

CONNECTICUT RAIN GARDENS
SUGGESTED PLANT LIST

PERENNIALS

- A. Swamp Milkweed (*Asclepias incarnata*)
B. New York aster (*Aster novae-belgii*)
C. Astilbe (*Astilbe* spp.)
D. Tickseed sunflower (*Bidens aristosa*)
E. Joe Pye weed (*Eupatorium fistulosum*)
F. Rose mallow (*Hibiscus moscheutos*)
G. Iris (*Iris versicolor*)
H. Cardinal flower (*Loebelia cardinalis*)

GRASSES

- p. Creeping bentgrass (*Agrostis stolonifera*)
Q. Meadow foxtail (*Alopecurus pratensis*)
R. Blue joint (*Calamagrostis Canadensis*)
S. Tussock sedge (*Carex stricta*)

SHRUBS

1. Red chokeberry (*Aronia arbutifolia*)
2. Buttonbush (*Cephalanthus occidentalis*)
3. Summersweet clethra (*Clethra alnifolia*)
4. Silky dogwood (*Cornus amomum*)
5. Gray dogwood (*Cornus racemosa*)
6. Red osier dogwood (*Cornus sericea*)
7. Inkberry (*Ilex glabra*)
8. Winterberry (*Ilex verticillata*)
9. Spicebush (*Lindera aestivale benzoin*)

- I. Spiked gay feather (*Liatris spicata*)
J. Sensitive fern (*Onclea sensibilis*)
K. Cinnamon fern (*Osmunda cinnamomea*)
L. Royal fern (*Osmunda regalis*)
M. Marsh fern (*Thelypteris palustris*)
N. Spiderwort (*Tradescantia virginiana*)
O. Black-Eyed Susan (*Rudbeckia birta*)

- T. Tufted hair grass (*Deschampsia caespitosa*)
U. Switch grass (*Panicum virgatum*)
V. Ribbon grass (*Phalaris arundinacea*)

10. Pinxterbloom azalea (*Rhododendron periclymenoides*)
11. Swamp azalea (*Rhododendron viscosum*)
12. Elderberry (*Sambucus Candensis*)
13. Lowbush blueberry (*Vaccinium angustifolium*)
14. Highbush blueberry (*Vaccinium corymbosum*)
15. Withered (*Viburnum cassinoides*)
16. Arrowwood (*Viburnum dentatum*)
17. Nannyberry (*Viburnum lentago*)
18. Black haw (*Viburnum prunifolium*)
19. American cranberry (*Viburnum trilobum*)

One or more trees can be added to a rain garden, depending upon its size. Caution should be used though, as a tree can quickly take over the garden and create a different look. Remember, most trees will grow very large unless they are purposely kept small. If a tree is desired, the following types are recommended:

TREES

20. River birch (*Betula nigra*)
21. Red maple (*Acer rubrum*)
22. Sweetgum (*Liquidambar styraciflua*)
23. Swamp white oak (*Quercus bicolor*)
24. Pin oak (*Quercus palustris*)

25. Larch (*larix laricina*)
26. Cottonwood (*Populus deltoides*)
27. Shadblow (*Amelanchier* spp.)
28. Green ash (*Fraxinus pennsylvanica*)

RAIN GARDEN MAINTENANCE PROCEDURES

YEAR 1

Watering

- For the first 3 weeks after planting, water rain gardens once per week. Watering is not necessary if $\frac{1}{2}$ " of rain or more falls during each of the first 3 weeks.
- Water during the draughty periods of summer if needed.

Weeding

- For the first 3 weeks plants are weeds and which are rain garden plants.
- Remove weeds carefully to protect the roots of the rain garden plants. Pull from the base of the weed.
- Check rain gardens monthly to determine the status of weed growth. Mulch gardens to reduce weed production.

YEAR 2

General Maintenance

- In the spring when new growth begins, cut off dead plant material. Keep stems and seed heads on through the winter for wildlife food.
- Remove any accumulated sediment and/or debris. Add a layer of new mulch.

Watering

- Water rain gardens only in times of drought.

Weeding

- Weed as needed and inspect for weeds on a monthly basis. As rain gardens mature, roots will fill voids within the rain gardens and significantly reduce the need for weeding.

BEYOND YEAR 2

General Maintenance

- In the spring when new growth begins, cut off dead plant material.
- Remove any accumulated sediment and/or debris. Add a layer of new mulch.
- Periodically remove accumulated litter that may collect.

RAIN GARDEN SIZING

AREA OF IMPERVIOUS SURFACES*

- IMPERVIOUS DRIVEWAY (SHEET FLOW) = 2,385 SQ. FT.
- BUILDING ROOF AREA = 1,795 SQ. FT.
- TOTAL IMPERVIOUS AREA = 4,180 SQ. FT.

