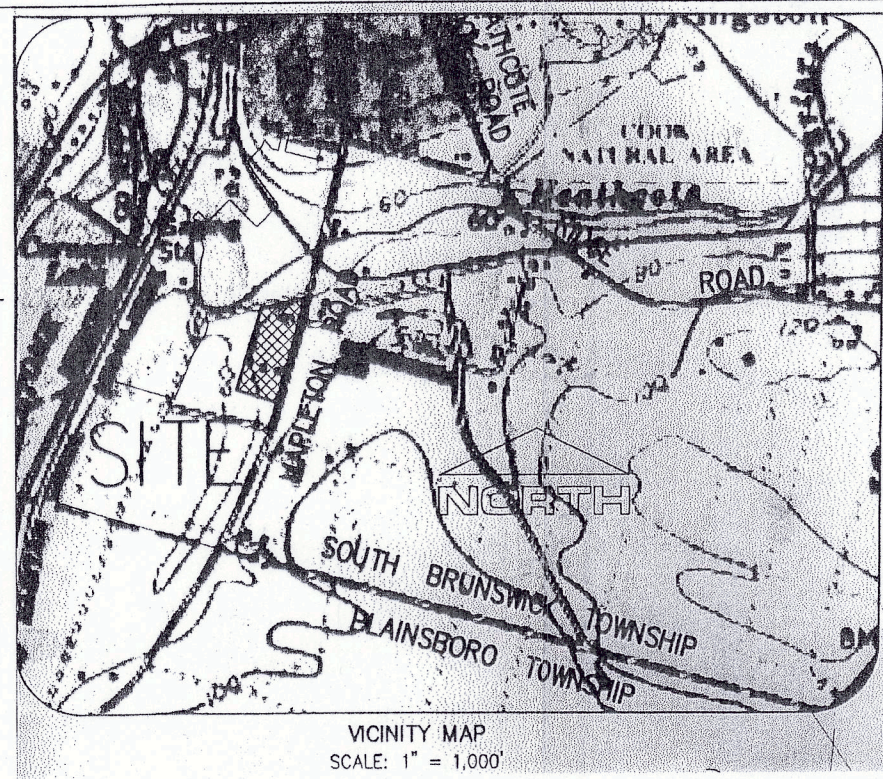




SECTION VIEW

INVERT FOR 2" PIPE

Modern ... Concrete Solutions

Modern Precast Concrete
Corporate Headquarters 1210 Durban Road, PO Box 329 | Otterville, PA 15942
610.426.2211 | www.mpcconcrete.com

 **MPC**
CERTIFIED PLANT

Modern ... Concrete Solutions

Modern Precast Concrete
Corporation Headquarters | 210 Durham Road, P.O. Box 139 | Ottville, PA 16842
(610) 847-5112 | (610) 847-1046 | www.modcon.com

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PUMP SELECTION: GROUND MODEL NO. 3885, SERIES NO. WE0121, 1 HP

DESIGNING VOLUME: MAX. 25% Q = 0.25(650) = 162.5 GALLONS

LOW WATER ELEVATION (PUMP OFF): SHALL BE 1' ABOVE THE FLOOR OF THE 1500 GALLON DOSING TANK

LOW WATER ELEVATION (PUMP ON): SHALL BE 1/2" ABOVE THE LOW WATER ELEVATION

$$D = \frac{(WGL - VGL) \times 100}{(1272/48)} = \frac{(363 + 30.48 + 11)(1272/48)}{5.16(10.5) \text{ OR } 34.18 \text{ SF FT}}$$
$$= \frac{A}{V} = 2.35' \text{ OR } 0.20 \text{ FTS}$$

