



**FROEHLING & ROBERTSON, INC.**  
 GEOTECHNICAL • ENVIRONMENTAL • MATERIALS  
 ENGINEERS • LABORATORIES  
 "OVER ONE HUNDRED YEARS OF SERVICE"

N.C.D.O.T. GEOTECHNICAL UNIT  
 BORING LOG

SHEET 1 OF 1

PROJECT NO. 33656.1.1		ID. B-4319		COUNTY Wayne		GEOLOGIST C. Baldwin							
SITE DESCRIPTION Bridge No. 21 over Great Swamp on NC 222							GROUND WATER (ft)						
BORING NO. EB1-A		BORING LOCATION 15+91		OFFSET 16ft LT	ALIGNMENT -L-	0 HR. 24.5	24 HR. 25.0						
COLLAR ELEV. 111.1 ft		NORTHING 660,582		EASTING 2,290,862									
TOTAL DEPTH 34.7 ft		DRILL MACHINE CME 550		DRILL METHOD 2.25" ID HSA		HAMMER TYPE Automatic							
DATE STARTED 5/12/05		COMPLETED 5/12/05		SURFACE WATER DEPTH N/A									
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80				100
111.1													Ground Surface
107.6	3.5	1	1	2									-ROADWAY EMBANKMENT- Brown, fine to coarse SAND (A-2-4(0)), with little clay, trace silt.
102.6	8.5	WOH		1	2								-ALLUVIAL- Gray, coarse sandy clayey SILT (A-4(0)), with little fine sand.
97.6	13.5	1	1	1									-RESIDUAL- Brown & gray, micaceous fine to coarse sandy SILT (A-4), saprolitic.
92.6	18.5	6	9	12									-WEATHERED ROCK- Brown & gray, PHYLLITE.
87.6	23.5	30	60/0.3'										-WEATHERED ROCK- Brown & gray, PHYLLITE.
82.6	28.5	60	40/0.2'										-RESIDUAL- Brown & gray, micaceous fine to coarse sandy SILT (A-4), saprolitic.
77.6	33.5	30	57	43/0.2'									-WEATHERED ROCK- Brown & gray, PHYLLITE.
													Boring Terminated at Elevation 76.4 ft in WEATHERED ROCK (PHYLLITE)
NOTES:													
1) Driller indicates harder drilling at 17.0' (elev. 94.1').													
2) Geologist indicates strata break in split spoon at 24.0' (elev. 87.1').													
3) Boring offset due to location of underground utilities.													

NCDOT BORE SINGLE G66-036.GPJ NC\_DOT.GDT 7/1/05



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N.C.D.O.T. GEOTECHNICAL UNIT  
 BORING LOG SHEET 10 OF 15

SHEET 1 OF 1

PROJECT NO. 33656.1.1		ID. B-4319		COUNTY Wayne		GEOLOGIST C. Baldwin							
SITE DESCRIPTION Bridge No. 21 over Great Swamp on NC 222							GROUND WATER (ft)						
BORING NO. EB1-B		BORING LOCATION 15+84		OFFSET 21ft RT	ALIGNMENT -L-	0 HR. 21.0	24 HR. 21.0						
COLLAR ELEV. 110.5 ft		NORTHING 660,547		EASTING 2,290,847									
TOTAL DEPTH 43.6 ft		DRILL MACHINE CME 550		DRILL METHOD 2.25" ID HSA		HAMMER TYPE Automatic							
DATE STARTED 5/11/05		COMPLETED 5/11/05		SURFACE WATER DEPTH N/A									
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80				100
110.5													Ground Surface
107.0	3.5	1	2	1									-ROADWAY EMBANKMENT- Brown, silty fine to coarse SAND (A-2-4), with some clay.
102.0	8.5	2	1	1									-ALLUVIAL- Gray, fine to coarse SAND (A-2-4(0)), with trace silt & clay.
97.0	13.5	3	4	7									Gray, fine to coarse sandy CLAY (A-6).
92.0	18.5	1	2	12									-RESIDUAL- Brown, micaceous fine to coarse sandy SILT (A-4(0)), saprolitic, with little clay.
87.0	23.5	28	22	21									-WEATHERED ROCK- Brown, PHYLLITE.
82.0	28.5	44	56/0.3'										-RESIDUAL- Brown & gray, micaceous fine to coarse sandy SILT (A-4), saprolitic.
77.0	33.5	19	30	45									-WEATHERED ROCK- Brown & gray, PHYLLITE.
72.0	38.5	60/0.3'											-WEATHERED ROCK- Brown & gray, PHYLLITE.
67.0	43.5	32	68/0.4'										-NON-CRYSTALLINE ROCK- Gray & brown, PHYLLITE.
		60/0.1'											Boring Terminated with Standard Penetration Test Refusal at Elevation 66.9 ft in NON-CRYSTALLINE ROCK (PHYLLITE)

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