

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BP14.R024	1	10

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

STRUCTURE
SUBSURFACE INVESTIGATION

COUNTY HAYWOOD
 PROJECT DESCRIPTION EMERGENCY BRIDGE
REPLACEMENT OF BRIDGE 266 ON SR 1212
(JOHNSON BRANCH RD.) OVER CAMPBELL CREEK
EAST OF SR 1212 (CAMPBELL CREEK RD)
 SITE DESCRIPTION _____

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 1919 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:
- 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

G. ALBRIGHT

B. WEISERBS

GEI

INVESTIGATED BY G. ALBRIGHT

B. WEISERBS

DRAWN BY G. ALBRIGHT

CHECKED BY P. ZHANG

SUBMITTED BY HDR

DATE APRIL 2025

HDR HDR Engineering, Inc. of the Carolinas
 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
 N.C.B.E.L.S. License Number: F-0116



Signed by:

Paul Zhang

4/18/2025

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SIGNATURE

DATE

**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**

REFERENCE: BP14.R024

PROJECT: N/A

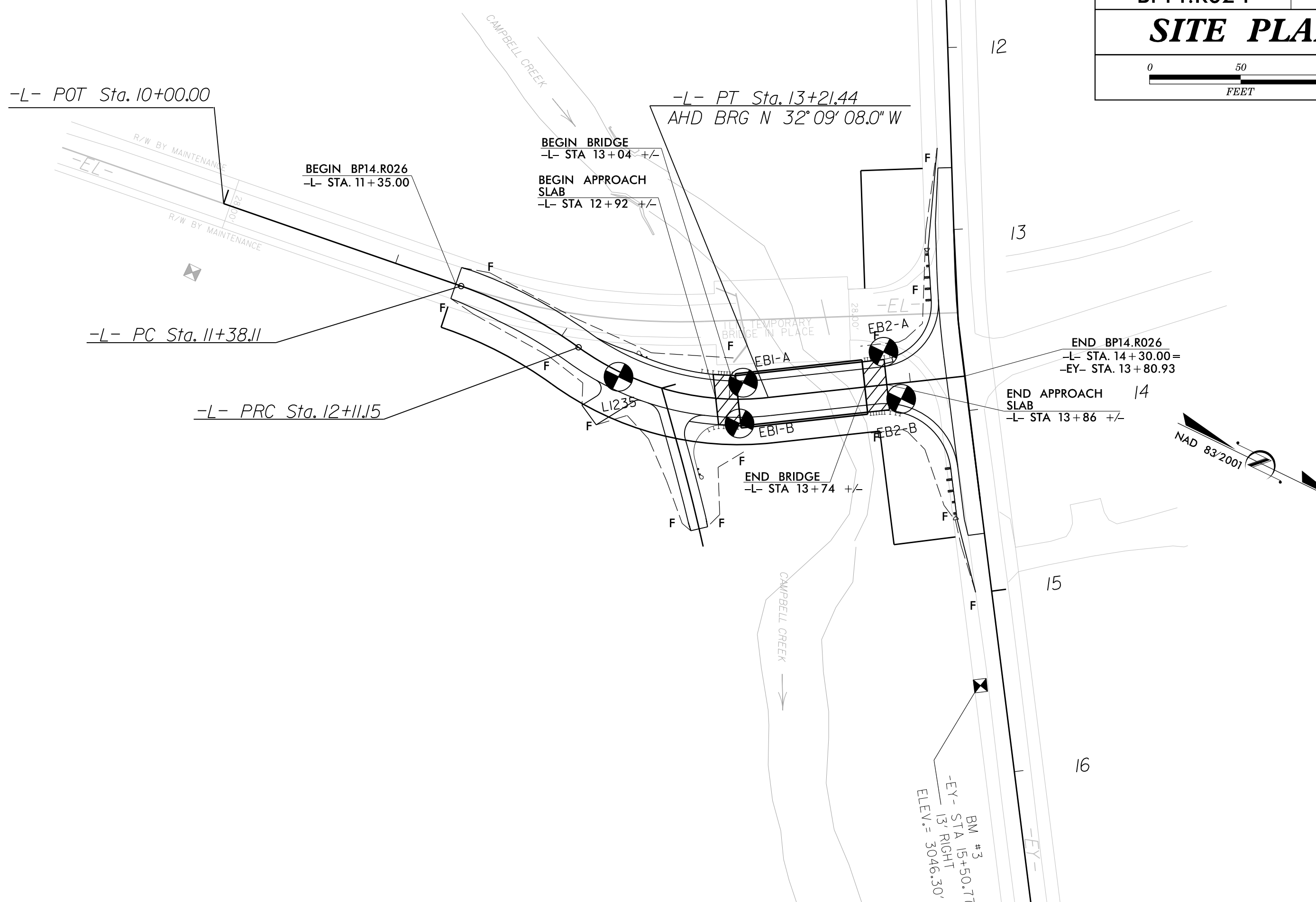
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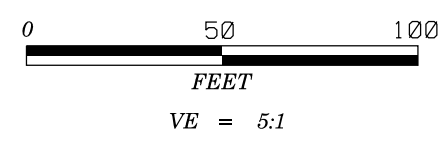
<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2	LEGEND (SOIL & ROCK)
3	SITE PLAN
4	BRIDGE PROFILE
5-6	CROSS SECTIONS
7-9	BORING LOGS
10	SITE PHOTOGRAPHS

