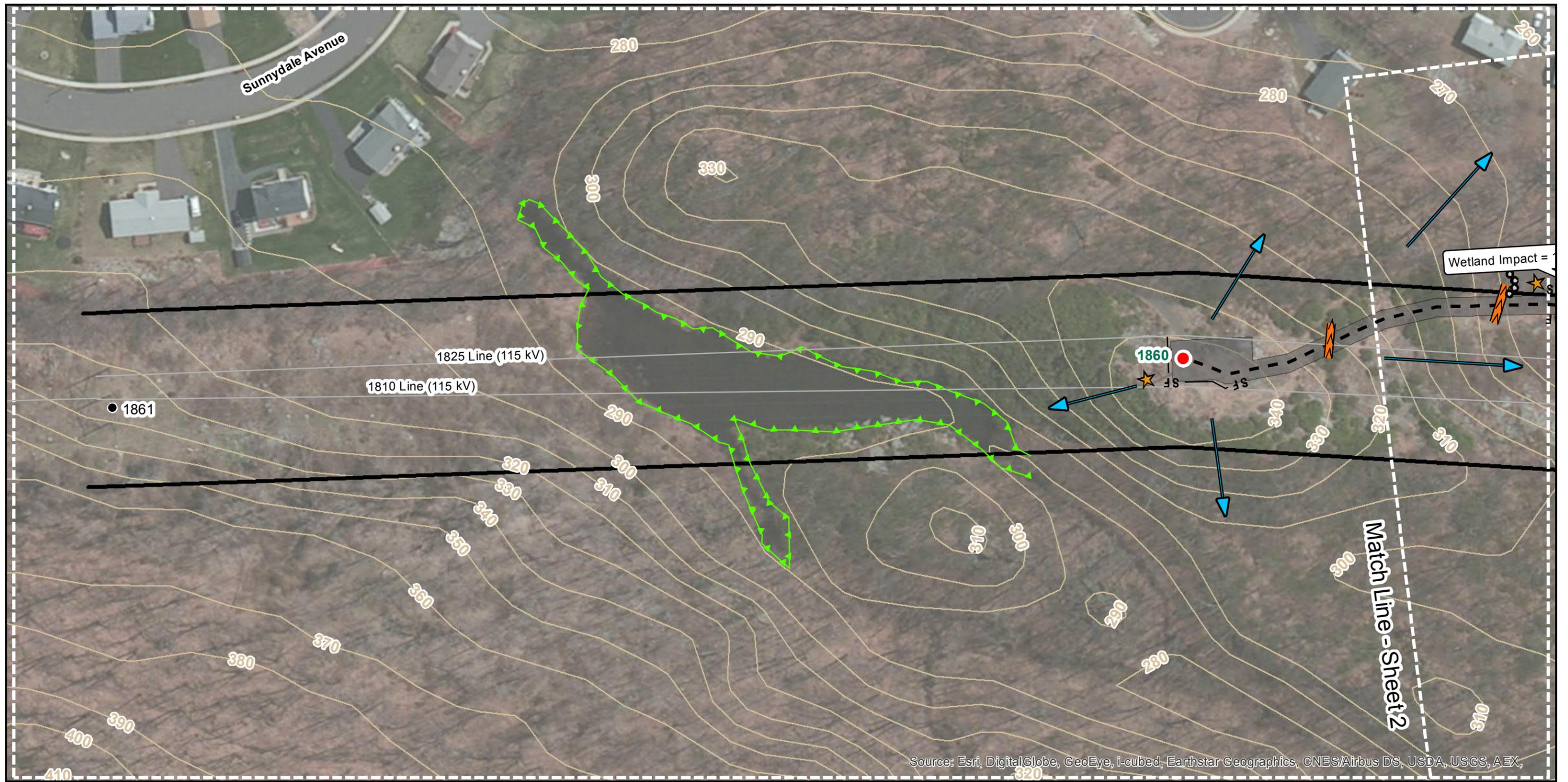
Map Sources: Connecticut Department of Energy and Environmental Protection (CT DEEP); Eversource Energy



www.FandO.com

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78 INTERSTATE DRIVE WEST SPRINGFIELD, MA 01089 413.452.0445



Legend

- Existing Structure
- Structures to be Modified
- Structures to be Removed
- Proposed Structure
- 1810 Line (115 kV)
- Other Utility Lines
- - - Eversource Property Boundary
- Approximate Utility Rights of Way
- Existing Access Road
- Proposed Access Road
- Proposed Alternate Access Road
- Wetland Boundary
- Swale
- 100-yr Floodplain
- 10 ft Contours
- ▶ Direction of Stormwater Runoff
- ★ Stormwater Sampling Location
- SF — Silt Fence and/or Hay Bales
- Water Bar
- Sediment Basin
- Construction Mat
- Work Area (Placement of Gravel)

Map Labels

- W_00 Wetland ID
 - 210 Elevation
-
- 0 50 100
Feet

EVERSOURCE
ENERGY

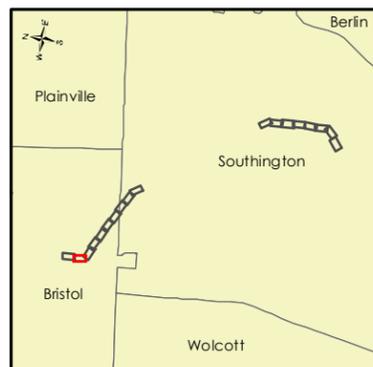
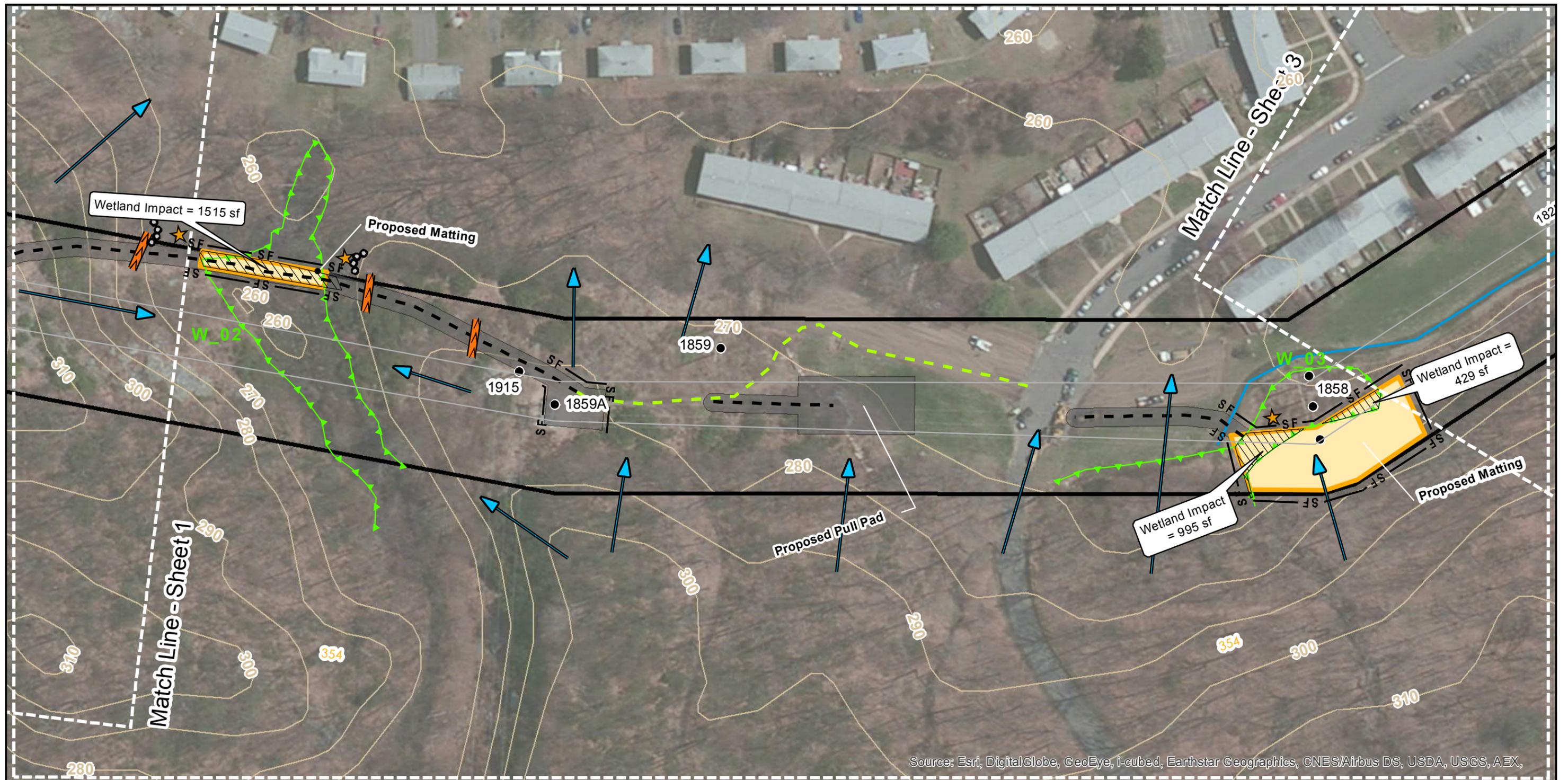
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WEST SPRINGFIELD, MA 01089

**1810 TRANSMISSION
LINE UPGRADE PROJECT**

Stormwater Pollution Control Plan

LINE 1810

Sheet 1



Legend

● Existing Structure	--- Eversource Property Boundary	--- Wetland Boundary	SF — Silt Fence and/or Hay Bales
● Structures to be Modified	— Approximate Utility Rights of Way	— Swale	▨ Water Bar
● Structures to be Removed	— Existing Access Road	— 100-yr Floodplain	○ Sediment Basin
● Proposed Structure	— Proposed Access Road	— 10 ft Contours	▨ Construction Mat
— 1810 Line (115 kV)	— Proposed Alternate Access Road	▶ Direction of Stormwater Runoff	▨ Work Area (Placement of Gravel)
— Other Utility Lines		★ Stormwater Sampling Location	

Map Labels

W_00 Wetland ID
210 Elevation

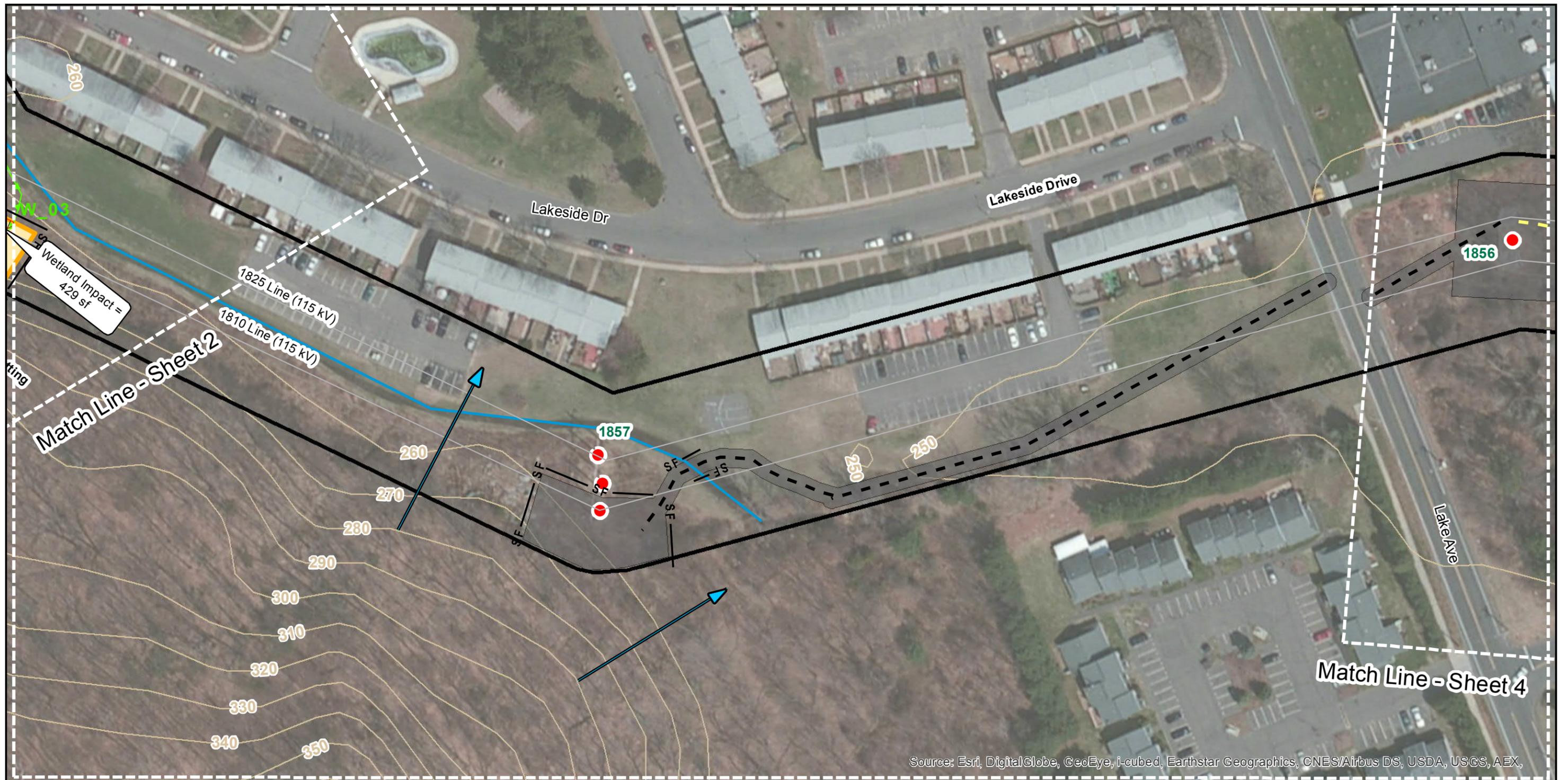
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EVERSOURCE ENERGY

