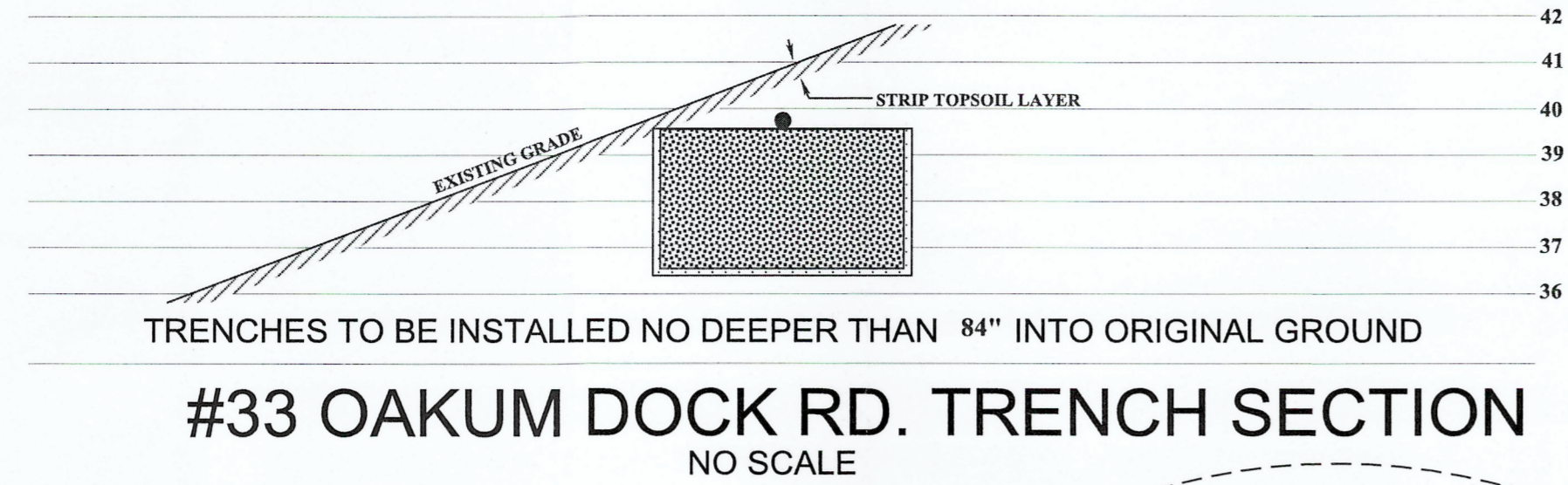


PERCOLATION TEST DATA

PT #1	DATE: 4/23/18
DEPTH: 36"	PRESOAK (12"): 11:45
REF. NAIL: 4"	
TIME: READING:	
2:27 20.00"	
2:32 22.25"	
2:37 23.50"	
2:42 24.50"	
2:47 25.50"	
2:52 26.00"	
2:57 26.50"	
PERC. RATE: 10.0 MIN./IN.	
PT #2	DATE: 4/23/18
DEPTH: 36"	PRESOAK (12"): 11:45
REF. NAIL: 4"	
TIME: READING:	
1:13 20.00"	
1:14 21.75"	
1:15 22.50"	
1:16 23.50"	
1:17 24.50"	
1:18 25.00"	
1:19 25.50"	
1:20 26.00"	
1:21 26.75"	
1:22 27.00"	
PERC. RATE: 2.0 MIN./IN.	
PT #3	DATE: 4/23/18
DEPTH: 36"	PRESOAK (12"): 11:45
REF. NAIL: 4"	
TIME: READING:	
1:20 20.00"	
1:21 22.00"	
1:22 23.50"	
1:23 25.25"	
1:24 26.00"	
PERC. RATE: <1.0 MIN./IN.	

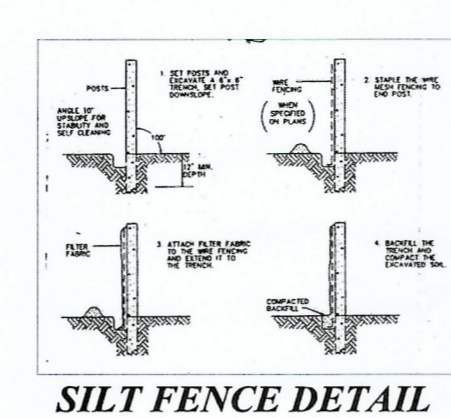


#33 OAKUM DOCK RD. TRENCH SECTION
NO SCALE

#33 OAKUM DOCK RD.
BASIS OF SANITARY DESIGN

2 BEDROOM HOUSE - <1.0 Min/in PERC RATE
375 SQ. FT. OF LEACHING AREA REQUIRED
USE 1 TRENCHES 42" WIDE @ 13' CTRS @ LENGTHS SHOWN
393 SQ. FT. OF LEACHING AREA PROVIDED
USE MINIMUM 1,000 GALLON SEPTIC TANK

NO RESTRICTIVE LAYER OBSERVED, THEREFORE MLSS NEED NOT BE CONSIDERED.
2 BEDROOM HOUSE
USE 1 ROW OF GEOMATRIX GST 6236 @ 26.2 FT' PER LINEAR FT X 15' OF TRENCH = 393 FT' OF LEACHING PROVIDED (375 FT' REQUIRED)



