

ABBREVIATIONS

- S.H.G.E. - SEASONAL HIGH GROUNDWATER ELEVATION
- T.O.F. - TOP OF FOUNDATION
- B.F.E. - BASEMENT FLOOR ELEV.
- S.A.S. - SOIL ABSORPTION SYSTEM
- T.O.W. - TOP OF WALL
- B.O.W. - BOTTOM OF WALL
- V.C. - VITRIFIED CLAY
- C.I. - CAST IRON
- U.P. - UTILITY POLE
- DWAY - DRIVEWAY

CUT & FILL ANALYSIS SUMMARY

CUT VOLUME = 10 CY
 FILL VOLUME = 140 CY
 NET VOLUME = 130 CY

SOIL DATA:

DATE: 03/16/2025
 PERFORMED BY: ROBERT S. REGO, SE

SOIL HORIZ.	TP-1 DEPTH (INCHES)	ELEV. (FEET)	SOIL HORIZ.	TP-2 DEPTH (INCHES)	ELEV. (FEET)
Ap	0	13.0	Ap	0	15.7
	12	12.0		12	14.7
Bw			Bw		
	30	10.5		30	13.2
C			C		
	46	9.2		46	11.9

MOTTLING - 30" (10.5)
 WEeping - 46" (9.2)
 STANDING WATER - 46" (9.2)
 E.S.H.G.E. = 30" (10.5)

MOTTLING - 46" (11.9)
 WEeping - NOT OBSERVED
 STANDING WATER - NOT OBSERVED
 E.S.H.G.E. = 46" (11.9)

NOTE: THE A LAYER & B LAYER IS TO BE REMOVED BELOW THE INFILTRATION AREA. UNSUITABLE SOIL TO BE REMOVED TO A DISTANCE OF 1' BEYOND THE LIMITS OF THE INFILTRATION AREA.

EXISTING TREE KEY

- INDICATES TYPE AND DBH OF TREE
- CP - COMMON PEAR
- BC - BLACK CHERRY

ALL OF THE TREES WITHIN THE TREE YARD AND 100' BUFFER ZONE ARE DEAD. IN ACCORDANCE WITH THE TOWN OF HINGHAM TREE PROTECTION AND PRESERVATION BY-LAW, THOSE TREES ARE NOT PROTECTED TREES AND WILL BE REMOVED. REFER TO LETTER FROM ARBORIST.

PLANT KEY					
SYMBOL	ID	BOTANICAL NAME	COMMON NAME	SIZE	AMOUNT
	AR	ACER RUBRUM "RED SUNSET"	RED SUNSET MAPLE	3" CAL.	1
	CF	CORNUS FLORIDA	EASTERN DOGWOOD	3" CAL.	1



SITE LOCATION
NOT TO SCALE

NOTES:

- PROPERTY LINE AND EXISTING CONDITIONS DETERMINED BY INSTRUMENT SURVEY CONDUCTED BY RIVER HAWK LAND SURVEY, LLC.
- THE PROPERTY IS REFERENCED BY THE TOWN OF HINGHAM ASSESSORS AS PARCEL: MAP 16, LOT 137.
- THE TITLE REFERENCE TO THE SUBJECT PROPERTY IS RECORDED IN THE PLYMOUTH COUNTY REGISTRY OF DEEDS IN: BOOK 4511, PAGE 129.
- THE SUBJECT PROPERTY IS LOCATED IN A ZONE RA, "RESIDENCE A" DISTRICT.
- THE SUBJECT PROPERTY IS LOCATED IN ZONE X AND AE, AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.) OF (PLYMOUTH COUNTY), MASSACHUSETTS, MAP NUMBER 25023C00191 DATED JULY 17, 2012.
- THE PROPERTY IS NOT LOCATED IN A PRIORITY HABITAT OR ESTIMATED HABITAT AS SHOWN ON THE MASSACHUSETTS NATURAL HERITAGE ATLAS 14TH EDITION EFFECTIVE DATE AUGUST 1, 2021.
- THE BORDERING VEGETATED WETLANDS (FLAGS A1 THROUGH A16) WERE DELINEATED BY ENVIRONMENTAL CONSULTING & RESTORATION (ECR) IN FEBRUARY 2025.
- THE BORDERING VEGETATED WETLAND IS DOMINATED WITH COMMON REED (PHRAGMITES AUSTRALIS), WHICH IS A NON-NATIVE INVASIVE PLANT. A PORTION OF THE COMMON REED WAS PRUNED BY THE PREVIOUS OWNER.
- THE BUFFER ZONE IS OVERGROWN WITH INVASIVE SPECIES (JAPANESE KNOTWEED - REYNOUTRIA JAPONICA). VEGETATION IN BUFFER ZONE WAS PRUNED TO GROUND BY PREVIOUS OWNER OF THE PROPERTY.
- VERTICAL DATUM IS NAVD88.
- THE LOCATIONS OF SUBSURFACE UTILITIES INCLUDING WATER, SEWER AND GAS ARE BASED ON FIELD LOCATIONS OF SURFICIAL FEATURES AND DIGSAFE MARKINGS, AND MUST BE FIELD VERIFIED.
- NO CERTIFICATION IS MADE AS TO THE EXISTENCE OR NON-EXISTENCE OF ANY SUBSURFACE STRUCTURE NOT VISIBLE AND EVIDENCED FROM THE GROUND SURFACE.