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1810 TRANSMISSION LINE UPGRADE PROJECT
Stormwater Pollution Control Plan

LINE 1810
Sheet 2



Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX,



Legend

- Existing Structure
- Structures to be Modified
- Structures to be Removed
- Proposed Structure
- 1810 Line (115 kV)
- Other Utility Lines
- - - Eversource Property Boundary
- Approximate Utility Rights of Way
- Existing Access Road
- Proposed Access Road
- Proposed Alternate Access Road
- Wetland Boundary
- Swale
- 100-yr Floodplain
- 10 ft Contours
- ▶ Direction of Stormwater Runoff
- ★ Stormwater Sampling Location
- SF — Silt Fence and/or Hay Bales
- ▨ Water Bar
- Sediment Basin
- ▭ Construction Mat
- ▭ Work Area (Placement of Gravel)

Map Labels

- W_00 Wetland ID
- 210 Elevation

0 50 100 Feet

EVERSOURCE ENERGY

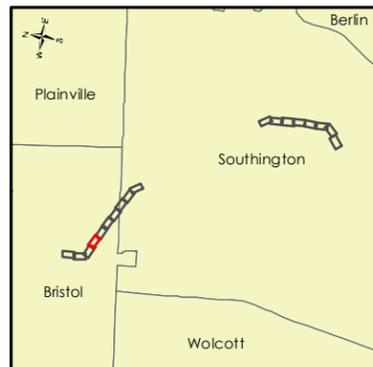
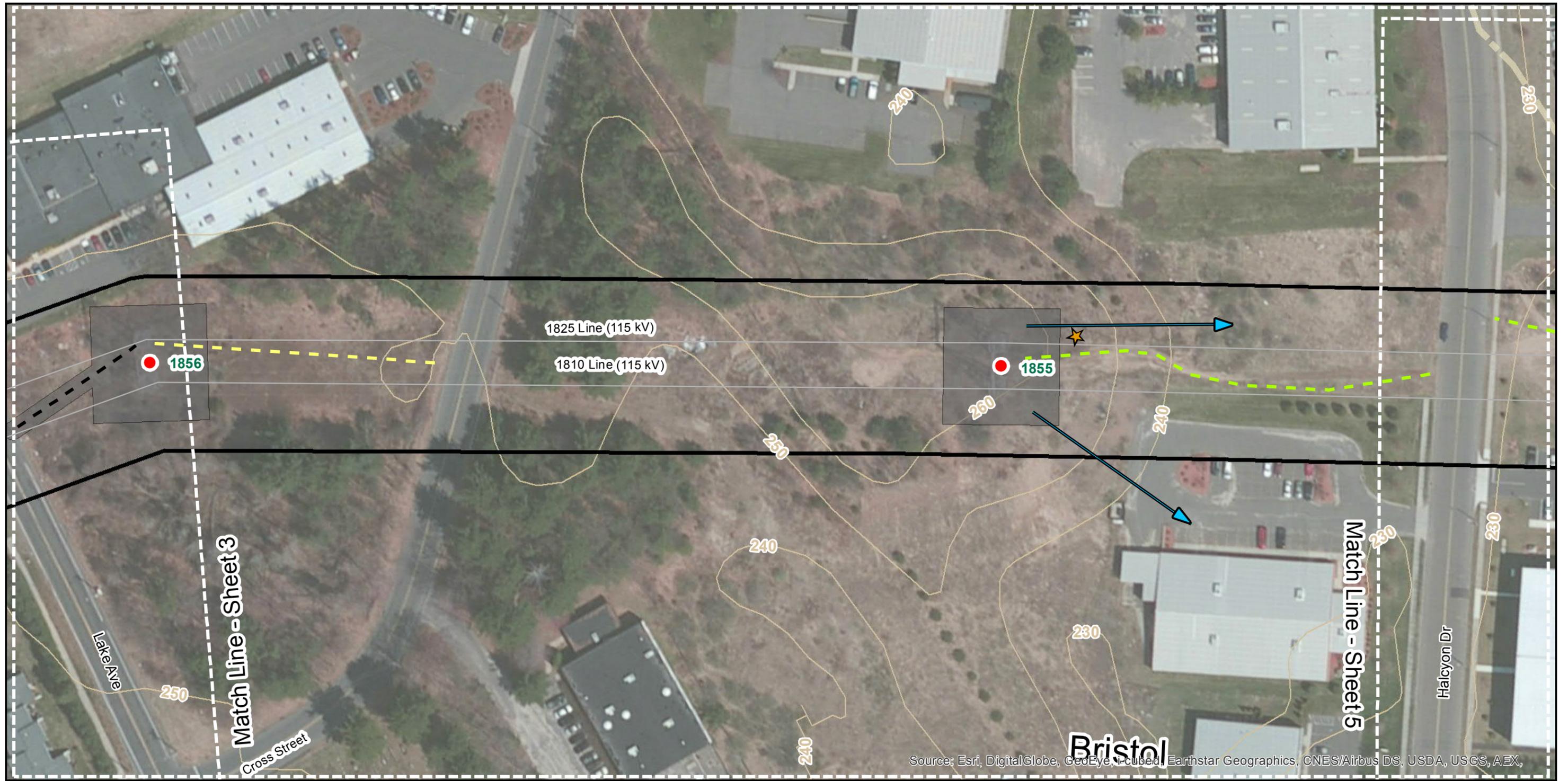
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1810 TRANSMISSION LINE UPGRADE PROJECT

Stormwater Pollution Control Plan

LINE 1810

Sheet 3



Legend

- Existing Structure
- Structures to be Modified
- Structures to be Removed
- Proposed Structure
- 1810 Line (115 kV)
- Other Utility Lines
- Eversource Property Boundary
- Approximate Utility Rights of Way
- Existing Access Road
- Proposed Access Road
- Proposed Alternate Access Road
- Wetland Boundary
- Swale
- 100-yr Floodplain
- 10 ft Contours
- ▶ Direction of Stormwater Runoff
- ★ Stormwater Sampling Location
- SF — Silt Fence and/or Hay Bales
- Water Bar
- Sediment Basin
- Construction Mat
- Work Area (Placement of Gravel)

Map Labels

- W_00 Wetland ID
 - 210 Elevation
-

EVERSOURCE
ENERGY

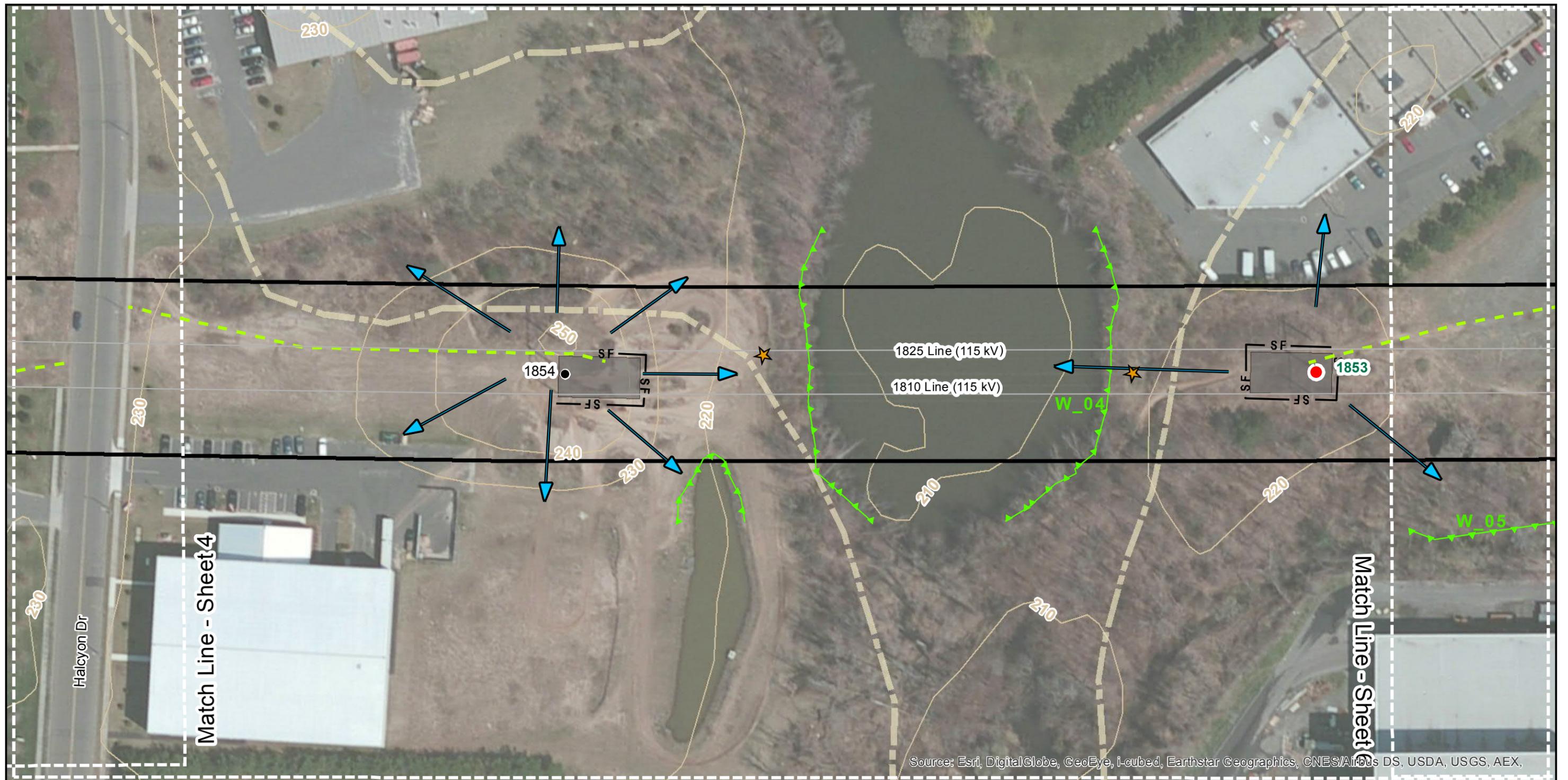
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78 INTERSTATE DRIVE
WEST SPRINGFIELD, MA 01089

**1810 TRANSMISSION
LINE UPGRADE PROJECT**

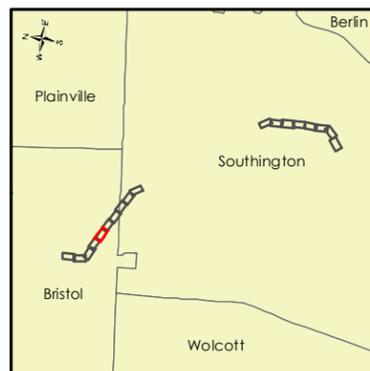
Stormwater Pollution Control Plan

LINE 1810

Sheet 4



Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX,



Legend

- Existing Structure
- Structures to be Modified
- Structures to be Removed
- Proposed Structure
- 1810 Line (115 kV)
- Other Utility Lines
- - - Eversource Property Boundary
- Approximate Utility Rights of Way
- - - Existing Access Road
- Proposed Access Road
- - - Proposed Alternate Access Road
- Wetland Boundary
- Swale
- 100-yr Floodplain
- 10 ft Contours
- Direction of Stormwater Runoff
- ★ Stormwater Sampling Location
- SF — Silt Fence and/or Hay Bales
- Water Bar
- Sediment Basin
- Construction Mat
- Work Area (Placement of Gravel)

