

TECHNICAL
SECTION
2000
TRAINING

LIQUID WASTE LAWS

PORTER COLOGNE WATER QUALITY ACT

Creates the State Water Resources Control Board

Water Resource Control Board is divided into 9 Regional Water Quality Control Boards.

Each Regional Board has developed a Basin Protection Plan and implemented guidelines for on-site sewage.

MOU grants county the authority to oversee on-site program. Local ordinance and regulations are reviewed by RWQCB to ensure compliance with Basin Plan.

LIQUID WASTE LAWS

CALIF. HEALTH AND SAFETY CODE

Section 5411 - Prohibits improper discharge of waste.

17920.3 - substandard housing code sections.

UNIFORM PLUMBING CODE

Adopted by local ordinances and CA state law.

Governs prohibitions, construction, materials,
and inspections.

LIQUID WASTE LAWS

LOCAL ORDINANCES

FUNCTION OF A SEPTIC SYSTEM

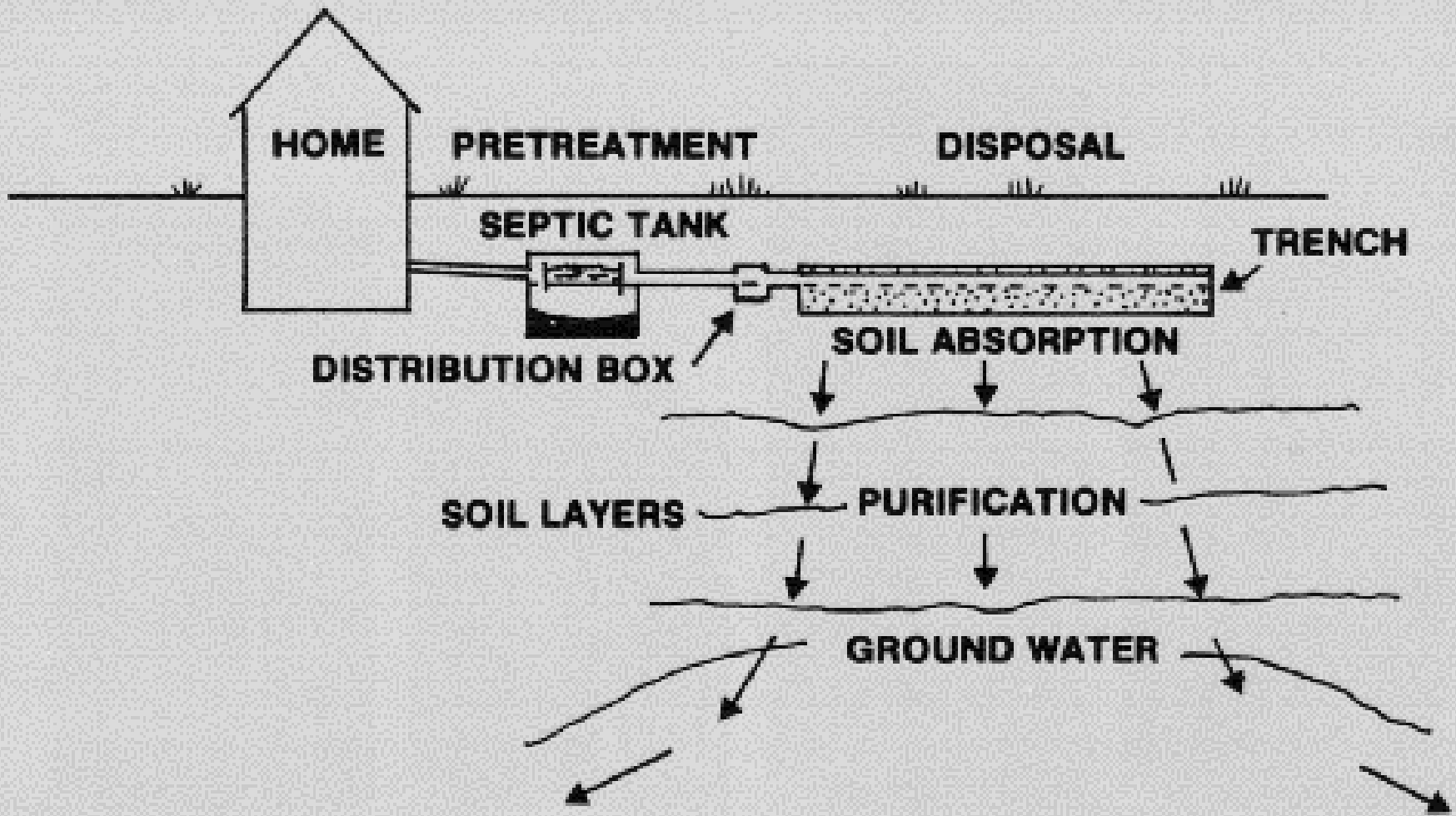
- TREAT SEWAGE SO THAT IT IS MADE HARMLESS.

KILL DISEASE CAUSING BACTERIA, VIRUSES, AND PROTOZOANS.

REDUCE HOUSEHOLD CHEMICAL CONCENTRATIONS.

REDUCE BIOLOGICAL OXYGEN DEMAND.

- DISPOSE OF SEWAGE (MAKE IT GO AWAY).



LIQUID WASTE STEPS TO INSTALLING A SEPTIC SYSTEM

SITE EVALUATION

WITHOUT THOROUGH SITE EVALUATION TO DETERMINE THE BEST LOCATION AND DESIGN OF THE SEPTIC SYSTEM EVEN A WELL CONSTRUCTED AND PROPERLY USED SYSTEM MAY PREMATURELY FAIL.

