FINAL GEOTECHNICAL ENGINEERING REPORT **VENETIAN AT WESTON TRAILS, PHASE 1** PRELIMINARY GEOTECHNICAL REPORT REMAINDER OF VENETIAN AT WESTON TRAILS **WESTON, TEXAS** Prepared for: HONEYCREEK VENETIAN, LLC C/O LENART DEVELOPMENT Plano, Texas EWI Report No. LD205681R October 2020



October 27, 2020

Honeycreek Venetian, LLC

c/o Lenart Development Company, LLC

520 Central Expressway East, Suite 104

Plano, Texas 75074 Attn: Mr. Steve Lenart

Re: Final Geotechnical Engineering Report

Venetian at Weston Trails, Phase 1

Preliminary Geotechnical Report

Remainder of Venetian at Weston Trails (not designated as Phase 1)

County Road 206

Weston, Texas

EWI Report No. LD205681R (Revised)

Ellerbee-Walczak, Inc. (EWI) has completed the Geotechnical Engineering Report for the above referenced project. This report was revised to include recommendations for pavement and pavement subgrades. The results are presented in the attached report.

Please do not hesitate to contact us if you have any questions regarding the information in this report or if we can be of any additional assistance.

It has been a pleasure providing geotechnical services for this project.

Sincerely,

Ellerbee-Walczak, Inc.

TBPE Firm No. F-4610

7. Neill Lawrenče, Jr., P.E.

Manager Engineering

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FINAL GEOTECHNICAL ENGINEERING REPORT VENETIAN AT WESTON TRAILS, PHASE 1

PRELIMINARY GEOTECHNICAL REPORT REMAINDER OF VENETIAN AT WESTON TRAILS WESTON, TEXAS

1.0 SITE & PROJECT INFORMATION

The 44.586-acre development site designated as Phase 1 of the Weston Trails development being a portion of the 324.506-acre Weston Trails (remainder) development is located on the north side of County Road 206 and east of FM 543 N. and FM 229 in the City of Weston, Collin County, Texas. The property was mostly open crop and pastureland with scattered tress along the fence lines and drains from the north centrally located higher elevation to towards the south, east and west. Phase 1 was generally open with scattered trees along the fence lines and drains towards the east.

The proposed residential portion of Phase 1 will consist of Block Y – Lots 1 through 18, Block Z – Lots 1 through 36, Block AA – Lots 1 through 33, Block BB – Lots 1 through 21, Block CC – Lots 1 through 27, Block DD – Lots 1 through 32, Block EE – Lots 1 through 32 and Block JJ – Lots 18 through 31.

Proposed Phase 1 construction consists of about 213 new, one or two story, wood-frame/brick-veneer single-family residences with relatively light foundation loads. The project's preliminary grading plans (dated 4/23/2020) provided to this office indicate cuts up to -2 feet and fills up to +7 feet will be required to achieve finished pad grades.

About 1,235 residential lots are planned for the entire Weston Trails development.

2.0 SCOPE OF SERVICES

The purpose of our geotechnical services for this site were to:

- Evaluate the subsurface conditions encountered in the borings.
- Evaluate the pertinent engineering properties of the recovered samples.
- Provide final recommendations concerning suitable types of foundation and floor slab systems for the proposed Phase 1 residences.
- Provide preliminary recommendations concerning suitable types of foundation and floor slab systems for the proposed remainder (not consisting of Phase 1) of the development.

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· Provide recommendations for earthwork and site grading.



3.0 FIELD OPERATIONS

The subsurface conditions were evaluated by performing fifty-five out of the planned sixty-one borings, which were drilled on July 13 through July 16 of 2020. Five of the preliminary borings could not be drilled due to access issues but in our opinion enough borings were completed for preliminary information. The approximate boring locations are provided on the Plan of Borings (Figure 1) in the Appendix. The results of the field exploration program are presented on the Boring Logs (Figures 2 through 56) in the Appendix. A Soil Classification Chart containing the keys to symbols and the description of terms used on the boring logs are presented on Figure 57.

A truck-mounted drilling rig with continuous flight augers were used to advance the borings. Soils were sampled using steel tubes. The samples were extruded in the field, logged, sealed, and packaged to preserve their in-situ moisture content and reduce disturbance during transportation to the laboratory. The load carrying capacity of the limestone encountered in most of the borings was evaluated in the field by performance of the Texas Department of Transportation's (TxDOT) Cone Penetration Test. Drilling and sampling were performed in general accordance with applicable ASTM procedures.

4.0 LABORATORY TESTING

The Boring Logs were reviewed by a geotechnical engineer who assigned soil samples for testing. Tests were performed in the laboratory by technicians working under the direction of the engineer. Testing was performed in general accordance with applicable ASTM procedures.

Liquid and Plastic Limit tests (ASTM D 4318) were performed on samples of the cohesive soils. These tests were used in conjunction with moisture content tests (ASTM D 2216) for classification and estimating their volume change potential. Absorption swell tests were performed on selected samples of the cohesive materials to quantitatively evaluate volume change potential at the in-situ moisture levels. Percent passing the No. 200 Sieve tests were performed on selected samples of the cohesive soil to determine the percentage finer than 0.075 mm to aid in classification. Hand penetrometer and unconfined compression tests were performed on the soils to evaluate consistency and strength.

The results of the laboratory tests are presented on the Boring Logs in the Appendix. Results of the swell tests are presented in Table 1.

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TABLE 1 - SUMMARY OF SWELL TESTS

Boring	Depth (feet)	F	면	Initial Moisture (%)	Final Moisture (%)	Surcharge (psf)	Swell (%)
1	8 – 10	63	39	21.4	30.1	1125	0.5
2	6-8	56	35	20.6	25.3	875	Ö
3	4-6	84	50	37.8	39.2	625	0.2
4	6-8	63	36	23.7	27.4	875	0.6
ຜ	8 – 10	67	43	23.6	27.0	1125	1.0
6	2-4	66	40	42.7	44.4	375	0.2
7	4-6	79	50	38.1	40.0	625	0.5
8	4-6	84	56	36.6	38.9	625	0.7
9	0-2	78	49	40.9	42.2	125	1.2
10	6-8	88	60	40.1	42.8	875	0
11	8 10	61	38	22.6	25.6	1125	0.2
12	6 – 8	68	43	28.3	29.5	875	0
13	2-4	52	30	21.0	26.1	375	1.1
14	2-4	55	33	22.2	25.2	375	0.8
15	4 - 6	60	37	23.9	25.6	625	0.1
16	6 - 8	59	33	21.8	30.7	875	1.1
17	8 – 10	51	29	22.9	24.9	1125	0.3
18	6 – 8	63	40	27.7	28.7	875	0
19	4-6	57	32	28.5	29.9	625	. 0
20	2-4	73	40	34.6	36.1	375	0.6
21	8 – 10	63	38	25.0	29.2	1125	0.4
22	2-4	81	46	44.4	46.3	375	0.3
23	4 - 6	61	35	39.7	41.4	625	0
24	6-8	61	38	24.8	27.0	875	0.2
25	0-2	57	32	28.4	30.3	125	1.6
26	2-4	67	43	19.6	24.4	375	0.5

TABLE 1 - SUMMARY OF SWELL TESTS

Boring	Depth (feet)	LL	PI	Initial Moisture (%)	Final Moisture (%)	Surcharge (psf)	Swell (%)
27	4 – 6	55	33	27.2	30.3	625	0
28	6 – 8	57	34	28.5	31.0	875	0
29	4 – 6	76	43	39.2	40.2	625	0.3
30	6 – 8	64	38	22.8	25.3	875	0.6
31	4 – 6	56	32	24.2	26.8	625	0.1
32	6 – 8	58	32	24.4	28.2	875	0.8
33	8 – 10	85	55	29.5	26.1	375	1.1
34	6 – 8	74	47	34.1	38.0	875	0.6
35	8 – 10	70	44	28.9	31.2	1125	0
36	2 – 4	52	32	21.3	25.5	375	0.2
37	4 – 6	75	47	25.6	27.9	625	0.6
38	6 – 8	64	36	25.5	28.2	875	0.3
39	0 – 2	68	37	31.7	36.8	125	2.2
40	2 – 4	71	39	36.6	40.4	375	0.7
41	8 – 10	57	32	26.7	30.9	1125	0.2

5.0 SITE SUBSURFACE CONDITIONS

The conditions encountered at each boring location are depicted on the Boring Logs in the Appendix. Descriptions of each strata with its approximated depth and thickness are provided. The depths reported on each log refer to the depth from the existing ground surface at the time the boring was performed. A brief description of the variable stratigraphy indicated by the borings is presented below.

Dark brown, brown, gray and tan clay, shaley clay and some silty clay soils, with occasional limestone layers, were encountered at the surface of Borings 1 through 48, 54 and 56 through 61. The clay soils extended to depths of 17, 8, 11, 12, 17, 13, 13, 17, 18½, 4, 19, 18, 17, 19, 17, 17, 19, 19, 17, 19, 4, 5, 8, 12, 12, 19, 18, 19, 19, 18, 17, 18, 11, 12, 13, 16, 13, 11½, 16, 12, 13½, 13½ and 12 feet below existing grades in Borings 1 through 9, 12 through 33, 36, 37, 38, 42, 45, 46, 47, 48, 54, 56, 57, 59, 60 and 61, respectively, and to termination depths of about 20 feet in Borings 10, 11, 34, 35, 39, 40, 41, 43, 44 and 58. The soils had Liquid Limits (LL) of 49 to

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88 percent and Plasticity Indices (PI) of 29 to 50. The variable soils classified mostly CH and occasionally CL according to the Unified Soil Classification System (USCS) and were stiff to hard in consistency and generally moist.

Tan and some gray limestone with clay layers with variable harder and softer layers were next encountered in Borings 1 through 8, 13, 25, 26, 27, 28, 47, 48, 56 and 57. The tan limestone with clay layers extended to depths of about 19½, 13, 14, 18, 18, 18, 17, 18, 18, 17 and 13 feet below existing grades in Borings 1, 4, 5, 7, 8, 13, 26, 27, 47, 48, 56 and 57, respectively, and to termination depths of about 20 feet in Borings 2, 3, 6, 25 and 28.

