

### NOTES & SPECIFICATIONS

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF 310 CMR 15 (TITLE V) OF THE COMMONWEALTH OF MASSACHUSETTS AND THOSE OF THE TOWN BOARD OF HEALTH.

THE REQUIRED INSPECTION SCHEDULE DURING THE PROCESS OF CONSTRUCTION SHALL BE ARRANGED BY THE CONTRACTOR WITH THE BOARD OF HEALTH & DESIGN ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

1500 GALLON FAST SYSTEM SEPTIC TANK AND DISTRIBUTION BOX SHALL BE STANDARD DUTY DESIGN AS MANUFACTURED BY ROTONDO & SONS, INC. OR APPROVED EQUAL.

ALL PIPING SHALL BE 4" DIA. SCHD. 40 NSF PVC, WITH ALL JOINTS SEALED WATERTIGHT.

ALL STONE SHALL BE DOUBLE WASHED AND FREE OF IRONS, CLAY OR FINES AND SHALL BE SATISFACTORY TO THE TOWN BOARD OF HEALTH.

THIS SYSTEM IS NOT DESIGNED TO ACCOMMODATE A GARBAGE DISPOSAL OR OTHER HIGH WATER USE UNITS.

THE PROPOSED SEPTIC SYSTEM IS NOT LOCATED WITHIN THE CONE OF INFLUENCE OF ANY MUNICIPAL WELL NOR ARE THERE ANY PRIVATE WELLS LOCATED WITHIN 100 FEET (RADIAL) OF THE PROPOSED SYSTEM.

EXCAVATE ALL TOP, SUB AND ANY OTHER SOILS ENCOUNTERED DOWN TO THE BOTTOM OF EXCAVATION (SEE CROSS SECTION) AND FOR A HORIZONTAL DISTANCE OF 5' ON ALL SIDES OF THE PROPOSED SYSTEM. BACK FILL TO TOP OF STONE ELEVATION WITH SELECT ON SITE OR IMPORTED SOIL MATERIAL CONSISTING OF CLEAN GRANULAR SAND, FREE OF ORGANIC MATTER OR OTHER DELETERIOUS SUBSTANCES AND MEETING THE SIEVE SIZE REQUIREMENTS OF 310 CMR 15.255(3) & (5) (CONSTRUCTION IN FILL).

ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON NGVD 29.

CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO THE CONTINUATION OF CONSTRUCTION.

WATER TABLE FLUCTUATES ANNUALLY, NO WARRANTY OF A DRY BASEMENT IS EXPRESSED OR IMPLIED.

THE PROPOSED WORK DOES NOT LIE IN A CRITICAL FLOOD HAZARD ZONE.

THE LOT DOES NOT LIE IN AN OVERLAY DISTRICT FOR GROUNDWATER ACQUIFER PROTECTION.

THE SITE IS UNDER CONSTRUCTION, DUE TO THE POSSIBILITY OF THE BENCHMARK CHANGING DURING CONSTRUCTION, THE CONTRACTOR IS TO VERIFY THE BENCHMARK WITH THE SURVEYOR PRIOR TO CONSTRUCTION.

MAINTAIN 15' MINIMUM SEPARATION FROM WATER SERVICE TO PROPOSED SEPTIC COMPONENTS.

HOUSE DIMENSIONS, ELEVATION AND LOCATION ARE APPROXIMATE AND SUBJECT TO CHANGE, CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.

THE LOT LIES IN A R-I ZONING DISTRICT.  
 FRONT YARD SETBACK: 35'  
 SIDE YARD SETBACK: 15' + 5'/STORY  
 REAR YARD SETBACK: 25'

REFERENCE: DEFINITIVE SUBDIVISION PLAN FOR FALL RIVER AVENUE DEVELOPMENT PARTNERS, LLC, "BANNA ESTATES" TAUNTON AVENUE/PLEASANT STREET, SEEKONK, MA. DATED: AUGUST 2, 2007; REVISED: MAY 27, 2008. BY INSITE ENGINEERING SERVICES, LLC. AND "NOTICE OF INTENT PLAN OF BANNA ESTATES" REVISED: MAY 12, 2008.

