Sladden Engineering

PERCOLATION TESTING FOR ONSITE
SEWAGE DISPOSAL FEASIBILITY
PROPOSED GYMNASIUM
JOSHUA SPRINGS CALVARY CHAPEL
57353 JOSHUA LANE
APN 0585-062-65
YUCCA VALLEY, CALIFORNIA

-Prepared By-

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March 13, 2025 Project No. 544-25019
25-02-117

1.0 DESCRIPTION OF SITE AND PROPOSAL

1.1 Joshua Springs Calvary Chapel
57353 Joshua Lane
Yucca Valley, California 92284

Project: Proposed Gymnasium
Joshua Springs Calvary Chapel
57353 Joshua Lane
APN 0585-062-65
Yucca Valley, California

Subject: Percolation Testing for Onsite Sewage Disposal Feasibility

1.2. Location:

The subject property is located at 57353 Joshua Lane in the Town of Yucca Valley, California. The property is formally identified by the County of San Bernardino as APN 0585-062-65 and occupies a total area of approximately 22.87 acres. At the time of our investigation, the site was occupied by various facility buildings, parking areas, a baseball diamond and landscape areas. The proposed gymnasium will be constructed in the southwest quarter of the property, just west of the existing baseball diamond. The site is near the elevation of the adjacent properties and roadways and is located at approximately 34.0946 degrees north latitude and 116.4128 degrees west longitude (Plate 1). The site is near the elevation of the adjacent properties and roadways and is generally bounded by Joshua Lane to the north, Joshua View Drive/Kingston Avenue to the east, Neaglesa Street to the south and Hardesty Drive to the west.

1.3 Proposed Development:

a) Based on the provided Site Plan (NV5, 2024), it is our understanding that the project will consist of constructing a new gymnasium on the property. Underground utilities, concrete flatwork, landscape areas and various associated improvements are also anticipated. The new gymnasium will be serviced by an onsite sewage disposal system consisting of a septic tank and seepage pits.

1.4 Description of Site and Surroundings:

a) Overall regional surface gradients descend to the north at inclinations of ten horizontal to one vertical and less (10H:1V). The project site is located at an elevation of approximately 3,645 feet above mean sea level (MSL)[1].
b) No natural ponding of water or surface seeps were observed at or near the site during our investigations conducted on February 12, 2025. Site drainage appears to be controlled via sheet flow and surface infiltration. A "blue line" stream is located just west of the proposed gymnasium location.
c) It is assumed that the properties within the vicinity of the project site are utilizing individual on-site sewage disposal systems consisting of septic tanks and leach lines or seepage pits.
d) No water wells were identified on-site during our field investigation. The site vicinity is serviced by the Hi-Desert Water District.
e) No bedrock outcrops were observed on the subject property or in the immediate site vicinity. The underlying earth materials consists of fine to coarse-grained silty sand (SM) and sandy silt (ML).
f) Bedrock was not encountered within the test holes that were excavated to a maximum depth of approximately 51 feet bgs.
g) Groundwater was not encountered within our test holes or exploratory bores that extended to a maximum depth of approximately 50 feet bgs. Information regarding the approximate depth to groundwater provided by the California Department of Water Resources online database indicates that the depth to groundwater is in excess of 100 feet below the existing ground surface in the vicinity of the site. The following table provides a summary of the historic high groundwater depths reported in the project vicinity.

TABLE 1
GROUNDWATER DEPTHS

STATE WELL	LAT/LONG	DISTANCE (KM)	DATE	DEPTH (FT)
01N05E36N001S	34.1217/-116.4225	3.10	06/01/1971	190.1
01N05E36J001S	34.1239/-116.4089	3.25	07/01/1969	Dry Well
01N05E36M004S	34.1253/-116.4214	3.50	03/29/2006	112.33
01N06E31P001S	34.1236/-116.3983	3.50	12/04/1968	307.2
01N05E36L001S	34.1266/-116.4161	3.60	12/01/1998	216
01N05E36M001S	34.1269/-116.4203	3.65	02/14/2006	177.54
01N05E36K003S	34.1273/-116.4130	3.65	03/20/2002	157
01N06E31E001S	34.1289/-116.4033	3.90	04/17/1996	309.25

h) Site geologic features are not expected to have a significant impact on sewage disposal system design.
i) It appears that there will be sufficient area for the on-site sewage disposal system and the required expansion area on the subject site.

[1] United States Geological Survey (USGS), 2021, Yucca Valley South Quadrangle, California-San Bernardino County, 7.5 Minute Series.

2.0 EQUIPMENT

a) Two (2) test holes were excavated on the subject property using a truck-mounted drill-rig (Mobile B-61) equipped with 8-inch outside diameter augers.
b) Tools used during testing consisted of a water level measuring device, a multi-timer application, and a 500-gallon truck-mounted water tank.

3.0 METHODOLOGY AND PROCEDURES

3.1 The test hole locations were determined by Global Positioning System (GPS). The approximate locations of the exploratory bore and test holes are indicated in the attached Exploration Location Plan (Figure 3).

3.2 The test results and soil conditions encountered during our site exploration indicated "favorable" conditions. The percolation test rates determined by testing were consistent with the alluvial soil conditions observed throughout the subject parcel. The surface gradient throughout the site is less than 30 percent.

3.3 The soil encountered in our exploratory bores and test holes consisted primarily of fine- to coarse-grained silty sand (SM) and sandy silt (ML).

