

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

SIGNING PLAN
ON SLOW COUNTY

LOCATION: WESTERN PARKWAY FROM APPROXIMATELY 1300 FT.
SOUTH OF COUNTRY CLUB RD. TO WESTERN BLVD.

TIP NO. U-4007B	SHEET NO. SIGN-1
APPROVED: <i>[Signature]</i>	
DATE: 7/29/10	
SEAL	

T.I.P.: U-4007B

CONTRACT: C202558

SUMMARY OF QUANTITIES

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4048000000	902	REINFORCED CONCRETE SIGN FOUNDATION	6	C.Y.
4054000000	902	PLAIN CONCRETE SIGN FOUNDATION	2	C.Y.
4057000000	SP	OVERHEAD FOOTING	110	C.Y.
4060000000	903	SUPPORTS, BREAKAWAY STEEL BEAM	5152	LB.
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	2037	L.F.
4078000000	903	SUPPORTS, 2 LB STEEL U-CHANNEL	6	EA.
4082100000	SP	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STATION "65+00 -Y2-"	1	L.S.
4082100000	SP	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STATION "105+00 -Y2-"	1	L.S.
4082100000	SP	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STATION "51+00 -YIA SBL-"	1	L.S.
4082100000	SP	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STATION "44+50 -NBL RAMP-"	1	L.S.
4082100000	SP	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STATION "15+00 -L-"	1	L.S.
4102000000	904	SIGN ERECTION, TYPE E	107	EA.
4108000000	904	SIGN ERECTION, TYPE F	2	EA.
4110000000	904	SIGN ERECTION, TYPE A (GROUND MOUNTED)	5	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE D	1	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE E	2	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE A (GROUND MOUNTED)	1	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE B (GROUND MOUNTED)	1	EA.
4138000000	907	DISPOSAL OF SUPPORT, STEEL BEAM	5	EA.
4142000000	907	STOCKPILE SUPPORT, OVERHEAD STRUCTURE	1	EA.
4152000000	907	DISPOSAL OF SIGN SYSTEM, STEEL BEAM	2	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	36	EA.
4234000000	907	DISPOSAL OF SIGN, A OR B (OVERHEAD)	2	EA.

PROJECT NOTES

- DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- DISPOSAL OF SIGN SYSTEM, STEEL BEAM
- DISPOSAL OF SIGN, A OR B (OVERHEAD)
- STOCKPILE SUPPORT, OVERHEAD STRUCTURE
- RELOCATE SIGN, TYPE E
- RELOCATE SIGN, TYPE D
- DISPOSAL OF SUPPORT, STEEL BEAM
- RELOCATE SIGN, A OR B (GROUND MOUNTED)

GENERAL NOTES

- SIGNS FURNISHED BY STATE
- ALL TYPE 'D' SIGNS SHALL BE MOUNTED ON TWO U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS.
- IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.
- SIGNING PLANS DO NOT INCLUDE TEMPORARY CONSTRUCTION SIGNING OR PAVEMENT MARKINGS. SEE TRAFFIC CONTROL PLANS.
- WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER
- WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.
- THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.
- DO NOT BEGIN FABRICATION FOR TYPES A & B SIGNS MOUNTED ON OVERHEAD STRUCTURES OR STEEL SUPPORTS UNTIL "S" DIMENSIONS HAVE BEEN FIELD VERIFIED.
- SEE ROADWAY PLANS FOR GUARD/GUIDE RAIL DETAILS.

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
901.10	TYPE 'A' SIGNS
901.20	TYPE 'B' SIGNS
901.50	ARROWS AND SHIELDS
901.70	SIGN STRINGERS AND SUPPORT SPACING
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS
1264.01	OBJECT MARKERS
1264.02	PLACEMENT OF OBJECT MARKERS

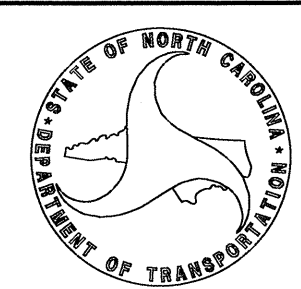
INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-2 thru 2D	SUPPORT INFORMATION AND GROUND MOUNT SHEETS
SIGN-3 thru 7	OVERHEAD SIGN ASSEMBLIES
SIGN-8 thru 11	SIGN DESIGNS
SIGN-12	TYPE 'E' AND 'F' SIGNS
SIGN-13 thru 24	SIGN PLACEMENT SHEETS

PLAN PREPARED BY: N.C.D.O.T. SIGNING AND DELINEATION UNIT

A. I. ALQUDWAH, PE SIGNING & DELINEATION REGIONAL ENGINEER

D. M. EATON SIGNING & DELINEATION PROJECT DESIGN ENGINEER/TECHNICIAN



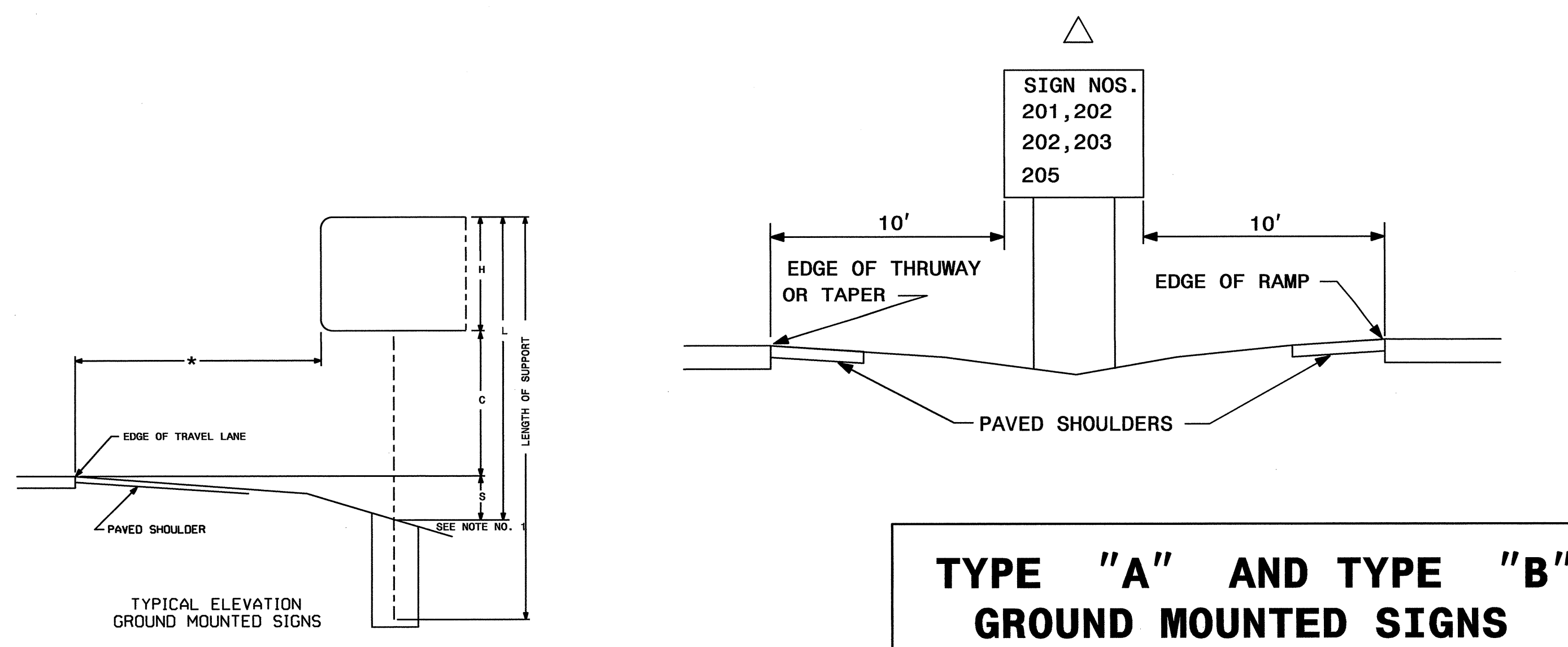
TIP NO. U-4007B	SHEET NO. SIGN-2
APPROVED: <i>[Signature]</i>	
DATE: 7/29/10	
SEAL	

SIGN NO.	SIGN TYPE	SIGN SIZE (in.) w x h	ROADWAY STATION	NO. OF SUP.	BEAM SECTION	SUPPORT TYPE BA or S	ATTACH METHOD	MOUNTING METHOD	HORIZ. CLR. (ft.)	LENGTH (ft)				LEFT SUPPORT (ft)		CENTER SUPPORT (ft)		RIGHT SUPPORT (ft)		FOOTING DIAMETER (ft.)	FOOTING DEPTH (ft.)	B/A SUPPORT WEIGHTS (lbs.)	SIMPLE SUPPORT WEIGHTS (lbs.)	REINF. FTGS. (c.y.)	PLAIN FTGS. (c.y.)	FIELD VERIFIED SEE NOTE 2 (mm/dd/yy)	
										SNS HT	MTG HT	EMBED- MENT	S	L	TOTAL LENGTH	S	L	TOTAL LENGTH	S								L
101	A	192 X 150	26+50 -L-	2	W14x30	BA	N/A	N/A	30.00	12.50	7.00	6.5	4.33	23.83	30.33	0.00	0.00	0.00	4.33	23.83	30.33	3	7	2304.79	0.00	3.67	0.00
201	A	72 X 60	16+50 NBL RA	2	S4x7.7	BA	N/A	N/A	△	5.00	7.00	4	0.50	12.50	16.50	0.00	0.00	0.00	0.50	12.50	16.50	1	4.5	294.71	0.00	0.00	0.26
202	A	72 X 60	101+67 Y2	2	S4x7.7	BA	N/A	N/A	△	5.00	7.00	4	0.50	12.50	16.50	0.00	0.00	0.00	0.50	12.50	16.50	1	4.5	294.71	0.00	0.00	0.26
203	A	72 X 60	24+30 RAMP-1	2	S4x7.7	BA	N/A	N/A	△	5.00	7.00	4	0.50	12.50	16.50	0.00	0.00	0.00	0.50	12.50	16.50	1	4.5	294.71	0.00	0.00	0.26
204	A	72 X 60	46+00 NBL RA	2	S4x7.7	BA	N/A	N/A	△	5.00	7.00	4	0.50	12.50	16.50	0.00	0.00	0.00	0.50	12.50	16.50	1	4.5	294.71	0.00	0.00	0.26
205	A	72 X 60	11+50 -Y-	2	S4x7.7	BA	N/A	N/A	△	5.00	7.00	4	0.50	12.50	16.50	0.00	0.00	0.00	0.50	12.50	16.50	1	4.5	294.71	0.00	0.00	0.26
901	B	108 X 36	62+00 -Y2-	2	W6x9	BA	N/A	N/A	25.00	3.00	7.00	3.5	4.58	14.58	18.08	0.00	0.00	0.00	5.92	15.92	0.00	1.50	4	400.62	0.00	0.52	0.00
902	A	210 X 66	88+50 -Y2-	2	W8x18	BA	N/A	N/A	30.00	5.50	7.00	5.5	3.92	16.42	21.92	0.00	0.00	0.00	5.08	17.58	23.08	2.00	6	972.12	0.00	1.40	0.00

	TOTAL	TOTAL	TOTAL	TOTAL
	5151.09	0.00	5.59	1.31
USE:	5152	0	6	2


NOTES

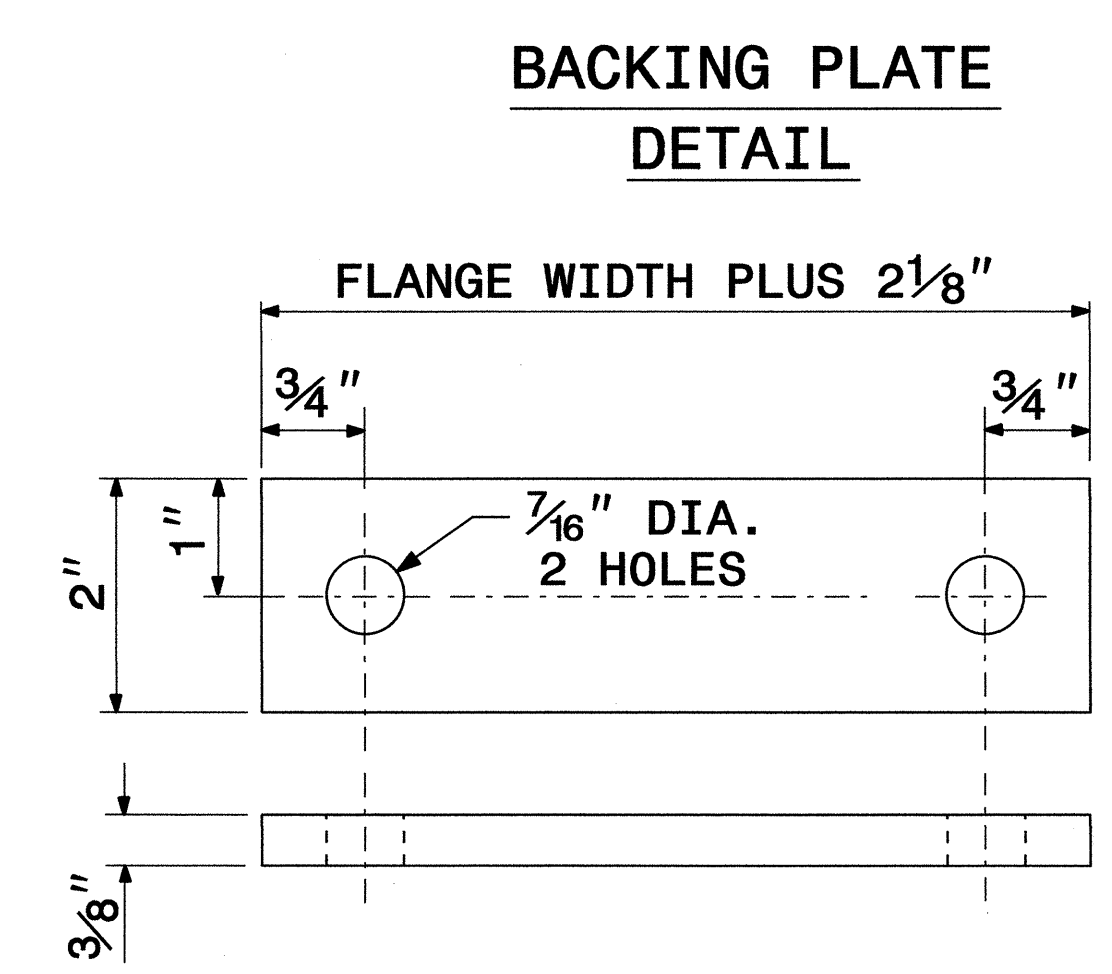
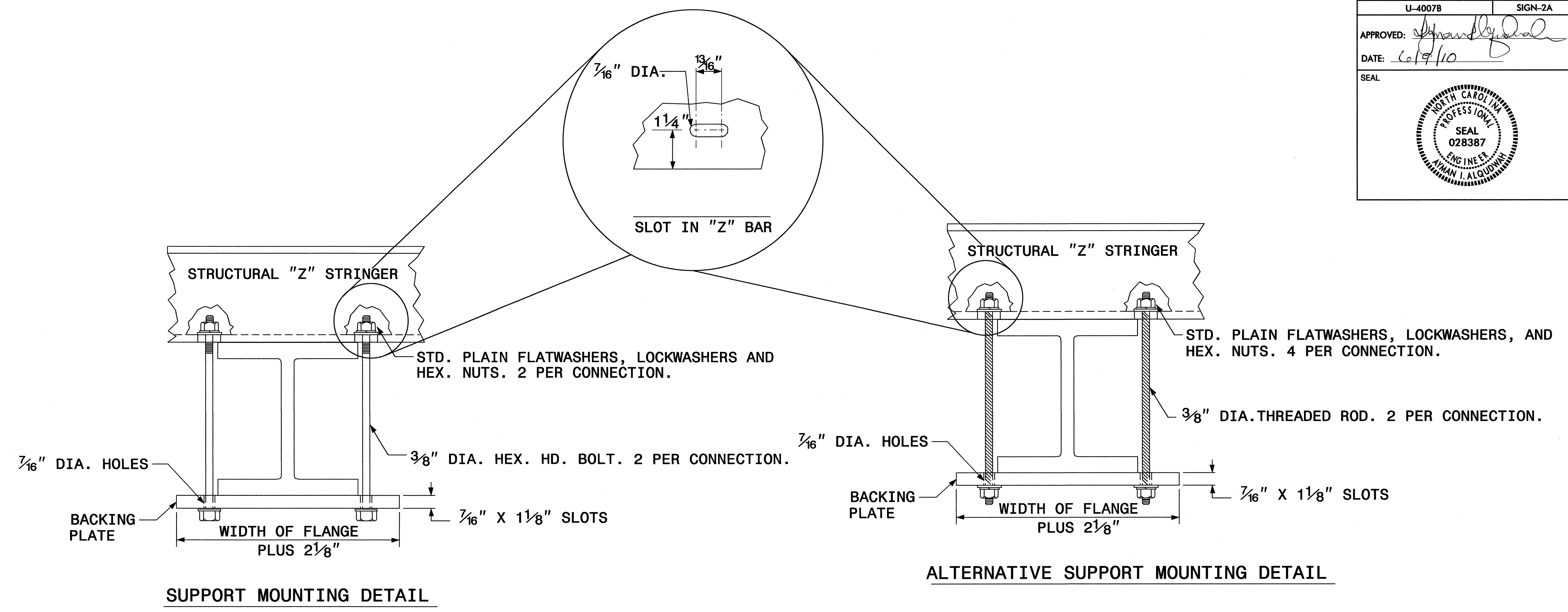
- DIMENSION "S" REPRESENTS AN INCREASE (+), OR A DECREASE (-) IN POLE LENGTH, RELATIVE TO THE ELEVATION OF THE EDGE OF PAVEMENT.
- FIELD VERIFICATIONS SHALL BE REQUIRED FOR ALL SUPPORTS, SEE (*) ARTICLE 903-3. FABRICATORS SHALL BE AISC CERTIFIED IN CATEGORY 1, SEE (*) ARTICLE 1072-1. (*) = N.C.D.O.T. STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES
- PLAN LOCATIONS FOR EXISTING UTILITIES ARE BASED ON THE BEST AVAILABLE INFORMATION AND, THEREFORE MAY NOT BE PRECISELY ACCURATE. THEREFORE, IT IS INCUMBENT UPON THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF UTILITIES BEFORE BEGINNING WORK IN A LOCATION.



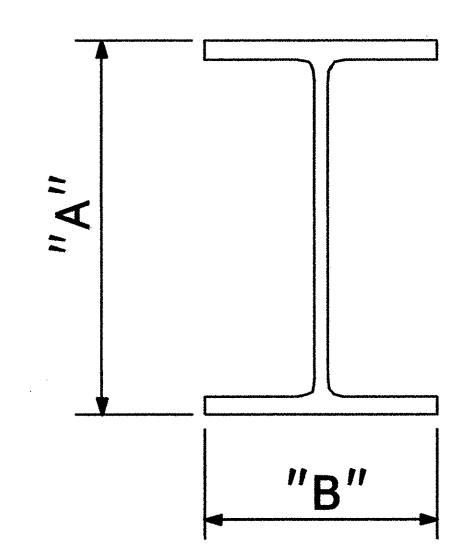
TYPE "A" AND TYPE "B" GROUND MOUNTED SIGNS

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 meaton AT 12/27/08

TIP NO. U-4007B	SHEET NO. SIGN-2A
APPROVED: <i>[Signature]</i>	
DATE: 6/9/10	
SEAL	
	



