

Environmental
Geotechnical Engineering
Geophysical Technology
Materials Testing
Field Inspections & Code Compliance

January 27, 2025

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

RE: Special Inspection Report No. 1 Village at Discovery Park – Lot 5

1900 NE Discovery Avenue Lee' Summit, Missouri

Report Period: December 8, 2024 to December 28, 2024

Permit No.: PRCOM20244782 UES Project No.: A23129.00089.005 Legacy Project No: J044702.06

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 subgrade evaluation 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**

#### Subgrade Evaluation

Following removal of the vegetation, the subgrade for the building pad was observed on December 10 and 18. 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 offroad dump truck to aid in evaluating the stability of the underlying soils.

### **Engineered Fill**

Field density tests and visual observations were performed in engineered fill placed for the building pad and parking garage between December 11 and behind the curb of Discovery Avenue on December 23. 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. The test results were evaluated using existing moisture-density (standard Proctor) relationship tests. Results of the field density tests are enclosed.

Placement of engineered fill was suspended on December 24. Site surveys indicated the presence of a gas line in proximity to the building perimeter. Work will continue after the design team relocates the building within the property to avoid the existing utilities.

Steve Damron

CMT Department Manager

# **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

Attachments: 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

# Village at Discovery Park – Lot 5 Variance/Discrepancy List

NOTE: Items resolved during the report period are shaded

Variance Date Date
Number Opened Closed

Description



Client: Intrinsic Development

Project: A23129.00089.005

Village at Discovery Park - Lot 5 J044702.06

Lee's Summit, MO

# **Field Density Test Results**

Report Date: 12/11/2024

Area Being Filled: Lot 5 building pad NE and NW Corner building pad

Description of Fill Material: (1) 3877: yellow-brown with grace fat clay (CH), trace weathered shale

# **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 G/5.5	962.4	105.2@19.6 <sup>(1)</sup>	106.10	19.80	8"	100.9	0.1/4.0	95	Pass
2	Building pad Grid H/7.5	962.4	105.2@19.6 <sup>(1)</sup>	105.30	20.10	8"	100.1	0.1/4.0	95	Pass

Remarks: Finished grade ~966.0

**UES Representative:** Seth T. Littlestone

Report Date: 12/23/2024

Area Being Filled: 0 to 150 feet south, 0 to 30 feet west

**Description of Fill Material:** (1) 4055: yellow-brown lean clay with sand (CL)

## **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	Lot 5 30' south 25' west	966.7	99.4@19.7 (1)	96.40	22.60	6"	97.0	1.0/3.0	95	Pass
2	Lot 5 140' south 10' west	966.7	99.4@19.7 (1)	95.50	22.70	6"	96.1	1.0/3.0	95	Pass
3	Lot 5 40' south 20' west	967.4	99.4@19.7 (1)	95.80	22.50	6"	96.4	1.0/3.0	95	Pass
4	Lot 5 160' south 5 west	967.4	99.4@19.7 (1)	97.30	21.90	6"	97.9	1.0/3.0	95	Pass
5	Lot 5 15' south 22' west	968.0	99.4@19.7 (1)	96.70	22.30	6"	97.3	1.0/3.0	95	Pass
6	Lot 5 120' south 10' west	968.0	99.4@19.7 (1)	96.20	22.50	6"	96.8	1.0/3.0	95	Pass
7	Lot 5 20' south 25' west	969.0	99.4@19.7 (1)	97.70	22.00	10"	98.3	1.0/3.0	95	Pass
8	Lot 5 130' south 10' west	969.0	99.4@19.7 (1)	99.50	21.70	10"	100.1	1.0/3.0	95	Pass

Remarks: Reference point: Lot 5 northeast corner

Finished grade = 969.0

**UES Representative:** Ryan Davidson