

**Docket No. 217 – Development and Management Plan Inspection**

Northeast Utilities Service Company Certificate of Environmental Compatibility and Public Need for the construction of a 345-kV electric transmission line and reconstruction of an existing 115-kV electric transmission line between Connecticut Light and Power Company's Plumtree Substation in Bethel, through the towns of Redding, Weston, and Wilton, and to the Norwalk Substation in Norwalk, Connecticut.

**Date:** October 13, 2006

**Inspector:** Diana Walden, Lee Curtis, BSC Group

**Location:** Overhead Line (Composite 345kV and 115kV Gallows Hill to Archers Lane, 345kV H-Frame Hoyts Hill to Gallows Hill, and Norwalk Section)

**Storm/**

**Rain Event:** Reports range from 0.51-3.44" of rain recorded over 10/11-10/12, depending on location. (NOAA)

Areas of Inspection	Observation	Recommended Action	Corrective Action
Access Roads and Adjacent Roadways  <b>Composite</b>	<p>- The Composite ROW work is mainly accessible from Gallows Hill Rd and an access road passing through the Archers Lane station 10/13/06.</p> <p>-Restoration work is complete within the Archers Lane ROW and access road. Stone crossings and temporary mats have been removed from all wetland crossings. Disturbed areas were re-graded to original conditions and hay mulch and seed applied. 10/13/06. See Erosion Control Section for more detail.</p> <p>-Water bars remain in the access road near the first wetland crossing to divert water flow and decrease the potential for erosion within the road. 9/29-10/13/06.</p>	<p>-None 10/13/06</p> <p>-Continue to monitor until stabilized. Replace remaining silt fence with haybales or remove fence when the area revegetates. 10/13/06.</p> <p>-Place haybales at the downgradient outlet of each water bar to prevent sediment flow to the wetland until this area is stabilized. 9/29-10/13/06.</p> <p>- Monitor the hydrology within the crossing to be</p>	<p>-NA</p> <p>-NA</p> <p>-Needs attention.</p> <p>-Restoration was noted</p>

Areas of Inspection	Observation	Recommended Action	Corrective Action
<p><b>345kV H-Frame</b></p>	<p>-The stone and fabric was removed from the wetland crossing near structure #34 off Gallows Hill Road. It appears that some spots may not have been re-graded to original conditions and hydrology. 10/13/06.</p> <p>- Work areas are accessed from various roadways. Restoration is nearing completion in this section. With the exception of those remaining at the stream crossing off Webb Rd, all mats had been removed from the Bethel Reservoir section. 10/13/06.</p> <p>- All crossings were removed and the entire access road well restored within the Chestnut Ridge Section. 10/13/06. This area will no longer be inspected.</p>	<p>sure this area was restored to the original grade. 10/13/06.</p> <p>-Continue restoration and replace silt fence with hay bales in appropriate locations. Remove mats when restoration activities are nearing completion. 10/13/06.</p> <p>-The entire area was mulched with hay and temporarily stabilized. 10/13/06</p>	<p>-Most mats were removed.</p> <p>-Restoration is complete in this section.</p>
<p><b>Norwalk Section</b></p>	<p>- Erosion continues along the access road near structure #31 but hay bales seem to be containing sediment. 7/19-10/13/06.</p> <p>- No sediment tracking was noted in Kent Road from the ROW access to the north this week. There was no active work here at the time of inspection. 10/13/06.</p> <p>-It appears that restoration activities have not yet begun in the Kent Road north section of</p>	<p>-Continue to monitor and keep stone out of any resource areas. Hay bales currently contain the sediment. 7/26-10/13/06.</p> <p>- Continue to maintain this entrance and sweep street when necessary. Add more clean stone if needed. 7/19-10/13/06.</p> <p>- Continue restoration and clean up in previously disturbed areas. Restore as near as possible to original conditions. 10/13/06.</p>	<p>-NA</p> <p>- N/A</p> <p>-Needs attention</p>

