GEOTECHNICAL ENGINEERING TESTING, INC.

~ Geotechnical Evaluations ~ Construction Materials Testing ~ Geosciences ~ Infrastructure Management Services ~

SOILS EXPLORATIONS AND GEOTECHNICAL ENGINEERING STUDIES
CITY OF MOBILE
LANGAN PARK LAKE

Professional Services Since 1974

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Geotechnical Engineering-Testing, Inc.

PROFESSIONAL ENGINEERS

Geotechnical Evaluations - Geosciences - Construction Materials - Pavement Management

July 12, 2017

City of Mobile
Engineering Department
205 Government Street
Mobile, Alabama 36633

Attn: Mr. Janic Terry, P. E.

Re: Soils Explorations and Geotechnical Engineering Studies
City of Mobile
Langan Park Lake
GET Project No. 17-173

Dear Mr. Terry:

Geotechnical Engineering-Testing, Inc. (GET) has completed the soils exploration and geotechnical investigation of the insitu sediment soils in the Langan Park Lake in Mobile, Alabama. We understand that the data from this investigation will be utilized for the proposed dredging of the lake to provide additional capacity, clean much of the surface organics and remove the invasive species of apple snails. This report has been performed in general accordance with the proposed scope of work dated March 6, 2017 that was revised on April 6, 2017.

This document constitutes the geotechnical report for the design phase services which may be used in support of project design and construction activities. Details of the soils explorations and geotechnical engineering studies are presented in the report and appendices.

Should questions arise regarding our findings and recommendations, or if additional information is needed, please let us know.

Sincerely,

GEOTECHNICAL ENGINEERING-TESTING, INC.

Curt Doyle, P.E.
Principal Engineer
Alabama License No. 25733
Date: 7/12/2017

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I. INTRODUCTION

Geotechnical Engineering-Testing, Inc. (GET) has completed the authorized soils explorations and geotechnical investigation of sediment within the lake at Langan Park in Mobile, Alabama. Sediment samples were collected and evaluated to determine material types and suitability for future beneficial use. The sediments collected in the lake have likely been carried in from Three Mile Creek that passes from west to east through the lake, Twelve Mile Creek that terminates at the southwest corner of the lake, and two unnamed tributaries that terminate on both the south and north sides near the center of the lake. A small concrete lined drainage ditch also outfalls to the lake on the northeast side of the lake. In addition to the channel erosion of these creeks, some of the deposition has likely occurred due to the erosion from unpaved roads, the development of residential and commercial properties and general stormwater runoff since the construction of the lake. A topographic location map for the area has been included in Appendix A of this report.

The soils explorations included sampling the lake sediment at 26 locations. Sampling tubes were pushed into the sediment to depths of 6.1 to 12.7 ft deep, as measured from the water surface. Soil samples recovered from the explorations were visually examined and laboratory soil mechanics tests were performed on selected samples. For additional information, 74 soundings were taken to measure water depth at randomly selected locations. The geotechnical engineering studies included planning the soils explorations program, evaluating the soils exploration data, making quantity estimates of material that may be suitable for use in embankment construction, and the preparation of this report of our findings. Our professional services for this project have been performed, findings obtained, and recommendations prepared in accordance with generally accepted engineering principles and practices. This warranty is in lieu of all other warranties, either expressed or implied.

The details of the soils explorations and geotechnical studies that we have performed are provided in the following sections of this report.

II. GENERAL DESCRIPTION

The lake is approximately 4100 ft long in the east-west direction extending from Gaillard Drive where Three Mile Creek enters the lake on the west side to the earthen dam with a concrete spillway on the east side of the lake near Springhill Avenue. The lake varies in width from about 400 to 500 ft.

Approximately 1100 ft east of Gaillard Drive, a spillway crosses the width of the lake creating an upper lake. The upper portion of the lake generally maintains a water level elevation of +81 ft to +83 ft and the lower portion of the lake generally maintains a water level elevation of +74 ft to +75.5 ft.

