



Sladden Engineering

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August 23, 2022

Project No. 644-22032
22-08-118

Mr. Jordan Bursch
Corman Leigh Companies
32823 Temecula Parkway
Temecula, California 92592

Project: Proposed Residential Development
NWC Lyon Avenue & Appaloosa Drive
TTM 38468
APN 436-280-006 & 007
San Jacinto, California

Subject: Infiltration Testing for On-Site Stormwater Management

In accordance with your request, we have performed infiltration testing on the subject site to evaluate the infiltration potential of the near surface soil to assist in stormwater management system design. The infiltration rates determined by testing should be useful in the assessment of on-site stormwater management needs. The approximate locations of the tests are indicated on the attached Exploration Location Plan (Figure 3).

Infiltration testing was performed on July 18, 2022 utilizing double ring infiltrometers. The tests were performed at depths of approximately 5.0 feet below the existing ground surface (bgs) for DR-1 & DR-2. The soil conditions encountered within the test hole locations consisted of silty sand (SM) and sandy silt (ML). Testing was performed in general accordance with the *Standard Test Method for Infiltration Rate of Soils in Field Using Double-Ring Infiltrometer* (ASTM D-3385).

INFILTRATION TEST RESULTS

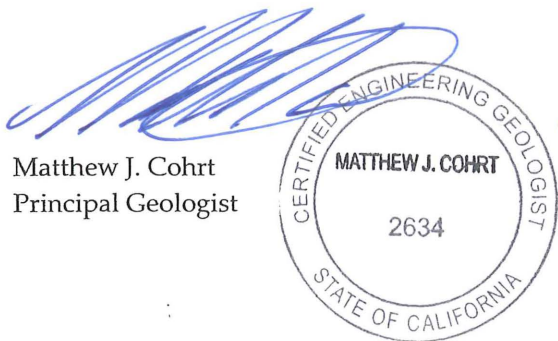
Test Location No.	Depth Below Existing Ground Surface (ft)	Infiltration Rate (in/hr)
DR-1	5.0	0.9
DR-2	5.0	0.8

The rates determined represent ultimate rates and an appropriate safety factor should be incorporated into the design to account for long-term saturation and potential "silting" of the surface soil. The safety factor should be determined with consideration to other factors considered in the storm water retention system design (specifically stormwater volume estimates) and the safety factors associated with the related design components.

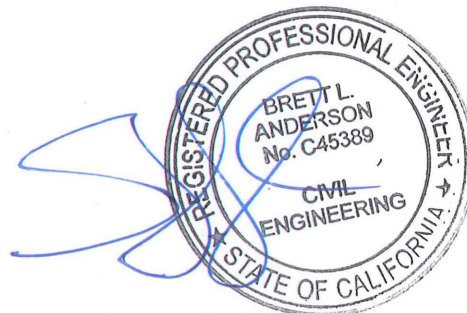
If you have any questions regarding this memo or the testing summarized herein, please contact the undersigned.

Respectfully submitted,
SLADDEN ENGINEERING

Matthew J. Cohrt
Principal Geologist




Brett L. Anderson
Principal Engineer



Copies: PDF / Addressee

FIGURES

SITE LOCATION MAP
REGIONAL GEOLOGIC MAP
EXPLORATION LOCATION PLAN

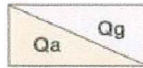
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SITE LOCATION MAP	
Project Number	644-22032
Report Number:	22-08-118
Date:	August 23, 2022

FIGURE

1

LEGEND

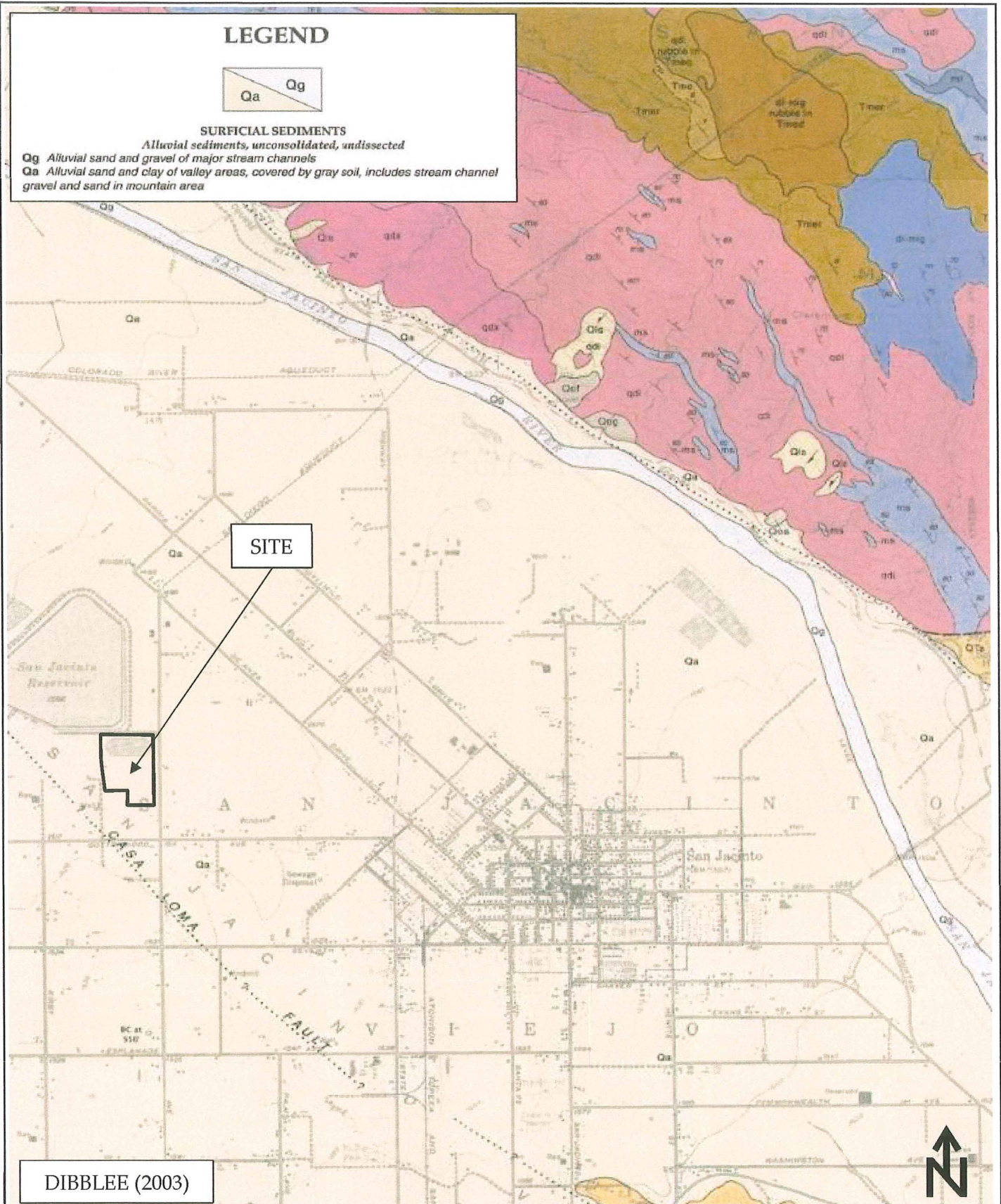


SURFICIAL SEDIMENTS

Alluvial sediments, unconsolidated, undissected

Qg Alluvial sand and gravel of major stream channels

Qa Alluvial sand and clay of valley areas, covered by gray soil, includes stream channel gravel and sand in mountain area



DIBBLEE (2003)

REGIONAL GEOLOGIC MAP

FIGURE

2



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Project Number:

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Report Number:

22-08-118

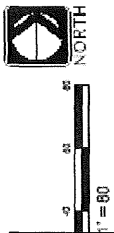
Date:

August 23, 2022

IN THE CITY OF SAN JACINTO
 TENTATIVE TRACT MAP NO. 38468

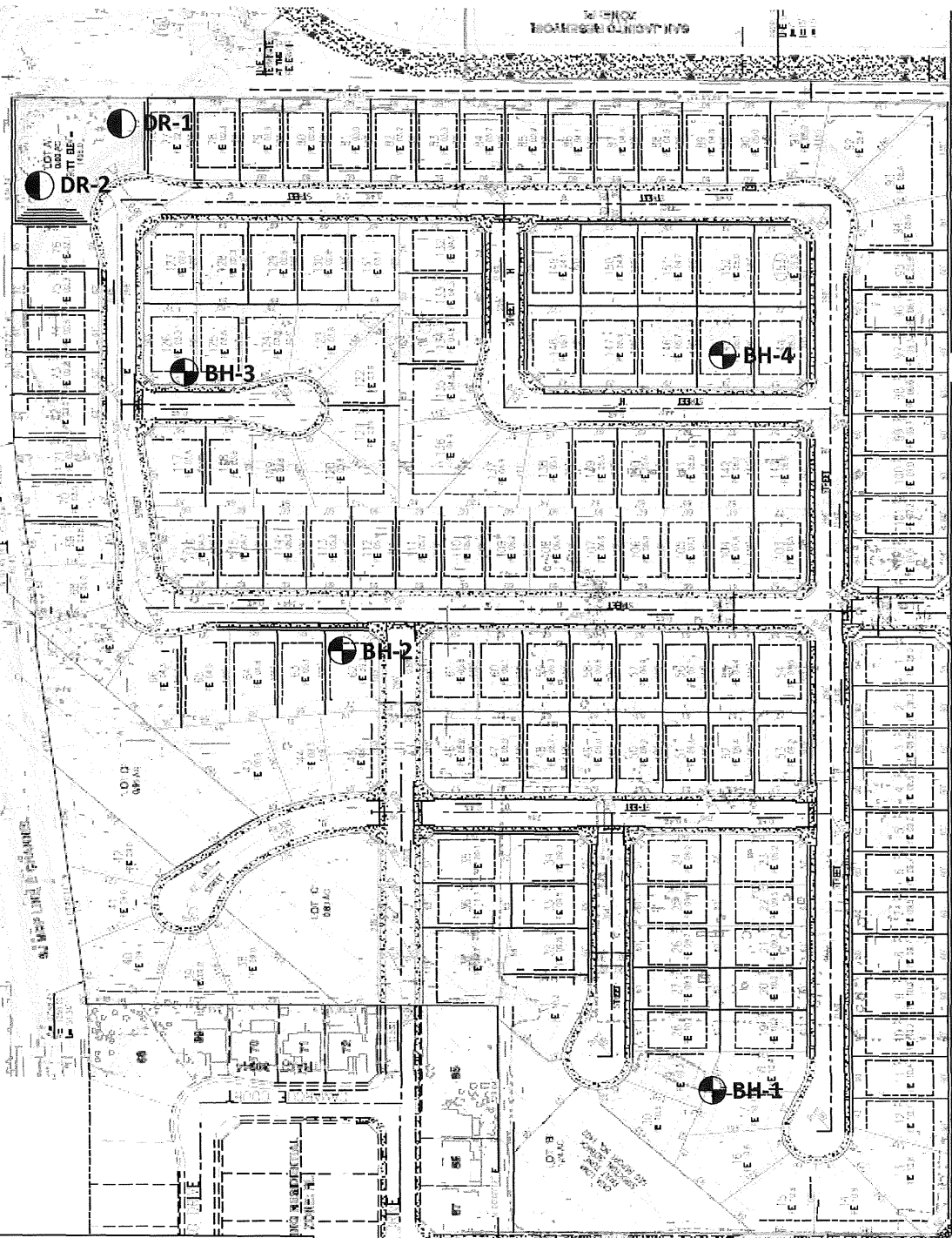
Text

IN THE CITY OF SAN JACINTO



LEGEND

- BH-4 Borehole Location
- DR-2 Infiltration Test Location



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EXPLORATION LOCATION PLAN

Project Number:	644-22032
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Date:	August 23, 2022

FIGURE

3

BORELOGS



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BORE LOG

Equipment: MOBILE B-61 Date Drilled: 6/13/2022

Elevation: 1,500 FT MSL Boring No: BH-1

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density/ pcf	Depth (feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, dry, fine- to coarse-grained (Disturbed/Fill).
	5 7 10			3.3	0.4		4		Gravelly Sand (SP); grayish brown, dry, medium dense, fine- to coarse-grained (Qa).
							6		
							8		
	5 16 16			1.8	1.8		10		Sand (SP); grayish brown, dry, dense, fine- to coarse-grained (Qa).
							12		
							14		
	6 10 11			25.5	12.6	115.9	16		Silty Sand (SM); dark grayish brown, moist, medium dense, fine- to coarse-grained (Qa).
							18		
	6 8 9			13.7	7.6		20		Silty Sand (SM); grayish brown, moist, medium dense, fine-grained (Qa).
							22		
							24		Terminated at ~21.5 Feet bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

PROPOSED RESIDENTIAL DEVELOPMENT
NWC LYON AVENUE AND APPALOOSA DRIVE, SAN JACINTO

Project No: 644-22032

Report No: 22-08-118



Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	6/13/2022
Elevation:	1,500 FT MSL	Boring No:	BH-2

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (feet)	Graphic Lithology	Description
	3 7 10			3.7	1.1	107.9	2		Silty Sand (SM); grayish brown, dry, fine- to coarse-grained (Disturbed/Fill).
	3 4 9			2.0	0.8	105.1	4		Sand (SP); grayish brown, dry, medium dense, fine- to coarse-grained (Qa).
	5 6 5			2.2	1.4		10		Sand (SP); grayish brown, dry, medium dense, fine- to coarse-grained (Qa).
	9 8 21			14.4	8.7	118.9	16		Silty Sand (SM); grayish brown, dry to slightly moist, medium dense, fine- to coarse-grained (Qa).
	8 16 24			3.1	1.7		20		Sand (SP); grayish brown, dry, dense, fine- to coarse-grained (Qa).
	14 36 50			7.0	2.8	101.2	26		Sand (SP); grayish brown, dry, very dense, fine- to coarse-grained (Qa).
	4 3 4			72.3	28.9		30		Sandy Clay (CL); olive brown, moist, medium stiff, low plasticity with gravel (Qa).
	8 26 50			64.8	20.1	105.8	36		Sandy Silt (ML); olive brown, moist, hard, low plasticity, micaceous (Qa).
	2 3 5			73.2	27.3		40		Sandy Clay (CL); olive brown, moist, medium stiff, low plasticity (Qa).
	10 22 50			61.9	23.0	102.3	46		Sandy Silt (ML); dark grayish brown, moist, hard, low plasticity, micaceous (Qa).
	5 6 9			81.2	30.8		50		Sandy Silt (ML); dark grayish brown, moist, stiff, low plasticity, micaceous (Qa).

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

PROPOSED RESIDENTIAL DEVELOPMENT
 NWC LYON AVENUE AND APPALOOSA DRIVE, SAN JACINTO

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BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	6/13/2022
Elevation:	1,500 FT MSL	Boring No:	BH-3

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, dry, fine- to coarse-grained (Disturbed/Fill).
	4 8 9			64.3	11.1		4		Sandy Silt (ML); grayish brown, slightly moist, very stiff, low plasticity, micaceous (Qa).
							6		
	8 17 27			29.3	3.8	118.6	10		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained (Qa).
							12		Silty Sand (SM); grayish brown, dry, medium dense, fine- to coarse-grained (Qa).
	2 7 7			29.2	7.6		14		
	12 14 30			11.9	1.8	103.7	20		Sand (SP); grayish brown, dry, medium dense, fine- to coarse-grained with gravel (Qa).
							22		Terminated at ~21.5 Feet bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

PROPOSED RESIDENTIAL DEVELOPMENT
 NWC LYON AVENUE AND APPALOOSA DRIVE, SAN JACINTO

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BORE LOG

Equipment: MOBILE B-61 Date Drilled: 6/13/2022

Elevation: 1,500 FT MSL Boring No: BH-4

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density pcf	Depth (feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, dry, fine- to coarse-grained (Disturbed/Fill).
	8 11 16			5.4	1.4	107.3	4		Gravelly Sand (SP); grayish brown, dry, medium dense, fine- to coarse-grained (Qa).
							6		
	4 6 5			43.7	8.5		10		Silty Sand (SM); grayish brown, dry to slightly moist, medium dense, fine- to coarse-grained (Qa).
	11 17 16			41.5	4.7	104.3	14		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained with gravel (Qa).
							16		
	5 7 12			36.3	5.5		20		Silty Sand (SM); grayish brown, dry to slightly moist, medium dense, fine-grained (Qa).
							22		Terminated at ~21.5 Feet bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

PROPOSED RESIDENTIAL DEVELOPMENT
NWC LYON AVENUE AND APPALOOSA DRIVE, SAN JACINTO

Project No: 644-22032

Report No: 22-08-118



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TEST PIT LOG

Equipment:	MOBILE B-61	Date Drilled:	6/13/2022
Elevation:	1,500 FT MSL	Boring No:	TP-1 (DR-1)

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, dry, fine- to coarse-grained (Disturbed/Fill).
							4		Gravelly Sand (SP); grayish brown, dry, fine- to coarse-grained (Qa).
							6		Terminated at -5.0 Feet bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							8		
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		



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TEST PIT LOG

Equipment:	MOBILE B-61	Date Drilled:	6/13/2022
Elevation:	1,500 FT MSL	Boring No:	TP-2 (DR-2)

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, dry, fine- to coarse-grained (Disturbed/Fill).
							4		Gravelly Sand (SP); grayish brown, dry, fine- to coarse-grained (Qa).
							6		Terminated at ~5.0 Feet bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							8		
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
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							42		
							44		
							46		
							48		
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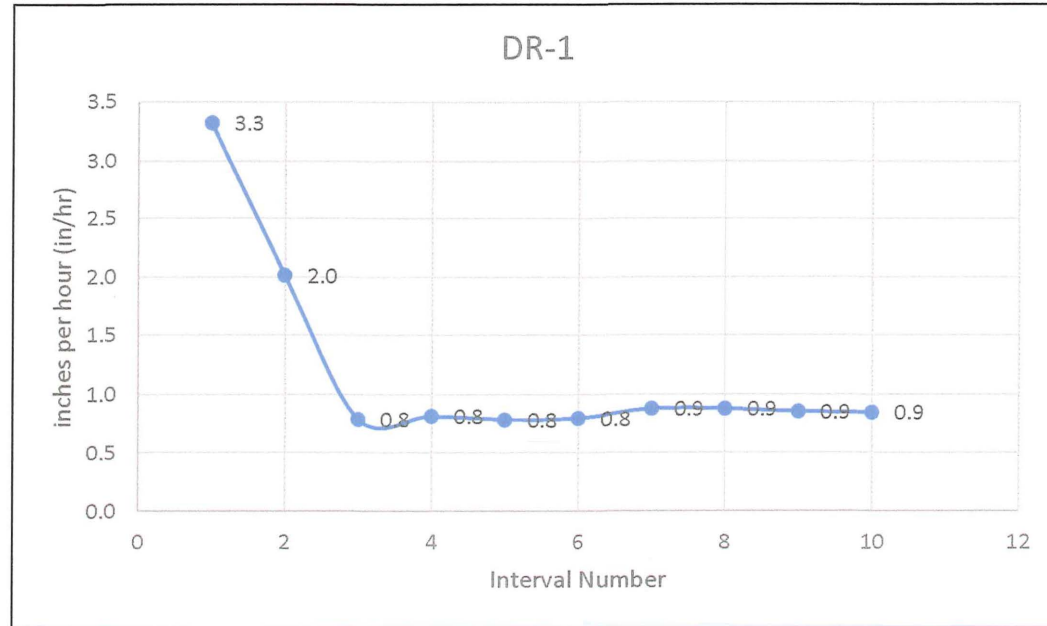
APPENDIX A

DOUBLE-RING TESTING DATA SHEETS

DOUBLE RING INFILTRATION RATE CALCULATIONS

		INNER RING										
Job No.:	544-22032	Interval Number	Initial Water(cm)	Final Water(cm)	Con. Factor (cm to in)	Water (in)	Area Mar. (in ²)	Volume (in ³)	Area IR (in ²)	Time (min)	Time (hr)	Vir (in/hr)
Test Hole:	DR-1	1	46.2	19.5	0.39	10.5	8.9	94.0	113.1	15	0.25	3.3
		2	46.1	29.9	0.39	6.4	8.9	57.0	113.1	15	0.25	2.0
Depth (Ft.):	5.0 Ft. bgs	3	46.2	33.4	0.39	5.0	8.9	45.1	113.1	30	0.50	0.8
		4	46.3	33.1	0.39	5.2	8.9	46.5	113.1	30	0.50	0.8
Date:	7/18/2022	5	46.0	33.3	0.39	5.0	8.9	44.7	113.1	30	0.50	0.8
		6	45.4	32.5	0.39	5.1	8.9	45.4	113.1	30	0.50	0.8
		7	46.1	31.9	0.39	5.6	8.9	50.0	113.1	30	0.50	0.9
		8	45.9	31.7	0.39	5.6	8.9	50.0	113.1	30	0.50	0.9
		9	45.8	32.0	0.39	5.4	8.9	48.6	113.1	30	0.50	0.9
		10	45.5	31.8	0.39	5.4	8.9	48.2	113.1	30	0.50	0.9

AVERAGE RATE* = 0.9
(in/hr)



DOUBLE RING INFILTRATION RATE CALCULATIONS

		INNER RING										
Job No.:	544-22032	Interval Number	Initial Water(cm)	Final Water(cm)	Con. Factor (cm to in)	Water (in)	Area Mar. (in ²)	Volume (in ³)	Area IR (in ²)	Time (min)	Time (hr)	Vir (in/hr)
Test Hole:	DR-2	1	45.9	18.7	0.39	10.7	8.9	95.8	113.1	15	0.25	3.4
		2	46.1	27.8	0.39	7.2	8.9	64.4	113.1	15	0.25	2.3
Depth (Ft.):	5.0 Ft. bgs	3	46.3	29.3	0.39	6.7	8.9	59.9	113.1	30	0.50	1.1
		4	45.8	29.8	0.39	6.3	8.9	56.3	113.1	30	0.50	1.0
Date:	7/18/2022	5	45.3	30.6	0.39	5.8	8.9	51.8	113.1	30	0.50	0.9
		6	46.9	33.2	0.39	5.4	8.9	48.2	113.1	30	0.50	0.9
		7	45.3	33.5	0.39	4.6	8.9	41.5	113.1	30	0.50	0.7
		8	46.0	33.8	0.39	4.8	8.9	43.0	113.1	30	0.50	0.8
		9	46.4	34.2	0.39	4.8	8.9	43.0	113.1	30	0.50	0.8
		10	46.1	33.2	0.39	5.1	8.9	45.4	113.1	30	0.50	0.8

AVERAGE RATE* = 0.8
(in/hr)

