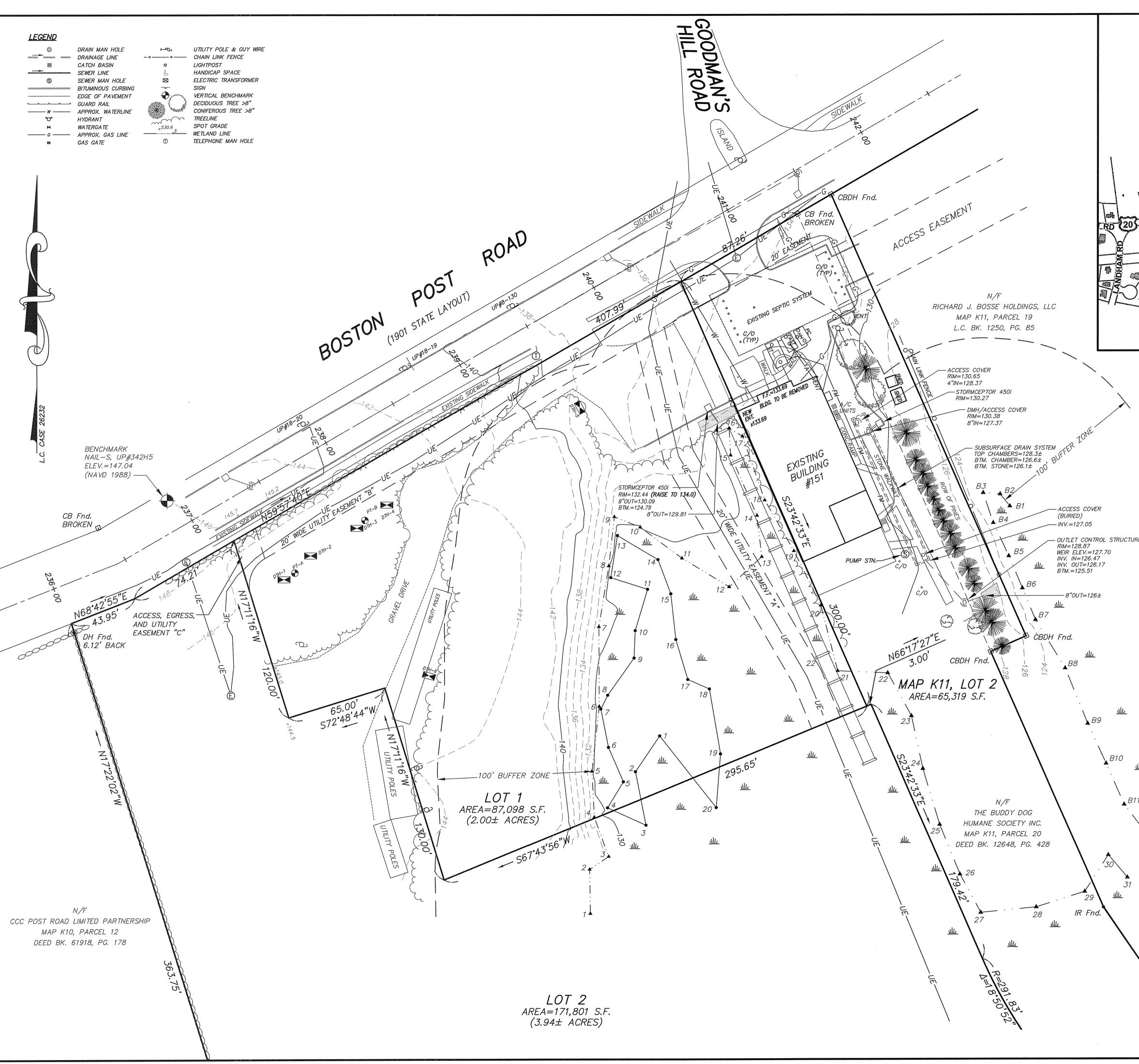








HANDICAP SPACE



GOOD	15		GENERAL NOTES: 1. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN OF
	NS: HILL OF		SUDBURY ASSESSORS RECORDS. 2. THIS PLAN IS BASED ON AN
	K SA		ON-THE-GROUND SURVEY BY SULLIVAN CONNORS AND ASSOCIATES PERFORMED ON FEBRUARY 8, 2017.
		OLD COUNT	3. LEGAL STATUS OF EASEMENTS AND WAYS, NOT DETERMINED BY THIS SURVEY.
í b		BOST RD BOSTON POST R	4. WETLANDS SHOWN HEREON WERE FLAGGED BY GODDARD CONSULTING INC. AND LOCATED ON-THE-GROUND BY SULLIVAN CONNORS AND ASSOCIATES.
H	205	ION POST RD BOSTON POST R	TOWN ASSESSOR MAP K10, PARCEL 14 TOWN ASSESSOR MAP K11, PARCEL 20
	LOCUS		DEED BOOK 7734, PAGE 426 PLAN NUMBER 1251 OF 1949
2 BOISTON PO	5 m -		PLAN NUMBER 1212 OF 1998 PLAN NUMBER 590 OF 1974 PLAN NUMBER 453 OF 1992
			L.C. PLAN 26232–A, B BOSTON POST ROAD 1901 STATE LAYOUT BOSTON POST ROAD 1969 ALTERATION
Sal			ZONED: INDUSTRIAL AREA = N/A sf
	LOCUS MA	<u>NP: 1=300'</u>	FRONTAGE = 50 feet SETBACKS: FRONT = 20 feet = 50 feet Boston Post Rd. ROAD Q = 50 feet SIDE = 30 feet REAR = 30 feet
BELINEDDISSION IN CONTRACTOR	DTH-1	DTH-4	
	(3–15–18)	(3–15–18)	-
	0-21" Fla 21-60" C1 MED 10YR	-SAND 20 70" C1 MEDSAND	
		SAND TO BO" CO LOAMY SAND	APPROVED BY:
	80-102" C3 10YR		
	102–120° C4 10YR		
	NO WATER, NO MOTTLES] L	
	DTH-2 (3-15-18)	DTH-5 (11-5-19)	
RE	0-22" Fla	-SAND MED -SAND	
		SAND 74 110" C2 SANDY LOAM	 DA TE:
	50-100" C3 10YR	-SAND	PREPARED FOR:
		LOAM WATER NONE	THE BUDDY DOG HUMANE SOCIETY INC.
	NO WATER, NO MOTTLES	EST. G.W. ELEV.= 131.0	151 BOSTON POST ROAD SUDBURY, MA 01776
	DTH3 (31518)	DTH-6 (11-5-19)	
	0-23" Fl		
	23-75" C1 10YR	-SAND 26/4 12–160" C1 MED.–SAND 26/4 10YR6/4	SULLIVAN, CONNORS
	75-93" C2 10YR		AND ASSOCIATES
	93–117" C3 10YR	6/4	
<u> 111-</u>	NO WATER, NO MOTTLES	NO WATER, NO MOTTLES	PHONE: 978-443-9566 FAX: 978-443-8915
11			PROJECT: PROPOSED SITE PLAN
B12			OF 183 BOSTON POST ROAD
	SHEE1	<u>INDEX</u>	IN SUDBURY, MASS.
		IEET / EXISTING CONDITIONS	
		D SITE PLAN D EROSION CONTROL PLAN	2/27/2020CON. COMM. EDITS2/14/2020PLANNING BOARD COMMENTS
	4 of 4 CONSTRUC	CTION DETAILS	2/3/2020 REVISED SITE LAYOUT
\		STALTH OF MASS	11/5/2019PEER REVIEW COMMENTS10/4/2019EDITS PER MEETING
\backslash		VITO VITO COLONNA No. 47635	9/30/2019FINALIZE REVISED LAYOUT8/5/2019COORDINATION W/ ARCH DRAWINGS
		TO SEGIST P ST	REVISED: DESCRIPTION:
	CD 4 DU U C C	CALE: 1"-20'	DRAWN BY: REM CHECK BY: VC DATE: JUNE 12, 2019
0 10	GKAPHIC SC 20 30 40 50 7	CALE: 1"=30' 75 100 125 150 FEET	EXISTING CONDITIONS PLAN
토르티	10 15 20	25 30 35 40 45 METER	S SCALE: 1"=30' SHEET 1 OF 5.

