

**PERCOLATION FEASIBILITY INVESTIGATION
PROPOSED COMMERCIAL/LIGHT
INDUSTRIAL PROJECT
APN 0239-311-01-0000
LYTLE CREEK AREA, CALIFORNIA**

**PROJECT NO. 13789.4
FEBRUARY 15, 2022**

Prepared For:

Land Engineering Consultants, Inc.
P.O. Box 541
Calimesa, California 92320

Attention: Mr. Daniel J. Haskins

February 15, 2022

Land Engineering Consultants, Inc.
P.O. Box 541
Calimesa, California 92320

Project No. 13789.4

Attention: Mr. Daniel J. Haskins

Subject: Percolation Feasibility Investigation, Proposed Commercial/Light Industrial Project, APN 0239-311-01-0000, Lytle Creek, California.

In accordance with your request, this firm has performed a Percolation Feasibility Investigation for the proposed project within APN 0239-311-01-0000 in Lytle Creek, California. This investigation was planned and executed based on available drawings and other information furnished to this office, and in accordance with the County of San Bernardino Percolation Testing and Reporting Standards for onsite Wastewater Treatment Systems (2019). The results of our percolation tests and our recommendations are included in this report.

We appreciate the opportunity to continue working with you on this project. If you have any questions or comments please do not hesitate to contact us at your convenience.

LOR Geotechnical Group, Inc.

Table of Contents

	<u>Page No.</u>
DESCRIPTION OF PROJECT.....	1
Prepared For.	1
Location of Project.	1
Proposed Development.	1
Description of Site and Surroundings.	1
EQUIPMENT.	2
SOIL CONDITIONS.	2
METHODOLOGY AND PROCEDURE.....	3
Locations of Trenches and Percolation Tests.	3
Number of Trench and Percolation Tests.....	3
Tests Procedures.	3
Pre-Soaking Period.	3
Measurement of the Percolation Rate.	3
Table of Final Results.....	3
DISCUSSION OF RESULTS.	4
DESIGN.	4
General Criteria.	4
System Design.	5
System Layout.	5
PLOT PER CURRENTLY ADOPTED PLUMBING CODE.....	6
GENERAL DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS.....	6
CLOSURE.	7
REFERENCES.....	8

Table of Contents

Page No.

APPENDICES

Appendix A

Index Map.....	A-1
Site Plan.....	A-2
Septic System Plot Plan.....	A-3

Appendix B

Soil Classification Chart.....	B-i
Trench Log.....	B-1

Appendix C

Percolation Test Results.....	C-1 through C-4
-------------------------------	-----------------

DESCRIPTION OF PROJECT

1) Prepared For:

Land Engineering Consultants, Inc.
P.O. Box 541
Calimesa, California 92320
(909)795-8882
Mr. Daniel J. Haskins

2) Location of Project:

The site is an irregular shaped parcel of land located at 3112 Lytle Creek Road, approximately one mile north of the Interstate 15 freeway, near the mouth of Lytle Creek Canyon, in San Bernardino County, California. The approximate location of the site is shown on the attached Index Map, Enclosure A-1, Appendix A.

3) Proposed Development:

- a) Type of Project: Construction of two, 15,000 square-foot warehouse buildings will result in the need for an onsite sewage disposal system for a 1,500 gallon septic tank.
- b) Lot Size: APN 0239-311-01-0000 is 16.00 acres.
- c) Type of Sewage Disposal: This report addresses the feasibility of placing a single septic tank and leach line wastewater disposal system for both buildings within the site.

4) Description of Site and Surroundings:

- a) Topography: The topography of the site is planar with a very gentle slope towards the south-southeast at gradients averaging approximately 2 to 5 percent. The proposed site layout is shown on the attached Site Plan, Enclosure A-2, within Appendix A.
- b) Watercourses: Grapevine Canyon is an intermittent stream located approximately 200 feet to the northeast at its closest point. This streambed meets with Lytle Creek Wash further to the east of the site.

- c) Vegetation: The area of the proposed onsite sewage disposal systems is currently vacant.
- d) Existing Structures: None.
- e) Wells: An existing onsite water well is located approximately 160 feet north-northeast of the proposed percolation leachfield.
- f) Rock Outcroppings: None.
- g) Probable Depth to Water Table: Groundwater was not encountered in our exploratory trench as advanced to a maximum depth of approximately 15 feet below the existing ground surface. The onsite water well was measured to a depth of 295 feet without water or a bottom encountered. However, the property owner reports that the water table was at a depth of approximately 83 feet when the depth to water in this well was last checked, about 2 to 3 years ago. Therefore, groundwater does not appear to be a factor in the proposed effluent disposal.
- h) Any Other Features That May Affect Sewage Disposal: None.
- i) Grading: No grading is currently proposed within the area of the proposed effluent disposal system.

