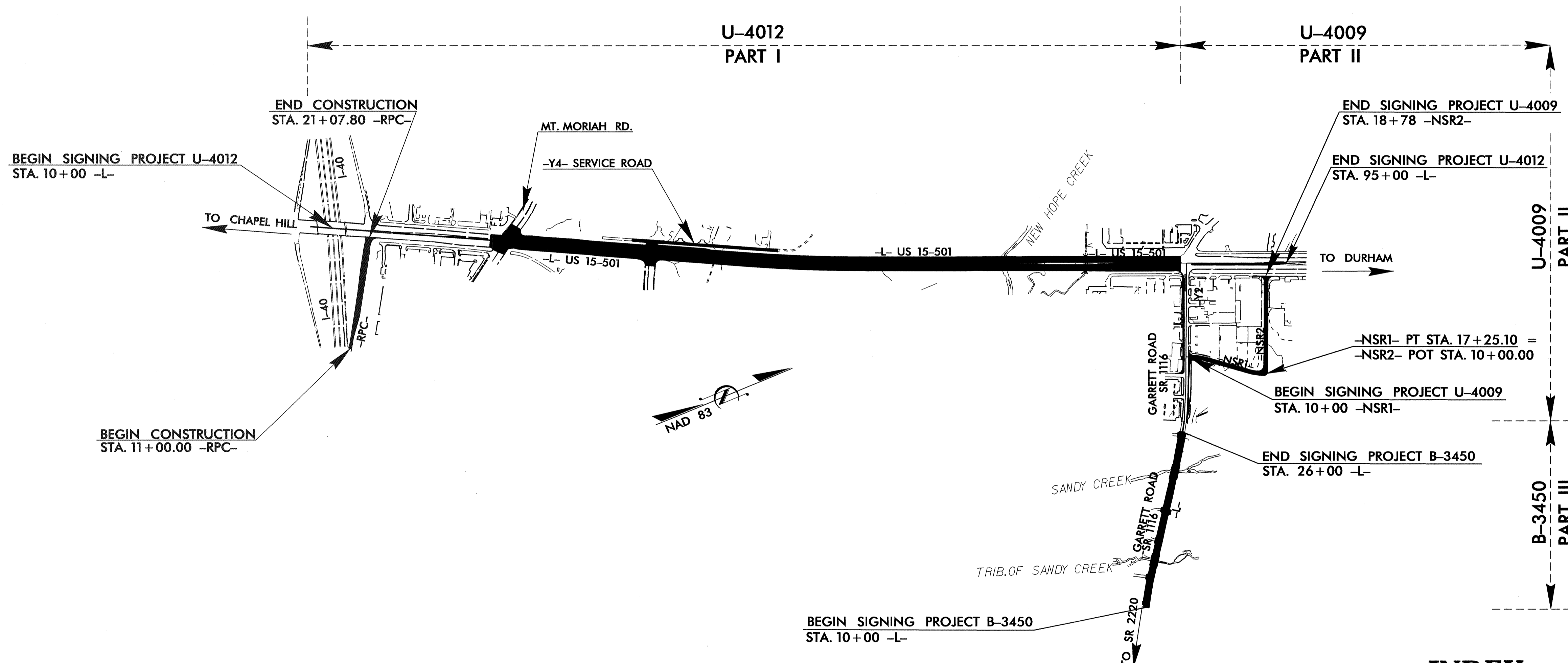


**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLANS
DURHAM COUNTY**

**LOCATION: BRIDGE 217 OVER TRIBUTARY OF SANDY CREEK AND
BRIDGE 122 OVER SANDY CREEK ON SR 1116 (GARRETT
ROAD); DURHAM - SR 1126 (SERVICE ROAD) NEAR US 15-501
& SR 1116 (GARRETT ROAD) INTERSECTION; US 15-501 FROM
NORTH OF MT. MORIAH ROAD SOUTH OF GARRETT ROAD**

CONTRACT: C201487 TIP PROJECTS: U-4012 / U-4009 / B-3450



INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SUMMARY OF QUANTITIES & NOTES
3A - 3E	SUPPORT INFORMATION
4A - 4C	"E", "F" SHEET AND SIGN DESIGN SHEETS
5 - 9	SIGN ROADWAY SHEETS

PLAN PREPARED BY: N.C.D.O.T. SIGNING SECTION	SEAL
R. W. KING, P.E. SIGNING ENGINEER	
A. I. ALQUDWAH, P.E. SIGNING PROJECT ENGINEER	
D. M. EATON SIGNING PROJECT DESIGN ENGINEER	
E. E. WARD SIGNING DESIGN ENGINEER	

ROADWAY STANDARD DRAWINGS
APPLICABLE TO THESE SIGNING PLANS
901.50 901.70 904.50

SUMMARY OF QUANTITIES

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4048000000	902	REINFORCED CONCRETE SIGN FOUNDATION.....	2	C.Y.
4060000000	903	SUPPORTS, BREAKAWAY STEEL BEAM	1,119	LB.
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	1,101	L.F.
4096000000	904	SIGN ERECTION, TYPE D	7	EA.
4102000000	904	SIGN ERECTION, TYPE E	44	EA.
4108000000	904	SIGN ERECTION, TYPE F	2	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE A (GROUND MOUNTED).....	2	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE B (GROUND MOUNTED).....	1	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE D	1	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE E.....	3	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE F.....	1	EA.
4138000000	907	DISPOSAL OF SUPPORT, STEEL BEAM.....	6	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	50	EA.
4192000000	907	DISPOSAL OF SUPPORT, U-CHANNEL	7	EA.

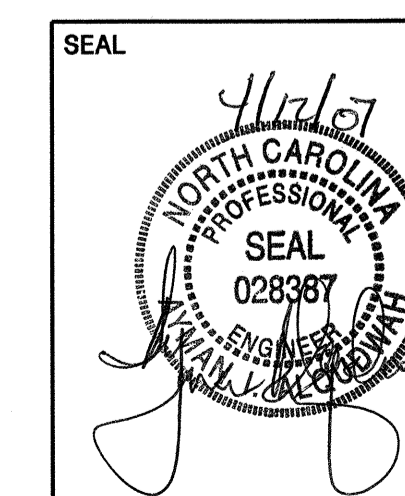
NOTES

Pay Item Notes:

- | | |
|---|--|
| 1 | RELOCATE SIGN, TYPE B (GROUND MOUNTED) |
| 2 | RELOCATE SIGN, TYPE D |
| 3 | RELOCATE SIGN, TYPE E |
| 4 | RELOCATE SIGN, TYPE F |
| 5 | DISPOSAL OF SUPPORT, STEEL BEAM |
| 6 | RELOCATE SIGN, TYPE A (GROUND MOUNTED) |
| 7 | DISPOSAL OF SIGN SYSTEM, U-CHANNEL |
| 8 | DISPOSAL OF SUPPORT, U-CHANNEL |

General Notes:

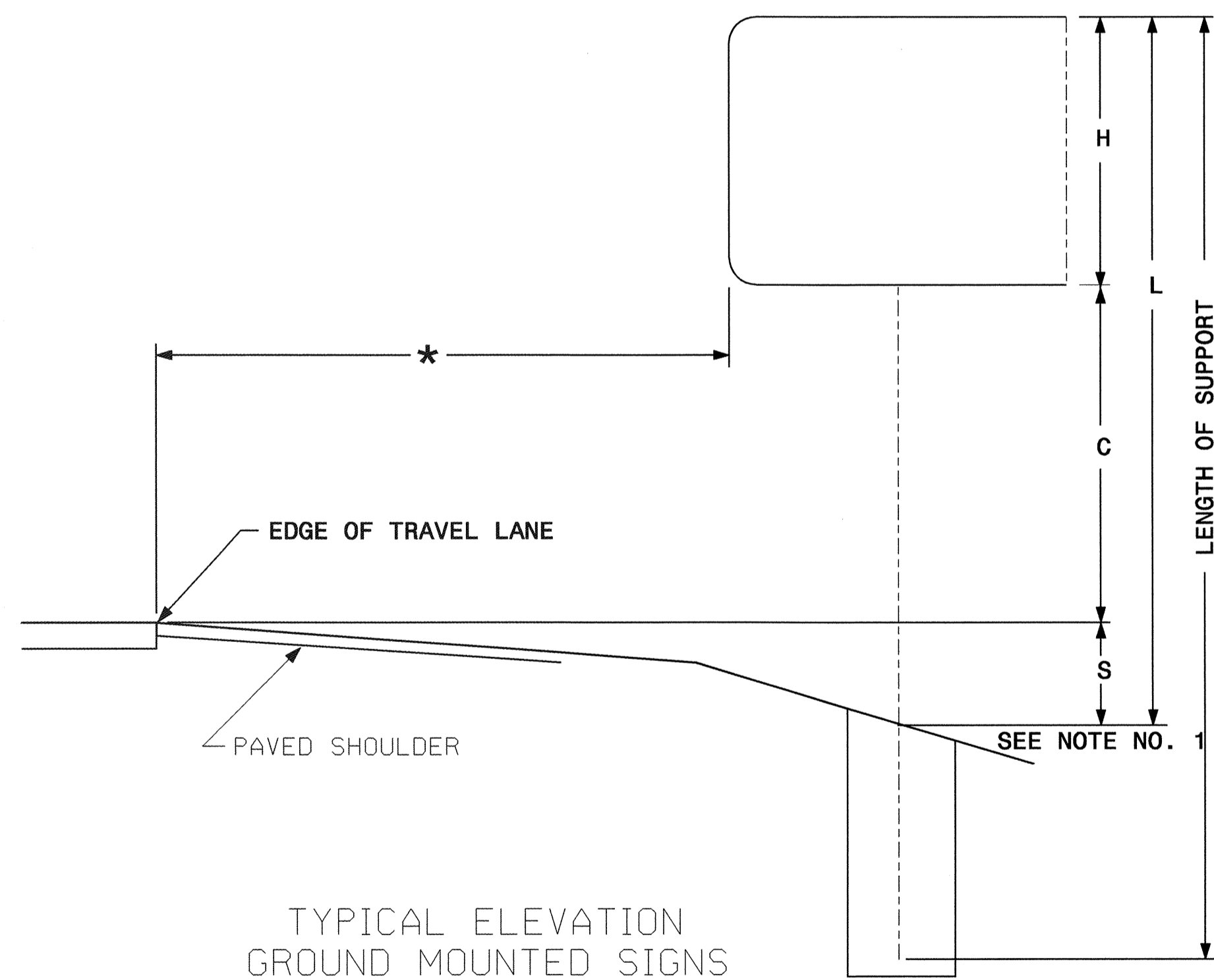
- . SIGNS FURNISHED BY STATE
- . ALL TYPE 'D' SIGNS SHALL BE MOUNTED ON TWO U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS.
- . IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL 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 III REFLECTIVE SHEETING.
- . SEE ROADWAY PLANS FOR GUARD/GUIDE RAIL DETAILS.



SUMMARY OF QUANTITIES AND NOTES

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH	REVISIONS
DATE	03/29/07		
SIGNING DESIGN ENG	E. WARD		
SIGNING PROJECT DGN ENG	M. EATON		
SIGNING PROJECT ENG	A. ALQUDWAH		

SIGN NO.	SIGN TYPE	SIGN SIZE (in.)			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.)	FIELD VERIFIED SEE NOTE 2 (mm/dd/yy)																
		w	x	h								SNS H	HT H	MTG HT	EMBED-MENT	S	L	TOTAL LENGTH	S	L	TOTAL LENGTH	S	L	TOTAL LENGTH																						
901	B	126	X	36	17+35 RP.C	2	S4x7.7	BA	N/A	N/A	18.00	3.00	7.00	4	3.77	13.77	17.77	0.00	0.00	0.00	5.56	15.56	19.56	1	4.5	328.05	0.00	0.26																		
902	A	84	X	54	18+60 RP.C	2	S4x7.7	BA	N/A	N/A	18.00	4.50	7.00	3.5	3.04	14.54	18.04	0.00	0.00	0.00	4.03	15.53	19.03	1	4	326.05	0.00	0.23																		
903	A	84	X	102	16+10 RP.C	2	W6x9	BA	N/A	N/A	18.00	8.50	7.00	4	2.29	17.79	21.79	0.00	0.00	0.00	3.27	18.77	22.77	1.5	4.5	464.16	0.00	0.59																		
																							1118.26			0.00			1.08			USE:			1119			0			2					



