

# letter of transmittal



DATE 3/08/18 JOB NO. R20-17-261

1308 Adams Street  
Kansas City, KS 66103  
Ph (913) 321-8100  
Fax (913) 321-8181

ATTN: JAKE LOVELESS

TO: GRIFFIN RILEY INVESTMENTS LLC  
120 SE 30TH ST  
LEE'S SUMMIT MO 64082

RE: RESIDENCES @ ECHELON

## WE ARE SENDING YOU

☒ ATTACHED ☐ UNDER SEPARATE COVER ☐ THE FOLLOWING ITEMS:

<input type="checkbox"/> AGGREGATE REPORT	<input type="checkbox"/> CONCRETE REPORT	<input type="checkbox"/> PROPOSAL
<input type="checkbox"/> ASPHALT REPORT	<input type="checkbox"/> FOUNDATION REPORT	<input type="checkbox"/> SOILS REPORT
<input checked="" type="checkbox"/> AS NOTED	<input type="checkbox"/> INVOICE	<input type="checkbox"/> OTHER

COPIES	DATE	NO.	DESCRIPTION
1			SITE OBSERVATION PERFORMED 3/02 - 3/07

## THESE ARE TRANSMITTED AS CHECKED BELOW:

<input type="checkbox"/> FOR CHECKING	<input type="checkbox"/> FOR REVIEW / COMMENT	<input checked="" type="checkbox"/> FOR FILES & INFO.
<input type="checkbox"/> FOR YOUR USE ON JOB	<input type="checkbox"/> APPROVED AS NOTED	
<input type="checkbox"/> AS REQUESTED	<input type="checkbox"/> APPROVED AS SUBMITTED	

## REMARKS:

## COPY TO:

jake@griffinriley.com  
tjwatreas@lukedraily.com  
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thauschild@nspjarch.com  
mschlicht@es-kc.com  
matthew.munger@cityofLS.net  
srunyan@lukedraily.com

BY:

JIM BYRNES  
SR PROJ MANAGER

## REPORT OF IN-PLACE DENSITY

**CLIENT:** GRIFFIN RILEY INVESTMENTS, LLC  
ATTN: JAKE LOVELESS  
120 SE 30TH STREET  
LEE'S SUMMIT MO 64082

PAGE 1 OF 2

**PROJECT:** THE RESIDENCES @ ECHELON  
MO 291 & 50  
LEE'S SUMMIT, MO

**PROJECT NO.:** R20-17-261  
**REPORT NO.:** K22429  
**DATE OF SERVICE:** 03/02/2018  
**AUTHORIZATION:** JAKE LOVELESS  
**REPORT DATE:** 03/08/2018

**SERVICES:** Perform in-place density and moisture content tests to determine the degree of field compaction.

## PROJECT DATA

**CONTRACTOR:** LUKE DRAILY CONST

**GAUGE:** Troxler 3440  
**GAUGE SERIAL NO.:** 15277

	DENSITY	MOISTURE
<b>METHOD OF TEST:</b>	ASTM D6938	ASTM D3017
<b>SPECIFICATION:</b>	95% Min	-1 to +3% of Opt

**STANDARD COUNTS**  
**MOISTURE - CURRENT:** 716 **PREVIOUS:** 713  
**DENSITY - CURRENT:** 1486 **PREVIOUS:** 1481  
**TEST MODE:** Direct Transmission  
**PROBE DEPTH:** 8

M/D #	TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS		REFERENCE REPORT
			OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	
1.	STANDARD PROCTOR	REDDISH BROWN SILTY CLAY	23.1	96.7	K21466
2.	STANDARD PROCTOR	YELLOWISH BROWN SILTY CLAY	21.1	101.4	K21470

