



# CVIII ENGINEERING GROUP, INC.

GEOTECHNICAL, STRUCTURAL & TRANSPORTATION ENGINEERING

## PERCOLATION TEST REPORT

(USUAL OPEN HOLE TEST - CONSTANT HEAD)

**CLIENT:** ORLANDO CASTRO  
9039 WEST SUNRISE BLVD  
PLANTATION, FL 33322

**DATE:** OCTOBER 27, 2021  
**ORDER#:** 21-1027-B  
**PERC#:** P2

<b>PROJECT NAME:</b>	PROPOSED NEW DRAINAGE
<b>PROJECT LOCATION:</b>	1371 NE 27 WAY. POMPANO BEACH, FL 33061

## CALCULATION OF HYDRAULIC CONDUCTIVITY (K-VALUE)

ELAPSED TIME (MIN)	WATER (GAL)	WATER TABLE (FT)	FIELD DATA INFO & PARAMETERS:	
0	0.0	3.00	TOTAL DEPTH BORE HOLE (FT)	15.00
1	5.0	3.00	HOLE DIAMETER OR PERFORATED CASIGN DIAMETER (FT)	0.50
2	5.0	3.00	DEPTH OF WATER TABLE BELOW GROUND SURFACE (FT)	3.00
3	5.0	3.00	SATURATED HOLE DEPTH (FT)	12.00
4	5.0	3.00	AVERAGE FLOW RATE AT CONSTANST DEPTH (GAL/MIN)	5.00
5	5.0	3.00	BORE HOLE PURGED	YES
6	5.0	3.00	EFFECTIVE CONSTANT HEAD DURING PUMP (FT ABOVE W.T)	3.00
7	5.0	3.00	STABILIZED FLOW RATE AT CONSTANT HEAD (CFS)	0.0111
8	5.0	3.00	<b>K-VALUE 1.73533E-04</b> CFS/FT <sup>2</sup> - FT OF HEAD	
9	5.0	3.00		
10	5.0	0.00		

## SUB-SURFACE INVESTIGATION

DEPTH BELOW GROUND SURFACE	SOIL DESCRIPTION
0'0" TO 3'6"	BROWN SAND
3'6" TO 5'0"	LIGHT BROWN SAND SUGAR
5'0" TO 8'0"	DARK BROWN SAND
8'0" TO 15'0"	GRAY SUGAR SAND

**REMARKS:** THE ABOVE TEST WAS PERFORMED AND CALCULATED AS PRESENTED IN THE MANUAL "DESIGN OF EXFILTRATION TRENCH TO MEET SFWMD REGULATORY CRITERIA & FDOT CRITERIA"

## PERC TEST LOCATION SITE PLAN



RAW DATA CALCULATION TABLE		
DEEP OF WATER TABLE (H2)	(H2)	3.00
SATURATED HOLE DEPTH (DS)	(DS)	12.00
DIAMETER OF TEST HOLE (D)	(D)	0.50
STABILIZED FLOW RATE (CFS)	SFR-(CFS)	0.0111
FORMULA	A	0.044566667
FORMULA	B	1.570759633
FORMULA	C	163.5
FORMULA	D	0.028372684
FORMULA = A/(B*C)	K	0.000173533
FORMULA = (D)/(C)	K - CHECK	0.000173533

RESPECTFULLY SUBMITTED,

**CVIII ENGINEERING GROUP, INC.**

DANIEL MORAO, P.E.

PROFESSIONAL ENGINEER NO. 87771

STATE OF FLORIDA



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by Daniel  
Morao  
Date:  
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# DRC

PZ21-12000034

12/15/2021



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GEOTECHNICAL, STRUCTURAL & TRANSPORTATION ENGINEERING

## PERCOLATION TEST REPORT

(USUAL OPEN HOLE TEST - CONSTANT HEAD)

**CLIENT:** ORLANDO CASTRO  
9039 WEST SUNRISE BLVD  
PLANTATION, FL 33322

**DATE:** OCTOBER 27, 2021  
**ORDER#:** 21-1027-A  
**PERC#:** P1

<b>PROJECT NAME:</b>	PROPOSED NEW DRAINAGE
<b>PROJECT LOCATION:</b>	2716 NE 14 STREET. POMPANO BEACH, FL 33061

## CALCULATION OF HYDRAULIC CONDUCTIVITY (K-VALUE)

ELAPSED TIME (MIN)	WATER (GAL)	WATER TABLE (FT)	FIELD DATA INFO & PARAMETERS:	
0	0.0	3.00	TOTAL DEPTH BORE HOLE (FT)	15.00
1	5.5	3.00	HOLE DIAMETER OR PERFORATED CASIGN DIAMETER (FT)	0.50
2	5.5	3.00	DEPTH OF WATER TABLE BELOW GROUND SURFACE (FT)	3.00
3	5.5	3.00	SATURATED HOLE DEPTH (FT)	12.00
4	5.5	3.00	AVERAGE FLOW RATE AT CONSTANST DEPTH (GAL/MIN)	5.50
5	5.5	3.00	BORE HOLE PURGED	YES
6	5.5	3.00	EFFECTIVE CONSTANT HEAD DURING PUMP (FT ABOVE W.T)	3.00
7	5.5	3.00	STABILIZED FLOW RATE AT CONSTANT HEAD (CFS)	0.0123
8	5.5	3.00	<b>K-VALUE 1.90887E-04</b> CFS/FT <sup>2</sup> - FT OF HEAD	
9	5.5	3.00		
10	5.5	0.00		

## SUB-SURFACE INVESTIGATION

DEPTH BELOW GROUND SURFACE	SOIL DESCRIPTION
0'0" TO 3'6"	LIGHT BROWN SAND
3'6" TO 5'0"	LIGHT BROWN SAND SUGAR
5'0" TO 8'0"	DARK BROWN SAND
8'0" TO 15'0"	GRAY SUGAR SAND

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## PERC TEST LOCATION SITE PLAN



RAW DATA CALCULATION TABLE		
DEEP OF WATER TABLE (H2)	(H2)	3.00
SATURATED HOLE DEPTH (DS)	(DS)	12.00
DIAMETER OF TEST HOLE (D)	(D)	0.50
STABILIZED FLOW RATE (CFS)	SFR-(CFS)	0.0123
FORMULA	A	0.049023333
FORMULA	B	1.570759633
FORMULA	C	163.5
FORMULA	D	0.031209952
FORMULA = A/(B*C)	K	0.000190887
FORMULA = (D)/(C)	K - CHECK	0.000190887

RESPECTFULLY SUBMITTED,

**CVIII ENGINEERING GROUP, INC.**

DANIEL MORAO, P.E.

PROFESSIONAL ENGINEER NO. 87771

STATE OF FLORIDA



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