APPENDIX 8

897 VIA LATA, SUITE N • COLTON, CA 92324 • (909) 370-0474 • (909) 370-0481 • FAX (909) 370-3156

Report of Water Infiltration Rate

Proposed Stormwater Disposal System Design Planned Prairie View Multi-Family Development NEC Dale Street and Wilson Avenue Perris, California APN: 311502001

Project No. 20003-BMP

February 10, 2020

Prepared for:

ACAA Limited Partnership 422 Wier Road San Bernardino, CA 92408



897 VIA LATA, SUITE N - COLTON, CA 92324 - (909) 370-0474 - (909) 370-0481 - FAX (909) 370-3156

February 10, 2020

Project No. 20003-BMP

ACAA Limited Partnership 422 Wier Road San Bernardino, CA 92408

Attention:

Mr. Ed Haddad

Subject:

Report of Water Infiltration Rate

Proposed Stormwater Disposal System Design Planned Prairie View Multi-Family Development

NEC Dale Street and Wilson Avenue

Perris, California APN: 311502001

Reference:

1. Site Location Map supplied by Goodman & Associates, Inc.

2. Riverside County Low Impact Development BMP Design Handbook

Gentlemen:

Presented herewith are the results of soils infiltration testing performed for the planned storm water disposal design proposed for the project site described.

Six (6) infiltration testing were performed about 5 feet below the current grades using the standardized "falling-head" test converted to infiltration rate using the Porchet Method as per the guidelines in accordance with the Table 1, Infiltration Basin Option 2 of Appendix A of the Riverside County-Low Impact Development (LID) BMP design Handbook. Approximate test locations are shown on Plate 1, attached

The soils encountered consist in general upper fine silty sands with scattered pebbles and rock fragments overlying slightly clayey silty sands to the maximum 5 feet depth explored. No free groundwater was encountered. Descriptions of the soils encountered are provided in the Log of Borings, P-1 to P-6, attached.

Based on the field infiltration testing completed, it is our opinion that for the infiltration system design proposed at 5 feet below grade, the average observed soils infiltration rate is 0.41 in/hr. For design, it is suggested that, use of a factor of safety of 2.0 to 3.0, or an appropriate Factor of Safety as selected by the design engineer should be considered to the observed field percolation rate described. Lower infiltration rate may be anticipated over prolong use of the installed system due to continual deposits of fines and lack of adequate maintenance.

We offer no other warranty, express or implied.

Respectfully submitted Soils Southwest, Inc. Moloy Gupta, RCE 31768



1.0 PROPOSED DEVELOPMENT

Based on the preliminary project information supplied, it is understood that in conjunction with the planned new apartment complex buildings and parking, at least one (1) or more infiltration strom water systems will be installed at the approximate test locations as described. Based on existing site topography, minor to moderate site preparations and grading may be anticipated with the development planned.

2.0 EXCAVATED TEST PIT:

For BMP soil infiltration testing at the location as shown on the accompanying Plate 1, six (6) test borings (P-1 to P-6) were made using a 8-inch diameter hollow-stem auger drilling rig, advanced to 5 feet below the current grade. Water used during infiltration percolation testing was supplied by using a water truck along with portable water tank and 5-gallon water jugs.

3.0 METHODOLOGY AND TEST PROCEDURES:

EQUIPMENT SET-UP (POST EXCAVATION) PROCEDURES

Following test boring completion, each of the test holes were fitted with perforated pvc pipes backfilled with 2-inch thick crushed rock at the bottom to minimize potentials for scouring and caving. A 5-gallon bucket of water was used to presoak the test holes the day prior to testing. For testing, each test holes were initially backfilled using water supplied by water tank.

