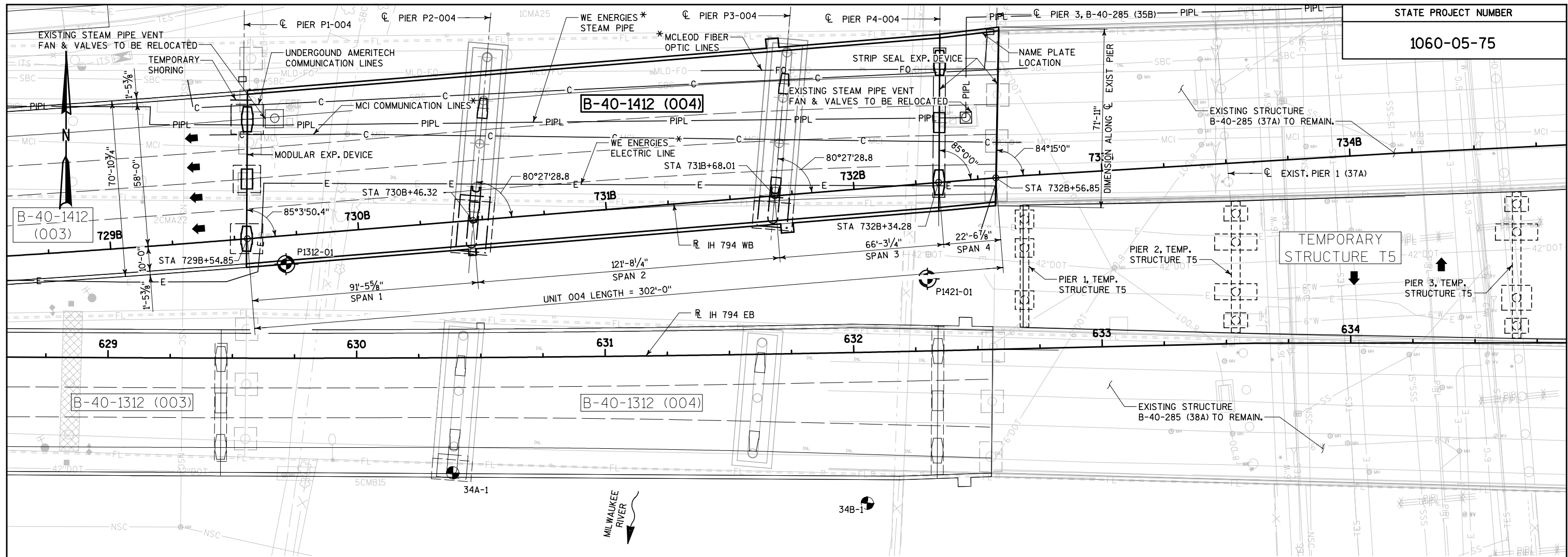
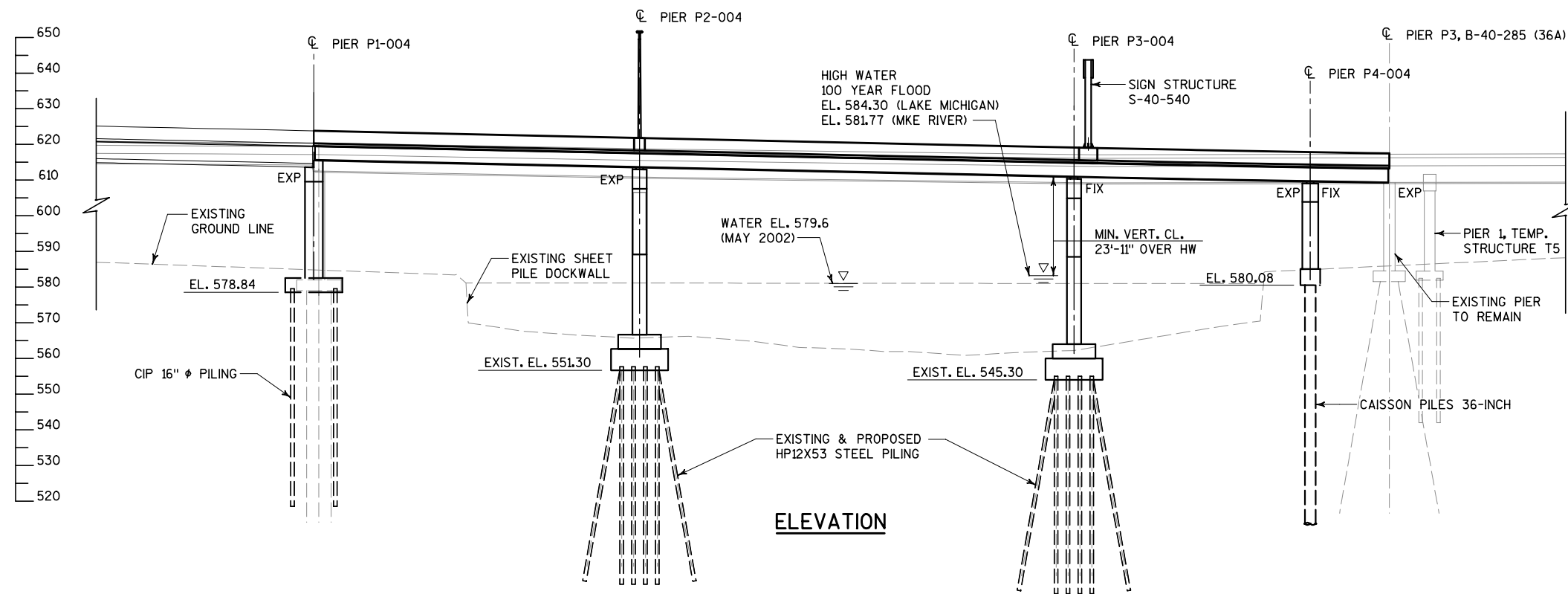




PLAN
(UNIT 004: 3 SPAN 48" STEEL PLATE GIRDER & SINGLE SPAN CONC SLAB)



ELEVATION

LEGEND

- EXISTING BORING DRILLED BETWEEN 1961 AND 1964
- NEW STRUCTURE BORINGS. DRILLED BETWEEN 2002 AND 2003.
- * ALL EXISTING UTILITIES WILL BE RELOCATED TO THE PROPOSED IH 794 EB STRUCTURE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CKD. KES
004 GENERAL PLAN AND ELEVATION			SHEET 210 OF 432

LEGEND

* LOCATION OF LABORATORY UNCONFINED COMPRESSIVE STRENGTH TEST.

NOTES

- 1. SEE "GENERAL PLAN AND ELEVATION" SHEET FOR BOREHOLE LOCATIONS.
- 2. SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORTS. REVIEW THE APPROPRIATE GEOTECHNICAL ENGINEERING REPORTS AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.
- 3. WATER LEVELS INDICATED MAY NOT BE REPRESENTATIVE OF STATIC WATER LEVELS.
- 4. ADDITIONAL SUBSURFACE AND GROUNDWATER INFORMATION IS AVAILABLE FROM DEPARTMENT.

STATE PROJECT NUMBER

1060-05-75

ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

TOPSOIL/ FILL SILT SANDSTONE
SAND PEAT LIMESTONE
GRAVEL CLAY IGNEOUS ROCK

LEGEND OF PROBING

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6
95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING

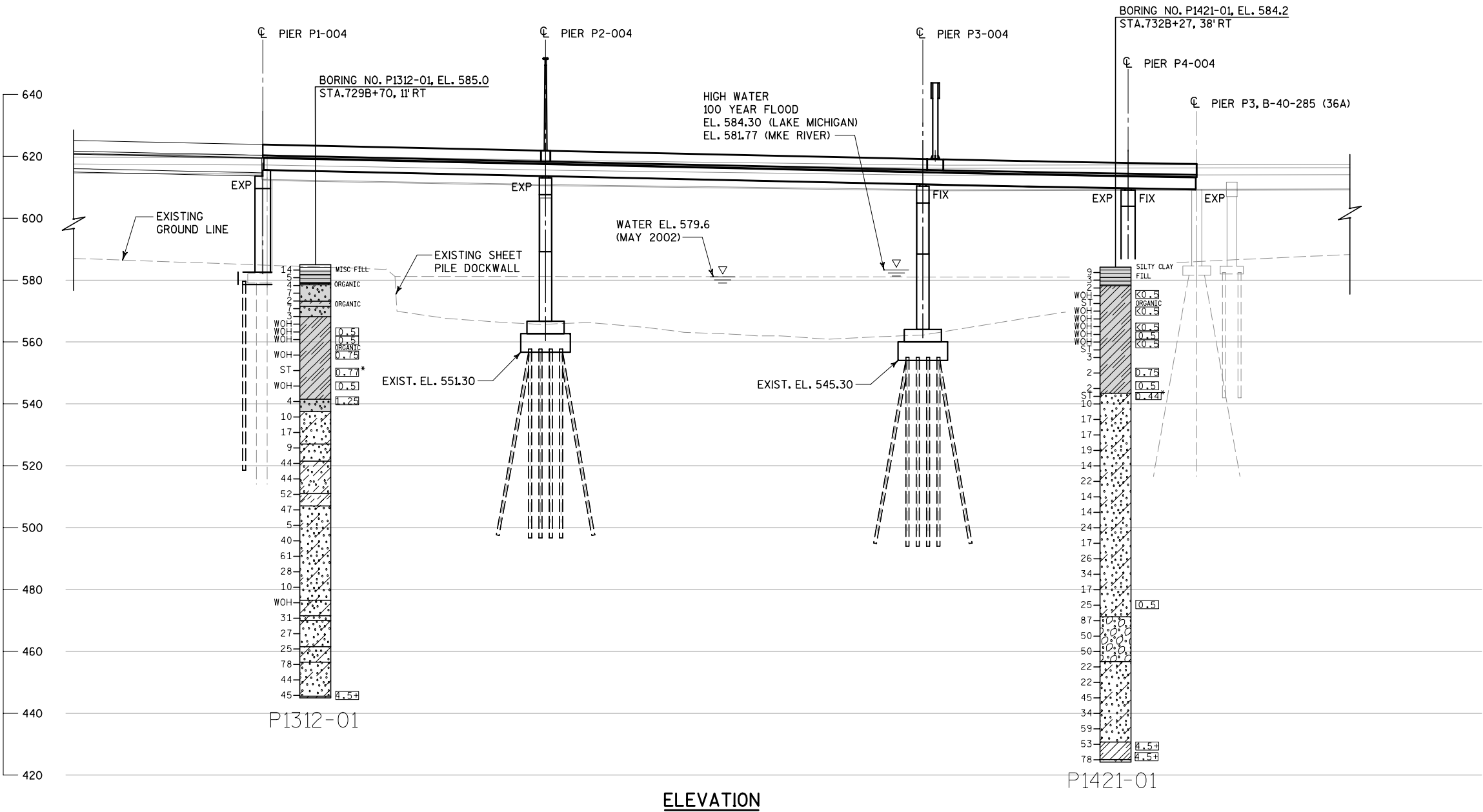
BORING NO.
STA.
ELEV.
UNCONFINED STRENGTH 7.7
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO LIMESTONE