Areas of Inspection	Observation	Recommended Action	Corrective Action
	<p>ROW. Mats remain in the wetlands in this section. 10/13/06.</p> <p>-Restoration activities have begun in the Kent Rd south section. Wetland crossings remain matted. Haybales and silt fence at the wash out areas are deteriorating. 9/20-10/13/06.</p>	<p>- Maintain hay bales at wash out areas until this area is stabilized. Remove mats from wetland areas when restoration activities are nearing completion. 9/20-10/13/06.</p>	<p>-Needs attention</p>
<p><b>Line Construction Composite</b></p> <p><b>345kV H-Frame</b></p> <p><b>Norwalk Section</b></p>	<p>- Line work is complete within the Archers Lane and Gallows Hill ROW sections. 9/20-10/13/06.</p> <p>- Line work is complete within the Bethel Reservoir, Chestnut Ridge, John Todd Way, and Costa Lane ROW sections. Restoration efforts continue. 9/20-10/13/06.</p> <p>-Wire pulling is complete and all rider poles have been removed in this section. 9/13-10/13/06.</p> <p>-An unused (saved) structure and steel components are still being stored near structure #11073 off Perry Ave. 9/29-10/13/06.</p>	<p>- None at this time. A few restoration activities remain. 10/13/06.</p> <p>- Continue restoration in previously disturbed areas and ensure that materials are not forgotten in place. 10/13/06.</p> <p>-None at this time. 10/13/06.</p> <p>-Remove unused materials from the ROW. 9/29-10/13/06.</p>	<p>-Restoration at Archers Lane and Gallows Hill is largely complete</p> <p>- Restoration efforts noted.</p> <p>-NA</p> <p>-NA</p>
<p>Erosion and Sediment Controls</p> <p><b>Composite</b></p>	<p>- All wetland crossings along the Archers Lane access road were restored to the extent feasible. 9/29-10/13/06. Grass growth was noted in the restored areas. 10/13/06.</p> <p>-Crews were grading the access drive, located off Diamond Hill Road, in</p>	<p>- Wetlands crossings are in good shape. Remove silt fence once vegetation returns (or replace with haybales). 9/29-10/13/06.</p> <p>-None at this time. 10/13/06.</p>	<p>-Grass growth was noted</p> <p>-NA</p>

Areas of Inspection	Observation	Recommended Action	Corrective Action
<p><b>345kV H-Frame</b></p> <p>Bethel Reservoir Section to Chestnut Ridge Rd.</p>	<p>preparation for paving. 10/13/06.</p> <p>- Water bars are in place to divert flow in several locations and reduce erosion. Haybale check dams were also installed within the road as a temporary erosion control measure. 9/29-10/13/06.</p> <p>- Wood chips had been blown into the uplands and wetland area at the third structure in from Gallows Hill Road. 2/22-10/13/06.</p> <p>-The wetland crossing near structure #34 off Gallows Hill Road was removed. It appears that some spots may not have been graded to original contours and hydrology. 10/13/06.</p> <p>-Restoration is nearing completion in the Bethel Reservoir section. With the exception of those remaining at the stream crossing off Webb Rd, all mats had been removed from site. Most disturbed areas have re-vegetated. 10/13/06.</p> <p>- All crossings were removed and disturbed areas restored within the Chestnut Ridge section. 10/13/06. This section will no longer be inspected.</p> <p>-The area around</p>	<p>-Place haybales at the down-gradient outlets of the water bars to prevent sediment flow to the wetland while this area is stabilizing. 9/29-10/13/06.</p> <p>- Deeper piles should be spread out, including areas immediately off the ROW. However, this may no longer be feasible since the crossing has been removed. 10/13/06.</p> <p>- Monitor the hydrology within the crossing to be sure this area continues to function. 10/13/06.</p> <p>-Continue to monitor mat removal and restoration. 10/13/06.</p> <p>-The entire slope and access road was well graded and mulched with hay. The existing stream culvert is in original condition following removal of mats.. 10/13/06.</p> <p>-Monitor grass growth for</p>	<p>- NA</p> <p>-Needs similar attention as at Archers Lane. However, equipment can no longer access this area.</p> <p>-Restoration is nearly complete. Crossing may need further evaluation.</p> <p>-Most mats are now removed.</p> <p>-Restoration is complete within the Chestnut Ridge section.</p> <p>-Restoration efforts</p>