On the west side of the spillway (within the upper lake), numerous small islands exist. Many of these islands have likely developed due to the deposition of sediments from Three Mile Creek. Near the center of the lower lake a small island approximately 1200 ft in length and 75 ft in width exists. This island has been present for at least 50 years and was probably original to the lake when constructed. Crossing the eastern half of the center island and the full width of the lake is a wooden pedestrian bridge.

III. GENERAL SUBSURFACE CONDITIONS

The sampling of the soils in the lake was performed from a boat using sampling tubes that were pushed/driven to the termination depth. The lake was generally cross sectioned at five locations and these samples were generally taken at 300 to 500 ft intervals. Additional borings were selected in areas to provide additional data. The approximate sampling locations were determined using hand held GPS equipment. The approximate sample locations have been shown on a map included in Appendix B of this report. Based upon the soils encountered we have divided the lake into three separate areas.

The soils explorations performed in AREA 1, the western third of the lake (the upper lake and approximately the western most 300 ft of the lower lake), indicated by sampling points MB-1 thru MB-6 that the water depth was generally 4 to 5 ft. The lake bottom in this area generally consisted of clean sandy (SP or A-1-b and A-3) soils that generally meet the criteria for Underwater Backfill. In general, these sands were sampled to a depth of at

least 5 ft below the mudline. Generally, the sample tubes could only penetrate 5 to 6 ft into these sands. Therefore, the total quantity of sand at these points can be expected to be greater than that shown on the logs of boring.

Explorations performed in AREA 2, defined as the area extending from about 350 ft east of the western spillway to about 450 ft west of the earthen dam and spillway on the east end of the lake indicated the water depth was about 4 to 7 ft deep. The sampling points MB-7 through MB-19 indicated the sediment in this area was widely variable with a mix of silty sands (SM or A-2), clayey sands (SC or A-4) and sandy clay (CL or A-6 and A-7-6) soils. There was no real consistency to the deposition of the soils within this area.

Previously GET provided the geotechnical investigation for the pedestrian bridge as part of an ALDOT project for the City. Six borings were performed as part of this investigation from both land and barge mounted drill equipment. One boring was performed on each side of the lake, one boring was performed on the center island and three borings were performed on a pontoon barge along the bridge. The borings were performed to depths of about 30 to 40 ft below ground/water surface. These borings indicated the soils to be widely variable with interbedded layers of sands and clays. There appeared to be no definitive bottom layer.

In AREA 3 defined as from about 450 ft west of the earthen dam and spillway on the east end of the lake to the east end of the lake, represented by sampling points MB-20 through B-26. At sampling points MB-20 through MB-23, the water depths ranged from 6.5 to 7.5 ft and at sampling points MB-24 through MB-26, the water depths ranged from 2.0 to 2.5 ft. At most of these locations, the sediment soils were generally silty sand (SM or A-2 and A-3) with some minor areas of clayey sand (SC or A-7) soils. In general, these sands were sampled to a depth of at least 5 ft below the mudline. Generally, the sample tubes could only penetrate 5 to 6 ft into these sands. Therefore, the total quantity of sand at these points can be expected to be greater than that shown on the logs of boring.

It should be noted that water elevation recorded during the sampling event was at approximately elevation +75.5 in the lower lake and at approximately elevation +83.5 ft in the upper lake and the water level during the sounding event was approximately elevation +74.5 ft in the lower lake and at approximately elevation +82.8 ft in the upper lake. Tables

indicating the approximate locations of borings and soundings and the measured water depth and approximate ground elevation have been included in Appendices C and D of this report, respectively.

IV. EVALUATIONS AND RECOMMENDATIONS

We understand that the City of Mobile is planning to dredge the lake to increase the holding capacity of the lake. As part of this dredging operation, we have been informed that a minimum 2 ft of the material will be dredged to remove the invasive species of apple snails that are within the lake. Additionally, the City would like to would like to utilize any suitable sediment that has been deposited into the lake for future beneficial use.

