

PROJECT DESCRIPTION

SLOPE REPAIR OF A LANDSLIDE ALONG THE LEFT SIDE OF STATE ROUTE 19 (S.R. 19). REPAIR THE SLOPE AND INSTALL NEW CURB AND GUARDRAIL ALONG THE ROADWAY. OUTLET THE CURB DRAINAGE INTO A TIED-BLOCK MAT. REPAIR THE PAVEMENT DAMAGE CAUSED BY THE LANDSLIDE.

HISTORIC RECORDS

NO HISTORICAL GEOTECHNICAL RECORDS WERE FOUND FOR THIS PROJECT.

GEOLOGY

THE PROJECT IS LOCATED WITHIN THE MAUMEE LAKE PLAINS PHYSIOGRAPHIC REGION, WHICH IS CHARACTERIZED BY VERY LOW RELIEF FROM AN ICE-AGED LAKE BASIN WITH SLIGHTLY DISSECTED MODERN STREAM CHANNELS. THE AREA CONTAINS PREDOMINATELY COHESIVE SOILS WITH AREAS OF NON-COHESIVE SOILS FOUND ASSOCIATED WITH BEACH RIDGES, BARS, DUNES AND DELTAS. THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR) INTERACTIVE GEOLOGIC MAP INDICATES THAT THE SURFACE OVERBURDEN SOILS ARE GENERALLY CHARACTERIZED AS ALLUVIUM ALONG GREEN CREEK FLOOD PLAIN WITH LACUSTRINE SAND TO THE WEST AND LAKE-PLANED MORAINE TO THE EAST WHICH SUPPORTS THE ROADWAY WITHIN THE PROJECT AREA. BENEATH THE OVERBURDEN SOILS, THE MAP INDICATES SILURIAN-AGED DOLOMITE WITH SHALE LAMINAE OF THE TYMOCOTEE GROUP IS PRESENT.

RECONNAISSANCE

FIELD RECONNAISSANCE WAS COMPLETED BY PERSONNEL FROM THE OFFICE OF GEOTECHNICAL ENGINEERING (OGE) AND SME ON JANUARY 8, 2025. THE PAVEMENT WAS NOTED AS BEING IN FAIR CONDITION WITH SIGNS OF DISTRESS ALONG THE WESTERN SHOULDER DUE TO SLOPE INSTABILITY WITH PAVEMENT CRACKING, DROP OF THE OUTSIDE OF THE LANE, AND LEANING GUARDRAIL PRESENT. IMMEDIATELY ADJACENT TO THE SOUTHBOUND LANE OF THE ROADWAY IS AN OVER STEEPENED SLOPE WHICH IS WOODED AND INTERSECTS THE FLOODPLAIN OF GREEN CREEK WHICH HAS WELL-DEVELOPED WETLAND AREAS. TO THE EAST OF THE PROJECT AREA ADJACENT LAND USAGE WAS NOTED AS BEING RURAL RESIDENTIAL LOT.

SUBSURFACE EXPLORATION

THREE (3) BORINGS, B-001-0-25, B-002-0-25, AND B-003-0-25, WERE COMPLETED AS PART OF THE SUBSURFACE EXPLORATION ON FEBRUARY 11, 2025, MARCH 10, 2025, AND FEBRUARY 25, 2025, RESPECTIVELY. DRILLING WAS COMPLETED BY SME WITH A TRUCK MOUNTED CME 55 ROTARY DRILL RIG UTILIZING 3.75-INCH I.D. HOLLOW STEM AUGERS. DISTURBED SAMPLES WERE COLLECTED IN ACCORDANCE WITH THE STANDARD PENETRATION TEST (AASHTO T206) AT 2.5-FOOT INTERVALS FOR THE FULL DEPTH OF THE BORINGS. THE HAMMER SYSTEM USED WAS CALIBRATED ON JUNE 11, 2024, WITH AN AVERAGE DRILL ROD ENERGY RATIO (ER) OF 80%.