ON SITE REVIEW

SOIL PROFILE EVALUATION

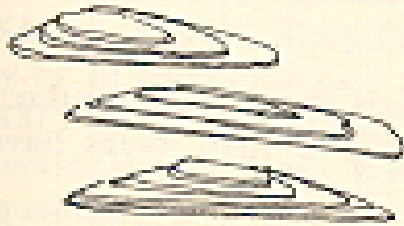
HYDROMETER TEST

PERCOLATION TEST





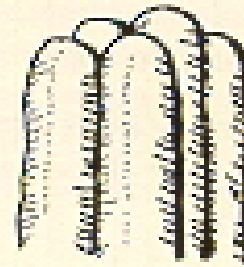




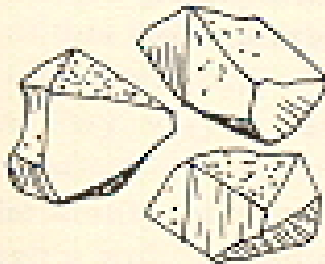
PLATY
STRUCTURE



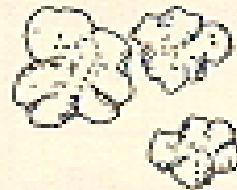
PRISMATIC
STRUCTURE



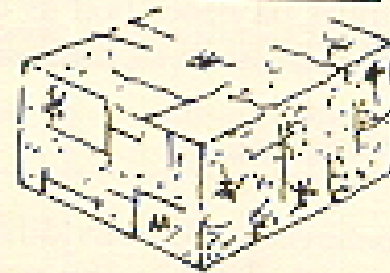
COLUMNAR
PRISMATIC
STRUCTURE



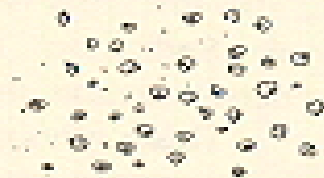
ANGULAR BLOCKY
STRUCTURE



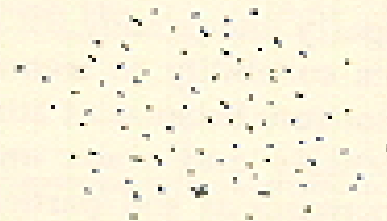
SUBANGULAR BLOCKY
STRUCTURE



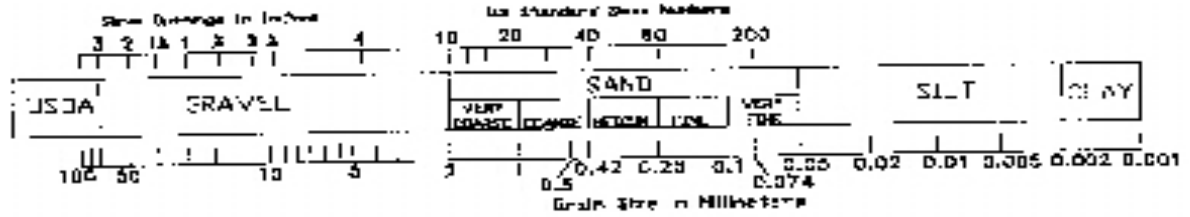
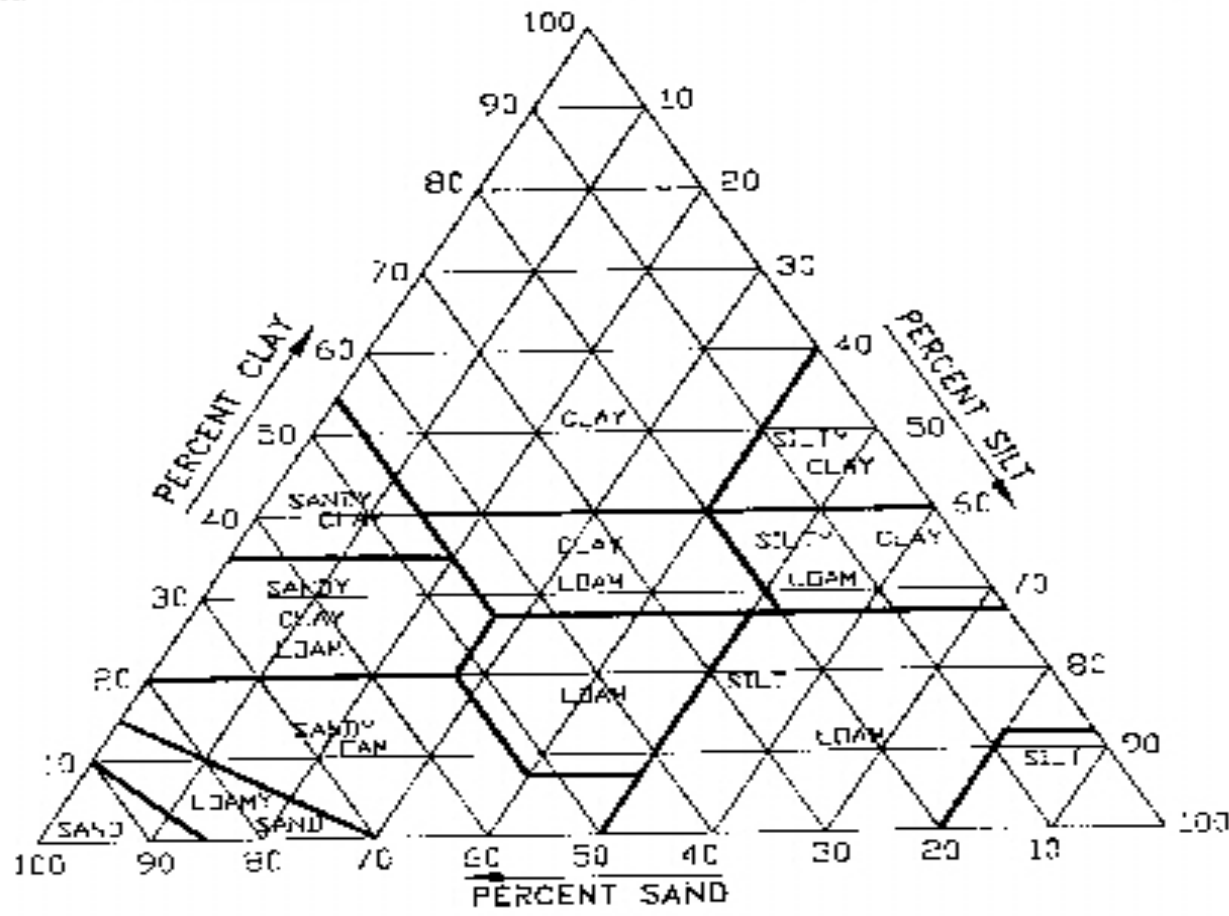
MASSIVE STRUCTURE



GRANULAR
STRUCTURE



SINGLE GRAIN
STRUCTURE



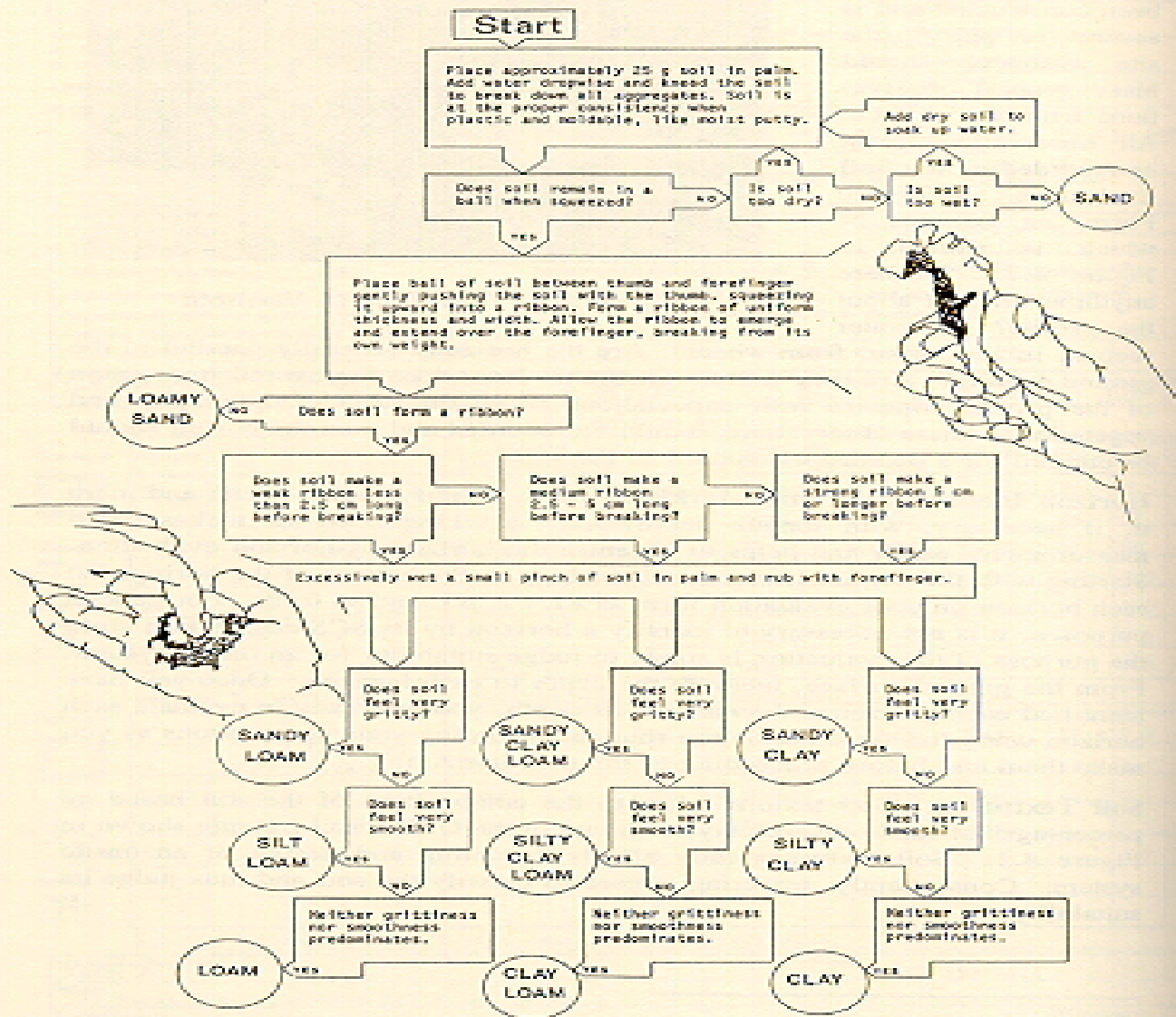
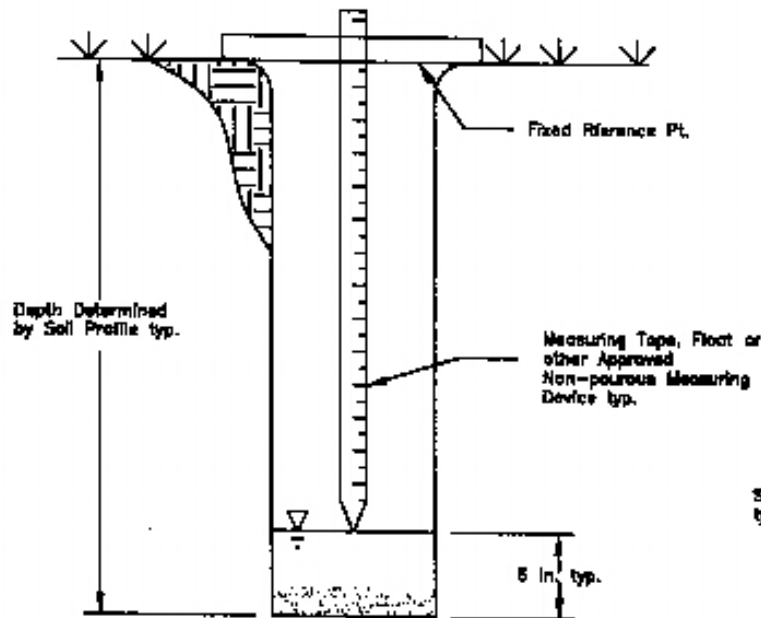