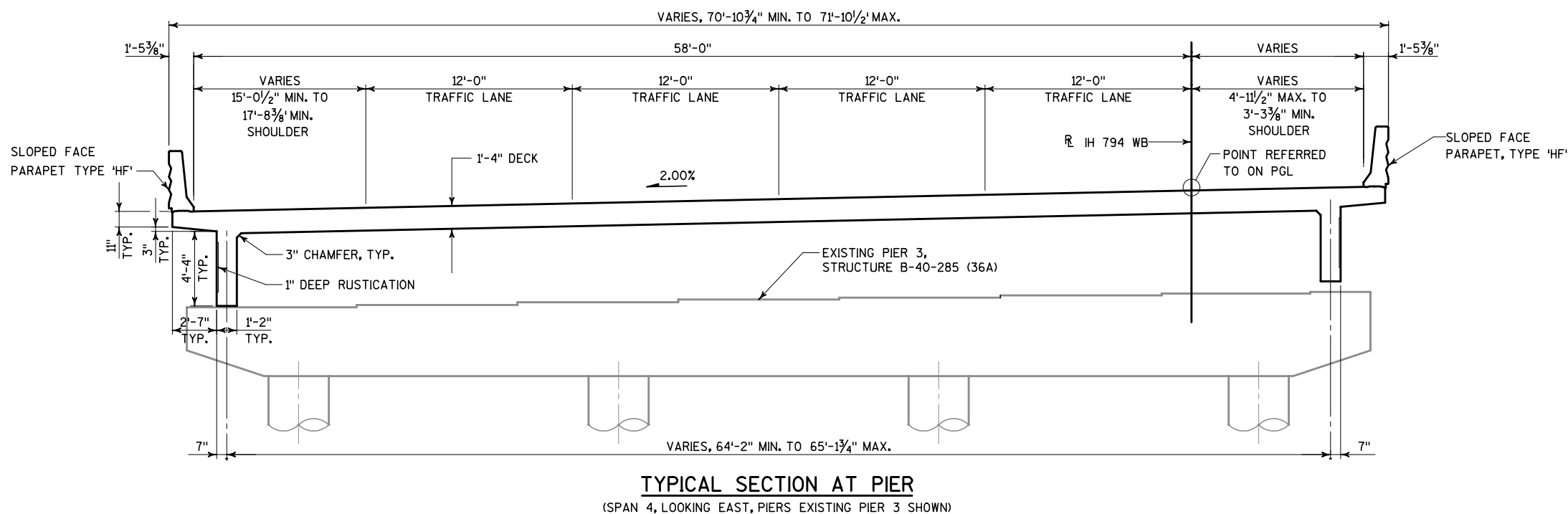
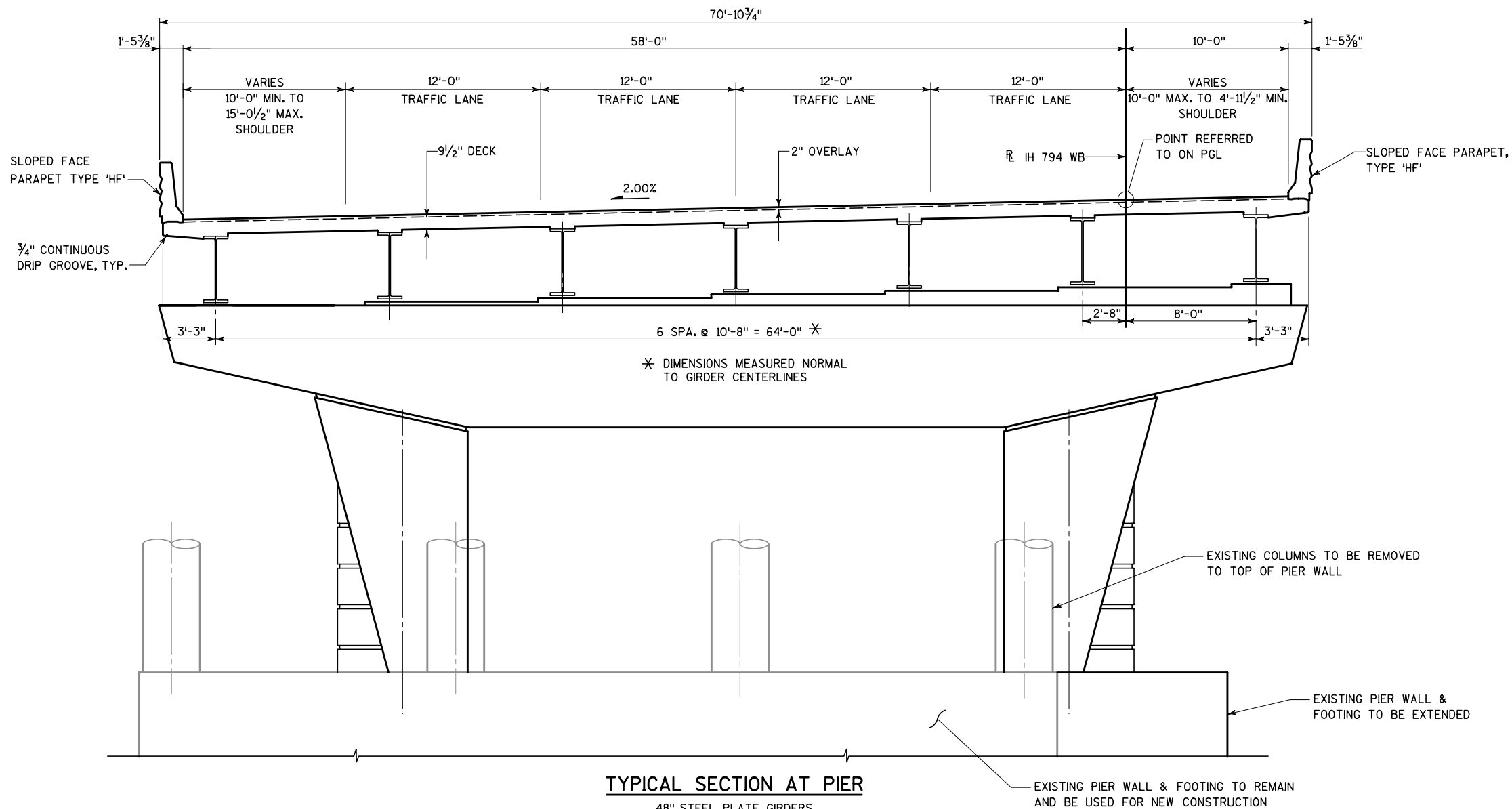
UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A Cased OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

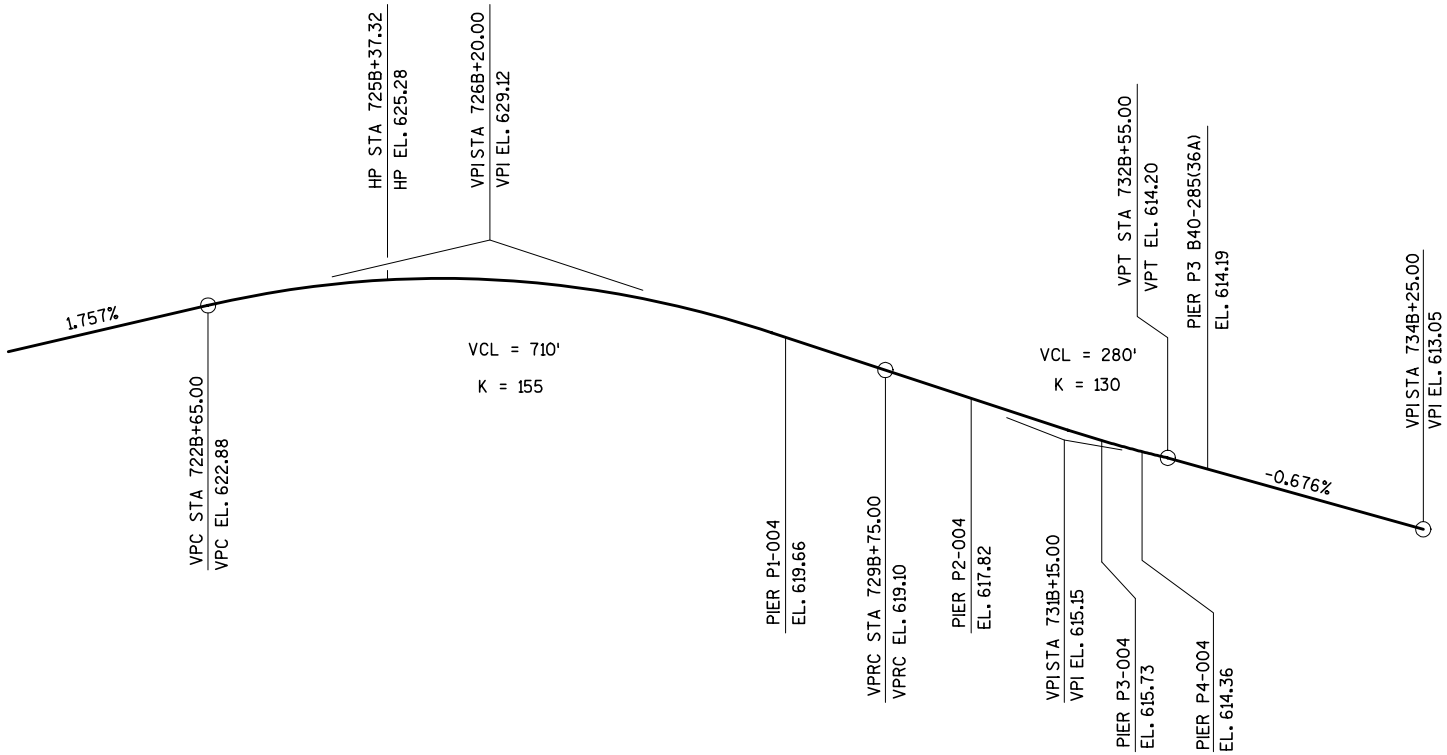
TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-142 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
SUBSURFACE EXPLORATION UNIT 004		SHEET 211 OF 432	





NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
TYPICAL SECTIONS			SHEET 212 OF 432



PROFILE GRADE LINE - R IH 794 WB

SUBSTRUCTURE DATA

UNIT	STATION	SKEW
P1-004	STA 729B+54.85	5° 0' 0" LHF
P2-004	STA 730B+46.32	9° 32' 38.5" LHF
P3-004	STA 731B+68.01	9° 32' 38.5" LHF
P4-004	STA 732B+34.28	5° 0' 0" LHF
3 B40-285(36A)	STA 732B+56.85	6° 0' 0" LHF

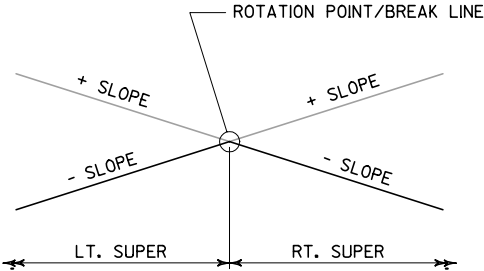
HORIZONTAL CURVE DATA

R IH 794 WB

- PI = STA 727B+11.96
- Δ = 4°59'20"
- D = 1°00'00"
- T = 249.60
- L = 498.88
- R = 5729.58
- E = 5.43
- PC = STA 724B+62.36
- PT = STA 729B+61.24
- PT = STA 729B+61.24
- POE = STA 732B+67.89
- L = 306.65

SUPERELEVATION TABLE

	STATION	SUPERELEVATION	
		LT. SUPER (%)	RT. SUPER (%)
R IH 794 WB	725B+50.00	-2.30	2.30
	728B+75.00	-2.30	2.30
	729B+00.00	-2.00	2.00
	732B+55.00	-2.00	2.00
	733B+29.00	-1.90	1.90

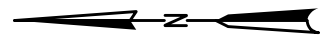


SUPERELEVATION DETAIL

SEE DECK CROSS SECTION FOR LOCATION OF ROTATION POINT/BREAK LINE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
ALIGNMENT & PROFILE			SHEET 213 OF 432

(PIER P1-004 LOOKING EAST - DIMENSIONS SHOWN)