EXPLORATION FINDINGS

ALL THREE (3) BORINGS WERE COMPLETED WITHIN THE SOUTHBOUND LANE OF S.R. 19 INITIALLY ENCOUNTERING 8 TO 14-INCHES OF ASPHALT WITH B-001-0-25 AND B-003-0-25 ALSO ENCOUNTERING 15 AND 17-INCHES OF AGGREGATE BASE, RESPECTIVELY. THE SURFACE MATERIALS WERE UNDERLAIN BY PREDOMINATELY COHESIVE SOILS CLASSIFIED AS SANDY SILT (A-4a), SILT (A-4b), SILT AND CLAY (A-6a), AND SILTY CLAY (A-6b) IN STIFF TO HARD CONSISTENCY AND IN DAMP TO MOIST CONDITION INTO WHICH THE BORINGS WERE TERMINATED. MEDIUM DENSE COARSE AND FINE SAND (A-3a) IN MOIST CONDITION WAS ENCOUNTERED IN B-001-0-25 BETWEEN ELEVATION (EL.) 653.3 AND 649.2 FEET (FT) WHICH COULD BE POSSIBLE AGGREGATE BASE MATERIALS, AS WELL AS A THIN SAND SEAM RANGING FROM EL. 630.7 TO 630.5 FT. IN B-003-0-25 A VERY DENSE STONE FRAGMENTS WITH SAND (A-1-b) LAYER IN WET CONDITION WAS ENCOUNTERED BETWEEN EL. 600.2 AND 596.9 FT.

FREE WATER WAS NOTED IN B-001-0-25 AT EL. 630.7 AND 612.2 FT, AND IN B-003-0-25 AT EL. 601.2 FT. WATER UPON COMPLETION WAS NOTED IN B-003-0-25 AT EL. 599.7 FT, WHILE B-001-0-25 AND B-002-0-25 WERE NOTED AS DRY AT COMPLETION.

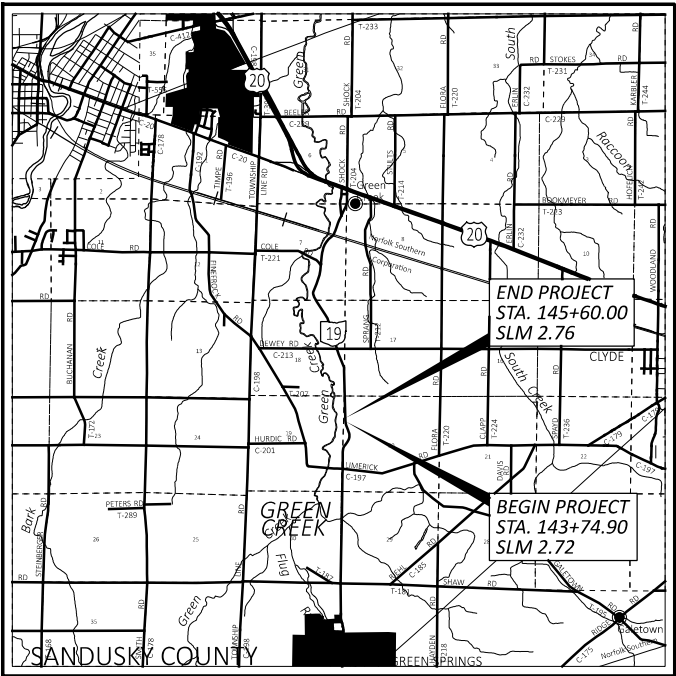
SPECIFICATIONS

THIS GEOTECHNICAL EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JANUARY 2025.

AVAILABLE INFORMATION

THE SOIL, BEDROCK, AND GROUNDWATER INFORMATION COLLECTED FOR THIS SUBSURFACE EXPLORATION THAT CAN BE CONVENIENTLY DISPLAYED ON THE GEOTECHNICAL PROFILE SHEETS HAS BEEN PRESENTED. GEOTECHNICAL REPORTS, IF PREPARED, ARE AVAILABLE FOR REVIEW ON THE OFFICE OF CONTRACT SALES WEBSITE.

