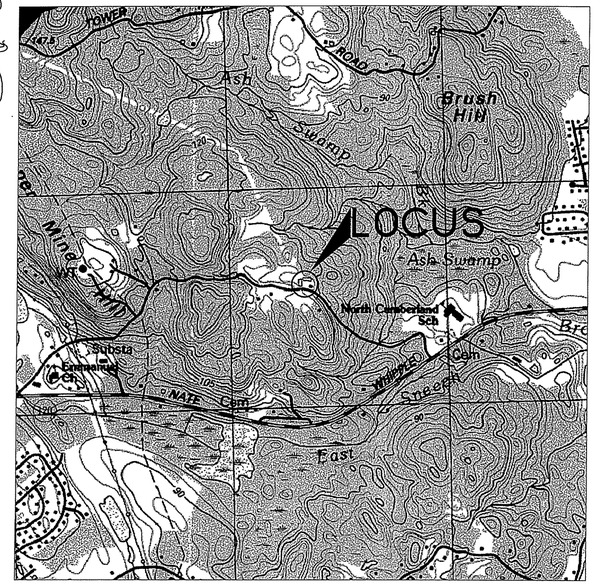
PRELIMINARY STAGE PLANS

MINOR SUBDIVISION
ASSESSORS MAP 43 ; LOT 13

SITUATED AT:

130 STAPLES ROAD
CUMBERLAND, RHODE ISLAND



½ MILE RADIUS MAP
1" = 1000'

PREPARED FOR:

TIMOTHY AND BARBARA SCANLON
4 WHIPPLE ROAD
GREENVILLE, RI 02828

JOB NO. 5167-01
DECEMBER 2006

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RECEIVED
AUG 16 2007

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
REVIEWED SITE PLAN APPLICATION NO.: 07-0331
DATED SEP 25 2007
SEE LETTER OF SAME DATE.
Charles A. Horbert

SAMUEL S. HEMENWAY
No. 6349
REGISTERED PROFESSIONAL ENGINEER
9-14-07

PREPARED BY:

GAROFALO & ASSOCIATES, INC.
CIVIL & STRUCTURAL ENGINEERS/SURVEYORS
LAND PLANNERS/ENVIRONMENTAL SCIENTISTS
85 CORLISS STREET P.O. BOX 6145
PROVIDENCE, RHODE ISLAND 02940
(401) 273-6000

PROJECT MANAGER: SAMUEL S. HEMENWAY, PE (#6349)

GENERAL NOTES:

1. AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE. DEVIATIONS OR CHANGES WILL NOT BE ALLOWED UNLESS APPROVED BY THE ENGINEER.
2. THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT WITH ITS RELATIONSHIP TO THE EXISTING SITE SURVEY. THE CONTRACTOR SHALL ALSO VERIFY ALL DIMENSIONS, SITE CONDITIONS, AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING OR PROCEEDING WITH WORK.
3. METHODS AND MATERIALS USED IN THE CONSTRUCTION OF IMPROVEMENTS FOR THIS PROJECT SHALL CONFORM TO THE CURRENT CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE TOWN OF CUMBERLAND AND THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION.
4. THE CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE ANY EXISTING UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION VERIFY ALL DIMENSIONS, SITE CONDITIONS, AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING OR PROCEEDING WITH WORK.
5. CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION OR BLASTING AT LEAST TWO WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS, PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION. ALL WATER, GAS, SEWER AND OTHER UTILITIES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING, WITH MATCHING MATERIALS, ANY PAVEMENT, DRIVEWAYS, WALKS, WALLS, CURBS, ETC.. THAT MUST BE CUT OR THAT ARE DAMAGED DURING CONSTRUCTION.
7. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM "THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER."
8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND TO TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER HAS DILIGENTLY ATTEMPTED TO LOCATE AND INDICATE ALL EXISTING FACILITIES ON THESE PLANS; HOWEVER, THIS INFORMATION IS SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES FOR EXACT LOCATION OF THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND REPLACE ANY AND ALL DAMAGE MADE TO UTILITIES BY THE CONTRACTOR.
9. ALL MATERIALS SHALL BE NEW UNLESS USED OR SALVAGED MATERIALS ARE AUTHORIZED BY THE OWNER AND ACCEPTED BY PROPER AUTHORITIES.
10. NECESSARY BARRICADES, SUFFICIENT LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL METHODS AS MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC, SHALL BE PROVIDED AND MAINTAINED THROUGHOUT THE CONSTRUCTION.
11. THIS DEVELOPMENT PLAN PROPOSES THE SUBDIVISION OF ASSESSORS PLAT 43, LOT 13.
OWNER/APPLICANT:
TIMOTHY SCANLON & BARBARA.
12. THIS SUBDIVISION SHALL BE SERVED BY PRIVATE WELL, SEPTIC (ISDS), AND OVERHEAD ELECTRIC AND TELEPHONE.
13. CONSTRUCTION OF THIS PROJECT WILL NOT BE PHASED.
14. NO EXISTING EASEMENTS HAVE BEEN IDENTIFIED ON THE SUBJECT PROPERTY.
15. ALL ADJACENT LOTS ARE SERVED BY INDIVIDUAL SEWAGE DISPOSAL SYSTEMS (ISDSs).
16. ADJACENT WELLS HAVE NOT BEEN IDENTIFIED WITHIN 200'.

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL NOTIFY THE CUMBERLAND DEPARTMENT OF PUBLIC WORKS 48 HOURS BEFORE THE BEGINNING OF CONSTRUCTION.
2. ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL, AND LOCAL CODES, AND ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER/DEVELOPER.
3. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER OF ANY DISCREPANCIES OR ERRORS DISCOVERED IN THE PLANS.
4. THE CONTRACTOR SHALL BE REQUIRED TO USE THE "DIG-SAFE" NUMBER [1-888-344-7233] FOR THE PURPOSE OF COORDINATING THE MARKING OF UNDERGROUND UTILITIES.
5. ALL PIPING LAYOUT INDICATED ON THESE PLANS IS DIAGRAMMATIC ONLY AND DOES NOT SHOW ALL THE REQUIRED FITTINGS FOR PROPER ALIGNMENT. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS TO OBTAIN PROPER ALIGNMENT AND FOR EXISTING UTILITY CONNECTIONS BASED UPON FIELD CONDITIONS.
6. SANITARY SEWER SERVICE SHALL BE BY ISDS. FINAL PERMITTING REQUIRED THROUGH RIDEM.
7. ELECTRIC SERVICE FACILITIES SHALL BE DESIGNED BY OTHERS AT THE TIME OF LOT DEVELOPMENT. ELECTRIC SERVICE SHALL CONFORM TO THE REQUIREMENTS OF THE ELECTRIC COMPANY.
8. TEL/CABLE SERVICE FACILITIES SHALL BE DESIGNED BY OTHERS AT THE TIME OF LOT DEVELOPMENT.
9. MAXIMUM SLOPE OF EMBANKMENT SHALL BE 2.0 FEET HORIZONTAL TO 1.0 FOOT VERTICAL, OR PER APPLICABLE JURISDICTIONAL REGULATIONS.
10. PROPOSED CONTOURS ARE TO FINISHED GRADE.
11. ALL NEW DWELLINGS PROPOSED SHALL BE CONSTRUCTED WITH ROOFDRAINS CONNECTED TO INFILTRATION GALLEYS. GALLIES SHALL BE INSTALLED AT A RATE OF ONE (1) FOUR FOOT GALLEY PER 400 S.F. ROOFTOP AREA CONTRIBUTING.

R.I.D.E.M. NOTES:

1. ALL EXCESS SOIL, STUMPS, TREES, ROCKS, BOULDERS, AND OTHER REFUSE SHALL BE DISCARDED OFFSITE, OUTSIDE OF ALL WETLANDS AND WETLAND SETBACK AREAS, UNLESS OTHERWISE SPECIFIED.
2. THE HAY BALE LINE ILLUSTRATED ON THIS PLAN SHALL BE INSTALLED IN THE FIELD PRIOR TO CONSTRUCTION, AND SHALL SERVE AS THE LIMIT OF CLEARING & SURFACE DISTURBANCE ON THE SUBJECT PROPERTY (PROPERLY SECURED SILT FENCE MAY BE SUBSTITUTED FOR HAY BALES WITH ENGINEERS APPROVAL). NO ALTERATIONS (INCLUDING VEGETATIVE CLEARING, RESTORATION PLANTINGS, SEEDING, OR SURFACE DISTURBANCE) SHALL OCCUR BEYOND THE SILT FENCE/DISTURBANCE LINE. UPON THE COMPLETION OF CONSTRUCTION, AND AN ADEQUATE STABILIZATION OF THE SITE, ALL SILT FENCE SHALL BE REMOVED ALONG WITH ANY ACCUMULATED SANDS/SEDIMENTS.
3. UPON THE COMPLETION OF THE NECESSARY GRADING ON THE SUBJECT LOT, ALL DISTURBED SURFACES WITHIN OR ADJACENT TO WETLAND AREAS SHALL BE COVERED WITH PLANTABLE SOIL (4" MINIMUM), SEEDED WITH A CONSERVATION SEED MIX (OR LIKE), STABILIZED WITH A SPREAD HAY MULCH OR SIMILAR EROSION CONTROL AGENT AND, WHERE APPLICABLE, PLANTED WITH EVERGREEN WOODY SHRUB AND SAPLING SPECIES. THESE AREAS SHALL REMAIN ENTIRELY UNDISTURBED FOLLOWING PROJECT COMPLETION AND WILL BE ALLOWED TO REVEGETATE TO A NATURAL CONDITION.

