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REFERENCE: B-4746

PROJECT: 38518

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.	B-4746	1	5

CONTENTS

LINE	STATION	PLAN	PROFILE
-L-	10+50.00 to 21+55.30	4	5
-Y1-	11+50.00 to 15+00.00	4	5
-Y2-	10+90.00 to 13+83.34	4	5

ROADWAY SUBSURFACE INVESTIGATION

COUNTY FORSYTH
PROJECT DESCRIPTION BRIDGE NO. 229 OVER
NORFOLK & WESTERN RAILROAD ON
SR 2264 (AKRON DR.)

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

C.C. MURRAY

J.E. ESTEP

M.R. MOORE

INVESTIGATED BY J.E. BEVERLY

DRAWN BY J.K. McCLURE

CHECKED BY C.B. LITTLE

SUBMITTED BY C.B. LITTLE

DATE JANUARY 2015



930443D5AC8E3523/2015

SIGNATURE

DATE

SIGNATURE

DATE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4746	3	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
38518.1.1	BRZ-2264(3)	PE	

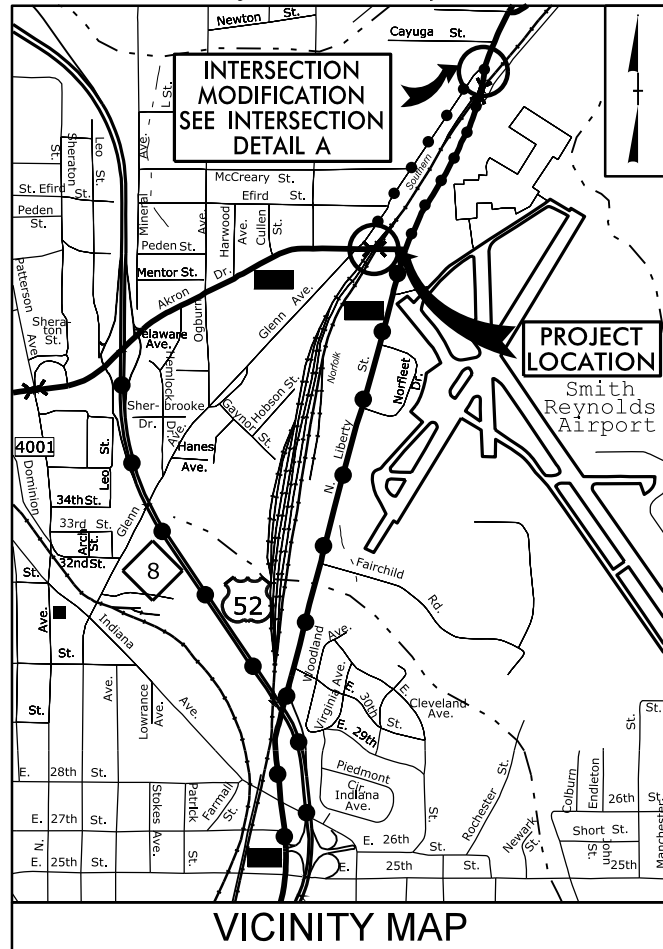
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

FORSYTH COUNTY

LOCATION: BRIDGE NO. 229 OVER NORFOLK SOUTHERN RAILROAD ON SR 2264 (AKRON DR.)