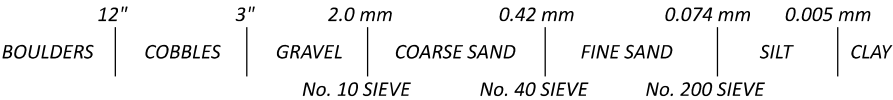
LEGEND		ODOT CLASS	CLASSIFIED MECH./VISUAL	
DESCRIPTION				
	STONE FRAGMENTS WITH SAND	A-1-b	2	-
	COARSE AND FINE SAND	A-3a	1	-
	SANDY SILT	A-4a	10	4
	SILT	A-4b	2	-
	SILT AND CLAY	A-6a	12	30
	SILTY CLAY	A-6b	1	4
		TOTAL	28	38
	PAVEMENT AND BASE = X = APPROXIMATE THICKNESS	VISUAL		
	BORING LOCATION - PLAN VIEW.			
	DRIVE SAMPLE BORING PLOTTED TO VERTICAL SCALE ONLY. HORIZONTAL BAR INDICATES A CHANGE IN STRATIGRAPHY.			
WC	INDICATES WATER CONTENT IN PERCENT.			
N ₆₀	INDICATES STANDARD PENETRATION RESISTANCE NORMALIZED TO 60% DRILL ROD ENERGY RATIO.			
W	INDICATES FREE WATER ELEVATION.			
▽	INDICATES WATER AT COMPLETION.			
NP	INDICATES A NON-PLASTIC SAMPLE.			
SS	INDICATES A SPLIT SPOON SAMPLE.			



