letter of transmittal

srunyan@lukedraily.com



DATE 4/19	JAKE LOVEL	NO	R20-17-261	1308 Adams Street Kansas City, KS 66103 Ph (913) 321-8100 Fax (913) 321-8181
то:	GRIFFIN RI 120 SE 30TI LEE'S SUMM	H ST	TMENTS LLC 082	
RE:	RESIDENCE	s @ ECHEL	ON	
	ATTACHED AGGREGATE ASPHALT RE AS NOTED	UND	ER SEPARATE COVER CONCRETE REPORT FOUNDATION REPO INVOICE	THE FOLLOWING ITEMS: PROPOSAL SOILS REPORT OTHER
COPIES	DATE	NO.		DESCRIPTION
1			SITE OBSERVATION PER	RFORMED 4/05 - 4/18
THESE ARE	FOR CHECKI FOR YOUR U AS REQUES	:NG JSE ON JOE	FOR REVIEW / COM/ APPROVED AS NOTE APPROVED AS SUBM	ED
REMARKS:				
cbeverlin@ thauschild@ mschlicht@	Plukedraily.co bdc-engrs.co Pnspjarch.com	m n		BY: JIM BYRNES SR PROJ MANAGER



Kansas City Testing & Engineering, LLC 1308 Adams Street Kansas City, KS 66103 Phone 913.321.8100 Fax 913.321.8181

SITE OBSERVATION

CLIENT: GRIFFIN RILEY INVESTMENTS, LLC

ATTN: JAKE LOVELESS 120 SE 30TH STREET LEE'S SUMMIT MO 64082

PROJECT:

THE RESIDENCES @ ECHELON

MO 291 & 150 LEE'S SUMMIT, MO

SERVICES:

PAGE 1 OF 1

PROJECT NO.: R20-17-261

REPORT NO.: K22857

04/05/2018 DATE OF SERVICE: JAKE LOVELESS AUTHORIZATION:

REPORT DATE:

04/16/2018

The contractor placed epoxy-embedded reinforcing bars, tying the footing longitudinal bars for the stoops for building #5. The bars matched the longitudinal reinforcing steel per the on-site drawings. The bars were embedded 7 to 8" into the existing footings with Simpson Set-XP epoxy (expiration date 10/24/19) in a manner consistent with the epoxy manufacturers's recommendations.

Technician: ANDREW WILSON, SR. ENGR. TECHNICIAN

Report Distribution:

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KANSAS CITY TESTING & ENGINEERING,

JIM BYRNES, R.G. PROJECT MANAGER

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Kansas City Testing & Engineering, LLC 1308 Adams Street Kansas City, KS 66103 Phone 913.321.8100 Fax 913.321.8181

SITE OBSERVATION

CLIENT:

GRIFFIN RILEY INVESTMENTS, LLC

ATTN: JAKE LOVELESS 120 SE 30TH STREET LEE'S SUMMIT MO 64082

PROJECT:

THE RESIDENCES @ ECHELON

MO 291 & 150 LEE'S SUMMIT, MO

SERVICES:

PAGE 1 OF 1

PROJECT NO.: R20-17-261

REPORT NO.: K22874

04/05/2018 DATE OF SERVICE:

AUTHORIZATION:

JAKE LOVELESS

REPORT DATE:

04/16/2018

Concrete was placed for the foundation wall at A.R/B.2 to B.6, thickened slabs on the west half of building #5 and patio footings on the east and west sides. The reinforcing steel was placed in substantial compliance with the plans available for our review on site. One set of compressive strength test specimens was cast from a sample of the concrete placed.

Technician: JOHN MAXWELL, ENGINEERING TECHNICIAN

Report Distribution:

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KANSAS CITY TESTING & ENGINEERING,

JIM BYRNES, R.G.

