

ROCKVILLE, MD
WATERTOWN, MA
NEW BEDFORD, MA
SOUTH WINDSOR, CT
124 WATERTOWN ST, SUITE 3F
WATERTOWN, MA
1213 PURCHASE STREET SUITE 301
NEW BEDFORD, MA
58H CONNECTICUT AVENUE
SOUTH WINDSOR, CT

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PROJECT

NYE LUBRICATING
BUILDING 1 RE-PAVING
PROJECT

OWNER

NYE LUBRICANTS, INC.
12 HOWLAND RD.
FAIRHAVEN, MA

NO.	DATE	DESCRIPTION	BY
1	8/26/19	PEER REVIEW EDIT	JER

PROJECT NO.	6893-001
CADD FILE	
DESIGNED BY	JBM
DRAWN BY	JER
CHECKED BY	JBM
DATE	8/8/19
DRAWING SCALE	1" = 20'

GRAPHIC SCALE

SCALE: 1" = 20'

SHEET TITLE







EXISTING
CONDITIONS

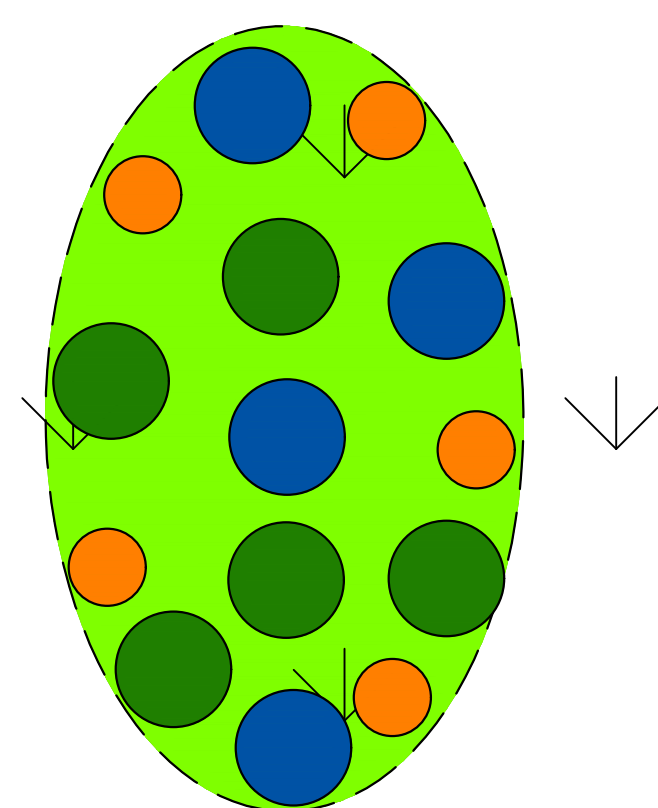
DRAWING NO.

E-1




1 OF 3

- NOTES:
1. BASE PLAN PROVIDED BY NYE LUBRICANTS, INC., SCALE AND DIMENSIONS ARE APPROXIMATE ON EXISTING CONDITIONS. PROPOSED CONDITIONS DIMENSIONS FOR THE STORMWATER BMPS SHOULD BE CONSIDERED THE REQUIRED DIMENSIONS.
 2. TOPOGRAPHY AND LIMITED SITE FEATURE SURVEY CONDUCTED BY APEX COMPANIES, LLC ON AUGUST 8, 2019.
 3. THE PURPOSE OF THIS SET OF PLANS IS TO SHOW EXISTING AND PROPOSED CONDITIONS ASSOCIATED WITH THE RE-PAVING OF THE PARKING AND DRIVEWAY AREA TO THE SOUTH AND SOUTHWEST OF BUILDING 1. OTHER FEATURES AND ACTIVITIES RELATED TO THIS PROPERTY BEYOND THIS AREA ARE NOT CONSIDERED IN THE PURVIEW OF THESE DRAWINGS AND SHOULD NOT BE ASSUMED TO BE ACCURATE OR RESEARCHED.
 4. THE RE-PAVING PROJECT INCLUDES THE REPAVING OF APPROXIMATELY 17,000 SF OF IMPERMEABLE AREA AND THE IMPLEMENTATION OF STORMWATER BEST MANAGEMENT PRACTICES INCLUDING A VEGETATED FILTER STRIP AND TWO RAINGARDENS.
 5. NO CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL EROSION CONTROL DEVICES HAVE BEEN PUT IN PLACE AND APPROVED BY THE FAIRHAVEN CONSERVATION AGENT.
 6. EROSION CONTROLS SHALL REMAIN IN PLACE UNTIL THE AREA IS COMPLETELY STABILIZED, AS DETERMINED BY THE ENGINEER AND THE FAIRHAVEN CONSERVATION AGENT.
 7. ALL EROSION CONTROLS MEASURES SHALL BE INSPECTED DAILY AND MAINTAINED OR REPLACED DURING CONSTRUCTION ACTIVITIES AS NECESSARY.
 8. DISTURBING OF EXISTING UTILITIES - SPECIAL CARE SHALL BE EXERCISED DURING EXCAVATION TO AVOID INJURY TO UNDERGROUND STRUCTURES, SUCH AS ELECTRICAL CABLES, WATER OR GAS MAINS, PIPES, CONDUITS, MANHOLES, CATCH BASINS, ETC. THE CONTRACTOR SHALL NOTIFY DIGSAFE (1-800-DIG-SAFE) A MINIMUM OF 72 HOURS PRIOR TO EXCAVATION ACTIVITIES.
 9. THE CONTRACTOR SHALL MAINTAIN ALL BENCHMARKS, MONUMENTS AND OTHER REFERENCE POINTS AND IF DISTURBED, SHALL REPLACE THEM AT NO ADDITIONAL COST TO THE OWNER.
 10. ALL STORMWATER TREATMENT AND INFILTRATION BMPS SHALL BE PROTECTED FROM SEDIMENTATION AND RUNOFF DURING CONSTRUCTION ACTIVITIES. DISCHARGE TO THESE BMPS WILL ONLY OCCUR ONCE THE SITE HAS BEEN STABILIZED.

