

GENERAL NOTES

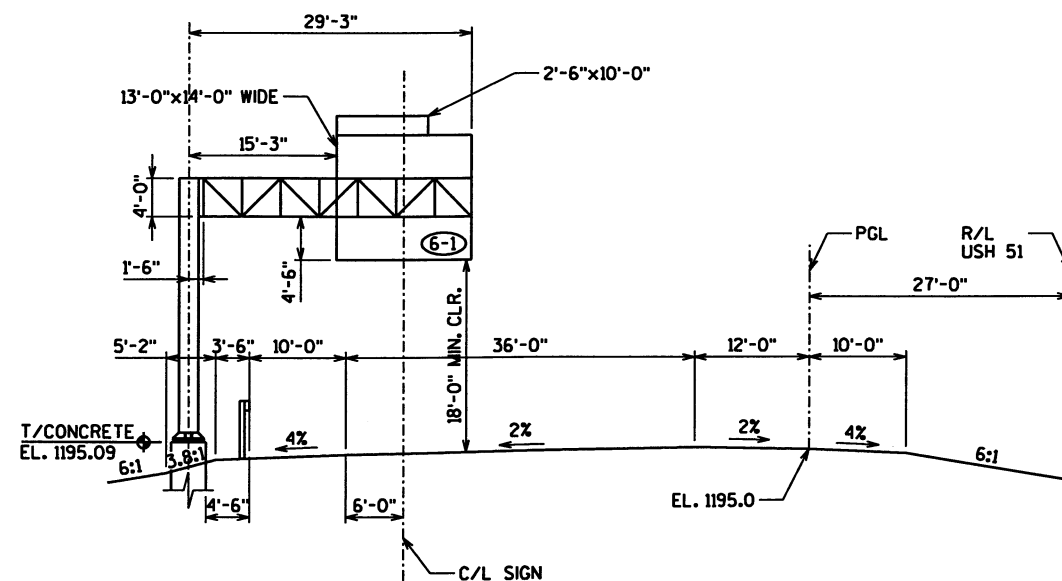
DRAWINGS SHALL NOT BE SCALED.

SIGN BRIDGE IDENTIFICATION PLAQUES CONSIDERED INCIDENTAL TO SIGN BRIDGES.

ELEVATIONS ARE IN FEET UNLESS OTHERWISE SHOWN OR NOTED.

ALTERNATE DESIGNS ARE NOT ALLOWED.

NO CATWALKS, LIGHTING, OR HANDHOLES ARE REQUIRED.



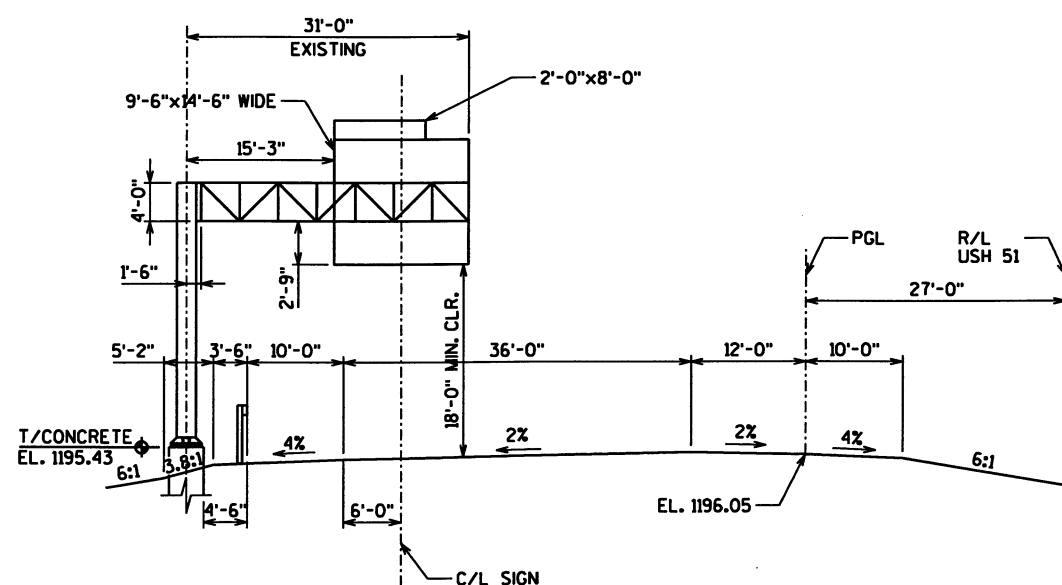
ELEVATION

STRUCTURE S-37-42, STA. 444+00.00
(LOOKING NORTH)

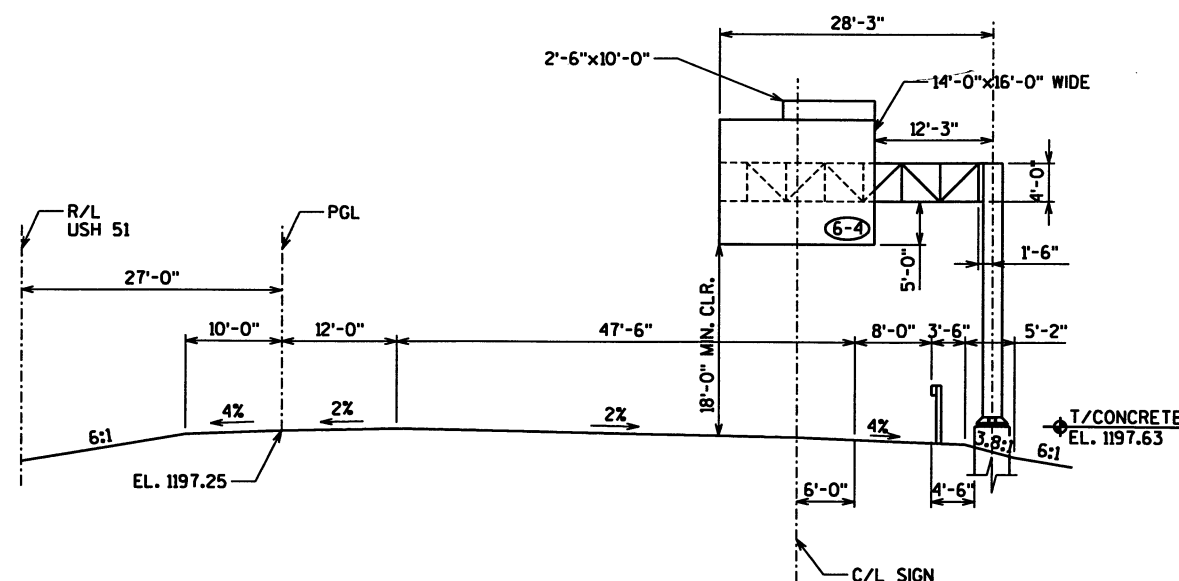
ESTIMATED OF QUANTITIES (CATEGORY 0010)