PROJECT MANAGER



CLIENT:

GRIFFIN RILEY INVESTMENTS, LLC

ATTN: JAKE LOVELESS 120 SE 30TH STREET LEE'S SUMMIT MO 64082 PAGE 1 OF 3

PROJECT NO.: R20-17-261

REPORT NO.: K22948

04/12/2018 DATE OF SERVICE:

JAKE LOVELESS

AUTHORIZATION: **REPORT DATE**: 04/17/2018

PROJECT:

THE RESIDENCES @ ECHELON

MO 291 & 150 LEE'S SUMMIT, MO

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 METHOD OF TEST: ASTM D6938

ASTM D3017

MOISTURE

STANDARD COUNTS

715

PREVIOUS:

719

-1 to +3% of opt SPECIFICATION: 95% Min

MOISTURE - CURRENT: DENSITY - CURRENT:

1478

PREVIOUS:

1489

TEST MODE: Direct Transmission

PROBE DEPTH:

			MOISTURE/DENS	SITY RELATIONS	
M/D #	TEST OF	MATERIALS	OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	REFERENCE REPORT
1.	STANDARD PROCTOR	GRAY SILTY CLAY	21.0	100.4	K21465
2.	STANDARD PROCTOR	BROWN-GRAY SILTY CLAY	22.1	99.9	K21467
3.	STANDARD PROCTOR	REDDISH BROWN SILTY CLAY	23.1	96.7	K21466
4.	STANDARD PROCTOR	YELLOWISH BROWN SILTY CLAY	19.0	102.8	K21468

REPORT OF TESTS

TEST NO	LOCATION	PROBE DEPTH	LIFT/ ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DE (pcf WET		MAXIMUM DENSITY (pcf)	DENSITY (% max)
1.	STORM SEWER: 20' S of structure 8-7	8	3' bg	1	20.6	21.0	120.1	99.6	100.4	99
2.	70' S of structure 8-7	8	3' bg	1	21.5	21.0	116.9	96.2	100.4	96
3.	30' S of structure 8-7	8	2' bg	1	21.4	21.0	122.9	101.2	100.4	101
4.	80' S of structure 8-7	8	2' bg	2	25.0	22.1	123.3	98.6	99.9	99
5.	30' S of structure	8	1' bg	1	20.9	21.0	121.5	100.5	100.4	100



REPORT OF TESTS (continued)

REPORT NO.: K22948

PAGE 2 OF 3

PROJECT NO.: R20-17-261 GRIFFIN RILEY INVESTMENTS, LLC DATE OF SERVICE: 04/12/2018

TES		PROBE DEPTH	LIFT/ ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DE (pcf WET		MAXIMUM DENSITY (pcf)	DENSITY (% max)
6.	80' S of structure 8-7	8	1' bg	3	25.5	23.1	117.0	93.2	96.7	96
7.	20' S of structure 8-7	8	on grade	1	20.3	21.0	120.2	99.9	100.4	100
8.	80' S of structure 8-7	8	on grade	3	25.9	23.1	119.6	95.0	96.7	98
9.	20' S of structure 8-8	8	4' bg	2	23.3	22.1	118.2	95.9	99.9	96
10.	30' S of structure 8-8	8	3' bg	2	24.9	22.1	118.7	95.0	99.9	95
11.	20' S of structure 8-8	8	2' bg	1	23.0	21.0	119.1	96.8	100.4	96
12.	25' S of structure 8-8	8	1' bg	1	23.2	21.0	122.7	99.6	100.4	99
13.	30' S of structure 8-8(rock present)	8	on grade	1	22.2	21.0	123.7	101.2	100.4	101
14.	80' S of structure 8-8	8	2' bg	3	23.3	23.1	114.2	92.6	96.7	96
15.	70' S of structure 8-8	8	2' bg	3	24.3	23.1	119.5	96.1	96.7	99
16,	65' S of structure 8-8	8	1' bg	3	24.6	23.1	114.5	91.9	96.7	95
17.	55' S of structure 8-8	8	on grade	2	23.3	22.1	120.7	97.9	99.9	98
18.	20' E of structure 8-9	8	1' bg	1	20.9	21.0	115.7	95.7	100.4	95
19.	20' E of structure 8-10	8	3' bg	2	23.1	22.1	119.5	97.1	99.9	97
20.	25' E of structure 8-10	8	2' bg	3	25.2	23.1	119.8	95.7	96.7	99
21.	30' E of structure 8-10	8	on grade	2	22.4	22.1	120.3	98.3	99.9	98
22.	20' SE of structure 10-1	8	3' bg	4	18.5	19.0	118.0	99.6	102.8	97
23.	35' SE of structure 10-1	8	2' bg	3	24.2	23.1	116.5	93.8	96.7	97
24.	40' SE of structure 10-1	8	1' bg	2	23.9	22.1	118.7	95.8	99.9	96