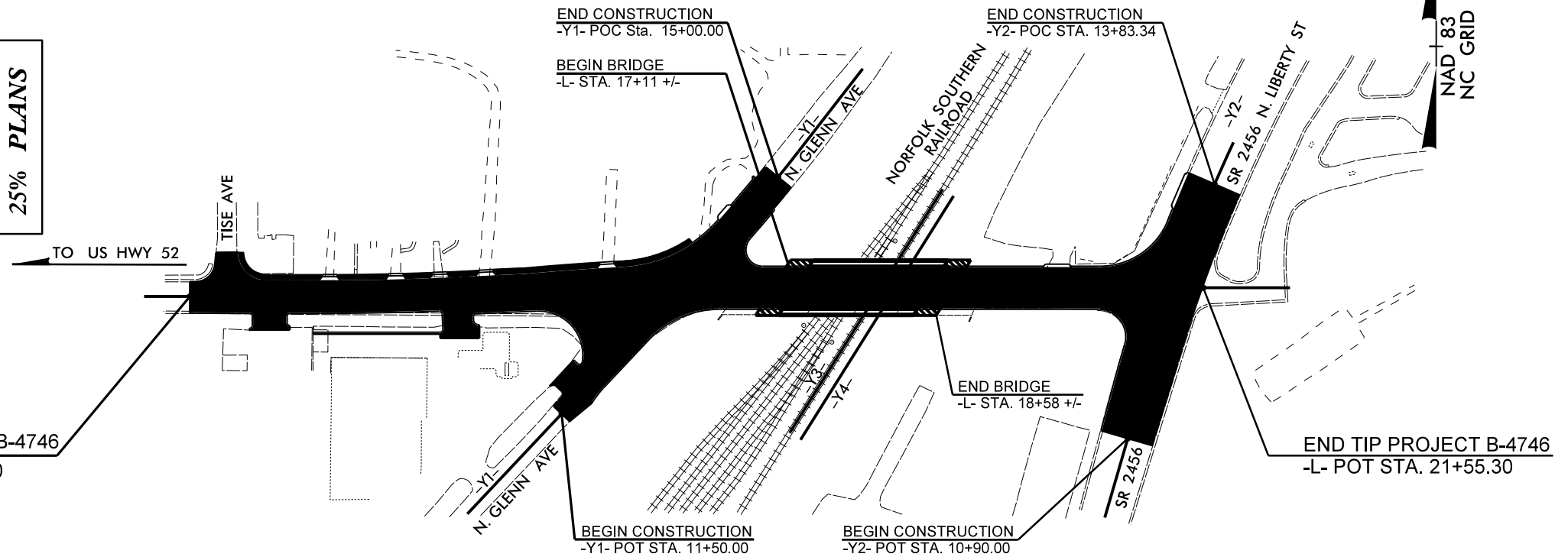
TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols
See Sheets 1C-1 Through 1C-? For Survey Control Sheets



25% PLANS

- — ● — ● — ● — DETOUR ROUTE
- — ● — TRUCK DETOUR ROUTE

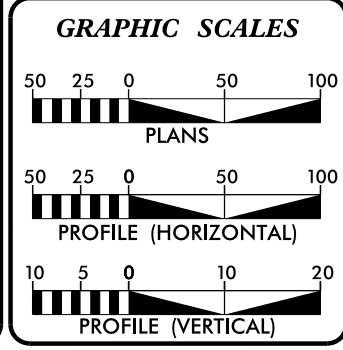


CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD__.

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE CITY OF WINSTON-SALEM.

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONTRACT:



DESIGN DATA

ADT 2017 =	8900
ADT 2037 =	10600
K =	10 %
D =	55 %
T =	7 % *
V =	40 MPH
* TTST = 2% DUAL 5%	
FUNC CLASS = LOCAL SUBREGIONAL TIER	

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-4746	=	0.181 MI
LENGTH OF STRUCTURE TIP PROJECT B-4746	=	0.028 MI
TOTAL LENGTH OF TIP PROJECT B-4746	=	0.209 MI

PLANS PREPARED BY:
PARSONS BRINCKERHOFF
24 PAYETTEVILLE STREET
SUITE 1500
RALEIGH, NC 27601
LICENSE NO. E-4046

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
SEPTEMBER 18, 2015

LETTING DATE:
SEPTEMBER 19, 2017

NCDOT CONTACT:

PLANS PREPARED FOR:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr.
Raleigh NC, 27610

DAVID KEISER, PE
PROJECT ENGINEER

ERIC MISAK
PROJECT DESIGN ENGINEER

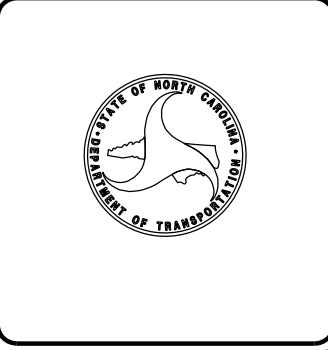
BRENDA MOORE, PE

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

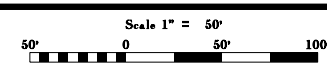
ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



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PROJECT REFERENCE NO. B-4746		SHEET NO. 04	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER			
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			
PLANS PREPARED BY: PARSONS BRINCKERHOFF 434 FAYETTEVILLE STREET SUITE 1500 RALEIGH, NC 27601			

CURVE DATA -L- (AKRON DR)

