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PROJECT: 45721 REFERENCE: B-5765

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

**STRUCTURE**  
**SUBSURFACE INVESTIGATION**

COUNTY DAVIDSON  
 SITE DESCRIPTION BRIDGE NO. 115 ON SR 1711  
(GUMTREE RD.) OVER WINSTON-SALEM SOUTHBOUND  
RAILROAD

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5765	1	6

CAUTION NOTICE

THE SUBSURFACE INFORMATION AND THE SUBSURFACE INVESTIGATION ON WHICH IT IS BASED WERE MADE FOR THE PURPOSE OF PREPARING THE SCOPE OF WORK TO BE INCLUDED IN THE REQUEST FOR PROPOSAL. 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.

SOIL AND ROCK BOUNDARIES WITHIN A BOREHOLE ARE BASED ON GEOTECHNICAL INTERPRETATION UNLESS ENCOUNTERED IN A SAMPLE. INTERPRETED BOUNDARIES MAY NOT NECESSARILY REFLECT ACTUAL SUBSURFACE CONDITIONS BETWEEN SAMPLED STRATA AND BOREHOLE INFORMATION MAY NOT NECESSARILY REFLECT ACTUAL SUBSURFACE CONDITIONS BETWEEN BORINGS. 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:
- 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.
  - 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

J.K. STICKNEY

C.L. SMITH

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INVESTIGATED BY J.K. STICKNEY

DRAWN BY T.T. WALKER

CHECKED BY J.E. BEVERLY

SUBMITTED BY K.B. MILLER

DATE AUGUST 2019



Designed by:

957A789AED704CB  
 8/15/2019

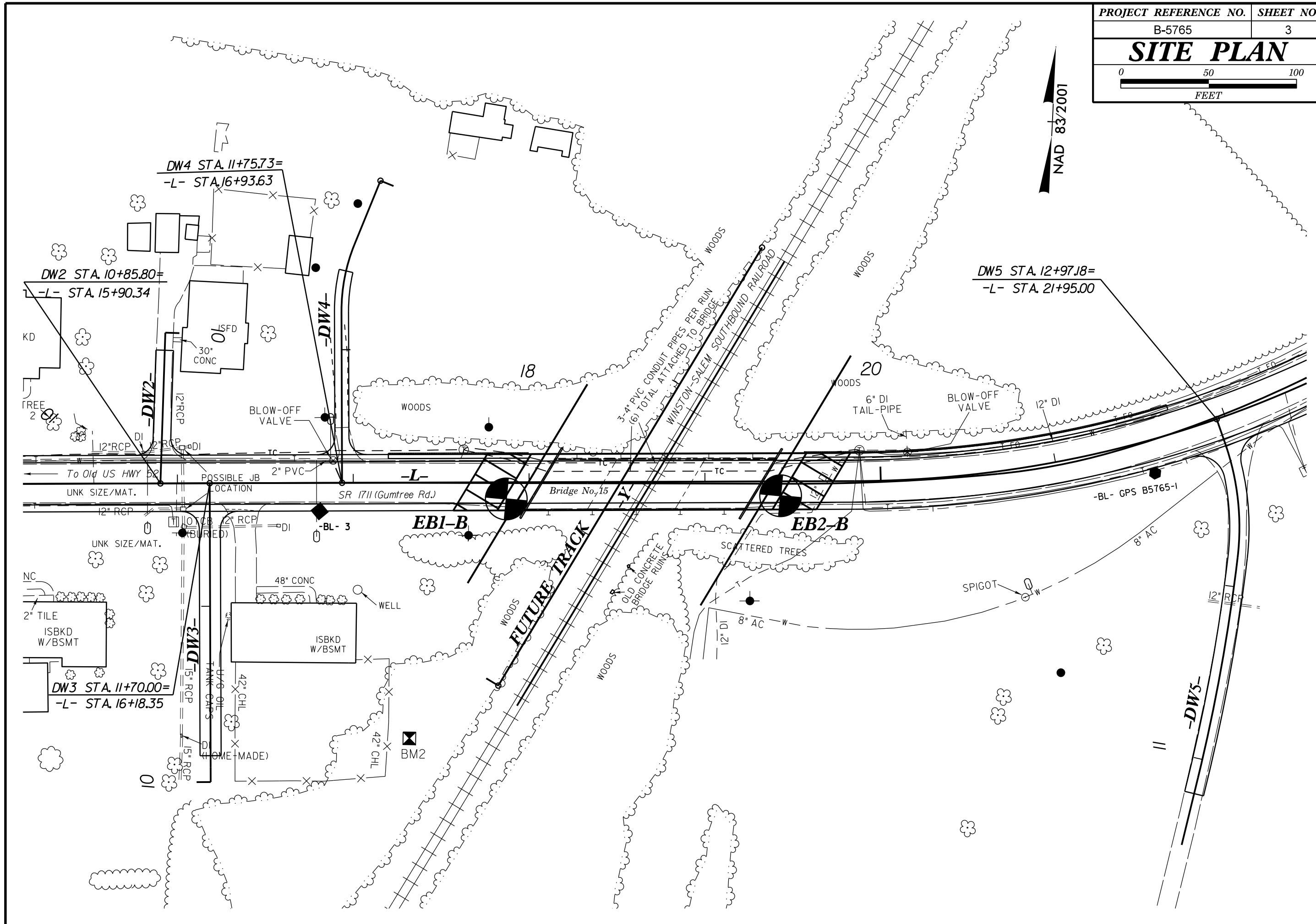
SIGNATURE DATE

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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.

NAD 83/2001



# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 45721.1.1		TIP B-5765		COUNTY DAVIDSON		GEOLOGIST Stickney, J. K.									
SITE DESCRIPTION Bridge No. 115 on SR 1711 (Gumtree Rd.) over Winston-Salem Southbound Railroad							GROUND WTR (ft)								
BORING NO. EB1-B		STATION 17+87		OFFSET 10 ft RT		ALIGNMENT -L-									
COLLAR ELEV. 907.6 ft		TOTAL DEPTH 74.4 ft		NORTHING 811,902		EASTING 1,638,318									
DRILL RIG/HAMMER EFF./DATE HFC0072 CME-550X 92% 08/15/2018			DRILL METHOD NW Casing w/ Advancer			HAMMER TYPE Automatic									
DRILLER Smith, C. L.		START DATE 07/10/19		COMP. DATE 07/10/19		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
920															
915															
910															
905															
900	903.3	4.3	1	1	1										
895	898.3	9.3	3	2	2										
890	893.3	14.3	4	5	6										
885	888.3	19.3	2	3	4										
880	883.3	24.3	3	4	4										
875	878.3	29.3	3	3	5										
870	873.3	34.3	5	5	6										
865	868.3	39.3	4	4	7										
860	863.3	44.3	3	6	7										
855	858.3	49.3	7	9	11										
850	853.3	54.3	11	15	17										
845	848.3	59.3	16	18	26										
840	843.3	64.3	46	54/0.4											100/0.9

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			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
840															
	838.3	69.3													
835	833.3	74.3													

Match Line

WEATHERED ROCK  
Brown-White (GRANITE) (continued)

Boring Terminated at Elevation 833.2 ft in CRYSTALLINE ROCK (GRANITE)

Note:  
1. Unable to drill EB1-A due to underground utilities and unsafe conditions near C/L

NCDOT BORE DOUBLE B-5765\_BH\_GEO\_BRD0115.GPJ NC\_DOT\_GDT\_8/15/19





# Bridge No. 115 on SR 1711 (Gumtree Rd.) over Winston Salem Southbound Railroad

## SITE PHOTOGRAPHS



**Photograph No. 1:** Looking from End Bent 2 toward End Bent 1