NOTES

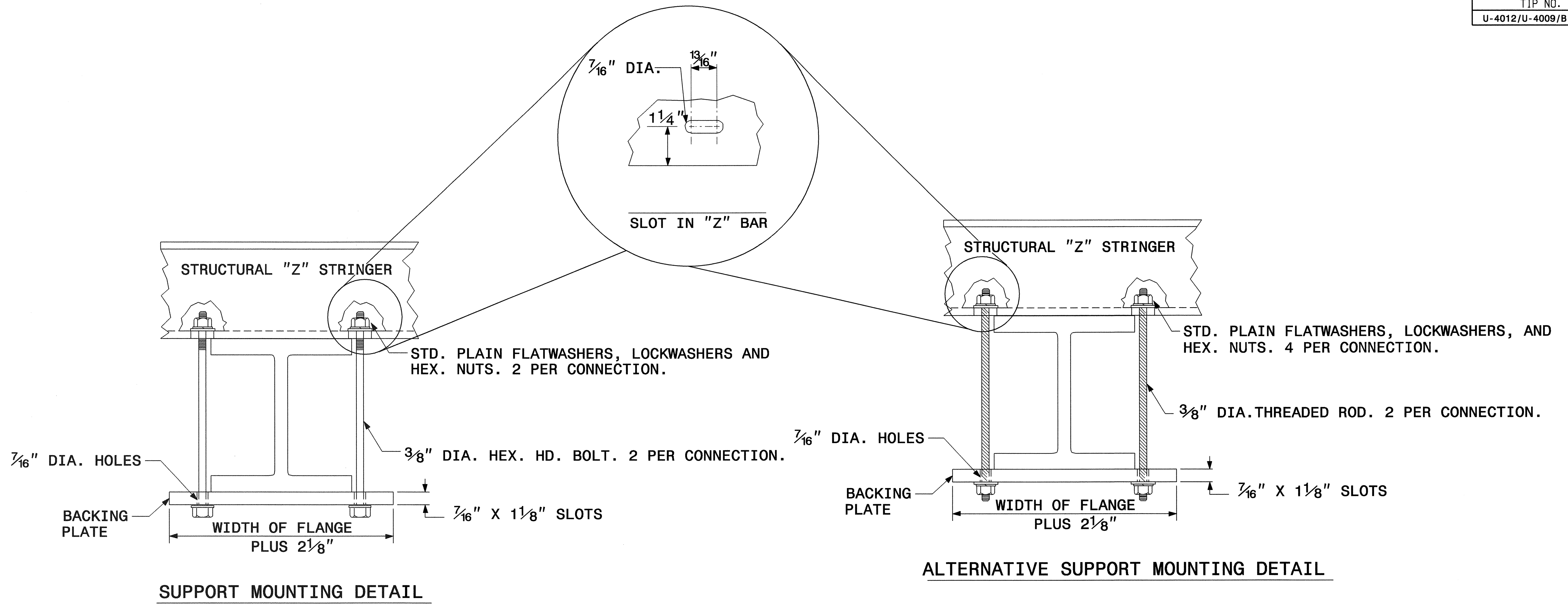
1. DIMENSION "S" REPRESENTS AN INCREASE (+), OR A DECREASE (-) IN POLE LENGTH, RELATIVE TO THE ELEVATION OF THE EDGE OF PAVEMENT.
2. FIELD VERIFICATIONS SHALL BE REQUIRED FOR ALL SUPPORTS, SEE (*) ARTICLE 903-3. FABRICATORS SHALL BE AISC CERTIFIED IN CATEGORY 1, SEE (*) ARTICLE 1072-1. (*) = N.C.D.O.T. STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES
3. 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.

SEAL

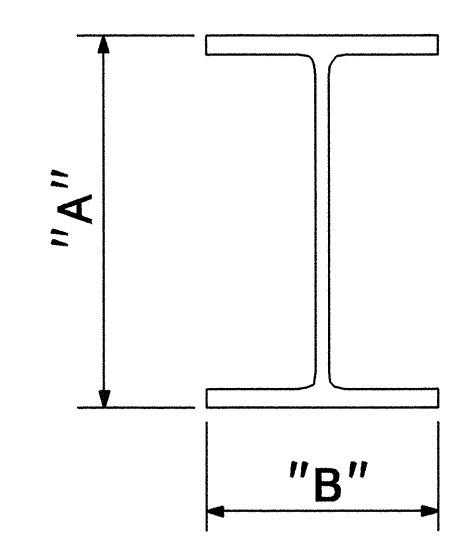


**TYPE "B"
GROUND MOUNTED SIGNS**

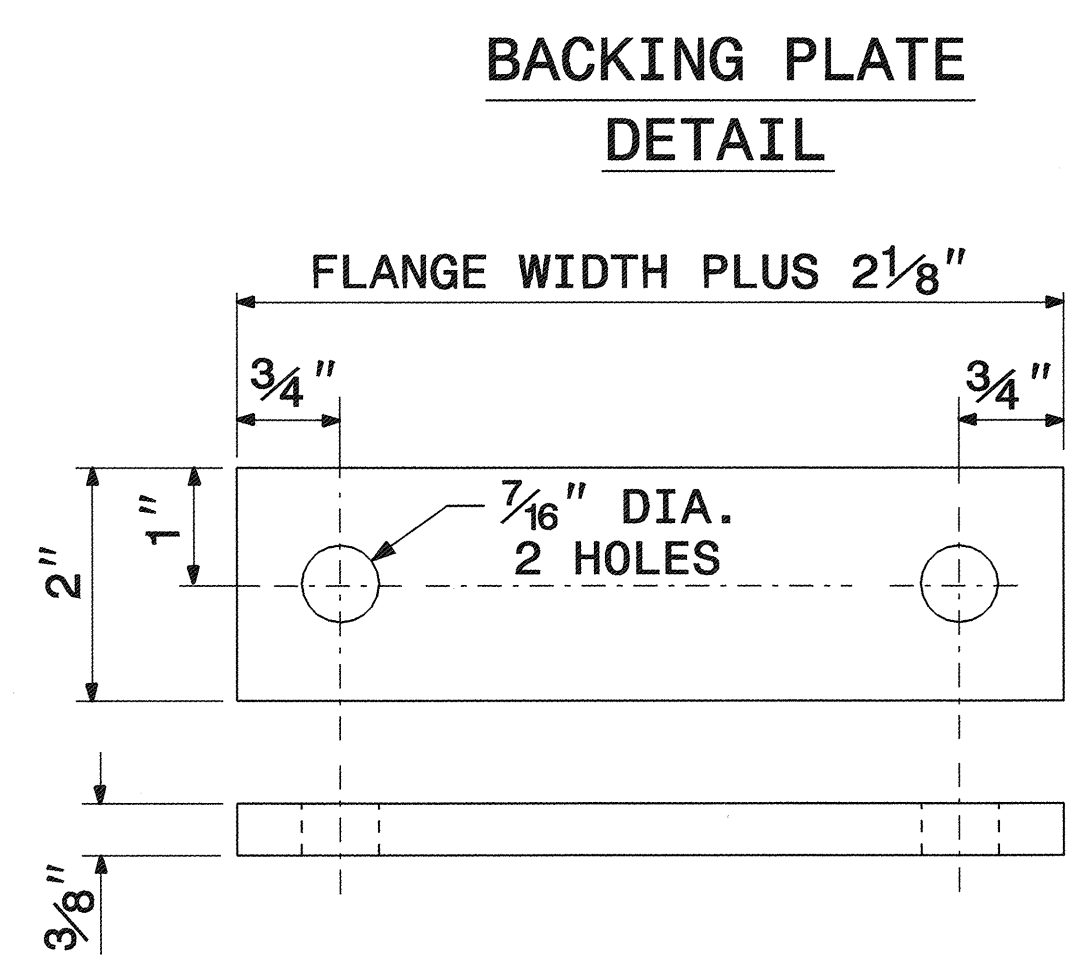
SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH	REVISIONS
DATE	03/29/07		
SIGNING DESIGN ENG	E. WARD		
SIGNING PROJECT DGN ENG	M. EATON		
SIGNING PROJECT ENG	A. ALQUDWAH		



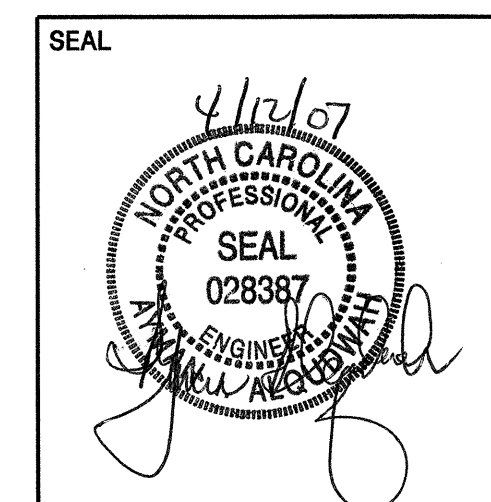
SIGN SUPPORTS SECTION DIMENSIONS



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"