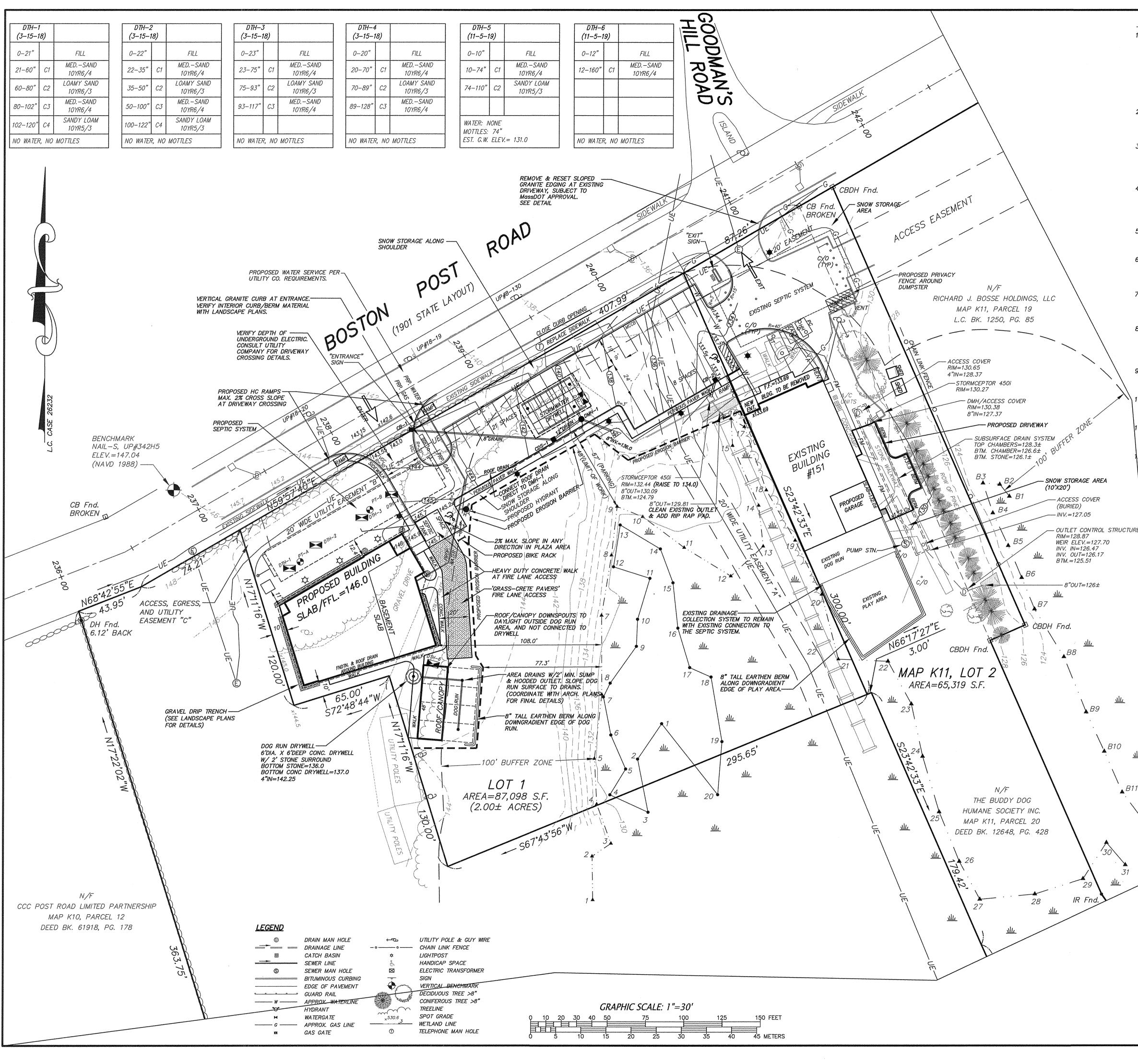
DTH—1 (3—15—1			
0-21"		FILL	
21–60"	C1	MED.—SAND 10YR6/4	
60-80"	C2	LOAMY SAND 10YR6/3	
80-102"	C3	MED.—SAND 10YR6/4	
102-120"	C4	SANDY LOAM 10YR5/3	
NO WATER, NO MOTTLES			

DTH-2 (3-15-1		
0-22"		FILL
22–35"	C1	MED.—SAND 10YR6/4
35–50"	C2	LOAMY SAND 10YR6/3
50–100"	C3	MED. – SAND 10YR6/4
100–122"	C4	SANDY LOAM 10YR5/3

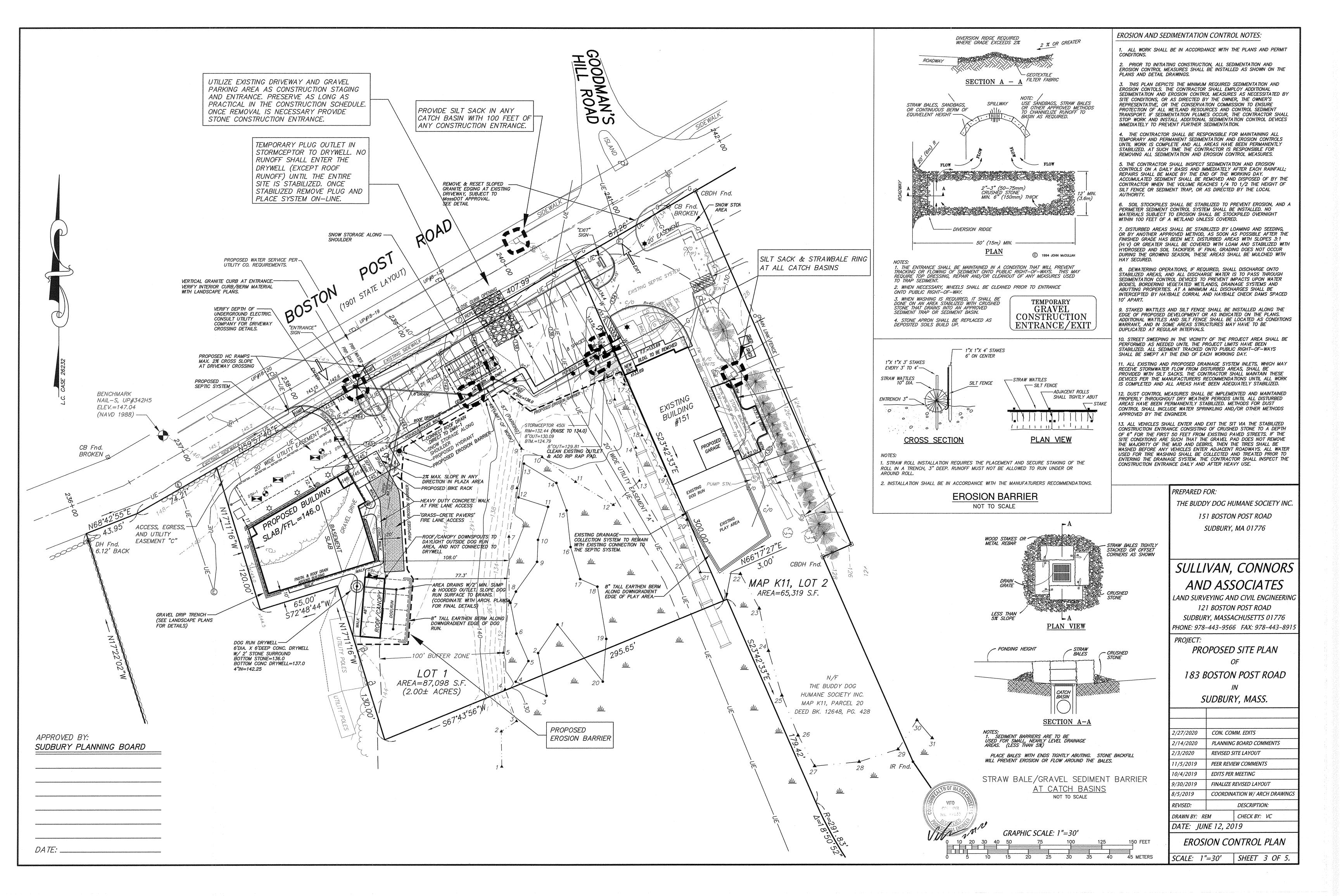
DTH—3 (3—15—18)			
0–23"		FILL	
23–75"	C1	MED.—SAND 10YR6/4	
75–93"	C2	LOAMY SAND 10YR6/3	
93–117"	С3	MED.—SAND 10YR6/4	
NO WATER, NO MOTTLES			

