January 27, 2025

Mr. Brian Maenner
Vice President of Development
Intrinsic Development
3622 Endeavor Avenue
Columbia, Missouri 65201

RE: Special Inspection Report No. 1
Home2 Suites by Hilton
251 N. Alura Way
Lee' Summit, Missouri
Report Period: October 27, 2024 to December 28, 2024
Permit No.: PRCOM20241886
UES Project No.: A23129.00089.002
Legacy Project No: J044702.03

Dear Mr. Maenner:

This letter with attachments will constitute our Special Inspection transmittal for the above referenced project. Representatives of UES have provided field observation and testing services for site development and engineered fill during the report period. Our services have been provided on a part-time basis as scheduled by representatives of Advanced Excavation, LLC. The compliance of materials or work not observed by our personnel is not addressed, or implied, by this or any previous report.

Summary of Activities

Site Development

Following the removal of the vegetation, the subgrades for the building pad and parking lot were evaluated on October 29. The exposed grades were observed with respect to stability and moisture content prior to fill placement. The exposed grades were also proofrolled with a fully-loaded off-road dump truck to aid in evaluating the stability of the underlying soils. An approximately 1,600 square foot area within the parking lot was dewatered and construction debris removed to a depth of approximately 3 to 4 feet. The undercut area was backfilled with engineered fill.

Engineered Fill

Field density tests and visual observations were performed in engineered fill placed for the parking lot and building pad between October 29 and November 26. The engineered fill consisted primarily of clays except within the top two feet of the building pad. On-site crushed limestone was placed as low-volume-change material within the top two feet of the building pad. The fill was placed in approximately 8- to 9-inch lifts and compacted with a self-propelled sheepsfoot roller or vibratory smooth drum roller. To evaluate the field density test results of the low-volume-change material, samples of the crushed rock was obtained for moisture-density (standard Proctor) relationship and gradation testing. Test results of the on-site clays were evaluated using

existing moisture-density (standard Proctor) relationship tests. Results of the standard Proctor, gradation tests, and field density tests are enclosed.

Status of Compliance

The specific items discussed above in this report appeared to be in general compliance with the contract documents.

Closure

The results of our field observations and testing were reported to authorized personnel during our site visits. If you have any questions regarding this report, or if we may be of further service, please contact us.

Respectfully submitted,

UES

STATE OF MISSOURI
PETER
F. BRULL
PE-2009009318

Peter F. Brull, P.E.
Senior Engineer

Steve Damron
CMT Department Manager

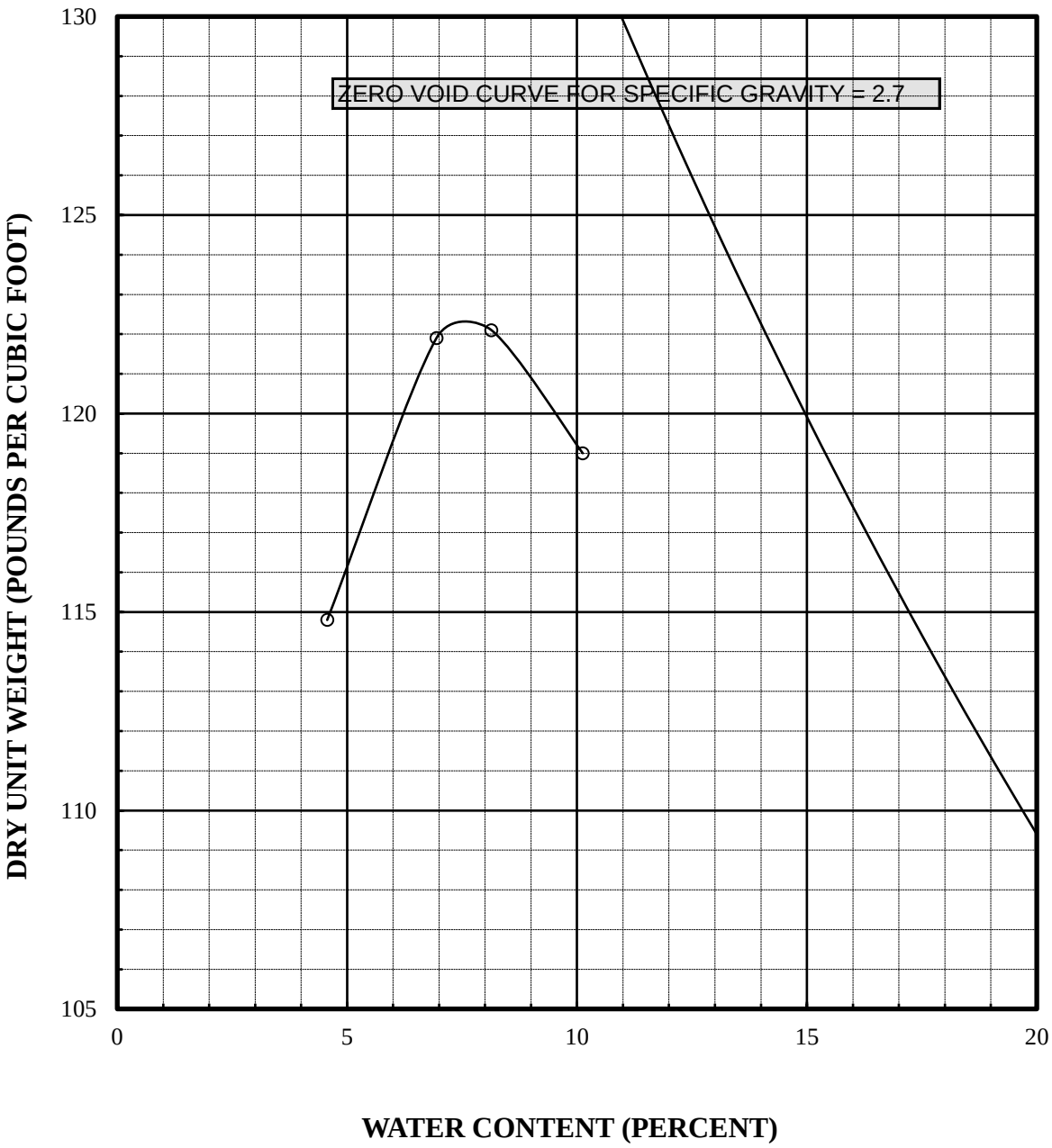
Attachments: Proctor Test Results
Gradation Test Results
Field Density Test Results

cc: Mr. Joe Frogge – City of Lee's Summit
Mr. Aaron Addis – Intrinsic Development
Mr. Earl Peterson – Intrinsic Development
Mr. AJ Dolph – Rosemann & Associates, PC
UES S.I. File

Home2 Suites by Hilton
Variance/Discrepancy List

NOTE: Items resolved during the report period are shaded

Variance Number	Date Opened	Date Closed	Description
		-	



PROJECT NAME

Home2Suites by Hilton

SPECIFICATIONS

Standard Proctor
ASTM D 698 Method A

PROCTOR TEST RESULTS

Max. Dry Density	Optimum Water Content
122.2 pcf	7.5%

ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit	Plastic Limit	Plasticity Index

DESCRIPTION

Crushed Limestone

SAMPLE LOCATION

On-site stockpile

UES

MOISTURE - DENSITY CURVE

Job No.	J044702.03	**Test Date**	10/22/2024
Sampled By	APS	**Tested By**	ADC
Sample Date	10/18/2024	**Calc. By**	ADC
Proctor No.	4424	**Ch'd By**	PFB

Client Name:	Intrinsic Development		Project No.:	J023248.54	Report Date: 10/22/2024
Address:	3622 Endeavor Avenue		Lab No.:	4424	
	Columbia, MO 65201		Sample Location:	On-site	
	Attn: Mr. Brian Maenner				
Project Name:	Home2Suites by Hilton		Aggregate Source:	N/A	
Location:	251 N. Alura Way				
	Lee's Summit, MO 64063		Aggregate Type:	Crushed Limestone	
Sampled By:	A. Spano	Date: 10/18/2024			
Tested By:	A. Coates	Date: 10/22/2024	Reviewed By:	P. Brull	

Sieve Analysis, ASTM C136

Sieve Size	X	Passing / Retained	% Accumulative	Specification MODOT Section 1007.3 Type 5 Min	Max
6"					
5"					
4"					
3"					
2"					
1-1/2"					
1"			100	100	
3/4"			100		
1/2"			85	60	90
3/8"			69		
# 4			39	35	60
# 8			27		
# 10					
# 16			22		
# 20					
# 30			20	10	35
# 40					
# 50			19		
# 80					
# 100			18		
# 200			17	0	15

Test Standards are ASTM unless otherwise noted

Test	Standard	Results	Specification MODOT Type 5

Angela D. Coates, Laboratory Supervisor

Client: Intrinsic Development
Project: A23129.00089.002
Home2 Suites by Hilton J044702.03
Lee's Summit, MO

Field Density Test Results

Report Date: 10/29/2024

Area Being Filled: Building pad Line AC to A, 1.1 to 7 and parking lot at 20 to 60 feet north, 40 to 80 feet east

Description of Fill Material: (1) CLAY - brown with grey-brown, fat - (CH)

TABULATION OF FIELD DENSITY TEST RESULTS (ASTM D6938)

Test No.	Test Location	Elevation (feet) -/+	Max. Dry Den. @ Optimum Moisture (pcf @ %)	In Place Dry Density (pcf)	In Place Moisture (%)	Probe Depth	Percent Compaction	Moisture Tolerance (-/+)	Min. Comp. Spec. (%)	Result
1	Building pad Grid AC.5/1.3	954.3	98.2@21.8 (1)	95.30	22.80	8"	97.0	1.0/3.0	95	Pass
2	Building pad Grid AC.5/1.8	954.3	98.2@21.8 (1)	94.90	21.60	8"	96.6	1.0/3.0	95	Pass
3	Building pad Grid AC.5/3.5	955.4	98.2@21.8 (1)	95.20	21.40	8"	96.9	1.0/3.0	95	Pass
4	Building pad Grid AC.5/4.2	955.8	98.2@21.8 (1)	96.70	21.70	8"	98.5	1.0/3.0	95	Pass
5	Parking lot 40' north 60' east	952.4	98.2@21.8 (1)	102.90	21.00	8"	104.8	1.0/3.0	95	Pass
6	Parking lot 50' north 60' east	953.0	98.2@21.8 (1)	98.80	20.80	8"	100.6	1.0/3.0	95	Pass
7	Parking lot 40' north 50' east	953.5	98.2@21.8 (1)	96.70	20.80	8"	98.5	1.0/3.0	95	Pass
8	Parking lot 30' north 70' east	954.0	98.2@21.8 (1)	97.30	20.90	8"	99.1	1.0/3.0	95	Pass

Remarks: Reference point (Tests #5 through #8): Building northeast corner
Finished grade = 956.0

UES Representative: Seth T. Littlestone

Report Date: 10/30/2024

Area Being Filled: Building pad at Grid A to AC, 7 to 18 and parking lot at 20 to 60 feet north, 40 to 80 feet east

Description of Fill Material: (1) CLAY - brown with grey-brown, fat - (CH)

TABULATION OF FIELD DENSITY TEST RESULTS (ASTM D6938)

Test No.	Test Location	Elevation (feet) -/+	Max. Dry Den. @ Optimum Moisture (pcf @ %)	In Place Dry Density (pcf)	In Place Moisture (%)	Probe Depth	Percent Compaction	Moisture Tolerance (-/+)	Min. Comp. Spec. (%)	Result
1	Parking lot 45' north 60' east	954.3	98.2@21.8 (1)	100.70	21.20	8"	102.5	1.0/3.0	95	Pass
2	Parking lot 50' north 75' east	953	98.2@21.8 (1)	100.50	22.00	8"	102.3	1.0/3.0	95	Pass
3	Green space Grid AC.5/9.5	952.4	98.2@21.8 (1)	96.60	21.90	8"	98.4	1.0/3.0	95	Pass
4	Green space Grid AC.5/10.3	953.0	98.2@21.8 (1)	97.50	22.50	8"	99.3	1.0/3.0	95	Pass
5	Green space Grid AC.5/14	953.6	98.2@21.8 (1)	97.20	21.60	8"	99.0	1.0/3.0	95	Pass
6	Green space Grid AC.5/13	954.2	98.2@21.8 (1)	97.70	21.80	8"	99.5	1.0/3.0	95	Pass

Remarks: Reference point (Tests #1 and #2): Building pad northeast corner
Finished grade = 956.0

UES Representative: Seth T. Littlestone

Report Date: 11/25/2024

Report Date: 11/25/2024

Area Being Filled: Building pad

Description of Fill Material: (1) 4424: Crushed limestone

TABULATION OF FIELD DENSITY TEST RESULTS (ASTM D6938)

Test No.	Test Location	Elevation (feet) -/+	Max. Dry Den. @ Optimum Moisture (pcf @ %)	In Place Dry Density (pcf)	In Place Moisture (%)	Probe Depth	Percent Compaction	Moisture Tolerance (-/+)	Min. Comp. Spec. (%)	Result
1	Building pad Grid AC.5/2.5	956.5	122.2@7.5 (1)	117.90	6.10	8"	96.5	--/--	95	Pass
2	Building pad Grid E.5/2.5	956.5	122.2@7.5 (1)	116.60	5.70	8"	95.4	--/--	95	Pass
3	Building pad Grid E.5/5.5	956.5	122.2@7.5 (1)	115.60	5.70	8"	94.6	--/--	95	Pass
4	Building pad Grid A.5/5.5	956.5	122.2@7.5 (1)	121.40	5.10	8"	99.3	--/--	95	Pass
5	Building pad Grid A.5/10.5	956.5	122.2@7.5 (1)	123.50	5.20	8"	101.1	--/--	95	Pass
6	Building pad Grid E.5/10.5	956.5	122.2@7.5 (1)	121.60	5.10	8"	99.5	--/--	95	Pass
7	Building pad Grid E.5/16.5	956.5	122.2@7.5 (1)	124.50	5.40	8"	101.9	--/--	95	Pass
8	Building pad Grid A.5/16.5	956.5	122.2@7.5 (1)	121.00	5.60	8"	99.0	--/--	95	Pass

Remarks: Finished grade = 958.0 (estimated)

UES Representative: Seth T. Littlestone

Report Date: 11/26/2024

Area Being Filled: Building pad

Description of Fill Material: (1) 4424: Crushed limestone

TABULATION OF FIELD DENSITY TEST RESULTS (ASTM D6938)

Test No.	Test Location	Elevation (feet) -/+	Max. Dry Den. @ Optimum Moisture (pcf @ %)	In Place Dry Density (pcf)	In Place Moisture (%)	Probe Depth	Percent Compaction	Moisture Tolerance (-/+)	Min. Comp. Spec. (%)	Result
1	Building pad Grid AC.5/2.5 AC/A	957.3	122.2@7.5 (1)	118.60	5.00	8"	97.1	--/--	95	Pass
2	Building pad Grid E.5/2.5 E/F	957.3	122.2@7.5 (1)	123.90	5.20	8"	101.4	--/--	95	Pass
3	Building pad Grid E.5/5.5 E/F	957.3	122.2@7.5 (1)	120.80	5.40	8"	98.9	--/--	95	Pass
4	Building pad Grid A.5/5.5 A/B	957.3	122.2@7.5 (1)	123.80	5.10	8"	101.3	--/--	95	Pass
5	Building pad Grid A.5/10.5 A/B	957.3	122.2@7.5 (1)	125.10	4.90	8"	102.4	--/--	95	Pass
6	Building pad Grid E.5/10.5 E/F	957.3	122.2@7.5 (1)	117.30	4.50	8"	96.0	--/--	95	Pass
7	Building pad Grid E.5/16.5 E/F	957.3	122.2@7.5 (1)	118.70	5.80	8"	97.1	--/--	95	Pass
8	Building pad Grid A.5/16.5 A/B	957.3	122.2@7.5 (1)	118.90	5.80	8"	97.3	--/--	95	Pass
9	Building pad Grid AC.5/2.5 AC/A	958.0	122.2@7.5 (1)	117.40	5.30	8"	96.1	--/--	95	Pass
10	Building pad Grid E.5/2.5 E/F	958.0	122.2@7.5 (1)	120.60	5.60	8"	98.7	--/--	95	Pass
11	Building pad Grid E.5/5.5 E/F	958.0	122.2@7.5 (1)	126.10	5.20	8"	103.2	--/--	95	Pass
12	Building pad Grid A.5/5.5 A/B	958.0	122.2@7.5 (1)	124.30	4.50	8"	101.7	--/--	95	Pass
13	Building pad Grid A.5/10.5 A/B	958.0	122.2@7.5 (1)	126.10	5.20	8"	103.2	--/--	95	Pass

Report Date: 11/26/2024

Area Being Filled: Building pad

Description of Fill Material: (1) 4424: Crushed limestone

TABULATION OF FIELD DENSITY TEST RESULTS (ASTM D6938)

Test No.	Test Location	Elevation (feet) -/+	Max. Dry Den. @ Optimum Moisture (pcf @ %)	In Place Dry Density (pcf)	In Place Moisture (%)	Probe Depth	Percent Compaction	Moisture Tolerance (-/+)	Min. Comp. Spec. (%)	Result
14	Building pad Grid E.5/10.5 E/F	958.0	122.2@7.5 (1)	118.90	4.90	8"	97.3	--/--	95	Pass
15	Building pad Grid E.5/16.5 E/F	958.0	122.2@7.5 (1)	126.10	4.60	8"	103.2	--/--	95	Pass
16	Building pad Grid A.5/16.5 A/B	958.0	122.2@7.5 (1)	119.50	5.30	8"	97.8	--/--	95	Pass

Remarks: Finished grade = 958.0

UES Representative: Seth T. Littlestone