To make an estimate of the quantity of suitable borrow material, we have divided the lake into the three areas described above based upon the soil types encountered and used the average thickness of suitable material within each of these areas to obtain our estimate. Suitable materials are defined as sands, silty sands and clayey sands with classification of A-1-b, A-2-4, A-3 or A-4. In AREA 1, represented by MB-1 through MB-6, an average thickness of 5 ft of suitable material was used in our quantity estimate. The actual thickness of the sands in this area will likely exceed 5 ft. In AREA 2, represented by MB-7 through MB-20, the soils were very inconsistent and were predominantly clayey sand and sandy clay soils that are unsuitable for construction purposes. In AREA 3, represented by B-21 through B-26, an average thickness of 5 ft of suitable material was used in our quantity estimate. The actual thickness of the sands in this area will likely exceed 5 ft.

The table below provides our estimates of suitable material that may be excavated from the various areas of the lake:

AREA	ESTIMATED AREA (SQUARE FT)	ESTIMATED THICKNESS OF SUITABLE MATERIAL (FT)	ESTIMATED VOLUME (CUBIC YARDS)
1	630,000	5	100,000
2	840,000	0	0
3	170,000	5	30,000

Based upon our estimates, there is approximately 130,000 cubic yards of suitable material that may be excavated from the lake. In approximately half of the lake, the soils were generally considered unsuitable for construction purposes. However, if the clay soils are properly mixed with the sands they could be utilized as embankment fill material for roadway construction.

We understand that the City of Mobile is planning to place a small dredge into the lake and pump the material into geotubes on the shoreline that would allow the water to drain from the soils. This would have the added benefit of removing the small invasive species of the apple snails

The use of a dredge will tend to blend the soils more in the excavation process and identifying the extents of the bottom of the sand soils will be difficult to identify. This operation will need to be closely monitored to prevent mixing of soils if it is the desire of the city to reutilize the clean sandy materials. Although much of the dredge material from AREA 2 may be clayey soils that are generally considered unsuitable, if properly mixed with the sand soils the properties of this material can be improved and utilized as embankment fill. If mixed soils are utilized in construction, additional considerations may be required with regards to the embankment design and construction.

V. SOILS EXPLORATIONS PROGRAM

A total of 26 sampling points were selected for the soils exploration program. The sampling locations were selected by representatives of GET, the City of Mobile engineering staff and the design engineer, Larry Dorsey, P.E. of Dorsey & Dorsey Engineering, Inc. A handheld GPS was used to determine the sampling locations in the field. Samples were generally collected at 300 to 500 ft intervals and are identified on the map included in Appendix B of this report.

The soil samples were collected by driving a 1 inch diameter steel tube through the water into the soils at the lake bottom. The samples were advanced to "refusal". Refusal generally occurred due to the dense nature of the sediment sands or because trees or limbs were encountered. The sample tubes were sealed and transported to the laboratory. Water depths were recorded at each of the sampling points.

At the laboratory, the tubes were cut, samples extracted and the soils were visually examined and classified. Logs of Boring were prepared for each sampling point based upon visual classifications of the soils extracted and/or laboratory test results. These Logs of Boring are included in Appendix E of this report.

The boring logs and related information are based on the logs prepared after soil extraction from the sampling tubes and visual examination of selected samples in the laboratory. The delineation between soil types shown on the logs is approximate and the description represents the interpretation of subsurface conditions at the designated sampling point on the particular date the sample was collected. The soil conditions at many of these locations could change significantly due to a heavy rainfall event or additional sedimentation.

Laboratory soil mechanics tests have been performed on selected soil samples recovered from the explorations to determine some of the physical properties of the respective soils encountered at the project site. These tests included moisture content, grain size, and Atterberg limits. The tests have been performed in general accordance with standard laboratory soil testing procedures. The results of these tests are shown on the Logs of Boring opposite the respective samples tested and in the Summary of Laboratory Tests included in Appendix F of this report.