(continued)

REPORT NO.: K22948

PAGE 3 OF 3

PROJECT NO.: R20-17-261

GRIFFIN RILEY INVESTMENTS, LLC

DATE OF SERVICE: 04/12/2018

TEST NO	LOCATION	PROBE DEPTH	LIFT/ ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DE (pcf WET	NO.	MAXIMUM DENSITY (pcf)	DENSITY (% max)
25.	30' SE of structure	8	on grade	2	24.8	22.1	120.1	96.2	99.9	96
	10-1									

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

ADDITIONAL COMMENTS:

Technician: ANDREW WILSON, SR. ENGR. TECHNICIAN

Report Distribution:

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KANSAS CITY TESTING & ENGINEERING,



Kansas City Testing & Engineering, LLC 1308 Adams Street Kansas City, KS 66103 Phone 913.321.8100 Fax 913.321.8181

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 1

PROJECT NO.: R20-17-261

REPORT NO.: K22988

DATE OF SERVICE: AUTHORIZATION:

04/13/2018 JAKE LOVELESS

REPORT DATE:

04/17/2018

PROJECT:

THE RESIDENCES @ ECHELON

MO 291 & 150 LEE'S SUMMIT, MO

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

compaction.

PROJECT DATA

M/D #

CONTRACTOR: LUKE DRAILY CONST

GAUGE: Troxler 3440

GAUGE SERIAL NO.: 15277

MOISTURE ASTM D3017

STANDARD COUNTS

PREVIOUS:

715

METHOD OF TEST: ASTM D6938

SPECIFICATION: 95% Min

TEST OF

-1 to +3% of Opt

MOISTURE - CURRENT: DENSITY - CURRENT:

720 1481

PREVIOUS:

1478

TEST MODE: Direct Transmission

PROBE DEPTH:

8

MOISTURE/DENSITY RELATIONS

OPTIMUM MAXIMUM MOISTURE % **DENSITY** pcf

REFERENCE REPORT

STANDARD PROCTOR

YELLOWISH BROWN SILTY CLAY

MATERIALS

19.0

102.8 K21468

REPORT OF TESTS

TEST NO	LOCATION	PROBE DEPTH	LIFT/ ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DE (pc		MAXIMUM DENSITY (pcf)	DENSITY (% max)
1.	STORM SEWER: 10' W of structure 10-1	8	2' bg	1	20.2	19.0	118.4	98.5	102.8	96
2.	15' W of structure 10-1	8	1' bg	1	18.5	19.0	117.2	98.9	102.8	96
3.	22' W of structure	8	on grade	1	19.1	19.0	118.9	99.8	102.8	97

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

ADDITIONAL COMMENTS:

Technician: ANDREW WILSON, SR. ENGR. TECHNICIAN

Report Distribution:

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KANSAS CITY TESTING & ENGINEERING,



CLIENT:

GRIFFIN RILEY INVESTMENTS, LLC

ATTN: JAKE LOVELESS 120 SE 30TH STREET LEE'S SUMMIT MO 64082 PAGE 1 OF 2

PROJECT NO.: R20-17-261

REPORT NO: K23005

DATE OF SERVICE:

AUTHORIZATION:

04/16/2018 JAKE LOVELESS

REPORT DATE:

04/17/2018

PROJECT:

THE RESIDENCES @ ECHELON

MO 291 & 150

LEE'S SUMMIT, MO

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 METHOD OF TEST: ASTM D6938

MOISTURE ASTM D3017

STANDARD COUNTS

PREVIOUS:

715

SPECIFICATION: 95% Min

-1 to +3% of opt

MOISTURE - CURRENT: DENSITY - CURRENT:

1481 PREVIOUS:

720

1478

TEST MODE: Direct Transmission

PROBE DEPTH:

8

MOISTURE/DENSITY RELATIONS **OPTIMUM** MAXIMUM REFERENCE M/D # TEST OF **MATERIALS** MOISTURE % **DENSITY** pcf REPORT 1. STANDARD PROCTOR BROWN-GRAY SILTY CLAY 22.1 99.9 K21467 STANDARD PROCTOR 2. 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 DE (pcf WET		MAXIMUM DENSITY (pcf)	DENSITY (% max)
1.	STORM SEWER: 50' E of structure 11-2	8	3' bg	1	21.7	22.1	116.3	95.6	99.9	96
2.	60' E of structure 11-2	8	2' bg	2	22.8	21.1	122.8	100.0	101.4	99
3.	60' E of structure 11-2	8	1' bg	2	22.5	21.1	124.0	101.2	101.4	100
4.	50' E of structure 11-2	8	on grade	2	22.5	21.1	124.5	101.6	101.4	100

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



(continued)

REPORT NO.: K23005

PAGE 2 OF 2

PROJECT NO.: R20-17-261

GRIFFIN RILEY INVESTMENTS, LLC

DATE OF SERVICE: 04/16/2018

OPTIMUM FIELD DENSITY MAXIMUM **FIELD** MOISTURE DENSITY DENSITY TEST PROBE LIFT/ M/D MOISTURE (pcf) NO **ELEV** NO (%) (%) (pcf) (% max) LOCATION **DEPTH**

ADDITIONAL COMMENTS:

The contractor placed 4000 psi plain concrete (3500 psi plain required) for the garage bay slabs on grade for building #4. The placement of vapor barrier, reinforcing steel & concrete was in substantial compliance with the plans available for our review at the site. One set of compressive strength test specimens was cast from a sample of the concrete placed.

Technician: ANDREW WILSON, SR. ENGR. TECHNICIAN

Report Distribution:

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KANSAS CITY TESTING & ENGINEERING,



CLIENT:

GRIFFIN RILEY INVESTMENTS, LLC

ATTN: JAKE LOVELESS 120 SE 30TH STREET LEE'S SUMMIT MO 64082 PAGE 1 OF 2

PROJECT NO.: R20-17-261

REPORT NO.: K23022

DATE OF SERVICE:

AUTHORIZATION:

04/17/2018 JAKE LOVELESS

REPORT DATE:

04/19/2018

PROJECT:

THE RESIDENCES @ ECHELON

MO 291 & 150 LEE'S SUMMIT, MO

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

compaction.

PROJECT DATA

CONTRACTOR: LUKE DRAILY CONST

DENSITY

GAUGE: Troxler 3440

GAUGE SERIAL NO.: 15277

METHOD OF TEST: ASTM D6938 SPECIFICATION: 95% Min

MOISTURE ASTM D3017

-1 to +3% of Opt

STANDARD COUNTS

MOISTURE - CURRENT:

715

PREVIOUS:

720

DENSITY - CURRENT:

1482

PREVIOUS:

1481

TEST MODE: Direct Transmission

PROBE DEPTH:

8

			MOISTURE/DEN		
M/D #	TEST OF	MATERIALS	OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	REFERENCE REPORT
1.	STANDARD PROCTOR	REDDISH BROWN SILTY CLAY	23.1	96.7	K21466
2.	STANDARD PROCTOR	BROWN-GRAY SILTY CLAY	22.1	99.9	K21467
3.	STANDARD PROCTOR	YELLOWISH BROWN SILTY CLAY	19.0	102.8	K21468

REPORT OF TESTS

TEST NO	LOCATION	PROBE DEPTH	LIFT/ ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DE (pc: WET		MAXIMUM DENSITY (pcf)	DENSITY (% max)
1.	STRUCTURE 11-2 STORM SEWER: 50' W	8	5' bg	1	25.5	23.1	118.5	94.4	96.7	98
2.	40' W	8	4' bg	2	24.8	22.1	124.3	99.6	99.9	100
3.	50' W	8	3' bg	2	23.7	22.1	122.3	98.9	99.9	99
4.	40' W	8	2' bg	1	25.4	23.1	117.0	93.3	96.7	96
5.	30' W	8	1' bg	3	21.4	19.0	124.2	102.3	102.8	100
6.	50' W	8	on grade	2	23.1	22.1	120.4	97.8	99.9	98

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



(continued)