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT
SUBSURFACE INVESTIGATION
SOIL LEGEND AND AASHTO CLASSIFICATION**

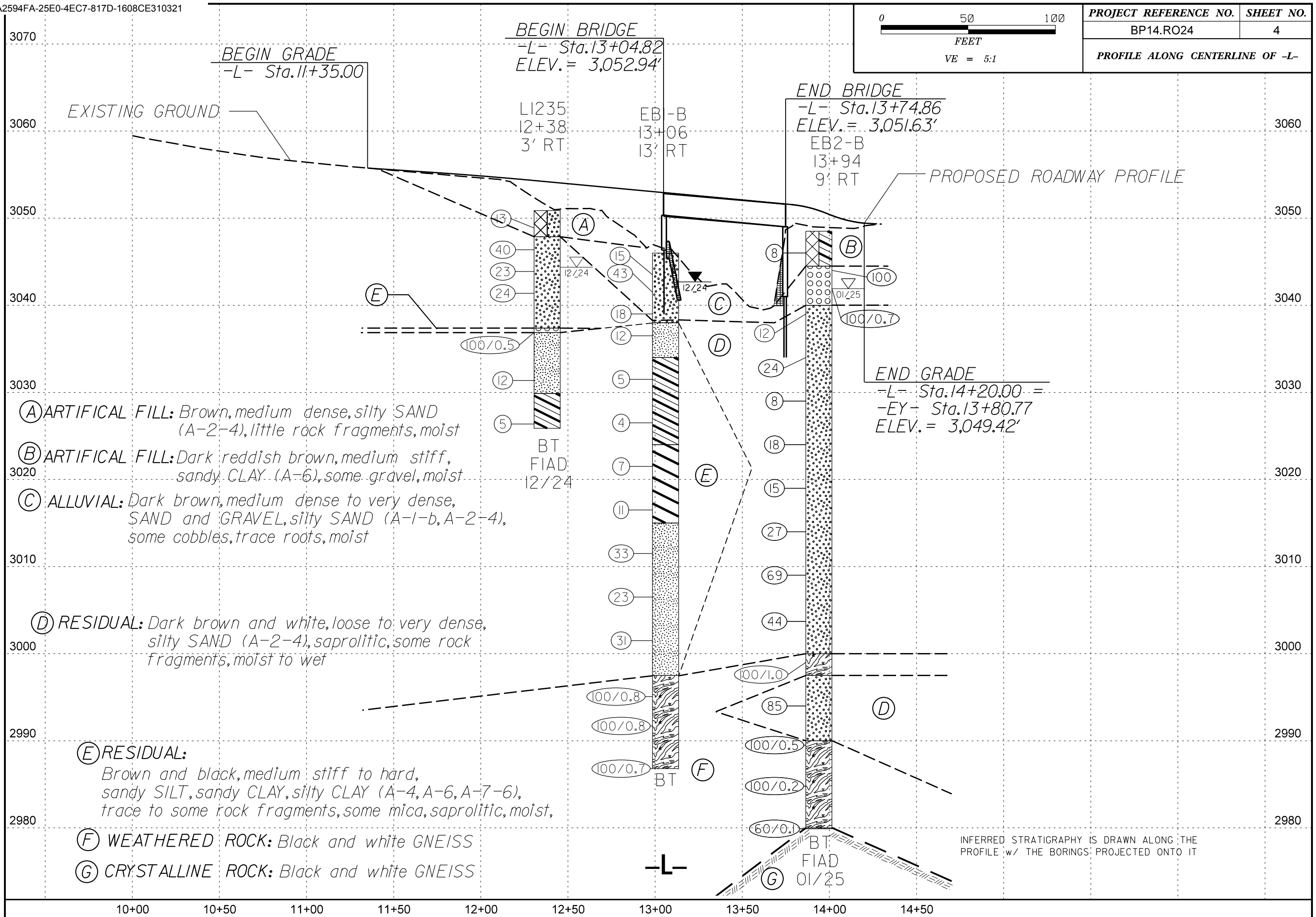
SOIL DESCRIPTION	GRADATION	ROCK DESCRIPTION	TERMS AND DEFINITIONS
SOIL IS CONSIDERED UNCONSOLIDATED, SEMI-CONSOLIDATED, OR WEATHERED EARTH MATERIALS THAT CAN BE PENETRATED WITH A CONTINUOUS FLIGHT POWER AUGER AND YIELD LESS THAN 100 BLOWS PER FOOT ACCORDING TO THE STANDARD PENETRATION TEST (AASHTO T 206, ASTM D1586). SOIL CLASSIFICATION IS BASED ON THE AASHTO SYSTEM. BASIC DESCRIPTIONS GENERALLY INCLUDE THE FOLLOWING: CONSISTENCY, COLOR, TEXTURE, MOISTURE, AASHTO CLASSIFICATION, AND OTHER PERTINENT FACTORS SUCH AS MINERALOGICAL COMPOSITION, ANGULARITY, STRUCTURE, PLASTICITY, ETC. FOR EXAMPLE, <i>VERY STIFF, GRAV. SILTY CLAY, MOIST WITH INTERBEDDED FINE SAND LAYERS, HIGHLY PLASTIC, A-7-6</i>	WELL GRADED - INDICATES A GOOD REPRESENTATION OF PARTICLE SIZES FROM FINE TO COARSE. UNIFORMLY GRADED - INDICATES THAT SOIL PARTICLES ARE ALL APPROXIMATELY THE SAME SIZE. GAP-GRADED - INDICATES A MIXTURE OF UNIFORM PARTICLE SIZES OF TWO OR MORE SIZES.	HARD ROCK IS NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT REFUSAL IF TESTED. AN INFERRED ROCK LINE INDICATES THE LEVEL AT WHICH NON-COASTAL PLAIN MATERIAL WOULD YIELD SPT REFUSAL. SPT REFUSAL IS PENETRATION BY A SPLIT SPOON SAMPLER EQUAL TO OR LESS THAN 60 BLOWS PER FOOT IN NON-COASTAL PLAIN MATERIAL. THE TRANSITION BETWEEN SOIL AND ROCK IS OFTEN REPRESENTED BY A ZONE OF WEATHERED ROCK. ROCK MATERIALS ARE TYPICALLY DIVIDED AS FOLLOWS:	ALLUVIUM (ALLUV.) - SOILS THAT HAVE BEEN TRANSPORTED BY WATER. AQUIFER - A WATER BEARING FORMATION OR STRATA. ARENACEOUS - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OR THAT CONTAIN SAND. ARGILLACEOUS - APPLIED TO ALL ROCKS OR SUBSTANCES COMPOSED OF CLAY MINERALS, OR HAVING A NOTABLE PROPORTION OF CLAY IN THEIR COMPOSITION, SUCH AS SHALE, SLATE, ETC. ARTESIAN - GROUND WATER THAT IS UNDER SUFFICIENT PRESSURE TO RISE ABOVE THE LEVEL AT WHICH IT IS ENCOUNTERED, BUT