Prior to actual testing, in order to determine test intervals, as per the Section 2.3 for deep percolation testing of the referenced handbook guideline, in two consecutive readings, since 6 inches or more of water did not seep away in less than 25 minutes, subsequent six percolation testing were performed at 30-minute time intervals for 3.5 to 4.5 hours for P-1 to P-5 where the change in water level was consistent. However, for P-6, since more than 6 inches seeped away in two consecutive 25-minute intervals, subsequent percolation testing were performed at 10-minute time intervals for over 1.5 hours at which point the observed rate became constant. Initial water placement was about 35 to 36 inches below existing grade surface (inlet depth).

The final 10-minute and 30-minute recorded percolation test rates were converted into an Infiltration Rate (I_t) for inches per hour using the "Porchet Method" equation as described in the Reference 2, Riverside County Low Impact Development BMP Design Handbook.

4.0 INFILTRATION TEST RESULT

Based on the soils infiltration testing completed at the test locations and at the test depth as described, the average observed soil percolation rate is 0.41 inches/hour for the test locations P-1 to P-6 respectively.

Calculations to convert the percolation test rate to infiltration test rates in accordance with Section 2.3 of the County Handbook are presented in Table I and II below.

TABLE I
Infiltration Test Summary

Observed Infiltration Rate for Design

Test Date Test No. (2-6-20)	Approx Onsite Location	Test Depth (ft.) Below Grade	Observed Rate(inch/hour.) based on Porchet Method Calculations (Inner Ring)
P-1	Southeast	5.0	0.23
P-2	East/Northeast	5.0	0.49
P-3	North/Northeast	5.0	0.14
P-4	Center South	5.0	0.04
P-5	Center North	5.0	0.08
P-6	Southwest	5.0	1.47

Average observed infiltration rate: 0.41 in/hr.

TABLE II Conversion Table (Porchet Method)

Test No.	Depth Test Hole (inches)	Time Interval	Initial Depth (inch)	Final Depth (inch)	Initial Water Height (inch)	Final Water Height (inch)	Change Height/ Time	Average Head Height/Time
	D _T	$\Delta_{T \text{ (Min)}}$	Do (in)	D _{f (In)}	H _o =D _t -D _o	H _f =D _t -D _f	ΔH= H _f -H _O	$H_{avg} = (H_{o+}H_f)/2$
P-1	59.5	30	35.5	37.00	24	22.5	1.5	23.25
P-2	60.0	30	36.0	39.00	24	21.0	3.0	22.50
P-3	61.0	30	35.0	36.00	26	25	1.0	25.50
P-4	61.5	30	37.5	37.75	24	23.75	0.25	23.875
P-5	59	30	34.5	35.00	24.5	24	0.50	24.50
P-6	58.5	10	34.5	37.50	24	21	3.0	22.5

	Infiltration Rate (It)=ΔH60r/Δt(r+2Havg)						
	A	В	С				
Test No.	ΔH60r	Δt(r+2Havg)	A/B=in/hr				
P-1	360	1515	0.23				
P-2	720	1470	0.49				
P-3	240	1650	0.14				
P-4	60	1552.50	0.04				
P-5	120	1575	0.08				
P-6	720	490	1.47				

For design, it is suggested that, use of a factor of safety of 2.0 to 3.0, or an appropriate Factor of Safety as selected by the design engineer should be considered to the observed field percolation rate described.

Use of safety factor should be considered to account for long-term saturation, inconsistencies in subsoil conditions, along with the potential for silting of percolating soils.

The infiltration rate described is based on the in-situ testing completed at the locations as suggested by the project civil engineer. In event the final chamber location and depth vary considerably from those as described herein, supplemental soils infiltration testing may be warranted.

It should be noted that over prolong use and lack of maintenance the detention/infiltration basins or deep chambers constructed based on the suggested design rate may experience much lower infiltration rate due to the accumulation of silts, fines, oils and others. Regular maintenance of the chambers in form of removal of debris, oil and fines are strongly recommended. A maintenance record of such is suggested for future use, if any.

Suggested Site Requirements for Stormwater BMP installation

The invert of stormwater infiltration shall be at least 10 feet above the groundwater elevation. Stormwater infiltration BMPs shall not be placed on steep slopes and shall not create the condition or potential for slopes instability.

