



EARTHWORK

Matrix Report # 1

Project Name: Wheeler Park Infiltration Testing (Geotechnical)

Date: 9/7/2023 **Day:** Thursday

Project No: 301287.51

Weather: Overcast

Representative: Ryan Woodcum, PE

Temperature: 70 - 90°

General Contractor: -

Evaluation Type: Earthwork

Rainfall Amount: 0 inch

Location: Infiltration Testing

Matrix Engineering Group completed the authorized infiltration testing at the Wheeler Park Project.. The field testing was performed by Mr. Ryan Woodcum, P.E. of Ahlberg Engineering, Inc. at the designated location provided by the client.

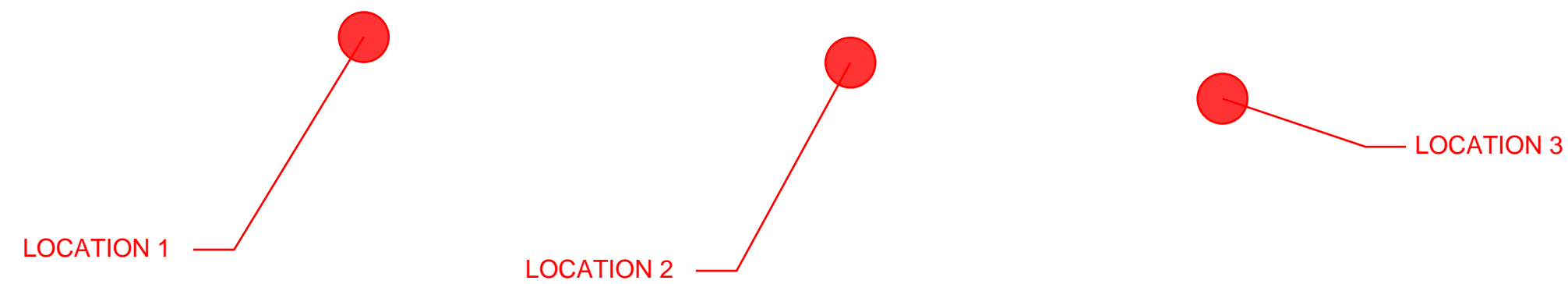
The measured percolation rates and calculated infiltration rates are shown below:

Location	Test Depth (ft) BGS	Percolation Rate (minutes/inch)	Calculated Infiltration Rate (inches/hr)
I-1	4	30	0.33
I-2	4	35	0.24
I-3	4	45	0.19

Please find attached the infiltration report with the investigative findings.

Nick Ackall
Prepared By

Respectfully submitted
MATRIX ENGINEERING GROUP, INC.



OWNER/DEVELOPER
 COMPANY: ROCKDALE COUNTY
 ADDRESS: P.O. BOX 289
 CONYERS, GA 30012
 PHONE: (770) 278-7283
 CONTACT: BRITTANY KONOPKA
 EMAIL: BRITTANY.KONOPKA@ROCKDALECOUNTYGA.GOV

CONTRACTOR
 COMPANY: XXXXXX
 ADDRESS: XXXXXX
 CONTACT: XXXXXX
 PHONE: (XXX) XXX-XXXX
 EMAIL: XXXXXXXX

SURVEYOR
 COMPANY: PATRICK & ASSOCIATES
 ADDRESS: 928 BLACKLAWN RD SW,
 CONYERS, GA 30094
 PHONE: 770-483-9745
 CONTACT: XX
 EMAIL: XX

SITE DESIGNER
 COMPANY: GEORGIA CIVIL, INC.
 ADDRESS: P.O. BOX 896
 MADISON, GA 30650
 PHONE: 706.342.1104

PAVING LEGEND:
 HD = HEAVY DUTY
 SD = STANDARD DUTY

	PLAYGROUND SURFACE
	SPLASH PAD SURFACE
	CONCRETE PAVING
	VOLLEYBALL COURT SURFACE
	DISC GOLF COURSE
	FITNESS COURT SURFACE

REFER TO DETAILS FOR SECTION REQUIREMENTS.

- NOTES:**
- ALL STRIPING SHOWN INCLUDING ARROWS, STOPBARS, AND PARKING SPACES REFLECTS STRIPING TO BE DONE BY CONTRACTOR.
 - ALL PAVEMENT MARKINGS SHALL BE INSTALLED PRIOR TO ACCEPTANCE BY THE LIA AND/OR ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
 - THE DEVELOPER SHALL BE RESPONSIBLE FOR THE INITIAL INSTALLATION OF STOP SIGNS.

GEORGIA811
 www.Georgia811.com

Contact 811 before you dig

Utilities shown are for Contractor's convenience. Items are shown schematically and neither the site design professional nor the owner assumes any responsibility for accuracy in their actual location. This plan may not show and/or may incorrectly show utilities located on site. Contractor shall be responsible to secure and use the services of a private utility locator firm during the entire course of work and shall pay for said services. Contractor shall locate utilities prior to any excavation including field verifying location and depth of utilities that are to be saved and protected. Contractor shall notify the site design professional of any utility conflicts prior to installation of new utilities, grading, etc. The Contractor at their expense shall be responsible to repair, replace and/or indicate, as necessary, any utilities damaged, whether shown or not. Abandonment, relocation, etc. of utilities shall be coordinated with the respective utility company.