RAIN GARDEN STORAGE CAPACITY

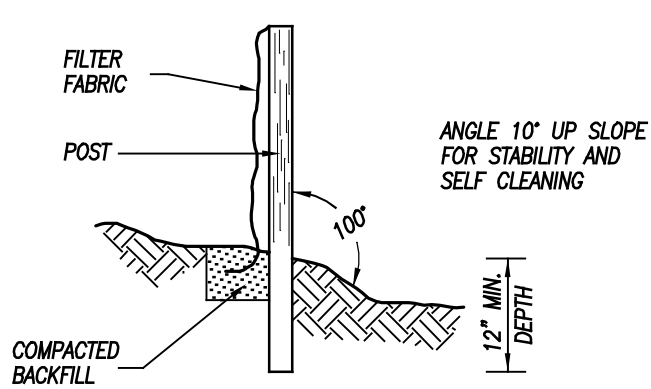
- REQUIRED 4,180 SQ. FT. (IMPERVIOUS AREA) $\times$ $1 \frac{1}{12}$ = 348 CU. FT.
- PROVIDED (TOTAL) = 850 SQ. FT.
- RAIN GARDENS RAINFALL STORAGE CAPACITY 642 CU. FT. (STORAGE VOLUME) FOR 1" STORM EVENT

USE 12" DIAMETER SILT SOCK FILLED WITH WOOD CHIPS OR COMPOST. FIT BEGINNING OF SOCK OVER END OF SOCK OVERLAPPING BY 1-2 FEET. USE FILTREXX® SILT SOCK™ OR EQUAL. STAKE IN PLACE AT 10' INTERVALS.

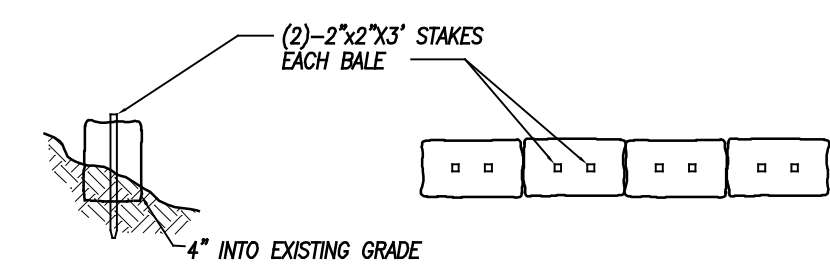
SILT SOCK LOCATED AS SHOWN ON SITE DEVELOPMENT PLAN

SILT SOCK APPLICATION
NOT TO SCALE

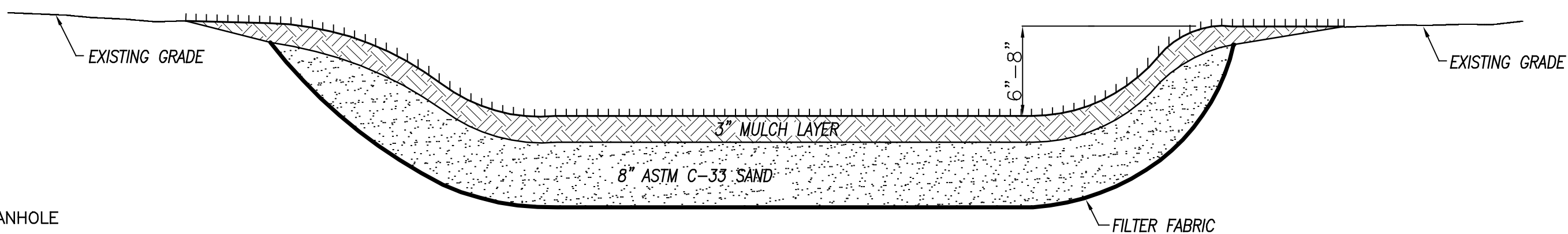
NOTE: REMOVE SEDIMENT FROM UPHILL SIDE OF SOCK WHEN SEDIMENT HAS REACHED HALF THE EFFECTIVE HEIGHT OF THE SOCK