Figure 4.9 - Steps in soil texturing

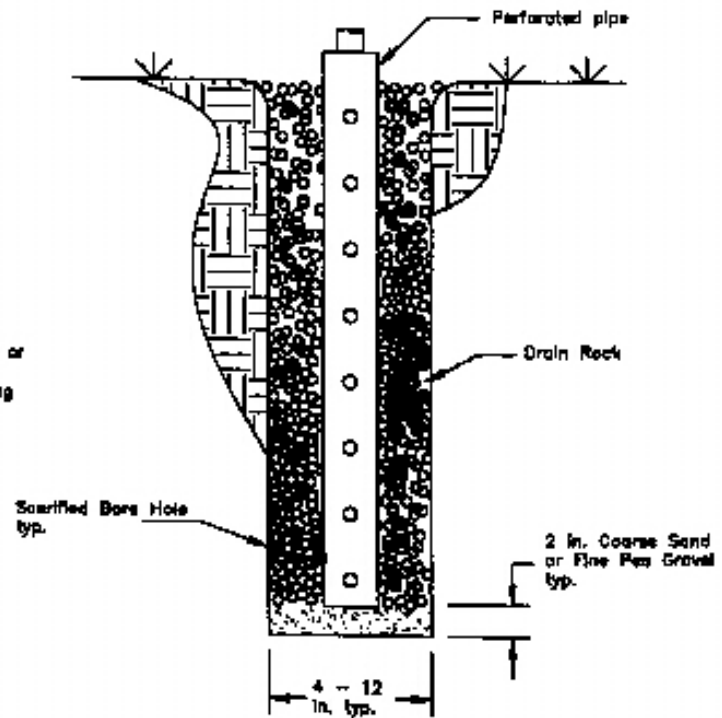
Fine Earth Fraction

Class	Size
Sand	0.05 - 2.0 mm
Silt	0.002 - 0.05 mm
Clay	<0.002 mm

Type 1



Type 2



Salano County Standard Detail

Figure 5: Standard Percolation Test Holes

DATE: 9.11.2000

SCALE: NTS

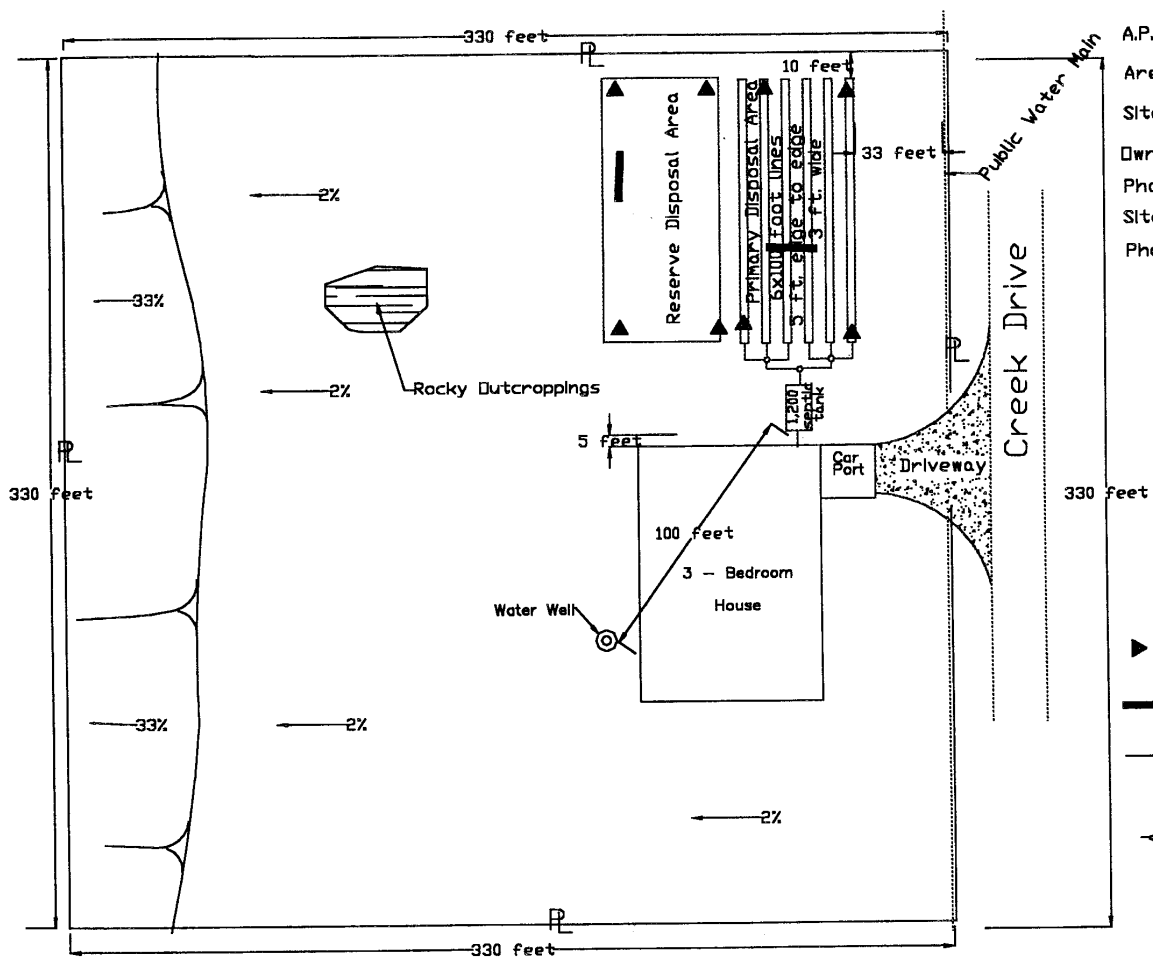
DRAWN BY: JLC

LIQUID WASTE STEPS TO INSTALLING A SEPTIC SYSTEM

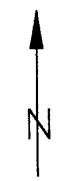
SITE EVALUATION

PLAN REVIEW

IF THE DESIGN DOES NOT ADDRESS CONDITIONS AT THE SITE, EVEN THE BEST CONSTRUCTED AND PROPERLY USED SEPTIC SYSTEM MAY FAIL PREMATURELY OR CAUSE ENVIRONMENTAL CONTAMINATION.