Gray limestone with shale layers was next encountered in Borings 1, 4, 5, 12 through 24, 26, 27, 29, 30, 31, 32, 33, 36, 37, 38, 42, 45, 46, 47, 48, 54, 56, 59, 60 and 61.

The soils encountered in the borings above the bedrock at this site are considered to be active to highly active with respect to moisture-induced volume changes. The soils encountered in the borings have shrink and swell potential with seasonal moisture changes within the active zone. The active zone is variable in some of the boring's depth due to shallower bedrock.

6.0 GROUNDWATER

The borings were advanced in the dry using auger-drilling techniques. This process allows relatively accurate short-term observations of groundwater while drilling. Seepage was observed while drilling at depths of about 14, 14, 12, 7, 11, 8, 18 and 15 feet below existing grades in Borings 6, 10, 21, 27 (trace), 28, 33, 34 and 58, respectively. Groundwater was measured at depths of about 10, 18, 19, 10, 19, 18 and 13 feet below existing grades in Borings 6, 10, 21, 28, 33, 34 and 58, respectively, after the completion of drilling.

Seepage was not observed in Borings 1 through 5, 7, 8, 9, 11 through 20, 22 through 26, 29 through 32, 35 through 48, 54, 56, 57, 59, 60 and 61 while drilling and these borings along with Boring 27 were observed to be dry after completion of drilling.

Groundwater levels will seasonally fluctuate due to variations in the amount of precipitation, evaporation and surface water runoff. Groundwater, like observed in some of the borings can occur above and within the limestone particularly during wet annual/seasonal cycles. Intermittent surface seepage can occur in areas where cuts or natural grades approach the top of the limestone. In addition, groundwater conditions may change due to landscape irrigation, tree root demand and from leaking buried utilities.

7.0 ANALYSIS AND RECOMMENDATIONS

If some differential foundation movements can be tolerated, area residential structures can use post-tensioned or conventionally reinforced, stiffened ground supported foundation systems (Slab-On-Grade) for moisture modified soil conditions at this site.



Recommendations for ground supported foundations are provided below.

7.1 Foundation Recommendations

Lightly loaded ground supported foundation systems placed on site subgrades will be subject to some movement as a result of moisture-induced volume changes in the active soils. The more clayey soils expand (heave) with increases in moisture and contract (shrink) with decreases in moisture. The movement typically occurs as post construction heave.

The potential magnitude of the moisture-induced movements is rather indeterminate. It is influenced by the soil properties, overburden pressures, thickness of clay strata and to a great extent by soil moisture levels at the time of construction. The greatest potential for post-construction movement occurs when the soils are in dry condition at the time of construction.

Site grading can affect the potential movements. For example, the use of clays as fill material will increase the potential movements by increasing the total clay thickness.

The estimated magnitude of post-construction movements for the lots near finished current grades for soils at a **dry condition** is on the order of **4 to 6½ inches**. Preliminary borings indicate the accessible areas outside of Phase 1 are similar to Phase 1

Moisture and swell test data indicate the upper 10 feet of the soils observed in the Phase 1 borings were at a favorable moisture conditions at the time of drilling with current Potential Vertical Rise (PVR) values on the order of 4½ inches or less. We understand earthwork operation for the project will commence prior to December 2020. If earthwork commences after December 2020, this office should be notified in order to revise our recommendations.

It is estimated that slab movements of approximately 4½ inches, or less, can generally be obtained by elevating the moisture contents (Moisture Conditioning) of the existing soils and/or fills soils. A large portion of the Phase 1 site will consist of significant fills.

The starting elevation (to be filled) should be scarified to a minimum depth of 12 inches. The scarified soils should be uniformly compacted to a minimum of 94 percent of ASTM D 698 at a minimum of +4 percent (Moisture conditioned) above the soil's optimum moisture determined by that test. All Phase 1 pads should be covered with poly sheeting as soon as possible after completion of the moisture-conditioning process to prevent drying of the subgrade. The poly should extend to outermost edge pad lines and the poly sheeting be covered with a minimum of 6 inches and a maximum of 12 inches of soil for protection.

For the remainder of the Phase 1 pads (those not listed in the above paragraph) with significant fills over about 1½ feet, we recommend that subgrade in areas to be filled should be stripped of vegetation and any debris present. The starting elevation (to be filled) should be scarified to a minimum depth of 12 inches. The scarified soils should have enough water added to allow for uniformly compacted to a minimum of 94 percent of ASTM D 698 at a minimum of +4 percent



(Moisture Conditioned) above the soil's optimum moisture determined by that test. Native CH clay fill materials should then be spread in loose lifts, less than 9 inches thick and uniformly compacted to a minimum of 94 percent of ASTM D 698 at a minimum of +4 percent above the soil's optimum moisture determined by that test to the bottom of the poly. The moisture modified pads should be covered with poly sheeting as soon as possible after completion of the moisture-conditioning process to prevent drying of the subgrade. The poly should extend to outermost edge pad lines and the poly sheeting be covered with a minimum of 6 inches and a maximum of 12 inches of soil for protection.

The PVR estimates for the borings were estimated using the information from the testing program and are based on the Texas Highway Department's Method 124-E and our general knowledge of the area. PVR calculations are one-dimensional representations of the Potential Vertical Movements (PVM) (i.e. – swell is only considered). Shrinkage due to soil desiccation of near the same magnitude can also occur. PVR calculations are estimates based on assumptions that the area around the structures will be well drained (Properly Graded), landscape beds are not over-watered, and utility leaks are promptly repaired.

7.1.1 Ground-Supported Stiffened Slabs

Post-tensioned, ground-supported stiffened slab foundation systems must be designed to resist and/or tolerate potential vertical movements due to volume changes in the site soils without inducing unacceptable distress in the foundation or structural elements. These movements will typically occur as differential movement between the periphery and interior of the slab-on-grade systems.

PVR calculations are estimates based on assumptions that the area around the structures will be well drained (Properly Graded), landscape beds are not over-watered, and utility leaks are promptly repaired. Long term utility leaks can result in soil movements in excess of those estimated above. The following parameters assume that the subgrade beneath the slabs should meet the requirements discussed in the Earthwork/Site Grading section of this report.

Adjacent flatwork such as sidewalks and pavements should be designed in such a way as to allow for differential movements between flatwork and the exterior perimeter of the residence foundations.

Design parameters were developed for differential swell (y_m) using the Post-Tensioning Institute's (PTI) slabs-on-ground (Third Edition) design method and the VOLFLO 1.5 computer program. The final PTI design criteria based upon moisture/current condition soils are presented below in Table 2.

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<u>TABLE 2 – PTI DESIGN CRITERIA</u> Phase 1 Lots (and for preliminary information on remainder)

Based on Moisture Conditioned/Current Condition Soils w/poly as described in Section 7.1 (PTI 3 rd Ed.) Borings 1 through 24	Center Lift	Edge Lift			
Edge Moisture Variation (em)	7.2 ft.	4.5 ft.			
Differential Swell (Ym)	1.7 in. 2.2 in.				
Potential Vertical Rise (PVR)	About 4½ inches, or less				

Site grading can greatly affect the movements discussed above. The values presented assume final grades will be within -2 to +7 feet of current grades and fill soils will be similar to on-site materials.

The grade beams of the slab-on-grade foundation system should exert a maximum bearing pressure of 1,500 PSF on existing or properly compacted fill soils. These beams should extend a minimum of 12 inches below finished grade.

A properly engineered and constructed vapor retarder (5 mil minimum) should be provided beneath slab areas, which will be covered, carpeted, or sealed.

7.2 Utilities

Limestone should be anticipated for deeper utility excavations. Care should be taken that utility cuts are not left open for extended periods, and that the cuts are properly backfilled. Backfilling should be accomplished with properly compacted on-site soils, rather than granular materials. A positive cut-off at the building line is recommended to help prevent water from migrating in the utility trench backfill.

7.3 Earthwork/Site Grading

Site grading can greatly affect the potential vertical movements as discussed above. Fills constructed using clay soils can increase the potential movements. The on-site soils may be used as fill. Imported (select) fill to achieve finished grade beneath a ground supported foundation should have a Liquid Limit less than 35. The subgrade in areas to be filled and/or under residence structure, slopes and pavements should be stripped of vegetation and any debris present.

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The subgrade beneath fills should be scarified to a minimum depth of 12 inches and uniformly compacted to a minimum of 94 percent of ASTM D 698 at a minimum of +4 percent (moisture conditioned) above the soil's optimum moisture determined by that test. Native CH clay fill materials should then be spread in loose lifts, less than 9 inches thick and uniformly compacted to a minimum of 94 percent of ASTM D 698 at a minimum of +4 percent above the soil's optimum moisture determined by that test. Imported (select) fill if placed by the home builder should be uniformly compacted to a minimum of 95 percent of ASTM D 698 at or above the soil's optimum moisture content.

If trees are removed within the perimeter of the house pads, the soil should be excavated to a depth beneath the root bulb and replaced to the same criteria presented above. The pads should be proof rolled with heavy pneumatic equipment. Any soft or pumping areas should be excavated to a firm subgrade and properly backfilled. It should then be scarified to a minimum depth of 6 inches and uniformly compacted to the same criteria presented above. If tree bulbs are not removed, the rooted areas may be in a desiccated state and the potential for heave may exist as moisture levels increase over time.

7.4 Site Drainage

All grades must be adjusted to provide positive drainage away from the residence structures. Water permitted to pond near or adjacent to the perimeter of residences can result in soil movements, which exceed those discussed in this report. Open ground should preferably be sloped at a minimum of 4 percent grade for at least 5 feet, or as much as possible away from the perimeter of the house foundations.

Flatwork will be subject to post-construction movement. Maximum grades practical should be used for flatwork to prevent areas where water can pond. In addition, allowances in final grades should take into consideration post-construction movement of flatwork, particularly if such movement would be critical. Where paving or flatwork abuts the structures, care should be taken that the joint is properly sealed and maintained to prevent the infiltration of surface water.