BID ITEMS	UNIT	TOTALS
SIGN SUPPORTS CONCRETE MASONRY	CY	32
SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	4680
SIGN BRIDGE CANTILEVERED STRUCTURE S-37-41	LS	1
SIGN BRIDGE CANTILEVERED STRUCTURE S-37-42	LS	1
MOVING SIGN BRIDGE CANTILEVERED STRUCTURE S-37-26	LS	1
MOVING SIGN BRIDGE CANTILEVERED STRUCTURE S-37-27	LS	1

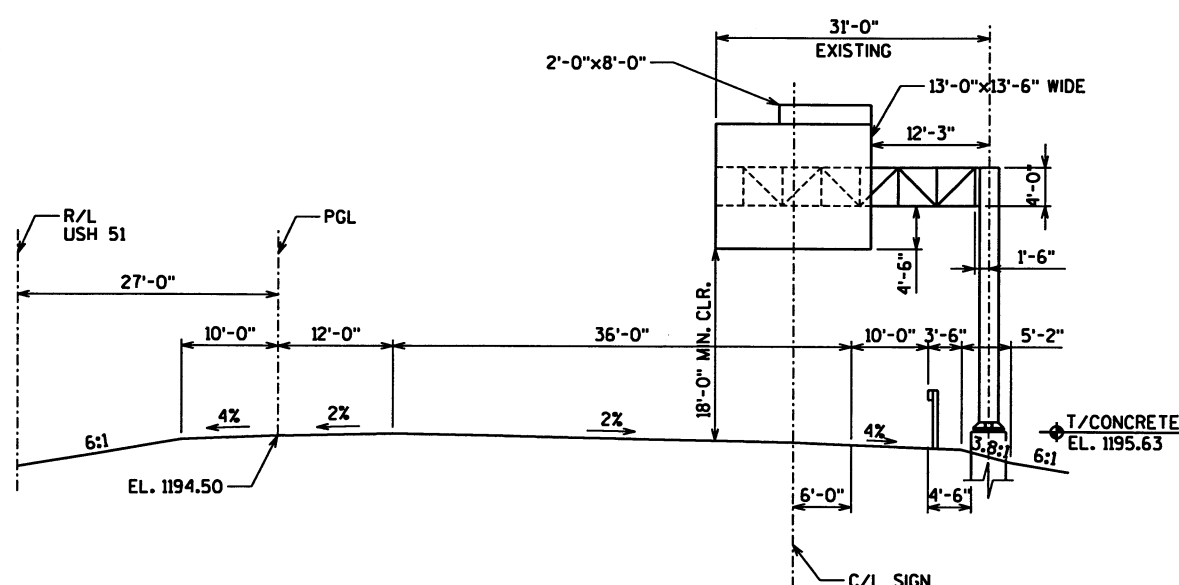
NOTE: NEW FOOTING REQUIRED FOR RELOCATED SIGN STRUCTURES S-37-26 & S-37-27. PROVIDING AND PLACING ANCHOR BOLT ASSEMBLIES FOR RELOCATED SIGN BRIDGES SHALL BE INCIDENTAL TO THE BID ITEM FOR MOVING SIGN BRIDGE.



ELEVATION

STRUCTURE S-37-27,
RELOCATED TO STA. 429+90.00
(LOOKING NORTH)

ELEVATION

STRUCTURE S-37-41, STA. 448+50.00
(LOOKING NORTH)

ELEVATION

STRUCTURE S-37-26,
RELOCATED TO STA. 433+00.00
(LOOKING NORTH)

DESIGN DATA

SIGN BRIDGE	DESIGN SIGN AREA	MAX. SIGN DEPTH
S-37-41	249 S.F.	14'
S-37-42	207 S.F.	13'
S-37-26	191.5 S.F.	13'
S-37-27	153.75 S.F.	9.5'

DESIGNED ACCORDING TO A.A.S.H.T.O. "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" 2001 & 2002 INTERIM.

