

AP 49 LOT 86  
N/F  
DENNIS R. & SUZANNE  
LAVALLEE  
BK. 1438 PG. 244

**GENERAL NOTES:**

1. THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.
2. WETLANDS SHOWN HEREIN WERE DELINEATED BY MASON & ASSOCIATES, INC. 771 PLAINFIELD PIKE, NORTH SCITUATE, RI.
3. THIS SITE DOES NOT LIE WITHIN ANY KNOWN AGRICULTURAL USE, SILVICULTURAL USE, NATURAL HERITAGE, OR FARMLAND CONSERVATION AREAS.
4. THE CONTOURS SHOWN HEREIN ARE BASED ON AN ASSUMED DATUM.
5. FLOOR PLAIN ZONE X PER FIRM MAP 44007C0089G.

**REFERENCES:**

1. A PLAN ENTITLED "CUMBERLAND, RI COMPOSITE PLAN OF LAND NOW OR FORMALLY OWNED BY HOMESITE REALTY INC DRAWN BY MCCORMICK SURVEY AUG.1979 SCALE 1" = 100"

AP 49 LOT 97  
N/F  
DENNIS R. & SUZANNE D.  
LAVALLEE  
D.B. 252 PG. 81

NO.	DATE	DESCRIPTION	BY
4.	5/15/19	REVISED PER DEM COMMENTS	W.C.R.
4.	4/24/19	RELOCATION HOUSE & OWTS	W.C.R.
3.	4/9/19	SEPTIC DESIGN CHANGE	S.M.G.
2.	3/8/19	JOINT APPLICATION	S.M.G.
1.	2/11/19	JOINT APPLICATION	S.M.G.

AP 49 LOT 11  
N/F  
JOSEPH & ANN M.  
ROSSETTI  
D.B. 827 PG. 66

AP 49 LOT 87  
N/F  
JOSEPH B. & LORRAINE A.  
HYNES  
D.B. 1363 PG. 416

AP 49 LOT 133  
N/F DAVID M. &  
BARBARA P. GARRIGAN  
D.B. 746 PG. 215

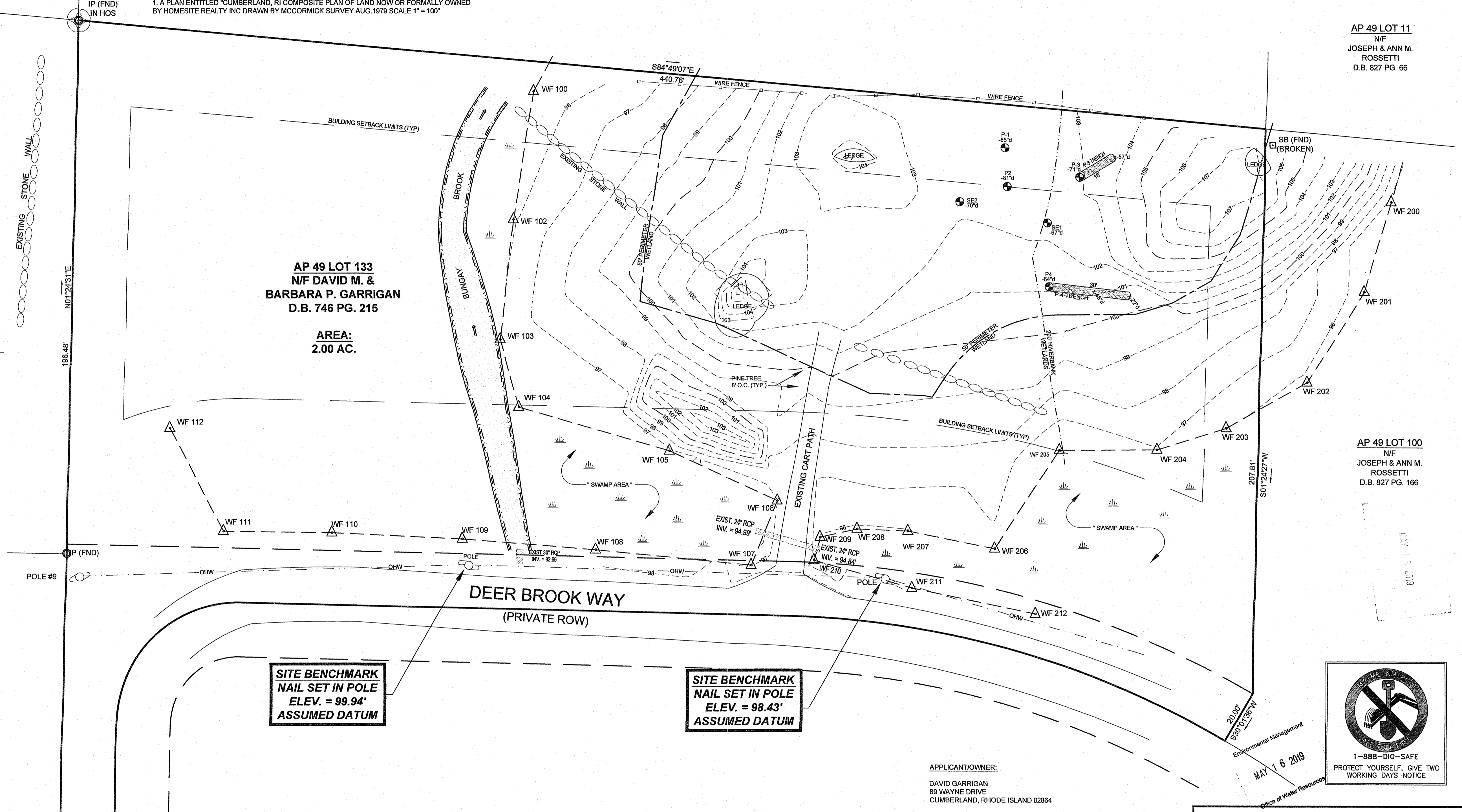
AREA:  
2.00 AC.

AP 49 LOT 100  
N/F  
JOSEPH & ANN M.  
ROSSETTI  
D.B. 827 PG. 166

**LEGEND**  
NOT TO SCALE

- BOUNDARY
- ABUTTER
- MAJOR CONTOUR
- MINOR CONTOUR
- STONEWALL
- WETLANDS EDGE
- 50' PERIMETER WETLAND
- 200' RIVERBANK WETLAND
- STREAM
- BUILDING ENVELOPE
- OVERHEAD WIRE
- PROP. OVERHEAD WIRE
- LIMITS OF DISTURBANCE
- EROSION CONTROL
- DRAINAGE LINE
- WATER LINE
- IRON PIN
- BOUND
- DRILL HOLE
- WELL
- UTILITY POLE
- SOIL EVALUATION HOLE
- PROPOSED TREE

AP 49 LOT 88  
N/F  
DOMINICK R. & ADA M.  
LABELLA  
D.B. 569 PG. 967



**SITE BENCHMARK**  
NAIL SET IN POLE  
ELEV. = 99.94'  
ASSUMED DATUM

**SITE BENCHMARK**  
NAIL SET IN POLE  
ELEV. = 98.43'  
ASSUMED DATUM

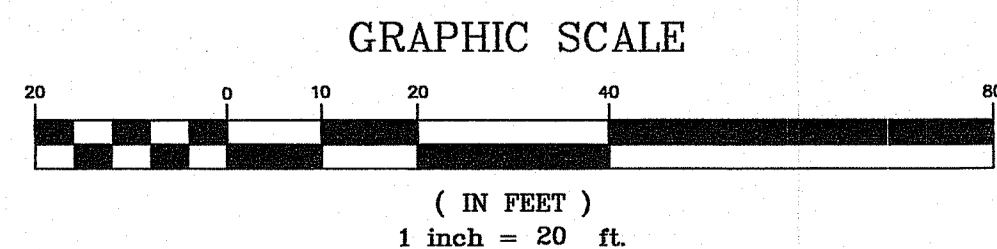
THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON NOVEMBER 25, 2015, AS FOLLOWS:

TYPE OF SURVEY: LIMITED CONTENT SURVEY (CLASS I)  
PURPOSE OF SURVEY: JOINT APPLICATION SEPTIC SYSTEM DESIGN

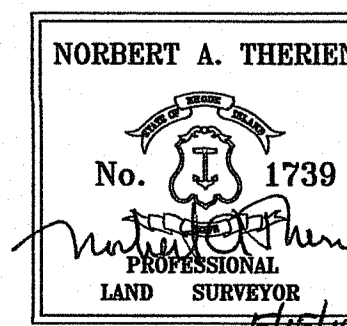
BY: *Norbert A. Therien*  
NORBERT A. THERIEN P.L.S.