Portions of samples extracted from the tubes were collected and taken by Envirochem Laboratories for chemical analyses.

VI. CONCLUSION

This report concludes the services authorized for this project. Geotechnical Engineering-Testing, Inc. appreciates this opportunity to be of service the City of Mobile.

Should there be any questions regarding the findings or opinions presented by this report, please let us know.

Source – Google Earth

GEOTECHNICAL ENGINEERING TESTING, INC.

Boring Location Map
Langan Park Lake
Mobile County

CITY OF MOBILE
LANGAN PARK LAKE
APPROXIMATE BORING LOCATIONS
WATER ELEVATION - +75.5 (LOWER LAKE), +83.0 (UPPER LAKE)

BORING #	LATITUDE	LONGITUDE	NORTHING	EASTING	APPROXIMATE WATER DEPTH (ft)	APPROXIMATE BOTTOM ELEVATION (ft)
MB-1	30° 42.321"	88° 09.726"	257138	1760418	4.7	78.3
MB-2	30° 42.289"	88° 09.723"	256944	1760433	4.6	78.4
MB-3	30° 42.258"	88° 09.715"	256756	1760474	4.0	79.0
MB-4	30° 42.334"	88° 09.627"	257214	1760937	4.2	71.3
MB-5	30° 42.302"	88° 09.627"	257020	1760936	4.4	71.1
MB-6	30° 42.259"	88° 09.661"	256760	1760757	2.3	73.2
MB-7	30° 42.348"	88° 09.568"	257297	1761247	5.5	70.0
MB-8	30° 42.335"	88° 09.587"	257219	1761147	4.7	70.8
MB-9	30° 42.322"	88° 09.568"	257139	1761246	4.2	71.3
MB-10	30° 42.308"	88° 09.587"	257055	1761146	4.6	70.9
MB-11	30° 42.298"	88° 09.568"	256994	1761245	4.6	70.9
MB-12	30° 42.359"	88° 09.521"	257362	1761493	5.5	70.0
MB-13	30° 42.336"	88° 09.521"	257223	1761493	4.8	70.7
MB-14	30° 42.315"	88° 09.521"	257096	1761492	5.4	70.1
MB-15	30° 42.322"	88° 09.441"	257136	1761911	5.9	69.6
MB-16	30° 42.368"	88° 09.379"	257412	1762238	4.4	71.1
MB-17	30° 42.329"	88° 09.322"	257174	1762535	7.0	68.5
MB-18	30° 42.369"	88° 09.226"	257414	1763039	4.3	71.2
MB-19	30° 42.333"	88° 09.217"	257195	1763085	4.4	71.1
MB-20	30° 42.384"	88° 09.172"	257503	1763322	6.7	68.8
MB-21	30° 42.366"	88° 09.172"	257394	1763322	7.6	67.9
MB-22	30° 42.346"	88° 09.172"	257273	1763321	6.5	69.0
MB-23	30° 42.331"	88° 09.172"	257182	1763321	6.9	68.6
MB-24	30° 42.317"	88° 09.172"	257097	1763320	2.4	73.1
MB-25	30° 42.368"	88° 09.139"	257405	1763495	1.9	73.6
MB-26	30° 42.336"	88° 09.142"	257211	1763478	2.0	73.5
B-1	30° 42.385"	88° 09.301"	257513	1762647	NORTH EDGE	
B-2	30° 42.3741"	88° 09.300"	257446	1762652	4.8	70.5
B-3	30° 42.358"	88° 09.297"	257349	1762667	ISLAND	
B-4	30° 42.342"	88° 09.295"	257252	1762677	6.0	69.3
B-5	30° 42.325"	88° 09.292"	257149	1762692	4.0	71.3
B-6	30° 42.310"	88° 09.290"	257058	1762702	SOUTH EDGE	