WIND VELOCITY = 90 MPH

LIST OF DRAWINGS

1. LAYOUT S-37-41, S-37-42, S-37-26, S-37-27
2. CANTILEVER SIGN TRUSS
3. CANTILEVER SIGN FOOTING

NO.	DATE	REVISION	BY

PLANS PREPARED BY: GRAEF ANHALT SCHLOEMER and Associates Inc. ENGINEERS & SCIENTISTS One Honey Creek Corporate Center 125 South 84th Street, Suite 401 Milwaukee, WI 53214-1470

WISDOT
BUREAU OF STRUCTURES

STRUCTURE S-37-41, 42, 26, 27

USH51/STH29 - CTH N INTERCHANGE

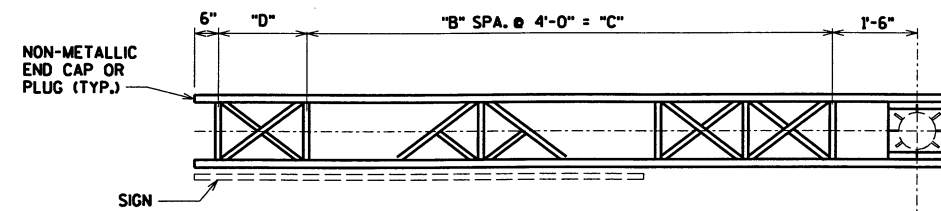
COUNTY	MARATHON	TOWN	RIB MOUNTAIN
DESIGN SPEC.	A.A.S.H.T.O. 2001	LOAD 90 MPH WIND	CONST. SPEC. 2003
DESIGNED BY	KW	DRAWN BY	AK
CK'D.	JRS	CK'D.	KW

APPROVED: *Finn Hubbard* 2-26-04
CHIEF STRUCTURAL DESIGN ENGINEER DATE

LAYOUT S-37-41, S-37-42, S-37-26, S-37-27

SHEET 1 OF 3
DATE: 4/28

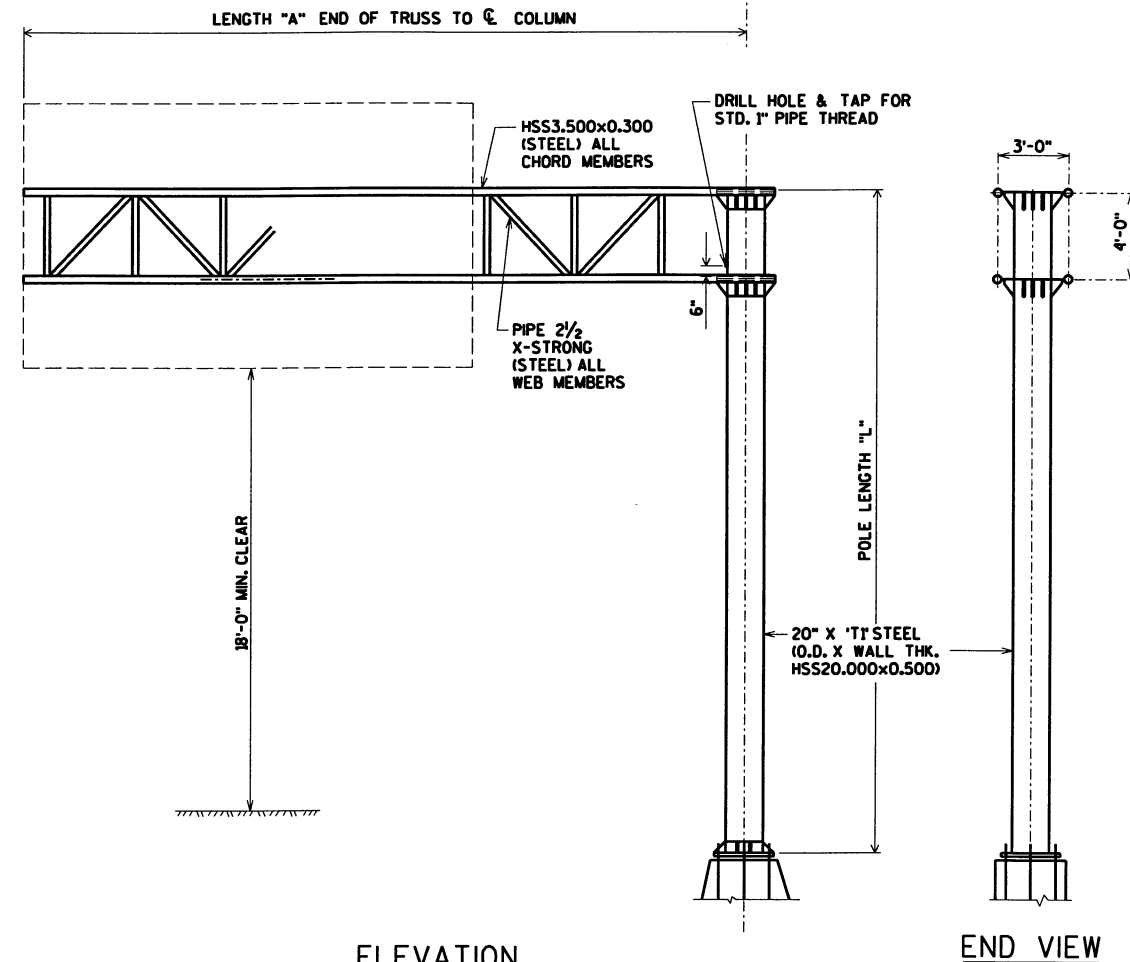
BRIDGE OFFICE CONTACT = FINN HUBBARD (608) 266-8489
CONSULTANT CONTACT = KEVIN G. WOOD (414) 259-1500



PLAN

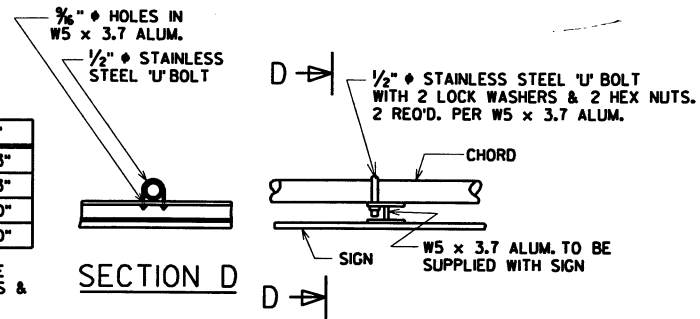
STRUCTURE	"A"	"L"	"B"	"C"	"T1"	"D"
S-37-41	28'-3"	26'-0"	6	24'-0"	1/2"	2'-3"
S-37-42	29'-3"	26'-0"	6	24'-0"	1/2"	3'-3"
S-37-26	31'-0"	25'-0"	6	24'-0"	1/2"	5'-0"
S-37-27	31'-0"	25'-0"	6	24'-0"	1/2"	5'-0"

NOTE: S-37-26 & S-37-27 ARE EXISTING STRUCTURES THAT ARE BEING RELOCATED, SEE CONTRACT 1170-01-61 FOR ORIGINAL PLANS & CALCULATIONS.



