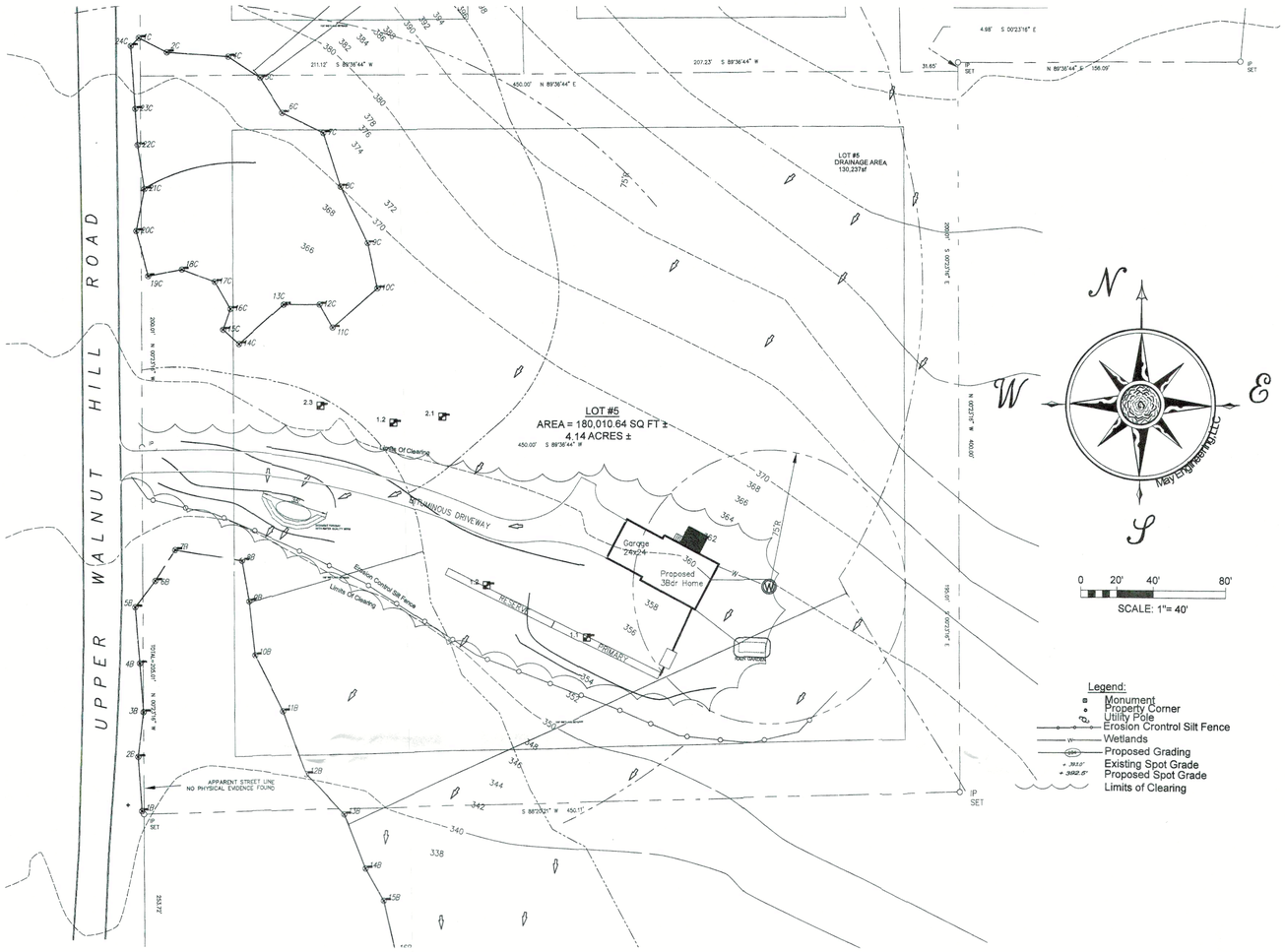
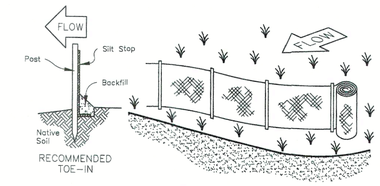




PREASSEMBLED SILT FENCE

SOIL EROSION & SEDIMENTATION CONTROL NOTES

E & S plan is based on Connecticut Guidelines for Soil Erosion and Sediment Control'

Install Erosion Control silt fence as depicted on this plan
All disturbed areas shall have erosion control installed down gradient to stop soil migration. After each rainfall event erosion control shall be inspected and repairs to insure silt fence integrity to stop silt migration off site.

Unnecessary clearing of any vegetation or ground cover will be avoided. Any disturbed area left unvegetated will be covered with a hay or straw mulch to minimize erosion material.

Following final grading, all disturbed areas will be covered with 6" loam and seeded as described below. If final grading occurs past October 15, disturbed areas will be seeded with winter rye- grass and mulched with hay or straw at a rate of 1.5 - 2 tons per acre.