Planters located adjacent to the structures should be designed to drain. Sprinkler mains should be located a minimum of five feet away or as much as possible from the building lines. If heads must be located adjacent to the structures, then service lines off the main should be provided. The homeowners should be advised by the home builders that it is important to maintain moist ground conditions during prolonged periods of dry weather.

Newly planted trees and deep-rooted shrubs should be planted no closer to the structures than ½ their mature height to reduce the potential for foundation settlement caused by moisture absorption of the root systems. If closer tree plantings are required a root barrier system is recommended. Roof drains should be extended a minimum of 5 feet away from the structures for grades less than 4 percent.

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7.5 Pavement Recommendations

7.5.1 Pavement Subgrade Preparation

Based on our experience with the soils encountered in this geologic formation, the soils probably do not have soluble sulfates in sufficient concentration for significant sulfate induced heave in a lime modified subgrade. EWI recommends that soluble soil samples be obtained on 300 feet intervals after rough grades have been established on the roadways and after utilities have been placed to verify sulfate concentrations of 3,000 ppm, or less.

Subgrade soils will primarily consist of clay soils. The clay soils are subject to loss in support value with the moisture increases, which can occur beneath pavements. The soils can be modified with lime to improve and maintain their support value.

For budget purposes, a minimum of eight percent lime, by dry weight, should be considered for used beneath pavement systems. The actual lime placement application should be determined by lime series testing after rough grades have been established. Flexible base can be considered as an alternative to lime modification if the soils indicate high soluble sulfate contents. The lime should be thoroughly mixed and blended with the top six inches of the subgrade. Lime modification should extend a minimum of one foot beyond the edge of the pavement.

The lime modified subgrade should then be uniformly compacted to a minimum of 95 percent of ASTM D698 near, -1 to +3 percent, the optimum moisture content determined by that test. It should be protected and maintained in a moist condition until the pavement is placed.

A minimum of five inches of concrete is recommended for light duty automobile and occasional truck traffic. The Portland Cement Concrete (PCC) thickness should be increased to 6 inches for heavier use automobile traffic and 7 or more inches in areas subject to frequent truck traffic. The concrete should have a minimum 28-day compressive strength of 3,600 psi. It should contain a minimum of 5±2 percent entrained air. As a minimum, the section should be reinforced with No. 3 bars on 18-inch centers in both directions.

The pavement will be subject to movements due to volume changes in the site soils. Flat grades should be avoided with positive drainage provided away from the pavement edges.

Backfilling of curbs should be accomplished as soon as practical to prevent ponding of water.

7.5.2 Pavement Movements

The soils encountered in the borings are considered to be highly active and subject to volume changes with fluctuations in their moisture content. The clay soils expand (heave) with increases in moisture and contract (shrink) with decreases in moisture. The movement at the center of the pavement typically occurs as post construction heave. At the edge of the pavement, both shrinkage and swell could occur due to seasonal moisture fluctuations in response to rainfall and evapotranspiration.



The potential magnitude of the moisture-induced movements is rather indeterminate. It is influenced by the soil properties, surface drainage, overburden pressures and to a great extent by soil moisture levels at the time of construction. The greatest potential for post-construction movement occurs when the soils are in dry condition at the time of construction. Based on TxDOT Test Method 124-E, potential active soil movements, to the boring depths evaluated, are estimated to range up to around 6 inches for the upper 10 feet of the soil profile if at a dry condition.

Pavements should be sloped to provide rapid drainage of surface water. Water allowed to pond on or adjacent to the pavements or behind curbs or planting areas could saturate the subgrade and contribute to premature pavement deterioration. A minimum grade of 0.5% and preferably 1% is recommended for all pavements.

8.0 LIMITATIONS

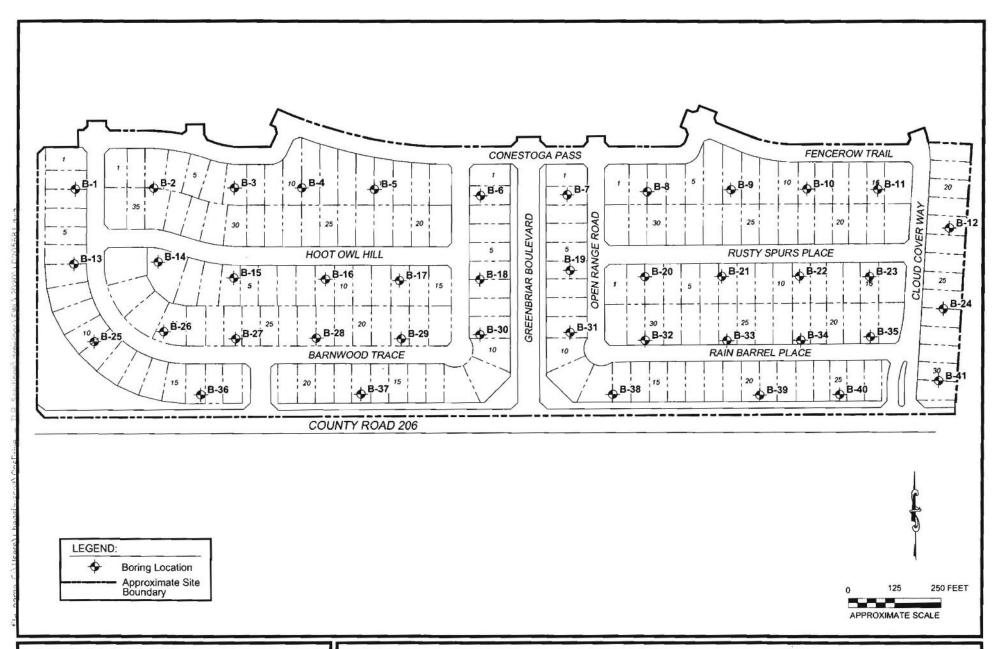
The professional services performed for the preparation of this geotechnical report were accomplished in accordance with current and locally accepted geotechnical engineering principles and practices. The recommendations presented in this report are based upon the data obtained from the borings at the indicated locations and/or from other information discussed in this report. The subsurface conditions occurring between borings and across the site, or due to seasonal/annual climatic cycles may vary from those encountered in the borings. The nature of these variations may not become evident until during or after construction. Should subsurface conditions varying significantly from those described herein, EWI should be immediately notified to evaluate the effects on these recommendations and so supplemental recommendations can be provided. EWI's services should also be retained for the final review of design plans/specifications so comments can be made regarding interpretation of the geotechnical recommendations provided in this report, or to provide additional borings if soil variation is encountered during foundation placement.

The recommendations provided in this report were prepared for the exclusive use of our client. No warranties, expressed or implied, are intended or made. The information and recommendations provided in this report are applicable only for the design of the types of structure(s) described in the <u>Site and Project Information</u> section of this report and should not be used for any other structures, locations or for any other purposes. We should not be held responsible for the conclusions, opinions or recommendations made by others based upon the information submitted in this report. If changes to the design and/or location of this project as outlined in this report are planned, the recommendations provided in this report shall not be considered valid unless EWI reviews these changes and either verifies or amends this report in writing. Construction issues such as site safety support of excavations and dewatering procedures are the responsibility of others.

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The scope of services for this report does not include any environmental or biological assessments either specifically or implied. If the owner is concerned about the potential mold, fungi, bacteria, identification of contaminants or hazardous materials and conditions, etc., additional studies should be undertaken. EWI's capabilities include a full range of construction material testing and observation services. A qualified testing firm should be retained to provide testing and observation during excavation, grading, foundation and construction phases of this project. We will retain the samples recovered from the borings on this project for a period of 30 days subsequent to the submittal date printed on this report. After the 30-day period, the samples will be discarded unless otherwise notified by the owner in writing.





Ellerbee Walczak, Inc.

EWI Project No. LD205681

PLAN OF BORINGS

Weston Trails Weston, Texas Ellerbee-Walczak, Inc. **BORING NUMBER B-1** 4501 Broadway Avenue PAGE 1 OF 1 Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---**ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) LIMITS GRAPHIC : Blows/ft. Inches/100 Bl : Tons/Sq. Ft. : Percent u: Kips/sq. Ft. QD: Percent DEPTH (ft) PLASTICITY PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION A: Be T: Tack P: Tock R: Per ROU: Kill Dark brown clay P = 2.2579 33 46 99 Tan clay ST P = 4.25Tan and gray clay ST P = 4.5 +21 57 22 35 Tan and gray shaley clay ST P = 4.5 +ST P = 4.5 +21 63 24 39 Tan shaley clay P = 4.5 +72 ST 26 31 41 Tan limestone

AU

T = 3.5"/100

LD205681.GPJ GINT US.GDT 8/14/20

GEOTECH BH COLUMNS

20

- with clay layers

Gray limestone

Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc. **BORING NUMBER B- 2** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING _--Blows **ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) DRY UNIT WT. (pcf) SAMPLE TYPE LIMITS GRAPHIC N. Blows/ft. T. Inches/100 Bir P. Tons/Sq. Ft. R. Percent Qu. Kips/sq. Ft. RQD: Percent PLASTICITY INDEX PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Dark brown clay P = 1.5ST Brown clay ST 38 82 48 97 P = 2.534 Tan clay P = 4.5 +Tan and gray shaley clay ST P = 4.521 56 21 35 Tan and gray limestone THD T = 5.5"/100- with clay layers AU 10 THD T = 4"/100AU THD T = 3.5"/100AU T = 3"/10020

Bottom of hole at 20 feet.

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT

Ellerbee-Walczak, Inc. **BORING NUMBER B-3** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---**ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) LIMITS GRAPHIC LOG Blows/ft. Inches/100 Bl Tons/Sq. Ft. Percent u: Kips/sq. Ft. QD: Percent PLASTICITY INDEX DEPTH (ft) PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION 0 Dark brown clay ST P = 2.2545 83 32 51 Brown clay ST P = 2.038 50 ST P = 2.584 34 Tan and gray clay ST P = 4.5 +Tan and gray shaley clay ST P = 4.5 +21 56 22 34 Tan limestone - with clay layers ΑU T = 3.75"/10015 ΑU

Bottom of hole at 20 feet.