**ZONING CRITERIA**

ZONING DISTRICT	A2 (NO WATER OR SEWER)
MINIMUM LOT AREA	80,000 SQ. FT.
MINIMUM LOT FRONTAGE	180'
MINIMUM FRONT YARD SETBACK	75'
MINIMUM SIDE YARD SETBACK	20'
MINIMUM REAR YARD SETBACK	30'
MAXIMUM BUILDING COVERAGE	15%
MAXIMUM BUILDING HEIGHT	35'



APPLICANT/OWNER:  
DAVID GARRIGAN  
89 WAYNE DRIVE  
CUMBERLAND, RHODE ISLAND 02864  
1-401-529-1663  
OWTS NUMBER 1808-0338  
WETLANDS 19-0081

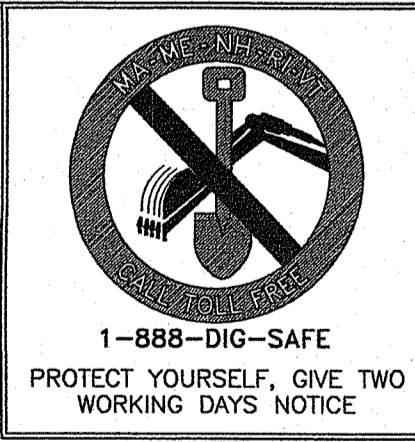


**NATIONAL**  
Surveyors-Developers  
Inc.  
42 Hamlet Ave., Woonsocket, R.I.  
(401) 769-7779

**JOINT APPLICATION**  
**DAVID M. GARRIGAN**  
ASSESSORS PLAT 49 LOT 133  
DEER BROOK WAY  
CUMBERLAND, RHODE ISLAND

**EXISTING CONDITIONS PLAN**

DRAWN BY: J.E.S.	CHECKED BY: N.A.T.	FIELD BY: M.A.
FEBRUARY 2019	JOB No. 2018-215	SHEET 1 OF 4



MAY 16 2019  
Office of Water Resources  
Environmental Management



**SOIL EROSION AND SEDIMENTATION CONTROL NOTES:**

THE HAYBALE AND SILT FENCE LINE ILLUSTRATED ON THESE PLANS SHALL SERVE AS THE STRICT LIMIT OF DISTURBANCE FOR THE PROJECT WITHIN OR ADJACENT TO REGULATED FRESHWATER WETLAND AREAS.

THE LIMITS OF CLEARING, GRADING, AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE OF THESE LIMITS, AS DEPICTED ON THE PLAN SHALL BE TOTALLY UNDISTURBED, TO REMAIN IN NATURAL CONDITION.

ALL CATCH BASINS SHALL BE PROTECTED WITH STAKED HAYBALES (R.I. STD. 9.8.0) DURING CONSTRUCTION ACTIVITIES. ALL PROPOSED STORMWATER DISCHARGE AREAS SHALL BE LINED WITH A RIPRAP SPLASH PAD AND PROTECTED WITH STAKED HAYBALE OUTLET PROTECTION (R.I. STD. 9.1.0), OR STAKED HAYBALE WITH SILT FENCE (R.I. STD. 9.3.0) SHALL ALSO BE INSTALLED AT ALL EXISTING STORMWATER DISCHARGE LOCATIONS WHERE DISTRIBUTING PIPES, CATCH BASINS, AND MANHOLES ARE TO BE CLEANED AND FLUSHED.

ALL DISTURBED SLOPES EITHER NEWLY CREATED OR CURRENTLY EXPOSED SHALL BE SEEDED, PROTECTED AND MAINTAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL REGULARLY CHECK ALL SEEDED AREAS TO ENSURE THAT A GOOD STAND OF VEGETATION IS MAINTAINED.

ALL HAYBALES, TEMPORARY TREATMENT (HAY, STRAW, ETC.) AND TEMPORARY EROSION PROTECTION SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.

STOCKPILES OF TOPSOIL SHALL NOT BE LOCATED NEAR WATERWAYS OR WETLAND EDGES. THEY SHALL HAVE SIDE SLOPES OF NO GREATER THAN 2:1 AND SHALL BE TEMPORARILY SEEDED AND/OR STABILIZED PER CONTRACT SPECIFICATIONS.

THE HAYBALES SHALL BE CHECKED BY THE CONTRACTOR ON A WEEKLY BASIS AND AFTER EACH STORM FOR UNDERMINING OR DETERIORATION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY HAYBALES AS NEEDED. THE CONTRACTOR SHALL CLEAN THE ACCUMULATED SEDIMENT IF HALF OF THE ORIGINAL HEIGHT OF THE BALES BECOMES FILLED WITH SEDIMENTS.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL SOIL EROSION AND SEDIMENT CONTROLS ON THE PROJECT SITE FOR THE ENTIRE DURATION OF THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL FOLLOW THE DIRECTION OF THE RESIDENT ENGINEER WITH REGARD TO INSTALLATION, MAINTENANCE, AND REPAIR OF ALL SOIL EROSION AND SEDIMENTATION CONTROLS ON THE PROJECT SITE. TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROLS (HAYBALES, SILT FENCE, ETC.) SHALL BE MAINTAINED UNTIL ALL EXPOSED SOILS ARE SATISFACTORILY STABILIZED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND/OR RESEEDING ALL AREAS THAT DO NOT DEVELOP WITHIN ONE YEAR FROM THE COMPLETION OF CONSTRUCTION.

ALL REFERENCED SOIL EROSION AND SEDIMENTATION CONTROLS INCLUDING MATERIALS USED, APPLICATION RATES AND THE INSTALLATION PROCEDURES SHALL BE PERFORMED PER THE "RHODE ISLAND EROSION AND SEDIMENTATION HANDBOOK", DATED 1993.

**BMP MAINTENANCE SCHEDULE:**

ALL MAINTENANCE (INCLUDING CLEANING) REQUIRED DURING THE CONSTRUCTION PHASE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL INCLUDE:

INSPECTION OF ALL SLOPES, BERMS, AND OTHER CONTROL STRUCTURES (INCLUDING ROADWAY SIDE SLOPES, FOR STRUCTURAL INTEGRITY/STABILITY AND EVIDENCE OF SOIL EROSION PROCESSES, AND MAINTENANCE OF THESE STRUCTURES IF NECESSARY. INSPECTIONS SHALL BE PERFORMED FOLLOWING ALL RAIN EVENTS OF 1/8" INCH RAINFALL OR MORE IN A 24-HOUR PERIOD, OR BI-MONTHLY IF NO RAINFALL EVENT OCCURS.

REPLANTING, REGRADING, OR OTHER REPAIRS NEEDED AS A RESULT OF SOIL EROSION AND SEDIMENTATION PROCESSES SHALL BE DONE PROMPTLY.

**SITE PLAN NOTES:**

DETAILED ENGINEERING REVIEW FOR PROPOSED UTILITIES COVERED UNDER SEPARATE SUBMISSION, TO GOVERNING AGENCIES. THE DETAILED ENGINEERING PLANS FOR UTILITIES INSTALLATION AND CONNECTION HAVE NOT BEEN PROVIDED UNDER THIS SUBMISSION.

THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.

**MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE AND PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC INCLUDING POLICE PROTECTION. ALL TEMPORARY AND VEHICULAR SIGNS, BARRICADES AND LANE CLOSURES SHALL BE IN CONFORMANCE WITH THE LATEST REVISIONS OF MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.)

TEMPORARY CONSTRUCTION SIGNS AND ALL APPLICABLE TRAFFIC CONTROL DIVIDES SHALL BE IN PLACE PRIOR TO THE START OF WORK IN ANY AREA OPEN TO TRAFFIC.

THE PRIVATE VEHICLES OF CONSTRUCTION WORKERS WILL NOT BE PARKED IN THE STATE RIGHT-OF-WAY.

ALL MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SETUPS, SIGNS CHANNELING DEVICES, ETC. SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 1988 EDITION, INCLUDING REVISION 3, SEPTEMBER 3, 1993 AND SUBSEQUENT ADDENDA.

SIGN MOUNTINGS SHALL BE IN ACCORDANCE WITH THE R.I.D.O.T. SPECIFICATIONS FOR TEMPORARY CONSTRUCTION SIGNS.