Map Labels

- W_00 Wetland ID
- 210 Elevation

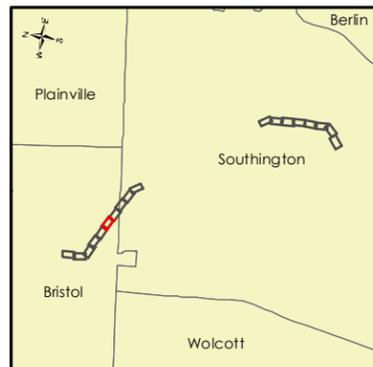
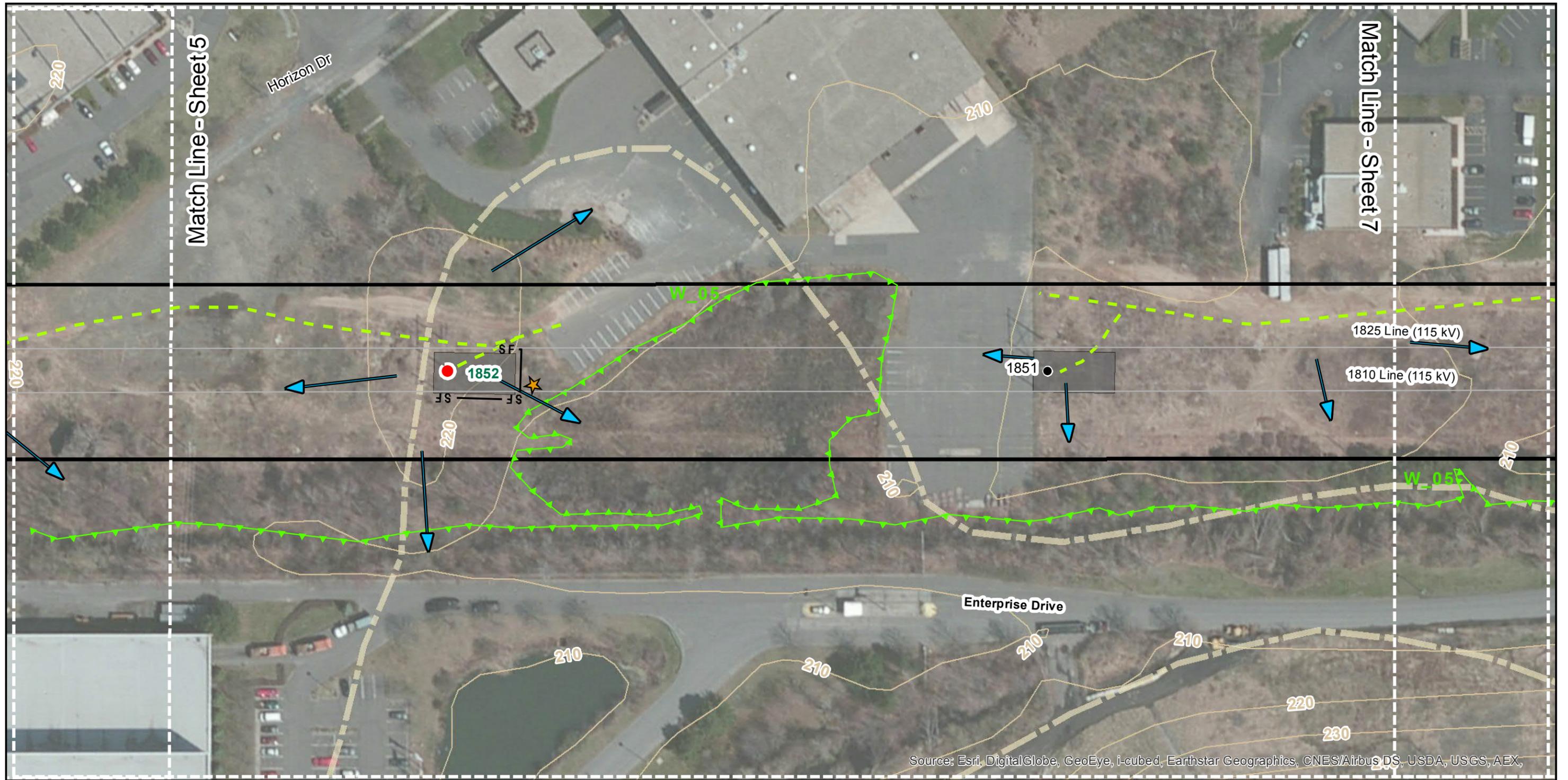
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1810 TRANSMISSION LINE UPGRADE PROJECT
Stormwater Pollution Control Plan

LINE 1810
Sheet 5



Legend

- Existing Structure
- Structures to be Modified
- Structures to be Removed
- Proposed Structure
- 1810 Line (115 kV)
- Other Utility Lines
- - - Eversource Property Boundary
- Approximate Utility Rights of Way
- Existing Access Road
- Proposed Access Road
- Proposed Alternate Access Road
- Wetland Boundary
- Swale
- 100-yr Floodplain
- 10 ft Contours
- ▶ Direction of Stormwater Runoff
- ★ Stormwater Sampling Location
- SF — Silt Fence and/or Hay Bales
- ▨ Water Bar
- Sediment Basin
- ▭ Construction Mat
- ▭ Work Area (Placement of Gravel)

Map Labels

- W_00 Wetland ID
 - 210 Elevation
-

EVERSOURCE
ENERGY

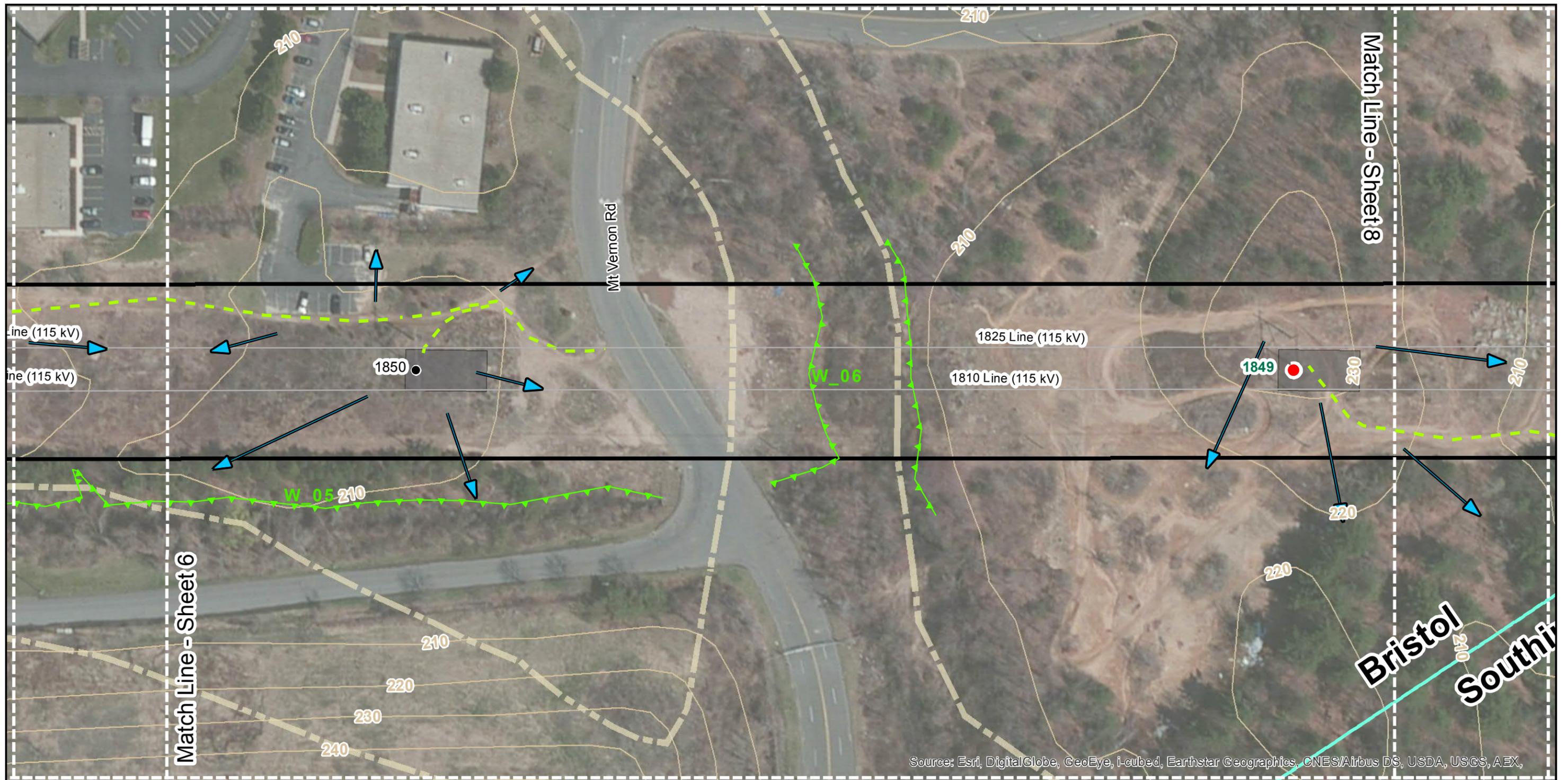
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**1810 TRANSMISSION
LINE UPGRADE PROJECT**

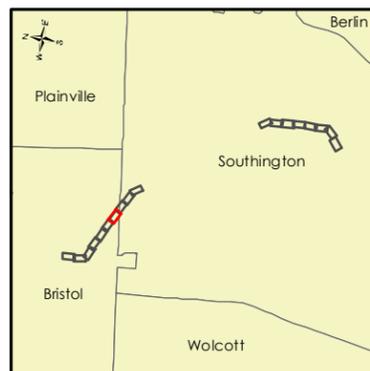
Stormwater Pollution Control Plan

LINE 1810

Sheet 6



Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX,



Legend

- Existing Structure
- Structures to be Modified
- Structures to be Removed
- Proposed Structure
- 1810 Line (115 kV)
- Other Utility Lines
- - - Eversource Property Boundary
- Approximate Utility Rights of Way
- Existing Access Road
- Proposed Access Road
- Proposed Alternate Access Road
- Wetland Boundary
- Swale
- 100-yr Floodplain
- 10 ft Contours
- Direction of Stormwater Runoff
- ★ Stormwater Sampling Location
- SF — Silt Fence and/or Hay Bales
- Water Bar
- Sediment Basin
- Construction Mat
- Work Area (Placement of Gravel)

Map Labels

- W_00 Wetland ID
- 210 Elevation

0 50 100
Feet

EVERSOURCE ENERGY

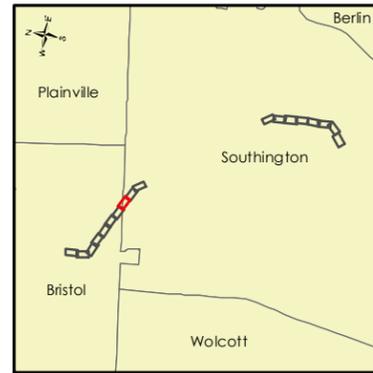
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1810 TRANSMISSION LINE UPGRADE PROJECT
Stormwater Pollution Control Plan

LINE 1810
Sheet 7



Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX,



Legend

- Existing Structure
- Structures to be Modified
- Structures to be Removed
- Proposed Structure
- 1810 Line (115 kV)
- Other Utility Lines
- Eversource Property Boundary
- Approximate Utility Rights of Way
- Existing Access Road
- Proposed Access Road
- Proposed Alternate Access Road
- Wetland Boundary
- Swale
- 100-yr Floodplain
- 10 ft Contours
- Direction of Stormwater Runoff
- ★ Stormwater Sampling Location
- SF — Silt Fence and/or Hay Bales
- Water Bar
- Sediment Basin
- Construction Mat
- Work Area (Placement of Gravel)

Map Labels

- W_00 Wetland ID
- 210 Elevation

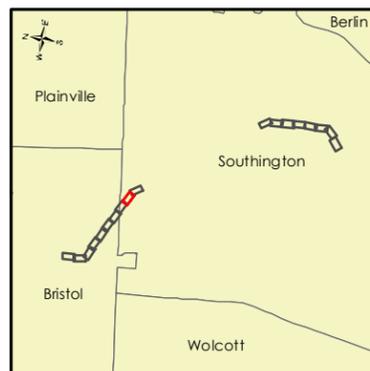
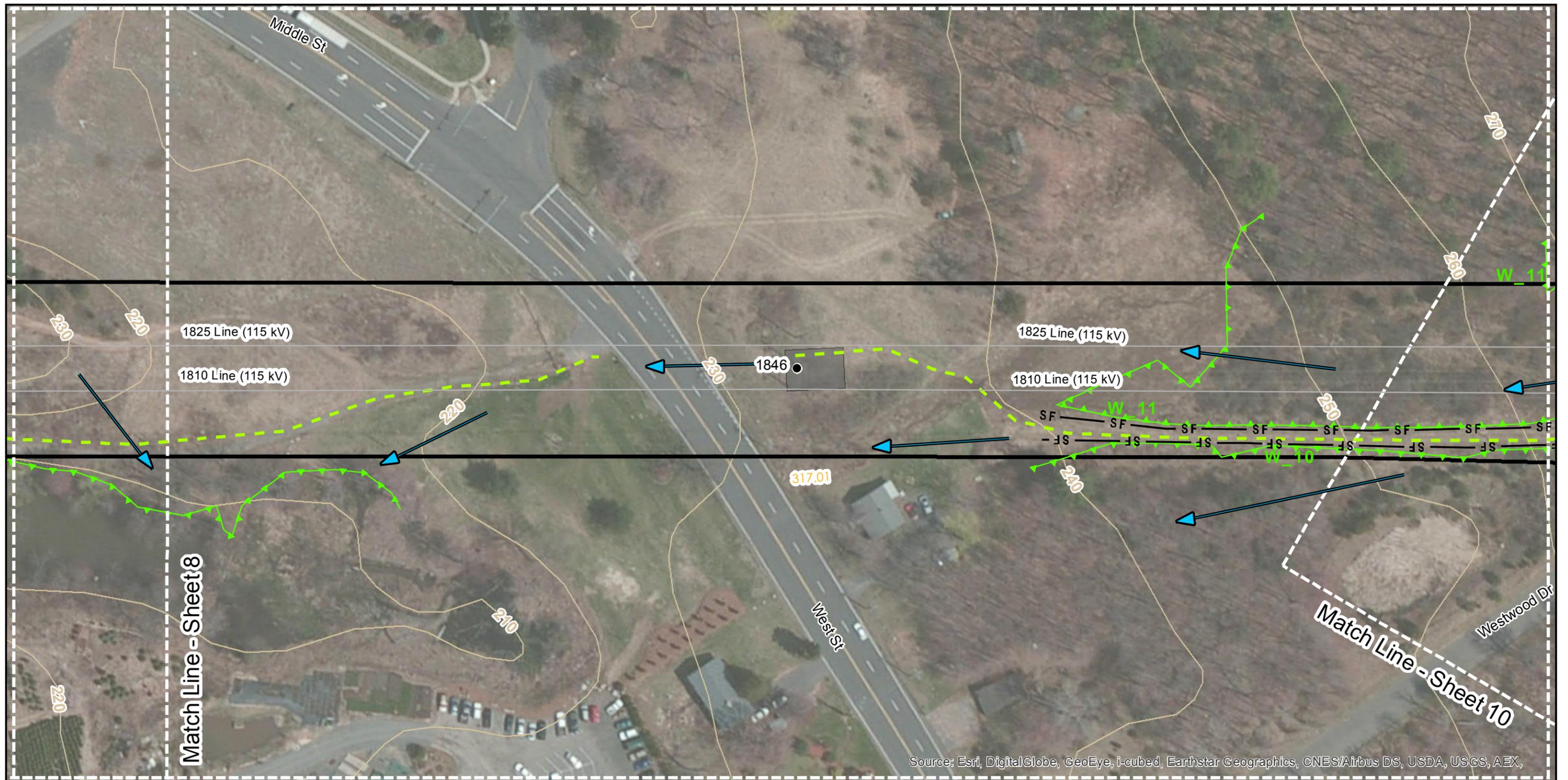
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1810 TRANSMISSION LINE UPGRADE PROJECT
Stormwater Pollution Control Plan