## REPORT OF TESTS

TEST NO	LOCATION	PROBE DEPTH	LIFT/ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
1.	C.7-09	8	2.5' bff	2	22.3	21.1	119.0	97.3	101.4	96
2.	C-0.7	8	1' bff	1	24.7	23.1	119.8	96.1	96.7	99
3.	E-2	8	2.5' bff	1	23.8	23.1	114.5	92.5	96.7	96
4.	D.9-1.1	8	4.5' bff	2	21.9	21.1	119.8	98.3	101.4	97
5.	D.7-2	8	2.5' bff	2	20.2	21.1	116.7	97.1	101.4	96
6.	D.6-1.2	8	4.5' bff	1	25.2	23.1	117.2	93.6	96.7	97
7.	E.2-2	8	1.5' bff	1	25.6	23.1	117.8	93.8	96.7	97
8.	E-1.3	8	3.5' bff	1	24.0	23.1	118.5	95.6	96.7	99

Report of Tests continued on page 2

PROJECT NO.: R20-17-261 GRIFFIN RILEY INVESTMENTS, LLC

DATE OF SERVICE: 03/02/2018

TEST NO	LOCATION	PROBE DEPTH	LIFT/ ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
9.	D.6-2.0	8	2.5' bff	1	23.7	23.1	117.0	94.6	96.7	98
10.	D.3-1.1	8	6' bff	1	25.9	23.1	115.8	92.0	96.7	95

Test results on this report meet project specifications as noted above.

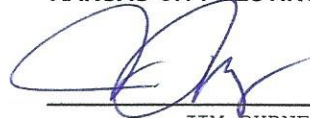
ADDITIONAL COMMENTS:

Technician: ANDREW WILSON, SR. ENGR. TECHNICIAN

Report Distribution:

(1) cbeverlin@kdc-engrs.com  
(1) jake@griffinriley.com  
(1) matthew.munger@cityofls.net  
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(1) tjwatreas@lukedrailey.com