**ESTABLISHMENT OF VEGETATIVE COVER:**

ALL FILL SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH THE R.I. STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 202.

SLOPES SHALL NOT BE LEFT UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON.

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 TO RHODE ISLAND STANDARD SPECIFICATION M.20.

THE SEED MIX TO BE USED ON SLOPE APPROACHING WETLAND SHALL BE THE NEW ENGLAND CONSERVATION/WILDLIFE MIX FROM NEW ENGLAND WETLAND PLANTS, INC. OR APPROVED EQUAL APPLIED AT A RATE OF 25 LBS. PER ACRE AND MULCHED WITH STRAW.

EARLY SPRING OR LATE SUMMER SEEDING IS RECOMMENDED. LIME AND FERTILIZE AS REQUIRED BY SOIL TESTING TO COMPLIMENT OR UPGRADE EXISTING CONDITIONS.

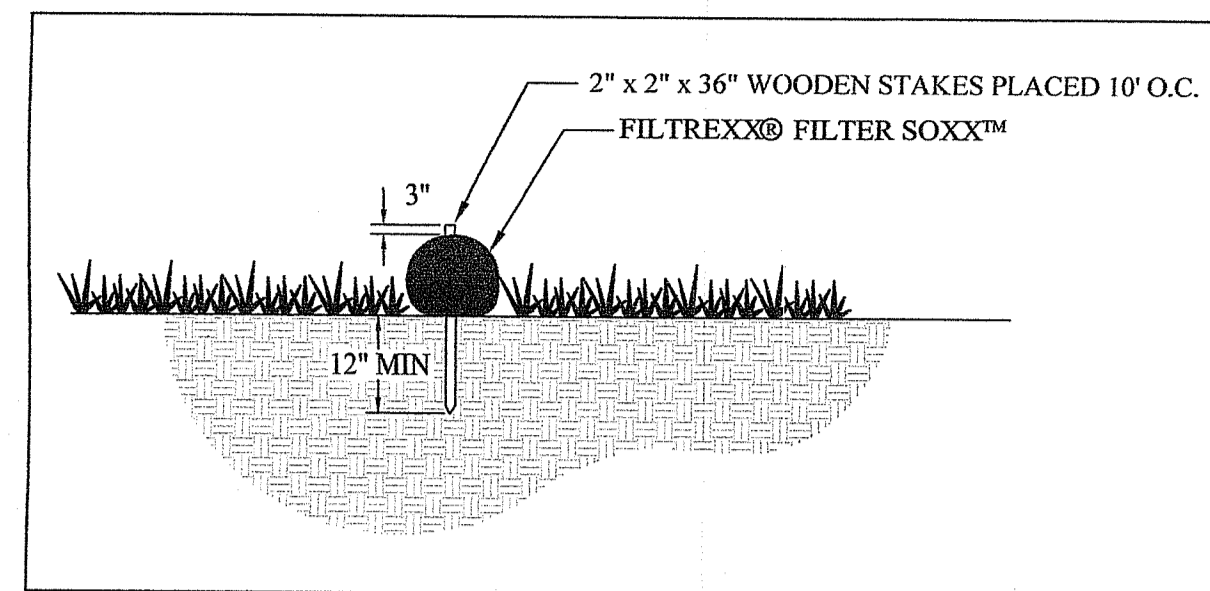
**VEGETATED COVER PLANTING:**

- THE NORMAL ACCEPTABLE SEASONABLE SEEDING DATES ARE APRIL 1ST THROUGH OCTOBER 15TH.
- TOP SOIL FOR PERMANENT OR LONG TERM TEMPORARY SEEDING SHOULD HAVE A SANDY LOAM TEXTURE, RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS. TOP SOIL SHALL CONFORM WITH RHODE ISLAND SPECIFICATIONS M18.01.
- THE DESIGN SEED MIX UTILIZED IN ALL DISTURBED AREAS TO BE SEEDED SHALL BE COMPRISED OF THE FOLLOWING:

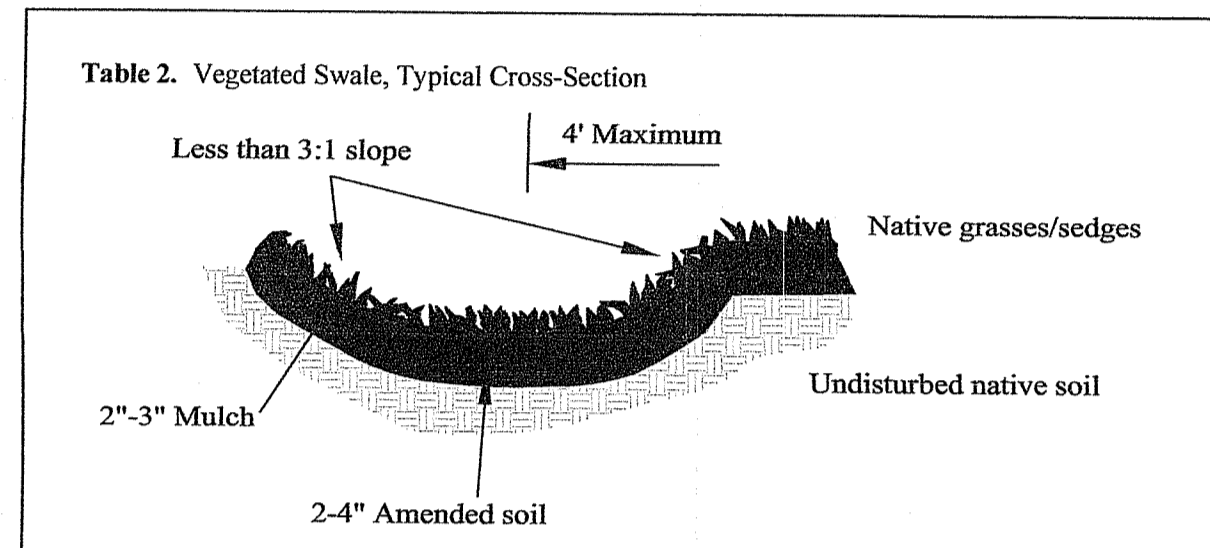
TYPE	% BY WEIGHT	SEEDING DATE
CREeping RED FESCUE	70	
ASTORIA BENTGRASS	5	APRIL 1 - JUNE 15
BIRDFOOT TREFOIL	15	AUG. - OCT 15
PERENNIAL RYE GRASS	10	

APPLICATION RATE - 100 LBS PER ACRE

SEED MIX SHALL BE INOCULATED WITHIN 24 - HOURS BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULATION FOR EACH SEED VARIETY. ALTERNATE SEED TYPES DUE TO SITE SPECIFIC CONDITIONS AND SOILS ARE ACCEPTABLE WITH THE ENGINEER'S APPROVAL.
- IN TOPSOIL SEEDING AREAS, THE CONTRACTOR WILL LIME AND FERTILIZE AS REQUIRED TO COMPLIMENT OR UPGRADE SOIL CONDITIONS.
- THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY PERMANENT VEGETATIVE COVER AREAS THAT DO NOT DEVELOP OR WHICH ERODE WITHIN A ONE (1) YEAR PERIOD.