3.4 Test procedures for seepage pits:

a) Prior to testing, the County of San Bernardino DEHS was notified of the intent to perform percolation testing.
b) Two (2) exploratory bores and two (2) percolation test holes were excavated on the project site. The test holes were excavated to approximate depths of 30 and 20 feet below the existing grade for P-1 and P-2, respectively.
c) The test bores were cased with perforated pipe and gravel packed to prevent sedimentation during testing.
d) Each test hole was filled with water to the ground surface. Since more than half of the wetted depth percolated through the test holes within two consecutive readings, percolation testing was initiated immediately.
e) Percolation testing was performed by filling the test holes with water and recording the drop in the water surface with time. Testing was performed in accordance with San Bernardino County DEHS procedures.

3.4 Seepage Pit Test Results

TABLE 2
SEEPAGE PIT TEST RESULTS

Test Hole No.	Depth (Ft)	USCS	Q gal/sq. ft/day	Q gal/sq. ft/day (w/GPC)
P-1	30	SM/ML	10.3	5.5
P-2	20	SM/ML	8.2	4.4

4.0 DISCUSSION OF RESULTS

4.1 Testing indicates percolation rates of 4.4 and 5.5 gallons per square foot per day as determined by San Bernardino County procedures.

4.2 Measurements were considered accurate and the consistency of the individual test results indicates accuracy. The rapid percolation rates are consistent with that expected for the sandy soil encountered throughout the depth of our bores.

5.0 DESIGN

5.1 Criteria:

a) Seepage pits may be designed using **4.0 gallons per square foot of seepage pit area per day (Q)** in accordance with San Bernardino County guidelines. **A design rate of 25 square feet per 100 gallons of septic tank capacity should be utilized for design.**

b) The following presents the estimated waste/sewage flow rates based on Occupancy Category on CPC Table H201.1(4) as follows:

- Occupancy Category: Schools – Intermediate and high (per student)
- Gallons (per student): 20
- Estimated number of students: 100
- Estimated Flow: 100 x 20 = 2000 gpd

c) The following table provides the fixture count provided by the design team:

FIXTURE COUNT

PLUMBING FIXTURE	NUMBER	FIXTURE UNIT	TOTAL
Floor (Mop) Sink	1	3	3
Lavatory Sink	7	1	7
*Water Closet	9	6	54
Urinal	5	3	15
Drinking Fountain	1	1	1

*Water closets shall be computed as 6 f/u when determining septic tank sizes (CPC Table 702.1)

d) Based on the calculated fixture count from the design team, and the San Bernardino County LAMP, the liquid capacity of the septic tank should be based on California Plumbing Code Table H201.1(1) for a maximum fixture unit count of 80 (3,000 gstc).

e) The estimated daily wastewater flow was determined from the following equation. For sizing purposes, a commercial factor of safety of +30% (1.3 F.O.S.) was applied to the estimated flow for absorption area calculations.

- Flow x 0.75 + 1125 = gstc
- Flow = (3000 -1125)/0.75
- Flow = 2,500 + 30% = **3250 gallons per day.**

f) The absorption area (seepage pit side wall area) required for the sewage disposal system is as follows:

- Flow / Design Rate (Q)
- (3250 gallons per day)/(4 gallons per Ft^2 per day) = **812.5 Ft^2**

g) Depth: The following calculation may be utilized to determine the seepage pit design depth below the inlet:

- Absorption Area (Ft^2) / (Diameter x Π)
- 812.5 Ft^2 / (5 x Π) = **51.7 Ft**

h) **OWTS DESIGN SUMMARY**
Applicate Rate (gal/ft^2/day): 4.0
Estimated Daily Wastewater Flow (gallons): 2,500
Septic Tank Size (gallons): 3000
Pit Diameter (ft): 5
Design Depth Below Inlet (ft): 2 seepage pits @ 26 Feet below inlet

6.0 SEE ATTACHED EXPLORATION LOCATION PLAN AND OWTS PLAN

7.0 GENERAL DISCUSSION AND CONCLUSIONS

7.1 Based on the data presented in the report, it is the judgment of this engineer that seepage pits may be used for the sewage disposal on this property.

7.2 Based on the data presented in this report and the tested information accumulated, it is the judgment of the engineer that the groundwater table should not encroach with the allowable limit set forth by County and State requirements, when the recommendations of this report are followed. Also, there appears to be sufficient area for the proposed on-site sewage disposal systems and future expansion.

7.3 All minimum setback distances shall be maintained for the proposed sewage disposal system in accordance with San Bernardino County guidelines[2].

8.0 GENERAL

The findings and recommendations presented in this report are based upon interpolating the soil conditions between bore locations and extrapolating the conditions throughout the sewage disposal system area. Should conditions encountered during grading (or excavation) appear different than those indicated in this report, this office should be notified.

[2] San Bernardino Public Health, Environmental Health Services, Percolation Testing and Reporting Standards for Onsite Wastewater Treatment Systems, Revised September 2019; Appendix D.

This report is considered applicable for use by the client for the specific site and project described herein. The use of this report by other parties or for other projects is not authorized.

We appreciate the opportunity to provide service to you on this project. If you have any questions regarding this report, please contact the undersigned.

