

letter of transmittal



KANSAS CITY
TESTING & ENGINEERING, LLC

DATE 3/05/18 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 2/19 - 3/01

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
cbeverlin@bdc-engrs.com
thauschild@nspjarch.com
mschlicht@es-kc.com

matthew.munger@cityofLS.net
srnyan@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.: K22317
DATE OF SERVICE: 02/19/2018
AUTHORIZATION: JAKE LOVELESS
REPORT DATE: 02/27/2018

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
METHOD OF TEST:	ASTM D6938	ASTM D3017
SPECIFICATION:	95% Min	-1 to +3% of Opt

STANDARD COUNTS

MOISTURE - CURRENT:	719	PREVIOUS:	713
DENSITY - CURRENT:	1488	PREVIOUS:	1494

TEST MODE: Direct Transmission

PROBE DEPTH: 8

MOISTURE/DENSITY RELATIONS

M/D #	TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS		REFERENCE REPORT
			OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	
1.	STANDARD PROCTOR	YELLOWISH BROWN SILTY CLAY	19.0	102.8	K21468
2.	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.	F-1	8	4' bg	1	20.5	19.0	122.8	101.9	102.8	99
2.	F.5-1	8	4' bg	1	20.0	19.0	120.4	100.3	102.8	98
3.	F.5-1.5	8	4' bg	1	20.6	19.0	123.4	102.3	102.8	100
4.	F.9-1.6	8	4' bg	1	20.8	19.0	122.2	101.2	102.8	98
5.	F.5-1.9	8	4' bg	1	20.9	19.0	123.2	101.9	102.8	99
6.	F-2.3	8	4' bg	1	21.2	19.0	121.6	100.3	102.8	98
7.	G-2.2	8	3' bg	1	22.2 *	19.0	119.4	97.7	102.8	95

Report of Tests continued on page 2

PROJECT NO.: R20-17-261

GRIFFIN RILEY INVESTMENTS, LLC

DATE OF SERVICE: 02/19/2018

TEST NO	LOCATION	PROBE DEPTH	LIFT/ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
8.	F-1	8	3' bg	1	21.7	19.0	126.0	103.5	102.8	101
9.	F.5-1	8	3' bg	1	18.7	19.0	121.8	102.6	102.8	100
10.	F.1-1.5	8	3' bg	1	19.8	19.0	124.7	104.1	102.8	101
11.	F.7-1.4	8	3' bg	1	18.5	19.0	128.1	108.1	102.8	105
12.	F-2	8	3' bg	1	18.2	19.0	121.5	102.8	102.8	100
13.	F.7-.5	8	3' bg	1	20.5	19.0	120.7	100.2	102.8	97
14.	F.9-1.1	8	4' bg	1	20.6	19.0	124.6	103.3	102.8	100
15.	F-1.2	8	3' bg	1	18.1	19.0	125.9	106.6	102.8	104
16.	F.6-1	8	2' bg	1	19.8	19.0	124.4	103.8	102.8	101
17.	F.8-1.7	8	2' bg	2	16.4 *	17.6	126.6	108.8	106.0	103

An asterisk (*) appears next to test results which do NOT meet the project specifications as noted on page 1.


ADDITIONAL COMMENTS:

Technician: ANDREW WILSON, SR. ENGR. TECHNICIAN

Report Distribution:

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


JIM BYRNES, R.G.
PROJECT 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.: K22408
DATE OF SERVICE: 02/28/2018
AUTHORIZATION: JAKE LOVELESS
REPORT DATE: 03/01/2018

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

METHOD OF TEST: ASTM D6938
SPECIFICATION: 95% Min

MOISTURE
ASTM D3017
-1 to +3% of Opt

STANDARD COUNTS

MOISTURE - CURRENT: 713 **PREVIOUS:** 719

DENSITY - CURRENT: 1481 **PREVIOUS:** 1488

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	BROWN-GRAY SILTY CLAY	22.1	99.9	K21467
2.	STANDARD PROCTOR	REDDISH BROWN SILTY CLAY	23.1	96.7	K21466
3.	STANDARD PROCTOR	GRAY SILTY CLAY	21.0	100.4	K21465

