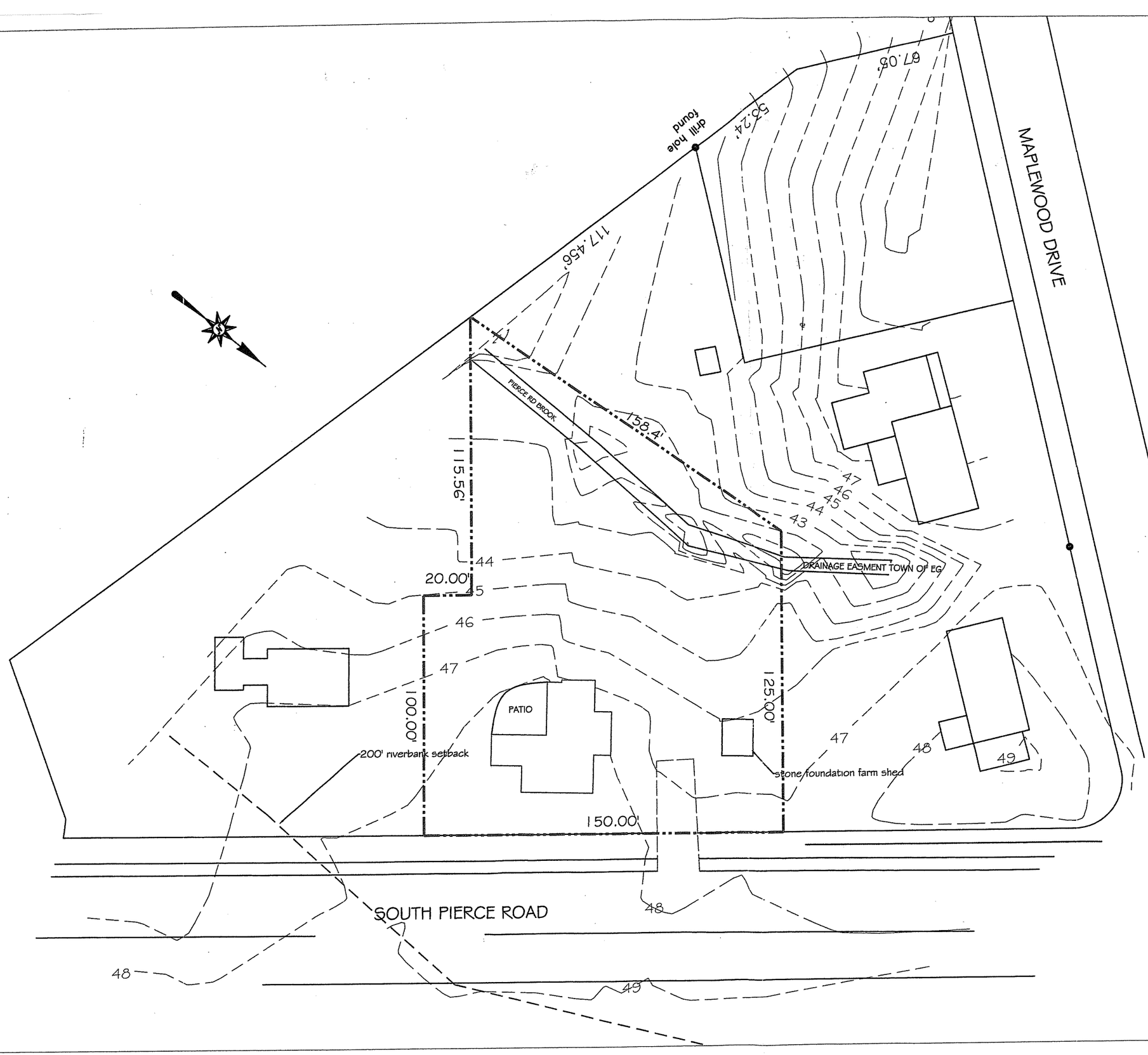

DEPARTMENT OF ENVIRONMENTAL MANAGEMEN
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 2 4 2020 FILE # 20-0252
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Kathy C Freeman

RICHARD L. PASTORE
STATE OF RHODE ISLAND
No. 5813
REGISTERED
PROFESSIONAL ENGINEER

KEY
Silt Fence/LOD
Driveway
Cont Exst —xx—
Cont Prop —(XX)—
PL

K&D Bruce
98 S Pierce Rdl
East Greenwich, RI
Plat/Lot: 054/011/17

REVISIONS

EXISTING CONDITIONS PRELIMINARY DETERMINATION 98 SOUTH PIERCE RD EAST GREENWICH, RI

RP Engineering, Inc.
1215uffolk Drive
North Kingstown, RI 02852
885-7255

Scale - 1' = 40'
Sheet - 1
07/24/19

PIERCE RD BROOK

158.4'