SIGN SUPPORTS SECTION DIMENSIONS




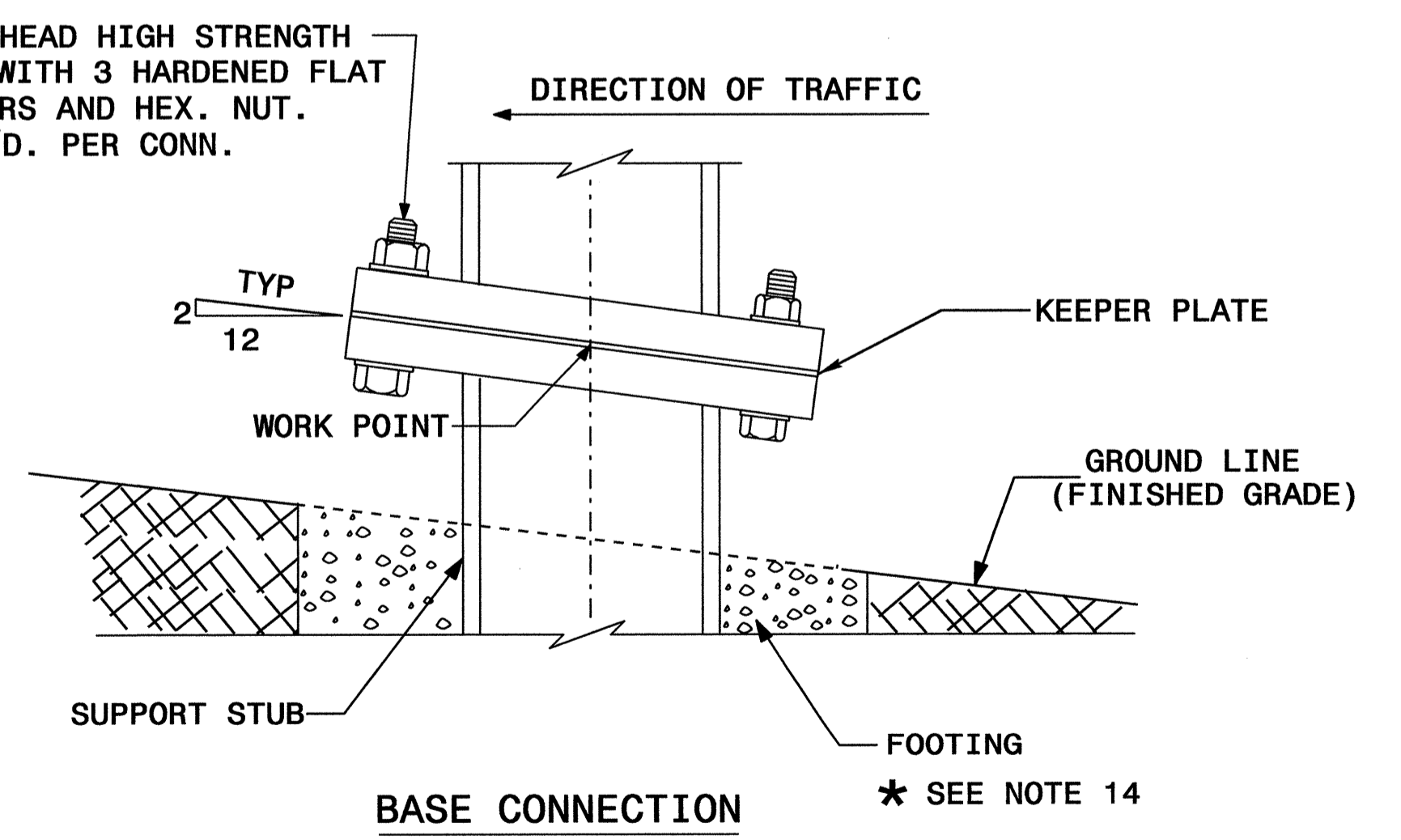
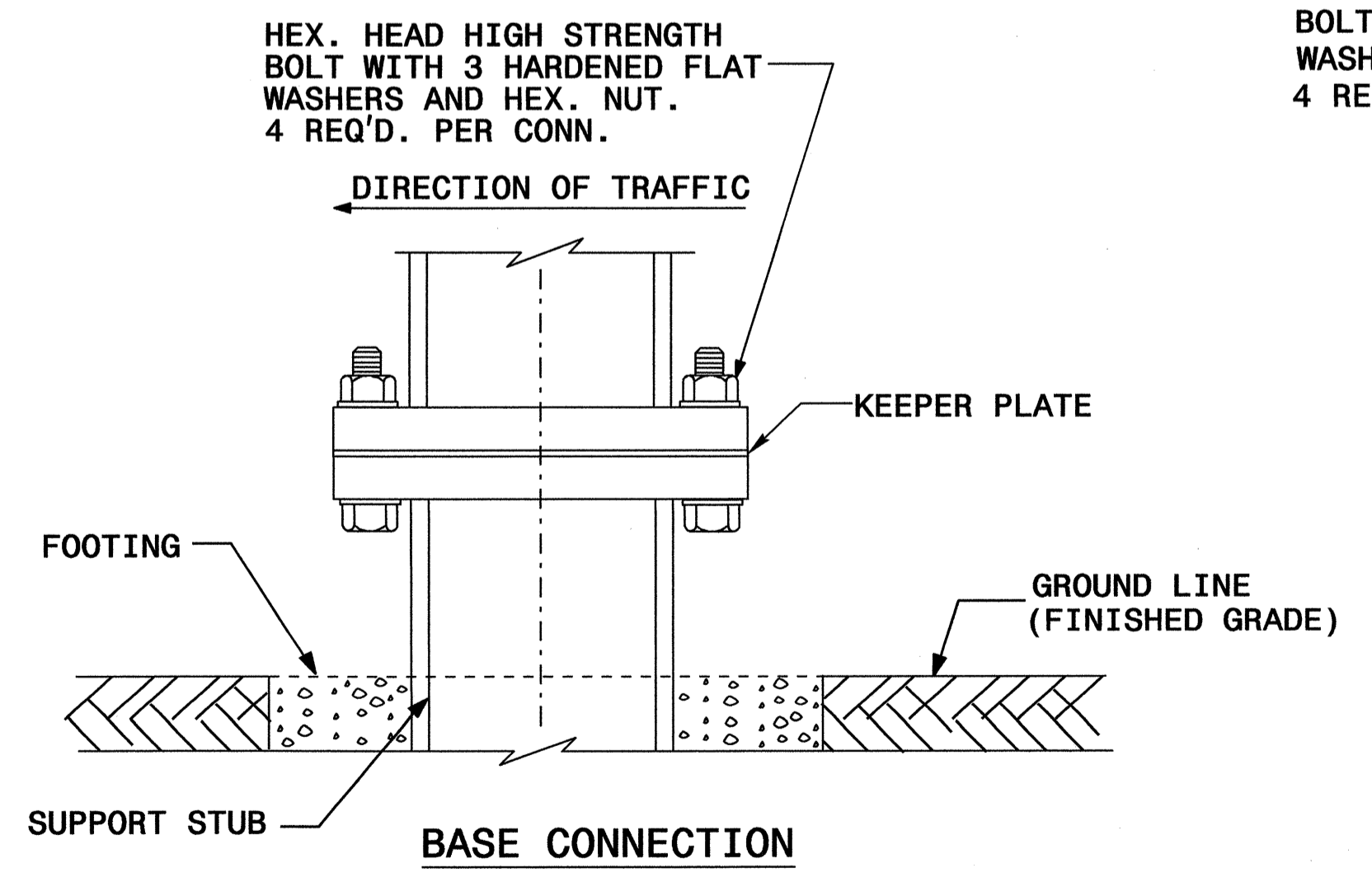
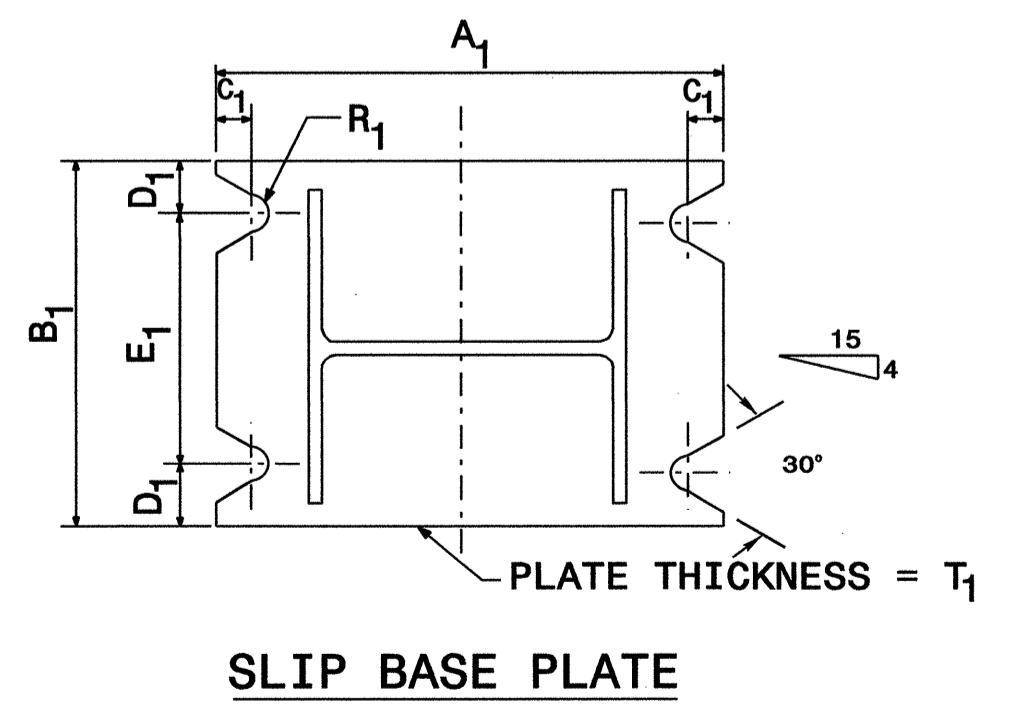
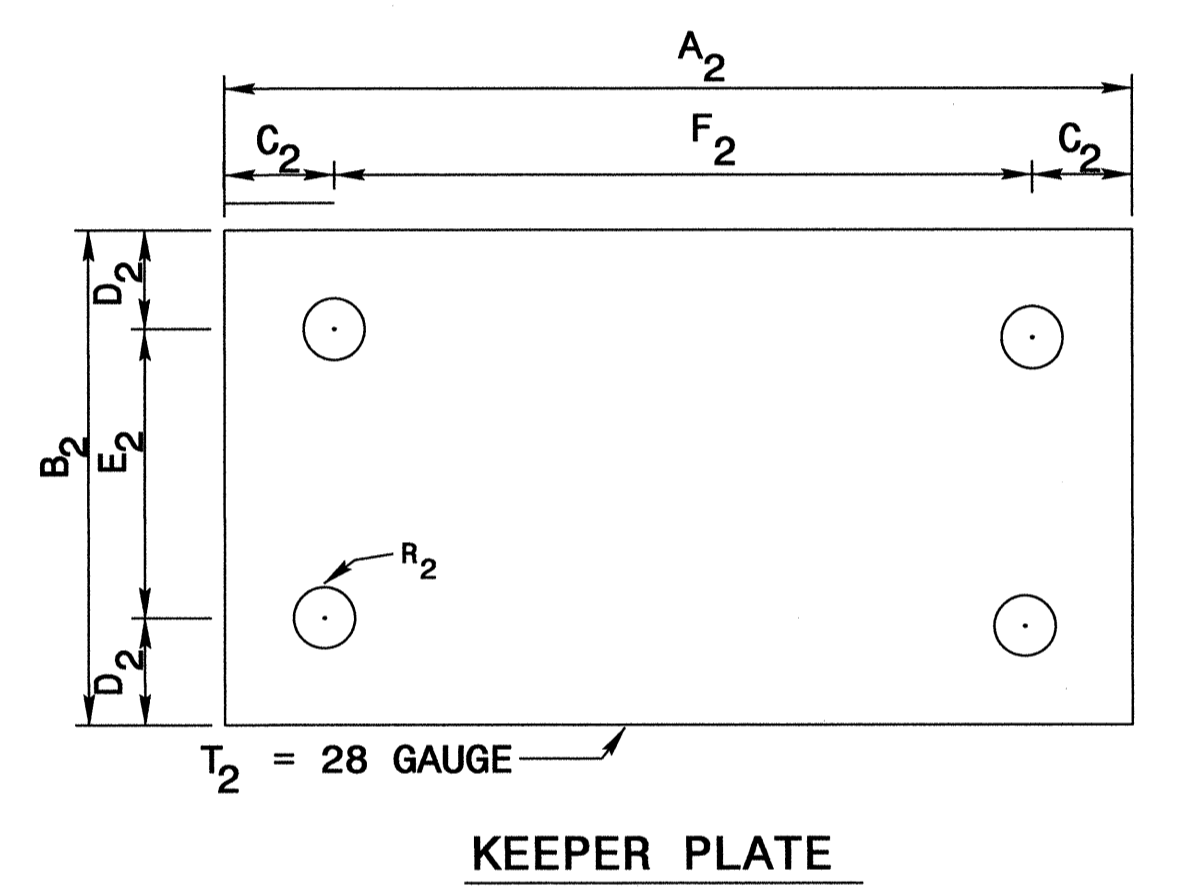
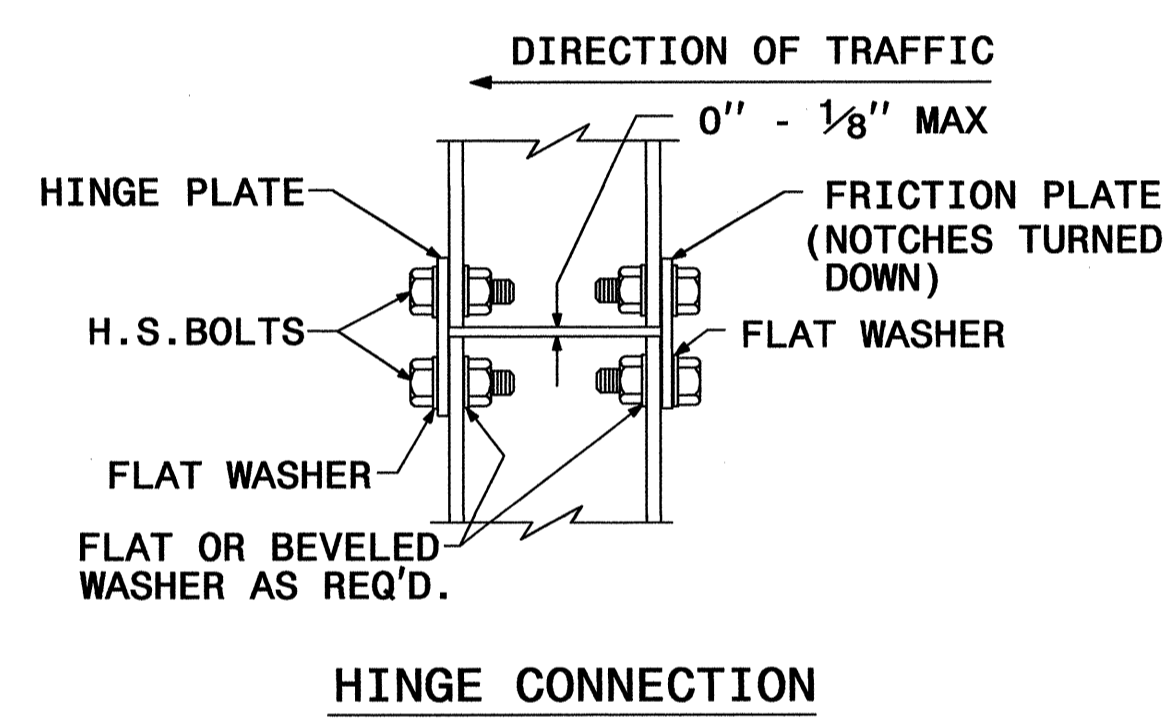
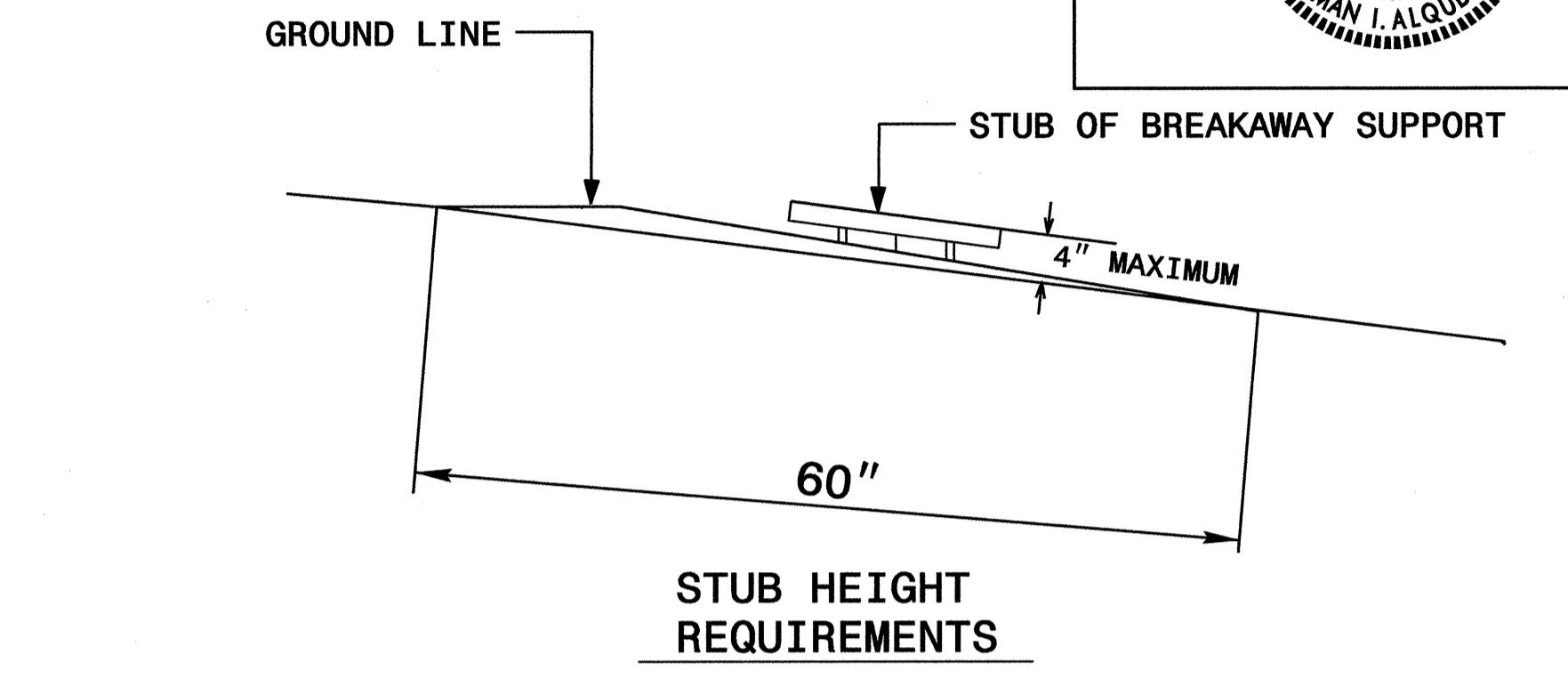
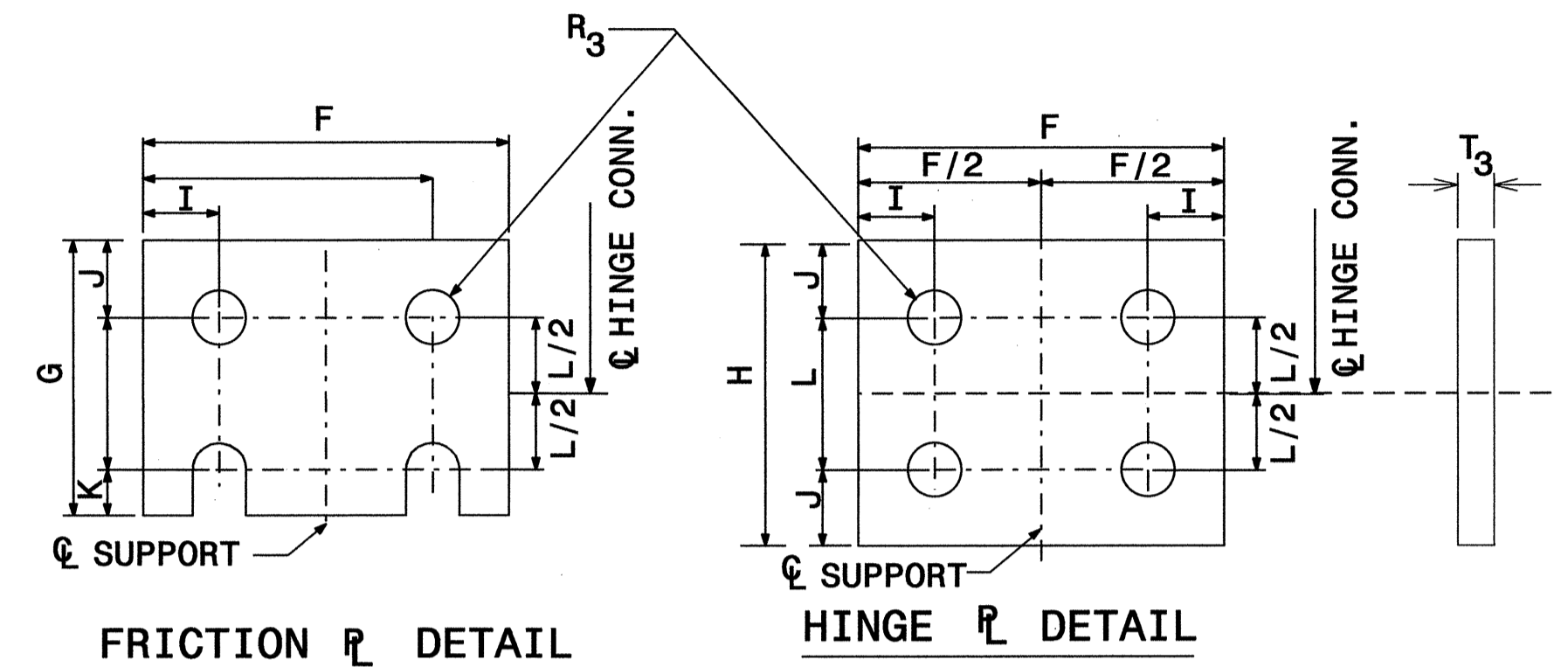
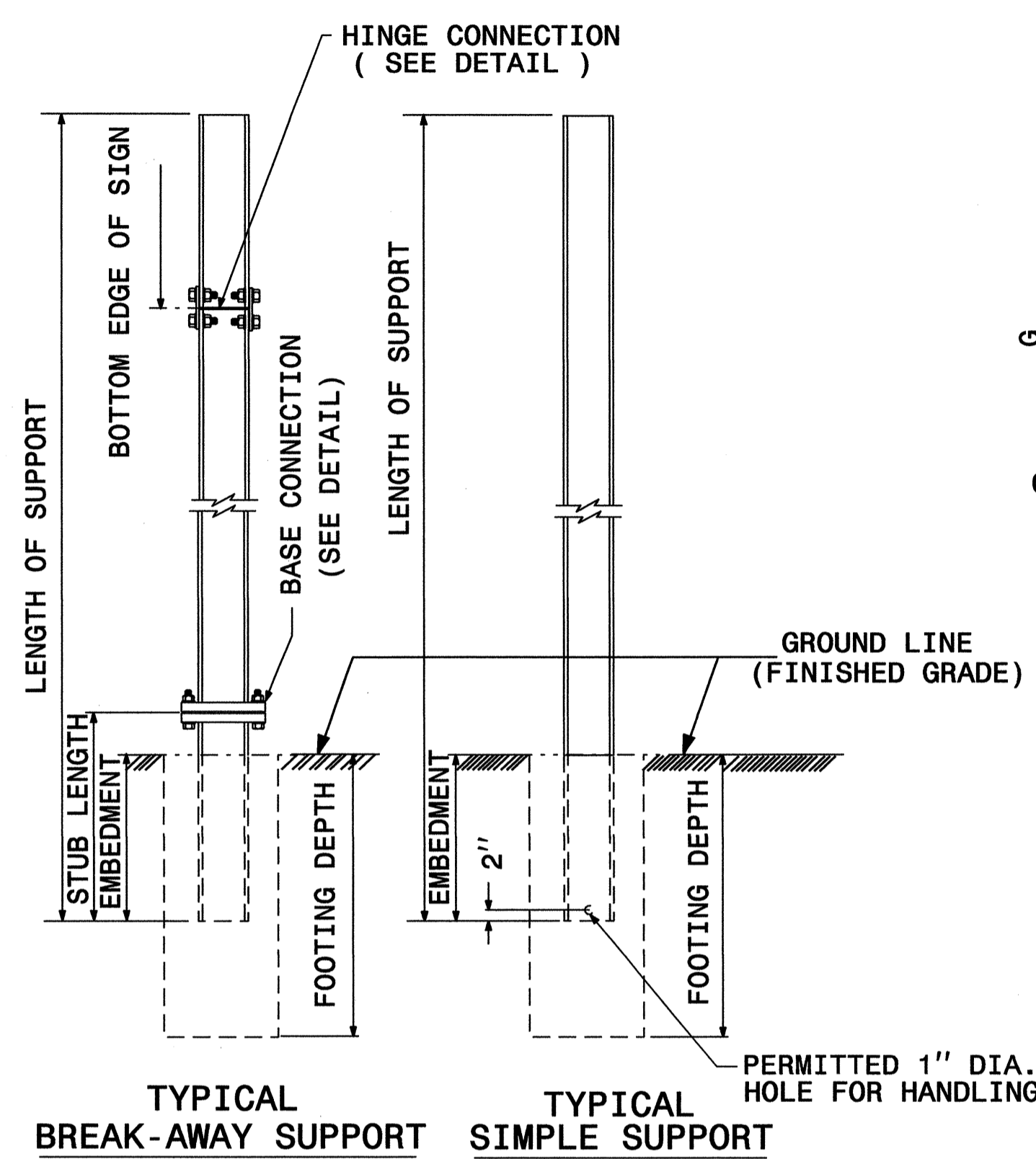
SECTION	A	B
S3 X 5.7	3"	2 3/8"
S4 X 7.7	4"	2 5/8"
W6 X 9	6"	4"
W6 X 12	6"	4"
W6 X 16	6 1/4"	4"
W8 X 18	8 1/8"	5 1/4"
W8 X 21	8 1/4"	5 1/4"
W10 X 22	10 1/8"	5 3/4"
W10 X 26	10 3/8"	5 3/4"
W12 X 26	12 1/4"	6 1/2"
W14 X 30	13 7/8"	6 3/4"
W16 X 31	15 7/8"	5 1/2"
W18 X 35	17 3/4"	6"
W18 X 40	17 7/8"	6"
W21 X 44	20 5/8"	6 1/2"

1. THE SUPPORT MOUNTING DETAIL SHOWS A "W" OR "S" BEAM. THIS DETAIL IS ALSO USED FOR MOUNTING SIGNS TO WOOD OR SQUARE TUBE SUPPORTS.
2. USE GALVANIZED STEEL FOR BACKING PLATES AND MOUNTING BOLTS IN ACCORDANCE WITH ASTM A123.
3. SEE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES FOR TYPE OF MATERIAL TO BE USED FOR SIGN HANGER ASSEMBLIES AND SUPPORTS.
4. USE GALVANIZED STEEL FOR MOUNTING BOLTS AND THREADED RODS IN COMPLIANCE WITH ASTM A307 AND ASTM A153.