KANSAS CITY TESTING & ENGINEERING,



JIM BYRNES, R.G.  
PROJECT MANAGER



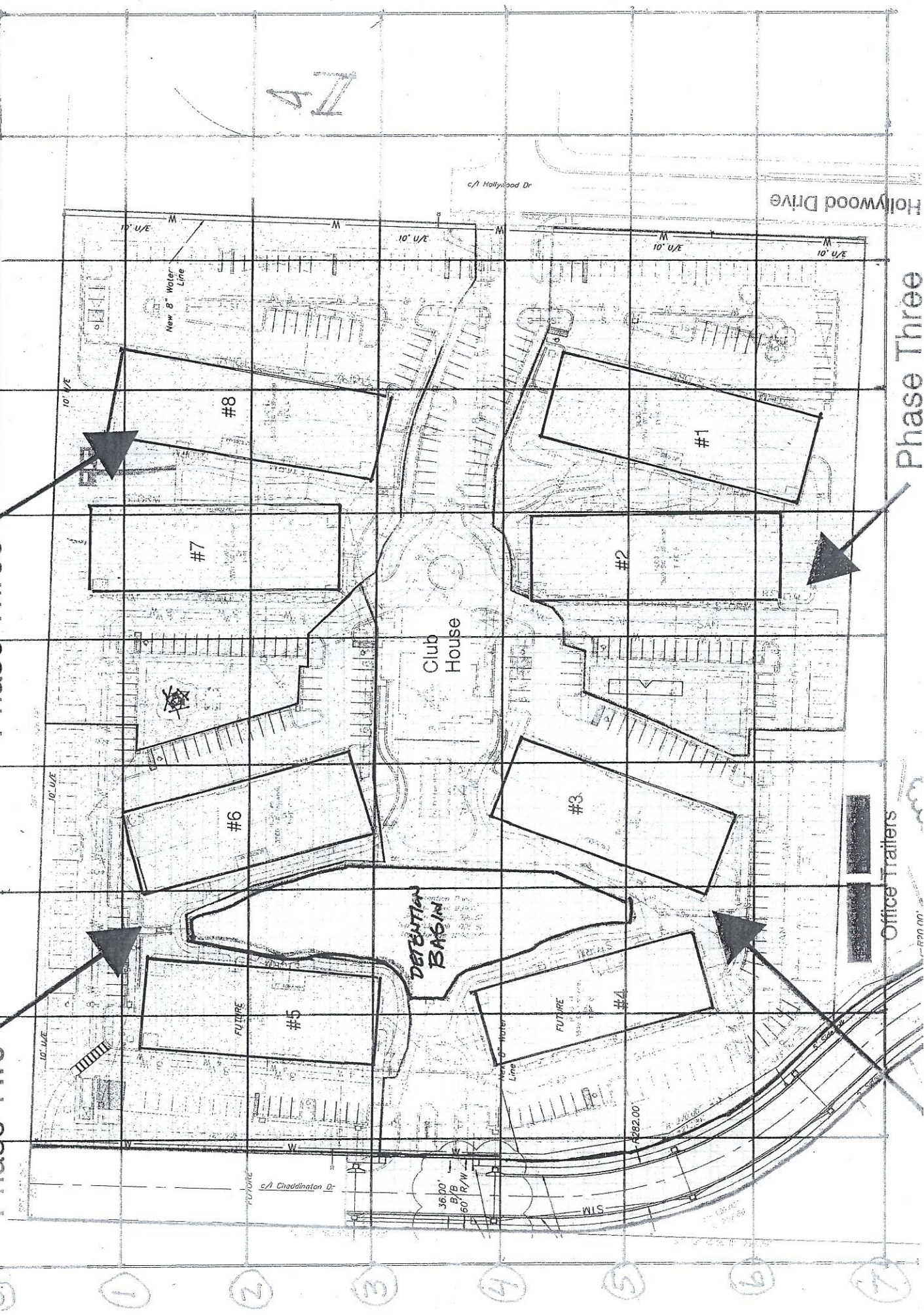
DENSITY TEST LOCATION GRID  
RESIDENCES AT ECHELON

Exhibit "C" - Schedule and Phasing

A B C D E F G H I J K

Phase Two

Phase Three



Office Trailers

R20 00'



## REPORT OF IN-PLACE DENSITY

**CLIENT:** GRIFFIN RILEY INVESTMENTS, LLC  
ATTN: JAKE LOVELESS  
120 SE 30TH STREET  
LEE'S SUMMIT MO 64082

PAGE 1 OF 2

**PROJECT:** THE RESIDENCES @ ECHELON  
MO 291 & 50  
LEE'S SUMMIT, MO

**PROJECT NO.:** R20-17-261  
**REPORT NO.:** K22443  
**DATE OF SERVICE:** 03/03/2018  
**AUTHORIZATION:** JAKE LOVELESS  
**REPORT DATE:** 03/08/2018

**SERVICES:** Perform in-place density and moisture content tests to determine the degree of field compaction.

### PROJECT DATA

**CONTRACTOR:** LUKE DRAILY CONST

**GAUGE:** Troxler 3440  
**GAUGE SERIAL NO.:** 15277

	DENSITY	MOISTURE
<b>METHOD OF TEST:</b>	ASTM D6938	ASTM D3017
<b>SPECIFICATION:</b>	95% Min	-1 to +3% of Opt

STANDARD COUNTS		
<b>MOISTURE - CURRENT:</b>	716	<b>PREVIOUS:</b> 713
<b>DENSITY - CURRENT:</b>	1486	<b>PREVIOUS:</b> 1481
<b>TEST MODE:</b> Direct Transmission		
<b>PROBE DEPTH:</b> 8		

M/D #	TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS		REFERENCE REPORT
			OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	
1.	STANDARD PROCTOR	BROWN-GRAY SILTY CLAY	22.1	99.9	K21467
2.	STANDARD PROCTOR	REDDISH BROWN SILTY CLAY	23.1	96.7	K21466

### REPORT OF TESTS

TEST NO	LOCATION	PROBE DEPTH	LIFT/ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
1.	E-2	8	1' bff	1	23.1	22.1	119.2	96.8	99.9	97
2.	E-0.7	8	4.5' bff	1	24.9	22.1	120.2	96.2	99.9	96
3.	D.6-2	8	3' bff	1	22.0	22.1	117.2	96.1	99.9	96
4.	D.5-1.1	8	4.5' bff	2	24.0	23.1	114.0	91.9	96.7	95
5.	D-1.1	8	4.5' bff	1	21.1	22.1	119.4	98.6	99.9	99
6.	D.7-2.1	8	3' bff	1	25.0	22.1	118.8	95.0	99.9	95
7.	E.1-1.1	8	1' bff	1	23.1	22.1	118.5	96.3	99.9	96
8.	D.7-1.8	8	2.5' bff	2	23.8	23.1	115.8	93.5	96.7	97