Stormwater infiltration shall not increase the potential for static or seismic settlement of structures on or its adjacent.

Stormwater infiltration shall not place an increased surcharge on structures or foundations on or its adjacent. The pore-water pressure shall not be increased on soil retaining structures on or adjacent to the site.

The invert of stormwater infiltration shall be set back at least 15 feet, and outside a 1:1 plan drawn up from the bottom of adjacent foundations.

Stormwater infiltration shall not be located near utility lines where the introduction of stormwater could cause damage to utilities or settlement of trench backfill.

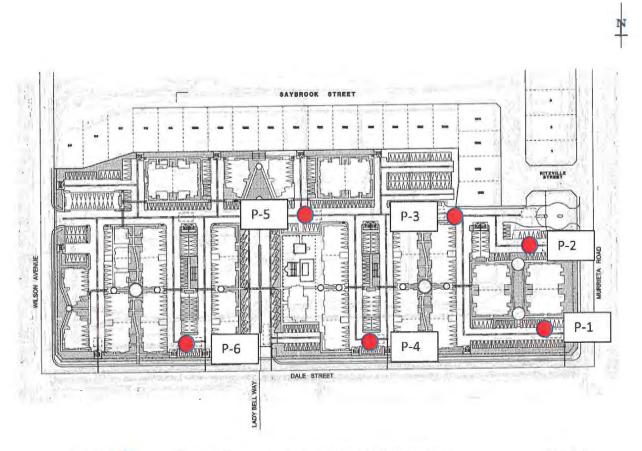
Stormwater infiltration is not allowed within 100 feet of any potable groundwater production well.

Once installed, regular maintenance of the detention basin is recommended.

LOT PLAN AND TEST LOCATIONS

Proposed Infiltration System Design Planned Multi-family Development NEC Dale Street and Wilson Avenue Perris, California APN: 311502001

(Schematic, not to scale)



Legend:

P-1 Approximate Location of BMP Testing

Plate 1

EXCAVATION TEST BORING LOGS and PERCOLATION TEST DATA



(909) 370-0474 Fax (909) 370-3156

LOG OF BORING P-1

Project: Prairie View Job No.: 20003-BMP Logged By: Boring Diam.: John F. 8" HSA Date: February 5,2020

Standard Penetration (Blows per Ft.) Sample Type Water Content in %	Dry Density in PCF Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
		SM-ML SM-SC SM	9	5 10 20 25	Seasonal grass and weeds SAND - light yellowish brown, silty, fine, scattered pebbles, dry - color change to light brown, silty, slightly clayey, occasional pebble and scattered rock fragments, damp - color change to yellowish brown, silty, fine, dry - End of infiltratoin test boring @ 5.0 ft no bedrock - no groundwater - pvc perforated pipe installed with gravel at the bottom

Groundwater: n/a

Approx. Depth of Bedrock: n/a

Datum: n/a Elevation: n/a Site Location

Proposed Multi-Family Apartment

Complex

NEC Dale Street & Wilson Avenue Perris, California



(909) 370-0474 Fax (909) 370-3156

LOG OF BORING P-2

Project: Prairie View Job No.: 20003-BMP
Logged By: John F. Boring Diam.: 8" HSA Date: February 5,2020

Standard Penetration (Blows per Ft.) Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
				SM		10 20 25 30	Seasonal grass and weeds SAND - light yellowish brown, silty, fine, dry - color change to light brown, silty, traces of clay, fine, scattered pebble and rock fragments, damp - End of infiltration test boring @ 5.0 ft. - no bedrock - no groundwater - pvc perforated pipe installed with gravel at the bottom

Groundwater: r	n/a
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Approx. Depth of Bedrock: n/a

Datum: n/a
Elevation: n/a

Site Location

Proposed Multi-Family Apartment

Perris, California

Complex NEC Dale Street & Wilson Avenue



LOG OF BORING P-3

Project: Prairie View Job No.: 20003-BMP
Logged By: John F. Boring Diam.: 8" HSA Date: February 5,2020