WHICH DOES NOT NECESSARILY RISE TO OR ABOVE THE GROUND SURFACE. CALCAREOUS (CALC.) - SOILS THAT CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE. COLLUVIUM - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM OF SLOPE. CORE RECOVERY (REC.) - TOTAL LENGTH OF ALL MATERIAL RECOVERED IN THE CORE BARREL DIVIDED BY TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE. DIKE - A TABULAR BODY OF IGNEOUS ROCK THAT CUTS ACROSS THE STRUCTURE OF ADJACENT ROCKS OR CUTS MASSIVE ROCK. DIP - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE HORIZONTAL. DIP DIRECTION (DIP AZIMUTH) - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE LINE OF DIP, MEASURED CLOCKWISE FROM NORTH. FAULT - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE. FISSILE - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES. FLOAT - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLODGED FROM PARENT MATERIAL. FLOOD PLAIN (FP) - LAND BORDERING A STREAM, BUILT OF SEDIMENTS DEPOSITED BY THE STREAM. FORMATION (FM) - A MAPPABLE GEOLOGIC UNIT THAT CAN BE RECOGNIZED AND TRACED IN THE FIELD. JOINT - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED. LEDGE - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO ITS LATERAL EXTENT. LENS - A BODY OF SOIL OR ROCK THAT THINS OUT IN ONE OR MORE DIRECTIONS. MOTTLED (MDT) - IRREGULARLY MARKED WITH SPOTS OF DIFFERENT COLORS. MOTTLING IN SOILS USUALLY INDICATES POOR AERATION AND LACK OF GOOD DRAINAGE. PERCHED WATER - WATER MAINTAINED ABOVE THE NORMAL GROUND WATER LEVEL BY THE PRESENCE OF AN INTERVENING IMPERVIOUS STRATUM. RESIDUAL (RES.) SOIL - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK. ROCK QUALITY DESIGNATION (RQD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE. SAPROLITE (SAP) - RESIDUAL SOIL THAT RETAINS THE RELIC STRUCTURE OR FABRIC OF THE PARENT ROCK. SILL - AN INTRUSIVE BODY OF IGNEOUS ROCK OF APPROXIMATELY UNIFORM THICKNESS AND RELATIVELY THIN COMPARED WITH ITS LATERAL EXTENT, THAT HAS BEEN EMPLACED PARALLEL TO THE BEDDING OR SCHISTOSITY OF THE