CONSERVATION SEED MIX:
(% BY WEIGHT)

70% RED FESCUE
10% PERENNIAL RYE GRASS
5% COLONIAL BENT GRASS
15% BIRDSFOOT TREFOIL

SEEDING RATE: 100 LBS/ACRE

FLOOD NOTE:

PROJECT IS LOCATED WITHIN A ZONE "X" (AREA DETERMINED TO BE OUTSIDE THE 500 YEAR FLOOD PLAIN), AS SHOWN ON F.E.M.A. FLOOD INSURANCE RATE MAP FOR THE TOWN OF CUMBERLAND, PROVIDENCE COUNTY, RHODE ISLAND COMMUNITY PANEL #440016 0003 B HAVING AN EFFECTIVE DATE OF FEBRUARY 16, 1990.

LOT CONSTRUCTION NOTE:

THE DWELLING UNITS INDICATED HAVE BEEN PROVIDED TO INDICATE APPROXIMATE GRADING AND EROSION CONTROL MEASURES NECESSARY FOR LOT DEVELOPMENT. ACTUAL UNITS AND FINAL GRADING MAY VARY BUT NO GRADING SHALL OCCUR CLOSER TO REGULATED WETLAND AREAS THAN NOTED ON THIS PLAN WITHOUT APPROVAL.

WAIVERS/CONDITIONS:

THE SUBJECT LOTS MEET ALL REQUIREMENTS OF THE CURRENT SUBDIVISION REGULATIONS.

SURVEY NOTES:

1. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. (PLEASE CONTACT DIGSAFE PRIOR TO CONSTRUCTION @ 1-888-344-7233)
2. WETLANDS DELINEATED BY NATURAL RESOURCES SERVICE, INC. AND LOCATED BY ACCURATE SURVEY METHODS ON 11-9-06 BY GAROFALO & ASSOCIATES, INC.

PLAN REFERENCES:

1. ADMINISTRATIVE SUBDIVISION, A.P. 44, LOTS 8 & 39, FOR K.M.K. DEVELOPMENT, L.L.C., CUMBERLAND, RHODE ISLAND, SCALE: 1"=50', DATED NOVEMBER 17, 2004, BY MARC N. NYBERG ASSOCIATES, INC., DRAWING NO. 11, SHEET NO. 914, FILE NO. 44.
2. DIVISION OF LAND, A.P. 44, LOT 28, CUMBERLAND, RHODE ISLAND, SCALE: 1"=100', DATED JUNE, 1996, OWNED BY ENA R. & FLORENCE B. LAMBERT, BY LUNAR MAPPING, P.C. 1054.
3. CUMBERLAND, RHODE ISLAND, LAND TO BE CONVEYED BY RENE LAMBERT TO ARMAND LAMBERT, SURVEYED AND DRAWN BY McCORMICK SURVEY, SCALE: 1"=40', DATED SEPTEMBER, 1979, DRAWING NO. 11, SHEET NO. 520, FILE NO. 44.

ZONING DATA *

A-2 - (LOCUS)
MIN. LOT AREA - 80,000 S.F.
MIN. LOT WIDTH - 180'
MIN. LOT FRONTAGE - 180'
SETBACKS:
FRONT - 75'
SIDE - 20'
REAR - 30'
MAX. LOT COVERAGE - 15%
MAX. BUILDING HEIGHT - 35'
MIN. BUILDING AREA** - 40,000 S.F.

*REFER TO TOWN OF CUMBERLAND ZONING ORDINANCE FOR FURTHER INFORMATION.

**REFER TO TOWN OF CUMBERLAND SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.

ORIGINAL PARCEL DATA

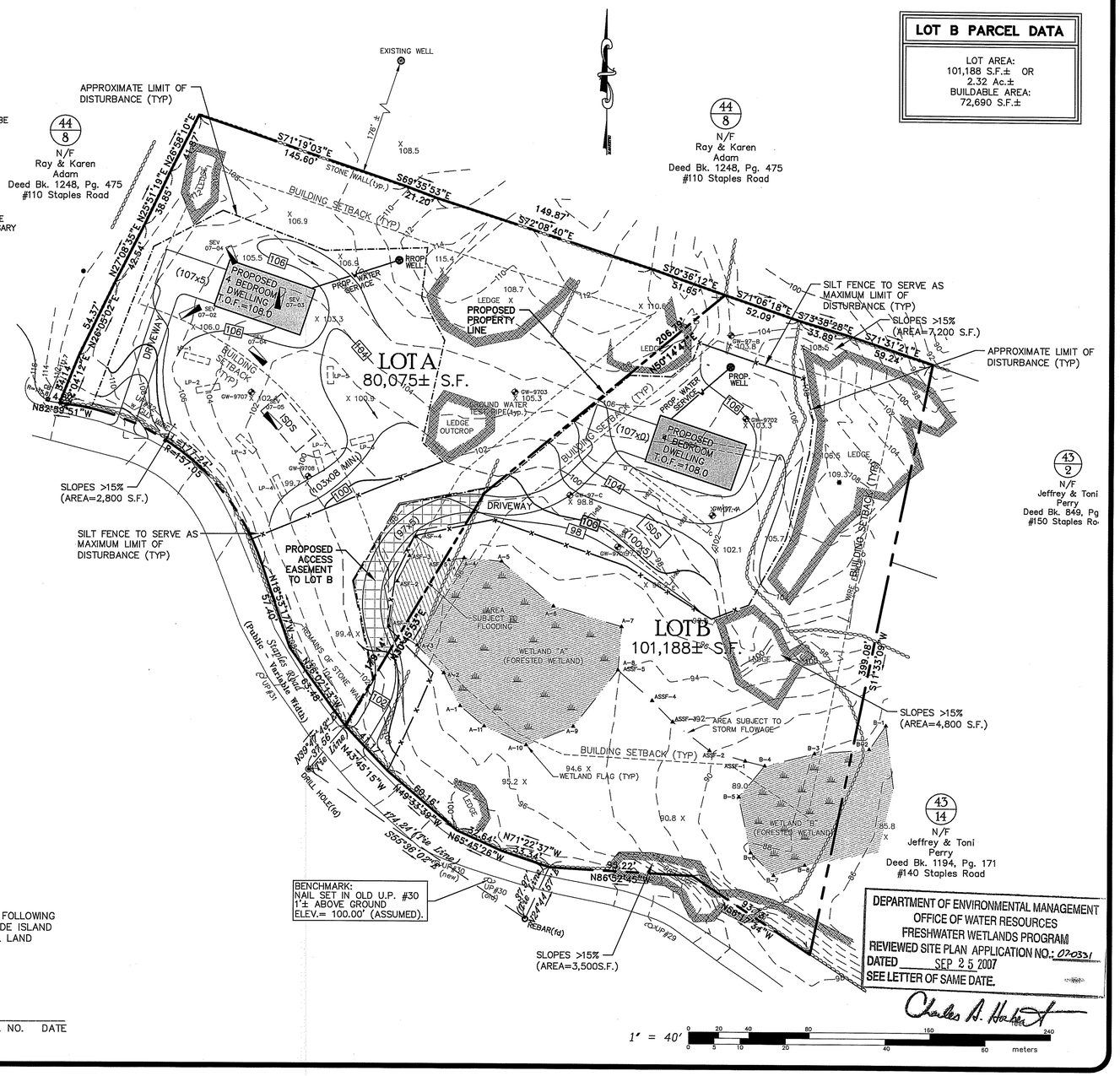
A.P. 43, LOT 13
N/F
Timothy R. & Barbara A. Scanlon
Deed Bk. 741, Pg. 124
#130 Staples Road
LOT AREA:
181,263 S.F.± OR
4.16 Ac.±

LOT A PARCEL DATA

LOT AREA:
80,075 S.F.± OR
1.84 Ac.±
BUILDABLE AREA:
77,270 S.F.±

LOT B PARCEL DATA

LOT AREA:
101,188 S.F.± OR
2.32 Ac.±
BUILDABLE AREA:
72,690 S.F.±



CERTIFICATION:

THIS SURVEY AND PLAN CONFORMS TO THE FOLLOWING CLASS STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

BOUNDARY SURVEY - CLASS I
TOPOGRAPHIC SURVEY - CLASS III

BY: _____
PROFESSIONAL LAND SURVEYOR REG. NO. DATE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
REVIEWED SITE PLAN APPLICATION NO.: 070331
DATED SEP 25 2007
SEE LETTER OF SAME DATE.
Charles A. Horbert