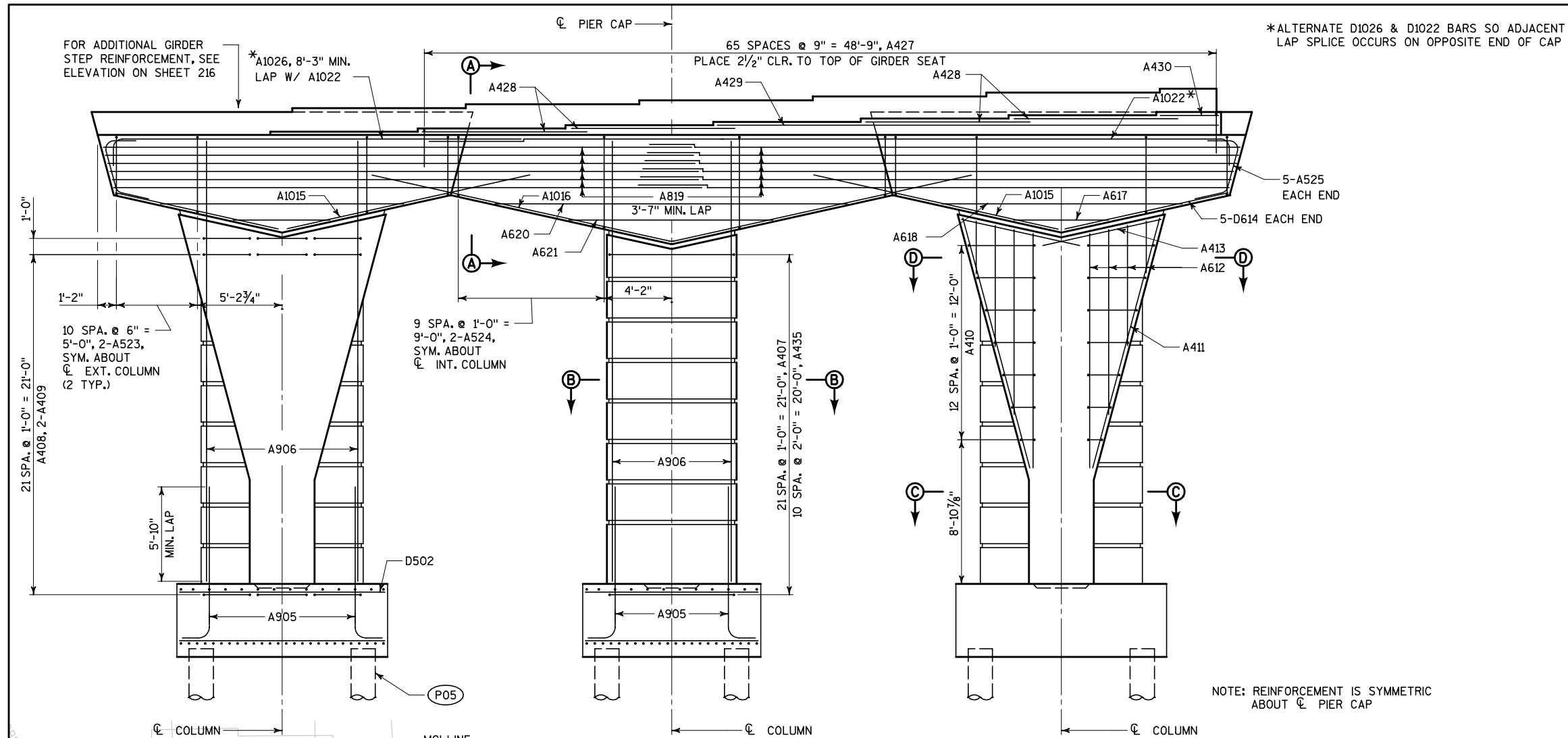
(PIER P1-004 - DIMENSIONS SHOWN)

(PIER P1-004 LOOKING NORTH)

BEARING ANGLE

LOCATION		ANGLE
	GIRDER 1	94°59'53.5"
	GIRDER 2	94°59'53.5"
	GIRDER 3	94°59'53.5"
	GIRDER 4	94°59'53.5"
	GIRDER 5	94°59'53.5"
	GIRDER 6	94°59'53.5"
	GIRDER 7	94°59'53.5"
	GIRDER 1	85°43'21.7"
	GIRDER 2	85°43'21.7"
	GIRDER 3	85°43'21.7"
	GIRDER 4	85°43'21.7"
	GIRDER 5	85°43'21.7"
	GIRDER 6	85°43'21.7"
	GIRDER 7	85°43'21.7"
	GIRDER 8	85°43'21.7"

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY	PLANS CK'D. KES
PIER P1-004		SHEET 214 OF 432	



NOTES

1. SEE SHEET 432 FOR C-I-P PILE SPLICE AND C-I-P PILE TIP DETAILS.

(P05) CIP 16" DIAM. PILING AT 190 TONS ALLOWABLE LOAD, ESTIMATED LENGTH = 135'.

NOTE - PROPOSED PILES MAY BE ADJUSTED UP TO 6" EACH WAY TO AVOID CONFLICTS WITH EXISTING PILES. IF GREATER ADJUSTMENT IS REQUIRED, CONTACT THE ENGINEER FOR ADDITIONAL INSTRUCTIONS BEFORE PROCEEDING.

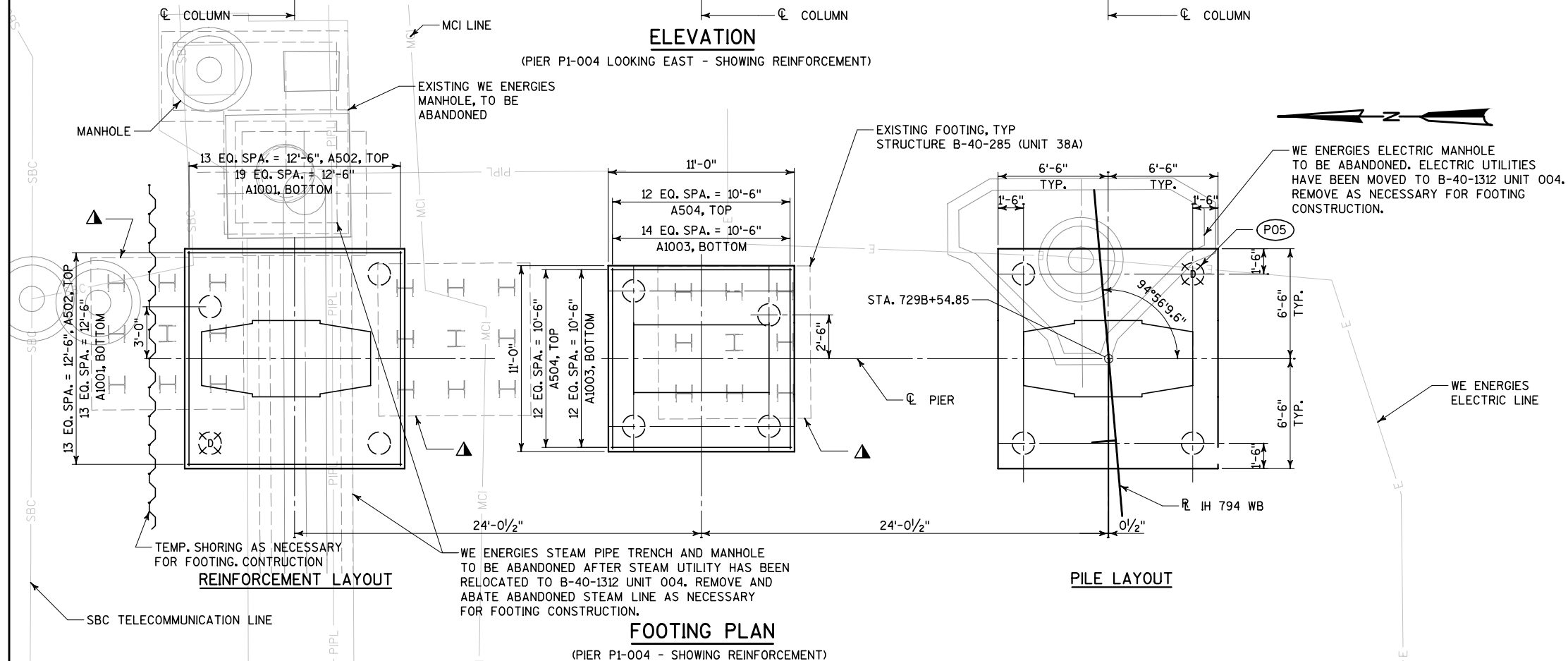
LOCATION OF EXISTING PILES IS SHOWN BASED ON AS-BUILT DRAWINGS ONLY. FIELD VERIFY PILE LOCATIONS IMMEDIATELY AFTER EXPOSURE AND NOTIFY THE ENGINEER OF ANY DEVIATIONS NOTED.

(X) DYNAMIC PILE LOAD TESTING LOCATION.

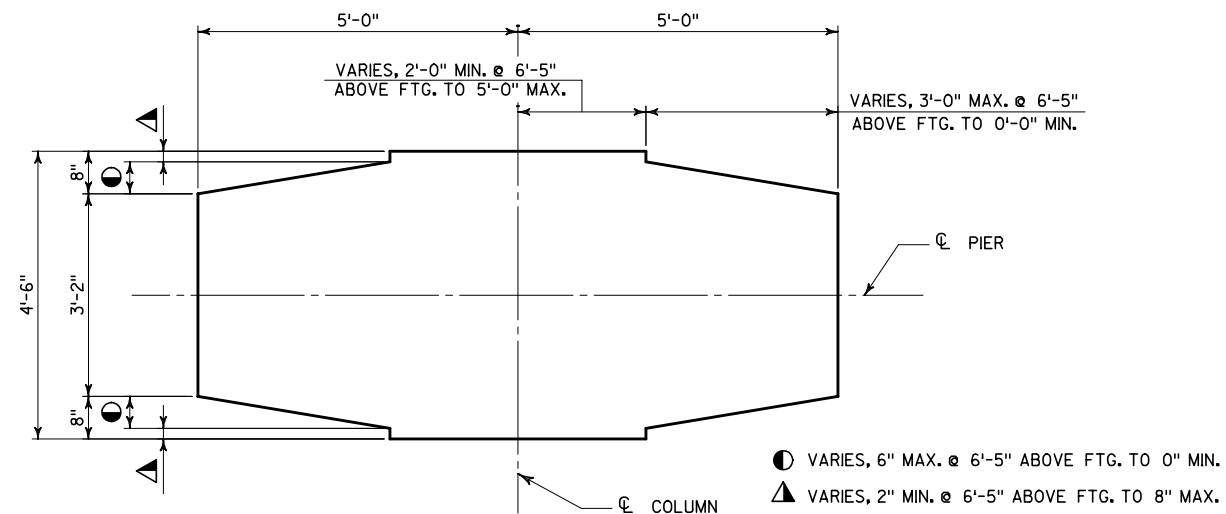
NOTE THAT PAY ITEMS SPV.0060.2060 AND SPV.0060.2065 INCLUDE ONLY THE PREMIUM COST ASSOCIATED WITH THE DYNAMIC LOAD TESTING OF THESE PILES. PAYMENT FOR ALL OTHER ASPECTS OF THESE PILES IS INCLUDED UNDER OTHER PAY ITEMS.

TEST PILES REQUIRE AN INTERIM CUTOFF ELEVATION THAT IS HIGHER THAN THE FINAL CUTOFF ELEVATION. THIS ADDITIONAL LENGTH WILL BE PAID FOR UNDER THE PILING PAY ITEM AND HAS BEEN INCLUDED IN THE ESTIMATED QUANTITIES.

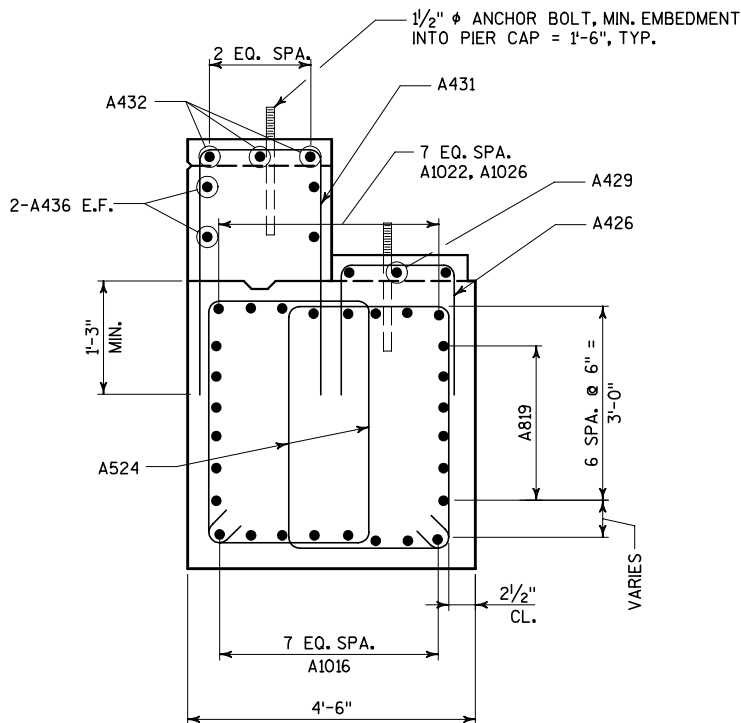
(A) CUTOFF PILING IN EXIST. FOOTING THAT IS IN THE FOOTPRINT OF THE PROPOSED FOOTING 2'-0" BELOW BOTTOM OF PROPOSED FOOTING. DO NOT INCORPORATE EXIST. PILING INTO PROPOSED FOOTING.