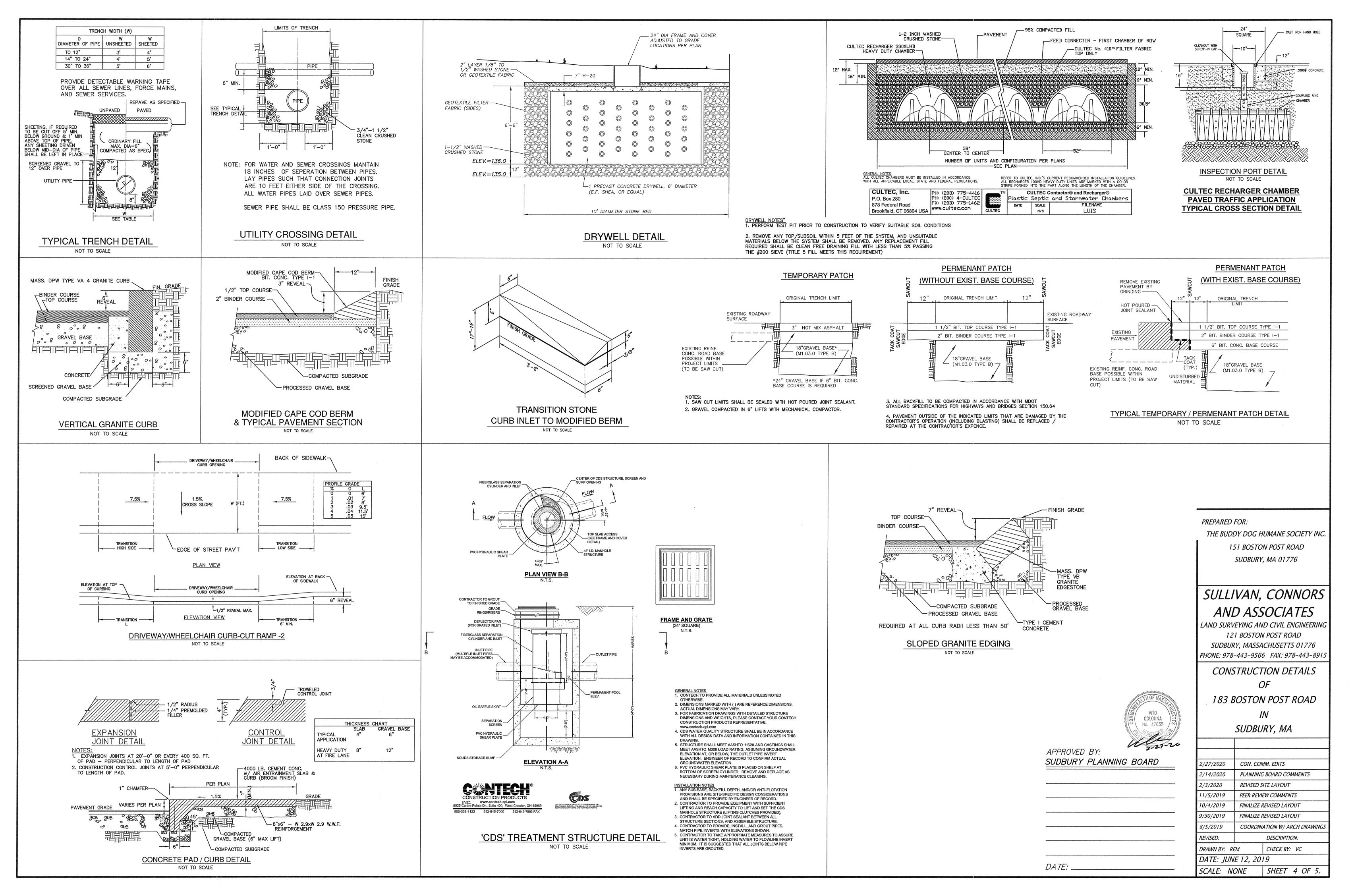
DTH-4 (3–15–1				
0-20"		FILL		
20-70"	C1	MEDSAND 10YR6/4		
70–89"	C2	LOAMY SAND 10YR6/3		
89–128"	С3	MEDSAND 10YR6/4		
NO WATER, NO MOTTLES				

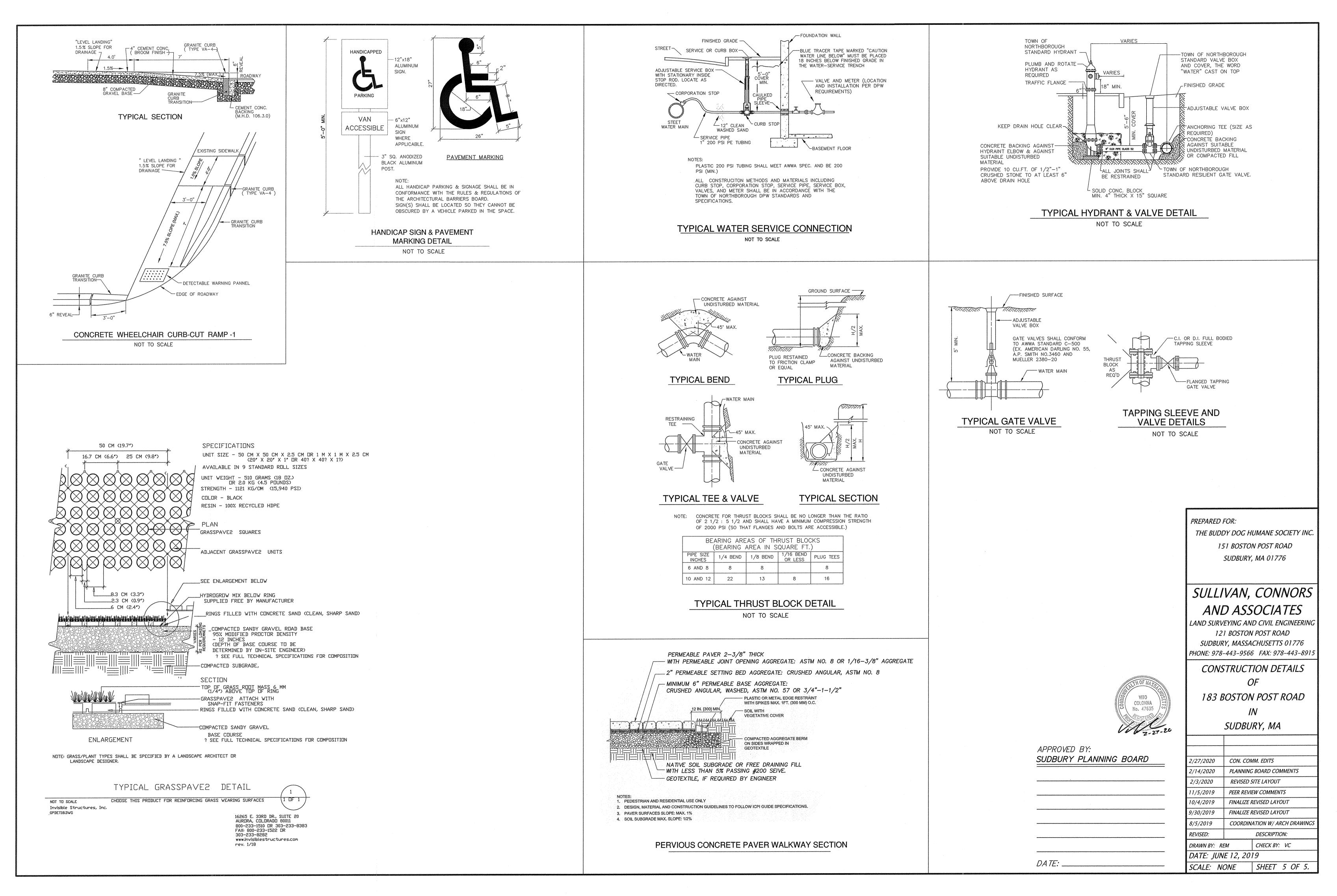
	-	1			
DTH-5 (11-5-1					
0–10"		FILL			
10-74"	C1	MED.–SAND 10YR6/4			
74–110"	C2	SANDY LOAM 10YR5/3			
WATER: NONE MOTTLES: 74" EST. G.W. ELEV.= 131.0					



