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SEE SHEET 3 FOR PLAN SHEET LAYOUT
AT TIME OF INVESTIGATION

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	42308	1	4

CONTENTS

LINE	STATION	PLAN	PROFILE
-L-	10+17.43 - 12+11.55	4	

**ROADWAY
SUBSURFACE INVESTIGATION**

COUNTY ASHE
PROJECT DESCRIPTION REPLACE BRIDGE #327
OVER LITTLE BUFFALO CREEK ON SR 1509

INVENTORY

CAUTION NOTICE

THE SUBSURFACE INFORMATION AND THE SUBSURFACE INVESTIGATION ON WHICH IT IS BASED WERE MADE FOR THE PURPOSE OF STUDY, PLANNING AND DESIGN, AND NOT FOR CONSTRUCTION OR PAY PURPOSES. THE VARIOUS FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA AVAILABLE MAY BE REVIEWED OR INSPECTED IN RALEIGH BY CONTACTING THE N. C. DEPARTMENT OF TRANSPORTATION, GEOTECHNICAL ENGINEERING UNIT AT (919) 707-6850. THE SUBSURFACE PLANS AND REPORTS, FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA ARE NOT PART OF THE CONTRACT.

GENERAL SOIL AND ROCK STRATA DESCRIPTIONS AND INDICATED BOUNDARIES ARE BASED ON A GEOTECHNICAL INTERPRETATION OF ALL AVAILABLE SUBSURFACE DATA AND MAY NOT NECESSARILY REFLECT THE ACTUAL SUBSURFACE CONDITIONS BETWEEN BORINGS OR BETWEEN SAMPLED STRATA WITHIN THE BOREHOLE. THE LABORATORY SAMPLE DATA AND THE IN SITU (IN-PLACE) TEST DATA CAN BE RELIED ON ONLY TO THE DEGREE OF RELIABILITY INHERENT IN THE STANDARD TEST METHOD. THE OBSERVED WATER LEVELS OR SOIL MOISTURE CONDITIONS INDICATED IN THE SUBSURFACE INVESTIGATIONS ARE AS RECORDED AT THE TIME OF THE INVESTIGATION. THESE WATER LEVELS OR SOIL MOISTURE CONDITIONS MAY VARY CONSIDERABLY WITH TIME ACCORDING TO CLIMATIC CONDITIONS INCLUDING TEMPERATURES, PRECIPITATION AND WIND, AS WELL AS OTHER NON-CLIMATIC FACTORS.

THE BIDDER OR CONTRACTOR IS CAUTIONED THAT DETAILS SHOWN ON THE SUBSURFACE PLANS ARE PRELIMINARY ONLY AND IN MANY CASES THE FINAL DESIGN DETAILS ARE DIFFERENT. FOR BIDDING AND CONSTRUCTION PURPOSES, REFER TO THE CONSTRUCTION PLANS AND DOCUMENTS FOR FINAL DESIGN INFORMATION ON THIS PROJECT. THE DEPARTMENT DOES NOT WARRANT OR GUARANTEE THE SUFFICIENCY OR ACCURACY OF THE INVESTIGATION MADE, NOR THE INTERPRETATIONS MADE, OR OPINION OF THE DEPARTMENT AS TO THE TYPE OF MATERIALS AND CONDITIONS TO BE ENCOUNTERED. THE BIDDER OR CONTRACTOR IS CAUTIONED TO MAKE SUCH INDEPENDENT SUBSURFACE INVESTIGATIONS AS HE DEEMS NECESSARY TO SATISFY HIMSELF AS TO CONDITIONS TO BE ENCOUNTERED ON THE PROJECT. THE CONTRACTOR SHALL HAVE NO CLAIM FOR ADDITIONAL COMPENSATION OR FOR AN EXTENSION OF TIME FOR ANY REASON RESULTING FROM THE ACTUAL CONDITIONS ENCOUNTERED AT THE SITE DIFFERING FROM THOSE INDICATED IN THE SUBSURFACE INFORMATION.