SILT FENCE DETAIL

DEEP TEST PIT DATA

TP #1	0 - 12" TOPSOIL 12 - 23" LOAMY DARK BROWN SAND & GRAVEL (LOOSE) 23 - 33" MEDIUM TO COURSE SAND & GRAVEL W/ STONES & COBBLES (LOOSE) 33 - 120" PINKISH BROWN FINE SAND (LOOSE) MOTTLES: NO - GW: NO - LEDGE: NO ROOTS: MOST@33"/SOME@80" - RESTRICTIVE: NONE
TP #2	0 - 22" TOPSOIL & DARK BROWN SILT LOAM 22 - 37" ORANGE BROWN FINE SANDY LOAM, SOME STONES (LOOSE) 37 - 144" BROWN FINE SAND (LOOSE) MOTTLES: NO - GW: NO - LEDGE: NO ROOTS: MOST@37"/SOME@80" - RESTRICTIVE: NONE
TP #3	0 - 7" TOPSOIL 7 - 31" BROWN FINE SANDY LOAM W/ STONES (LOOSE) 31 - 50" MEDIUM TO COURSE RED BROWN SAND, GRAVEL, STONES & COBBLES (LOOSE) 50 - 132" BROWN FINE SAND (LOOSE) MOTTLES: NO - GW: NO - LEDGE: NO ROOTS: @ 65" - RESTRICTIVE: NONE
TP #4	0 - 6" BLACK ORGANIC LAYER 6 - 31" ORANGE BROWN FINE SANDY LOAM SOME STONES (LOOSE) 31 - 67" BROWN MEDIUM TO COURSE SAND & GRAVEL W/ ROCKS (LOOSE) 67 - 132" BROWN FINE SAND (LOOSE) MOTTLES: NO - GW: NO - LEDGE: NO ROOTS: MOST@44"/SOME@84" - RESTRICTIVE: NONE
TP #5	0 - 5" TOPSOIL 5 - 132" BROWN FINE SAND (LOOSE) NOTE: THIS PIT WAS IN AN AREA THAT WAS LIKELY A CUT TO BUILD A TERRACE DOWN BELOW MOTTLES: NO - GW: NO - LEDGE: NO ROOTS: NO - RESTRICTIVE: NONE
TP #6	0 - 1" TOPSOIL 1 - 64" RED SILTY FINE SAND (LOOSE) 64 - 132" TAN TO REDDISH VERY FINE SAND (LOOSE) MOTTLES: NO - GW: NO - LEDGE: NO ROOTS: MOST@44" - RESTRICTIVE: NONE

TEST PITS AS WITNESSED AND DESCRIBED BY DON MITCHELL 3/26/2018

EROSION CONTROL NOTES

GENERAL REQUIREMENTS FOR EROSION CONTROL:
A SCHEDULE OF OPERATIONS TO INCLUDE STARTING AND COMPLETION DATES FOR MAJOR DEVELOPMENT PHASES, SUCH AS LAND CLEARING AND GRADING, STREET, SIDEWALK, AND STORM SEWAGE INSTALLATION, ETC.

SEEDING, SOODING, OR REVEGETATION PLANS AND SPECIFICATIONS FOR ALL UNPROTECTED OR UNVEGETATED AREAS SHALL BE IMPLEMENTED AS SOON AS POSSIBLE.

EXCAVATIONS, FILLS AND GRADING:

CUT AND FILL SLOPES SHALL NOT BE STEEPER THAN 3:1 UNLESS STABILIZED BY A RETAINING WALL OR CRIBBING, EXCEPT AS APPROVED BY THE COMMISSION UNDER SPECIAL CONDITIONS.

ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATER FROM DAMAGING THE CUT FACE OF EXCAVATION OR THE SLOPING SURFACES OF FILLS.

CUT AND FILLS SHALL NOT ENDANGER ADJOINING PROPERTY.

FILL SHALL BE PLACED AND COMPACTED SO AS TO MINIMIZE SLIDING OR EROSION OF THE SOIL.

GRADING SHALL NOT BE DONE IN SUCH A WAY SO AS TO DIVERT WATER ONTO THE PROPERTY OF ANOTHER LANDOWNER WITHOUT THE EXPRESSED CONSENT OF THAT LANDOWNER AND THE COMMISSION.

FILLS SHALL NOT ENCRUCH ON THE NATURAL WATERCOURSES OR CONSTRUCTED CHANNELS.

DURING GRADING OPERATIONS, NECESSARY MEASURES FOR DUST CONTROL SHALL BE EXERCISED.

GRADING EQUIPMENT WILL NOT BE ALLOWED TO CROSS LIVE STREAMS EXCEPT BY MEANS OF BRIDGES OR CULVERTS OR OTHER METHODS AS APPROVED BY THE COMMISSION.

IMPLEMENTATION PROCEDURES:

WHEREVER FEASIBLE, NATURAL VEGETATION SHOULD BE RETAINED AND PROTECTED.

ONLY THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT.

WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME.

WHERE NECESSARY, TEMPORARY VEGETATION AND/OR MULCHING SHOULD BE USED TO PROTECT AREAS EXPOSED DURING DEVELOPMENT.

THE PERMANENT FINAL VEGETATION AND STRUCTURES SHOULD BE INSTALLED AS SOON AS PRACTICAL IN THE DEVELOPMENT.

SEPTIC DESIGN FOR 49 OAKUM DOCK RD.
SEPTIC DESIGN FOR A COMMERCIAL KITCHEN SERVING 150 MEALS PER DAY.

DESIGN FLOW: (150 MEALS @ 10 GALS./MEAL) = 1,500 GPD
APPLICATION RATE/PERC. RATE <10.1 MIN./IN.) = 0.8
REQUIRED ELA = DESIGN FLOW/APP. RATE = 1,500/0.8 = 1,875 FT'

NO RESTRICTIVE LAYER OBSERVED, THEREFORE MLSS NEED NOT BE CONSIDERED.

USE 1 ROW OF GEOMATRIX GST 6236 @ 26.2 FT' PER LINEAR FT OF TRENCH X 72' OF TRENCH = 1,866.4 FT' (1,875 FT' REQUIRED)

THE PROPOSED SEPTIC SYSTEM WILL REQUIRE AN EFFLUENT PUMP. STORAGE CAPACITY OF GST 6236 IS 27.68 GALLONS PER LINEAR FT. -> 72' OF GST 6236 CAPACITY = 1,992.96 GALLONS
MAX. DOSE = 1,992.96 X 20% = 398.6 GALLONS
PROPOSED DOSE = 350 GALLONS (4.3 DOSES/DAY)

USE (1) 1,500 GALLON GIT, (1) 1,500 GALLON SEPTIC TANK, AND (1) 1,000 GALLON PUMP CHAMBER IN SERIES (SEE PLAN FOR LAYOUT & ELEVATIONS)

PUMP CHAMBER WILL PROVIDE 322 GALLONS OF EMERGENCY STORAGE (SEE PUMP CHAMBER DETAIL FOR SWITCH ELEVATIONS)
DUAL ALTERNATING PUMP CONFIGURATION SHALL BE UTILIZED.