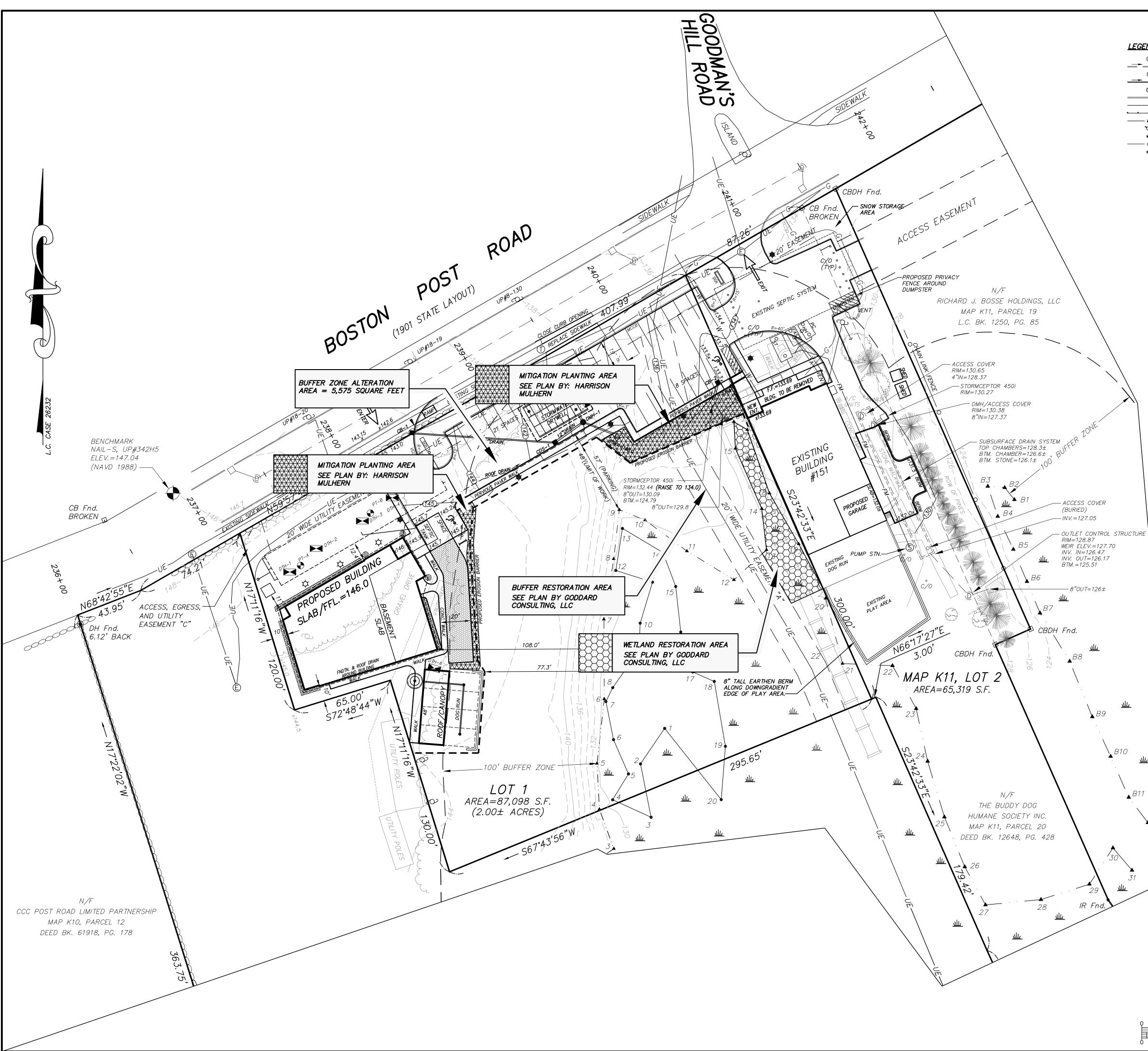
С	ONSTRUCTION NOTES:	GENERAL NOT	GENERAL NOTES:			
1.	EXISTING UTILITY LINES SHOWN ON THIS DRAWING ARE FROM AVAILABLE INFORMATION AND ARE APPROXIMATE LOCATIONS. THE ENGINEER DOES NOT GUARANTEE THEIR ACCURACY OR THAT ALL UTILITIES AND SUBSURFACE STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL VERIFY SIZE, LOCATION AND INVERT ELEVATIONS OF THE UTILITIES AND STRUCTURES, AS REQUIRED PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES WITH RECORD DATA SHALL BE	SHOWN ACCOR SUDBURY ASSE 2. THIS PLAN ON-THE-GROU	ADJOINING PROPERTIES ARE DING TO CURRENT TOWN OF ESSORS RECORDS. IS BASED ON AN IND SURVEY BY SULLIVAN ASSOCIATES PERFORMED ON			
	REPORTED TO THE ENGINEER IMMEDIATELY. THE CONTRACTOR SHALL CONTACT DIG SAFE: 1-800-344-7233 (72 HOURS BEFORE DIGGING), AND TOWN DPW FOR UTILITY LOCATIONS PRIOR TO EXCAVATION. TEST PITS SHALL BE UTILIZED FOR UTILITY CONNECTIONS.	FEBRUARY 8, . 3. LEGAL STAT				
2.	WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.	4. WETLANDS S BY GODDARD (SHOWN HEREON WERE FLAGGED CONSULTING INC. AND LOCATED IND BY SULLIVAN CONNORS AND			
3.	ALL MATERIALS AND CONSTRUCTION PRACTICES SHALL BE IN CONFORMANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE SUDBURY DEPARTMENT OF PUBLIC WORKS, OR THE LATEST EDITION OF THE MASSACHUSETTS HIGHWAY DEPARTMENT (MHD) CONSTRUCTION STANDARDS AND THE MHD "STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES", WHICHEVER IS MORE STRINGENT.	1. SEE PROJE SITE LIGHTING	ON WITH PLANS BY OTHERS: CT LANDSCAPE PLANS FOR G, LANDSCAPING, GRAVEL			
4.	THE WATER SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH THE TOWN OF SUDBURY DPW WATER DIVISION RULES AND REGULATIONS. CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH APPLICABLE PERMITS (TO BE OBTAINED BY THE CONTRACTOR). CONNECTION LOCATION AND SIZE TO BE CONFIRMED WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.	DETAILS. 2. VERIFY BU	, AND RAIN GARDEN IILDING DIMENSIONS AND WITH ARCHITECTURAL PLANS INSTRUCTION.			
5.	IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, TO KEEP ACCURATE ASBUILT MEASUREMENTS / RECORDS OF ALL UNDERGROUND OR CONCEALED WORK.	(INVERT ELEV	TE BUILDING CONNECTIONS ., LOCATION, AND SIZE) CCTURAL PLANS PRIOR TO			
6.	THE LAYOUT AND INSTALLATION OF ELECTRIC, GAS, TELEPHONE AND CATV UTILITY CONNECTIONS AND SERVICES SHALL IN ACCORDANCE WITH THE REQUIREMENTS OF THE RESPECTIVE UTILITY. CONNECTION LOCATION AND SIZE TO BE CONFIRMED WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.	CONSTRUCTIO	N. ANY DISCREPANCY PORTED TO THE ENGINEER.			
7.	THE CONTRACTOR SHALL UTILIZE ALL MEASURES AND MATERIALS NECESSARY TO ENSURE THE SAFETY OF ALL PERSONS AND PROPERTIES AT THE SITE DURING CONSTRUCTION. ALL EXCAVATIONS SHALL CONFORM TO CURRENT OSHA STANDARDS.	ZONING				
8.	IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE HIS WORK WITH THE APPROPRIATE HIGHWAY & UTILITY DEPARTMENTS. WORK WITHIN THE HIGHWAY LAYOUT SHALL CONFORM TO THE CONDITIONS OF THE PERMIT ISSUED BY MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION OR THE LOCAL AUTHORITY.	ZONED: INDU AREA = N/A FRONTAGE = SETBACKS:	A sf = 50 feet FRONT = 20 feet			
9.	ALL SIGN SIZES AND MATERIAL SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC DEVICES" (MUTCD) AND THE OFFICE OF TRAFFIC OPERATIONS, FEDERAL HIGHWAY ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION.	R	= 50 feet Boston Post Rd. OAD @ = 50 feet SIDE = 30 feet REAR = 30 feet			
10.	ALL RAMPS, CURB CUTS, SIDEWALKS, AND ACCESSIBLE SPACES SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT REGULATIONS AND WITH ARCHITECTURAL ACCESS BOARD REGULATIONS (521 CMR 1-47).	APPROVEL				
11.	AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE OWNER.	8	PLANNING BOARD			
12.	JOINTS BETWEEN PROPOSED BITUMINOUS CONCRETE PAVEMENT AND EXISTING PAVEMENT TO REMAIN SHALL BE SAWCUT AND SEALED WITH HOT POURED RUBBERIZED ASPHALT SEALER.		······································			
	PARKING TABULATION:					
RE	VETERINARY CLINIC SPACES PROVIDED = 29					
	OPEN SPACE / BUILDING COVERAGE SUMMARY	DA TE:				
	LOT AREA = $152,417\pm$ S.F. OPEN SPACE REQUIRED = 30% (45,725 S.F.)	PREPARED FO	<i>R:</i>			
	OPEN SPACE PROPOSED = 76% (115,997 S.F.)	THE BUDDY	DOG HUMANE SOCIETY INC.			
	MAXIMUM ALLOWED BUILDING COVERAGE = 60% PROPOSED BUILDING COVERAGE = 8.8%	151	BOSTON POST ROAD			
	EXISTING IMPERVIOUS AREA = $27,560$ S.F. PROPOSED IMPERVIOUS AREA = $36,440$ S.F.	SU	DBURY, MA 01776			
	DRAINAGE TABULATION					
	CB-1 RIM=142.50 8"OUT=139.05	SULLIV	AN, CONNORS			
	CDS-1	AND	ASSOCIATES			
	CDS MODEL 2015-4 RIM=140.7		ING AND CIVIL ENGINEERING			
	8"IN=137.25 12"OUT=137.0		BOSTON POST ROAD MASSACHUSETTS 01776			
<u>M/</u>	DMH-1		43–9566 FAX: 978–443–8915			
	RIM=139.4 12"IN=136.6 (CDS-1)	PROJECT:				
1	8"IN=136.6 (ROOF DRAIN) 12"OUT=135.5 (DRYWELL)	PROF	POSED SITE PLAN			
L	₩ 8"OUT=136.5 (OVERFLOW) B12 CB-2 RIM=133.25	183 BC	OF DSTON POST ROAD			
	8"OUT=130.5 STC (MODIFY EXISTING)	SU	IN DBURY, MASS.			
	RIM=134.0 8"IN=130.34 (PROPOSED) 8"OUT=130.09 (EXISTING)					
/	STORMWATER DRYWELL 24 CULTEC 330XLHD CHAMBERS	l	CON. COMM. EDITS			
	8 ROWS OF 3	I	PLANNING BOARD COMMENTS REVISED SITE LAYOUT			
	BOTTOM STONE=134.0 BOTTOM CHAMBERS=134.5		PEER REVIEW COMMENTS			
	12" IN=135.25		EDITS PER MEETING			
	PRE-CONSTRUCTION NOTE:		REVISED LAYOUT COORDINATION W/ ARCH DRAWINGS			
	PERFORM CONFIRMATORY TEST PIT AT PROPOSED DRYWELLS PRIOR TO THE START OF	REVISED:	DESCRIPTION:			
	CONSTRUCTION. TESTING SHALL BE WITNESSED BY THE DESIGN ENGINEER AND TOWN OF	DRAWN BY: REM				
	SUDBURY STAFF.	DATE: JUNE	12, 2019			
		PROF	POSED SITE PLAN			
		SCALE: 1"=	30' SHEET 2 OF 5.			