- NOTES:
1. THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N. C. DEPARTMENT OF TRANSPORTATION AS ACCURATE NOR IS IT CONSIDERED PART OF THE PLANS, SPECIFICATIONS OR CONTRACT FOR THE PROJECT.
 2. BY HAVING REQUESTED THIS INFORMATION, THE CONTRACTOR SPECIFICALLY WAIVES ANY CLAIMS FOR INCREASED COMPENSATION OR EXTENSION OF TIME BASED ON DIFFERENCES BETWEEN THE CONDITIONS INDICATED HEREIN AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

PERSONNEL

DC ELLIOT

CJ COFFEY

INVESTIGATED BY DM MULLEN

DRAWN BY DM MULLEN

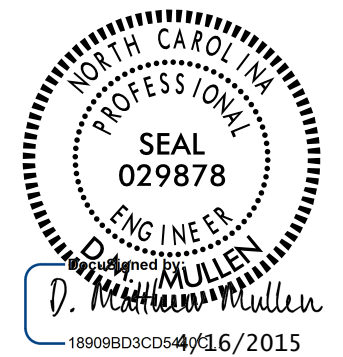
CHECKED BY SC CLARK

SUBMITTED BY JC KUHNE

DATE 1.30.2015

REFERENCE: 42308

PROJECT: B-5147



SIGNATURE

DATE

SIGNATURE

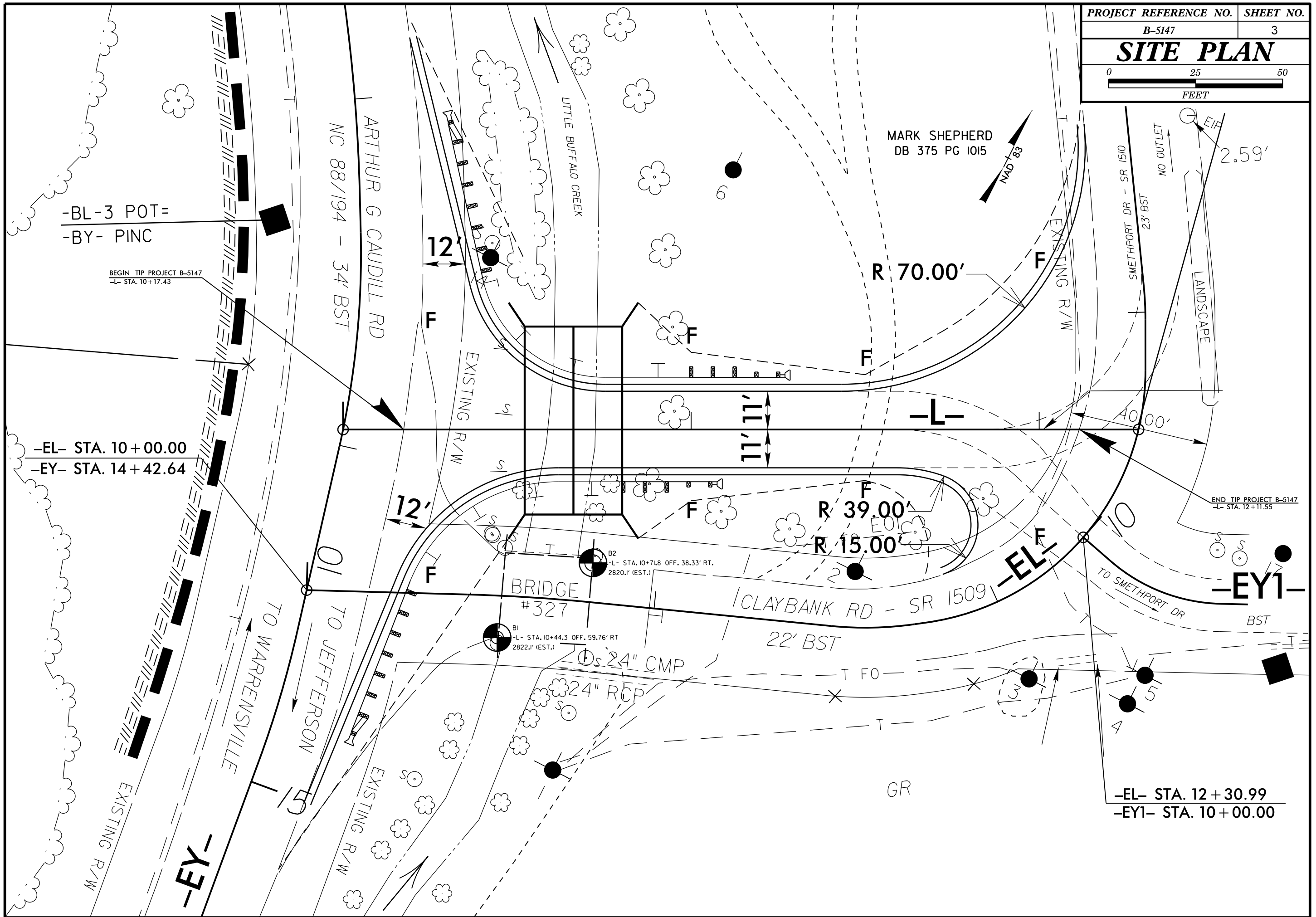
DATE

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

Table with 4 main columns: SOIL DESCRIPTION, GRADATION, ROCK DESCRIPTION, and TERMS AND DEFINITIONS. It contains detailed technical specifications, classification charts, and symbols for soil and rock analysis.





NCDOT GEOTECHNICAL ENGINEERING UNIT
BORELOG REPORT

WBS 42308.1.1		TIP B-5147		COUNTY ASHE		GEOLOGIST Kuhne, J. C.										
SITE DESCRIPTION BRIDGE NO. 327 ON SR 1509, SOUTH CORNER							GROUND WTR (ft)									
BORING NO. B-1		STATION 10+44		OFFSET 60 ft RT		ALIGNMENT L										
COLLAR ELEV. N/A		TOTAL DEPTH 16.5 ft		NORTHING 983,486		EASTING 1,264,013										
DRILL RIG/HAMMER EFF./DATE CME-550		DRILL METHOD NW Casing w/ SPT		HAMMER TYPE Automatic												
DRILLER Childers, R.		START DATE 04/01/09		COMP. DATE 04/01/09		SURFACE WATER DEPTH N/A										
