

CIVIL PLANS:

REVISED SITE PLAN

CONSTRUCTION DETAILS

CONSTRUCTION DETAILS

SHEET:

C1

D1

D2

DOG DAYCARE FACILITY

FOR

GREAT BAY KENNEL

27 & 35 NEWMARKET ROAD

DURHAM, NH

TAX MAP 6, LOT 11-7

FEBRUARY 20, 2012

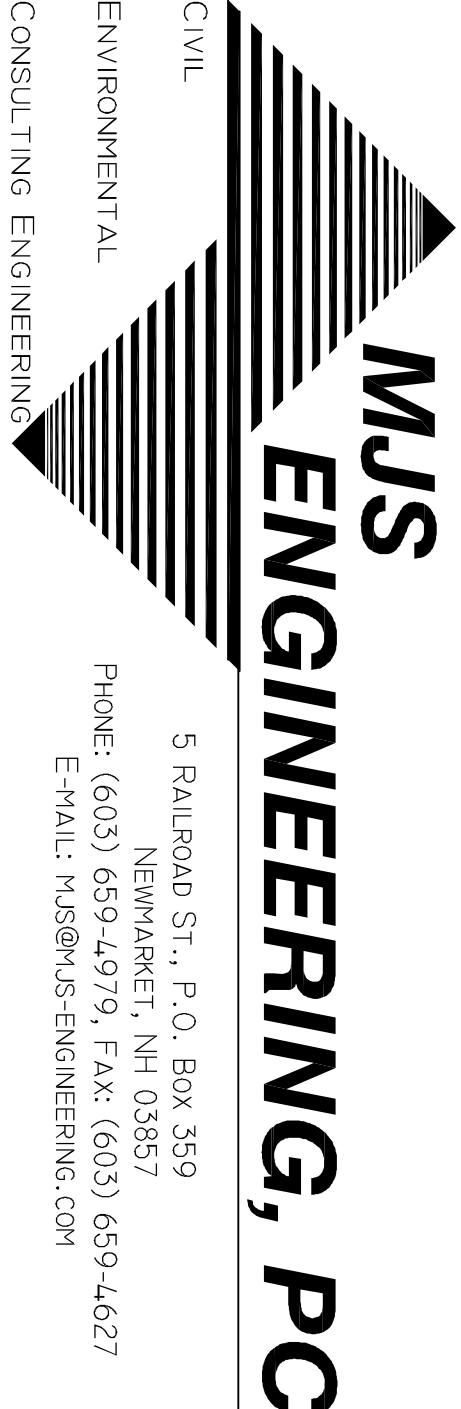
REVISED MAY 21, 2014

SITE AND STRUCTURAL ENGINEER:

FINAL APPROVAL BY THE DURHAM PLANNING BOARD

CERTIFIED BY _____

DATE _____



CIVIL

ENVIRONMENTAL

CONSULTING ENGINEERING

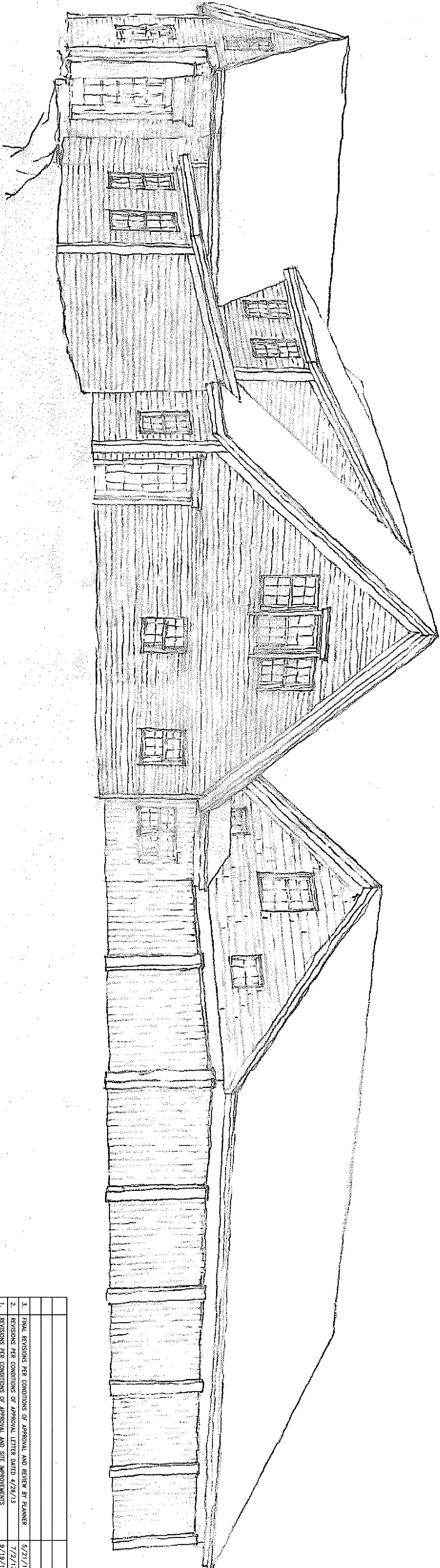
5 RAILROAD ST., P.O. BOX 359
NEWMARKET, NH 03857
PHONE: (603) 659-4979, FAX: (603) 659-4627
E-MAIL: mjs@mjs-engineering.com