CITY OF MOBILE
LAKE AT LANGAN PARK
APPROXIMATE SOUNDING LOCATIONS
WATER ELEVATION - +74.6 (LOWER LAKE), +82.8 (UPPER LAKE)

BORING #	LATITUDE	LONGITUDE	NORTHING	EASTING	APPROXIMATE WATER DEPTH (ft)	APPROXIMATE BOTTOM ELEVATION (ft)
S-1	30° 42.381"	88° 09.273"	257488	1762793	1.8	72.8
S-2	30° 42.375"	88° 09.276"	257452	1762777	3.8	70.8
S-3	30° 42.369"	88° 09.285"	257416	1762730	2.6	72.0
S-4	30° 42.386"	88° 09.307"	257519	1762615	3.1	71.5
S-5	30° 42.371"	88° 09.325"	257429	1762521	2.6	72.0
S-6	30° 42.373"	88° 09.340"	257442	1762442	1.5	73.1
S-7	30° 42.368"	88° 09.352"	257412	1762379	3.5	71.1
S-8	30° 42.371"	88° 09.369"	257430	1762290	1.4	73.2
S-9	30° 42.368"	88° 09.387"	257413	1762196	2.8	71.8
S-10	30° 42.370"	88° 09.412"	257426	1762065	3.0	71.6
S-11	30° 42.359"	88° 09.417"	257359	1762038	1.3	73.3
S-12	30° 42.342"	88° 09.408"	257256	1762085	1.9	72.7
S-13	30° 42.330"	88° 09.416"	257183	1762042	1.9	72.7
S-14	30° 42.314"	88° 09.435"	257087	1761942	2.6	72.0
S-15	30° 42.324"	88° 09.463"	257148	1761796	2.5	72.1
S-16	30° 42.339"	88° 09.483"	257240	1761692	2.3	72.3
S-17	30° 42.382"	88° 09.500"	257501	1761604	1.3	73.3
S-18	30° 42.382"	88° 09.473"	257500	1761746	8.9	65.7
S-19	30° 42.373"	88° 09.462"	257445	1761803	0.8	73.8
S-20	30° 42.367"	88° 09.473"	257409	1761745	0.4	74.2
S-21	30° 42.367"	88° 09.494"	257410	1761635	0.8	73.8
S-22	30° 42.374"	88° 09.531"	257454	1761442	0.9	73.7
S-23	30° 42.362"	88° 09.530"	257381	1761446	2.5	72.1
S-24	30° 42.340"	88° 09.530"	257247	1761446	2.3	72.3
S-25	30° 42.304"	88° 09.526"	257029	1761465	3.0	71.6
S-26	30° 42.295"	88° 09.544"	256975	1761371	2.1	72.5
S-27	30° 42.310"	88° 09.557"	257066	1761303	1.6	73.0
S-28	30° 42.328"	88° 09.574"	257176	1761215	2.1	72.5
S-29	30° 42.351"	88° 09.599"	257316	1761085	2.2	72.4
S-30	30° 42.330"	88° 09.613"	257189	1761011	2.3	72.3
S-31	30° 42.297"	88° 09.619"	256989	1760978	1.5	73.1
S-32	30° 42.286"	88° 09.638"	256923	1760878	3.2	71.4
S-33	30° 42.270"	88° 09.659"	256827	1760767	1.6	73.0
S-34	30° 42.287"	88° 09.668"	256930	1760721	7.7	66.9