EQUIPMENT

The equipment used for our percolation testing consisted of a John Deere 410C backhoe with a 36-inch bucket, a 300-gallon, truck mounted water reservoir and dispenser, perforated 6-inch by 12-inch cylinder cans with preset measurement devices installed, and a digital watch.

SOIL CONDITIONS

As encountered within our test pits and exploratory trench, alluvial soils consisting of medium dense, brown, poorly graded sands with gravel are present beneath a one to two-foot thick, near surface layer of loose to medium dense disturbed/topsoil, silty sand materials.

A detailed description of the subsurface conditions as encountered within our exploratory trench presented on the Trench Log, Enclosures B-1, within Appendix B. The locations of the exploratory trench and percolation tests are shown on the attached Site Plan, Enclosure A-2, within Appendix A.

METHODOLOGY AND PROCEDURE

- 1) Locations of Trench and Percolation Tests: See attached Site Plan, Enclosure A-2, within Appendix A.
- 2) Number of Trench and Percolation Tests: Four percolation tests were conducted at a depth of approximately 4 feet below the existing ground surface and an exploratory trench was excavated to a depth of approximately 15 feet below the ground surface in the area proposed for the leach lines.
- 3) Test Procedures: Test procedures were followed in general accordance with Chapter 3 Percolation Testing Procedures of the County of San Bernardino Percolation Testing and Reporting Standards for Onsite Wastewater Treatment Systems (2019). Test holes were hand excavated 14 inches deep at the bottom of the backhoe excavations. The test holes were 6 inches in diameter and 2 inches of gravel was placed at the bottom of the hand excavated hole before a perforated plastic liner was inserted to prevent caving.
- 4) Pre-Soaking Period: Tests P-1 through P-4 were pre-soaked with 5 gallons of water prior to testing on the same day.
- 5) Measurement of the Percolation Rate: Testing was conducted following Section 4.3 - Continuous Pre-Soak Percolation Test Procedure for Leach Lines - as presented within San Bernardino County Public Environmental Health Services Percolation Testing and Reporting Standards for Onsite Wastewater Treatment Systems (2019).
- 6) Table of Final Results: Percolation test results are summarized in the following table:

TABLE OF PERCOLATION TEST RESULTS		
Percolation Test No.	Depth (feet)	Percolation Rate (min/in)
P-1	4.0	1.2
P-2	4.0	1.3
P-3	4.0	1.4
P-4	4.0	1.2

For the detailed field data, see the enclosed Leach Line Percolation Test Data sheets, Enclosures C-1 through C-4, within Appendix C.

DISCUSSION OF RESULTS

Subsurface data and percolation test results indicate that acceptable characteristics for use of a septic tank and leach line waste water disposal system at the project site are present at a depth of approximately 4 feet below the existing ground surface. The site soils were noted to be typically granular with a good percolation rate of approximately 1 minute per inch.

A shallow groundwater condition is not expected at the site. Groundwater was not encountered in our earlier exploratory trench that was advanced to a depth of 15 feet nor during measurement of the onsite water well as part of this investigation as explored to a depth of approximately 295 feet. Groundwater under the site is anticipated to lie at a depth of 80 feet or more, at times, as described earlier under the Probable Depth to Water Table section of this report.

DESIGN

- 1) General Criteria: A design percolation rate of 1 minute per inch was used for design of the effluent disposal system. According to Figure 4.5 of the County of San Bernardino Percolation Testing and Reporting Standards for Onsite Wastewater Treatment Systems (2019), this corresponds to a sewage application rate of 0.83 square feet of leaching area per gallon of effluent per day. The separation between the bottom of the proposed system and the groundwater level is anticipated to meet the current County of San Bernardino Department of Environmental Health Services requirements.