DESIGN:

RW ROBIN WUNDERLICH
66 MAST ROAD
LEE, NH 03861

OWNER/APPLICANT:

GEOFF SAWYER
27 NEWMARKET ROAD
DURHAM, NH 03824



REVISIONS		DATE	INT.
NO.			
1.	REVISIONS PER CONDITIONS OF APPROVAL AND SITE IMPROVEMENTS	9/19/12	MS
2.	REVISIONS PER CONDITIONS OF APPROVAL LETTER DATED 4/29/13	7/2/13	MS
3.	FINAL REVISIONS PER CONDITIONS OF APPROVAL AND REVIEW BY PLANNER	5/21/14	MS

CONSTRUCTION SEQUENCING
AND EROSION CONTROL NOTES:

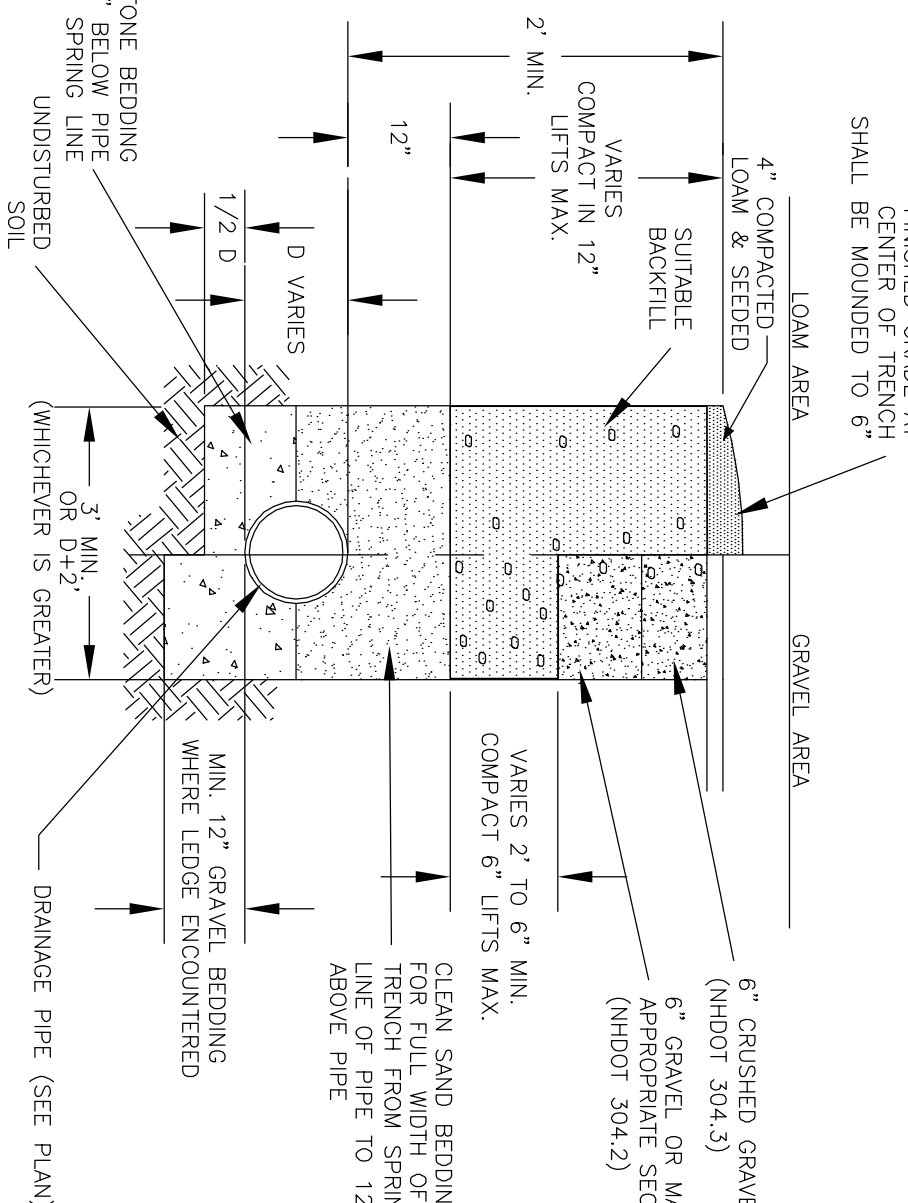
1. AREAS OF OBSTRUCTION/STABILIZATION.
2. THE STABILIZED PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 4 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
3. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - a. A MINIMUM OF 90% VEGETATED GROUND HAS BEEN ESTABLISHED.
 - b. A MINIMUM OF 3' OF NON-EROSIVE MATERIAL, SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED.
 - c. EROSION CONTROL PLANTS HAVE BEEN PROPERLY INSTALLED.
4. EROSION CONTROL PLANTS TAKEN PLANT, BUT STUMPS AND UNDERLING VEGETATION REMAIN UNDISTURBED.
5. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS.
6. PERMANENT AREAS OF OBSTRUCTION/STABILIZATION AND MUDCHANS WITH THE FOLLOWING SEEDING SHALL BE COMPLETED BY APRIL 15TH AND OCTOBER 15TH, WITHIN 12 HOURS OF MOISTURE FINISHED GRADE.