Penetration (Blows per Ft.) Sample Type Water Content in % Dry Density	Percent Compaction	Unified Classification System	Graphic Depth in Feet	Description and Remarks
		SM	10 15 20 25	Seasonal grass and weeds SAND - light yellowish brown, silty, fine, dry - color change to light brown, silty, fine - End of test infiltration boring @ 5.0 ft no bedrock - no groundwater - pvc perforated pipe installed with gravel at the bottom

Groundwater: n/a	Site Location	Plate #
Approx. Depth of Bedrock: n/a	Proposed Multi-Family Apartment	
Datum: n/a	Complex	
Elevation: n/a	NEC Dale Street & Wilson Avenue	



(909) 370-0474 Fax (909) 370-3156

LOG OF BORING P-4

Project: Prairie View Job No.: 20003-BMP Logged By: John F. Boring Diam.: 8" HSA Date: February 5,2020

Standard Penetration (Blows per Ft.) Sample Type	Water Content in % Dry Density	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
			SM-ML SM-SC		10 15 20 25	Seasonal grass and weeds along with bare soils SAND - light yellowish brown, silty, fine, occasional pebble and scattered, rock fragments, dry color change to light brown, silty, slightly clayey, fine, pebbles, scattered rock fragments, damp End of test infiltration boring @ 5.0 ft no bedrock no groundwater pvc perforated pipe installed with gravel at the bottom gravel at gravel at gravel gravel at gravel gravel at gravel grave

Ground	water:	n/a

Approx. Depth of Bedrock: n/a

Datum: n/a
Elevation: n/a

Site Location

Proposed Multi-Family Apartment Complex

NEC Dale Street & Wilson Avenue Perris, California



(909) 370-0474 Fax (909) 370-3156

LOG OF BORING P-5

Project: Prairie View Job No.: 20003-BMP Logged By: John F. Boring Diam.: 8" HSA Date: February 5,2020

Standard Penetration (Blows per Ft.) Sample Type	Water Content in %	in PCF Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
			SM-ML		10 20 25 30	Seasonal grass and weeds along with bare soils SAND - light yellowish brown, silty, fine, dry

Groundwater:	n/a		
Approx. Depth	of Bedrock:	n/a	

Datum: n/a
Elevation: n/a

Site Location

Proposed Multi-Family Apartment Complex

NEC Dale Street & Wilson Avenue Perris, California



(909) 370-0474 Fax (909) 370-3156

LOG OF BORING P-6

Job No.: Project: Prairie View 20003-BMP Boring Diam.: Date: Logged By: 8" HSA February 5,2020 John F.

Standard Penetration (Blows per Ft.) Sample Type Water Content in %	Dry Density in PCF Percent	Compaction Unified Classification System	Graphic	Depth in Feet	Description and Remarks
		SM-SC SM SM-SC SM		10 15 20 25	Seasonal grass and weeds SAND - light yellowish brown to light gray brown, silty, slightly clayey, fine, occasional pebbles, damp color change to light yellowish brown, silty fine to medium, scattered pebble and rock fragments, dry color change to grayish light brown, silty slightly clayey, fine, pebbles, rock fragments silty, fine to medium with pebbles and rock fragments, dry to damp End of test infiltration boring @ 5.0 ft no bedrock no groundwater pvc perforated pipe installed with gravel at the bottom

Groundwater:	n/a

Approx. Depth of Bedrock: n/a

Datum: n/a Elevation: n/a

Site Location

Proposed Multi-Family Apartment

Complex

NEC Dale Street & Wilson Avenue Perris, California

KEY TO SYMBOLS

Symbol Description

Strata symbols

Poorly graded silty

fine sand

Poorly graded clayey

silty sand



Silty sand

Notes:

- 1. Exploratory borings were drilled on February 5,2020 using a 4-inch diameter continuous flight power auger.
- 2. No free water was encountered at the time of drilling or when re-checked the following day.
- 3. Boring locations were taped from existing features and elevations extrapolated from the final design schematic plan.
- 4. These logs are subject to the limitations, conclusions, and recommendations in this report.
- Results of tests conducted on samples recovered are reported on the logs.