TIE INTO PROPOSED CONTOURS AND ELEVATIONS AS SHOWN IN THE ABOVE REFERENCE.

I CERTIFY THAT THE PROPOSED WATER SERVICE SHOWN ON THIS PLAN IS IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE SEEKONK WATER DISTRICT. THE CONTRACTOR IS TO COORDINATE THE WATER SERVICE TIE IN WITH THE WATER AUTHORITY AND INSTALL THE WATER SERVICE WITH MAGNETIC MARKING TAPE ABOVE THE ENTIRE LENGTH OF THE WATER SERVICE.

REFER TO CONSERVATION FILINGS FOR WORK WITHIN WETLAND BUFFER.

OWNER OF RECORD: FALL RIVER AVENUE DEVELOPMENT PARTNERS, LLC  
 C/O STEVEN NAJAS  
 111 MILES AVENUE  
 EAST PROVIDENCE, RI 02914

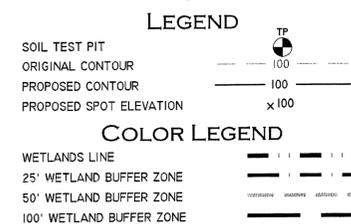
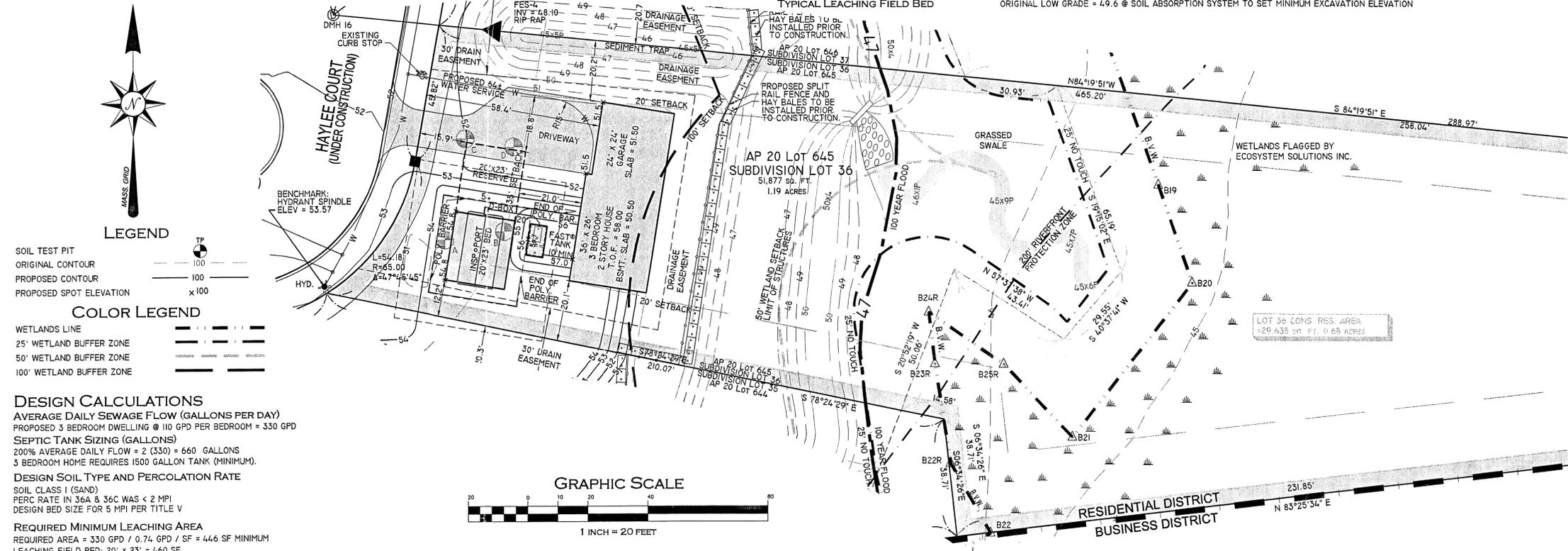
WETLAND LINES ESTABLISHED AND APPROVED UNDER THE ORDER OF RESOURCE AREA DELINEATION SE 69-613.