LINE 1810
Sheet 8



Legend

- Existing Structure
- Structures to be Modified
- Structures to be Removed
- Proposed Structure
- 1810 Line (115 kV)
- Other Utility Lines
- - - Eversource Property Boundary
- - - Approximate Utility Rights of Way
- - - Existing Access Road
- - - Proposed Access Road
- - - Proposed Alternate Access Road
- Wetland Boundary
- Swale
- 100-yr Floodplain
- 10 ft Contours
- Direction of Stormwater Runoff
- ★ Stormwater Sampling Location
- SF — Silt Fence and/or Hay Bales
- Water Bar
- Sediment Basin
- Construction Mat
- Work Area (Placement of Gravel)

Map Labels

- W_00 Wetland ID
- 210 Elevation

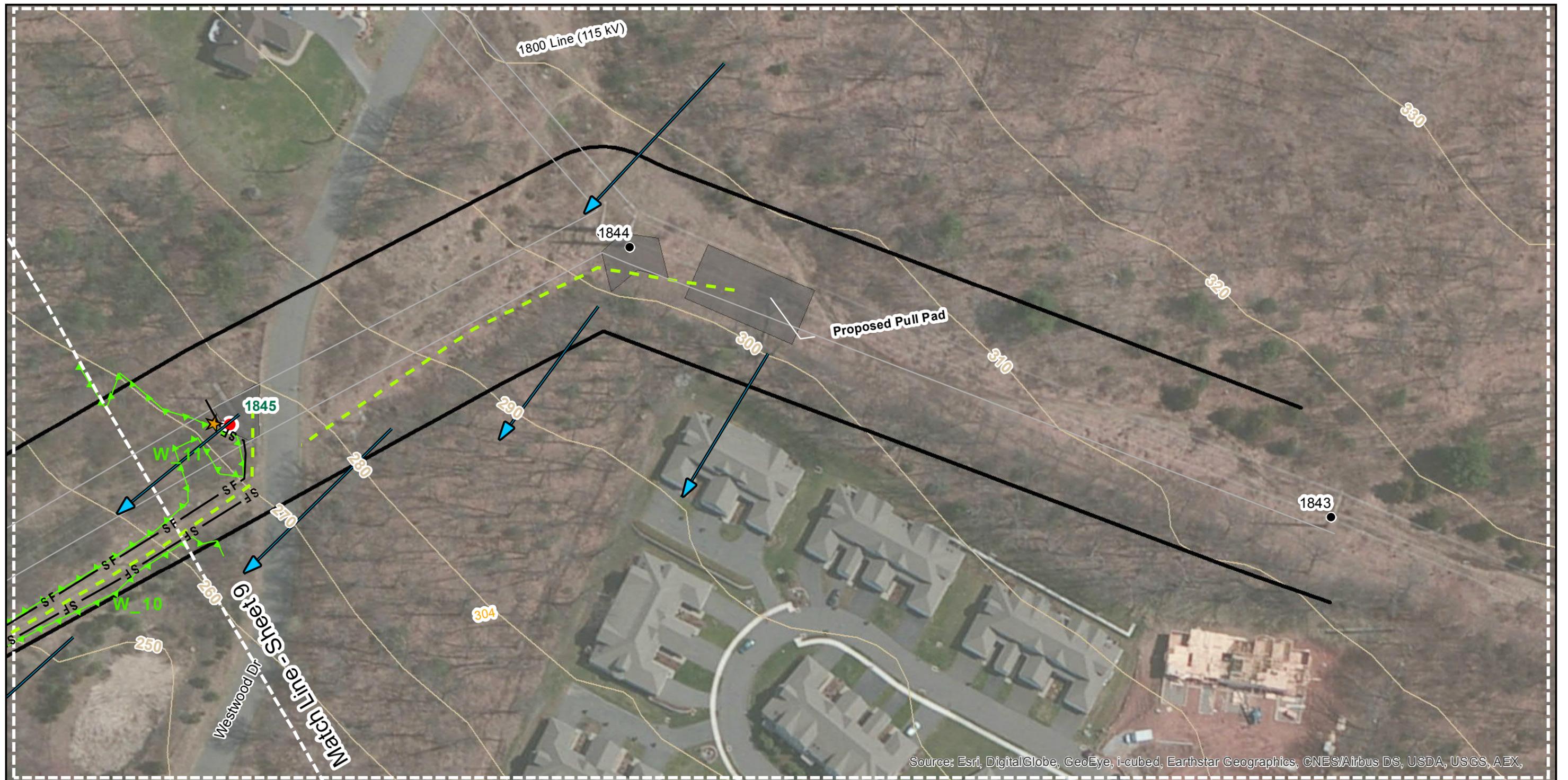
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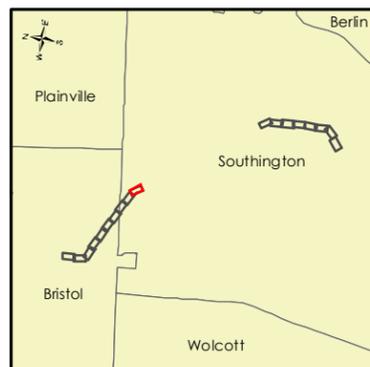
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1810 TRANSMISSION LINE UPGRADE PROJECT
Stormwater Pollution Control Plan

LINE 1810
Sheet 9



Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX,



Legend

- Existing Structure
- Structures to be Modified
- Structures to be Removed
- Proposed Structure
- 1810 Line (115 kV)
- Other Utility Lines
- - - Eversource Property Boundary
- Approximate Utility Rights of Way
- - - Existing Access Road
- Proposed Access Road
- - - Proposed Alternate Access Road
- Wetland Boundary
- Swale
- 100-yr Floodplain
- 10 ft Contours
- Direction of Stormwater Runoff
- ★ Stormwater Sampling Location
- SF — Silt Fence and/or Hay Bales
- Water Bar
- Sediment Basin
- Construction Mat
- Work Area (Placement of Gravel)

Map Labels

- W_00 Wetland ID
- 210 Elevation

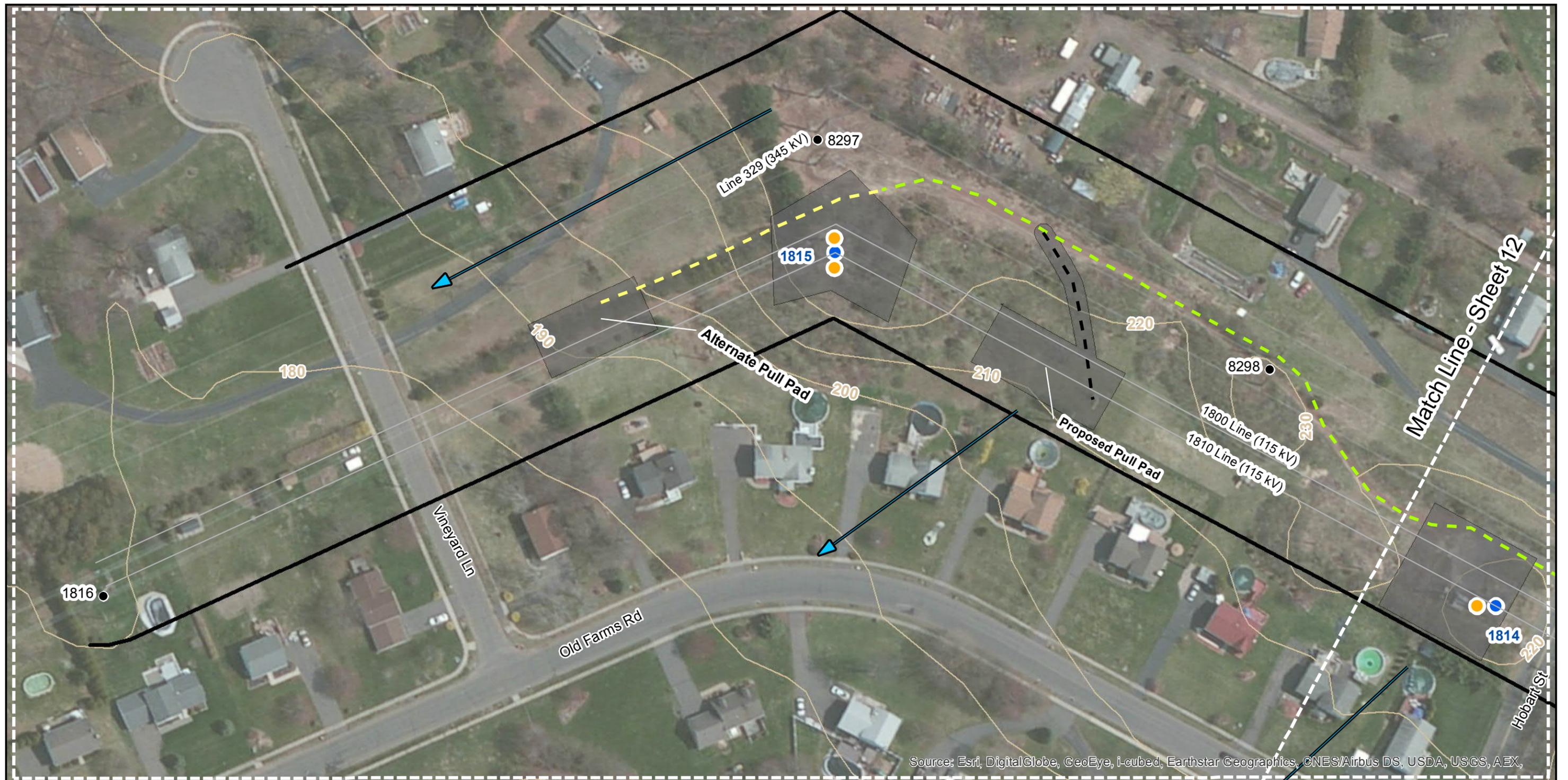
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WEST SPRINGFIELD, MA 01089

1810 TRANSMISSION LINE UPGRADE PROJECT
Stormwater Pollution Control Plan

LINE 1810
Sheet 10



Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX,



Legend

- Existing Structure
- Structures to be Modified
- Structures to be Removed
- Proposed Structure
- 1810 Line (115 kV)
- Other Utility Lines
- - - Eversource Property Boundary
- Approximate Utility Rights of Way
- - - Existing Access Road
- Proposed Access Road
- - - Proposed Alternate Access Road
- Wetland Boundary
- Swale
- 100-yr Floodplain
- 10 ft Contours
- ▶ Direction of Stormwater Runoff
- ★ Stormwater Sampling Location
- SF — Silt Fence and/or Hay Bales
- Water Bar
- Sediment Basin
- Construction Mat
- Work Area (Placement of Gravel)

Map Labels

- W_00 Wetland ID
- 210 Elevation

0 50 100 Feet

EVERSOURCE ENERGY

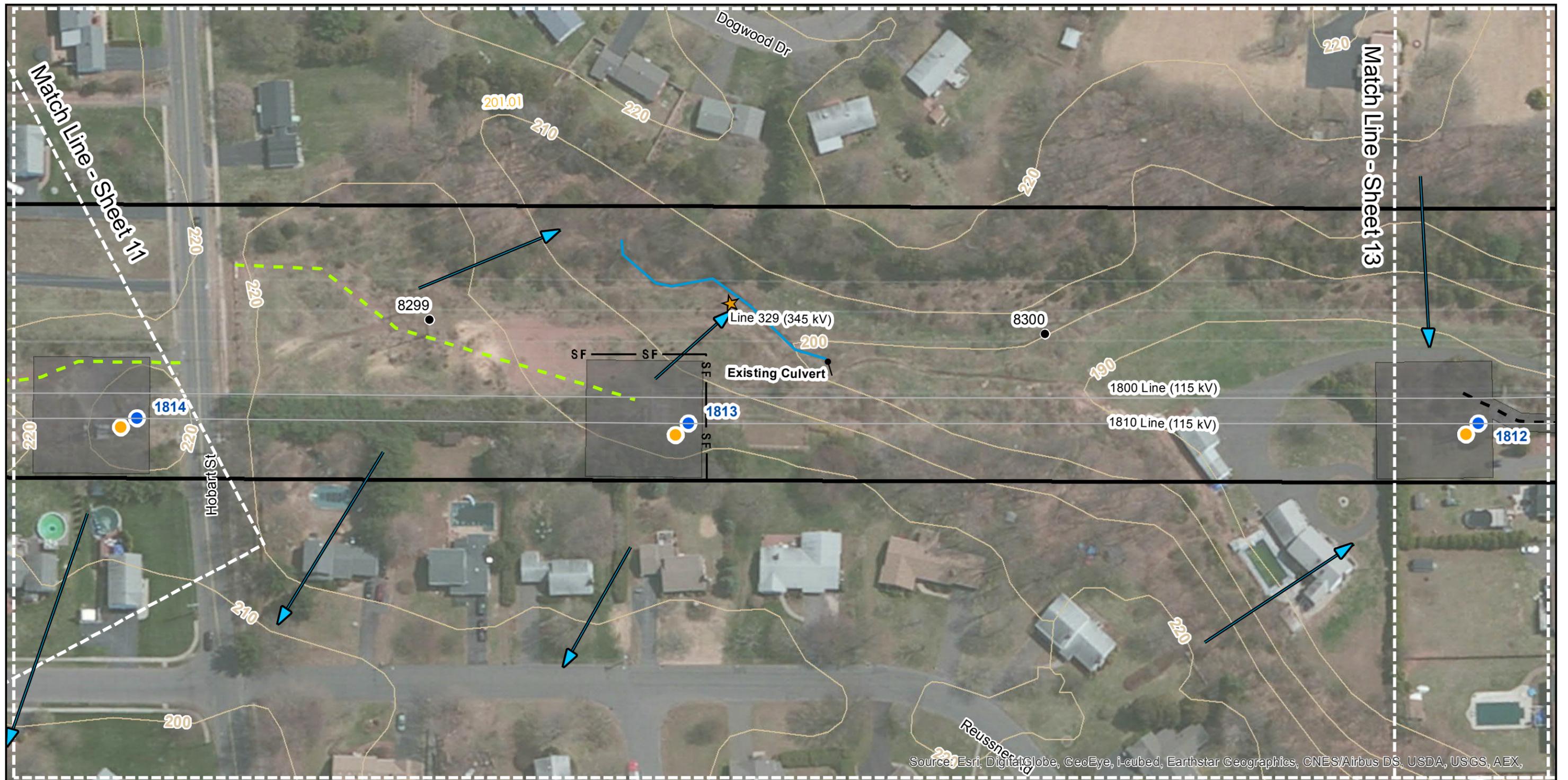
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WEST SPRINGFIELD, MA 01089