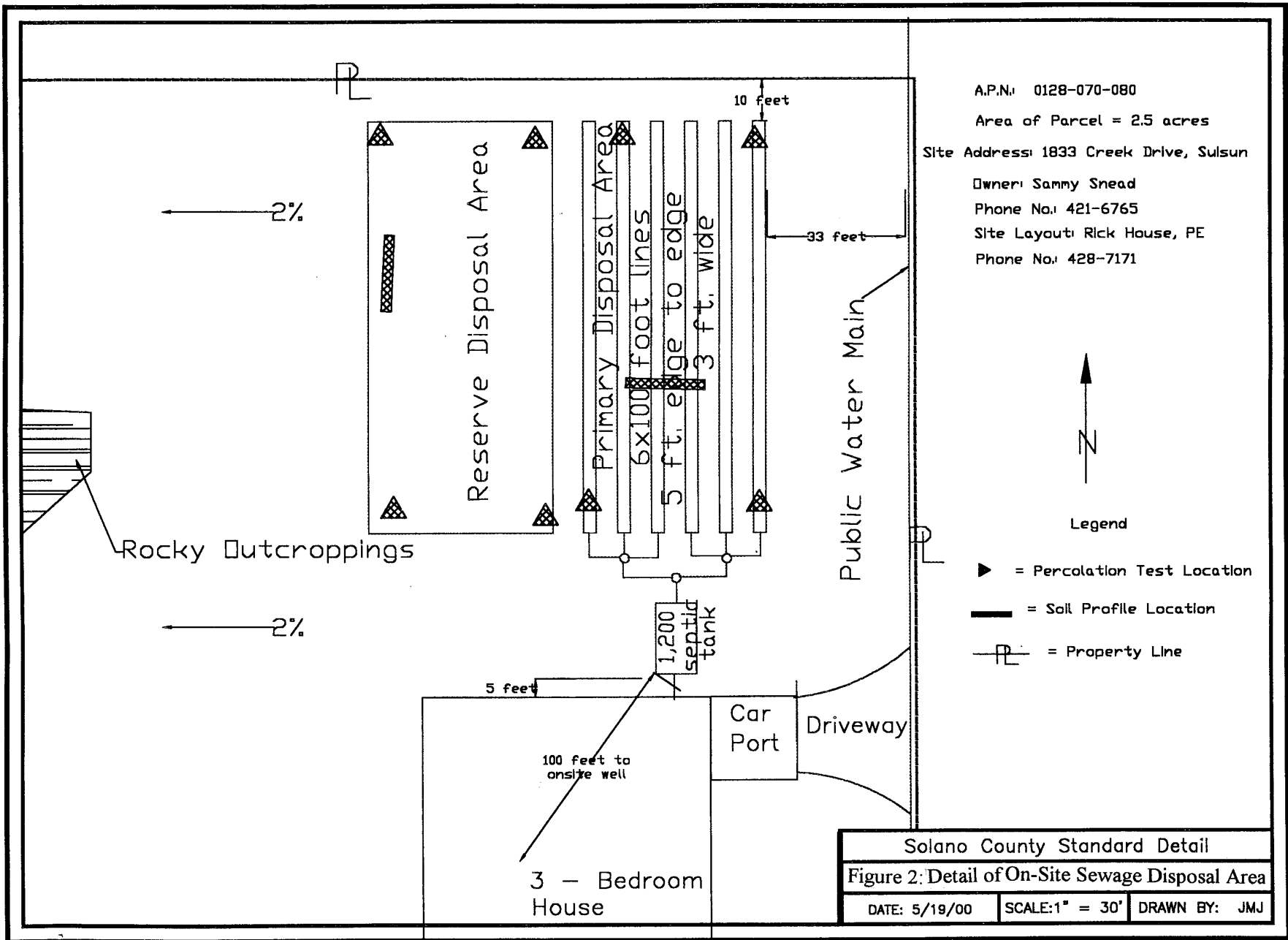


A.P.N.: 0128-070-080
 Area of Parcel = 2.5 acres
 Site Address: 1833 Creek Drive, Suisun
 Owner: Sammy Snead
 Phone No.: 421-6765
 Site Layout: Rick House, PE
 Phone No.: 428-7171



- Legend
- ▶ = Percolation Test Location
 - = Soil Profile Location
 - |— = Property Line
 - ⌋ = Top of Creek Bank
 - ⊙ = Water Supply Well

Solano County Standard Detail		
Figure 1:		Site Layout
DATE: 5/19/00	SCALE: 1" = 60'	DRAWN BY: JMJ



A.P.N.: 0128-070-080

Area of Parcel = 2.5 acres

Site Address: 1833 Creek Drive, Sulstun

Owner: Sammy Snead




Phone No.: 421-6765

Site Layout: Rick House, PE

Phone No.: 428-7171



Legend

-  = Percolation Test Location
-  = Soil Profile Location
-  = Property Line

Solano County Standard Detail

Figure 2: Detail of On-Site Sewage Disposal Area

DATE: 5/19/00

SCALE: 1" = 30'