Report of Tests continued on page 2

PROJECT NO.: R20-17-261 GRIFFIN RILEY INVESTMENTS, LLC

DATE OF SERVICE: 03/03/2018

TEST NO	LOCATION	PROBE DEPTH	LIFT/ ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
9.	D.5-1.1	8	.5' bff	1	21.2	22.1	116.0	95.7	99.9	96
10.	D.9-2.1	8		1	21.5	22.1	115.8	95.3	99.9	95

Test results on this report meet project specifications as noted on page 1.

ADDITIONAL COMMENTS:

**Technician:** ANDREW WILSON, SR. ENGR. TECHNICIAN

**Report Distribution:**

(1) cbeverlin@bdc-engrs.com  
(1) jake@griffinriley.com  
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**KANSAS CITY TESTING & ENGINEERING,**



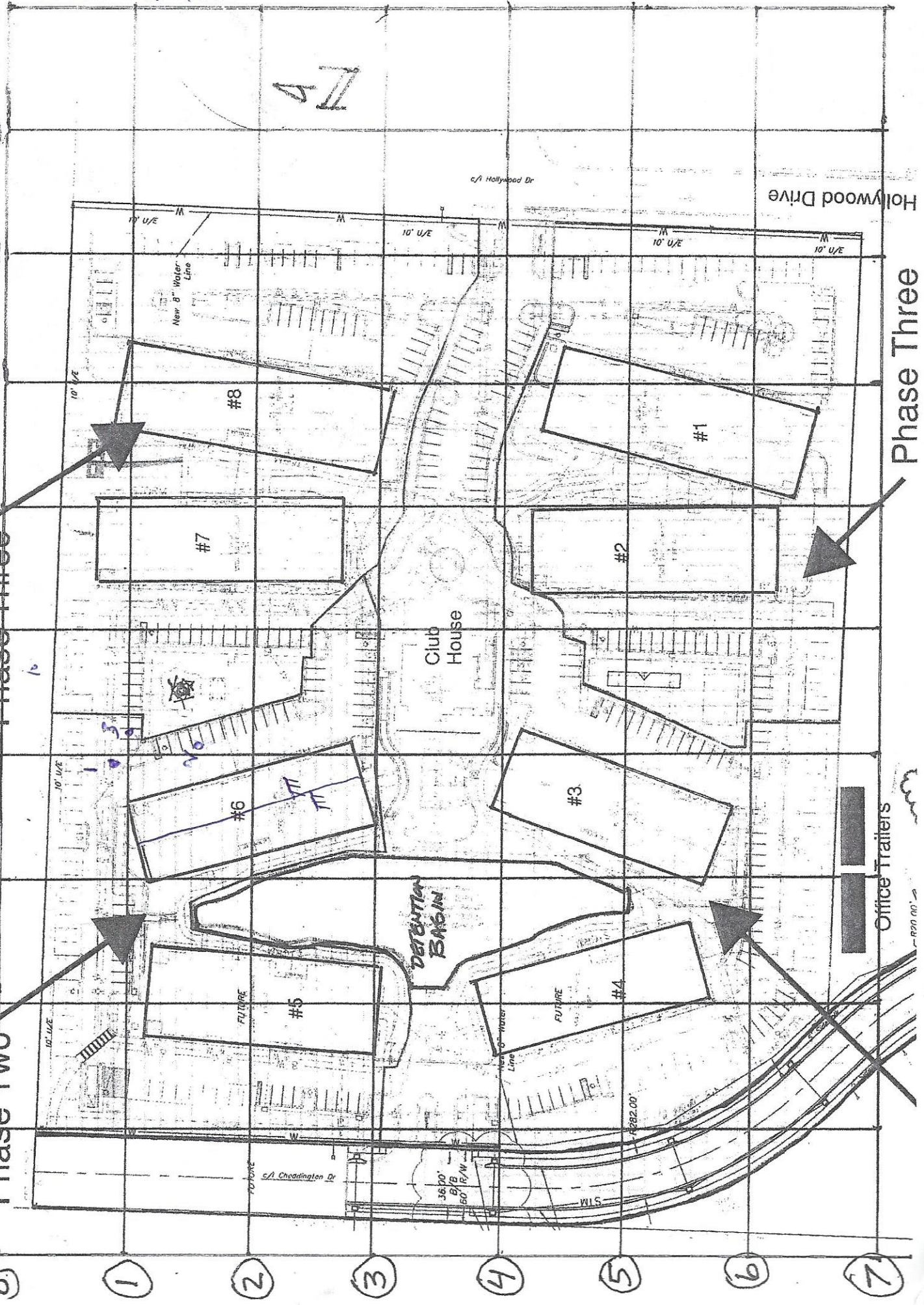
JIM BYRNES, R.G.  
PROJECT MANAGER



DENSITY TEST LOCATION GRID  
RESIDENCES AT ECHOLON

Exhibit "C" - Schedule and Naming

- A B C D E F G H I J K  
 Phase Two Phase Three



660-676 4385



## REPORT OF IN-PLACE DENSITY

**CLIENT:** GRIFFIN RILEY INVESTMENTS, LLC  
ATTN: JAKE LOVELESS  
120 SE 30TH STREET  
LEE'S SUMMIT MO 64082

PAGE 1 OF 2

**PROJECT:** THE RESIDENCES @ ECHELON  
MO 291 & 50  
LEE'S SUMMIT, MO

**PROJECT NO.:** R20-17-261  
**REPORT NO.:** K22459  
**DATE OF SERVICE:** 03/06/2018  
**AUTHORIZATION:** JAKE LOVELESS  
**REPORT DATE:** 03/08/2018

**SERVICES:** Perform in-place density and moisture content tests to determine the degree of field compaction.

### PROJECT DATA

**CONTRACTOR:** LUKE DRAILY CONST

**GAUGE:** Troxler 3440

**GAUGE SERIAL NO.:** 15277

	DENSITY	MOISTURE
<b>METHOD OF TEST:</b>	ASTM D6938	ASTM D3017