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100						
															GROUND SURFACE	0.0
		4.4	1	2	2								M		ROADWAY EMBANKMENT BRN CLAYEY, SILTY SAND	6.9
		9.4	1	2	6							SS-1	M		SAPROLITE BRN SILTY SAND - UPPER GREEN/GRAY SILTY SAND - LOWER	11.7
		14.4	100/35												WEATHERED ROCK WEATHERED BIOTITE GNEISS W/ PHYLLITIC LAYERS	16.5
		16.5	60/0.0												Boring Terminated WITH STANDARD PENETRATION TEST REFUSAL at Depth 16.5 ft ON CRYSTALLINE ROCK, BIOTITE GNEISS	

WBS 42308.1.1		TIP B-5147		COUNTY ASHE		GEOLOGIST Kuhne, J. C.										
SITE DESCRIPTION BRIDGE NO. 327 ON SR 1509, NORTH CORNER							GROUND WTR (ft)									
BORING NO. B-2		STATION 10+72		OFFSET 38 ft RT		ALIGNMENT L										
COLLAR ELEV. N/A		TOTAL DEPTH 17.2 ft		NORTHING 983,518		EASTING 1,264,028										
DRILL RIG/HAMMER EFF./DATE CME-550		DRILL METHOD NW Casing w/ SPT		HAMMER TYPE Automatic												
DRILLER Childers, R.		START DATE 04/01/09		COMP. DATE 04/01/09		SURFACE WATER DEPTH N/A										
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100						
															GROUND SURFACE	0.0
		4.0	1	9	28								M		ROADWAY EMBANKMENT BROWN COARSE SAND W/ GRAVEL	7.5
		9.0	6	10	23								M		ALLUVIAL DK GRAY/GREEN SAND W/ ROUND PEBBLES	11.8
		14.0	100/35												WEATHERED ROCK WEATHERED BIOTITE GNEISS	17.2
		15.6	100/3													
		17.1	60/0.5												Boring Terminated WITH STANDARD PENETRATION TEST REFUSAL at Depth 17.2 ft ON CRYSTALLINE ROCK, BIOTITE GNEISS	

NCDOT BORE DOUBLE B5147_CULV_BORELOGS.GPJ NC_DOT.GDT 4/15/15