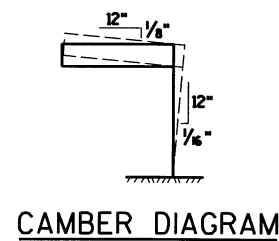
ELEVATION

END VIEW

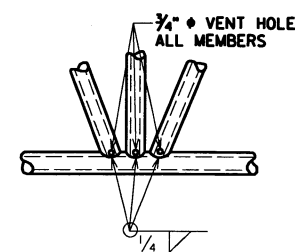


SECTION D

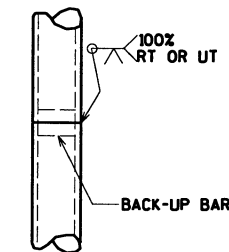
TYPICAL SIGN CONNECTION



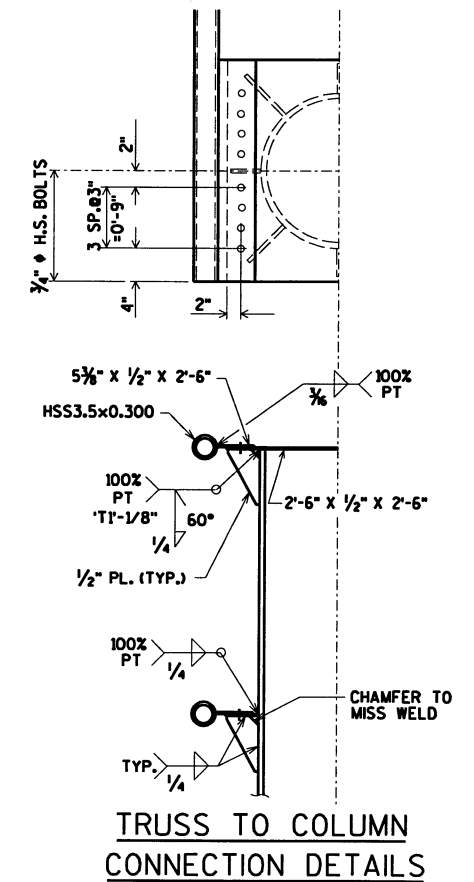
CAMBER DIAGRAM



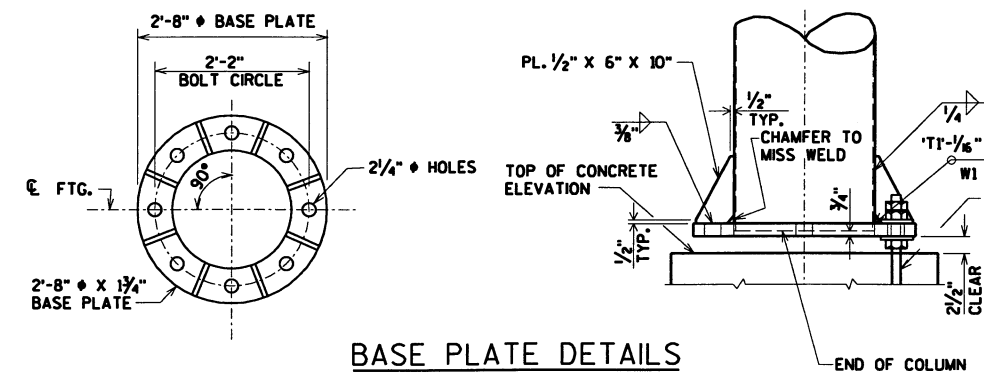
TRUSS JOINT DETAILS



OPTIONAL COLUMN OR CHORD SPLICE DETAIL

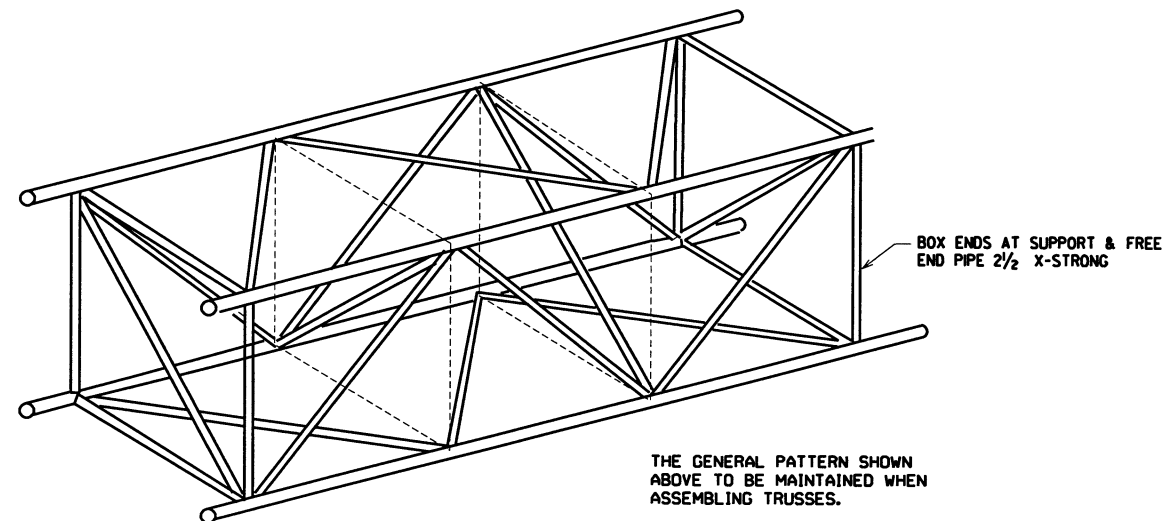


TRUSS TO COLUMN CONNECTION DETAILS



BASE PLATE DETAILS

WELD SIZE 'W1'	
POLE 'T1'	'W1'
.281"	1/4"
.312"	1/4"
.344"	5/8"
.375"	3/8"
.406"	3/8"
.500"	3/8"