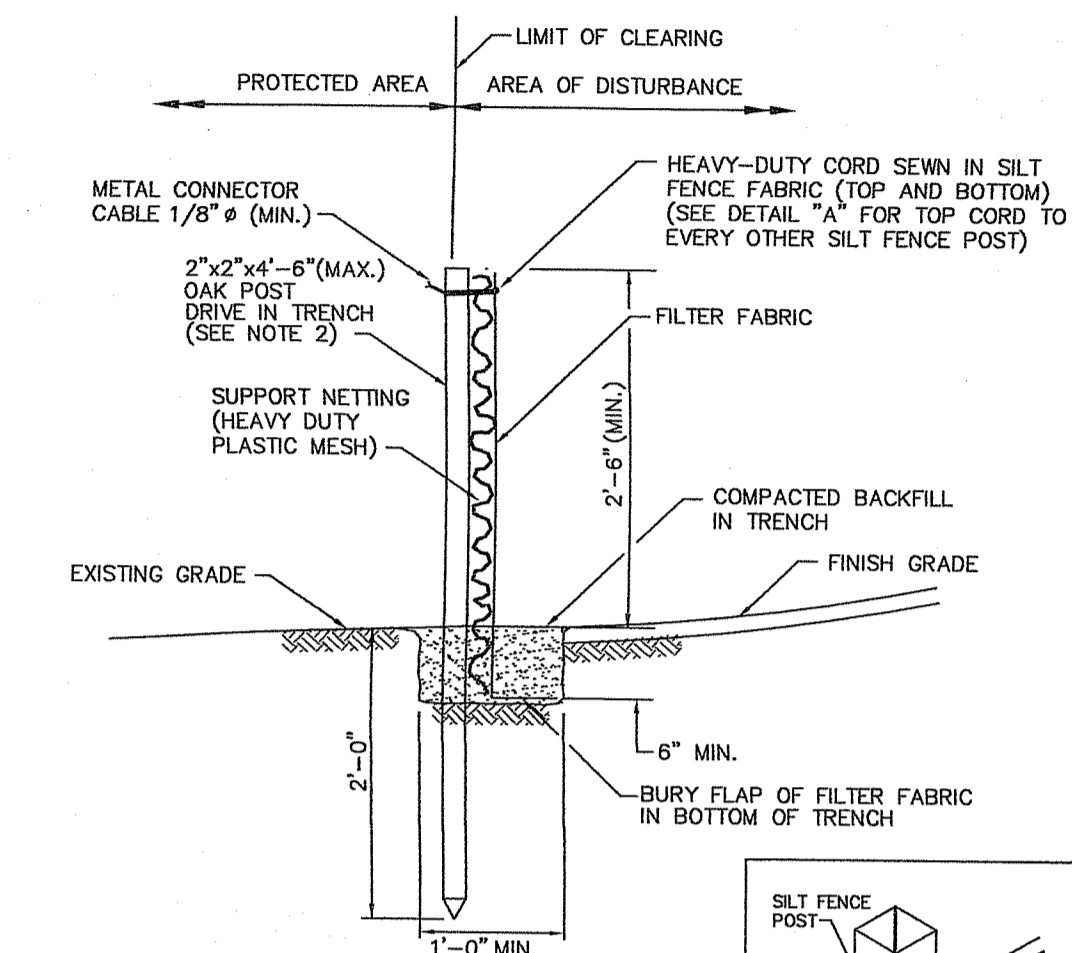
**SILT SOCK**



**Table 5. Vegetated Swale Sizing Guidance**

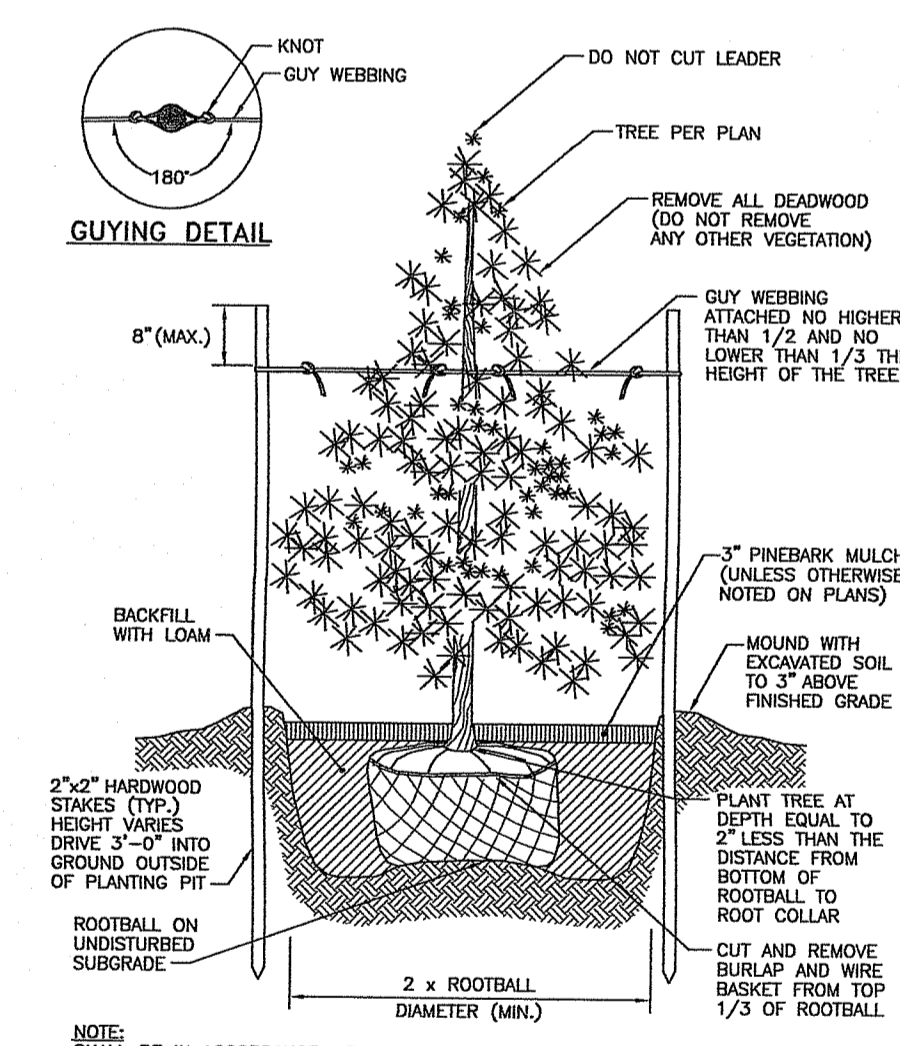
Drainage Area (in square feet)	Bottom surface Area (in square feet) for an 8 in. deep swale	
	Sandy Soils*	Silly Soils*
200	16	32
400	32	64
600	48	96
800	64	128
1000	80	160

**VEGETATIVE SWALE DETAIL**

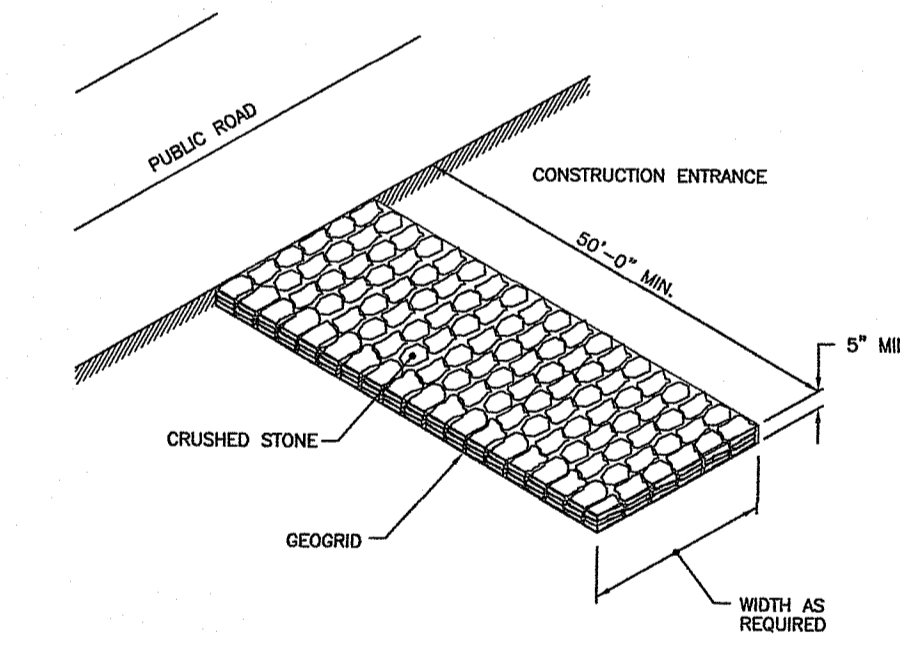


- NOTES:**
- SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
  - 2"x2"x4'-6" (MAX.) OAK POSTS FOR SILT FENCE SHALL BE LOCATED 8'-0" (MAX.) O.C. IN WETLAND AREAS AND 4'-0" (MAX.) O.C. IN WETLAND RAVINE, GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
  - 1"x1"x4'-6" (MIN.) POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE.
  - SILT FENCE SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.