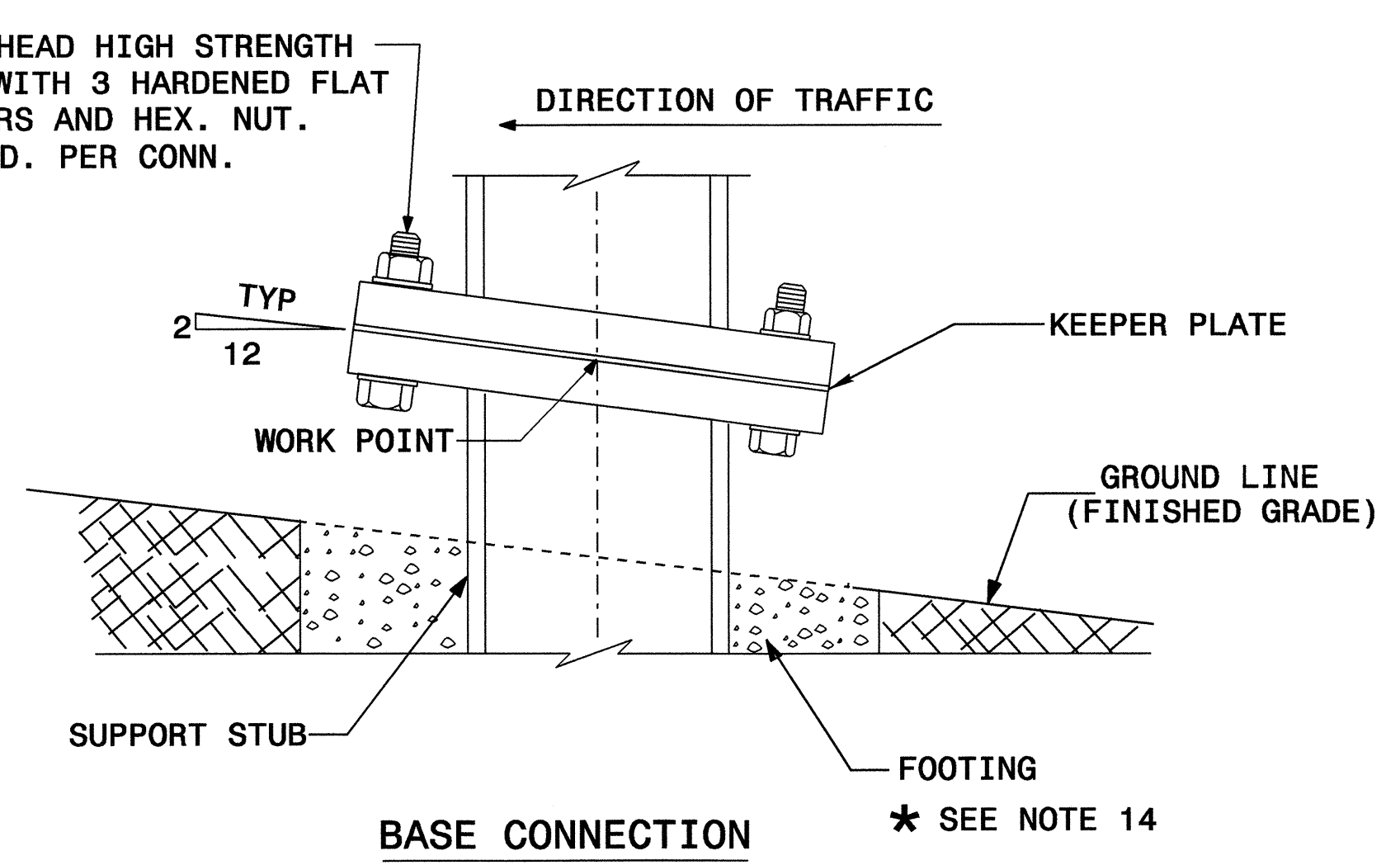
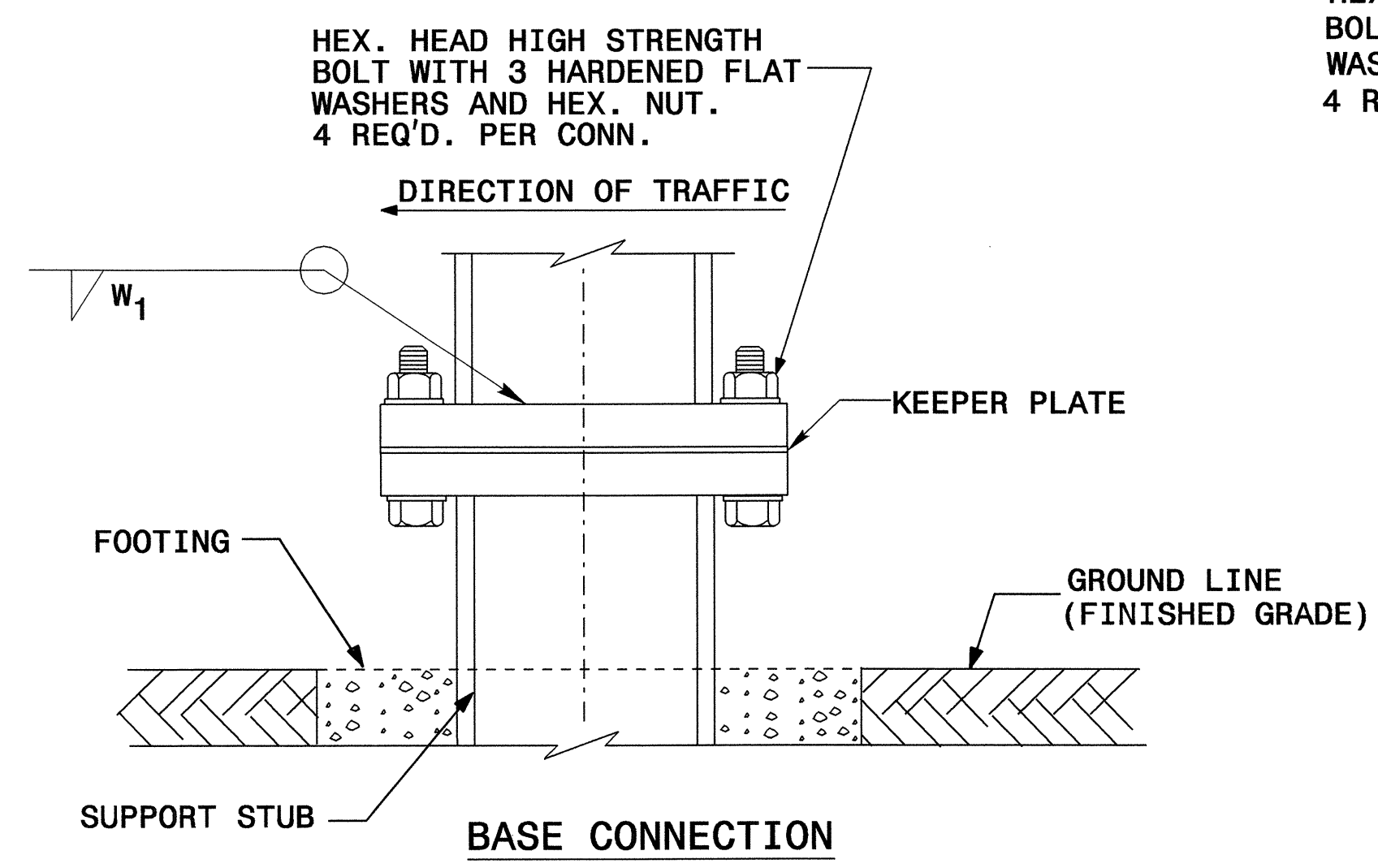
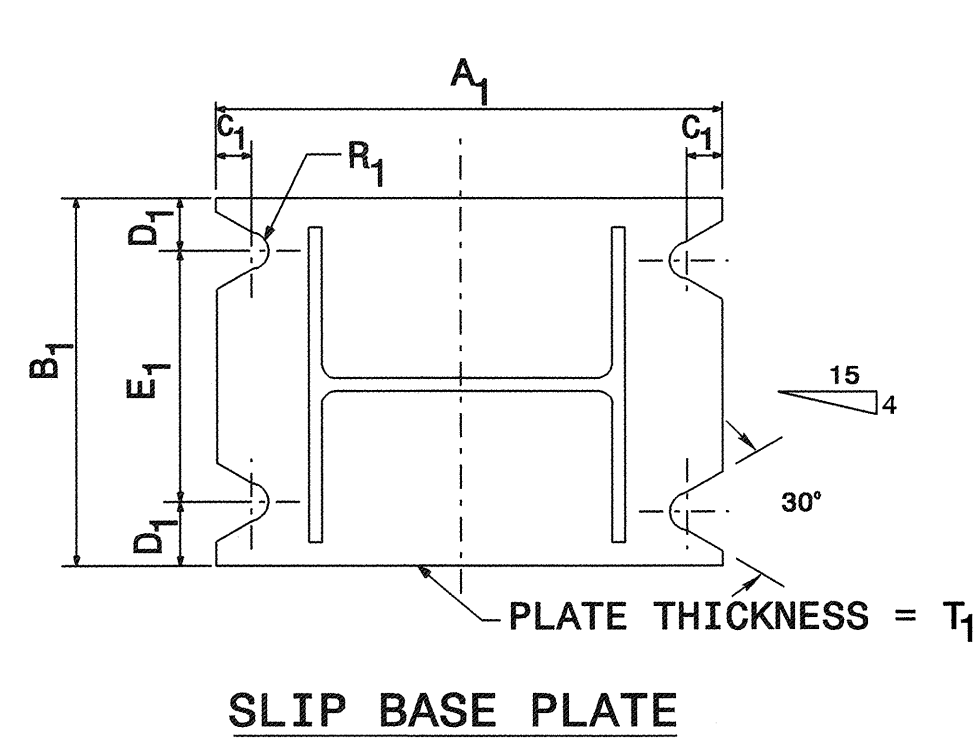
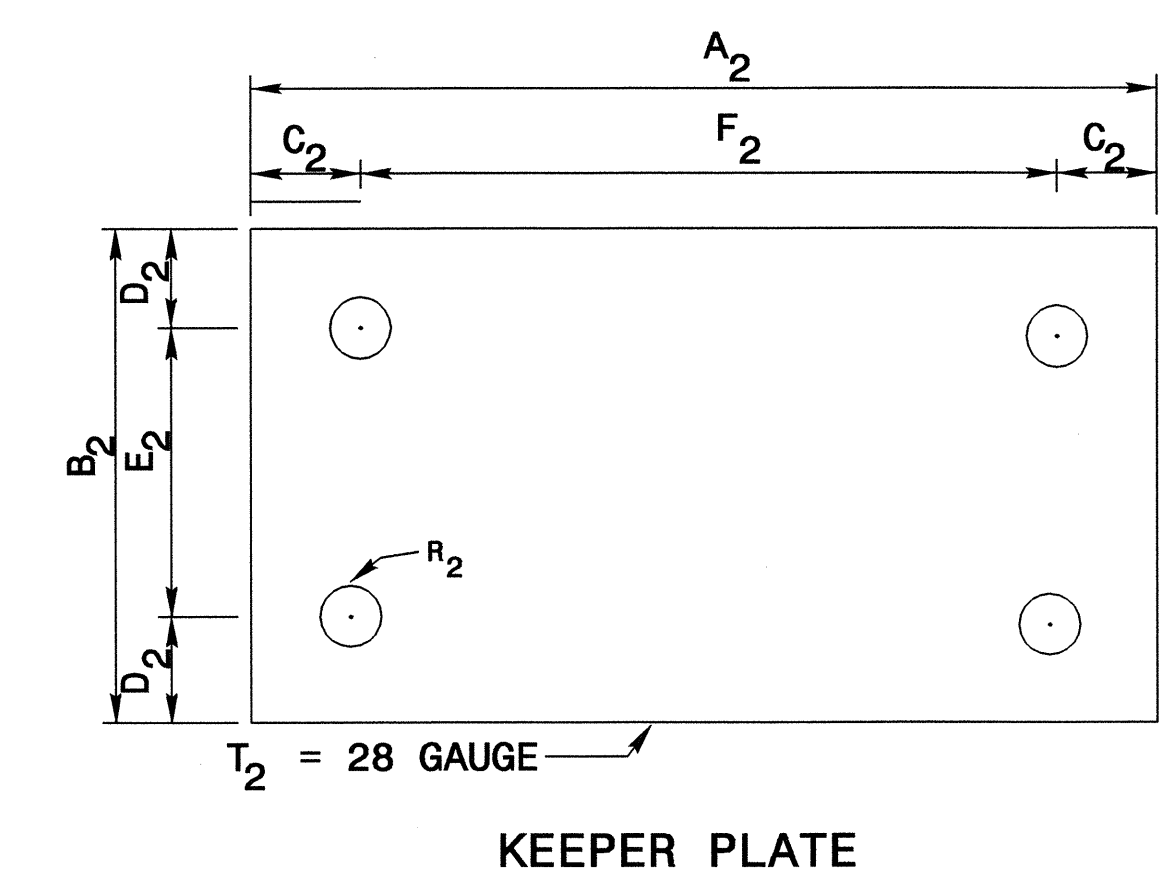
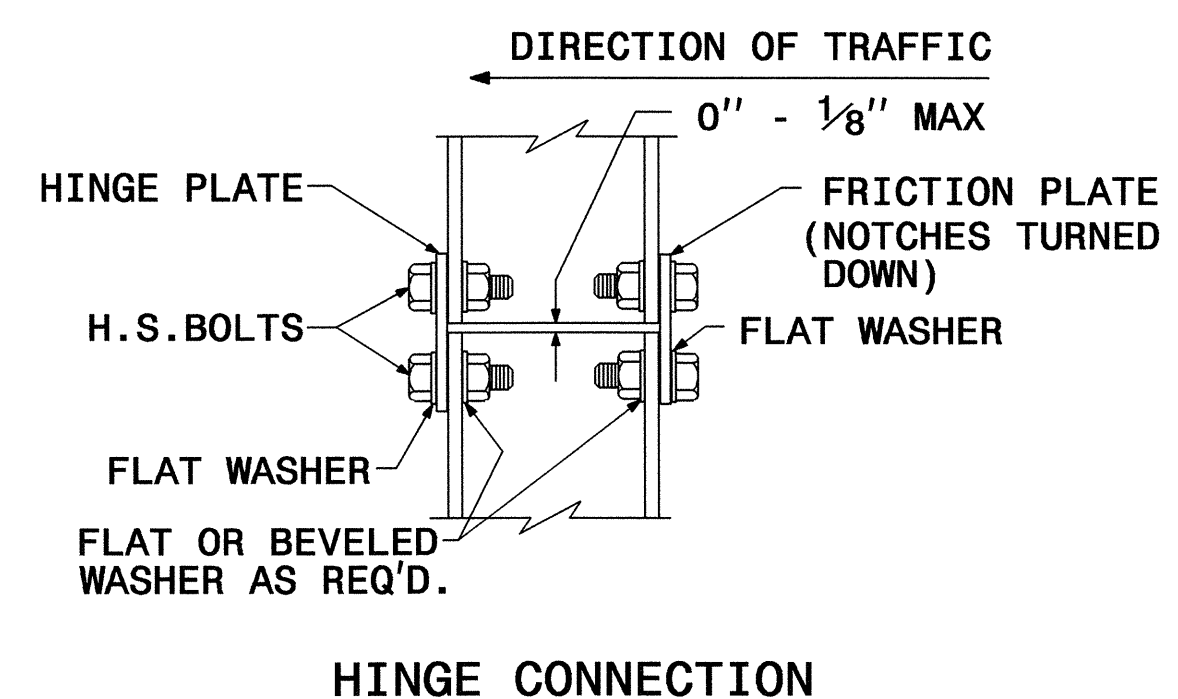
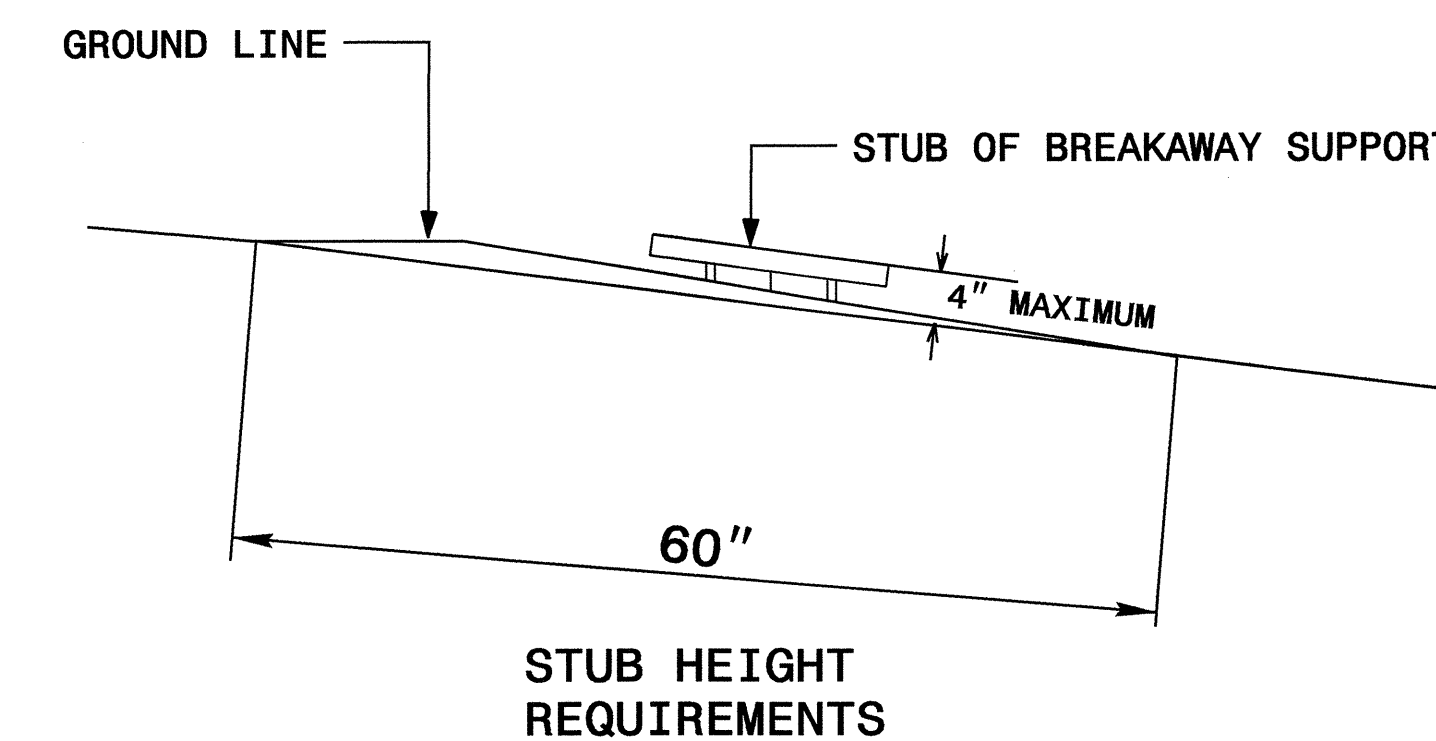
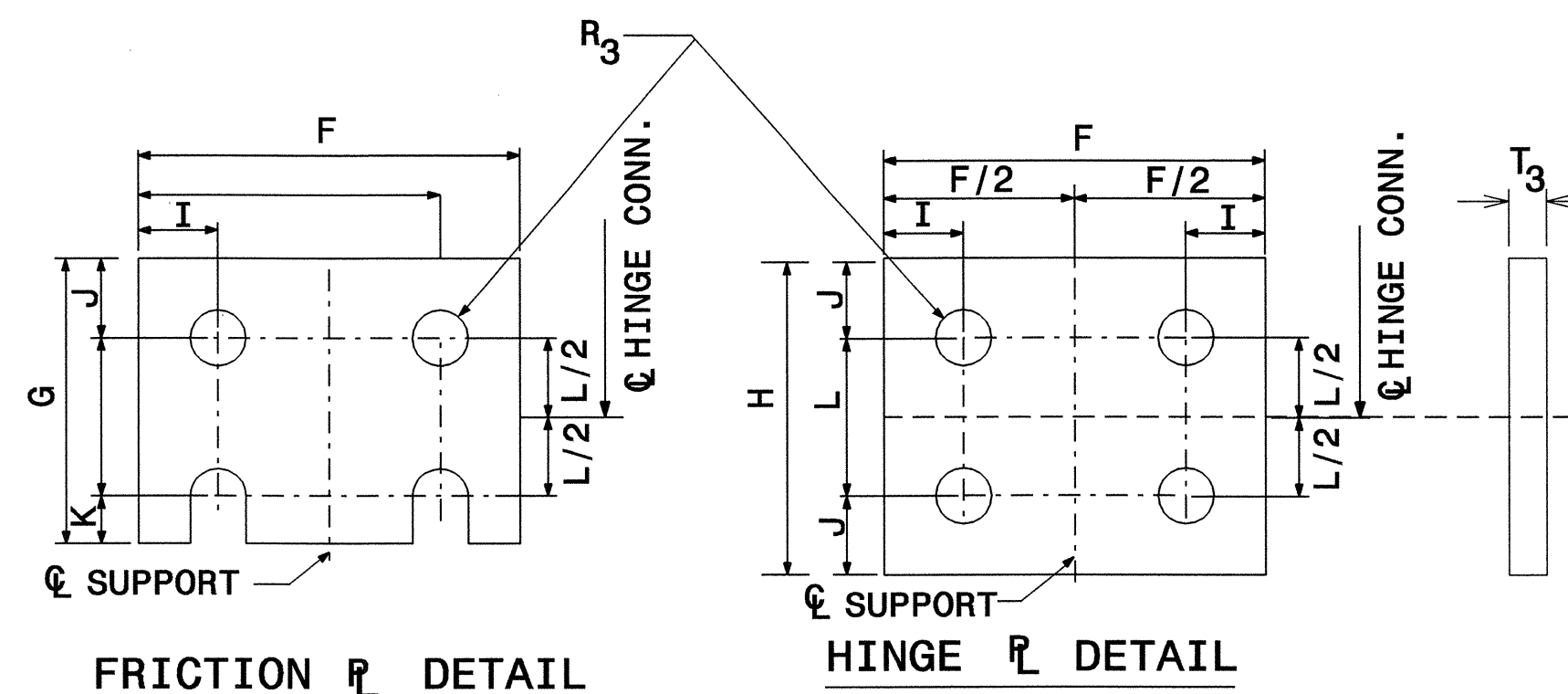
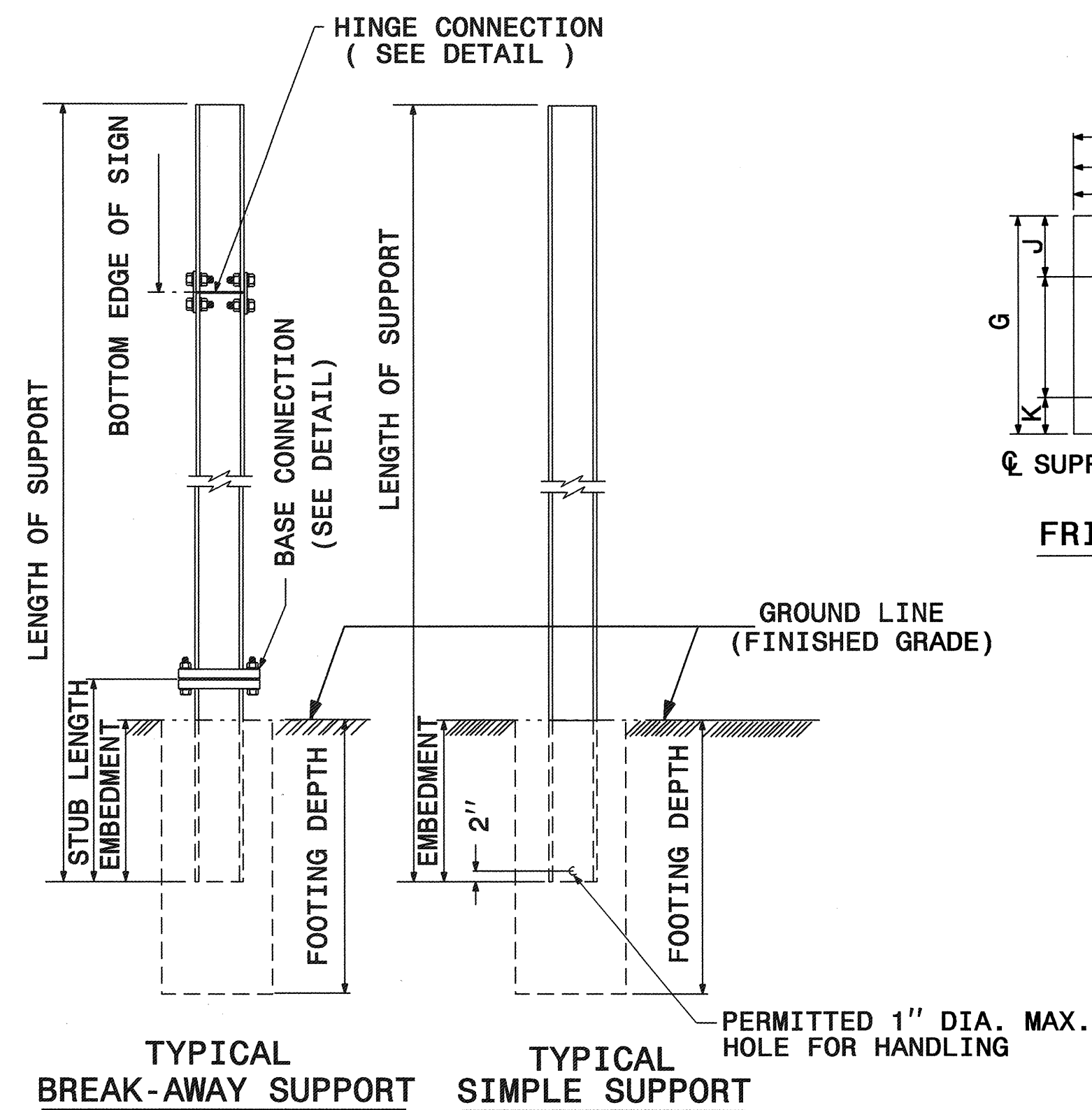
1. THE SUPPORT MOUNTING DETAIL SHOWS A "W" OR "S" BEAM. THIS DETAIL IS ALSO USED FOR MOUNTING SIGNS TO WOOD OR SQUARE TUBE SUPPORTS.
2. USE GALVANIZED STEEL FOR BACKING PLATES AND MOUNTING BOLTS IN ACCORDANCE WITH ASTM A123.
3. SEE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES FOR TYPE OF MATERIAL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