** THERE IS AN EXISTING SEPTIC SYSTEM LOCATED AT 49 OAKUM DOCK RD. THIS SYSTEM IS TO REMAIN AND SHALL RECEIVE FLOWS FROM THE EXISTING BATHROOM FACILITIES. THE EXISTING SYSTEM IS INTENDED TO BE USED AS DESIGNED. THE DESIGN IS FOR 29 MARINA SLIPS @ 20 GAL./SLIP/DAY + 150 PEOPLE (OUTDOOR RECEPTION, ETC.) @ 5 GAL./PERSON/DAY = 1,350 GPD
THE REQUIRED ELA FOR THIS DESIGN IS 1,330/1.5 (APP. RATE) = 887 FT' (SEE THE REFERENCED SEPTIC DESIGN BY CHATAM ENGINEERING FOR FURTHER DETAIL)

SEPTIC INSTALLATION NOTES
EXISTING SEPTIC SYSTEM SERVING 633 OAKUM DOCK RD. TO BE PROPERLY ABANDONED (PUMPED, CRUSHED & FILLED) AND PROPOSED NEW LEACHING FIELD TO BE IMPLEMENTED PRIOR TO OR SIMULTANEOUSLY WITH PROPOSED LEACHING FIELD FOR 49 OAKUM DOCK RD.

INSTALLER TO BE FAMILIAR WITH PROPER INSTALLATION PRACTICES FOR THIS PROPRIETARY SYSTEM. PRODUCT RELATED QUESTIONS SHOULD BE DIRECTED TO GEOMATRIX SYSTEMS LLC (860) 510-0730.

PUMP SWITCH ELEVATIONS ARE BASED ON A 1,000 GALLON CONCRETE PUMP CHAMBER WITH A CAPACITY OF 18.18 GALLONS PER INCH FROM THE INSIDE BOTTOM OF THE TANK TO THE OUTLET. ANY CHANGES IN TANK SPECIFICATIONS WILL EFFECT SWITCH ELEVATIONS AND THEREFORE SHOULD BE CONSIDERED AND THE ENGINEER CONTACTED.

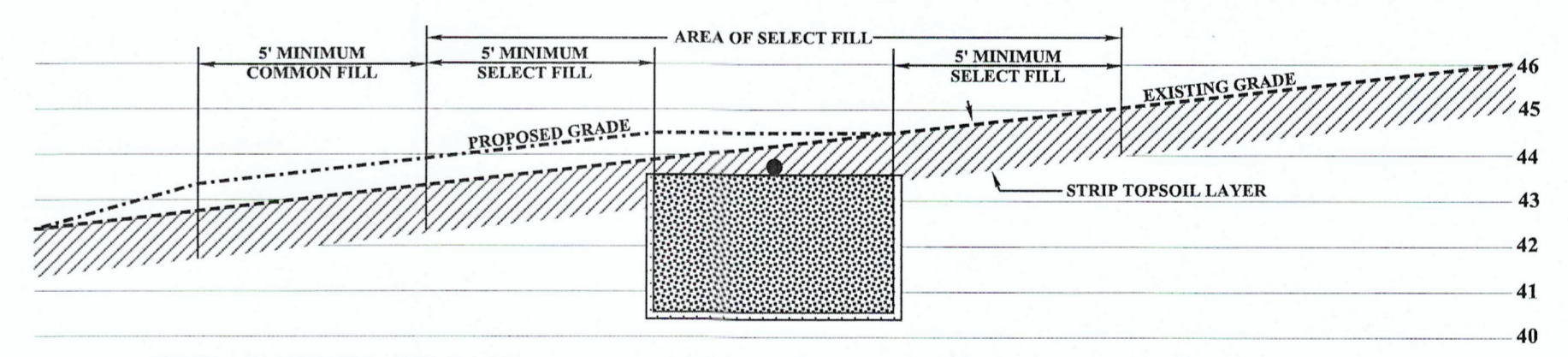
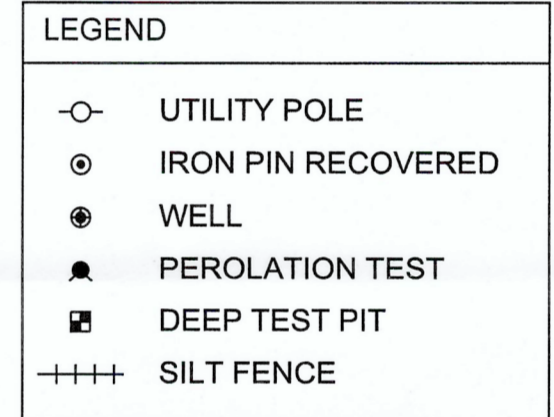
CONTACT THE ENGINEER IF ANY VARIATION IN DESIGN SPECIFICATIONS NEEDED AND/OR IF ANY UNADDRESSED SITE CONDITIONS ARE ENCOUNTERED.