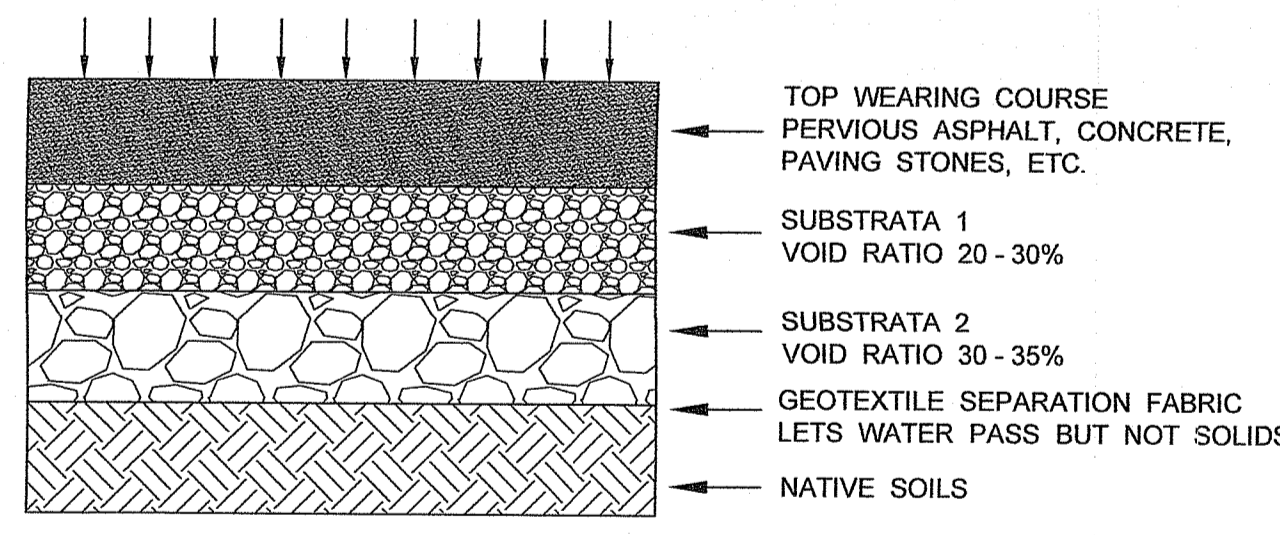
**SILT FENCE DETAIL**



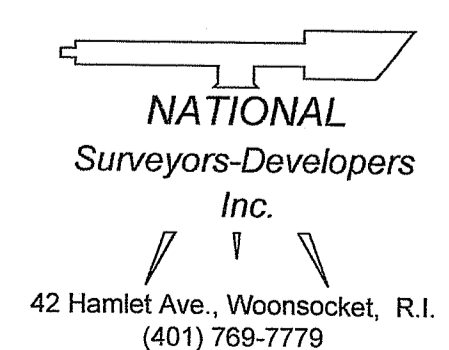
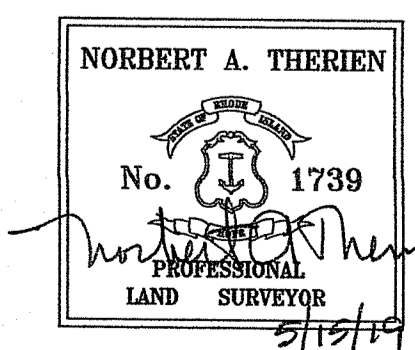
**EVERGREEN TREE PLANTING DETAIL (4'-0" HIGH AND GREATER)**



**CONSTRUCTION ACCESS**



**PERVIOUS DRIVEWAY DETAIL**



**JOINT APPLICATION**  
**DAVID M. GARRIGAN**  
 ASSESSORS PLAT 49 LOT 133  
 DEER BROOK WAY  
 CUMBERLAND, RHODE ISLAND

**DETAILS**

DRAWN BY: J.E.S.	CHECKED BY: N.A.T.	FIELD BY: M.A.
FEBRUARY 2019	JOB No. 2018-215	SHEET 3 OF 4

**O.W.T.S. NOTES**

THIS DESIGN IS SUBMITTED TO RIDEM TO BE REVIEWED IN CONFORMANCE WITH ALL APPLICABLE REGULATIONS. CONSTRUCTION OF THIS SYSTEM WILL REQUIRE THE "DESIGNER'S CERTIFICATE OF CONSTRUCTION FOR ISDS".

ALL PIPES EXCEPT IN THE LEACHING FIELD SHALL BE SOLID 4 INCH DIAMETER SCHEDULE 40 WITH WATERTIGHT JOINTS OR EQUIVALENT.

SEPTIC TANK AND DISTRIBUTION BOX SHALL BE SET ON A LEVEL STABLE BASE THAT WILL NOT SETTLE.

DISTRIBUTION PIPES FOR A MINIMUM OF 2 FEET FROM DISTRIBUTION BOX TO THE FIRST SECTION IN THE FIELD SHALL BE SET LEVEL.

NO PROPOSED OR EXISTING KNOWN SYSTEMS WITHIN 100 FEET OF PROPOSED WELL.

NO KNOWN SUBSURFACE DRAINS WITHIN 25 FEET OF PROPOSED SYSTEM, INCLUDING FOUNDATION DRAINS.

ALL PIPES WITHIN LEACHING FIELD SHALL BE SET LEVEL. THERE SHALL BE A 2 INCH DROP FROM THE DISTRIBUTION BOX TO THE LEACHFIELD.

THE PROPOSED DISTRIBUTION BOX SHALL HAVE A BOTTOM AREA OF 3 SF OR GREATER.

THE LEACHING AREA AND AREA EXTENDING 10 FEET ON ALL SIDES MUST BE STRIPPED OF TREES AND BRUSH.

THE LEACHING AREA AND AREA EXTENDING 5' FEET ON ALL SIDES MUST BE STRIPPED OF TOP SOIL, SUBSOIL AND ANY UNDESIRABLE MATERIAL AND THE EXCAVATION SACRIFICED.

ANY GRAVEL BASE MATERIAL USED UNDER THE SAND LAYER SHALL CONSIST OF CLEAN, COARSE SAND, OR BANK RUN GRAVEL CONTAINING LITTLE OR NO FINES, OR ORGANIC MATERIAL AND CONTAINING LITTLE TO NO LARGE FRAGMENTS WITH NO STONE GREATER THAN 3 INCHES IN DIAMETER. NOT MORE THAN 10% OF THE GRAVEL CAN BE MADE UP OF STONES BETWEEN 3/4 INCHES AND 3 INCHES IN DIAMETER.

THE GRAVEL BASE MATERIAL SHALL BE PLACED IN SHALLOW LIFTS AND COMPACTED. THE GRAVEL BASE AFTER PLACEMENT AND COMPACTION SHALL HAVE A PERCOLATION RATE EQUAL TO OR BETTER THAN 5 MINUTES PER INCH. WHENEVER A SEWAGE LEACHING FIELD WILL BE LOCATED IN FINE TEXTURED SOILS CONTAINING FINE SANDS, SILTS OR CLAYS, A MINIMUM SIX (6) INCH DEPTH GRAVEL BASE MUST BE PLACED BENEATH THE ENTIRE LEACHING FIELD.

NO PROPOSED OR EXISTING KNOWN PUBLIC WELLS WITHIN 500 FEET OF PROPOSED SYSTEM EXCEPT AS SHOWN.

NO DRIVING, PARKING OR PAVING OVER ANY PORTION OF THE LEACH FIELD.

GRAVEL BACKFILL MUST BE BROUGHT UP AROUND THE TRENCH TO AT LEAST 2 INCHES ABOVE THE TOP OF THE DISTRIBUTION LINES IN THE LEACH FIELD.

BACKFILL PLACED OVER A LEACHING SYSTEM SHALL BE FREE OF LARGE STONES, FROZEN CLUMPS OF EARTH, RUBBISH, STUMPS, WASTE CONSTRUCTION MATERIALS OR ANY OTHER CONTAMINANTS.

THE SURFACE AREA OVER THE LEACH FIELD SHALL BE GRASSED.

THE FINISH GRADE EXTENDING 10' AROUND EACH FIELD SHALL BE NO LOWER THAN ELEVATION 102.78 UNLESS OTHERWISE SPECIFIED, THE SYSTEM HAS NOT BEEN DESIGNED WITH THE PROVISIONS FOR GARBAGE GRINDERS.