Percolation Test Data Sheet PRAIRIE VIEW Project No: 20003-BMP Project: 2-6-20 Date: Test Hole No: P-1 Tested By: M: C. Depth of Test Hole, Dr: 59.5 SM-SC USCS Soil Classification: Test Hole Dimensions (inches) Length Width Diameter (if round)= 8'incres Sides (if rectangular)= Sandy Soil Criteria Test Greater Time Initial Final Change in than or Interval, Depth to Depth to Water Equal to 6"? Trial No. Start Time Stop Time (min.) Water (in.) Water (in.) Level (in.) (y/n)1 9: 36 10:01 25 35.5 1.5 37.0

*If two consecutive measurements show that six inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every 10 minutes. Other wise, pre-soak (fill) overnight. Obtain at least twelve measurements per hole over at least six hours (approximately 30 minute intervals) with a precision of at least 0.25".

			Δt	Do	Df	ΔD	
			Time	initial	Final	Change in	Percolation
			Interval	Depth to	Depth to	Water	Rate
Trial No.	Start Time	Stop Time	(min.)	Water (in.)	Water (in.)	Level (in.)	(min./in.)
1	10:03	10.33	30	35,5	37.0	1.5	
2	10:40	11:10	30	35,5	37.0	1:5	
, 3	11:14	11:44	30	35.5	37.0	1.5	
4	11:45	12:15	30	35,5	370	1.5	
5	12:16	12:46	30	35.5	37.0	1.5	
5	12:50	1:20	30	35.5	37.0	1.5	
7	1:23	1:53	30	35.5	37.0	1.5	
	1:55	2:25	30	35.5	37.0	1.5	
9	2:30	3,00	30	35,5	37.0	1.5	
10	3,03	3:33	30	35,5	37.0	1.5	
. 11	3:36 .	4:06	30	35.5	37.0	1.5	
12	4:10	4:40	30	35,5	37.0	1.5	
13							
14			***				
15							
TRABAERITE:							

Percolation Test Data Sheet PRAIRIE VIEW Project No: 2 0003 BMP Project: Date: Test Hole No: Tested By: J.F. & Alex Depth of Test Hole, D_T: 60 wence USCS Soil Classification: Test Hole Dimensions (inches) Length Width Diameter (if round)= 8 mencs Sides (if rectangular)= Sandy Soil Criteria Test® Greater Time Initial Final Change in than or Interval, Depth to Depth to Water Equal to 6"? Water (in.) Water (in.) Level (in.) Trial No. Start Time Stop Time (min.) (y/n)19:07 9:32 25 36 40.0 *If two consecutive measurements show that six Inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every 10 minutes. Other wise, pre-soak (fill) overnight. Obtain at least twelve measurements per hole over at least six hours (approximately 30 minute intervals) with a precision of at least 0.25°.

110			Δt	D_{o}	Df	ΔD	
			Time	Initial	Final	Change in	Percolation
			Interval	Depth to	Depth to	Water	Rate
Trial No.	Start Time	Stop Time	(min.)	Water (in.)	Water (in.)	Level (in.)	(min./in.)
1	9:38	10108	30	36	40	4	
2	10:10	10:40	30	36	40	4	
. 3	10:46	11:16	30	36	39	3	
4	11:19	11:49	30	36	39	3	
5	11:50	12:20	30	36	39	3	
5	12:22	12:52	30	36	39	3	
7	12:54	1:24	30	.36	39	3	
8	1:28	1:58	30	36	39	3	
9	1:59	2:29	30	36	39	3	
10	2:32	3:02	30	36	39	3	
11	3105.	3:35	30	36	39	3	
12	3:37	4:07	30	36	39	3	
13							
14	1						
15		-					
004444545	***						