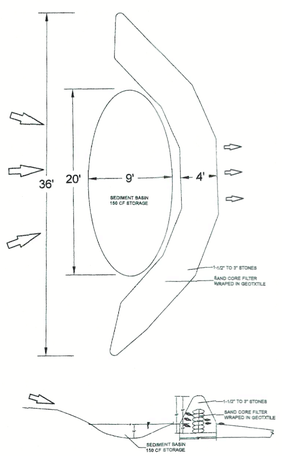
Seed Mixture Seeding Rate	% by Wt. Lbs./Ac.
Red Fescue	75-100
Colonial Bentgrass-Exeter	5
Perennial Ryegrass	5
Birdsfoot Trefoil-Empire	15

Any proposed vegetation which has not survived one growing season will be replaced.

All suitable material excavated for roadway construction to be used elsewhere on site. Unsuitable material will be removed from the site and deposited in a suitable location.

All construction activity to occur between March 15 and October 15 to avoid adverse impacts on down stream flows.

Less than (1/2) of an acre of disturbance is proposed for this site plan.



SEDIMENT FOREBAY
WITH WATER QUALITY BERM

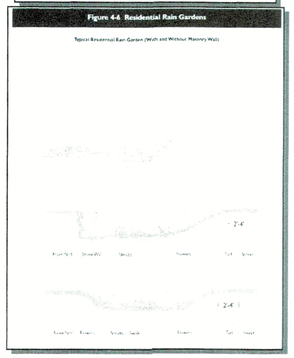
Rain Gardens

Water Quality Volume rainfall event 1" WQV rainfall

where:

P = design precipitation, inches (1" for water quality storm)
A = drainage area (acres) roof area 2,400 sf >> 0.055 ac
V = runoff volume CF
$V = (1"/12)/ft \times 2400\ sf = 200\ CF$

Rain Garden size 10-foot wide X 20 -foot long x 1-foot deep= 200CF
Actual roof area is 1,480 sf >> 123 CF Required (200 CF provided)



SITE DESCRIPTION:

The site is a 12.39 acre parcel located on the east side of Upper Walnut Hill Rd. and the south side of Holmes Rd in the Town of East Lyme, CT. The proposed site development is for 5 residential subdivision lots. The parcel was previously part of the Hathaway Farm property, and is an undeveloped wooded parcel with mature deciduous trees and dense understory of brush, with slopes ranging from 3% to10%. There are wetlands and water courses located on this parcel. The soil type is primarily a hydraulic soil group B consisting of Canton-Carlton fine sandy loams and Woodbridge fine sandy loam The soil types were evaluated for their permeability and have a moderate infiltration rate throughout the site.
The existing stormwater drainage flow paths for proposed lots #1 & 2 flow across the parcels in a northeasterly direction to the existing drainage path along Holmes Rd. and then into the wetlands south side of Holmes Rd. Stormwater drainage flows for proposed lots #3 & 4 flow across the parcel in a northwestern direction into the existing drainage paths along Holmes Rd. and Upper Walnut Hill Rd. Stormwater drainage flows for proposed lot #5 flows south west across the parcel into wetland on the east side of Upper Walnut hill Rd. The stormwater then flows onto the surrounding adjacent property as shallow concentrated flow dispersing into the woods or wetland areas. No evidence of channelized flows or ponding is observed.
The proposed 5 residential subdivision lots will have less than ½ ac of disturbance for each lot. Water quality volumes WQV will be implemented by the use of rain gardens to capture the roof runoff and will reduce the Water Quality Flow (WQF). Each parcel will have paved driveways and grassed lawns. Additional water quality measures are proposed to slow down stormwater velocities and reduce sediment loads prior to stormwater entering the wetlands. A sediment forebay along with a water quality berm is proposed to intercept stormwater flows from Lot #1 & #2 and another is proposed to intercept flows from Lot #5. The proposed sediment forebay along and water quality berm are designed using the Connecticut Stormwater Quality Manual. Each Sediment forebay is designed with a shallow basin, with 150 cf storage that will slow stormwater to settle out sediments. The water quality berm is a mound of 1-1/2" to 3" stones with geotextile & sand core filter, that is designed to reduce stormwater velocities and improve water quality.
Stormwater will be managed during construction with a soil and erosion control plan using best management practices (BMP'si) from the ConnDOT Drainage Manual and the Connecticut Stormwater Quality Manual. Stormwater will also be managed by treatment controls for stormwater discharges. These will include rain gardens for all roof discharges to mitigate water quality volumes (WQV) for the 1" rain fall. Designed devices such as sediment forebay and water quality berms designed to intercept stormwater, reduce sediment and slow velocities before intering into the wetlands.

STATE OF CONNECTICUT
TIMOTHY A. MAY
No. 23200
LICENSED
PROFESSIONAL ENGINEER
4/28/23

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Civil Engineering and Site Planning
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860 884-9671

Applicant:
Nehantic Highlands Subdivision
Kristen Clarke P.E. & Shelly Harney

Owner:
Port Side Holdings Inc. &
English Harbour Capital Partners LLC
Tenants in Common
207 Clarendon Ave
Southport, NC 28461

HOLMES ROAD
EAST LYME, CT

Erosion Control and Grading Plan
Lot #5

SCALE: 1"=40'
DATE: 28 April 2023

JOB NUMBER	SHEET
21040	8 of 10