Respectfully submitted,
SLADDEN ENGINEERING

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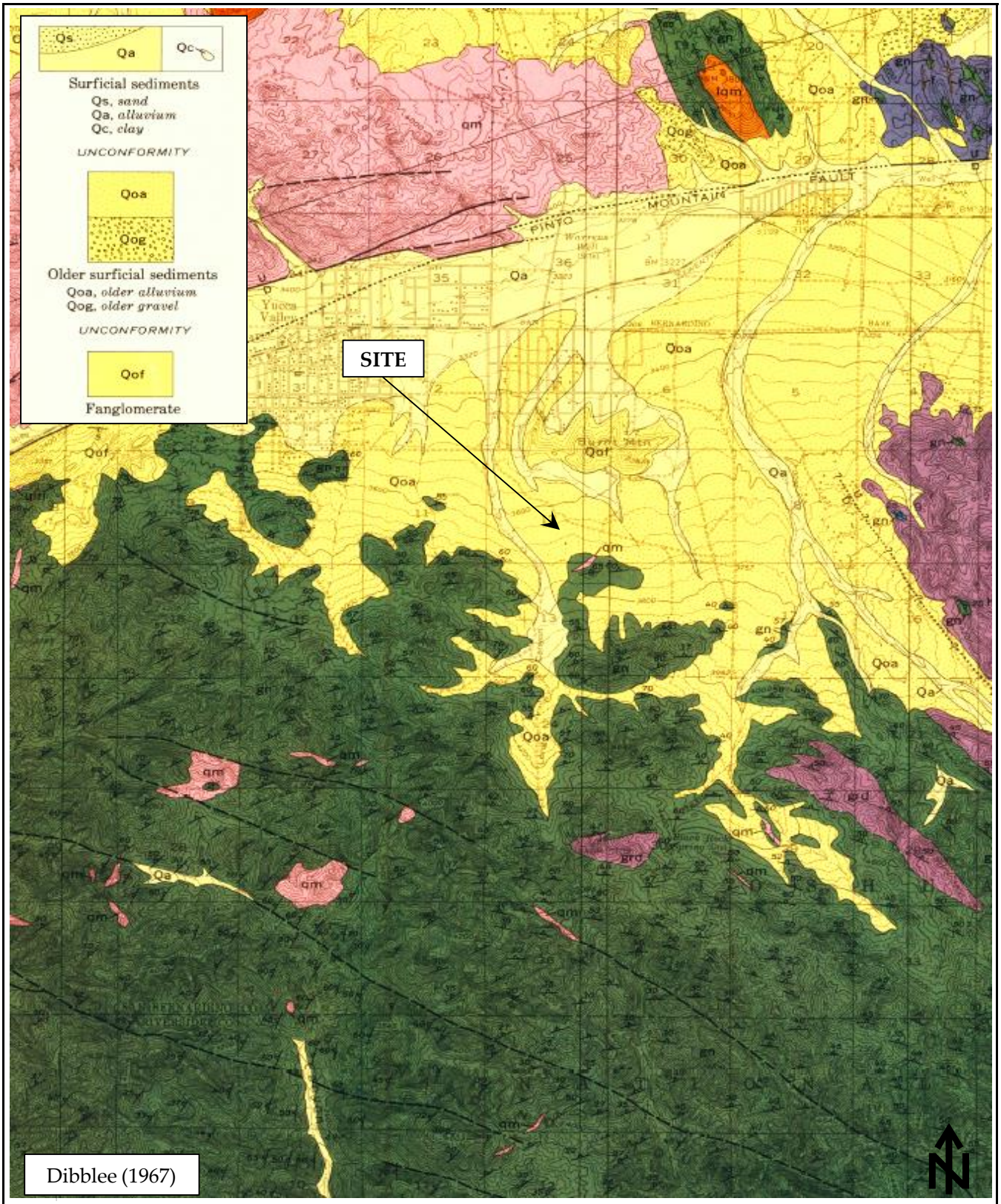
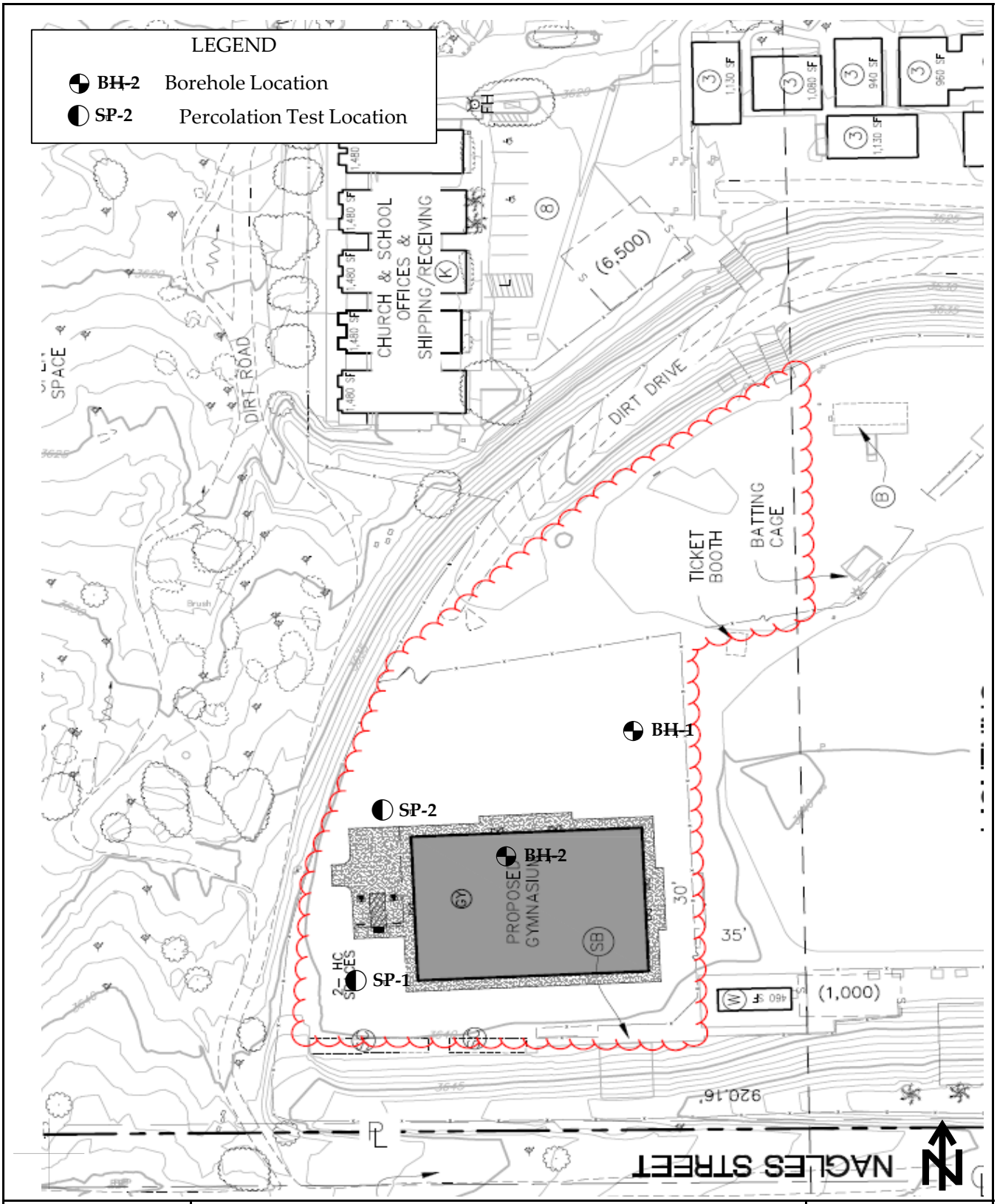
SITE LOCATION MAP
REGIONAL GEOLOGIC MAP
EXPLORATION LOCATION PLAN
OWTS PLAN