THE SPLIT RAIL FENCE WILL SERVE AS THE LIMIT OF LAWN AND FUTURE YARD ACTIVITIES AND SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION.

PROPOSED SEPTIC TANK TO BE INSTALLED IS A MICROFAST 0.5 DENITRIFICATION SYSTEM BY BIO-MICROBICS INC.

THE 25-FOOT BUFFER ZONE DELINEATES THE LIMITS OF DISTURBANCE AND ALL FUTURE ACTIVITIES.

THE 50-FOOT WETLAND BUFFER DELINEATES THE LIMITS OF ALL STRUCTURES AS STATED WITHIN THE TOWN OF SEEKONK CONSERVATION COMMISSION REGULATIONS AMENDED MARCH, 2003.



### DESIGN CALCULATIONS

AVERAGE DAILY SEWAGE FLOW (GALLONS PER DAY)  
 PROPOSED 3 BEDROOM DWELLING @ 110 GPD PER BEDROOM = 330 GPD

SEPTIC TANK SIZING (GALLONS)  
 200% AVERAGE DAILY FLOW = 2 (330) = 660 GALLONS  
 3 BEDROOM HOME REQUIRES 1500 GALLON TANK (MINIMUM).

DESIGN SOIL TYPE AND PERCOLATION RATE  
 SOIL CLASS I (SAND)  
 PERC RATE IN 36" & 36" WAS < 2 MPI  
 DESIGN BED SIZE FOR 5 MPI PER TITLE V

REQUIRED MINIMUM LEACHING AREA  
 REQUIRED AREA = 330 GPD / 0.74 GPD / SF = 446 SF MINIMUM  
 LEACHING FIELD BED: 20' x 23' = 460 SF  
 RESERVE AREA: 20' x 23' = 460 SF

### SOIL EVALUATION & PERC RESULTS

DEEP OBSERVATION HOLE 36A					
DEPTH	HORIZON	TEXTURE	COLOR	MOTTILING	OTHER
0-4"	Ao	SL	10 YR 3/2	-	ORGANIC
4-24"	B	LS	10 YR 5/6	-	-
24-120"	C	F-MS	2.5 Y 6/3&2	40" 7.5 YR 5/8	STRATIFIED
OBSERVED GROUND WATER: 66" STANDING, 60" WEEPING DATE: 7-19-07					
ESTIMATED HIGH GROUND WATER: 40" BY: M. FARIA					
PERC. RATE @ 42" = < 2 MPI WITNESS: H. CHENEVERT					

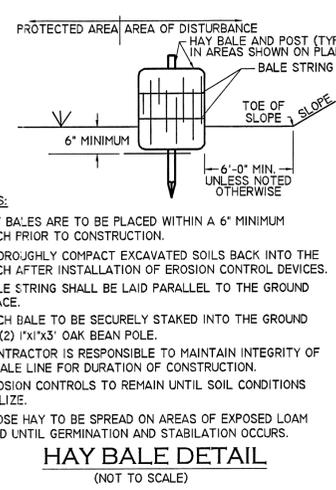
DEEP OBSERVATION HOLE 36B					
DEPTH	HORIZON	TEXTURE	COLOR	MOTTILING	OTHER
0-4"	Ao	SL	10 YR 3/2	-	ORGANIC
4-24"	B	LS	10 YR 5/6	-	-
24-120"	C	F-MS	2.5 Y 6/3&2	40" 7.5 YR 5/8	STRATIFIED
OBSERVED GROUND WATER: 66" STANDING, 60" WEEPING DATE: 7-19-07					
ESTIMATED HIGH GROUND WATER: 40" BY: M. FARIA					
NO PERC. TEST PERFORMED WITNESS: H. CHENEVERT					

DEEP OBSERVATION HOLE 36C					
DEPTH	HORIZON	TEXTURE	COLOR	MOTTILING	OTHER
0-4"	Ao	SL	10 YR 3/2	-	ORGANIC
4-24"	B	LS	10 YR 5/6	-	-
24-120"	C	F-MS	2.5 Y 6/3&2	40" 7.5 YR 5/8	STRATIFIED
OBSERVED GROUND WATER: 66" STANDING, 60" WEEPING DATE: 7-19-07					
ESTIMATED HIGH GROUND WATER: 40" BY: M. FARIA					
PERC. RATE @ 50" = < 2 MPI WITNESS: H. CHENEVERT					