S-35	30° 42.304"	88° 09.669"	257033	1760716	2.0	72.6
S-36	30° 42.322"	88° 09.670"	257143	1760712	5.9	68.7
S-37	30° 42.321"	88° 09.650"	257136	1760816	5.8	68.8
S-38	30° 42.340"	88° 09.646"	257251	1760838	3.4	71.2
S-39	30° 42.379"	88° 09.258"	257475	1762872	2.3	72.3
S-40	30° 42.371"	88° 09.244"	257427	1762945	1.7	72.9
S-41	30° 42.385"	88° 09.238"	257511	1762976	0.6	74.0
S-42	30° 42.380"	88° 09.213"	257480	1763108	2.8	71.8
S-43	30° 42.363"	88° 09.201"	257377	1763170	2.8	71.8
S-44	30° 42.312"	88° 09.170"	257067	1763330	0.9	73.7
S-45	30° 42.319"	88° 09.193"	257110	1763210	3.6	71.0
S-46	30° 42.322"	88° 09.225"	257129	1763043	3.6	71.0
S-47	30° 42.317"	88° 09.276"	257100	1762775	2.3	72.3
S-48	30° 42.319"	88° 09.298"	257113	1762660	3.1	71.5
S-49	30° 42.318"	88° 09.320"	257108	1762545	2.7	71.9
S-50	30° 42.320"	88° 09.338"	257120	1762451	2.0	72.6
S-51	30° 42.330"	88° 09.335"	257181	1762467	2.0	72.6
S-52	30° 42.343"	88° 09.365"	257261	1762310	2.1	72.5
S-53	30° 42.350"	88° 09.315"	257301	1762572	0.8	73.8
S-54	30° 42.350"	88° 09.334"	257302	1762473	0.9	73.7
S-55	30° 42.341"	88° 09.325"	257247	1762520	3.6	71.0
S-56	30° 42.351"	88° 09.309"	257307	1762604	1.1	73.5
S-57	30° 42.341"	88° 09.304"	257247	1762630	3.8	70.8
S-58	30° 42.342"	88° 09.289"	257252	1762708	3.1	71.5
S-59	30° 42.353"	88° 09.286"	257319	1762724	0.6	74.0
S-60	30° 42.353"	88° 09.257"	257318	1762876	1.4	73.2
S-61	30° 42.339"	88° 09.253"	257233	1762897	3.9	70.7
S-62	30° 42.347"	88° 09.227"	257281	1763033	4.1	70.5
S-63	30° 42.344"	88° 09.695"	257277	1760582	3.8	79.0
S-64	30° 42.337"	88° 09.696"	257234	1760576	3.4	79.4
S-65	30° 42.320"	88° 09.703"	257131	1760539	1.1	81.7
S-66	30° 42.307"	88° 09.699"	257053	1760559	3.8	79.0
S-67	30° 42.293"	88° 09.696"	256968	1760574	4.2	78.6
S-68	30° 42.278"	88° 09.700"	256877	1760553	1.8	81.0
S-69	30° 42.275"	88° 09.712"	256859	1760490	1.3	81.5
S-70	30° 42.296"	88° 09.718"	256986	1760459	1.1	81.7
S-71	30° 42.203"	88° 09.731"	256423	1760388	2.1	80.7
S-72	30° 42.316"	88° 09.712"	257108	1760492	3.3	79.5
S-73	30° 42.327"	88° 09.722"	257174	1760440	2.8	80.0
S-74	30° 42.339"	88° 09.715"	257247	1760477	2.7	80.1

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/13/17

BORING DEPTH: 8.8 FT.

BORING ELEV.: 83 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-1

BORING LOCATION:
N 30° 42.321'
W 88° 09.726'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		4.7' Water										
5		Brown sand	1			18	NP	NP		2.5		A-3 (0)
		B.T. @ 8.8 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/13/17

BORING DEPTH: 11.1 FT.

BORING ELEV.: 83 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-2

BORING LOCATION:
N 30° 42.289'
W 88° 09.723'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		4.6' Water										
5		Brown sand	1			24	NP	NP		4.8		A-3 (0)
10		B.T. @ 11.1 FT										
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/13/17

BORING DEPTH: 9.3 FT.