0-50' BUFFER COVERAGE SUMMARY TABLE

	EXISTING	PROPOSED	CHANGE
TOTAL IMPERVIOUS	1,049	695	-354
ROOF (SF)	774	695	-79
DRIVEWAY (SF)	264	0	-264
HARDSCAPE (SF)	11	0	-11
POROUS DEVELOPED (SF)	1,774	2,128	+354
TOTAL DEVELOPED (SF)	2,823	2,823	0

50-100' BUFFER COVERAGE SUMMARY TABLE

	EXISTING	PROPOSED	CHANGE
TOTAL IMPERVIOUS	1,619	1,743	+124
ROOF (SF)	548	1,571	+1,023
DRIVEWAY (SF)	919	0	-919
HARDSCAPE (SF)	152	172	+20
POROUS DEVELOPED (SF)	5,520	5,396	-124
TOTAL DEVELOPED (SF)	7,139	7,139	0

0-100' BUFFER COVERAGE SUMMARY TABLE

	EXISTING	PROPOSED	CHANGE
TOTAL IMPERVIOUS	2,668	2,438	-230
ROOF (SF)	1,322	2,266	+944
DRIVEWAY (SF)	1,183	0	-1,183
HARDSCAPE (SF)	163	172	+9
POROUS DEVELOPED (SF)	7,294	7,524	+230
TOTAL DEVELOPED (SF)	9,962	9,962	0

TOTAL SITE COVERAGE SUMMARY TABLE

	EXISTING	PROPOSED	CHANGE
TOTAL IMPERVIOUS	2,837	2,438	-399
ROOF (SF)	1,322	2,266	+944
DRIVEWAY (SF)	1,349	0	-1,349
HARDSCAPE (SF)	166	172	+6
POROUS DEVELOPED (SF)	8,086	8,485	+399
TOTAL DEVELOPED (SF)	10,923	10,923	0

OFF-STREET PARKING REQUIREMENTS:

ITEM:	REQ'D PER UNIT	NO. UNITS	MIN. REQ'D
DWELLING UNIT	2	1	2

TOTAL PARKING SPACES REQUIRED: 2
 TOTAL PARKING SPACES PROVIDED: 2 (+2 IN GARAGE)

REV	DATE	DESCRIPTION	BY	APP.
1	04/29/2025	CON. COM. COMMENTS	AWL	RSR

OWNER/APPLICANT

53 BEL AIR ROAD REALTY TRUST
 CHRIS MCKENNA, TRUSTEE
 4 OTIS AVENUE
 COHASSET, MA 02025

04/29/2025

RiverHawk ENVIRONMENTAL

CIVIL ENGINEERING & ENVIRONMENTAL CONSULTING
 511 WEST GROVE STREET, SUITE 301, MIDDLEBOROUGH, MA
 781-536-4639 www.riverhawkllc.com