Areas of Inspection	Observation	Recommended Action	Corrective Action
<p>Costa Lane, Whortleberry, Lime Kiln and John Todd Way</p> <p><b>Norwalk Section</b></p> <p>Broad Street, Perry Ave, and North Seir Hill Road.</p>	<p>structure #9 has been re-graded to original conditions and seed and hay mulch applied. 10/13/06.</p> <p>- Vehicle tracks were repaired within the restored area at structure #10. Stockpiles were removed and hay mulch and seed applied. 10/13/06.</p> <p>- Restoration efforts (seed and mulch) are complete along the ROW off John Todd Way and Lime Kiln Road. Significant grass growth was noted in the restored areas. 10/13/06.</p> <p>-The slopes associated with the stone access road at structure #24 do not appear to be stable. Loose stone could wash into the wetland once silt fence is removed. 10/13/06.</p> <p>- Mats remain at the wetland crossing within the ROW off Costa Lane. 9/29-10/13/06.</p> <p>- The access road erosion near structure #31 was re-graded but erosion has returned, despite the haybales. 7/19-10/13/06.</p> <p>- The ROW off Perry Ave and North Seir Hill Road have been re-graded to original conditions and seed and hay mulch applied.</p>	<p>final stabilization. 10/13/06.</p> <p>-Monitor grass growth for final stabilization. 10/13/06.</p> <p>- Remove silt fence near structure #25. Silt fence could remain near the access road off John Todd Way due to the private contractor's work in this area. 10/13/06.</p> <p>-Investigate further stabilization measures for the slopes adjacent to the wetland. 10/13/06.</p> <p>- Continue to remove access mats and monitor. 10/13/06.</p> <p>- Keep all stone/sediment from entering resource areas and investigate alternative stabilization measures. 7/19-10/13/06.</p> <p>-Continue to monitor grass growth for final stabilization. 10/13/06.</p> <p>-Continue to monitor</p>	<p>noted</p> <p>-Vehicle tracks were restored and stockpiles removed.</p> <p>-Significant grass growth noted in restored areas.</p> <p>-Needs evaluation.</p> <p>-Most restored areas have re-vegetated.</p> <p>-Needs evaluation.</p> <p>-Restoration noted.</p>

Areas of Inspection	Observation	Recommended Action	Corrective Action
Kent Rd. (North)	<p>10/13/06.</p> <ul style="list-style-type: none"> <li>- The disturbed/cleared slopes adjacent to the stream bank at structure #11064 have been seeded and mulched but the stream is not protected by erosion controls. 10/13/06.</li> <li>- Grass growth was noted at structure #11080 near the substation but washouts in the mulch continue. The silt fence here is stressed. 10/04-10/13/06</li> <li>- Grass growth was noted in the restored areas off Broad Street, Perry Ave south, and the Rt 7 extension following restoration. Perry Ave south has stabilized and will no longer be inspected. 10/13/06</li> <li>- The disturbed areas at Kent Road (north) have not been seeded or mulched. Some areas don't appear to have been graded back to original conditions. 9/29-10/13/06.</li> </ul>	<p>grass growth for final stabilization. Install and maintain hay bales along both sides of the stream to prevent sediment from entering the stream channel. 10/13/06.</p> <ul style="list-style-type: none"> <li>- Repair silt fence and monitor until the area is stabilized with vegetation. 10/13/06.</li> <li>-Continue to monitor but the area is becoming stable. 10/13/06</li> <li>-These areas should be restored/seeded as soon as possible. Generally, the end of fall seeding is Oct 15<sup>th</sup>. 10/13/06.</li> </ul>	<ul style="list-style-type: none"> <li>-Restoration noted but still needs attention.</li> <li>- Restoration was noted but still needs attention</li> <li>-Grass growth was noted in some areas.</li> <li>- Perry Ave south has stabilized and will no longer be inspected.</li> <li>-Needs attention</li> </ul>
Kent Rd. (South)	<ul style="list-style-type: none"> <li>- Silt fence remains along both banks of the stream and near the foundation at the pond in the Kent Rd north section. 7/19-10/13/06.</li> <li>- The work areas at Kent Road (south) have been re-graded to original conditions and seed and hay mulch applied. Mats</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to monitor and maintain as needed. Restore areas and replace silt fence with haybales. 10/13/06.</li> <li>-Monitor until stabilized with vegetation. 10/13/06.</li> </ul>	<ul style="list-style-type: none"> <li>-NA</li> <li>-Grass growth noted in restored areas.</li> </ul>