1810 TRANSMISSION LINE UPGRADE PROJECT

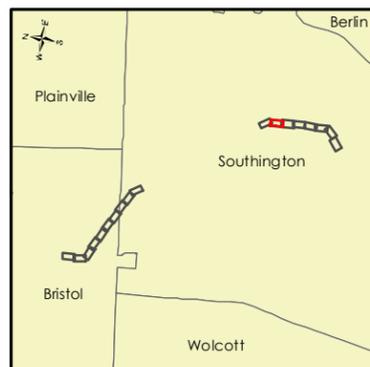
Stormwater Pollution Control Plan

LINE 1810

Sheet 11



Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX,



Legend

● Existing Structure	--- Eversource Property Boundary	--- Wetland Boundary	SF — Silt Fence and/or Hay Bales
● Structures to be Modified	— Approximate Utility Rights of Way	— Swale	▨ Water Bar
● Structures to be Removed	— Existing Access Road	— 100-yr Floodplain	○ Sediment Basin
● Proposed Structure	— Proposed Access Road	— 10 ft Contours	▨ Construction Mat
— 1810 Line (115 kV)	— Proposed Alternate Access Road	▶ Direction of Stormwater Runoff	▨ Work Area (Placement of Gravel)
— Other Utility Lines		★ Stormwater Sampling Location	

Map Labels

W_00 Wetland ID
210 Elevation

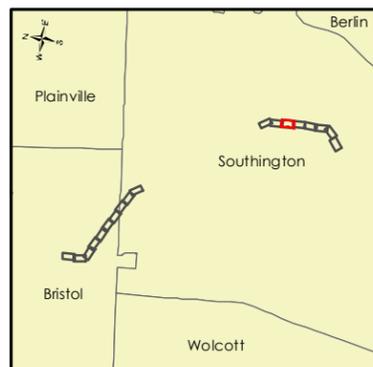
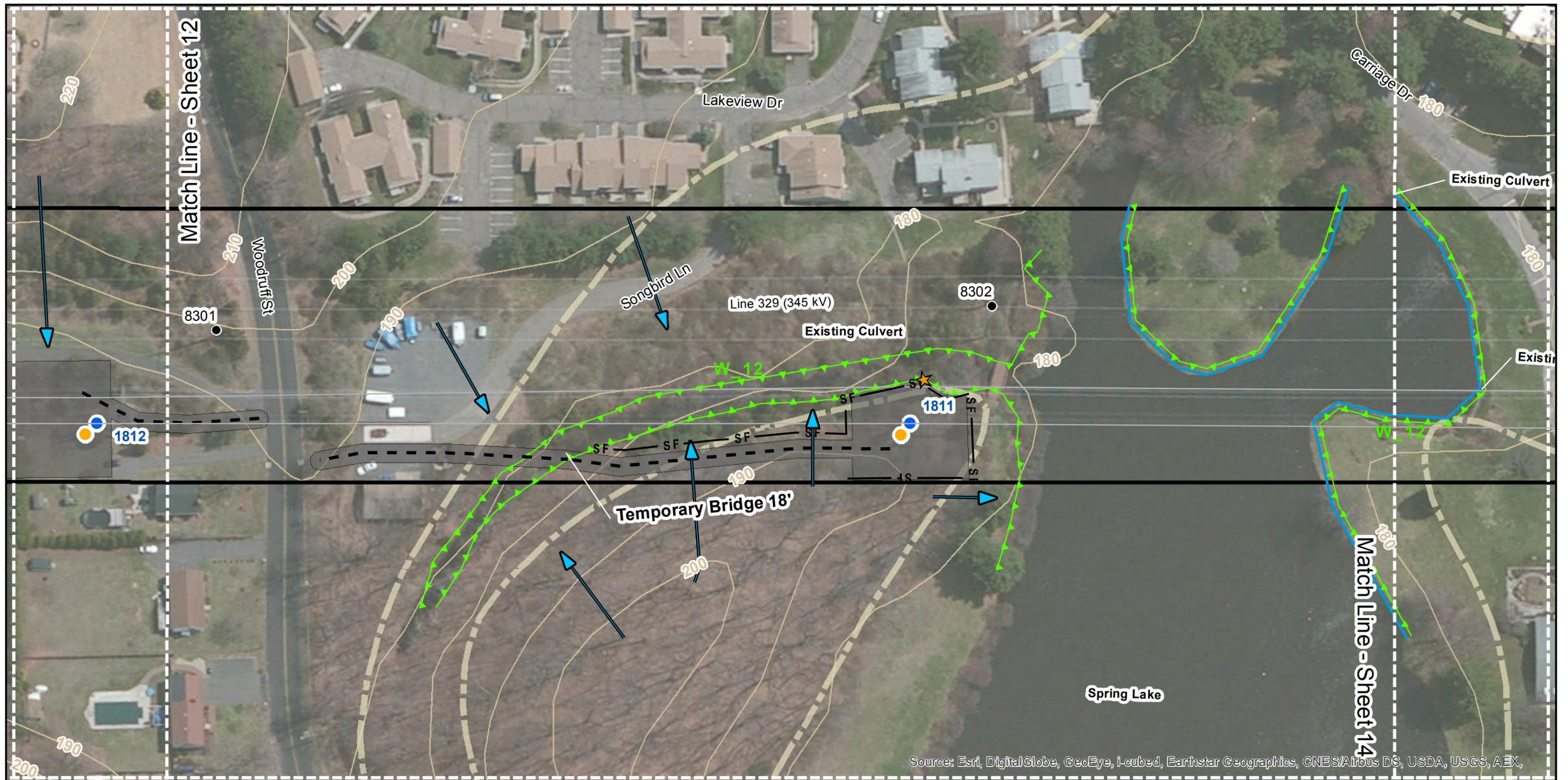
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1810 TRANSMISSION LINE UPGRADE PROJECT
Stormwater Pollution Control Plan

LINE 1810
Sheet 12



Legend

- Existing Structure
- Structures to be Modified
- Structures to be Removed
- Proposed Structure
- 1810 Line (115 kV)
- Other Utility Lines
- - - Eversource Property Boundary
- Approximate Utility Rights of Way
- Existing Access Road
- Proposed Access Road
- Proposed Alternate Access Road
- Wetland Boundary
- Swale
- 100-yr Floodplain
- 10 ft Contours
- ▶ Direction of Stormwater Runoff
- ★ Stormwater Sampling Location
- SF — Silt Fence and/or Hay Bales
- ▬ Water Bar
- Sediment Basin
- ▭ Construction Mat
- ▭ Work Area (Placement of Gravel)

Map Labels

- W_00 Wetland ID
- 210 Elevation

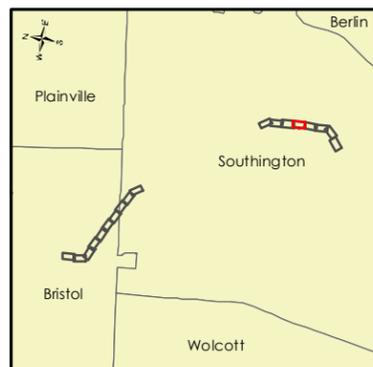
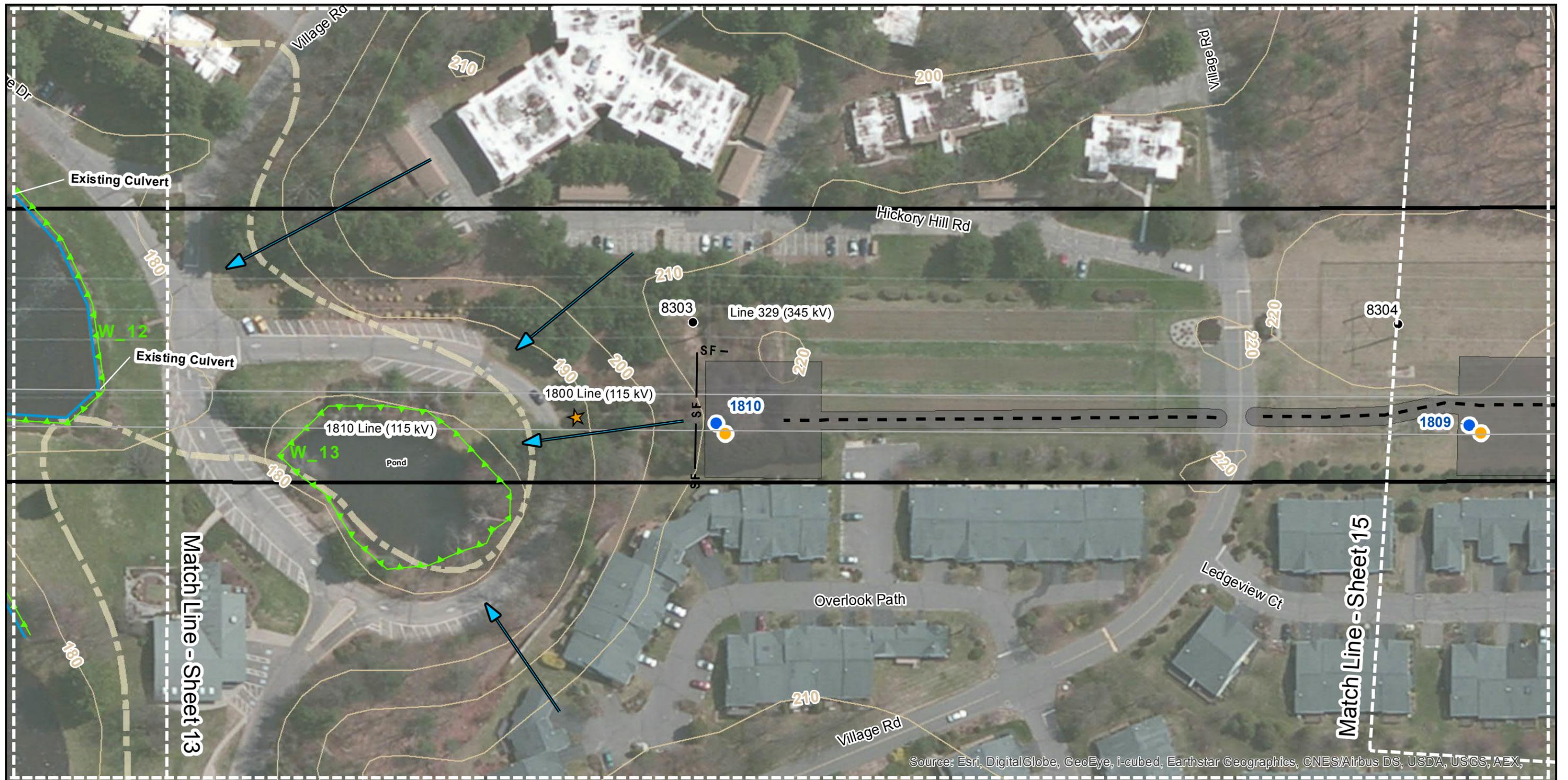
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1810 TRANSMISSION LINE UPGRADE PROJECT
Stormwater Pollution Control Plan

LINE 1810
Sheet 13



Legend

- Existing Structure
- Structures to be Modified
- Structures to be Removed
- Proposed Structure
- 1810 Line (115 kV)
- Other Utility Lines
- - - Eversource Property Boundary
- Approximate Utility Rights of Way
- Existing Access Road
- Proposed Access Road
- Proposed Alternate Access Road
- Wetland Boundary
- Swale
- 100-yr Floodplain
- 10 ft Contours
- ▶ Direction of Stormwater Runoff
- ★ Stormwater Sampling Location
- SF — Silt Fence and/or Hay Bales
- ▨ Water Bar
- Sediment Basin
- ▨ Construction Mat
- ▨ Work Area (Placement of Gravel)