115.56'

41

42

41

43

41

42

43

44

45

46

47

48

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Nancy C Freeman

4" PVC downspout leaders
S= 1/8" /LF to rain garden

DRAINAGE EASEMENT TOWN OF EG

20.0'

15

60.2'

50'

LOD 1

LOD 2

125.00'

46

47

rain garden

20'

5'

15'

10'

10'

15'

984 sf
Addition

24'

farm
shed

100.00'

Exst 2 story
residence

30'

New pervious
driveway & construction
pad entrance

25'

200' riverbank setback

150.0'

RICHARD L. PASTORE
No. 5815
REGISTERED
PROFESSIONAL ENGINEER

KEY
Silt Fence/LOD
Driveway
Cont Exst
Cont Prop
PL

K&D Bruce
98 S Pierce Rdl
East Greenwich, RI

Plat/Lot: 054/011/17

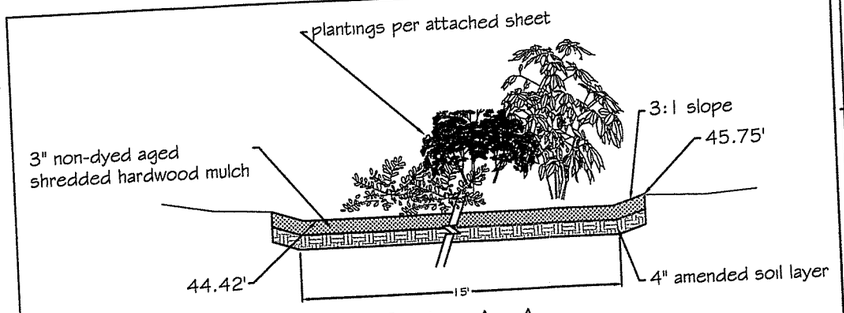
REVISIONS

PROPOSED CONDITIONS
PRELIMINARY DETERMINATION
98 SOUTH PIERCE RD
EAST GREENWICH, RI

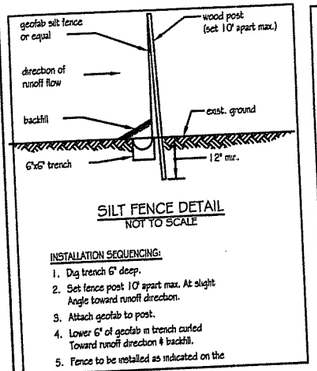
RP Engineenng, Inc.
1215uffolk Drive
North Kingstown, RI 02852
885-7255

Scale - 1" = ~~50'~~ 20'
Sheet - 2

07/24/19

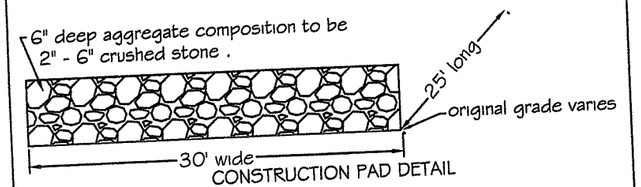


Section A---A
NTS

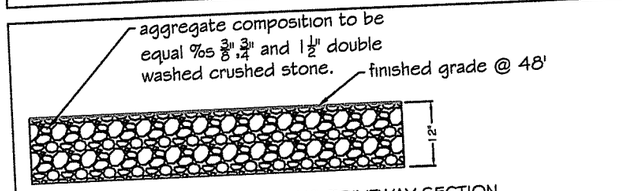


SILT FENCE DETAIL
NOT TO SCALE

INSTALLATION SEQUENCING:
1. Dig trench 6" deep.
2. Set fence post 10' apart max. At slight Angle toward runoff direction.
3. Attach geotab to post.
4. Lower 6" of geotab in trench curled Toward runoff direction & backfill.
5. Fence to be installed as indicated on the



CONSTRUCTION PAD DETAIL
NTS



TYPICAL PERVIOUS DRIVEWAY SECTION
NTS

Drainage Calculations:
Impervious (roof + soffits)= 984sf (conservatively)
WQV = 1.2"/12 x 984sf = 99cf
Rain garden area = 5x15 = 75sf
Depth reqrd = 99cf/75sf = 1.32'=16"

