

PROJECT DESCRIPTION

REPLACE PIER CAPS, SUPERSTRUCTURE AND ABUTMENTS FOR BRIDGE PRE-726-0274 OVER BANTAS FORK. CONVERT ABUTMENTS TO INTEGRAL TYPE. EXISTING SUBSTRUCTURE PILING SHALL BE RE-USED.

HISTORIC RECORDS

HISTORICAL RECORDS WERE OBTAINED FROM ODOT’S TRANSPORTATION INFORMATION MAPPING SYSTEM (TIMS) FOR PRE-726-2.22, SUB-BATCH 7361, COMPLETED IN 1957 FOR THE CURRENT STRUCTURE. RESULTS OF THE EXPLORATION DISCLOSED THE EXISTING STRUCTURE APPEARS TO BE SUPPORTED ON DRIVEN PILES FOUNDED IN VERY DENSE GRAVEL CONTAINING COBBLES AND BOULDERS. THIS HISTORICAL INFORMATION WAS NOT UTILIZED WITHIN THE CURRENT DESIGN THEREFORE NOT SHOWN WITHIN FOR CLARITY.

GEOLOGY

THE PROJECT IS LOCATED WITHIN THE SOUTHERN OHIO LOAMY TILL PLAIN PHYSIOGRAPHIC REGION WHICH IS CHARACTERIZED BY MODERATE RELIEF WITH END AND RECESSIONAL MORAINES CONTAINING RELATIVELY FLAT GROUND MORAINES IN BETWEEN. BOULDER BELTS ARE PRESENT ALONG WITH OUTWASH FILLED PRE-GLACIAL VALLEYS. OVERBURDEN SOILS ARE PREDOMINATELY COHESIVE IN AREAS OF MORAINES AND NON-COHESIVE IN OUTWASH AREAS. THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR) INTERACTIVE GEOLOGIC MAP INDICATES THAT THE PROJECT AREA OVERBURDEN SOILS ARE GROUND MORaine LOCATED BETWEEN TWO (2) FINGERS OF AN END MORaine. BENEATH THE OVERBURDEN SOILS THE SITE IS UNDERLAIN BY SILURIAN-AGED LOCKPORT DOLOMITE THAT CONTAINS MINOR LIMESTONE, CHERT, AND SHALE LAYERS.

RECONNAISSANCE

FIELD RECONNAISSANCE WAS COMPLETED BY PERSONNEL FROM THE DISTRICT OFFICE AND OFFICE OF GEOTECHNICAL ENGINEERING (OGE) ON SEPTEMBER 18, 2024. THE EXISTING STRUCTURE WAS NOTED AS BEING IN POOR CONDITION WITH CRACKING AND SPALLING CONCRETE IN THE DECK. THE APPROACH ROADWAY PAVEMENT WAS NOTED AS BEING IN POOR CONDITION WITH SEVERE CRACKING AND EVIDENCE OF PAST CRACK SEALING. THE APPROACH EMBANKMENTS ARE NOT SHOWING SIGNS OF INSTABILITY. THE STREAM CHANNEL IS WOODED WITH SIGNS OF EROSION ALONG THE BANKS AND SEDIMENT BUILDUP ALONG THE FORWARD ABUTMENT. THE ADJACENT LAND USAGE WAS NOTED AS BEING PREDOMINATELY RURAL RESIDENTIAL OR WOODED RIPARIAN CORRIDOR.

SUBSURFACE EXPLORATION

THREE (3) BORINGS, B-001-0-24 THROUGH B-003-0-24, WERE COMPLETED AS PART OF THE SUBSURFACE EXPLORATION BETWEEN OCTOBER 9 AND 24, 2024. DRILLING WAS COMPLETED WITH A TRUCK MOUNTED CME 75 ROTARY DRILL RIG UTILIZING 3.25-INCH I.D. HOLLOW STEM AUGERS. DISTURBED SAMPLES WERE COLLECTED IN ACCORDANCE WITH THE STANDARD PENETRATION TEST (AASHTO T206) AT CONTINUOUS, 2.5-FOOT AND 5-FOOT INTERVALS. THE HAMMER SYSTEM USED WAS CALIBRATED ON MAY 23, 2024, WITH AN AVERAGE DRILL ROD ENERGY RATIO (ER) OF 89%. EACH BORING WAS ADVANCED INTO BEDROCK AND SAMPLED (AASHTO T225) USING AN N SERIES WIRELINE CORE BARREL, WATER METHOD.

EXPLORATION FINDINGS

BORINGS B-001-0-24 AND B-003-0-24 WERE COMPLETED WITHIN THE EXISTING ROADWAY NEAR THE REAR AND FORWARD ABUTMENT, RESPECTIVELY, AND INITIALLY ENCOUNTERED 2-INCHES OF ASPHALT AND BETWEEN 9 AND 9.5-INCHES OF CONCRETE. BORING B-002-0-24 WAS COMPLETED WITHIN THE STREAM BED THROUGH A PRE-CORED HOLE IN THE BRIDGE DECK. THE BORINGS PRIMARILY ENCOUNTERED NON-COHESIVE SOILS CONSISTING OF GRAVEL AND STONE FRAGMENTS (A-1-a), GRAVEL AND/OR STONE FRAGMENTS WITH SAND (A-1-b), COARSE AND FINE SAND (A-3a), GRAVEL AND/OR STONE FRAGMENTS WITH SAND AND SILT (A-2-4), AND SANDY SILT (A-4a) IN MEDIUM DENSE TO VERY DENSE COMPACTNESS AND DAMP TO WET IN MOISTURE CONDITION.