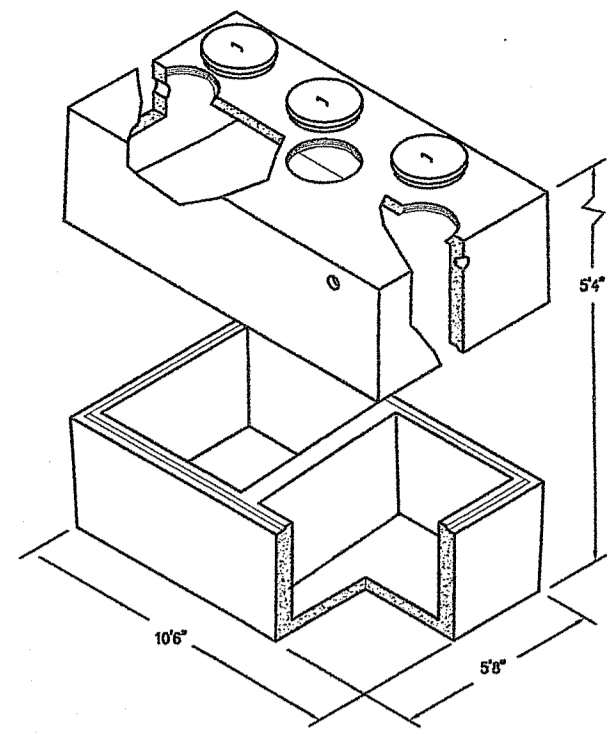
THIS SEWERAGE DISPOSAL SYSTEM SHALL CONFORM TO ALL THE REGULATIONS UNDER SECTIONS 42-17-1(2)(1), (4) (R) AND (S) AND SECTION 23-19.5-4 AND CHAPTER 42-35 OF THE GENERAL LAWS OF RHODE ISLAND.

NO PROPOSED OR EXISTING KNOWN PRIVATE WELLS WITHIN 200 FEET OF THE PROPOSED SYSTEM EXCEPT AS SHOWN.

THE 6 INCH SAND LAYER UNDERLYING THE ELIEN UNITS SHALL BE ASTM C33 OR EQUAL.

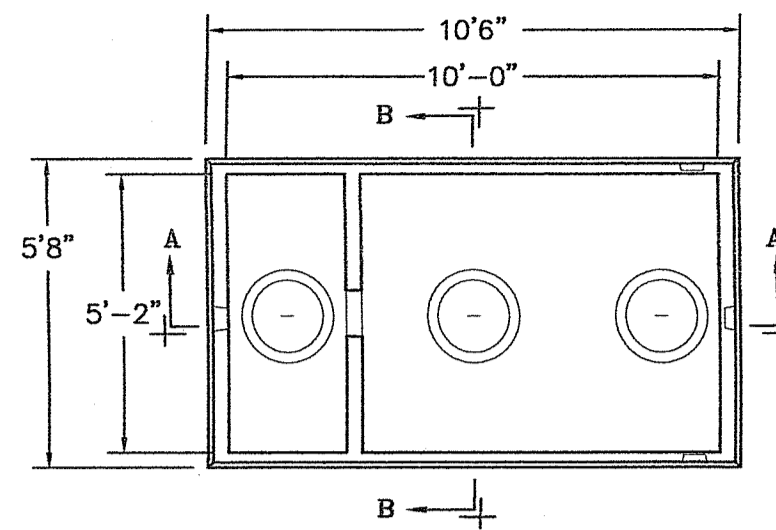
A COC FOR THE SYSTEM CANNOT BE PROVIDED UNTIL THE CONTRACTOR PROVIDE RECEIPTS FOR ALL COMPONENTS OF THE ISDS.

INSPECTIONS OR AS-BUILT PLANS ARE REQUIRED, DESIGNER MUST BE NOTIFIED 48 HOURS IN ADVANCE AND COMPONENTS OF SYSTEM MUST BE LEFT EXPOSED.

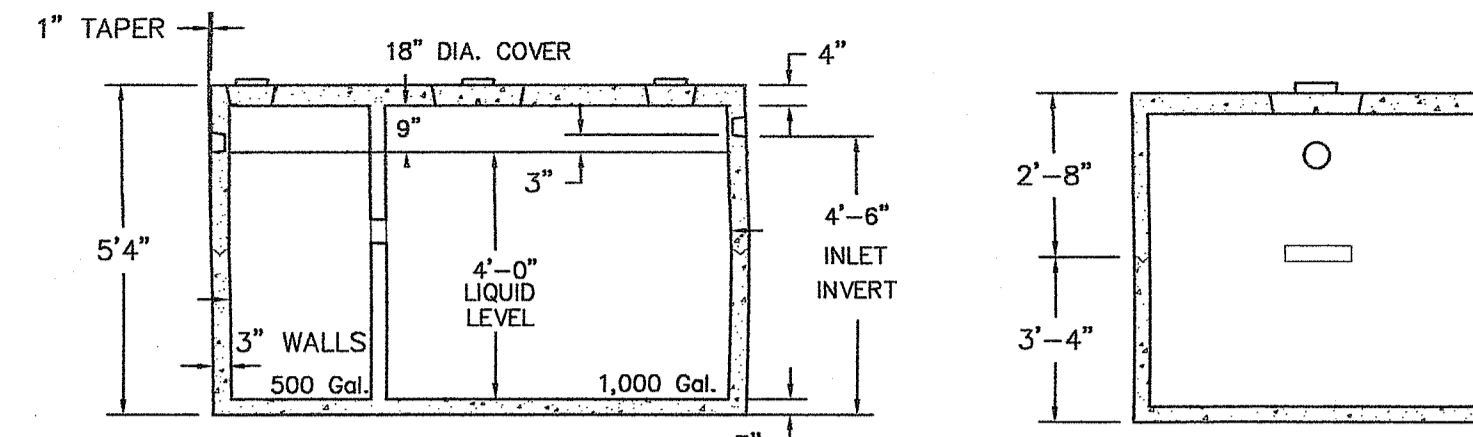


**1,500 GALLON SEPTIC TANK**

NOT TO SCALE



PLAN VIEW

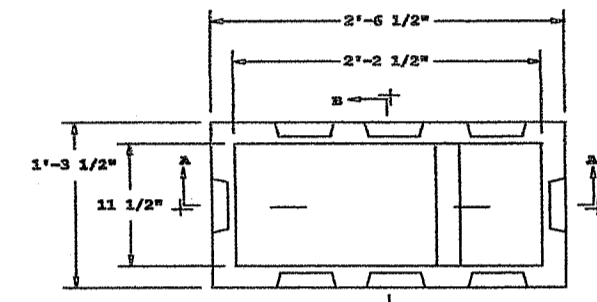
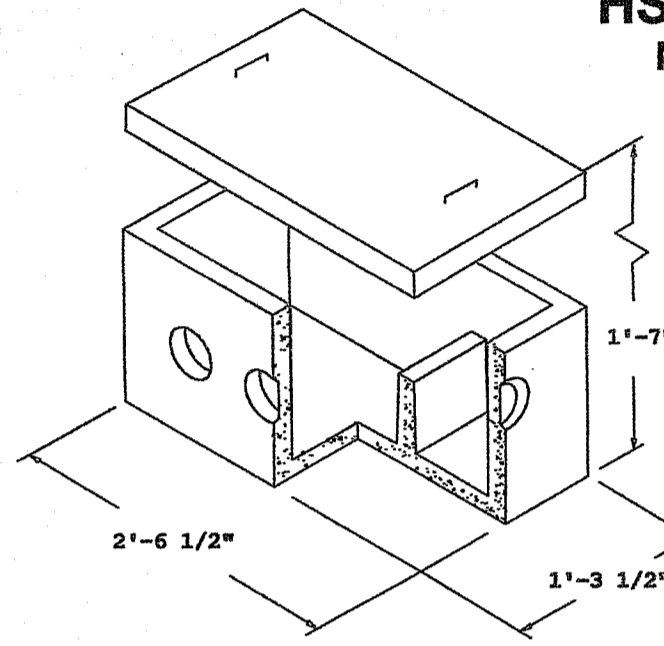


