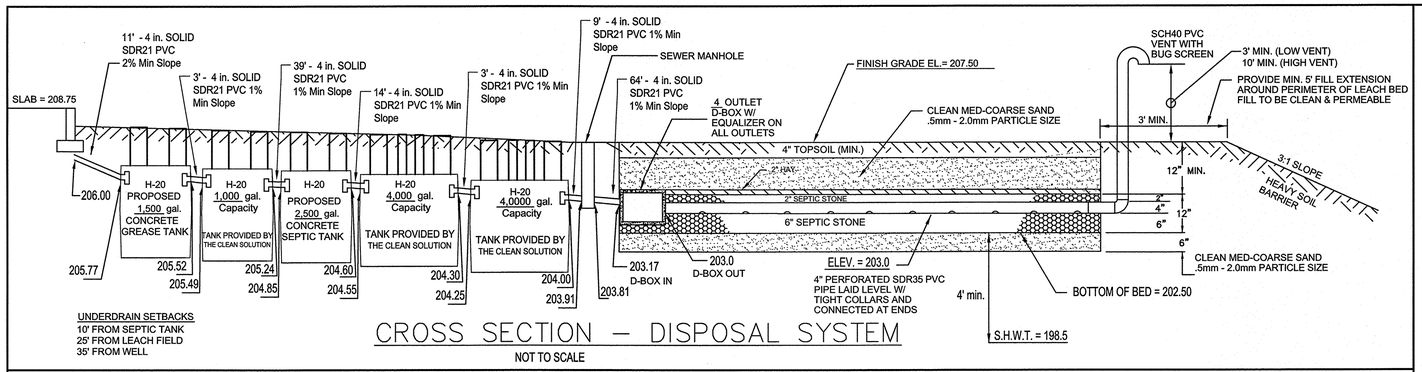



## CROSS SECTION – DISPOSAL SYSTEM

NOT TO SCALE

## TEST PIT LOGS

PERFORMED BY: Christopher Albert, Jones & Beach Engineers, Inc., SSD #1085

### TEST PIT #6

| | | |
|---|---|---|
| | GRASS MAT | |
| 0"–6" | 10YR 3/3 | DARK BROWN FINE SANDY LOAM |
| 6"–60" | 10YR 5/8 | YELLOWISH BROWN MED. TO COURSE GRAVELLY SAND GRANULAR |
| 60"–108" | 2.5Y 6/3 | LIGHT YELLOWISH BROWN FINE TO MED. SAND MASSIVE |

SHWT = 78"
ROOTS TO 6"
H2O @ 108"
NO REFUSAL OBSERVED
PERC RATE = 2 MIN/INCH

TEST PIT, DATE: 12-24-13

PERC. TEST, DATE: 12-24-13
2 MIN./INCH

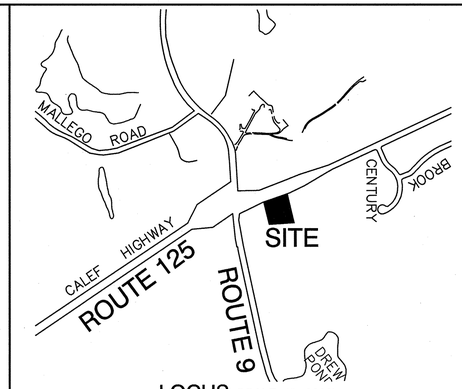
### TEST PIT #7

| | | |
|---|---|---|
| | GRASS MAT | |
| 0"–6" | 10YR 3/3 | DARK BROWN FINE SANDY LOAM GRANULAR FRIABLE |
| 6"–42" | 10YR 5/8 | MED. TO COURSE GRAVELLY SAND GRANULAR |
| 42"–54" | 2.5Y 7/6 | YELLOW MED. SAND |
| 54"–96" | 2.5Y 6/3 | LIGHT YELLOWISH BROWN, FINE TO MED.SAND, MASSIVE |