LOCATION MAP
SCALE IN MILES



PARTICLE SIZE DEFINITIONS



RECON. - PPP,SME 01/08/25
DRILLING - SME 02/11/25 - 03/10/25
DRAWN - ARR 06/04/25
REVIEWED - SAT 06/06/25

DESIGN AGENCY



DESIGNER

ARR

REVIEWER

SAT 06/06/25

PROJECT ID

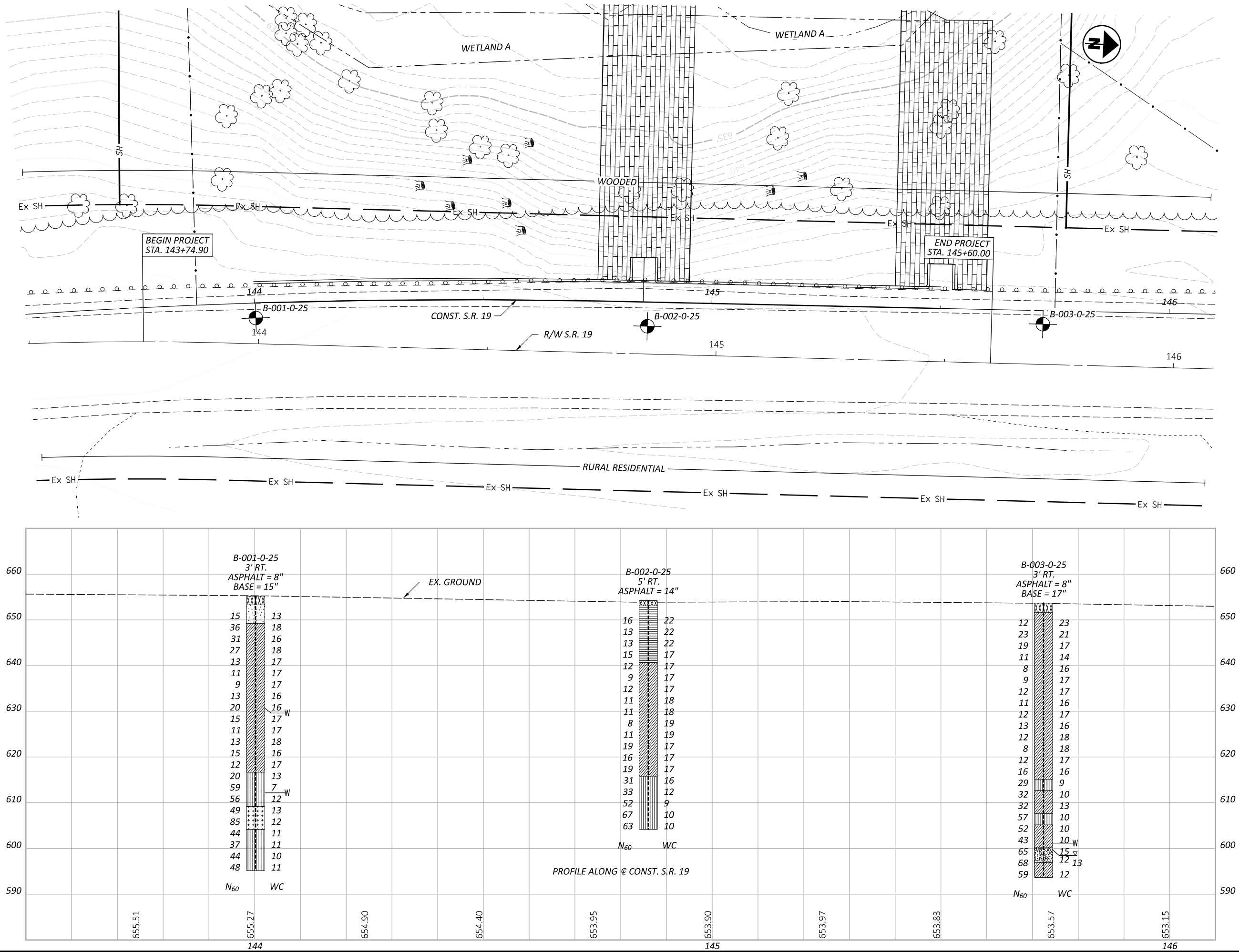
119896

SUBSET TOTAL

1 5

SHEET TOTAL

P.17 21



GEOTECHNICAL PROFILE - LANDSLIDE
STA. 143+50 TO STA. 146+10 CONST. S.R. 19



DESIGN AGENCY



DESIGNER

ARR

REVIEWER

SAT 06/06/25

PROJECT ID

119896

SUBSET

2

TOTAL

5

SHEET

P.18

TOTAL

21

SAN-19-2-72

MODEL: Boring Log for B-001-0-25 PAPER SIZE: 17x11 (in.) DATE: 6/4/2025 TIME: 2:36:35 PM USER: aross3
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PROJECT: <u>SAN-19-02.72</u>				DRILLING FIRM / OPERATOR: <u>SME / RM</u>				DRILL RIG: <u>SME CME 55 (293)</u>				STATION / OFFSET: <u>144+00.3' RT.</u>								EXPLORATION ID					
TYPE: <u>LANDSLIDE</u>				SAMPLING FIRM / LOGGER: <u>SME / SS</u>				HAMMER: <u>CME AUTOMATIC</u>				ALIGNMENT: <u>CL CONST SR 19</u>								B-001-0-25					
PID: <u>119896</u> SFN: <u>N/A</u>				DRILLING METHOD: <u>3.75" HSA</u>				CALIBRATION DATE: <u>6/11/24</u>				ELEVATION: <u>655.2 (ft)</u> EOB: <u>60.0 ft.</u>								PAGE					
START: <u>2/11/25</u> END: <u>2/11/25</u>				SAMPLING METHOD: <u>SPT</u>				ENERGY RATIO (%): <u>80</u>				LAT / LONG: <u>41.295844, -83.051775</u>								1 OF 1					
MATERIAL DESCRIPTION AND NOTES				ELEV.		DEPTHS		SPT/ RQD		REC (%)		SAMPLE ID		HP (tsf)		GRADATION (%)								HOLE	
																ATTEMBERG								SEAL	