Areas of Inspection	Observation	Recommended Action	Corrective Action
	<p>still need to be removed. 9/29-10/13/06. Grass growth was noted in restored areas. 10/13/06.</p> <p>- Stone from the access road continues to washout beyond the erosion controls into the wetland. Silt fence/ haybales here are deteriorating. 9/29-10/13/06.</p>	<p>- Stabilization options for the stone access road should be evaluated. 9/29-10/13/06. These areas will be difficult to control during heavy rain due to the drainage patterns. 7/12-10/13/06.</p>	<p>-Needs attention</p>
<p>Inland Wetland and Watercourse encroachment and mitigation <b>Composite</b></p> <p><b>345kV H-Frame</b></p>	<p>-The stone and mats have been removed from the wetland crossings along the Archers Lane ROW and the road has been re-graded to original condition. 9/29-10/13/06.</p> <p>-The stone was removed from the wetland crossing near structure #34 off Gallows Hill Road. It appears some spots may not have been re-graded to original conditions and hydrology. 10/13/06.</p> <p>-The matted crossings have been removed from wetlands in the Bethel Reservoir ROW. Bare soil remains where the mats were located 10/13/06.</p> <p>- All crossings were removed within the Chestnut Ridge Section. 10/13/06. The existing stream culvert appears to be in original condition. This area will no longer</p>	<p>Silt fence will be removed when vegetation has established (or replaced with haybales in appropriate locations). 9/29-10/13/06.</p> <p>- Monitor the hydrology within the crossing to be sure this area continues to function properly. 10/13/06.</p> <p>- Continue to monitor until stabilized. Silt fence should be replaced with haybales in appropriate locations. Wetland vegetation should return by the next growing season. 10/13/06.</p> <p>-NA</p>	<p>-N/A</p> <p>-The crossing was removed.</p> <p>- Mats were removed.</p> <p>-Restoration is complete in this section and it will no longer be inspected.</p>

Areas of Inspection	Observation	Recommended Action	Corrective Action
<b>Norwalk</b>	<p>being inspected.</p> <p>-Mats remain at wetland crossings. All disturbed areas have been restored with seed and hay mulch. 10/13/06.</p> <p>-The disturbed slopes adjacent to structure #11064 have been seeded and mulched but the stream channel is not protected by erosion controls. 10/13/06.</p>	<p>- Continue to monitor until stabilized. Silt fence should be replaced with haybales in appropriate locations. Remove mats from wetland crossings when restoration activities are nearing completion 10/13/06.</p> <p>-Monitor for grass growth and install hay bales along both sides of the stream to prevent sediment from entering the stream channel. 10/13/06.</p>	<p>-Restoration efforts noted.</p> <p>-Needs attention</p>
State species of concern, threatened and endangered species	<p>- The composite portion of overhead work includes state-listed turtle habitat area. 9/15-10/13/06.</p> <p>-An Eastern box turtle was noted crossing the access road near structure #7 in the Chestnut Ridge Rd section on 6/14/06.</p>	<p>- Continue daily walkthroughs prior to equipment movement in this area. 4/6-10/13/06.</p> <p>- Perform walkthroughs in this new section as well. 6/14-10/13/06.</p>	<p>-N/A at this time</p> <p>-N/A</p>
<p>Vegetative clearing limits (including trees to save or danger trees noted)</p> <p><b>Composite</b></p> <p><b>345kV H-Frame</b></p>	<p>- Adjacent homeowners near Gallows Hill mentioned damage to mountain laurel and other shrubs. 3/2-10/13/06.</p> <p>- A significant amount of chips were blown off the ROW into the upland and also along the wetland edge at the 3<sup>rd</sup> structure off Gallows Hill. These areas are off property. 2/22-10/13/06.</p> <p>- Widespread restoration efforts were noted. Many recently restored areas have good grass cover.</p>	<p>-Replace shrubs where approved during these restoration efforts. 10/13/06.</p> <p>- In order to comply with the D&amp;M plan the chips should be spread on the ROW to a depth of 3". 2/22-10/13/06. However, the crossing has since been removed and equipment should not pass. 10/13/06.</p> <p>- Remove excess wood before mats are removed from wetland crossings.</p>	<p>-Needs attention when feasible</p> <p>-Needs similar attention as at Archers Lane. However, equipment can no longer access this area.</p> <p>-Restoration activities noted.</p>