Map Labels

- W_00 Wetland ID
- 210 Elevation

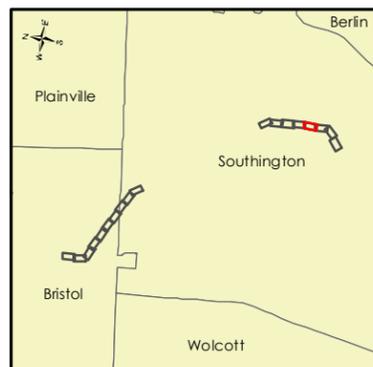
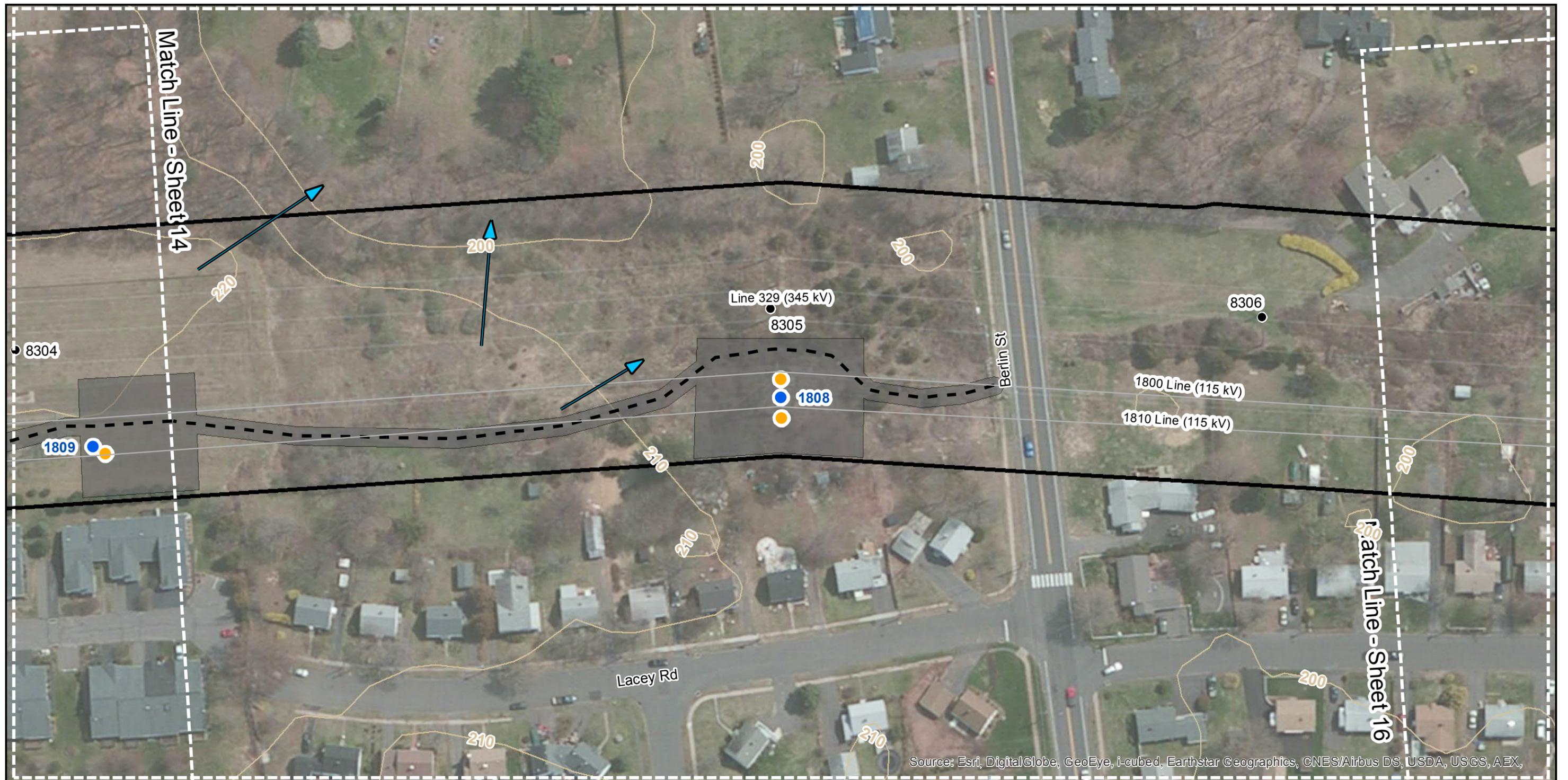
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1810 TRANSMISSION LINE UPGRADE PROJECT
Stormwater Pollution Control Plan

LINE 1810
Sheet 14



Legend

● Existing Structure	--- Eversource Property Boundary	--- Wetland Boundary	SF --- Silt Fence and/or Hay Bales
● Structures to be Modified	— Approximate Utility Rights of Way	— Swale	▨ Water Bar
● Structures to be Removed	— Existing Access Road	— 100-yr Floodplain	○ Sediment Basin
● Proposed Structure	— Proposed Access Road	— 10 ft Contours	▭ Construction Mat
— 1810 Line (115 kV)	— Proposed Alternate Access Road	▶ Direction of Stormwater Runoff	▭ Work Area (Placement of Gravel)
— Other Utility Lines		★ Stormwater Sampling Location	

Map Labels

W_00 Wetland ID
210 Elevation

0 50 100
Feet

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1810 TRANSMISSION LINE UPGRADE PROJECT

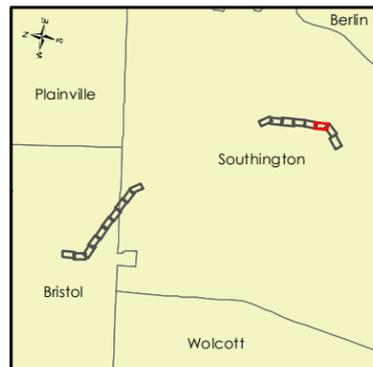
Stormwater Pollution Control Plan

LINE 1810

Sheet 15



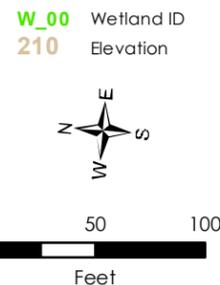
Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX,



Legend

- Existing Structure
- Structures to be Modified
- Structures to be Removed
- Proposed Structure
- 1810 Line (115 kV)
- Other Utility Lines
- - - Eversource Property Boundary
- Approximate Utility Rights of Way
- Existing Access Road
- Proposed Access Road
- Proposed Alternate Access Road
- Wetland Boundary
- Swale
- 100-yr Floodplain
- 10 ft Contours
- ▶ Direction of Stormwater Runoff
- ★ Stormwater Sampling Location
- SF — Silt Fence and/or Hay Bales
- ▬ Water Bar
- Sediment Basin
- ▭ Construction Mat
- ▭ Work Area (Placement of Gravel)

Map Labels



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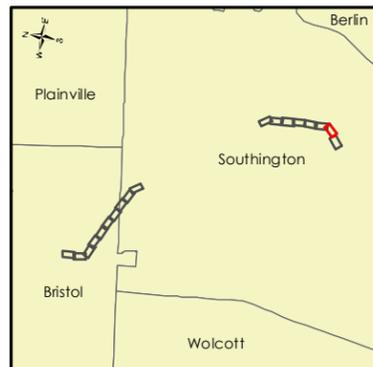
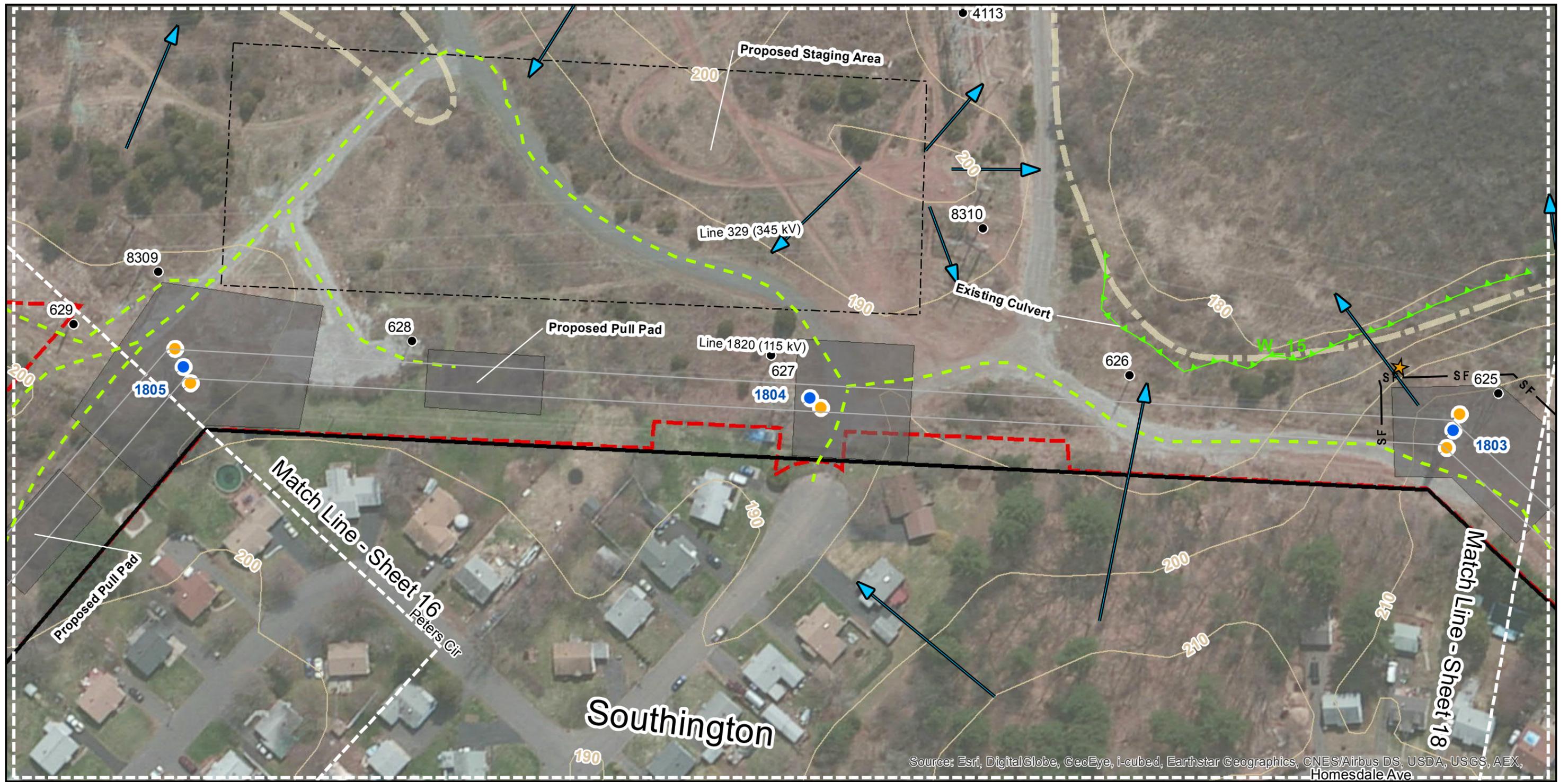
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1810 TRANSMISSION LINE UPGRADE PROJECT

Stormwater Pollution Control Plan

LINE 1810

Sheet 16



Legend

- Existing Structure
- Structures to be Modified
- Structures to be Removed
- Proposed Structure
- 1810 Line (115 kV)
- Other Utility Lines
- Eversource Property Boundary
- Approximate Utility Rights of Way
- Existing Access Road
- Proposed Access Road
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- Swale
- 100-yr Floodplain
- 10 ft Contours
- ▶ Direction of Stormwater Runoff
- ★ Stormwater Sampling Location
- SF — Silt Fence and/or Hay Bales
- ▬ Water Bar
- Sediment Basin
- ▭ Construction Mat
- ▭ Work Area (Placement of Gravel)

Map Labels

- W_00 Wetland ID
 - 210 Elevation
-

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**1810 TRANSMISSION
LINE UPGRADE PROJECT**

Stormwater Pollution Control Plan

LINE 1810

Sheet 17

Appendix D

Wetland Identification and Delineation Report

TECHNICAL MEMORANDUM

Wetland Delineation and Description 1810 Transmission Line Upgrade Project Bristol and Southington, Connecticut

October 2015

During the week of May 18-22, 2015 and August 24, 2015 staff from either Haines Hydrogeologic Consulting or Fuss & O'Neill conducted on-site wetland and watercourse investigations along the Eversource Energy (Eversource) 1810 transmission line located in Bristol and Southington, Connecticut.

The purpose of the investigation, as discussed in this Technical Memorandum (TM), was to determine the State and Federal jurisdictional wetlands and watercourse (or waters of the US) within the transmission line rights-of-way. Eversource will be completing upgrades, including re-conductoring and/or re-building structures, along an approximately 1.85 mile long section of the line located in Southington, and approximately 1.75 mile section in Bristol and Southington.

Regulatory Framework and Methodology

Under the Connecticut Inland Wetland and Watercourses Act, a wetland soil is defined as a soil that is saturated within 20 inches of the surface during a portion of the growing season. These soils have redoximorphic features, a deficiency of oxygen near the surface, and/or ponded water during the growing season. They are poorly drained, very poorly drained, alluvial, or fluvial as specified by the USDA Natural Resource Conservation Service (NRCS). Depth to seasonal high water table is determined by low-chroma mottling or wetness indicators. Hydric soils have a similar definition.

Watercourses are also regulated under the Connecticut Inland Wetland and Watercourses Act. Watercourses are rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs, and all other bodies of water including natural or artificial, vernal or intermittent, public or private. A defined permanent channel and bank, and the occurrence of two or more of the following characteristics delineate intermittent watercourses:

- Evidence of scour or deposits of recent alluvium or detritus
- Presence of standing or flowing water for a duration longer than a particular storm incident
- Presence of hydrophytic vegetation

The Army Corps of Engineers (Federal Register 1982) and the Environmental Protection Agency (Federal Register 1980) jointly define wetlands as:

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

TECHNICAL MEMORANDUM
Wetland Delineation and Description
1810 Transmission Line Upgrade Project
Bristol and Southington, Connecticut
October 2015
Page 2 of 4

Wetlands are generally identified and delineated through the positive evidence of the following diagnostic environmental characteristics: 1) hydrophytic vegetation, 2) hydric soil, and 3) evidence of hydrological indicators. The 1987 USACE Wetland Delineation Manual (I) and *the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (ERDC/EL TR-12-1) provides specific guidelines and methodology required to complete federal wetland delineations.