Percolation Test Data Sheet PRAIRIE VIEW Project No: 20003 - SMP Project: Date: Tested By: ALEK Test Hole No: 61. Que USCS Soil Classification: SM Depth of Test Hole, D_T: Test Hole Dimensions (inches) Length Width Diameter (if round)= 8 wees Sides (if rectangular)= Sandy Soil Criteria Test® Greater Time Initial Fina! Change in than or Interval, Depth to Depth to Water Equal to 6"? Start Time | Stop Time Water (in.) Water (in.) Level (in.) Trial No. (min.) (y/n)19:12 9:37 25 37 38,25 1.25

"If two consecutive measurements show that six inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every 10 minutes. Other wise, pre-soak (fill) overnight. Obtain at least twelve measurements per hole over at least six hours (approximately 30 minute intervals) with a precision of at least 0.25".

			Δt	Do	$D_{\tilde{t}}$	AD	
			Time	Initial	Final	Change in	Percolation
			Interval	Depth to	Depth to	Water	Rate
Trial No.	Start Time	Stop Time	(min.)	Water (in.)	Water (in.)	Level (in.)	(min./in.)
11.	9:47	10117	30	37	38.75	1.75	
2	10:20	10:50	30	37	38.25	1.25	
. 3	10:54	11:24	30	37 .	38.0	1.00	
4	11:30	12:00	30	35	38.0	1.00	
5	12:01	12:31	36	35	38.0	1.00	
6	12132	1102	30	35	38.0	100	
7	1:03	1133	. 30	.35	38.0	1,00.	
8	1134	2:04	30	35	38.0	1,00	•
9	2105	2135	30	35	38.0	1.00	
10	2:37	3:07	30	35	38.0	1.60	
. 11	310 .	3140	30	35	38.0	1.00	
	3:42	4:12	30	35	38.0	1.00	
13							
14							
15		- 1					

Percolation Test Data Sheet PRAGRIE VIEW Project No: 26003-BMP 2-6-20 Project: Date: 9-4 Tested By: M.C. Test Hole No: 61.5 IN SH-SC USCS Soil Classification: Depth of Test Hole, D_T: Test Hole Dimensions (inches) Length Width Diameter (if round)= 8 14465 Sides (if rectangular)= Sandy Soil Criteria Test* Greater Initial Final Change in than or Time Depth to Depth to Water Equal to 6"? Interval, Start Time Stop Time (min.) Water (in.) Water (in.) Level (in.) (y/n)Trial No. 9:28 0.5 1 8:53 25 37.5 38.0

"If two consecutive measurements show that six inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every 10 minutes. Other wise, pre-soak (fill) overnight. Obtain at least twelve measurements per hole over at least six hours (approximately 30 minute intervals) with a precision of at least 0.25".

	4 4			4			
			Δt	Do	Df	ΔĐ	
			Time	initial	Final	Change In	Percolation
			Interval	Depth to	Depth to	Water	Rate
Triai No.	Start Time	Stop Time	(min.)	Water (in.)	Water (in.)	Level (in.)	(min./in.)
1	9,28	9158	30	37.5	38.0	0,50	
2	10:00	10:30	30	37.5	37.75	0.25	
, 3	10:32	11:02	30	37.5	37.75	0.25	
4	11:03	11:33	30	37.5	37.75	0.25	
5	11:36	12:06	30	37.5	37.75	0.25	
6	12:07	12:37	30	37.5	37.75	0.25	
7	12:40	1:10	: 30	37.5	37.75	0.25	
8	1:12	1:32	30	37.5	37.75	0.25	1
9	1:34	2:04	30	37.5	37.75	0.25	
10	2:06	2136	30	37.5	37.75	0.25	
. 11	2:40.	2:10	30	37.5	37.75	0.25	
12	3:12	3:42	30	37.5	37.75	0,25	
13			30				
14	•		30				,
15			30			1	
CARACATE				-			