PI Sta 12+80.42 Δ = 3°06'56.8" (LT) D = 1'46'45.7" L = 175.10' T = 87.57' R = 3,220.00' SE = RC RO = 48'	PI Sta 14+55.52 Δ = 3°06'56.8" (RT) D = 1'46'45.7" L = 175.10' T = 87.57' R = 3,220.00' SE = RC RO = 48'
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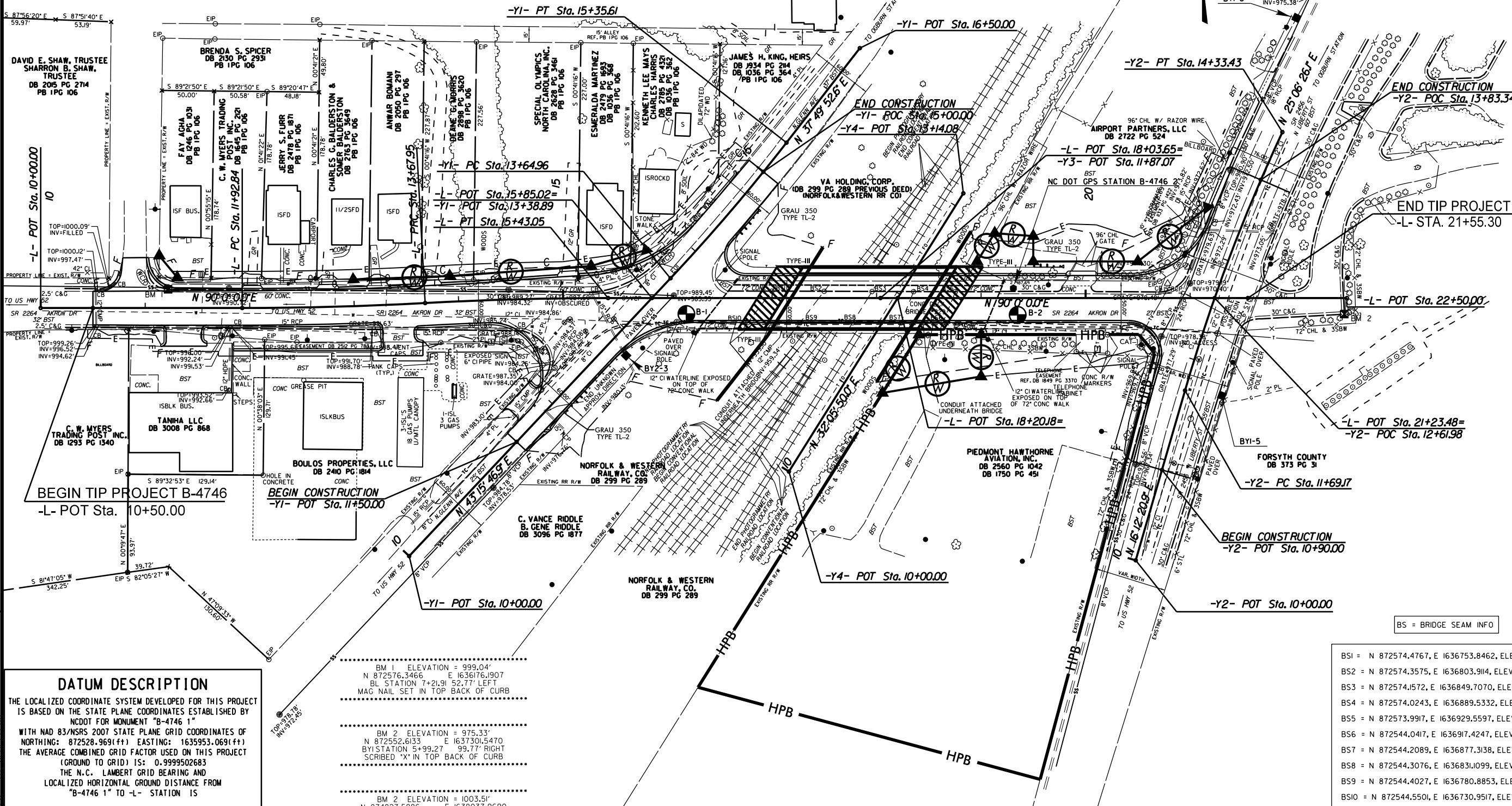
CURVE DATA -Y1- (N. GLENN AVE)

PI Sta 14+50.35 Δ = 5°25'54.4" (LT) D = 3'11'00.6" L = 170.62' T = 85.39' R = 1,800.00' SE = 3.0% RO = 78'	CURVE DATA -Y2- (N. LIBERTY ST.)
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PI Sta 13+01.57 Δ = 8°54'05.2" (RT) D = 3'22'06.7" L = 264.27' T = 132.40' R = 1,701.00' SE = 3.4% RO = 143'