SECTION A-A

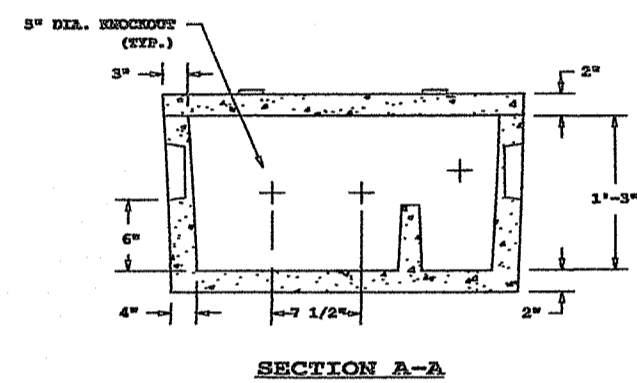
SECTION B-B

**DISTRIBUTION BOX**

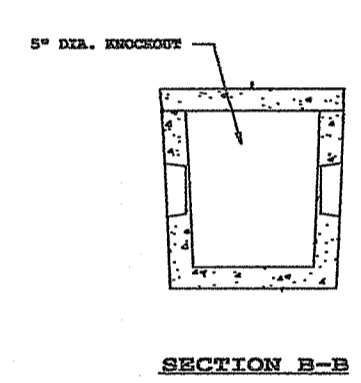
HS 20 LOADING  
NOT TO SCALE



PLAN VIEW



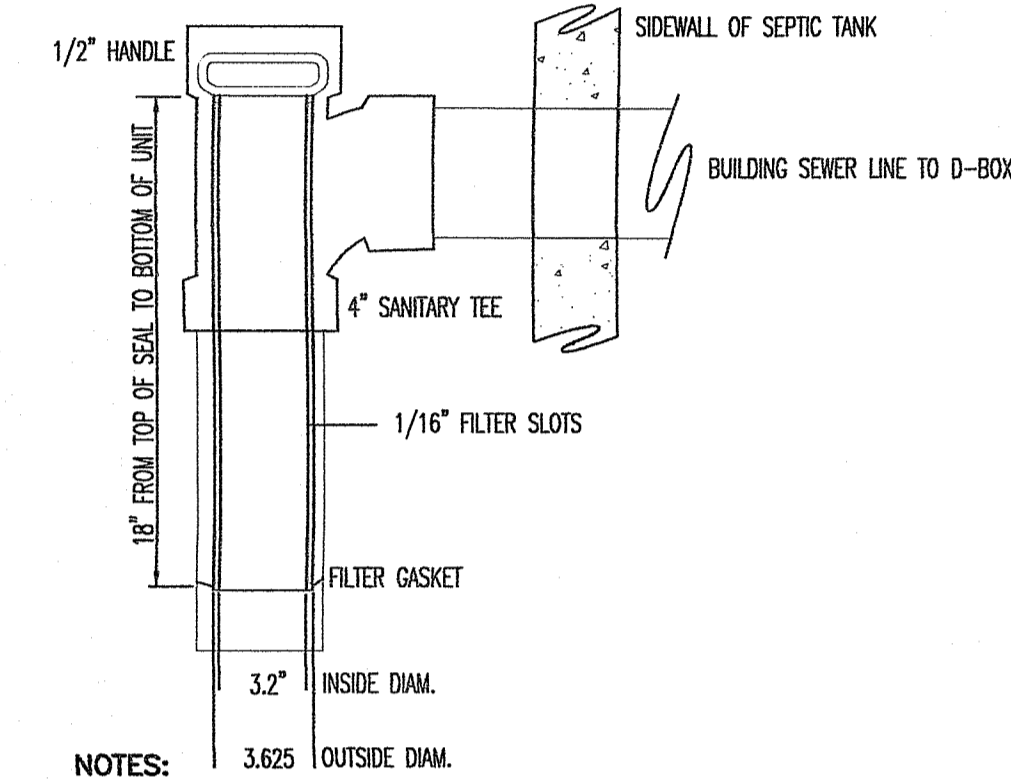
SECTION A-A



SECTION B-B

**ZABEL FILTER**

REQUIRED  
NOT TO SCALE

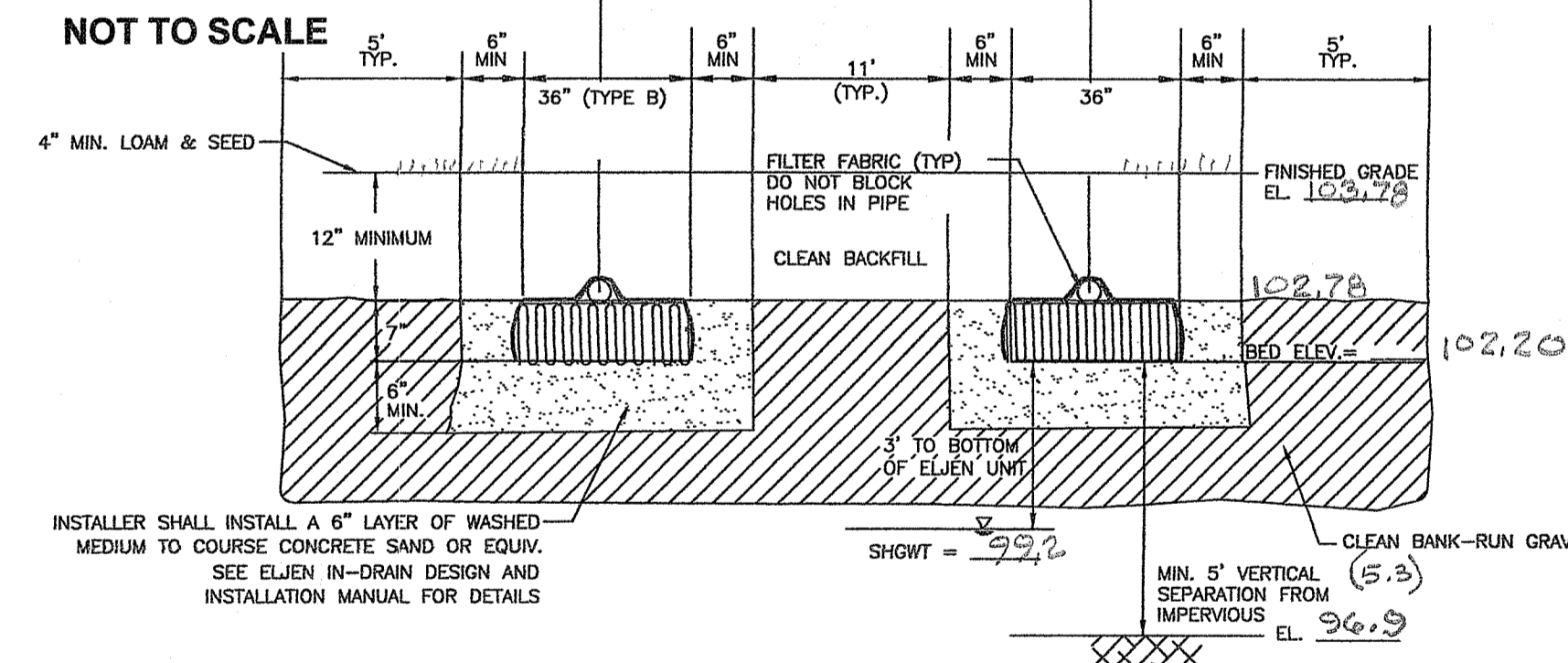


NOTES:

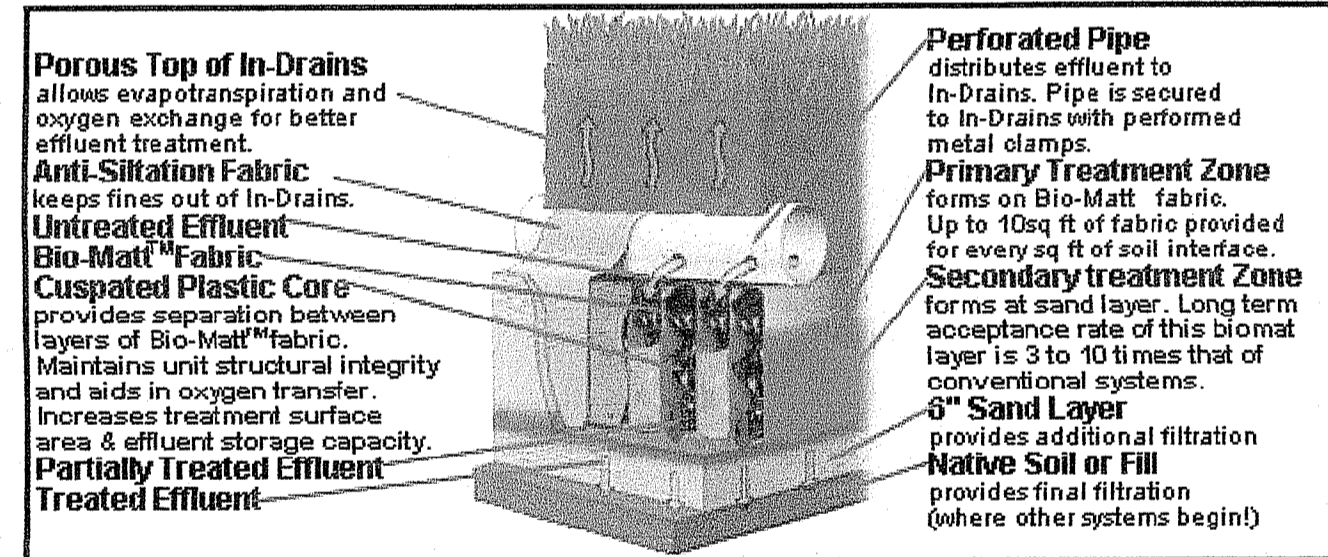
APPLICATION: SINGLE FAMILY HOME  
FLOW RATE: 800 GPD OR LESS  
INSTALLATION: A1800 FILTER CARTRIDGE WILL FIT INSIDE 4" SANITARY TEE USED AS SEPTIC TANK OUTLET BAFFLE. EXTEND SEWER PIPE MINIMUM 1-INCH BELOW FILTER GASKET.  
SERVICE: GRASP HANDLE AND REMOVE FROM SANITARY TEE. LIGHTLY HOSE OFF AND PROPERLY DISPOSE OF SOLIDS. CLEAN THE FILTER A MINIMUM OF ONCE ANNUALLY.