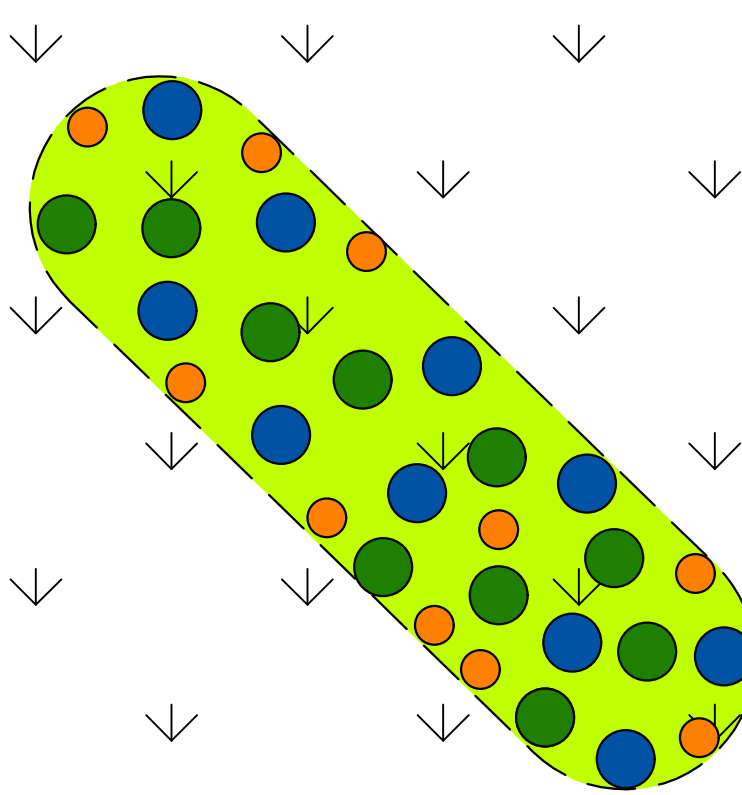
	EXISTING BUILDING
	PROPOSED GRASSLAND
	PROPOSED ASPHALT AREA
	DRAINAGE DISCHARGE POINT
	PROPOSED CONTOUR
	PROPOSED SILT FENCE AND STRAW WATTLES
5.70	PROPOSED SPOT GRADES






RAINGARDEN NO.
PLANTING DETAIL
SCALE 1" = 5'

KEY	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	QUANTITY
	PANICUM VIRGATUM	SWITCH GRASS	12" MIN, NO CLOSER THAN 18" O.C.	5
	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	12" MIN, NO CLOSER THAN 18" O.C.	5
	MYRICA REFLEXA/ VANICA	BAYBERRY	#3 GALLON NO CLOSER THAN 4" ON CENTER.	4