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.	D.5-1.6	8	7' bff	1	23.0	22.1	118.0	95.9	99.9	96
2.	F.1-1.2	8	3.5' bff	1	21.4	22.1	124.8	102.8	99.9	103
3.	F.9-2	8	3' bff	2	22.7	23.1	117.7	95.9	96.7	99
4.	D.5-1.6	8	6' bff	2	25.8	23.1	117.4	93.3	96.7	96
5.	D.9-2.5	8	7.5' bff	2	24.8	23.1	117.2	93.9	96.7	97
6.	D.5-1.1	8	7.5' bff	1	22.3	22.1	122.5	100.2	99.9	100
7.	D.5-2.1 (rock present)	8	7' bff	3	20.4	21.0	122.2	101.5	100.4	101

Report of Tests continued on page 2

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

DATE OF SERVICE: 02/28/2018

TEST NO	LOCATION	PROBE DEPTH	LIFT/ ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
8.	F.1-1.7	8	2.5' bff	2	22.5	23.1	112.5	91.8	96.7	95
9.	F-1.1 (rock present)	8	2' bff	3	21.2	21.0	123.1	101.6	100.4	101
10.	F.9-1.9	8	2.5' bff	2	26.0	23.1	117.2	93.0	96.7	96
11.	E.1-1	8	11' bff	2	24.1	23.1	120.3	96.9	96.7	100

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

ADDITIONAL COMMENTS:

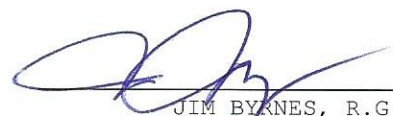
BFF = below finish floor

Technician: ANDREW WILSON, SR. ENGR. TECHNICIAN

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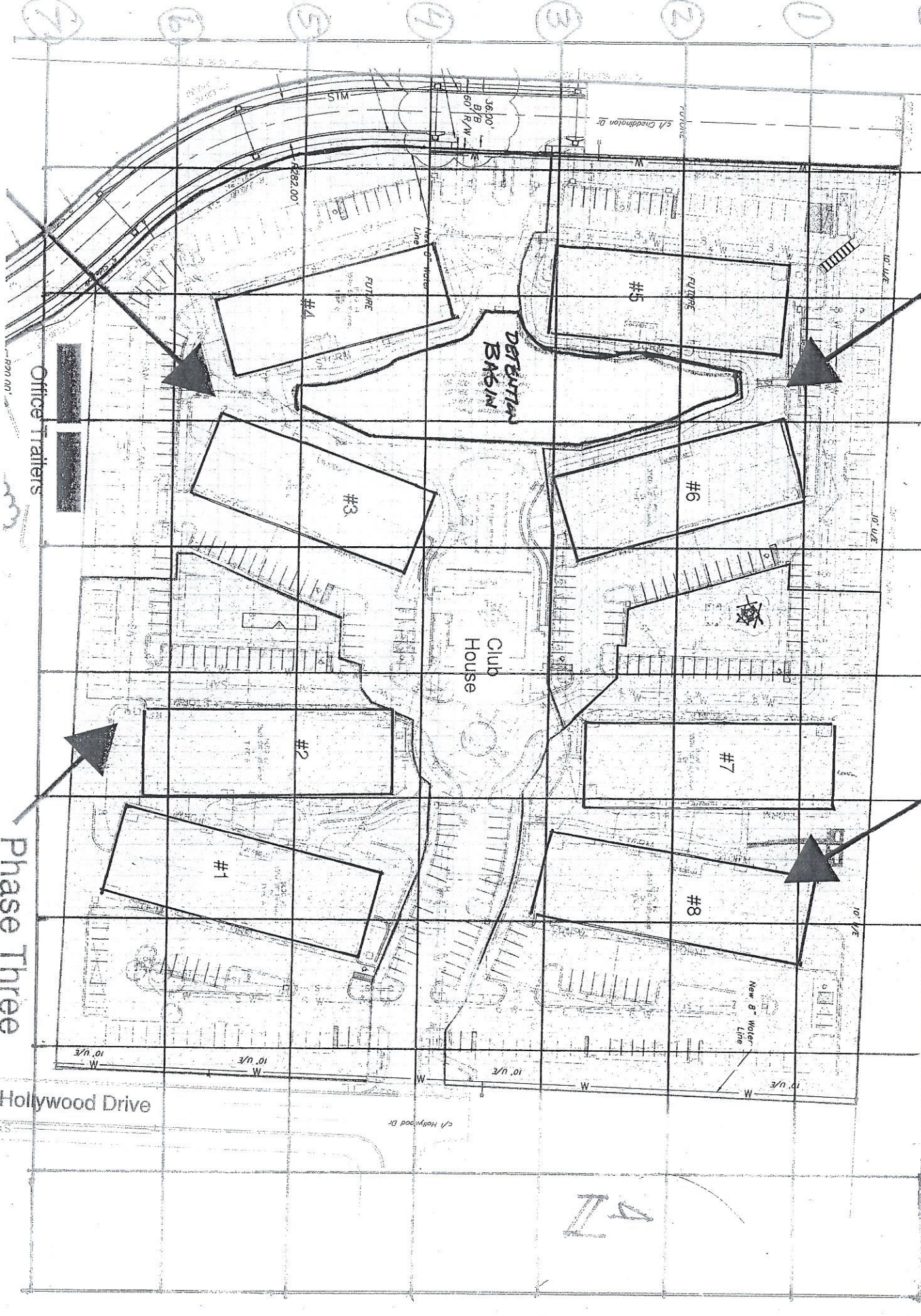
KANSAS CITY TESTING & ENGINEERING,


