

**NEW ENGLAND ENVIRONMENTAL SERVICES**  
*Wetland Consulting Specialists Since 1983*

Wetland Report  
121 Upper Pattagansett Road  
East Lyme, Connecticut

The proposal is to convert a portion of a wetland biofilter in order to renovate stormwater. The wetland biofilter is proposed in an isolated wetland along Pattagansett Road. The wetland is lightly wooded. The tree species in the wetland is Red Maple. The shrub species include Japanese Barberry, Mountain Laurel, Ironwood, and Witch Hazel. The herbaceous plant species include New York Fern, Sensitive Fern, Broom Sedge, White Wood Aster, and Green Briar. The vine species include Poison Ivy and Virginia Creeper.

The soil type in the wetland is Leicester. Leicester is a poorly drained soil formed in glacial outwash. The topsoil and subsoil has a fine sandy loam texture. The substratum (unweathered glacial till) has a gravelly sandy loam texture.

The wetland disturbance area for the construction of the wetland biofilter is 2,900 ft<sup>2</sup>. The wetland biofilter area is 3,800 ft<sup>2</sup>. The wetland biofilter is designed to retain one inch of water after a storm event.

**Wetland Biofilter Details**

1. Eight inches of topsoil will be placed in the wetland biofilter to provide a suitable soil medium for the establishment of herbaceous wetland plants. The topsoil will be placed loose and not compacted. The topsoil will have a texture of very fine sandy loam, fine sandy loam, or silt loam.
2. The following native herbaceous wetland plants will be installed in the wetland biofilter to improve water quality:

<u>Scientific Name</u>	<u>Common Name</u>	<u>Quantity</u>
<i>Carex lurida</i>	Lurid Sedge	200
<i>Carex stricta</i>	Tussock Sedge	150
<i>Juncus effusus</i>	Soft Rush	200
<i>Scirpus cyperinus</i>	Fringed Sedge	100
<i>Carex lupulina</i>	Hop Sedge	100
<i>Carex stipata</i>	Awl-fruited Sedge	150

*The plants will be 2" plugs.*

3. The following shrubs will be installed on the side slopes of the wetland biofilter:

<u>Scientific Name</u>	<u>Common Name</u>	<u>Quantity</u>	<u>Height</u>
<i>Amelanchier canadensis</i>	Shadblow	20	4'
<i>Cornus racemosa</i>	Gray Dogwood	10	4'
<i>Cornus sericea</i>	Red-osier Dogwood	15	4'
<i>Vaccinium corymbosum</i>	Highbush Blueberry	14	4'