ASPHALT (8") & BASE (15")				655.2		1		1		0		SS-1		-		GR								WC	
				653.3		2		15		SS-2		2.50		CS FS SI CL LL PL								PI			
MEDIUM DENSE, BROWN, COARSE AND FINE SAND, LITTLE SILT, TRACE CLAY, TRACE GRAVEL, MOIST				649.2		3		10		78		SS-3		-		CS FS SI CL LL PL								PI	
				649.2		4		36		SS-4		4.5+		CS FS SI CL LL PL								PI			
VERY STIFF, BROWN, SILT AND CLAY, LITTLE SAND, TRACE GRAVEL AND STONE FRAGMENTS, MOIST				649.2		5		12		78		SS-5		2.50		CS FS SI CL LL PL								PI	
				649.2		6		36		SS-6		4.5+		CS FS SI CL LL PL								PI			
@8.5'; HARD, DAMP				649.2		7		15		78		SS-7		2.50		CS FS SI CL LL PL								PI	
				649.2		8		36		SS-8		4.5+		CS FS SI CL LL PL								PI			
@11.0'; MOIST				649.2		9		12		78		SS-9		2.50		CS FS SI CL LL PL								PI	
				649.2		10		36		SS-10		4.5+		CS FS SI CL LL PL								PI			
@13.5'; STIFF, GRAY				649.2		11		15		78		SS-11		2.50		CS FS SI CL LL PL								PI	
				649.2		12		36		SS-12		4.5+		CS FS SI CL LL PL								PI			
@21.0'; VERY STIFF				649.2		13		15		78		SS-13		2.50		CS FS SI CL LL PL								PI	
				649.2		14		36		SS-14		4.5+		CS FS SI CL LL PL								PI			
@23.5'; STIFF				649.2		15		15		78		SS-15		2.50		CS FS SI CL LL PL								PI	
				649.2		16		36		SS-16		4.5+		CS FS SI CL LL PL								PI			
@24.5' - 24.7"; SAND SEAM				649.2		17		15		78		SS-17		2.50		CS FS SI CL LL PL								PI	
				649.2		18		36		SS-18		4.5+		CS FS SI CL LL PL								PI			
@26.0'; VERY STIFF				649.2		19		15		78		SS-19		2.50		CS FS SI CL LL PL								PI	
				649.2		20		36		SS-20		4.5+		CS FS SI CL LL PL								PI			