- 2) System Design: The size of the septic tank is based on effluent discharge. The effluent discharge was determined based on the amount of fixture units, 30, proposed for the two warehouse buildings combined (Land Engineering Consultants, Inc., 2022). Based on the fixture units we understand that a minimum 1,500 gallon septic tank will be required for the proposed structures. The estimated waste/sewage flow rate was determined to be two-thirds of the capacity in gallons for the septic tank (UPC, 2018). The leaching area required is estimated based on the sewage application rate (determined from percolation testing). The leach line requirement is then determined to satisfy the required leaching area for a 3 foot wide trench.

TABLE OF LEACH LINE DESIGN		
Gallons of Septic Tank Capacity	Estimated Waste/Sewage Flow Rate (gallon / day)	Leach Line Requirement for a 3-foot wide trench
1,500	1,000	(3) 100-foot lines

- 3) System Layout: The lines should be separated a minimum of 5 feet from wall to wall for systems consisting of 3 feet wide trenches. Leach lines are to have a maximum cover of 4 feet and should be located in natural undisturbed soil at the approximate depth tested. The perforated pipe should be placed within the gravel such that it has a minimum of one foot of gravel above and below it. Since more than one leach line is recommended, a properly designed distribution box should be installed ahead of the leach lines to insure equal flow to each line.

The disposal system must satisfy the setback criteria presented in the County of San Bernardino Percolation Testing and Reporting Standards for Onsite Wastewater Systems (2019). The disposal system should be placed within the area of the percolation testing as shown on the attached Septic System Plot Plan, Enclosure A-3, within Appendix A. This plan illustrates a sample plot plan for the 1,500 gallon tank with infiltration leach field. The one-hundred percent expansion system should replicate the design requirement for the primary disposal systems.

PLOT PER CURRENTLY ADOPTED PLUMBING CODE

A preliminary effluent disposal plot plan is present on Enclosure A-3, within Appendix A. This depicts the primary disposal and 100 percent expansion areas for a system comprised utilizing a 1,500 gallon septic tank and infiltration leach line disposal field.

GENERAL DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

- 1) The leach line system for the site should be constructed in accordance with the County of San Bernardino Department of Environmental Health Services criteria and applicable portions of the Uniform Plumbing Code (UPC).
- 2) According to all information available to this firm, this site contains sufficient area to handle the liquid wastes, provided proper design is achieved. It is our opinion that there is sufficient area on the lot for the system installation plus a one-hundred percent expansion area for the locations tested.
- 3) A copy of this report should be submitted to the County of San Bernardino Department of Environmental Health Services or other applicable agencies for their review and assignment of the final application rate. The design of the leach line systems may need to be revised once the effluent discharge and discharge elevations have been determined for the site.
- 4) Based on the data presented in this report and using recommendations set forth, it is the judgement of this engineer that there is sufficient area on the subject lot to support the sewage disposal system that will meet current codes and standards of the health department.
- 5) Based on the data presented in this report and the testing information accumulated, it is the judgement of the engineer that the groundwater table will not encroach within the current allowable limit set forth by county and state requirements.
- 6) If the determination is made that connection to sanitary sewer is an option, the property owner will be required to connect to sewer within a time frame as determined by the Director.


Land Engineering Consultants, Inc.
February 15, 2022

Project No. 13789.4

CLOSURE

We appreciate this opportunity to be of service and trust this report provides the necessary information. If at any time during the construction phase of this project, any questions should arise concerning the contents of this report or our recommendations, please do not hesitate to contact this firm at your convenience.

Respectfully submitted,
LOR Geotechnical Group, Inc.


John P. Leuer, GE 2030
President



RMM:JPL/ss

Distribution: Addressee (2) and PDF via email dan@lecincorporated.com

REFERENCES

California Department of Water Resources, 2022, Groundwater Level Data, <http://wdl.water.ca.gov/waterdatalibrary>