TYPICAL TRUSS SECTION

THE GENERAL PATTERN SHOWN ABOVE TO BE MAINTAINED WHEN ASSEMBLING TRUSSES.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DESIGNED ACCORDING TO A.A.S.H.T.O. "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" 2001 & 2002 INTERIM.

WIND VELOCITY = 90 M.P.H.

ALLOWABLE DESIGN STRESSES

CHORDS & COLUMN — API-5L-X42 — $f_y=42,000$ P.S.I.
 ALL OTHER PIPE — A53, GRADE B — $f_y=35,000$ P.S.I.
 PLATES & BARS — A709 — $f_y=36,000$ P.S.I.
 ANCHOR BOLTS — A.A.S.H.T.O. M314 — $f_y=55,000$ P.S.I.
 HIGH STRENGTH BOLTS — A325 — $f_y=92,000$ P.S.I.
 STRUCTURAL MEMBERS GALVANIZED A123
 HARDWARE GALVANIZED — A153 CLASS C

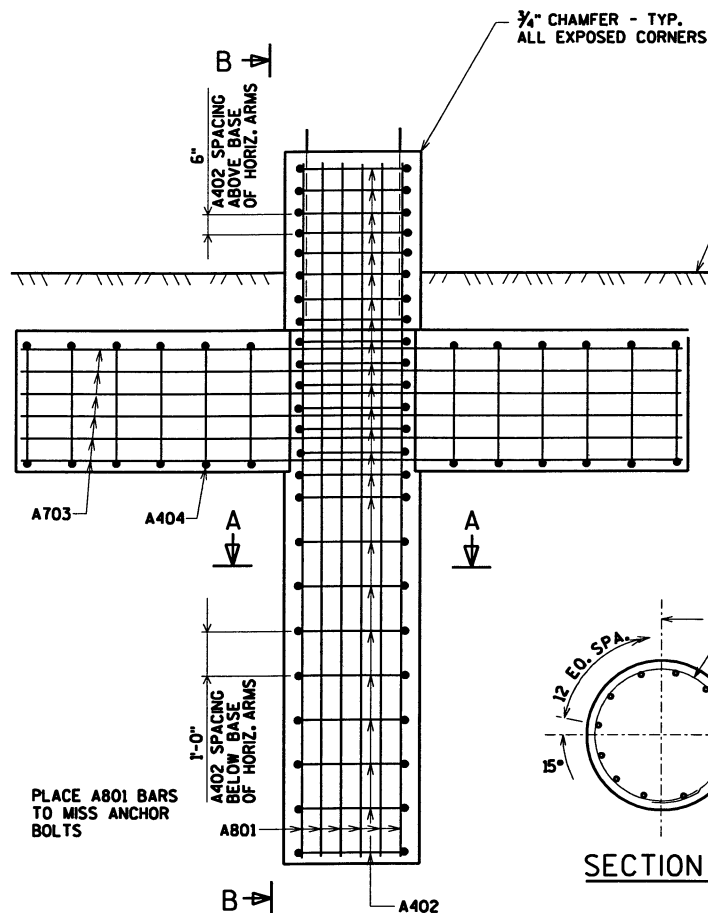
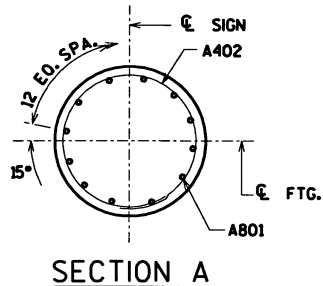
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE S-37-41,42,26,27			
CONST. SPEC.	2003	DRAWN BY AK	PLANS CK'D KW
CANTILEVER SIGN TRUSS			SHEET 2 OF 3
479			

NOTE:
THE FIRST OR FIRST TWO DIGITS OF A
BAR MARK SIGNIFIES THE BAR SIZE.