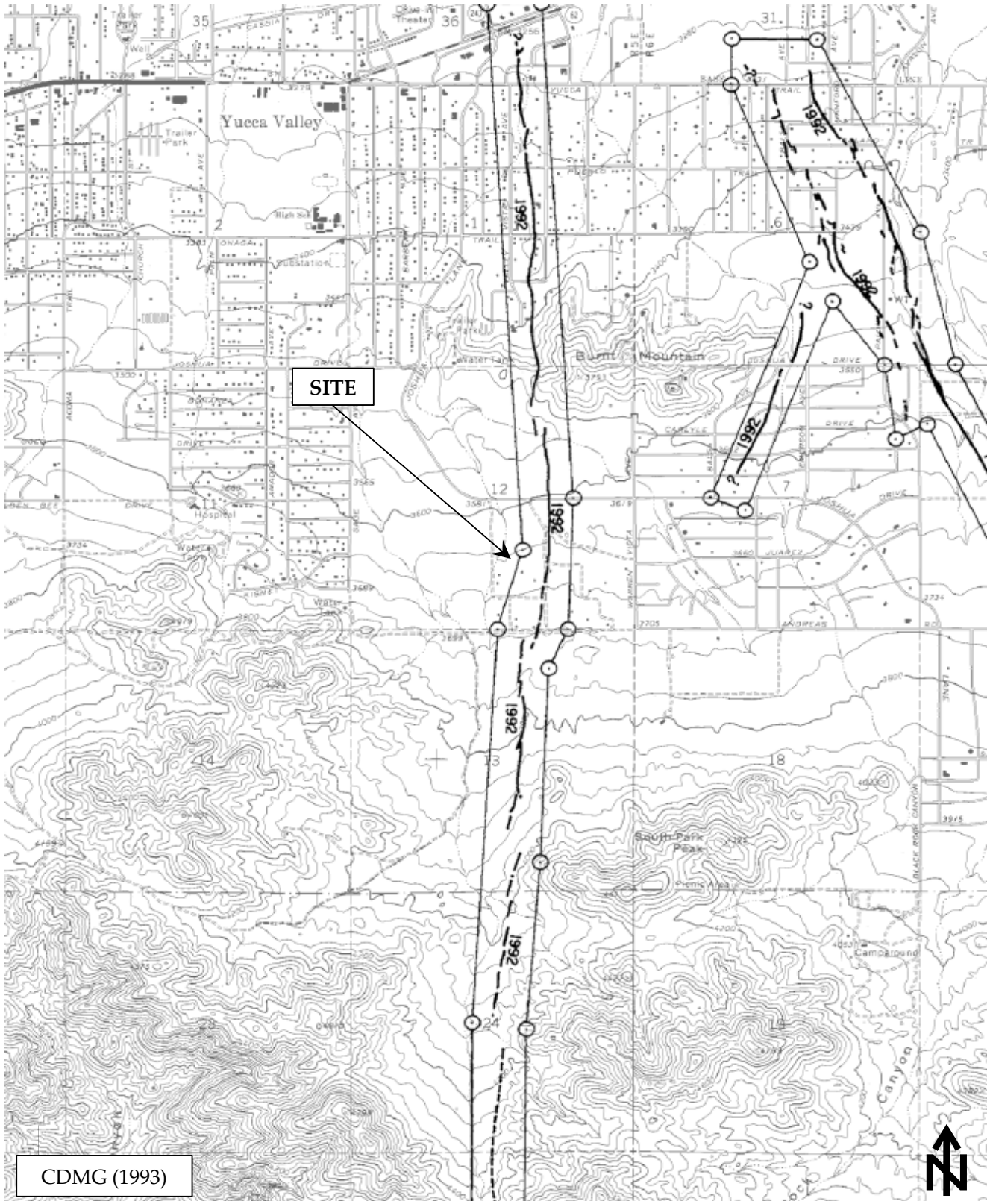
	SITE LOCATION MAP		PLATE
Sladden Engineering	Project Number:	544-25019	1
	Report Number:	25-02-117	
	Date:	April 8, 2025	



Sladden Engineering	REGIONAL GEOLOGIC MAP	PLATE 2
	Project Number: 544-25019	
	Report Number: 25-02-117	
	Date: April 8, 2025	