GINT US.GDT 8/14/20

GEOTECH BH COLUMNS LD205681.GPJ

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 $T = 3.25^{\circ}/100$

Ellerbee-Walczak, Inc. BORING NUMBER B- 4 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---ATTERBERG FINES CONTENT (%) MOISTURE CONTENT (%) DRY UNIT WT. (pcf) SAMPLE TYPE LIMITS GRAPHIC LOG PLASTICITY INDEX DEPTH (ft) PLASTIC LIMIT LIMIT MATERIAL DESCRIPTION Brown clay ST P = 3.7527 69 25 44 ST P = 4.25Tan clay P = 4.5 +ST ST P = 4.5 +24 63 27 36 Tan shaley clay ST P = 4.5 +Tan limestone - with clay layers Gray limestone AU - with shale layers THD $T = 3.25^{\circ}/100$ AU T = 2.25"/10020 Bottom of hole at 20 feet.

8/14/20

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT

Ellerbee-Walczak, Inc. 4501 Broadway Avenue

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

BORING NUMBER B- 5

Haltom Telepho Fax: 81	City, one: 8 7-759	Texas 76117 17-759-9999 -1888								PAGE	E 1 O	0F 1	
		ycreek Venetian, LLC	_ PROJECT N	AM	E _W	leston Trails P	rojec <u>t</u>	& Fin	al Ph.	1			
PROJEC	T NU	IBER_LD205681	PROJECT L	OC.	ATIO	N Weston, TX							
DATE S	TARTE	D 7/15/20 COMPLETED 7/15/20	GROUND ELEVATION N/A										
		**	GROUND WATER LEVELS:										
DRILLIN	IG ME	HOD Continuous Flight Auger	AT TIME	E OI	FDRI	LLING Dry							
						LING Dry							
NOTES	-		_ AFTER	DRI	LLIN	S - 67							
	50W.2			Щ	ı	lows	Ë			ERBE		F.	
DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE		N. Blows/ft. T. Inches/100 Blows P. Tons/Sq. Ft. R. Percent Qu. Kips/sq. Ft. RQD: Percent	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)		PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)	
0				Ü	5	ST C SOR	5	-0	-	D.	5_	N.	
		Brown clay				A		22					
					ST	P = 2.5		40	80	31	49		
					ST	P = 2.25							
					51	F - 2.23							
5				1	ST	P = 2.75		39					
		· · · · · · · · · · · · · · · · · · ·											
		Tan clay			ST	P = 4.5+							
30000		git.			31	F - 4.5+			70 ±00			-	
		**									40		
10					ST	P = 4.5+		24	67	24	43		
<i>**</i> = 2		*				NA 12-1-1-100-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1						8	
		Tan limestone											
		- with clay layers	-										
		p			AU								
100		Gray limestone		1	НĎ	T = 3.5"/100	9						
15	拱	- with shale layers			ПО	1 = 3.57100]					6	
-	井			*									
		en e											
	山	g:	8										
	中												
-	茁		لي		AU								
20	出			T	THD	T = 2.25"/100							
		Bottom of hole at 20 feet.	,										

Ellerbee-Walczak, Inc. **BORING NUMBER B-6** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** ∡AT TIME OF DRILLING 14.0 ft DRILLING METHOD Continuous Flight Auger AT END OF DRILLING 10.0 ft NOTES AFTER DRILLING ---**ATTERBERG** FINES CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) MOISTURE CONTENT (%) IMITS GRAPHIC LOG N: Blows/ft. T: Inches/100 Bl P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent PLASTICITY DEPTH (ft) PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Brown clay P = 1.5ST P = 2.543 66 26 40 ST P = 2.25ST P = 2.040 82 29 53 Tan and gray clay ST P = 3.0Tan shaley clay P = 4.5 +ST 26 71 29 42 Tan limestone - with clay layers AU T = 3.75"/10020 Bottom of hole at 20 feet.

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

Ellerbee-Walczak, Inc. **BORING NUMBER B-7** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---N: Blows/ft. T: Inches/100 Blows P: Tons/Sq. Ft. R: Percent Qu: Kips/Sq. Ft. RQD: Percent **ATTERBERG** FINES CONTENT (%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) SAMPLE TYPE LIMITS GRAPHIC LOG PLASTICITY INDEX PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION 0 Dark brown clay ST P = 1.7541 77 32 45 ST P = 2.0Brown clay - with calcareous particles ST 79 P = 2.7538 29 50 Tan clay ST P = 3.067 ST P = 4.5 +30 22 45 Tan limestone AU - with clay layers THD T = 7.5"/10015

AU

T = 2"/100

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

20

Gray limestone

- with shale layers

Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc. **BORING NUMBER B-8** 4501 Broadway Avenue PAGE 1 OF 1 Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 **GROUND ELEVATION N/A GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---**ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) IMITS N: Blows/ft.
T: Inches/100 Blc
P: Tons/Sq. Ft.
R: Percent
Qu: Kips/sq. Ft.
RQD: Percent GRAPHIC DEPTH (ft) PLASTICITY INDEX PLASTIC LIQUID MATERIAL DESCRIPTION Dark brown clay P = 4.5Brown clay P = 2.084 ST 42 57 27 ST 37 P = 2.2584 28 56 Tan clay ST P = 4.5 +ST P = 4.5 +Tan limestone AU - with clay layers THD T = 6.75"/100 Gray limestone AU - with shale layers T = 2.5"/10020

Bottom of hole at 20 feet.

GINT US.GDT

LD205681.GPJ

GEOTECH BH COLUMNS

Ellerbee-Walczak, Inc. **BORING NUMBER B-9** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 **GROUND ELEVATION N/A GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---ATTERBERG FINES CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) MOISTURE CONTENT (%) **IMITS** N: Blows/ft. T: Inches/100 Blc P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent GRAPHIC LOG PLASTICITY PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Dark brown clay P = 2.041 78 29 49 Brown clay ST P = 2.057 42 85 ST P = 2.528 Tan clay ST P = 3.25ST P = 4.5 +31 80 53 27 Tan and gray shaley clay ST P = 4.5 +Gray limestone - with shale layers AU T = 1.75"/100

Bottom of hole at 20 feet.

GEOTECH BH COLUMNS LD205681 GPJ GINT US GDT 8/14/20

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Ellerbee-Walczak, Inc. **BORING NUMBER B-10** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetlan, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED _7/15/20 _____ COMPLETED _7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger ✓ AT TIME OF DRILLING 14.0 ft AT END OF DRILLING 18.0 ft NOTES AFTER DRILLING ---N: Blows/ft.
T: Inches/100 Blows
P: Tons/Sq. Ft.
R: Percent
Qu: Kips/sq. Ft.
RQD: Percent **ATTERBERG** FINES CONTENT
(%) SAMPLE TYPE DRY UNIT WT. (pcf) MOISTURE CONTENT (%) LIMITS GRAPHIC LOG PLASTICITY INDEX PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Dark brown clay ST P = 1.75Brown clay ST P = 2.039 82 28 54 P = 2.0ST P = 2.2540 88 28 60 ST P = 2.0Tan and gray clay ST P = 3.0Gray and tan shaley clay ST 68 P = 4.5 +24 27 41 Bottom of hole at 20 feet.

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

Ellerbee-Walczak, Inc.

BORING NUMBER B-11

Haltom City, Telephone:	way Avenue Texas 76117 817-759-9999 9-1888							PAGI	E 1 O)F 1
	9-1888 eycreek Venetian, LLC	PROJECT NAME	MF V	Veston Trails P	roject	& Fin	al Ph	1		
	MBER LD205681			N Weston, TX		<u> </u>	ai i ii.	-		
	ED 7/15/20 COMPLETED 7/15/20	GROUND ELEV								
		GROUND WATER LEVELS:								
DRILLING ME	THOD Continuous Flight Auger	AT TIME OF DRILLING Dry								
		AT END O	F DRI	LLING Dry						
NOTES		AFTER DE	RILLIN							
돈 ^얼			TYPE	00 Blows Ft. Ft. nt	T WT.	JRE IT (%)		ERBE	RG }	NTENT
DEPTH (ft) GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE	N: Blows/ft. T: Inches/100 Blows P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT
0 ////	Dark brown clay			Z F C C C C					Δ	ш
	,		ST	P = 1.5		40	81	29	52	
	Brown clay		ST	P = 2.25						
										ě
_5			ST	P = 2.25		35	80	26	54	
	Tan clay		ST	P = 4.5+						
///					1					
///		e e	ST	P = 4.5+		23	61	23	38	
10										
	Tan and gray shaley clay									
	ten and gray enalty day			· · · · · · · · · · · · · · · · · · ·						
15			ST	P = 4.5+		30	61	26	35	
	Gray and tan shaley clay		ST	P = 4.5+	1					
	Bottom of hole at 20 feet.						-			

Ellerbee-Walczak, Inc. **BORING NUMBER B-12** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING _---N. Blows/ft.
T. Inches/100 Blows
T. Prons/Sq. Ft.
R. Percent
Qu. Kips/Sq. Ft.
RQD: Percent **ATTERBERG** FINES CONTENT (%) DRY UNIT WT. (pdf) MOISTURE CONTENT (%) SAMPLE TYPE LIMITS GRAPHIC LOG PLASTICITY INDEX DEPTH (ft) PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Brown clay P = 4.25ST ST P = 2.537 79 31 48 ST P = 3.0Tan clay ST P = 4.5 +28 68 25 43 ST P = 4.5 +Tan and gray shaley clay ST P = 3.024 76 30 46 Gray limestone - with shale layers T = 2.75"/100

Bottom of hole at 20 feet.