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<u>LEGEND</u>

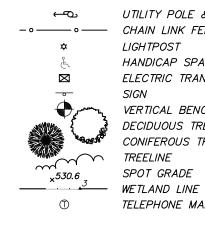
M

181

CATCH BASIN SEWER LINE SEWER MAN HOLE BITUMINOUS CURBING EDGE OF PAVEMENT GUARD RAIL APPROX. WATERLINE HYDRANT WA TERGA TE — G — APPROX. GAS LINE GAS GATE

DRAIN MAN HOLE

DRAINAGE LINE



UTILITY POLE & GUY WIRE - • — • • CHAIN LINK FENCE LIGHTPOST HANDICAP SPACE ELECTRIC TRANSFORMER SIGN VERTICAL BENCHMARK DECIDUOUS TREE >8" CONIFEROUS TREE >8" TREELINE SPOT GRADE TELEPHONE MAN HOLE

GENERAL NOTES:

1. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN OF SUDBURY ASSESSORS RECORDS.

2. THIS PLAN IS BASED ON AN ON–THE–GROUND SURVEY BY SULLIVAN CONNORS AND ASSOCIATES PERFORMED ON FEBRUARY 8, 2017.

3. LEGAL STATUS OF EASEMENTS AND WAYS, NOT DETERMINED BY THIS SURVEY.

4. WETLANDS SHOWN HEREON WERE FLAGGED BY GODDARD CONSULTING INC. AND LOCATED ON-THE-GROUND BY SULLIVAN CONNORS AND ASSOCIATES.

ZONING ZONED: INDUSTRIAL AREA = N/A sf FRONTAGE = 50 feet SETBACKS: FRONT = 20 feet = 50 feet Boston Post Rd. ROAD Q = 50 feet SIDE = 30 feet REAR = 30 feet

APPROVED BY: SUDBURY PLANNING BOARD

DA TE: ___

PREPARED FOR: THE BUDDY DOG HUMANE SOCIETY INC. 151 BOSTON POST ROAD SUDBURY, MA 01776

SULLIVAN, CONNORS

AND ASSOCIATES LAND SURVEYING AND CIVIL ENGINEERING 121 BOSTON POST ROAD SUDBURY, MASSACHUSETTS 01776

PHONE: 978-443-9566 FAX: 978-443-891. PROJECT:

PROPOSED MITIGATION PLAN OF

183 BOSTON POST ROAD IN

SUDBURY, MASS.

2/27/2020	CON. COMM. EDITS			
2/14/2020	PLANNINC	G BOARD COMMENTS		
2/3/2020	REVISED SITE LAYOUT			
11/5/2019	PEER REVIEW COMMENTS			
10/4/2019	EDITS PER MEETING			
9/30/2019	REVISED LAYOUT			
8/5/2019	COORDINATION W/ ARCH DRAWINGS			
REVISED:	DESCRIPTION:			
DRAWN BY: REM CHECK BY: VC				
DATE: JUNE 12, 2019				
MITIGATION PLAN				

SCALE: 1"=30' SHEET 1 OF 1.