#49 OAKUM DOCK RD. SEPTIC PUMP & TRENCH ELEVATIONS

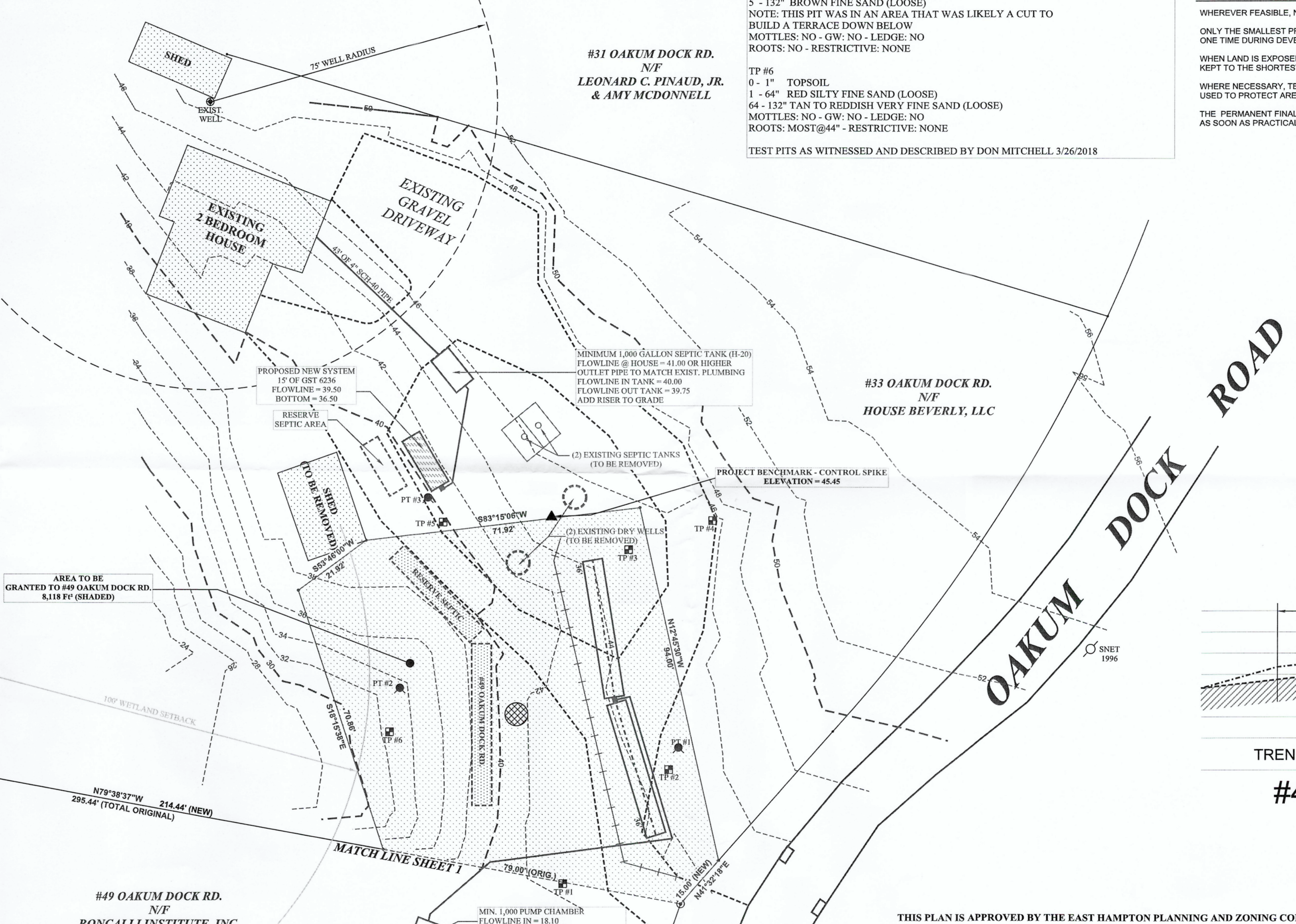
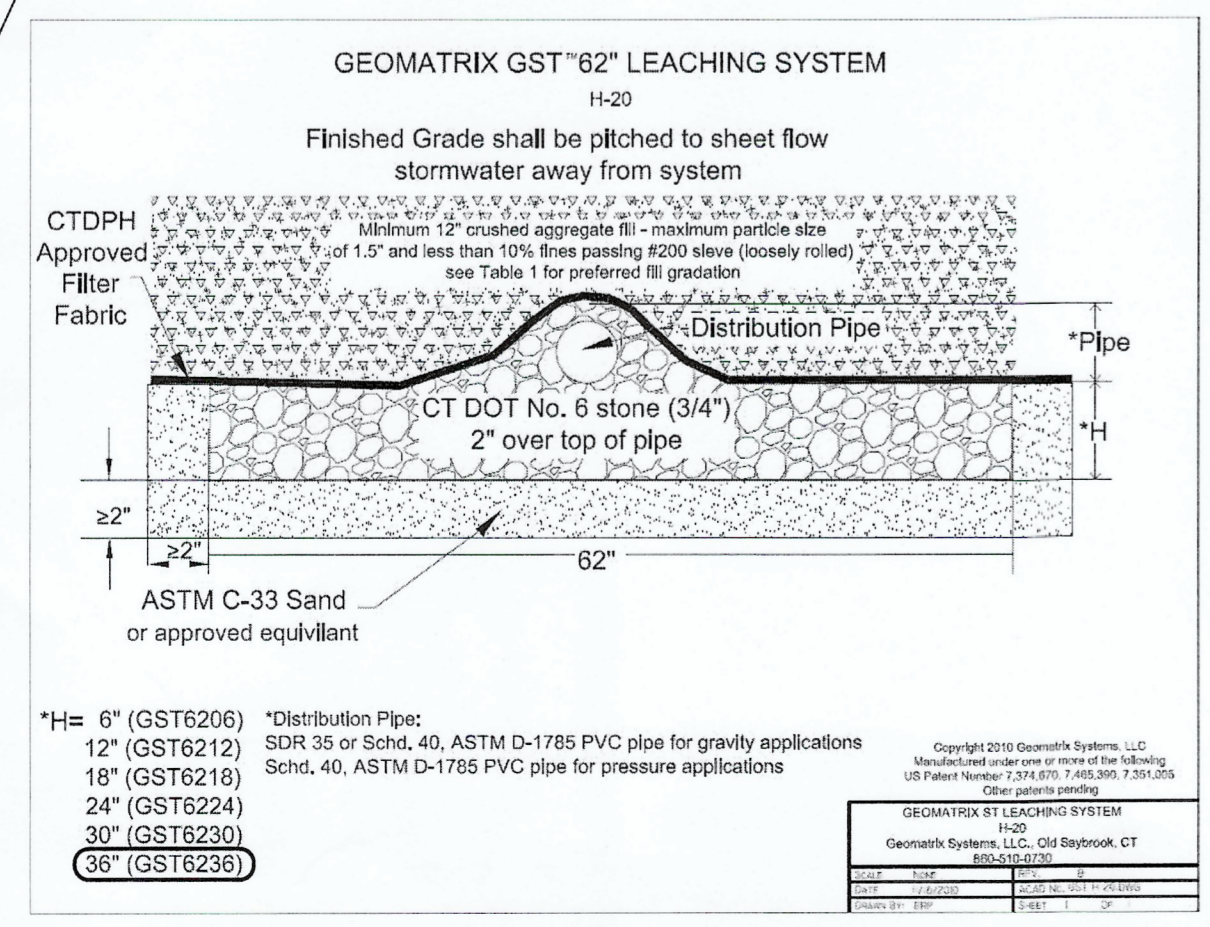
INSIDE BOTTOM PUMP CHAMBER ELEV. =