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

Ellerbee-Walczak, Inc. **BORING NUMBER B-13** 4501 Broadway Avenue PAGE 1 OF 1 Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/16/20 COMPLETED 7/16/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING _---**ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) DRY UNIT WT. (pcf) SAMPLE TYPE LIMITS GRAPHIC LOG N: Blows/ft. T: Inches/100 Blc P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent PLASTICITY INDEX PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Brown clay ST P = 3.031 70 29 41 Tan clay ST P = 4.5 +21 52 22 30 Tan limestone THD T = 6"/100- with clay layers AU THD T = 5"/100AU THD T = 7"/10015 Gray limestone - with shale layers T = 2.5''/100

Bottom of hole at 20 feet.

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

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Ellerbee-Walczak, Inc. **BORING NUMBER B-14** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED _7/16/20 ____ COMPLETED _7/16/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---Blows **ATTERBERG** FINES CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) MOISTURE CONTENT (%) LIMITS GRAPHIC LOG N: Blows/ft. T: Inches/100 Blc P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent PLASTICITY DEPTH (ft) PLASTIC LIQUID MATERIAL DESCRIPTION Brown clay ST P = 3.5Tan clay ST P = 4.5 +22 55 22 33 ST P = 4.5 +ST P = 4.5 +20 56 22 34 SS N = 58ST P = 4.5 +25 64 25 39

THD

T = 1.5"/100

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

Gray limestone

Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc. **BORING NUMBER B-15** 4501 Broadway Avenue PAGE 1 OF 1 Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/16/20 COMPLETED 7/16/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING _---ATTERBERG FINES CONTENT (%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) SAMPLE TYPE **∠IMITŞ** GRAPHIC LOG N: Blows/ft. T: Inches/100 Blc P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent PLASTICITY INDEX PLASTIC LIMIT LIMIT MATERIAL DESCRIPTION Brown clay ST P = 1.578 47 41 31 ST P = 2.5Tan clay P = 4.5 +60 37 24 23 P = 4.5 +ST ST P = 4.5 +23 61 27 34 ST P = 4.5 +Gray limestone - with shale layers $T \approx 2.25"/100$ 20

Bottom of hole at 20 feet.

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

Ellerbee-Walczak, Inc. **BORING NUMBER B-16** 4501 Broadway Avenue PAGE 1 OF 1 Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/16/20 COMPLETED 7/16/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---N: Blows/ft.
T: Inches/100 Blows
P: Tons/Sq. Ft.
R: Percent
Qu: Kips/sq. Ft.
RQD: Percent **ATTERBERG** FINES CONTENT
(%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) LIMITS GRAPHIC PLASTICITY DEPTH (ft) PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Brown clay ST P = 1.5ST P = 4.537 78 37 41 Tan clay P = 4.5 +ST P = 4.5 +22 59 26 33 ST P = 4.5 +ST P = 4.5 +Gray limestone - with shale layers ΑU

Bottom of hole at 20 feet.

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

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T = 1.25"/100

Ellerbee-Walczak, Inc. **BORING NUMBER B-17** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/16/20 COMPLETED 7/16/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---Blows ATTERBERG FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) LIMITS N: Blows/ft. T: Inches/100 Blc P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent GRAPHIC PLASTICITY INDEX DEPTH (ft) PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Brown clay 97 ST P = 1.042 75 30 45 ST P = 1.5ST P = 2.041 81 35 46

Ellerbee-Walczak, Inc. **BORING NUMBER B-18** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/16/20 COMPLETED 7/16/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING _---**ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) **IMITS** N: Blows/ft. T: Inches/100 Blc P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent GRAPHIC LOG PLASTICITY INDEX DEPTH (ft) PLASTIC LIQUID MATERIAL DESCRIPTION Brown clay ST P = 2.75ST P = 1.541 31 53 ST P = 2.25Tan clay ST P = 3.2528 63 23 40 ST P = 4.5 +ST P = 4.5 +

AU

T = 2"/100

GEOTECH BH COLUMNS LD205681 GPJ GINT US.GDT 8/14/20

20

Gray limestone - with shale layers

Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc. **BORING NUMBER B-19** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/16/20 COMPLETED 7/16/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---**ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) IMITS N. Blows/ft. T: Inches/100 Bis P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent GRAPHIC LOG DEPTH (ft) PLASTICITY PLASTIC LIQUID MATERIAL DESCRIPTION Brown clay ST P = 2.034 80 33 47 ST P = 2.0Tan clay ST P = 4.5 +28 57 25 32 ST P = 4.5 +ST P = 4.5 +ST P = 4.5 +40 61 23 38 Gray limestone - with shale layers AU T = 1.25"/10020 Bottom of hole at 20 feet.

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

Ellerbee-Walczak, Inc. 4501 Broadway Avenue

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

BORING NUMBER B-20

Haltom Teleph Fax: 8'	City, 7 one: 8 17-759	Texas 76117 17-759-9999 -1888									PAGI	E 1 C)F 1		
		ycreek Venetian,	LLC		PROJECT NAME Weston Trails Project & Final Ph. 1										
PROJE	CT NUM	IBER <u>LD205681</u>	<u> </u>		PROJECT LOCATION Weston, TX										
DATE S	TARTE	D 7/16/20	_ COMPLETED	7/16/20	GROUND EL	EVATION	N <u>N/A</u>								
240004 OTO 1410 - 144					GROUND W										
DRILLIN	NG MET	HOD Continuo	us Flight Auger		-45 ACOUNT CORES		RILLING Dry								
NOTES						D OF DR	ILLING <u>Dry</u>		====						
							61			АΠ	TERBE	RG	<u> </u>		
DEPTH (ft)	GRAPHIC LOG		MATERIAL DESC	CRIPTION		SAMPLE TYPE	N: Blows/ft. T: Inches/100 Blows P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)		PLASTIC E		FINES CONTENT (%)		
0_	////	Brown clay	_			0,	z = a a a a a	_			10.05	<u>a</u>	正		
		Brown clay				ST	P = 1.25								
						ST	P = 2.0		35	73	33	40			
_ 5 _		Tan clay	-			ST	P = 4.5+					- XX			
						ST	P = 4.5+		23	63	27	36			
						ST	P = 4.5+								
				9	s										
						ST	P = 4.5+	_	22	62	28	34			
15				1 03					-						
		Gray limesto	ne												
·		- with shale	layers			22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2									
	+					AU									
_ 20	丑					THD	T = 1.5"/100								
			Bottom of hole	at 20 feet				1		1					

Ellerbee-Walczak, Inc. **BORING NUMBER B-21** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED <u>7/16/20</u> COMPLETED <u>7/16/20</u> GROUND ELEVATION N/A **GROUND WATER LEVELS:** ☐ AT TIME OF DRILLING 12.0 ft DRILLING METHOD Continuous Flight Auger AT END OF DRILLING 19.0 ft NOTES AFTER DRILLING _---**ATTERBERG** FINES CONTENT (%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) SAMPLE TYPE IMITS N. Blows/ft. T: Inches/100 Blc P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent GRAPHIC LOG DEPTH (ft) PLASTICITY INDEX PLASTIC LIMIT LIMIT MATERIAL DESCRIPTION Brown clay ST P = 1.540 75 31 44 98 ST P = 1.5ST P = 1.7534 75 28 47 ST P = 4.5 +Tan clay ST P = 4.5 +25 63 25 38 P = 4.5 +ST AU Gray limestone T = 2.25"/100 Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc.

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

BORING NUMBER B-22

Haltom Telepho Fax: 81	City, one: 8	Texas 76117 317-759-9999 9-1888								PAGI	E 1 C	OF 1
		eycreek Venetian	AGE ACTION 1.500 B.	PROJECT	NAME	Weston Trails I	Project	& Fin	al Ph.	1		
	11.00	WBER LD205681		PROJECT	LOCA.	TION Weston, T	X					
DATE S	TARTE	D 7/16/20	COMPLETED 7/16/20	GROUND EL	EVATI	ON N/A						
				GROUND W	ATER L	EVELS:						
DRILLIN	IG ME	THOD Continuo	us Flight Auger			DRILLING Dry						 :
						RILLING Dry			-			
NOTES		-		AFTER	RDRILI	.ING	_					
					W.	lows	F.			ERBE		F.
DEPTH (ft)	GRAPHIC LOG		MATERIAL DESCRIPTION		SAMPLE TYPE	N: Blows/ft. T: Inches/100 Blows P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
0	////	Brown clay	-			SHUKOK	-	-	-	-	ш.	ш
		Drown day			S	P = 3.5						
		2			S.	P = 1.5		44	81	35	46	
5					s ⁻	P = 2.0						
					S	P = 2.5		37	80	33	47	
		Tan clay	×		s	P = 3.5						
10				2								
15					S	P = 4.5+						
				3	Al	J						
		Gray limesto	ne		тн	D T = 1"/100						
20		-	Bottom of hole at 20 feet.	,								

Ellerbee-Walczak, Inc. **BORING NUMBER B-23** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/16/20 COMPLETED 7/16/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING _---**ATTERBERG** FINES CONTENT (%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) SAMPLE TYPE LIMITS N: Blows/ft. T: Inches/100 Bit P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent GRAPHIC LOG PLASTICITY INDEX DEPTH (ft) LIQUID MATERIAL DESCRIPTION Brown clay ST P = 1.532 ST P = 1.75P = 2.040 61 26 35 ST P = 1.75Tan clay 26 41 ST P = 4.5 +68 27 ST P = 4.5 +Gray limestone - with shale layers AU $T = 1.5^{\circ}/100$ 20 Bottom of hole at 20 feet.

8/14/20

Ellerbee-Walczak, Inc. **BORING NUMBER B-24** 4501 Broadway Avenue PAGE 1 OF 1 Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---ATTERBERG FINES CONTENT (%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) SAMPLE TYPE LIMITS N: Blows/ft. T: Inches/100 Blc P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent GRAPHIC PLASTICITY INDEX PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Dark brown clay ST P = 1.75Brown clay ST P = 2.2533 72 29 43 ST P = 3.75Tan clay ST P = 4.025 61 23 38 ST P = 4.5 +ST P = 4.5

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

20

Gray limestone

Bottom of hole at 20 feet.