REPORT NO.: K23022

PAGE 2 OF 2

PROJECT NO .: R20-17-261

GRIFFIN RILEY INVESTMENTS, LLC

DATE OF SERVICE: 04/17/2018

FIELD **OPTIMUM** FIELD DENSITY MAXIMUM TEST PROBE M/D LIFT/ MOISTURE MOISTURE (pcf) DENSITY DENSITY NO LOCATION **DEPTH ELEV** NO (%) (%) WET (pcf) (% max)

ADDITIONAL COMMENTS:

Technician: ANDREW WILSON, SR. ENGR. TECHNICIAN

Report Distribution:

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KANSAS CITY TESTING & ENGINEERING,



CLIENT:

GRIFFIN RILEY INVESTMENTS, LLC

JAKE LOVELESS 120 SE 30TH STREET LEE'S SUMMIT MO 64082 PAGE 1 OF 2

PROJECT NO .: R20-17-261

REPORT NO.: K23054

DATE OF SERVICE:

04/18/2018 JAKE LOVELESS

AUTHORIZATION: REPORT DATE:

04/19/2018

PROJECT:

THE RESIDENCES @ ECHELON

MO 291 & 150

LEE'S SUMMIT, MO

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 ASTM D3017

STANDARD COUNTS

719 PREVIOUS: 715

METHOD OF TEST: ASTM D6938

M/D #

1.

2.

SPECIFICATION: 95% Min

TEST OF

STANDARD PROCTOR

STANDARD PROCTOR

-1 to +3% of Opt

BROWN-GRAY SILTY CLAY

REDDISH BROWN SILTY CLAY

MATERIALS

MOISTURE - CURRENT: **DENSITY - CURRENT:**

1491

TEST MODE: Direct Transmission

PREVIOUS:

1489

PROBE DEPTH:

MOISTURE/DENSITY RELATIONS **OPTIMUM MAXIMUM** REFERENCE MOISTURE % DENSITY pcf REPORT 22.1 99.9 K21467 23.1 96.7 K21466

REPORT OF TESTS

TEST NO	LOCATION	PROBE DEPTH	LIFT/ ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DE (pcf WET		MAXIMUM DENSITY (pcf)	DENSITY (% max)
1.	STRUCTURE 11-3 STORM SEWER: 10' N	8	3' bg	1	24.9	22.1	119.7	95.8	99.9	96
2.	30' N	8	2' bg	1	24.3	22.1	118.7	95.5	99.9	96
3.	40' N	8	1' bg	1	24.8	22.1	119.3	95.6	99.9	96
4.	50' N	8	on grade	1	24.3	22.1	118.5	95.3	99.9	95
5.	50' S	8	3' bg	2	24.4	23.1	116.7	93.8	96.7	97
6.	40' S	8	2' bg	2	25.9	23.1	115.7	91.9	96.7	95
7.	32' S	8	1' bg	2	24.3	23.1	118.7	95.5	96.7	99



(continued)

REPORT NO.: K23054

PAGE 2 OF 2

PROJECT NO.: R20-17-261

GRIFFIN RILEY INVESTMENTS, LLC

DATE OF SERVICE: 04/18/2018

TEST	TEST		PROBE LIFT/	M/D	FIELD MOISTURE	OPTIMUM MOISTURE	FIELD DENSITY (pcf)		MAXIMUM DENSITY	DENSITY
NO	LOCATION	DEPTH	ELEV	NO	(%)	(%)	WET	DRY	(pcf)	(% max)
8.	25' S	8	on grade	2	25.7	23.1	119.3	94.9	96.7	98

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

ADDITIONAL COMMENTS:

The contractor placed 4000 psi plain (3500 plain required) for the slab on grade for the garage bays for building #4 from AN to AR lines. The placement of vapor barrier, reinforcing steel & concrete were in substantial compliance with the plans available for our review at the site. One set of compressive strength test specimens was cast from a sample of the concrete placed.

Technician: ANDREW WILSON, SR. ENGR. TECHNICIAN

Report Distribution:

(1) cbeverlin@bdc-engrs.com (1) jake@griffinriley.com (1) matthew.munger@cityofLS.net (1) mschlicht@es-kc.com (1) srunyan@lukedraily.com (1) thauschlid@nsplarch.com (1) tjwatreas@lukedraily.com

KANSAS CITY TESTING & ENGINEERING,