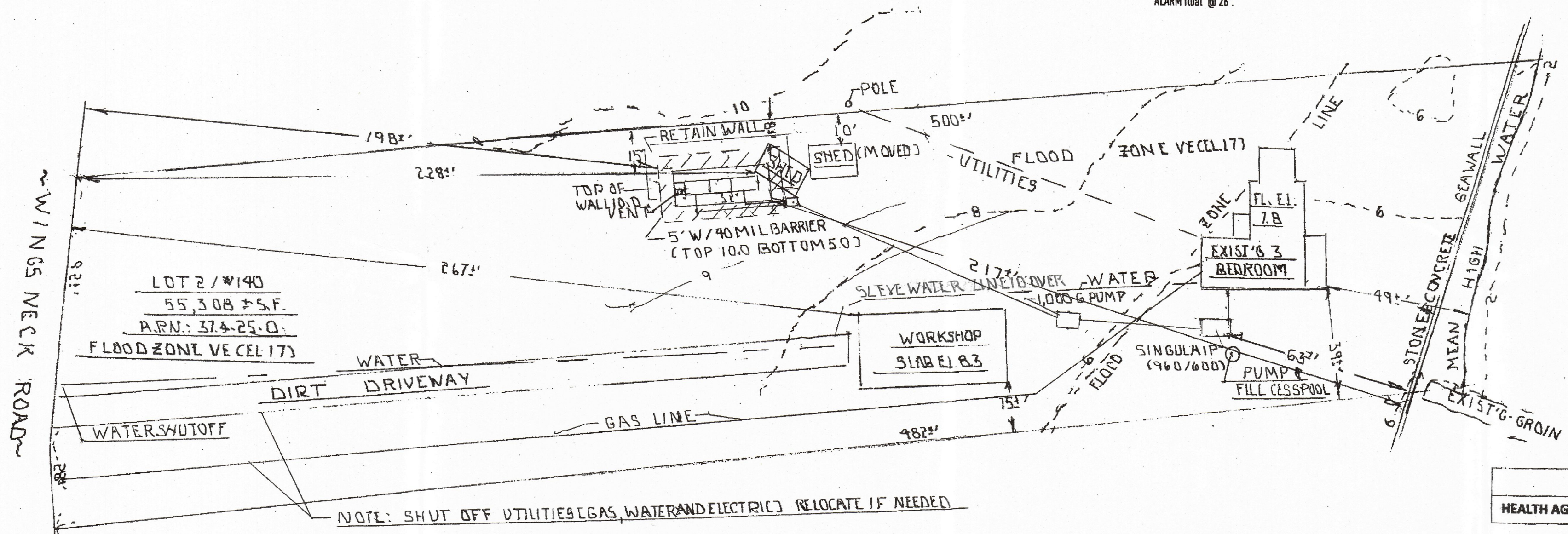
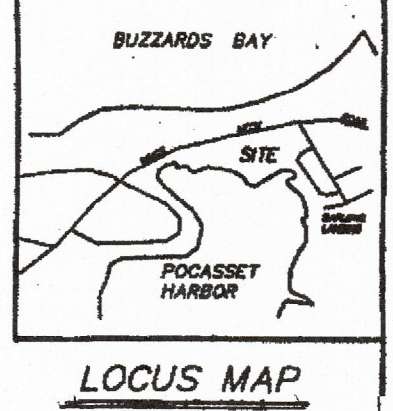


- NOTES:
1. Disposal System to be constructed in strict accordance with Comm. of Mass. Environmental Code Title V.
  2. This plan is for sole purpose of construction of a septic system.
  3. Contractor to call Dig-Safe at least 72 hours prior to beginning of excavation.
  4. Install a Singulair model 960-600 GPD nitrogen removal system.
  5. Use a new (H-20) 1,000 gal. MONO Pump chamber with Myers pump, see note 14. Use an H-20 Dist. Box. Water proof both chambers.
  6. Contractor to field check invert of outlet at foundation.
  7. Bench mark is top of foundation, elev. 7.0 (N.G.V.D. 1929).
  8. APN: 37.4-25-0 for the Town of Bourne.
  9. Locus is served by town water.
  10. The plan view is based on site plan by, Gary S. Labrie, RLS, William Warwick, & Assoc., North Falmouth.
  11. The installer to notify engineer and Agent when starting over-dig excavation to show 4 feet of good materials below the clay.
  12. High ground water is based on high tide elevation @ 9:00 on 9/26/22.
  13. Use 3-5'x8'x2' P.C.L.C.(H-20) with 4' of double washed 3/4" to 1 1/2" stone all around the chambers with filter fabric on top. The approval letter allows a 1' reduction to groundwater.
  14. Top of retaining wall, elev. 10.0; install a 40 mil vinyl barrier, top elev. 10, bottom elev. 5.0
  15. Install a Myers model ME3,1/3 HP cast iron effluent pump with chain to grade to service pump. Set OFF float @ 6", ON float @ 18" and ALARM float @ 26".