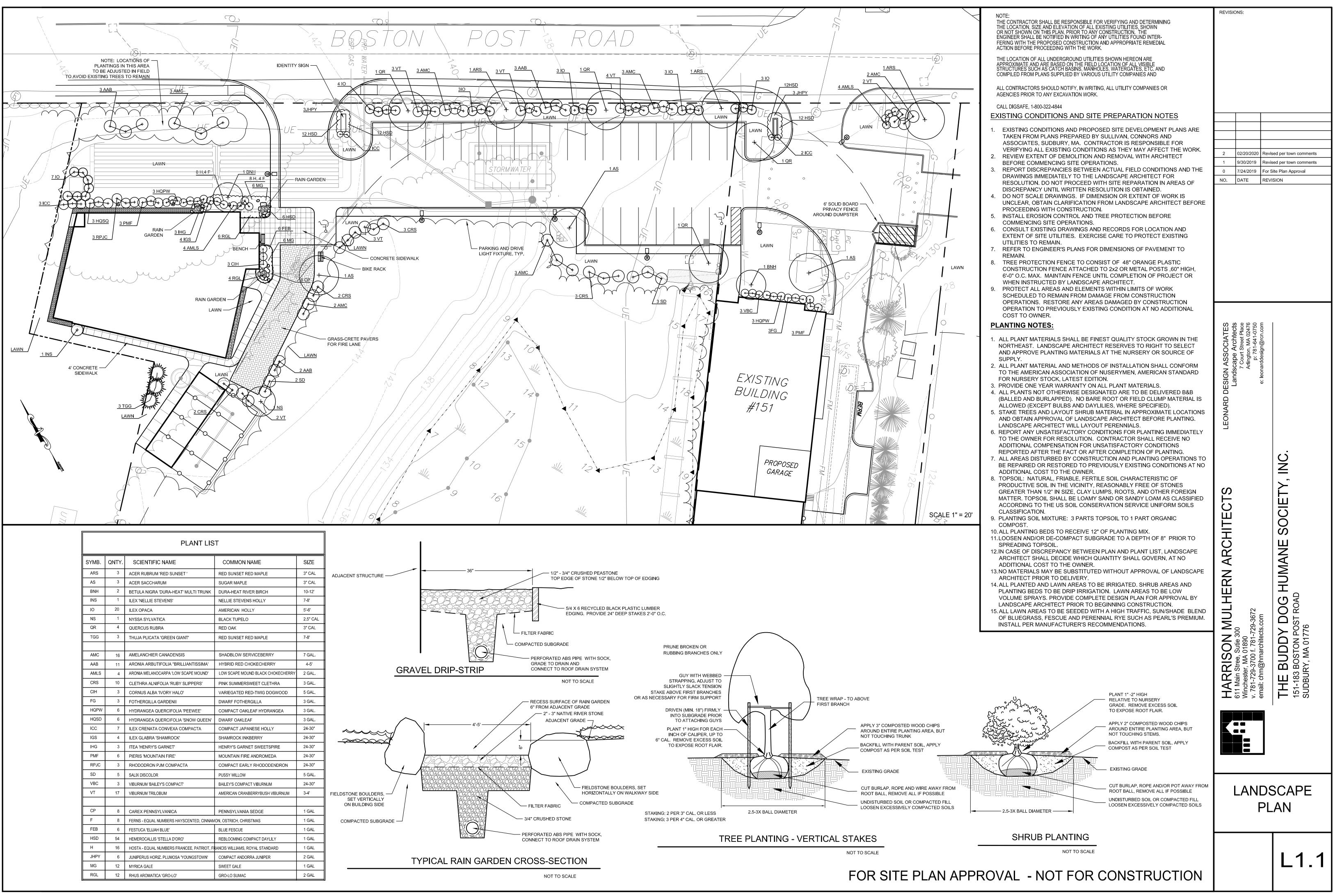
GRAPHIC SCALE: 1"=30'