DRAWN BY: JMJ

LIQUID WASTE

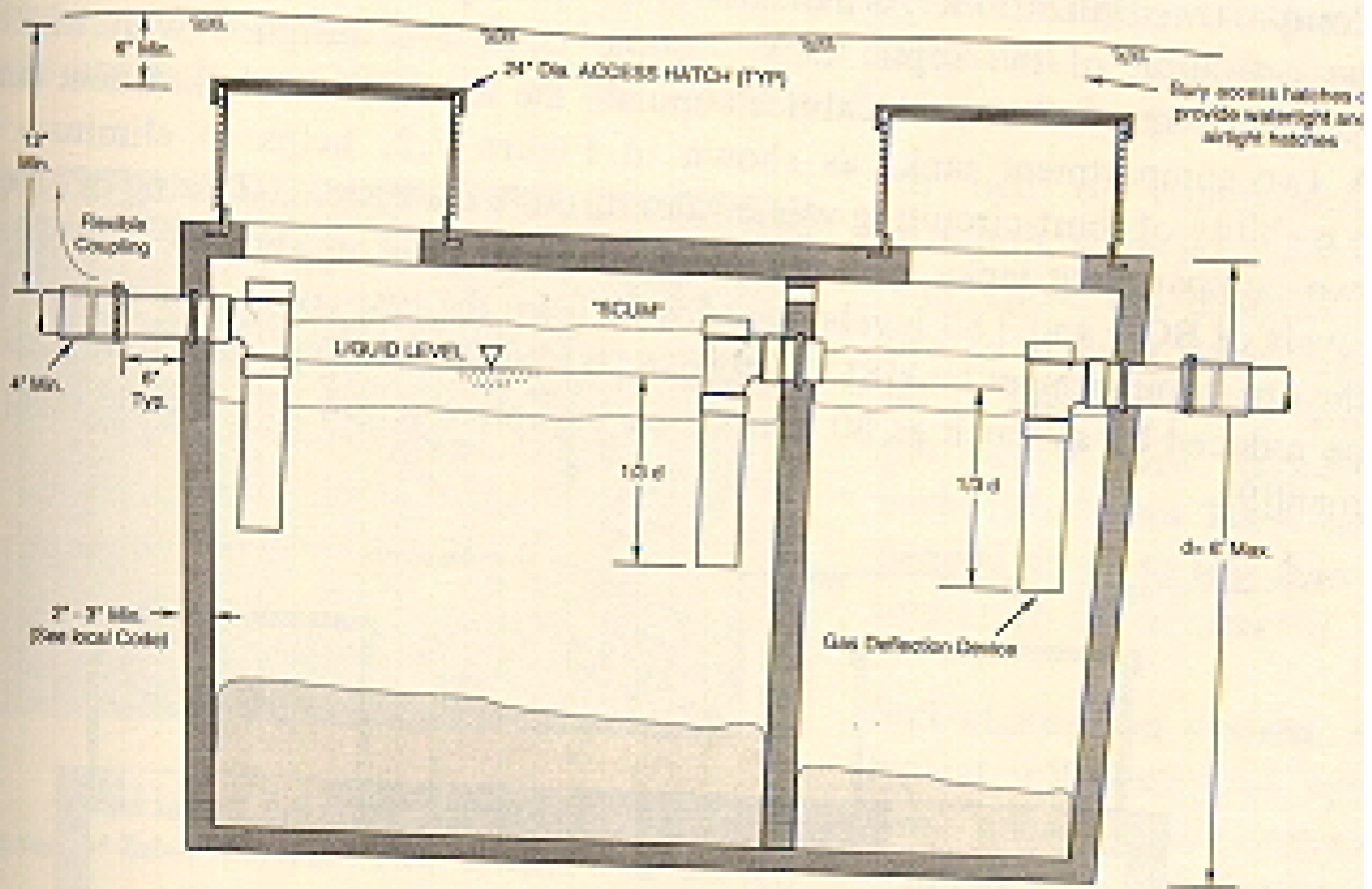
STEPS TO INSTALLING A SEPTIC SYSTEM

SITE EVALUATION

PLAN REVIEW

CONSTRUCTION

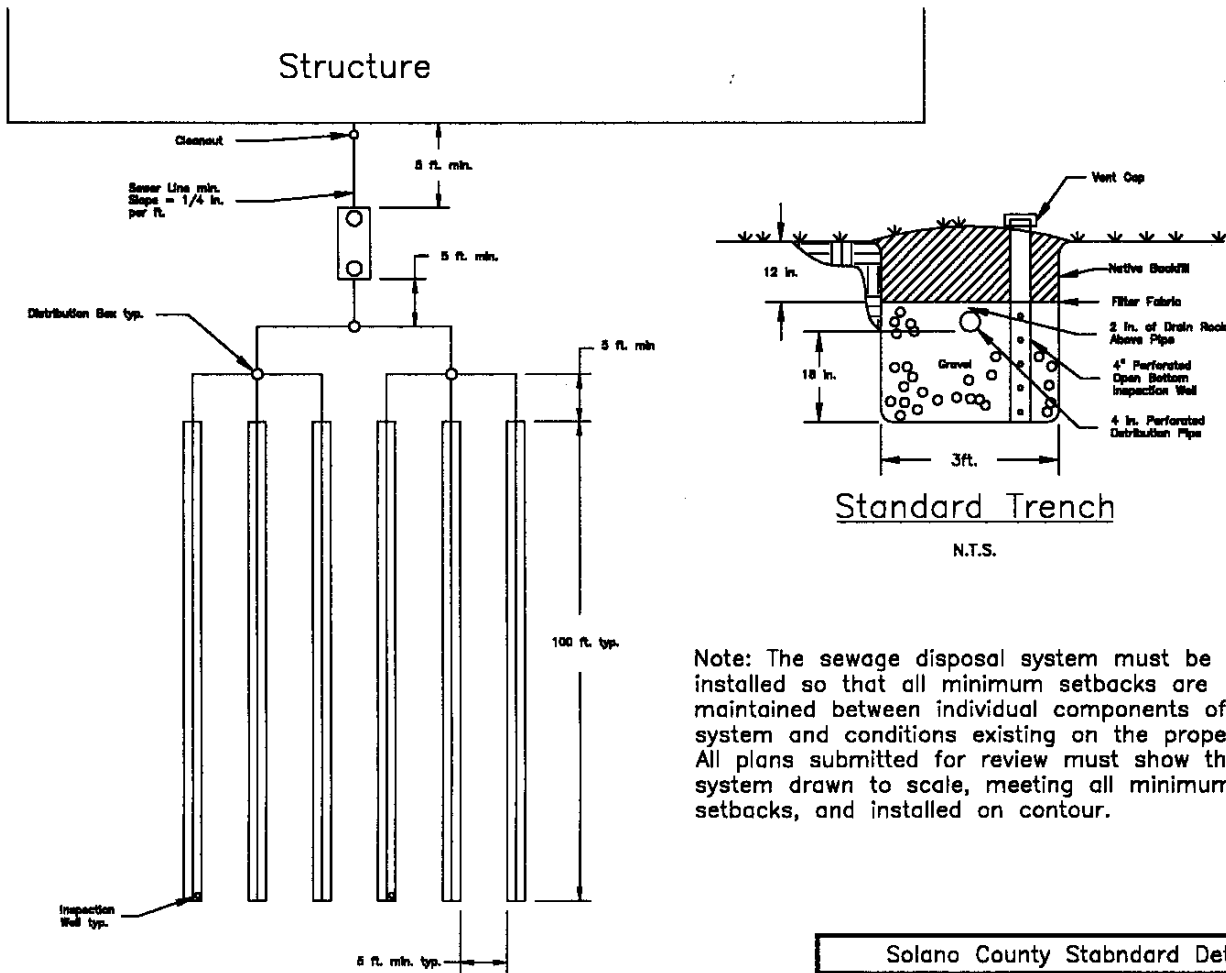
EVEN IF A SYSTEM IS SITED AND USED PROPERLY IT MAY HAVE A SHORTEND LIFESPAN IF FAULTY CONSTRUCTION MATERIALS ARE USED, OR PROPER MATERIALS ARE USED, BUT INSTALLED WRONG.



SIDE VIEW (TYP) TWO - COMPARTMENT 1500 GALLON SEPTIC / PUMP TANK

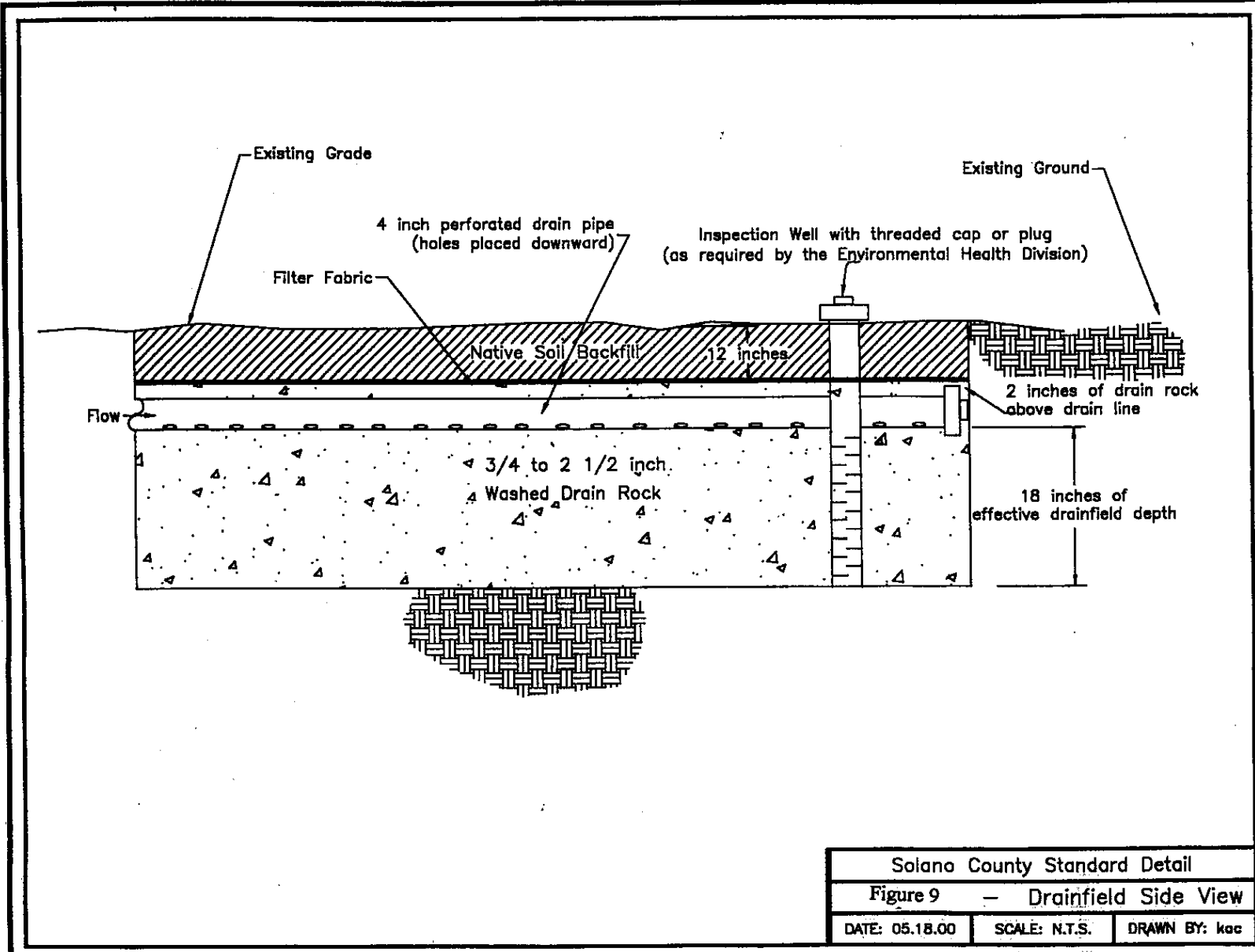






Note: The sewage disposal system must be installed so that all minimum setbacks are maintained between individual components of the system and conditions existing on the property. All plans submitted for review must show the system drawn to scale, meeting all minimum setbacks, and installed on contour.