 $T = 2^{\circ}/100$

Ellerbee-Walczak, Inc. **BORING NUMBER B-25** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---Blows ATTERBERG LIMITS FINES CONTENT (%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) SAMPLE TYPE GRAPHIC LOG N: Blows/ft. T: Inches/100 Bl. P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent DEPTH (ft) PLASTICITY INDEX PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Brown clay P = 4.5 +28 57 25 32 Tan clay ST P = 4.5 +Tan limestone THD T = 4.75"/100- with clay layers AU THD T = 8"/10010 AU THD T = 6.75"/100 THD T = 3''/10020 Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc. **BORING NUMBER B-26** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 PROJECT NAME Weston Trails Project & Final Ph. 1 CLIENT Honeycreek Venetian, LLC PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED <u>7/15/20</u> COMPLETED <u>7/15/20</u> GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---**ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) DRY UNIT WT. (pcf) SAMPLE TYPE LIMITS GRAPHIC LOG N: Blows/ft. T: Inches/100 Bl. P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent PLASTICITY INDEX PLASTIC LIQUID MATERIAL DESCRIPTION Dark brown clay P = 2.5Tan clay ST P = 4.5 +20 67 24 43 P = 4.5 +Tan limestone THD - with clay layers AU $T = 10^{\circ\prime}/100$ AU THD T = 7.25"/10015 Gray limestone ΑU - with shale layers T = 5.25"/100 Bottom of hole at 20 feet.

GINT US.GDT

LD205681.GPJ

GEOTECH BH COLUMNS

Ellerbee-Walczak, Inc. **BORING NUMBER B-27** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT END OF DRILLING Dry NOTES AFTER DRILLING ---Blows **ATTERBERG** FINES CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) MOISTURE CONTENT (%) LIMITS N: Blows/ft. T: Inches/100 Blc P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent GRAPHIC LOG PLASTICITY
INDEX DEPTH (ft) LIQUID MATERIAL DESCRIPTION Dark brown clay ST P = 1.538 76 33 43 Brown clay ST P = 2.0Tan silty clay ST P = 4.5 +27 55 22 33 ST P = 4.5 +Tan limestone THD T = 12"/46 - with clay layers ΑU T = 9"/10015 Gray limestone - with shale layers AU T = 3.25"/10020 Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc. **BORING NUMBER B-28** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** AT TIME OF DRILLING 11.0 ft DRILLING METHOD Continuous Flight Auger AT END OF DRILLING 10.0 ft NOTES AFTER DRILLING ---Blows/ft. Inches/100 Blows **ATTERBERG** FINES CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) MOISTURE CONTENT (%) **IMITS** N: Blows/ft.
T: Inches/100 Blc
P: Tons/Sq. Ft.
R: Percent
Qu: Kips/sq. Ft.
RQD: Percent GRAPHIC LOG PLASTICITY INDEX DEPTH (ft) PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Dark brown clay P = 1.5ST ST P = 1.7538 75 28 47 Brown clay P = 2.0Tan clay ST P = 4.2528 57 23 34 ST P = 4.5 +Tan limestone - with clay layers ΑU THD T = 6"/10015 AU T = 5.75"/10020 Bottom of hole at 20 feet.

GINT US.GDT 8/14/20

GEOTECH BH COLUMNS LD205681.GPJ

Ellerbee-Walczak, Inc. **BORING NUMBER B-29** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 __ GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING _---Blows **ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) DRY UNIT WT. (pcf) SAMPLE TYPE LIMITS N: Blows/ft. T: Inches/100 Blc P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent GRAPHIC PLASTICITY INDEX DEPTH (ft) PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Dark brown clay P = 1.0ST 44 ST P = 1.25ST P = 1.539 76 33 43 Light brown and tan clay P = 2.2526 51 19 32 Tan clay ST P = 2.5Gray limestone - with shale layers ST P = 4.5 +15

Bottom of hole at 20 feet.

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT

20

T = 1.25"/100

Ellerbee-Walczak, Inc. **BORING NUMBER B-30** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED _7/16/20 ____ COMPLETED _7/16/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---Blows/ft. Inches/100 Blows **ATTERBERG** FINES CONTENT (%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) SAMPLE TYPE LIMITS GRAPHIC LOG N. Blows/ft. T: Inches/100 Blc P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent PLASTICITY INDEX DEPTH (ft) PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Dark brown clay ST P = 1.5Brown clay ST P = 2.041 75 30 45 Tan clay ST P = 4.5 +38 ST P = 4.5 +23 64 26 ST P = 4.5 +ST P = 4.5 +Gray limestone T = 0.75"/10020 Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc.

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

BORING NUMBER B-31

4501 Bro Haltom (Telepho Fax: 817	padway Avenue Dity, Texas 76117 ne: 817-759-9999 7-759-1888			20.			- 1211	PAG	E 1 0)F 1			
	Honeycreek Venetian, LLC			Veston Trails Pr		& Fin	al Ph.	1					
	NUMBER _LD205681		OJECT LOCATION Weston, TX										
DATE ST	ARTED 7/16/20 COMPLETED 7/16/20	GROUND ELEVATION N/A GROUND WATER LEVELS:											
DRILLING	METHOD Continuous Flight Auger	GROUND WATER LEVELS: AT TIME OF DRILLING _Dry											
	- Total Control of the Control of th	AT END OF DRILLING Dry											
NOTES _		_ AFTER D		G									
			ш	N: Blows/ft. T: Inches/100 Blows P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent	Ľ	(9	АП	ERBE	RG	Z			
E_	MATERIAL DESCRIPTION		TYPE	NO BE	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)		LIMITS	<u>`</u>	FINES CONTENT (%)			
DEPTH	MATERIAL DESCRIPTION		SAMPLE	ws/ft. es/1(s/Sq. cent cent os/sq	S G	JIST TEN	LIQUID	PLASTIC LIMIT	들찄	0%)			
	5		SAN	Blo Franch DC: Fee	DRY	COM	25	7 =	PLASTICIT INDEX	Ä			
0	Brown clay			ZHŮKOŘ					ь.	ш			
			ST	P = 2,25		41	82	36	46				
				. 2,20		37.5%	ů.	00	,,,				
			ST	P = 2.5									
	Tan clay	*											
5			ST	P = 4.5+		24	56	24	32				
			ST	P = 4.5+									
			ST	P = 4.5+		23	64	30	34				
10													
			ST	P = 4.5+									
15													
_ /													
	Gray limestone												
- 4		L	AU										
20			THD	T = 1.25"/100									
	Bottom of hole at 20 feet.												

Ellerbee-Walczak, Inc. **BORING NUMBER B-32** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/16/20 COMPLETED 7/16/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING _---N: Blows/ft.
T: Inches/100 Blows
P: Tons/Sq. Ft.
R: Percent
Qu: Kips/Sq. Ft.
RQD: Percent **ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) TYPE DRY UNIT WT. (pcf) LIMITS GRAPHIC LOG DEPTH (ff) PLASTICITY INDEX PLASTIC LIMIT LIQUID SAMPLE MATERIAL DESCRIPTION Dark brown clay P = 2.5ST Brown clay ST 29 68 30 38 P = 3.75Tan clay ST P = 4.5 +ST P = 4.5 +24 58 26 32 P = 4.5 +ST ST P = 4.5 +AU

THD

T = 1.0"/100

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

20

Gray limestone

Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc. **BORING NUMBER B-33** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/16/20 COMPLETED 7/16/20 **GROUND ELEVATION N/A GROUND WATER LEVELS:** AT TIME OF DRILLING 8.0 ft DRILLING METHOD Continuous Flight Auger AT END OF DRILLING 19.0 ft NOTES AFTER DRILLING ---N. Blows/ft. Tr. Inches/100 Blows Pr. Tons/Sq. Ft. R. Percent Qu. Kips/Sq. Ft. RQD: Percent ATTERBERG FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) IMITS GRAPHIC LOG PLASTICITY
INDEX DEPTH (#) PLASTIC LIGUID MATERIAL DESCRIPTION LIMIT Dark brown clay ST P = 2.036 72 29 43 98 Brown clay ST P = 1.25ST P = 2.7534 73 25 48 Tan clay ST P = 4.5 +ST P = 4.5 +29 85 30 55 ST P = 4.5 +AU

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

20

Gray limestone

- with shale layers

Bottom of hole at 20 feet.

T = 3''/100

Ellerbee-Walczak, Inc. **BORING NUMBER B-34** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/16/20 COMPLETED 7/16/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** AT TIME OF DRILLING 18.0 ft DRILLING METHOD Continuous Flight Auger AT END OF DRILLING 18.0 ft NOTES AFTER DRILLING _---**ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) IMITS N: Blows/ft. T: Inches/100 Blr P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent GRAPHIC PLASTICITY INDEX PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Dark brown clay ST P = 1.75ST P = 2.038 75 28 47 Brown clay ST P = 2.0ST P = 2.034 74 27 47 Brown and tan clay ST P = 3.0Tan clay P = 4.5 +ST ST P = 4.5 +38 82 34 48 Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc.

BORING NUMBER B-35

Haltom City, T Telephone: 81 Fax: 817-759-	exas 76117 7-759-9999 1888							PAG	E 1 C	OF 1		
	creek Venetian, LLC	PROJECT	NAME V	Weston Trails P	roiect	& Fin	al Ph	1				
	BER_LD205681			ON Weston, TX								
DATE STARTED	7/15/20 COMPLETED 7/15/20 HOD Continuous Flight Auger	GROUND ELEVATION N/A GROUND WATER LEVELS: AT TIME OF DRILLING Dry										
				LLING Dry								
NOTES			R DRILLIN	IG								
O DEPTH (ff) GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE	N: Blows/ft. T: Inches/100 Blows P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIMIT	PLASTIC WINT	PLASTICITY B	FINES CONTENT		
	Brown clay		ST	P = 2.0		38	78	31	47			
			ST	P = 1.75								
5	Top alou		ST	P = 1.25		41	4 56					
	Tan clay		ST	P = 4.5+								
			ST	P = 4.5+		29	70	26	44			
	Tan and gray shaley clay											
	ran and gray shaley day	80	ST	P = 4.5+		24	70	29	41			
15										-		
			ST	P = 4.5+								
	Bottom of hole at 20 feet.					-						

Ellerbee-Walczak, Inc. **BORING NUMBER B-36** 4501 Broadway Avenue PAGE 1 OF 1 Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PROJECT NAME Weston Trails Project & Final Ph. 1 CLIENT Honeycreek Venetian, LLC PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING _---N: Blows/ft.
T: Inches/100 Blows
P: Tons/Sq. Ft.
R: Percent
Qu: Kips/sq. Ft.
RQD: Percent **ATTERBERG** FINES CONTENT (%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) SAMPLE TYPE LIMITS GRAPHIC LOG DEPTH (ft) PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Brown clay ST P = 2.75Tan clay ST P = 4.5 +21 52 20 32 P = 4.5 +ST P = 4.5 +22 65 28 37 ST P = 4.5 +ST P = 4.5 +Gray limestone ΑU

Bottom of hole at 20 feet.