A. 500 lb./Ac. of 10-20-20 FERTILIZER
 2. SEED MIXTURED LAMN AREAS
 A. SUGAR BEET TYPE
 KENTUCK 31 TALL RESCUE
 RED TOP
 MIX APPLIED AT 100
 B. GRASS SMILES AND DEFOLIATION PRONG
 TALL RESCUE
 GREENING RED RESCUE
 MIX APPLIED AT 25
 3. MULCH
 A. 1.5-2.0 TONS/Ac.
 4. TEMPORARY SEED STABILIZERS OR TEMPORARILY STABILIZED SHALL BE TREATED WITH ONE OF THE FOLLOWING SEED MIXTURES IF LEFT UNWORKED FOR MORE THAN 14 DAYS.

SEASON	APPLICATION DATE	MIXTURE TYPE	QUANTITY (lb./Ac.)
EARLY SPRING	NO LATER THAN 5/15	OATS	80
LATE SPRING/ FALL	4/1 TO 6/1 & 8/15 TO 9/15	PERENNIAL RYE	30
EARLY SPRING/ FALL	4/1 TO 5/15 & 8/15 TO 9/15	ANNUAL RYE	40
FALL	8/15 TO 9/15	WINTER RYE	112

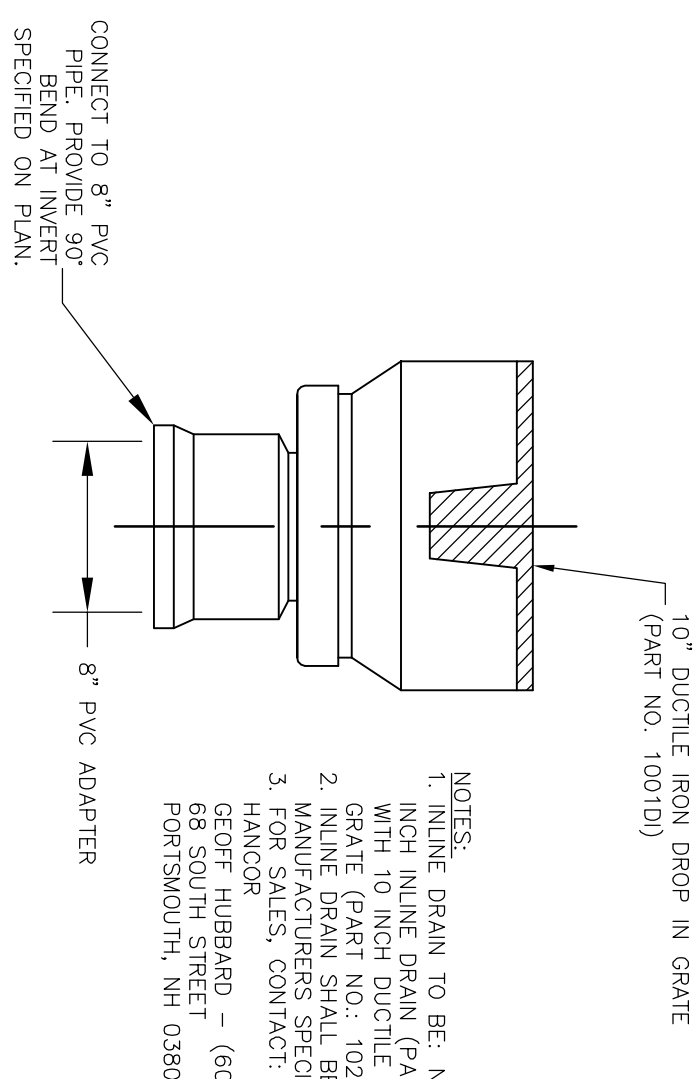
- [illegible]