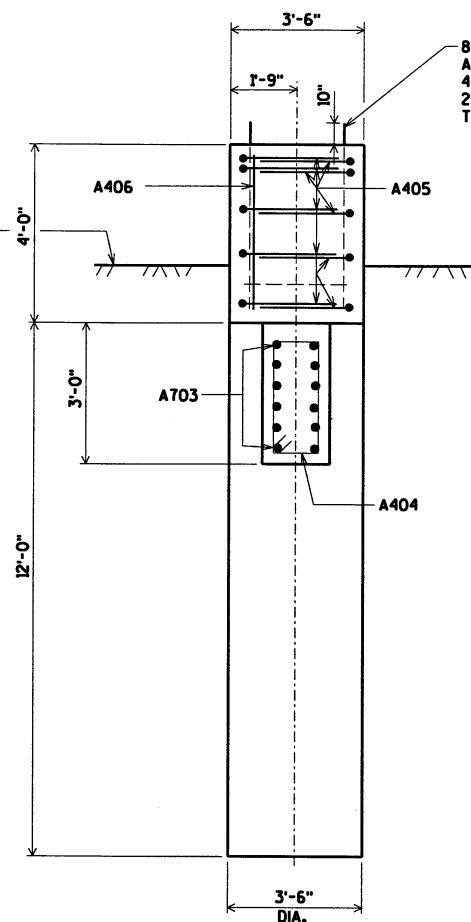
BILL OF BARS

1170 LB.

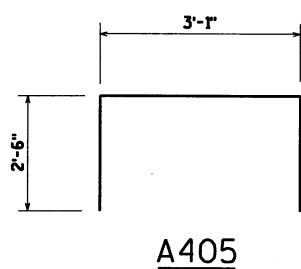
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	CUT. DIAG.	BUN-DLE	LOCATION
A801		12	15'-6"				FOOTING - COLUMN/TOP
A402		24	10'-5"	X			FOOTING - COLUMN/TOP
A703		12	15'-0"				FOOTING - WINGS
A404		12	7'-6"	X			FOOTING - WINGS
A405		10	7'-11"	X			FOOTING - TOP
A406		4	3'-6"				FOOTING - TOP - COLUMNS
A507		7	8'-10"	X			FOOTING - ANCHOR BOLTS

ELEVATION
(8 C.Y.)

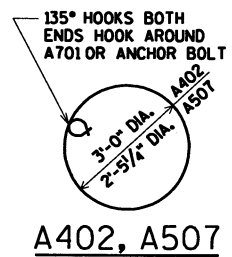
SECTION A



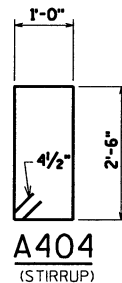
SECTION B



A405



A402, A507

A404
(STIRRUP)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
BAR STEEL REINFORCEMENT SHALL
BE EMBEDDED 3" CLEAR UNLESS
DETAILED OTHERWISE.

ALLOWABLE DESIGN STRESSES

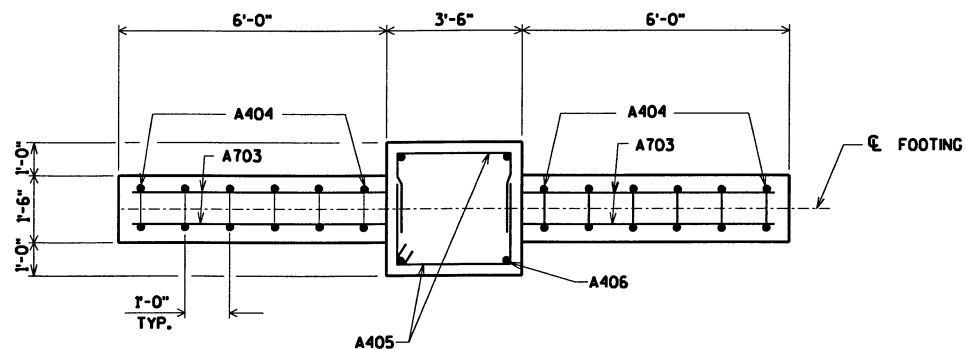
CONCRETE MASONRY $f'_c=3,500$ P.S.I.
HIGH STRENGTH BAR STEEL REINFORCEMENT, $f_y=60,000$ P.S.I.
ANCHOR BOLTS A.A.S.H.T.O. M314 GRADE 60 $f_y=55,000$ P.S.I.

FOUNDATION DATA

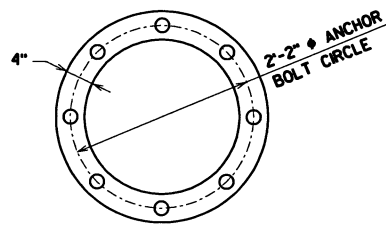
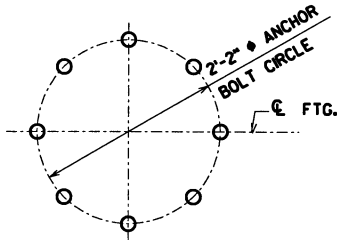
ALLOWABLE SOIL BEARING PRESSURE = 15T/SQ. FT.

TOTAL ESTIMATED QUANTITIES (1 FTG.)

CONCRETE MASONRY, SIGN SUPPORTS 8 C.Y.
HIGH STRENGTH BAR STEEL REINFORCEMENT, SIGN SUPPORTS 1170 LB.



PLAN

TOP VIEW OF TOP &
BOTTOM TEMPLATES

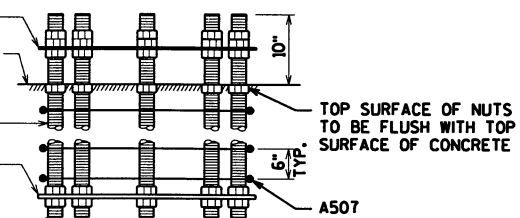
TOP ANCHOR BOLT TEMPLATE,
1/4" THICK, REMOVE
AFTER CONCRETE SET

TOP OF CONCRETE

8 - 2" x 4'-8" ANCHOR
BOLTS AASHTO M314

BOTTOM ANCHOR BOLT
TEMPLATE 1/2" THICK

THREAD BOTTOM 5/2" OF ANCHOR BOLTS
FOR NUTS



ANCHOR BOLT DETAILS

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE S-37-41,42,26,27			
CONST. SPEC.	2003	DRAWN BY AK	PLANS CK'D KW
CANTILEVER SIGN FOOTING			SHEET 3 OF 3 480

DESIGN DATA

DESIGNED ACCORDING TO A.A.S.H.T.O. "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORT FOR HIGHWAY SIGNS, LUMINARIES, AND TRAFFIC SIGNALS."

WIND VELOCITY = 90 MPH

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

SIGN STRUCTURE MATERIALS SHALL BE AS FOLLOWS:

STEEL ANGLES AND PLATES:	ASTM A709 GRADE 36
WELD METAL:	E70XX
BOLTS:	ASTM A325
ANCHOR BOLTS:	ASHTO M314-90 GRADE 55.

ALL STEEL ITEMS SHALL BE GALVANIZED AS FOLLOWS:

STRUCTURAL SHAPES AND PLATES - ASTM A123
ALL NUTS, BOLTS, AND WASHERS - ASTM A153 CLASS C OR D DEPENDING ON SIZE.
6 INCHES OF THE EXPOSED END OF ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS AS STATED IN SECTION 64L OF THE WISDOT STANDARD SPECIFICATIONS.

WELD TEST AS PER AWS D1.1

SHOP DRAWINGS FOR THESE STRUCTURES ARE REQUIRED AND FABRICATION SHALL NOT BEGIN UNTIL THE SHOP DRAWINGS ARE APPROVED.

SIGN PANELS AND HARDWARE REQUIRED TO ATTACH SIGNS TO SUPPORT STRUCTURE, INCLUDING 4" DEEP WIDE FLANGE SIGN SUPPORT BRACKETS, U-BOLTS, AND POST CLIP HARDWARE WILL BE DESIGNED, SUPPLIED, AND DELIVERED TO SITE BY OTHERS.

BID ITEMS (CATEGORY 0010)

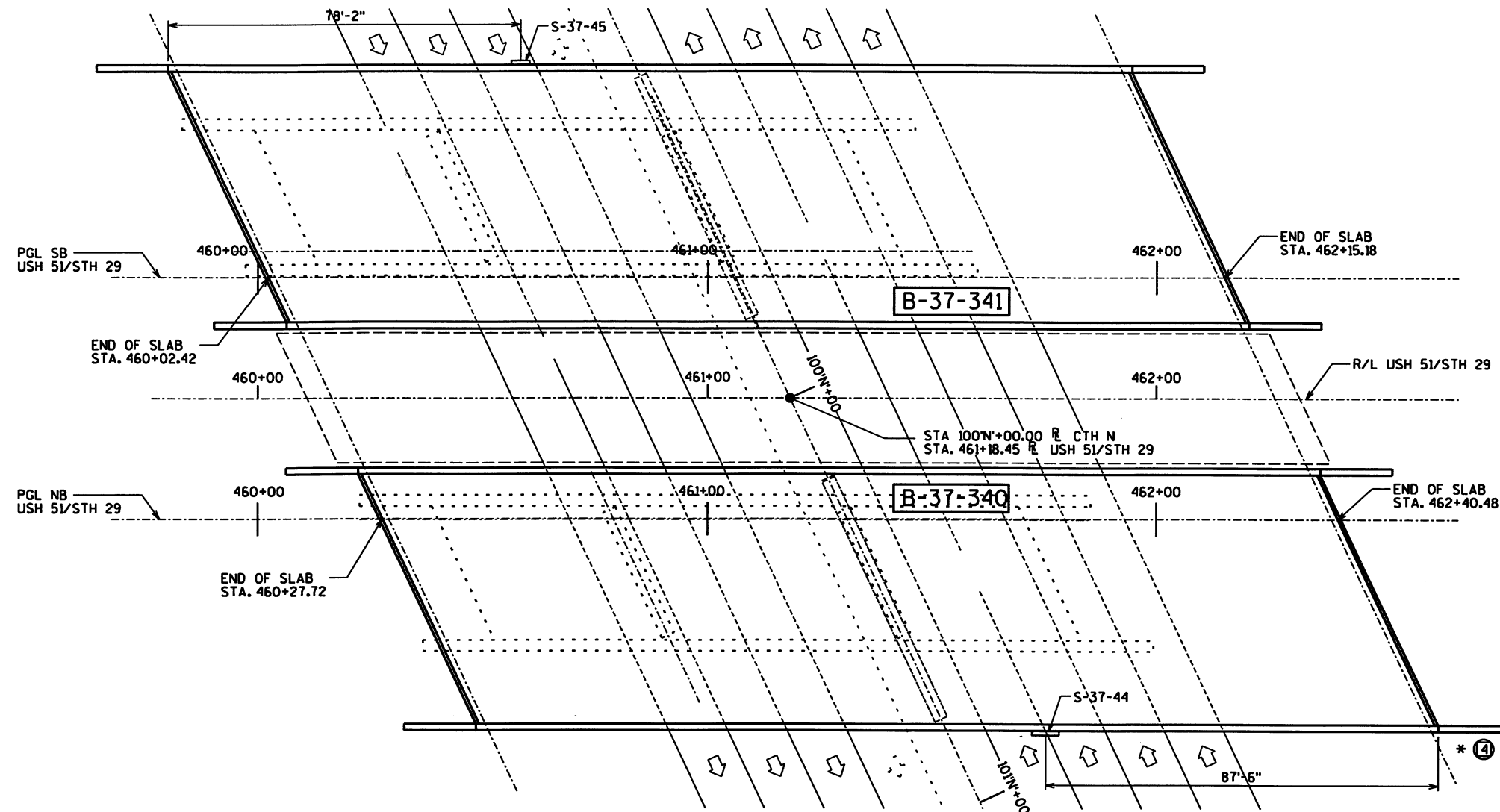
SIGN BRIDGES, STRUCTURE MOUNTED, STRUCTURE S-37-44	1 L.S.
SIGN BRIDGES, STRUCTURE MOUNTED, STRUCTURE S-37-45	1 L.S.