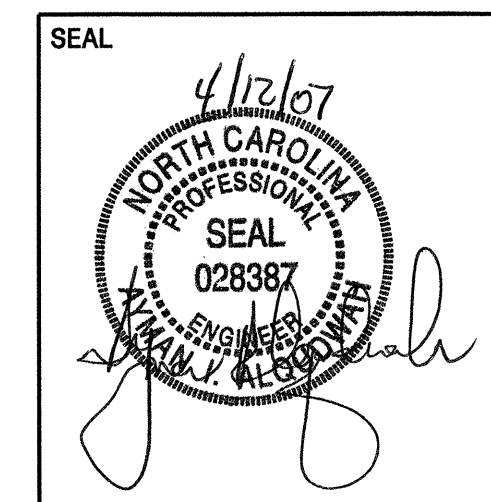
GROUND MOUNTED SIGN SUPPORTS

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH	REVISIONS
DATE	03/29/07		
SIGNING DESIGN ENG.	E. WARD		
SIGNING PROJECT DGN ENG.	M. EATON		
SIGNING PROJECT ENG.	A. ALQUDWAH		

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SEE SHEET SIGN-3D FOR DIMENSIONS.
SEE SHEET SIGN-3E FOR NOTES.

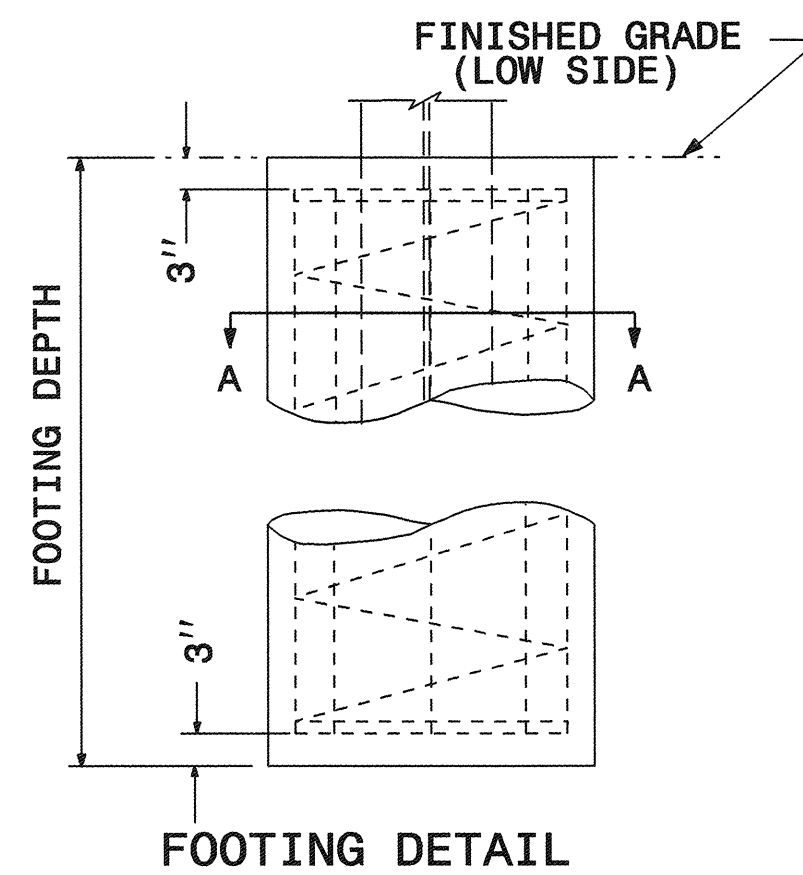
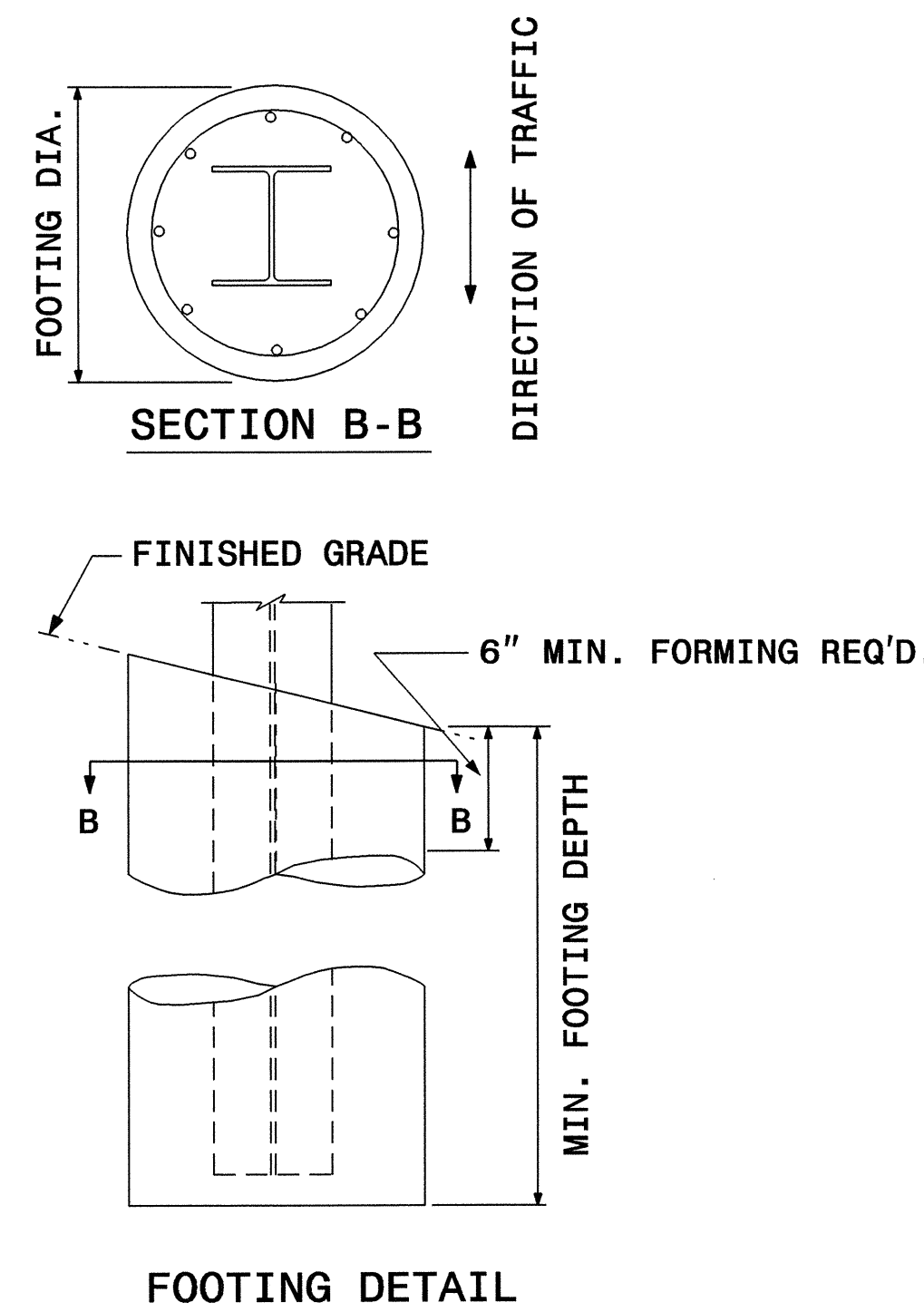
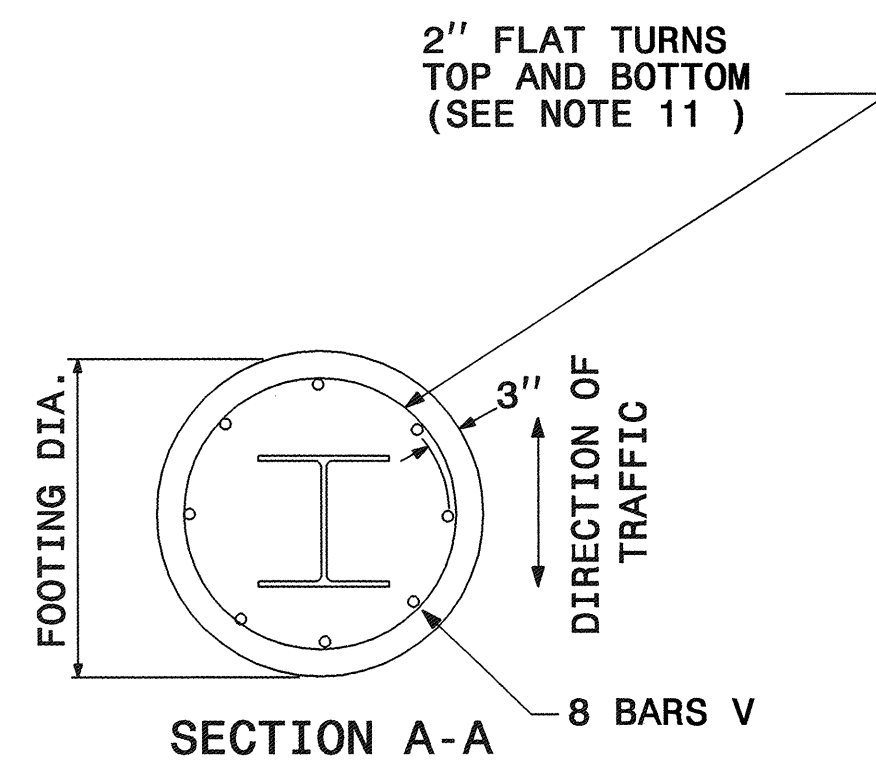


GROUND MOUNTED SIGN SUPPORT

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH	REVISIONS
DATE	03/29/07		
SIGNING DESIGN ENG	E. WARD		
SIGNING PROJECT DGN ENG	M. EATON		
SIGNING PROJECT ENG	A. ALQUDWAH		

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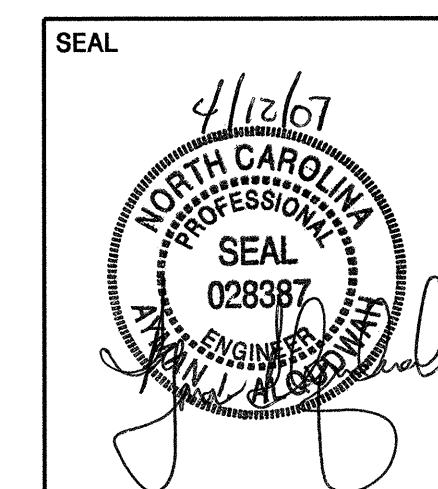
BEAM SHAPE	SLIP BASE PLATE DATA										KEEPER PLATE DATA							HINGE CONNECTION DATA							BREAK AWAY SUPPORT WEIGHT CONSTANT LBS.			
	BOLT SIZE	A ₁	B ₁	C ₁	D ₁	E ₁	T ₁	W ₁	R ₁	A ₂	B ₂	C ₂	D ₂	E ₂	F ₂	R ₂	T ₂	BOLT SIZE	F	G	H	I	J	K		L	R ₃	T ₃
S3X5.7	1/2"DIA.X 3"	7"	4"	1"	3/4"	2 1/2"	1"	3/8"	9/32"	7"	4"	1"	3/4"	2 1/2"	5"	9/32"	28 GAUGE	1/2"DIA.X1 1/4"	2 1/4"	3 1/2"	4"	1/2"	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"	3/8"	9/32"	8"	4"	1"	3/4"	2 1/2"	6"	9/32"	28 GAUGE	1/2"DIA.X1 1/4"	2 5/8"	3 1/2"	4"	1/2"	1"	1/2"	2"	9/32"	3/8"	20
W6X9	1/2"DIA.X 3"	10"	5"	1"	3/4"	3 1/2"	1"	3/8"	9/32"	10"	5"	1"	3/4"	3 1/2"	8"	9/32"	28 GAUGE	1/2"DIA.X1 1/4"	4"	3 1/2"	4"	3/4"	1"	1/2"	2"	9/32"	3/8"	32
W6X12	5/8"DIA.X 3 3/4"	11"	5"	1 1/4"	7/8"	3 1/4"	1 1/4"	3/8"	11/32"	11"	5"	1 1/4"	7/8"	3 1/4"	8 1/2"	11/32"	28 GAUGE	5/8"DIA.X2 1/4"	4"	4"	4 1/2"	3/4"	1 1/8"	5/8"	2 1/4"	11/32"	3/8"	43
W6X16	5/8"DIA.X 4 1/4"	12"	6"	1 1/4"	7/8"	4 1/4"	1 1/2"	3/8"	11/32"	12"	6"	1 1/4"	7/8"	4 1/4"	9 1/2"	11/32"	28 GAUGE	5/8"DIA.X2 1/2"	4"	4"	4 1/2"	3/4"	1 1/8"	5/8"	2 1/4"	11/32"	1/2"	66
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"	3/8"	11/32"	13 1/2"	6 1/2"	1 1/4"	7/8"	4 3/4"	11"	11/32"	28 GAUGE	5/8"DIA.X2 1/2"	5 1/4"	4"	4 1/2"	1"	1 1/8"	5/8"	2 1/4"	11/32"	1/2"	81
W8X21	3/4"DIA.X 4 1/4"	14"	7"	1 1/2"	1"	5"	1 1/2"	3/8"	13/32"	14"	7"	1 1/2"	1"	5"	11"	13/32"	28 GAUGE	3/4"DIA.X2 3/4"	5 1/4"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	13/32"	1/2"	93
W10X22	3/4"DIA.X 4 1/4"	16"	8"	1 1/2"	1"	6"	1 1/2"	3/8"	13/32"	16"	8"	1 1/2"	1"	6"	13"	13/32"	28 GAUGE	3/4"DIA.X2 3/4"	5 3/4"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	13/32"	1/2"	119
W10X26	3/4"DIA.X 4 3/4"	16 1/2"	8"	1 1/2"	1"	6"	1 3/4"	3/8"	13/32"	16 1/2"	8"	1 1/2"	1"	6"	13 1/2"	13/32"	28 GAUGE	3/4"DIA.X2 3/4"	5 3/4"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	13/32"	5/8"	144
W12X26	3/4"DIA.X 4 3/4"	18 1/2"	9"	1 1/2"	1"	7"	1 3/4"	3/8"	13/32"	18 1/2"	9"	1 1/2"	1"	7"	15 1/2"	13/32"	28 GAUGE	3/4"DIA.X2 3/4"	6 1/2"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	13/32"	5/8"	180
W14X30	1"DIA.X 5 3/4"	22"	9"	2"	1 1/2"	6"	2"	1/2"	17/32"	22"	9"	2"	1 1/2"	6"	18"	17/32"	28 GAUGE	1"DIA.X3"	6 3/4"	7"	8"	1 1/4"	2"	1"	4"	17/32"	5/8"	242
W16X31	1"DIA.X 5 3/4"	24"	9"	2"	1 1/2"	6"	2"	1/2"	17/32"	24"	9"	2"	1 1/2"	6"	20"	17/32"	28 GAUGE	1"DIA.X3 1/4"	5 1/2"	7"	8"	1 1/4"	2"	1"	4"	17/32"	3/4"	263
W18X35	1"DIA.X 5 3/4"	25"	9"	2"	1 1/2"	6"	2"	1/2"	17/32"	25"	9"	2"	1 1/2"	6"	21"	17/32"	28 GAUGE	1"DIA.X3 1/4"	6"	7"	8"	1 1/4"	2"	1"	4"	17/32"	3/4"	274
W18X40	1"DIA.X 6 1/4"	26"	9"	2"	1 1/2"	6"	2 1/4"	5/8"	17/32"	26"	9"	2"	1 1/2"	6"	22"	17/32"	28 GAUGE	1"DIA.X3 3/4"	6"	7"	8"	1 1/4"	2"	1"	4"	17/32"	7/8"	321
W21X44	1"DIA.X 6 3/4"	29"	9"	2"	1 1/2"	6"	2 1/2"	5/8"	17/32"	29"	9"	2"	1 1/2"	6"	25"	17/32"	28 GAUGE	1"DIA.X3 3/4"	6 1/2"	7"	8"	1 1/4"	2"	1"	4"	17/32"	7/8"	394



FOUNDATION DATA *		
FOOTING DIAMETER	REINFORCEMENT	SPIRAL BAR
1'	8 # 4 BARS	#3 BAR, 3" PITCH
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-3E FOR NOTES.



GROUND MOUNTED SIGN SUPPORTS

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH	REVISIONS
DATE	03/29/07		
SIGNING DESIGN ENG	E. WARD		
SIGNING PROJECT DGN ENG	M. EATON		
SIGNING PROJECT ENG	A. ALQUDWAH		

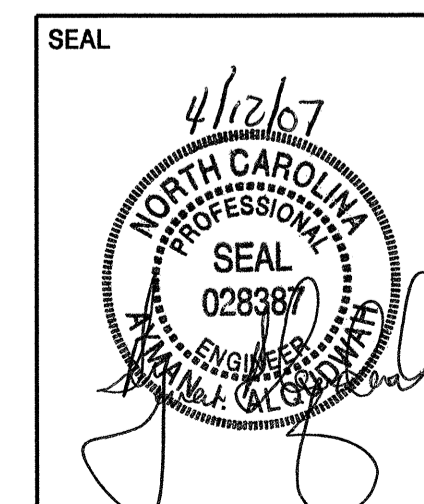
NOTES:

1. DESIGN CONFORMS WITH THE SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS - A.A.S.H.T.O.
2. USE MATERIALS, FABRICATE AND ERECT SIGNS AND SUPPORTS THAT CONFORM TO THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
3. 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.
4. 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
5. 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.
6. BASE PLATES DETAILS ARE FOR INSTALLATIONS ON THE RIGHT SHOULDER AND IN GORE AREAS.
7. ASSEMBLE UPPER SUPPORT TO STUB AS SHOWN IN DETAIL. SLIP BASE PLATES SHALL BE FILLET WELDED ONTO POSTS ALL AROUND THE STRUCTURAL SHAPE. 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
3/4"	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.