DESIGNED BY: RSR
 CHECKED BY: RSR
 APPROVED BY: RSR

53 BEL AIR ROAD
 HINGHAM, MA

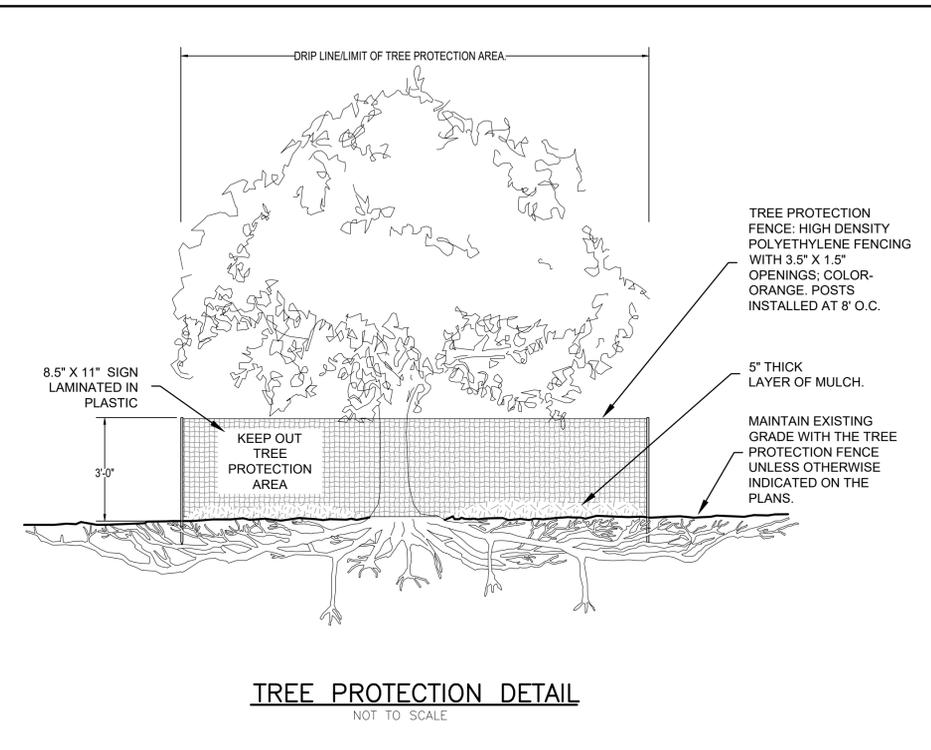
SITE PLAN

SCALE: AS SHOWN

PROJECT NO: 00337-07-01

DATE: MAR. 31, 2025

SP1.1



TREE PROTECTION DETAIL
NOT TO SCALE

BUFFER ZONE/WETLAND RESTORATION PLAN

SITE DESCRIPTION:
THE PROJECT SITE INCLUDES A BUFFER ZONE ADJACENT TO A BORDERING VEGETATED WETLAND (BW). THE BUFFER ZONE AND BW ARE CURRENTLY DEGRADED DUE TO EXTENSIVE COLONIZATION BY INVASIVE PLANT SPECIES, RESULTING IN REDUCED HABITAT QUALITY AND IMPAIRED ECOLOGICAL FUNCTION.

- GOALS & OBJECTIVES:**
1. REMOVE AND MANAGE INVASIVE PLANT SPECIES.
 2. RESTORE NATIVE PLANT COMMUNITY STRUCTURE AND BIODIVERSITY.
 3. STABILIZE SOILS AND MINIMIZE EROSION INTO THE ADJACENT BW.
 4. ENHANCE WILDLIFE HABITAT.
 5. RE-ESTABLISH ECOLOGICAL FUNCTION USING NATIVE SEED MIXES.

- SITE PREPARATION:**
1. INVASIVE SPECIES REMOVAL.
 - 1.1 TARGET SPECIES: (PHRAGMITES AUSTRALIS AND REYNOUTRIA JAPONICA)
 - 1.2 REMOVAL METHODS:
 - MANUAL REMOVAL – CUTTING, PULLING, OR DIGGING DURING DORMANT SEASON OR EARLY GROWING SEASON
 - HERBICIDE APPLICATION – SPOT TREATMENT USING WETLAND SAFE HERBICIDES (E.G. GLYPHOSATE BASED, APPROVED FOR AQUATIC USE)
 2. SOIL PREPARATION.
 - 2.1 LIGHT SCARIFICATION OR RAKING TO CREATE SEED TO SOIL CONTACT.
 - 2.2 REMOVE REMAINING PLANT DEBRIS AND INVASIVE SEEDBANKS WHERE FEASIBLE.

- SEED MIX & PLANTING:**
1. SEED MIX COMPOSITION (BUFFER ZONE):
USE A NEW ENGLAND EROSION CONTROL/RESTORATION, NATIVE WETLAND/UPLAND TRANSITION SEED MIX. (REFER TO TABLE 1 FOR SAMPLE MIX)
 2. SEED MIX COMPOSITION (BW):
USE A NEW ENGLAND WETMIX, NATIVE WETLAND SEED MIX. (REFER TO TABLE 2 FOR SAMPLE MIX)

- EROSION CONTROL:**
1. PLACE WATLES OR SILT FENCING TO PREVENT SEDIMENT MIGRATION INTO THE WETLAND DURING EARLY ESTABLISHMENT.