- B. EROSION CONTROL:
 1. INSTALLATION, INSPECTION, AND MAINTENANCE:
 - A. INSTALL ALL EROSION CONTROLS AS SHOWN ON THE GRADING PLAN AND PER TECHNICAL DETAILS.
 - B. INSPECT EROSION CONTROLS WEEKLY AND AFTER EVERY RAIN EVENT OF 0.5 INCHES OR GREATER.
 - C. MAINTAIN EROSION CONTROLS PER REQUIREMENTS NOTED IN TYPICAL CONSTRUCTION DETAILS.
 2. EROSION CONTROL STRUCTURES:
 - A. PERIMETER CONTROLS (I.E. SLOTT SOCK)
 1. INSTALL PRIOR TO BEGINNING EARTH MOVING OPERATIONS.
 - B. RIP RAP OUTLET PROTECTION
 1. INSTALL IN SLOATES FOR EROSION PROTECTION PRIOR TO STABILIZATION
 2. INSTALL IN AREAS WHERE SURFACE RUNOFF CHANNELIZES (SUCH AS DITCHES, DRAINAGE DITCHES, ETC.)
 - C. STONE CHECK DAMS
 1. INSTALL ON SLOPES WHILE IN PROCESS OF BUILDING UP ROAD/PARKING AREAS)
 - E. PERMANENT DETENTION BASINS AND SLOATES
 1. INSTALL PRIOR TO FILLING GRADES THE SITE.
 2. THEY MUST BE PERMANENTLY STABILIZED PRIOR TO DIRECTING FLOW TO THEM.
 - F. TEMPORARY SEDIMENT BASINS/SLOATES
 1. INSTALL DURING CONSTRUCTION AS NEEDED.
 2. THEY MUST BE PERMANENTLY STABILIZED PRIOR TO DIRECTING FLOW TO THEM.
 3. REMOVAL:
 - A. ALL EROSION AND SEDIMENT CONTROL STRUCTURES MUST REMAIN IN PLACE AND BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED OR GROUND SURFACE IS STABILIZED PER SECTION 2.
 - B. ALL EROSION AREAS SHALL BE REGRADED, FERTILIZED, AND SEEDING MONITOR TO ENSURE VEGETATIVE GROWTH IS ESTABLISHED AND REPAIR AS NEEDED. UNTIL MINIMUM OF 85% VEGETATIVE COVER IS ESTABLISHED.