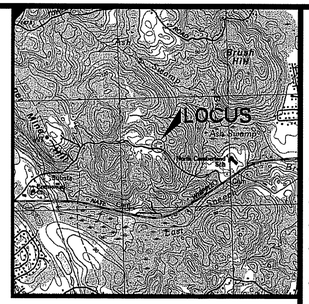
MINOR SUBDIVISION
DEVELOPMENT PLAN
FOR
A.P. 43, LOT 13
SITUATED AT
130 STAPLES ROAD
CUMBERLAND, RHODE ISLAND
PREPARED FOR
Mr. Timothy Scanlon

NO.	REVISION	BY	DATE
1	PER RIDEM WETLANDS & ISDS	SSH	07/20/07

GAROFALO
GAROFALO & ASSOCIATES, INC.
CIVIL & STRUCTURAL ENGINEERS/SURVEYORS
LAND PLANNERS/ENVIRONMENTAL SCIENTISTS
85 CORLISS STREET
P.O. BOX 6145
PROVIDENCE, R.I. 02940
TEL. 401-273-6000

JOB NO. 5167-01
DWG. NO. 5167-BASE.DWG
SCALE: 1"=40'
DRAWN BY M.J.C.
CHECKED S.S.H.
APPROVED
DATE: DECEMBER 8, 2006

SHEET
2
OF 5 SHEETS



LEGEND

18	EXISTING CONTOUR
(21)	PROPOSED CONTOUR
GW	GROUND WATER TEST LOCATION
SEV	SOIL EVALUATION
LP	LEDGE PROBE
W	PROPOSED WATER LINE
W W	EXISTING WATER LINE
N/F	NOW OR FORMERLY
PL	PROPERTY LINE
	EXISTING TREE LINE
	WETLAND SETBACK
(0x0)	PROPOSED SPOT GRADE
	EXISTING STONE WALL
Ⓦ	PROPOSED WELL

ZONING – A-2

*** SETBACKS**

FRONT	75'
SIDE	20'
REAR	30'

* OWNER SHALL VERIFY PRIOR TO CONSTRUCTION AND OBTAIN ALL NECESSARY VARIANCES/EXCEPTIONS PRIOR TO CONSTRUCTION.

SEPTIC TANK FILTER

CROSS SECTION

NO SCALE

DESIGN WATER TABLE			IMPERVIOUS ENCOUNTERED	
TEST PIT NO.	DEPTH	WATER ELEVATION	DEPTH	ELEVATION
SEV 07-05	2'-6"	99.5	7'-0"	95.0
SEV 07-04	N/A	N/A	5'-8"	98.0-95.0
LP-1	N/A	N/A	8'-4" to 8'-8"	97.5-97.6
LP-2	N/A	N/A	6' to 6'-6"	97.4-97.9
GWT 9707	4'-1"	98.3	>11'	>91.4
GWT 9708	2'-0"	97.7	5' to 6'-6"	94.7-93.2
LP-1	N/A	N/A	6' to 6'-4"	95.5-95.8
LP-4	N/A	N/A	7'-4"	94.6
LP-5	N/A	N/A	4'-7" to 5'	96.3-96.7
LP-6	N/A	N/A	5'-0"	94.7
LP-7	N/A	N/A	5'-8"	93.8

REFERENCE: SOIL EVALUATIONS DATED 3/20/07, APPL. 9708-1256 & WATER TABLE VERIFICATION W9708-1256 FOR DESIGN DEPTHS.

1. Set posts min. depth of 12" and excavate a 6"x6" trench upslope along the line of posts. 2. Staple wire fencing to the posts.

3. Attach the filter fabric to the wire fence and extend it into the trench.
4. Backfill and compact the excavated soil.

SILT FENCE DETAIL

1500 GALLON
SINGLE COMPARTMENT
SEPTIC TANK

DESIGN NOTES

1) ALL JOINTS SEALED WITH BUTYL RUBBER SEALANT.
2) ALL INLETS AND OUTLETS HAVE STATE-APPROVED SEALS.
3) AVAILABLE WITH 8' TOP
4) MEETS ASTM C 1227-97A
5) CONCRETE STRENGTH 5000 PSI. MIN. 28 DAYS

JOLLEY PRECAST, INC.
860-774-9066

5 HOLE "D" BOX WITH BAFFLE

DB5-3

DESIGN NOTES

1) FIVE OUTLETS AND THREE INLETS
2) INLETS AND OUTLETS HAVE STATE APPROVED SEALS THAT ACCEPT 4" S-40, 4" SDR-35, 3" AND 2" PIPE.
3) TYPE II CEMENT ASTM C-150-81
4) CONCRETE STRENGTH 5000 PSI MIN. 28 DAYS

JOLLEY PRECAST, INC.
860-774-9066

LOCUS MAP

NOT TO SCALE

I.S.D.S. NOTES: CIRCLE APPLICABLE NUMBERS

1. ① All other design, construction and maintenance requirements, whether noted hereon, or not, shall be in conformance with, Rules & Regulations Establishing Minimum Standards Relating To Location, Design, Construction And Maintenance Of Individual Sewage Disposal Systems, December 1, 1980 by the R.I. Dept. Of Environmental Management, Authority Sections 42-17.1-2(1) (m),(r),(s) & Section 23-19.5-4 & Chapter 42-35 of the General Laws Of Rhode Island, 1956(1977 Re-Enactment) as amended.
2. ② Maintain invert elevation 103.08' for 25' around system.
3. ③ See I.S.D.S. specifications attached.
4. ④ Clear all trees and stumps within 10' of system.
5. ⑤ There shall be no waterlines, subsurface, foundation or storm drains within 25' of system.
6. ⑥ Comply with any additional terms of approval as may be required by R.I.D.E.M.
7. ⑦ Cast iron pipe, schedule 35 MIN. PVC pipe, or equal from building to septic tank. SDR35 PVC pipe to be used in system unless otherwise noted.
8. ⑧ All soil containing fines, at least 36" below the proposed system, and 5' on all sides, shall be stripped and backfilled with a course free draining soil to at least 2" above the top of the distribution pipes in the leach field. Strip to elevation 99.5' or as requested by D.E.M.
9. Benchmark to be set within 150' of the proposed I.S.D.S. prior to construction.
10. ⑩ There are no other known wells existing or proposed within 200' of the proposed I.S.D.S. nor are there any other I.S.D.S.'s within 100' of the proposed well except as noted.
11. ⑪ Proposed wells are shown in suggested location. Placement of wells shall conform to applicable R.I.D.E.M., I.S.D.S. and Well Regulations.
12. ⑫ There are no known existing or proposed public wells within 500' of the proposed system.
13. ⑬ There are no known existing or proposed public sewers or drains within 200' of the proposed system unless otherwise noted.
14. ⑭ All stages of ISDS installation must be supervised by the designer, a R.I.P.L.S. or R.I.P.E.
15. ⑮ The septic tank is to have an inspection cover over the outlet at finish grade. This cover is to be installed so as to divert surface water runoff away from the cover. The outlet of the septic tank is to be fitted with a Zabel A1800 effluent filter or equal in lieu of a standard tee. The tank is to be pumped out as needed and upon pumping out the tank the effluent filter is to be removed, rinsed off and reinstalled.
16. ⑯ No garbage disposal units shall be tied into the existing plumbing network as they are not allowed to discharge into the proposed septic system, per the manufacturer and RIDEM-ISDS Section requirements.

SEV 07-05 ESHWT IS AT 30" (ELEV.=99.5)
AT LP-5 LEDGE IS AT 4'7" – 5' (ELEV.= 96.3')
DESIGN WATER TABLE AT 30"

GENERAL NOTES:

1. The septic tank shall be provided with an inlet tee or baffle , an effluent filter and an access manhole to grade over the outlet. Set cover to divert runoff.
2. All piping shall be SDR35 PVC or approved equal, except as noted & shown on plan.
3. The distribution box shall have a minimum bottom area of 3 s.f. and shall withstand H-20 wheel loads and shall have an inlet tee or baffle.
4. Distribution box must be able to withstand HS-20 loading requirements.
5. Sand media shall meet ASTM C-33 Specifications.
6. An effluent filter shall be installed in the outlet tee of the septic tank.
7. A 4" dia. solid pvc distribution line shall be installed at the midpoint between rows of in-drains when the length of the rows exceeds thirty (30') feet, and shall be interconnected to the trenches using 45 degree bends, or flatter. Crushed stone or equal should be placed below and around pipe to assure pipe remains level.

ELJEN IN-DRAIN NOTES:

1. The Eljen In-Drain units are to have a minimum of 6" of concrete sand (less than 5% passing a #200 sieve) directly below and around the sides of each unit.
2. Clamps provided with units are to be placed over the pipe and pressed into In-Drain units to prevent movement of pipe during backfilling.
3. All leach field piping is to be 4" SDR-35 pvc or equivalent. The piping over the Eljen In-Drain units is to be perforated only on the bottom (all other piping is to be solid).
4. Prior to backfilling over the Eljen In-Drain units a filter fabric is to be placed over the top. All backfill material is to be free of large rocks, etc. In backfilling the following sequence is to be followed:
    1. Secure filter fabric with hand shoveled sand.
    2. First heavy load must be placed over covered (filter fabric) pipe.
    3. Second and third loads are to be placed on either side of first load.
    4. All backfilling/grading should be done in 6" lifts. Upon completing all backfilling compact with a light track machine with caution, avoid crushing or shifting of pipe assembly. When compacting the soil the light track machine must follow the direction of the pipe assembly (parallel), do not run the track machine perpendicular to the pipe assembly. Do not use a wheeled machine to backfill over the pipe assembly and Eljen In-Drain units as this may cause the pipe assembly and units to shift or improperly settle.