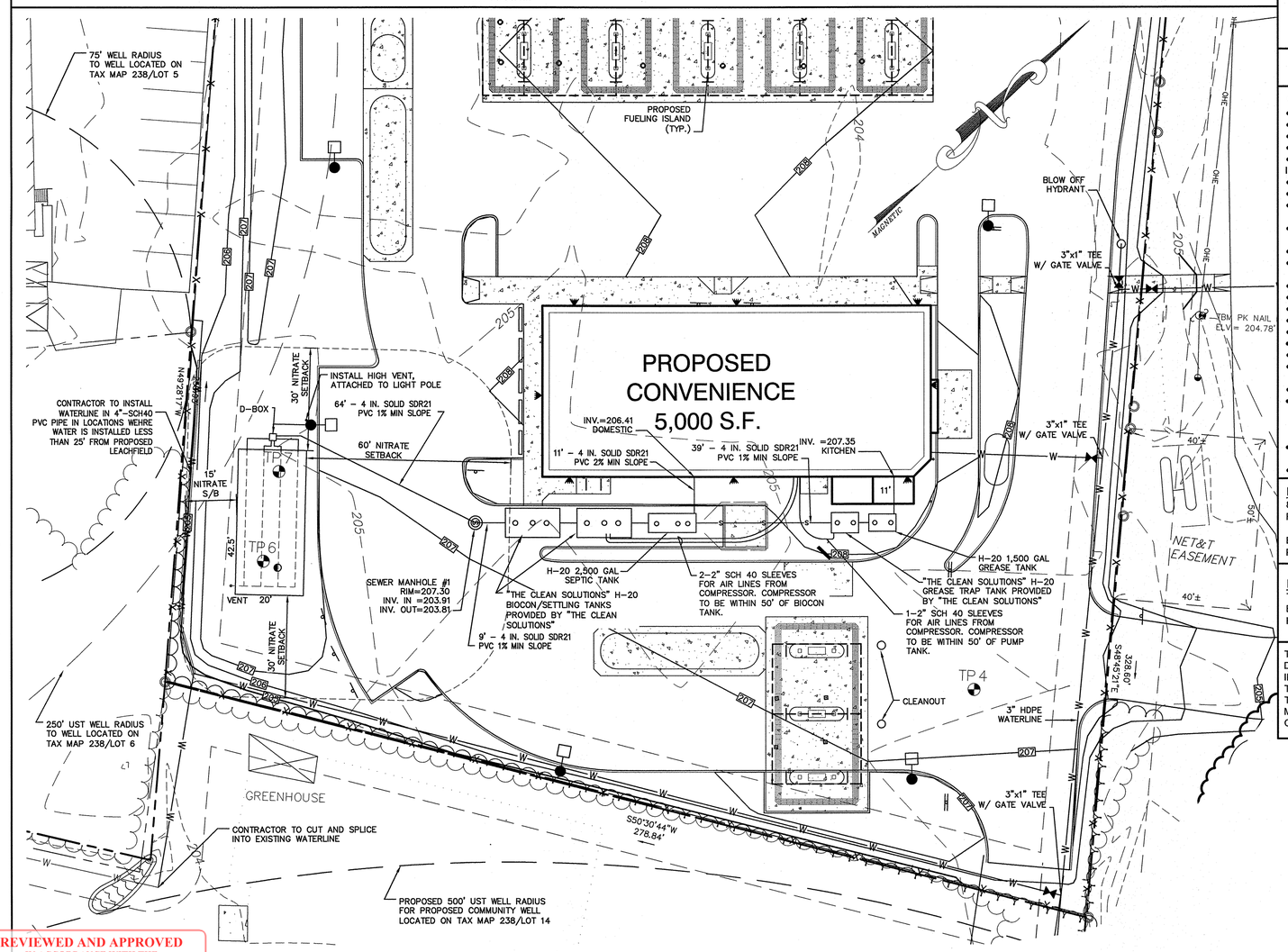
SHWT = 78"
ROOTS TO 6"
H2O @ NONE
NO REFUSAL OBSERVED
PERC RATE = 2 MIN/INCH

TEST PIT, DATE: 12-24-13

PERC. TEST, DATE: 12-24-13
2 MIN./INCH




LOCUS SCALE: 1"=2000'