STANDARD DRAINAGE PIPE TRENCH

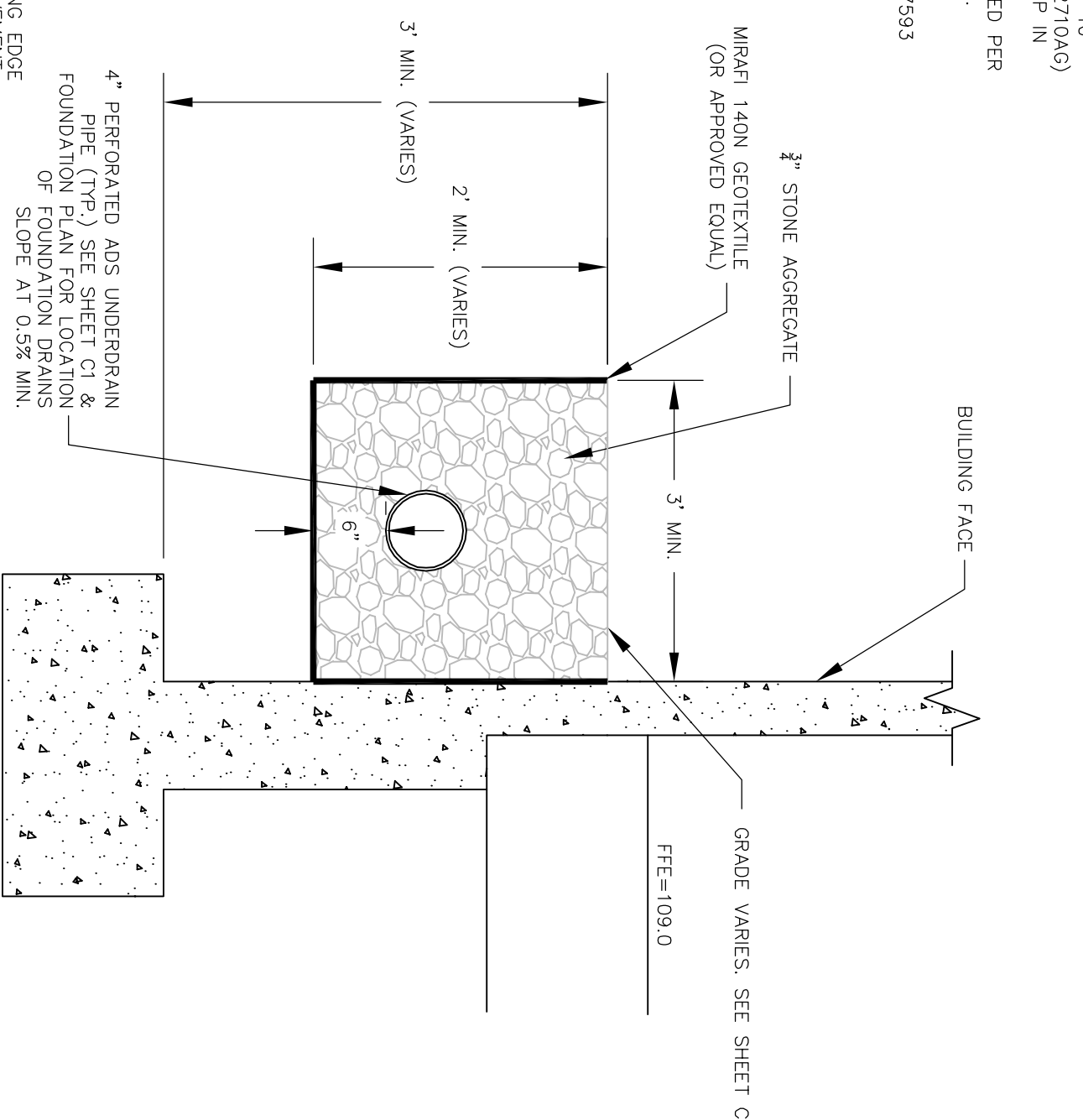
N.T.5



NYLOPLAST INLINE DRAIN

N.T.S.

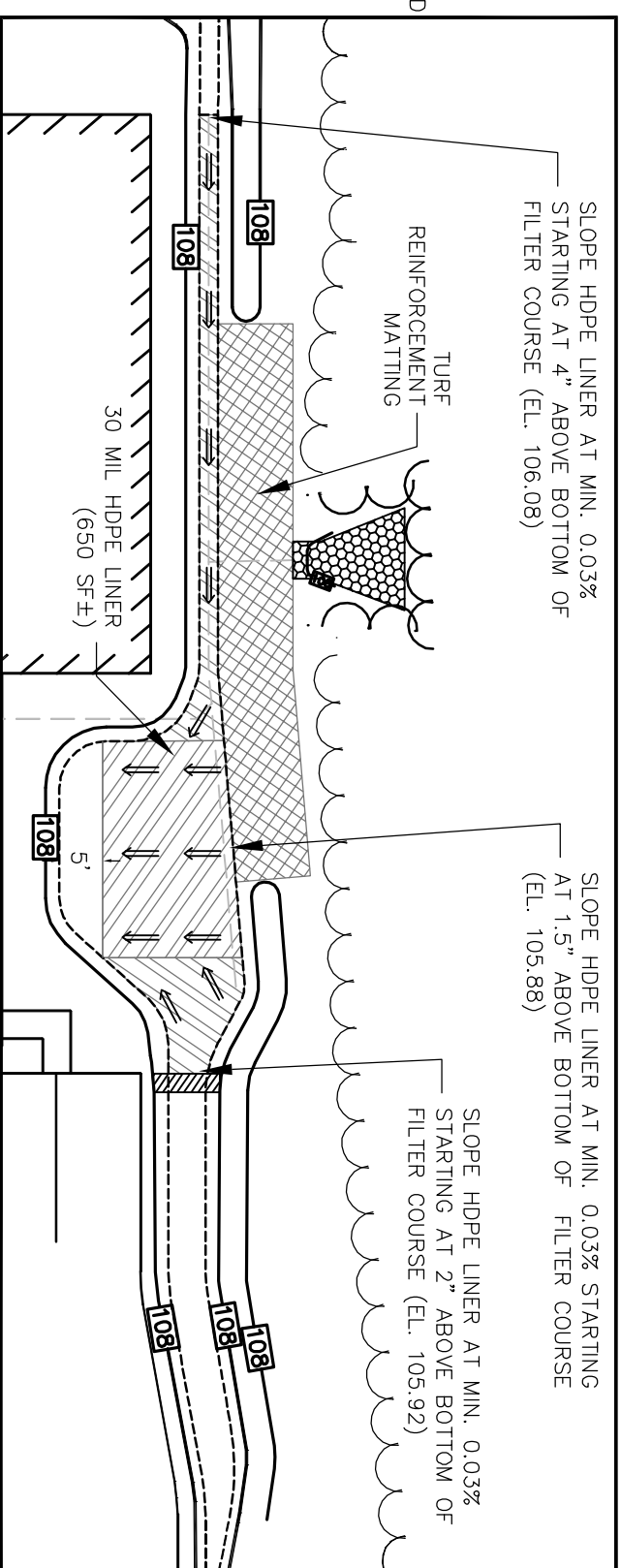
1. INCH INLINE DRAIN (PART NO.: 2710A6) WITH 10 INCH DUCTILE IRON DROP IN GRATE (PART NO.: 10201D).
2. INLINE DRAIN SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS.
3. FOR SALES, CONTACT:
HANCOR
GEOFF HUBBARD - (603) 988-7593
68 SOUTH STREET
PORTSMOUTH, NH 03801