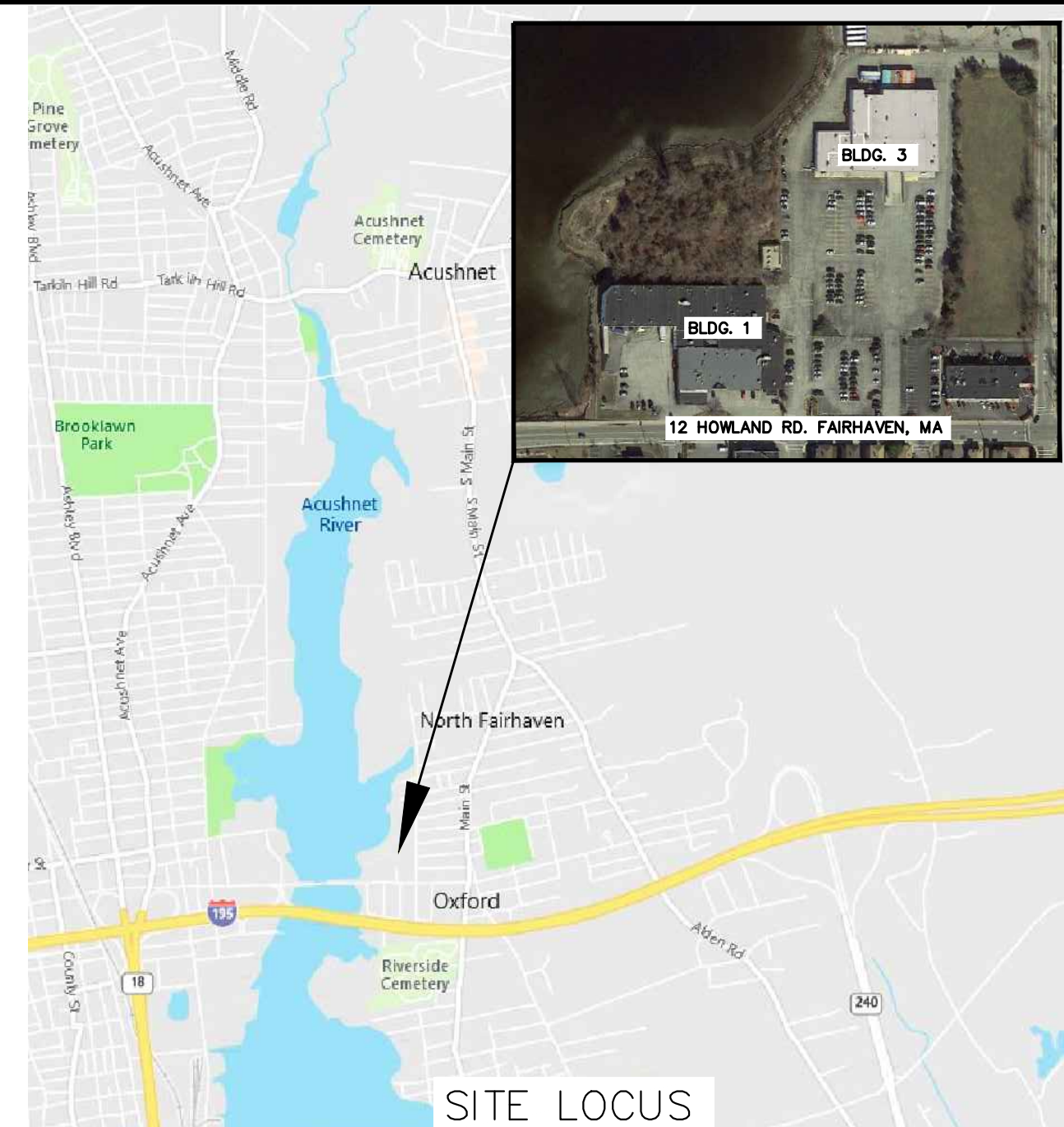
RAINGARDEN NO. 1 PLANTING PLAN
NOTE: PLANTINGS NOTED ABOVE ARE RECOMMENDED,
ALTERNATIVE PLANTINGS AT SIMILAR DENSITY ARE
ALLOWABLE AS LONG AS CHOSEN PLANTINGS ARE TAKEN
FROM THE TABLE "PLANT SPECIES SUITABLE FOR USE IN
BIORETENTION - HERBACIOUS SPECIES" AND THE PLANTINGS
ARE NATIVE SPECIES.



RAINGARDEN NO. 2
PLANTING DETAIL
SCALE 1" = 10'

KEY	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	QUANTITY
	PANICUM VIRGATUM	SWITCH GRASS	12" MIN, NO CLOSER THAN 18" O.C.	10
	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	12" MIN, NO CLOSER THAN 18" O.C.	10
	MYRICA PENNSYLVANICA	BAYBERRY	#3 GALLON NO CLOSER THAN 4" ON CENTER	10

RAINGARDEN NO. 2 PLANTING PLAN
NOTE: PLANTINGS NOTED ABOVE ARE RECOMMENDED,
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ALLOWABLE AS LONG AS CHOSEN PLANTINGS ARE TAKEN
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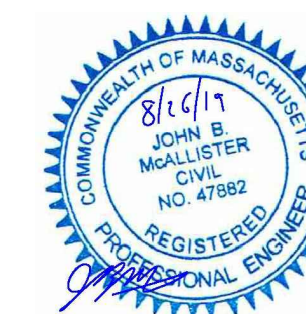


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GRAPHIC SCALE

SCALE: 1"=20'

SHEET TITLE

PROPOSED CONDITIONS

DRAWING NO.