## GENERAL NOTES

CONTRACTOR TO VERIFY ALL ELEVATIONS IN FIELD PRIOR TO CONSTRUCTION

- FILL TO BE MEDIUM TO COURSE-TEXTURED SAND (0.5mm-2.0mm).
- REMOVE TOPSOIL BEFORE PLACING FILL.
- 4 INCH THICK LOAM & SEED AROUND PERIMETER OF FILL.
- SIDE SLOPES OF FILL= 3(HORIZONTAL): 1(VERTICAL).
- INLET AND OUTLET OF SEPTIC TANK SHALL BE SEALED WITH HYDRAULIC CEMENT PRIOR TO INSPECTION.
- 50' SETBACK FROM POORLY DRAINED SOILS.
- 75' SETBACK FROM VERY POORLY DRAINED SOILS.
- THE OUTLET BAFFLE SHALL BE A VENTED TEE WHICH SHALL EXTEND TO A DISTANCE BELOW THE SURFACE EQUAL TO 40% OF THE LIQUID DEPTH.
- THE OUTLET AND INLET BAFFLES SHALL EXTEND ABOVE THE LIQUID LINE TO NOT LESS THAN ONE INCH FROM THE TOP OF THE TANK.
- NO VEHICULAR, NOR LIVESTOCK TRAVEL, NOR SNOW REMOVAL ALLOWED IN AREA OF SYSTEM.
- SEPTIC TANK IS TO BE SEALED AND GROUTED WITH NON-SHRINK MORTAR OR THICK PLASTIC CEMENT.
- SYSTEM WILL BE REPLACED IN SAME LOCATION IN CASE OF FAILURE.
- RECOMMENDED CLEANING SEPTIC TANK AT LEAST ONCE EVERY 2 YEARS.
- CROWN SYSTEM TO SHED RAINWATER; SLOPE SYSTEM AWAY FROM HOUSE.
- IF GARBAGE GRINDERS ARE DESIRED, SEPTIC TANK 50% LARGER.
- NO SURFACE WATER OR WELLS WITHIN 75'.
- 3 FT. FILL EXTENSION.
- TOWN OF BARRINGTON REQUIRES BED BOTTOM INSPECTION.
- 2,500 GALLON SEPTIC TANK, GREASE TRAP & D-BOX TO BE SUPPLIED BY: EF SHEA NEW ENGLAND CONCRETE PRODUCTS, INC. (603-942-5668) OR EQUAL.
- ROCKINGHAM COUNTY SOIL CONSERVATION SERVICE SOIL TYPE: WINDSOR .
- "THE CLEAN SOLUTION" SYSTEM IS DESIGNED AND PROVIDED BY ADVANCED ONSITE SOLUTIONS, INC. (603) 783-8042. THE OWNER / APPLICANT OF THE CONVENIENCE STORE IS RESPONSIBLE TO COMPLY WITH MAINTENANCE OF THE CLEAN SOLUTION SYSTEM PER THE GUIDELINES IN THE ADVANCED ONSITE SOLUTIONS, INC. INSPECTION CONTRACT.
- HIGH VENT SHALL BE INSTALLED A MINIMUM OF 10' IN HEIGHT AND SHALL BE STRAPPED TO THE PROPOSED LIGHT POLE.
- SEE SHEET D3 FOR SEPTIC SYSTEM DETAILS

### LOT LOADING

80,240 SQ.FT. LOT (OFF-SITE COMMUNITY WATER SYSTEM) x WINDSOR SOILS 1.0 FACTOR/ 2,000 GALLONS PER ACRE = 3,684 GPD ALLOWABLE

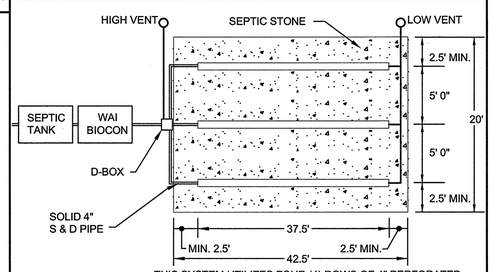
BUILDING TO BE SERVICE BY AN OFF-SITE COMMUNITY WATER SYSTEM.
PRELIMINARY WELL SITING APPROVAL NO. DR999864, ISSUED: 12/10/13

### DESIGN INTENT

THE BOTTOM OF THE EFFLUENT DISPOSAL SYSTEM (EDS) SHALL BE CONSTRUCTED AT ELEVATION 202.5. THIS IS APPROXIMATELY 2.5 FEET BELOW ORIGINAL GROUND ON THE HIGH CONTOUR OF THE DESIGNED EFFLUENT DISPOSAL SYSTEM.

THE BUILDER/SITE CONTRACTOR IS RESPONSIBLE TO CONFIRM THE ZONING DIMENSIONAL REQUIREMENTS AND SETBACK LINE REQUIREMENTS PRIOR TO INITIATING CONSTRUCTION OF THE PROPOSED HOUSE AND SEPTIC SYSTEM. THE ZONING ORDINANCE OF THE MUNICIPALITY IS TO BE COMPLIED WITH. THE BUILDER/SITE CONTRACTOR IS ALSO RESPONSIBLE TO CONTACT THE MUNICIPALITY REGARDING INSPECTIONS PRIOR TO AND DURING CONSTRUCTION, I.E. LOCATION AND BED-BOTTOM INSPECTIONS.

## TYPICAL PLAN VIEW




THIS SYSTEM UTILIZES FOUR (4) ROWS OF 4" PERFORATED PIPE. SEE 20-SCALE PLAN AT LEFT FOR LAYOUT.