<b>SPECIFICATION:</b>	95% Min	-1 to 3% of Opt

STANDARD COUNTS		PREVIOUS:
MOISTURE - CURRENT:	711	716
DENSITY - CURRENT:	1476	1486
<b>TEST MODE:</b> Direct Transmission		
<b>PROBE DEPTH:</b> 8		

M/D #	TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS		REFERENCE REPORT
			OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	
1.	STANDARD PROCTOR	REDDISH BROWN SILTY CLAY	23.1	96.7	K21466
2.	STANDARD PROCTOR	YELLOWISH BROWN SILTY CLAY	19.0	102.8	K21468
3.	STANDARD PROCTOR	GRAY-BROWN SHALEY CLAY	17.6	106.0	K22335

## REPORT OF TESTS

TEST NO	LOCATION	PROBE DEPTH	LIFT/ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
1.	E-0.5	8	3.5' bff	1	24.8	23.1	120.7	96.7	96.7	100
2.	D.6-1.3	8	2.5' bff	1	24.4	23.1	114.6	92.1	96.7	95
3.	D.9-2.5	8	2' bff	2	19.3	19.0	117.0	98.1	102.8	95
4.	F-1	8	1.5' bff	1	22.3	23.1	116.4	95.2	96.7	98
5.	F.1-2.1	8	1' bff	3	20.0	17.6	123.2	102.7	106.0	97
6.	D.5-2.1	8	.5' bff	3	17.4	17.6	120.0	102.2	106.0	96
7.	E-0.9	8	2' bff	2	22.0	19.0	121.0	99.2	102.8	96
8.	C-0.5	8	2.5' bff	2	21.2	19.0	123.7	102.1	102.8	99

Report of Tests continued on page 2



PROJECT NO.: R20-17-261 GRIFFIN RILEY INVESTMENTS, LLC

DATE OF SERVICE: 03/06/2018

TEST NO	LOCATION	PROBE DEPTH	LIFT/ ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
9.	E.7-0.5	8	3' bff	3	19.2	17.6	124.4	104.4	106.0	98
10.	B.2-1.5	8	1.5' bff	1	22.5	23.1	117.1	95.6	96.7	99
11.	B.3-2.5	8	1' bff	2	20.1	19.0	119.4	99.4	102.8	97

Test results on this report meet project specifications as noted on page 1.