INTRUDED ROCKS. SLICKENSIDE - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE. STANDARD PENETRATION TEST (PENETRATION RESISTANCE) (SPT) - NUMBER OF BLOWS IN OR BPF OF A 140 LB. HAMMER FALLING 30 INCHES REQUIRED TO PRODUCE A PENETRATION OF 1 FOOT INTO SOIL WITH A 2 INCH OUTSIDE DIAMETER SPLIT SPOON SAMPLER. SPT REFUSAL IS PENETRATION EQUAL TO OR LESS THAN 60 BLOWS PER FOOT. STRATA CORE RECOVERY (SREC.) - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE. STRATA ROCK QUALITY DESIGNATION (SRQD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS WITHIN A STRATUM EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF STRATA AND EXPRESSED AS A PERCENTAGE. TOPSOIL (TS.) - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.
SOIL LEGEND AND AASHTO CLASSIFICATION	ANGULARITY OF GRAINS THE ANGULARITY OR ROUNDNESS OF SOIL GRAINS IS DESIGNATED BY THE TERMS: ANGULAR, SUBANGULAR, SUBROUNDED, OR ROUNDED.	WEATHERED ROCK (WR) CRYSTALLINE ROCK (CR) NON-CRYSTALLINE ROCK (NCR) COASTAL PLAIN SEDIMENTARY ROCK (CP)	
MINERALOGICAL COMPOSITION MINERAL NAMES SUCH AS QUARTZ, FELDSPAR, MICA, TALC, KAOLIN, ETC. ARE USED IN DESCRIPTIONS WHEN THEY ARE CONSIDERED OF SIGNIFICANCE.	COMPRESSIBILITY SLIGHTLY COMPRESSIBLE LL < 31 MODERATELY COMPRESSIBLE LL = 31 - 50 HIGHLY COMPRESSIBLE LL > 50	WEATHERING FRESH VERY SLIGHT (V SLI.) SLIGHT (SLI.) MODERATE (MOD.) MODERATELY SEVERE (MOD. SEV.) SEVERE (SEV.) VERY SEVERE (V SEV.) COMPLETE	
PERCENTAGE OF MATERIAL ORGANIC MATERIAL TRACE OF ORGANIC MATTER 2 - 3% LITTLE ORGANIC MATTER 3 - 5% MODERATELY ORGANIC 5 - 10% HIGHLY ORGANIC > 10%	GROUND WATER WATER LEVEL IN BORE HOLE IMMEDIATELY AFTER DRILLING STATIC WATER LEVEL AFTER 24 HOURS PERCHED WATER, SATURATED ZONE, OR WATER BEARING STRATA SPRING OR SEEP	ROCK HARDNESS VERY HARD HARD MODERATELY HARD MEDIUM HARD SOFT VERY SOFT	
CONSISTENCY OR DENSENESS	MISCELLANEOUS SYMBOLS		
TEXTURE OR GRAIN SIZE	RECOMMENDATION SYMBOLS		
SOIL MOISTURE - CORRELATION OF TERMS	ABBREVIATIONS		
PLASTICITY	EQUIPMENT USED ON SUBJECT PROJECT		
COLOR			