@28.5'; STIFF				649.2		21		15		78		SS-21		2.50		CS FS SI CL LL PL								PI	
				649.2		22		36		SS-22		4.5+		CS FS SI CL LL PL								PI			
@31.0'; VERY STIFF				649.2		23		15		78		SS-23		2.50		CS FS SI CL LL PL								PI	
				649.2		24		36		SS-24		4.5+		CS FS SI CL LL PL								PI			
@36.0'; GRAYISH BROWN				649.2		25		15		78		SS-25		2.50		CS FS SI CL LL PL								PI	
				649.2		26		36		SS-26		4.5+		CS FS SI CL LL PL								PI			
HARD, GRAY, SANDY SILT, "AND" CLAY, TRACE GRAVEL AND STONE FRAGMENTS, DAMP				616.7		27		15		78		SS-27		2.50		CS FS SI CL LL PL								PI	
				616.7		28		36		SS-28		4.5+		CS FS SI CL LL PL								PI			
@41.0'; LITTLE STONE FRAGMENTS, LITTLE CLAY				616.7		29		15		78		SS-29		2.50		CS FS SI CL LL PL								PI	
				616.7		30		36		SS-30		4.5+		CS FS SI CL LL PL								PI			
@43.5'; SOME CLAY, TRACE GRAVEL AND STONE FRAGMENTS				616.7		31		15		78		SS-31		2.50		CS FS SI CL LL PL								PI	
				616.7		32		36		SS-32		4.5+		CS FS SI CL LL PL								PI			
HARD, GRAY, SILT, SOME CLAY, TRACE SAND, TRACE GRAVEL AND STONE FRAGMENTS, DAMP				609.2		33		15		78		SS-33		2.50		CS FS SI CL LL PL								PI	
				609.2		34		36		SS-34		4.5+		CS FS SI CL LL PL								PI			
@48.5'; LITTLE SAND				609.2		35		15		78		SS-35		2.50		CS FS SI CL LL PL								PI	
				609.2		36		36		SS-36		4.5+		CS FS SI CL LL PL								PI			
HARD, GRAY, SANDY SILT, SOME CLAY, TRACE GRAVEL AND STONE FRAGMENTS, DAMP				595.2		37		15		78		SS-37		2.50		CS FS SI CL LL PL								PI	
				595.2		38		36		SS-38		4.5+		CS FS SI CL LL PL								PI			

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM OGE SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; POURED BENTONITE CHIPS; BENTONITE GROUT

DESIGN AGENCY

DESIGNER

ARR

REVIEWER

SAT 06/06/25

PROJECT ID

119896

SUBSET

3

TOTAL

5

SHEET

P.19

TOTAL

21

GEOTECHNICAL PROFILE - LANDSLIDE
BORING LOG FOR B-001-0-25

SAN-19-2.72

MODEL: Boring Log for 8-002-0-25 PAPERSIZE: 17x11 (in.) DATE: 6/4/2025 TIME: 2:36:42 PM USER: aros33
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PROJECT: SAN-19-02.72				DRILLING FIRM / OPERATOR: SME / LP				DRILL RIG: SME CME 55 (293)				STATION / OFFSET: 144+86.5' RT.				EXPLORATION ID			
TYPE: LANDSLIDE				SAMPLING FIRM / LOGGER: SME / SS				HAMMER: CME AUTOMATIC				ALIGNMENT: CL CONST SR 19				B-002-0-25			
PID: 119896 SFN: N/A				DRILLING METHOD: 3.75" HSA				CALIBRATION DATE: 6/11/24				ELEVATION: 654.2 (ft) EOB: 50.0 ft.				PAGE			
START: 3/10/25 END: 3/10/25				SAMPLING METHOD: SPT				ENERGY RATIO (%): 80				LAT / LONG: 41.296079, -83.051785				1 OF 1			
MATERIAL DESCRIPTION AND NOTES				ELEV.		DEPTHS		SPT/ RQD		REC SAMPLE		GRADATION (%)		ATTERBERG		HOLE			
				654.2				N ₆₀		(tsf) ID		GR CS FS SI CL		LL PL PI		ODOT CLASS (gl) SEALED			
ASPHALT (14")				653.0		1													
				653.0		2													
				653.0		3													
				653.0		4		5		16		89		SS-1		4.50		1	
				653.0		5		7											
				653.0		6													
				653.0		7		5		13		100		SS-2		4.25		-	
				653.0		8		5											
				653.0		9		5		13		100		SS-3		4.5+		-	
				653.0		10		5											
@11.0'; DAMP				653.0		11													
				653.0		12		6		15		100		SS-4		4.00		-	
				653.0		13		6		5		6							
				653.0		14		4		12		100		SS-5		1.75		7	
				653.0		15		4		5									
				653.0		16		3		9		100		SS-6		2.00		-	
				653.0		17		3		4									
				653.0		18													
				653.0		19		4		5		12		100		SS-7		2.50	
				653.0		20		4		5		4							
@18.5'; VERY STIFF				653.0		21													
				653.0		22		3		11		100		SS-8		2.25		-	
				653.0		23		3		5									
				653.0		24		4		3		11		100		SS-9		2.00	
				653.0		25		4		3		5							
				653.0		26		3		8		100		SS-10		1.75		9	
				653.0		27		3		3									
				653.0		28													
				653.0		29		4		4		11		100		SS-11		1.75	
				653.0		30		4		4		4							
@31.0'; VERY STIFF				653.0		31		5		19		89		SS-12		2.50			
				653.0		32		6		8									
				653.0		33													
				653.0		34		6		6		16		78		SS-13		2.75	
				653.0		35		6		6									
				653.0		36		6		6		19		100		SS-14		3.25	
				653.0		37		6		8									
				653.0		38													
				653.0		39		9		11		31		83		SS-15		4.50	
				653.0		40		11		12									
HARD, GRAY, SANDY SILT, "AND" CLAY, TRACE GRAVEL AND STONE FRAGMENTS, DAMP				653.0		41		10		33		78		SS-16		4.50			
				653.0		42		12		13									
				653.0		43													
				653.0		44		16		18		52		89		SS-17		4.50	
				653.0		45		18		21									
				653.0		46		17		21		67		72		SS-18		4.50	
				653.0		47		21		29									
				653.0		48													
				653.0		49		21		22		63		89		SS-19		4.5+	
				653.0		50		22		25									
HARD, GRAY, SANDY SILT, "AND" CLAY, TRACE GRAVEL AND STONE FRAGMENTS, DAMP				653.0		51		21		63		89		SS-19		4.5+			
				653.0		52		22		25									
				653.0		53													
				653.0		54													
				653.0		55													
				653.0		56													
				653.0		57													
				653.0		58													
				653.0		59													
				653.0		60													
@43.5'; LITTLE GRAVEL AND STONE FRAGMENTS, LITTLE CLAY				653.0		61													
				653.0		62													
				653.0		63													
				653.0		64													
				653.0		65													
				653.0		66													
				653.0		67													
				653.0		68													
				653.0		69													
				653.0		70													
@46.0'; TRACE GRAVEL AND STONE FRAGMENTS				653.0		71													
				653.0		72													
				653.0		73													
				653.0		74													
				653.0		75													
				653.0		76													
				653.0		77													
				653.0		78													
				653.0		79													
				653.0		80													
@48.5'; SOME CLAY				653.0		81													
				653.0		82													
				653.0		83													
				653.0		84													
				653.0		85													
				653.0		86													
				653.0		87													
				653.0		88													
				653.0		89													
				653.0		90													