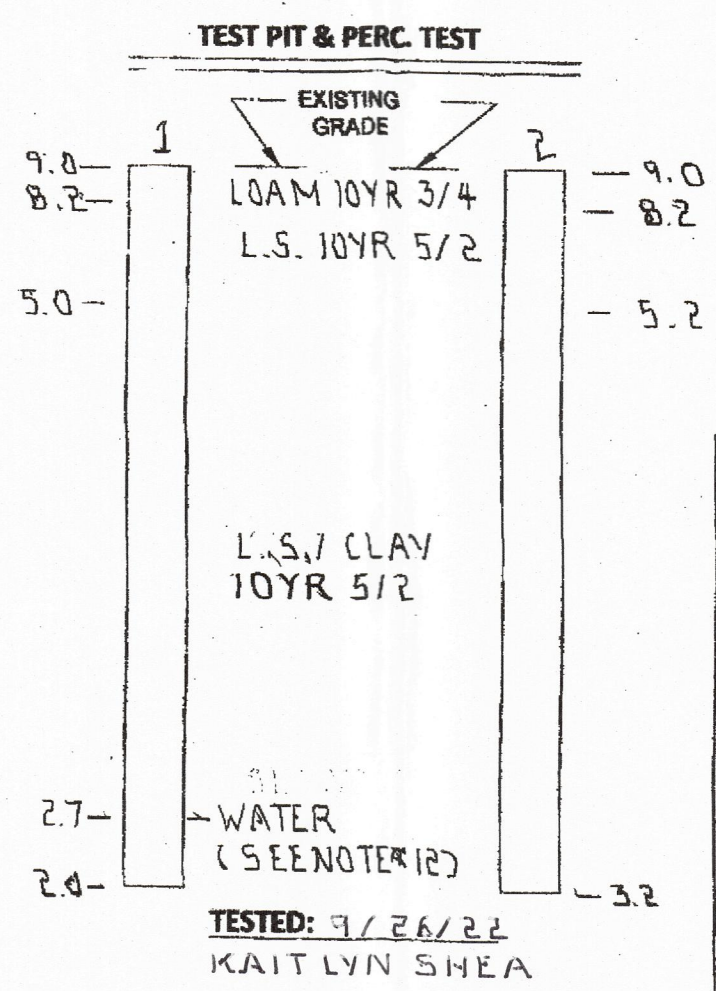
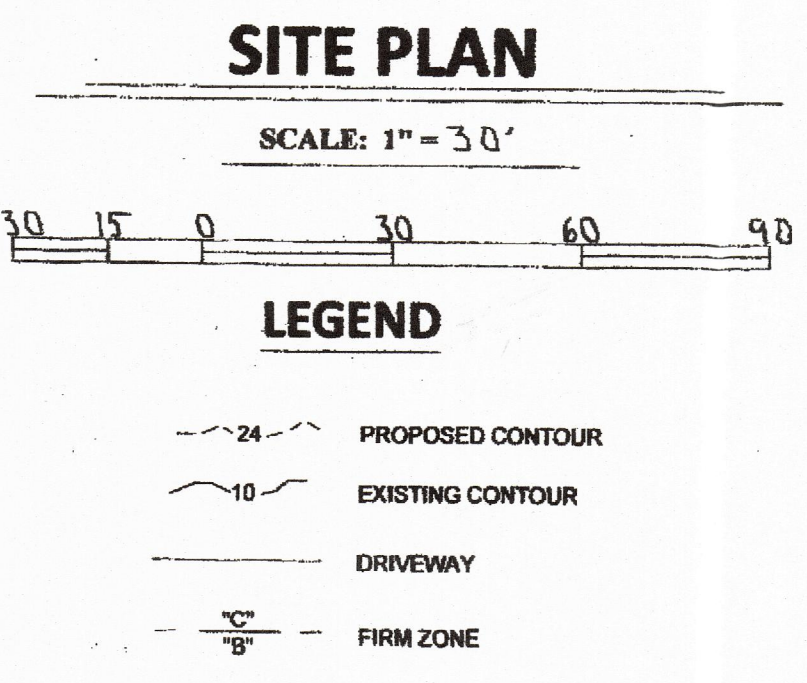
16. See Buoyancy and Pump calculations on sheet 2.  
 17. Grade, loam and seed all disturbed areas.  
 18. Variance of 1' from 5' to 4' to groundwater allowed by MADEP approval letter.  
 19. SLEEVE WATER LINE 10' EITHER SIDE OF SEWERLINE

REGISTERED PROFESSIONAL ENGINEER  
 HARRY EARL LANTERY JR.  
 No. 26575  
 3/9/23

BUZZARDS BAY

RECEIVED  
 MAR 09 2023  
 Bourne Health Department  
 24 Perry Avenue  
 Buzzards Bay MA 02532

**DESIGN**  
 SINGLE FAMILY DWELLING W/ 4 BEDROOMS  
 NO GARBAGE DISPOSAL  
 DAILY FLOW = 110 x 4 = 440 G.P.D.  
 SEPTIC TANK (VOL. EQ'D)  
 USE AN ORWECO SINGULAR SESI MODEL 960  
 NITROGEN REMOVAL SYSTEM (600 GPD)  
 LEACHING (REACTS.A.S.)  
 USE 3-5'x8'x2' P.C.L.C.+4' OF DOUBLE WASHED 3/4" 1 1/2"  
 STONE ALL AROUND.  
 EFFECTIVE DEPTH = 2.0'  
 $2064 \div 2670.74 = 133$   
 $33 \div 13 \times 0.74 = 308$   
 TOTAL CAPACITY = 441 GALS.

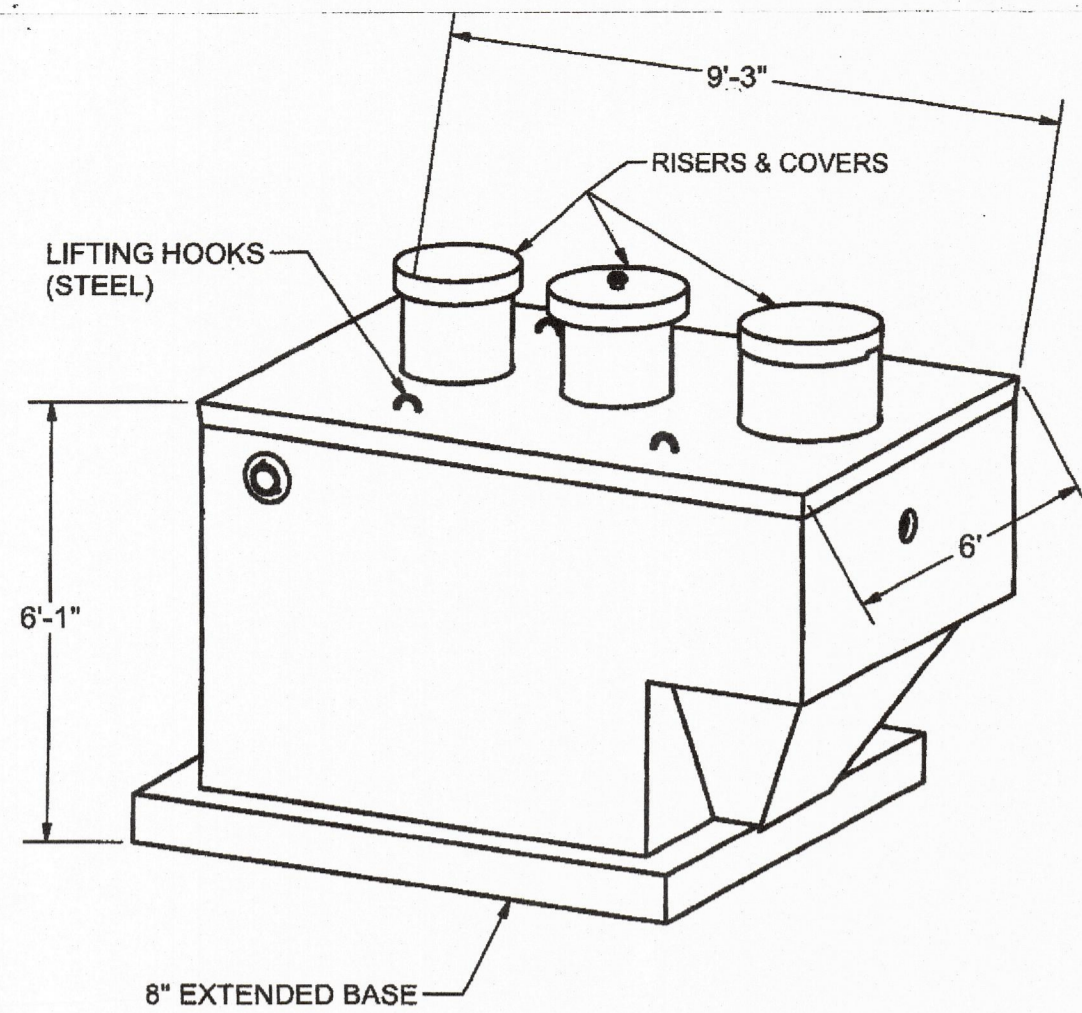


HEALTH AGENT APPROVAL \_\_\_\_\_ DATE: \_\_\_\_\_

FOR:  
 PETER OHANIAN TRS.  
 25 NORTH SHORE RD.  
 WINDHAM NH 03087  
 ON:  
 140 WINGS NECK RD.  
 POCASSET, MA.  
 A.P.N. - 37.4-25-0

**H. EARL LANTERY P.E.**  
 CONSULTING ENGINEER  
 SANDWICH, MA 02563  
 DATE: 1/24/23 DWG: 12423



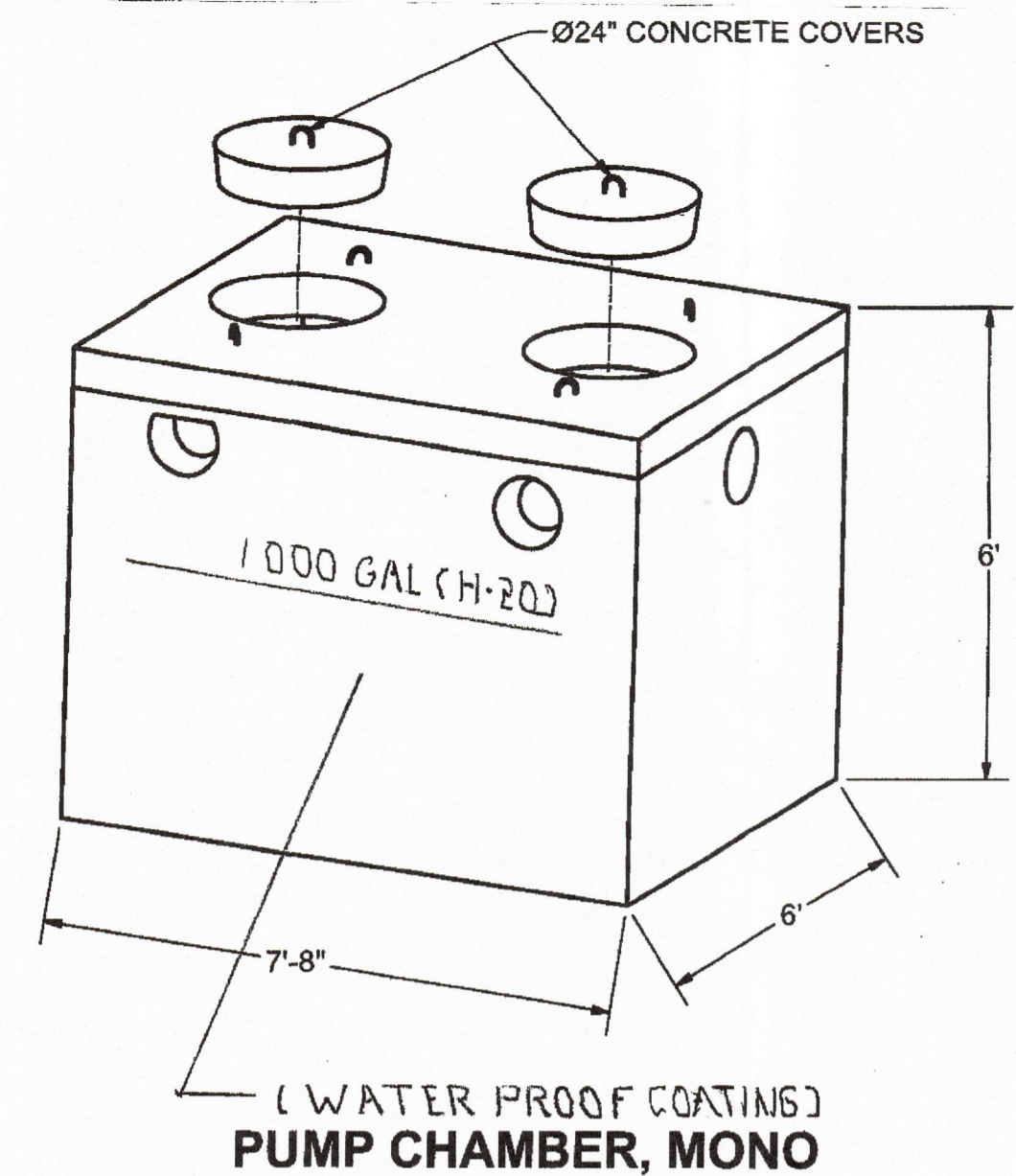


**SINGULAIR BIO-KINETIC MONO TANK  
W/EXTENDED BASE**

FOR PROCESS INFO  
PLEASE CONTACT:  
  
DISTRIBUTOR  
SES WASTEWATER **norweco**  
Norton, Ma 02766  
(888) 999-1389  
www.seswastewater.com

500 G.P.D.  
H10

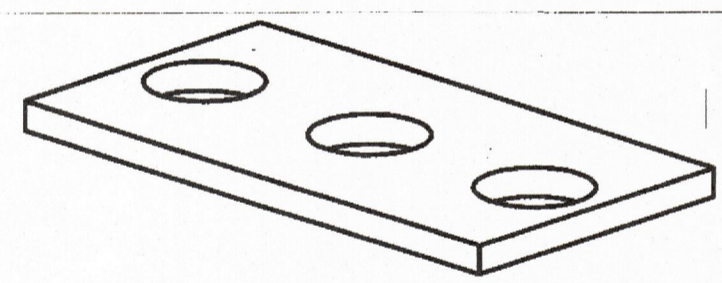
ITEM# <b>SG500MEB</b>	Wt. 16,300 Lbs	7 -3.1a	Sht 1 of 2
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**(WATER PROOF COATING)  
PUMP CHAMBER, MONO**