8. 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.
9. FORM TOP 6" OF FOOTINGS. ENGINEER APPROVES THE METHOD USED.
10. 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.
11. ELIMINATE HINGE CONNECTION FOR ALL SINGLE SUPPORT SIGNS.
12. 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.
13. SHAPE THE TOPS OF THE FOOTINGS TO CONFORM WITH FINISHED GROUND ELEVATIONS SUCH THAT WATER WILL NOT COLLECT AGAINST THE SUPPORTS.
14. 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.

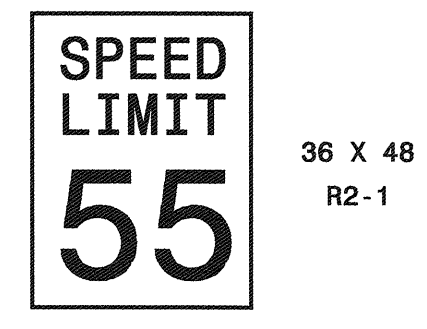


**GROUND MOUNTED
SIGN SUPPORTS**

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH	REVISIONS
DATE	03/29/07		
SIGNING DESIGN ENG	E. WARD		
SIGNING PROJECT DGN ENG	M. EATON		
SIGNING PROJECT ENG	A. ALQUDWAH		

5/14/99
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401 QUANTITY REQ'D 1



36 X 48
R2-1

TWO "U" POSTS PER SIGN

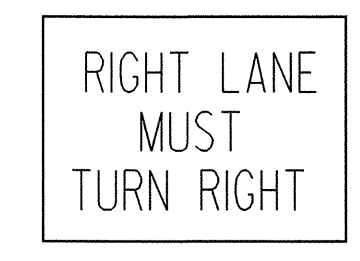
410 QUANTITY REQ'D 4



36 X 24
R5-1a

ONE "U" POST PER SIGN

455 QUANTITY REQ'D 1



30 X 30
R3-7

ONE "U" POST PER SIGN

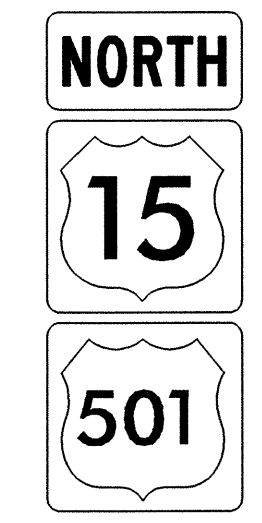
479 QUANTITY REQ'D 2



24 X 30
W13-1

MOUNT BELOW SIGN 477/478
IN 2 INSTALLATIONS

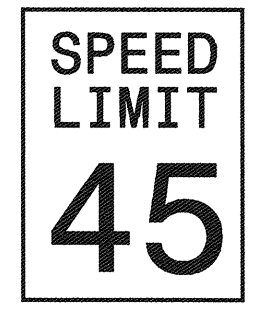
501



1-30 X 15
1-36 X 36
1-45 X 36

ONE "U" POSTS PER SIGN

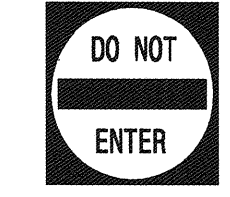
402 QUANTITY REQ'D 2



36 X 48
R2-1

TWO "U" POSTS PER SIGN

411 QUANTITY REQ'D 4



30 X 30
R5-1

ONE "U" POST PER SIGN

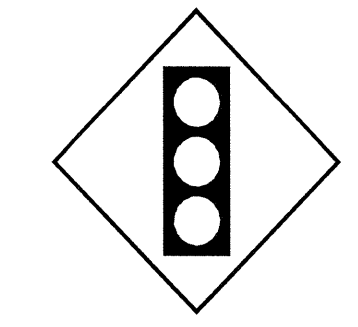
463 QUANTITY REQ'D 1



36 X 36
R2-5a

ONE "U" POST PER SIGN

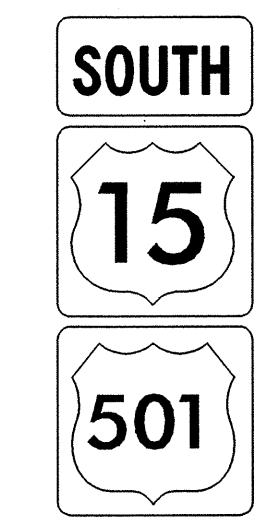
438 QUANTITY REQ'D 1



36 X 36
W3-3

ONE "U" POST PER SIGN

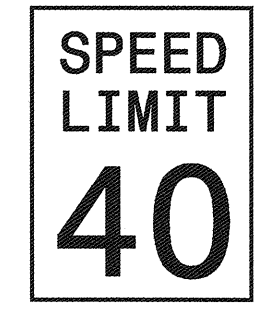
502



1-30 X 15
1-36 X 36
1-45 X 36

ONE "U" POSTS PER SIGN

403 QUANTITY REQ'D 3



24 X 30
R2-1

ONE "U" POST PER SIGN

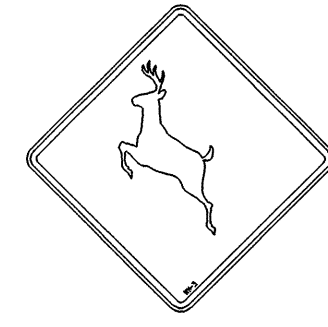
414 QUANTITY REQ'D 4



54 X 18
R6-1 (L)

TWO "U" POSTS PER SIGN

464 QUANTITY REQ'D 2



30 X 30
W-11-2

ONE "U" POST PER SIGN

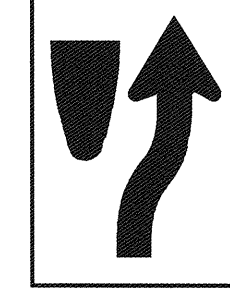
404 QUANTITY REQ'D 2



24 X 30
R2-1

ONE "U" POST PER SIGN

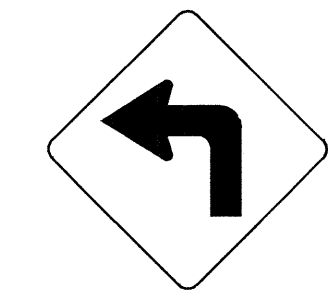
415 QUANTITY REQ'D 6



24 X 30
R4-7

ONE "U" POSTS PER SIGN

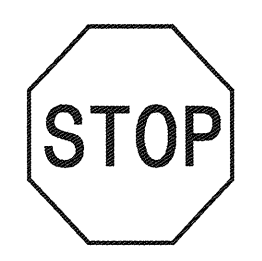
477 QUANTITY REQ'D 1



30 X 30
W1-1

ONE "U" POST PER SIGN

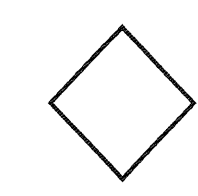
408 QUANTITY REQ'D 3



30 X 30
R1-1

ONE "U" POST PER SIGN

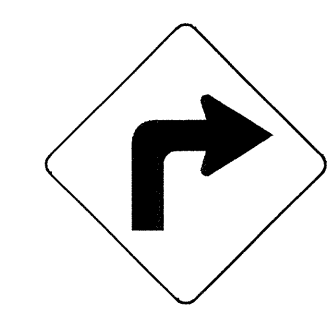
417 QUANTITY REQ'D 6



18 X 18
W23-15

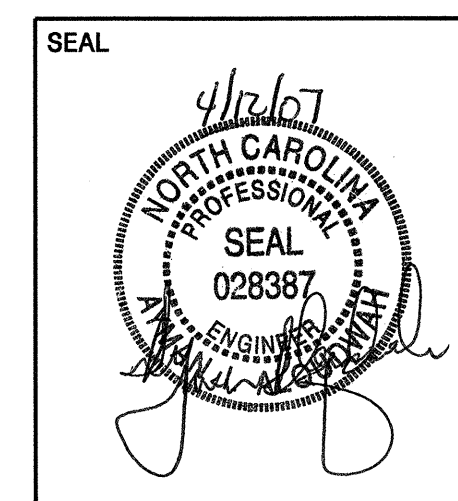
MOUNT BELOW SIGN 415
IN 6 INSTALLATIONS

478 QUANTITY REQ'D 1



30 X 30
W1-1

ONE "U" POST PER SIGN



TYPE "E" AND "F" SIGNS

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH	REVISIONS
DATE	03/29/07		
SIGNING DESIGN ENG	E. WARD		
SIGNING PROJECT DGN ENG	M. EATON		
SIGNING PROJECT ENG	A. ALQUDWAH		

5/14/99
I:\APR-2007\244\er\er\signing\layout\plans\4012_sgn_title.dgn

SIGN NUMBER: 301
TYPE: D
QUANTITY: 1
SIGN WIDTH: 4'-0"
HEIGHT: 3'-0"
TOTAL AREA: 12.0 Sq.Ft.

BACK COLOR: Green
COPY COLOR: White

DESIGN BY: E. WARD
PROJECT ID: U-4012
CHECKED BY: N. EATON
DATE: Apr 11, 2007

SYMBOL TABLE:

SYMBOL	X	Y	WID	HT
ARUP	15	4.5	6	9
ARUP	24	4.5	6	9

LETTER POSITIONS

Letter	Series/Size	Text Length
S H O P P I N G	D 2000	37.9
C E N T E R S	D 2000	33.2

FILENAME: u4012_sgn_01a.dgn
NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 307
TYPE: D
QUANTITY: 1
SIGN WIDTH: 4'-0"
HEIGHT: 3'-0"
TOTAL AREA: 12.0 Sq.Ft.

BACK COLOR: Green
COPY COLOR: White

DESIGN BY: E. WARD
PROJECT ID: U-4012
CHECKED BY: N. EATON
DATE: Apr 11, 2007

SYMBOL TABLE:

SYMBOL	X	Y	WID	HT
ARUP	19.5	4.5	6	9

LETTER POSITIONS

Letter	Series/Size	Text Length
S H O P P I N G	D 2000	37.9
C E N T E R	D 2000	28.6

FILENAME: u4012_sgn_01a.dgn
NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 303, 304
TYPE: D
QUANTITY: 2
SIGN WIDTH: 8'-6"
HEIGHT: 2'-6"
TOTAL AREA: 17.0 Sq.Ft.

BACK COLOR: Green
COPY COLOR: White

DESIGN BY: E. WARD
PROJECT ID: U-4012
CHECKED BY: N. EATON
DATE: Mar 20, 2007

SYMBOL TABLE:

SYMBOL	X	Y	WID	HT
ARUP	19.5	32.6	32.2	37.1

LETTER POSITIONS

Letter	Series/Size	Text Length
H O P P E R C R E E K	D 2000	87.9

FILENAME: u4012_sgn_01a.dgn
NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 302
TYPE: D
QUANTITY: 1
SIGN WIDTH: 6'-6"
HEIGHT: 3'-6"
TOTAL AREA: 22.6 Sq.Ft.

BACK COLOR: Blue
COPY COLOR: White

DESIGN BY: E. WARD
PROJECT ID: U-4012
CHECKED BY: N. EATON
DATE: Mar 26, 2007

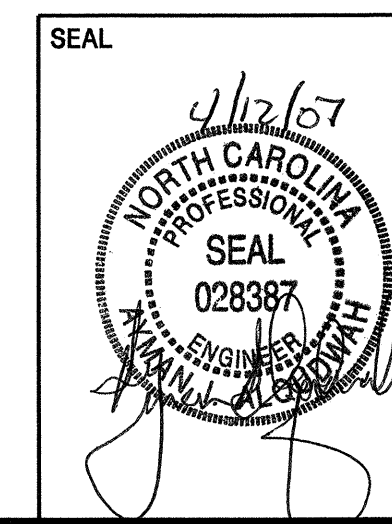
SYMBOL TABLE:

SYMBOL	X	Y	WID	HT
ARUP	17.8	25.2	32.2	37.1

LETTER POSITIONS

Letter	Series/Size	Text Length
D U K E I N F O	D 2000	56.7
T U N E R A D I O	D 2000	62.6
1 6 1 0 A M	D 2000	42.5

FILENAME: u4012_sgn_01a.dgn
NORTH CAROLINA D.O.T. SIGN DETAIL



SIGN DESIGNS

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH	REVISIONS
DATE	03/29/07		
SIGNING DESIGN ENG	E. WARD		
SIGNING PROJECT DGN ENG	M. EATON		
SIGNING PROJECT ENG	A. ALQUDWAH		

5/14/09
J:\APR-2007\5427\012\tr-of-trc\signing\layout\plns\4012_sgn_Guidsign.dgn
Eric Ward

5/14/09

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING BRANCH

SIGN NUMBER: 305 BACKG COLOR: Green
TYPE: D COPY COLOR: White
QUANTITY: 1
SIGN WIDTH: 6'-6" SYMBOL X Y WID HT
HEIGHT: 2'-0" ARUP 15.2 14.4 6 9
TOTAL AREA: 13.0 Sq.Ft.
BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 0.75"
RADIUS: 3"
NO. Z BARS: MAT'L: 0.125" (3.2 mm) ALUMINUM
LENGTH:

DESIGN BY: E. WARD CHECKED BY: N. EATON
PROJECT ID: U-4012 DIV: 5 STD #: SSTH
DATE: Mar 29, 2007

USE NOTES: 1 and 4
1. Legend and border shall be direct applied Type III reflective sheeting.
2. Legend and border shall be direct applied non-reflective sheeting.
3. Shields shall be Type III reflective sheeting on 0.032" (0.8mm) aluminum and demountable.
4. Background shall be Type III reflective sheeting.
5. Background shall be Type I reflective sheeting.
6. Center arrow(s) vertically on sign.
7. Bottom panel shall be yellow Type III sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is:

LETTER POSITIONS
Letter locations are panel edge to lower left corner

Series/Size	Text Length
D 2000	32.5
D 2000	67.9

Spacing Factor is 1 unless specified otherwise
FILENAME: u4012_sgn_0412.dgn NORTH CAROLINA D.O.T. SIGN DETAIL

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING BRANCH

SIGN NUMBER: 306 BACKG COLOR: Green
TYPE: D COPY COLOR: White
QUANTITY: 1
SIGN WIDTH: 6'-6" SYMBOL X Y WID HT
HEIGHT: 2'-0" ARUP 14.5 14.5 6 9
TOTAL AREA: 13.0 Sq.Ft.
BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 0.75"
RADIUS: 3"
NO. Z BARS: MAT'L: 0.125" (3.2 mm) ALUMINUM
LENGTH:

DESIGN BY: E. WARD CHECKED BY: N. EATON
PROJECT ID: U-4012 DIV: 5 STD #: SSTH
DATE: Mar 29, 2007

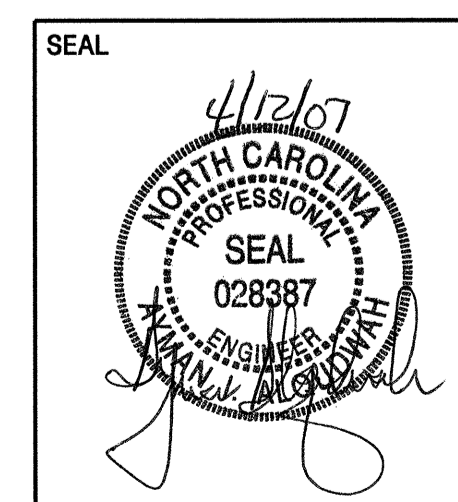
USE NOTES: 1 and 4
1. Legend and border shall be direct applied Type III reflective sheeting.
2. Legend and border shall be direct applied non-reflective sheeting.
3. Shields shall be Type III reflective sheeting on 0.032" (0.8mm) aluminum and demountable.
4. Background shall be Type III reflective sheeting.
5. Background shall be Type I reflective sheeting.
6. Center arrow(s) vertically on sign.
7. Bottom panel shall be yellow Type III sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is:

LETTER POSITIONS
Letter locations are panel edge to lower left corner

Series/Size	Text Length
D 2000	32.5
D 2000	67.9

Spacing Factor is 1 unless specified otherwise
FILENAME: u4012_sgn_0412.dgn NORTH CAROLINA D.O.T. SIGN DETAIL

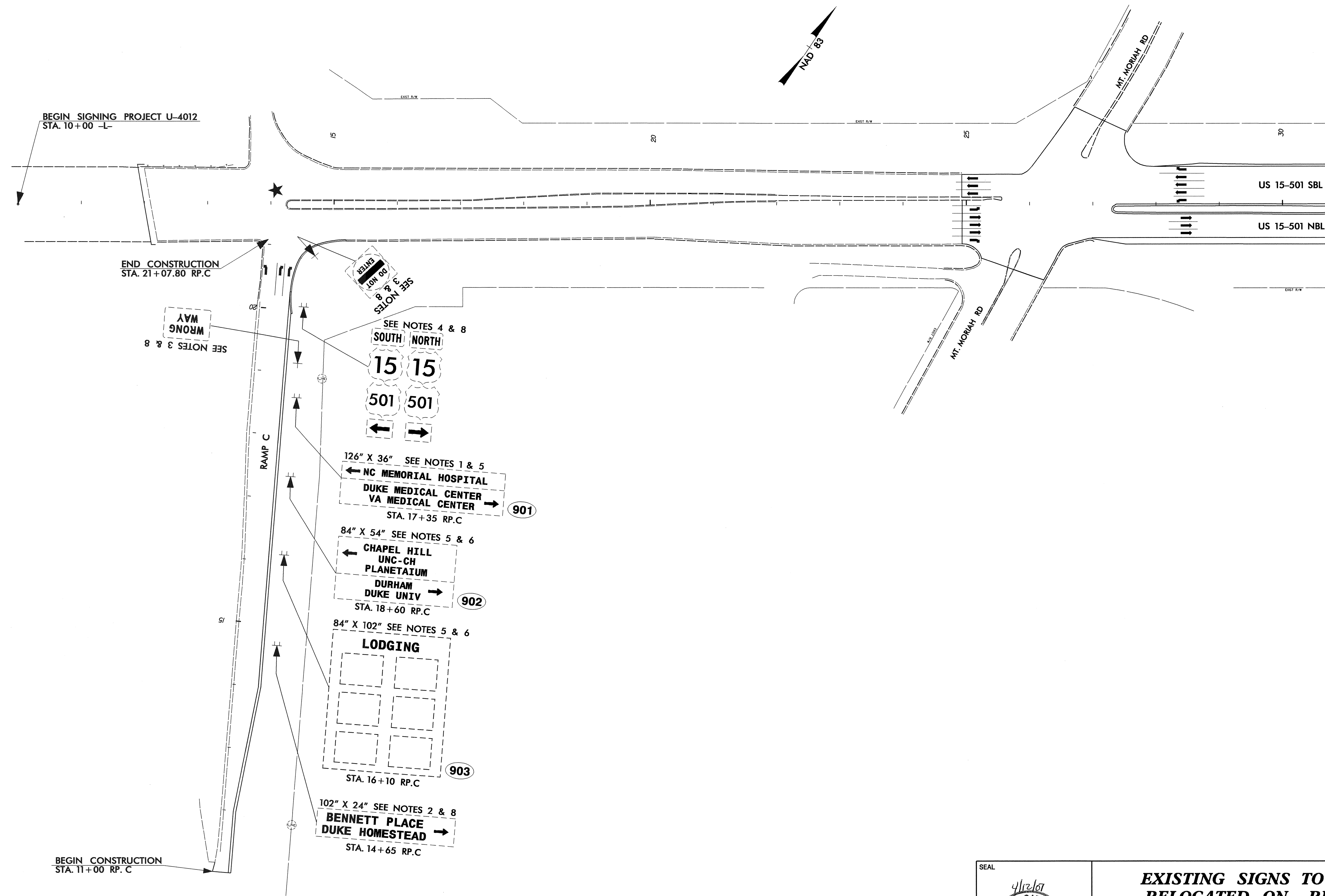
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5/14/09



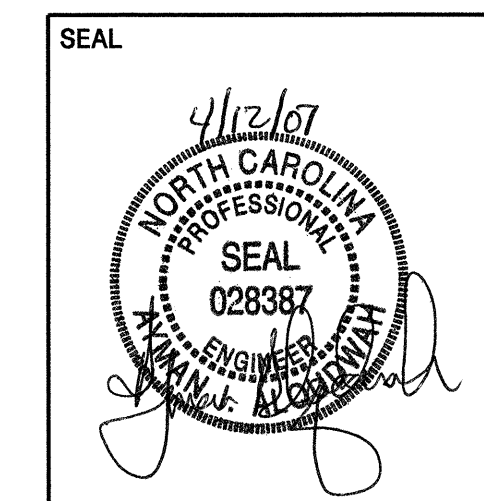
SIGN DESIGNS

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH	REVISIONS
DATE	03/29/07		
SIGNING DESIGN ENG	E. WARD		
SIGNING PROJECT DGN ENG	M. EATON		
SIGNING PROJECT ENG	A. ALQUDWAH		

MATCH LINE STA. 31+25 SEE SHEET 6



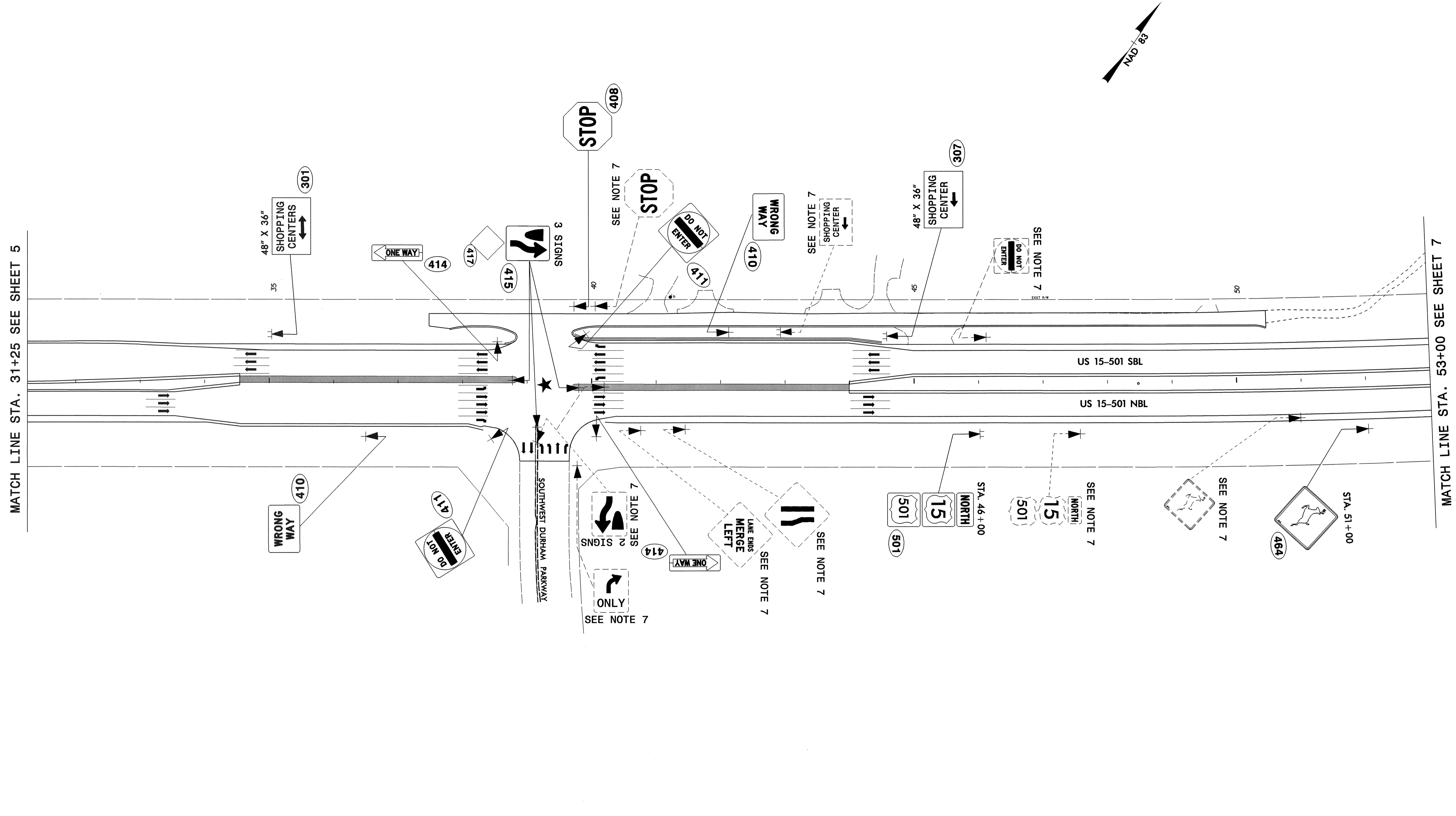
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 ericward



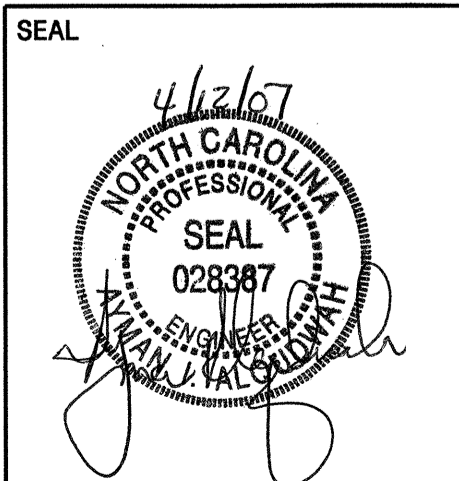
**EXISTING SIGNS TO BE
RELOCATED ON -RPC-
STA. 11+00 - STA. 21+07.80**

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	03/29/07	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	E. WARD	TRAFFIC ENGINEERING	
SIGNING PROJECT DGN ENG	M. EATON	BRANCH	
SIGNING PROJECT ENG	A. ALQUDWAH		

5/14/99

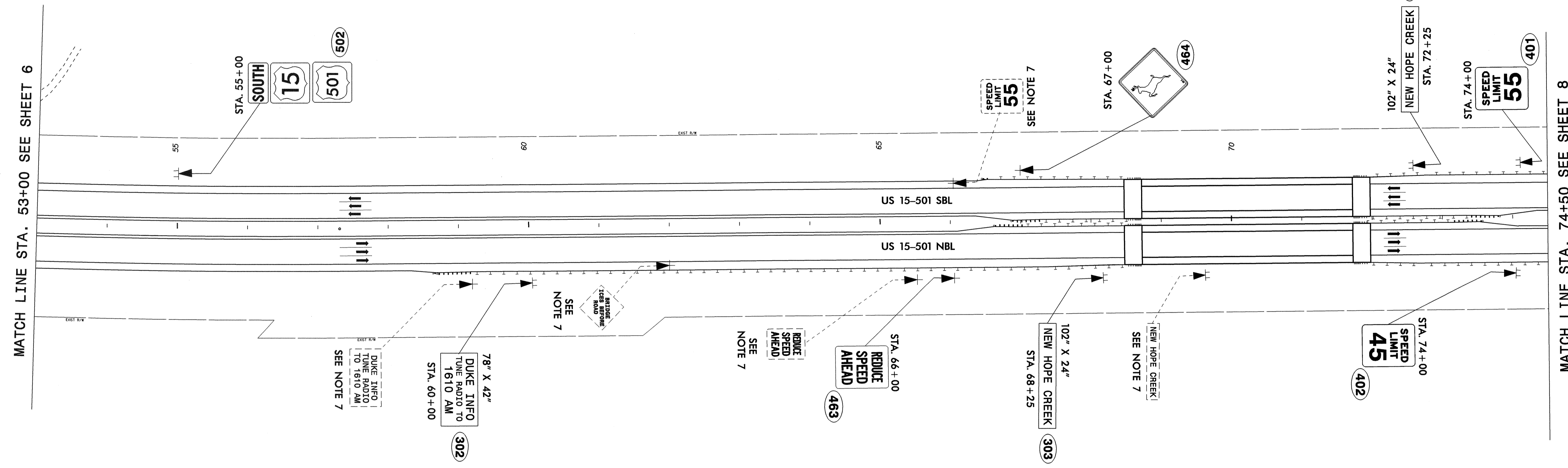


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 03/29/07 15:28
 II-APR-2007 15:28



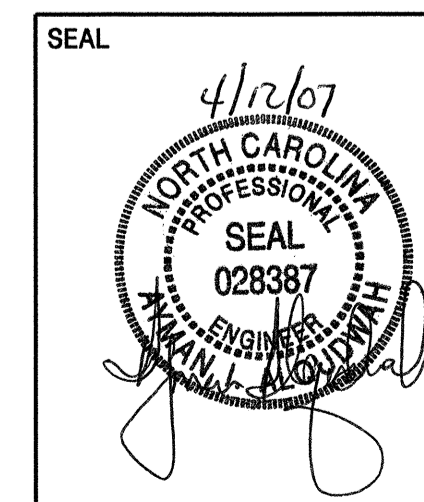
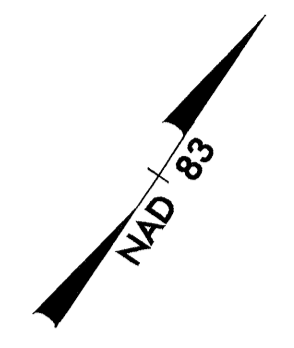
EXISTING & PROPOSED SIGNS
US 15-501 -L-
STA. 31+25 - STA. 53+00

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH	REVISIONS
DATE	03/29/07		
SIGNING DESIGN ENG	E. WARD		
SIGNING PROJECT DGN ENG	M. EATON		
SIGNING PROJECT ENG	A. ALQUDWAH		



MATCH LINE STA. 53+00 SEE SHEET 6

MATCH LINE STA. 74+50 SEE SHEET 8



EXISTING & PROPOSED SIGNS
US 15-501 -L-
STA. 53+00 - STA. 74+50

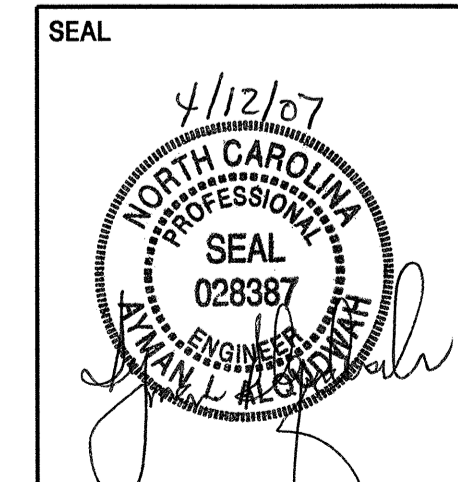
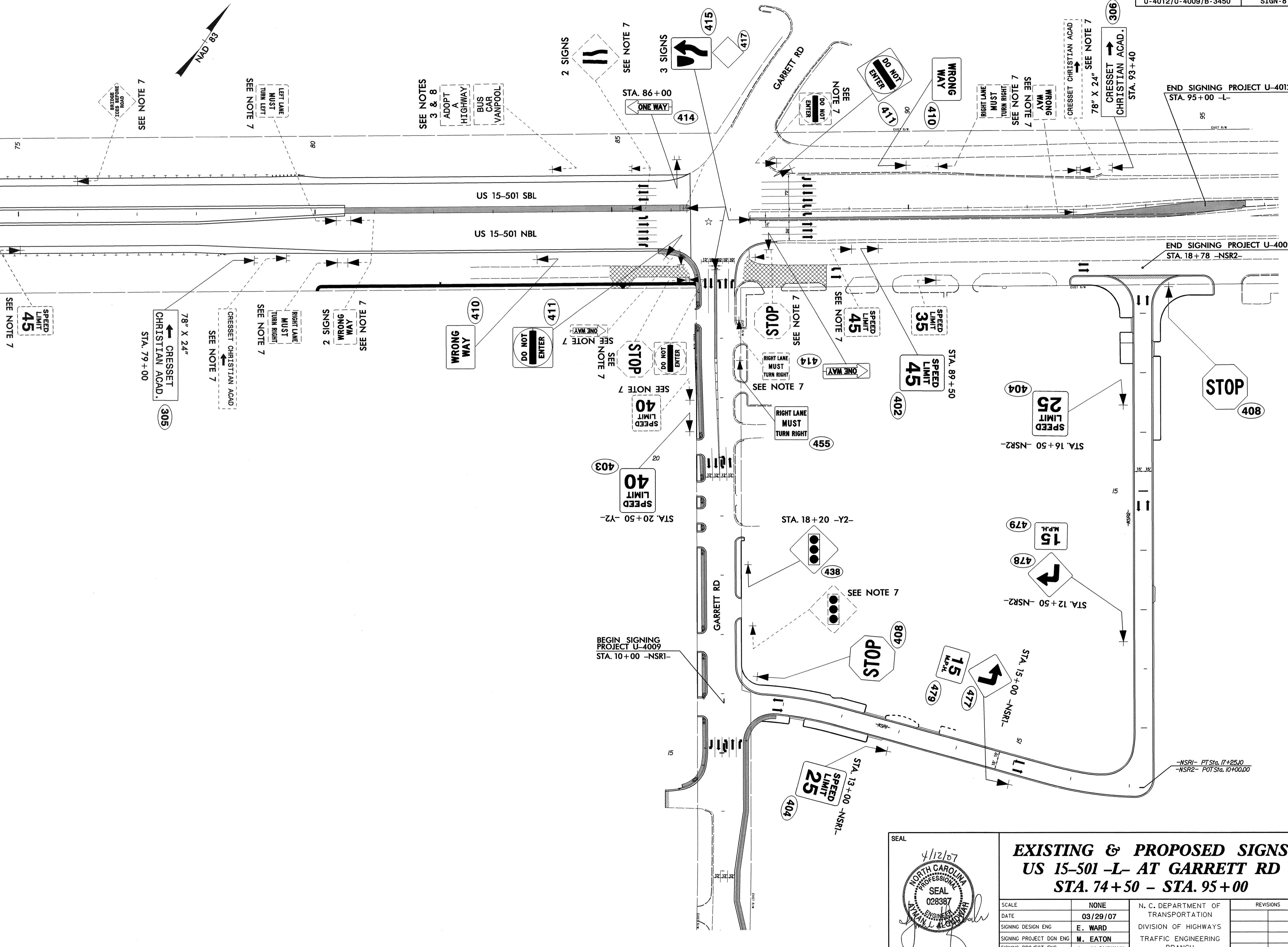
SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH
DATE	03/29/07	
SIGNING DESIGN ENG	E. WARD	
SIGNING PROJECT DGN ENG	M. EATON	
SIGNING PROJECT ENG	A. ALQUDWAH	

REVISIONS	

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 5/14/07

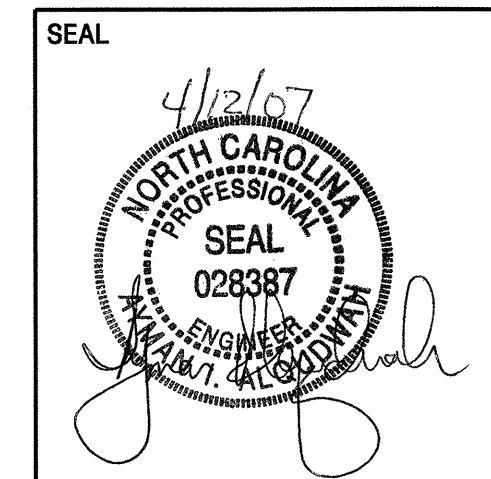
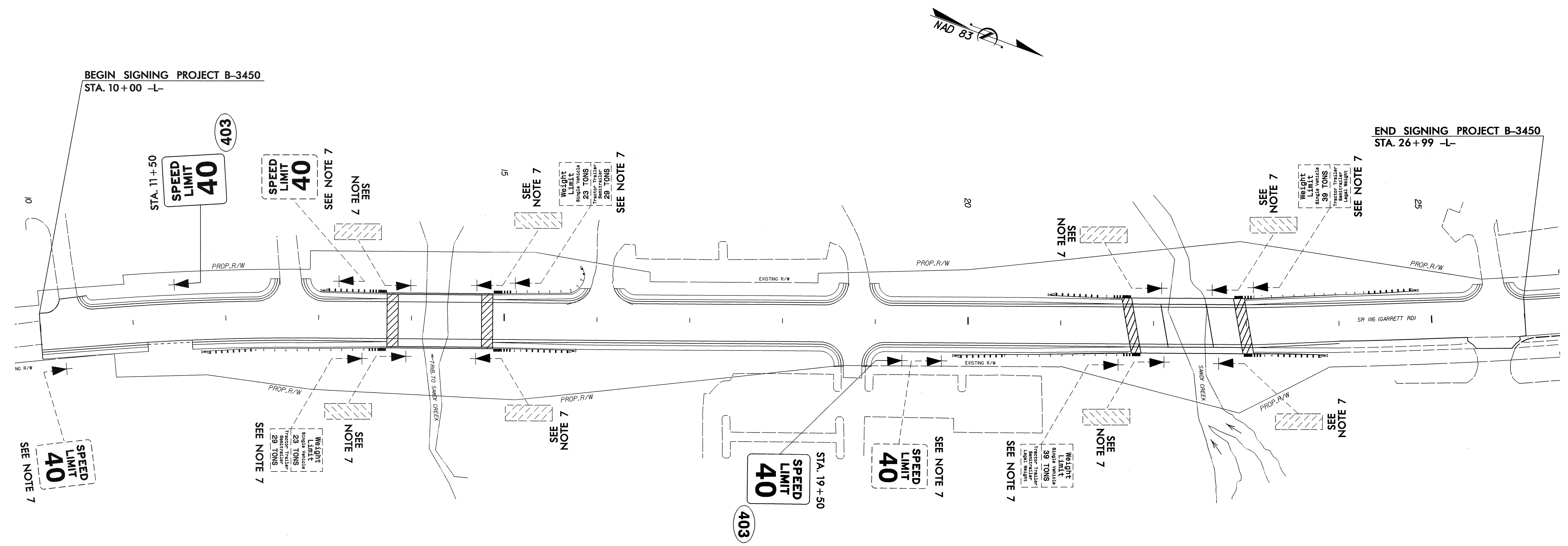
MATCH LINE STA. 74+50 SEE SHEET 7



EXISTING & PROPOSED SIGNS
US 15-501 -L- AT GARRETT RD
STA. 74+50 - STA. 95+00

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH	REVISIONS
DATE	03/29/07		
SIGNING DESIGN ENG	E. WARD		
SIGNING PROJECT DGN ENG	M. EATON		
SIGNING PROJECT ENG	A. ALQUDWAH		

5/14/99
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**EXISTING & PROPOSED SIGNS
SANDY CREEK ON GARRETT RD
STA. 10+00 - STA. 26+99**

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH	REVISIONS
DATE	03/29/07		
SIGNING DESIGN ENG	E. WARD		
SIGNING PROJECT DGN ENG	M. EATON		
SIGNING PROJECT ENG	A. ALQUDWAH		