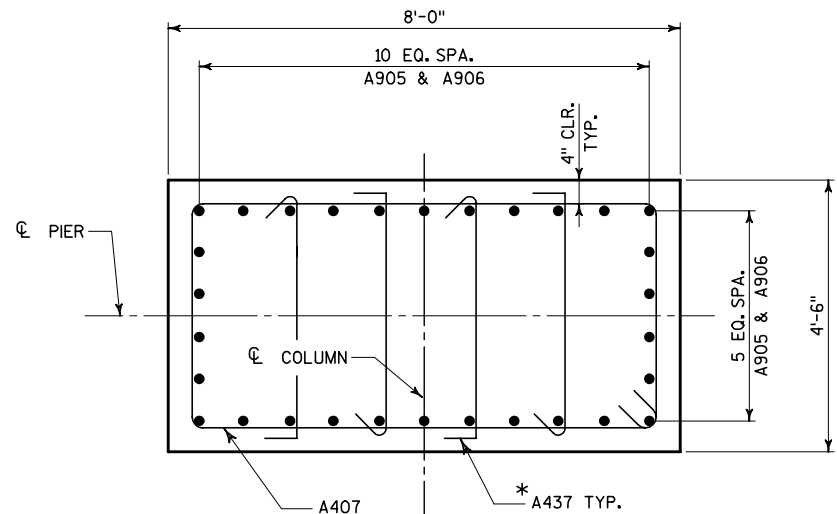
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PIER P1-004 REINF. LAYOUT			SHEET 215 OF 432



SECTION THRU COLUMN

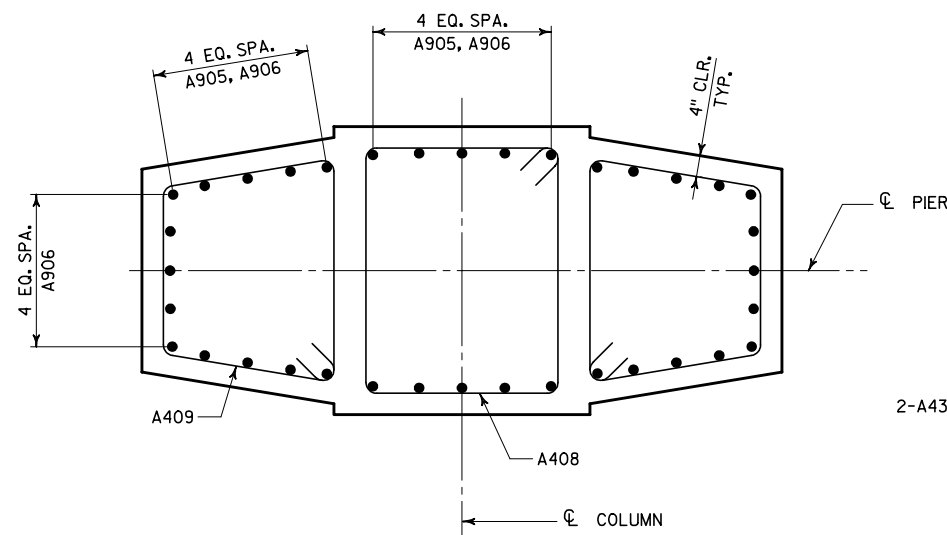


SECTION A-A

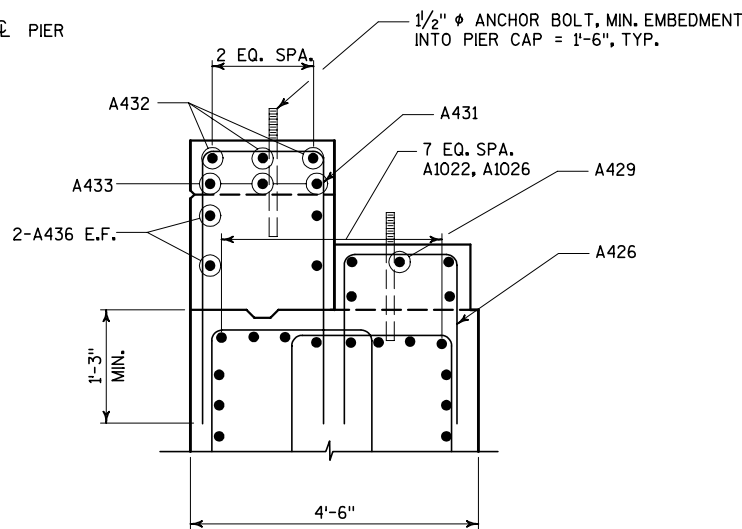


SECTION B-B

* ALTERNATE THE POSITION OF THE 90° & 135° HOOKS @ EACH TIE SPACING

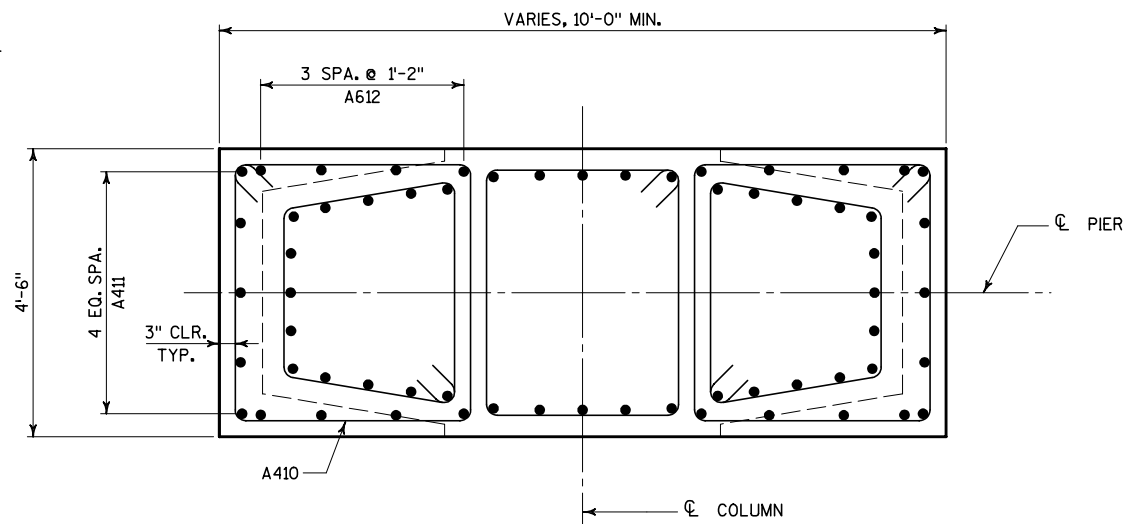


SECTION C-C



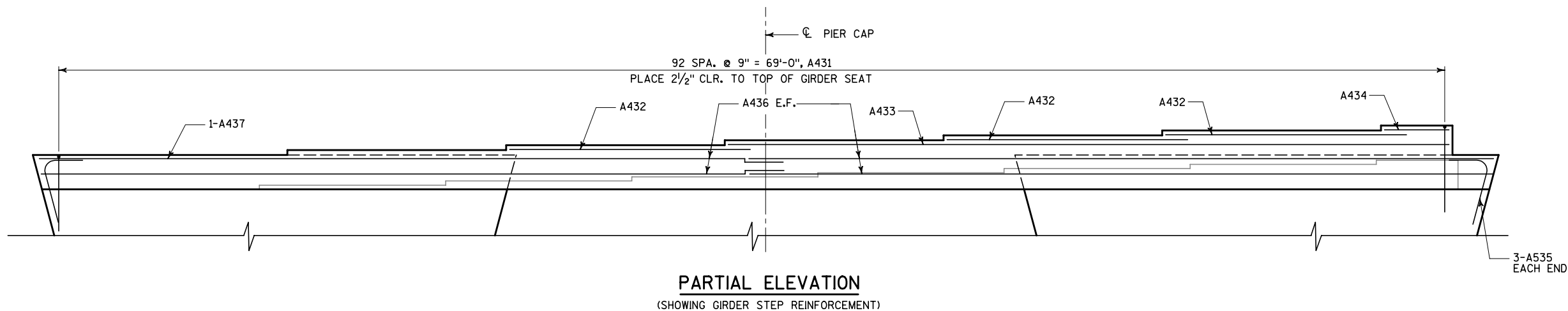
SECTION E-E

(FOR REINFORCEMENT NOT CALLED OUT, SEE SECTION A-A)



SECTION D-D

(FOR REINFORCEMENT NOT CALLED OUT, SEE SECTION C-C)

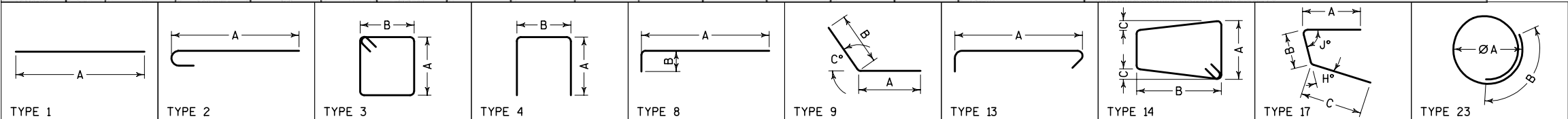


PARTIAL ELEVATION

(SHOWING GIRDER STEP REINFORCEMENT)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CKD. KES
PIER P1-004 DETAILS			SHEET 216 OF 432

BAR INFORMATION						BAR DIMENSIONS										LOCATION	REMARKS
BAR MARK	COAT	NO. REQ'D	CUT LENGTH	TOTAL WT (LB)	BEND TYPE	A	B	C	D	E	F	G	H	J			
A1001		68	12'-6"	3658	1	12'-6"										FOOTING	BOTTOM
A502		56	12'-6"	730	1	12'-6"										FOOTING	TOP
A1003		28	10'-6"	1265	1	10'-6"										FOOTING	BOTTOM
A504		26	10'-6"	285	1	10'-6"										FOOTING	TOP
A905	E	102	12'-2"	4219	8	10'-10"	1'-7"									COLUMNS	VERTICAL
A906	E	102	27'-0"	9364	1	23'-0"										COLUMNS	VERTICAL
A407	E	22	22'-11"	337	3	3'-10"	7'-4"									COLUMNS	TIES
A408	E	46	14'-3"	438	3	3'-10"	3'-0"									COLUMNS	TIES
A409	E	92	12'-1"	743	14	3'-6"	2'-8"	5"								COLUMNS	TIES
A410	E	4 SERIES OF 13	9'-10" TO 16'-6"	457	3	4'-0"	8" TO 4'-0" BY 3 ³ / ₈ "									COLUMNS	TIES, BUNDLE AND TAG EACH SERIES SEPARATELY
A411	E	20	17'-6"	234	1	17'-6"										COLUMNS	VERTICAL
A612	E	8 SERIES OF 4	3'-2" TO 14'-11"	437	1	3'-2" TO 14'-11" BY 3'-11"										COLUMNS	VERTICAL, BUNDLE AND TAG EACH SERIES SEPARATELY
A413	E	8	7'-6"	40	1	7'-6"										COLUMNS	TOP
A614	E	10	10'-6"	158	1	10'-6"										CAP	BOTTOM @ ENDS
A1015	E	16	15'-6"	1067	1	15'-6"										CAP	BOTTOM
A1016	E	8	38'-0"	1308	9	19'-0"	19'-0"	25.00								CAP	BOTTOM
A617	E	4	5'-3"	32	1	5'-3"										CAP	SIDES
A618	E	4	13'-2"	79	1	13'-2"										CAP	SIDES
A819	E	24	36'-6"	2339	1	36'-6"										CAP	SIDES
A620	E	2	21'-0"	63	1	21'-0"										CAP	SIDES
A621	E	2	12'-0"	36	1	12'-0"										CAP	SIDES
A1022	E	8	53'-9"	1850	8	1'-9½"	52'-3"									CAP	TOP
A523	E	8 SERIES OF 11	12'-11" TO 15'-1"	1285	3	3'-4" TO 4'-5" BY 1 ¹ / ₈ "	2'-9"									CAP	STIRRUPS, BUNDLE AND TAG EACH SERIES SEPARATELY
A524	E	4 SERIES OF 10	12'-8" TO 16'-8"	615	3	3'-4" TO 5'-4" BY 2 ³ / ₈ "	2'-9"									CAP	STIRRUPS, BUNDLE AND TAG EACH SERIES SEPARATELY
A525	E	10	7'-1"	74	17	2'-0"	3'-3"	2'-0"					62.51	75.00		CAP	VERTICAL @ ENDS
A1026	E	8	26'-6"	912	8	1'-9½"	25'-0"									CAP	TOP
A427	E	66	6'-8"	294	4	2'-6"	1'-8½"									CAP	VERTICAL GIRDER SEATS
A428	E	13	10'-6"	91	1	10'-6"										CAP	HORIZONTAL GIRDER SEATS
A429	E	2	31'-0"	41	1	31'-0"										CAP	HORIZONTAL GIRDER SEATS
A430	E	3	3'-8"	7	1	3'-8"										CAP	HORIZONTAL GIRDER SEATS
A431	E	93	7'-9"	481	4	4'-3"	1'-10"									CAP	VERTICAL GIRDER SEATS
A432	E	10	12'-0"	80	1	12'-0"										CAP	HORIZONTAL GIRDER SEATS
A433	E	2	35'-1"	47	1	35'-1"										CAP	HORIZONTAL GIRDER SEATS
A434	E	3	3'-2"	6	1	3'-2"										CAP	HORIZONTAL GIRDER SEATS
A535	E	6	5'-8"	35	17	2'-0"	3'-9"	0"						75.00		CAP	VERTICAL @ ENDS
A436	E	8	37'-6"	200	1	37'-6"										CAP	HORIZONTAL GIRDER SEATS
A437	E	1	13'-6"	9	1	13'-6"										CAP	HORIZONTAL GIRDER SEATS