Wetland Delineation

To prepare for the field investigation, the following documents and mapping were reviewed:

- USGS 7.5 Minute Topographic Mapping
- NRCS Web Soil Survey (Release 2.3) (<http://websoilsurvey.nrcs.usda.gov/>)
- Environmental GIS Data for Connecticut (CTECO, 2013)
- U.S. Fish and Wildlife National Wetlands Inventory (USFWS, 2013)
- Publicly available aerial photography.

Wetlands were delineated in the field in accordance with the criteria outlined above. Generally, soils are investigated with a spade and auger to a depth of 24 inches or refusal. Soil colors are compared to standard colors in the Munsell Soil Chart. Mapped upland soils in the Bristol section are generally till soils and include Canton-Charlton soils. However, most of the upland soils are mapped as Udorthents, indicating human disturbance. Only one hydric soil is identified. It is associated with Wetland #7/8. The soil is Saco silt loam.

Upland soils in the Southington section are predominantly sandy and gravelly outwash soils. Manchester gravelly sand is the most common soil encountered. Two hydric soils are identified. Timakwa soil is associated with Wetland #13 and Catden Freetown, a deep organic soil, is associated with Wetland #15.

The codes below use the classification system described in the “Classification of Wetlands and Deepwater Habitats of the United States” (Cowardin, 1979). In most cases, wetlands have more than one class. For instance, many emergent wet meadows are surrounded by a fringe of wetland shrubs. Following is a brief description of each class used, based on the classification scheme referenced:

PUB Permanently inundated ponds – natural or man-made
PEM Emergent marsh, fen, or wet meadow
PSS Palustrine scrub-shrub swamp or bog
PFO Forested or wooded swamp or bog

The following table summarizes field delineated wetlands along the transmission rights-of-way . Fifteen distinct wetlands were identified. The following table is broken down by section.

TECHNICAL MEMORANDUM
 Wetland Delineation and Description
 1810 Transmission Line Upgrade Project
 Bristol and Southington, Connecticut
 October 2015
 Page 3 of 4

Bristol (Re-Conducting) Section

Wetland Number	Dominant NWI Class	Other NWI Classes	Hydro-period	Other Notable Features
W_1	PUB	PEM	Permanently flooded	
W_2	PEM	PSS	Seasonally saturated	
W_3	PEM	PSS	Seasonally saturated	
W_4	PUB	PSS	Seasonally saturated	
W_5	PEM	PSS	Seasonally saturated	
W_6	PSS	None	Seasonally saturated	Associated with intermittent stream
W_7	PSS	None	Seasonally saturated	
W_8	PSS	None	Seasonally saturated	
W_9	PUB	PSS	Permanently flooded	Irrigation pond
W_10	PSS	None	Seasonally saturated	
W_11	PSS	None	Seasonally saturated	

Southington (Re-building Section)

Wetland Number	Dominant NWI Class	Other NWI Classes	Hydro-period	Other Notable Features
W_12	PUB	PSS	Permanently flooded	"Spring Lake"
W_13	PUB	PSS	Permanently flooded	man-made pond
W_14	PEM	PSS	Seasonally saturated	
W_15	PEM	PSS	Seasonally saturated	

Vernal Pools or Other Amphibian Breeding Habitats

No official regulatory definition of a vernal pool currently exists for the State of Connecticut. However, the United States Army Corps of Engineers Connecticut General Permit (CT GP) defines a vernal pool as:

[A]n often temporary body of water occurring in a shallow depression of natural or human origin that fills during spring rains and snow melt and typically dries up during summer months. Vernal pools support populations of species specially adapted to reproducing in these habitats (obligate species). Such species may include wood frogs, mole salamanders (*Ambystoma* sp.), fairy shrimp, fingernail clams, and other amphibians, reptiles and invertebrates. Vernal pools lack breeding populations of fish.



TECHNICAL MEMORANDUM
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For the purposes of this project, the definition provided in the CT GP was used, to the extent possible, to assess the presence of potential vernal pools on site.

No vernal pools were identified within project limits.

Submitted by:

A handwritten signature in blue ink that reads 'David Askew'.

David R. Askew, Project Manager
Registered Professional Soil Scientist (SSSNE)

Appendix E

Notice of Termination Form



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

Notice of Termination Form

Please complete and submit this form in accordance with the general permit (DEP-PED-GP-015) in order to ensure the proper handling of your termination. Print or type unless otherwise noted.

Note: Ensure that for commercial and industrial facilities, registrations under the *General Permit for the Discharge of Stormwater Associated with Industrial Activity* (DEP-PED-GP-014) or the *General Permit for the Discharge of Stormwater from Commercial Activities* (DEP-PED-GP-004) have been filed where applicable. For questions about the applicability of these general permits, please call the Department at 860-424-3018.

Part I: Registrant Information

1. Permit number: GSM			
2. Fill in the name of the registrant(s) as indicated on the registration certificate: Registrant:			
3. Site Address: City/Town: _____ State: _____ Zip Code: _____			
4. Date all storm drainage structures were cleaned of construction sediment: Date of Completion of Construction: _____ Date of Last Inspection (must be at least three months after final stabilization pursuant to Section 6(b)(6)(D) of the general permit): _____			
5. Check the post-construction activities at the site (check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Residential	<input type="checkbox"/> Commercial	<input type="checkbox"/> Capped Landfill
<input type="checkbox"/> Other (describe): _____			

Part II: Certification

"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."	
_____ Signature of Permittee	_____ Date
_____ Name of Permittee (print or type)	_____ Title (if applicable)

Note: Please submit this Notice of Termination Form to:
STORMWATER PERMIT COORDINATOR
BUREAU OF WATER MANAGEMENT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

Appendix F

Sedimentation and Erosion Control Inspection Report Form

SEDIMENTATION AND EROSION CONTROL INSPECTION REPORT
 EVERSOURCE ENERGY SERVICE COMPANY
 TRANSMISSION LINE 1810

SITE # _____

INSPECTION INFORMATION DATE: QUALIFIED INSPECTOR: RAIN EVENT <input type="checkbox"/> WEEKLY <input type="checkbox"/> SPECIAL <input type="checkbox"/>	WEATHER INFORMATION CURRENT FORECAST: DATE OF LAST RAIN EVENT: AMOUNT OF LAST RAIN EVENT:
---	--

GENERAL PROJECT COMPLIANCE

APPROXIMATE CURRENT ACRES DISTURBED:		DUST CONTROL MEASURES ESTABLISHED:	Y / N
CONSTRUCTION ENTRANCE INSTALLED:	Y / N	SILT FENCE INSTALLED & FUNCTIONAL:	Y / N
WASHOUT AREA ESTABLISHED:	Y / N	INLET PROTECTION INSTALLED & FUNCTIONAL:	Y / N
WASTE DISPOSAL AREA ESTABLISHED:	Y / N	ALL OTHER E&S CONTROLS INSTALLED & FUNCTIONAL:	Y / N
IN-ACTIVE AREAS STABILIZED:	Y / N	STORMWATER DISCHARGE OBSERVED:	Y / N
DESCRIPTION OF STORMWATER DISCHARGE:			

DISTRIBUTION:

In my judgment the site is in / out of compliance with the terms and conditions of the Stormwater Pollution Control Plan and permit.

 Signature of Qualified Inspector

 Date

"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."

 Signature of Permittee/Authorized Representative

 Date

ITEMS NOTED IN THIS INSPECTION:

List specific items relating to erosion & sediment controls, implementation of the plan, description of stormwater discharges, and any water quality monitoring performed during the inspection.

ITEM #	ITEM NOTED	DESCRIPTION OF DEFICENCY	REMEDIAL ACTIONS REQUIRED	IN COMPLIANCE	DATE NOTED	CURRENT STATUS

ITEMS NOTED IN THIS INSPECTION:

**Note: The item numbers listed above correspond to the circled numbering on the attached reference map.

ADDITIONAL COMMENTS OR NOTES:

- Additional Comments

Appendix G

Stormwater Monitoring Report Form (Turbidity Sampling Data)



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

**General Permit for the Discharge of Stormwater and Dewatering Wastewaters from
Construction Activities, issued 8/21/13, effective 10/1/13**
Stormwater Monitoring Report

SITE INFORMATION

Permittee: _____
 Mailing Address: _____
 Business Phone: _____ ext.: _____ Fax: _____
 Contact Person: _____ Title: _____
 Site Name: _____
 Site Address: _____
 Receiving Water (name, basin): _____
 Stormwater Permit No. GSN _____

SAMPLING INFORMATION (Submit a separate form for each outfall)

Outfall Designation: _____ Date/Time Collected: _____
 Outfall Location(s) (lat/lon or map link): _____
 Person Collecting Sample: _____
 Storm Magnitude (inches): _____ Storm Duration (hours): _____
 Size of Disturbed Area at any time: _____

MONITORING RESULTS

Sample #	Parameter	Method	Results (units)	Laboratory (if applicable)
1	Turbidity			
2	Turbidity			
3	Turbidity			
4	Turbidity			

(provide an attachment if more than 4 samples were taken for this outfall)

Avg = _____

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: _____
 Signature: _____ Date: _____

Please send completed form to:

DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
 BUREAU OF MATERIALS MANAGEMENT AND COMPLIANCE ASSURANCE
 79 ELM STREET
 HARTFORD, CT 06106-5127
 ATTN: NEAL WILLIAMS

Appendix H

Natural Diversity Data Base (NDDB) Areas



Re: NDDB Review - 1810 Line 

From: **Justin W. Adams** <LICENSING + PERMITTING > <665-3951 >
To: DEEP Nddbrequest
Cc: Justin W. Adams

12/02/2015 01:34 PM

Hello.

Please see the attached document amended to reflect protocols and consideration for the Spotted Turtle and Peregrine Falcon.

Best,



DEEP Letter NDDB 12022015.pdf

Justin W. Adams
Environmental Affairs
Eversource Energy
(860) 839-8373

DEEP Nddbrequest

Hi Justin, Thank you for clarifying that you did...

11/27/2015 09:57:52 AM

From: DEEP Nddbrequest <DEEP.Nddbrequest@ct.gov>
To: Justin W. Adams/NUS@NU,
Date: 11/27/2015 09:57 AM
Subject: Re: NDDB Review - 1810 Line

Hi Justin,

Thank you for clarifying that you did consider the spotted turtle and peregrine falcon. Maybe to make it clearer for me to understand your analysis you might mention that you considered these species in your determination of no conflict for these state listed species. That way I can see your analysis in a more transparent way. I agree with your determination on the peregrine falcon but you may want to consider best management practices for the spotted turtles if work will be completed in late May, June or July for the spotted turtles as they can sometimes leave the wet areas to find suitable nesting sites. Let me know what you think.

Dawn

Dawn M. McKay
Wildlife Division
Bureau of Natural Resources
Connecticut Department of Energy and Environmental Protection
79 Elm Street, Hartford, CT 06106-5127
P: 860.424.3592 | E: dawn.mckay@ct.gov

From: justin.adams@eversource.com <justin.adams@eversource.com>
Sent: Wednesday, November 25, 2015 3:27 PM
To: DEEP Nddbrequest
Subject: Re: NDDB Review - 1810 Line

I saw this polygons and determined they were outside of our project area.

There is no work in or near a watercourse or water body, so I do not see this as a conflict. Additionally, there is no clearing associated with the project, so I do not see a conflict with peregrine.

Justin Adams
Environmental Affairs
Eversource Energy
(860) 839-8373

Original Message

From: DEEP Nddbrequest
Sent: Wednesday, November 25, 2015 3:07 PM
To: Justin W. Adams
Subject: Re: NDDB Review - 1810 Line

Justin,

We have records of peregrine falcons in the area of the Lake Avenue Junction project and I also see spotted turtles in the most southern portion of the Southington substation. Also Box turtles are most likely found along the length of both corridors.

Dawn
Dawn M. McKay
Wildlife Division
Bureau of Natural Resources
Connecticut Department of Energy and Environmental Protection
79 Elm Street, Hartford, CT 06106-5127
P: 860.424.3592 | E: dawn.mckay@ct.gov<mailto:dawn.mckay@ct.gov>

From: justin.adams@eversource.com <justin.adams@eversource.com>
Sent: Wednesday, November 25, 2015 1:34 PM
To: DEEP Nddbrequest
Subject: NDDB Review - 1810 Line

Hello,

Attached you will find a project description, mapping and proposed protocols during construction for an Eversource line project in Southington, CT. Please let me know if you concur with our assessment and proposed protocols.

Best,

Justin W. Adams
Environmental Affairs
Eversource Energy
(860) 839-8373

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STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

Petition No. 1201

The Connecticut Light and Power Company d/b/a Eversource Energy Southington and Bristol, Connecticut

Staff Report

January 21, 2016

Introduction

On November 25, 2015, the Connecticut Siting Council (Council) received a petition (Petition) from The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for proposed modifications to the existing #1800 115-kV transmission line and the #1810 115-kV transmission line within existing rights of way (ROW) located in Bristol and Southington. Council members Phil Ashton and Robert Hannon and Council staff member Michael Perrone conducted a field review of the proposed project on January 5, 2016. John Morissette, Project Manager – Transmission Siting CT, Eversource; Jason Cabral, Project Manager, Eversource; and Justin Adams, Permitting, Eversource also attended the field review.