TYPICAL IN-DRAIN PROFILE

NOT TO SCALE

AUG 16 2007

NOTE:
BOTTOM ELEV. SET AT 5' ABOVE LEDGE AT G.W.T. 9705 (ELEV.= 97.5±)

TYPICAL IN-DRAIN CROSS SECTION

NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
REVIEWED SITE PLAN APPLICATION NO.: 07-0331
DATED SEP 25 2007
SEE LETTER OF SAME DATE.

SOIL EVALUATION/WATER TABLE APPLICATION NUMBER W9708-1256
SUBDIVISION REVIEW NO. N/A

I.S.D.S. DESIGN DATA (BASED ON 10 MINS/INCH PERC. RATE)

REQUIRED AREA	= 660	S.F.
6" OF CONCRETE SAND BELOW BELOW & AROUND EACH UNIT	= 7.0	S.F./L.F. (28.0 S.F./UNIT)
2 LINES AT 36'	= 72	L.F.
2 LOOPS AT 12'	= 24	L.F.
	= 96	L.F.
	x 7.0	S.F./L.F. (28.0 S.F./UNIT)
ACTUAL	= 672	S.F. OR (24 UNITS)

PLAN OF PROPOSED SEWAGE DISPOSAL SYSTEM

MINOR SUBDIVISION – LOT A

PORTION OF ASSESSOR'S PLAT 43 LOT 13

STAPLES ROAD
CUMBERLAND, RHODE ISLAND

PREPARED FOR: TIMOTHY AND BARBARA SCANLON

SCALE: 1"=40'
DATE: DECEMBER 11, 2006

REVISED: 07/20/07

GAROFALO
GAROFALO & ASSOCIATES, INC.
CIVIL & STRUCTURAL ENGINEERS\SURVEYORS
LAND PLANNERS\ENVIRONMENTAL SCIENTISTS
85 CORLISS STREET, P.O. BOX 6145 PROVIDENCE, RI 02940
401-273-6000

LOT A

JOB NO. 5167-01

DRAWING NO. 5167-01-BASE.DWG

LEGEND

—18—	EXISTING CONTOUR
—(21)—	PROPOSED CONTOUR
⊕	SOIL EVALUATION/ GROUND WATER TEST LOCATION
◪	PERC. TEST LOCATION
—W—	PROPOSED WATER LINE
—W—W—	EXISTING WATER LINE
N/F	NOW OR FORMERLY
—P—	PROPERTY LINE
	EXISTING TREE LINE
	WETLAND SETBACK
(0x0)	PROPOSED SPOT GRADE
oooooo	EXISTING STONE WALL
(W)	PROPOSED WELL

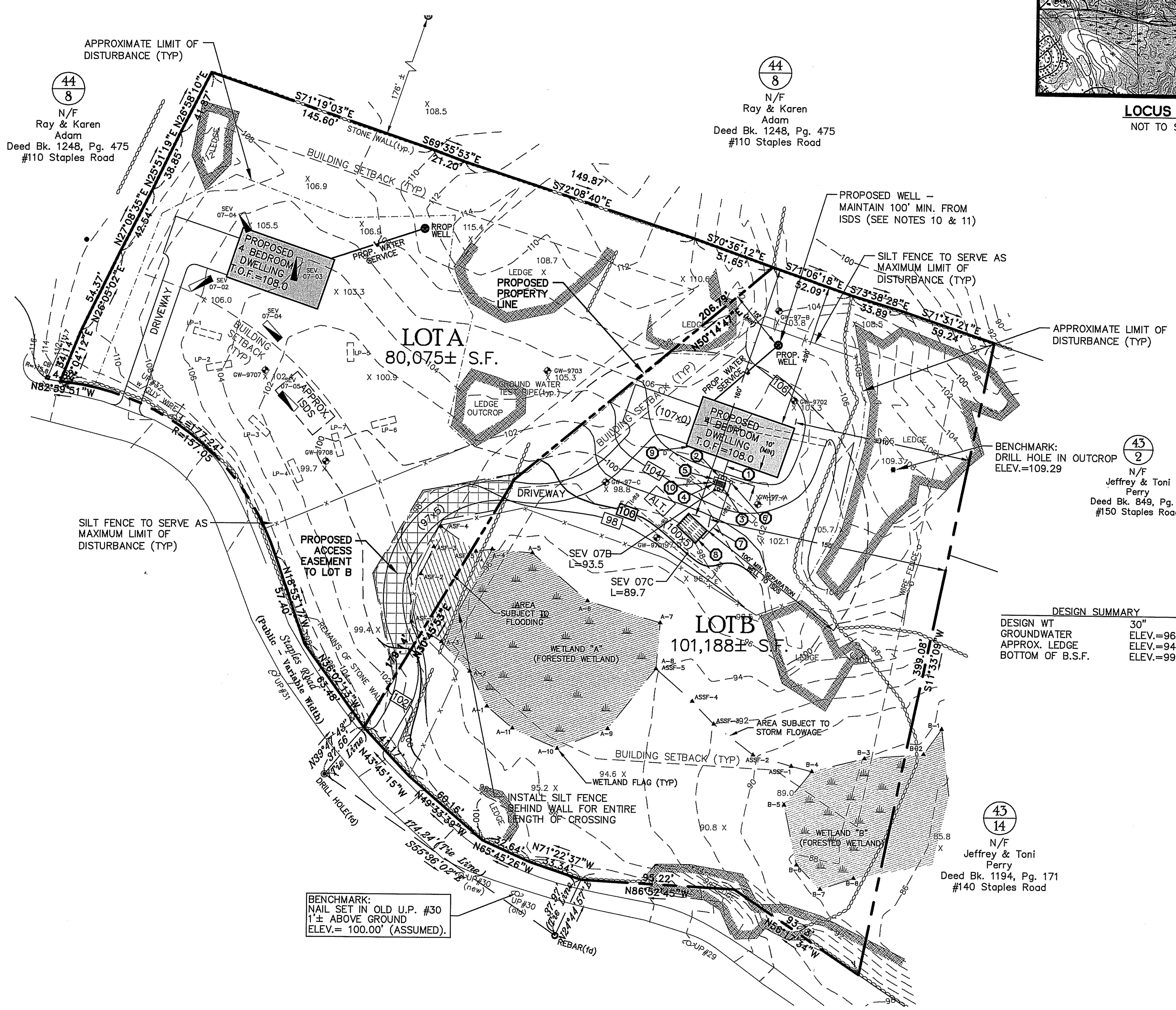
ZONING – A-2

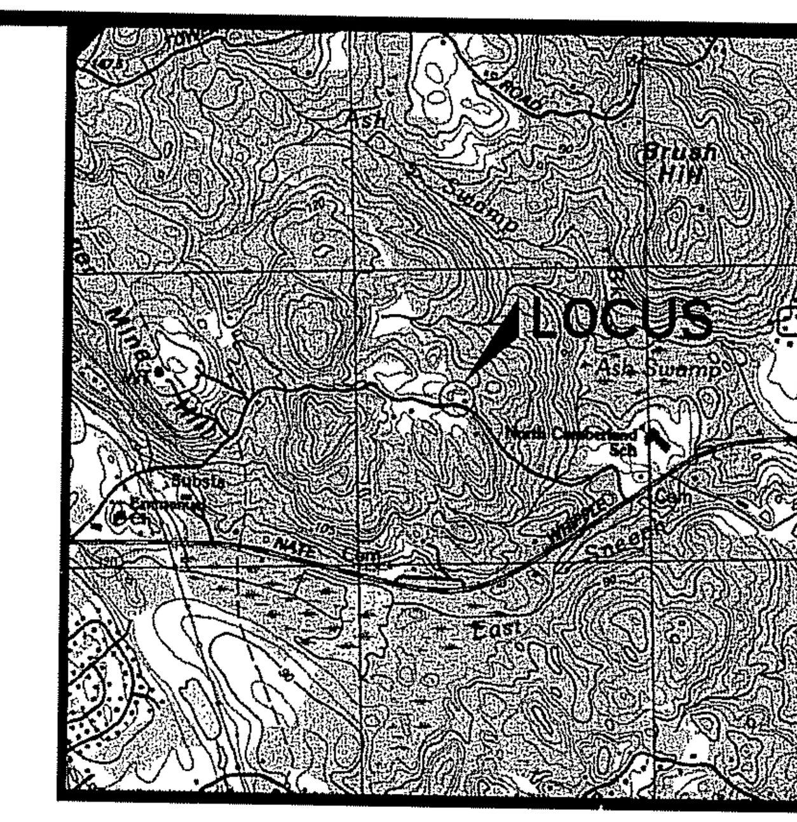
*SETBACKS

FRONT	75'
SIDE	20'
REAR	30'

* OWNER SHALL VERIFY PRIOR TO CONSTRUCTION AND OBTAIN ALL NECESSARY VARIANCES/EXCEPTIONS PRIOR TO CONSTRUCTION.