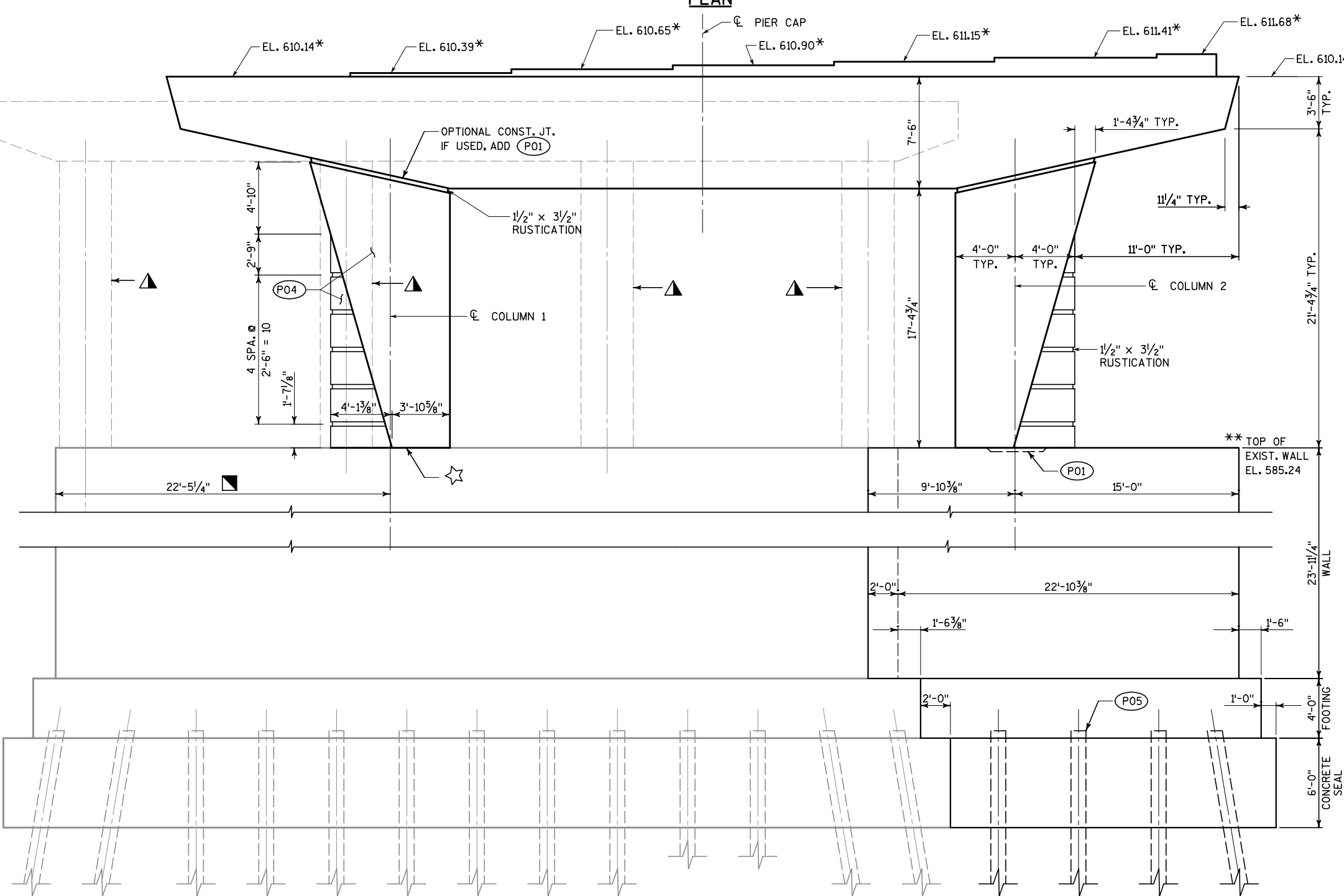
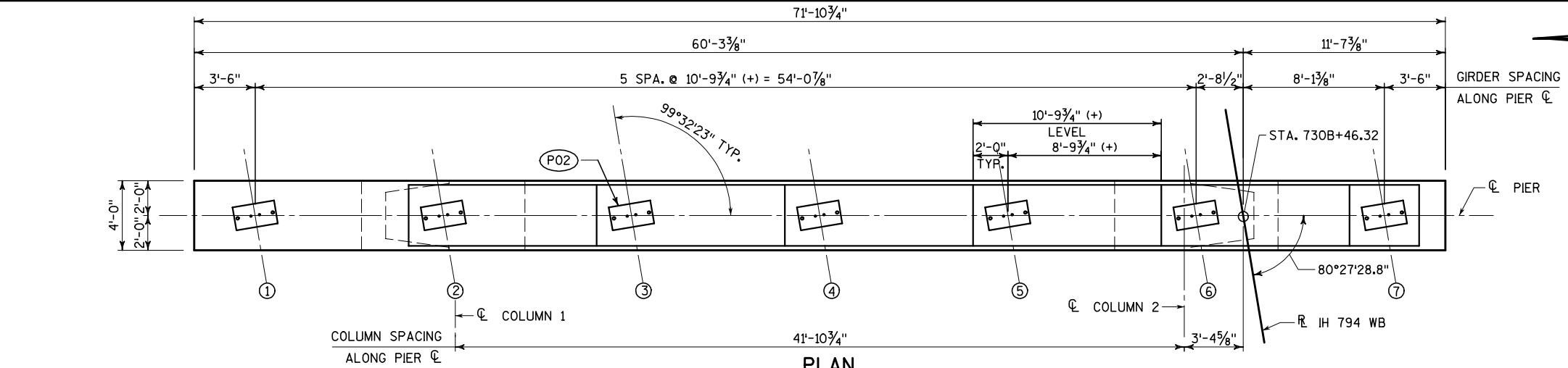


NOTES

1. REINFORCEMENT SCHEDULES AND BREAKDOWNS ARE FOR INFORMATION ONLY. SEE GENERAL NOTES ON SHEET 3 FOR ADDITIONAL INFORMATION.
2. THE FIRST ONE OR TWO DIGITS IN THE BAR MARK DENOTES THE BAR SIZE.
3. THE ENTRY IN THE 'COAT' COLUMN IS DEFINED AS FOLLOWS:
BLANK = UNCOATED
E = EPOXY COATED
4. ALL BENDS AND BAR EXTENSIONS ARE STANDARD AASHTO DIMENSIONS UNLESS OTHERWISE NOTED.
5. BARS ARE SYMMETRIC UNLESS OTHERWISE NOTED.
6. BAR SERIES ARE INDICATED BY A CUT LENGTH AND ONE DIMENSION THAT VARIES. BAR SERIES INFORMATION IS LOCATED IN THE BAR CHART.

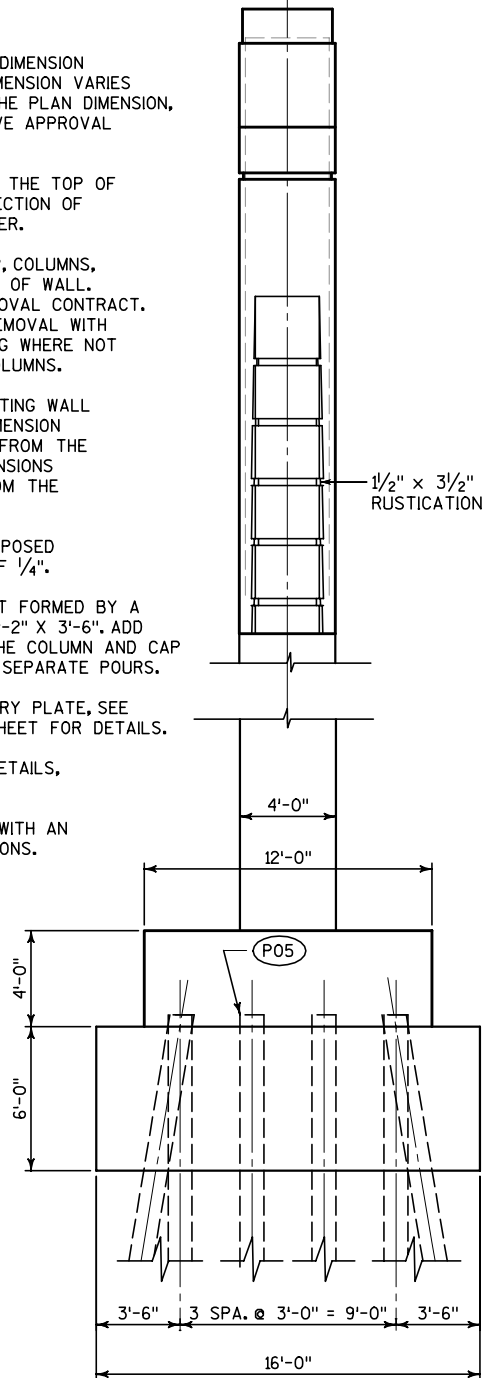
TOTAL NON-EPOXY REINFORCEMENT	WT (LB)	5,940
TOTAL EPOXY REINFORCEMENT	WT (LB)	27,385

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PIER P1-004 REINF. SCHEDULE			SHEET 217 OF 432