ADDITIONAL COMMENTS:

Technician: ANDREW WILSON, SR. ENGR. TECHNICIAN

Report Distribution:

(1) cbeverlin@bdc-engrs.com  
(1) jake@griffinriley.com  
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(1) tjwatreas@lukedrailly.com

KANSAS CITY TESTING & ENGINEERING,



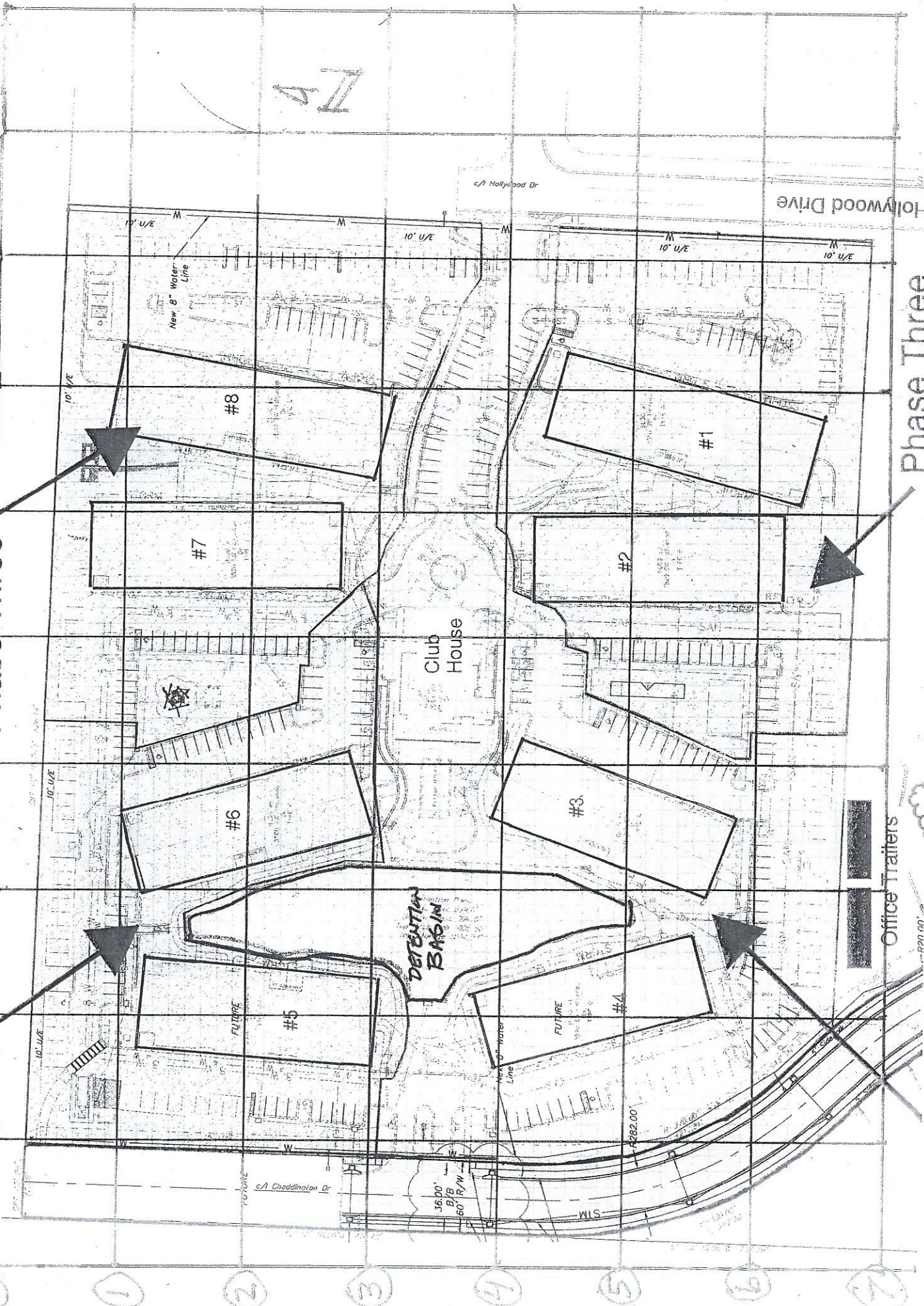
JIM BYRNES, R.G.  
PROJECT MANAGER



DENSITY TEST LOCATION GRID  
RESIDENCES AT ECHELON

Exhibit "C" - Schedule and Phasing

Ⓐ Phase Two Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ Ⓘ Ⓚ





## REPORT OF IN-PLACE DENSITY

**CLIENT:** GRIFFIN RILEY INVESTMENTS, LLC  
ATTN: JAKE LOVELESS  
120 SE 30TH STREET  
LEE'S SUMMIT MO 64082

PAGE 1 OF 2

**PROJECT:** THE RESIDENCES @ ECHELON  
MO 291 & 50  
LEE'S SUMMIT, MO

**PROJECT NO.:** R20-17-261  
**REPORT NO.:** K22489  
**DATE OF SERVICE:** 03/07/2018  
**AUTHORIZATION:** JAKE LOVELESS  
**REPORT DATE:** 03/08/2018

**SERVICES:** Perform in-place density and moisture content tests to determine the degree of field compaction.

### PROJECT DATA

**CONTRACTOR:** LUKE DRAILY CONST

**GAUGE:** Troxler 3440

**GAUGE SERIAL NO.:** 15277

	DENSITY	MOISTURE
<b>METHOD OF TEST:</b>	ASTM D6938	ASTM D3017
<b>SPECIFICATION:</b>	95% Min	-1 to +3% of Opt

STANDARD COUNTS		PREVIOUS:
<b>MOISTURE - CURRENT:</b>	716	711
<b>DENSITY - CURRENT:</b>	1487	1476
<b>TEST MODE:</b> Direct Transmission		
<b>PROBE DEPTH:</b> 8		

M/D #	TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS		REFERENCE REPORT
			OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	
1.	STANDARD PROCTOR	REDDISH BROWN SILTY CLAY	23.1	96.7	K21466

### REPORT OF TESTS

TEST NO	LOCATION	PROBE DEPTH	LIFT/ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
1.	G.5-6.3	8	9.5' bff	1	25.4	23.1	115.4	92.0	96.7	95
2.	G.6-6.4	8	9.2' bff	1	24.4	23.1	119.1	95.7	96.7	99
3.	G.5-6.2	8	8' bff	1	25.0	23.1	115.1	92.1	96.7	95
4.	G.7-6.4	8	7' bff	1	25.0	23.1	115.4	92.3	96.7	95
5.	G.6-6.2	8	6' bff	1	25.5	23.1	115.8	92.3	96.7	95
6.	G.7-6.2	8	5' bff	1	25.1	23.1	116.5	93.1	96.7	96
7.	G.5-6.0	8	4' bff	1	24.8	23.1	115.2	92.3	96.7	95
8.	E-0.7	8	2' bff	1	26.0	23.1	117.9	93.6	96.7	97

Report of Tests continued on page 2

PROJECT NO.: R20-17-261 GRIFFIN RILEY INVESTMENTS, LLC

DATE OF SERVICE: 03/07/2018

TEST NO	LOCATION	PROBE DEPTH	LIFT/ ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
9.	D.5-0.7	8	2.2' bff	1	25.9	23.1	120.4	95.6	96.7	99

Test results on this report meet project specifications as noted on page 1.

ADDITIONAL COMMENTS:

Technician: ANDREW WILSON, SR. ENGR. TECHNICIAN

**Report Distribution:**

(1) cbeverlin@bdc-engrs.com  
(1) jake@griffinriley.com  
(1) matthew.munger@cityofLS.net  
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(1) tjwatreas@lukedrailey.com

KANSAS CITY TESTING & ENGINEERING,



JIM BYRNES, R.G.  
PROJECT MANAGER



DENSITY TEST LOCATION GRID  
RESIDENCES AT ECHELON

(A) Phase Two (B) (C) (D) (E) Phase Three (F) (G) (H) (I) (J) (K)

Exhibit "C" - Schedule and Phasing