HIGH WATER ALARM ELEVATION (ALARM ON): SHALL BE 4" ABOVE THE HIGH WATER ELEVATION

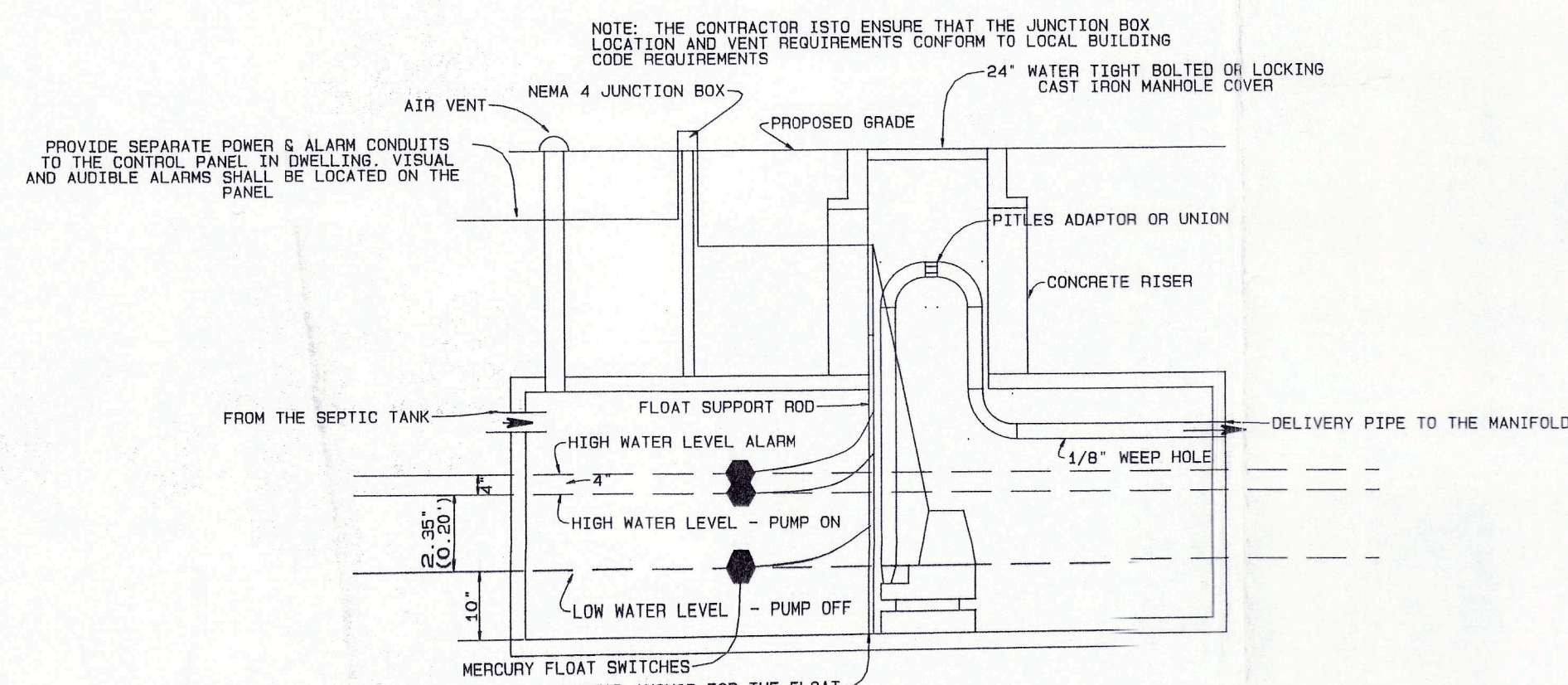
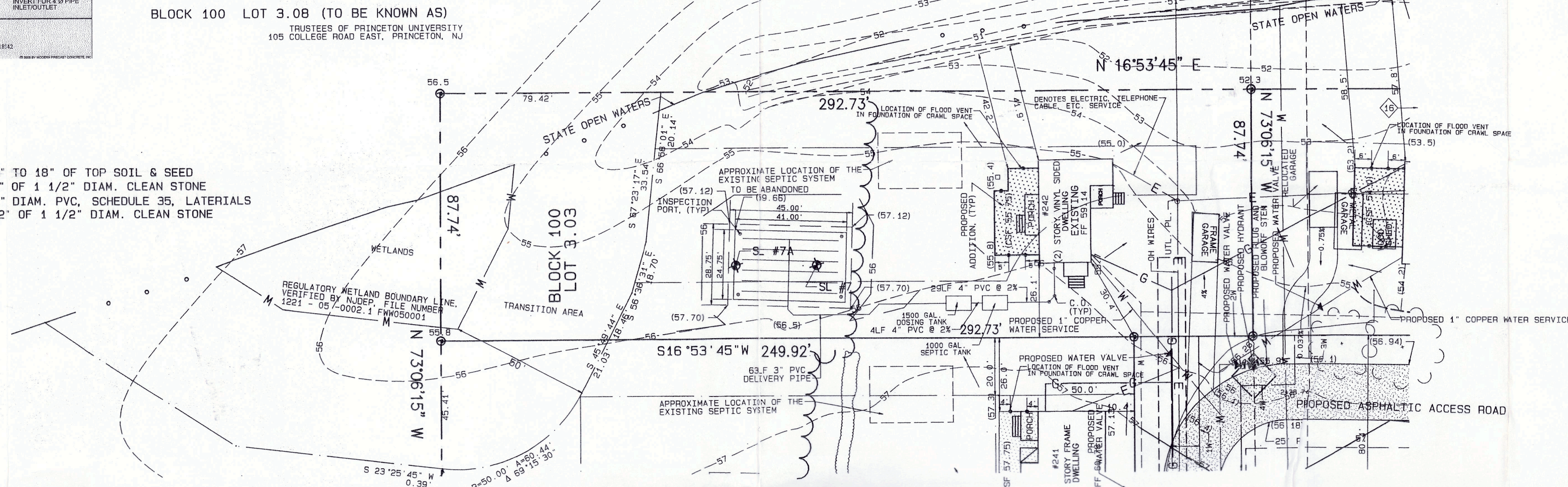
DESIGN RESERVE CAPACITY OF THE 1500 GALLON Dosing TANK: 1070 GALLONS