1" = 40'





LOCUS MAP
NOT TO SCALE

I.S.D.S. NOTES: CIRCLE APPLICABLE NUMBERS

1. All other design, construction and maintenance requirements, whether noted hereon, or not, shall be in conformance with, Rules & Regulations Establishing Minimum Standards Relating To Location, Design, Construction And Maintenance Of Individual Sewage Disposal Systems, December 1, 1980 by the R.I. Dept. Of Environmental Management, Authority Sections 42-17.1-2(1) (m),(r),(s) & Section 23-19.5-4 & Chapter 42-35 of the General Laws Of Rhode Island, 1956(1977 Re-Enactment) as amended.
2. Maintain a minimum 3"-4" of pea stone over pipes in pressurized drainfield/sand filter.
3. See I.S.D.S. specifications & details on sheets 1 & 2 of 2 attached.
4. Clear all trees and stumps within 10' of system. System shall be placed in a sunny location of the site to prevent freezing during cold periods.
5. There shall be no waterlines, subsurface, foundation or storm drains within 25' of system, except as shown.
6. Comply with any additional terms of approval as may be required by R.I.D.E.M.
7. Cast iron pipe, schedule 40 PVC pipe, or equal from building to septic tank. Sch. 40 PVC pipe to be used in system unless otherwise noted.
8. All soil containing fines below the proposed bottomless sand filter, shall be stripped and back filled with ASTM 33 sand. Strip to elevation 96.0 or as requested by D.E.M.
9. Benchmark to be set within 150' of the proposed I.S.D.S. prior to construction.
10. There are no known wells existing or proposed within 200' of the proposed I.S.D.S. except as shown.
11. Proposed wells are shown in suggested location. Placement of wells shall conform to applicable R.I.D.E.M., I.S.D.S. and Well Regulations.
12. There are no known existing or proposed public wells within 500' of the proposed system.
13. There are no known existing or proposed public sewers or drains within 200' of the proposed system unless otherwise noted or shown.
14. All stages of ISDS installation must be supervised by a R.I.P.E., Class III designer.
15. The septic tank and pump basin (see details) are to have inspection covers as noted to finish grade. These covers are to be installed so as to divert surface water runoff away for the covers. The tank is to be pumped out at least every four years and the pump systems & sand filters shall be inspected at least annually & maintained as per manufacturers recommendations. Tank must meet ASTM 1227-97A standards & shall be subject to vacuum testing.
16. The contractor shall maintain a copy of the approved plan on-site at all times.
17. Bottomless sand filter media: shall be Holliston sand & gravel (0-DAMP)ASTM-33 sand. Less than 1% passing the 10 sieve with an effective size of .25 – .40 mm and with a uniformity coefficient of 2.0±. (Holliston sand & gravel: 401-766-5010). Contractor to supply engineer with samples of all media to be used in the sand filter. Contractor shall also supply engineer with sieve analysis.
18. It is highly recommended that Wastewater Technologies, Inc. of Warwick, R.I., Tel. 1-401-737-7810, Atlantic Solutions, LTD. of Portsmouth, R.I., Tel. 1-401-293-0176, or another qualified representative of Orenco Systems, Inc. (OSI) provide construction oversight to insure proper installation of Advantex, sand filter & components.
19. It is recommended that low flow water devices be installed and NO garbage disposals.

LIST OF COMPONENTS – SEE DETAILS NEXT SHEET

NOTE: OSI SHALL REFER TO ORENCO SYSTEM INCORPORATED, SUTHERLIN, OR – (541) 459-4449

1. BUILDING SEWER – 10 LF – 4" SCH40 PVC SEWER PIPE (S=0.02 FT/FT)
2. 2000 GAL. TWO-COMPARTMENT SEPTIC TANK WITH RECIRCULATING EFFLUENT PUMP SYSTEM & SPLITTER VALVE(SEE DETAILS)
   (TANK MANUF. BY JOLLEY PRECAST, OR EQUAL)
   (PUMP – O.S.I.
3. 1" CLASS 200 PVC PRESSURE SEWER WITH SOLVENT WELDED JOINTS – LENGTH AS REQUIRED BY FIELD CONDITIONS.
4. OSI-AX 20 ADVANTEX TEXTILE FILTER (SEE DETAILS)
5. 20 L.F.± 2" SCH. 40 PVC RETURN LINE THROUGH SPLITTER VALVE.
6. 24" DIA. OSI PUMP BASIN w/PUMP – P 3005
7. 1 1/4" CLASS 200 PVC PRESSURE SEWER WITH SOLVENT WELDED JOINTS – LENGTH AS REQUIRED BY FIELD CONDITIONS.
8. 10' x 15' BOTTOMLESS SAND FILTER (ASTM 33, 0 DAMP) MEDIA SAND SHALL BE OBTAINED FROM HOLLISTON SAND CO., TIFFT ROAD, P.O. 1168, SLATERSVILLE, R.I. 02876. PHONE 401-766-4144 OR ANOTHER MATERIAL PROVIDER AS APPROVED BY R.I.D.E.M.
9. PUMP CONTROL PANEL (TO BE LOCATED AS SHOWN) OSI MODEL NO. VCOM-AXB, 115V PANEL REQUIRES CONNECTION TO PHONE SERVICE. (SEE NOTE 4).
10. OSI-ADVANTEX 2"ø VENT ASSEMBLY.

NOTES

1.) ALL PUMPS SHALL BE EQUIPPED WITH A HIGH WATER LEVEL VISIBLE AND AUDIBLE ALARM POWERED BY A CIRCUIT SEPARATE FROM THE PUMP POWER. THE ALARM SHALL BE LOCATED IN A NORMALLY OCCUPIED AREA OF THE FACILITY TO BE DETERMINED BY OWNER.

2.) ALL PUMPS SHALL BE EQUIPPED WITH A ELAPSED RUN TIME AND CYCLE COUNT READOUTS. THE SYSTEM SHALL BE CALIBRATED IN THE FIELD TO DETERMINE ACTUAL RATE (GALLONS) PER CYCLE.

3.) ALL TANKS AND APPURTENANCES SHALL BE CONSTRUCTED SUCH THAT ALL ELEMENTS ACT AS A SINGLE WATERTIGHT UNIT, WHICH SHALL DEVELOP A FACTOR OF SAFETY AGAINST BUOYANT UPLIFT. CONTRACTOR SHALL SUITABLY COMPACT COHESIVE OVERBURDEN MATERIAL AND/OR PROVIDE SUITABLE BALAST SURCHARGE AND/OR ANCHORING MEASURES WHEN NEEDED TO MEET THIS REQUIREMENT.

NET REQUIRED (TANK AND ANCHORAGE) = 0 LBS
BUOYANCY ANCHORAGE IS NOT REQUIRED

4.) PROPOSED PUMP CONTROL PANEL TO BE LOCATED IN AN ACCESSIBLE LOCATION ON NON-LIVING SPACE WALL

DESIGN SUMMARY

DESIGN WT	30"
GROUNDWATER	ELEV.=96.5
APPROX. LEDGE	ELEV.=94.0
BOTTOM OF B.S.F.	ELEV.=99.50

CONSTRUCTION NOTES:

1.) THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT WITH ITS RELATIONSHIP TO THE EXISTING SITE SURVEY. THE CONTRACTOR SHALL ALSO VERIFY ALL DIMENSIONS, SITE CONDITIONS, AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND DESIGNER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING OR PROCEEDING WITH WORK. NOTE; THE PROPERTY LINES SHOWN HEREON ARE BASED SOLELY ON PHYSICAL MONUMENTS/ OCCUPATION LIMITS LOCATED IN THE FIELD.

2.) THE CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE ANY EXISTING UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF NECESSARY. THE EXISTENCE AND/OR LOCATION OF UTILITIES SHOWN ON THESE PLANS MAY BE ONLY APPROXIMATELY CORRECT AND THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN HEREON AND ANY OTHER EXISTING UTILITIES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING, AT HIS EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.

3.) THIS PLAN DOES NOT GUARANTEE THE EXISTENCE OR NON-EXISTENCE OF UNDERGROUND UTILITIES. PRIOR TO ANY CONSTRUCTION OR EXCAVATION, THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF, OR THE NON-EXISTENCE OF, ANY UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "DIG SAFE" AT 1-800-225-4977 AT LEAST THREE BUSINESS DAYS PRIOR TO COMMENCEMENT OF EXCAVATION.

4.) RELOCATION OF ANY UTILITIES SHALL BE AT THE OWNERS EXPENSE AND COMPLETED WITH THE UTILITY WORK. THE OWNER SHALL DETERMINE ANY RELOCATIONS REQUIRED PRIOR TO THE START OF CONSTRUCTION.