DRIP STRIP DETAIL

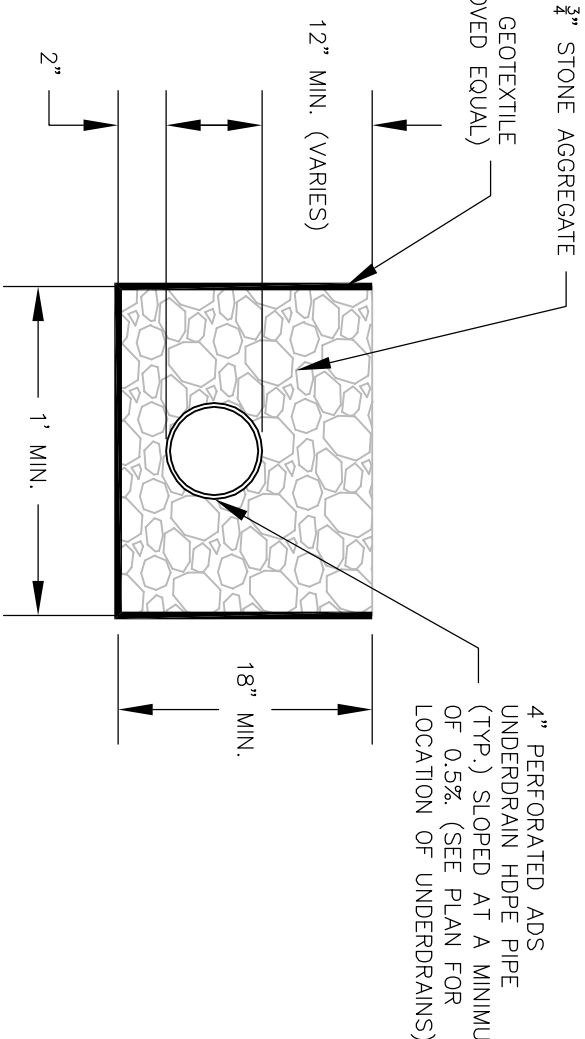
N.T.S.

- NOTES:
1. SEE PLANS FOR LOCATION OF TRENCH



BIORETENTION SYSTEM HDPE LINER LAYOUT PLAN

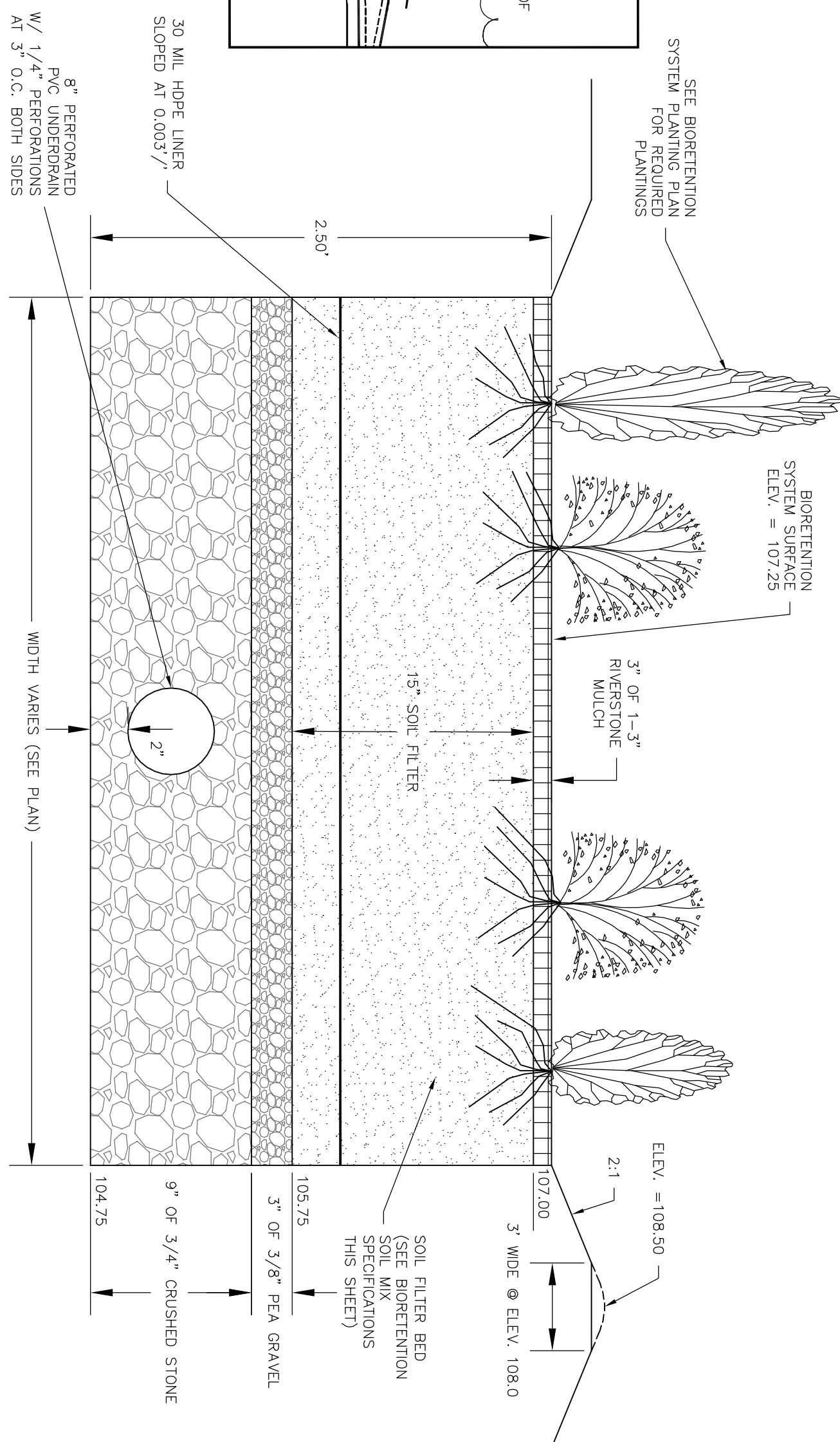
SCALE: 1"=20'