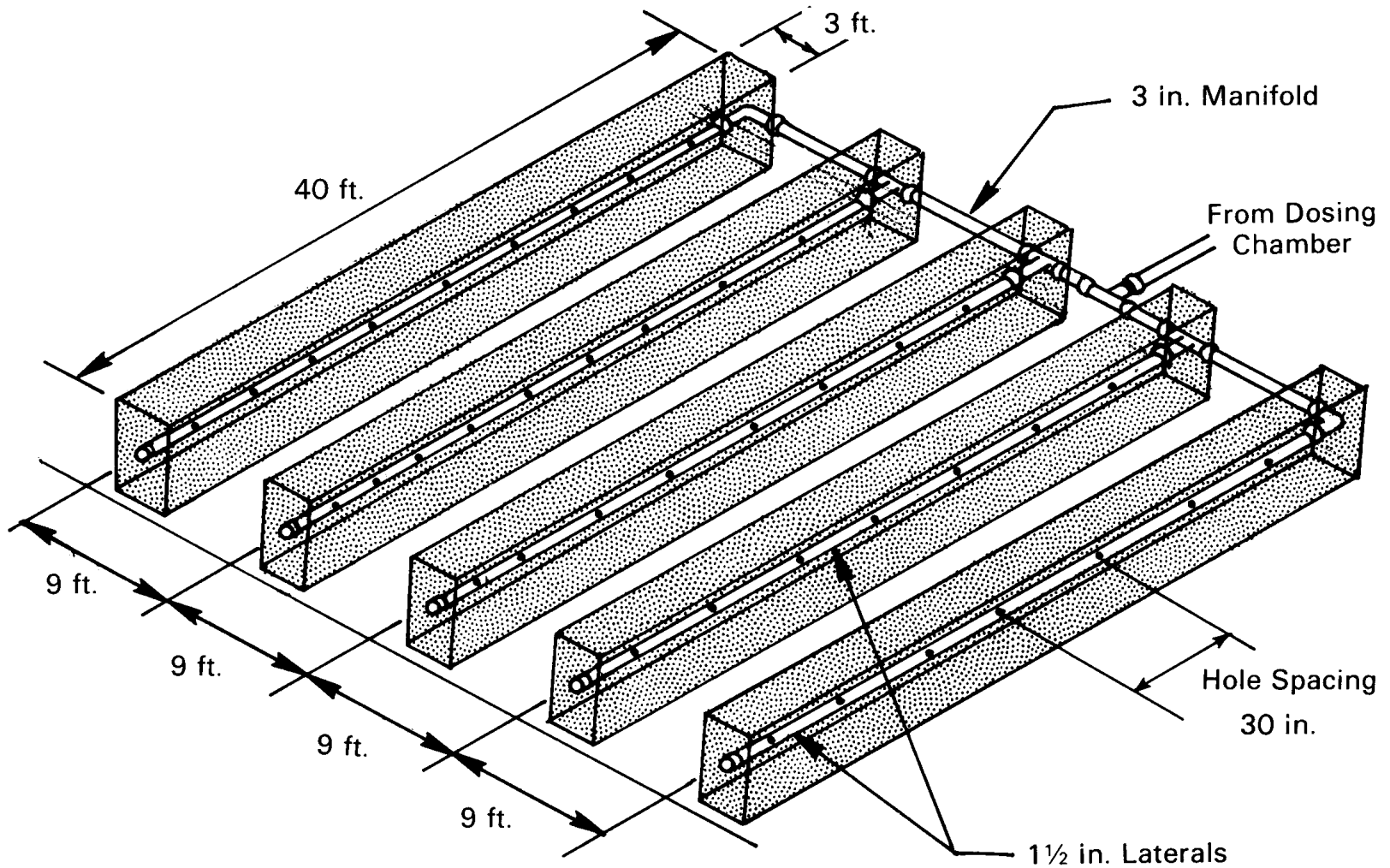
Solano County Standard Detail		
Figure 8: Standard Sewage Disposal System		
DATE: 5.19.2000	SCALE: NTS	DRAWN BY: JLC



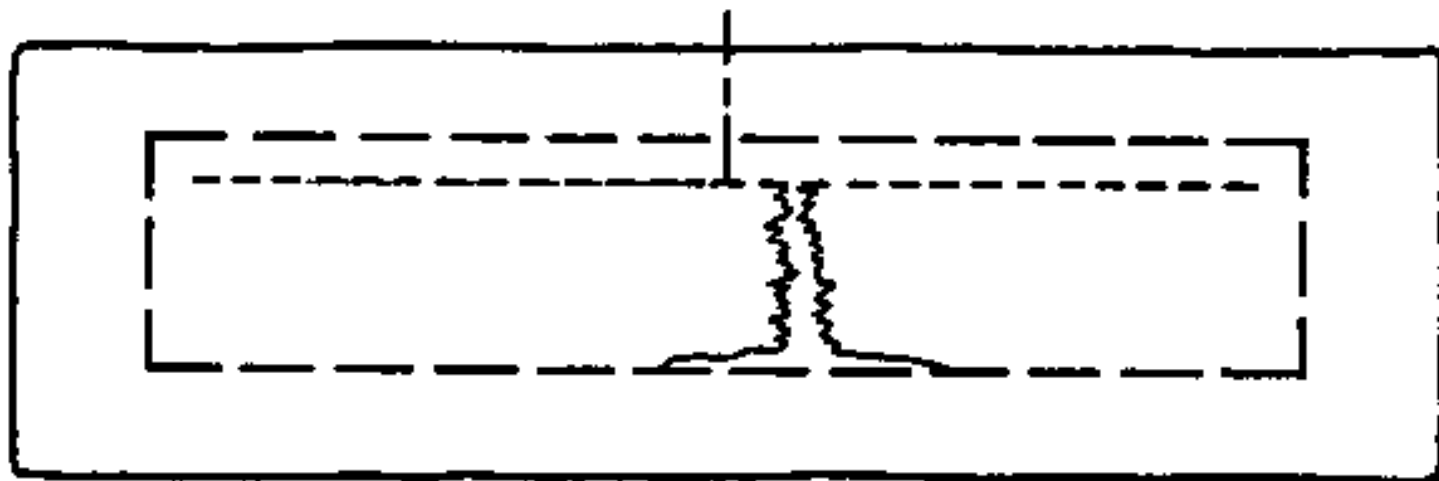
Solano County Standard Detail		
Figure 9 — Drainfield Side View		
DATE: 05.18.00	SCALE: N.T.S.	DRAWN BY: kac

FIGURE 7-31

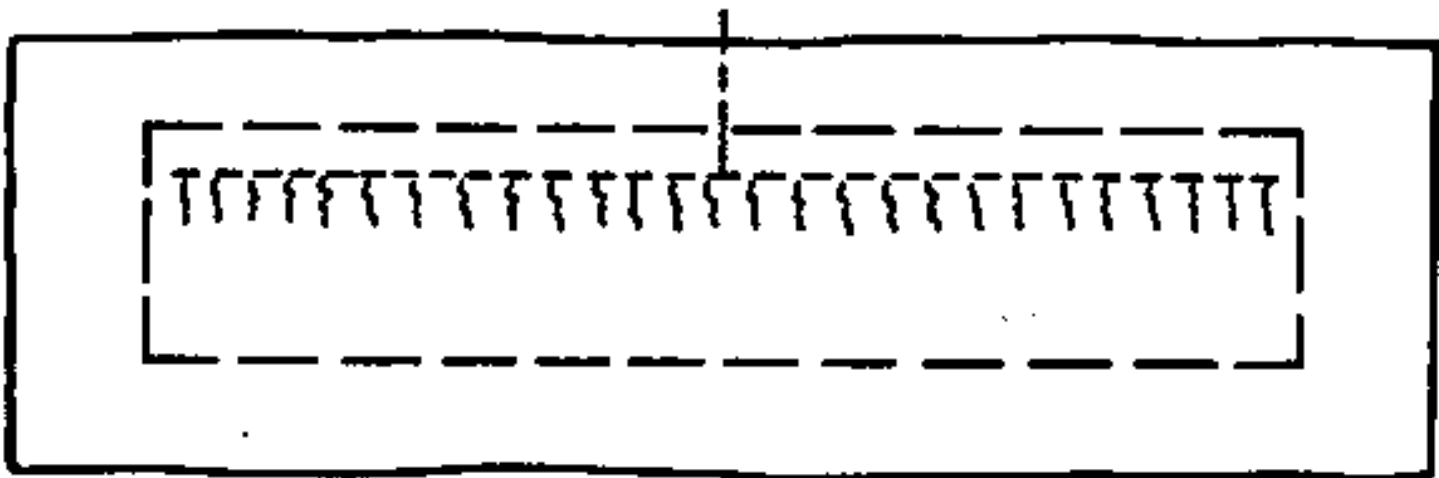
DISTRIBUTION NETWORK FOR EXAMPLE 7-2



GRAVITY DISTRIBUTION

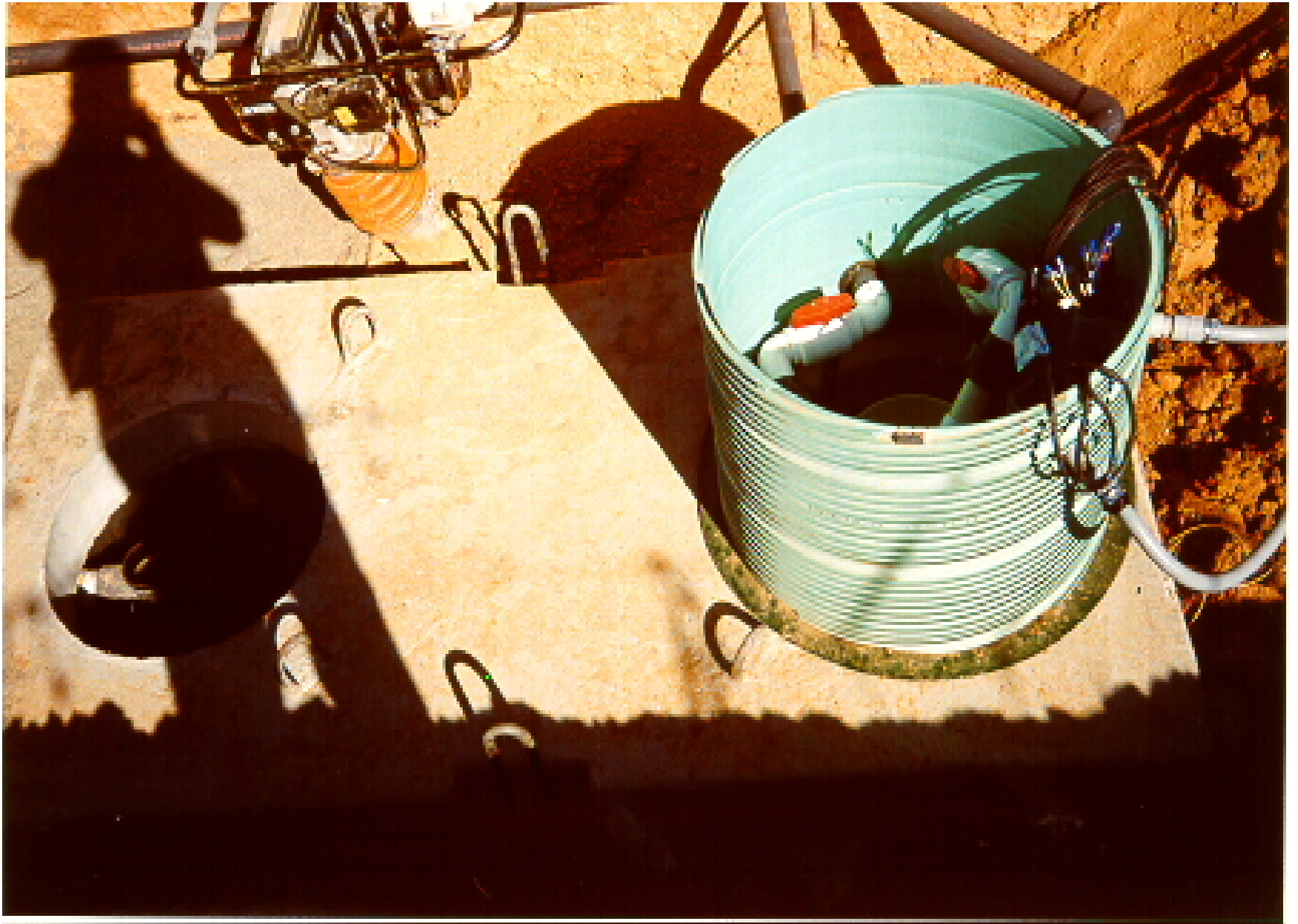


PRESSURE DISTRIBUTION

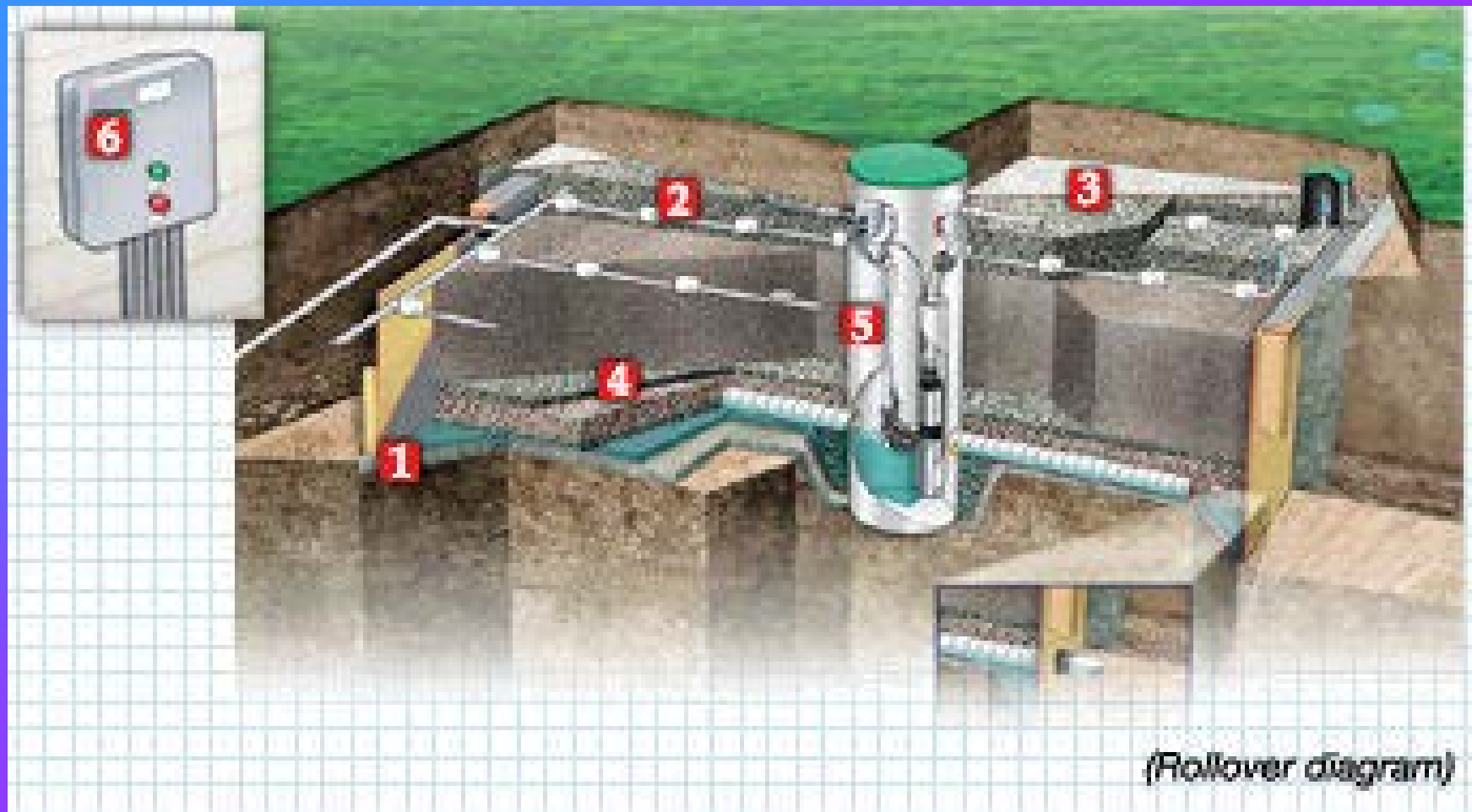


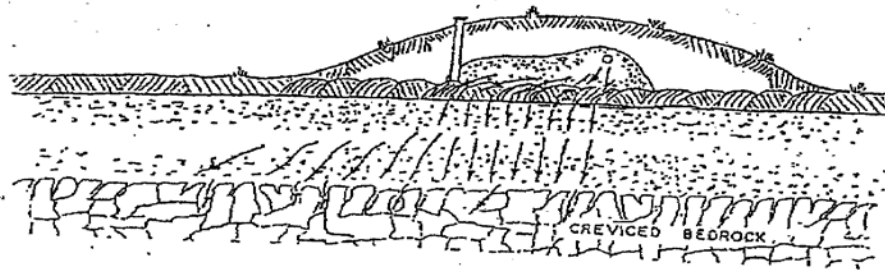




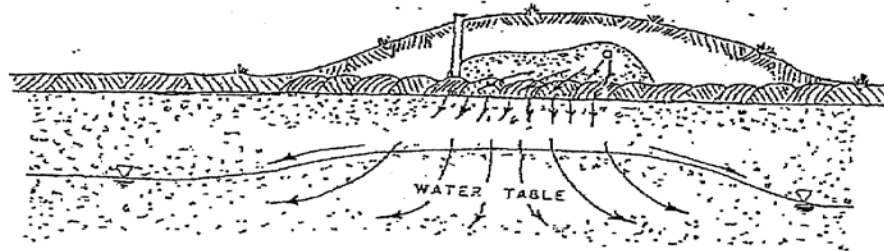




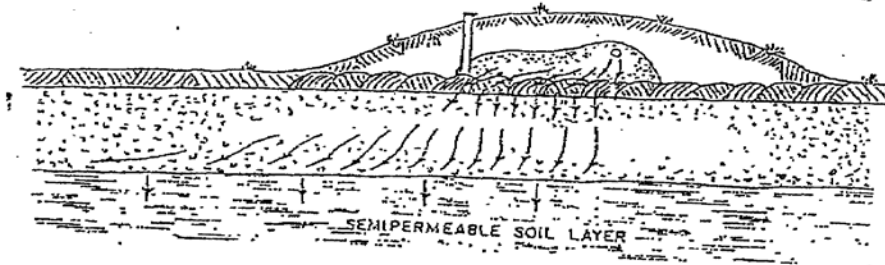




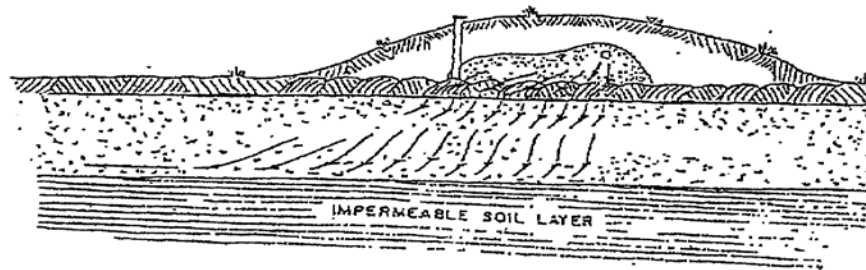
System
overlying a
permeable soil
lens over creviced
bedrock.
Estimated Linear
Loading Rate =
8 to 10 gal/day/LF