5.) PROPOSED SILT FENCE/ROW OF STAKED HAYBALES/ SOIL & EROSION CONTROLS TO BE INSTALLED PRIOR TO ANY SITE DISTURBANCES ASSOCIATED WITH HOUSE AND /OR ISDS CONSTRUCTION.

6.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING, WITH MATCHING MATERIALS, ANY PAVEMENT, DRIVEWAYS, WALKS, WALLS, CURBS, ETC. THAT MUST BE CUT OR THAT ARE DAMAGED DURING CONSTRUCTION.

7.) CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, IDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM "THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER."

8.) ALL DISTURBED AREAS NOT COVERED BY BUILDINGS, PAVEMENT OR OTHER GROUND COVER SHALL BE PLANTED WITH GRASS ON FOUR INCH (4") THICKNESS OF TOPSOIL. IF SEEDING CANNOT BE COMPLETED IMMEDIATELY, DISTURBED AREAS SHALL BE STABILIZED WITH A SPREAD HAY MULCH (APPROPRIATELY ANCHORED) OR EXCELSIOR EROSION CONTROL MATTING.

9.) ALL TEMPORARY SOIL STOCKPILE AREAS AND TRENCH EXCAVATION SPOILS SHALL BE PROTECTED WITH A ROW OF STAKED HAYBALES AND/OR SILT FENCE AND WITH A SPREAD HAY MULCH AND WOVEN NETTING (OR EXCELSIOR EROSION CONTROL MATTING) WHEN LEFT EXPOSED FOR LONG PERIODS OF TIME. ANY SUCH STOCKPILE AREAS SHALL BE PLACED IN AN APPROPRIATE UPLAND LOCATION AND COMPLETELY REMOVED PRIOR TO PROJECT CLOSE-OUT.

10.) THE CONTRACTOR SHALL PROPERLY GRADE SITE TO ENSURE PROPER DRAINAGE AWAY FROM SEPTIC SYSTEM, DWELLING AND ADJACENT PROPERTY OWNERS. SHALLOW DIVERSION SWALES OR EQUAL NOT SHOWN ON PLANS, MAY BE REQUIRED. CONTRACTOR SHALL INSTALL LANDSCAPE TIMBERS OR EQUAL AS NECESSARY TO PROTECT BSF AND ADVANTEX FILTER UNITS.

AUG 1 6 2007

GROUND WATER – SITE APPLICATION NUMBER 0213-0700

GROUND WATER VERICATION NUMBER N/A

SUBDIVISION REVIEW NO. N/A

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
REVIEWED SITE PLAN APPLICATION NO.: 07-0331
DATED SEP 2 5 2007
SEE LETTER OF SAME DATE.

NOTICE: THE SEWAGE DISPOSAL SYSTEM AS SHOWN HEREON REQUIRES MAINTENANCE (AT LEAST TWICE DURING THE FIRST YEAR AND ANNUALLY THEREAFTER.) AN OPERATION AND MAINTENANCE CONTRACT MUST BE OBTAINED BY THE OWNER PRIOR TO START UP OF SYSTEM. IT IS RECOMMENDED THAT AN O.S.I. REPRESENTATIVE BE CONTRACTED FOR THESE SERVICES.

DESIGN PARAMETERS

SYSTEM LOADING

3 BEDROOMS @ 150 GPD/BEDROOM 450 GPD

ADVANTEX AX 20 TREATMENT

(DESIGN LOADING RATE 29.1 GAL/SF/DAY)
REQUIRED SIZE:
450 GPD / 29.1 GPD/SF = 15.5 SF
PROVIDED SIZE:
20 S.F. (CAPABLE OF TREATING 600 GALS/DAY)

BOTTOMLESS SAND FILTER DESIGN

(DESIGN LOADING RATE 3.00 GAL/SF/DAY)
REQUIRED SIZE:
GPD / 3.00 GPD/SF = 150 SF
PROVIDED SIZE:
x = 150 SF
ACTUAL LOADING RATE = 3.00 GAL./S.F./DAY

CERTIFICATION:

THIS SURVEY AND PLAN CONFORMS TO THE FOLLOWING CLASS STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

BOUNDARY SURVEY – CLASS IV
TOPOGRAPHY SURVEY – CLASS III

BY: ____________________
PROFESSIONAL LAND SURVEYOR REG. NO. DATE

NOTES:

1. THE CONTRACTOR SHALL ASSURE MINIMUM GRADE REQUIREMENTS ARE MAINTAINED OVER ALL COMPONENTS OF I.S.D.S. AND THAT GRADING PROVIDES FOR PROPER DRAINAGE AWAY FROM I.S.D.S., DWELLING AND ADJACENT PROPERTIES.

2. ACCORDING TO THE SOIL SURVEY OF RHODE ISLAND SOILS ON SITE ARE CLASSIFIED AS HAVING AN ESTIMATED SEASONAL HIGH WATER TABLE RANGING BETWEEN AND

DESIGN NOTE:

SOILS WITNESSED IN SEV CONSIST PRIMARILY OF

A SEASONAL HIGH WATER TABLE ESTIMATED AT INCHES AND A MINUTE PER INCH PERCOLATION RATE WERE USED FOR DESIGN PURPOSES.

INNOVATIVE/ALTERNATIVE TECHNOLOGY PLAN OF PROPOSED SEWAGE DISPOSAL SYSTEM REPAIR MINOR SUBDIVISION – LOT B PORTION OF ASSESSORS PLAT 43, LOT NO. 13 STAPLES ROAD CUMBERLAND, RHODE ISLAND

PREPARED FOR: TIMOTHY AND BARBARA SCANLON

SCALE: 1"=40' DATE: JULY 27, 2007

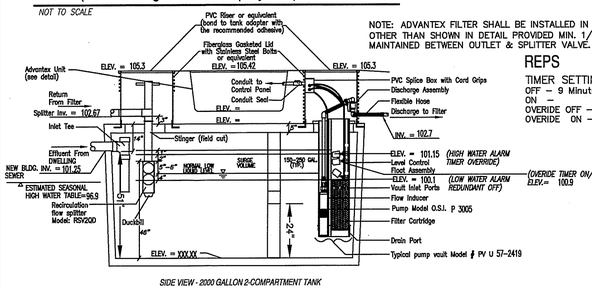
REVISED: 07/20/07

LOT B

JOB NO. 5167-01

REPS (Recirculating Effluent Pump System) - SIDE VIEW

NOT TO SCALE



SIDE VIEW - 2000 GALLON 2-COMPARTMENT TANK
(JOLLEY TANK)

NOTE: ADVANTEX FILTER SHALL BE INSTALLED IN A LOCATION OTHER THAN SHOWN IN DETAIL PROVIDED MIN. 1/4"/FT, SLOPE IS MAINTAINED BETWEEN OUTLET & SPLITTER VALVE.

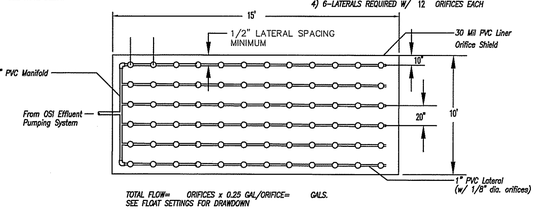
REPS

TIMER SETTINGS:
OFF – 9 Minutes, 30 Seconds
ON – 30 Seconds
OVERIDE OFF – 4Min., 45 Sec.
OVERIDE ON – 30 Seconds

Bottomless Sand Filter (Cold Weather Design)

*This drawing is for a 10' x 15' bottomless sand filter
*The dosing pump shall be on P 3005
Loaded at 4.5 gpd/sf, this filter can polish up to 6.75 gallons per day
*SEE NOTE BELOW

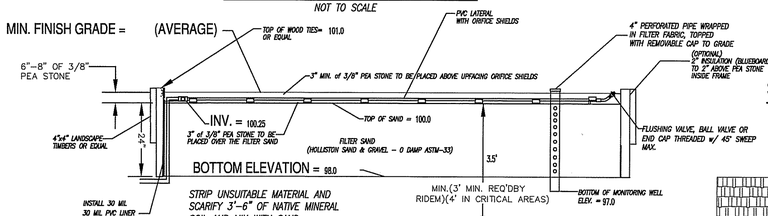
1) LATERAL SPACING = 20"
2) ORIFICE SPACING = 15"
3) LATERALS TO BE INSTALLED = 10" FROM EDGE OF FILTER
4) 6-LATERALS REQUIRED W/ 12 ORIFICES EACH



TOTAL FLOW= ORIFICES x 0.25 GAL/ORIFICE= GALS.
SEE FLOAT SETTINGS FOR DRAWDOWN

TOP VIEW - BOTTOMLESS SAND FILTER

NOT TO SCALE



SIDE VIEW - BOTTOMLESS SAND FILTER

NOT TO SCALE

OG @ HIGH SIDE = 99.0 - 30" = 96.5
@ TEST HOLE 070 98.7, 30" ESHWT
070 100.4, 42" ESHWT

NOTE:

LOADING RATE OF GALS/FT /DAY WAS CHOSEN BASED ON THE PREDOMINENT USDA SOIL TEXTURE OF THE MOST RESTRICTIVE RECEIVING SOIL HORIZON IN ACCORDANCE WITH THE RIDEM SAND FILTER GUIDANCE DOCUMENT.