O& M Plan
1.Rain gardens shall be inspected following at least the first two precipitation events of at least 1.0" to ensure that the system is functioning properly. Thereafter, it shall be monitored and maintained to insure proper functioning, plant growth and survival. Plants shall be replaced on an as-needed basis during the growing season.
2. Silt/sediment shall be removed from the rain garden when the accumulation exceeds one inch or when water ponds on the surface for more than 48 hours. The top few inches of material shall be removed and replaced with fresh soil mixture and mulch.
3. Pruning or replacement of woody vegetation shall occur when dead or dying vegetation is observed.
4. Soil erosion gullies shall be repaired when they occur.
5. Fertilizer or pesticides shall not be applied to plants within rain gardens.
Perennial plants and ground covers shall be replaced as necessary to maintain an adequate vegetated ground cover. Annual plants may also be used to maintain ground cover.

SEDIMENTATION CONTROL PROGRAM:
1. Extreme care shall be exercised so as to prevent any unsuitable material from entering downstream water-courses and stormwater systems.
2. During construction the contractor shall be responsible for maintaining drainage and runoff flow during precipitation.
3. Sedimentation control devices shall be inspected and maintained immediately after storm events.
4. Removed sediments shall not be placed in the path of existing, new or proposed watercourses or areas subject to storm flowage.
5. Additional haybales, sandbags or silt fence shall be located as warranted or as directed by the engineer.
6. Sediment traps shall be provided at all drainage structures during construction.
7. Erosion and sedimentation controls shall be installed at the site prior to the start of construction and be properly maintained until all areas are stabilized including:
   a) An installation of a continuous line of staked haybales or silt fence in all locations shown on the site plan and where otherwise necessary to prevent sediments from entering downstream water-courses and stormwater systems.
   b) All disturbed areas are to be permanently stabilized with approved ground cover prior to the completion of the project. Areas exposed for extended periods are to be completely covered with cast hay mulch.
   c) Catch basins will be protected with haybale filters throughout the construction period and until all disturbed areas are throughly stabilized.
   d) Outfalls are to be protected by haybale filters until disturbed areas are permanently stabilized with approved ground cover.
   e) All control measures will be maintained in effective condition throughout the construction period. The limits of all clearing, grading and disturbance shall be kept to a minimum within the proposed area of disturbance.
8. All areas outside of the limit of disturbance shall remain totally undisturbed.
9. As stated in Sec F.A.2/3 of the RI Soil Erosion and Sediment Control Handbook, sediment deposits should be removed when they reach one-half the height of the haybale and/or silt fence.

EROSION CONTROL AND SOIL STABILIZATION PROGRAM
1. Denuded slopes shall not be left exposed for excessive periods of time such as the inactive winter seasons.
2. Temporary treatments shall consist of a hay, straw, fiber mulch or protective cover such as a mat or fiber lining(burlap,jute,fiberglass netting, excelsior blankets). They shall be incorporated into the work as warranted or as ordered by the engineer.
3. Hay or straw applications should be in the amount of 2000 lbs/acre.
4. All haybales or temporary protection shall remain in place until an acceptable stand of grass or approved ground cover is established.
5. The topsoil shall have a sandy loam texture relatively free of subsoil material, stones, roots, lumps of soil, tree limbs, trash or construction debris and shall conform with RI Standard Spec M.20.01.
6. The seed mix shall be inoculated within 24 hrs before mixing and planting with appropriate inoculum for each variety.
7. The design mix utilized in all disturbed areas to be seeded shall be comprised of the following:

Type	% by weight
creeping red fescue	70
astoria bentgrass	5
birdfoot treefoil	15
perennial ryegrass	10

Application rate 100 lbs / acre, liming and fertilizing as required to compliment or upgrade exsting conditions.
8. The contractor must repair and /or reseed any areas that do not develop within the period of one year, and shall do so at no additional expense to the client.
9. The normal acceptable seasonal seeding dates are April 1 - October 15
10. Stabilization as described above shall be achieved within 15 days of final grading.
11. Stockpiles of top soil and earth shall not be located near waterways. They shall have side slopes no greater than 30% shall be seeded and or stabilized and shall be completely encircled with staked hay bales and or silt fence. see detail.
12. On both steep and long slopes, consideration should be given to "crimping" or "tracking" to tack down mulch applications.
13. Trees to be retained shall be fenced or roped off to protect them from construction equipment at the drip line.
14. All proposed plantings must be accomplished as early as possible upon completion of grading and construction
15. All proposed plantings must be maintained by the property owner to ensure survival.
16. All disturbed areas must be seeded or planted within the construction season
17. Temporary seeding must be done within one month after disturbance.
18. All disturbed areas must be permanently seeded or planted before November 1 if not they must be temporarily seeded.
19. The contractor should initiate appropriate vegetative practices on all disturbed areas as soon as possible but not more than 14 days after the construction activity in that area has temproarily or permanently ceased, unless the activity is to resume within 21 days.

NOTE:
1. Subject site lies in FEMA AE zone. (undefined BFE)
   Firm PANEL 4453970002B
2. Pervious driveway to be composed of equal parts 3/8" 3/4" & 1 1/2" washed crushed stone.
3. Delineate rain garden with painted stakes prior to start of construction.

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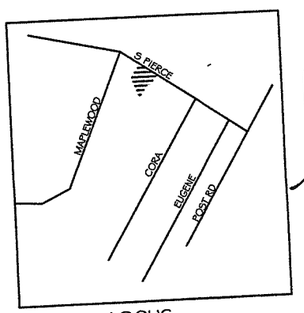

LOCUS

RICHARD L. PASTORE
No. 5815
REGISTERED
PROFESSIONAL ENGINEER

K&D Bruce
98 S Pierce Rdl
East Greenwich, RI

Plat/Lot: 054/011/

REVISIONS

DETAILS
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North Kingstown, RI 02852
885-7255

Scale - NTS
Sheet - 3

07/24/19

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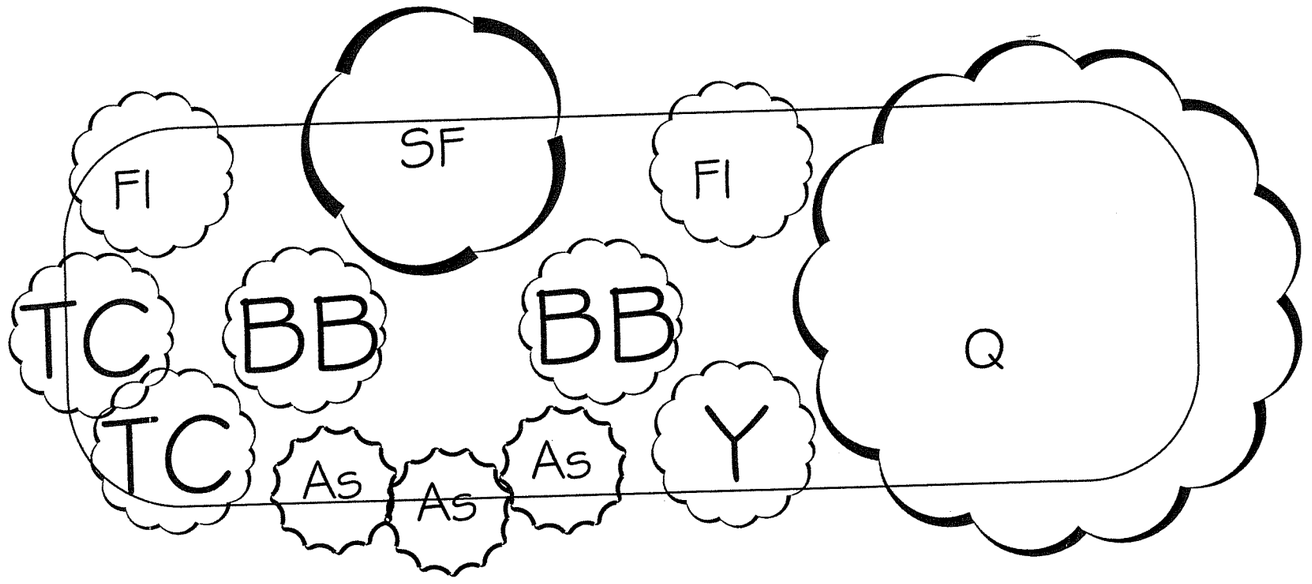

KEY

SF- Sweet Fern
(Comptonia Peregrina)

FI False Indigo
(Baptisia tinctoria)

As Astilbe
(Astilbe sp.)

Y Yarrow
(Achillea sp.)

BB Bearberry
(Arctostaphylos uva-ursi)

SP Sweet pepper bush
(Clethra alnifolia)

TC Threadleaf Coreopsis
(Coreopsis verticillata)

RAIN GARDEN PLANTING KEY

1" = 2'-0"

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East Greenwich, RI

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