Sladden Engineering	EXPLORATION LOCATION PLAN	PLATE 3
	Project Number: 544-25019	
	Report Number: 25-02-117	
	Date: April 8, 2025	



Sladden Engineering	FAULT ZONE MAP		PLATE 4
	Project Number:	544-25019	
	Report Number:	25-02-117	
	Date:	April 8, 2025	

Sladden Engineering	FAULT ZONE OVERLAY	PLATE 5
	Project Number: 544-25019	
	Report Number: 25-02-117	
	Date: April 8, 2025	

BORELOGS

Sladden Engineering

BORE LOG

Equipment:	Mobile B-61	Date Drilled:	2/12/2025
Elevation:	3,645 Ft. MSL	Boring No:	BH-1

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
■	31 50	1	0	21.3	5.2	136.3	2		Silty Sand (SM); dark yellowish brown, slightly moist, dense, fine- to coarse-grained with clay (Fill/Disturbed).
							4		
■	7 8 8			20.3	4.7	127.2	6		Silty Sand (SM); dark yellowish brown, slighly moist, fine- to coarse-grained (Qoa)
							8		
▯	12 13 16			4.5	2.5		10		Sand (SP); dark yellowish brown, dry, medium dense, fine- to coarse-grained (Qoa).
							12		
■	11 15 19			20.1	7.1	106.5	14		Silty Sand (SM); dark yellowish brown, moist, medium dense, fine- to coarse-grained with trace clay (Qoa).
							16		
▯	13 15 16			6.5	3.4		18		Sand (SW-SM); dark yellowish brown, dry, fine- to coarse-grained with gravel (Qoa).
							20		
■	15 21 25			5.6	2.6		22		Sand (SW-SM); dark yellowish brown, dry, medium dense, fine- to coarse-grained (Qoa).
							24		
▯	12 13 15			5.6	2.6		26		Sand (SW-SM); dark yellowish brown, dry, medium dense, fine- to coarse-grained (Qoa).
							28		
■	18 36 37			3.8	1.5	106.2	30		Sand (SW); dark yellowish brown, dry, dense, fine- to coarse-grained (Qoa).
							32		
▯	12 17 18			4.4	2.1		34		Sand (SW); dark yellowish brown, dry, dense, fine- to coarse-grained (Qoa).
							36		
■	15 24 50			4.8	1.7	112.2	38		Sand (SW); dark yellowish brown, dry, dense, fine- to coarse-grained (Qoa).
							40		
▯	15 16 16			6.6	2.8		42		Sand (SW); dark yellowish brown, dry, dense, fine- to coarse-grained (Qoa).
							44		
							46		
							48		
							50		

Completion Notes:
Terminated at ~51.5 Feet bgs.
No Bedrock Encountered.
No Groundwater or Seepage Encountered.

PROPOSED GYMNASIUM
57353 JOSHUA LANE, YUCCA VALLEY

Project No: 544-25019
Report No: 25-02-117

Sladden Engineering

BORE LOG

Equipment:	Mobile B-61	Date Drilled:	2/12/2025
Elevation:	3,645 Ft. MSL	Boring No:	BH-2

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							0		Silty Sand (SM); dark yellowish brown, slightly moist, fine- to coarse-grained with clay (Fill).
							2		
							4		Silyt Sand (SM); very dark brown, moist, loose, fine to coarse-grained (Fill).
	3 3 2				13.3		6		
							8		
	8 9 11				5.2	116.7	10		Silty Sand (SM); dark yellowish brown, moist, medium dense, fine- to coarse-grained (Qoa).
							12		
							14		
	6 10 12				5.0		16		Sand (SW-SM); dark yellowish brown, moist, medium dense, fine- to coarse-grained (Qoa).
							18		
	19 23 27				3.7	126.8	20		Sand (SW); dark yellowish brown, dry to slightly moist, dense, fine- to coarse-grained with gravel (Qoa).
							22		
							24		
	11 14 19				3.4		26		Sand (SW-SM); dark yellowish brown, dry, dense, fine- to coarse-grained (Qoa).
							28		
	14 17 21				3.1	115.2	30		Sand (SW-SM); dark yellowish brown, dry, slightly moist, medium dense, fine- to coarse-grained (Qoa).
							32		
							34		Terminated at 31.5 Feet bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

PROPOSED GYMNASIUM
57353 JOSHUA LANE, YUCCA VALLEY

Project No: 544-25019
Report No: 25-02-117

Sladden Engineering

BORE LOG

Equipment:	Mobile B-61	Date Drilled:	2/12/2025
Elevation:	3,645 Ft. MSL	Boring No:	SP-1

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							0–6		Silty Sand (SM); dark brown, moist, fine- to coarse-grained with roots (Fill).
							6–22		Sand (SW-SM); dark yellowish brown, dry to slightly moist, fine- to coarse-grained (Qoa).
							22–30		Silty Sand (SM); dark brown, moist, fine to coarse-grained (Qoa).
■				19.3	4.9				
							30–50		Terminated at 30.0 Feet bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.

Completion Notes:

PROPOSED GYMNASIUM
57353 JOSHUA LANE, YUCCA VALLEY

Project No: 544-25019
Report No: 25-02-117

Sladden Engineering

BORE LOG

Equipment:	Mobile B-61	Date Drilled:	2/12/2025
Elevation:	3,645 Ft. MSL	Boring No:	SP-2

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							0–6		Silty Sand (SM); dark brown, moist, fine- to coarse-grained with roots (Fill).
							6–20		Sand (SW-SM); dark yellowish brown, dry to slightly moist, fine- to coarse-grained (Qoa).
							20		Terminated at 20.0 Feet bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.