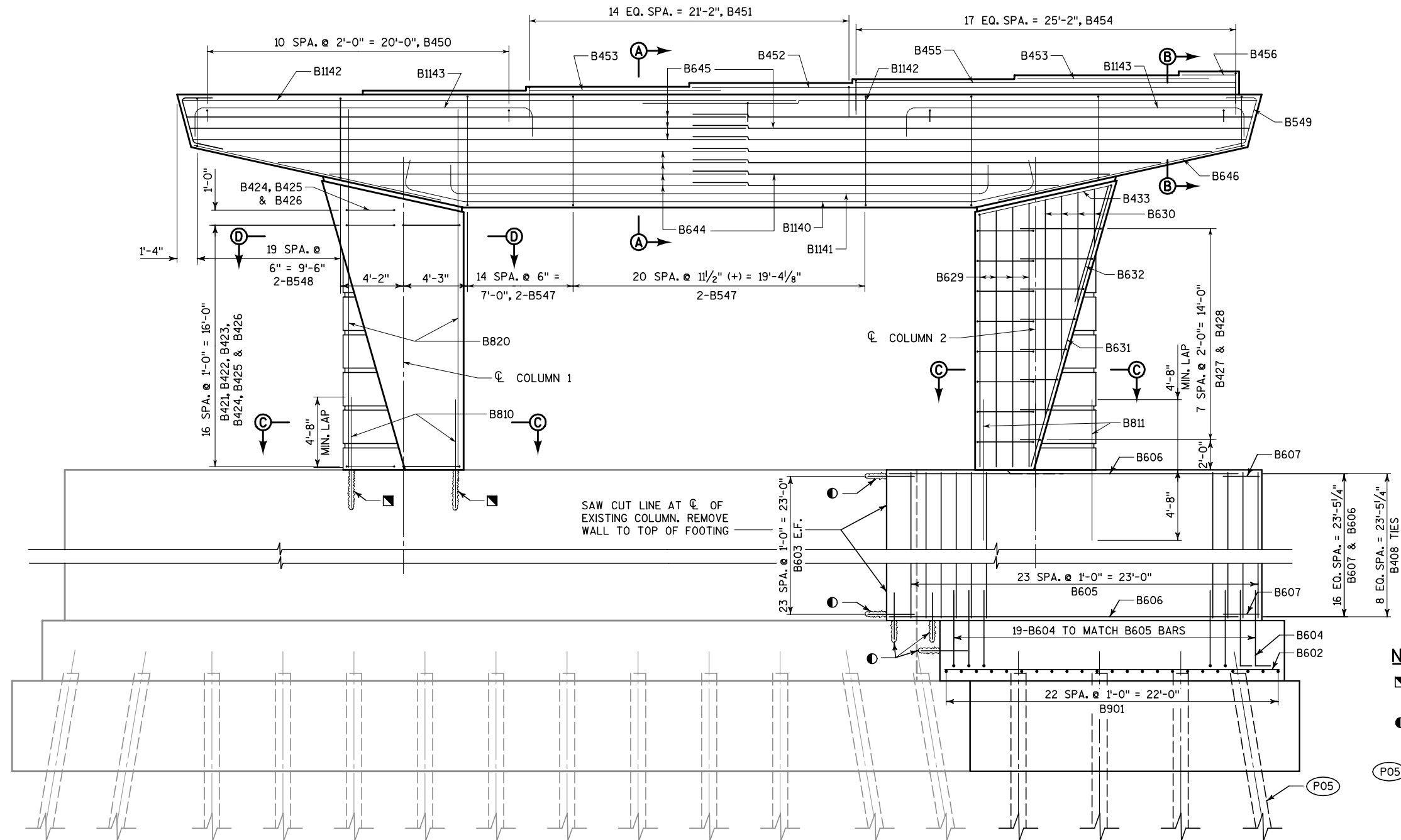
NOTES:

- FIELD VERIFY HORIZONTAL DIMENSION @ PIER. IF VERIFIED DIMENSION VARIES BY MORE THAN 6" FROM THE PLAN DIMENSION, NEW DIMENSIONS MUST HAVE APPROVAL FROM THE ENGINEER.
- ELEVATIONS ARE GIVEN AT THE TOP OF CONCRETE AT THE INTERSECTION OF THE GIRDER AND PIER.
- REMOVE EXISTING PIER CAP, COLUMNS, & REINFORCEMENT TO TOP OF WALL. THIS IS PART OF THE REMOVAL CONTRACT. COAT AREA OF COLUMN REMOVAL WITH PROTECTIVE CLEAR COATING WHERE NOT COVERED BY PROPOSED COLUMNS.
- FIELD VERIFY TOP OF EXISTING WALL ELEVATION. IF VERIFIED DIMENSION VARIES BY MORE THAN 6" FROM THE PLAN DIMENSION, NEW DIMENSIONS MUST HAVE APPROVAL FROM THE ENGINEER.
- ROUGHEN AREA UNDER PROPOSED COLUMNS TO AMPLITUDE OF 1/4".
- KEYED CONSTRUCTION JOINT FORMED BY A SURFACED, BEVELED 3" X 1'-2" X 3'-6". ADD TO TOP OF COLUMNS IF THE COLUMN AND CAP CONCRETE ARE PLACED IN SEPARATE POURS.
- 2 7/8" X 1'-4" X 2'-5" MASONRY PLATE, SEE "PLATE GIRDER BEARING" SHEET FOR DETAILS.
- FOR CONCRETE STAINING DETAILS, SEE SHEET 419.
- HP 12 X 53 STEEL PILING WITH AN ALLOWABLE LOAD OF 55 TONS. ESTIMATED LENGTH = 50'.



ELEVATION
(PIER P2-004 LOOKING NORTH)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-142 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CKD. KES
PIER P2-004			SHEET 218 OF 432

**NOTES**

- CONCRETE MASONRY ANCHOR, TYPE L, NO. 8 BAR, HAVING A MIN. PULLOUT CAPACITY OF 48 KIPS. EMBED 2'-6"
- CONCRETE MASONRY ANCHOR, TYPE L, NO. 6 BAR, HAVING A MIN. PULLOUT CAPACITY OF 27 KIPS. EMBED 1'-3". TYP. AT VERTICAL FACE OF EXISTING WALL AND FOOTING.
- (P05) HP 12 X 53 STEEL PILING WITH AN ALLOWABLE LOAD OF 60 TONS. ESTIMATED LENGTH = 50'.

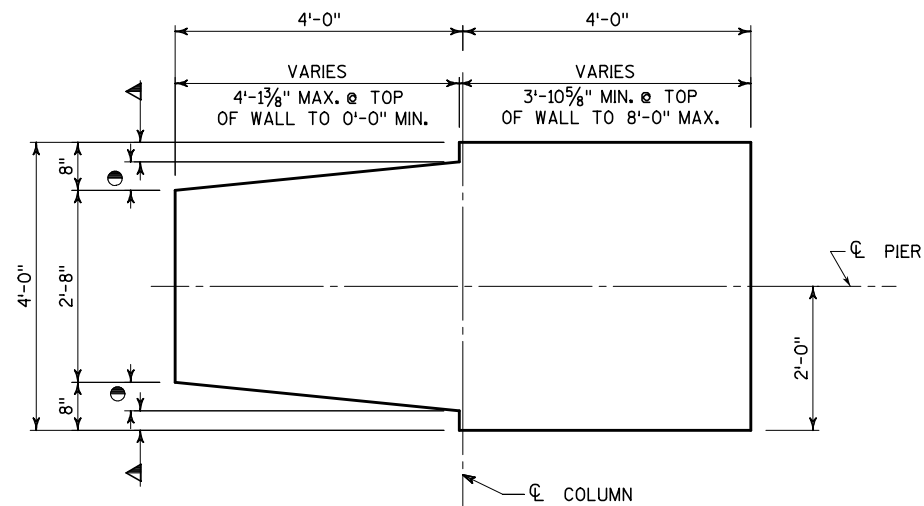
ELEVATION

(PIER P2-004 LOOKING EAST REINFORCEMENT SHOWN)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PIER P2-004 REINF. LAYOUT			SHEET 219 OF 432



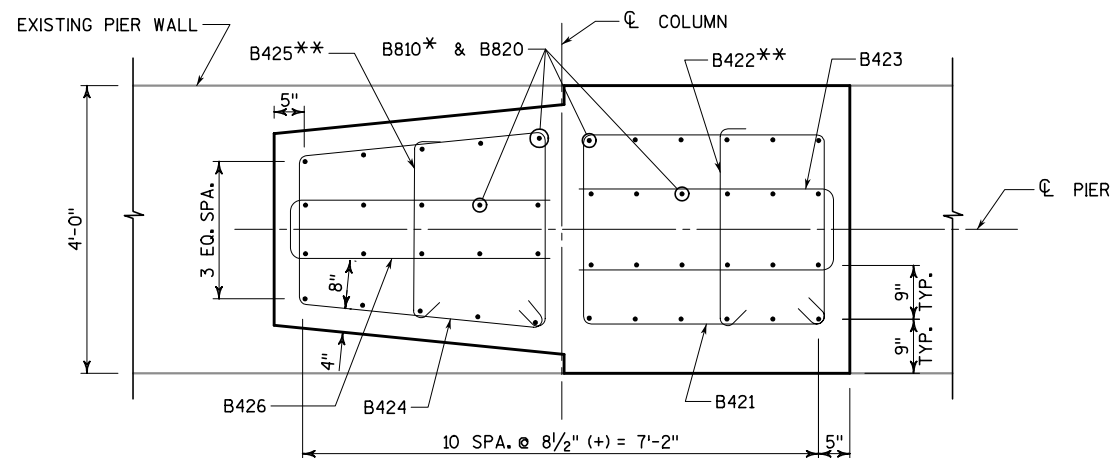
NO.	DATE	REVISION						BY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION									
STRUCTURE B-40-1412 (004)									
CONST. SPEC.		2004		DRAWN BY		EKM	PLANS CK'D. KES		
PIER P2-004 FOOTING PLAN							SHEET 220 OF 432		



● VARIES 4 3/4" MAX. @ TOP OF WALL TO 0" MIN.
 ▲ VARIES 3 1/4" MIN. @ TOP OF WALL TO 8" MAX.

SECTION THRU COLUMN

(REINFORCEMENT NOT SHOWN)

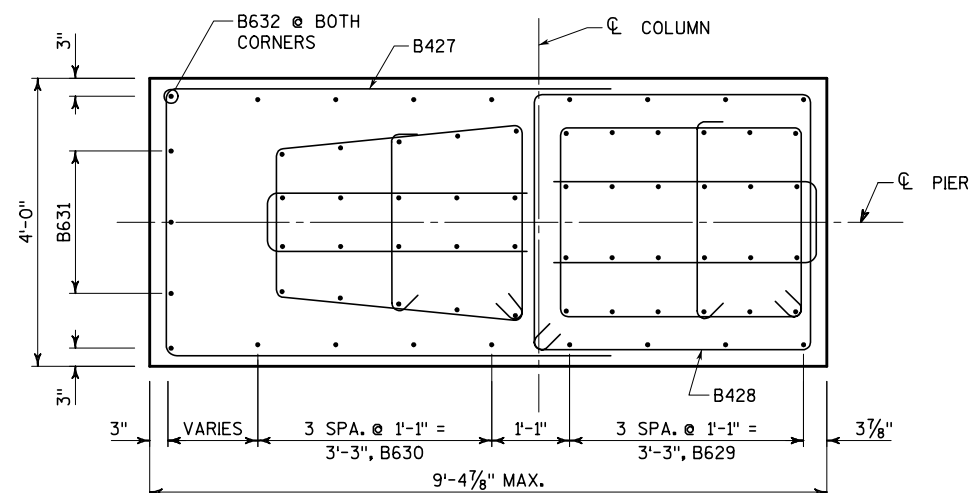


* B810 TO BE ANCHORED (TYPE L) A MIN. OF 2'-6" INTO EXISTING PIER WALL.

** ALTERNATE THE POSITION OF THE 90° AND 135° HOOKS AT EACH TIE SPACING.

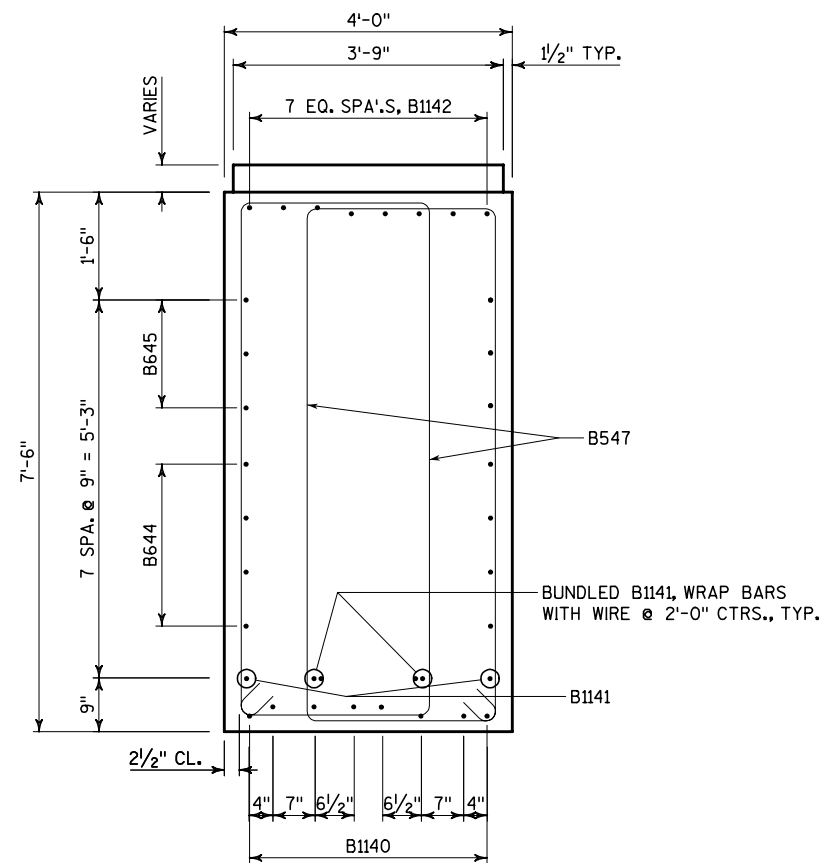
COLUMN 1 SECTION C-C

(SHOWING REINFORCEMENT)



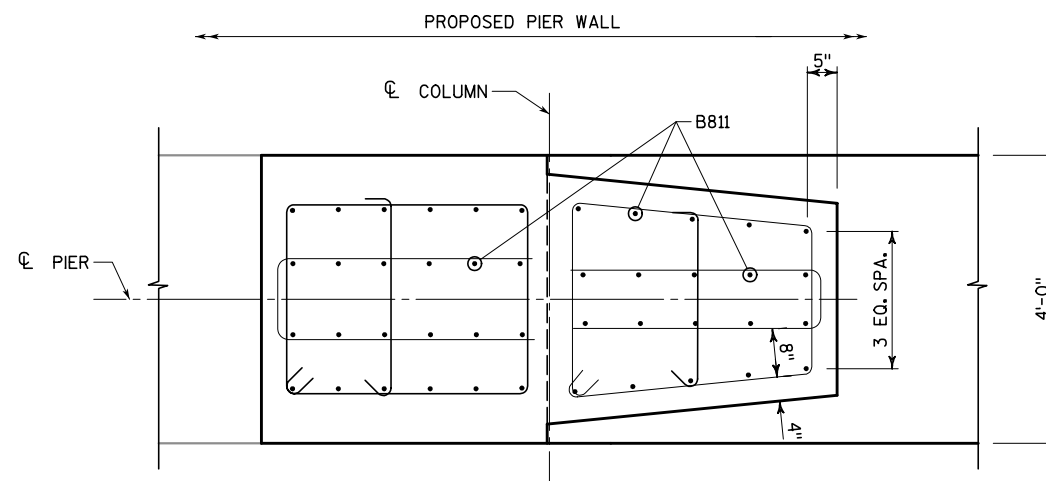
SECTION D-D

(SHOWING REINFORCEMENT)



SECTION A-A

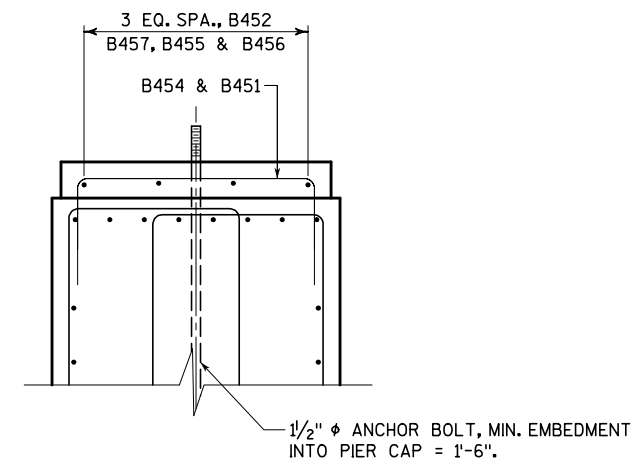
(SHOWING REINFORCEMENT)



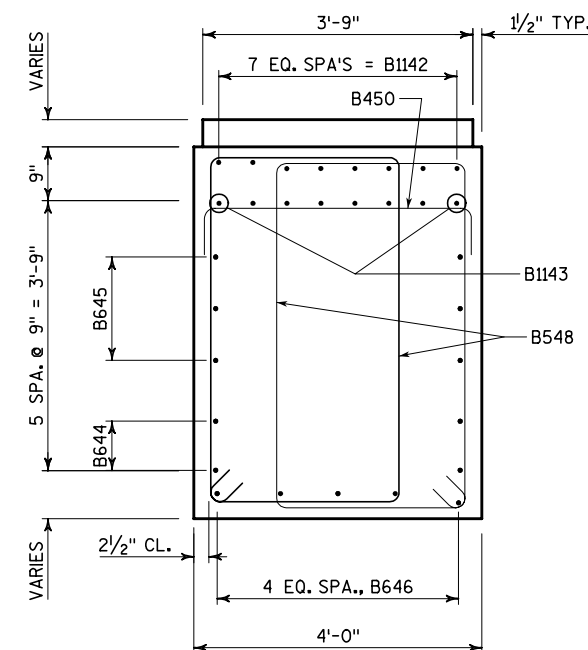
FOR DETAILS AND DIMENSIONS NOT SHOWN, SEE "COLUMN 1 SECTION C-C"

COLUMN 2 SECTION C-C

(SHOWING REINFORCEMENT)



SECTION THRU GIRDER SEAT

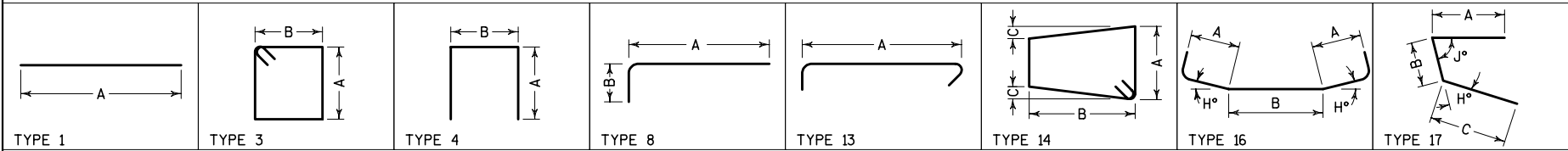


SECTION B-B

(SHOWING REINFORCEMENT)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PIER P2-004 DETAILS			SHEET 221 OF 432

BAR INFORMATION						BAR DIMENSIONS										LOCATION	REMARKS
BAR MARK	COAT	NO. REQ'D	CUT LENGTH	TOTAL WT (LB)	BEND TYPE	A	B	C	D	E	F	G	H	J			
B901		23	11'-6"	899	1	11'-6"									FOOTING	TRANSVERSE	
B602		16	22'-6"	541	1	8'-10"									FOOTING	LONGITUDINAL	
B603		70	3'-3"	342	1	3'-3"									DOWELS		
B604		41	6'-4"	390	8	5'-6"	1'-0"								FOOTING	VERTICAL	
B605		49	23'-7"	1736	1	23'-7"									WALL	VERTICAL	
B606		34	22'-7"	1153	1	9'-0"									WALL	HORIZONTAL	
B607		17	8'-11"	228	37	3'-6"	3'-4"	3'-6"							WALL	HORIZONTAL	
B408		132	4'-7"	404	13	3'-6"									WALL	TIES	
B810		44	7'-4"	862	1	7'-4"									COL. DOWELS	COLUMN ANCHORS INTO EXISTING WALL	
B811	E	56	9'-4"	1396	1	9'-4"									COL. DOWELS	COLUMN ANCHORS INTO NEW WALL	
B820	E	88	23'-9"	5581	1	23'-9"									COLUMN	VERTICAL	
B421	E	34	12'-7"	286	3	3'-4½"	2'-8"								COLUMN	TIES	
B422	E	34	3'-4"	76	13	2'-8"									COLUMN	TIES	
B423	E	34	7'-9"	176	4	3'-5"	1'-2"								COLUMN	TIES	
B424	E	36	12'-3"	295	14	2'-8½"	3'-5½"	4"							COLUMN	TIES	
B425	E	36	3'-1"	74	13	2'-5½"									COLUMN	TIES	
B426	E	36	7'-8"	184	4	3'-6"	10½"								COLUMN	TIES	
B427	E	2 series of 8	13'-10" to 5'-10"	105	4	5'-3" to 1'-3" by 6⅞"	3'-7"								COLUMN	TIES, BUNDLE AND TAG EACH SERIES SEPARATELY	
B428	E	16	15'-5"	165	3	3'-10½"	3'-7"								COLUMN	TIES	
B629	E	2 series of 4	16'-9" to 17'-6"	206	1	16'-9" to 17'-6" by 3"									COLUMN	VERTICAL, BUNDLE AND TAG EACH SERIES SEPARATELY	
B630	E	4 series of 4	14'-4" to 3'-9"	218	1	14'-4" to 3'-9" by 3'-6⅜"									COLUMN	VERTICAL, BUNDLE AND TAG EACH SERIES SEPARATELY	
B631	E	6	19'-5"	175	1	19'-5"									COLUMN	VERTICAL	
B632	E	4	8'-0"	48	1	8'-0"									COLUMN	VERTICAL	
B433	E	2	26'-1"	35	3	9'-2½"	3'-7"								COLUMN	TIES	
B1140	E	8	45'-5"	1931	16	4'-2"	33'-10"						12.49		CAP	BOTTOM	
B1141	E	6	38'-11"	1241	4	1'-11½"	35'-9"								CAP	BOTTOM	
B1142	E	16	40'-9"	3464	1	40'-9"									CAP	TOP	
B1143	E	16	24'-10"	2111	4	1'-11½"	21'-8"								CAP	TOP	
B644	E	4 series of 4	24'-3" to 34'-5"	704	1	24'-3" to 34'-5" by 3'-4⅝"									CAP	SIDES, BUNDLE AND TAG EACH SERIES SEPARATELY	
B645	E	4 series of 3	36'-8" to 37'-1"	664	1	36'-8" to 37'-1" by 2½"									CAP	SIDES, BUNDLE AND TAG EACH SERIES SEPARATELY	
B646	E	10	16'-9"	252	1	16'-9"									CAP	BOTTOM @ ENDS	
B547	E	98	20'-1"	2053	3	7'-1"	2'-8"								CAP	STIRRUPS	
B548	E	4 series of 20	16'-5" to 12'-3"	1198	3	5'-3" to 3'-2" by 1⅜"	2'-8"								CAP	STIRRUPS @ ENDS, BUNDLE AND TAG EACH SERIES SEPARATELY	
B549	E	12	7'-0"	88	17	2'-0"	3'-2"	2'-0"					62.51	75.00	CAP	VERTICAL ENDS	
B450	E	22	4'-8"	69	4	8"	3'-7"								CAP	TIE	
B451	E	15	7'-2"	72	4	2'-0½"	3'-4"								CAP	VERTICAL GIRDER SEATS	
B452	E	4	36'-0"	96	1	36'-0"									CAP	HORIZ. GIRDER SEATS	
B453	E	8	12'-8"	68	1	12'-8"									CAP	HORIZ. GIRDER SEATS	
B454	E	18	8'-8"	104	4	2'-9½"	3'-4"								CAP	VERTICAL GIRDER SEATS	
B455	E	4	25'-3"	67	1	25'-3"									CAP	HORIZ. GIRDER SEATS	
B456	E	4	3'-7"	10	1	3'-7"									CAP	HORIZ. GIRDER SEATS	



TOTAL NON-EPOXY REINFORCEMENT	WT (LB)	6957
TOTAL EPOXY REINFORCEMENT	WT (LB)	23210

NOTES

1. REINFORCEMENT SCHEDULES AND BREAKDOWNS ARE FOR INFORMATION ONLY. SEE GENERAL NOTES ON SHEET 3 FOR ADDITIONAL INFORMATION.
2. THE FIRST ONE OR TWO DIGITS IN THE BAR MARK DENOTES THE BAR SIZE.
3. THE ENTRY IN THE 'COAT' COLUMN IS DEFINED AS FOLLOWS:
BLANK = UNCOATED
E = EPOXY COATED
4. ALL BENDS AND BAR EXTENSIONS ARE STANDARD AASHTO DIMENSIONS UNLESS OTHERWISE NOTED.
5. BARS ARE SYMMETRIC UNLESS OTHERWISE NOTED.
6. BAR SERIES ARE INDICATED BY A CUT LENGTH AND ONE DIMENSION THAT VARIES. BAR SERIES INFORMATION IS LOCATED IN THE BAR CHART.