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

20

T = 2"/100

Ellerbee-Walczak, Inc. **BORING NUMBER B-37** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING _---Inches/100 Blows Tons/Sq. Ft. **ATTERBERG** FINES CONTENT (%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) SAMPLE TYPE IMITS N: Blows/ft. T: Inches/100 Bit P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent GRAPHIC LOG PLASTICITY PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Brown clay ST P = 2.034 72 28 44 ST P = 1.5Tan clay P = 4.5 +26 75 28 47 ST P = 4.5 +ST P = 4.5 +21 ST P = 4.5 +Gray limestone - with shale layers AU T = 1.25"/10020 Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc.

BORING NUMBER B-38

LIENT Honeycreek Vener ROJECT NUMBER LD209		PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT LOCATION Weston, TX									
ATE STARTED 7/15/20											
		GROUND WA	ATER LEV	/ELS:							
RILLING METHOD Conti	nuous Flight Auger	AT TIM	E OF DR	ILLING Dry							
				LLING Dry			= 17				
IOTES		AFTER	RDRILLIN								
0			/PE	N: Blows/ft. T: Inches/100 Blows P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent	DRY UNIT WT. (pcf)	щ [%]		TERBE LIMITS	3	FINES CONTENT	
OEPTH (ft) (ft) GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE	SK # 4 100	F &	MOISTURE CONTENT (%)	ے ۵	ပ္ရ	PLASTICITY INDEX	S	
BRA SRA	WATERIAL DESCRIPTION		MPL	ows/f ches/ chs/S ercen Cips/s	5.9	OSION	LIQUID	PLASTIC LIMIT	STIC	SSC	
0			SA	2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	E E	≥0		겁	₹=	IN IN	
Brown cla	ру										
///		*	ST	P = 1.75							
				<u> </u>						1	
///			ST	P = 1.75		40	80	30	50		
Tan clay						- 15.55LPS					
5			ST	P = 4.5+							
										1	
///			ST	P = 4.5+		26	64	28	36		
										1	
-///			ST	P = 4.5+							
10			1						l		
					1						
///											
///											
///					-						
			ST	P = 4.5+				- 4			
15				- N	-						
///											
		:									
Gray lime	estone		AU								
			4								
20			THD	T = 1.25"/100							
	Bottom of hole at 20 feet.		VC - 400		1	_		1		1	

Ellerbee-Walczak, Inc. **BORING NUMBER B-39** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/15/20 COMPLETED 7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---N: Blows/ft. T: Inches/100 Blows P: Tons/Sq. Ft. R: Percent Qu: Kips/Sq. Ft. RQD: Percent **ATTERBERG** FINES CONTENT (%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) SAMPLE TYPE LIMITS GRAPHIC LOG PLASTICITY INDEX DEPTH (ft) PLASTIC LIMIT LIMIT MATERIAL DESCRIPTION Dark brown clay ST P = 3.032 68 31 37 Brown clay ST P = 1.5ST P = 2.533 73 26 47 ST P = 2.5Tan clay ST P = 1.530 60 21 39 ST P = 4.5 +ST P = 4.5 +

Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc.

BORING NUMBER B-40

CLIENT Honeycreek Ver	CALCED RELOCATION CONTRACTOR CONT		200012-0-	PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT LOCATION Weston, TX										
PROJECT NUMBER LD: DATE STARTED 7/15/20 DRILLING METHOD Cor	COMPLETED 7/15/20	GROUND ELEVATION _N/A GROUND WATER LEVELS: AT TIME OF DRILLING _Dry AT END OF DRILLING _Dry												
NOTES		AFTERL					АТТ	ERBE	RG	Ŀ,				
O DEPTH (ft) GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE	N: Blows/ft. T: Inches/100 Blows P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)		LIMITS		FINES CONTENT				
Dark br	rown clay		ST	P = 2.25										
			ST	P = 1.25		37	71	32	39					
5			ST	P = 1.0										
			ST _.	P = 1.5		33	77	26	51					
Tan cla	зу		ST	P = 2.25										
									lis .					
	es established		ST	P = 3.5										
	e e		ST	Qu = 4.0	103	24								
20	Bottom of hole at 20 feet.									1				

Ellerbee-Walczak, Inc. **BORING NUMBER B-41** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX ___ COMPLETED <u>7/15/20</u> DATE STARTED 7/15/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---**ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) LIMITS N. Blows/ft.
T. Inches/100 Bk
P. Tons/Sq. Ft.
R. Percent
Qu. Kips/sq. Ft.
RQD: Percent GRAPHIC LOG PLASTICITY INDEX DEPTH (ft) LIMIT MATERIAL DESCRIPTION Dark brown clay ST P = 2.037 77 28 49 ST P = 2.5 Brown clay ST P = 3.040 79 29 50 ST P = 3.75Tan clay ST P = 4.5 +27 57 25 32 ST P = 4.5 +35 85 55 30

ST

Bottom of hole at 20 feet.

Qu = 4.7

90

32

Ellerbee-Walczak, Inc. **BORING NUMBER B-42** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/13/20 COMPLETED 7/13/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING _---Blows **ATTERBERG** FINES CONTENT (%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) SAMPLE TYPE LIMITS N. Blows/ft. T: Inches/100 Bly P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent GRAPHIC LOG PLASTICITY DEPTH PLASTIC LIMIT LIQUID € MATERIAL DESCRIPTION Dark brown clay ST P = 4.5 +Brown clay P = 4.5 +67 42 ST 27 25 Tan and gray clay ST P = 4.5 +74 ST P = 4.5 +25 27 47 ST P = 4.5 +Gray limestone - with shale layers AU T = 7"/100AU T = 1.75"/10020 Bottom of hole at 20 feet.

8/14/20

GINT US.GDT

GEOTECH BH COLUMNS LD205681.GPJ

Ellerbee-Walczak, Inc. **BORING NUMBER B-43** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 PROJECT NAME Weston Trails Project & Final Ph. 1 CLIENT Honeycreek Venetian, LLC PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/13/20 COMPLETED 7/13/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---Blows **ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) LIMITS N: Blows/ft.
T: Inches/100 Blc
P: Tons/Sq. Ft.
R: Percent
Qu: Kips/sq. Ft.
RQD: Percent GRAPHIC LOG PLASTICITY INDEX PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Dark brown clay P = 3.0ST 36 76 31 45 Brown clay ST P = 2.527 ST P = 3.032 77 50 Tan clay - with calcareous particles ST P = 3.75P = 4.5 +ST Tan silty shaley clay 31 ST P = 4.5 +20 49 18 15 Tan shaley clay ST P = 4.5 +Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc. **BORING NUMBER B-44** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/13/20 COMPLETED 7/13/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING _---Blows **ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) LIMITS N: Blows/ft. T: Inches/100 Blc P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent GRAPHIC LOG PLASTICITY INDEX DEPTH (ft) PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Brown clay ST P = 2.5ST P = 2.035 75 27 48 ST P = 2.5Tan and gray clay - with calcareous particles 60 ST P = 3.028 20 40 ST P = 4.0Tan and gray clay ST P = 4.5 +Tan and gray shaley clay ST P = 4.5 +25 53 19 34

Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc. **BORING NUMBER B-45** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/13/20 COMPLETED _7/13/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---**ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) LIMITS GRAPHIC LOG N. Blows/ft. T: Inches/100 Bit P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent PLASTICITY INDEX PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Brown clay ST P = 3.524 57 22 35 Tan and gray clay ST P = 4.5 +ST P = 4.5 +Tan and gray clay P = 4.5 +ST ST P = 4.5 +32 90 34 56 Gray limestone - with shale layers AU T = 4.5"/100AU T = 2"/100Bottom of hole at 20 feet.

8/14/20

GINT US.GDT

GEOTECH BH COLUMNS LD205681.GPJ

Ellerbee-Walczak, Inc. **BORING NUMBER B-46** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/13/20 COMPLETED 7/13/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---**ATTERBERG** FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) **IMITS** GRAPHIC LOG N: Blows/ft.
T: Inches/100 Blr.
P: Tons/Sq. Ft.
R: Percent
Qu: Kips/sq. Ft.
RQD: Percent DEPTH (#) PLASTICITY INDEX PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Brown clay ST P = 3.25Tan and gray clay ST 59 19 P = 3.024 40 ST P = 3.75ST P = 4.5 +27 65 28 37 ST P = 4.5 +Gray limestone AU - with shale layers THD T = 6.25"/100 AU

Bottom of hole at 20 feet.

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

20

T = 2.5"/100

Ellerbee-Walczak, Inc. **BORING NUMBER B-47** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/13/20 COMPLETED 7/13/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING _--Blows ATTERBERG FINES CONTENT (%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) SAMPLE TYPE LIMITS GRAPHIC N: Blows/ft. T: Inches/100 Blc P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent PLASTICITY INDEX PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Brown clay P = 1.75ST P = 2.0Tan clay ST P = 4.5 +21 53 22 31 ST P = 4.5 +Tan shaley clay ST P = 4.5 +20 56 26 30 ST P = 4.5 +Tan limestone - with clay layers Gray limestone - with shale layers T = 3.75"/100

Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc.