SILT FENCE
NOT TO SCALE



HAYBALE BARRIER
NOT TO SCALE



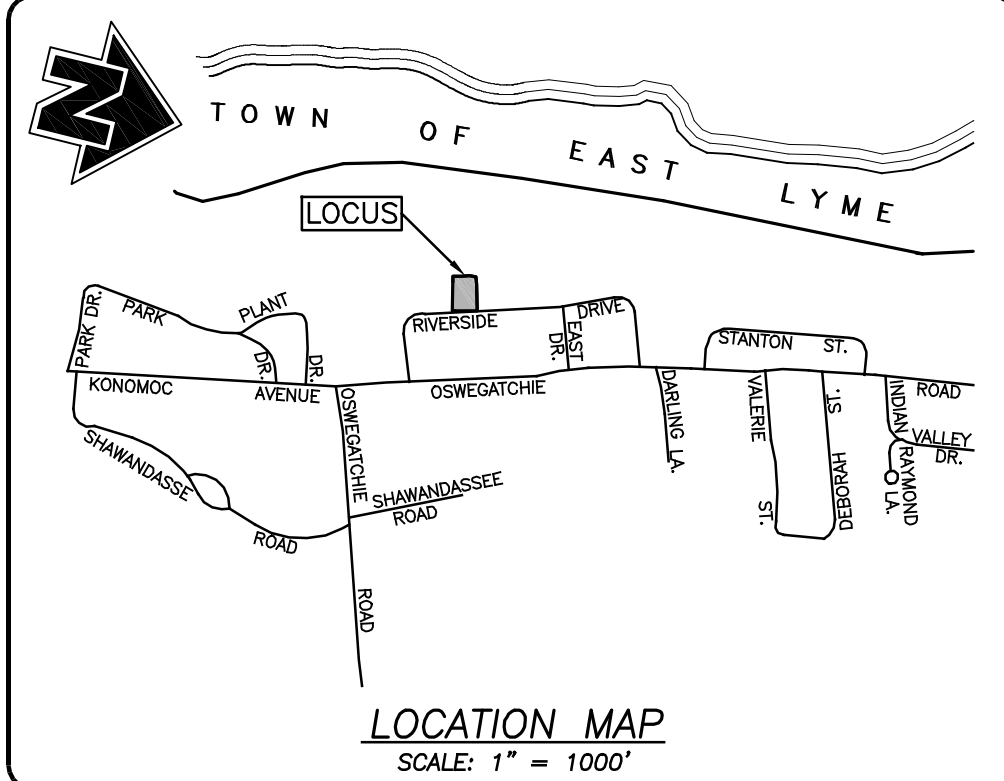
RAIN GARDEN SECTION
NOT TO SCALE

LEGEND

- IRON PIN FOUND
- MONUMENT FOUND
- ⊗ UTILITY POLE
- SMH
- 100' --- EXISTING CONTOURS
- 100' --- PROPOSED CONTOURS
- B --- BUILDING SETBACK LINE
- S --- SANITARY SEWER LINE

TABLE OF ZONING REQUIREMENTS		
ZONE = R-20W		
	REQUIRED	PROVIDED
Lot Area	20,000 S.F.	22,280 S.F.
Front Yard Setback	50'	68.8'
Side Yard Setback	20'	26.7'
Rear Yard Setback	50'	60'
Building Height	35' Max.	*32'-6"
Building Coverage	25% Max.	7.9%

*Walk out to roof ridge



NOTES:

- This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Sections 20-300b-1 through 20-300b-20 and the "Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996, Amended October 26, 2018;

— This survey conforms to a Class "A-2" horizontal accuracy.

— Field surveyed topographic features conform to a Class "T-2", "V-2" vertical accuracy.

— LIDAR topographic features conform to a Class "T-D" vertical accuracy.

— Survey Type: Improvement Location Survey.

— Boundary Determination Category: Dependent Resurvey

- Lot area = 0.511 acres.

- Zone = R-20W.

- Owner of record: James M. O'Leary.
122 Oswegatchie Road, Waterford, CT 06385
See Volume 1282, Page 20212

- Parcel is shown as Lot #6605, on Assessors Map #114.

- Parcel lies within Flood Hazard Zone "AE" (areas of minimal flooding) as shown on FIRM Map # 09011C Panel 0481J Effective Date: 08/05/2013.

- Elevations shown are based on North American Vertical Datum of 1988 (NAVD 88). Contours shown are taken from Connecticut statewide LIDAR and supplemented with actual field survey. Contour interval = 2'.

- North orientation, bearings and coordinate values shown are based on North American Datum of 1983 (NAD 83) and are taken from GPS observations using the "Superior" statewide GPS network and RTK correction system.

MAP REFERENCE:

- "Lot Layout Subdivision of - Emelia Mitchell Estate - Oswegatchie Road - Waterford, Connecticut - Scale: 1" = 40' - Date: June 1980 - Prepared by: Dicesare, Bentley, Welling Engineers, Inc". On file in the Waterford Land Records as Map #1121.

DATE	DESCRIPTION
06/18/2023	PER ADDITIONAL TOWN REVIEW
04/12/2023	PER TOWN REVIEW & ARCHITECT EDITS
DATE	DESCRIPTION
REVISIONS	

IMPROVEMENT LOCATION SURVEY
SITE DEVELOPEMTN PLAN

PREPARED FOR

JAMES M. O'LEARY

31 RIVERSIDE DRIVE
WATERFORD, CONNECTICUT

Killingly Engineering Associates
Civil Engineering & Surveying

114 Westcott Road
P.O. Box 421
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www.killinglyengineering.com

DATE: 11/14/2022	DRAWN: RGS
SCALE: 1" = 20'	DESIGN: NET
SHEET: 1 OF 1	CHK BY: GG
DWG. No: CLIENT FILE	JOB No: 22111

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON,

GREG A. GLAUDE, L.S. LIC. NO. 70191 DATE

NO CERTIFICATION IS EXPRESSED OR IMPLIED UNLESS THIS MAP BEARS THE ORIGINAL SEAL AND SIGNATURE OF THE LAND SURVEYOR.

NORMAND E. THIBEAULT, JR., P.E.
LIC #PEN 0022834 DATE