150 FEET

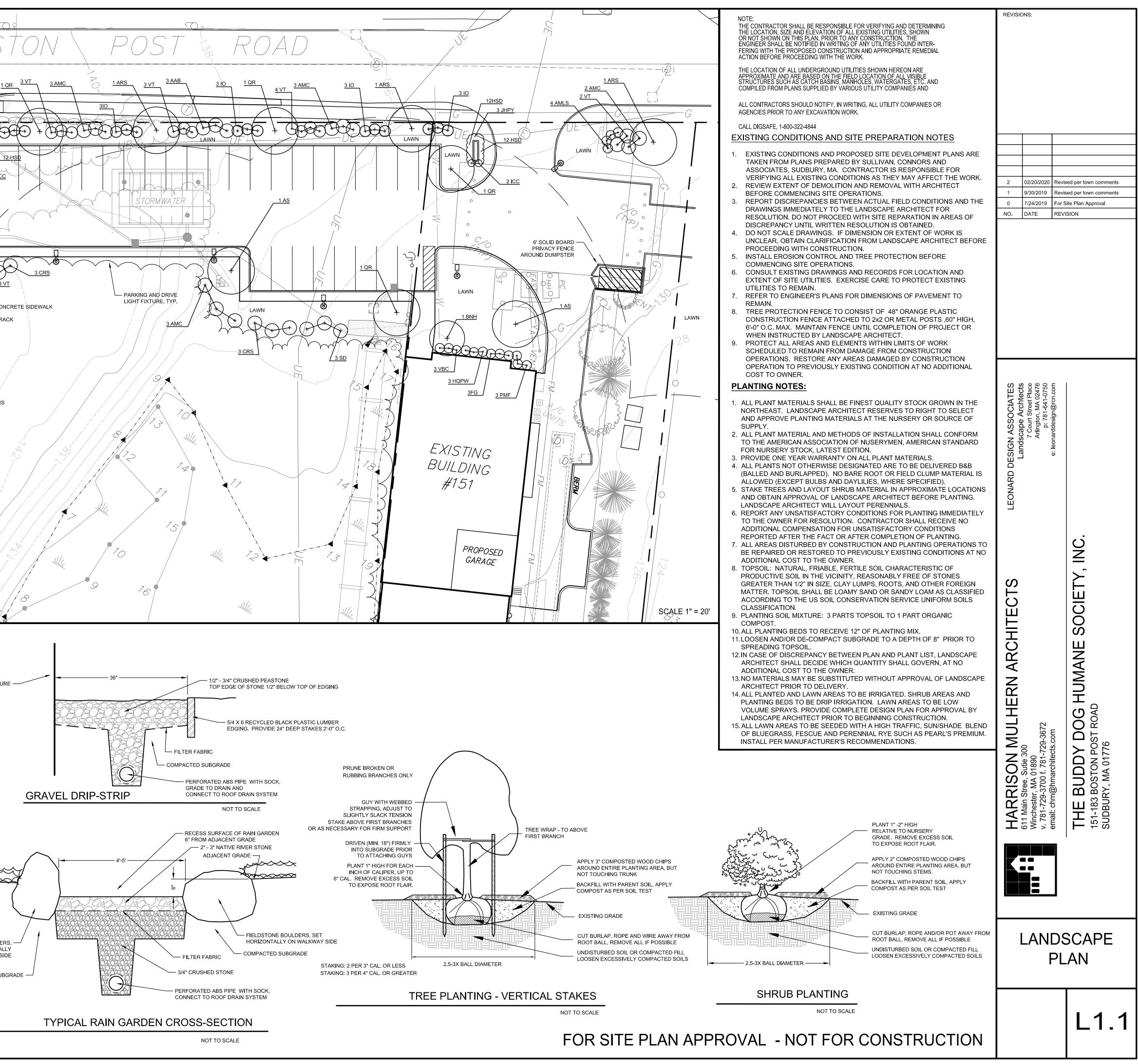
45 METERS

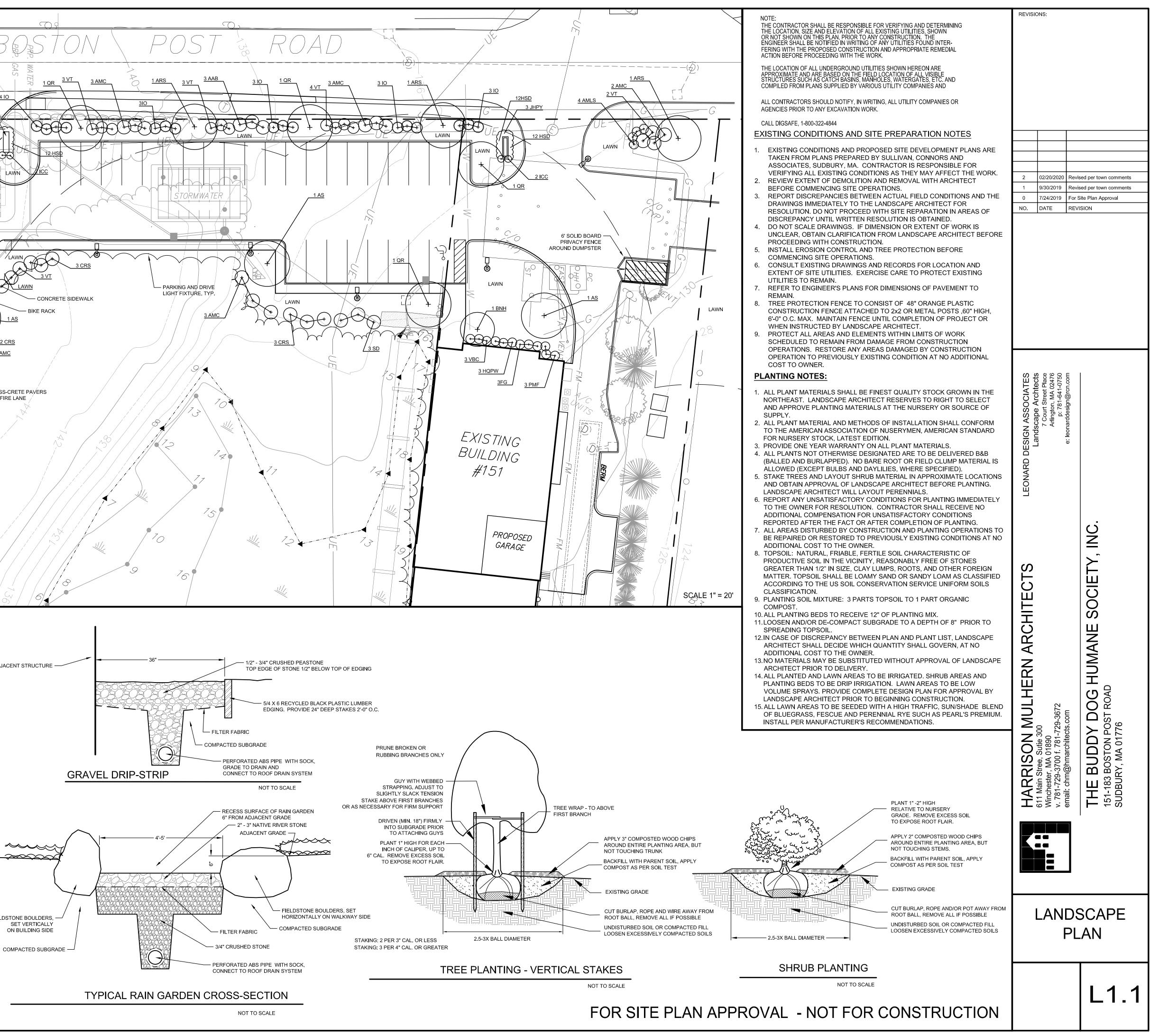
<u> M/</u>

<u>____</u> **▲***B11* **▶***B12*



PLANT LIST					
SYMB.	QNTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	
ARS	3	ACER RUBRUM 'RED SUNSET '	RED SUNSET RED MAPLE	3" CAL	
AS	3	ACER SACCHARUM	SUGAR MAPLE	3" CAL	
BNH	2	BETULA NIGRA 'DURA-HEAT' MULTI TRUNK	DURA-HEAT RIVER BIRCH	10-12'	
INS	1	ILEX 'NELLIE STEVENS'	NELLIE STEVENS HOLLY	7-8'	
10	20	ILEX OPACA	AMERICAN HOLLY	5'-6'	
NS	1	NYSSA SYLVATICA	BLACK TUPELO	2.5" CAL	
QR	4	QUERCUS RUBRA	RED OAK	3" CAL	
TGG	3	THUJA PLICATA 'GREEN GIANT'	RED SUNSET RED MAPLE	7-8'	
AMC	16	AMELANCHIER CANADENSIS	SHADBLOW SERVICEBERRY	7 GAL.	
AAB	11	ARONIA ARBUTIFOLIA "BRILLIANTISSIMA'	HYBRID RED CHOKECHERRY	4-5'	
AMLS	4	ARONIA MELANOCARPA 'LOW SCAPE MOUND'	LOW SCAPE MOUND BLACK CHOKECHERRY	2 GAL.	
CRS	10	CLETHRA ALNIFOLIA 'RUBY SLIPPERS'	PINK SUMMERSWEET CLETHRA	3 GAL.	
CIH	3	CORNUS ALBA 'IVORY HALO'	VARIEGATED RED-TWIG DOGWOOD	5 GAL.	
FG	3	FOTHERGILLA GARDENII	DWARF FOTHERGILLA	3 GAL.	
HQPW	6	HYDRANGEA QUERCIFOLIA 'PEEWEE'	COMPACT OAKLEAF HYDRANGEA	3 GAL.	
HQSD	6	HYDRANGEA QUERCIFOLIA 'SNOW QUEEN'	DWARF OAKLEAF	3 GAL.	
ICC	7	ILEX CRENATA CONVEXA COMPACTA	COMPACT JAPANESE HOLLY	24-30"	
IGS	4	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	24-30"	
IHG	3	ITEA 'HENRY'S GARNET'	HENRY'S GARNET SWEETSPIRE	24-30"	
PMF	6	PIERIS 'MOUNTAIN FIRE'	MOUNTAIN FIRE ANDROMEDA	24-30"	
RPJC	3	RHODODRON PJM COMPACTA	COMPACT EARLY RHODODENDRON	24-30"	
SD	5	SALIX DISCOLOR	PUSSY WILLOW	5 GAL.	
VBC	3	VIBURNUM 'BAILEY'S COMPACT'	BAILEY'S COMPACT VIBURNUM	24-30"	
VT	17	VIBURNUM TRILOBUM	AMERICAN CRANBERRYBUSH VIBURNUM	3-4'	
СР	8	CAREX PENNSYLVANICA	PENNSYLVANIA SEDGE	1 GAL	
F	8	FERNS - EQUAL NUMBERS HAYSCENTED, CINNAM		1 GAL	
FEB	6	FESTUCA 'ELIJAH BLUE'	BLUE FESCUE	1 GAL	
HSD	54	HEMEROCALLIS 'STELLA D'ORO'	REBLOOMING COMPACT DAYLILY	1 GAL	
H	16	HOSTA - EQUAL NUMBERS FRANCEE, PATRIOT, FI		1 GAL	
JHPY	6	JUNIPERUS HORIZ. PLUMOSA 'YOUNGSTOWN'	COMPACT ANDORRA JUNIPER	2 GAL	
MG	12	MYRICA GALE	SWEET GALE	1 GAL	
RGL	12	RHUS AROMATICA 'GRO-LO'	GRO-LO SUMAC	2 GAL	







February 27, 2020

Habitat Restoration Plan

Buddy Dog Humane Society 151 & 183 Boston Post Road Sudbury, MA

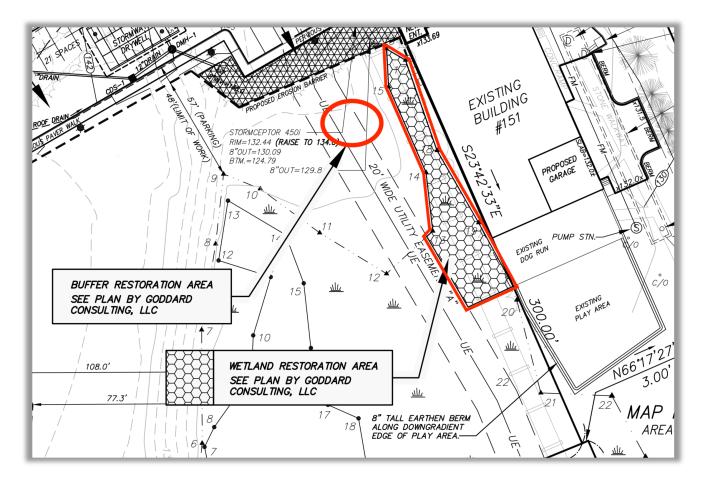
Submitted to: Sudbury Conservation Commission Department of Public Works Building 275 Old Lancaster Road Sudbury, MA 01776

Prepared for: Steve Burtt Buddy Dog Humane Society, Inc. 151 Boston Post Road Sudbury, MA 01776

goddardconsultingllc.com • 291 Main Street, Suite 8, Northborough, MA 01532 • 508.393.3784

1. INTRODUCTION

On behalf of the Applicant, Buddy Dog Humane Society, Goddard Consulting, LLC is pleased to submit this Habitat Restoration Plan as a component of the Notice of Intent filed for 151 & 183 Boston Post Road in Sudbury, MA. Restoration is proposed within buffer zone and wetlands to the west of the existing Buddy Dog building, in order to mitigate for the proposed alteration of 3,550 sf of natural vegetation for the project. See the following figure for a visual plan of the buffer zone and wetland restoration locations.