PUMP FLOAT ELEVATIONS:
PUMP OFF = 14.52
PUMP ON = 16.13
PUMP ALARM = 16.37
EMERGENCY STORAGE = 322 GALLONS

TRENCH ELEVATIONS:
BOTTOM ELEVATION = 40.50
FLOWLINE ELEVATION = 43.50

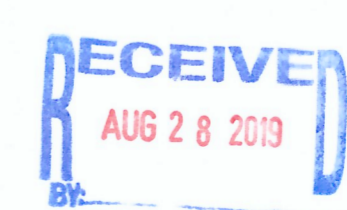
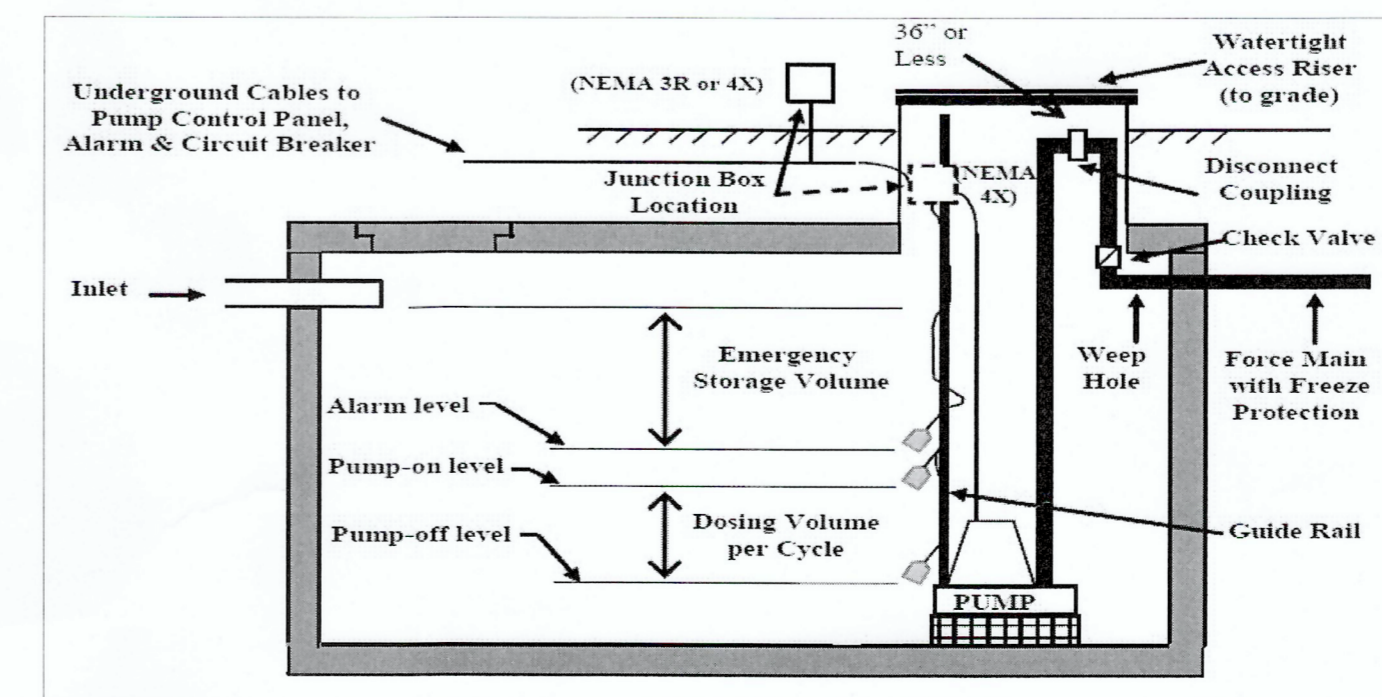


#49 OAKUM DOCK RD. TRENCH SECTION
NO SCALE



THIS PLAN IS APPROVED BY THE EAST HAMPTON PLANNING AND ZONING COMMISSION.