SIGN MOUNTING DETAILS

09-JUN-2010 08:53
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 AT TE247908
 meaton

TIP NO. U-4007B	SHEET NO. SIGN-2B
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DATE: 6/9/10	
SEAL	
	



SEE SHEET SIGN-2C FOR DIMENSIONS.
SEE SHEET SIGN-2D FOR NOTES.

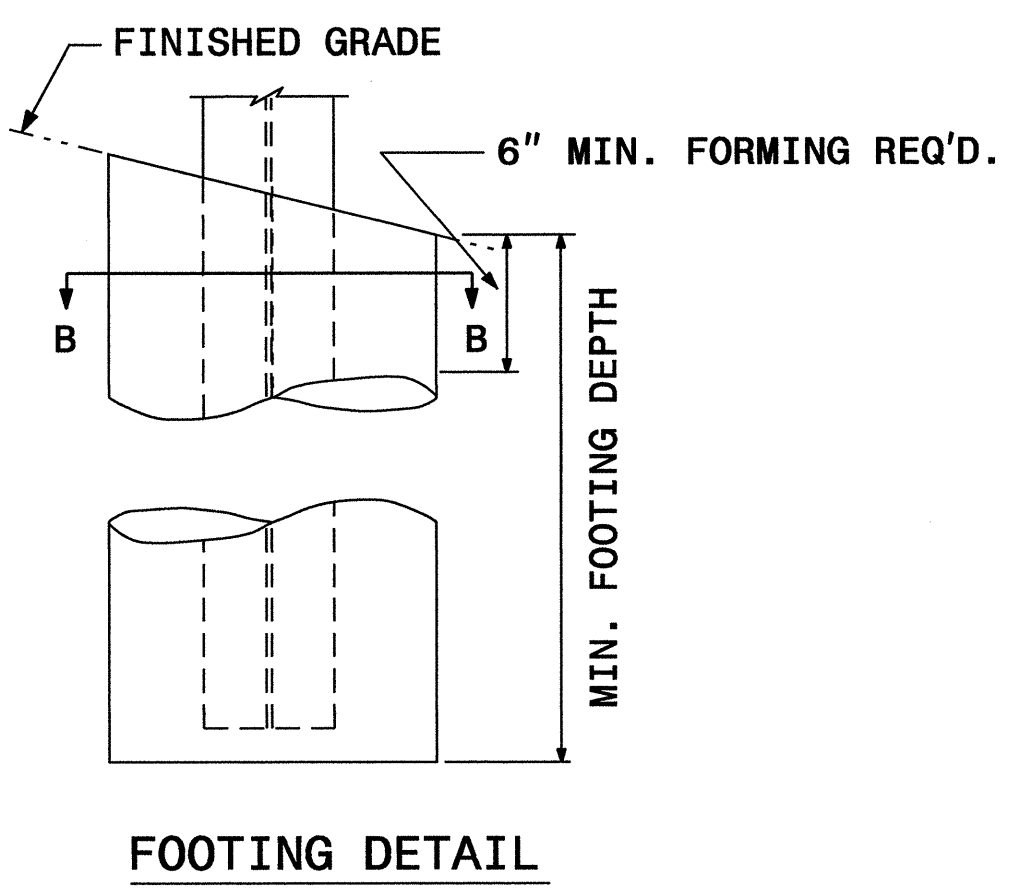
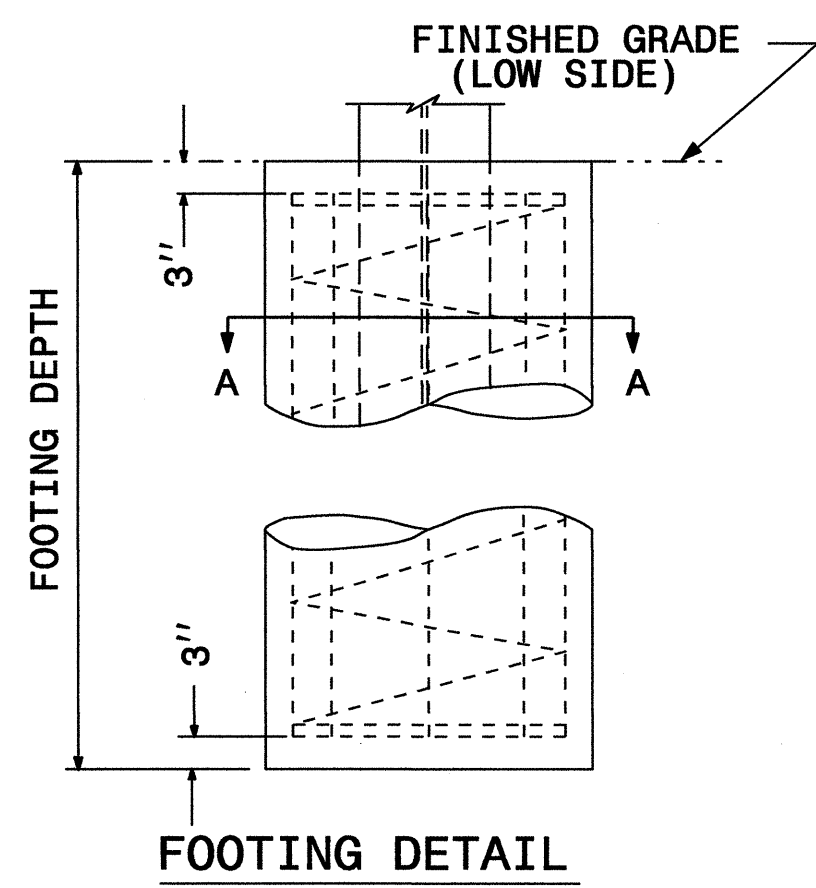
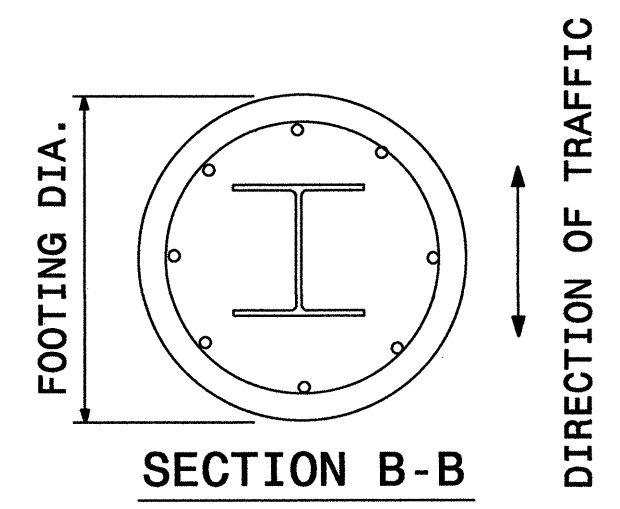
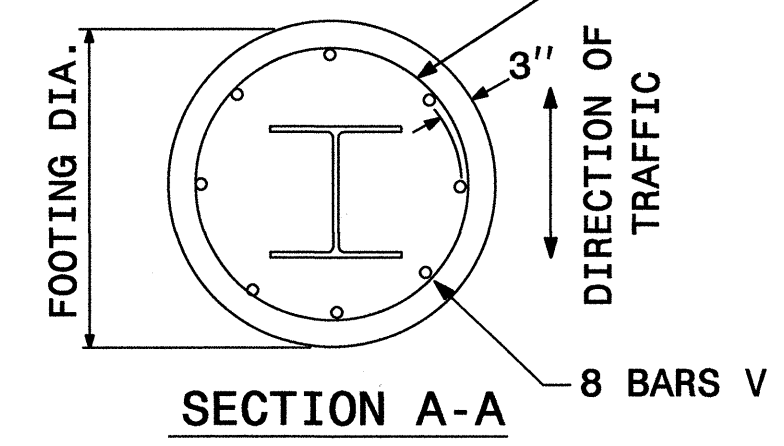
GROUND MOUNTED SIGN SUPPORT

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TIP NO. U-4007B	SHEET NO. SIGN-2C
APPROVED: <i>[Signature]</i>	
DATE: 6/19/10	
SEAL	

BEAM SHAPE	SLIP BASE PLATE DATA								KEEPER PLATE DATA								HINGE CONNECTION DATA								BREAK AWAY SUPPORT WEIGHT CONSTANT LBS.	
	BOLT SIZE	A ₁	B ₁	C ₁	D ₁	E ₁	T ₁	R ₁	A ₂	B ₂	C ₂	D ₂	E ₂	R ₂	T ₂	BOLT SIZE	F	G	H	I	J	K	L	R ₃		T ₃
S3X5.7	1/2"DIA.X 3"	7"	4"	1"	3/4"	2 1/2"	1"	9/32"	7"	4"	1"	3/4"	2 1/2"	9/32"	28 GAUGE	1/2"DIA.X1 1/4"	2 1/4"	3 1/2"	4"	1 1/2"	1"	1 1/2"	2"	9/32"	3/8"	18
S4X7.7	1/2"DIA.X 3"	8"	4"	1"	3/4"	2 1/2"	1"	9/32"	8"	4"	1"	3/4"	2 1/2"	9/32"	28 GAUGE	1/2"DIA.X1 1/4"	2 5/8"	3 1/2"	4"	1 1/2"	1"	1 1/2"	2"	9/32"	3/8"	20
W6X9	1/2"DIA.X 3"	10"	5"	1"	3/4"	3 1/2"	1"	9/32"	10"	5"	1"	3/4"	3 1/2"	9/32"	28 GAUGE	1/2"DIA.X1 1/4"	4"	3 1/2"	4"	3/4"	1"	1 1/2"	2"	9/32"	3/8"	32
W6X12	5/8"DIA.X3 3/4"	11"	5"	1 1/4"	7/8"	3 1/4"	1 1/4"	1 1/32"	11"	5"	1 1/4"	7/8"	3 1/4"	1 1/32"	28 GAUGE	5/8"DIA.X2 1/4"	4"	4"	4 1/2"	3/4"	1 1/8"	5/8"	2 1/4"	1 1/32"	3/8"	39
W6X16	5/8"DIA.X3 3/4"	12"	6"	1 1/4"	7/8"	4 1/4"	1 1/2"	1 1/32"	12"	6"	1 1/4"	7/8"	4 1/4"	1 1/32"	28 GAUGE	5/8"DIA.X2 1/2"	4"	4"	4 1/2"	3/4"	1 1/8"	5/8"	2 1/4"	1 1/32"	1/2"	47
W8X18	5/8"DIA.X 4 1/4"	13 1/2"	6 1/2"	1 1/4"	7/8"	4 3/4"	1 1/2"	1 1/32"	13 1/2"	6 1/2"	1 1/4"	7/8"	4 3/4"	1 1/32"	28 GAUGE	5/8"DIA.X2 1/2"	5 1/4"	4"	4 1/2"	1"	1 1/8"	5/8"	2 1/4"	1 1/32"	1/2"	70
W8X21	3/4"DIA.X 4 1/4"	14"	7"	1 1/2"	1"	5"	1 1/2"	1 3/32"	14"	7"	1 1/2"	1"	5"	1 3/32"	28 GAUGE	3/4"DIA.X2 3/4"	5 1/4"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	1 3/32"	1/2"	73
W10X22	3/4"DIA.X 4 1/4"	16"	8"	1 1/2"	1"	6"	1 1/2"	1 3/32"	16"	8"	1 1/2"	1"	6"	1 3/32"	28 GAUGE	3/4"DIA.X2 3/4"	5 3/4"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	1 3/32"	1/2"	119
W10X26	3/4"DIA.X4 3/4"	16 1/2"	8"	1 1/2"	1"	6"	1 3/4"	1 3/32"	16 1/2"	8"	1 1/2"	1"	6"	1 3/32"	28 GAUGE	3/4"DIA.X2 3/4"	5 3/4"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	1 3/32"	5/8"	140
W12X26	3/4"DIA.X4 3/4"	18 1/2"	9"	1 1/2"	1"	7"	1 3/4"	1 3/32"	18 1/2"	9"	1 1/2"	1"	7"	1 3/32"	28 GAUGE	3/4"DIA.X2 3/4"	6 1/2"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	1 3/32"	5/8"	176
W14X30	1"DIA.X 5"	22"	9"	2"	1 1/2"	6"	2"	1 7/32"	22"	9"	2"	1 1/2"	6"	1 7/32"	28 GAUGE	1"DIA.X3"	6 3/4"	7"	8"	1 1/4"	2"	1"	4"	1 7/32"	5/8"	205
W16X31	1"DIA.X 5"	24"	9"	2"	1 1/2"	6"	2"	1 7/32"	24"	9"	2"	1 1/2"	6"	1 7/32"	28 GAUGE	1"DIA.X3 1/4"	5 1/2"	7"	8"	1 1/4"	2"	1"	4"	1 7/32"	3/4"	223
W18X35	1"DIA.X 5"	25"	9"	2"	1 1/2"	6"	2"	1 7/32"	25"	9"	2"	1 1/2"	6"	1 7/32"	28 GAUGE	1"DIA.X3 1/4"	6"	7"	8"	1 1/4"	2"	1"	4"	1 7/32"	3/4"	243
W18X40	1"DIA.X5 1/2"	26"	9"	2"	1 1/2"	6"	2 1/4"	1 7/32"	26"	9"	2"	1 1/2"	6"	1 7/32"	28 GAUGE	1"DIA.X3 3/4"	6"	7"	8"	1 1/4"	2"	1"	4"	1 7/32"	7/8"	278
W21X44	1"DIA.X5 1/2"	29"	9"	2"	1 1/2"	6"	2 1/2"	1 7/32"	29"	9"	2"	1 1/2"	6"	1 7/32"	28 GAUGE	1"DIA.X3 3/4"	6 1/2"	7"	8"	1 1/4"	2"	1"	4"	1 7/32"	7/8"	310

2" FLAT TURNS
TOP AND BOTTOM
(SEE NOTE 10)



FOUNDATION DATA *		
FOOTING DIAMETER	REINFORCEMENT	SPIRAL BAR
1' 6"	8 # 6 BARS	#3 BAR, 3" PITCH
2'	8 # 7 BARS	#3 BAR, 3" PITCH
2' 6"	8 # 9 BARS	#3 BAR, 3" PITCH
3'	8 # 11 BARS	#3 BAR, 3" PITCH
3' 6"	8 # 12 BARS	#3 BAR, 3" PITCH
4'	8 # 14 BARS	#3 BAR, 3" PITCH

* FOUNDATION DIMENSIONS ARE SHOWN IN PLANS
SEE SHEET SIGN-2D FOR NOTES.

GROUND MOUNTED SIGN SUPPORT

09-JUN-2010 08:52
 P:\TIP-Projects\U4007B\Traffic\Signing\CADD\Quantities & GM Signs\U4007b_Engseed.dgn
 meaton

TIP NO. U-4007B	SHEET NO. SIGN-2D
APPROVED: <i>[Signature]</i>	
DATE: 6/9/10	
SEAL	



NOTES:

- DESIGN CONFORMS WITH THE SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS - A.A.S.H.T.O.
- USE MATERIALS, FABRICATE AND ERECT SIGNS AND SUPPORTS THAT CONFORM TO THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
- USE HIGH STRENGTH BOLTS, NUTS AND WASHERS THAT CONFORM TO A.S.T.M. A-325 AND THAT ARE GALVANIZED IN ACCORDANCE WITH A.S.T.M. A-153.
- USE BACKING PLATES, SLIP BASE PLATES, FRICTION PLATES, AND HINGE PLATES THAT CONFORM TO A.S.T.M. A-36 AND THAT ARE GALVANIZED IN ACCORDANCE WITH A.S.T.M. A-123 PRIOR TO GALVANIZING, GRIND SMOOTH ANY METAL PROJECTION BEYOND THE PLATE FACE. KEEPER PLATES SHALL BE MANUFACTURED FROM 28 GAUGE SHEET STEEL THAT CONFORMS TO A.S.T.M. A-36 AND IS GALVANIZED IN ACCORDANCE WITH A.S.T.M. A-123
- ASSEMBLE HINGE CONNECTIONS IN THE SHOP. SHOP TIGHTEN BOLTS BY USE OF EITHER A CALIBRATED POWER WRENCH OR A MANUAL TORQUE WRENCH. TIGHTEN EACH HINGE CONNECTION BOLT TO 1/3 PAST SNUG.
- BASE PLATES DETAILS ARE FOR INSTALLATIONS ON THE RIGHT SHOULDER AND IN GORE AREAS.
- ASSEMBLE UPPER SUPPORT TO STUB AS SHOWN IN DETAIL. SLIP BASE PLATES SHALL BE FILLET WELDED ONTO POSTS ALL AROUND THE STRUCTURAL SHAPE SO AS TO INSURE NO LOSS OF STRENGTH. ASSEMBLE IN EITHER SHOP OR FIELD. 28 GAUGE KEEPER PLATE IS PLACED BETWEEN SLIP BASE PLATES TO PREVENT BOLT SLIPPING. TIGHTEN BOLTS TO THE FOLLOWING PRESCRIBED TORQUE:

BOLT DIAMETER	TORQUE (LB. FT.)
1/2"	9
5/8"	22
3/8"	37
1"	48

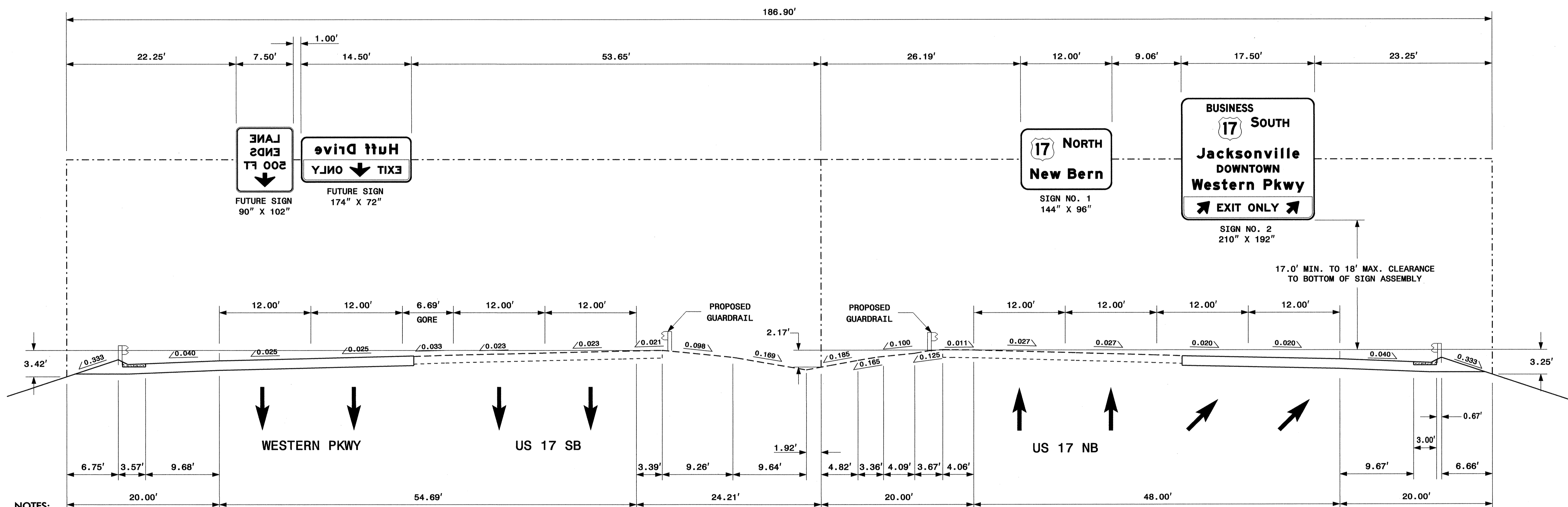
COMPLETELY ASSEMBLE B/A POSTS PRIOR TO ERECTION. B/A POST TO BE SET IN ONE PIECE. AFTER SUPPORT HAS BEEN ERECTED AND THE CONCRETE FOOTINGS HAS CURED AT LEAST 48 HRS., CLEAN CONCRETE FROM BASE CONNECTION BOLTS THEN LOOSEN AND RETIGHTEN EACH BOLT IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. DO NOT OVERTIGHTEN. BURR ALL BOLT THREADS OF BASE CONNECTIONS TO PREVENT LOOSENING.

- USE REINFORCED FOOTINGS WITH DIMENSIONS AS SHOWN IN PLANS. WHERE SOLID ROCK IS ENCOUNTERED, THE ENGINEER DIRECTS WHETHER TO PLACE THE FOOTING AT THE PRESCRIBED DEPTH OR EXTEND IT AT LEAST TWO FEET INTO THE ROCK. CONSTRUCT ALL FOOTINGS OF CLASS A CONCRETE.
- FORM TOP 6" OF FOOTINGS. ENGINEER APPROVES THE METHOD USED.
- THE FINAL FLAT TURN OF SPIRAL OR HOOPS NO. 3 OR LARGER PLACED 3" FROM TOP AND BOTTOM OF FOOTING MAY BE WELDED TO VERTICAL REINFORCING BARS. NO OTHER WELDING WILL BE PERMITTED.
- ELIMINATE HINGE CONNECTION FOR ALL SINGLE SUPPORT SIGNS.
- DETAIL IS FOR ONE DIRECTION BREAKAWAY. WHEN PLANS REQUIRE A TWO DIRECTION BREAKAWAY, TWO FRICTION PLATES SHALL BE USED IN LIEU OF ONE FRICTION PLATE AND ONE HINGE PLATE.
- SHAPE THE TOPS OF THE FOOTINGS TO CONFORM WITH FINISHED GROUND ELEVATIONS SUCH THAT WATER WILL NOT COLLECT AGAINST THE SUPPORTS.
- IF THE GROUNDWATER IS ENCOUNTERED AT AN DEPTH SHALLOWER THAN 7 FEET, THE SIGN FOUNDATION MUST BE REDESIGNED BASED UPON THE ACTUAL FIELD CONDITIONS. THE FOUNDATION DESIGN DOES NOT APPLY TO VERY SOFT OR LOOSE SOIL, MUCK, WEATHERED ROCK, OR HARD ROCK.

GROUND MOUNTED SIGN SUPPORT

09-JUN-2010 08:52
 P:\TIP-Projects\U4007B\Traffic\Signing\CADD\Quantities & GM_Signs\U4007B_Engseed.dgn
 meaton AT TE247908

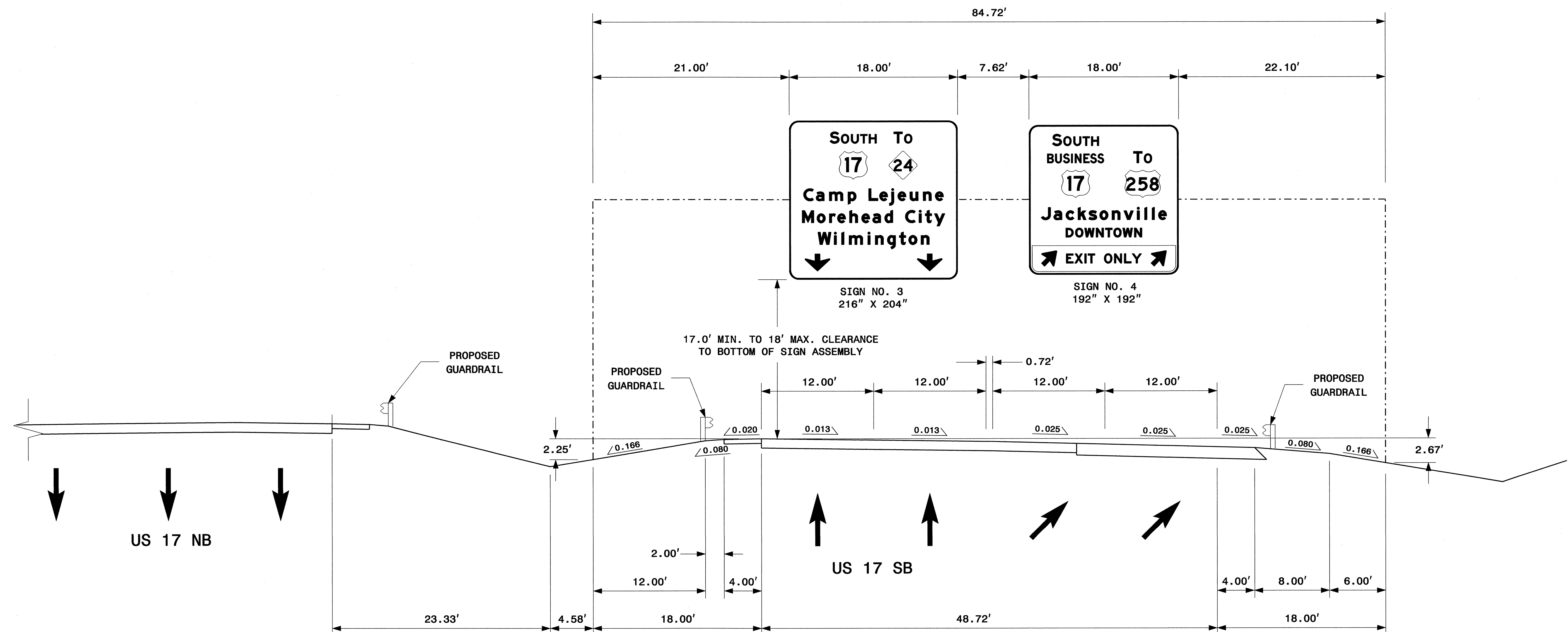
STATE	PROJECT NO.	SHEET NO.	TOTAL SHTS.
N.C.	U-4007B	SIGN-3	
APPROVED: <i>[Signature]</i>			
DATE: 6/9/10			
SEAL			



- NOTES:
- IF THE CONTRACTOR BIDS ALUMINUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
 - MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
 - FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. PROVIDE FIELD VERIFICATION TO THE SIGNING SECTION.
 - THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 4 INCHES AND NOT MORE THAN 24 INCHES ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
 - SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THIS PLAN SHEET.
 - DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 130 M.P.H.


**OVERHEAD SIGN ASSEMBLY
AT STA. 65+00 -Y2-**

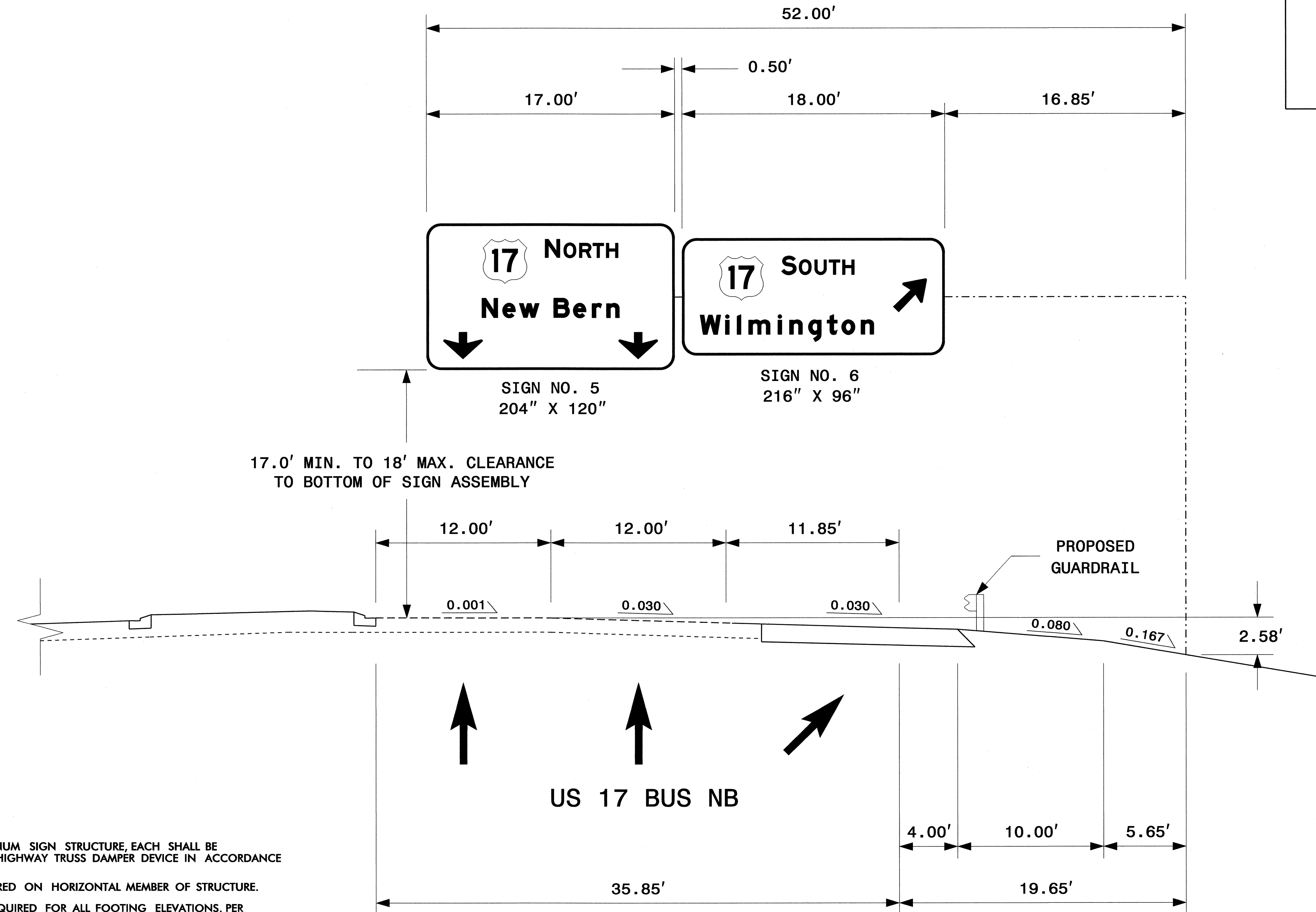
STATE	PROJECT NO.	SHEET NO.	TOTAL SHTS.
N.C.	U-4007B	SIGN-4	
APPROVED: <i>[Signature]</i>			
DATE: 6/9/10			
SEAL			



- NOTES:
1. IF THE CONTRACTOR BIDS ALUMINUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
 2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
 3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. PROVIDE FIELD VERIFICATION TO THE SIGNING SECTION.
 4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 4 INCHES AND NOT MORE THAN 24 INCHES ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
 5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THIS PLAN SHEET.
 6. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 130 M.P.H.

**OVERHEAD SIGN ASSEMBLY
AT STA. 105+00 -Y2-**

STATE	PROJECT NO.	SHEET NO.	TOTAL SHTS.
N.C.	U-4007B	SIGN-5	
APPROVED: <i>[Signature]</i>			
DATE: 6/9/10			
SEAL			
			

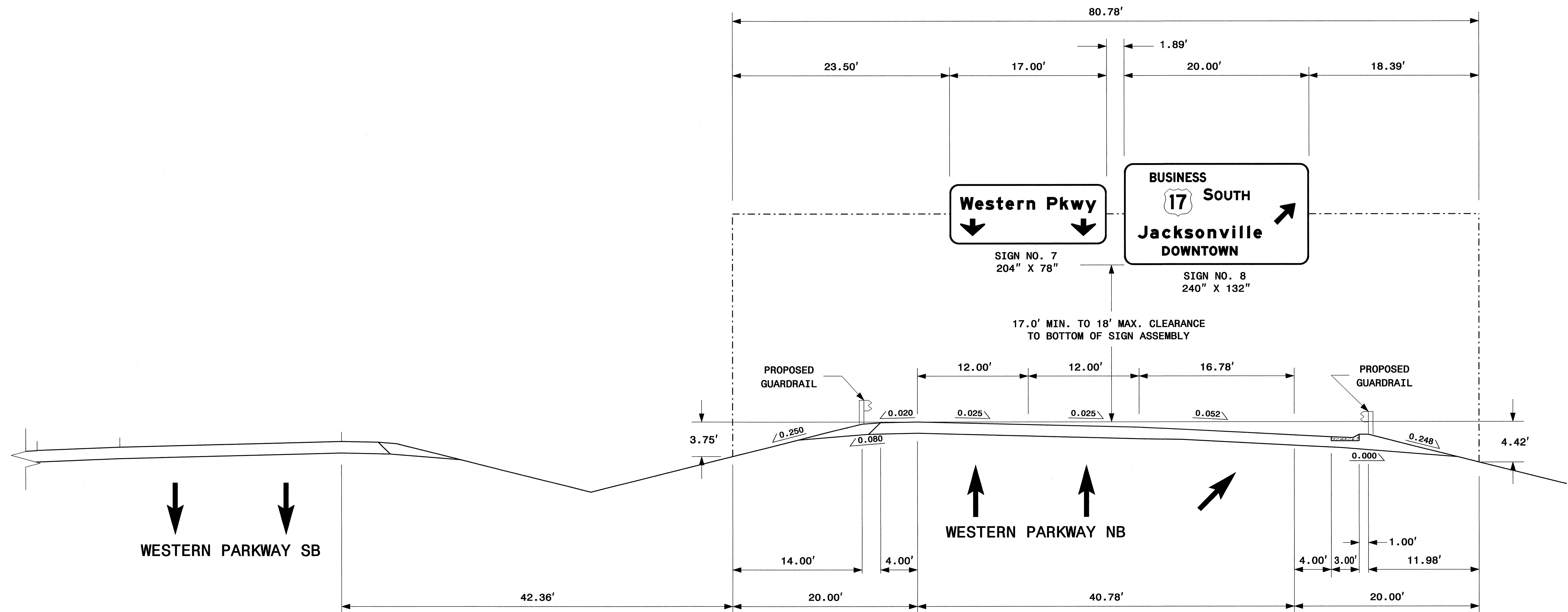


NOTES:

1. IF THE CONTRACTOR BIDS ALUMINUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. PROVIDE FIELD VERIFICATION TO THE SIGNING SECTION.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 4 INCHES AND NOT MORE THAN 24 INCHES ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THIS PLAN SHEET.
6. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 130 M.P.H.

**OVERHEAD SIGN ASSEMBLY
AT STA. 51+00 -Y1A SBL-**

STATE	PROJECT NO.	SHEET NO.	TOTAL SHTS.
N.C.	U-4007B	SIGN-6	
APPROVED: <i>[Signature]</i>			
DATE: 6/9/10			
SEAL			

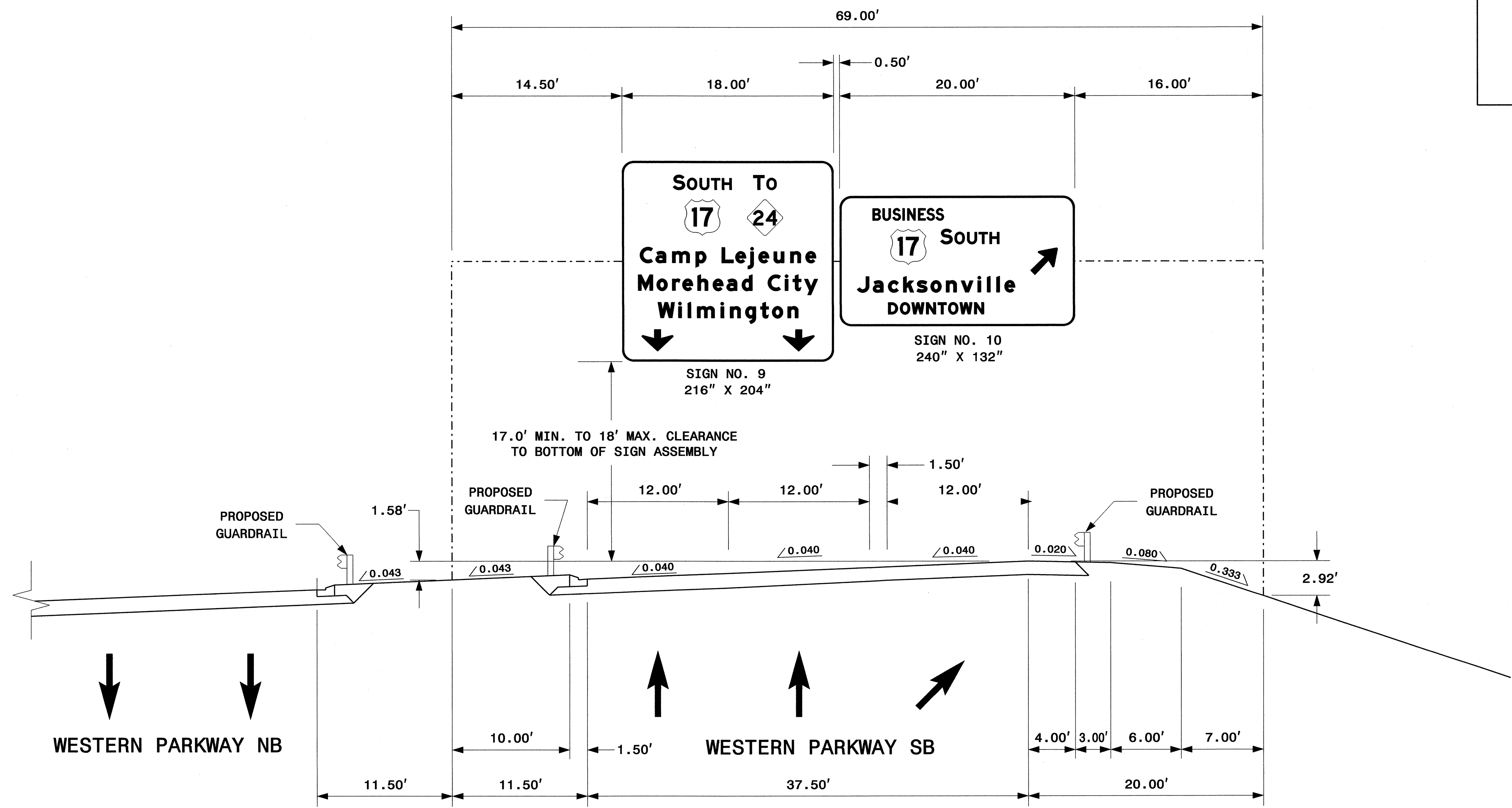


NOTES:

1. IF THE CONTRACTOR BIDS ALUMINUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. PROVIDE FIELD VERIFICATION TO THE SIGNING SECTION.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 4 INCHES AND NOT MORE THAN 24 INCHES ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THIS PLAN SHEET.
6. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 130 M.P.H.

**OVERHEAD SIGN ASSEMBLY
AT STA. 44+50 -NBL RAMP-**

STATE	PROJECT NO.	SHEET NO.	TOTAL SHTS.
N.C.	U-4007B	SIGN-7	
APPROVED: <i>[Signature]</i>			
DATE: 6/9/10			
SEAL			




NOTES:

1. IF THE CONTRACTOR BIDS ALUMINUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. PROVIDE FIELD VERIFICATION TO THE SIGNING SECTION.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 4 INCHES AND NOT MORE THAN 24 INCHES ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THIS PLAN SHEET.
6. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 130 M.P.H.

OVERHEAD SIGN ASSEMBLY
AT STA. 15+00 -L LINE-

TIP NO. U-4007B	SHEET NO. SIGN-8
APPROVED: <i>[Signature]</i>	
DATE: 6/9/10	
SEAL	



SIGN NUMR: 6
TYPE: A Overhead
QUANTITY: 1

BACKG. COLOR: Green
COPY COLOR: White

DESIGN BY: DME
PROJECT ID: U-4007B

CHK BY: DIV: 3

STD #: \$STN
DATE: May 07, 2010

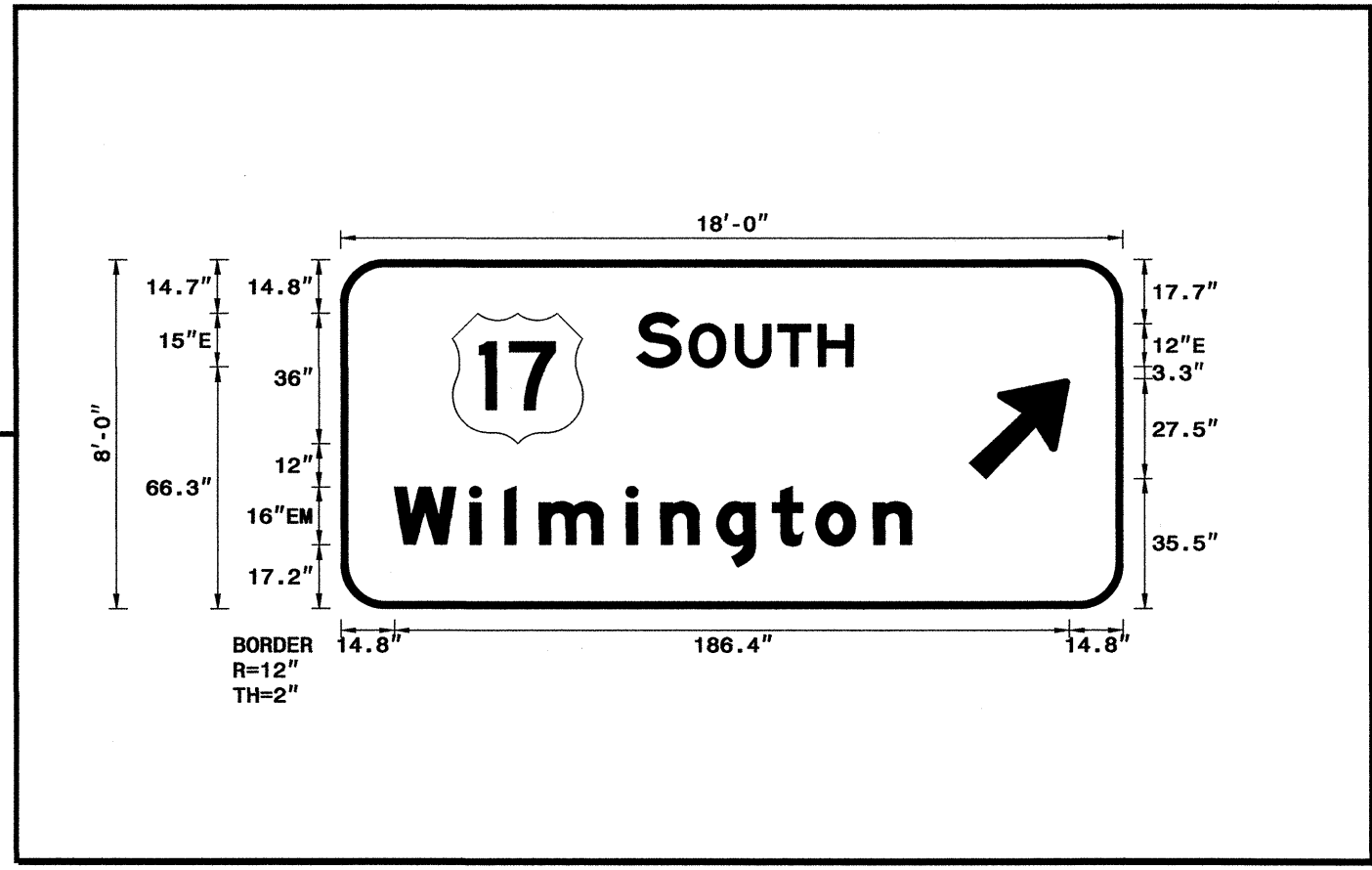
N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH
SIGNING DEPARTMENT

SIGN WIDTH: 18'-0"
HEIGHT: 8'-0"
TOTAL AREA: 144.0 Sq.Ft.

MAT'L: 0.125" ALUMINUM

BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 2"
RADII: 12"
NO. Z BARS: 3
LENGTH: 208.0"

SYMBOL	X	Y	WID	HT
M1_4	30.9	45.3	36	36
ARMED	179.7	35.5	22.4	35.3



USE NOTES: 1,3,5,6
1. Legend and border shall be direct applied Grade A reflective sheeting.
2. Legend and border shall be direct applied Grade C reflective sheeting.
3. Shields shall be Grade A reflective sheeting on 0.032" aluminum and demountable.
4. Background shall be Grade B reflective sheeting.
5. Background shall be Grade C reflective sheeting.
6. Center arrow(s) vertically on sign.

Letter spacings are to start of next letter													Series/Size Text Length
S	O	U	T	H									E 2000 59.8
81.9	12.2	2.2	12.8	11.8	11	9.7	74.4						
W	i	l	m	i	n	g	t	o	n				EM 2000 142.9
14.8	20.8	9.6	9.6	24	9.6	15.5	15.4	12	15.8	10.6	58.3		

Spacing Factor is 1 unless specified otherwise
FILENAME: GSENG

SIGN NUMR: 1
TYPE: A Overhead
QUANTITY: 1

BACKG. COLOR: Green
COPY COLOR: White

DESIGN BY: DME
PROJECT ID: U-4007B

CHK BY: DIV: 3

STD #: \$STN
DATE: May 07, 2010

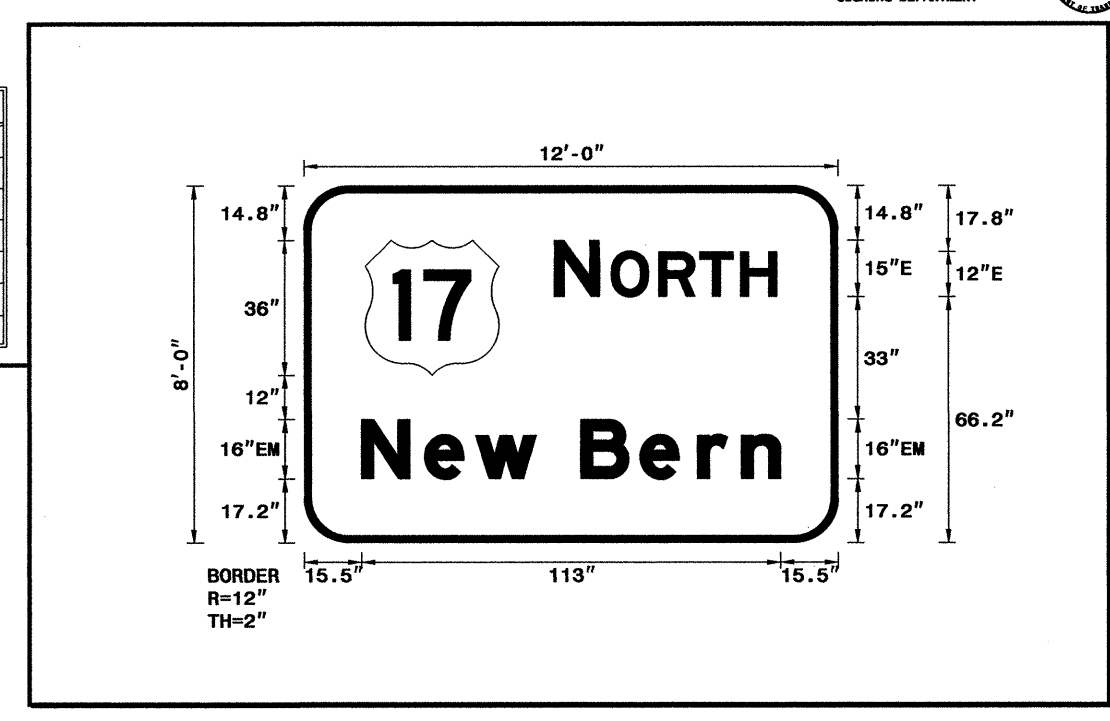
N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH
SIGNING DEPARTMENT

SIGN WIDTH: 12'-0"
HEIGHT: 8'-0"
TOTAL AREA: 96.0 Sq.Ft.

MAT'L: 0.125" ALUMINUM

BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 2"
RADII: 12"
NO. Z BARS: 3
LENGTH: 136.0"

SYMBOL	X	Y	WID	HT
M1_4	16.5	45.3	36	36



USE NOTES: 1,3,5
1. Legend and border shall be direct applied Grade A reflective sheeting.
2. Legend and border shall be direct applied Grade C reflective sheeting.
3. Shields shall be Grade A reflective sheeting on 0.032" aluminum and demountable.
4. Background shall be Grade B reflective sheeting.
5. Background shall be Grade C reflective sheeting.
6. Center arrow(s) vertically on sign.

Letter spacings are to start of next letter													Series/Size Text Length
N	O	R	T	H									E 2000 59.8
67.5	12.2	3.1	12.8	11	11	9.7	16.5						
N	e	w	B	e	r	n							EM 2000 113
15.5	17	13.8	16.3	12	16	15.5	11.8	10.6	15.5				

Spacing Factor is 1 unless specified otherwise
FILENAME: GSENG

SIGN NUMR: 5
TYPE: A Overhead
QUANTITY: 1

BACKG. COLOR: Green
COPY COLOR: White

DESIGN BY: DME
PROJECT ID: U-4007B

CHK BY: DIV: 3

STD #: \$STN
DATE: May 07, 2010

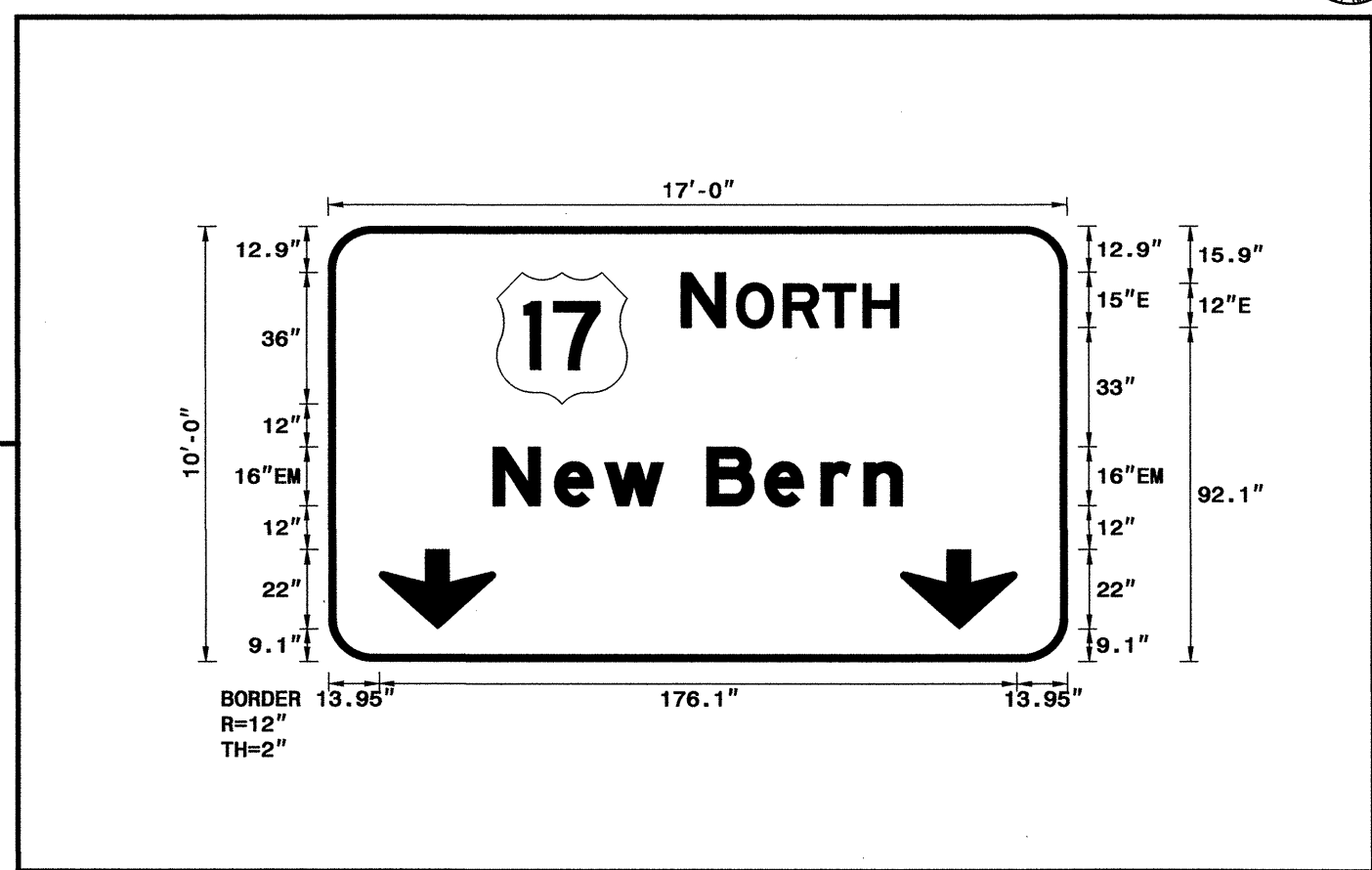
N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH
SIGNING DEPARTMENT

SIGN WIDTH: 17'-0"
HEIGHT: 10'-0"
TOTAL AREA: 170.0 Sq.Ft.

MAT'L: 0.125" ALUMINUM

BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 2"
RADII: 12"
NO. Z BARS: 3
LENGTH: 196.0"

SYMBOL	X	Y	WID	HT
M1_4	46.5	71.1	36	36
ARDOWN	14	9	32.1	22
ARDOWN	158	9	32.1	22



USE NOTES: 1,3,5
1. Legend and border shall be direct applied Grade A reflective sheeting.
2. Legend and border shall be direct applied Grade C reflective sheeting.
3. Shields shall be Grade A reflective sheeting on 0.032" aluminum and demountable.
4. Background shall be Grade B reflective sheeting.
5. Background shall be Grade C reflective sheeting.
6. Center arrow(s) vertically on sign.

Letter spacings are to start of next letter													Series/Size Text Length
N	O	R	T	H									E 2000 59.9
97.5	12.2	3.1	12.8	11	11	9.7	46.5						
N	e	w	B	e	r	n							EM 2000 113
45.5	17	13.8	16.3	12	16	15.5	11.8	10.6	45.5				

Spacing Factor is 1 unless specified otherwise
FILENAME: GSENG

SIGN NUMR: 7
TYPE: A Overhead
QUANTITY: 1

BACKG. COLOR: Green
COPY COLOR: White

DESIGN BY: DME
PROJECT ID: U-4007B

CHK BY: DIV: 3

STD #: \$STN
DATE: May 07, 2010

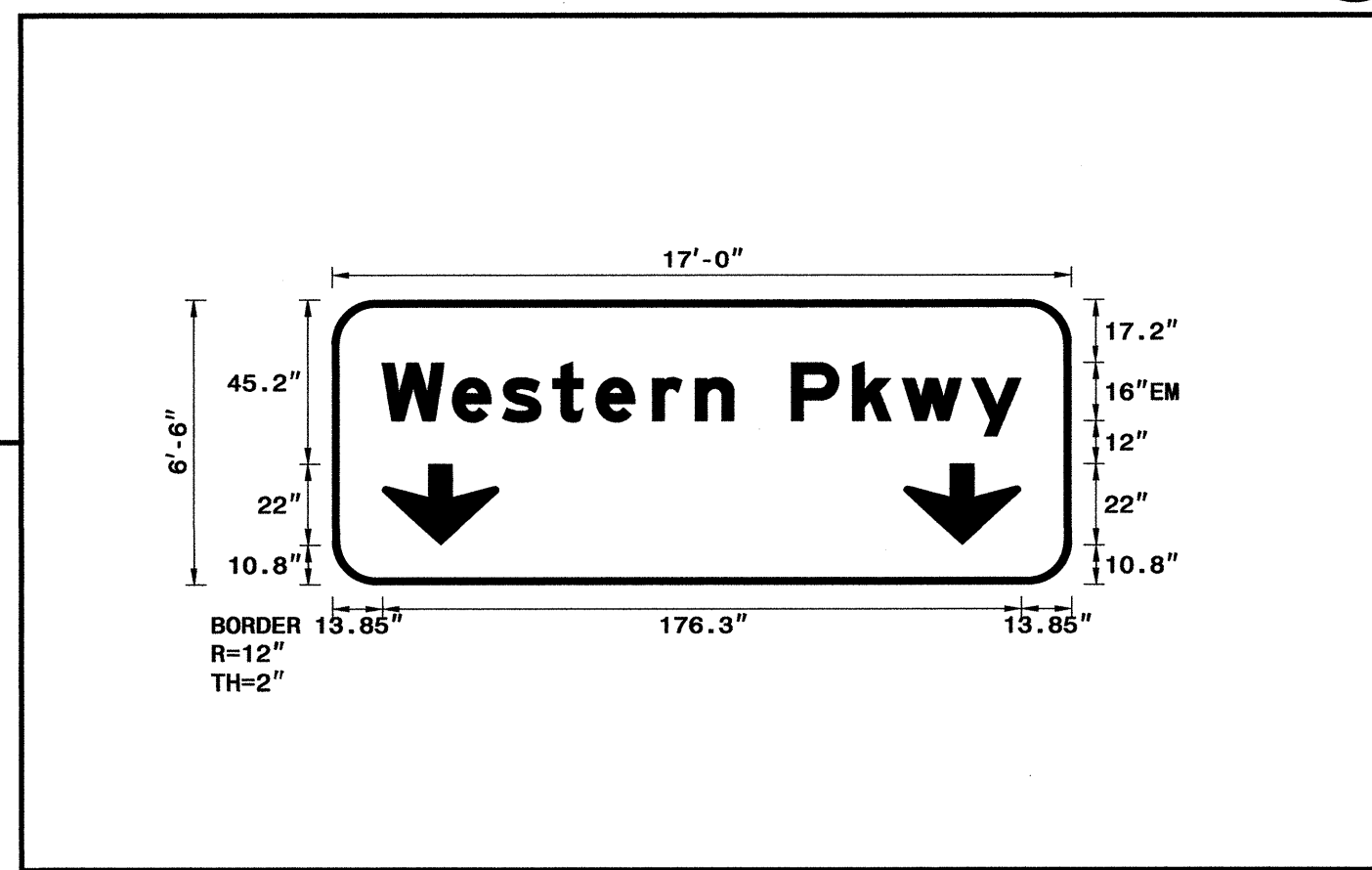
N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH
SIGNING DEPARTMENT

SIGN WIDTH: 17'-0"
HEIGHT: 6'-6"
TOTAL AREA: 110.5 Sq.Ft.

MAT'L: 0.125" ALUMINUM

BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 2"
RADII: 12"
NO. Z BARS: 2
LENGTH: 196.0"

SYMBOL	X	Y	WID	HT
ARDOWN	13.8	10.8	32.1	22
ARDOWN	157.8	10.8	32.1	22




USE NOTES: 1,5
1. Legend and border shall be direct applied Grade A reflective sheeting.
2. Legend and border shall be direct applied Grade C reflective sheeting.
3. Shields shall be Grade A reflective sheeting on 0.032" aluminum and demountable.
4. Background shall be Grade B reflective sheeting.
5. Background shall be Grade C reflective sheeting.
6. Center arrow(s) vertically on sign.

Letter spacings are to start of next letter													Series/Size Text Length
W	e	s	t	e	r	n	P	k	w	y			EM 2000 176.3
13.8	19.4	13.8	13.9	12	15.5	11.8	10.6	16.8	13.8	19.2	13.6	13.8	

Spacing Factor is 1 unless specified otherwise
FILENAME: GSENG

09-JUN-2010 07:43 P:\TIP-Projects\U4007B\Traffic\Signing\CADD\Sign_Designs\U4007B_s1signs.dgn

TIP NO. U-4007B	SHEET NO. SIGN-9
APPROVED: <i>[Signature]</i>	
DATE: 6/9/10	
SEAL	



SIGN NUMR: 2
TYPE: A Overhead
QUANTITY: 1

BACKG. COLOR: Green
COPY COLOR: White

DESIGN BY: DME
PROJECT ID: U-4007B

CHK BY: DIV: 3

STD #: \$STN
DATE: May 07, 2010

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH
SIGNING DEPARTMENT

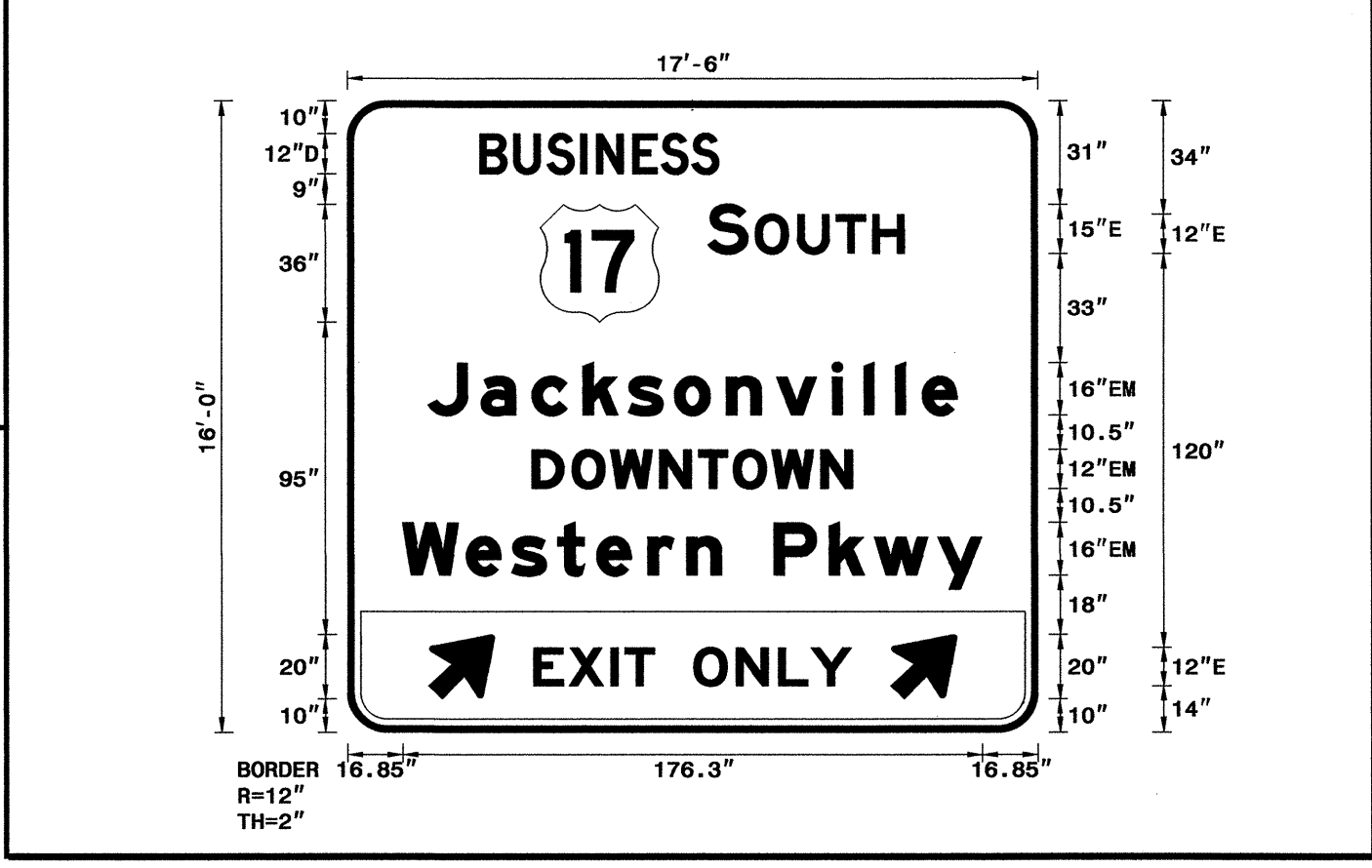
SIGN WIDTH: 17'-6"
HEIGHT: 16'-0"

TOTAL AREA: 280.0 Sq.Ft.
EXIT PANEL AREA: 46.3 Sq.Ft.
MAT'L: 0.125" ALUMINUM

BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 2"
RADII: 12"

NO. Z BARS: 6
LENGTH: 202.0"

SYMBOL	X	Y	WID	HT
M1_4	58.8	125	36	36
ARSHRT	24.7	10	22.3	25
ARSHRT	165.3	10	22.3	25



USE NOTES: 1,3,5,7
1. Legend and border shall be direct applied Grade A reflective sheeting.
2. Legend and border shall be direct applied Grade C reflective sheeting.
3. Shields shall be Grade A reflective sheeting on 0.032" aluminum and demountable.
4. Background shall be Grade B reflective sheeting.
5. Background shall be Grade C reflective sheeting.
6. Center arrow(s) vertically on sign.
7. Bottom panel shall be Yellow Grade A sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is: 202" X 33"

Letter spacings are to start of next letter

Series/Size	Text Length
D 2000	72.6
E 2000	59.8
EM 2000	161
EM 2000	97.6
EM 2000	176.3
E 2000	96.6

Spacing Factor is 1 unless specified otherwise
FILENAME: GSENG

SIGN NUMR: 3,9
TYPE: A Overhead
QUANTITY: 2

BACKG. COLOR: Green
COPY COLOR: White

DESIGN BY: DME
PROJECT ID: U-4007B

CHK BY: DIV: 3

STD #: \$STN
DATE: May 07, 2010

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH
SIGNING DEPARTMENT

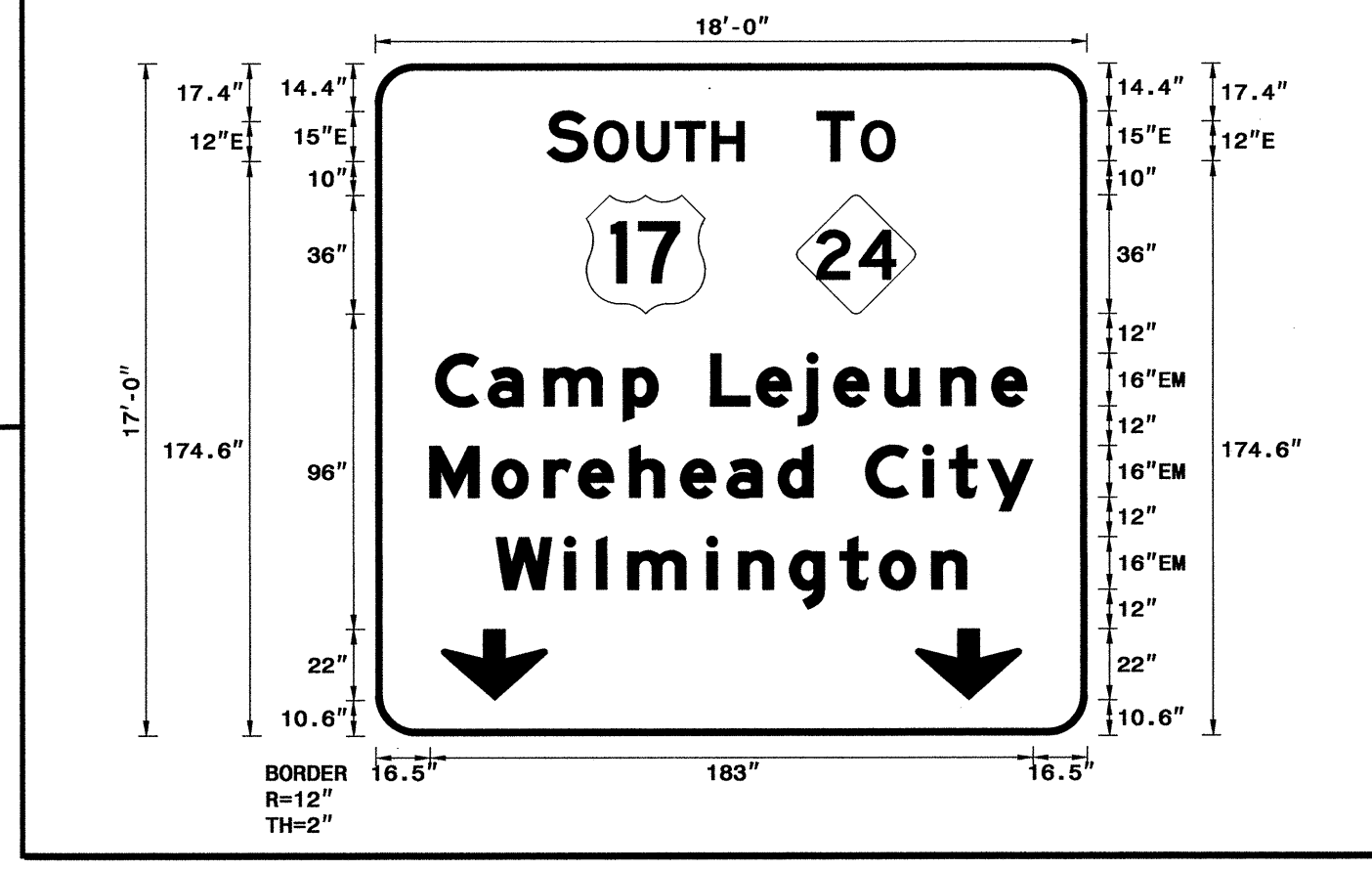
SIGN WIDTH: 18'-0"
HEIGHT: 17'-0"

TOTAL AREA: 306.0 Sq.Ft.
MAT'L: 0.125" ALUMINUM

BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 2"
RADII: 12"

NO. Z BARS: 6
LENGTH: 208.0"

SYMBOL	X	Y	WID	HT
M1_4	64	128.6	36	36
NC242	127.9	128.6	36	36
ARDOWN	20	10.5	32.1	22
ARDOWN	164	10.5	32.1	22



USE NOTES: 1,3,5
1. Legend and border shall be direct applied Grade A reflective sheeting.
2. Legend and border shall be direct applied Grade C reflective sheeting.
3. Shields shall be Grade A reflective sheeting on 0.032" aluminum and demountable.
4. Background shall be Grade B reflective sheeting.
5. Background shall be Grade C reflective sheeting.
6. Center arrow(s) vertically on sign.

Letter spacings are to start of next letter


Series/Size	Text Length
E 2000	59.8
E 2000	23.6
EM 2000	179.5
EM 2000	183
EM 2000	142.9

Spacing Factor is 1 unless specified otherwise
FILENAME: GSENG

SIGN DESIGNS

09-JUN-2010 07:44 P:\p\p-cojects-U\4007B-Traffic\Signing\CADD\Sign Designs\U4007B_sigs.dgn AT 1E247508 meaton

TIP NO. U-4007B	SHEET NO. SIGN-10
APPROVED: <i>[Signature]</i>	
DATE: 6/9/10	
SEAL	



SIGN NUMR: 4 TYPE: A Overhead QUANTITY: 1	BACKG. COLOR: Green COPY COLOR: White	DESIGN BY: DME PROJECT ID: U-4007B	CHK BY: DIV: 3	STD #: SSTN DATE: May 07, 2010	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH SIGNING DEPARTMENT
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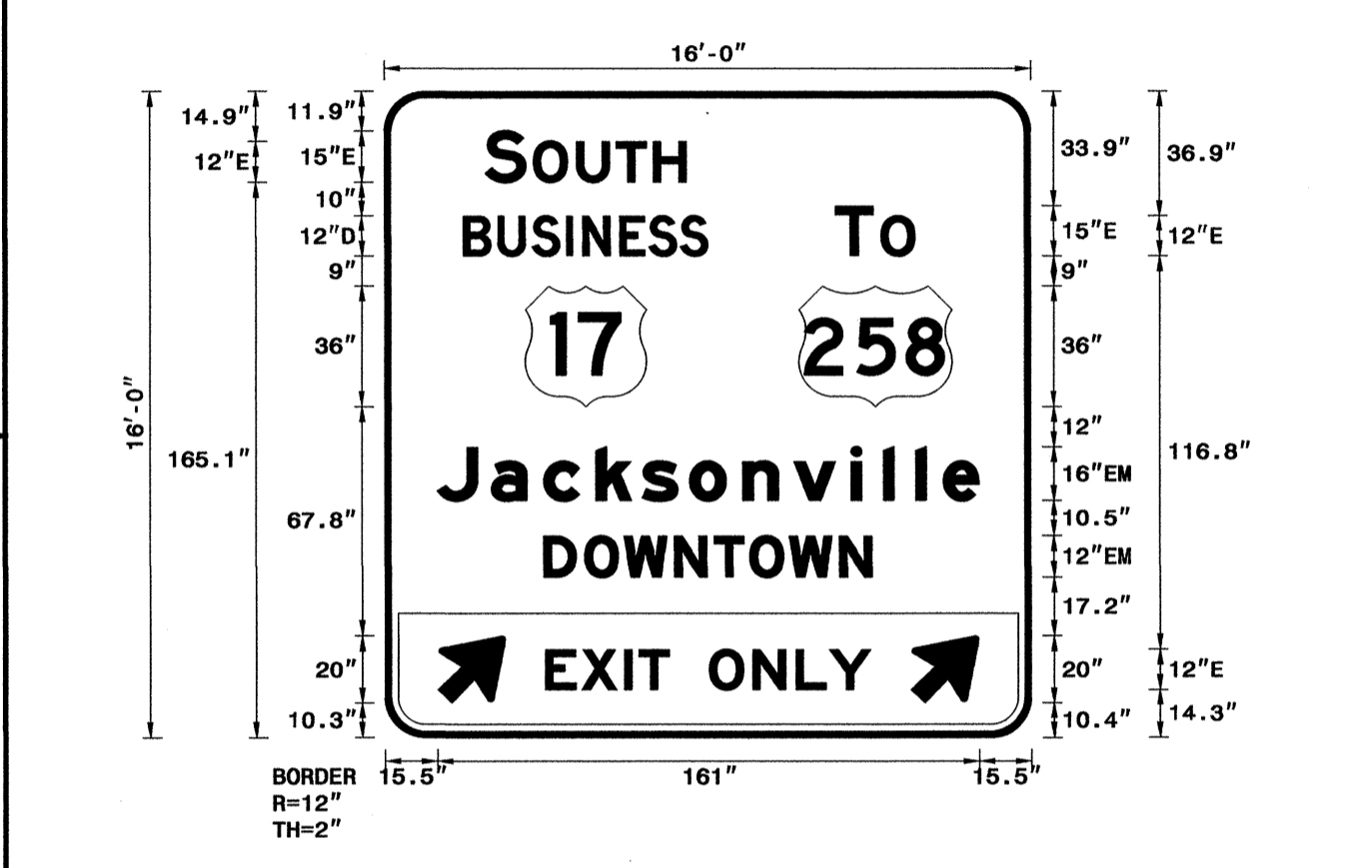
SIGN WIDTH: 16'-0"
HEIGHT: 16'-0"

TOTAL AREA: 256.0 Sq.Ft.
EXIT PANEL AREA: 42.2 Sq.Ft.
MAT'L: 0.125" ALUMINUM

BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 2"
RADII: 12"

NO. Z BARS: 6
LENGTH: 184.0 mm/"

SYMBOL	X	Y	WID	HT
M1_4	41.8	98.1	36	36
M1_4	123.1	98.1	45.4	36
ARSHRT	15.7	10.4	22.3	25
ARSHRT	156.3	10.4	22.3	25



USE NOTES: 1,3,5,7

- Legend and border shall be direct applied Grade A reflective sheeting.
- Legend and border shall be direct applied Grade C reflective sheeting.
- Shields shall be Grade A reflective sheeting on 0.032" aluminum and demountable.
- Background shall be Grade B reflective sheeting.
- Background shall be Grade C reflective sheeting.
- Center arrow(s) vertically on sign.
- Bottom panel shall be Yellow Grade A sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is: 184" X 33"

Letter spacings are to start of next letter													Series/Size Text Length	
S	O	U	T	H									E 2000	
29.9	12.2	2.2	12.8	11.8	11	9.7	102.3						59.8	
B	U	S	I	N	E	S	S						D 2000	
23.5	10.2	10.2	10.2	4.8	11	8.6	9.4	8.2	95.9				72.6	
T	O												E 2000	
134	11.3	2.3	10.1	34.4									23.6	
J	a	c	k	s	o	n	v	i	l	l	e		EM 2000	
15.5	16.2	15.5	15.5	13.8	14.1	15.8	15.2	17	9.6	9.6	8.2	10.6	15.5	161
D	O	W	N	T	O	W	N							EM 2000
47.2	12.1	11.8	14.9	11.9	10.6	11.8	14.9	9.7	47.2					97.6
E	X	I	T	O	N	L	Y							E 2000
47.7	10.7	12.8	4.2	9	12	12.8	12.8	10	12.2	47.7				96.6

Spacing Factor is 1 unless specified otherwise
FILENAME: GSENG

SIGN NUMR: 8,10 TYPE: A Overhead QUANTITY: 2	BACKG. COLOR: Green COPY COLOR: White	DESIGN BY: DME PROJECT ID: U-4007B	CHK BY: DIV: 3	STD #: SSTN DATE: May 07, 2010	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH SIGNING DEPARTMENT
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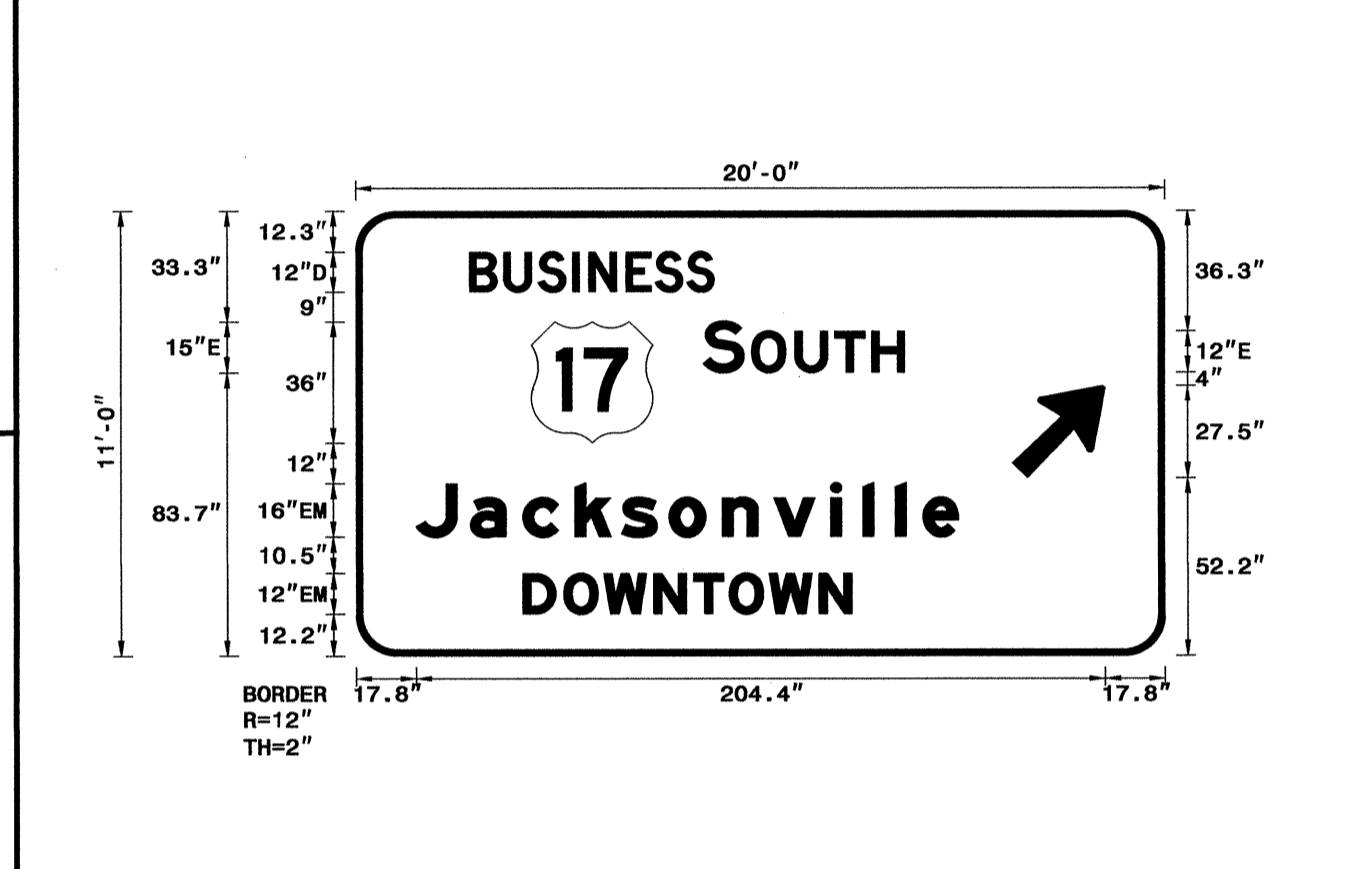
SIGN WIDTH: 20'-0"
HEIGHT: 11'-0"

TOTAL AREA: 220.0 Sq.Ft.
MAT'L: 0.125" ALUMINUM

BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 2"
RADII: 12"

NO. Z BARS: 3
LENGTH: 232.0"

SYMBOL	X	Y	WID	HT
M1_4	52	62.8	36	36
ARND	194.7	52.3	22.4	35.3



USE NOTES: 1,3,5,6


- Legend and border shall be direct applied Grade A reflective sheeting.
- Legend and border shall be direct applied Grade C reflective sheeting.
- Shields shall be Grade A reflective sheeting on 0.032" aluminum and demountable.
- Background shall be Grade B reflective sheeting.
- Background shall be Grade C reflective sheeting.
- Center arrow(s) vertically on sign.

Letter spacings are to start of next letter													Series/Size Text Length	
B	U	S	I	N	E	S	S						D 2000	
33.7	10.2	10.2	10.2	4.8	11	8.6	9.4	8.2	133.7				72.6	
S	O	U	T	H									E 2000	
103	12.2	2.2	12.8	11.8	11	9.7	77.2						59.8	
J	a	c	k	s	o	n	v	i	l	l	e		EM 2000	
17.8	16.2	15.5	15.5	13.8	14.1	15.8	15.2	17	9.6	9.6	8.2	10.6	61.3	161
D	O	W	N	T	O	W	N							EM 2000
49.5	12.1	11.8	14.9	11.9	10.6	11.8	14.9	9.7	93					97.6

Spacing Factor is 1 unless specified otherwise
FILENAME: GSENG

SIGN DESIGNS

09-JUN-2010 07:48 P:\Projects\U4007B\Traffic\Signing\CADD\Sign_Designs\U4007B_signs.dgn

TIP NO. U-4007B	SHEET NO. SIGN-11
APPROVED: <i>[Signature]</i>	
DATE: 6/9/10	
SEAL	
	

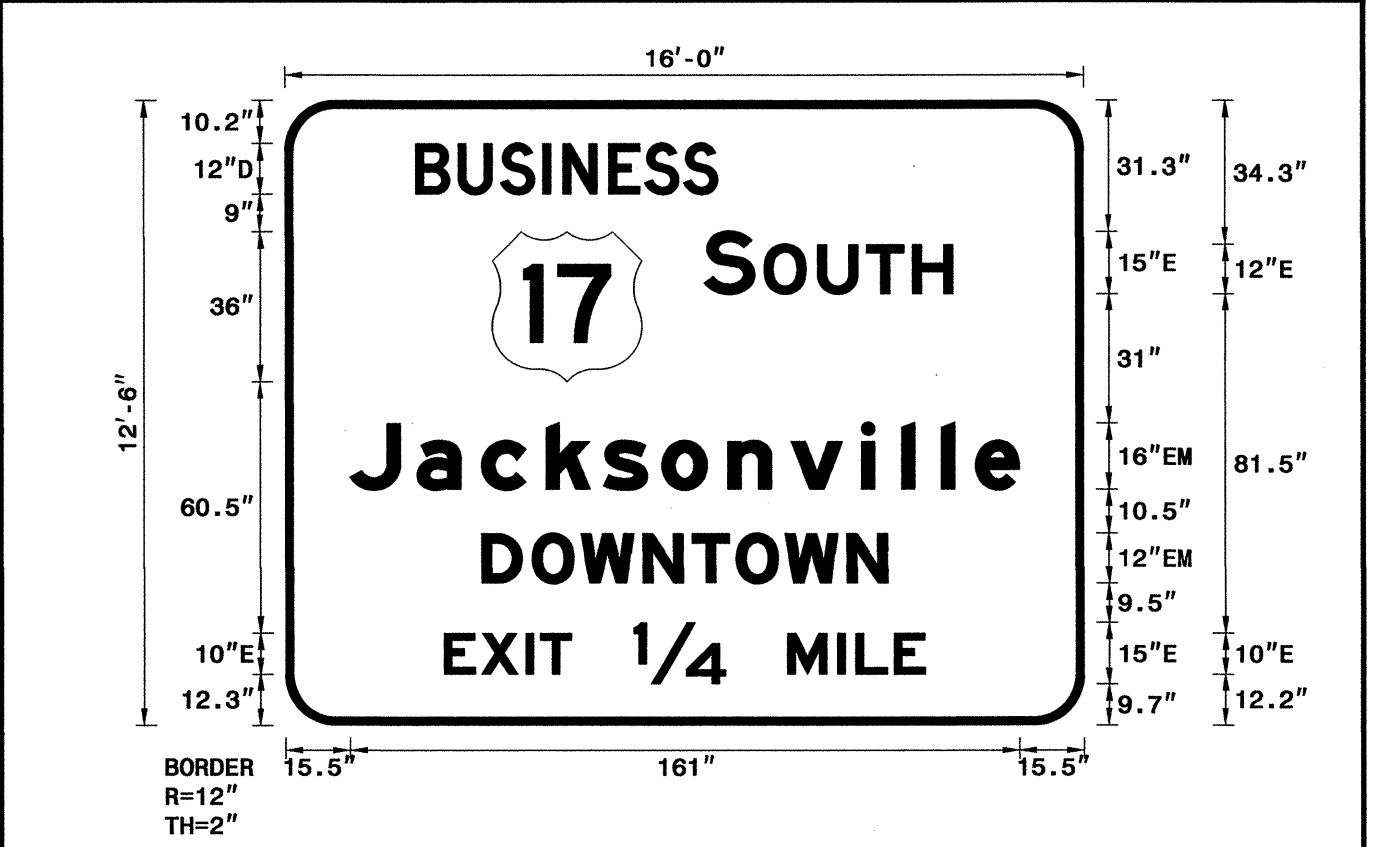
SIGN NUMR: 101 BACKG. COLOR: Green DESIGN BY: DME CHK BY: STD #: S5TN N. C. DEPARTMENT OF TRANSPORTATION
 TYPE: A Ground COPY COLOR: White PROJECT ID: U-4007B DIV: 3 DATE: May 10, 2010 DIVISION OF HIGHWAYS
 QUANTITY: 1 TRAFFIC ENGINEERING BRANCH
 SIGNING DEPARTMENT

SIGN WIDTH: 16'-0"
 HEIGHT: 12'-6"
 TOTAL AREA: 200.0 Sq.Ft.

SYMBOL	X	Y	WID	HT
M1_4	49.8	82.8	36	36

MAT'L: 0.125" ALUMINUM
 BORDER TYPE: FLUSH
 RECESS: 0"
 WIDTH: 2"
 RADII: 12"
 NO. Z BARS: 4
 LENGTH: 184.0"

USE NOTES: 2,3,5
 1. Legend and border shall be direct applied Grade A reflective sheeting.
 2. Legend and border shall be direct applied Grade C reflective sheeting.
 3. Shields shall be Grade C reflective sheeting on 0.032" aluminum and demountable.
 4. Background shall be Grade B reflective sheeting.
 5. Background shall be Grade C reflective sheeting.
 6. Center arrow(s) vertically on sign.



Letter locations are panel edge to lower left corner

Letter	B	U	S	I	N	E	S	S	Series/Size	Text Length
B	31.5	41.7	51.9	62.1	66.9	77.9	86.5	95.9	D 2000	72.6
S	100.8	115.2	128	139.8	150.8				E 2000	59.8
J	15.5	31.7	47.2	62.7	76.5	90.6	106.4	121.6	EM 2000	161
D	47.2	59.3	71.1	86	97.9	108.4	120.2	135.1	EM 2000	97.6
E	38.2	47.1	57.8	61.3	83.8	120.7	132.7	137.1	E 2000	115.7

Spacing Factor is 1 unless specified otherwise
 FILENAME: GSENG

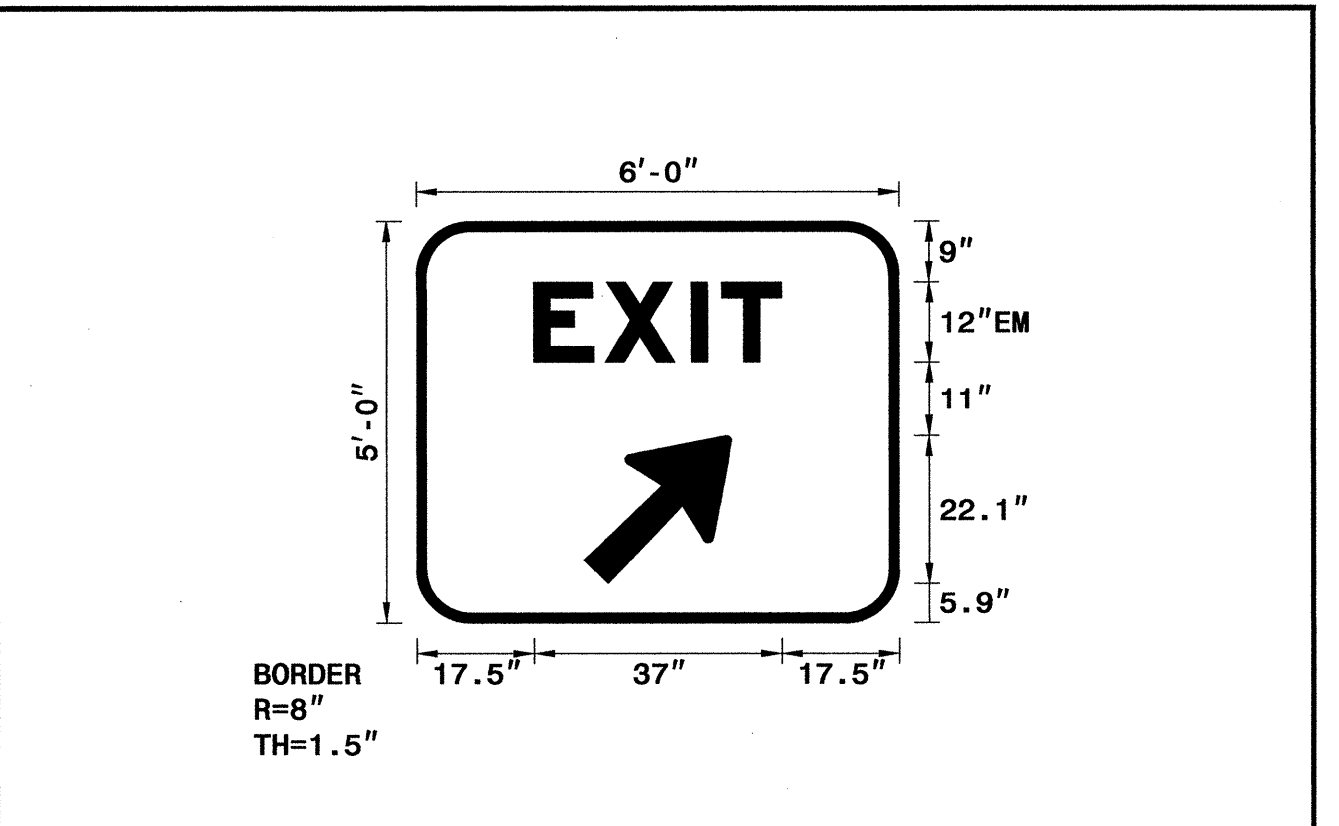
SIGN NUMR: 201,202,203,204,205 BACKG. COLOR: Green DESIGN BY: DME CHK BY: STD #: S5TN N. C. DEPARTMENT OF TRANSPORTATION
 TYPE: A Ground COPY COLOR: White PROJECT ID: U-4007B DIV: 3 DATE: May 11, 2010 DIVISION OF HIGHWAYS
 QUANTITY: 5 TRAFFIC ENGINEERING BRANCH
 SIGNING DEPARTMENT

SIGN WIDTH: 6'-0"
 HEIGHT: 5'-0"
 TOTAL AREA: 30.0 Sq.Ft.

SYMBOL	X	Y	WID	HT
ARMED	25	6	18	28.4

MAT'L: 0.125" ALUMINUM
 BORDER TYPE: FLUSH
 RECESS: 0"
 WIDTH: 1.5"
 RADII: 8"
 NO. Z BARS: 2
 LENGTH: 64.0"

USE NOTES: 2,5
 1. Legend and border shall be direct applied Grade A reflective sheeting.
 2. Legend and border shall be direct applied Grade C reflective sheeting.
 3. Shields shall be Grade A reflective sheeting on 0.032" aluminum and demountable.
 4. Background shall be Grade B reflective sheeting.
 5. Background shall be Grade C reflective sheeting.
 6. Center arrow(s) vertically on sign.



Letter locations are panel edge to lower left corner

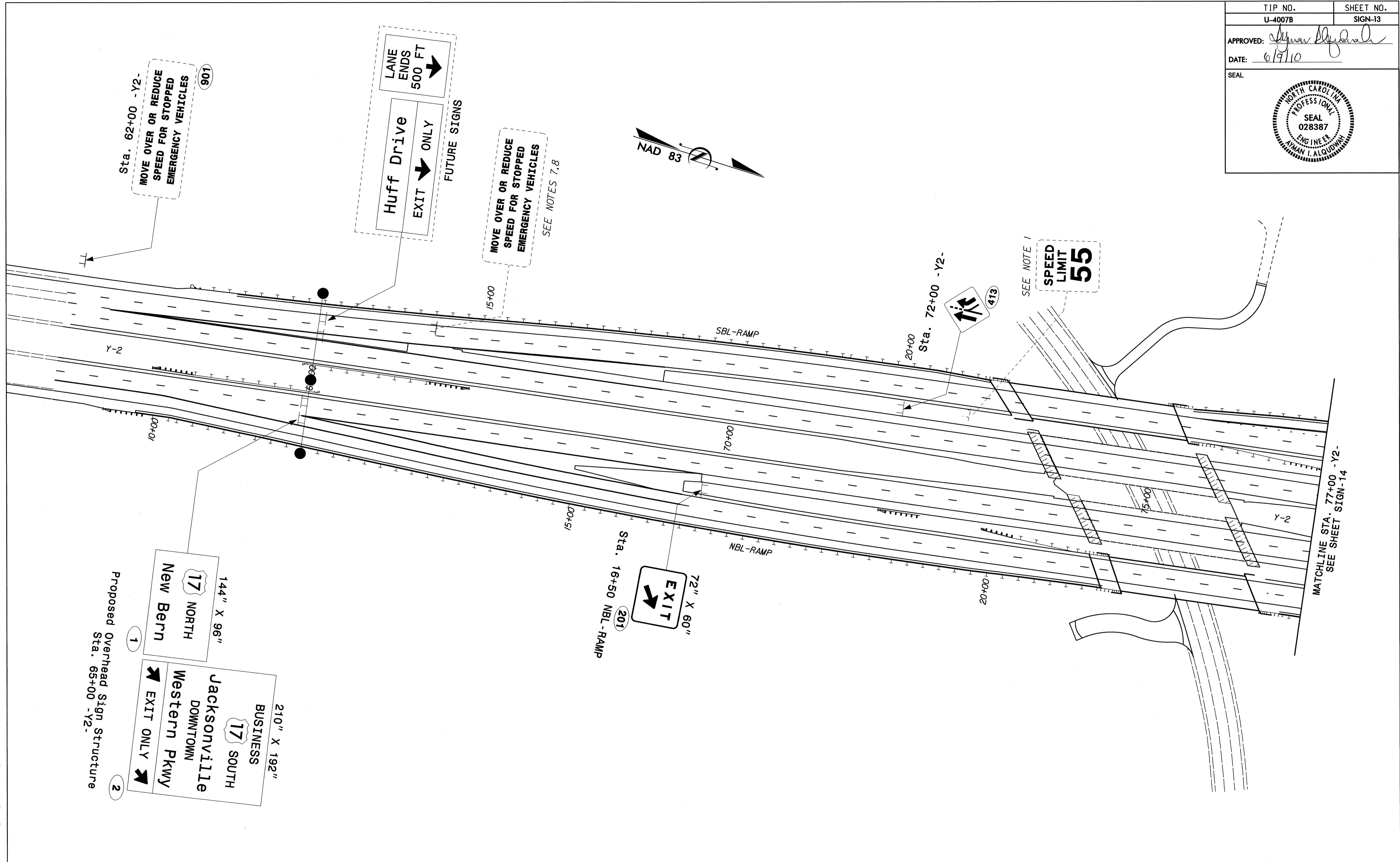
Letter	E	X	I	T	Series/Size	Text Length
E	17.5	28.1	41	45.6	EM 2000	37

Spacing Factor is 1 unless specified otherwise
 FILENAME: GSENG

SIGN DESIGNS

09-JUN-2010 07:49 P:\p\Projects-U\4007B\Traffic\Sign Designs\U4007B_sigs.dgn

TIP NO. U-4007B	SHEET NO. SIGN-13
APPROVED: <i>[Signature]</i>	
DATE: 6/9/10	
SEAL	

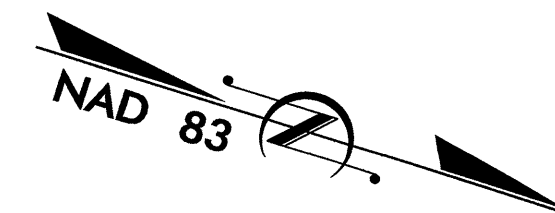
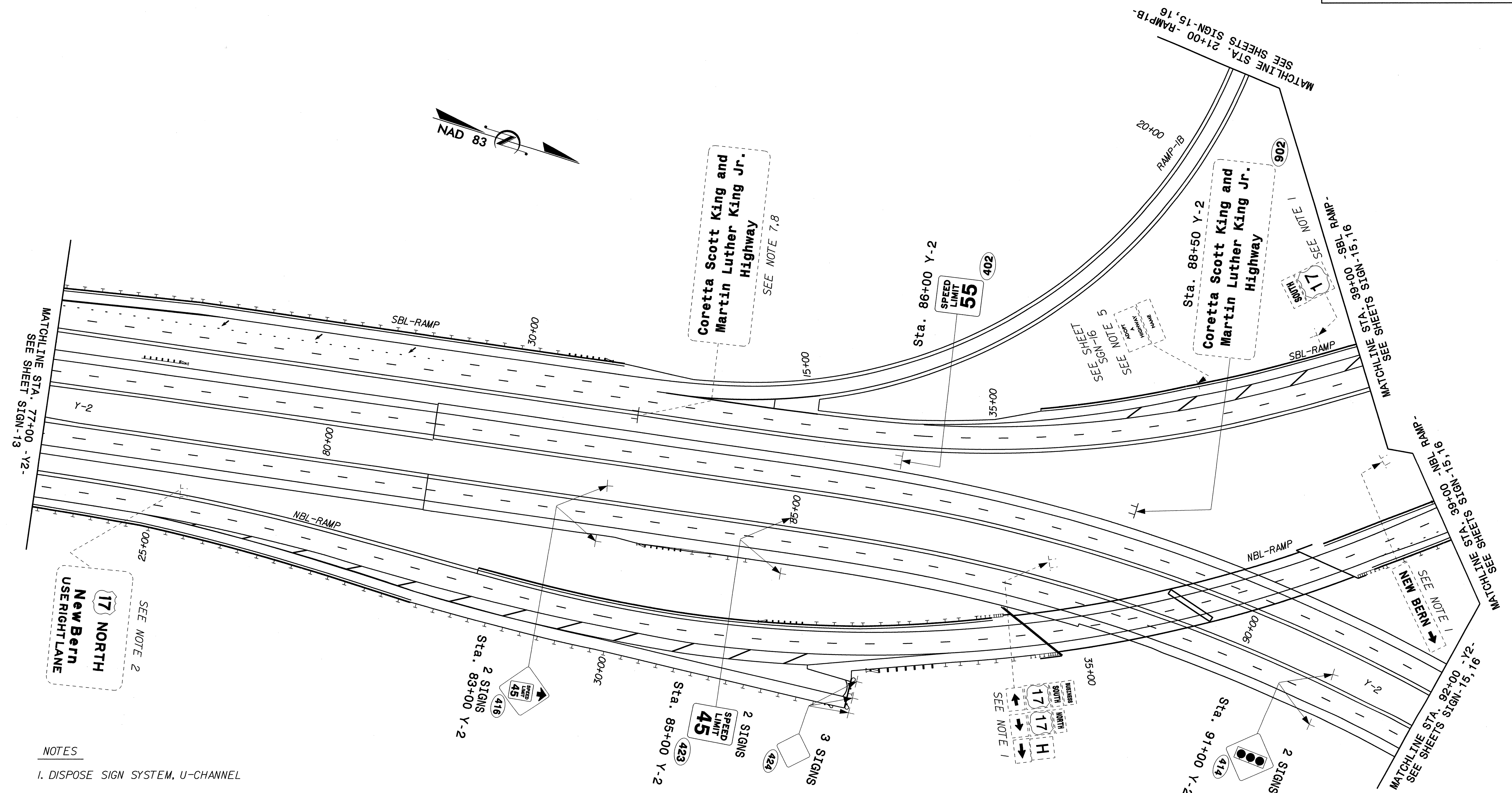


- NOTES**
1. DISPOSE SIGN SYSTEM, U-CHANNEL
 7. DISPOSAL OF SUPPORT, STEEL BEAM
 8. RELOCATE SIGN, TYPE A OR B (GROUND MOUNTED)

EXISTING AND PROPOSED SIGNS

09-JUN-2010 09:41
 P:\Projects\U-4007B\Traffic\Signing\CADD\Signing Layout Plans\U-4007B_Sgn_psh1.dgn
 meaton

TIP NO. U-4007B	SHEET NO. SIGN-14
APPROVED: <i>[Signature]</i>	
DATE: 6/9/10	
SEAL	




NOTES

1. DISPOSE SIGN SYSTEM, U-CHANNEL
2. DISPOSE SIGN SYSTEM, STEEL BEAM
5. RELOCATE SIGN, TYPE E
7. DISPOSAL OF SUPPORT, STEEL BEAM
8. RELOCATE SIGN, TYPE A OR B (GROUND MOUNTED)

EXISTING AND PROPOSED SIGNS

09-JUN-2010 09:42
 P:\TIP\Projects\Traffic\CADD\Sigming Layout Plans\U-4007B_Sgn_psh2.dgn
 At TE247408
 meaton

TIP NO. U-4007B	SHEET NO. SIGN-15
APPROVED: <i>[Signature]</i>	
DATE: 6/9/10	
SEAL	






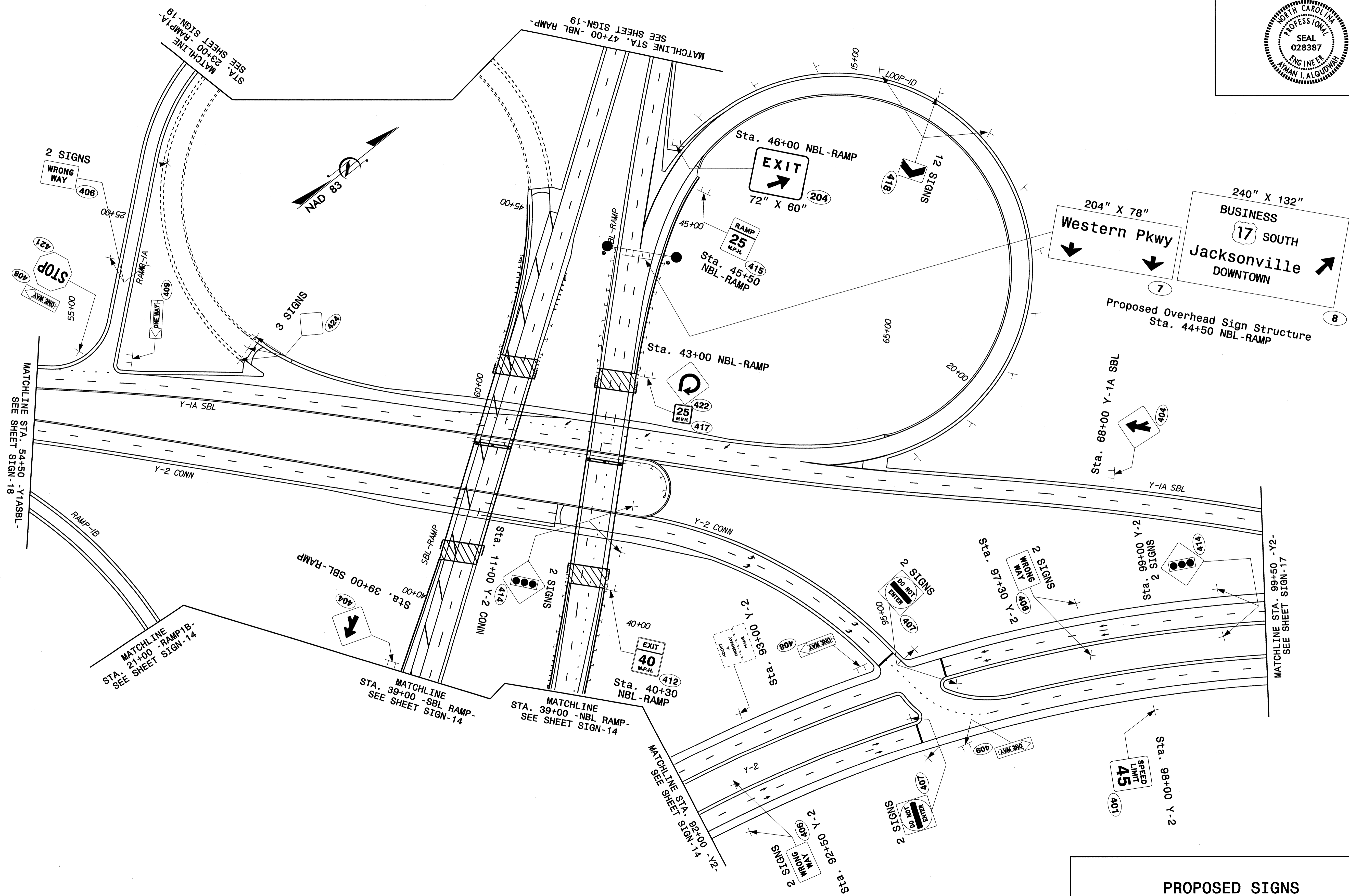
- NOTES**
- DISPOSE SIGN SYSTEM, U-CHANNEL
 - DISPOSE SIGN, A OR B (OVERHEAD)
 - STOCKPILE SUPPORT, OVERHEAD STRUCTURE

EXISTING SIGNS

09-JUN-2010 09:43
 P:\Projects\4007B\Traffic\Signing\CADD\Signing Layout Plans\U-4007B_Sgn_psh3a.dgn
 meaton

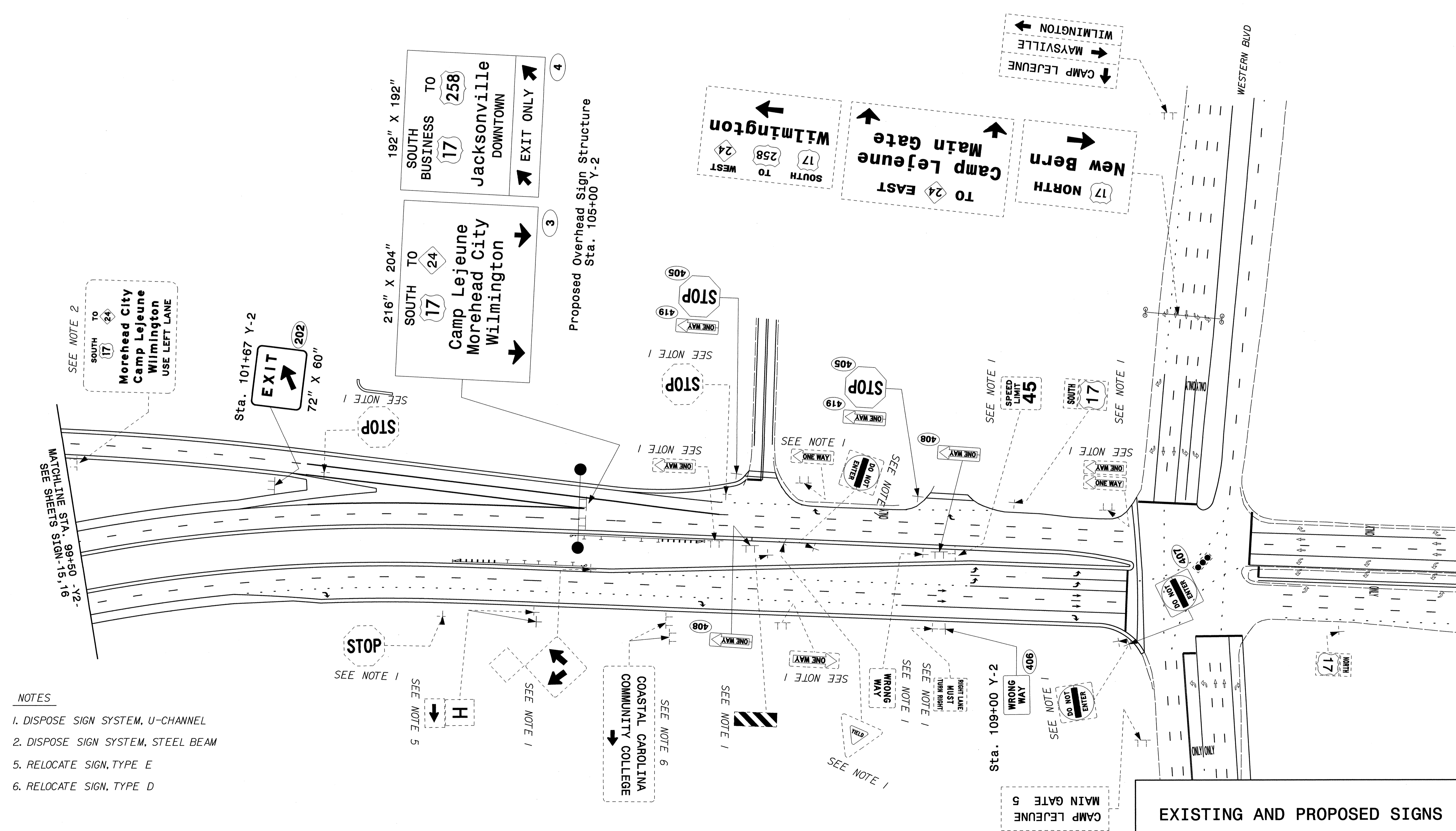
TIP NO. U-4007B	SHEET NO. SIGN-16
APPROVED: <i>[Signature]</i>	
DATE: 6/9/10	
SEAL	





PROPOSED SIGNS

09-JUN-2010 09:30
 P:\TIP\Projects\U-4007B\Traffic\Signing\CADD\Signing Layout Plans\U-4007B_Sgn_psh3.dgn
 meaton




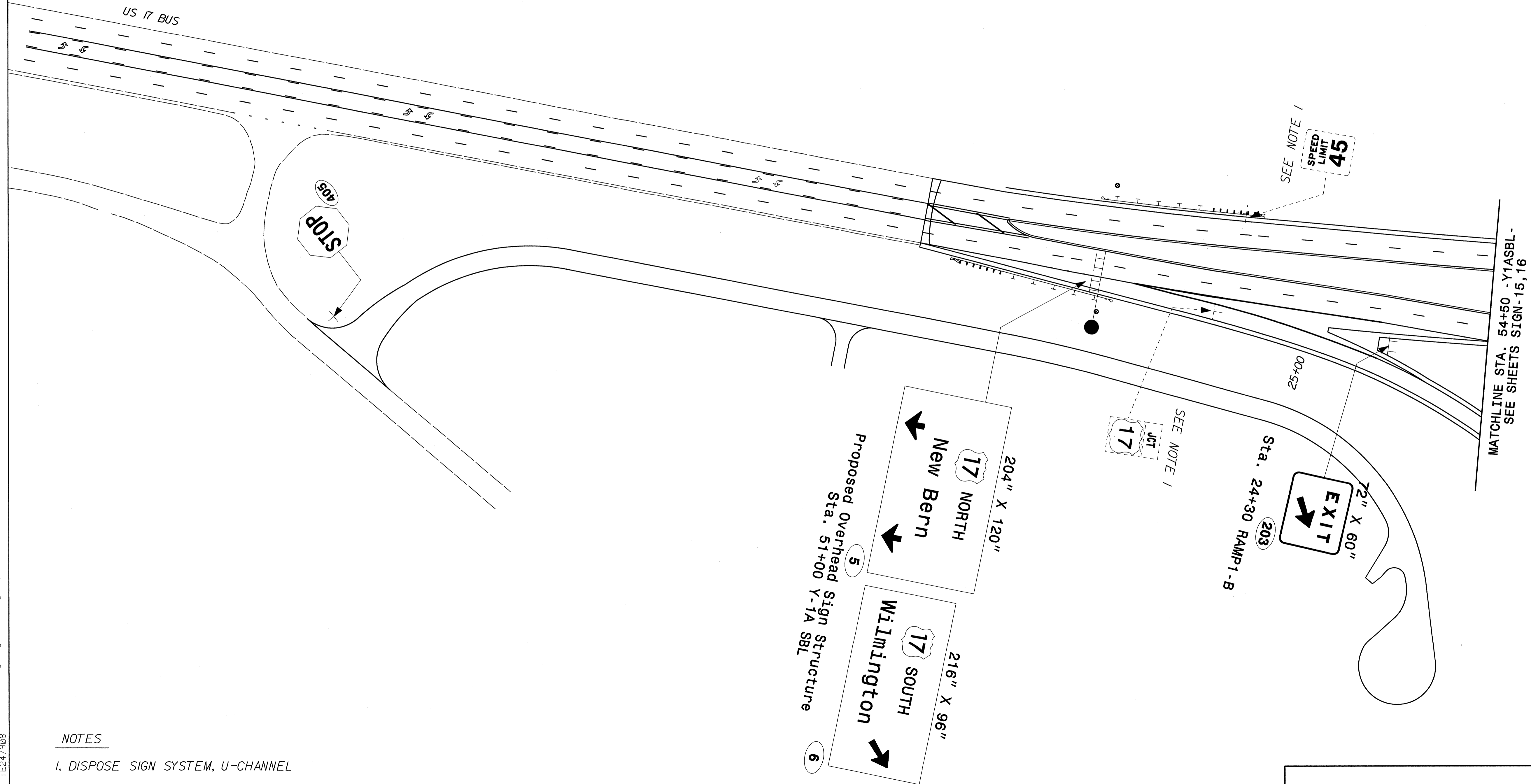
- NOTES**
- DISPOSE SIGN SYSTEM, U-CHANNEL
 - DISPOSE SIGN SYSTEM, STEEL BEAM
 - RELOCATE SIGN, TYPE E
 - RELOCATE SIGN, TYPE D

EXISTING AND PROPOSED SIGNS

09-JUN-2010 09:44
 P:\Projects\4007B\Traffic\Signing\CADD\Signing Layout Plans\U-4007B_Sgn-psb4.dgn
 meaton

TIP NO. U-4007B	SHEET NO. SIGN-18
APPROVED: <i>[Signature]</i>	
DATE: 6/9/10	
SEAL	






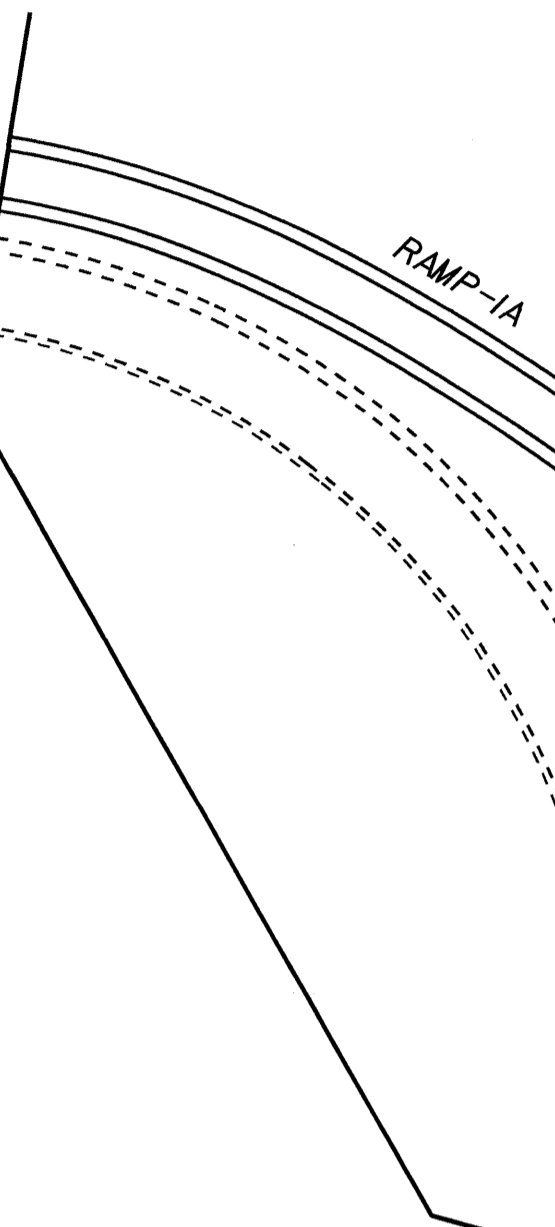
NOTES
1. DISPOSE SIGN SYSTEM, U-CHANNEL

EXISTING AND PROPOSED SIGNS

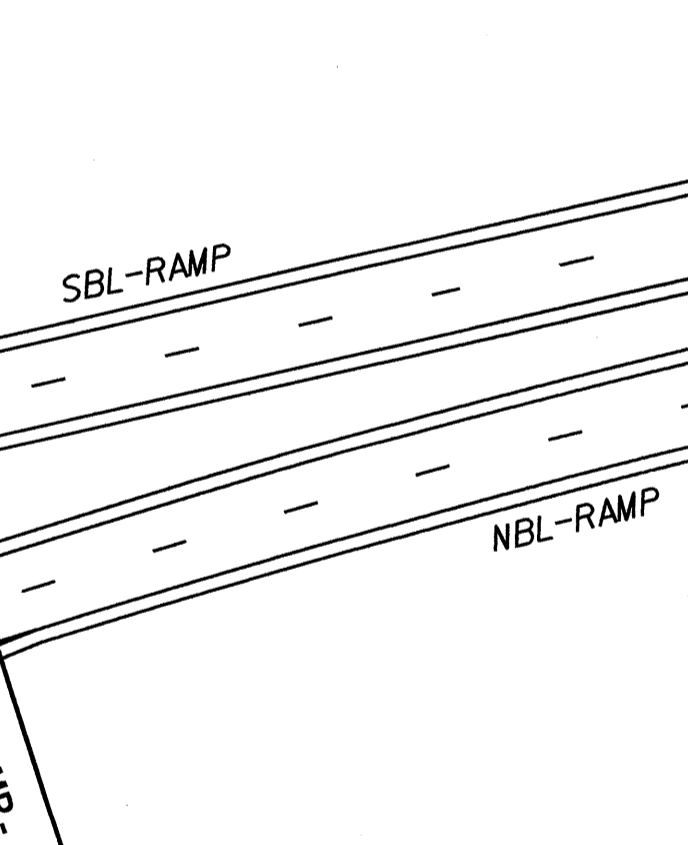
09-JUN-2010 09:33
 P:\TIP\Projects\14007B\Traffic\Signing\CADD\Signing Layout Plans\U-4007B_Sgn_pst5.dgn
 AT TE247908
 meaton

TIP NO. U-4007B	SHEET NO. SIGN-19
APPROVED: <i>[Signature]</i>	
DATE: 6/9/10	
SEAL	
	

MATCHLINE
STA. 23+00 - RAMP-1A-
SEE SHEET SIGN-16



MATCHLINE SEE SHEET
STA. 47+00 - NBL RAMP-
1-1-9



Sta. 50+00 NBL-RAMP
401

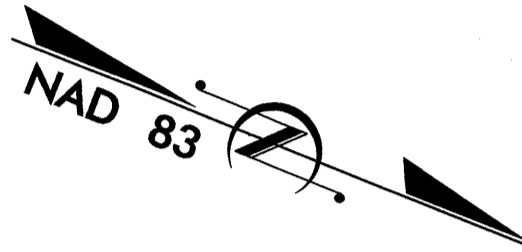
SPEED
LIMIT
45

PT Sta. 50+54.94 NBL-RAMP BK
PT Sta. 50+81.29 SBL-RAMP BK
PC Sta. 10+00.00 L-LINE AHD

Sta. 11+50 Y-LINE
75+00

EXIT
72" X 60"

205



Sta. 12+00 Y-LINE
WRONG
WAY 406

DO NOT
ENTER 407

Sta. 13+00 Y-4
403

SPEED
LIMIT
35

216" X 204"
SOUTH TO
17 24
Camp Lejeune
Morehead City
Wilmington

240" X 132"
BUSINESS
17 SOUTH
Jacksonville
DOWNTOWN

Proposed Overhead Sign Structure
Sta. 15+00 L-LINE

9

10

MATCHLINE
STA. 15+00 -Y4-
SEE SHEET SIGN-20

MATCHLINE STA. 18+50 -L-
SEE SHEET SIGN-21

09-JUN-2010 09:45
P:\TIP\Projects\U4007B\Traffic\Signing\CADD\Signing Layout Plans\U-4007B_Sgn_psh6.dgn
meaton AT 1E27908

PROPOSED SIGNS

TIP NO. U-4007B	SHEET NO. SIGN-20
APPROVED: <i>[Signature]</i>	
DATE: 6/9/10	
SEAL	

WRONG WAY

DO NOT ENTER

ONE WAY

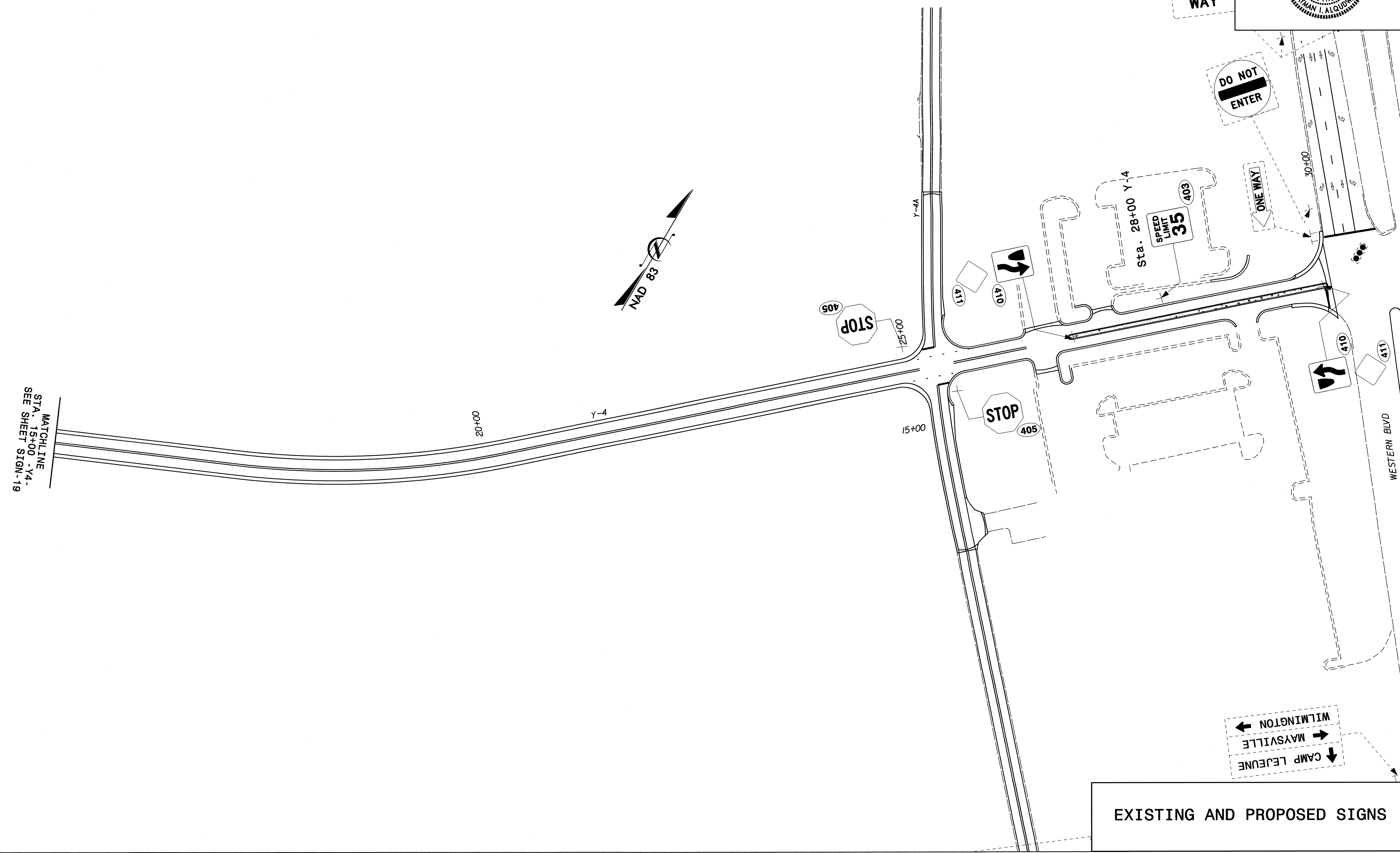
SPEED LIMIT 35

Sta. 28+00 Y-4

WESTERN BLVD

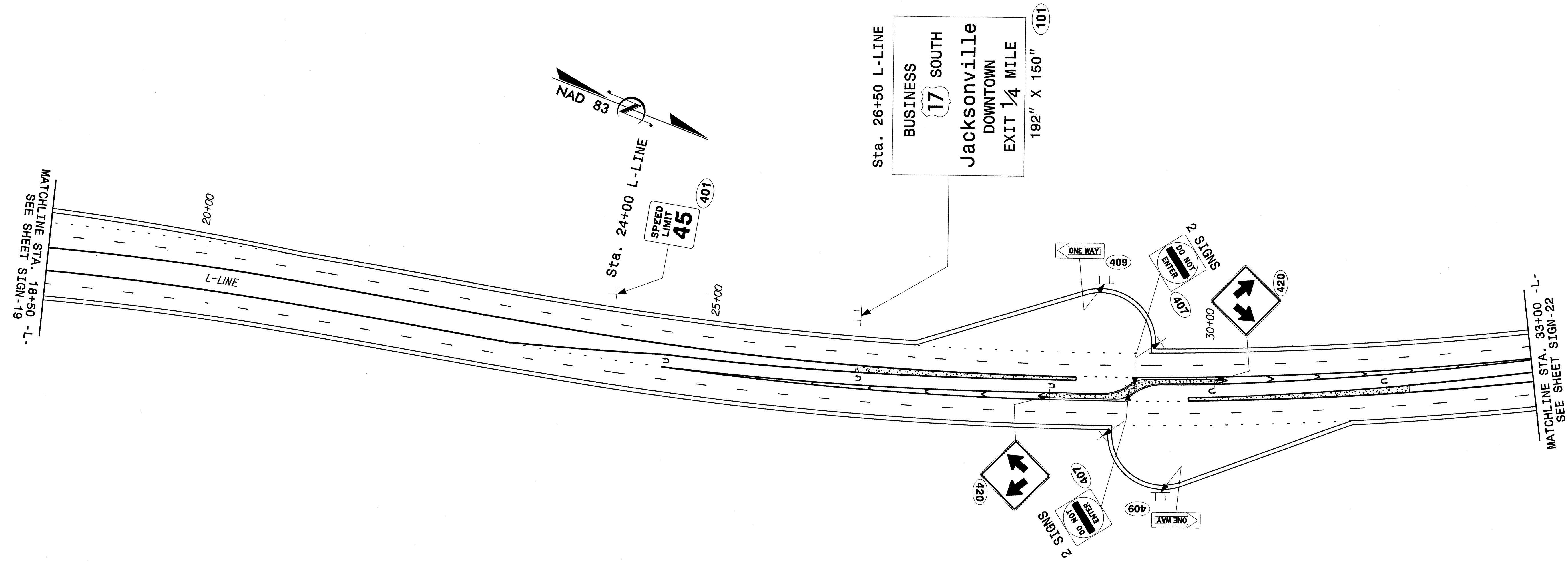
← WILMINGTON
→ MAYSVILLE
↓ CAMP LEJUNE

EXISTING AND PROPOSED SIGNS




MATCHLINE
STA. 15+00 - Y-4.
SEE SHEET SIGN-19

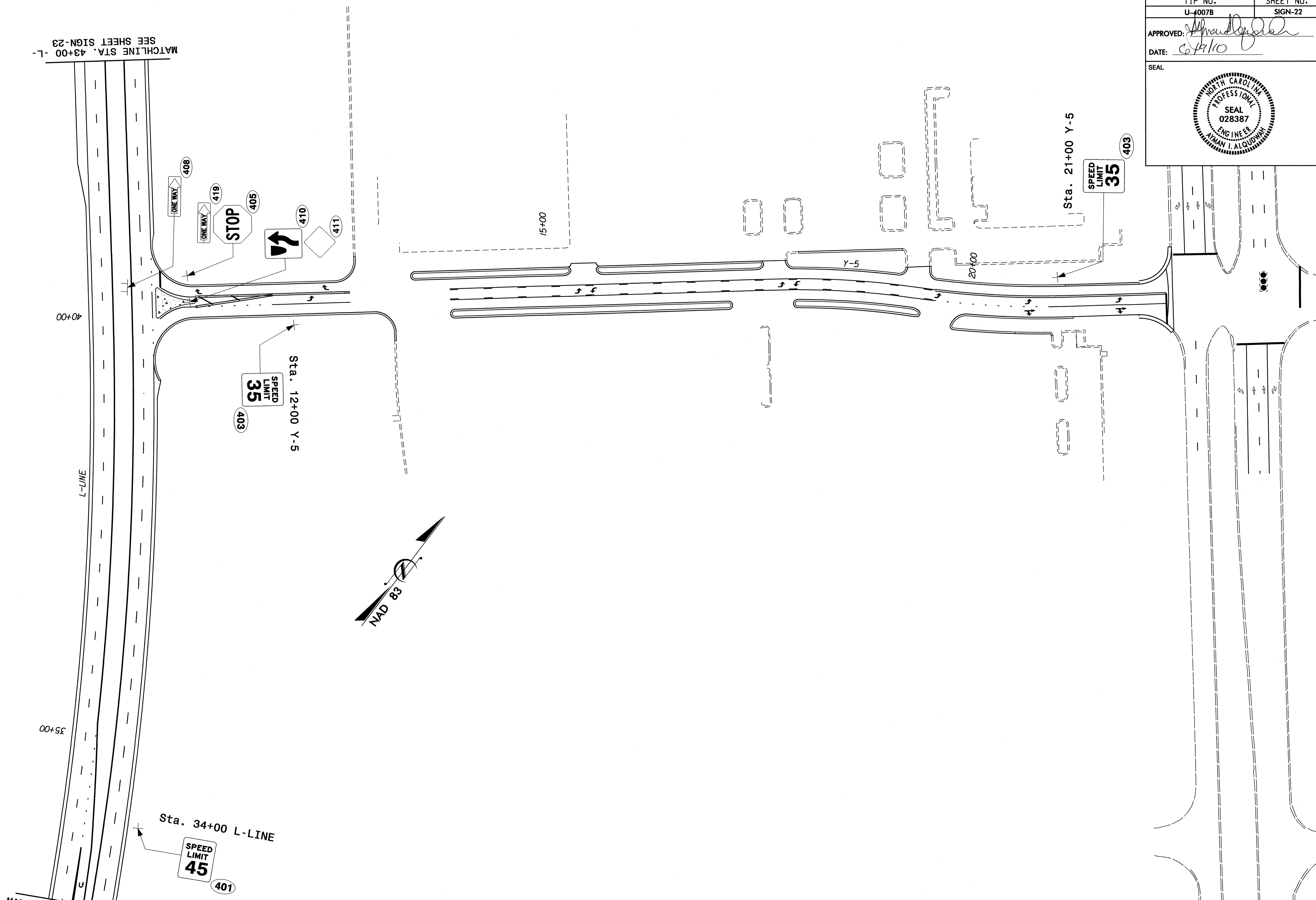
TIP NO. U-4007B	SHEET NO. SIGN-21
APPROVED: <i>[Signature]</i>	
DATE: 6/9/10	
SEAL	



PROPOSED SIGNS


09-JUN-2010 09:45
 P:\Projects\U-4007b\Traffic\Signing\CADD\Signing Layout Plans\U-4007B_Sgn_psh7.dgn
 meaton

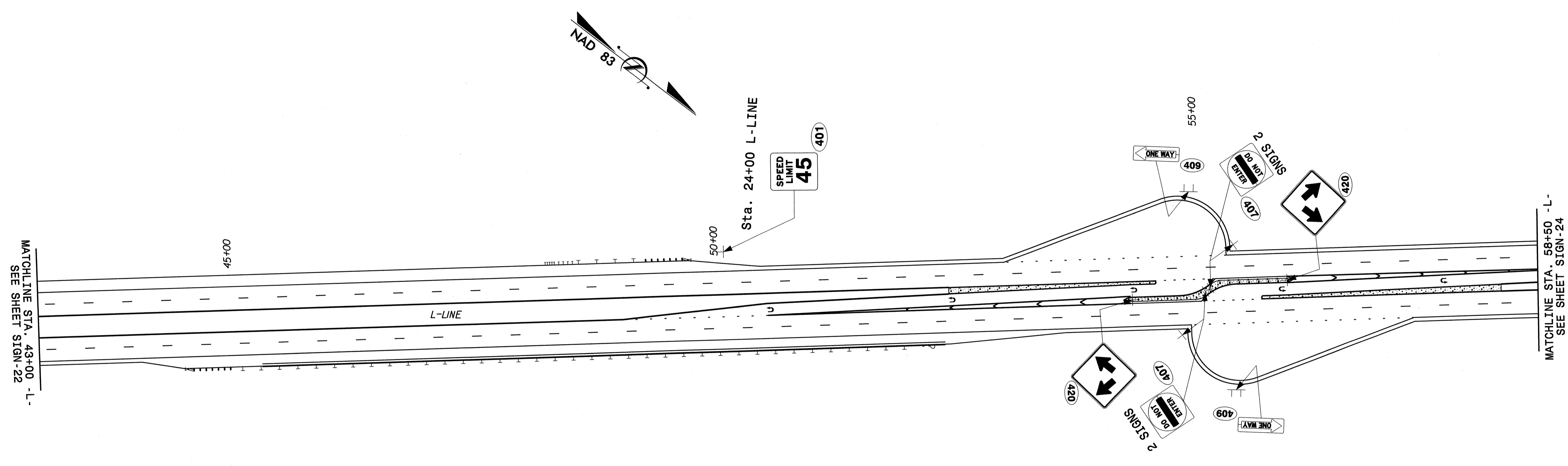
TIP NO. U-4007B	SHEET NO. SIGN-22
APPROVED: <i>[Signature]</i>	
DATE: 6/10/10	
SEAL	
	



PROPOSED SIGNS


09-JUN-2010 09:47
 P:\TIP\Projects\U-4007B\Traffic\Signing\CADD\Signing Layout Plans\U-4007B-Sgn-ps18.dgn
 meaton

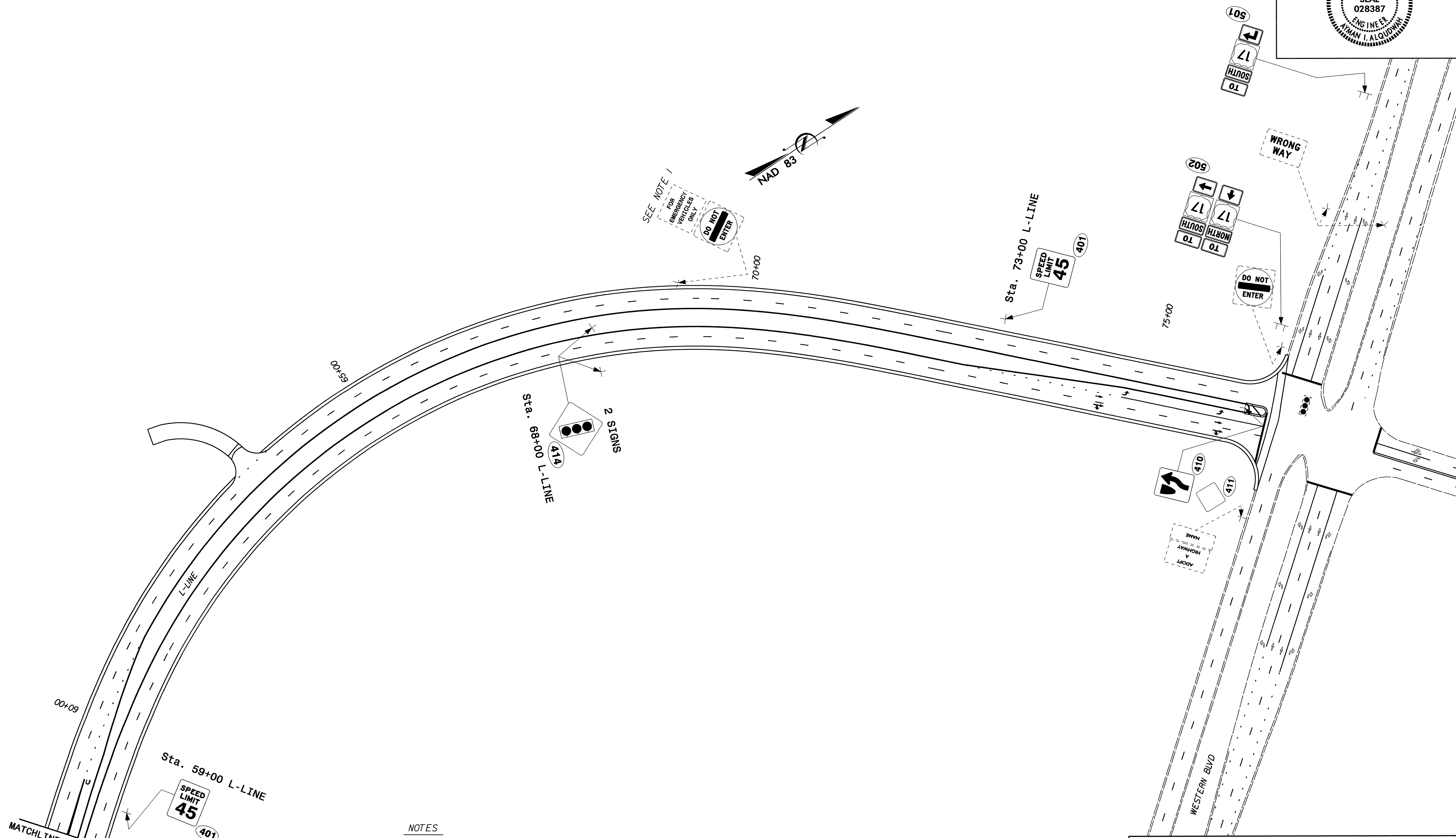
TIP NO. U-4007B	SHEET NO. SIGN-23
APPROVED: <i>[Signature]</i>	
DATE: 6/9/10	
SEAL	
	



PROPOSED SIGNS

TIP NO. U-4007B	SHEET NO. SIGN-24
APPROVED: <i>[Signature]</i>	
DATE: 07/10	
SEAL	





NOTES
1. DISPOSE SIGN SYSTEM, U-CHANNEL

EXISTING AND PROPOSED SIGNS

09-JUN-2010 09:18
 P:\Projects\U4007B\Traffic\Signing\CADD\Signing Layout Plans\U-4007B_Sgn_psh10.dgn
 meaton