P-1

2 OF 3

NOTES:

1. BASE PLAN PROVIDED BY NYE LUBRICANTS, INC., SCALE AND DIMENSIONS ARE APPROXIMATE ON EXISTING CONSTRUCTION. PROPOSED CONDITIONS DIMENSIONS FOR THE STORMWATER BMPs SHOULD BE CONSIDERED THE REQUIRED DIMENSIONS.
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9. THE CONTRACTOR SHALL MAINTAIN ALL BENCHMARKS, MONUMENTS AND OTHER REFERENCE POINTS AND IF DISTURBED, SHALL REPLACE THEM AT NO ADDITIONAL COST TO THE OWNER.
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PLOT SCALE 1/16"=1'-0"

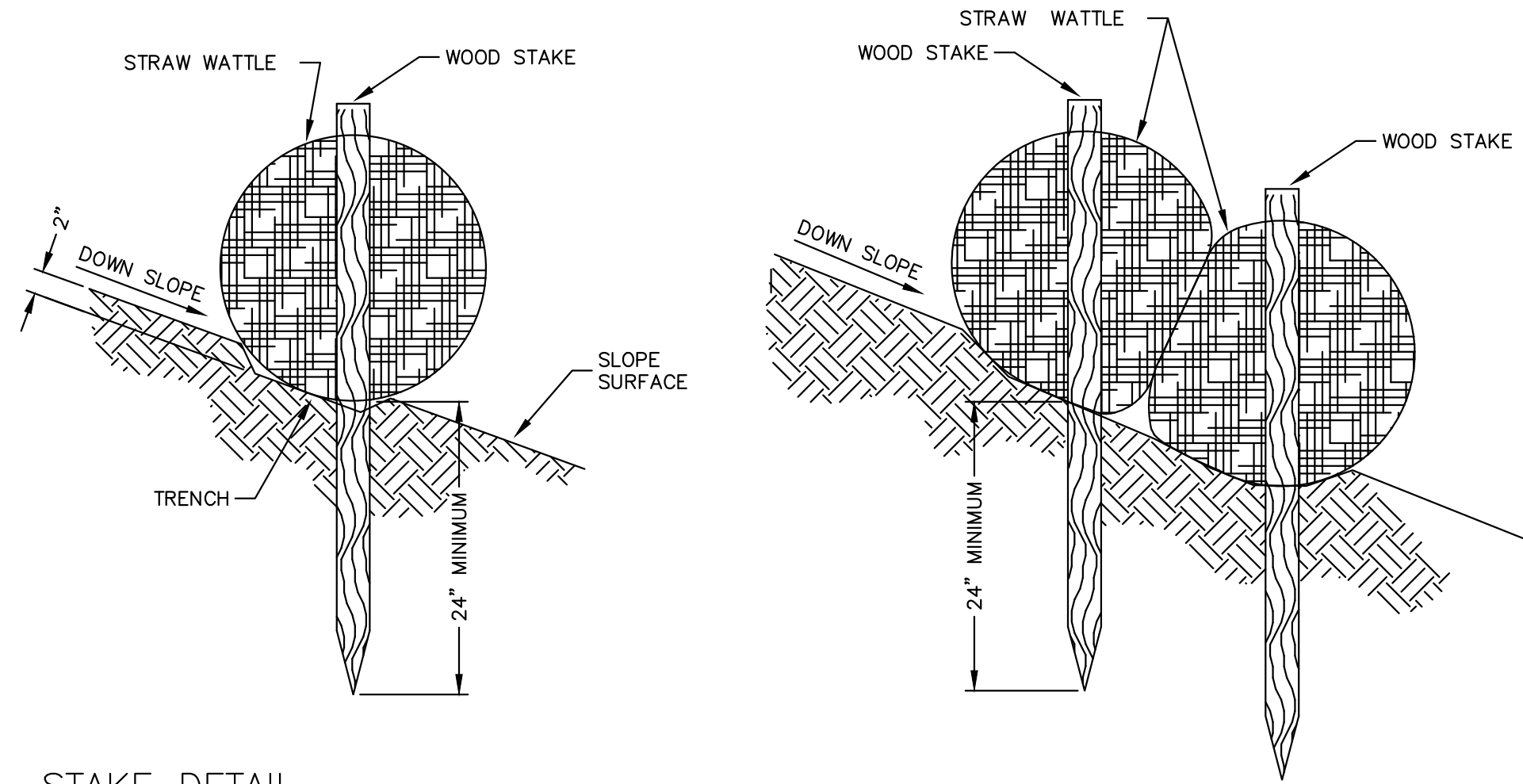
E

D

C

B

A



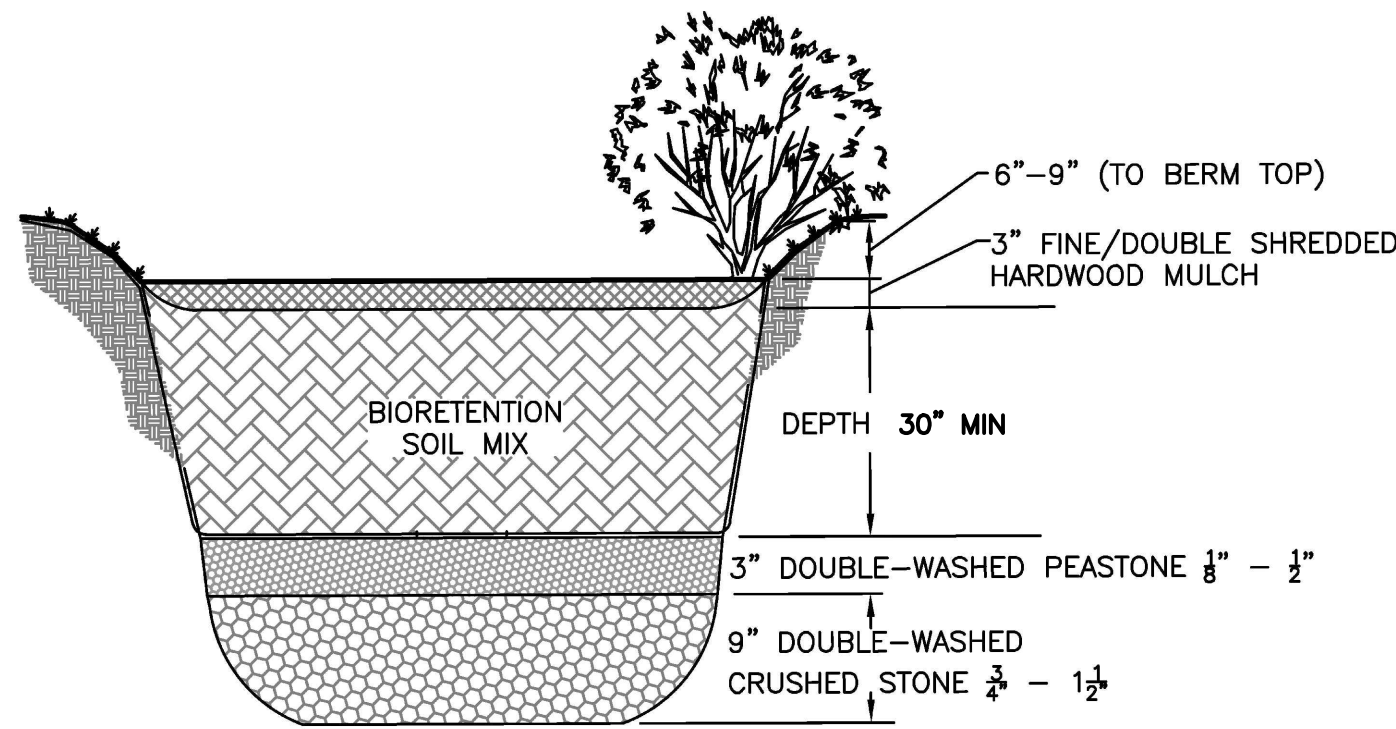
STAKE DETAIL
ON BARE SOIL
NO SCALE

STAKE DETAIL
NO SCALE

STRAW WATTLE
NO SCALE

NOTES:

1. CONTRACTOR WILL BE RESPONSIBLE FOR CONTROLLING WATER IN THE EXCAVATION AREA AND MEETING THE PERFORMANCE STANDARDS OF THE CONTRACT, PARTICULARLY FOR WATER QUALITY. CONTRACTOR TO SUBMIT A TRENCH DEWATERING PLAN THAT WILL ADDRESS, AT A MINIMUM, SOME FORM OF SEDIMENTATION/TURBIDITY REDUCTION BEST MANAGEMENT PRACTICE AS TO COMPLY WITH THE WATER QUALITY REQUIREMENTS..
2. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING SILT FENCE/STRAW WATTLE THROUGHOUT THE CONTRACT AND ENSURING IT IS PLACED IN A MANNER TO PROTECT THE SENSITIVE DOWNSTREAM RECEPTORS AND OFF-SITE AREAS.
3. EROSION AND SEDIMENTATION CONTROL SHALL REMAIN IN PLACE AND IN PROPER WORKING ORDER THROUGHOUT THE DURATION OF THE CONTRACT. IF INITIAL CONTROLS DO NOT PROVE TO BE SUFFICIENT, THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS.