The proposed project is required to increase the transmission line rating for a portion of the #1810 line in order to eliminate the potential for transmission system thermal criteria violations based on the results of the May 2014 Greater Hartford and Central Connecticut Area (GHCC) Needs Assessment performed by ISO New England Inc. (ISO-NE) and in accordance with the February 2015 GHCC Solutions Study performed by ISO-NE. The proposed project, in combination with other necessary system improvements identified in the Solutions Study, eliminates thermal and voltage criteria violations identified in the Northwestern Connecticut geographic sub-area of the GHCC area.

Specifically, the project consists of three components as noted below:

- a) Reconductoring approximately 1.75 miles of the existing #1810 line from Forestville Junction in Southington to one structure past Lake Avenue Junction in Bristol and adding bracing to the existing wood H-frame structures;
- b) Rebuilding and reconductoring approximately 1.85 miles of the existing double-circuit lattice towers (DCLT) that support the existing #1800 and #1810 lines from Southington Substation to structure #1815 in Southington as the existing structures are not strong enough to support the larger conductor required for the new line rating on the #1810 line; and
- c) Reinforcement of an existing line terminal structure at Southington Substation within the existing fenced area.

In the reconductoring section (located in northern Southington and southern Bristol), the #1810 line shares the transmission ROW with the exiting #1825 115-kV transmission line. In the rebuild section (located in Southington, roughly south of Interstate 84), the #1810 line shares the transmission ROW with the #1800 line, the existing #1820 line, and the #329 345-kV transmission line. The existing ROW was established in 1942. The existing #1800 and #1810 lines were put in service in 1962, and the #329 line was put into service in 1965.

Land in the project area includes rolling topography with some forest vegetation. Lands within the portions of the ROW occupied by transmission lines have been managed to promote shrub or similar low-growth vegetation. Land use adjacent to the reconductoring section is a mix of industrial and commercial uses with some undeveloped lands (e.g. open fields and forest lands). Land uses adjacent to the rebuild section are primarily residential.

Reconductoring Portion of the Project

Specifically, Eversource seeks to replace the existing 795-kcmil aluminum conductor steel reinforced (ACSR) conductors with new 795-kcmil aluminum conductor steel supported (ACSS) conductors on the #1810 line which is located on the west side of the double circuit structures from Forestville Junction to one structure past Lake Avenue Junction (structure nos. 1844 to 1860). Eversource would also reinforce seven existing double-circuit wood H-frame structures that support the #1810 line and the #1825 line. Reinforcement would consist of installing new cross bracing on four structures that currently do not have such bracing, installing additional cross bracing on one structure with existing bracing and replacing existing cross bracing on two structures. Eversource would also reinforce two horizontally configured DCLT structures that support the #1810 and the #1825 lines. Reinforcement would consist of installation of additional bracing angles in the truss area and reinforcing the two foundation footings of each of the two structures by excavating the soil around the base of the structure and filling with concrete. Finally, Eversource would install new optical ground wire from Forestville Junction to Lake Avenue Junction on the #1810 line side.

Rebuild Portion of the Project

Specifically, Eversource seeks to replace nine DCLT tangent structures with new direct-embedded double-circuit galvanized steel pole structures. Eversource would also replace each of six DCLT angle structures with two drilled shaft single-circuit galvanized steel poles on new foundations. The heights of the existing structures range between 95 feet to 105 feet above ground level. The proposed structures would be approximately 5 to 20 feet taller than existing structures and no taller than 120 feet. Eversource would also replace the existing 556-kcmil ACSR conductor with new 1272-kcmil ACSS conductor on the #1810 line. The existing 1272-kcmil ACSR on the #1800 line would be transferred from the existing DCLT onto the new steel pole structures. Eversource would also install new optical ground wire from structure #1805 to structure #1815 on the #1800 line side and install a new shield wire from Southington Substation to structure #1815 on the #1800 line side. Finally, Eversource would perform approximately 10 feet wide of tree/vegetation clearing along the western portion of the ROW to safely operate the proposed upgraded transmission facility.

Southington Substation Portion of the Project

Eversource would install braces on the truss area of the #1810 line terminal structure to provide additional reinforcement.

Construction Methods

The project would be constructed, operated, and maintained in accordance with established industry practices and in accordance with Eversource's December 2011 Best Management Practices Manual for Connecticut (Eversource BMPs). Construction vehicles and equipment would enter and exit the ROW at various points from public roads. To safely move construction vehicles and equipment on to and off the ROW, while minimizing disruptions to vehicular traffic along public routes, Eversource or its contractor would work with municipalities and/or Connecticut Department of Transportation as necessary.

Preparation of the ROW would include vegetative removal or mowing of the managed portion of the ROW. Woody vegetation within the ROW that could interfere with the operation of the transmission would be removed. No tree clearing is anticipated in the reconductoring section. However, some limited vegetation removal would be required within construction areas, access roads and work/pull pad areas. The removal would be performed by manual and/or mechanical methods. In the rebuild section, 10 feet of clearing would occur to the western limits of the ROW, and all vegetation would be removed using mechanical methods that could include chainsaws, brush mowing units, tree harvesters, feller-bunchers, forwarders, log skidders, and log trucks.

Temporary erosion and sedimentation control measures would be installed where needed and maintained and inspected throughout the project as necessary.

There are two proposed staging areas for the project, which would be located in Southington on parcels owned by Eversource. One staging area would be approximately 2.75 acres in size and would be located adjacent to Southington Substation with access from Peter's Circle or Lepage Drive. The second proposed staging area would be an existing parking lot approximately 0.1 acres in size and located off of Belleview Avenue at the entrance to Southington Substation.

The locations of new access, work pads, and pulling pads have been identified in the Petition drawings. Many of the access roads are already established, and existing access would be used wherever possible. Access installation and improvements would be to a width of 16 to 20 feet to accommodate construction vehicles and equipment. Once the access roads are prepared, mobilization activities would commence including material delivery from the staging areas to the work sites.

Work pads in the rebuild section would be approximately 100 feet by 100 feet for tangent structures and 150 feet by 100 feet for angle structures. In the reconductoring section, the work pads would range from 35 feet by 70 feet to 150 feet by 100 feet on angle structures. The pulling pads for conductor and optical ground wire installation would typically be about 50 feet by 100 feet in size.

For the rebuild section, structure foundation work would be performed using mechanical excavators, drill rigs and pneumatic hammers. During non-working hours, fencing or other barricades would be placed around or over open foundation excavations for safety purposes.

Structure sections and associated materials would be delivered by truck and then assembled and installed by crane. Installation of overhead line conductors and shield wires would require the use of special pulling tensioning equipment, which would be placed at the specified pull locations.

After removal of the old structures, the existing DCLT foundations would be cut at ground level. The removal of existing steel lattice towers (that would be replaced), conductor, associated hardware, concrete, etc. would be disposed of and/or recycled as applicable in accordance with applicable regulations and Eversource BMPs.

After construction, structure work pads and new access roads would be left in place to facilitate future transmission line maintenance, unless directed to be removed by the landowner. Access roads, work pads, and pull pads that may be located within a manicured or otherwise improved residential area would typically be removed unless the landowner requests that they remain in place. Construction mats would be removed after the project is complete.

Construction hours would typically occur Monday through Saturday from 7:00 a.m. to 7:00 p.m. In the vicinity of the Spring Lake Village Condominium Complex (SLVCC), Eversource would use an 8:00 a.m. start time. Sunday hours may be necessary in the case of transmission line outages. Construction is expected to begin in the summer of 2016 and be completed by the spring of 2017.

Environmental Effects and Mitigation Measures

According to the Connecticut Department of Energy and Environmental Protection's Natural Diversity Database, there are no state-listed endangered, threatened, or special concern species or critical habitat located within the Project area. No impacts to archeological or historic resources are expected.

Appendix I

2001 Management Practices Manual: Connecticut

Not included in E-Version

Attachment F

Historic and/or Archaeological Information Review





INTEGRATED HISTORIC PRESERVATION PLANNING

October 11, 2015

Mr. Brian M. Benito Jr.
Eversource Energy
Environmental Affairs- Sr. Licensing & Permitting Specialist
107 Selden Street
Berlin, CT 06037

RE: Preliminary Archeological Assessment of Structures 1858 and 1860 along Line 1810 in Bristol, Connecticut

Mr. Benito:

Heritage Consultants, LLC, is pleased to have this opportunity to provide Eversource Energy (Eversource) with the following preliminary archeological assessment of Structures 1858 and 1860 along Line 1810 in Bristol, Connecticut (Figure 1). Eversource plans to replace these two structures and is requesting a Category 1 permit from the United States Army Corps of Engineers (USACOE). As a result, the undertaking falls under the regulations of Section 106 of the National Historic Preservation Act of 1966. Heritage Consultants, LLC has been contracted by Eversource to complete a Phase IA cultural resources investigation in order to satisfy the cultural resources reporting portion of the USACE permitting process.

The current Phase IA investigation entailed completion of an existing conditions cultural resources summary based on the examination of GIS data obtained from the Connecticut State Historic Preservation Office, as well as historical data, aerial photographs, and topographic quadrangles maintained by Heritage Consultants, LLC. The objectives of this study were to gather and present data regarding previously identified cultural resources situated within the vicinity of the Structure 1858 and 1860 locations, and to investigate the project items in terms of their natural and historical characteristics so that the need for completing additional cultural resources investigations could be evaluated.

Figures 2 and 3, historic maps dating from 1855 and 1869, respectively, show that Structures 1858 and 1860 are located in what was a rural part of the Town of Bristol in the mid to late nineteenth century. This area contained very few roads or residences, suggesting that the project region probably consisted of woodlot at that time. A review of Figure 4, an aerial image dating from 1934, confirms the interpretation of the historic maps with respect to Structure 1860. This area remained forested well into the twentieth century. The area containing Structure 1858, in contrast, had been cleared by 1934 and was being used as an agricultural field. While some settlement of the area occurred to the east, as shown by the presence of a few residences and barns, the area encompassing Structures 1858 and 1860 remained largely undeveloped in the early twentieth century. Figure 5, an aerial image dating from 1965, shows that while both structures were situated in wooded areas, a large housing subdivision had been built nearby and wide scale disturbance had occurred in the east as result of sand and gravel operations. This was undoubtedly part of the "suburbanization" of Connecticut that occurred after the close of World War II. Figure 6, an aerial image taken in 1990, shows that no additional changes had occurred in the immediate vicinity of

the Structures 1858 and 1860 during the latter part of the twentieth century; the area remained undeveloped. Finally, Figure 7, a 2014 aerial image shows the structure location in the modern era. With the exception of the addition of an east-west trending electrical transmission line to the south of Structure 1860, little has changed in the region over the last two decades.

A review of previously recorded cultural resources on file with the Connecticut State Historic Preservation Office revealed that no archaeological sites or National Register of Historic Places properties exist within the vicinity of the Structures 1858 and 1860 (Figures 8 and 9). Finally, a review of soils in the area revealed that Structure 1858 is situated within a zone characterized by Udorthent soils. These types of soils have been subjected to large scale disturbances related to cutting, filling, and grading operation. In addition, Structure 1860 is located on Charlton-Chatfield Rock Outcrop soils. These soils are poorly developed. Both Udorthents and Charlton-Chatfield Rock Outcrop soils rarely contain intact archaeological deposits (Figure 10). This, combined with the presence of moderate to steep slopes in the area, indicates that the archaeological sensitivity in the vicinity of Structures 1858 and 1860 is low (Figure 11). Thus, it is the professional opinion of Heritage Consultants, LLC that no additional archaeological research is recommended in the vicinity of Structures 1858 and 1860, and that no cultural resources will be impacted as a result of structure replacement.

Eversource also requested that Heritage Consultants, LLC complete a review of the 1810 line from between Structure 1860 in the north and an electrical substation in the south (Figure 12; Sheets 1-5). While other structures in these additional areas also will be replaced, they will not require a Category I permit since they do not fall under the jurisdiction of the USACE. Nevertheless, Eversource, as part of its best management practices, wants to ensure that there are no cultural resources situated within or immediately adjacent to the proposed Line 1810 right-of-way corridor that may be impacted by the proposed construction.

A review of previously recorded cultural resources within the vicinity of the 1810 Line right-of-way corridor was undertaken at the Connecticut State Historic Preservation Office by representatives Heritage Consultants, LLC. The results of that review are depicted in Figures 13 and 14; Sheets 1 through 5. There are no previously recorded archaeological sites or National Register of Historic Places properties situated within or immediately adjacent to the right-of-way corridor. The nearest previously recorded cultural resources are the Woodruff House and the Meriden Avenue/Oakland Road Historic District. These resources are both located in excess of 500 m (1,640 ft) from the right-of-way corridor (Figure 14; Sheet 5). Thus, they will not be directly impacted by the proposed construction project. In addition, since they are located over three tenths of a mile from the 1810 Line, it is highly unlikely that any visual impacts to the Woodruff House and the Meriden Avenue/Oakland Road Historic District will result from the proposed construction project.

In sum, it is the professional opinion of Heritage Consultants, LLC that based on the highly developed nature of the project region (see Figure 5; Sheets 1 through 5), the presence of widespread disturbed areas, and the lack of archaeological sites and National Register of Historic Places properties within and immediately adjacent to the right-of-way, the proposed construction project will not have any impacts on cultural resources in the vicinity of Structure 1858 and 1860, or the remainder of the 1810 Line to be upgraded. As a result no archaeological testing is recommended.

Mr. Brian Benito
October 11, 2015
Page 3

If you have any questions regarding this Technical Memorandum, or if we may be of additional assistance with this or any other projects you may have, please do not hesitate to call us at 860-667-3001 or email me dgeorge@heritage-consultants.com. We are at your service.

Sincerely,

A handwritten signature in cursive script that reads "David R. George".

David R. George, M.A., R.P.A.