PROJECT REFERENCE NO.	SHEET NO.
BP14.R024	3
SITE PLAN	
 0 50 100 FEET	





PROJECT REFERENCE NO.	SHEET NO.
BP14.R024	4
PROFILE ALONG CENTERLINE OF -L-	



BEGIN GRADE
-L- Sta. 11+35.00

BEGIN BRIDGE
-L- Sta. 13+04.82
ELEV. = 3,052.94'

END BRIDGE
-L- Sta. 13+74.86
ELEV. = 3,051.63'

END GRADE
-L- Sta. 14+20.00 =
-EY- Sta. 13+80.77
ELEV. = 3,049.42'

EXISTING GROUND

PROPOSED ROADWAY PROFILE

- (A) **ARTIFICIAL FILL:** Brown, medium dense, silty SAND (A-2-4), little rock fragments, moist
- (B) **ARTIFICIAL FILL:** Dark reddish brown, medium stiff, sandy CLAY (A-6), some gravel, moist
- (C) **ALLUVIAL:** Dark brown, medium dense to very dense, SAND and GRAVEL, silty SAND (A-1-b, A-2-4), some cobbles, trace roots, moist
- (D) **RESIDUAL:** Dark brown and white, loose to very dense, silty SAND (A-2-4), saprolitic, some rock fragments, moist to wet
- (E) **RESIDUAL:** Brown and black, medium stiff to hard, sandy SILT, sandy CLAY, silty CLAY (A-4, A-6, A-7-6), trace to some rock fragments, some mica, saprolitic, moist,
- (F) **WEATHERED ROCK:** Black and white GNEISS
- (G) **CRYSTALLINE ROCK:** Black and white GNEISS

L1235
12+38
3' RT

EB-B
13+06
13' RT

EB2-B
13+94
9' RT

(13)
(40)
(23)
(24)
(12)
(5)
BT
FIAD
12/24

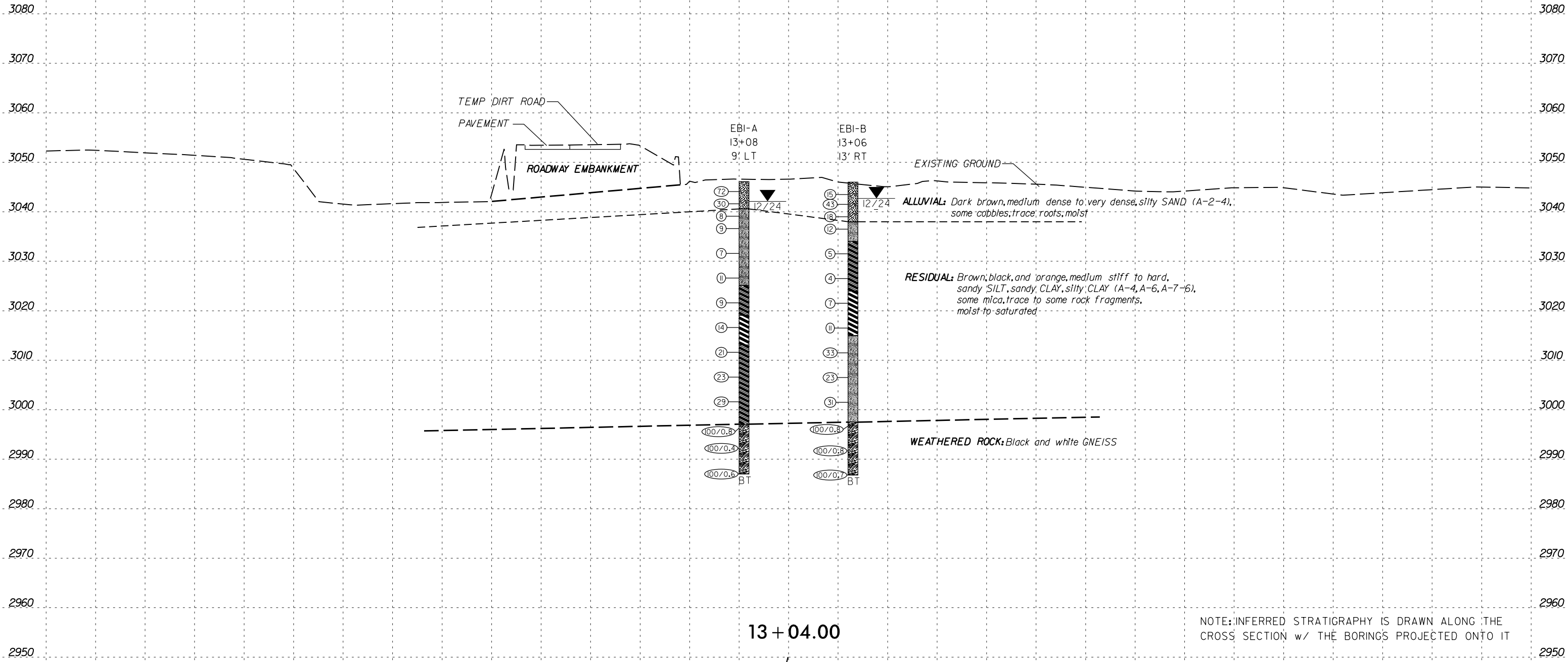
(15)
(43)
(18)
(12)
(5)
(4)
(7)
(11)
(33)
(23)
(31)
BT