NC GRID
NAD 83/NSRS 2007

NC GRID
NAD 83/NSRS 2007



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B-4746 1"

WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF
 NORTHING: 872528.9691(±) EASTING: 1635953.0691(±)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9999502683
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B-4746 1" TO -L- STATION IS

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

BM 1 ELEVATION = 999.04' N 872576.3466 E 1636176.1907 BL MAG SET IN TOP BACK OF CURB	BM 2 ELEVATION = 975.33' N 872552.6133 E 1637301.5470 BY1 STATION 5+99.27 99.77' RIGHT SCRIBED "X" IN TOP BACK OF CURB
BM 2 ELEVATION = 1003.51' N 874827.5886 E 1638037.9690 CHISELED SQUARE IN THE SOUTH EAST CORNER OF A CONCRETE PAD	

BS = BRIDGE SEAM INFO

BS1 = N 872574.4767, E 1636753.8462, ELEV. 992.72'
BS2 = N 872574.3575, E 1636803.9114, ELEV. 993.83'
BS3 = N 872574.1572, E 1636849.7070, ELEV. 993.68'
BS4 = N 872574.0243, E 1636889.5332, ELEV. 992.50'
BS5 = N 872573.9917, E 1636929.5597, ELEV. 990.43'
BS6 = N 872544.0417, E 1636917.4247, ELEV. 991.10'
BS7 = N 872544.2089, E 1636877.3138, ELEV. 992.89'
BS8 = N 872544.3076, E 1636831.0999, ELEV. 993.85'
BS9 = N 872544.4027, E 1636780.8853, ELEV. 993.43'
BS10 = N 872544.5501, E 1636730.9517, ELEV. 991.63'

SEE SHEET 5 FOR -L-, -Y1- & -Y2- PROFILES

5/28/99

PROJECT REFERENCE NO. B-4746	SHEET NO. 05
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS	L _L	P _L	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C-SAND	F-SAND	SILT	CLAY	#10	#40	#200		
SS-1	15 RT.	16+18 -L-	40-55	A-7-6	51	30	79	34.3	9.4	48.4	99	95	61		
SS-2			140-155	A-7-5	64	33	46	26	14.8	54.5	100	98	73		
SS-3			190-205	A-4	31	NP	75	55.5	20.9	16.1	100	98	45		
SS-4			240-255	A-4	31	NP	95	64.6	21.9	4	100	97	36		
SS-5			290-305	A-4	32	NP	97	59.3	26.9	4	99	96	40		
SS-6	16 RT.	19+35 -L-	37-52	A-2-4	29	NP	77	69	19.3	4	100	98	35		
SS-7			87-102	A-4	29	6	12.9	52.7	12.2	22.2	99	95	40		
SS-8			187-195	A-4	30	5	13.9	50.7	15.2	20.2	96	90	40		
SS-9			287-307	A-7-5	60	12	6.3	32.3	45.3	16.1	100	99	71		