HILLSIDE DITCH DETAIL

N.T.S

- NOTES:
1. SEE PLANS FOR LOCATION AND LENGTH OF DITCH.



BIORETENTION SYSTEM CROSS SECTION

N.T.S

- CONSTRUCTION NOTES:
1. DO NOT PLACE BIORETENTION SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

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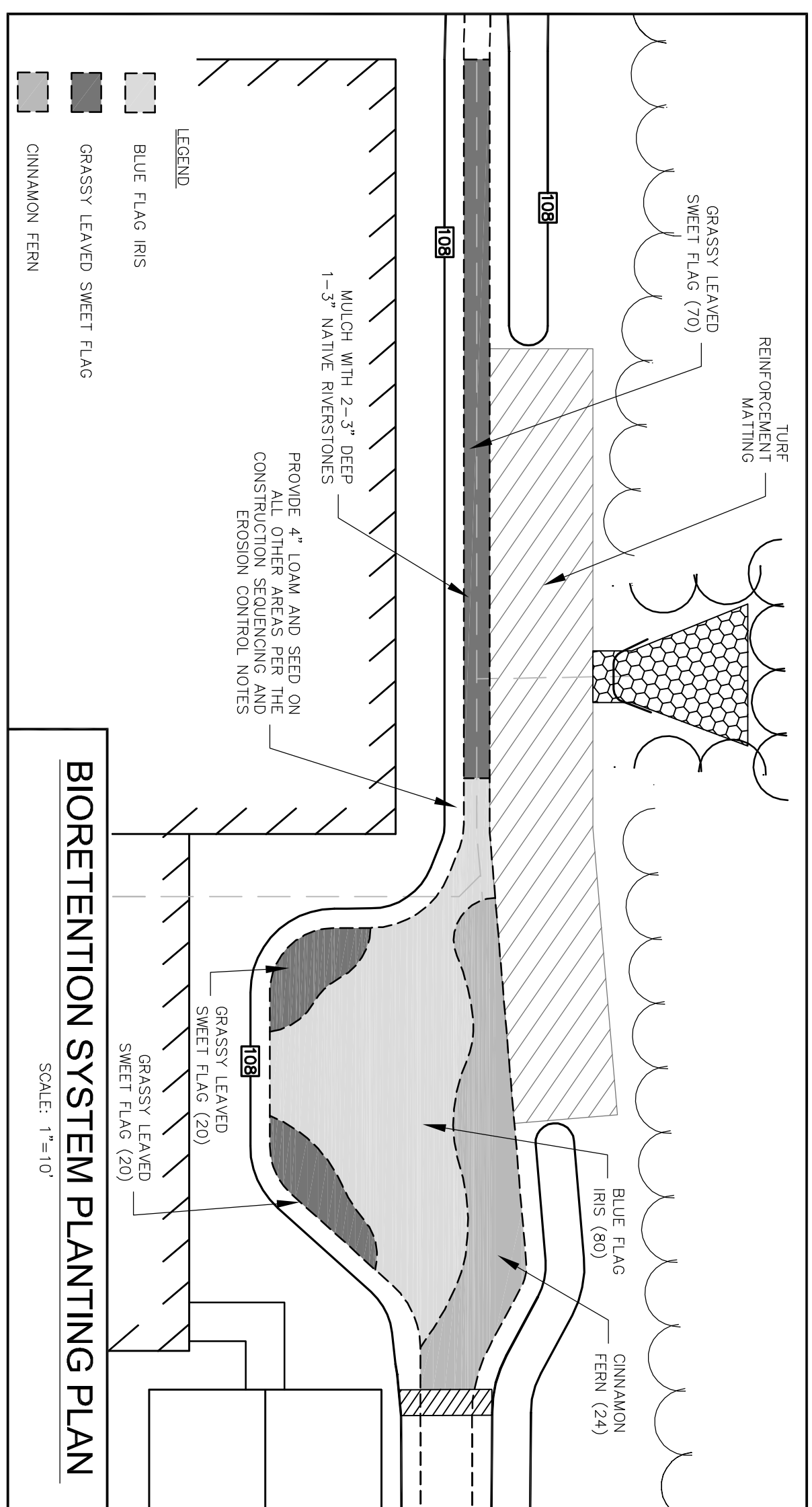
BIORETENTION SYSTEM PLANT LIST			
COMMON NAME	BOTANICAL NAME	QUANTITY	SIZE
CINNAMON FERN	<i>Onoclea sensibilis</i>	24	1 GAL.
BLUE FLAG IRIS	<i>Iris versicolor</i>	80	1 GAL.
GRASSY LEAVED SHEET PLANT	<i>Glossy Acorus gramineus</i> "Ogon"	110	1 GAL.