(8)
(100)
(100/0.7)
(12)
(24)
(8)
(18)
(15)
(27)
(69)
(44)
(85)
(100/1.0)
(100/0.8)
(100/0.8)
(100/0.5)
(100/0.2)
(60/0.1)
BT
FIAD
01/25

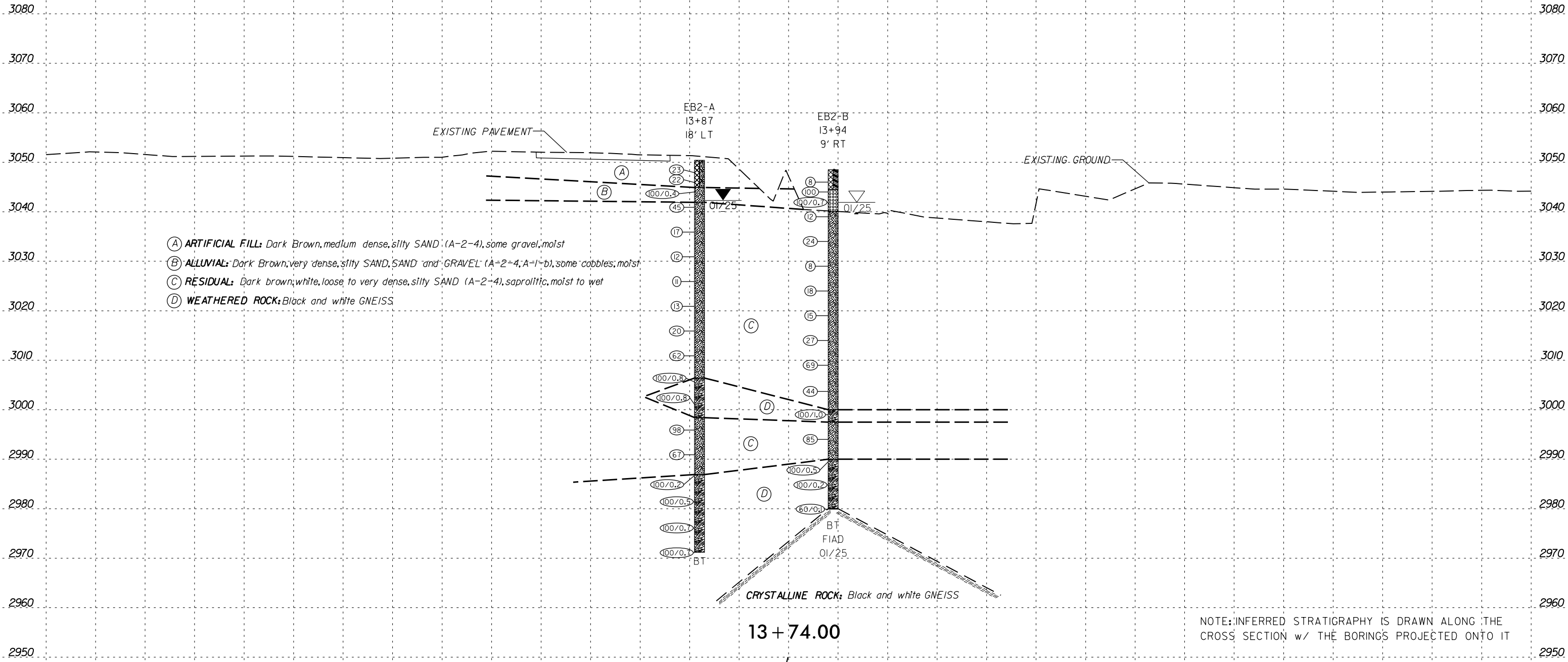
-L-

INFERRED STRATIGRAPHY IS DRAWN ALONG THE PROFILE w/ THE BORINGS PROJECTED ONTO IT

6/23



11/7/24 AM
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NOTE: INFERRED STRATIGRAPHY IS DRAWN ALONG THE CROSS SECTION w/ THE BORINGS PROJECTED ONTO IT

GEOTECHNICAL BORING REPORT

BORE LOG

WBS BP14.R024		TIP BP14.R024		COUNTY HAYWOOD		GEOLOGIST G. Albright									
SITE DESCRIPTION Emergency Replacement of Bridge 266 over Campbell Creek in Haywood County							GROUND WTR (ft)								
BORING NO. EB1-A		STATION 13+08		OFFSET 9 ft LT		ALIGNMENT -L-									
COLLAR ELEV. 3,046.1 ft		TOTAL DEPTH 59.1 ft		NORTHING 667,151		EASTING 780,320									
DRILL RIG/HAMMER EFF./DATE GEO047 Diedrich D-70 90% 02/09/2024			DRILL METHOD H.S. Augers		HAMMER TYPE Automatic										
DRILLER Messick, J.		START DATE 12/16/24		COMP. DATE 12/16/24		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
3050															
3045	3,045.1	1.0	7	17	55										3,046.1
	3,042.6	3.5	10	15	15										
3040	3,040.1	6.0	3	3	5										3,040.6
	3,037.6	8.5	6	4	5										
3035	3,032.6	13.5	6	4	3										
3030	3,027.6	18.5	6	5	6										
3025	3,022.6	23.5	3	4	5										3,025.1
	3,019.1	27.0													
3020	3,017.6	28.5	5	6	8										3,019.1
	3,013.1	33.0													
3015	3,012.6	33.5	8	9	12										3,013.1
3010	3,007.6	38.5	9	11	12										
3005	3,002.6	43.5	12	12	17										