LIST OF DRAWINGS

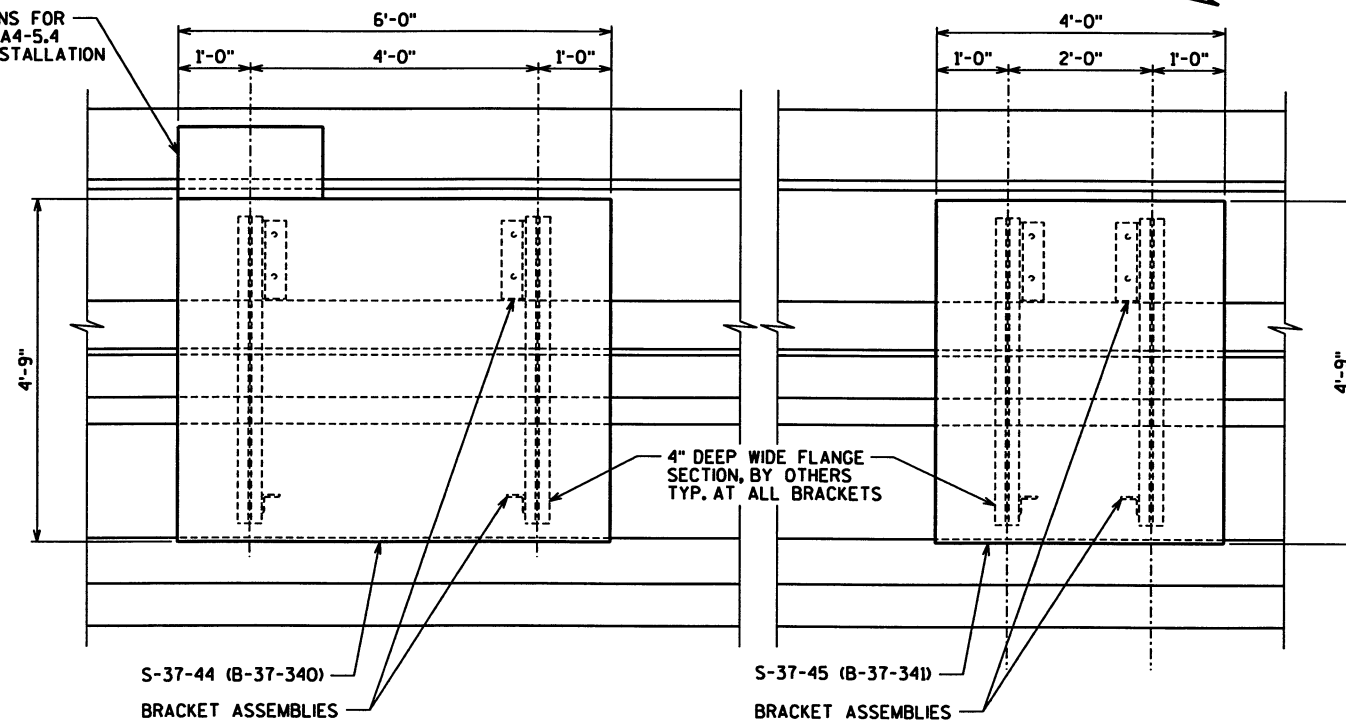
1. GENERAL PLAN & ELEVATION
2. BRACKET DETAILS

PLAN - STRUCTURES B-37-340 & B-37-341

(SHOWING SIGN STRUCTURE LOCATIONS)

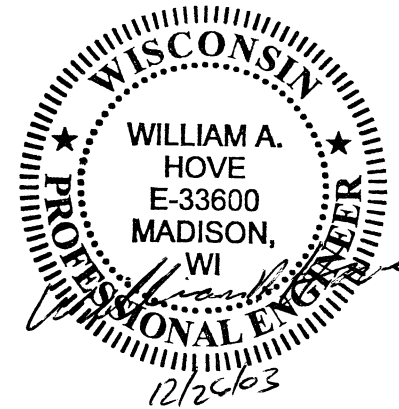


SEE ROADWAY PLANS FOR STANDARD DETAIL A4-5.4 "TYPICAL PANEL INSTALLATION FOR ASSEMBLIES"



ELEVATION - SIGN STRUCTURES

(LOOKING WEST AT STRUCTURE B-37-340)
(LOOKING EAST AT STRUCTURE B-37-341)



NO.	DATE	REVISION	BY
PLANS PREPARED BY: GRAY ANBALT SCHLOEMER and Associates Inc. ENGINEERS & SCIENTISTS One Honey Creek Corporate Center 125 South 84th Street, Suite 401 Milwaukee, WI 53214-1470			
WISDOT BUREAU OF STRUCTURES			
STRUCTURE S-37-44, 45			
SIGN STRUCTURES ON B-37-340 & B-37-341			
COUNTY	MARATHON	TOWN	RIB MOUNTAIN
DESIGN SPEC.	AASHTO 2002	LOAD	HS-20
DESIGNED BY	JRS	DRAWN BY	BLM
DESIGN CK'D.	WAH	PLANS CK'D.	JRS
APPROVED: <i>Fin Hubbard</i> CHIEF STRUCTURAL DESIGN ENGINEER			DATE: 2-26-04
GENERAL PLAN & ELEVATION			SHEET 1 OF 2 DATE: 481

BRIDGE OFFICE CONTACT = FINN HUBBARD (608) 266-8489
CONSULTANT CONTACT = WILLIAM A. HOVE (414) 259-1500

● EPOXY RESIN AND 3/4" DIA. ANCHOR ROD WITH NUT AND WASHER. TENSILE BOND STRENGTH OF EPOXY ANCHORS AND YIELD STRENGTH OF ANCHOR BARS SHALL BE A MINIMUM OF 8 KIPS EMBED AS SHOWN.



NO.	DATE	REVISION		BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION				
STRUCTURE S-37-44, 45				
CONST. SPEC.	2003	DRAWN BY	BLM	PLANS C&D JRS
BRACKET DETAILS			SHEET 2 OF 2	
			482	