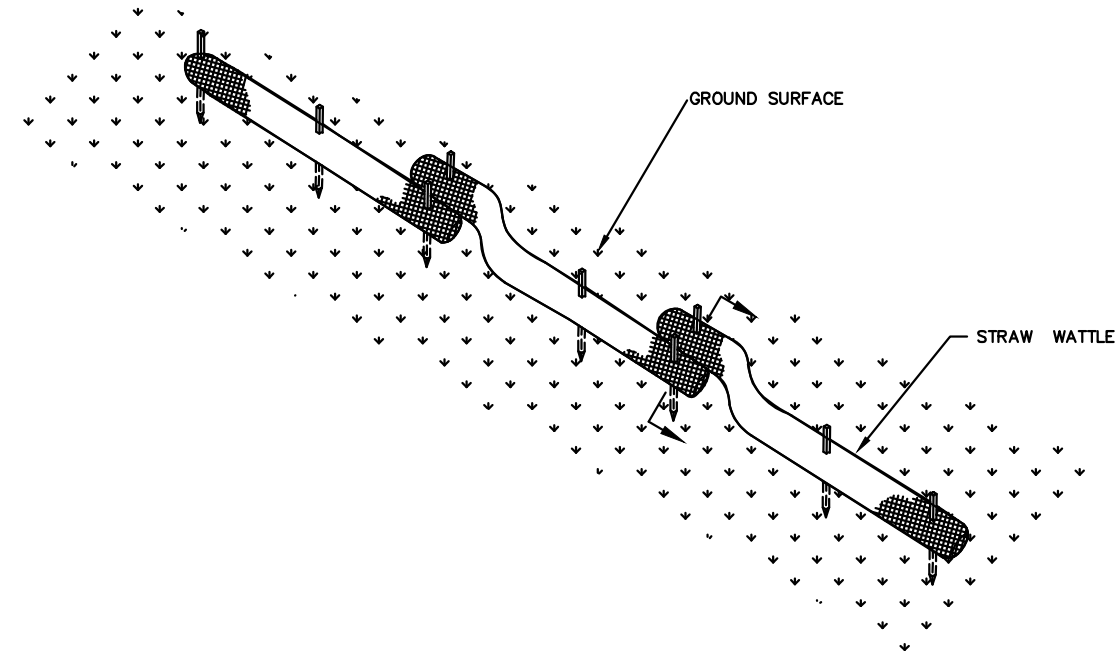


EXFILTRATING BIORETENTION
CELL DETAIL

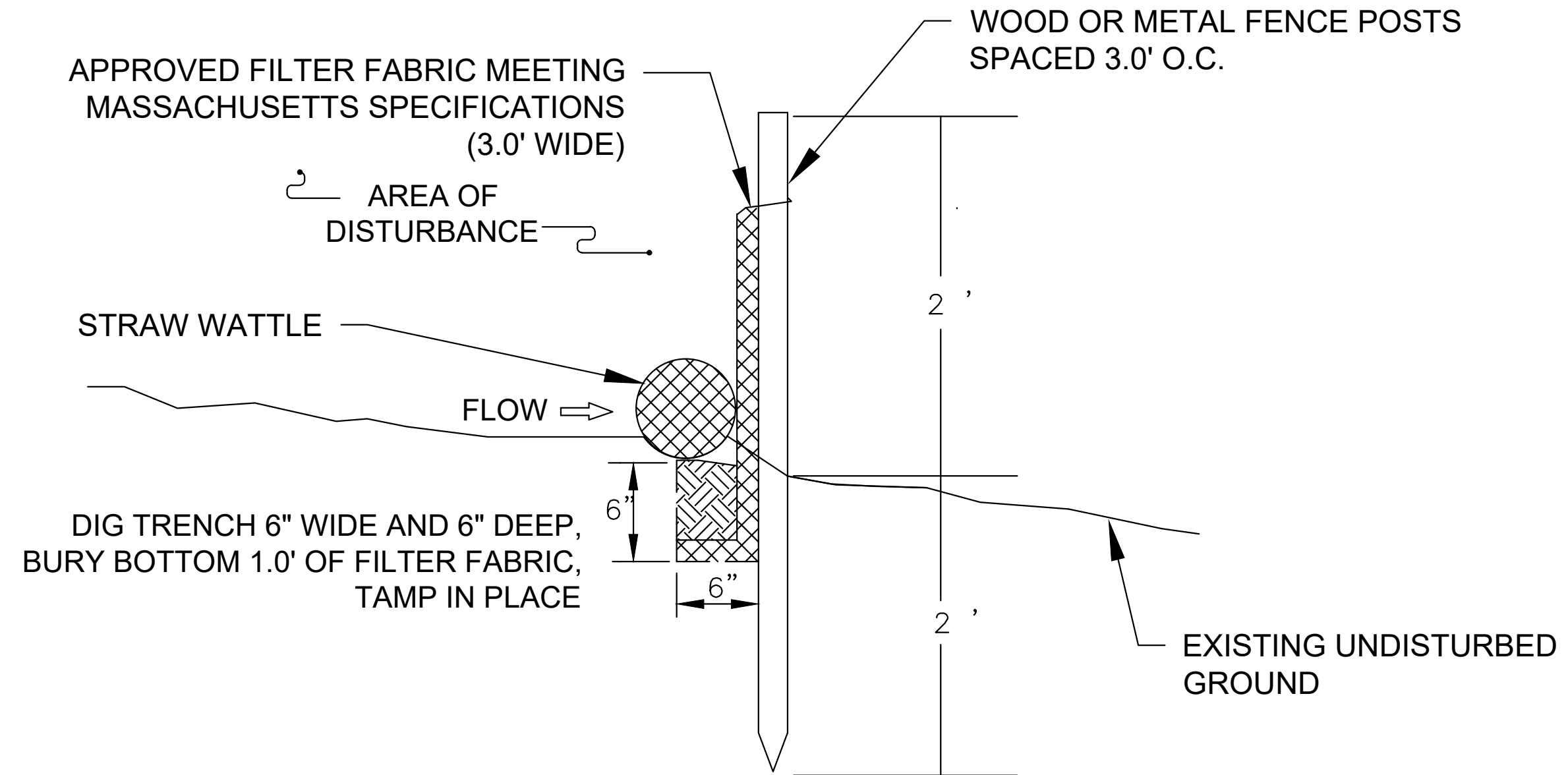
NO SCALE

NOTES:

1. ALL A & B HORIZON SOILS, AS WELL AS OTHER UNSUITABLE SOILS, UNDERLYING THE BMPS SHALL BE REMOVED AND REPLACED.
2. EXCAVATION FOR ALL BMPS SHALL INCLUDE AN OVERDIG OF 25% OF THE WIDTH OF THE BMP UP TO A MAXIMUM OF 3 FT TO ENSURE SUITABLE SOILS FOR THE BMP.
3. EXCAVATION AND INSTALLATION OF THE BMPS SHALL BE INSPECTED BY THE ENGINEER.
4. UNDERLYING SOILS FOR THE BMPS SHALL NOT BE COMPACTED PRIOR TO PLACEMENT OF THE BMPS.
5. ALL INFILTRATION PRACTICES SHALL BE PROTECTED DURING CONSTRUCTION.
6. THE BIORETENTION SOIL MIX SHALL BE A MINIMUM DEPTH OF 30 INCHES AND SHALL CONSIST OF A UNIFORM MIXTURE OF TWO PARTS (40% BY VOLUME) COARSE SAND (MASS HIGHWAY DEPARTMENT MATERIAL SPECIFICATION M1.04.0 TYPE A), TWO PARTS (40% BY VOLUME TOPSOIL (MHD SPECIFICATION M1.05.0 OR M1.06.1) ND ONE PART (20% BY VOLUME) SHREDDED HARDWOOD BARK MULCH.
7. THE LARGEST STONE SIZE SHALL BE 1/2" DIAMETER IN THE TOPSOIL.