6. ALL PIPE TO PIPE CONNECTIONS SHALL BE WATER-TIGHT.
7. ALL DISTURBED AREAS NOT OTHERWISE LANDSCAPED SHALL RECEIVE FOUR INCHES OF LOAM AND SEED.
- | <u>SIEVE SIZE:</u> | <u>% PASSING:</u> |
|--------------------|-------------------|
| #4 | 80-90 |
| #40 | 50-80 |
| #100 | 30-45 |
| #200 | 15-30 |

NOTES:
1. SEE PLANS FOR LOCATION AND LENGTH OF DITCH.

N.T.S

- NOTES:
1. SEE PLANS FOR LOCATION AND LENGTH OF DITCH.



BIORETENTION SYSTEM PLANTING PLAN

SCALE: 1"=10'

CONSTRUCTION DETAILS

prepared for

GREAT BAY KENNEL

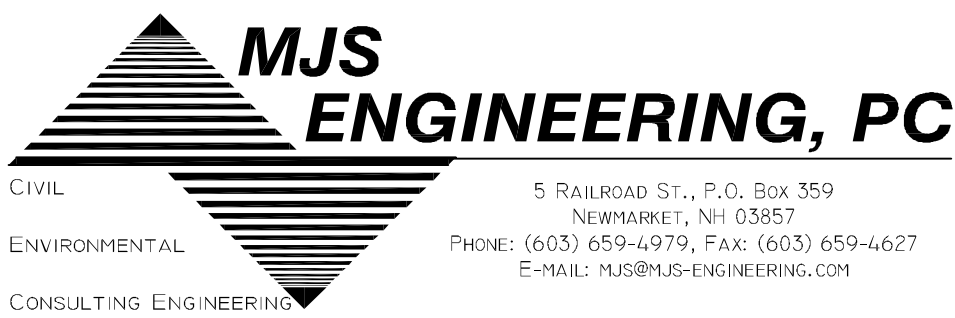
(TAX MAP 6, LOT 11-7)
27 & 35 NEWMARKET ROAD DURHAM, NH

DATE: 10/19/11
SCALE: AS SHOWN
DESIGNED BY: MJS/MS
DRAWN BY: MS
APPROVED BY: MJS

DWG FILE: 11-035 C1L.dwg

SEAL

4.	FINAL REVISIONS PER CONDITIONS OF APPROVAL AND REVIEW BY PLANNER	5/21/14	MS
3.	REVISIONS PER CONDITIONS OF APPROVAL LETTER DATED 4/26/13	7/2/13	MS
2.	REVISIONS PER CONDITIONS OF APPROVAL AND SITE IMPROVEMENTS	9/19/12	MS
1.	REVISIONS PER SITE REVIEW PROCESS	10/23/11	MS
NO.	REVISIONS	DATE	INT.



JOB: 11-035

APRON DIMENSION TABLE				
PIPE OUTLET	W ₀	W	L ₀	T
BIORETENTION SYSTEM	4.0"	11"	9"	12"