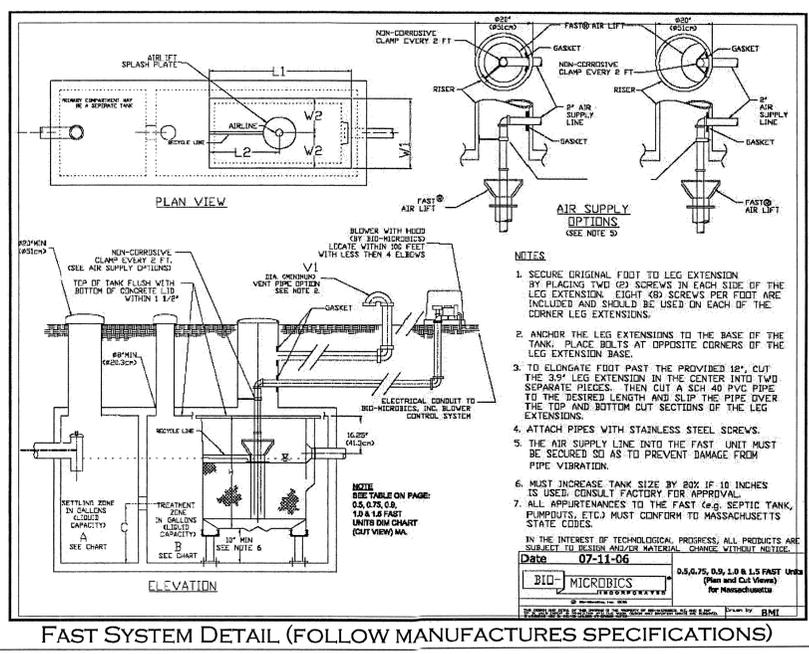
  

DEEP OBSERVATION HOLE 36D					
DEPTH	HORIZON	TEXTURE	COLOR	MOTTILING	OTHER
0-4"	Ao	SL	10 YR 3/2	-	ORGANIC
4-24"	B	LS	10 YR 5/6	-	-
24-120"	C	F-MS	2.5 Y 6/3&2	40" 7.5 YR 5/8	STRATIFIED
OBSERVED GROUND WATER: 66" STANDING, 60" WEEPING DATE: 7-19-07					
ESTIMATED HIGH GROUND WATER: 40" BY: M. FARIA					
NO PERC. TEST PERFORMED WITNESS: H. CHENEVERT					



SIZE	A	B	C	VI	H	LI	WI	L2	W2
0.5	500	1000	24"	3"	50"	60"	30"	26"	15.5"

A = SETTLING ZONE (LIQUID CAPACITY)  
 B = FAST CHAMBER (LIQUID CAPACITY)  
 C = INFLUENT APERTURE HEIGHT  
 VI = VENT SIZE (MINIMUM)  
 H = FAST HEIGHT  
 LI = FAST LENGTH (TOTAL)  
 L2 = FAST LENGTH FROM BACK TO AIR LIFT  
 WI = FAST WIDTH (TOTAL)  
 W2 = FAST WIDTH TO AIR LIFT



### SEPTIC SYSTEM DESIGN AND NOI PLAN

**"BANNA ESTATES"**  
 #16 HAYLEE COURT, SEEKONK, MA. 02771  
 AP 20 LOT 645 (SUBDIVISION LOT 36)

APPLICANT: KEVIN ALMEIDA, ALMEIDA CONSTRUCTION, CORP.  
 #6 BRAYTON WOODS DRIVE, REHOBOTH, MA 02769

JOB # 06-050-36 SCALE: 1"=20' DESIGN BY: MSF DATE: SEPTEMBER 26, 2011

REVISED: \_\_\_\_\_

PROFESSIONAL SEAL

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 SEEKONK, MA 02771  
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