WHEELER PARK
 1400 SE PARKER RD
 CONYERS, GA 30094
 ZONING: I-D

DRAWING DATE:	8/15/2023
DRAWN BY:	XXX
CHECKED BY:	XXX
REVISIONS	
DATE:	DESCRIPTION:

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LAYOUT & STAKING PLAN

Sheet Number
C-2.0



Ahlberg
Engineering Inc. 525 Webb Industrial Drive
Suite A
Marietta, GA 30062

Telephone
(770) 919-9968

Fax
(770) 919-9964

September 6, 2023

Mr. Naser Ackall
Matrix Engineering Group, Inc.
4358 Chamblee Tucker Road
Suite 3
Tucker, GA 30084

via email – naser@matrixengineeringgroup.com

**Re: Percolation Tests
Wheeler Park
1400 Parker Road, SE
Conyers, Georgia
Project No. 01-234044**

Dear Mr. Ackall:

In compliance with your instructions, we have performed percolation testing for the referenced project. The results are to be found in the accompanying report.

This report presents the results of the percolation tests for the Wheeler Park project located at 1400 Parker Road, SE in Conyers, Georgia conducted for Matrix Engineering Group, Inc. The work was performed in accordance with our Proposal No. P-23163 dated September 1, 2023. Authorization to perform this exploration and analysis was given in the form of a signed copy of that proposal.

The purpose of the percolation tests was to evaluate the soil and groundwater conditions at the site as well as to provide the Design Engineer a percolation rate.

The scope of the percolation tests included a reconnaissance of the immediate site, the subsurface exploration, field testing, and an engineering analysis and evaluation of the subsurface materials.

The data submitted are based on the available soil information and the preliminary design details. The Geotechnical Engineer warrants that the findings, recommendations, specifications, or professional advice contained herein, have been presented after being prepared in accordance with generally accepted professional engineering practice in the fields of foundation engineering, soil mechanics and engineering geology. No other warranties are implied or expressed.

This report has been prepared for the exclusive use of Matrix Engineering Group, Inc. for the specific application to the Wheeler Park project located at 1400 Parker Road, SE in Conyers, Georgia.

The field exploration included performing three (3) percolation tests at depths of approximately four (4) feet below the existing ground surface. The borings were made in locations determined by others; located in the field by Matrix Engineering Group, Inc.; and drilled by Ahlberg Engineering, Inc.

The hand auger borings were drilled using hand augering techniques. The soils were classified from the cuttings of the augered soil. The hand augering procedure included retracting the auger at approximately six (6) inch intervals to remove the material retained in the auger. All of the samples recovered were identified and evaluated by the Geotechnical Engineer.

The percolation rate measurements were made in accordance with the Modified Taft Engineering Center Method. The percolation test holes were bored with vertical sides and a minimum diameter of four (4) inches. Approximately two (2) inches of gravel was added to protect the bottom of the percolation test holes from sediment. The percolation test holes were filled with water. Water was allowed to stand in the test holes until the soil was saturated. A fixed point at the ground surface was established and repeated measurements made of the distance in inches from that point to the water surface. Approximately the same time interval was used between measurements. Successive measurements were continued at approximately equal time intervals until a constant rate of percolation was demonstrated by the water surface dropping the same distance per time interval.

The measured percolation rate was adjusted for each test according to the following formula found in City of Atlanta, Georgia's Green Infrastructure Practices for Small Commercial Development APPENDIX C – Infiltration Testing Parameters:

Infiltration Rate = (Percolation Rate) / (Reduction Factor), where the Reduction Factor is given by:

$Rf = (2d1 - \Delta d) / DIA + 1$, with:

$d1$ = initial water depth, in.

Δd = average/final water level drop, in.

DIA = diameter of the percolation test hole, in.

The subsurface materials encountered in the percolation test borings drilled by AEI consist of brownish red sandy silts, reddish brown sandy silts, and reddish brown silty sands.

Hand auger refusal materials were not encountered in the test boring.

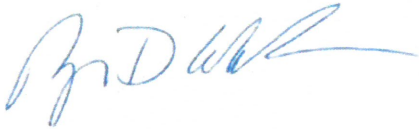
Groundwater was not encountered in the test boring during drilling or at the time of percolation testing.

The measured percolation rates and calculated infiltration rates are shown in Table 1.0 below.

Location	Test Depth, feet below existing ground surface	Percolation Rate, minutes/inch	Calculated Infiltration Rate, inches/hour
I-1	4	30	0.33
I-2	4	35	0.24
I-3	4	45	0.19

Table 1.0 - Test Results

Respectfully submitted,
AHLBERG ENGINEERING, INC.



Ryan D. Woodcum, PE
Principal Engineer