CHAIRMAN _____ DATE _____

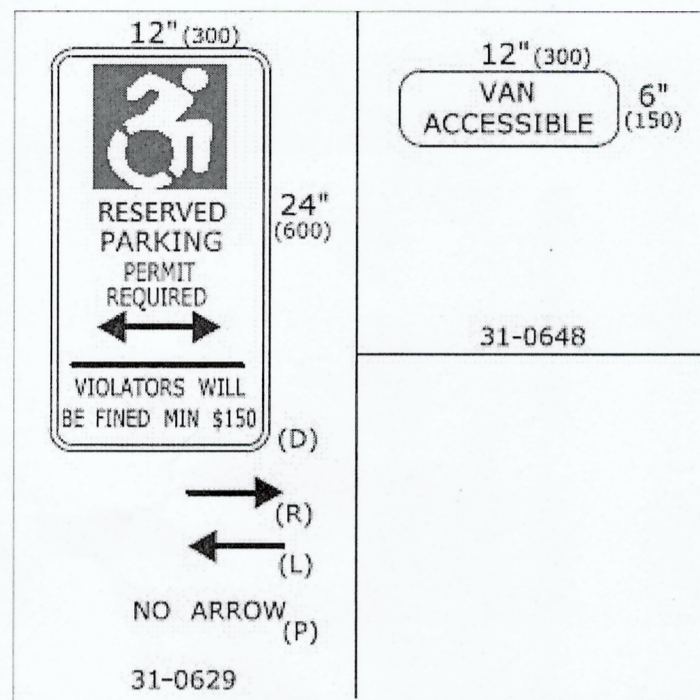


SEPTIC DESIGN
PREPARED FOR
RONCALLI INSTITUTE, INC.
49 OAKUM DOCK ROAD - M/B/L: 02/9A/4
EAST HAMPTON, CONNECTICUT
SCALE 1" = 20' - JANUARY 15, 2018
REVISED: 5/18/18; 6/11/19; 8/12/19; 8/22/19; 8/28/19
SHEET: 2 OF 2

DUTCH & ASSOCIATES
LAND SURVEYORS
392 SOUTH MAIN STREET, COLCHESTER, CONN.
PHONE: (860) 537-3465

MAP REFERENCES

- 1.) PLAN SHOWING PUBLIC WATER SUPPLY PROTECTIVE SANITARY EASEMENT IN FAVOR OF THE TOWN OF EAST HAMPTON AT OAKUM DOCK ROAD EAST HAMPTON CONNECTICUT. - SCALE: 1" = 40' - DATE: 11/19/2009 - BY BLUE RIVER ENGINEERING.
 - 2.) ATTACHMENT B - PORT HAMPTON MARINA CLUB - 49 OAKUM DOCK ROAD - EAST HAMPTON, CT. - SCALE: 1" = 30' - DATE: AUGUST 12, 2013 - REVISED: 9-20-13 - BY CHRISTOPHER G. BELL, P.E. - CONSULTING ENGINEERS
 - 3.) EXISTING CONDITIONS PLAN - PROPERTY OF: RONCALLI INSTITUTE INC. - #49 OAKUM DOCK ROAD - EAST HAMPTON, CONN. - SCALE: 1" = 20' - DATE: 16 AUG. 2017 - REVISED THRU 10-1-17 - BY BASCOM & BENJAMIN, LLC.
 - 4.) SEPTIC DESIGN SAINT CLEMENTS MARINA 49 OAKUM DOCK ROAD - PREPARED FOR SAINT CLEMENTS MARINA, LLC - EAST HAMPTON, CONN. - SCALE: 1" = 40' - DATE: 3-29-10 - REVISED THRU 4/9/10 - BY CHATHAM ENGINEERING INC.
 - 5.) PLAN OF LAND OF MIDDLESEX LAND TRUST, INC. - OAKUM DOCK PRESERVE - COBALT LANDING ON THE CONNECTICUT RIVER - OAKUM DOCK ROAD - EAST HAMPTON, CONNECTICUT - JANUARY 31, 2010 - SCALE: 1" = 20' - PREPARED BY SWAMP YANKEE SURVEY LLC
- SUBDIVISION OF QUAIL HILL - EAST HAMPTON CONN. - OWNED & DEVELOPED BY DULCEN CORP. OF PORTLAND CONN. - SCALE 1" = 50' - JULY 1972 - REVISED NOV. 1972 - BY WILLIAM W. HARRIS JR.



REQUIRED PARKING CALCULATION

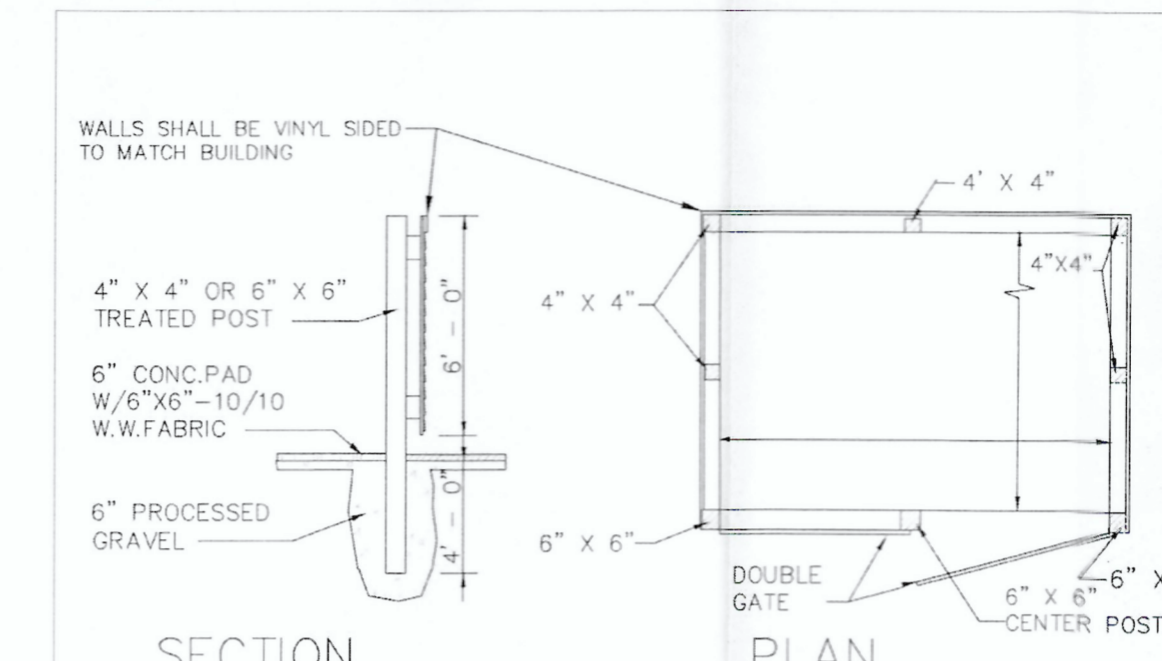
PER TABLE 7.1.B OF THE EAST HAMPTON ZONING REGULATIONS FOR PLACES OF ASSEMBLY:
 MAXIMUM OCCUPANCY = 150
 LOWER THRESHOLD: 1 SPACE PER 6 OCCUPANTS (25 SPACES)
 UPPER THRESHOLD: 1 SPACE PER 3 OCCUPANTS (50 SPACES) (45 SPACES PROVIDED)
 PLUS 1 SPACE FOR PEOPLE WITH DISABILITIES PER 25 SPACES OR PART THEREOF => 2 SPACES REQUIRED (3 SPACES PROVIDED)