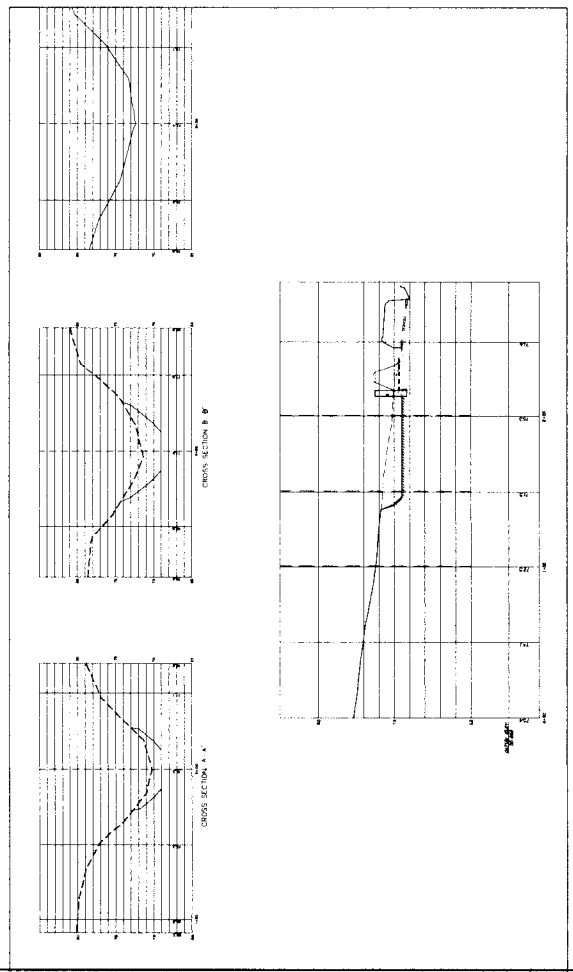
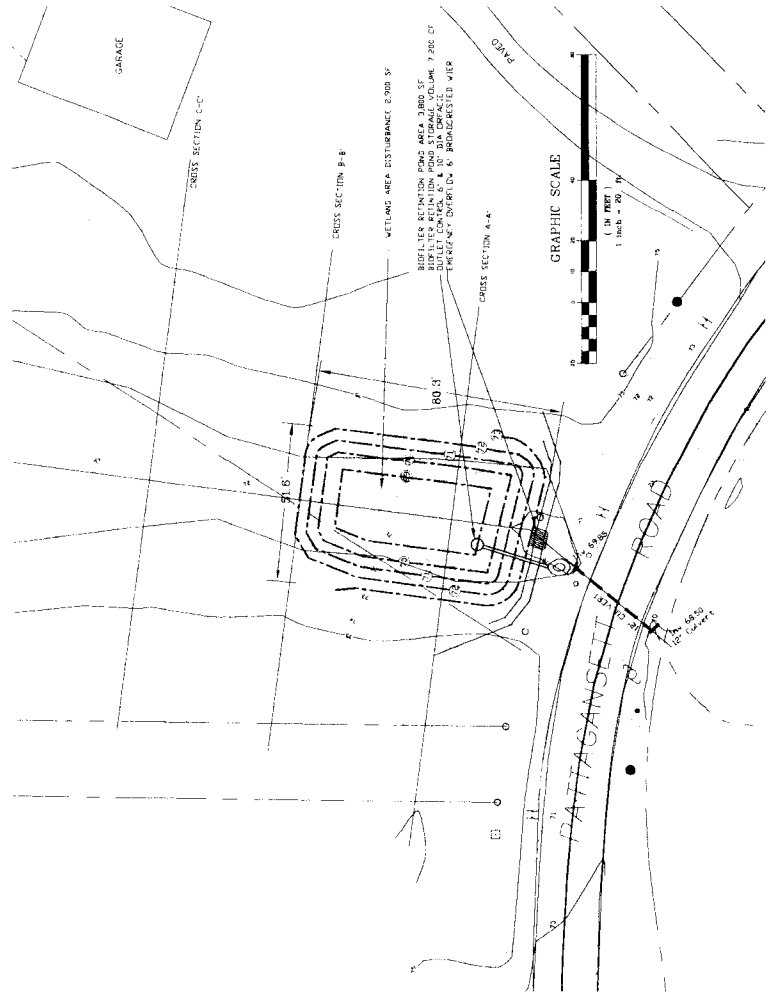
4. The location of the herbaceous wetland plants in the wetland biofilter and shrubs will be determined by Richard Snarski, Wetland Scientist, when the plants are installed.
5. The side slopes of the wetland biofilter will be seeded with "New England Conservation/Wildlife Mix", prepared by New England Wetland Plants, Inc., phone: 413-548-8000.
6. The wetland biofilter will be monitored after one full growing season. The monitoring report will address the success of the plantings. Recommendations will be provided for replanting if an 85 percent survival rate is not achieved. Photography will be included in the monitoring report. The monitoring report will be sent to the East Lyme Wetland Commission in September.

Prepared by:



R. Richard Snarski  
Registered Professional Soil Scientist  
Professional Wetlands Scientist #1391  
Consulting Botanist

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**May Engineering LLC**  
 Civil Engineering and Site Planning  
 1297 RT 163, Cheshire, CT 06370  
 860.884.9671

**BIOFILTER RETENTION POND**

SCALE: 1"=20' & as noted  
 DATE: 05 AUG 2021  
 JOB NUMBER: SHEET  
 1 of 1

**For Property**  
 Nottingham Hills  
 Subdivision Phase V  
 121 Upper Pattagansett Road  
 EAST LYME, CT 06333

DESCRIPTION: BIOFILTER DESIGN, OUTLET CONTROL & CROSS SECTION