3000	2,997.6	48.5	18	42	58/0.3										2,997.1
2995	2,992.6	53.5	100/0.4												2,997.1
2990	2,987.6	58.5	95	5/0.1											2,987.0
															59.1
Boring Terminated at Elevation 2,987.0 ft in WR: GNEISS															

WBS BP14.R024		TIP BP14.R024		COUNTY HAYWOOD		GEOLOGIST G. Albright									
SITE DESCRIPTION Emergency Replacement of Bridge 266 over Campbell Creek in Haywood County							GROUND WTR (ft)								
BORING NO. EB1-B		STATION 13+06		OFFSET 13 ft RT		ALIGNMENT -L-									
COLLAR ELEV. 3,046.0 ft		TOTAL DEPTH 59.2 ft		NORTHING 667,159		EASTING 780,341									
DRILL RIG/HAMMER EFF./DATE GEO047 Diedrich D-70 90% 02/09/2024			DRILL METHOD H.S. Augers		HAMMER TYPE Automatic										
DRILLER Messick, J.		START DATE 12/16/24		COMP. DATE 12/16/24		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
3050															
3045	3,044.5	1.5	4	7	8										3,046.0
	3,042.5	3.5	33	23	20										
3040	3,040.0	6.0	2	5	13										3,040.6
	3,037.5	8.5	10	6	6										
3035	3,032.5	13.5	2	2	3										
3030	3,027.5	18.5	2	2	2										
3025	3,022.5	23.5	2	2	5										3,025.1
	3,019.1	27.0													
3020	3,017.5	28.5	5	5	6										3,019.1
	3,012.5	33.5	10	16	17										3,013.1
3015	3,007.5	38.5	6	10	13										3,013.1
3010	3,002.5	43.5	5	10	21										
3005	2,997.5	48.5	45	55/0.3											2,997.1
3000	2,992.5	53.5	37	63/0.3											2,997.1
2995	2,987.5	58.5	40	60/0.2											2,987.0
															59.2
Boring Terminated at Elevation 2,986.8 ft in WR: GNEISS															