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 6/3/25 09:05 - X:\GINT\PROJECTS\601178.GPJ

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM OGE SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; POURED BENTONITE CHIPS; BENTONITE GROUT

GEOTECHNICAL PROFILE - LANDSLIDE
BORING LOG FOR B-002-0-25

SAN-19-2-7.2

MODEL: Boring Log for B-003-0-25 PAPER SIZE: 17x11 (in.) DATE: 6/4/2025 TIME: 2:36:49 PM USER: aross3
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PROJECT: SAN-19-02.72				DRILLING FIRM / OPERATOR: SME / LP				DRILL RIG: SME CME 55 (293)				STATION / OFFSET: 145+72.3' RT.				EXPLORATION ID					
TYPE: LANDSLIDE				SAMPLING FIRM / LOGGER: SME / SS				HAMMER: CME AUTOMATIC				ALIGNMENT: CL CONST SR 19				B-003-0-25					
PID: 119896 SFN: N/A				DRILLING METHOD: 3.75" HSA				CALIBRATION DATE: 6/11/24				ELEVATION: 653.7 (ft) EOB: 60.0 ft.				PAGE					
START: 2/25/25 END: 2/25/25				SAMPLING METHOD: SPT				ENERGY RATIO (%): 80				LAT / LONG: 41.296316, -83.051804				1 OF 1					
MATERIAL DESCRIPTION AND NOTES				ELEV. 653.7	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)				ODOT CLASS (GI)	HOLE SEALED					
											GR	CS	FS	SI			CL	LL	PL	WC	
ASPHALT (8") & BASE (17")				653.7	1-10	3	4	12	100	SS-1	4.00	2	1	4	39	54	34	19	15	23	A-6a (10)
@6.0"; HARD				651.6	11-20	5	7	23	100	SS-2	4.5+	-	-	-	-	-	-	21	A-6a (V)		
@8.5"; VERY STIFF, DAMP				651.6	21-30	6	7	19	100	SS-3	4.00	-	-	-	-	-	-	17	A-6a (V)		
@11.0"; GRAY, LITTLE SAND, LITTLE GRAVEL AND STONE FRAGMENTS				651.6	31-40	4	4	11	100	SS-4	2.50	13	5	11	31	40	29	15	14	A-6a (9)	
@13.5"; STIFF, MOIST				651.6	41-50	3	3	8	100	SS-5	2.00	-	-	-	-	-	-	16	A-6a (V)		
@16.0"; VERY STIFF				651.6	51-60	2	3	9	100	SS-6	2.50	-	-	-	-	-	-	17	A-6a (V)		
@21.0"; TRACE GRAVEL AND STONE FRAGMENTS				651.6	61-70	3	4	12	100	SS-7	2.25	-	-	-	-	-	-	17	A-6a (V)		
@31.0"; STIFF				651.6	71-80	2	3	8	100	SS-12	2.00	7	4	9	31	49	31	17	14	A-6a (10)	
@33.5"; VERY STIFF @33.6' - 33.75'; HIGH ANGLE SOIL FRACTURE WITH SAND INFILLING				651.6	81-90	3	4	12	100	SS-13	2.75	-	-	-	-	-	-	17	A-6a (V)		
HARD, GRAY, SANDY SILT, SOME CLAY, LITTLE GRAVEL AND STONE FRAGMENTS, DAMP				615.2	91-100	6	10	29	100	SS-15	4.5+	10	10	20	35	25	20	13	7	9	A-4a (5)
HARD, GRAY, SILT AND CLAY, LITTLE SAND, TRACE GRAVEL AND STONE FRAGMENTS, DAMP				612.7	101-110	10	10	32	89	SS-16	4.5+	-	-	-	-	-	-	10	A-6a (V)		
HARD, GRAY, SANDY SILT, SOME CLAY, TRACE GRAVEL AND STONE FRAGMENTS, DAMP				607.7	111-120	10	11	32	100	SS-17	4.5+	5	4	10	38	43	26	15	11	13	A-6a (8)
HARD, GRAY, SILT AND CLAY, LITTLE SAND, TRACE GRAVEL AND STONE FRAGMENTS, DAMP				605.2	121-130	10	18	57	100	SS-18	4.5+	8	12	16	41	23	19	15	4	10	A-4a (6)
HARD, GRAY, SILT AND CLAY, LITTLE SAND, TRACE GRAVEL AND STONE FRAGMENTS, DAMP				600.2	131-140	16	19	52	100	SS-19	4.5+	9	7	12	37	35	25	14	11	10	A-6a (8)
VERY DENSE, BLACK AND DARK GRAY, STONE FRAGMENTS WITH SAND, TRACE SILT, TRACE CLAY, WET				600.2	141-150	21	28	65	89	SS-21	-	46	36	10	4	4	NP	NP	15	A-1-b (0)	
HARD, GRAY, SILT AND CLAY, LITTLE SAND, TRACE STONE FRAGMENTS, DAMP				596.9	151-160	28	29	68	78	SS-22A	-	34	27	22	9	8	NP	NP	12	A-1-b (0)	
HARD, GRAY, SILT AND CLAY, LITTLE SAND, TRACE STONE FRAGMENTS, DAMP				593.7	161-170	18	21	59	100	SS-23	4.5+	7	7	12	34	40	26	15	11	12	A-6a (8)

NOTES: LAT/LONG/ELEV FROM OGE SURVEY GRADE INSTRUMENTS.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH: PLACED BENTONITE CHIPS; POURED BENTONITE GROUT