PI = 12+50.00
EL = 996.94'
VC = 240'
K = 114
Ds = 55 MPH

-L- POT STA. 15+85.02 =
-Y1- POT STA. 13+38.89

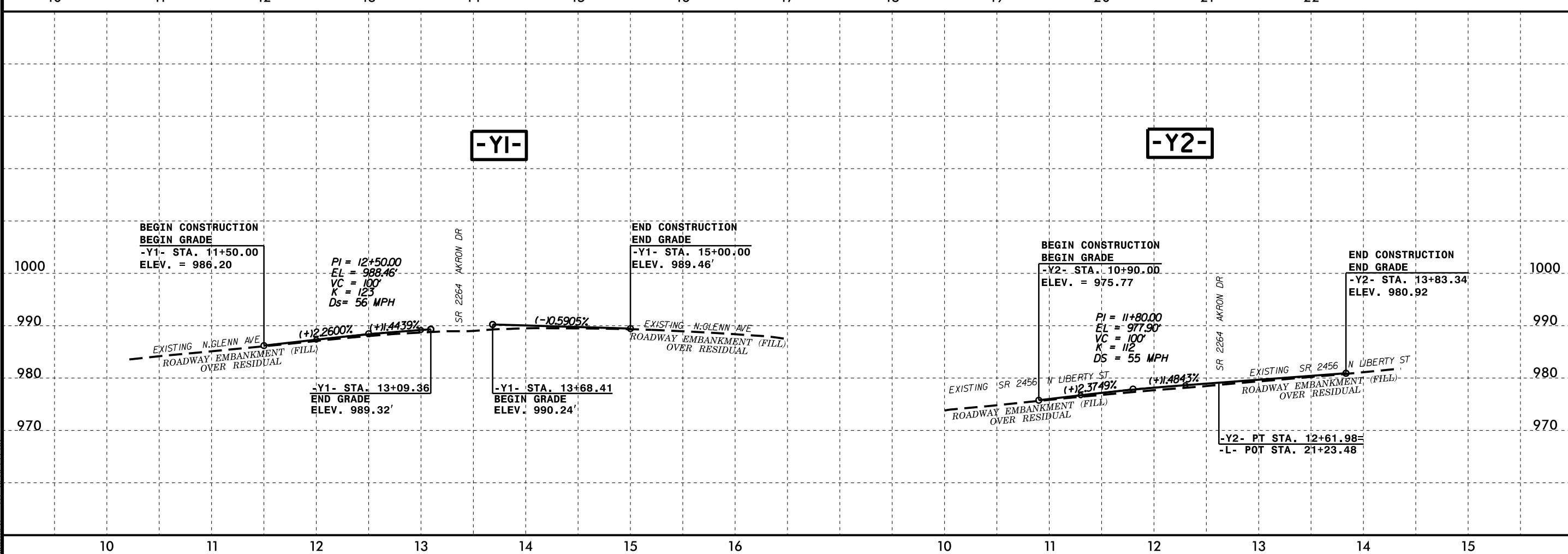
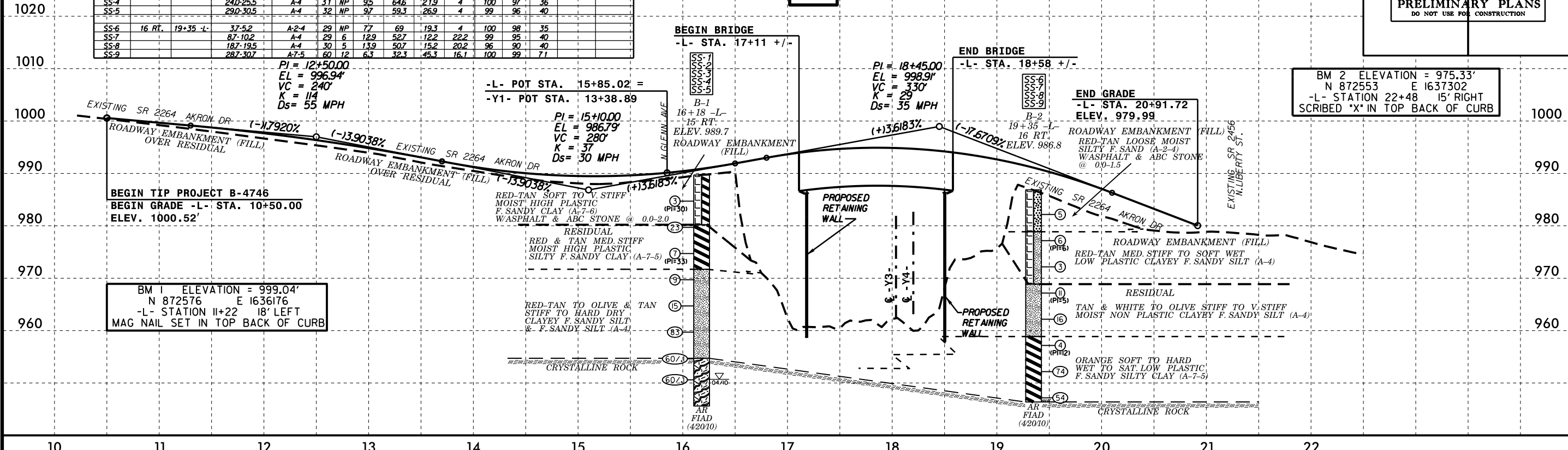
PI = 15+10.00
EL = 986.79'
VC = 280'
K = 37
Ds = 30 MPH

PI = 18+45.00
EL = 998.91'
VC = 330'
K = 29
Ds = 35 MPH

END BRIDGE
-L- STA. 18+58 +/-

END GRADE
-L- STA. 20+91.72
ELEV. 979.99

BM 2 ELEVATION = 975.33'
N 872553 E 1637302
-L- STATION 22+48 15' RIGHT
SCRIBED 'X' IN TOP BACK OF CURB



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