BORING ELEV.: 83 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-3

BORING LOCATION:
N 30° 42.258'
W 88° 09.715'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		4' Water										
5		Brown sand	1			26	NP	NP		2.7		A-3 (0)
10		B.T. @ 9.3 FT										
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/14/17

BORING DEPTH: 6.2 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-4

BORING LOCATION:
N 30° 42.334'
W 88° 09.627'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		4.2' Water										
5		Gray silty sand	1			47	NP	NP		25.4		A-2-4 (0)
		B.T. @ 6.2 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/14/17

BORING DEPTH: 6.1 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-5

BORING LOCATION:
N 30° 42.302'
W 88° 09.627'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		4.4' Water										
5		Brown sand w/ gravel	1			4	NP	NP		1.8		A-1-b (0)
		B.T. @ 6.1 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/14/17

BORING DEPTH: 7.7 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-6

BORING LOCATION:
N 30° 42.259'
W 88° 09.661'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		2.3' Water										
5		Brown sand with silt	1			33	NP	NP		5.5		A-3 (0)
		B.T. @ 7.7 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/14/17

BORING DEPTH: 7.7 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-7

BORING LOCATION:
N 30° 42.348'
W 88° 09.568'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0												
		5.5' Water										
5		Gray clayey sand	1									
		Gray fat clay	2			61	53	35		74.6		A-7-6 (26)
		B.T. @ 7.7 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/14/17

BORING DEPTH: 7.5 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-8

BORING LOCATION:
N 30° 42.335'
W 88° 09.587'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		4.7' Water										
5		Gray clayey sand	1			59	38	15		42.0		A-6 (3)
		Gray sand	2									
		B.T. @ 7.5 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/14/17

BORING DEPTH: 7 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-9

BORING LOCATION:
N 30° 42.322'
W 88° 09.568'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		4.2' Water										
5		Gary silty sand	1			50	NP	NP		19.4		A-2-4 (0)
		Gray clay	2									
		B.T. @ 7 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/14/17

BORING DEPTH: 7.6 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-10

BORING LOCATION:
N 30° 42.308'
W 88° 09.587'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		4.6' Water										
5		Grey clayey sand	1			59	28	10		44.4		A-4 (1)
		Gray sand	2									
		B.T. @ 7.6 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/14/17

BORING DEPTH: 7.9 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-11

BORING LOCATION:
N 30° 42.298'
W 88° 09.568'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		4.6' Water										
5		Brown & gray silty sand	1			44	NP	NP		25.7		A-2-4 (0)
		B.T. @ 7.9 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/17/17

BORING DEPTH: 8.1 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-12

BORING LOCATION:
N 30° 42.359'
W 88° 09.521'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		5.5' Water										
5		Gray clay w/ sand	1			123	41	20		55.0		A-7-6 (8)
		Brown sand	2									
		B.T. @ 8.1 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/17/17

BORING DEPTH: 8.3 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-13

BORING LOCATION:
N 30° 42.336'
W 88° 09.521'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		4.8' Water										
5		Gray clayey sand	1			78	47	22		39.2		A-7-6 (4)
		Gray clay	2									
		B.T. @ 8.3 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/17/17

BORING DEPTH: 7.9 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-14

BORING LOCATION:
N 30° 42.315'
W 88° 09.521'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		5.4' Water										
5		Brown silty clayey sand	1			63	29	7		34.9		A-2-4 (0)
		B.T. @ 7.9 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/17/17

BORING DEPTH: 7.9 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-15

BORING LOCATION:
N 30° 42.322'
W 88° 09.441'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0												
		5.9' Water										
5		Brown & gray clayey sand	1			64	36	14		24.5		A-2-6 (0)
		B.T. @ 7.9 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/17/17

BORING DEPTH: 8.4 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-16

BORING LOCATION:
N 30° 42.368'
W 88° 09.379'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		4.4' Water										
5		Gray clay w/ sand	1			36	33	15		51.8		A-6 (5)
		Gray clay	2									
		B.T. @ 8.4 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/17/17