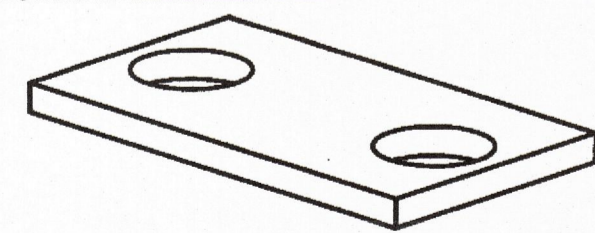
H20  
1,000 Gallon

ITEM# <b>PC102M</b>	Wt. 16,500 Lbs	9 -5.1
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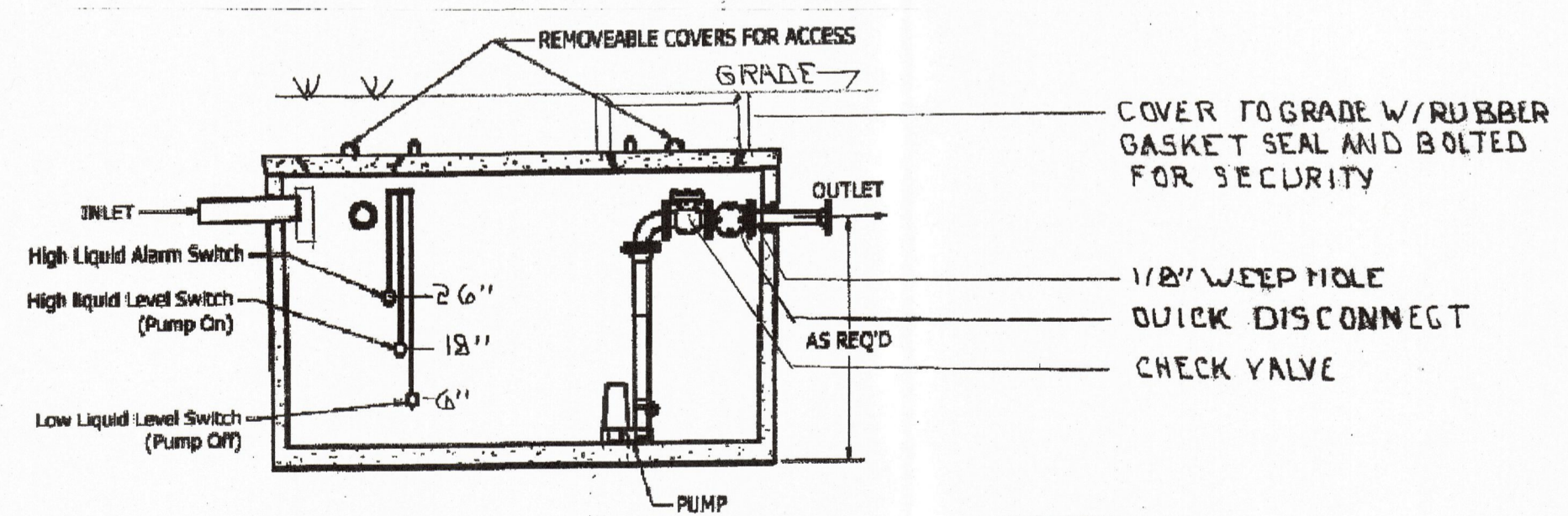
TBS15	Bouyancy Slab
Size	Dim
A (Lgth)	9'-3"
B (Wdth)	6'-0"
C (Thickness)	
D (dia)	
E	
F	
G	
H	
I	

<b>NAME: TANK BOUYANCY SLAB, 1000G Size, CUSTOM</b>	<b>ITEM# TS10</b>
Concrete Minimum Strength: 4,000 p.s.i. at 28 days Steel Reinforcement: ASTM A615, Grade 60 Design Loading: standard units - AASHTO - H10	TOTAL 4,600 Lbs. CH DATE: 5-5-2020 Ch 19 Pg 2.1 Sht 2 of 2



TBS10	Bouyancy Slab
Size	Dim
A (Lgth)	7'-8"
B (Wdth)	6'-0"
C (Thickness)	
D (dia)	
E	
F	
G	
I	

<b>NAME: TANK BOUYANCY SLAB, 1500g Size, CUSTOM</b>	<b>ITEM# TS15</b>