Completion Notes:

PROPOSED GYMNASIUM
57353 JOSHUA LANE, YUCCA VALLEY

Project No: 544-25019
Report No: 25-02-117

SEEPAGE PIT DATA SHEETS

SEEPAGE PIT APPLICATION RATE CALCULATOR

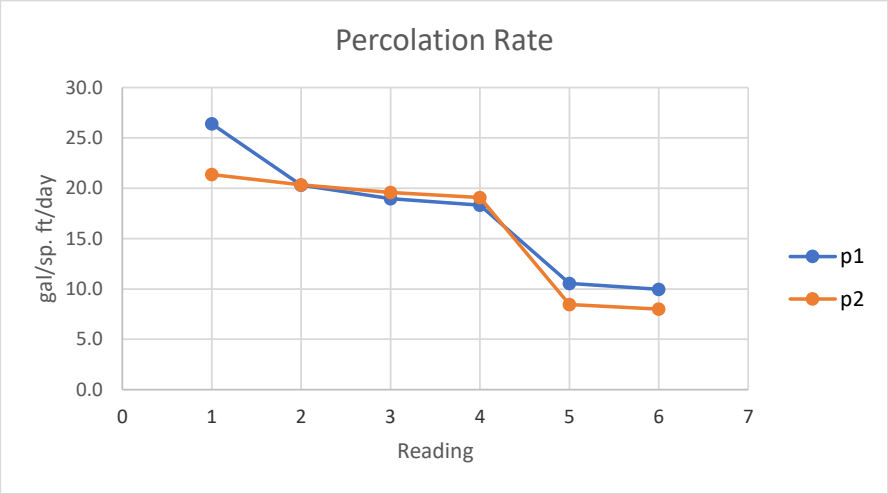
Job No. 544-25019 **Job Name:** 57353 Joshua Lane, Yucca Valley **Report No.** 25-02-117

Test Hole: P-1 GPC 0.54 Final Rate 5.5 gal./sq.ft./day

Reading No.	Db (ft) Hole Depth	Di (ft) Depth	Df (ft) Depth	F (ft) Drop	Wet Depth Lavg (ft)	Time T (hr)	D -Hole Dia. (ft)	Q gal./sq. ft./day	Pit mpi
A	30	0	29.5	29.5	15.25	0.50	0.50	17.4	10.3
B	30	0	28.6	28.6	15.7	0.50	0.50	16.4	11.0
1	30	0	19.7	19.7	20.15	0.17	0.50	26.4	6.8
2	30	0	16.4	16.4	21.8	0.17	0.50	20.3	8.9
3	30	0	15.6	15.6	22.2	0.17	0.50	19.0	9.5
4	30	0	15.2	15.2	22.4	0.17	0.50	18.3	9.8
5	30	4	12.5	8.5	21.75	0.17	0.50	10.6	17.1
6	30	4	12.1	8.1	21.95	0.17	0.50	10.0	18.1
7									
8									
9									
10									
11									
12									

Test Hole: P-2 GPC 0.54 Final Rate 4.4 gal./sq.ft./day

Reading No.	Db (ft) Hole Depth	Di (ft) Depth	Df (ft) Depth	F (ft) Drop	Wet Depth Lavg (ft)	Time T (hr)	D -Hole Dia. (ft)	Q gal./sq. ft./day	Pit mpi
A	20	0	17.6	17.6	11.2	0.50	0.50	14.1	12.7
B	20	0	15.6	15.6	12.2	0.50	0.50	11.5	15.6
1	20	0	11.5	11.5	14.25	0.17	0.50	21.4	8.4
2	20	0	11.1	11.1	14.45	0.17	0.50	20.3	8.9
3	20	0	10.8	10.8	14.6	0.17	0.50	19.6	9.2
4	20	0	10.6	10.6	14.7	0.17	0.50	19.1	9.4
5	20	4	8.4	4.4	13.8	0.17	0.50	8.4	21.3
6	20	4	8.2	4.2	13.9	0.17	0.50	8.0	22.5
7									
8									
9									
10									
11									
12									



Gravel Pack Correction Formula: $(1+P(C^2-1))/C^2$ 0.54

Quikrete Washed 3/4" Gravel:

P = % Voids: 46%

C= r_2/r_1: 2.67

r_2= radiuis of hole: 4

r_1=radius of pipe: 1.5

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TAKING CARE OF YOUR SEPTIC SYSTEM

SAN BERNARDINO COUNTY

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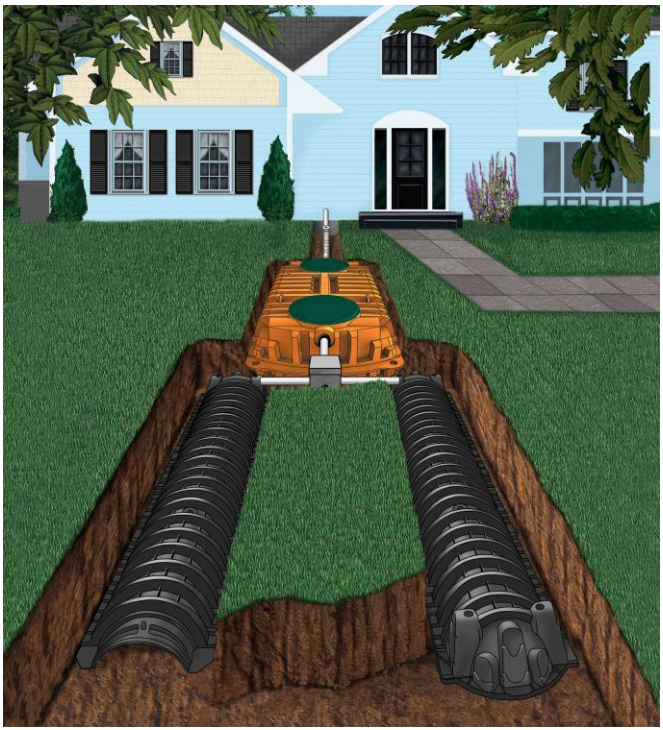
TAKING CARE OF YOUR SEPTIC SYSTEM