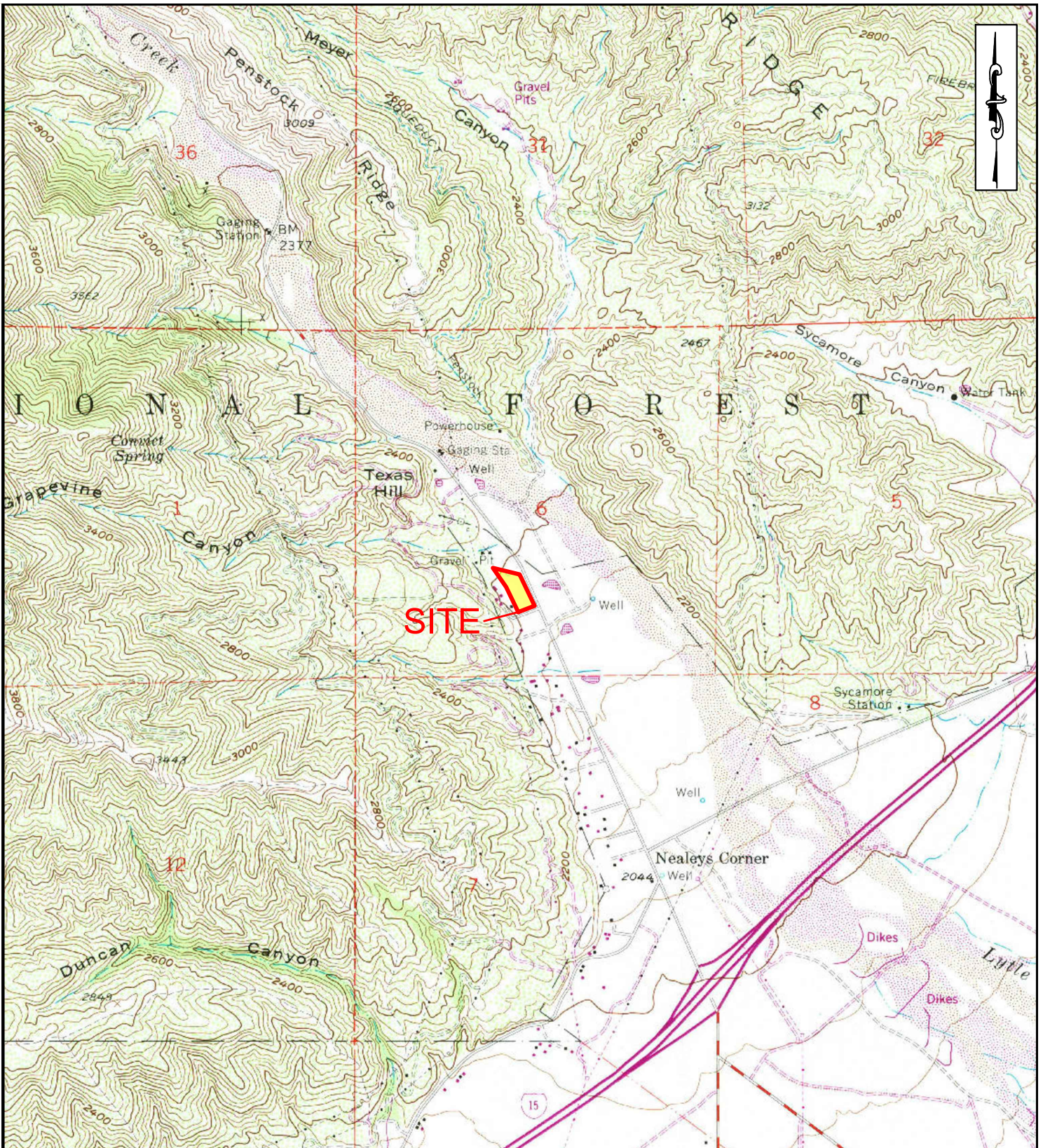
County of San Bernardino Department of Environmental Health Services, 2019, Percolation Testing and Reporting Standards for Onsite Wastewater Treatment Systems. dated September 2019.

International Association of Plumbing and Mechanical Officials, 2018, 2018 Uniform Plumbing Code, Ontario, California.

Land Engineering Consultants, Inc., 2022, Conditional Use Permit - Site Plan, 3112 Lytle Creek Road.

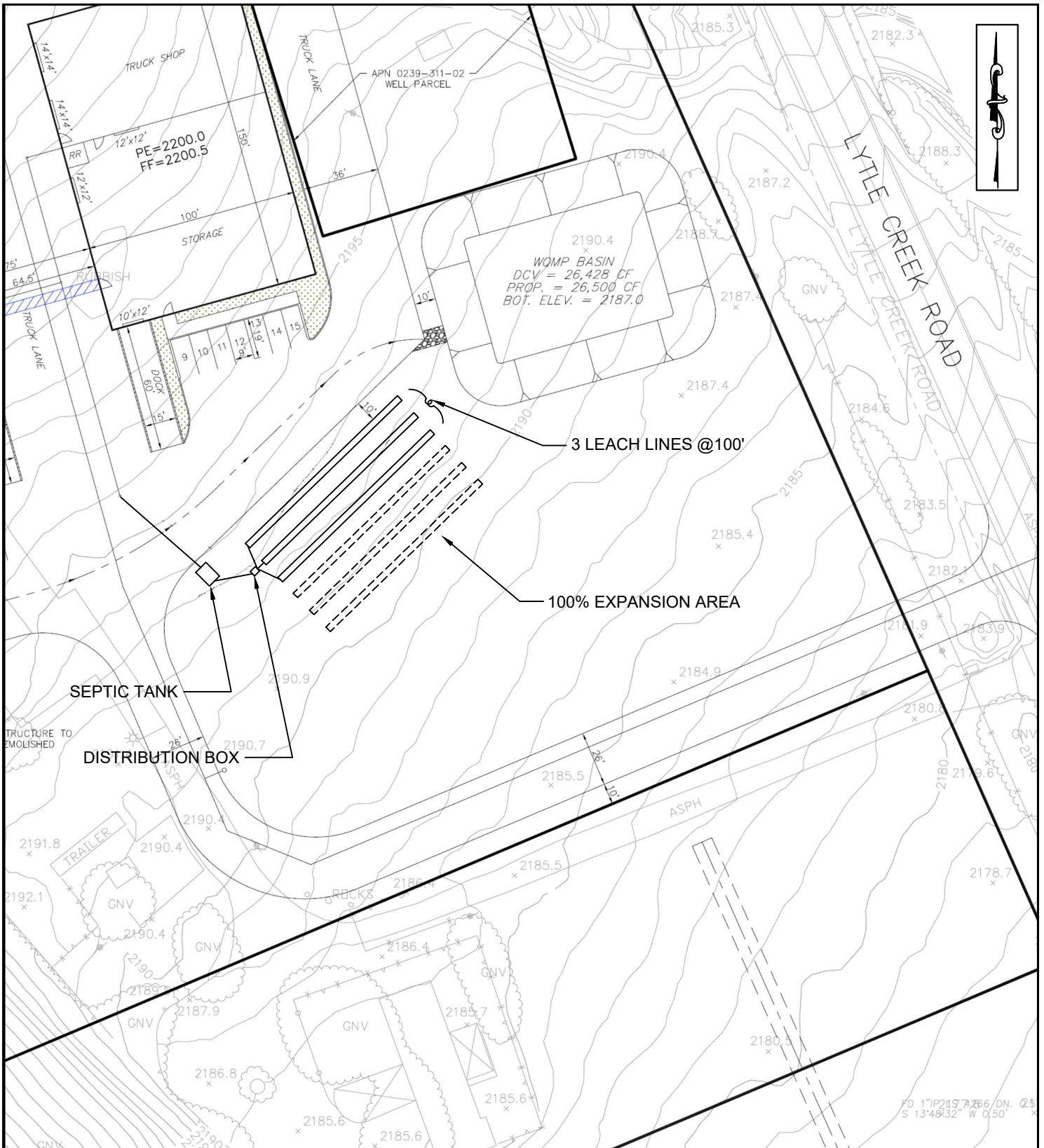
APPENDIX A

**Index Map, Site Plan and
Septic System Plot Plan**



INDEX MAP

PROJECT:	APN 0239-311-01-0000	PROJECT NO.:	13789.4
CLIENT:	Land Engineering Consultants, Inc.	ENCLOSURE:	A-1
LOR GEOTECHNICAL GROUP, INC.		DATE:	February 2022
		SCALE:	1" ≈ 2,000'



PLOT PLAN

PROJECT:	APN 0239-311-01-0000	PROJECT NO.:	13789.4
CLIENT:	Land Engineering Consultants, Inc.	ENCLOSURE:	A-3
LOR GEOTECHNICAL GROUP, INC.	DATE:	February 2022	
	SCALE:	1" ≈ 15'	

APPENDIX B

Soil Classification Chart and Trench Log

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS <small>MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE</small>	GRAVEL AND GRAVELLY SOILS <small>MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE</small>	CLEAN GRAVELS <small>(LITTLE OR NO FINES)</small>		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
	SAND AND SANDY SOILS <small>MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE</small>	CLEAN SANDS <small>(LITTLE OR NO FINES)</small>		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		SM	SILTY SANDS, SAND - SILT MIXTURES
FINE GRAINED SOILS <small>MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE</small>	SILTS AND CLAYS <small>LIQUID LIMIT LESS THAN 50</small>	CLEAN SANDS <small>(LITTLE OR NO FINES)</small>		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS <small>LIQUID LIMIT GREATER THAN 50</small>	SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		CH	INORGANIC CLAYS OF HIGH PLASTICITY
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

PARTICLE SIZE LIMITS

BOULDERS	COBBLES	GRAVEL		SAND			SILT OR CLAY
		COARSE	FINE	COARSE	MEDIUM	FINE	
12"	3"	3/4"	No. 4 <small>(U.S. STANDARD SIEVE SIZE)</small>	No. 10	No. 40	200	

SOIL CLASSIFICATION CHART

PROJECT: Proposed Commercial/ Industrial Development, Lytle Creek, California	PROJECT NO.: 13789.4
CLIENT: Land Engineering Consultants, Inc.	ENCLOSURE: B-i
	DATE: February 2022

LOG OF TRENCH T-5

TEST DATA							
DEPTH IN FEET	LABORATORY TESTS	ESTIMATED COMPACTION (%)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	SAMPLE TYPE	LITHOLOGY	U.S.C.S.
0							
		84	2.8	115.4	⊗		SM
		87	4.5	118.9	⊗		SP
5							
10							
15							

DESCRIPTION

@ 0 feet, FILL/TOPSOIL: SILTY SAND, approximately 15% gravel, 15% coarse grained sand, 25% medium grained sand, 30% fine grained sand, 15% silty fines, brown, damp, loose, heavily bioturbated.

@ 2 feet, ALLUVIUM: GRAVELLY SAND, approximately 25% gravel with trace of cobbles, 10% coarse grained sand, 25% medium grained sand, 35% fine grained sand, 5% silty fines.

@ 4 to 4.5± feet, thin, moist, finer grained sand with silt layer.

below 8 feet, includes minor cobbles and boulders to 1.5' diameter.

@ 12 feet, increase in boulders, includes occasional thin, dark brown, fine to medium grained sand with silt layers/lenses, difficult digging.

END OF TRENCH @ 15'

Fill to 2'
Heavy caving
No groundwater
No bedrock

PROJECT:	Commercial/Industrial Development	PROJECT NO.:	13789.4
CLIENT:	Land Engineering Consultants, Inc.	ELEVATION:	--
LOR GEOTECHNICAL GROUP INC.	DATE EXCAVATED:	January 25, 2022	
	EQUIPMENT:	JD 410C	
	BUCKET WD.: 36	ENCLOSURE:	B-1

APPENDIX C

PercolationTest Results

LEACH LINE PERCOLATION TEST DATA

Project:	<u>APN 0329-311-01-0000</u>	Test Date:	<u>January 25, 2022</u>
Project No.:	<u>13789.4</u>	Test Hole No.:	<u>P-1</u>
Soil Classification:	<u>(SP) Poorly graded sand w/ gravel</u>	Test Hole Size:	<u>6" x 8"</u>
Depth of Test Hole:	<u>4.0 ft.</u>	Date Excavated:	<u>January 25, 2022</u>
		Pre-Soaked:	<u>January 25, 2022</u>

PRE-SOAK PERIOD

<u>TIME INTERVAL:</u>		<u>AMOUNT OF WATER USED:</u>	
Start:	<u>10:33 AM</u>	<u>5</u>	<u>gallons</u>
Stop:	<u>11:40 AM</u>		

TEST PERIOD

TIME	TIME INTERVAL	INITIAL WATER LEVEL (in)	FINAL WATER LEVEL (in)	Δ IN WATER LEVEL (in)	PERCOLATION RATE (min/in)
11:43:00 AM	1.08	8.00	7.00	1.00	1.08
11:44:05 AM					
11:45:00 AM	1.10	8.00	7.00	1.00	1.10
11:46:06 AM					
11:48:00 AM	1.12	8.00	7.00	1.00	1.12
11:49:07 AM					
11:50:00 AM	1.13	8.00	7.00	1.00	1.13
11:51:08 AM					
11:52:00 AM	1.15	8.00	7.00	1.00	1.15
11:53:09 AM					
11:54:00 AM	1.15	8.00	7.00	1.00	1.15
11:55:09 AM					

LEACH LINE PERCOLATION TEST DATA

Project:	<u>APN 0329-311-01-0000</u>	Test Date:	<u>January 25, 2022</u>
Project No.:	<u>13789.4</u>	Test Hole No.:	<u>P-2</u>
Soil Classification:	<u>(SP) Poorly graded sand w/ gravel</u>	Test Hole Size:	<u>6" x 8"</u>
Depth of Test Hole:	<u>4.0 ft.</u>	Date Excavated:	<u>January 25, 2022</u>
		Pre-Soaked:	<u>January 25, 2022</u>

PRE-SOAK PERIOD

<u>TIME INTERVAL:</u>	<u>AMOUNT OF WATER USED:</u>
Start: <u>10:35 AM</u>	<u>5</u> gallons
Stop: <u>11:57 AM</u>	

TEST PERIOD

TIME	TIME INTERVAL	INITIAL WATER LEVEL (in)	FINAL WATER LEVEL (in)	Δ IN WATER LEVEL (in)	PERCOLATION RATE (min/in)
11:58:00 AM	1.22	8.00	7.00	1.00	1.22
11:59:13 AM					
12:00:00 PM	1.25	8.00	7.00	1.00	1.25
12:01:15 PM					
12:03:00 PM	1.27	8.00	7.00	1.00	1.27
12:04:16 PM					
12:05:00 PM	1.27	8.00	7.00	1.00	1.27
12:06:16 PM					
12:07:00 PM	1.28	8.00	7.00	1.00	1.28
12:08:17 PM					
12:09:00 PM	1.30	8.00	7.00	1.00	1.30
12:10:18 PM					

LEACH LINE PERCOLATION TEST DATA

Project:	APN 0329-311-01-0000	Test Date:	January 25, 2022
Project No.:	13789.4	Test Hole No.:	P-3
Soil Classification:	(SP) Poorly graded sand w/ gravel	Test Hole Size:	6" x 8"
Depth of Test Hole:	4.0 ft.	Date Excavated:	January 25, 2022
		Pre-Soaked:	January 25, 2022

PRE-SOAK PERIOD

<u>TIME INTERVAL:</u>	<u>AMOUNT OF WATER USED:</u>
Start: 12:18 PM	5 gallons
Stop: 12:50 PM	

TEST PERIOD

TIME	TIME INTERVAL	INITIAL WATER LEVEL (in)	FINAL WATER LEVEL (in)	Δ IN WATER LEVEL (in)	PERCOLATION RATE (min/in)
12:51:00 PM	1.40	8.00	7.00	1.00	1.40
12:52:24 PM					
12:53:00 PM	1.42	8.00	7.00	1.00	1.42
12:54:25 PM					
12:55:00 PM	1.43	8.00	7.00	1.00	1.43
12:56:26 PM					
12:57:00 PM	1.42	8.00	7.00	1.00	1.42
12:58:25 PM					
12:59:00 PM	1.42	8.00	7.00	1.00	1.42
1:00:25 PM					
1:01:00 PM	1.43	8.00	7.00	1.00	1.43
1:02:26 PM					

LEACH LINE PERCOLATION TEST DATA

Project:	APN 0329-311-01-0000	Test Date:	January 22, 2025
Project No.:	13789.4	Test Hole No.:	P-4
Soil Classification:	(SP) Poorly graded sand w/ gravel	Test Hole Size:	6" x 8"
Depth of Test Hole:	4.0 ft.	Date Excavated:	January 22, 2025
		Pre-Soaked:	January 22, 2025

PRE-SOAK PERIOD

<u>TIME INTERVAL:</u>	<u>AMOUNT OF WATER USED:</u>
Start: 12:45 PM	5 gallons
Stop: 1:05 PM	

TEST PERIOD

TIME	TIME INTERVAL	INITIAL WATER LEVEL (in)	FINAL WATER LEVEL (in)	Δ IN WATER LEVEL (in)	PERCOLATION RATE (min/in)
1:06:00 PM	1.17	8.00	7.00	1.00	1.17
1:07:10 PM					
1:08:00 PM	1.18	8.00	7.00	1.00	1.18
1:09:11 PM					
1:10:00 PM	1.15	8.00	7.00	1.00	1.15
1:11:09 PM					
1:12:00 PM	1.17	8.00	7.00	1.00	1.17
1:13:10 PM					
1:14:00 PM	1.17	8.00	7.00	1.00	1.17
1:15:10 PM					
1:16:00 PM	1.17	8.00	7.00	1.00	1.17
1:17:10 PM					