Concrete Minimum Strength: 4,000 p.s.i. at 28 days Steel Reinforcement: ASTM A615, Grade 60 Design Loading: standard units - AASHTO - H10	TOTAL 1,472 Lbs CH DATE: 5-5-2020 Ch 19 Pg 2.2 Sht 2 of 2



**PUMPING CALCULATIONS:**  
 Pump on: 6.66' x 5' 1x' x 7.5 gallons/cu. ft. = 249 gals. / cycle  
 Alarm Storage: 6.66' x 5' x 2.5 x 7.5 gallons/cu. ft. = 624 gallons/24 Hr. capacity

**BOUYANCY CALC'S:**  
 water displaced by Singulair tank = 9.3' x 6' x 6' = 335 cu. ft.  
 335 cu. ft. x 62.4 lbs/cu. Ft. = 20,904 lbs. - 16,300 lbs. = 4,604 lbs. needed  
 add a 4,604 lb. Concrete (3 hole) bouyancy slab by Acme-Shorey Precast  
 Water displaced by pump chamber = 8' x 6' x 6' = 288 cu. ft.  
 288 cu. ft. x 62.4 lbs/cu. ft. = 17,972 lbs. - 16,500 lbs. = 1,472 lbs. needed  
 add a 1,472 lbs. concrete (2 hole) bouyancy slab by Acme-Shorey Precast