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



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.: K22417
DATE OF SERVICE: 03/01/2018
AUTHORIZATION: JAKE LOVELESS
REPORT DATE: 03/02/2018

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.: 19184

METHOD OF TEST: ASTM D6938
SPECIFICATION: 95% Min

MOISTURE
ASTM D3017
-1 to +3% of Opt

STANDARD COUNTS

MOISTURE - CURRENT: 713 **PREVIOUS:** 719

DENSITY - CURRENT: **PREVIOUS:** 1880

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	19.0	102.8	K21468

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.	D.9/0.8	8	-10'	1	25.5	23.1	115.8	92.3	96.7	95
2.	1.6/E.2	8	-5'	1	23.8	23.1	114.9	92.8	96.7	96
3.	E.3/1.0	8	-11'	1	24.5	23.1	118.9	95.5	96.7	99
4.	C.7-0.5	8	5' bff	2	20.0	19.0	119.8	99.8	102.8	97
5.	C-0.7	8	2' bff	1	24.0	23.1	120.0	96.8	96.7	100
6.	D.5-1.2	8	8.5' bff	1	25.4	23.1	119.4	95.2	96.7	98
7.	D.9-2.2	8	5' bff	1	23.4	23.1	115.3	93.4	96.7	97

Report of Tests continued on page 2

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

DATE OF SERVICE: 03/01/2018

TEST NO	LOCATION	PROBE DEPTH	LIFT/ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
8.	E-2.0	8	3' bff	1	24.9	23.1	114.8	91.9	96.7	95
9.	D.9-1.3	8	9' bff	1	25.2	23.1	117.7	94.0	96.7	97
11.	D-0.9	8	5' bff	1	22.2	23.1	117.1	95.8	96.7	99
12.	C.5-0.5	8	2.5' bff	1	22.9	23.1	112.9	91.9	96.7	95
13.	C-0.3	8	1.5' bff	1	22.3	23.1	115.8	94.7	96.7	98
14.	E-1.2	8	6.5' bff	1	24.2	23.1	121.3	97.7	96.7	101
15.	E-1.9	8	3' bff	1	22.5	23.1	112.7	92.0	96.7	95
16.	E.1-2	8	2' bff	2	20.4	19.0	118.6	98.5	102.8	96
17.	E.2-1.2	8	6.5' bff	2	21.3	19.0	119.2	98.3	102.8	96
18.	D-0.5	8	5' bff	1	23.0	23.1	118.8	96.6	96.7	100
19.	C.5-0.7	8	2' bff	1	22.5	23.1	113.6	92.7	96.7	96
20.	B.8-0.9	8	1' bff	2	20.8	19.0	121.2	100.3	102.8	98
21.	E.5-0.7	8	6.5' bff	1	23.4	23.1	119.1	96.5	96.7	100
22.	E.1-1.5	8	2.5' bff	1	24.5	23.1	114.4	91.9	96.7	95
23.	E-2.1	8	1.5' bff	2	21.8	19.0	119.1	97.8	102.8	95

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

ADDITIONAL COMMENTS:

Technician: ERIC HOWARD, CME TECHNICIAN III

Report Distribution:

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(1) srnyan@lakedraily.com
(1) thauschild@nspjarch.com
(1) tjwatreas@lakedraily.com

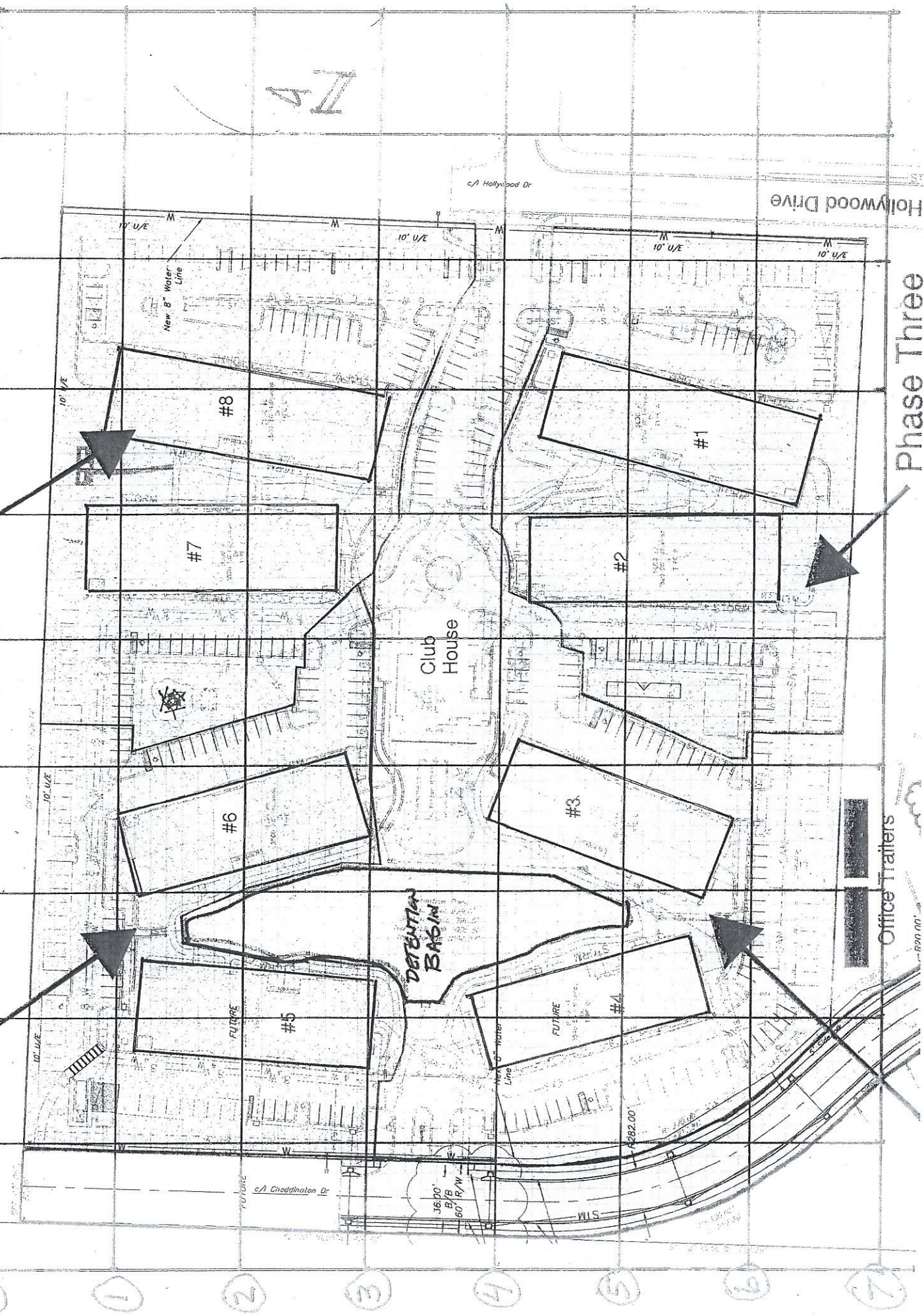
KANSAS CITY TESTING & ENGINEERING,


JIM BYENES, R.G.
PROJECT MANAGER

DENSITY TEST LOCATION GRID
RESIDENCES AT ECHELON

Exhibit "C" - Schedule and Phasing

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



Phase Three