BORING DEPTH: 10 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-17

BORING LOCATION:
N 30° 42.329'
W 88° 09.322'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0												
		7' Water										
5												
		Gray clayey sand	1			116	89	54		28.6		A-2-7 (6)
10		B.T. @ 10 FT										
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/17/17

BORING DEPTH: 8.2 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-18

BORING LOCATION:
N 30° 42.369'
W 88° 09.226'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		4.3' Water										
5		Gray sand with silt	1			64	NP	NP		11.2		A-2-4 (0)
		B.T. @ 8.2 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/17/17

BORING DEPTH: 8.7 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-19

BORING LOCATION:
N 30° 42.333'
W 88° 09.217'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		4.4' Water										
5		Gray clay w/ sand	1			47	31	11		51.2		A-6 (3)
		Gray clay	2									
		B.T. @ 8.7 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/18/17

BORING DEPTH: 10.8 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-20

BORING LOCATION:
N 30° 42.384'
W 88° 09.172'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0												
		6.7' Water										
5												
		Gray clayey sand	1			33	31	10		38.5		A-4 (1)
10		Gray clay	2									
		B.T. @ 10.8 FT										
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/18/17

BORING DEPTH: 12.7 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-21

BORING LOCATION:
N 30° 42.366'
W 88° 09.172'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_I	S.P.T. N_C	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0												
		7.6' Water										
5												
10		Gray sand	1			158	126	104		0.6		A-2-7 (0)
		B.T. @ 12.7 FT										
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/18/17

BORING DEPTH: 11.5 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-22

BORING LOCATION:
N 30° 42.346'
W 88° 09.172'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0												
		6.5' Water										
5		Gray clayey sand	1			52	36	12		29.8		A-2-6 (0)
10		Gray sand	2									
		B.T. @ 11.5 FT										
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/18/17

BORING DEPTH: 12.5 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-23

BORING LOCATION:
N 30° 42.331'
W 88° 09.172'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0												
		6.9' Water										
5												
		Gray clayey sand	1			53	53	30		49.6		A-7-6 (11)
10		Gray sandy clay	2									
		B.T. @ 12.5 FT										
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/18/17

BORING DEPTH: 7 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-24

BORING LOCATION:
N 30° 42.317'
W 88° 09.172'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		2.4' Water										
5		Brown sand with silt	1			28	NP	NP		6.9		A-3 (0)
		B.T. @ 7 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/18/17

BORING DEPTH: 7.8 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-25

BORING LOCATION:
N 30° 42.368'
W 88° 09.139'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		1.9' Water										
5		Brown silty sand				53	NP	NP		23.6		A-2-4 (0)
		B.T. @ 7.8 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17

PROJECT NAME: LANGAN PARK

G.E.T. PROJ. NUMBER: 17-173

PROJECT LOCATION: MOBILE, ALABAMA

DRILL RIG:

DRILL METHOD:

DRILL CREW: SW, RS(LOGGER)

DATE DRILLED: 6/18/17

BORING DEPTH: 7.8 FT.

BORING ELEV.: 75.5 FT.

DATUM:

WATER DEPTH:

REMARKS:

GEOTECHNICAL ENGINEERING TESTING, INC.

BORING NUMBER: MB-26

BORING LOCATION:
N 30° 42.336'
W 88° 09.142'

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T. N_f	S.P.T. N_c	W.C. %	ATTERBERG LIMITS L.L.	ATTERBERG LIMITS P.I.	DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	AASHTO CLASS
0		2' Water										
5		Brown silty sand	1			48	NP	NP		34.1		A-2-4 (0)
		B.T. @ 7.8 FT										
10												
15												
20												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

MOD DEEP BORING LOG W/ AASHTO 17-173 LANGAN PARK.GPJ GETI_AL.GDT 7/12/17