Percolation Test Data Sheet PRAIRIE VIEW Project No: 20003 - BMP Project: Date: 2-6-20 Tested By: JF Test Hole No: P-5 Depth of Test Hole, D_T: 59 WCM USCS Soil Classification: SM Test Hole Dimensions (inches) Length Width Diameter (if round)= 8 INCH Sides (if rectangular)= Sandy Soil Criteria Test Greater Time Initial Final Change in than or Interval, Depth to Depth to Water Equal to 6"? Trial No. Start Time Stop Time (min.) Water (in.) Water (in.) Level (in.) (y/n)19:27 9:52 25 34.75 35,0 0,25 N *If two consecutive measurements show that six inches of water seeps away in less than 25

"If two consecutive measurements show that six inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every 10 minutes. Other wise, pre-soak (fill) overnight. Obtain at least twelve measurements per hole over at least six hours (approximately 30 minute intervals) with a precision of at least 0.25".

55 /	top Time	Δt Time Interval (min.)	D _o initial Depth to	D _f Final Depth to	. AD Change In Water	Percolation Rate
55 /		Interval (min.)	Depth to	Depth to	-	Percolation Rate
55 /		(min.)			Water	Rate
55 /			Maraham dim 1			H blod farme
	125		Water (in.)	Water (in.)	Level (in.)	(min./in.)
	0.63	30	35	35.75	0.75	
29 11	0:59	30	35	35,75	0.75	
59 11	1:29	30	35	35,50	0.50	
9 10	2:09	30	34.75	35.25	0.50	
09 12	1:39	30	35,0	35,50	0,50	
40 /	10	30	3510	35,50	0.50	
1 1	:41	30	35,0	35,50	0,50.	
2 2	112	30	34.5	35,50	0,50	,
2 2	142	30	35,0	35,50	0,50	
2 37	1/2	30	35,0	35,50	0,50	
2 . 3:	4.2	30	35,0	35,50.	0,50	
2 4	501	30	35,0	35,50	0.50	
	-					
,						
_						

Percolation Test Data Sheet PRAIRIE VIEW Project No: 20063-BMP 2-6-20 Project: Date: P-6 Test Hole No: Tested By: M.C. SM Depth of Test Hole, Dr: 58.5W USCS Soil Classification: Test Hole Dimensions (inches) Length Width Diameter (if round)= 8 INCH Sides (if rectangular)= Sandy Soil Criteria Test* Greater Time Initial Final Change in than or Interval, Depth to Depth to Water Equal to 6"? Trial No. | Start Time Stop Time (min.) Water (in.) Water (in.) Level (in.) (y/n)1 8:48 9:13 25 34,5 515 25 2 9:20 9145 34.5 49.5

*If two consecutive measurements show that six inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every 10 minutes. Other wise, pre-soak (fill) overnight. Obtain at least twelve measurements per hole over at least six hours (approximately 30 minute Intervals) with a precision of at least 0.25°.

			Δt	Do	Df	AD	
			Time	initial	Final	Change in	Percolation
			Interval	Depth to	Depth to	Water	Rate
Trial No.	Start Time	Stop Time	(ំពារិក.)	Water (in.)	Water (in.)	Level (in.)	(min./in.)
1	9.54	10:04	10	34.5	41.5	7.0	
2	10:08	10:18	10	34.5	40.5	6.0	
. З	10:20	10:30	10	34.5	40.0	5,5	
4	10:35	10145	10	34.5	38.5	4.0	
5	10:42	10:57	10	34.5	37.5	3.0	
6	10159	11:09	10	34.5	37.5	3.0	
7	11:11	11:21	10	34.5	37.5	3.0.	
	11:24	11:34	10	34.5	37.5	3.0	
9	11:37	11:47	10	34.5	37.5	3.0	
10	11:49	11:59	10	34.5	37.5	3.0	
11	,						
12							
13							
14							
15							