A COHESIVE SANDY SILT (A-4a) LAYER WAS IDENTIFIED WITHIN EACH BORING BETWEEN ELEVATION (EL.) 1064.8 AND 1059.5 FEET (FT) IN VERY STIFF TO HARD CONSISTENCY AND DAMP TO MOIST IN CONDITION. ADDITIONALLY, A STIFF SILT AND CLAY (A-6a) LAYER WAS ENCOUNTERED IN B-001-0-24 BETWEEN EL. 1078.0 AND 1076.5 FT IN MOIST CONDITION AND SLIGHTLY ORGANIC, SEE ORGANIC CONTENT BY LOSS ON IGNITION TEST TABLE.

COBBLE AND BOULDER ZONES WERE NOTED WITHIN B-002-0-24 AND B-003-0-24. WITHIN B-002-0-24 COBBLES AND BOULDERS WERE NOTED AT EL. 1060.4 FT WHICH WERE CORED PRIOR TO ENCOUNTERING BEDROCK. B-003-0-24 FIRST ENCOUNTERED COBBLES AND BOULDERS BETWEEN EL. 1067.3 AND 1064.8 FT AND BELOW EL. 1059.8 FT EXTENDING TO TOP OF BEDROCK.

DOLOMITE BEDROCK WAS ENCOUNTERED IN B-001-0-24, B-002-0-24, AND B-003-0-24 AT EL. 1053.8, 1053.6, AND 1050.9 FT, RESPECTIVELY, INTO WHICH EACH WAS TERMINATED. THE DOLOMITE WAS DESCRIBED AS HIGHLY TO MODERATELY WEATHERED AND SLIGHTLY STRONG TO STRONG. STRENGTH TESTING WAS COMPLETED ON REPRESENTATIVE CORE SAMPLES WITH COMPRESSIVE STRENGTH TEST RESULTS RANGING FROM 2,172 TO 9,846 PSI. THESE RESULTS ARE PRESENTED IN TABULAR FORM, SEE BEDROCK TEST SUMMARY TABLE.

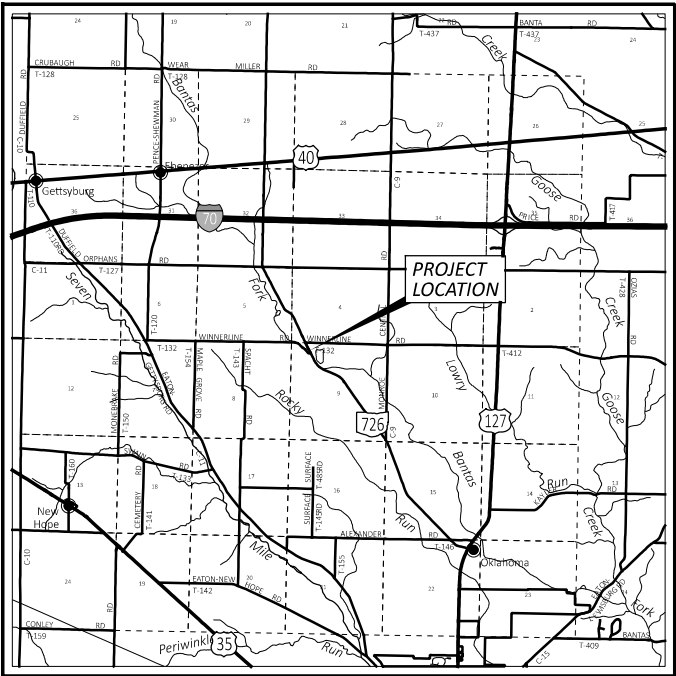
FREE WATER WAS NOTED AT EL. 1076.3 AND 1074.0 FT IN B-001-0-24 AND IN B-003-0-24 AT EL. 1074.8 FT, WITH WATER REPORTED AT COMPLETION AT EL. 1081.9, AND 1079.5 FT, RESPECTIVELY. B-002-0-24 WAS COMPLETED WITHIN THE STREAM CHANNEL ENCOUNTERING WATER AT THE GROUND SURFACE WHICH WAS THE STREAM CHANNEL. ELEVATED HYDROSTATIC HEAD PRESSURES RESULTING IN A HEAVING SAND CONDITION WAS ENCOUNTERED WITHIN B-001-0-24 BELOW EL. 1069.5 FT.

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 JULY 2024.

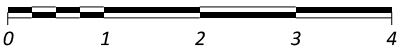
LEGEND

DESCRIPTION	ODOT CLASS	CLASSIFIED MECH./VISUAL
GRAVEL AND STONE FRAGMENTS	A-1-a	9 -
GRAVEL AND/OR STONE FRAGMENTS WITH SAND	A-1-b	16 -
COARSE AND FINE SAND	A-3a	2 -
GRAVEL AND/OR STONE FRAGS. WITH SAND AND SILT	A-2-4	6 1
SANDY SILT	A-4a	6 -
SILT AND CLAY	A-6a	1 -
	TOTAL	40 1
BOULDERY ZONE	VISUAL	
DOLOMITE	VISUAL	
PAVEMENT = X = APPROXIMATE THICKNESS	VISUAL	
BORING LOCATION - PLAN VIEW.		
DRIVE SAMPLE AND ROCK CORE 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.	
X/D"	NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT): X/D" = NUMBER OF BLOWS (UNCORRECTED) FOR D" OF PENETRATION AT REFUSAL.	
X/Y/D"	NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT): X = NUMBER OF BLOWS FOR 6 INCHES (UNCORRECTED). Y/D" = NUMBER OF BLOWS (UNCORRECTED) FOR D" OF PENETRATION AT REFUSAL.	
INDICATES WATER AT COMPLETION.		
INDICATES FREE WATER ELEVATION.		
INDICATES A PLASTIC MATERIAL WITH A MOISTURE CONTENT EQUAL TO OR GREATER THAN THE LIQUID LIMIT MINUS 3.		
INDICATES A NON-PLASTIC MATERIAL WITH A MOISTURE CONTENT GREATER THAN 25 % OR GREATER THAN 19 % WITH A WET APPEARANCE.		
INDICATES UNIT WEIGHT OF ROCK.		
LOI	INDICATES ORGANIC CONTENT BY LOSS ON IGNITION, AASHTO T267.	
NP	INDICATES A NON-PLASTIC SAMPLE.	
NQ	"N" SERIES ROCK CORE BARREL OF "Q" WIRELINE BIT SIZE.	
Qu	INDICATES UNCONFINED COMPRESSION TEST, ASTM D7012.	
SS	INDICATES A SPLIT SPOON SAMPLE.	
TR	INDICATES TOP OF ROCK ELEVATION.	

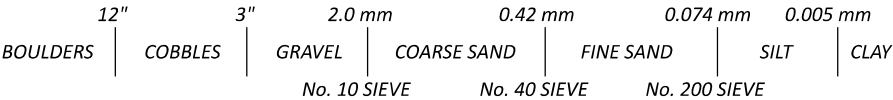


LOCATION MAP

SCALE IN MILES



PARTICLE SIZE DEFINITIONS



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.

FOR LAB TEST DATA, SEE SHEET 2.

RECON. -	PPP,AMJ	09/18/24
DRILLING -	DML,JAS	10/09-24/24
DRAWN -	ARR	05/29/25
REVIEWED -	AAM	06/02/25

DESIGN AGENCY



DESIGNER

ARR

REVIEWER

AAM 06/02/25

PROJECT ID

102766

SUBSET TOTAL

1 9

SHEET TOTAL

31 39

ORGANIC CONTENT BY LOSS ON IGNITION TEST				
EXPLOR. ID	SAMPLE ID	SAMPLE ELEVATION	SAMPLE DEPTH	LOI (%)
B-001-0-24	SS-7	1078.0' - 1076.5'	10.0' - 11.5'	3.9

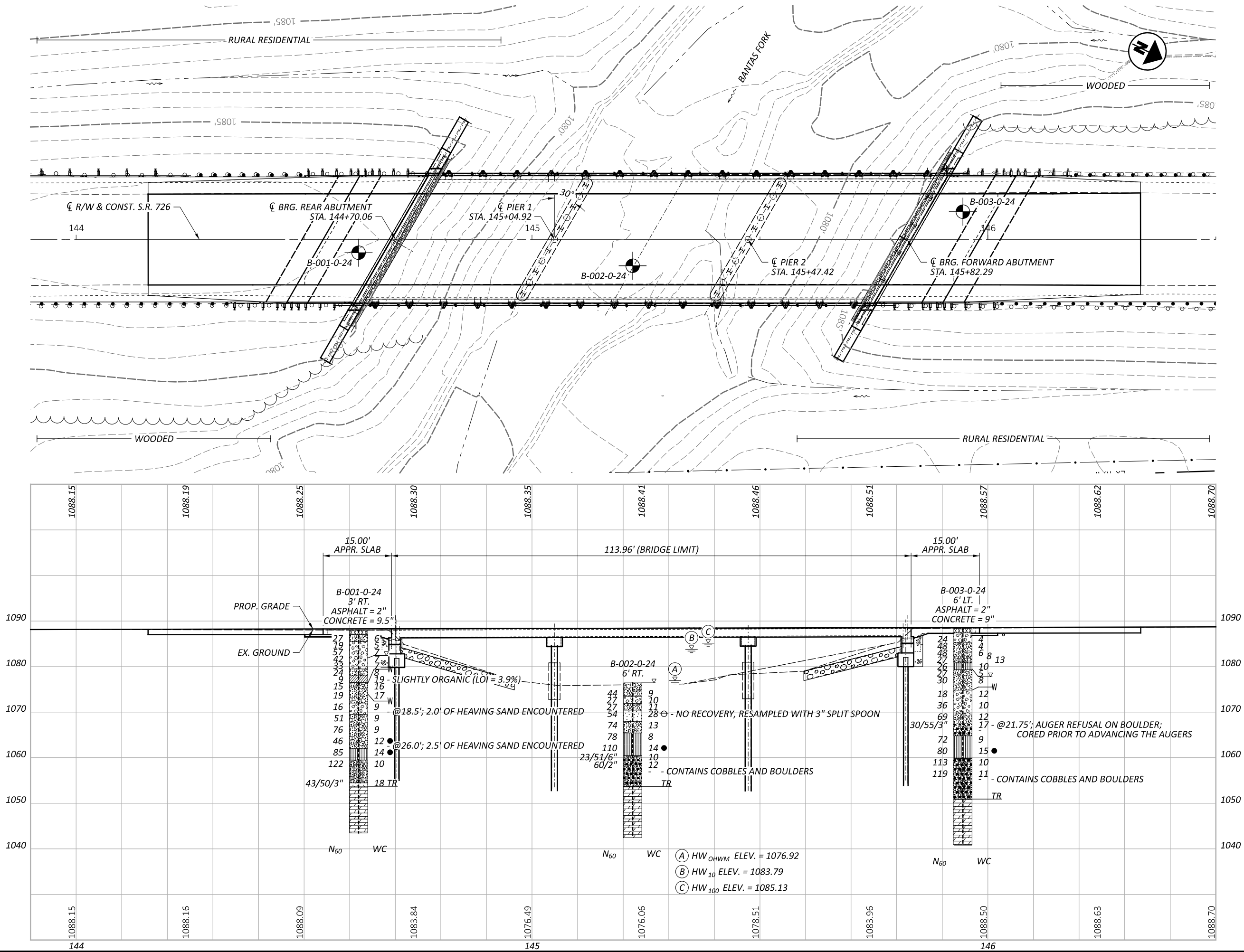
SCOUR SAMPLES			
EXPLOR. ID	SAMPLE ID	SAMPLE ELEVATION	D ₅₀ VALUE (mm)
B-001-0-24	SS-2	1085.5' - 1084.0'	2.4446
	SS-3	1084.0' - 1082.5'	3.4442
	SS-4	1082.5' - 1081.0'	3.3140
	SS-5	1081.0' - 1079.5'	2.6827
	SS-6	1079.5' - 1078.0'	2.1044
	SS-7	1078.0' - 1076.5'	0.0304
	SS-8	1076.5' - 1075.0'	0.7347
	SS-9	1074.5' - 1073.0'	1.0011
B-002-0-24	SS-1	1074.9' - 1073.4'	2.7393
	SS-2	1073.4' - 1071.9'	3.3854
	SS-3	1071.9' - 1070.4'	2.3463
	SS-4	1070.4' - 1068.9'	0.1980
B-003-0-24	SS-1	1086.8' - 1085.3'	2.1923
	SS-2	1085.3' - 1083.8'	2.0451
	SS-3	1083.8' - 1082.3'	1.3352
	SS-4A	1082.3' - 1081.6'	1.0048
	SS-4B	1081.6' - 1080.8'	0.3218
	SS-5	1080.8' - 1079.3'	0.1153
	SS-6	1079.3' - 1077.8'	1.3203
	SS-7	1077.8' - 1076.3'	1.3270
	SS-8	1074.8' - 1073.3'	2.2445

BEDROCK TEST SUMMARY				
EXPLOR. ID	SAMPLE ELEVATION	SAMPLE DEPTH	Qu (PSI)	LITHOLOGY
B-001-0-24	1052.6' - 1052.2'	35.4' - 35.8'	5,355	DOLOMITE
	1046.3' - 1045.9'	41.7' - 42.1'	2,172	DOLOMITE
	1043.9' - 1043.6'	44.1' - 44.4'	2,196	DOLOMITE
B-002-0-24	1050.8' - 1049.4'	25.6' - 27.0'	6,546	DOLOMITE
B-003-0-24	1047.7' - 1047.3'	40.6' - 41.0'	5,185	DOLOMITE
	1041.2' - 1040.8'	47.1' - 47.5'	9,846	DOLOMITE

GEOTECHNICAL PROFILE - BRIDGE
BRIDGE NO. PRE-SR 726-0274 OVER BANTAS FORK
LAB TEST DATA



DESIGN AGENCY	
DESIGNER	
ARR	
REVIEWER	
AAM 06/02/25	
PROJECT ID	
102766	
SUBSET	TOTAL
2	9
SHEET	TOTAL
32	39



GEOTECHNICAL PROFILE - BRIDGE
BRIDGE NO. PRE-SR 726-0274 OVER BANTAS FORK

DESIGN AGENCY



DESIGNER

ARR

REVIEWER

AAM 06/02/25

PROJECT ID

102766

SUBSET TOTAL

3 9

SHEET TOTAL

33 39

PRE-SR 726-2.74

MODEL: Boring Log for B-001-0-24 PAPER SIZE: 17x11 (in.) DATE: 1/16/2026 TIME: 12:41:01 PM PUT DRV: OHDOT_PDF.plt;fig: PENTBL: OHDOT_Pen.tbl USER: Christopher.Howard@dot.ohio.gov WORKSPACE: CHDOTCEv02 WORKSET: 102766 PRODUCT: OpenRoadsDesigner 24.00.00.205

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PROJECT: PRE-726-2.74			DRILLING FIRM / OPERATOR: ODOT / WEIS			DRILL RIG: CME 75 TRUCK			STATION / OFFSET: 144+62.3' RT.			EXPLORATION ID: B-001-0-24							
TYPE: BRIDGE			SAMPLING FIRM / LOGGER: ODOT / SPROUSE			HAMMER: CME AUTOMATIC			ALIGNMENT: CL SR 726			PAGE: 1 OF 1							
PID: 102766 SFN: 6804595 (P)			DRILLING METHOD: 3.25" HSA / NQ2			CALIBRATION DATE: 5/23/24			ELEVATION: 1088.0 (ft) EOB: 44.5 ft.										
START: 10/9/24 END: 10/17/24			SAMPLING METHOD: SPT / NQ2			ENERGY RATIO (%): 89			LAT / LONG: 39.815963, -84.667001										
MATERIAL DESCRIPTION AND NOTES			ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	WC	ODOT CLASS (gl)	HOLE SEALED
ASPHALT (2") & CONCRETE (9.5")			1088.0																
MEDIUM DENSE, BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND, GRAVEL AND STONE FRAGMENTS WITH SAND, TRACE SILT, TRACE CLAY, DAMP			1087.0		6	27	67	SS-1	-	49	27	10	10	4	16	15	1	6	A-1-b (0)
			1085.5		7	19	44	SS-2	-	54	25	9	9	3	NP	NP	NP	5	A-1-a (0)
					7	57	56	SS-3	-	59	18	8	11	4	19	15	4	7	A-1-a (0)
					11	42	83	SS-4	-	59	19	8	11	3	19	16	3	7	A-1-a (0)
					10	33	89	SS-5	-	56	21	9	10	4	20	17	3	7	A-1-a (0)
MEDIUM DENSE, GRAY, GRAVEL AND STONE FRAGMENTS WITH SAND, LITTLE SILT, TRACE CLAY, DAMP			1079.5		8	24	78	SS-6	-	51	21	12	12	4	18	17	1	8	A-1-b (0)
			1078.0		2	9	56	SS-7	1.50	11	11	15	40	23	31	18	13	19	A-6a (7)
STIFF, GRAY, SILT AND CLAY, SOME SAND, LITTLE GRAVEL AND STONE FRAGMENTS, SLIGHTLY ORGANIC (LOI = 3.9%), MOIST			1076.5		8	15	61	SS-8	-	33	25	30	8	4	NP	NP	NP	16	A-1-b (0)
					3	19	56	SS-9	-	35	33	25	5	2	NP	NP	NP	17	A-1-b (0)
MEDIUM DENSE, GRAY, GRAVEL WITH SAND, TRACE SILT, TRACE CLAY, WET			1072.0		6	16	50	SS-10	-	56	25	8	9	2	NP	NP	NP	9	A-1-a (0)
			1069.5		17	51	56	SS-11	-	62	13	9	11	5	16	13	3	9	A-1-b (0)
VERY DENSE, GRAY, STONE FRAGMENTS WITH SAND, LITTLE SILT, TRACE CLAY, WET					18	76	61	SS-12	-	51	18	15	12	4	NP	NP	NP	9	A-1-b (0)
					7	46	83	SS-13	-	33	33	17	12	5	14	13	1	12	A-1-b (0)
@23.5'; DENSE			1062.0		23	85	94	SS-14	-	14	10	29	32	15	16	13	3	14	A-4a (2)
					22	122	78	SS-15	-	31	12	30	20	7	NP	NP	NP	10	A-2-4 (0)
HARD, BROWN, SANDY SILT, LITTLE CLAY, LITTLE STONE FRAGMENTS, MOIST			1059.5		22	40													
					43														
VERY DENSE, BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT, TRACE CLAY, DAMP			1054.5		46		100	NQ2-1										CORE	
			1053.8		67		100	NQ2-2											CORE
VERY DENSE, YELLOWISH BROWN AND GRAY, COARSE AND FINE SAND, SOME SILT, TRACE CLAY, TRACE STONE FRAGMENTS, WET																			
DOLOMITE, LIGHT GRAY, HIGHLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO COARSE GRAINED, THIN TO MEDIUM BEDDED, ARENACEOUS, VUGGY, RUST STAINED, JOINT, FRACTURED TO MODERATELY FRACTURED, OPEN, SLIGHTLY ROUGH TO VERY ROUGH, BLOCKY, GOOD; RQD 47%, REC 100%.																			
@36.8' - 37.3'; HIGH ANGLE FRACTURE WITH RUST STAINING																			
@37.5' - 40.7'; HIGH ANGLE FRACTURE																			
@41.7' - 42.1'; γ = 153 pcf; Qu = 2,172 psi																			
@43.0' - 44.0'; HIGH ANGLE FRACTURE WITH RUST STAINING																			
@44.1' - 44.4'; γ = 156 pcf; Qu = 2,196 psi																			

PRE-SR 726-2.74

MODEL: Boring Log for B-002-0-24 PAPER SIZE: 17x11 (in.) DATE: 1/16/2026 TIME: 12:41:09 PM PUTDRV: OHDOT_PDF.plt;ig PENTBL: OHDOT_Pen.tbl USER: Christopher.Howard@dot.ohio.gov WORKSPACE: CHDOTCEv02 WORKSET: 102766 PRODUCT: OpenRoadsDesigner 24.00.00.205
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PROJECT: PRE-726-2.74			DRILLING FIRM / OPERATOR: ODOT / BLODGETT			DRILL RIG: CME 75 TRUCK			STATION / OFFSET: 145+22.6' RT.			EXPLORATION ID B-002-0-24										
TYPE: BRIDGE			SAMPLING FIRM / LOGGER: ODOT / LEWIS			HAMMER: CME AUTOMATIC			ALIGNMENT: CL SR 726			PAGE										
PID: 102766 SFN: 6804595 (P)			DRILLING METHOD: 3.25" HSA / NQ2			CALIBRATION DATE: 5/23/24			ELEVATION: 1076.4 (ft) EOB: 34.0 ft.			1 OF 1										
START: 10/23/24 END: 10/24/24			SAMPLING METHOD: SPT / NQ2			ENERGY RATIO (%): 89			LAT / LONG: 39.816112, -84.667093													
MATERIAL DESCRIPTION AND NOTES			ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC SAMPLE (%)	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	WC	ODOT CLASS (gl)	ABANDONED				
DENSE, GRAYISH BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND, LITTLE SILT, TRACE CLAY, WET			1076.4	▽	1076.4																	
						1																
						2	9	43	67	-	56	17	11	12	4	NP	NP	9	A-1-b (0)			
						3	16															
MEDIUM DENSE, GRAYISH BROWN, GRAVEL AND STONE FRAGMENTS, SOME SAND, TRACE SILT, TRACE CLAY, WET			1073.4																			
						4	7	27	50	-	62	19	6	9	4	20	16	4	10	A-1-a (0)		
						5	9															
						6	11															
MEDIUM DENSE, GRAYISH BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND, LITTLE SILT, TRACE CLAY, WET			1070.4																			
						7	5	27	78	-	54	22	8	12	4	18	15	3	11	A-1-b (0)		
						8	7															
						9	21															
VERY DENSE, GRAYISH BROWN, COARSE AND FINE SAND, LITTLE SILT, TRACE CLAY, TRACE GRAVEL AND STONE FRAGMENTS, NO RECOVERY, RESAMPLED WITH 3" SPLITSPOON, WET																						
						10	16	54	0	SS-4	1	22	62	11	4	NP	NP	28	A-3a (0)			
						11	20															
						12																
VERY DENSE, BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND, LITTLE SILT, TRACE CLAY, WET			1067.9																			
						13	9	73	39	SS-5		52	16	12	8	19	14	5	13	A-1-b (0)		
						14	22															
						15	27															
HARD, BROWN, SANDY SILT, SOME GRAVEL AND STONE FRAGMENTS, LITTLE CLAY, DAMP			1065.4																			
						16	15	77	72	SS-6		27	10	23	27	13	16	13	3	8	A-4a (1)	
						17	20															
						18	32															
@13.5' GRAY AND BROWN, LITTLE GRAVEL AND STONE FRAGMENTS																						
						19	22	109	89	SS-7		15	10	21	40	14	17	14	3	14	A-4a (4)	
						20	31															
						21	42															
VERY DENSE, BROWN, STONE FRAGMENTS WITH SAND AND SILT, LITTLE CLAY, CONTAINS COBBLES AND BOULDERS, MOIST			1060.4																			
						22	23	-	83	SS-8		28	10	28	23	11	15	13	2	10	A-2-4 (0)	
						23	51															
						24																
DOLOMITE, LIGHT GRAY, HIGHLY TO MODERATELY WEATHERED, MODERATELY STRONG, FINE TO COARSE GRAINED, THIN TO MEDIUM BEDDED, ARENACEOUS, VUGGY, SLIGHTLY FOSSILIFEROUS, JOINT, FRACTURED TO MODERATELY FRACTURED, OPEN, SLIGHTLY ROUGH; BLOCKY, GOOD; RQD 34%, REC 89%			1053.6	TR																		
			1053.6			25	60/2'	-	100	SS-9		-	-	-	-	-	-	-	12	A-2-4 (V)		
						26	0		29	NQ2-1										CORE		
						27																
@25.6' - 27.0'; γ = 156 pcf; Qu = 6,546 psi @26.4' - 26.6'; HIGH ANGLE FRACTURE WITH RUST STAINING																						
						28	0		39	NQ2-2									CORE			
						29																
						30																
@29.0' - 30.3'; HIGHLY FRACTURED WITH LOSS																						
						31	17		100	NQ2-3									CORE			
						32																
						33																
@31.0' - 31.6'; HIGH ANGLE FRACTURE WITH RUST STAINING																						
						34	42		100	NQ2-4									CORE			
						35																
						36																
@32.5' - 33.1'; HIGH ANGLE FRACRTUE WITH RUST STAINING																						
						37																
						38																
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						42																
@32.5' - 33.1'; HIGH ANGLE FRACRTUE WITH RUST STAINING																						
						43			75	NQ2-5									CORE			
						44																
						45																

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 5/29/25 10:20 - X:\GINT\PROJECTS\2024 COMPLETE\601163.GPJ

NOTES: LAT/LONG FROM JUNIPER GEODE GNS3 GPS RECEIVER. ELEV FROM PROJECT DTM. BORING ADVANCED THROUGH BRIDGE DECK WITH 12 FEET FROM DECK TO STREAM BED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: POURED 100 LB. BENTONITE CHIPS



DESIGN AGENCY

DESIGNER

ARR

REVIEWER

AAM 06/02/25

PROJECT ID

102766

SUBSET

5

TOTAL

9

SHEET

35

TOTAL

39

GEOTECHNICAL PROFILE - BRIDGE
BRIDGE NO. PRE-SR 726-0274 OVER BANTAS FORK
BORING LOG FOR B-002-0-24

PRE-SR 726-2.74

MODEL: Boring Log for B-003-0-24 PAPERSIZE: 17x11 (in.) DATE: 1/16/2026 TIME: 12:41:17 PM PUTDRV: OHDOT_PDF.plt;ig PENTBL: OHDOT_Pen.tbl USER: Christopher.Howard@dot.ohio.gov WORKSPACE: CHDOTCEv02 WORKSET: 102766 PRODUCT: OpenRoadsDesigner 24.00.00.205

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PROJECT: PRE-726-2.74			DRILLING FIRM / OPERATOR: ODOT / BLODGETT			DRILL RIG: CME 75 TRUCK			STATION / OFFSET: 145+95.6' LT.			EXPLORATION ID: B-003-0-24								
TYPE: BRIDGE			SAMPLING FIRM / LOGGER: ODOT / LEWIS			HAMMER: CME AUTOMATIC			ALIGNMENT: CL SR 726			PAGE 1 OF 1								
PID: 102766 SFN: 6804595 (P)			DRILLING METHOD: 3.25" HSA / NQ2			CALIBRATION DATE: 5/23/24			ELEVATION: 1088.3 (ft) EOB: 47.5 ft											
START: 10/21/24 END: 10/22/24			SAMPLING METHOD: SPT / NQ2			ENERGY RATIO (%): 89			LAT / LONG: 39.816272, -84.667252											
MATERIAL DESCRIPTION AND NOTES			ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC SAMPLE (%)	HP (tsf)	GRADATION (%)								ODOT CLASS (gl)	ABANDONED		
									GR	CS	FS	SI	CL	LL	PL	WC				
ASPHALT (2") & CONCRETE (9")			1088.3																	
MEDIUM DENSE, GRAYISH BROWN, GRAVEL AND STONE FRAGMENTS, SOME SAND, TRACE SILT, TRACE CLAY, DAMP			1087.4	1																
				2	6	24	39	SS-1	52	24	10	10	4	NP	NP	4	A-1-a (0)			
			1085.3	3	21	48	56	SS-2	50	21	11	13	5	17	15	2	4	A-1-b (0)		
				4	16	16														
			1082.3	5	16	48	67	SS-3	44	23	12	15	6	18	15	3	6	A-1-b (0)		
DENSE, GRAYISH BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND, LITTLE SILT, TRACE CLAY, DAMP @4.5"; BROWN				6	12	27	72	SS-4A	41	19	15	18	7	25	16	9	8	A-2-4 (0)		
			1080.8	7	10	8		SS-4B	30	17	21	20	12	20	13	7	13	A-2-4 (0)		
				8	6	9	17	SS-5	19	12	25	28	16	NP	NP	NP	10	A-4a (2)		
			1079.3	9	10	27	61	SS-6	45	18	17	16	4	NP	NP	NP	5	A-1-b (0)		
				10	9	9														
MEDIUM DENSE, BROWN, SANDY SILT, LITTLE GRAVEL, LITTLE CLAY, DAMP @10.5"; MOIST				11	10	30	78	SS-7	45	19	14	15	7	NP	NP	NP	8	A-1-b (0)		
				12																
				13																
			1074.8	14	4	18	39	SS-8	53	32	6	6	3	NP	NP	NP	12	A-1-a (0)		
				15	5	7														
MEDIUM DENSE, GRAY, GRAVEL AND STONE FRAGMENTS, "AND" SAND, TRACE SILT, TRACE CLAY, WET				16	8	11	36	SS-9	54	21	15	7	3	NP	NP	NP	10	A-1-a (0)		
				17	13															
				18																
			1069.8	19	21	68	39	SS-10	36	42	15	5	2	NP	NP	NP	12	A-1-b (0)		
				20	30	16														
LITTLE SILT @21.75"; AUGER REFUSAL ON BOULDER; CORED PRIOR TO ADVANCING THE AUGERS				21	30															
				22	30	55/3"	-	56	SS-11	20	42	23	11	4	NP	NP	NP	17	A-1-b (0)	
				23	0		100	NQ2										CORE		
				24	11	71	78	SS-12	19	12	25	30	14	16	12	4	9	A-4a (2)		
			1064.8	25	26															
HARD, GRAYISH BROWN, SANDY SILT, LITTLE GRAVEL AND STONE FRAGMENTS, LITTLE CLAY, DAMP @26.0"; VERY STIFF, BROWN, MOIST				26	18	79	89	SS-13	11	9	25	43	12	17	14	3	15	A-4a (4)		
				27	27	26														
				28																
			1059.8	29	14	112	50	SS-14	30	12	25	24	9	15	13	2	10	A-2-4 (0)		
				30	34	41														
VERY DENSE, BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT, TRACE CLAY, CONTAINS COBBLES AND BOULDERS, DAMP @31.0"; GRAY AND GRAYISH BROWN				31	31	41	118	78	SS-15	35	16	22	21	6	NP	NP	11	A-2-4 (0)		
				32	41	38														
				33																
				34																
				35	0		13	NQ2-1											CORE	
DOLOMITE, LIGHT GRAY, HIGHLY TO MODERATELY WEATHERED, MODERATELY STRONG TO STRONG, FINE TO COARSE GRAINED, THIN BEDDED, ARENACEOUS, VUGGY, CONTAINS RUST STAINING, JOINT, FRACTURED TO MODERATELY FRACTURED, OPEN, SLIGHTLY ROUGH; BLOCKY, GOOD; RQD 58%, REC 87%. @38.9' - 39.1"; VERTICAL FRACTURE @40.0' - 40.5"; VERTICAL FRACTURE @40.6' - 41.0"; γ = 157 pcf; Qu = 5,185 psi				36																
				37																
			1050.9	38																
				39	25		100	NQ2-2											CORE	
				40																
@47.1' - 47.5"; γ = 161 pcf; Qu = 9,846 psi				41	22		72	NQ2-3									CORE			
				42																
				43	71		75	NQ2-4											CORE	
				44																
			1040.8	45	75		100	NQ2-5											CORE	
				46																
				47																

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 5/29/25 10:20 - X:\GINT\PROJECTS\2024 COMPLETE\601163.GPJ

NOTES: LAT/LONG FROM JUNIPER GEODE GNS3 GPS RECEIVER. ELEV FROM PROJECT DIGITAL TERRAIN MODEL.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 100 LB. BENTONITE CHIPS; POURED 10 LB. CEMENT

DESIGN AGENCY

DESIGNER

ARR

REVIEWER

AAM 06/02/25

PROJECT ID

102766

SUBSET

6

TOTAL

9

SHEET

36

TOTAL

39

GEOTECHNICAL PROFILE - BRIDGE
BRIDGE NO. PRE-SR 726-0274 OVER BANTAS FORK
BORING LOG FOR B-003-0-24



Office of Geotechnical Engineering

B-001-0-24



Run #:	Depth	Recovery	RQD	
NQ2-1	34.5'	100%	11/24	46%
NQ2-2	36.5'	100%	24/36	67%
NQ2-3	39.5'	100%	21/60	35%
PRE-726-2.74 PID 102766				

DESIGNER	ARR
REVIEWER	AAM 06/02/25
PROJECT ID	102766
SUBSET	TOTAL
7	9
SHEET	TOTAL
37	39

GEOTECHNICAL PROFILE - BRIDGE
BRIDGE NO. PRE-SR 726-0274 OVER BANTAS FORK
ROCK CORE PHOTO FOR B-001-0-24



Office of Geotechnical Engineering

B-002-0-24



Run #:	Depth	Recovery	RQD
NQ2-1	19.0'	7/24	0/24
NQ2-2	21.0'	14/36	0/36
NQ2-3	24.0'	24/24	4/24
NQ2-4	26.0'	36/36	15/36
PRE-726-2.74 PID 102766			
			42%



Office of Geotechnical Engineering

B-002-0-24



Run #:	Depth	Recovery	RQD
NQ2-5	29.0'	45/60	26/60
PRE-726-2.74 PID 102766			
			43%



Office of Geotechnical Engineering

B-003-0-24



Run #:	Depth	Recovery	RQD
NQ2-1	32.5'	8/60	0/60
NQ2-2	37.5'	24/24	6/24
NQ2-3	39.5'	26/36	8/36
PRE-726-2.74 PID 102766			
0%			
25%			
22%			



Office of Geotechnical Engineering

B-003-0-24



Run #:	Depth	Recovery	RQD
NQ2-4	42.5'	18/24	17/24
NQ2-5	44.5'	36/36	27/36
PRE-726-2.74 PID 102766			
71%			
75%			