NEW ENGLAND RESTORATION SEED MIX – TABLE 1

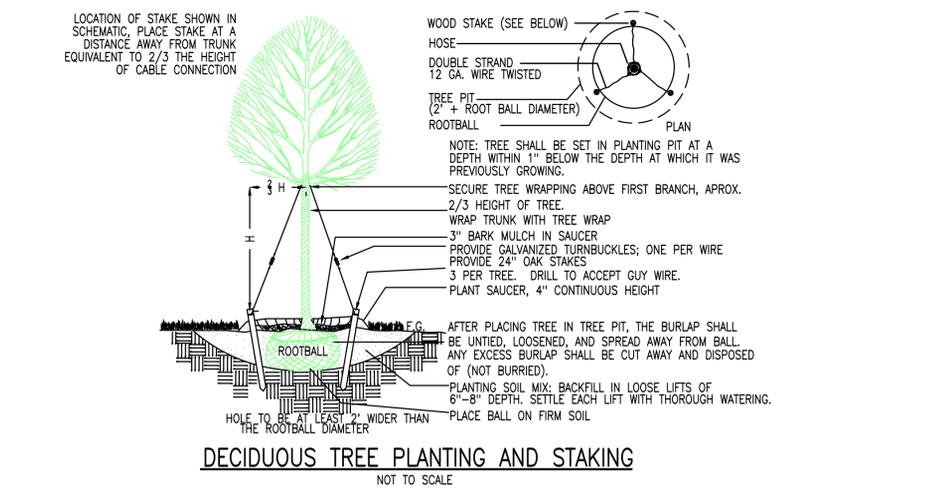
SPECIES:	COMMON NAME:
ELYMUS RIPARIUS	RIVERBANK WILD RYE
PANICUM VIRGATUM	SWITCHGRASS
SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM
FESTUCA RUBRA	RED FESCUE
ANDROPOGON GERARDII	BIG BLUESTEM
VERNONIA NOVEBORACENSIS	NEW YORK IRONWEED
BIDENS FRONDOSA	BEGGAR TICKS
EUPATORIUM MACULATUM	SPOTTED JOE PYE WEED
EUPATORIUM PERFORIATUM	BONESET
ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER
JUNCUS EFFUSUS	SOFT RUSH
AGROSTIS PERENNANS	UPLAND BENTGRASS
SCIRPUS CYPERINUS	WOOL GRASS

SEEDING RATE: APPROXIMATELY 35 LB PER ACRE (ADJUST PER MANUFACTURER RECOMMENDATIONS) 1250 SQ FT PER LB

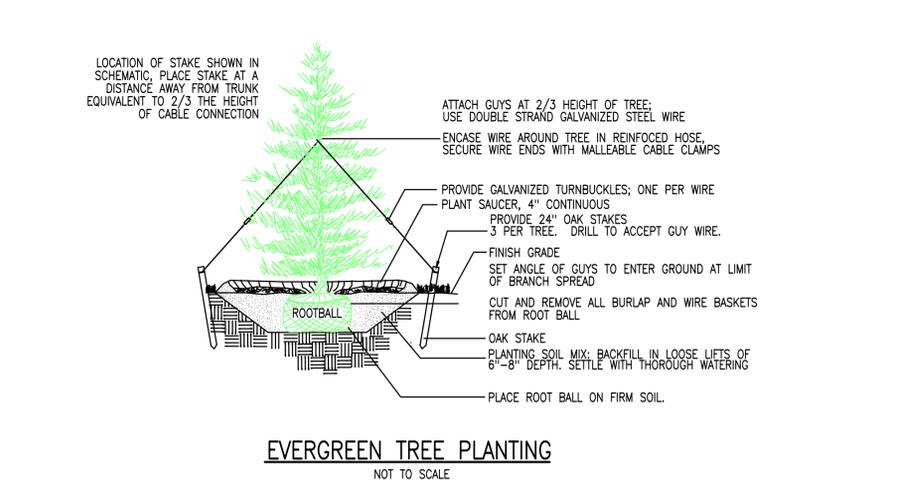
NEW ENGLAND RESTORATION SEED MIX – TABLE 2

SPECIES:	COMMON NAME:
CAREX VULPINOIDEA	FOX SEDGE
CAREX SCOPARIA	BLUNT BROOM SEDGE
CAREX LURIDA	LURID SEDGE
CAREX LUPULINA	HOP SEDGE
POA PALUSTRIS	FOWL BLUEGRASS
BIDENS FRONDOSA	BEGGAR TICKS
SCIRPUS ATROVIRENS	GREEN BULRUSH
ASCLEPIAS INCARNATA	SWAMP MILKWEED
CAREX CRINITA	FRINGED SEDGE
VERNONIA NOVEBORACENSIS	NEW YORK IRONWEED
JUNCUS EFFUSUS	SOFT RUSH
ASTER LATERIFLORUS	STARVED/CALICO ASTER
IRIS VERSICOLOR	BLUE FLAG
GLYCERIA GRANDIS	AMERICAN MANNAGRASS
MIMULUS RINGENS	SQUARE STEMMED MONKEY FLOWER
EUPATORIUM MACULATUM	SPOTTED JOE PYE WEED