STRAW WATTLE
NO SCALE

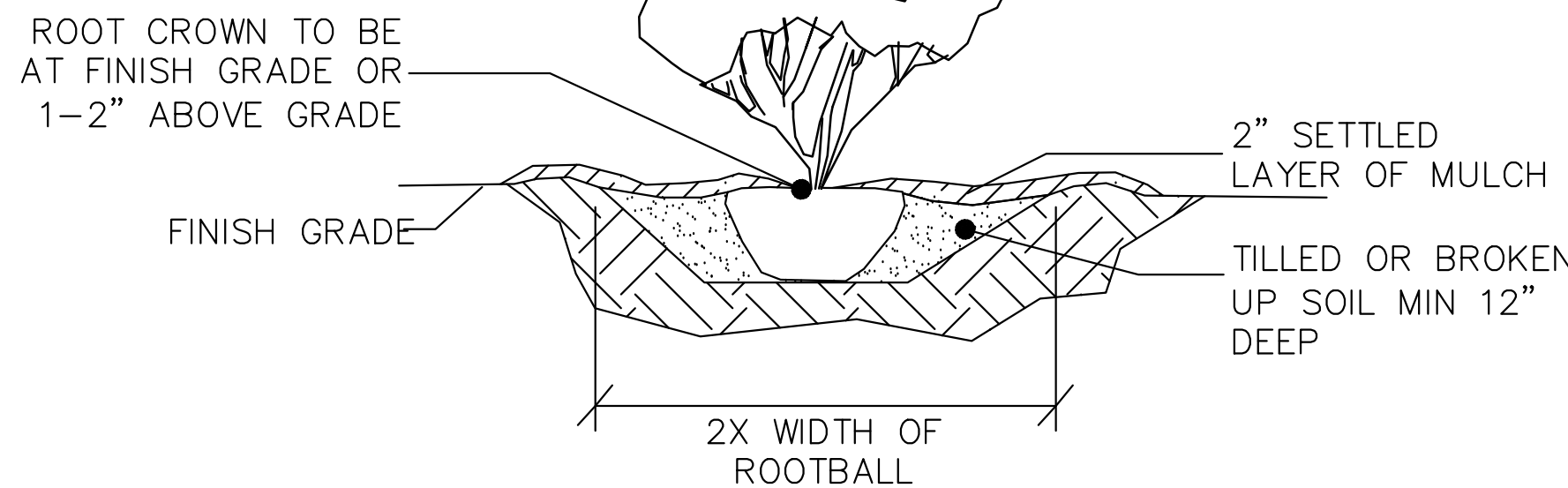


NOTES:

1. SILT FENCING SHALL BE PLACED AS SHOWN ON PROJECT DRAWINGS.
2. BOTTOM 1 FOOT OF SILT FENCING SHALL BE BURIED IN 6" X 6" TRENCH DUG AT BASE OF FENCING.
3. SILT FENCING SHALL BE ANCHORED IN PLACE WITH WOODEN OR METAL FENCE POSTS SPACED AT 3 FT. O.C.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE PROMPT (WHEN NEEDED).
5. SILT FENCING SHALL BE REMOVED WHEN IT HAS SERVED ITS USEFULNESS.
6. SILT FENCING TO BE PLACED DOWN-GRADIENT OF HAY BALES.

NOTES:

1. ALL PLANT MATERIALS SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICA ASSOCIATION OF NURSERYMEN, INC.
2. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, FREE OF DISEASE, INSECTS, AND PESTS.
3. KEEP ROOTBALLS INTACT PRIOR TO AND DURING PLANTING OPERATIONS. PLANTS WITH BROKEN OR DAMAGED ROOT BALLS SHALL BE REJECTED AND IMMEDIATELY REMOVED FROM THE SITE. KEEP ROOTBALLS DAMP AND PROTECTED FROM DAMAGE DUE TO SUN AND WIND.
4. ALL PLANTED AREAS WITHIN OR OUTSIDE THE LIMIT OF WORK WHICH ARE DISTURBED DURING CONSTRUCTION (INCLUDING PLANTING OPERATIONS) SHALL BE RETURNED TO ORIGINAL GRADE, LOAMED, AND SEEDED OR MULCHED (AS APPROPRIATE) BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
5. AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED AND SEEDED WITH NEW ENGLAND WETMIX (BY NEW ENGLAND WETLANDS PLANTS, INC.) OR EQUIVALENT: RECOMMEND 1 LB./2500 SF APPLICATION RATE; CONTAINS A WIDE VARIETY OF NATIVE SEEDS SUITABLE FOR WETLAND RESTORATION SITES THAT ARE NOT PERMANENTLY FLOODED.



TYP. SHRUB PLANTING

NO SCALE

NOTES: TYPICAL SHURB PLANTING, INDIVIDUAL PLANTING HOLE

1. DIG PLANTING HOLE AT LEAST 2X THE WIDTH OF THE ROOT BALL OR CONTAINER.
2. SCARIFY SUBGRADE AND SIDES OF PLANTING HOLE WHEN PLANTING IN CLAY SOIL.
3. SET THE TOP OF THE ROOT BALL LEVEL WITH THE SOIL SURFACE, OR 1-2" ABOVE IF THE SOIL IS PRONE TO SETTLING.
4. IF CONTAINER GROWN PLANT, GENTLY SLIDE PLANT OUT OF CONTAINER. DISTURB THE ROOTS.
5. IF B&B PLANT, REMOVE BURLAP FROM AT LEAST THE TOP 12 INCHES OF THE ROOTBALL, WITHOUT DISTURBING THE ROOTBALL. REMOVE ALL CORD FROM THE TRUNK. REMOVE BURLAP AND WIRE BASKET (IF PRESENT) FROM THE ROOT BALL.
6. BACK FILL THE PLANTING HOLE WITH EXCAVATED NATIVE SOIL, BROKEN UP OR TILLED. WATER TO REMOVE AIR POCKETS. DO NOT ADD AMENDMENTS.
7. PLACE PINE STRAW OR BARK MULCH ON THE SURFACE TO A (SETTLED) DEPTH OF 1 TO 3 INCHES.



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SHEET TITLE
**EROSION
CONTROLS
AND
DETAILS**

DRAWING NO.
D-1

3 OF 3

PLOT SCALE 1/16"=1'-0"