SURVEY NOTES:

- LANDS WATERWARD OF THE COASTAL JURISDICTION LINE ARE NAVIGABLE WATERS AND ARE THEREFORE SUBJECT TO THE RIGHTS AND RESTRICTIONS UNDER CONNECTICUT GENERAL STATUTES.
- THE SOUTHERLY BOUNDARY LINE IS THE CONNECTICUT RIVER. THE COURSE AND DISTANCE SHOWN IS A MATHEMATICAL "CLOSURE LINE".
- THE WESTERLY BOUNDARY LINE IS THE CENTERLINE OF GREAT HILL POND BROOK A.K.A. TAYLOR CREEK. THE COURSE AND DISTANCE SHOWN IS A MATHEMATICAL "CLOSURE LINE".
- PUBLIC WATER SUPPLY PROTECTIVE SANITARY EASEMENT & ACCESS EASEMENT SHOWN PER REFERENCE MAP #1.
- APPARENT PHYSICAL FEATURES PER FIELD LOCATION
- SUBTERRANEAN FEATURES SHOWN ARE TAKEN FROM REFERENCE MAPS OR AS MARKED BY CALL BEFORE YOU DIG.
- AS EVIDENCED BY SURFACE FEATURES (I.E. LIGHT POSTS, CONTROL BOXES, ETC.) THERE ARE BURIED UTILITIES WHOSE LOCATIONS ARE NOT EVIDENT ON THE SURFACE AND WHOSE LOCATIONS ARE NOT DEPICTED ON ANY REFERENCE MAPS. CARE SHOULD BE TAKEN AND "CALL BEFORE YOU DIG" SHOULD BE CONTACTED PRIOR TO ANY EXCAVATION ON THIS PROPERTY.
- SEPTIC LOCATION TAKEN FROM RECORD AS-BUILT PROVIDED BY CLIENT.
- EASEMENTS SHOWN PER REFERENCE MAPS
- WETLANDS SHOWN PER REFERENCE MAPS
- 1% ANNUAL BASE FLOOD ELEVATION = 20 PER FEMA FIRM MAPS #09007C0141G & #09007C0137G - EFFECTIVE DATE: AUGUST 28, 2008
- CONTOURS SHOWN BASED ON LIMITED FIELD TOPOGRAPHY, VERTICAL DATUM: NAVD88
- THE PURPOSE OF THIS MAP IS TO SHOW THE PROPERTY BOUNDARY AND GENERAL LOCATION OF APPARENT FEATURES.
- THE LOCATION OF BURIED FEATURES, EASEMENTS, AND WETLANDS SHOWN PER REFERENCE MAPS, CALL BEFORE YOU DIG MARKINGS, AND/OR ORAL TESTIMONY. THESE LOCATIONS ARE INTENDED TO REPRESENT GENERAL LOCATION ONLY. SUCH LOCATIONS HAVE NOT BEEN VARIFIED BY THIS SURVEYOR.
- OTHER BURIED UTILITIES MAY EXIST ON THIS PROPERTY. CAUTION SHOULD BE EXERCISED WHEN EXCAVATING ANYWHERE ON THIS PROPERTY. CONTACT CALL BEFORE YOU DIG BY CALLING 811 PRIOR TO ANY DIGGING.

GENERAL NOTES:

- 1.) ACCESS TO THE PROPERTY WILL BE FROM THE 1931 PORTLAND-COBALT ROAD ENTRANCE. THE GATED ACCESS ON OAKUM DOCK ROAD IS TO BE LIMITED TO EMERGENCY VEHICLES AND AFTER HOURS MARINA ACCESS.
- 2.) THE EXISTING WELL TO THE EAST OF THE BUILDING ON 49 OAKUM DOCK RD. IS TO BE PROPERLY ABANDONED BY A CONNECTICUT LICENSED WELL DRILLER.



NOTE:
 THIS DUMPSTER PAD ENCLOSURE IS BASED ON TWO FRONT END LOADING DUMPSTERS (6 CY EACH), PLACED SIDE BY SIDE. ONE SHALL BE FOR STANDARD REFUSE AND THE OTHER SHALL BE FOR RECYCLABLE REFUSE. THIS ENCLOSURE IS SUBJECT TO CHANGE DEPENDING ON OWNER'S DUMPSTER SIZE REQUIREMENTS.