WHAT YOU NEED TO KNOW



DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH SERVICES

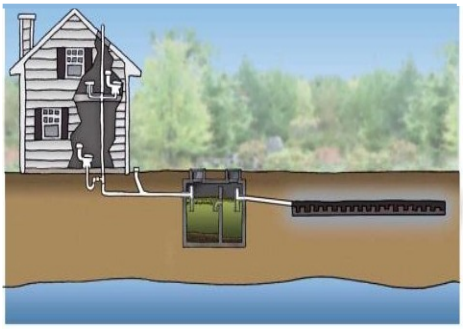
385 N Arrowhead Ave., 2nd Floor
San Bernardino, CA 92415
1-800-442-2283

TABLE OF CONTENTS

Reading this brochure could save you a lot of money, time, and trouble. By learning how to take care of your septic system, you can protect your family's health and the value of your home. You can also protect the environment, including your drinking water, from contamination caused by your septic system.

What Is A Septic System?

A septic system is made up of a septic tank and a leachline or seepage pit (dispersal soil absorption area) buried in the ground near your home. This system treats wastewater and sewage from your toilets, showers, washing machines, garbage disposals, kitchens, etc., where public sewer systems are not available.



The septic tank is a concrete, fiberglass, Polyethylene or steel box about nine feet long and five feet deep and wide. The tank is usually buried about five feet from the house under one to three feet of soil. The leachline is a gravel-filled underground trench, whereas a seepage pit is a vertical hole in the ground with a concrete block lid and walls that are covered with soil. The pit measures 4-6 feet in diameter and 15-40 feet deep.

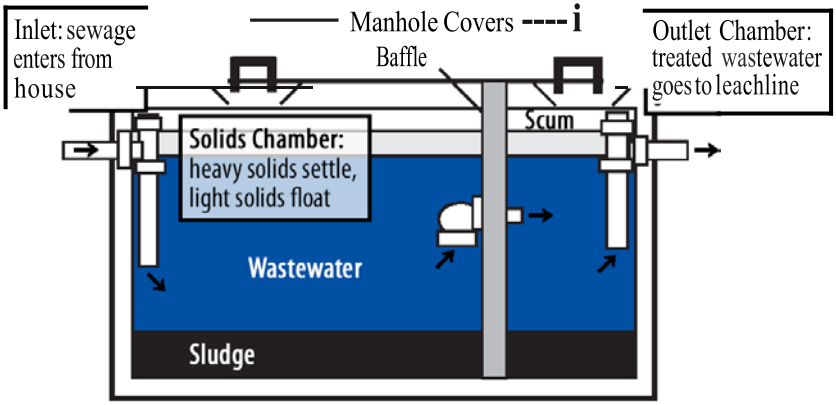
What Does A Septic System Do?

A septic tank has three main functions to:

1) Remove and treat greases and solids in the wastewater;
2) Store greases and solids until they are removed by a professional septic tank pumper; and
3) Slowly release wastewater to a dispersal system so it can be absorbed by the soil.

Wastewater from your home flows into a two-chamber septic tank. In the first solids chamber, greases and light solids in the water rise to the surface of the liquid, forming a scum layer, while heavier materials sink to the bottom and form a sludge layer. Anaerobic bacteria digest (break down) solids in the sludge layer to reduce sludge buildup. The third layer is the clarified wastewater which flows to the second liquids chamber where further settling occurs.

Typical Concrete Septic Tank



The treated wastewater flows from the liquid chamber to the dispersal soil absorption area, where it seeps down into the soil. Bacteria trapped in the soils continue treating the wastewater. Every time raw sewage flows into the tank, an equal amount of treated wastewater flows out.

What Could *Go* Wrong?

Septic Tank Failure

Ignoring your septic system could cost you thousands of dollars for repair or replacement. If your tank is not pumped regularly, scum and sludge will fill up the tank, overflow into the dispersal

area and plug up the soil. This causes the leachline to fail and the wastewater to rise to the surface of the ground. Failure of a leachline means a new leachline or seepage pit must be constructed with a permit from the County or City Building and Safety Department.

Other factors can also cause septic system failure. Wasting water, or even too many people living in the house, can cause a septic system to fail. Your septic system was designed according to the number of bedrooms in the home with an average of two people per bedroom. Because the soil can only absorb a limited amount of water, conserving water can help you stay under the daily limit.

This chart shows how much wastewater your tank can process in a 24-hour period:

Bedrooms	Estimated Gallons of Wastewater per Day	Septic Tank Capacity in Gallons
1-2	500	750
3	670	1000
4	800	1200
5-6	1000	1500

Water draining into the leachline from gutters, or even heavy rains, can overload the system and cause it to fail.

Health Hazard

Failure of a septic system is a serious health hazard and could threaten the health of your family and neighbors. Children and adults could come in contact with raw (untreated) sewage. Pets, insects, rodents, and birds could pick up and carry disease causing organisms to you and your family. Furthermore, it usually stinks.