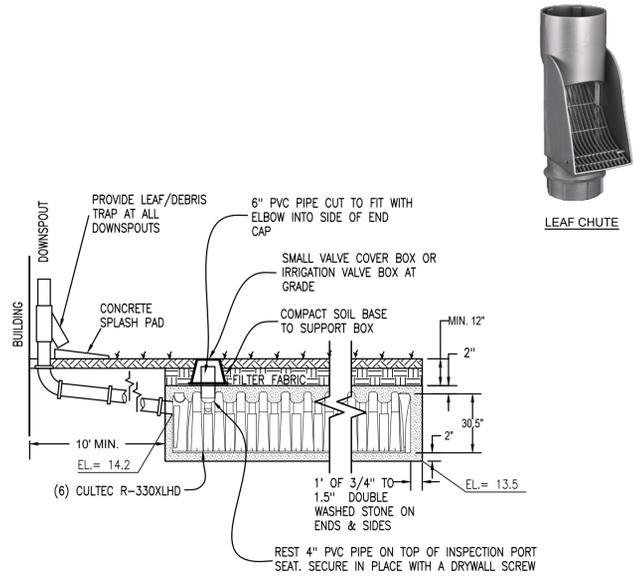
SEEDING RATE: APPROXIMATELY 18 LB PER ACRE (ADJUST PER MANUFACTURER RECOMMENDATIONS) 2500 SQ FT PER LB



DECIDUOUS TREE PLANTING AND STAKING
NOT TO SCALE

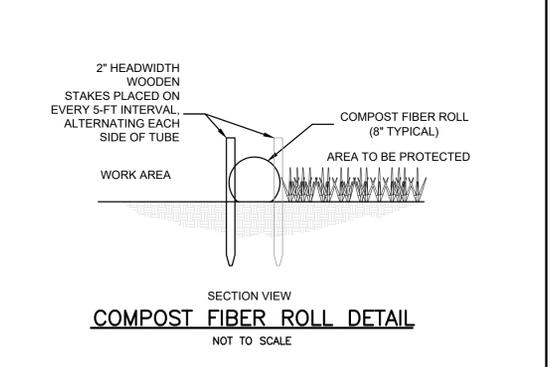


EVERGREEN TREE PLANTING
NOT TO SCALE

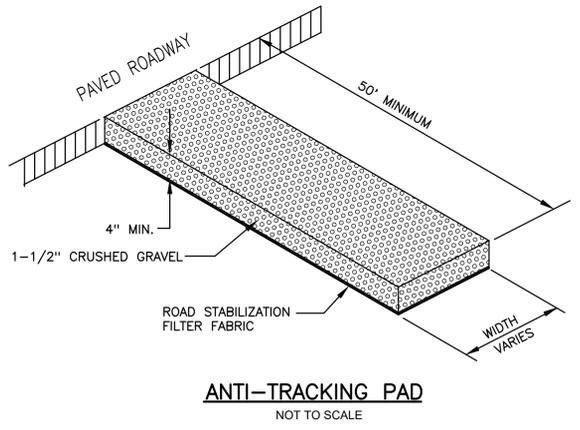


NOTES:
1. SEE MANUFACTURER WEBSITE / SPECIFICATIONS FOR INSTALLATION DETAILS AND MORE INFORMATION.

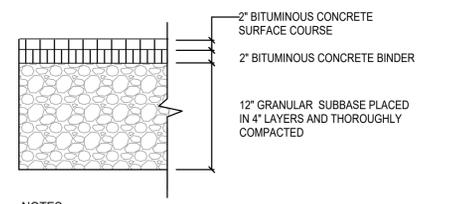
ROOF DRAIN INFILTRATION "DRY-WELL"
NOT TO SCALE



COMPOST FIBER ROLL DETAIL
NOT TO SCALE



ANTI-TRACKING PAD
NOT TO SCALE



NOTES:
SUBGRADE SHALL BE STRIPPED OF LOAM AND ANY UNSUITABLE MATERIAL ENCOUNTERED AND REPLACED WITH GRAVEL BORROW.

TYPICAL DRIVEWAY CROSS-SECTION
NOT TO SCALE

DATE	REV	DATE	DESCRIPTION
04/29/2025	1		CON. COM. COMMENTS

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HINGHAM, MA

DETAILS

PROJECT NO. 00337-07-01
DATE: MAR. 31, 2025
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