BORING NUMBER B-53

Ha Te	altom eleph ax: 81	roadw City, one: 8	vay Avenue Texas 76117 317-759-9999 ∂-1888				in the second				PAGE	E 1 C)F 1
			eycreek Venetian, LLC	PROJECT	NA	ME_V	Veston Trails P	roject	& Fin	al Ph.	1		
PF	ROJE	CT NUI	MBER _LD205681	PROJECT	LO	CATIC	N Weston, TX						
DA	ATE S	TARTE	ED 7/13/20 COMPLETED 7/13/20	GROUND E	LEV	ATION	N/A	12					
				GROUND W	ATE	R LE	/ELS:						
DF	RILLIN	IG ME	THOD Continuous Flight Auger	AT TII	ME	OF DR	ILLING Dry						_
					ND C	F DRI	LLING Dry						
N	DTES			AFTE	R D	RILLIN	G						
	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION			SAMPLE TYPE	N: Blows/ft. T: Inches/100 Blows P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)		PLASTIC WEST		FINES CONTENT
-	0		Brown clay	_		ST	P = 1.75					Δ.	ш
			Tan clay			ST	P = 3.0		37	80	28	52	
	5		Tan shaley clay			ST	P = 4.5+						
-	_		Tan limestone - with clay layers			THD	T = 6.25"/100						
	10		Tan clay			ST	P = 4.5+		22	63	30	33	
				٠									
T 8/14/20			Tan limestone - with clay layers	Sin	1	AU THD	T = 7"/100	-			*		
GEOTECH BH COLUMNS LD205681 GPJ GINT US GDT 8/14/20	15					INU	1 - 77100						
MNS LD2056		中	Gray limestone	(90)	1	AU							
H BH COLU	20	莒	- with shale layers		1	THD	T = 3.25"/100						
GEOTEC			Bottom of hole at 20 feet.	ts.								6	

Ellerbee-Walczak, Inc. **BORING NUMBER B-54** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 PROJECT NAME Weston Trails Project & Final Ph. 1 CLIENT Honeycreek Venetian, LLC PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED <u>7/13/20</u> COMPLETED <u>7/13/20</u> GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---Blows ATTERBERG FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) LIMITS N: Blows/ft. T: Inches/100 Blc P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent GRAPHIC LOG PLASTICITY INDEX DEPTH (ft) PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Dark brown clay P = 2.7534 79 29 50 ST Brown clay ST P = 3.0Tan and gray clay ST P = 4.5 +Tan clay ST P = 4.5 +23 65 28 37 ST P = 4.5 +Gray limestone - with shale layers AU GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20 T = 2.25"/100 15

Bottom of hole at 20 feet.

20

T = 1.5"/100

Ellerbee-Walczak, Inc.

BORING NUMBER B-56

Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888								PAG	E 1 C)F 1
CLIENT Honeycreek Venetian,	LLC	PROJECT	NAME 1	Weston Trails D	roject	& Fin	al Ph	1		
PROJECT NUMBER LD205681				ON <u>Weston</u> , TX		φ (* H)	ar i II.			
DATE STARTED 7/13/20		-			8					
		GROUND W	ATER LE	VELS:						
DRILLING METHOD Continuou	s Flight Auger			RILLING Dry						
NOTES				ILLING Dry					-	
NOTES		AFTER	RDRILLIN						·n^	
GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE	N: Blows/ft. T: Inches/100 Blows P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	PLASTIC WIRE		FINES CONTENT (%)
Dark brown c	lay		ST	P = 2.5						
Brown clay	5		ST	P = 2.5		30	69	28	41	
Tan clay			ST	P = 4.25						
			ST	P = 3.5						
			ST	P = 4.5+		24	62	27	35	
Tan shaley cl	ay									
- 15 CDT 8/14/20			ST	P = 4.5+		23	71	28	43	
intus.										
Tan limestone - with clay la Gray limestor - with shale	nyers								CS	
- with shale	layers									61
HE COLUMN			AU	T = 4.25"/100						
20 —	Bottom of hole at 20 feet.		1113	, 4.20 / 100						

Ellerbee-Walczak, Inc. **BORING NUMBER B-57** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/13/20 COMPLETED 7/13/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---ATTERBERG FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) LIMITS GRAPHIC LOG DEPTH (ft) PLASTICITY INDEX PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Dark brown clay P = 2.2578 27 51 Brown clay ST P = 2.0ST P = 4.25Tan clay ST P = 4.5 +25 58 23 35 Tan shaley clay - with calcareous particles ST P = 4.5 +Tan limestone - with clay layers Gray limestone AU - with shale layers THD T = 1.75"/100AU T = 1.25"/10020 Bottom of hole at 20 feet.

GINT US.GDT

GEOTECH BH COLUMNS LD205681.GPJ

Ellerbee-Walczak, Inc. **BORING NUMBER B-58** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/14/20 COMPLETED 7/14/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** □ AT TIME OF DRILLING 15.0 ft DRILLING METHOD Continuous Flight Auger AT END OF DRILLING 13.0 ft NOTES AFTER DRILLING ---ATTERBERG FINES CONTENT (%) MOISTURE CONTENT (%) SAMPLE TYPE DRY UNIT WT. (pcf) **IMITS** GRAPHIC N: Blows/ft.
T: Inches/100 Blc
P: Tons/Sq. Ft.
R: Percent
Qu: Kips/sq. Ft.
RQD: Percent PLASTICITY INDEX PLASTIC LIMIT € LIMIT MATERIAL DESCRIPTION Dark brown clay ST P = 1.7583 ST P = 1.541 28 55 Brown clay ST P = 2.25Tan and gray clay - with calcareous particles P = 2.526 67 45 22 ST P = 2.25Gray and tan clay ST P = 3.0Tan and gray clay ST P = 3.523 64 24 40 Bottom of hole at 20 feet.

Ellerbee-Walczak, Inc. **BORING NUMBER B-59** 4501 Broadway Avenue PAGE 1 OF 1 Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/13/20 COMPLETED 7/13/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING ---N. Blows/ft. T: Inches/100 Blows P: Tons/Sq. Ft. R: Percent Qu: Kips/Sq. Ft. RQD: Percent **ATTERBERG** FINES CONTENT (%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) SAMPLE TYPE LIMITS GRAPHIC LOG PLASTICITY INDEX PLASTIC LIMIT LIQUID MATERIAL DESCRIPTION Brown clay P = 4.029 71 27 44 Tan clay ST P = 4.5 +Tan shaley clay ST P = 4.5 +19 55 25 30 P = 4.5 +ST ST P = 4.5 +24 69 28 41 AU Gray limestone - with shale layers $T = 4.25^{\circ}/100$

Bottom of hole at 20 feet.

GEOTECH BH COLUMNS LD205681.GPJ GINT US.GDT 8/14/20

20

T = 1.75"/100

Ellerbee-Walczak, Inc. **BORING NUMBER B-60** 4501 Broadway Avenue PAGE 1 OF 1 Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/14/20 ____ COMPLETED 7/14/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING _---N. Blows/ft. T: Inches/100 Blows P: Tons/Sq. Ft. R: Percent Qu: Kips/Sq. Ft. RQD: Percent **ATTERBERG** FINES CONTENT (%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) SAMPLE TYPE LIMITS GRAPHIC LOG DEPTH (ft) PLASTICITY PLASTIC LIMIT MATERIAL DESCRIPTION Dark brown clay ST P = 3.25Brown clay ST P = 2.2539 81 28 53 P = 4.5 +Tan clay ST P = 4.2524 60 22 38 ST P = 4.5 +ΑU Gray limestone - with shale layers THD T = 3.25"/100 AU T = 1.5"/10020

Bottom of hole at 20 feet.

8/14/20

Ellerbee-Walczak, Inc. **BORING NUMBER B-61** 4501 Broadway Avenue Haltom City, Texas 76117 Telephone: 817-759-9999 Fax: 817-759-1888 PAGE 1 OF 1 CLIENT Honeycreek Venetian, LLC PROJECT NAME Weston Trails Project & Final Ph. 1 PROJECT NUMBER LD205681 PROJECT LOCATION Weston, TX DATE STARTED 7/14/20 COMPLETED 7/14/20 GROUND ELEVATION N/A **GROUND WATER LEVELS:** DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING Dry AT END OF DRILLING Dry NOTES AFTER DRILLING _---**ATTERBERG** FINES CONTENT (%) DRY UNIT WT. (pcf) MOISTURE CONTENT (%) SAMPLE TYPE LIMITS N. Blows/ft. T. Inches/100 Blc P: Tons/Sq. Ft. R: Percent Qu: Kips/sq. Ft. RQD: Percent GRAPHIC LOG PLASTICITY PLASTIC LIMIT LIGUID € MATERIAL DESCRIPTION Dark brown clay P = 1.043 57 ST 88 31 ST P = 1.5Brown clay ST P = 1.7541 87 29 58 ST P = 3.5Tan clay ST P = 4.5 +22 67 27 40 Gray limestone - with shale layers AU T = 2.25"/100AU T = 1.25"/10020 Bottom of hole at 20 feet.

GINT US.GDT 8/14/20

GEOTECH BH COLUMNS LD205681.GPJ

SOIL CLASSIFICATION CHART

М	AJOR DIVISION	ONS	SYM	BOLS	TYPICAL
	AUCK DIVION		GRAPH	LETTER	DESCRIPTIONS
	GRAVEL AND	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
	GRAVELLY SOILS	(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
COARSE GRAINED SOILS	MORE THAN 50% OF COARSE	GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
	FRACTION RETAINED ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS	SAND AND	CLEAN SANDS		sw	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
LARGER THAN NO. 200 SIEVE SIZE	SANDY SOILS	(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION	SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES
	PASSING ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		sc	CLAYEY SANDS, SAND - CLAY MIXTURES
		LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
FINE GRAINED SOILS	SILTS AND CLAYS			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
30120				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE				МН	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		СН	INORGANIC CLAYS OF HIGH PLASTICITY
				ОН	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
н	GHLY ORGANIC S	SOILS	77 77 77 77 77 7 77 77 77 77 77	PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS