



# SIGNS SUMMARY OF QUANTITIES

TIP NO. R-0505	SHEET NO. SIGN-2
APPROVED:	
DATE: 12/21/08	
SEAL	


ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT	ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT	ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.				DESC. NO.	SECT. NO.				DESC. NO.	SECT. NO.			
4001000000	800	MOBILIZATION.....		L.S.	4127000000	SP	LIGHTING FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4235000000	907	STOCKPILE SIGN, A OR B (GROUND MOUNTED)		EA.
4025000000	901	CONTRACTOR FURNISHED, TYPE A SIGN.....		S.F.	4127000000	SP	LIGHTING FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4236000000	907	DISPOSAL OF SIGN, A OR B (GROUND MOUNTED)		EA.
4025000000	901	CONTRACTOR FURNISHED, TYPE B SIGN.....		S.F.	4127000000	SP	LIGHTING FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4237000000	907	STOCKPILE SIGN, D, E OR F.....		EA.
4025000000	901	CONTRACTOR FURNISHED, TYPE D SIGN.....		S.F.	4127000000	SP	LIGHTING FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4237500000	907	STOCKPILE SIGN, MILEMARKERS.....		EA.
4025000000	901	CONTRACTOR FURNISHED, TYPE E SIGN.....		S.F.	4127000000	SP	LIGHTING FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4238000000	907	DISPOSAL OF SIGN, D, E OR F.....		EA.
4025000000	901	CONTRACTOR FURNISHED, TYPE F SIGN.....		S.F.	4127000000	SP	LIGHTING FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4238500000	907	DISPOSAL OF SIGN, MILEMARKERS.....		EA.
4025000000	901	CONTRACTOR FURNISHED, OVERLAYS SIGN.....		S.F.	4127000000	SP	LIGHTING FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4241000000	907	DISPOSAL OF SIGN, OVERLAY (OVERHEAD)		EA.
4025000000	901	CONTRACTOR FURNISHED, MILEMARKER SIGN.....		S.F.	4127000000	SP	LIGHTING FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4242000000	907	DISPOSAL OF SIGN, OVERLAY (GROUND MOUNTED)		EA.
4026000000	902	DEPARTMENT FURNISHED, TYPE A SIGN.....		S.F.	4127000000	SP	LIGHTING FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4250000000	907	STOCKPILE LIGHTING SYSTEM.....		EA.
4026000000	902	DEPARTMENT FURNISHED, TYPE B SIGN.....		S.F.	4127000000	SP	LIGHTING FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4251000000	907	DISPOSAL OF LIGHTING SYSTEM.....		EA.
4026000000	902	DEPARTMENT FURNISHED, TYPE D SIGN.....		S.F.	4127000000	SP	LIGHTING FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4252000000	907	STOCKPILE LIGHTING FIXTURES.....		EA.
4026000000	902	DEPARTMENT FURNISHED, TYPE E SIGN.....		S.F.	4127000000	SP	LIGHTING FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4258000000	907	DISPOSAL OF LIGHTING FIXTURES.....		EA.
4026000000	902	DEPARTMENT FURNISHED, TYPE F SIGN.....		S.F.	4127000000	SP	LIGHTING FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4262000000	907	STOCKPILE WALKWAY.....		EA.
4026000000	902	DEPARTMENT FURNISHED, OVERLAYS SIGN.....		S.F.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4263000000	907	DISPOSAL OF WALKWAY.....		EA.
4026000000	902	DEPARTMENT FURNISHED, MILEMARKER SIGN.....		S.F.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4355000000	SP	DYNAMIC MESSAGE SIGN SYSTEM INTEGRATION		L.S.
4026000000	902	DEPARTMENT FURNISHED, MILEMARKER SIGN.....		S.F.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4355100000	SP	DYNAMIC MESSAGE SIGN SYSTEM "DMS-***"		L.S.
4048000000	902	REINFORCED CONCRETE SIGN FOUNDATION.....	86	C.Y.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4355100000	SP	DYNAMIC MESSAGE SIGN SYSTEM "DMS-***"		L.S.
4054000000	902	PLAIN CONCRETE SIGN FOUNDATION.....		C.Y.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4355200000	SP	DMS SYSTEM SERVER COMPUTER.....		EA.
4057000000	SP	OVERHEAD FOOTING.....		C.Y.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4355210000	SP	DMS SYSTEM CLIENT COMPUTER.....		EA.
4060000000	903	SUPPORTS, BREAKAWAY STEEL BEAM.....	8823	LB.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4355220000	SP	DMS SYSTEM LAPTOP COMPUTER.....		EA.
4066000000	903	SUPPORTS, SIMPLE STEEL BEAM.....	10633	LB.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4355230000	SP	DMS SYSTEM CONTROL SOFTWARE.....		EA.
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL.....	1958	L.F.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4355300000	SP	DYNAMIC MESSAGE SIGN MAINTENANCE TRAINING.....		EA.
4078000000	903	SUPPORTS, 2 LB STEEL U-CHANNEL.....		EA.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4355310000	SP	DYNAMIC MESSAGE SIGN SYSTEM DESIGN APPROVAL TESTS.....		EA.
4079000000	903	SUPPORTS, BARRIER (SMALL).....		EA.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4355320000	SP	DYNAMIC MESSAGE SIGN SYSTEM OPERATIONAL FACTORY TESTS.....		L.S.
4080000000	903	SUPPORTS, BARRIER (LARGE).....		EA.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4355330000	SP	DYNAMIC MESSAGE SIGN SYSTEM OPERATIONAL FIELD TESTS.....		L.S.
4080200000	903	SUPPORTS, STEEL SQUARE TUBE.....		L.F.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4355340000	SP	DYNAMIC MESSAGE SIGN BENCH TEST UNIT.....		EA.
4082000000	903	SUPPORTS, WOOD.....		L.F.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4355350000	SP	DYNAMIC MESSAGE SIGN SYSTEM NTCIP TESTS.....		EA.
4082100000	SP	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STATION " ".....		L.S.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.					
4082110000	SP	SUPPORTS, OVERHEAD DMS STRUCTURE AT STATION " ".....		L.S.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.					
4096000000	904	SIGN ERECTION, TYPE D.....	3	EA.	4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.					
4102000000	904	SIGN ERECTION, TYPE E.....	65	EA.	4128000000	SP	STATIC LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.					
4108000000	904	SIGN ERECTION, TYPE F.....	17	EA.	4128000000	SP	STATIC LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.					
4109000000	904	SIGN ERECTION, TYPE A (OVERHEAD).....		EA.	4128000000	SP	STATIC LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.					
4109000000	904	SIGN ERECTION, TYPE B (OVERHEAD).....		EA.	4128000000	SP	STATIC LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.					
4110000000	904	SIGN ERECTION, TYPE A (GROUND MOUNTED).....	9	EA.	4128000000	SP	STATIC LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.					
4110000000	904	SIGN ERECTION, TYPE B (GROUND MOUNTED).....	5	EA.	4128000000	SP	STATIC LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.					
4114000000	904	SIGN ERECTION, MILEMARKERS.....	4	EA.	4128000000	SP	STATIC LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.					
4115000000	904	SIGN ERECTION, OVERLAY (OVERHEAD).....		EA.	4132000000	907	STOCKPILE SUPPORT, STEEL BEAM.....		EA.					
4116000000	904	SIGN ERECTION, OVERLAY (GROUND MOUNTED).....		EA.	4138000000	907	DISPOSAL OF SUPPORT, STEEL BEAM.....		EA.					
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE A (OVERHEAD).....		EA.	4140000000	907	STOCKPILE SUPPORT, WOOD.....		EA.					
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE B (OVERHEAD).....		EA.	4141000000	907	DISPOSAL OF SUPPORT, WOOD.....		EA.					
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE A (GROUND MOUNTED).....		EA.	4142000000	907	STOCKPILE SUPPORT, OVERHEAD STRUCTURE.....		EA.					
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE B (GROUND MOUNTED).....		EA.	4143000000	907	DISPOSAL OF SUPPORT, OVERHEAD STRUCTURE.....		EA.					
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE D.....		EA.	4148000000	907	STOCKPILE SIGN SYSTEM, OVERHEAD.....		EA.					
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE E.....		EA.	4149000000	907	DISPOSAL OF SIGN SYSTEM, OVERHEAD.....		EA.					
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE F.....		EA.	4151000000	907	STOCKPILE SIGN SYSTEM, STEEL BEAM.....		EA.					
4116100000	904	SIGN ERECTION, RELOCATE SIGN MILEMARKERS.....		EA.	4152000000	907	DISPOSAL OF SIGN SYSTEM, STEEL BEAM.....	7	EA.					
4116200000	904	SIGN ERECTION, REPOSITION OVERHEAD.....		EA.	4154000000	907	STOCKPILE SIGN SYSTEM, U-CHANNEL.....		EA.					
4116300000	904	SIGN ERECTION, LOGO TO PANEL.....		EA.	4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL.....		EA.					
4116400000	904	SIGN ERECTION, LOGO TRAILBLAZER.....		EA.	4157000000	907	STOCKPILE SIGN SYSTEM, WOOD.....		EA.					
4116500000	904	SIGN ERECTION, WALKWAY.....		L.F.	4158000000	907	DISPOSAL OF SIGN SYSTEM, WOOD.....		EA.					
4127000000	SP	LIGHTING FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4186000000	907	STOCKPILE SUPPORT, U-CHANNEL.....		EA.					
4127000000	SP	LIGHTING FOR OVERHEAD SIGN ASSEMBLY AT STA *****		L.S.	4192000000	907	DISPOSAL OF SUPPORT, U-CHANNEL.....		EA.					
					4228000000	907	STOCKPILE SIGN, A OR B (OVERHEAD).....		EA.					
					4234000000	907	DISPOSAL OF SIGN, A OR B (OVERHEAD).....		EA.					

ROADWAY STANDARD DRAWINGS  
APPLICABLE TO THESE SIGNING PLANS

901.10 904.10  
901.20 904.20  
901.30 904.30  
901.40 904.40  
901.50 904.50

**SIGNS  
SUMMARY OF QUANTITIES**

10-DEC-2008 09:54  
PA:\projects\081217\signing\081217\signing\layout\plms\engsecd.dgn  
At: 12/21/08

TIP NO. R-0505	SHEET NO. SIGN-3
APPROVED: <i>[Signature]</i>	
DATE: 12/21/08	
SEAL	
	

**Pay Item Notes:**

- 1 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 2 DISPOSAL OF SIGN SYSTEM, STEEL BEAM
- 3 DISPOSAL OF SIGN, D, E OR F
- 4 DISPOSAL OF SIGN, MILEMARKERS

**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

. ALL EXISTING SIGNS ON "U" CHANNEL POST WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS.

. 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.

**Project Notes:**

NOTES

09-DEC-2006 07:58 0505\staff\c\signing\oadd\signing layout plans\Engineed.dgn



TIP NO. R-0505	SHEET NO. SIGN-4
APPROVED: <i>[Signature]</i>	
DATE: 12/21/08	
SEAL	
	

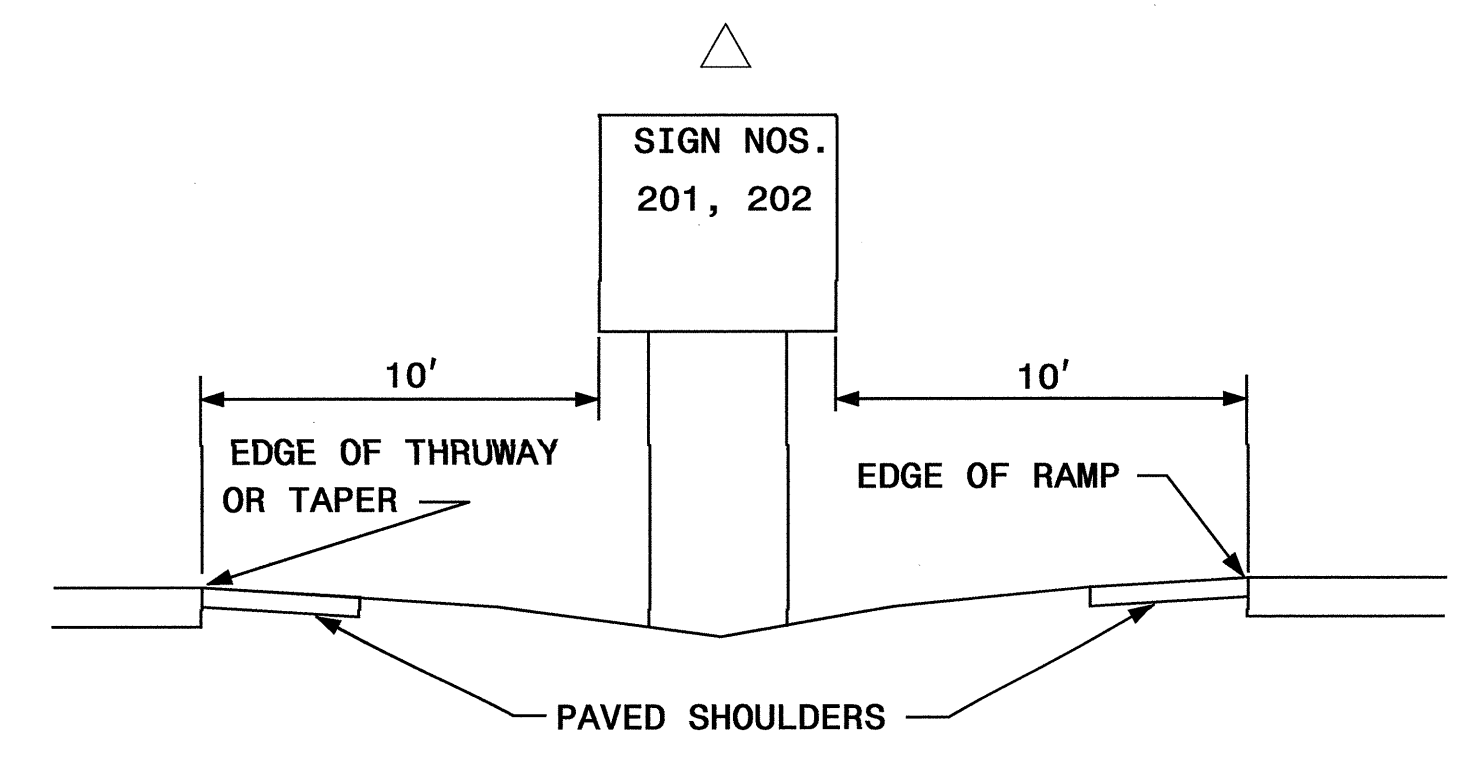
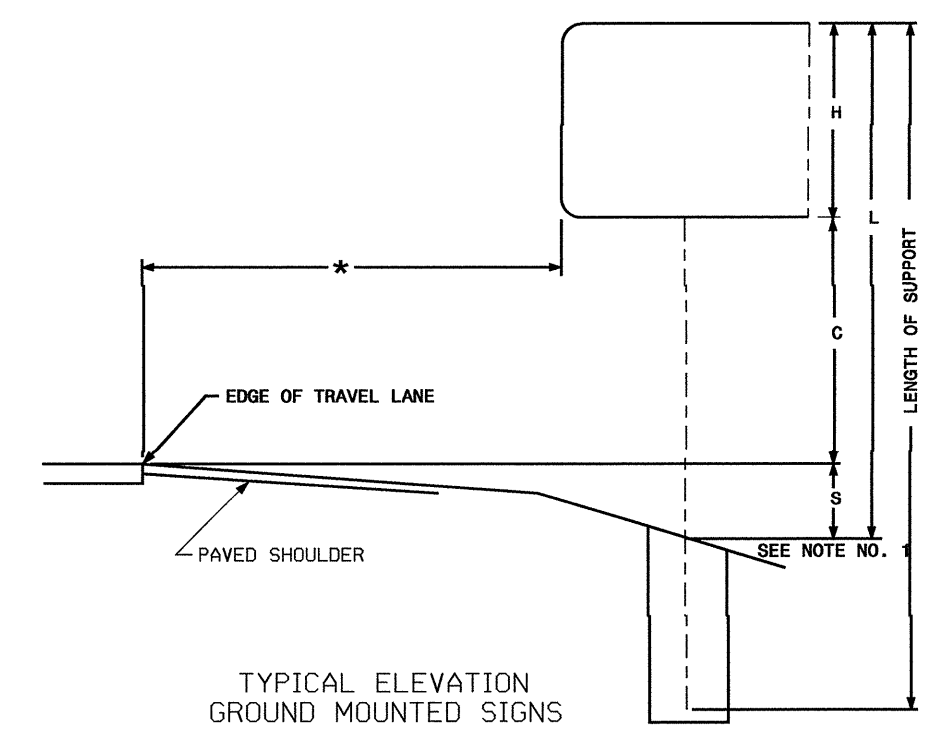
SIGN NO.	SIGN TYPE	SIGN SIZE (in.)		ROADWAY STATION	NO. OF SUP.	BEAM SECTION	SUPPORT TYPE BA or S	ATTACH METHOD	MOUNTING METHOD	HORIZ. CLR.* (ft.)	LENGTH (ft)			LEFT SUPPORT (ft)			CENTER SUPPORT (ft)			RIGHT SUPPORT (ft)			FOOTING DIAMETER (ft.)	FOOTING DEPTH (ft.)	B/A SUPPORT WEIGHTS (lbs.)	SIMPLE SUPPORT WEIGHTS (lbs.)	REINF. FTGS. (c.y.)	FIELD VERIFIED SEE NOTE 2 (mm/dd/yy)	
		w	x								h	SNS H	HT C	EMBED-MENT	S	L	TOTAL LENGTH	S	L	TOTAL LENGTH	S	L							TOTAL LENGTH
101A	B	82	X 30	738+00	3	W14x30	BA	1-R	N/A	30.00	23.00	8.10	7.5	0.34	31.44	38.94	-1.10	30.00	37.50	-0.22	30.87	38.37	3	8	4171.68	0.00	6.28		
101B	A	282	X 276																										
102	A	120	X 60	758+50	2	S4x7.7	S	N/A	N/A	18.00	5.00	7.00	4.5	0.76	12.76	17.26	0.00	0.00	0.00	3.69	15.69	20.19	1	5	0.00	288.40	0.29		
103A	B	82	X 30	764+00	3	W18x35	S	1-R	N/A	18.00	21.00	7.00	6	5.59	33.59	39.59	9.51	37.51	43.51	1.00	29.00	35.00	8	6.5	0.00	4133.58	36.30		
103B	A	324	X 252																										
104A	B	82	X 30	804+00	3	W18x40	S	1-R	N/A	30.00	21.00	20.60	7.5	-4.55	37.05	44.55	-11.70	29.90	37.40	-16.60	25.00	32.50	5.5	8	0.00	4577.84	21.12		
104B	A	324	X 252																										
105A	B	82	X 30	825+00	3	W14x30	BA	1-R	N/A	30.00	23.00	11.46	6.5	-0.88	33.58	40.08	-3.21	31.25	37.75	-4.46	30.00	36.50	5.5	7	4157.43	0.00	18.48		
105B	A	282	X 276																										
106A	B	82	X 30	750+00	2	W10x22	S	1-R	N/A	18.00	13.50	7.00	7	0.69	21.19	28.19	0.00	0.00	0.00	6.67	27.17	34.17	2.50	7.5	0.00	1371.95	2.73		
106B	A	192	X 162																										
107	A	120	X 54	Replace Exis	2	S4x7.7	S	N/A	N/A	18.00	4.50	7.00	4	0.07	11.57	15.57	0.00	0.00	0.00	2.85	14.35	18.35	1.00	4.5	0.00	261.20	0.26		
201	A	60	X 60	768+50+/-	2	S4x7.7	BA	N/A	△	10.00	5.00	11.17	3.5	-4.17	12.00	15.50	0.00	0.00	0.00	-3.47	12.70	16.20	1	4	284.66	0.00	0.23		
202	A	60	X 60	796+50+/-	2	S3x5.7	BA	N/A	△	10.00	5.00	8.39	3	-1.39	12.00	15.00	0.00	0.00	0.00	-0.98	12.41	15.41	1	3.5	208.84	0.00	0.20		

TOTAL 8822.61 TOTAL 10632.96 TOTAL 85.90

USE: 8823 10633 86

NOTES

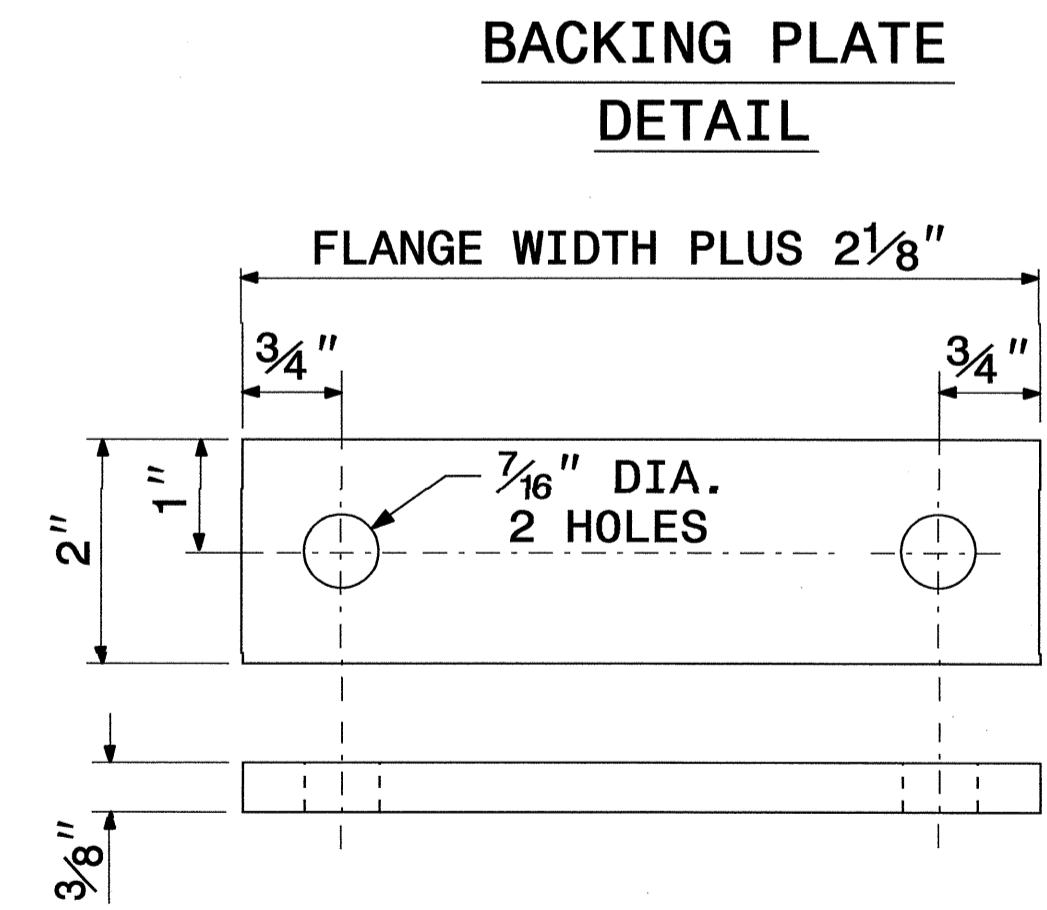
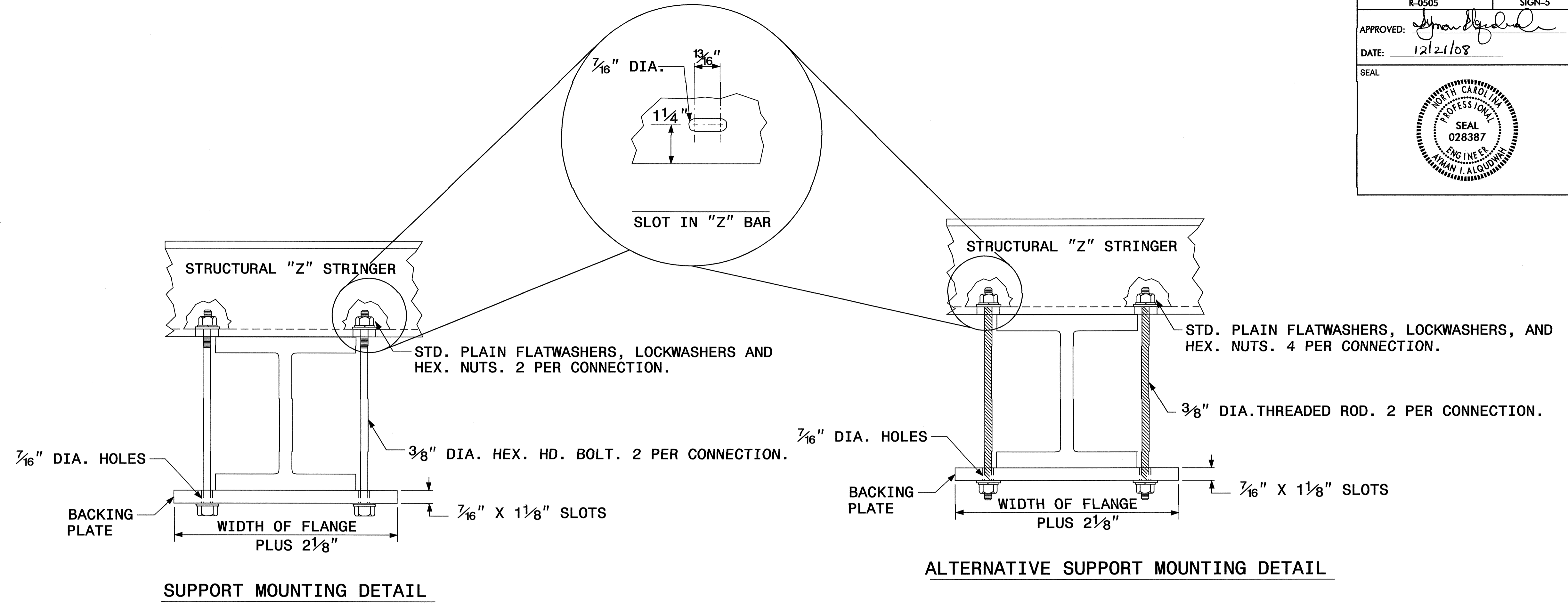
- DIMENSION "S" REPRESENTS AN INCREASE (+), OR A DECREASE (-) IN POLE LENGTH, RELATIVE TO THE ELEVATION OF THE EDGE OF PAVEMENT.
- FIELD VERIFICATIONS SHALL BE REQUIRED FOR ALL SUPPORTS, SEE (\*) ARTICLE 903-3. FABRICATORS SHALL BE AISC CERTIFIED IN CATEGORY 1, SEE (\*) ARTICLE 1072-1. (\*) = N.C.D.O.T.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

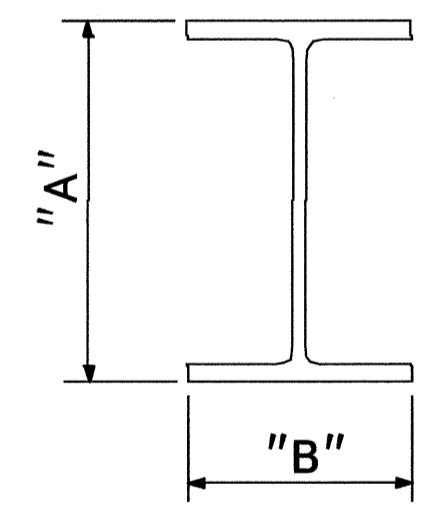
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TIP NO. R-0505	SHEET NO. SIGN-5
APPROVED: <i>[Signature]</i>	
DATE: 12/21/08	
SEAL	



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.

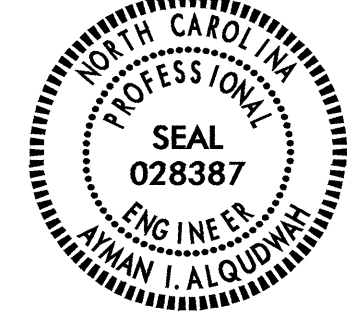
**SIGN SUPPORTS SECTION DIMENSIONS**

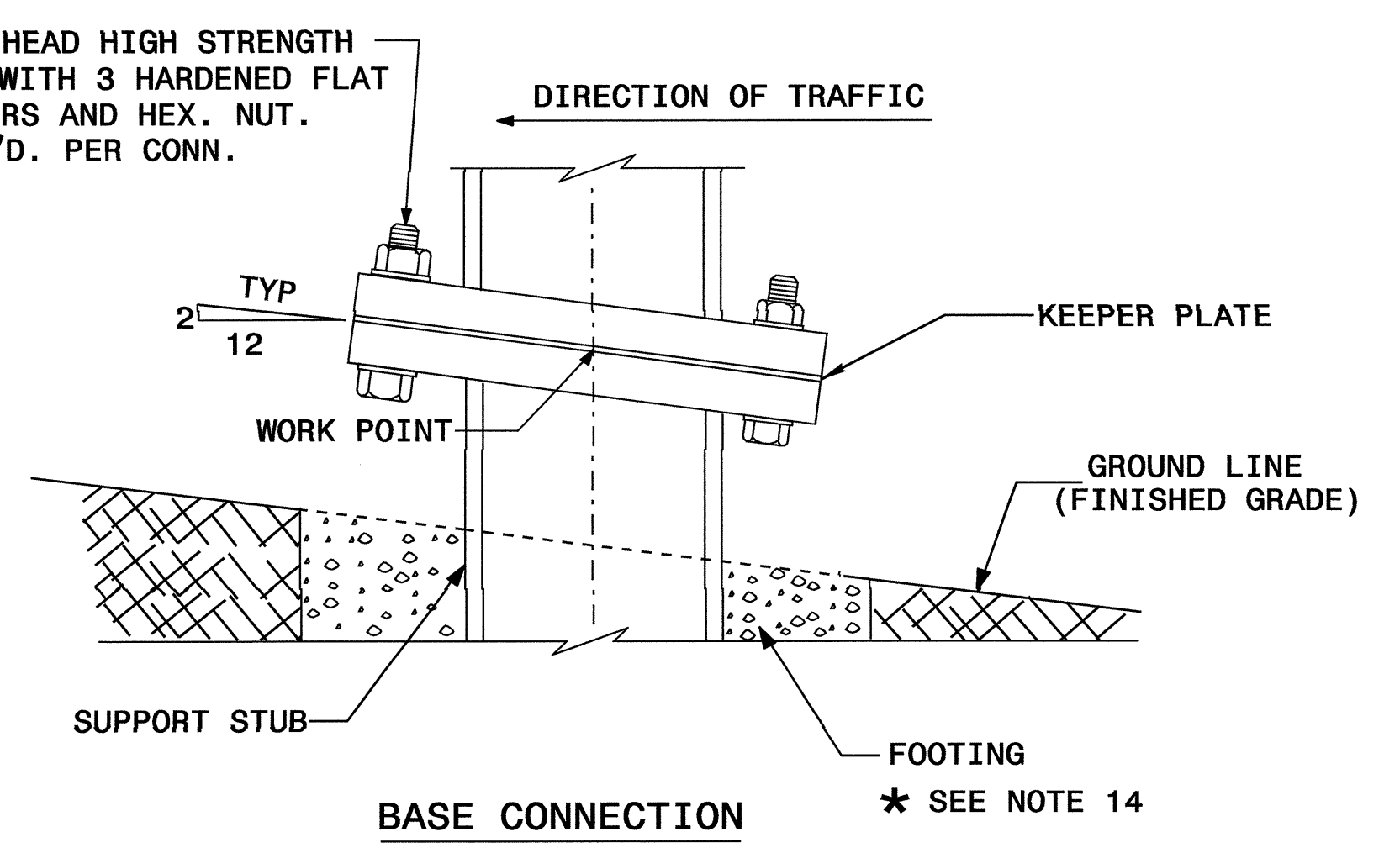
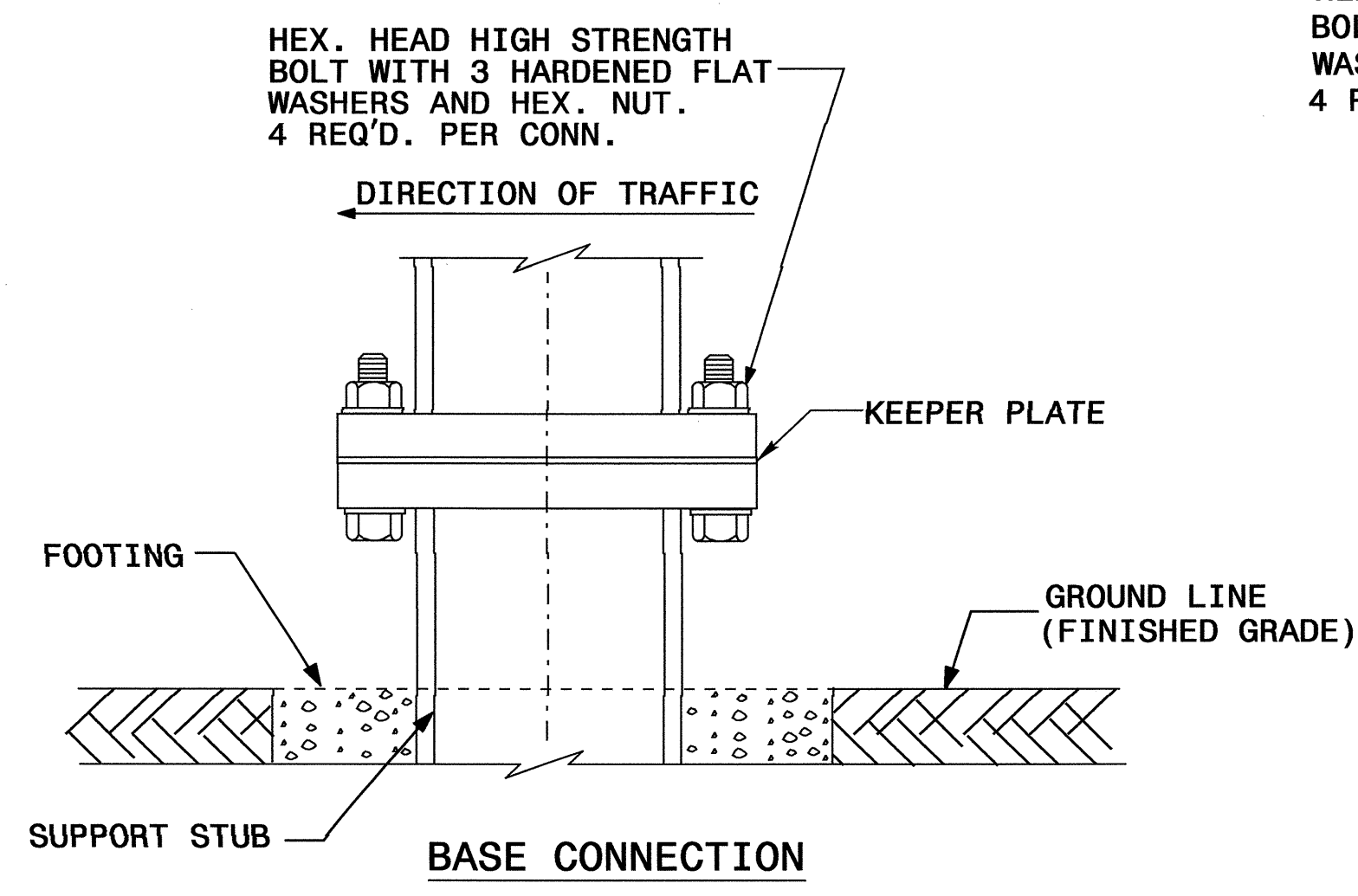
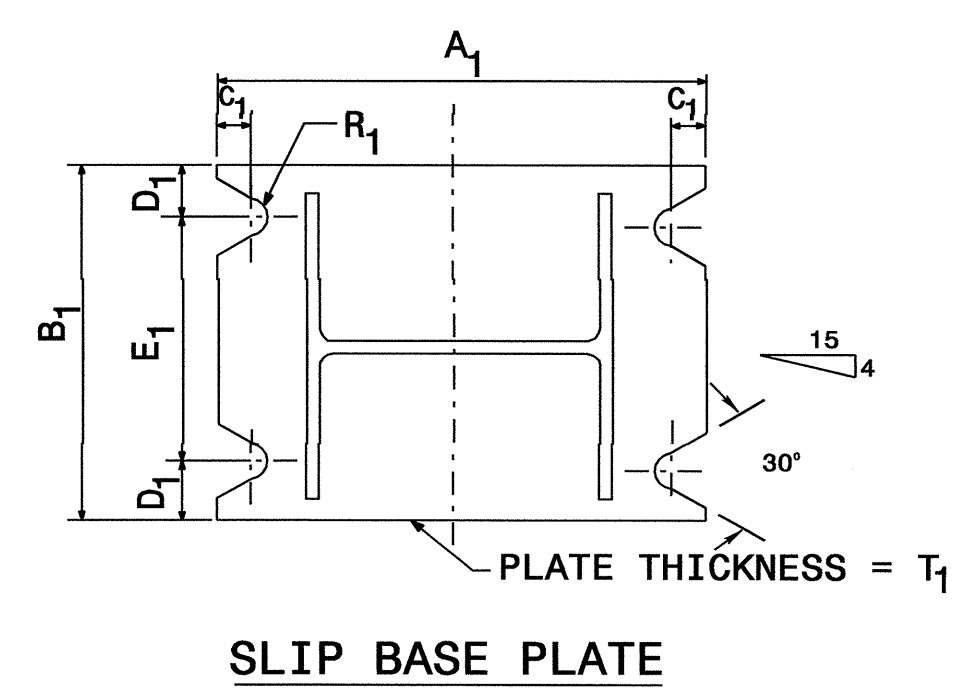
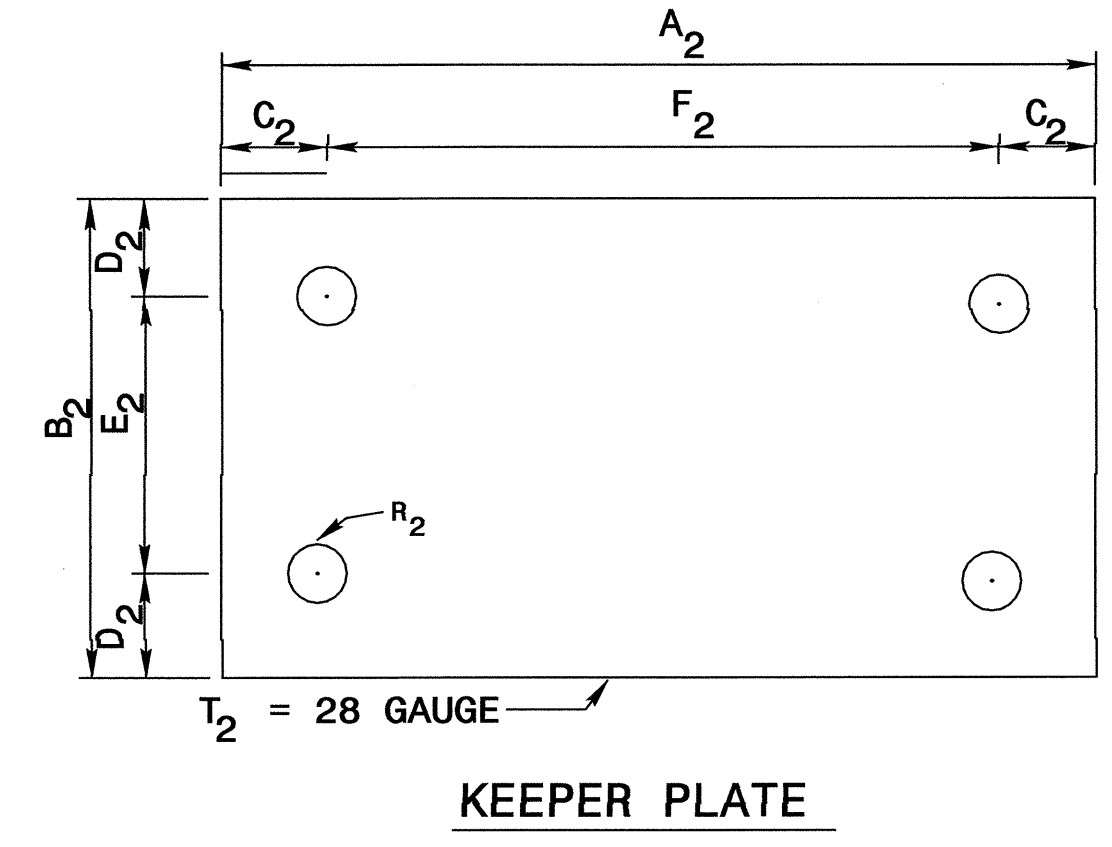
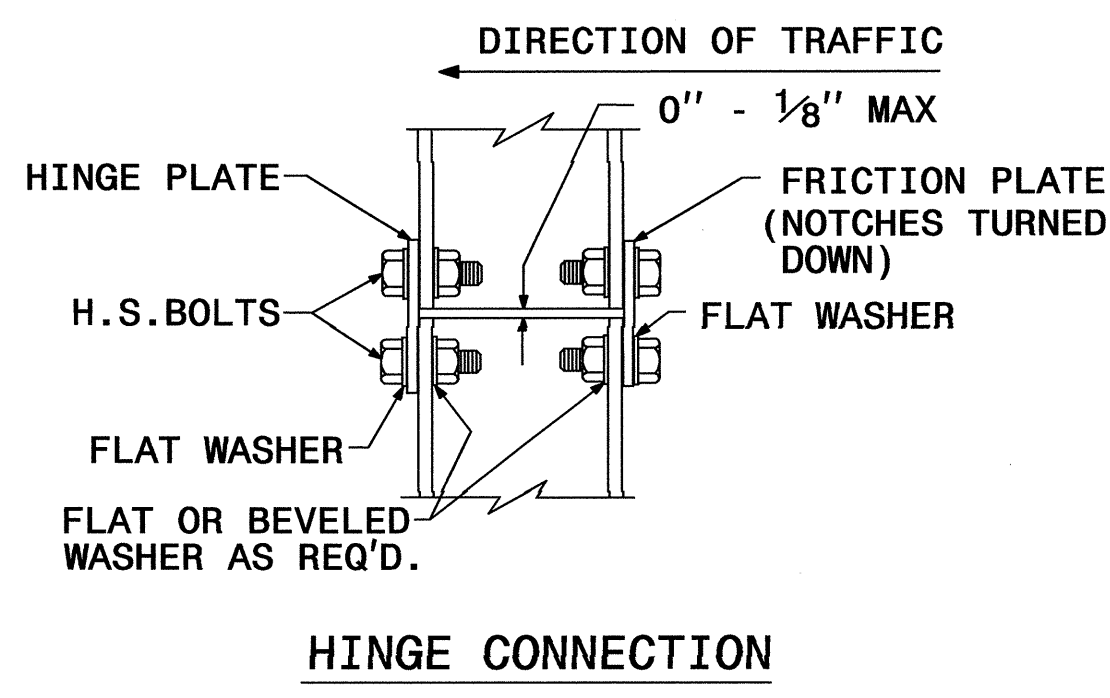
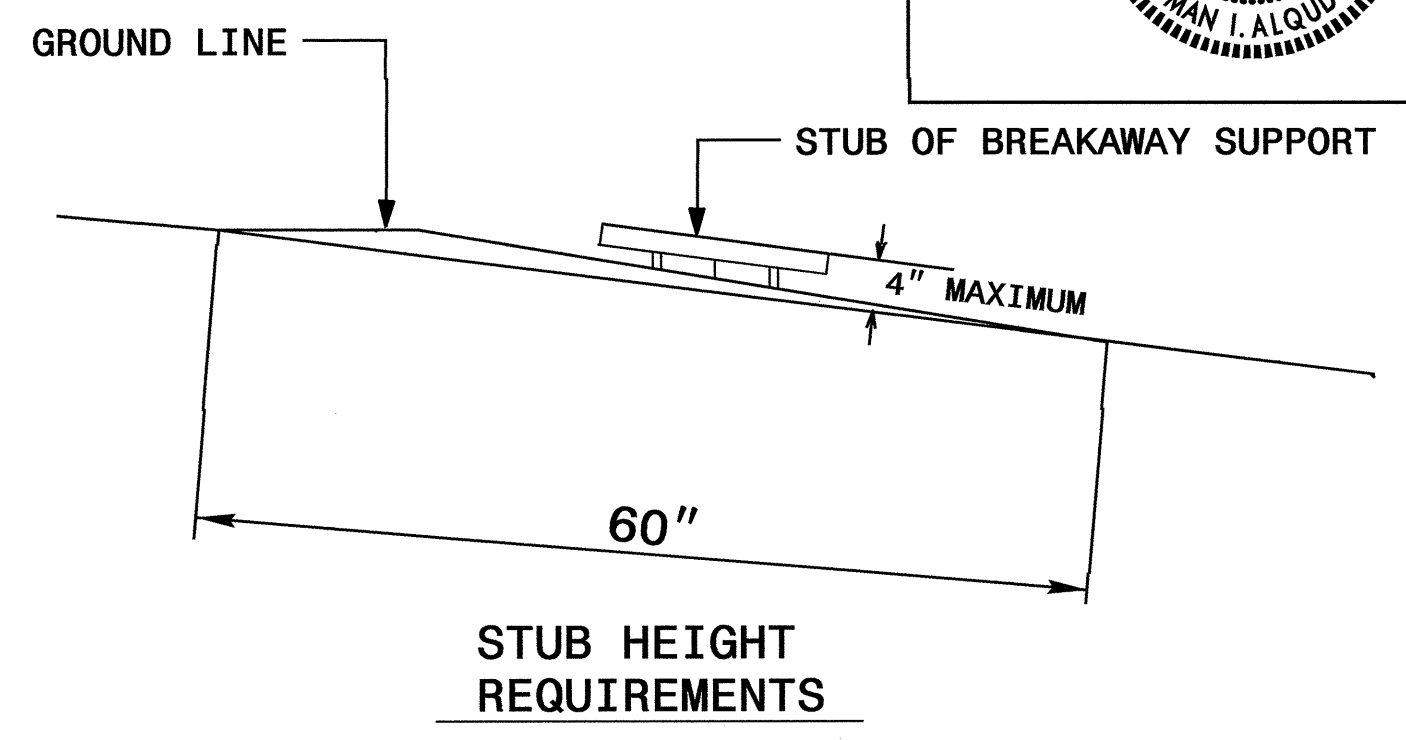
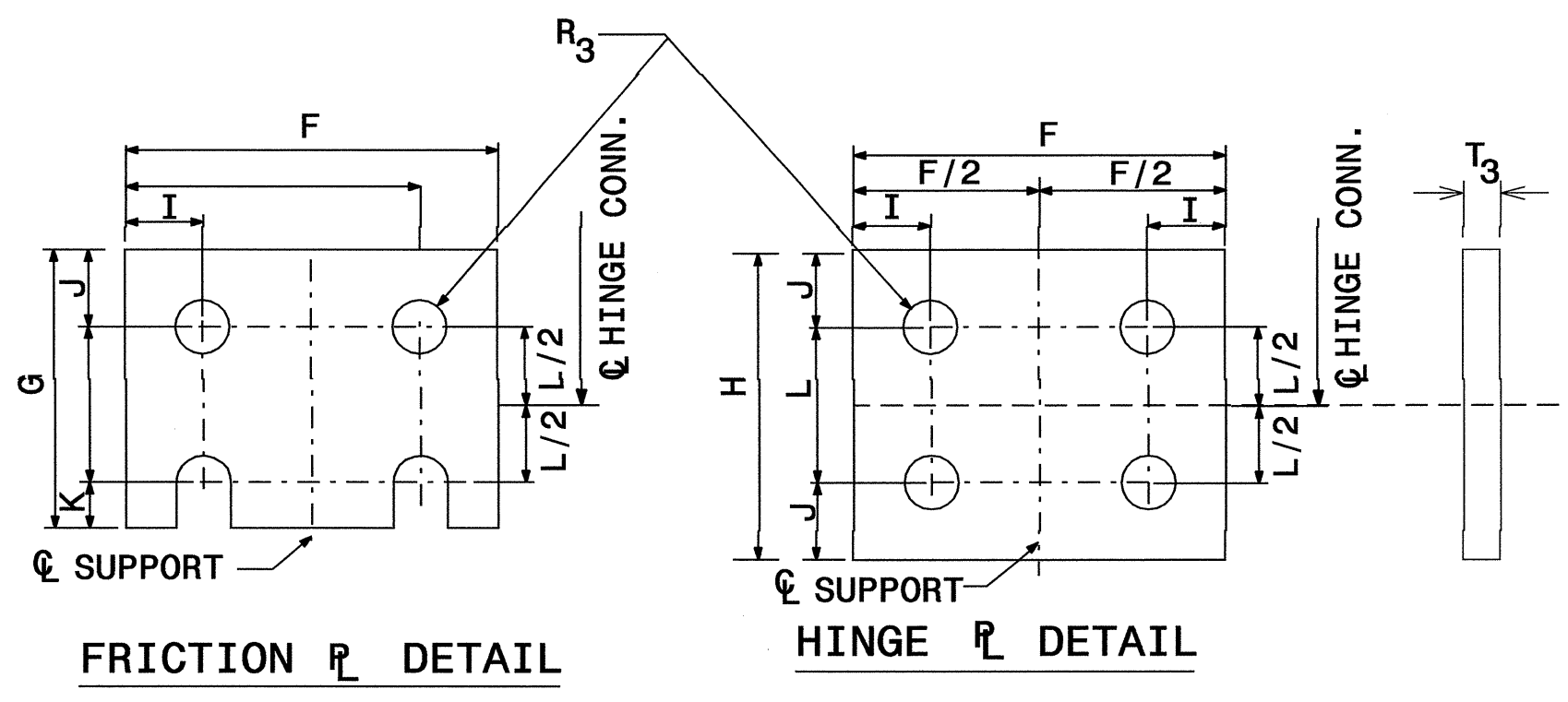
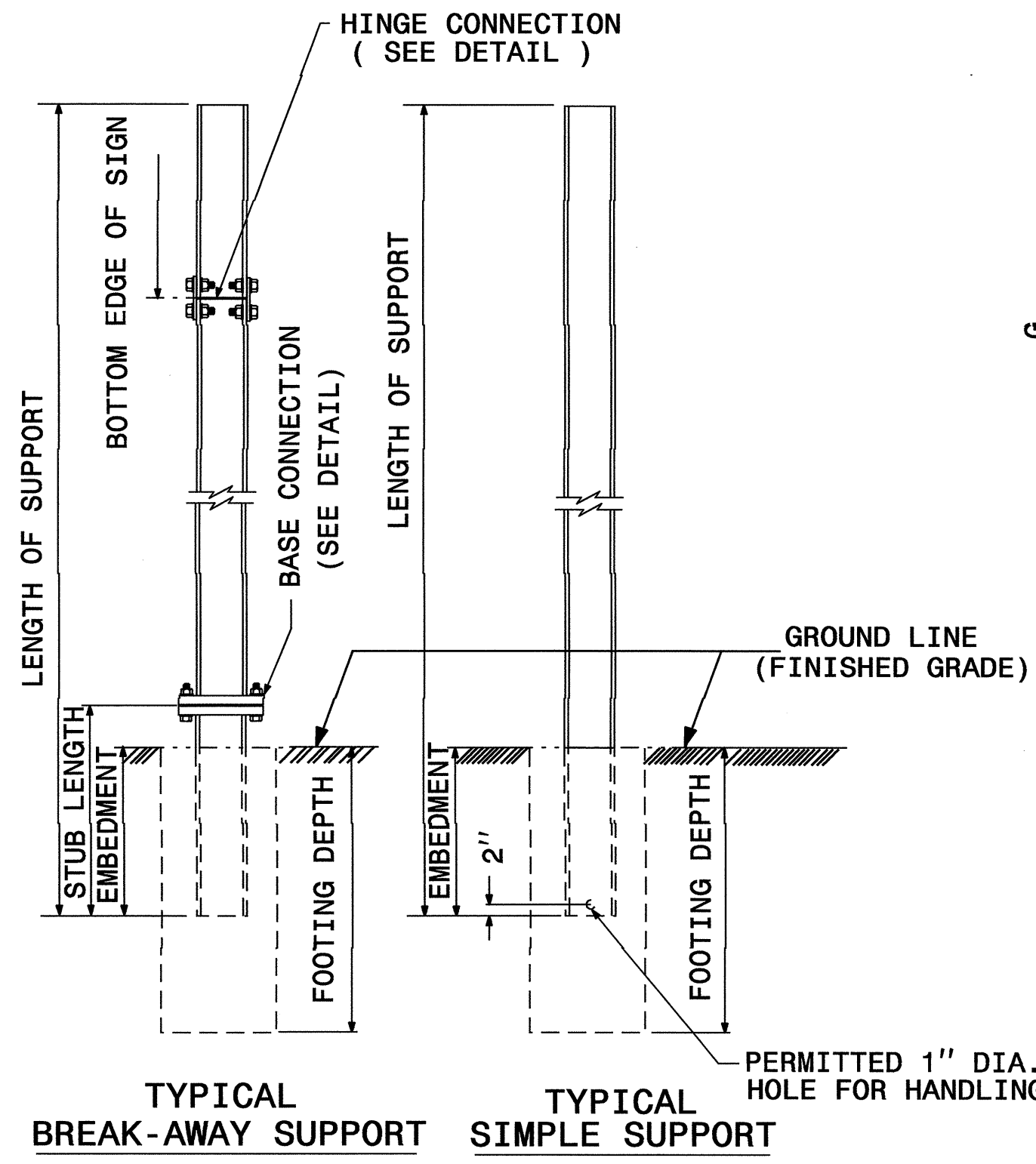


SECTION	A	B
S3 X 5.7	3"	2 3/8"
S4 X 7.7	4"	2 5/8"
W6 X 9	6"	4"
W6 X 12	6"	4"
W6 X 16	6 1/4"	4"
W8 X 18	8 1/8"	5 1/4"
W8 X 21	8 1/4"	5 1/4"
W10 X 22	10 1/8"	5 3/4"
W10 X 26	10 3/8"	5 3/4"
W12 X 26	12 1/4"	6 1/2"
W14 X 30	13 7/8"	6 3/4"
W16 X 31	15 7/8"	5 1/2"
W18 X 35	17 3/4"	6"
W18 X 40	17 7/8"	6"
W21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

**SIGN MOUNTING DETAILS**

09-DEC-2008 07:59:05 E:\projects\signing\cedd\signing layout plans\Engineer.dgn

TIP NO. R-0505	SHEET NO. SIGN-6
APPROVED: <i>[Signature]</i>	
DATE: 12/2/08	
SEAL	
	



**GROUND MOUNTED SIGN SUPPORT**

SEE SHEET SIGN-7 FOR DIMENSIONS.  
SEE SHEET SIGN-8 FOR NOTES.

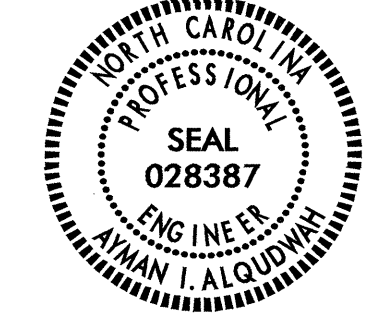
09-DEC-2008 07:59 0505\p\aff\to\signing\cead\signing layout plans\Engsead.dgn



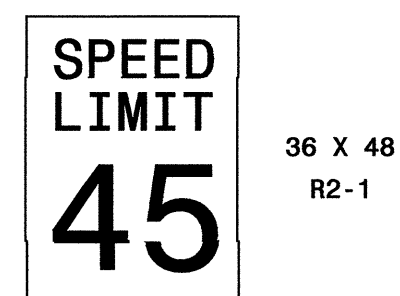






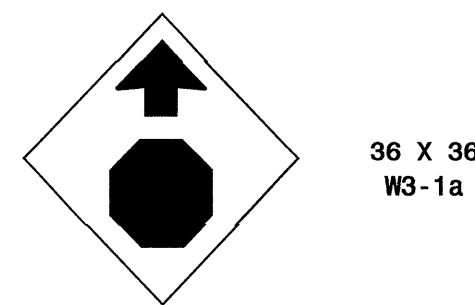
TIP NO. R-0505	SHEET NO. SIGN-9
APPROVED: <i>[Signature]</i>	
DATE: 12/1/09	
SEAL	
	

401 QUANTITY REQ'D 7



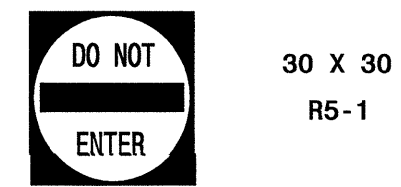
TWO "U" POSTS PER SIGN

406 QUANTITY REQ'D 6



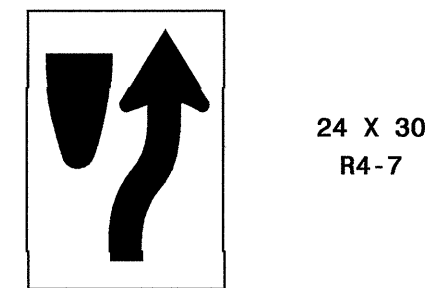
ONE "U" POST PER SIGN

411 QUANTITY REQ'D 4



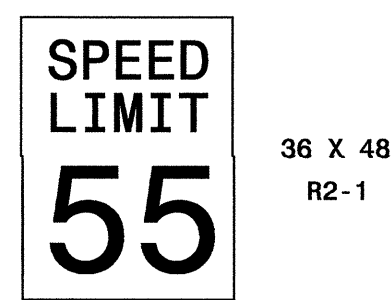
ONE "U" POST PER SIGN

416 QUANTITY REQ'D 5



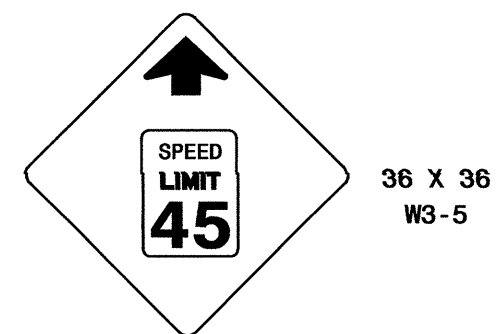
ONE "U" POST PER SIGN

402 QUANTITY REQ'D 2



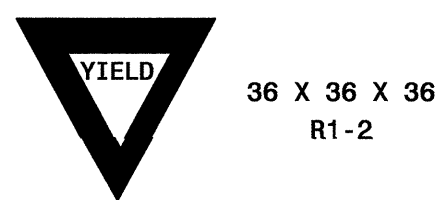
TWO "U" POSTS PER SIGN

407 QUANTITY REQ'D 1



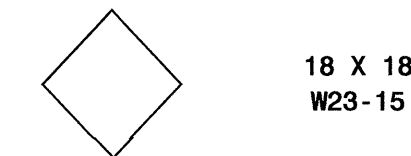
ONE "U" POST PER SIGN

412 QUANTITY REQ'D 2



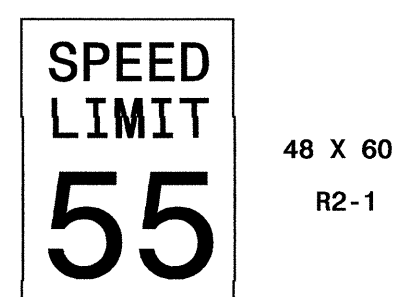
ONE "U" POST PER SIGN

417 QUANTITY REQ'D 5



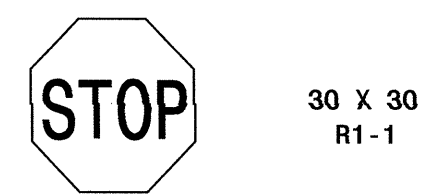
MOUNT BELOW SIGN 416  
IN 5 INSTALLATIONS

403 QUANTITY REQ'D 3



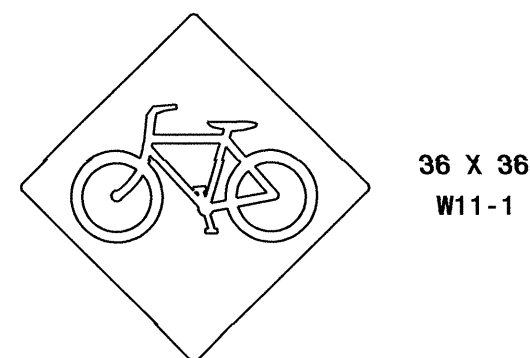
TWO "U" POSTS PER SIGN

408 QUANTITY REQ'D 4



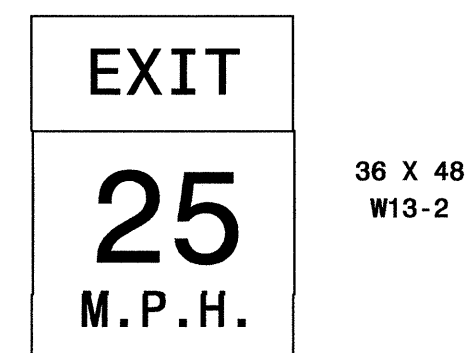
ONE "U" POST PER SIGN

413 QUANTITY REQ'D 1



ONE "U" POST PER SIGN

418 QUANTITY REQ'D 1



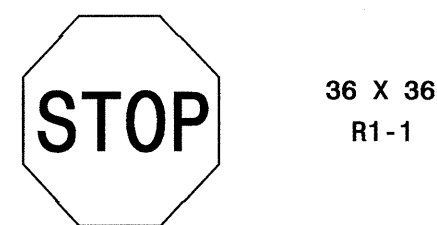
ONE "U" POST PER SIGN

404 QUANTITY REQ'D 2



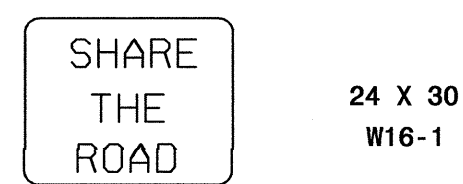
TWO "U" POSTS PER SIGN

409 QUANTITY REQ'D 9



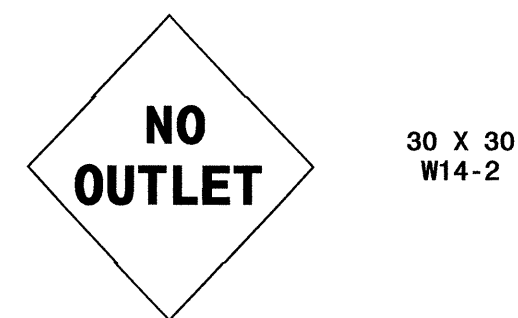
ONE "U" POST PER SIGN

414 QUANTITY REQ'D 1



MOUNT BELOW SIGN 413  
IN 1 INSTALLATIONS

419 QUANTITY REQ'D 2



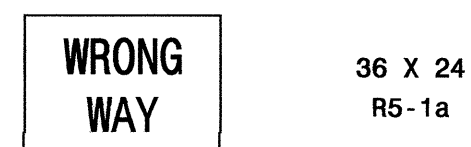
ONE "U" POST PER SIGN

405 QUANTITY REQ'D 2



MOUNT BACK TO BACK WITH SIGN 404  
IN 2 INSTALLATIONS

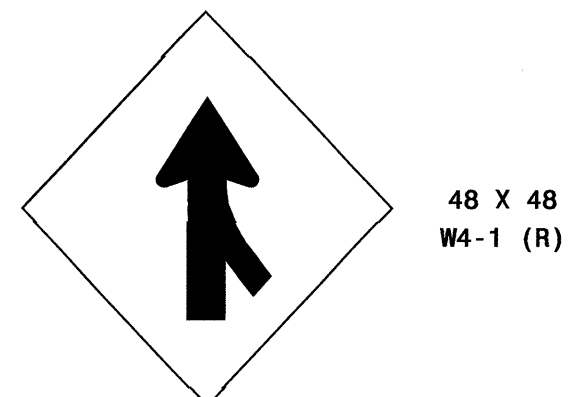
410 QUANTITY REQ'D 7



ONE "U" POST PER SIGN

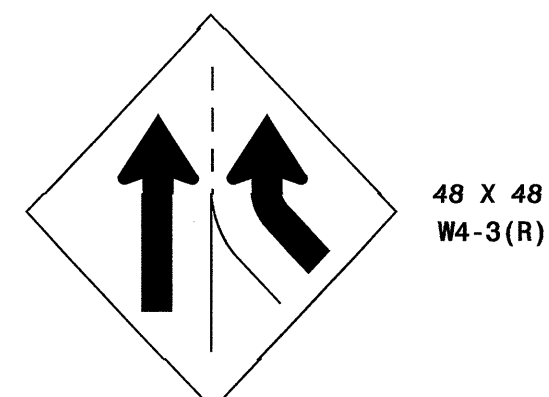
MOUNT BACK TO BACK WITH SIGN 507  
IN 1 INSTALLATIONS

415 QUANTITY REQ'D 2



TWO "U" POSTS PER SIGN

420 QUANTITY REQ'D 1



TWO "U" POSTS PER SIGN

TYPE "E" SIGNS

I:\01\2008 05\24\050505\Traffic\Signing\CADD\Signing Layout Plans\Engineer.dgn  
 Walter Johnson 11/22/09



APPROVED: *[Signature]*  
DATE: 12/21/08



**SIGN NUMBER:** 101A,103A,104A,105A **BACKG COLOR:** Green  
**TYPE:** B **COPY COLOR:** White  
**QUANTITY:** 4

SYMBOL	X	Y	WID	HT

**SIGN WIDTH:** 6'-10" **HEIGHT:** 2'-6"  
**TOTAL AREA:** 17.1 Sq.Ft.

**BORDER TYPE:** FLUSH  
**RECESS:** 0"  
**WIDTH:** 0"  
**RADII:** 0"

**NO. Z BARS:** 6  
**LENGTH:** 274.0

**MAT'L:** 0.125" (3.2 mm) ALUMINUM

**DESIGN BY:** W. Johnson **CHECKED BY:** [ ] **DATE:** Nov 17, 2008  
**PROJECT ID:** R-0505 **DIV:** 14

**BORDER**  
R=8"  
TH=2"

USE NOTES: 1,2,3,4

- Legend and border shall be direct applied Grade B sheeting.
- Background shall be Grade C reflective sheeting.
- Shields shall be on 0.032" (0.8mm) aluminum and demountable.
- Shields shall be Grade B sheeting.

Spacing Factor is 1 unless specified otherwise

**LETTER POSITIONS**

Letter spacings are to start of next letter										Series/Size	Text Length
E	X	I	T	7						E 2000	57.8
12.1	8.9	10.7	3.5	7.5	15	12.2	12.1				

FILENAME: Sign Design NORTH CAROLINA D.O.T. SIGN DETAIL

**SIGN NUMBER:** 101B,105B **BACKG COLOR:** Green  
**TYPE:** A **COPY COLOR:** White  
**QUANTITY:** 2

SYMBOL	X	Y	WID	HT
M1.4	46.4	152.9	60.5	48
M1.4	156.8	152.9	48	48

**SIGN WIDTH:** 23'-6" **HEIGHT:** 23'-0"  
**TOTAL AREA:** 640.5 Sq.Ft.

**BORDER TYPE:** FLUSH  
**RECESS:** 0"  
**WIDTH:** 3"  
**RADII:** 12"

**NO. Z BARS:** 6  
**LENGTH:** 274.0

**MAT'L:** 0.125" (3.2 mm) ALUMINUM

**DESIGN BY:** W. Johnson **CHECKED BY:** [ ] **DATE:** Nov 19, 2008  
**PROJECT ID:** R-0505 **DIV:** 14

**BORDER**  
R=12"  
TH=3"

USE NOTES: 1,2,3,4

- Legend and border shall be direct applied Grade B sheeting.
- Background shall be Grade C reflective sheeting.
- Shields shall be on 0.032" (0.8mm) aluminum and demountable.
- Shields shall be Grade B sheeting.

Spacing Factor is 1 unless specified otherwise

**LETTER POSITIONS**

Letter spacings are to start of next letter										Series/Size	Text Length						
N	O	R	T	H						E 2000	74.2						
143.8	14.6	3.8	16.1	13.8	13.8	12.2	64										
126.9	15.1	15.2	15.2	6.6	16	13.4	14.3	12.2	47.2	E 2000	107.9						
87.7	20.6	21.2	12	19.4	19.4	13.2	86.5				EM 2000	105.8					
22.8	18.4	19	17.4	10.4	20	20.2	10.2	19.2	10.4	20	19.8	18	19.4	13.2	23.6	EM 2000	235.6
22.8	21.2	19.4	19.4	19.4	12.6	17.6	19.8	19	21.2	12	12	10.2	13.2	22.8	EM 2000	236.4	
99	26.4	18	14.4	5.3	11	9	99				E 2000	84.1					

FILENAME: Sign Design NORTH CAROLINA D.O.T. SIGN DETAIL

**SIGN NUMBER:** 106A **BACKG COLOR:** Green  
**TYPE:** B **COPY COLOR:** White  
**QUANTITY:** 1

SYMBOL	X	Y	WID	HT

**SIGN WIDTH:** 6'-10" **HEIGHT:** 2'-6"  
**TOTAL AREA:** 17.1 Sq.Ft.

**BORDER TYPE:** FLUSH  
**RECESS:** 0"  
**WIDTH:** 0"  
**RADII:** 0"

**NO. Z BARS:** 6  
**LENGTH:** 274.0

**MAT'L:** 0.125" (3.2 mm) ALUMINUM

**DESIGN BY:** W. Johnson **CHECKED BY:** [ ] **DATE:** Dec 09, 2008  
**PROJECT ID:** R-0505 **DIV:** 14

**BORDER**  
R=8"  
TH=2"

USE NOTES: 1,2,3,4

- Legend and border shall be direct applied Grade B sheeting.
- Background shall be Grade C reflective sheeting.
- Shields shall be on 0.032" (0.8mm) aluminum and demountable.
- Shields shall be Grade B sheeting.

Spacing Factor is 1 unless specified otherwise

**LETTER POSITIONS**

Letter spacings are to start of next letter										Series/Size	Text Length
E	X	I	T	5						E 2000	57.8
12.1	8.9	10.7	3.5	7.5	15	12.2	12.1				

FILENAME: sign design NORTH CAROLINA D.O.T. SIGN DETAIL

**SIGN NUMBER:** 102 **BACKG COLOR:** Green/Green  
**TYPE:** A **COPY COLOR:** White  
**QUANTITY:** 1

SYMBOL	X	Y	WID	HT
ARUP	11.1	21.9	8	12
ARUP	103.9	6.4	8	12

**SIGN WIDTH:** 10'-0" **HEIGHT:** 5'-0"  
**TOTAL AREA:** 50.0 Sq.Ft.

**BORDER TYPE:** FLUSH  
**RECESS:** 0"  
**WIDTH:** 1"  
**RADII:** 3"

**NO. Z BARS:** 2  
**LENGTH:** 112.0

**MAT'L:** 0.125" (3.2 mm) ALUMINUM

**DESIGN BY:** W. Johnson **CHECKED BY:** [ ] **DATE:** Nov 19, 2008  
**PROJECT ID:** R-0505 **DIV:** 14

**BORDER**  
R=3"  
TH=1"

USE NOTES: 1,2,3,4

- Legend and border shall be direct applied Grade B sheeting.
- Background shall be Grade C reflective sheeting.
- Shields shall be on 0.032" (0.8mm) aluminum and demountable.
- Shields shall be Grade B sheeting.

Spacing Factor is 1 unless specified otherwise

**LETTER POSITIONS**

Letter spacings are to start of next letter										Series/Size	Text Length						
T	R	U	C	K	S					D 2000	39.2						
40.4	6.2	6.8	7.2	7.2	6.4	5.4	40.4										
27.1	7.4	6.8	7.4	5.6	7.3	3.2	6.2	6.2	5	8	2.5	3.8	7	5.4	11.1	D 2000	81.8
6.6	7.4	6.3	7.4	7.2	6.3	6.2	6.6	7.4	6.6	7.3	3.2	6.2	6.2	5	24.1	D 2000	89.3

FILENAME: Sign Design NORTH CAROLINA D.O.T. SIGN DETAIL

**GROUND MOUNTED**

10-DEC-2008 09:56 0505\p1\proj\objects\at\11221737\signing\layout\plans\engsees\dgn



APPROVED: *[Signature]*  
DATE: 12/21/08



SIGN NUMBER: 103B,104B TYPE: A QUANTITY: 2  
 BACKG COLOR: Green COPY COLOR: White  
 DESIGN BY: W. Johnson CHECKED BY: DATE: Nov 19, 2008  
 PROJECT ID: R-0505 DIV: 14

SYMBOL	X	Y	WID	HT
M1_4	67.8	128.8	60.5	48
M1_4	178.3	128.8	48	48
ARMED	276.4	55	22.5	35.4

SIGN WIDTH: 27'-0" HEIGHT: 21'-0" TOTAL AREA: 567.0 Sq.Ft.  
 BORDER TYPE: FLUSH RECESS: 0" WIDTH: 3" RADII: 12"  
 NO. Z BARS: 6 MAT'L: 0.125" (3.2 mm) ALUMINUM LENGTH: 316.0

USE NOTES: 1,2,3,4  
 1. Legend and border shall be direct applied Grade B sheeting.  
 2. Background shall be Grade C reflective sheeting.  
 3. Shields shall be on 0.032" (0.8mm) aluminum and demountable.  
 4. Shields shall be Grade B sheeting.

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter

Series/Size	Text Length
E 2000	74.2
E 2000	107.9
EM 2000	105.8
EM 2000	235.6
EM 2000	236.4

FILENAME: sign design NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 106B TYPE: A QUANTITY: 1  
 BACKG COLOR: Green COPY COLOR: White  
 DESIGN BY: W. Johnson CHECKED BY: DATE: Dec 09, 2008  
 PROJECT ID: R-0505 DIV: 14

SYMBOL	X	Y	WID	HT
NC243A	72	88.2	48	48

SIGN WIDTH: 16'-0" HEIGHT: 13'-6" TOTAL AREA: 216.0 Sq.Ft.  
 BORDER TYPE: FLUSH RECESS: 0" WIDTH: 3" RADII: 12"  
 NO. Z BARS: 4 MAT'L: 0.125" (3.2 mm) ALUMINUM LENGTH: 184.0

USE NOTES: 1,2,3,4  
 1. Legend and border shall be direct applied Grade B sheeting.  
 2. Background shall be Grade C reflective sheeting.  
 3. Shields shall be on 0.032" (0.8mm) aluminum and demountable.  
 4. Shields shall be Grade B sheeting.

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter

Series/Size	Text Length
EM 2000	150.4
E 2000	63.1

FILENAME: sign design NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 107 TYPE: B QUANTITY: 1  
 BACKG COLOR: Green/Green COPY COLOR: White  
 DESIGN BY: W. Johnson CHECKED BY: DATE: Dec 10, 2008  
 PROJECT ID: R-0505 DIV: 14

SYMBOL	X	Y	WID	HT
ARUP	6.6	32.4	8	12
ARUP	96.2	5.9	8	12

SIGN WIDTH: 10'-0" HEIGHT: 4'-6" TOTAL AREA: 45.0 Sq.Ft.  
 BORDER TYPE: FLUSH RECESS: 0" WIDTH: 1" RADII: 3"  
 NO. Z BARS: 2 MAT'L: 0.125" (3.2 mm) ALUMINUM LENGTH: 112.0

USE NOTES: 1,2,3,4  
 1. Legend and border shall be direct applied Grade B sheeting.  
 2. Background shall be Grade C reflective sheeting.  
 3. Shields shall be on 0.032" (0.8mm) aluminum and demountable.  
 4. Shields shall be Grade B sheeting.

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter

Series/Size	Text Length
D 2000	89.3
D 2000	55
D 2000	73.8

FILENAME: sign design NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 201,202 TYPE: A QUANTITY: 2  
 BACKG COLOR: Green COPY COLOR: White  
 DESIGN BY: W. Johnson CHECKED BY: DATE: Nov 17, 2008  
 PROJECT ID: R-0505 DIV: 14

SYMBOL	X	Y	WID	HT
ARMED	31	6	18.8	29.5

SIGN WIDTH: 5'-0" HEIGHT: 5'-0" TOTAL AREA: 25.0 Sq.Ft.  
 BORDER TYPE: FLUSH RECESS: 0" WIDTH: 1.5" RADII: 8"  
 NO. Z BARS: 2 MAT'L: 0.125" (3.2 mm) ALUMINUM LENGTH: 52.0

USE NOTES: 1,2,3,4  
 1. Legend and border shall be direct applied Grade B sheeting.  
 2. Background shall be Grade C reflective sheeting.  
 3. Shields shall be on 0.032" (0.8mm) aluminum and demountable.  
 4. Shields shall be Grade B sheeting.

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter

Series/Size	Text Length
EM 2000	37
D 2000	10.2

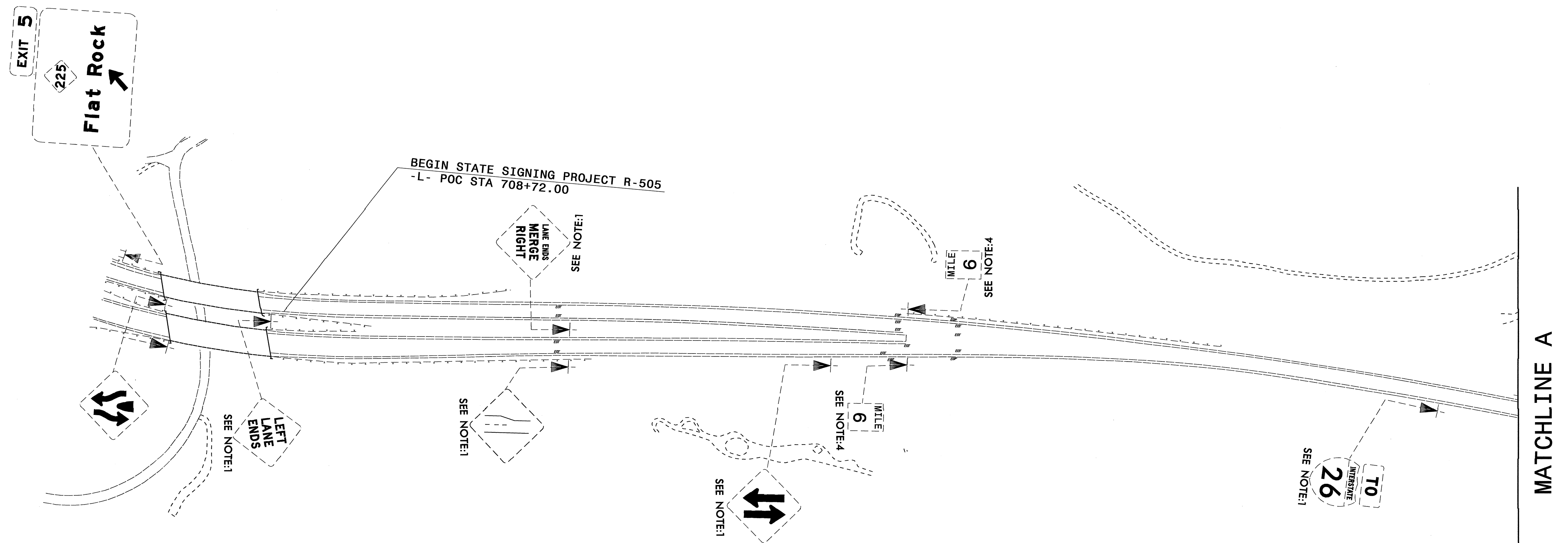
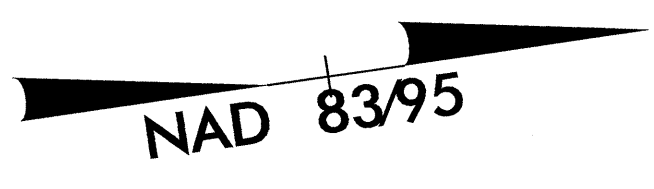
FILENAME: sign design NORTH CAROLINA D.O.T. SIGN DETAIL

GROUND MOUNTED

10-DEC-2008 09:56 p:\projects-r-0505\signing\cadd\signing layout plans\engseed.dgn  
 w:\verjohnson AT 12/21/08



TIP NO. R-0505	SHEET NO. SIGN-14
APPROVED: <i>[Signature]</i>	
DATE: 12/2/08	
SEAL	



**EXISTING SIGNS**

09-DEC-2008 08:04  
 W:\p\p\johnson\0505\signing\cadd\signing layout plans\R-0505\_Sgn\_Existing\_Sheet.dwg  
 I:\p\johnson\0505\signing\cadd\signing layout plans\R-0505\_Sgn\_Existing\_Sheet.dwg  
 I:\p\johnson\0505\signing\cadd\signing layout plans\R-0505\_Sgn\_Existing\_Sheet.dwg



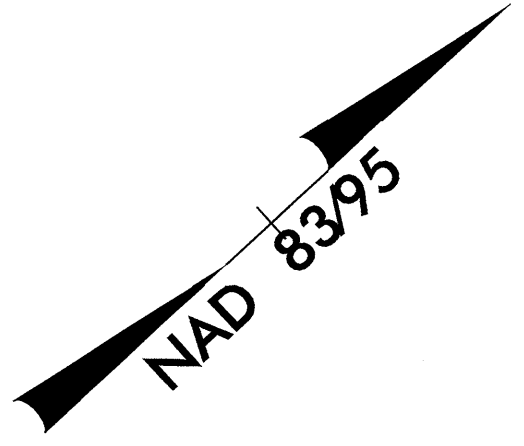








TIP NO. R-0505	SHEET NO. SIGN-18
APPROVED: <i>[Signature]</i>	
DATE: 12/21/08	
SEAL	



MATCHLINE D

MATCHLINE E

EXIT 7  
NORTH  
BUSINESS  
Saluda  
East Flat Rock  
Hendersonville  
1/2 MILE  
SEE NOTE:2

SEE NOTE:1  
SPEED  
LIMIT  
55

SEE NOTE:4  
MILE  
8

STOP  
SEE NOTE:1

SEE NOTE:3

TELEPHONE  
POLE

SEE NOTE:1  
NO PARKING  
ANY  
TIME

SEE NOTE:1  
NO PARKING  
ANY  
TIME

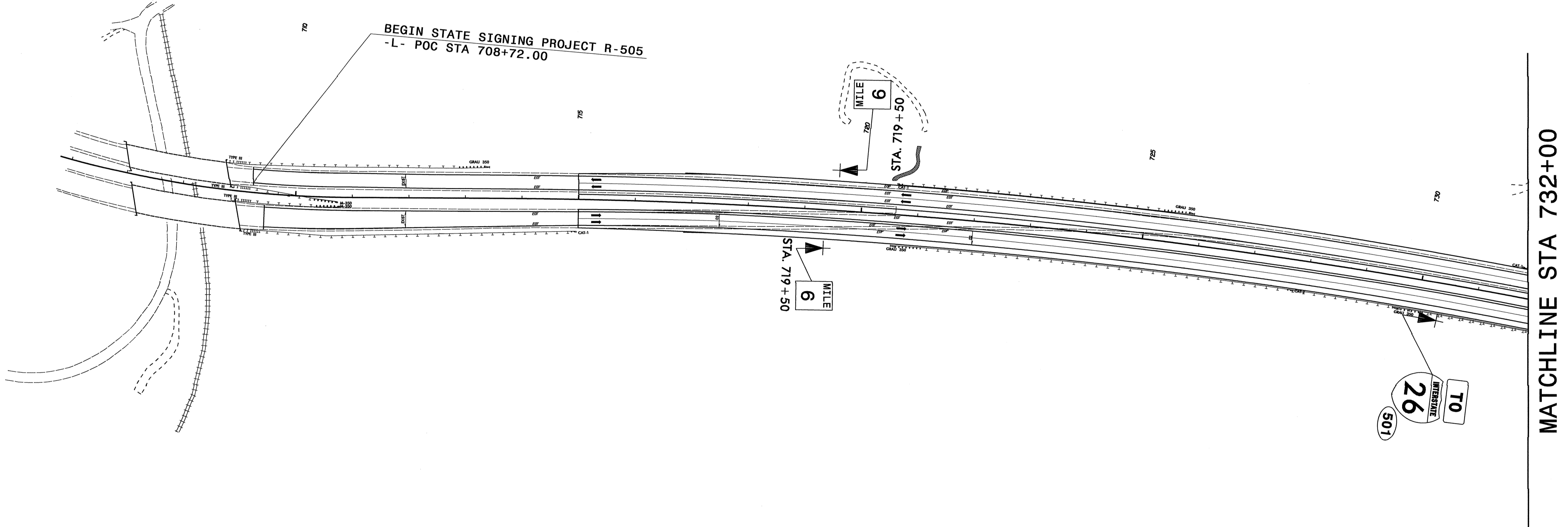
EXISTING SIGNS

09-DEC-2008 08:07:05  
C:\Users\ljohnson\AppData\Local\Temp\09-DEC-2008 08:07:05\signing\layout plans\R-0505\_Sgn\_Existing\_Sheet\_5.dgn  
L. Johnson



TIP NO. R-0505	SHEET NO. SIGN-20
APPROVED: <i>[Signature]</i>	
DATE: 12/21/08	
SEAL	

NAD 8395



PROPOSED SIGNS

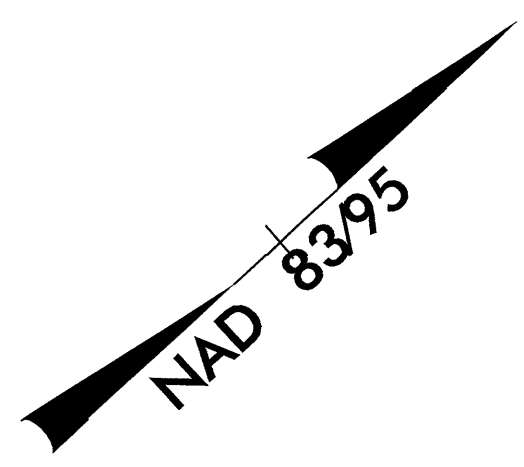
09-DEC-2008 08:08  
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 Walter Johnson AT 1221737





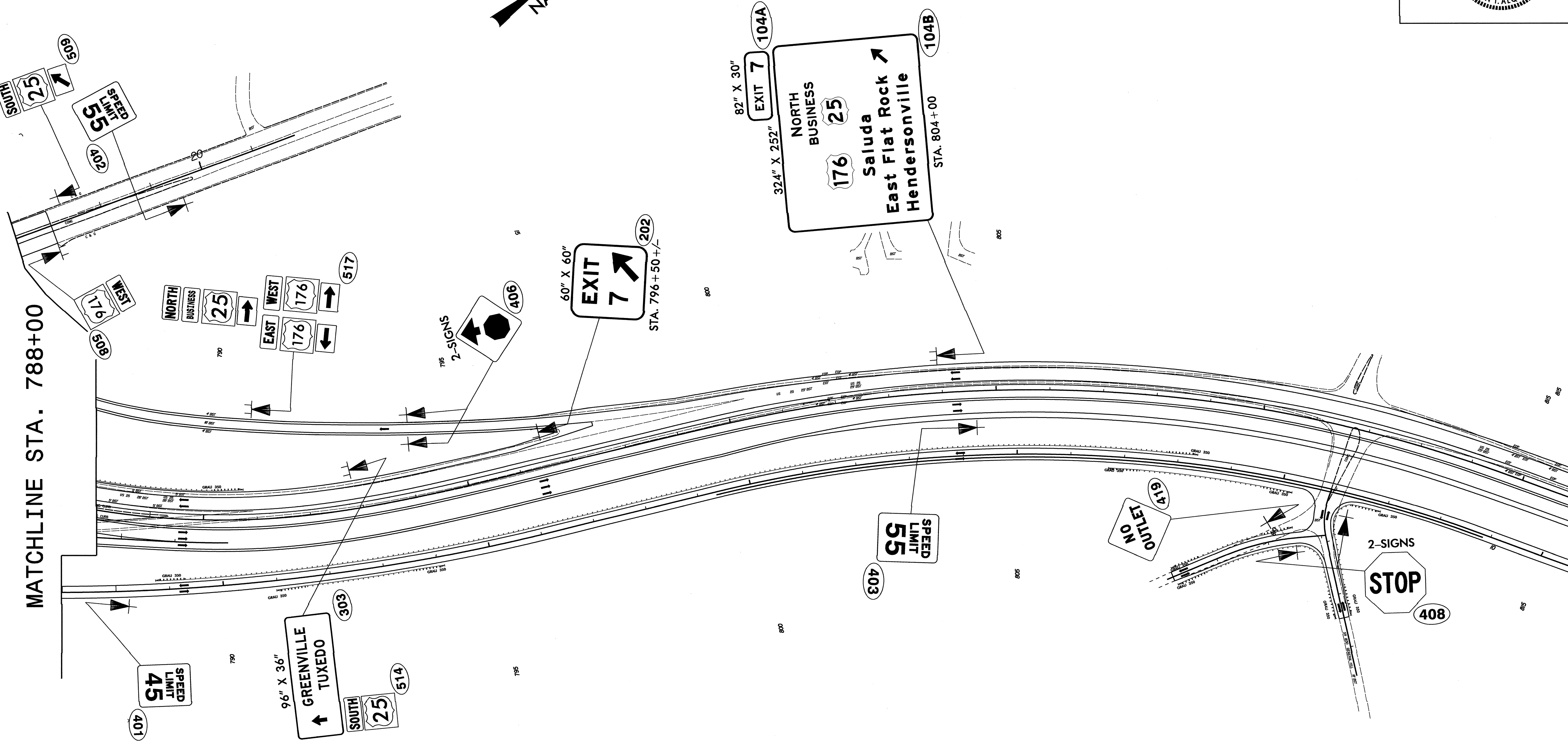


TIP NO. R-0505	SHEET NO. SIGN-23
APPROVED: <i>[Signature]</i>	
DATE: 12/21/08	
SEAL	



MATCHLINE STA. 788+00

MATCHLINE STA. 816+00

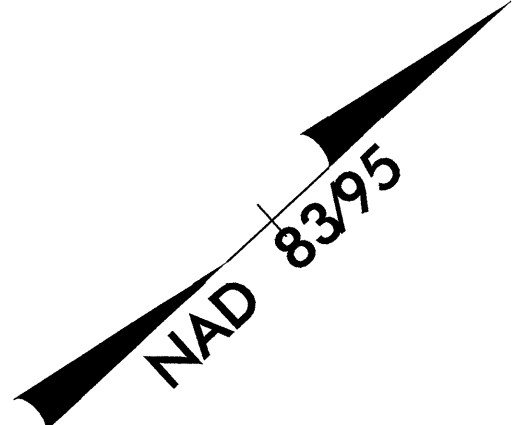


PROPOSED SIGNS

I:\D\6-2008-09-20 89505.Traffic\Signing\CADD\Signing Layout Plans\R-0505-Sgn-Proposed Sheet 4.dgn  
 Plot Date: 12/21/08 11:22:57 AM  
 Plotter: johnson

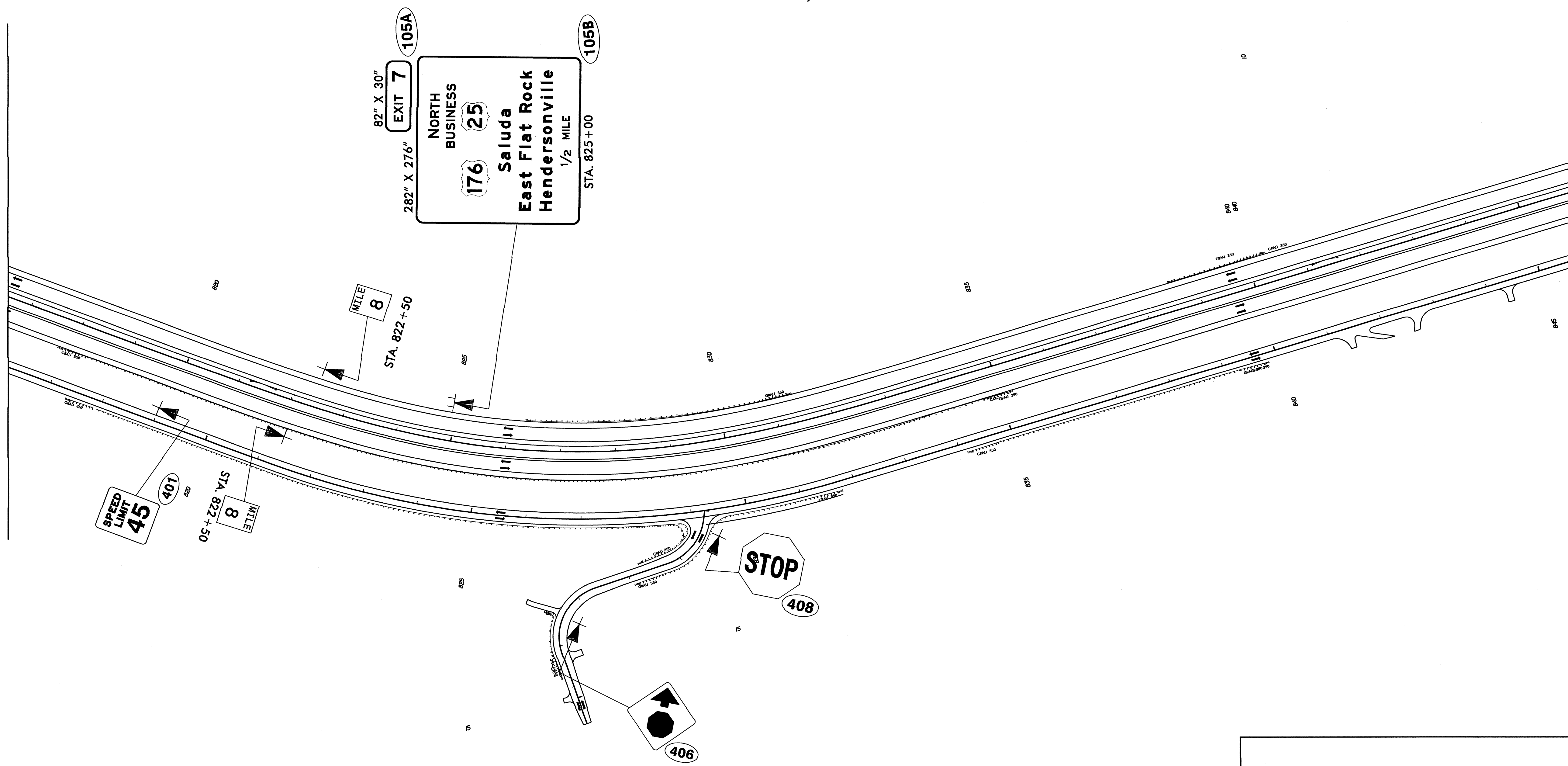


TIP NO. R-0505	SHEET NO. SIGN-24
APPROVED: <i>[Signature]</i>	
DATE: 12/21/08	
SEAL	



MATCHLINE STA. 816+00

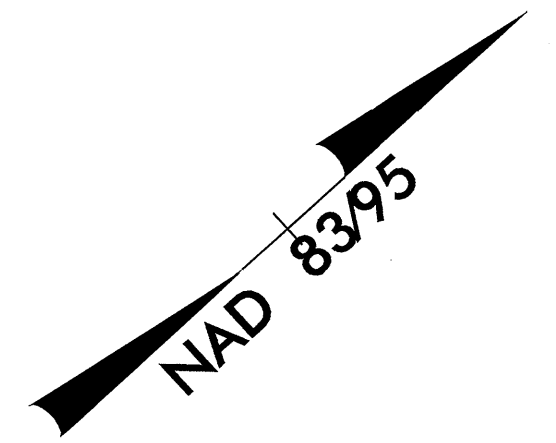
MATCHLINE STA. 846+00



PROPOSED SIGNS

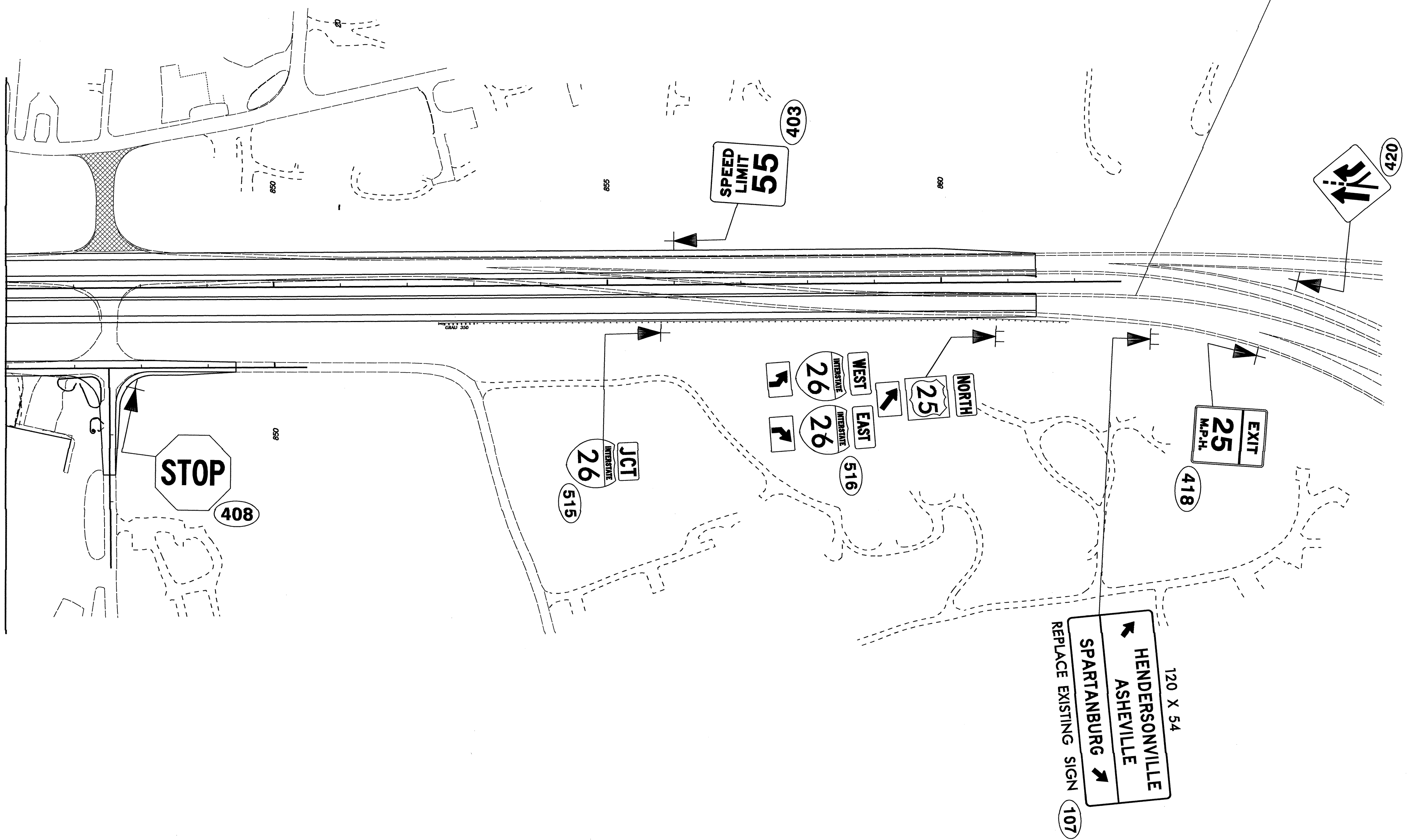
09-DEC-2008 08:42  
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 Plot Date: 12/21/08 11:22:17 AM  
 Plotter: johnson

TIP NO. R-0505	SHEET NO. SIGN-25
APPROVED: <i>[Signature]</i>	
DATE: 12/21/08	
SEAL	



END STATE SIGNING PROJECT R-505  
-L- POT STA 862+70.00

MATCHLINE STA. 846+00



PROPOSED SIGNS

10-DEC-2008 10:07  
p:\projects-r-0505\signing\cadd\signing layout plans\R-0505\_Sgn-Proposed Sheet 6.dgn  
walter.johnson A1 12/21/08