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

BORING LOG

WBS ELEMENT NO 33454.1.1	ID No. B-4096	COUNTY Davidson	GEOLOGIST P. Weaver/P. Alton
SITE DESCRIPTION Bridge 140 Over Rich Fork Creek on US 29-70/I-85 Business			GROUND WATER (ft)
BORING NO. B2-B	BORING LOCATION 20+68	OFFSET 20ft RT	ALIGNMENT -L-	0 HR. NM
COLLAR ELEV. 655.9 ft	NORTHING 771966.99	EASTING 1651461.63		24 HR. 1.8
TOTAL DEPTH 34.7 ft	DRILL MACHINE CME 850	DRILL METHOD Wash Rotary/HQ Core	HAMMER TYPE 140 lb. Automatic
DATE STARTED 3/2/04	COMPLETED 3/3/04	SURFACE WATER DEPTH NA	

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
655.9									655.9 0.00
654.9	1.0								ALLUVIAL: Medium Stiff to Soft, Brown and Grey, Clayey, Coarse to Fine Sandy SILT with a Trace of Organics (Leaf and Root Fragments)
652.4	3.5	3	3	3	@6				
		2	1	1	@2	ST-3	W		
647.4	8.5								648.9 7.0
		3	5	7	@12	SS-14	22.3%		ALLUVIAL: Stiff, Grey, Silty, Fine Sandy CLAY
642.4	13.5								643.9 12.0
		2	1	2	@3	SS-15	W		RESIDUAL: Very Loose, Grey, Clayey, Silty, Coarse to Fine SAND with a Little Mica and Rock Fragments
637.4	18.5								637.4 18.5
635.2	20.7	5	8	7	@15		M		Stiff to Very Stiff, Dark Grey with Some White, Coarse to Fine Sandy SILT with a Trace of Clay 635.2 20.7
		60/0.0			60/0.0	RS-2			CRYSTALLINE ROCK: Grey with White, Slightly to Very Slightly Weathered, Hard to Very Hard, Metadiorite with Granitic Intrusions and with Wide to Very Wide Fracture Spacing
									621.2 34.7
									Coring Terminated at Elevation 621.2 feet in Crystalline Rock: Metadiorite

Note: Drill fluid = creek water + bentonite
Mud density = 64.5 lbs./cu. ft.
Slurry was used for soil and weathered rock drilling.
Creek water alone was used for rock coring.

NCDOT BORE SINGLE 07104004.GPJ NC_DOT.GDT 3/19/04

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

CORE BORING REPORT

SHEET 25 OF 34

WBS ELEMENT NO 33454.1.1	ID No. B-4096	COUNTY Davidson	GEOLOGIST P. Weaver/P. Alton
SITE DESCRIPTION Bridge 140 Over Rich Fork Creek on US 29-70/I-85 Business			GROUND WATER (ft)
BORING NO. B2-B	BORING LOCATION 20+68	OFFSET 20ft RT	ALIGNMENT -L-	0 HR. NM
COLLAR ELEV. 655.9 ft	NORTHING 771966.99	EASTING 1651461.63		24 HR. 1.8
TOTAL DEPTH 34.7 ft	DRILL MACHINE CME 850	DRILL METHOD Wash Rotary/HQ Core	HAMMER TYPE 140 lb. Automatic
DATE STARTED 3/2/04	COMPLETED 3/3/04	SURFACE WATER DEPTH NA	
CORE SIZE HQ	TOTAL RUN 14.0 ft	DRILLER C. Heun	

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN REC. (ft)%	RUN RQD (ft)%	SAMP. NO.	STRATA REC. (ft) %	STRATA RQD (ft) %	LOG	DESCRIPTION AND REMARKS
										Begin Coring @ 20.7 ft
635.2	20.7	4.0	N=60/0.0	(4.0)	(4.0)	RS-2	(14.0)	(14.0)		635.2 CRYSTALLINE ROCK: Grey with White, Slightly to Very Slightly Weathered, Hard to Very Hard, Metadiorite with Granitic Intrusions and with Wide to Very Wide Fracture Spacing 20.7
			8:20	100%	100%		100%	100%		
631.2	24.7		8:10							
		5.0	9:30	(5.0)	(5.0)					Metamorphosed granitic intrusions are dominate from 21.0 feet to 21.7 feet, 28.4 feet to 29.2 feet, 29.9 feet to 31.0 feet, and 33.3 feet to 34.1 feet
			13:30	100%	100%					1 natural fracture at 30°
626.2	29.7		12:45							
			13:10							*Note: 0.2 ft. of core could not be retrieved from hole at end of Run #3. REC and RQD values assume unretrieved core is the same as retrieved core
		5.0	12:00	(5.0)	(5.0)					
			11:00	100%	100%					
			14:00							
621.2	34.7		16:00							
			17:10							
			18:20							
			19:20							
			25:30							
										621.2 34.7
										Coring Terminated at Elevation 621.2 feet in Crystalline Rock: Metadiorite

Note: Drill fluid = creek water + bentonite
Mud density = 64.5 lbs./cu. ft.
Slurry was used for soil and weathered rock drilling.
Creek water alone was used for rock coring.

NCDOT CORE SINGLE 07104004.GPJ NC_DOT.GDT 3/22/04