Water Contamination

The first sign of failure is sewage where you don't want it, such as:

- Sewage running into the tub when you flush the toilet
- Sewage rising to the surface of the ground above the leachline, especially after storms
- Slow draining toilets/drains or toilets that won't flush
- Gurgling sounds in pipes and drains
- Mushy ground or lush, green grass near septic system area
- Strong sewage odors and possible complaints from your neighbors

What Can I Do? Important Ways to Keep Your Septic System Running Well

Do **have your tank pumped by a County-licensed septic tank pumper every two to four years.** Have both compartments pumped. To see if your tank needs to be pumped, remove the manhole cover at the inlet end (the end closest to the house). Use a shovel to push the scum layer away from the side of the tank to estimate its thickness. If the scum layer is more than one foot thick, have your tank pumped immediately! Replace the manhole cover and wash your hands and shovel. Yearly inspection of the septic tank is strongly recommended. Check your phone book yellow pages for a licensed Septic Tank Pumper. If your tank does not have risers to grade, install them over both chambers.

Do **keep a record of all pumpings, inspections, installations and other maintenance.** Keep this brochure and use the back page to record this information. This record should remain in the

house, even if you move. If you buy a house with a septic system, make sure you get a record and layout from the owner. They are responsible for keeping the records.

Do **call your City or County Building and Safety Department if your system fails within five years of the installation date.** This could mean your system was not designed, constructed or installed properly. DEHS does not have final plans on what was installed.

Do **find out where your septic tank and leachline are.** Your licensed pumper can help you draw a sketch of the septic system layout, including the location of the manholes, tank, piping and leachline. Remember, pumping your tank or installing a new leachline will cost more if the pumpers or contractors have to dig and search for the tank or leachline. Also, install an effluent filter on the outlet line to prevent solids from plugging the soil.

Do **conserve water.** Repair dripping faucets and leaking toilets. Avoid taking long showers and use water saving toilets, shower heads and faucets. Don't leave faucets running for long periods of time. Use your dishwasher or clothes washer only when the machine has a full load. Using your garbage disposal will also fill up your septic tank much faster.

Do **use bleach, disinfectants, and drain/toilet bowl cleaners sparingly and according to labels.** Take your leftover household hazardous chemicals to a Household Hazardous Waste Collection Center. For more information on household hazardous waste disposal call (909) 382-5401.

Do **reserve additional land equal to or larger than your present septic system area for future use.** This is needed when the original system fails. Do not build over the existing system or expansion area.

Tips to Avoid Trouble

Do Not **wait until your septic system fails to have your tank pumped.** It is cheaper and easier to prevent system failure than to correct a failed system or to install a new system. Remember, once the leachline is clogged, cleaning the tank will do little good. You will need a new leaching area.

Do Not **waste money on chemical, yeast, bacteria or enzyme additives.** These products have been evaluated by the EPA and it has been determined that they usually don't prevent problems. These products could hurt your system in the long run, or even contaminate groundwater. Only regular tank pumpings by professional licensed septic tank pumpers can help.

Do Not **destroy an old, failed leachline.** It may be used again by letting the old leachline dry out, or rest, for three to five years. DEHS recommends installing a diversion valve when your new leachline is built to change the flow of wastewater from the new line to the old line. After the three to five year waiting period, you can release the wastewater to the new line on even-numbered years and to the old line on odd-numbered years. If you let a leaching area rest every other year and have your septic tank pumped regularly, the leachline(s) should last the life of your home or building.

Do Not **allow anyone to drive, park or pave over any part of the system.** Traffic vibration or heavy weight could damage pipes and your seepage pits. The area over the leachline should be left undisturbed with only a mowed grass cover. Keep trees and shrubs away from your septic system area. Their roots could clog or damage your leachline(s).

Do Not **use your toilet and sink as a trash can to dump non- degradable (things that do not dissolve).** Keep things like vegetable trimmings, cooking oils, greases, coffee grounds, cigarette butts, Kleenex, paper towels, disposable diapers, and sanitary pads out of your septic tank. Use good quality white toilet paper that breaks up easily when wet. Dyes from colored toilet paper can hurt the bacteria.

Do Not **contaminate the groundwater or harm your septic system by pouring harmful chemicals down the drain or toilet.** Large amounts of cleaning products can kill the good bacteria in your septic tank that treat wastewater. Read the instructions on the labels and use only as directed.

KEEP THESE MATERIALS OUT OF YOUR SEPTIC SYSTEMS!

Non-degradable: grease, paper towels, plastics, coffee grounds, cigarette butts, disposable diapers, etc.

Hazardous Waste: paints and paint thinners, used motor oil, pesticides, antifreeze, weed killers, etc.

WHERE IS MY SEPTIC SYSTEM?

One method to locate a septic tank is by probing with a metal rod or by listening to the noise a plumber's snake makes when it contacts the tank inlet. Care must be utilized during the probing as it may damage the inlet fitting or piping.

Another method is by making a water probe with *W"* X 6' galvanized water pipe or PVC, threaded on one end. Purchase a pipe-to-hose fitting or use duct tape as a temporary fitting. Turn the water on and sink the probe into the ground. The water will do the digging. Set up a grid pattern and probe every 1 to 2 feet until the tank is found. The top of the septic tank is usually 2 to 4 feet beneath the surface. Legally, septic tanks can be no closer than 5 feet from the house so begin probing 6 to 7 feet from the house. Typically, the septic tank is in the front yard but the system might be in the rear yard or even under a patio slab.

SAVE THESE IMPORTANT SEPTIC SYSTEM RECORDS!

SEPTIC TANK ADDRESS:

SEPTIC TANK
Installation Date/Size (gallons)

CONTRACTOR
Name/Phone Number

SEPTIC TANK/SEEPAGE PIT PUMPING

LEACHLINES/SEEPAGE PIT
Installation Dates/Length, Width, Depth of Rock

SAN BERNARDINO COUNTY

Department of Public Health | Division of Environmental Health Services | 800-442-2283 | www.SBCounty.gov/dph/dehs