NCDOT BORE DOUBLE BP14.R024.GPJ NC_DOT_GDT 4/17/25

GEOTECHNICAL BORING REPORT

BORE LOG

WBS BP14.R024		TIP BP14.R024		COUNTY HAYWOOD		GEOLOGIST B. Weiserbs										
SITE DESCRIPTION Emergency Replacement of Bridge 266 over Campbell Creek in Haywood County							GROUND WTR (ft)									
BORING NO. EB2-B		STATION 13+94		OFFSET 9 ft RT		ALIGNMENT -L-										
COLLAR ELEV. 3,048.5 ft		TOTAL DEPTH 68.6 ft		NORTHING 667,233		EASTING 780,290										
DRILL RIG/HAMMER EFF./DATE GEO047 Diedrich D-70 90% 02/09/2024			DRILL METHOD H.S. Augers		HAMMER TYPE Automatic											
DRILLER K. Sargent		START DATE 01/29/25		COMP. DATE 01/29/25		SURFACE WATER DEPTH N/A										
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	LOG G	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100						
3050																
	3,047.0	1.5	5	3	5										3,048.5	0.0
3045	3,045.0	3.5	2	70	30										3,044.5	4.0
	3,042.5	6.0	8	92/0.2											3,040.0	8.5
3040	3,040.0	8.5	6	8	4										3,040.0	8.5
	3,035.0	13.5	6	11	13											
3035	3,035.0	13.5	6	11	13											
	3,030.0	18.5	9	4	4											
3030	3,030.0	18.5	9	4	4											
	3,025.0	23.5	3	6	12											
3025	3,025.0	23.5	3	6	12											
	3,020.0	28.5	6	7	8											
3020	3,020.0	28.5	6	7	8											
	3,015.0	33.5	11	12	15											
3015	3,015.0	33.5	11	12	15											
	3,010.0	38.5	20	37	32											
3010	3,010.0	38.5	20	37	32											
	3,005.0	43.5	10	14	30											
3005	3,005.0	43.5	10	14	30											
	3,000.0	48.5	38	62												
3000	3,000.0	48.5	38	62												
	2,995.0	53.5	37	46	39											
2995	2,995.0	53.5	37	46	39											
	2,990.0	58.5	100/0.5													
2990	2,990.0	58.5	100/0.5													
	2,985.0	63.5	100/0.2													
2985	2,985.0	63.5	100/0.2													
	2,980.0	68.5	60/0.1													
2980	2,980.0	68.5	60/0.1													

WBS BP14.R024		TIP BP14.R024		COUNTY HAYWOOD		GEOLOGIST G. Albright										
SITE DESCRIPTION Emergency Replacement of Bridge 266 over Campbell Creek in Haywood County							GROUND WTR (ft)									
BORING NO. L1235		STATION 12+38		OFFSET 3 ft RT		ALIGNMENT -L-										
COLLAR ELEV. 3,050.9 ft		TOTAL DEPTH 25.0 ft		NORTHING 667,088		EASTING 780,347										
DRILL RIG/HAMMER EFF./DATE GEO047 Diedrich D-70 90% 02/09/2024			DRILL METHOD H.S. Augers		HAMMER TYPE Automatic											
DRILLER Messick, J.		START DATE 12/17/24		COMP. DATE 12/17/24		SURFACE WATER DEPTH N/A										
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	LOG G	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100						
3055																
	3,049.9	1.0	5	6	7										3,050.9	0.0
3050	3,049.9	1.0	5	6	7										3,049.9	3.0
	3,047.4	3.5	21	21	19										3,047.9	3.0
3045	3,044.9	6.0	10	13	10										3,044.9	6.0
	3,042.4	8.5	21	11	13											
3040	3,042.4	8.5	21	11	13											
	3,037.4	13.5	100/0.5												3,037.4	13.5
3035	3,037.4	13.5	100/0.5												3,036.9	14.0
	3,032.4	18.5	16	7	5											
3030	3,032.4	18.5	16	7	5										3,029.9	21.0
	3,027.4	23.5	5	3	2										3,025.9	25.0

NCDOT BORE DOUBLE BP14.R024.GPJ NC_DOT_GDT 4/17/25

SITE PHOTOGRAPHS