System
overlying a
deep permeable
soil lens over a
fluctuating water
table.
Estimated Linear
Loading Rate =
6 to 8 gal/day/LF



System
overlying a
shallow
permeable soil
lens over a semi-
permeable soil
layer.
Estimated Linear
Loading Rate =
5 to 6 gal/day/LF



System
overlying a
shallow
permeable soil
lens over an
impermeable soil
layer.
Estimated Linear
Loading Rate =
3 to 4 gal/day/LF

Figure 16: Profile View of Typical Mound System.

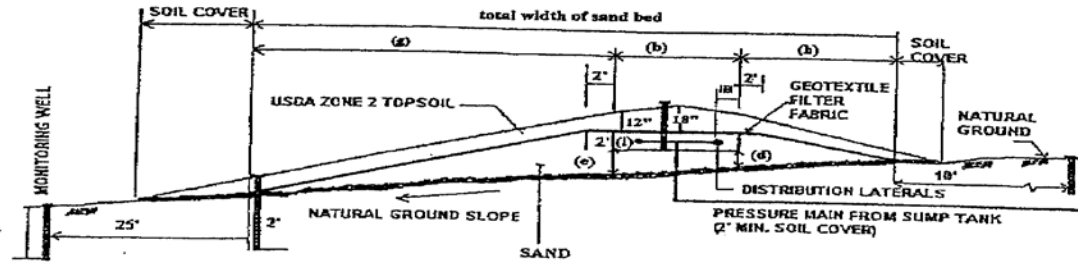
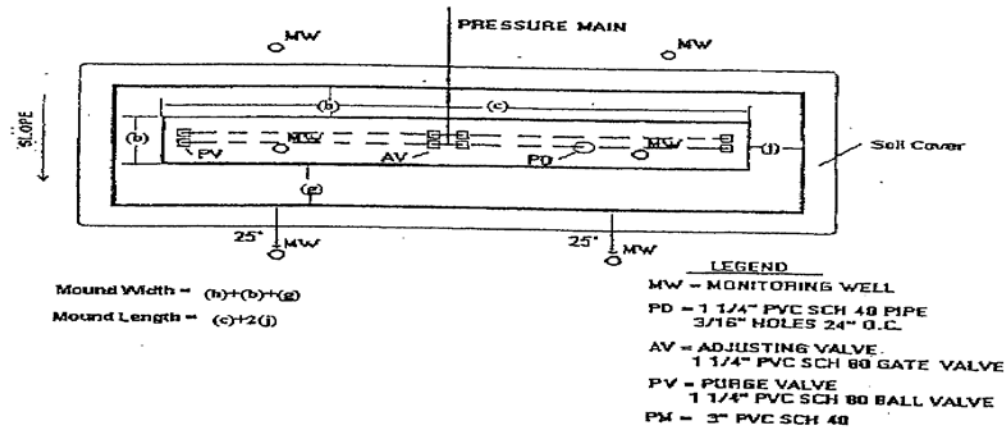
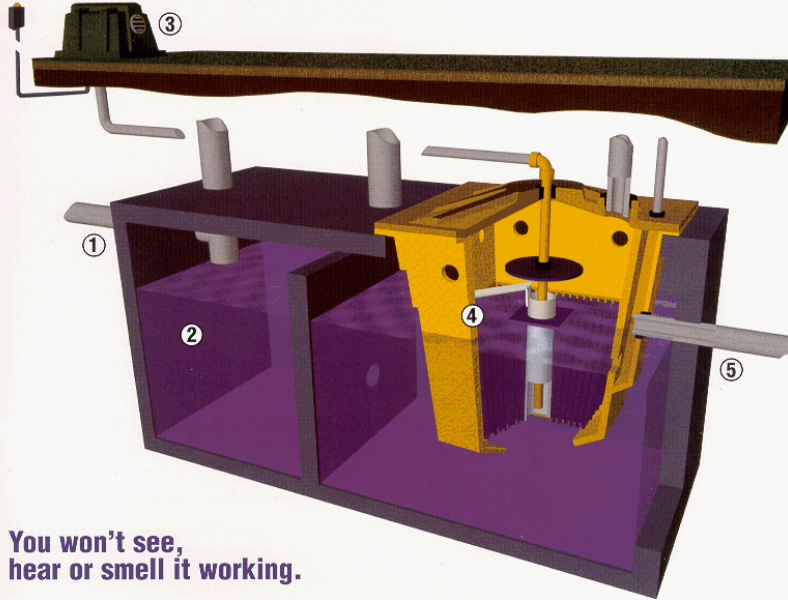


Figure 17: Plan View of Typical Mound System.



Introducing **FAST** Wastewater Treatment Systems

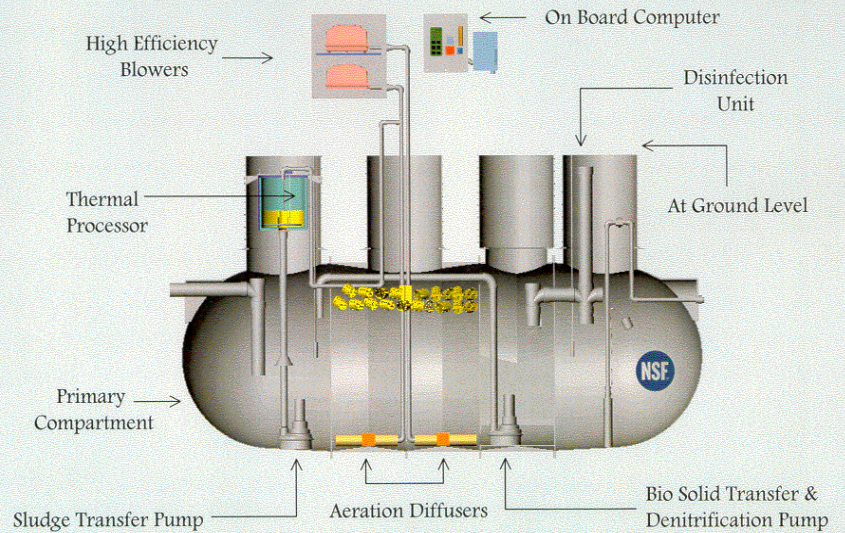


**You won't see,
hear or smell it working.**

- ① FAST® wastewater treatment systems process all the wastewater from single family homes, clusters of homes, small communities or even the high strength wastes from restaurants or commercial facilities.
- ② Natural separation and settling processes occur in the first compartment of the underground tank.
- ③ Remote blower (the system's only moving part) delivers large volumes of air into the heart of the system, creating vigorous water movement. FAST is oxygen-rich and self-cleaning.
- ④ Proven, reliable FAST treatment module provides the perfect environment for "friendly bacteria" to grow and multiply. FAST consistently processes and removes more than 95% of common impurities. Special patented technology allows exceptional Total Nitrogen reductions (including nitrates) of more than 70%.
- ⑤ Clear, odorless treated water is ready for standard or innovative dispersal.

 **MicroSepTec**

NSF



IAPMO TANK CERTIFICATION FOR:
600 Gallon per day - 1200 Gallon per day - 1500 Gallon per day

LIQUID WASTE AFTER INSTALLATION

Operation and Maintenance

EVEN WITH PROPER SITING, DESIGN, AND CONSTRUCTION, A SYSTEM WILL HAVE A SHORTENED LIFESPAN IF NOT PROPERLY OPERATED OR MAINTAINED.