Areas of Inspection	Observation	Recommended Action	Corrective Action
<b>Norwalk Section</b>	Log piles remain within the ROW from previous clearing efforts. 9/29-10/13/06.  - Widespread restoration is noted in several sections. Other remaining sections still need significant efforts. 10/13/06	9/29-10/13/06.  -Continue to restore remaining areas. 10/13/06	-Restoration activities noted.
Dewatering	- No obvious dewatering efforts were noted and should no longer be necessary. 10/13/06.	- Release water to the ground only in well vegetated areas if it will not reach any resource areas. 3/9-10/13/06.	-N/A at this time
Blasting	-No blasting has been necessary at this time on the ROW. 10/13/06.	-None at this time. 10/13/06.	-N/A
Spills and Material Storage	-No spills or drips were noted along the route this week. 10/13/06.  - In general, equipment should be parked over 100 ft from resource areas or as far as feasible. 10/13/06	- Continue to keep all vehicles maintained well (i.e. no apparent fluid leaks) - Keep adequately size fuel kits for worst-case scenarios. - Report spills immediately, even if they are being controlled. - Avoid refueling in the areas near the wetlands.	-NA
Additional Observations			

**Next likely scheduled inspection:**

Wednesday October 18, 2006

I have personally examined and am familiar with the information submitted in this document and all attachments and 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, and I understand that any false statements made in this document or its attachments may be punishable as a criminal offense in accordance with Section 22a-6 under Section 53a-157 of the Connecticut General Statutes.

**Inspector's Signature:** Diana Walden, Lee Curtis, BSC Group



**(Composite Section):** Photo on the left shows a hay bale check dam placed along the access road slope near the restored wetland crossing at Gallows Hill. Photo on the right shows a view of the restored crossing. The stone and fabric were removed, but it appears this area may not have been restored to original grade in all spots. Continue to monitor this area. 10/13/06.



**(345kV H-Frame):** Both photos show the views within the ROW in the Bethel Reservoir section. Photo on the left shows a view of the first wetland crossing where mats have been removed. Photo on the right shows pieces of mat and lumber stored within the ROW. 10/13/06.



Photo on the left shows the restored area at structure #10. Stockpiles were removed and disturbed areas were seeded and mulched with hay. Photo on the right shows the disturbed area at structure #9, which was graded to original conditions, seeded and mulched. 10/13/06



Both photos show the restored access road and stream crossing in the ROW off Chestnut Ridge Road. Photo on the left shows the entire access road graded to original conditions with seed and mulch applied. Mats were removed from the stream crossing here. Photo on the right shows a close up of the restoration work near the stream crossing. 10/13/06.



**Photo on the left shows a portion of the potentially unstable slope near the wetland at structure #24 off John Todd Way. Photo on the right shows disturbed areas have re-vegetated within the ROW here. 10/13/06**



**Photo on the left shows a view of the erosion continuing in the access road near structure #31 off Costa Lane. Photo on the right shows the access road graded to original conditions. Crews were applying seed and mulch to remaining disturbed areas at the time of inspection. 10/13/06.**



**(Norwalk Section):** Photo on the left shows grass growth in a restored area off Kent Road south. All disturbed areas are re-vegetating here. Photo on the right shows washouts continuing along the access road. Stone remains in the wetland in many areas. 10/13/06.



**Both photos show views of the restored area at structure #11064 off North Seir Hill Road. Photo on the left shows seed and hay mulch were applied to the access road and disturbed slopes. Photo on the right shows a close up of the stream channel at the base of the slope, which is not protected by erosion controls yet. Erosion control mats may be necessary here on the slopes.**



**Photo on the left shows disturbed areas have re-vegetated well in the ROW off Perry Ave (south). Photo on the right shows seed and hay mulch were applied at structure #11079 off Broad Street (north). 10/13/06.**



**Both photos show views of the washout occurring on the slope at structure #11080 near Norwalk substation. Photo on the left shows a gully forming along the slope due to storm water runoff from the paved bike path. Photo on the right shows sediment beginning to overwhelm erosion controls here. 10/13/06.**