**CROSS-SECTION**

NOT TO SCALE

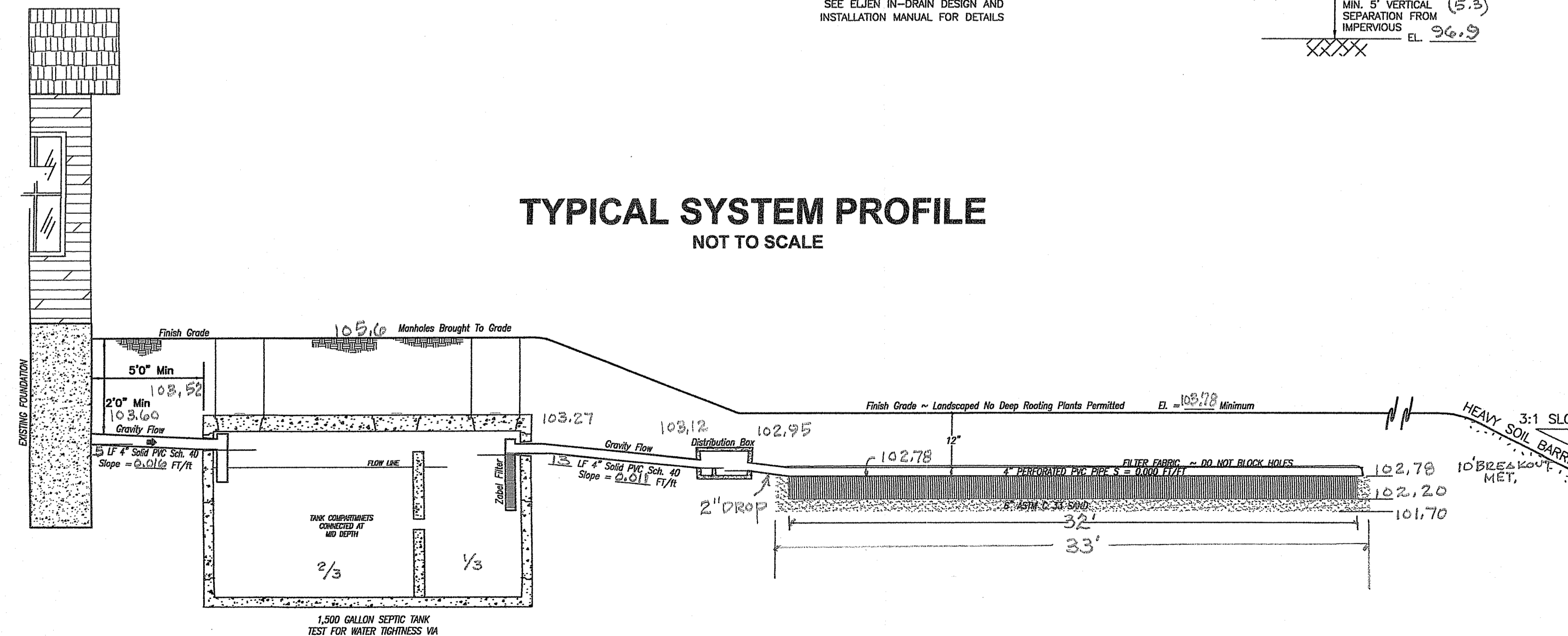


INSTALLER SHALL INSTALL A 6" LAYER OF WASHED MEDIUM TO COURSE CONCRETE SAND OR EQUIV. SEE ELIEN IN-DRAIN DESIGN AND INSTALLATION MANUAL FOR DETAILS



**TYPICAL SYSTEM PROFILE**

NOT TO SCALE



NO.	DATE	DESCRIPTION	BY
4	4/24/19	MOVE HOUSE & SEPTIC TANK	INCE
3	4/2/19	SEPTIC SYSTEM CHANGE	S.M.G.
2	3/8/19	JOINT APPLICATION	S.M.G.
1	2/11/19	JOINT APPLICATION	S.M.G.

**TEST HOLE RESULTS**

TEST HOLE # 1  
DATE OF TEST 4-20-18  
W.T. CARD # 1808-0338

SEE SITE INSPECTION REPORT  
SOIL DESCRIPTION BY STRATA

WATER TABLE 36"  
LEDGE AT 64'-86"

TEST HOLE # 2  
DATE OF TEST 4-20-18  
W.T. CARD # 1808-0338

SEE SITE INSPECTION REPORT  
SOIL DESCRIPTION BY STRATA

WATER TABLE 36"  
LEDGE AT 64'-86"

**PERCOLATION TEST**

SOIL CATEGORY 3, 6M PRESENT IN TESTHOLES  
SOIL CATEGORY 3 = 0.7 MPI  
SOIL CATEGORY 4 = 0.1 MPI  
SOIL CATEGORY 5 = 0.1 MPI  
DESIGN RATE = 0.7 MPI = 64.2 SF/BR/DAY

**DESIGN DATA**

4 BEDROOM DWELLING  
115 GAL/BR/DAY = 460 GAL/DAY  
0.77 GAL/SF/DAY = 67.1 SF REQUIRED  
ELIEN UNIT = 2.4 SF/UNIT  
2.4 ELIEN UNITS PROVIDED = 6.72 SF  
TOTAL AREA OF SYSTEM = 67.8 SF > 67.1 SF REQUIRED

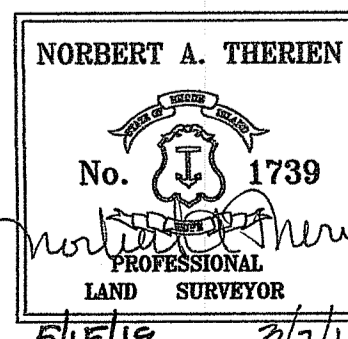
**SYSTEM ELEVATIONS**

INV. OUT FOUNDATION	103.60
INV. IN SEPTIC TANK	103.52
INV. OUT SEPTIC TANK	103.27
INV. IN DISTRIBUTION BOX	103.12
INV. OUT DISTRIBUTION BOX	102.95
10' FILL PERIMETER UTILIZED	102.78
INV. ELIEN LEACHFIELD	102.78
BOTTOM UNIT - TOP SAND	102.20
SOIL - SAND	101.70 3' 5.3'
WATER TABLE	99.20
MAX LEDGE ELEV. WITHIN 25 FT	96.9

JOINT APPLICATION  
DAVID M. GARRIGAN  
ASSESSORS PLAT 49 LOT 133  
DEER BROOK WAY  
CUMBERLAND, RHODE ISLAND

**DETAILS**

DRAWN BY: J.E.S.	CHECKED BY: N.A.T.	FIELD BY: M.A.
FEBRUARY 2019	JOB No. 2018-215	SHEET 4 OF 4



**NATIONAL**  
Surveyors-Developers  
Inc.  
42 Hamlet Ave., Woonsocket, R.I.  
(401) 769-7779

2017/4015

O.W.T.S. 1808-0338  
MAY 6 2019  
Office of the Registrar  
Environmental Management