OUTLET TO BOTTOM OF TANK =	1.00'
0.85' (PUMP 2493 - 0.30' PUMP 2491) + 0.33' (ALARM 3418) =	1.18'
RESERVE =	2.64'

$(2.64' \text{ FT})(34.18 \text{ SF}) 7.07 \text{ G/G} \text{ (C)} = 1070 \text{ GALLONS}$

0" - 14"	10YR 5/3 Silt LOAM, SUBANGULAR MODERATE MEDIUM, MOIST, FRAGILE, COMMON ROOTS
14" - 36"	10YR6/4 SANDY CLAY LOAM, SUBANGULAR WEAK MEDIUM, FRAGILE, 70% ROOTS, COMMON MEDIUM DISTINCT 10YR6/6 MOTTLES 24" - 44" (PERCHIE)
38" - 58"	7.5YR5/2 SANDY SAND, 15% GRAVEL 5% COBBLES, GRANULAR MEDIUM MOIST, LOOSE
58" - 72"	10YR5/2 SAND, 15% GRAVEL 5% COBBLES 5% BOULDERS, GRANULAR MEDIUM SATURATED, LOOSE, COMMON MEDIUM DISTINCT 10YR6/8 MOTTLES 48" - 72"
72" - 120"	10YR6/4 SAND, 10% GRAVEL, 5% GRANULAR MEDIUM SATURATED, LOOSE, COMMON MEDIUM DISTINCT 10YR7/2 MOTTLES 72" - 120"
	SEEPAGE ENCOUNTERED AT 58"

42 Filter material is to be laid into the excavated bed with a backhoe, front-end loader or dump
43 truck. Equipment shall not enter the excavated bed unless it is tracked piece of equipment and
44 not greater than 81 lbs sq. in. and the filter material is one foot thick below the equipment.
45
46 Backfill material is of earth similar to that found at the site free of stones, stumps and waste
47 material.
48
49 Backfill material shall not be more permeable than the surrounding soil.
50
51 Heavy equipment will not be driven directly on exposed area of excavation. There shall be a
52 minimum of 1 ft. of select fill below equipment at all times.
53
54 Backfill and final grading shall extend 5 ft. in all directions, beyond the perimeter of the filled
55 area.
56
57 No trees are permitted within 10 ft. of the proposed disposal fields and no overhanging tree
58 limbs (drip lines), permitted to hang over the disposal fields.
59
60 Prior to the proposed septic and dosing tanks becoming operational they shall be filled and
61 inspected by the Health Department to verify that they are watertight.



MONOLITHIC PUMP DOSING TANK
1500 GAL.

SELECT FILL SPECIFICATIONS: As per TWA to NJDEP,

PERMIT NO. C3-3487-45G

When fill material is used within the zone of treatment or disposal, fill material shall meet the requirements of N.J.A.C. 7:27A-10.1(f) and 10.4, or shall meet the following requirements:

1. *ASTM C-136 for Method of Sieve Analysis of Fine and Coarse Aggregate* must be used for characterizing aggregate test results.
2. The material shall meet the standards of *ASTM C33-93 Standard Specifications for Concrete Aggregate*; or
3. The material shall meet the following requirements:
 - a. *Course* fragment content (greater than a No. 8 sieve) less than 15 percent by volume or 10 percent by weight;
 - b. *Texture* analysis (composition, by weight, of size fraction passing the particular sieve as stated) 100 percent must pass a 3/8" sieve; between 80 and 100 percent must pass No. 8 sieve (3/16 mm) between 50 and 85 percent must pass No. 16 sieve (1.18 mm) between 25 and 60 percent must pass No. 30 sieve (0.6 mm) between 10 and 30 percent must pass No. 60 sieve (0.25 mm); and between 2 and 10 percent must pass No. 100 sieve (0.15 mm).
4. Permissibility for these materials is established within the range of 0-2 in/hr for design purposes.

This approval does not constitute approval to violate other Township ordinances or codes.

177 11/9/07
Signed Date

PROJECT	BLOCK 100 LOT 3/03 MAPLETON ROAD SOUTH BRUNSWICK TOWNSHIP, MIDDLESEX COUNTY, NJ			DWG. NUMBER :	04069 SSD 3.03
DWG. TITLE	SEPTIC SYSTEM DESIGN				
OWNER & APPLICANT					
MAPLETOWN ASSOCIATES, LLC					
DATE	SCALE	DRAWN BY:	CHECK BY:	FIELD BK	
5-26-07	1"=30'	DD	TD		
WILLIAM M. DORAN and SONS PROFESSIONAL ENGINEERS and SURVEYORS and PLANNERS					
 5-26-07					
DATE					
WILLIAM M. DORAN, PE & PLS. LIC. # 15082		PP LIC. # LI 04216			
DANIEL M. DORAN, PE & PLS. LIC. # 32389		PP LIC. # LI 04427			
14 NEWMAN ROAD, PARSIPpany PARK, NJ 08824 (732) 297 - 1112					