2. RESTORATION PLAN SUMMARY

2.1 Buffer Zone Restoration Area

This includes an approximately 800 sf area to the west of the existing building where woodchips, bird feeders and benches are present. The disturbed area will be replanted with native shrubs.

2.2 Wetland Restoration Area

The plan includes invasive species removal plus native shrub and fern plantings within an 1,800 sf wetland located immediately west of the existing building.

3. RESTORATION PLAN DETAILS

3.1 Overview

Supervision: All work within the restoration areas shall be supervised by a qualified wetland scientist or biologist with a minimum of five years' experience. The supervisor shall submit monitoring reports to the Conservation Commission as described below. Reports shall contain details of all work performed and photographs of completed conditions.

<u>Timing</u>: Invasive species removal may take place during any time of year. Restoration area plantings should be installed during the Spring or Fall growing seasons.

3.2 Sequencing of Procedures

Step 1: Define Limits of Work

Flag and/or stake out limits of work for the two separate restoration areas. Erosion control barriers shall not be necessary given the lack of grading required for the Buffer Zone Restoration Area and flat nature of the wetland restoration area. The supervising wetland scientist shall have authority to require erosion control measures if deemed necessary. If necessary, erosion control barriers shall be installed in the form of staked siltation fence or mulch sock (or similar invasive-free barrier) placed at the limit of work for the subject area. These will remain in place and be maintained until the areas are completely stabilized and then may be removed after approval of the Conservation Commission.

Step 2: Identify invasive species for removal

The wetland scientist shall identify and flag (with pink flagging) a representative sample of any non-native invasive species to be removed. Scientist shall provide identification training to removal contractor and laborers if necessary. Any native tree or shrub species to be left in place shall be clearly identified with a color other than pink and labeled.

Step 3: Remove invasive species

All invasive species specimens shall be removed and discarded in accordance with the following species-specific procedures:

<u>Glossy false buckthorn and honeysuckle</u>: hand-pull individual plants so that entire root system is removed. Chip or burn, taking care not to spread any berries beyond already-contaminated areas. If roots cannot be removed, cut as close to ground as possible to impede growth of stump sprouts the following growing season.

<u>Oriental bittersweet</u>: cut vines from living trees, attempt to pull out individual vines at the roots. Chip or burn removed pieces, taking care not to spread berries beyond already-contaminated area.

Step 4: Planting

The supervising wetland scientist shall direct the placement of shrubs and ferns during installation, but they should be generally distributed evenly throughout the area. Suggested species and actual quantity to be planted include:

FOR BUFFER ZONE RESTORATION AREA:

Shrubs (16 total)

- 4 American hazelnut (*Corylus americana*) (18"-24"' height)
- 4 serviceberry (Amelanchier canadensis/arborea) (2-3' height)
- 4 red-osier dogwood (*Swida sericea*) (2-3' height)
- 4 highbush blueberry (*Vaccinium angustifolium*) (2-3' height)

Seed Mix

• 1 lbs. New England Wetland Plants New England Conservation/Wildlife Mix or equivalent (25 lbs/acre) applied to newly planted portions

FOR WETLAND RESTORATION AREA:

Shrubs (28 total)

- 7 spicebush (*Lindera benzoin*) (2-3' height)
- 7 swamp azalea (*Rhododendron viscosum*) (2-3' height)
- 7 silky dogwood (*Cornus amomum*) (2-3' height)
- 7 highbush blueberry (*Vaccinium angustifolium*) (2-3' height)

Ferns (28 total)

- 30 sensitive fern (Onoclea sensibilis) (1 gal. pot)
- 30 cinnamon fern (Osmundastrum cinnamomea) (1 gal. pot)

Seed Mix

• 1 lbs. New England Wetland Plants WetMix or equivalent (25 lbs/acre) applied to newly planted portions

<u>Notes</u>

1) The shrubs to be planted must be native "non-cultivar" individuals. Cultivars are hybrids between the native species and a similar but non-native species, usually created to produce larger fruits/berries or showier flowers. These cultivars often are not used by the local native wildlife, which have not adapted to the different size/shape food source. Below is an example of how to choose a non-cultivar plant at the nursery:

*	VACCINIUM COR. 'BLUE CROP' #3		BLUE CROP HIGHBUSH BLUEBERRY #3
*	VACCINIUM COR. 'JERSEY' #3	CULTIVARS:	JERSEY HIGHBUSH BLUEBERRY #3
*	VACCINIUM COR. 'NORTHCOUNTRY' #3	DO NOT — CHOOSE _	NORTHCOUNTRY HIGHBUSH BLUEBERRY #3
*	VACCINIUM COR. 'PINK LEMONADE' #3		PINK LEMONADE HIGHBUSH BLUEBERRY #3
*	VACCINIUM CORYMBOSUM #1 S	TRAIGHT NATIVE	HIGHBUSH BLUEBERRY #1
*	VACCINIUM CORYMBOSUM #3	SPECIES	HIGHBUSH BLUEBERRY #3

Figure 1 - Example of cultivar vs. straight species of Highbush Blueberry (from Bigelow Nurseries, Northboro, MA).

2) If the specified non-cultivar shrub species are not available at any local nurseries, then substitutions can be made. Substitutions shall be made from the Sudbury Conservation Commission list of approved Native Plants.

3) All plantings shall be distributed randomly throughout the area; shrubs spaced at 6-8' on center and ferns 3' on center. Precise citing of plants may be determined by the wetland scientist in the field prior to installation.

4) Each plant will have it roots loosened prior to planting to encourage root growth away from the planting bulb.

5) Leaf litter shall be spread throughout area if available. Seed mix shall be scattered evenly by hand throughout the restoration area.

6) Plantings shall take place during suitable growing conditions and not before completion of the site grading and invasive plant species removal.

7) All plantings shall be watered appropriately during the first growing season, and shall be monitored by the supervising biologist at the end of the first growing season to assess survival and whether replacement plantings are necessary.

8) Any plants that do not survive the first growing season shall be replaced prior to the next growing season.

Step 6: Place woody debris and boulders

A variety of woody debris and rocks shall be randomly placed throughout the restoration areas to provide cover for wildlife and provide wildlife habitat. Dead wood shall consist of 6" or greater diameter logs approximately 6-feet long.

Step 7: Monitoring

a. **Seasonal monitoring reports** shall be prepared for the restoration areas by a qualified wetland scientist for a period of 2 additional years after installation. This monitoring program will consist of early summer and early fall inspections, and will include photographs and details about the vitality of the restoration area. Monitoring reports shall be submitted to the Commission by November 30th of each year. Monitoring reports shall describe, using

narratives, plans, and color photographs, the physical characteristics of the area, survival of vegetation and plant mortality, aerial extent and distribution, species diversity and vertical stratification (i.e. herb, shrub and tree layers). Invasive species will be documented if present, monitored and removed.

b. **At least 90% of the surface area** of the restoration areas shall be re-established with indigenous plant species within three growing seasons. If the restoration area does not meet the 90% re-vegetation requirement by the end of the second growing season after installation, the Applicant shall submit a remediation plan to the Commission for approval that will achieve, under the supervision of a Wetland Specialist, the desired goals. This plan must include an analysis of why the areas have not successfully re-vegetated and how the Applicant intends to resolve the problem.

c. There should be an intensive effort to prevent the establishment of non-native invasive plant species, and to ensure timely and consistent treatment (e.g., hand pulling, cutting) of invasive plant species that become established within the Restoration Area.

Step 8: Erosion Controls Removal

Once the restoration area is stable and plantings are complete, a request shall be submitted to the Conservation Commission to remove the erosion controls (if applicable).