COLD WEATHER RELATED DESIGN REQUIREMENTS:
TWO (2) ORIFICES IN EACH LATERAL SHALL BE DRILLED POINTING UP; ALL OTHER ORIFICES SHALL BE DRILLED POINTING DOWN. THE UP–POINTING ORIFICES SHALL BE LOCATED APPROXIMATELY 1/3 AND 2/3 RESPECTIVELY, ALONG THE LENGTH OF EACH LATERAL. ALL ORIFICES MUST BE COVERED WITH ORIFICE SHIELDS.

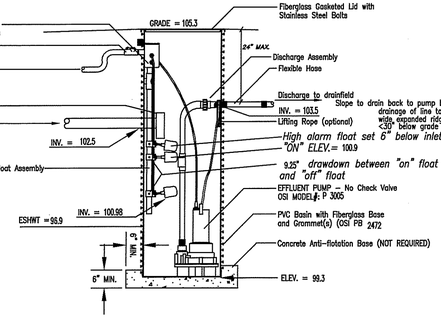
IN ADDITION TO THE 3" OF 3/8" PEA STONE INSTALLED OVER THE FILTER SAND AN ADDITIONAL 3" SHALL BE PLACED ABOVE THE UP–FACING ORIFICE SHIELDS.

NO FILTER FABRIC OF ANY KIND SHALL BE PLACED BETWEEN THE SAND AND OVERLYING PEA STONE.

NECESSARY PRECAUTIONS WHERE POSSIBLE, MUST BE TAKEN TO LOCATE BSF WHERE IT WILL RECEIVE THE MAXIMUM DIRECT SUNLIGHT.

Drainfield Pump Basin with Effluent Pump Assembly

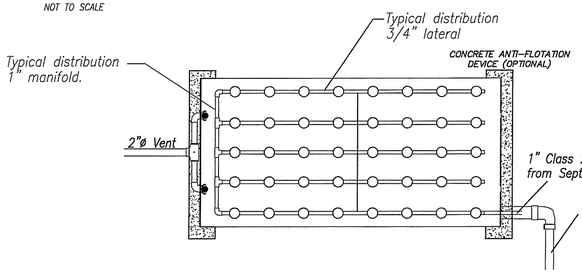
NOT TO SCALE Note: This system can also be fitted with an effluent screen that the pump and floats are installed in.



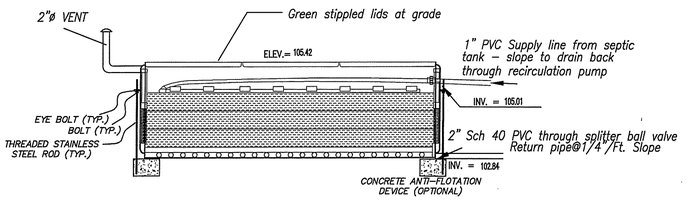
*AX 20 ADVANTEX Textile Filter

*NOTE: GRAPHIC ONLY.

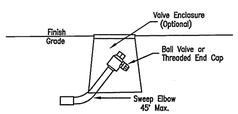
NOT TO SCALE



TOP VIEW - *AX 20 ADVANTEX TEXTILE FILTER



SIDE VIEW - *AX 20 ADVANTEX TEXTILE FILTER



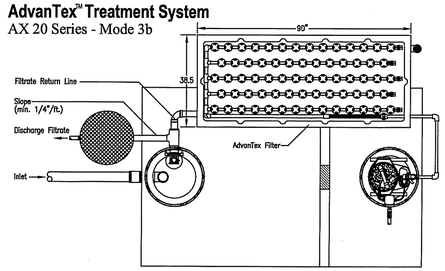
FLUSHING VALVE DETAIL

NOT TO SCALE

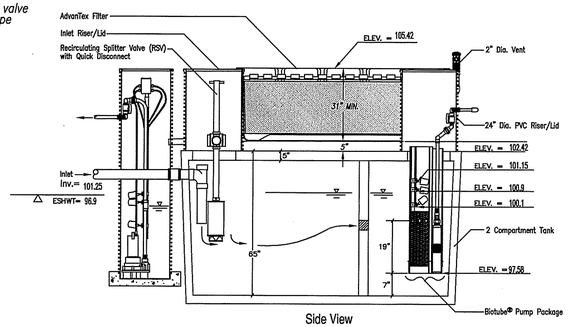
24" DIA. PUMP BASIN FLOAT SETTINGS	
DRAWDOWN	GALS.
6"	11.7
7"	13.7
8"	15.7
9"	17.6
10"	19.6
11"	21.5
12"	23.5
18"	35.25
24"	47.0

AdvanTex™ Treatment System

AX 20 Series - Mode 3b



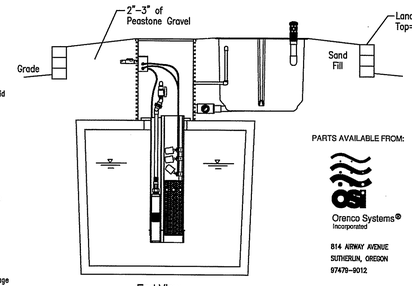
Top View



Side View

COMPOSITE SKETCH (GRAPHIC ONLY) ADVANTEX TREATMENT SYSTEM *AX 20 SERIES - MODE 3b (SEE DETAILS THIS SHEET)

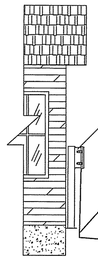
NOTE: ADVANTEX FILTER MAY BE INSTALLED IN A LOCATION OTHER THAN SHOWN IN DETAIL PROVIDED MIN. 1/4"/FT, SLOPE IS MAINTAINED BETWEEN OUTLET & SPLITTER VALVE.



End View

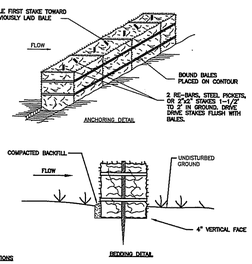
PARTS AVAILABLE FROM:

Orenco Systems®
Incorporated
814 AIRWAY AVENUE
SUTHERLIN, OREGON
97479-9012
TELEPHONE:
(541) 459-4449
FACSIMILE:



STRAW BALE BARRIER DETAIL

NOT TO SCALE

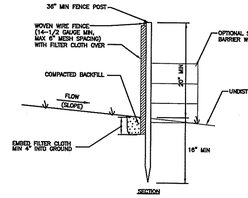


CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR, AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL, A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE, AT AN ANGLE, TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR/REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED. REMOVE ACCUMULATED SEDIMENT PROMPTLY.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

SILT FENCE DETAIL

NOT TO SCALE



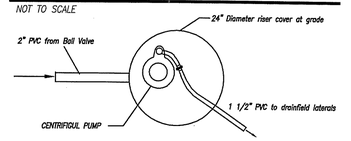
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE OR DEPTH OF ACCUMULATED SEDIMENT REACHES 6".

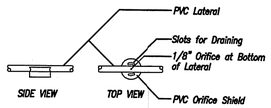
POSTS: STEEL, EITHER "T" OR "U" TYPE OR 2" HARDWOOD
FENCE: WOVEN WIRE, 14 GAUGE 6" MAX. MESH OPENING
FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

Drainfield Pump Basin

NOT TO SCALE



TOP VIEW - 24" DIAMETER PUMP BASIN FOR DOSING TO DRAINFIELD



COLD WEATHER ORIFICE DETAIL

NOT TO SCALE

INVERT SCHEDULE

LOCATION	ELEVATION
OUT OF HOUSE AT GRADE	101.5 (GRAVITY)
INTO SEPTIC TANK	101.25 (GRAVITY)
OUT OF SEPTIC TANK TO ADVANTEX FILTER	102.7 (PRESSURE)
INTO ADVANTEX FILTER LATERAL	105.01 (PRESSURE)
INVERT OF ADVANTEX OUTLET	102.84 (GRAVITY)
INVERT THROUGH SPLITTER VALVE	102.67 (GRAVITY)
INVERT INTO PUMP BASIN	102.5 (GRAVITY)
OUT OF PUMP BASIN	103.5 (PRESSURE)
INVERT OF BSF LATERALS	100.25 (PRESSURE)

SOIL EROSION AND SEDIMENT CONTROL NOTES:

1. ALL BARE OR EXPOSED SOILS EXISTING FOR EXTENDED PERIODS OF TIME WITHIN THE PROJECT LIMITS SHALL BE PROTECTED WITH A SPREAD HAY MULCH AND OR EXCELSIOR MATTING, OR AN APPROVED EQUAL. AN APPLICATION OF CELLULOSE FIBER MULCH MAY BE USED AT THE RATE OF 1,000 LBS./ACRE AS AN EROSION CONTROL AGENT.
2. UPON PROJECT COMPLETION ALL DISTURBED AREAS, UNLESS OTHERWISE SPECIFIED ON SITE PLANS, SHALL BE TREATED WITH PLANTABLE SOIL, THEN SEEDED WITH AN APPROPRIATE SEED MIX TO ENSURE PERMANENT SOIL STABILIZATION. DISTURBED AREAS SHALL BE SEEDED WITH A CONSERVATION TYPE SEED MIX. ALL TEMPORARY SOIL EROSION/SEDIMENT CONTROLS EROSION/SEDIMENT CONTROLS (HAYBALES, SILT FENCE, ETC.) SHALL BE MAINTAINED UNTIL EXPOSED SOILS ARE SATISFACTORILY STABILIZED WITH VEGETATION.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT AND MAINTAIN ALL SOIL EROSION AND SEDIMENT CONTROLS ON THE PROJECT SITE FOR THE DURATION OF THE CONSTRUCTION PERIOD.
4. ALL SILT FENCING SHALL BE PROPERLY SUPPORTED BY STURDY STAKES AND WIRE FENCING AND TOED INTO EXISTING SUBSTRATE SOILS. ALL HAYBALES SHALL BE TOED INTO EXISTING SUBSTRATE SOILS AND STABILIZED WITH STURDY STAKES (TWO PER HAYBALE). SEE SOIL EROSION AND SEDIMENT CONTROL DETAILS ABOVE.
5. ALL TEMPORARY SOIL STOCKPILE AREAS SHALL BE PROTECTED WITH A ROW OF STAKED HAYBALES AND/OR SILT FENCE AND MUST BE COVERED WITH A SPREAD HAY MULCH AND WOVEN NETTING (OR EXCELSIOR EROSION CONTROL MATTING) WHEN LEFT EXPOSED FOR LONG PERIODS OF TIME. ANY SUCH STOCKPILE AREAS SHALL BE PLACED IN AN APPROPRIATE UPLAND LOCATION, OUTSIDE OF ANY REGULATED WETLAND AREAS.
6. ALL REFERENCED SOIL EROSION AND SEDIMENT CONTROLS INCLUDING MATERIAL USED, APPLICATION RATES, AND INSTALLATION PROCEDURES SHALL BE PERFORMED PER THE "RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK", DATED 1989, WITH ALL CORRECTIONS AND ADDENDA, PUBLISHED BY THE R.I.D.E.M. AND THE U.S. SOIL CONSERVATION SERVICE.

NOTES:

1. THE SEPTIC TANK SHALL BE A WATERTIGHT, 2,000 GAL. 2–COMPARTMENT TANK WITH 24" MIN. DIAMETER INLET AND OUTLET ACCESS RISERS. RISERS SHALL BE PVC WITH SECURED FIBERGLASS LID. IF CONCRETE TANK IS USED, ABS TANK ADAPTER SHALL BE CAST INTO PLACE. TANK SHALL BE VACUUM TESTED WHEN CONSTRUCTED OR WATER TESTED/VACUUM TESTED ON SITE. (CONCRETE TANK MAY BE PURCHASED FROM JOLLY PRE CAST, INC. AT 1–800–582–4638.)
2. THE CONTRACTOR MUST FOLLOW ALL ITEMS CIRCLED IN THE LOWER RIGHT HAND AREA OF THE ISDS APPLICATION LABELED——IMPORTANT AND NOTIFY ENGINEER DURING THE DIFFERENT STAGES OF CONSTRUCTION TO ALLOW THE ENGINEER TO OBSERVE COMPLIANCE WITH THE APPROVED PLANS (AS REQUIRED BY DEM).
3. THE CONTRACTOR MUST NOTIFY LICENSED DESIGNER 48 HOURS PRIOR TO START OF CONSTRUCTION WITH VALID INSTALLERS LICENSE NUMBER. DESIGNER MUST NOTIFY DEM 24 HOURS PRIOR TO START OF CONSTRUCTION IN ACCORDANCE WITH SD 27.00 (g).
4. IF CONTRACTOR ENCOUNTERS UNANTICIPATED CONDITIONS DURING CONSTRUCTION WHICH INDICATE THAT THE SYSTEM CANNOT BE INSTALLED IN ACCORDANCE WITH THE APPROVED DESIGN, INSTALLER SHALL STOP CONSTRUCTION AND NOTIFY THE LICENSED DESIGNER RESPONSIBLE FOR WITNESSING AND INSPECTING THE INSTALLATION IN ACCORDANCE WITH SD 27.00 (c).
5. THE LICENSED DESIGNER SHALL WITNESS AND INSPECT ALL ASPECTS OF THE INSTALLATION, KEEP RECORDS, PREPARE THE CERTIFICATE OF COMPLETION AND PROVIDE O & M INFORMATION AND RECOMMENDATIONS TO THE OWNER, IN ACCORDANCE WITH SD 27.00 (h) THROUGH (m).
6. THE DESIGNER IS NOT RESPONSIBLE FOR ANY NEGLIGENT ACT OF OMISSION OF A USER OF AN ISDS, INCLUDING BUT NOT LIMITED TO, FAILURE TO PROPERLY USE AND MAINTAIN THE SYSTEM, WHICH CAUSES DAMAGE TO THE ISDS.
7. PUMPS SHALL BE AS MANUFACTURED BY ORENCO SYSTEMS, INC. OR APPROVED EQUAL.
   SEPTIC TANK PUMP TO ADVANTEX FILTER– O.S.I. P 3005
   PUMP BASIN PUMP TO BOTTOMLESS SAND FILTER – P 3005
8. CONTRACTOR TO NOTIFY ENGINEER DURING THE DIFFERENT STAGES OF CONSTRUCTION TO ALLOW THE ENGINEER TO OBSERVE COMPLIANCE WITH THE APPROVED PLANS (AS REQUIRED BY DEM).
9. ALL TANKS AND APPURTENANCES SHALL BE CONSTRUCTED SUCH THAT ALL ELEMENTS ACT AS A SINGLE WATERTIGHT UNIT & SHALL BE CONSTRUCTED ACCORDING TO ASTM STANDARD C–1227–97A OR ANY SUPERSEDING UPGRADING OF THIS STANDARD. ALL RISER ADAPTERS SHALL BE CAST IN PLACE DURING TANK MANUFACTURING. ALL INLETS AND OUTLETS SHALL BE CAST IN PLACE WITH CAST–A–SEAL OR EQUIVALENT W/STAINLESS STEEL ADJUSTABLE CLAMP.
10. THE PROPOSED SEPTIC TANK SHALL BE SEALED TO ENSURE WATER TIGHTNESS AND SHALL BE A TWO COMPARTMENT MONOLITHIC TANK WHICH CAN BE PURCHASED FROM JOLLEY PRE CAST, INC. @ 1–800–582–4638 OR EQUAL.
11. THE INSTALLER SHALL PROVIDE DESIGNER WITH MATERIAL RECEIPTS FOR ALL CONSTRUCTION MATERIALS PRIOR TO DESIGNER ISSUING CERTIFICATE OF CONSTRUCTION.
12. BOTTOMLESS SAND FILTER MEDIA: SHALL BE HOLLISTON SAND & GRAVEL OR EQUIVALENT ASTM–33 SAND. LESS THAN 1% PASSING THE 10 SIEVE WITH AN EFFECTIVE SIZE OF .25 – .40mm AND WITH A UNIFORMITY COEFFICIENT OF 2.0±. (HOLLISTON SAND & GRAVEL: 401–768–5010) –CONTRACTOR TO SUPPLY ENGINEER W/SAMPLES OF ALL MEDIA TO BE USED IN THE SAND FILTER. CONTRACTOR SHALL ALSO SUPPLY ENGINEER WITH SIEVE ANALYSIS SHOWING THAT THE FILTER MEDIA MEETS THE CRITERIA AS SHOWN ON PLAN.

AUG 16 2007

SCHEDULE OF PVC PIPE SIZES	
BUILDING TO SEPTIC TANK	4" SCH 40
SEPTIC TANK TO TEXTILE FILTER	1" CLASS 200
TEXTILE FILTER MANIFOLD	1" CLASS 200
TEXTILE FILTER LATERALS	3/4" CLASS 200
TEXTILE FILTER TO PUMP BASIN	2" SCH 40
PUMP BASIN TO BSF	1 1/2" CLASS 200
BSF MANIFOLD	1 1/4" CLASS 200
BSF LATERALS	1" SCH 40

INNOVATIVE/ALTERNATIVE TECHNOLOGY PLAN OF PROPOSED SEWAGE DISPOSAL SYSTEM REPAIR MINOR SUBDIVISION – LOT B PORTION OF ASSESSORS PLAT 43, LOT NO. 13 STAPLES ROAD CUMBERLAND, RHODE ISLAND

PREPARED FOR: TIMOTHY AND BARBARA SCANLON

SCALE: FRESHWATER WETLANDS PROGRAM DATE:

REVIEWED SITE PLAN APPLICATION NO.: 07-1331
DATED SEP 25 2007
SEE LETTER OF SAME DATE.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES

Charles A. Horbert

LOT B

REVISED: 07/20/07

JOB NO. 5167–01