DUMPSTER PAD DETAIL

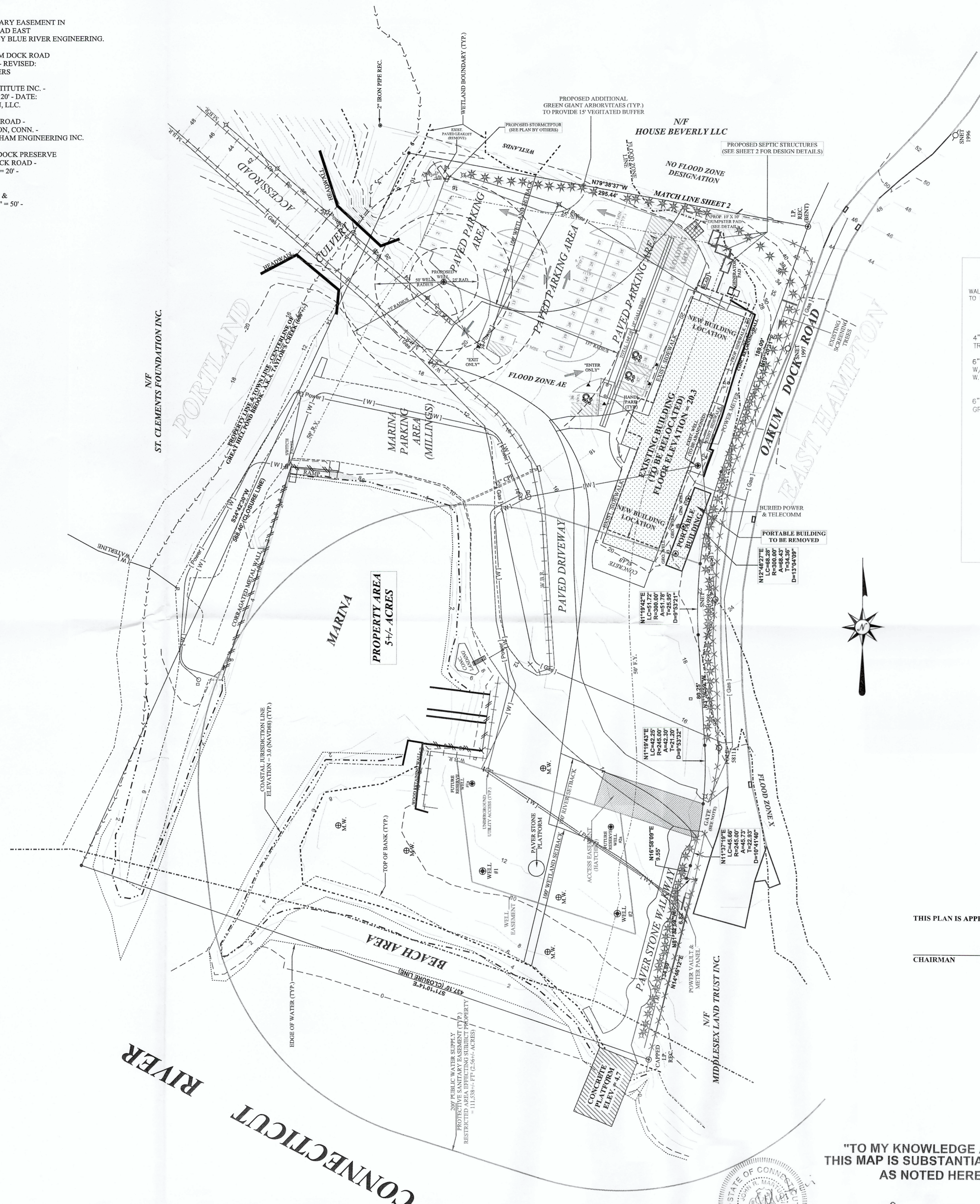
NOT TO SCALE

ZONING NOTES:

- THE SUBJECT PROPERTY IS LOCATED IN ZONE: R-2 AND FALLS WITHIN THE CONNECTICUT RIVER PROTECTION AREA (UPPER CONNECTICUT CONSERVATION ZONE)
- THE PROPERTY IS BEING USED AS A COMMERCIAL MARINA AND IS A NON-CONFORMING USE AT THE TIME OF THIS SURVEY

ZONING COMPLIANCE CHART (ZONE: R-2)			
	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	40,000 FT ²	217,800 FT ²	217,800 FT ²
MINIMUM LOT WIDTH	150'	515' +/-	515' +/-
MINIMUM LOT DEPTH	175'	292' +/-	292' +/-
MINIMUM LOT FRONTAGE	100'	622' +/-	622' +/-
MAXIMUM LOT COVERAGE	10%	22.0%	22.0%
MINIMUM FRONT SETBACK	50'	21.0'	21.0'
MINIMUM SIDE SETBACK	25'	66'N - 310' +/- S	56'N - 320' +/- S
MINIMUM REAR SETBACK	50'	230' +/-	230' +/-
MAXIMUM BUILDING HEIGHT	30'	SEE ARCH. PLANS	SEE ARCH. PLANS

LEGEND	
○	UTILITY POLE
⊙	GEOHERMAL WELL
×	LIGHT POST
⊕	WATER SPIGOT
⊗	MONITORING WELL
⊙	WELL
⊗	CHAIN LINK FENCE
⊗	CORRUGATED METAL WALL
⊗	W.B.R. WOOD BEAM RAIL
⊗	M.B.R. METAL BEAM RAIL
Y.D.	YARD DRAIN
▲	SIGN (AS NOTED)



"TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON."

Charles R. Dutch, L.S. License Number 15776



THIS PLAN IS APPROVED BY THE EAST HAMPTON PLANNING AND ZONING COMMISSION.

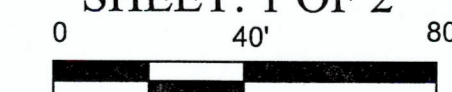
CHAIRMAN _____ DATE _____

SITE PLAN SURVEY
 PREPARED FOR

RONCALLI INSTITUTE, INC.

49 OAKUM DOCK ROAD - M/B/L: 02/9A/4
 EAST HAMPTON, CONNECTICUT
 SCALE 1" = 40' - JANUARY 15, 2018
 REVISED: 5/18/18; 6/11/19; 8/12/19; 8/22/19; 8/28/19

SHEET: 1 OF 2



DUTCH & ASSOCIATES
 LAND SURVEYORS

392 SOUTH MAIN STREET, COLCHESTER, CONN.
 PHONE: (860) 537-3465



REFERENCE NOTE
 THIS SURVEY AND MAP HAVE BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300B-1 THROUGH 20-300B-20 AND THE STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT ADOPTED FOR USE BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.
 THE TYPE OF SURVEY IS "BOUNDARY SURVEY".
 THE BOUNDARY DETERMINATION CATEGORY IS "FIRST SURVEY".
 THE HORIZONTAL ACCURACY CONFORMS TO "A-2" STANDARDS.