## STONE & PIPE DESIGN CALCULATIONS

SERVICE STATION: 75 GPD/ISLAND x 8 PUMP ISLANDS = 600 GPD
DRY GOODS (3,000 S.F.): (5 GPD / 100 S.F.) x 3,000 SQ.FT. = 150 GPD
FAST FOOD (2,000 S.F.): 16 SEAT x 20 GPD PER SEAT = 320 GPD
EMPLOYEES: 6 EMPLOYEES x 20 GPD = 120 GDP
TOTAL GPD = 1,190 GPD

1,190 GPD @ 2 MIN./INCH = 1,488 x 0.25(AOS REDUCTION) = 372 S.F. REQUIRED

850 S.F. PROVIDED

BED DIMENSIONS 42.5' x 20'

THE CLEAN SOLUTION SYSTEM CAN HANDLE A PEAK LOAD OF UP TO 1,190 GPD

## OPERATOR NOTES

- KNOW THE LOCATION OF YOUR SEPTIC TANK AND LEACHING AREA.
- INSPECT YOUR TANK YEARLY AND HAVE THE TANK PUMPED AS NEEDED AND AT LEAST EVERY THREE YEARS.
- DO NOT FLUSH BULKY ITEMS SUCH AS THROW-AWAY DIAPERS, SANITARY PADS OR BABY WIPES.
- DO NOT FLUSH TOXIC CHEMICALS SUCH AS PAINT THINNERS, PESTICIDES, OR CLORINE INTO YOUR SYSTEM AS THEY MAY KILL THE NECESSARY BACTERIA IN THE TANK.
- REPAIR LEAKING FIXTURES IN THE HOUSE PROMPTLY.
- BE CONSERVATIVE WITH YOU WATER USE AND USE WATER-REDUCING FIXTURES WHEREEVER POSSIBLE.
- KEEP DEEP-ROOTED TREES AND SHRUBS FROM GROWING ON AND ADJACENT TO YOUR LEACHING AREA.

SUBDIVISION APPROVAL # __PRE 1964____, ISSUED: _____
PREVIOUS CONSTRUCTION APPROVAL # CA2012107613 , ISSUED: 2/21/12
CONSTRUCTION APPROVAL #_____, ISSUED: _____

**Dig Safe Systems, Inc.**
*It's Smart. It's Easy. It's the Law.*
1-888-DIG-SAFE
digsafe.com

GRAPHIC SCALE
20 0 10 20 40 80
( IN FEET )
1 inch = 20 ft.

ZONING REQUIREMENTS TOWN OF BARRINGTON, NH
ZONE: TOWN CENTER
BUILDING SETBACKS:
FRONT = 50'
SIDES = 15'
REAR = 15'
WETLAND SETBACKS:
BUILDING = 75'
SEPTIC SYSTEM =75'
UNDERDRAIN SETBACKS:
5' FROM SEPTIC TANK
10' FROM LEACH FIELD
OUTLET 25' FROM WELL

**PROJECT PARCEL**
TOWN OF BARRINGTON, NH
TAX MAP 238, LOT 4

**APPLICANT**
THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD
HAMPTON, NH 03842
BOOK 3937, PAGE 0522

**TOTAL LOT AREA**
80,273.55 SQ. FT.
1.84 ACRES

REVIEWED AND APPROVED
IN ACCORDANCE WITH THE REQUIREMENTS OF THE NH DEPT OF ENVIRONMENTAL SERVICES
WATER DIVISION
Date: 4/3/2017
#eCA2017040303

Date: 01/03/12
Project No.: 10144

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NEW HAMPSHIRE Designer of Subsurface Disposal Systems
Wayne G. Morrill No. 1358
Department of Environmental Services

| REV. | DATE | REVISION | BY |
|---|---|---|---|
| 20 | 03/29/17 | REVISED PER NHDES SUBSURFACE BUREAU | BWG |
| 19 | 12/09/16 | REVISED PER CONDITIONS OF APPROVAL | BWG |
| 18 | 9/4/15 | REVISED WELL AND WATER LINE | GPC |
| 17 | 4/8/14 | REVISED SITE PLAN | BWG |
| 16 | 1/28/14 | REVISED PER TOWN COMMENTS | BWG |

Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: EFFLUENT DISPOSAL DESIGN
Project: TROPIC STAR CONVENIENCE
CALEF HIGHWAY (RTE. 125), BARRINGTON, NH
Owner of Record: THE THREE SOCIOS, LLC
321D LAFAYETTE ROAD, HAMPTON, NH 03842

DRAWING No.
S1
SHEET 18 OF 23
JBE PROJECT NO. 10144

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