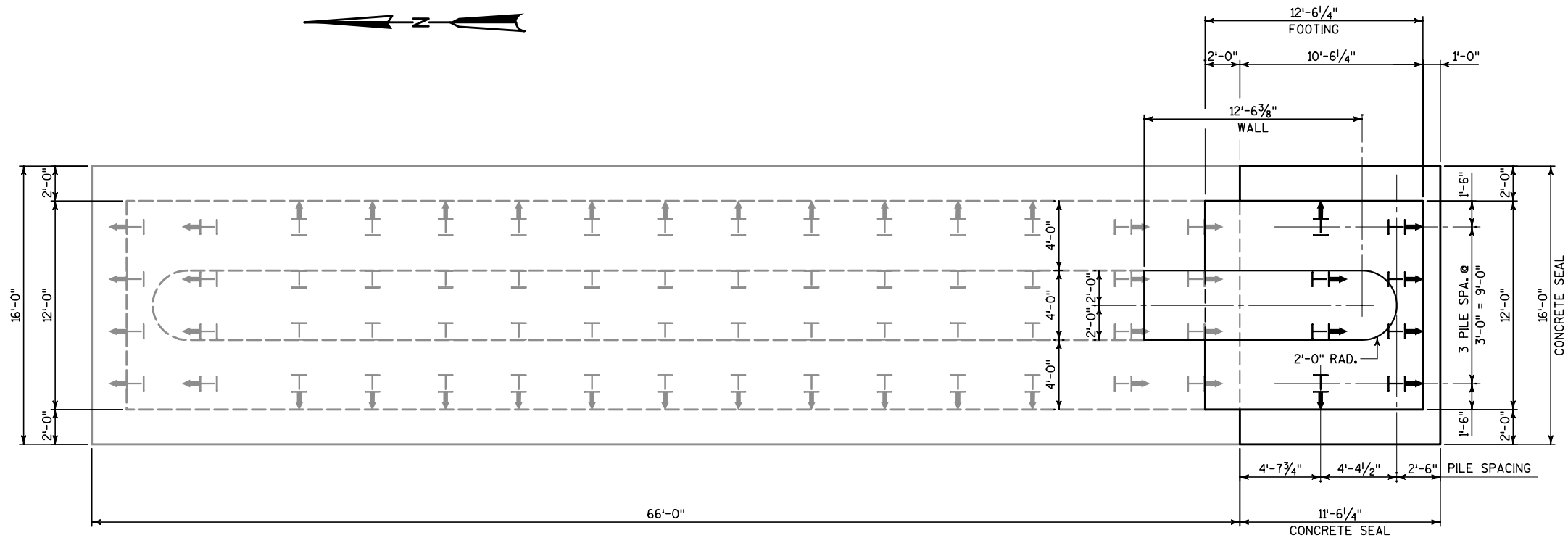
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PIER P2-004 REINF. SCHEDULE			SHEET 222 OF 432



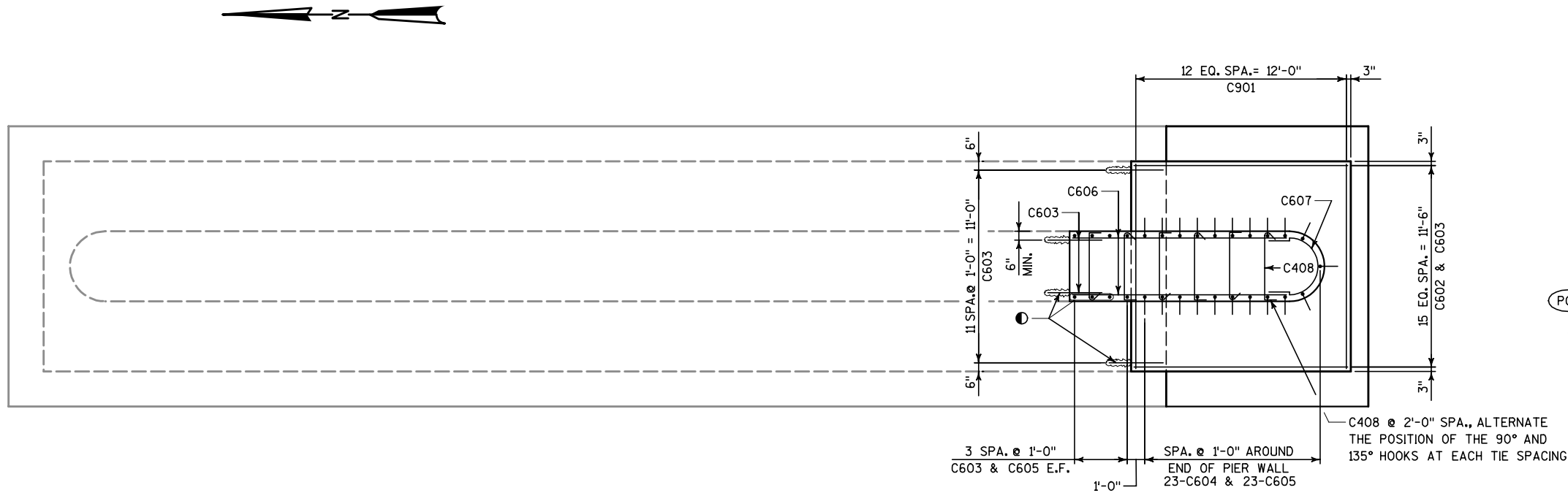
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(PIER P3-004 LOOKING NORTH)

NO.	DATE	REVISION				BY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION							
STRUCTURE B-40-1412 (004)							
CONST. SPEC.		2004		DRAWN BY	EKM	PLANS CK'D.	KES
PIER P3-004						SHEET 223 OF 432	



PILE PLAN
(PIER P3-004 DIMENSIONS SHOWN)

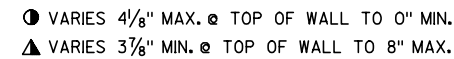


FOOTING PLAN
(PIER P3-004 REINFORCEMENT SHOWN)

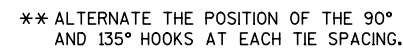
NOTES

- CONCRETE MASONRY ANCHOR, TYPE L, NO. 6 BAR, HAVING A MIN. PULLOUT CAPACITY OF 27 KIPS. EMBED 1'-6". TYP. AT VERTICAL FACE OF EXISTING WALL AND FOOTING.
- HP 12 X 53 STEEL PILING WITH AN ALLOWABLE LOAD OF 55 TONS. ESTIMATED LENGTH = 50'.
- INDICATES BATTER PILE DIRECTION, BATTER PILES 1:6.

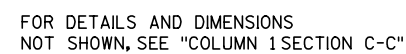
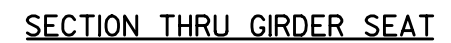
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PIER P3-004 FOOTING PLAN			SHEET 225 OF 432



SECTION THRU COLUMN
(REINFORCEMENT NOT SHOWN)



COLUMN 1 SECTION C-C
(SHOWING REINFORCEMENT)



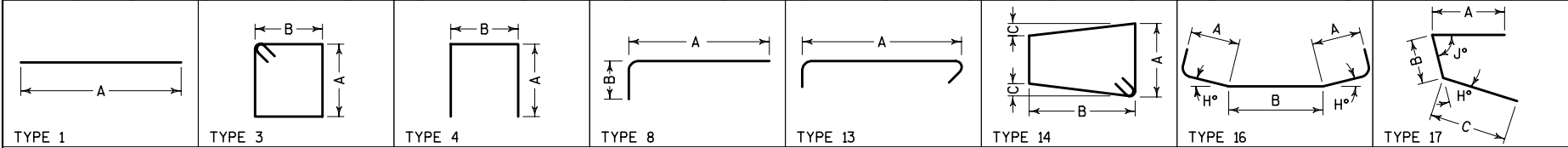
COLUMN 2 SECTION C-C
(SHOWING REINFORCEMENT)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY	PLANS CK'D.
		EKM	KES
PIER P3-004 DETAILS		SHEET 226 OF 432	

NOTES

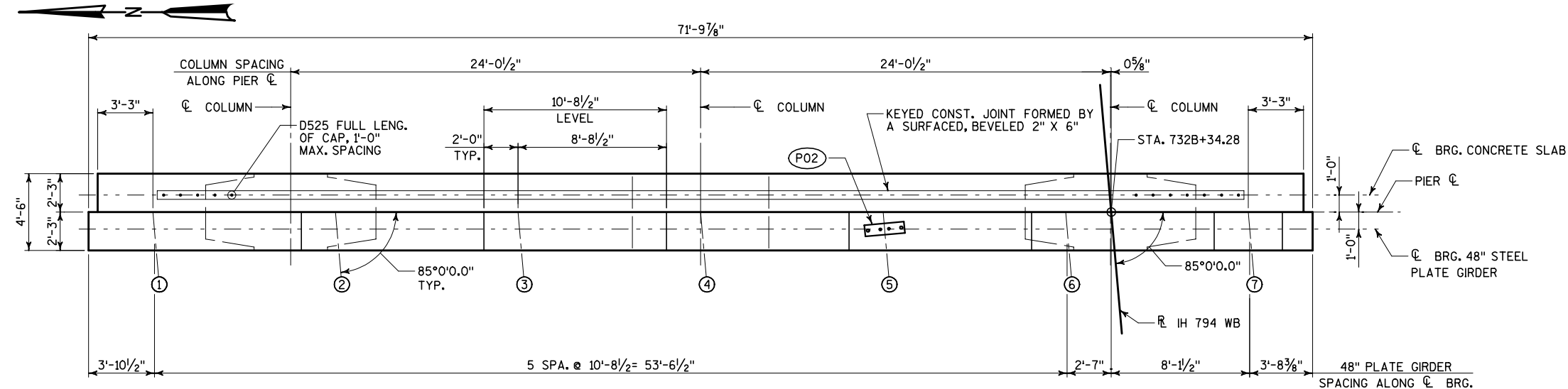
1. REINFORCEMENT SCHEDULES AND BREAKDOWNS ARE FOR INFORMATION ONLY. SEE GENERAL NOTES ON SHEET 3 FOR ADDITIONAL INFORMATION.
2. THE FIRST ONE OR TWO DIGITS IN THE BAR MARK DENOTES THE BAR SIZE.
3. THE ENTRY IN THE 'COAT' COLUMN IS DEFINED AS FOLLOWS:
BLANK = UNCOATED
E = EPOXY COATED
4. ALL BENDS AND BAR EXTENSIONS ARE STANDARD AASHTO DIMENSIONS UNLESS OTHERWISE NOTED.
5. BARS ARE SYMMETRIC UNLESS OTHERWISE NOTED.
6. BAR SERIES ARE INDICATED BY A CUT LENGTH AND ONE DIMENSION THAT VARIES. BAR SERIES INFORMATION IS LOCATED IN THE BAR CHART.

BAR INFORMATION						BAR DIMENSIONS									LOCATION	REMARKS
BAR MARK	COAT	NO. REQ'D	CUT LENGTH	TOTAL WT (LB)	BEND TYPE	A	B	C	D	E	F	G	H	J		
C901		13	11'-6"	508	1	11'-6"									FOOTING	TRANSVERSE
C602		16	12'-0"	288	1	8'-10"									FOOTING	LONGITUDINAL
C603		48	3'-3"	234	1	3'-3"									DOWELS	
C604		23	6'-4"	219	8	5'-6"	1'-0"								FOOTING	VERTICAL
C605		31	29'-7"	1377	1	23'-7"									WALL	VERTICAL
C606		40	13'-3"	796	1	9'-0"									WALL	HORIZONTAL
C607		20	8'-11"	268	37	3'-6"	3'-4"	3'-6"							WALL	HORIZONTAL
C408		90	4'-7"	276	13	3'-6"									WALL	TIES
C810		68	7'-2"	1301	1	7'-2"									COL. DOWELS	COLUMN ANCHORS INTO EXISTING WALL
C811	E	20	9'-4"	498	1	9'-4"									COL. DOWELS	COLUMN ANCHORS INTO NEW WALL
C820	E	88	21'-7"	5072	1	21'-7"									COLUMN	VERTICAL
C421	E	30	12'-7"	252	3	3'-4½"	2'-8"								COLUMN	TIES
C422	E	30	3'-4"	67	13	2'-8"									COLUMN	TIES
C423	E	30	7'-9"	155	4	3'-5"	1'-2"								COLUMN	TIES
C424	E	32	12'-2"	260	14	2'-8½"	3'-5½"	4"							COLUMN	TIES
C425	E	32	3'-1"	66	13	2'-5½"									COLUMN	TIES
C426	E	32	7'-8"	164	4	3'-6"	10½"								COLUMN	TIES
C627	E	2 series of 5	14'-7" to 15'-6"	226	1	14'-7" to 15'-6" by 2¾"									COLUMN	VERTICAL, BUNDLE AND TAG EACH SERIES SEPARATELY
C628	E	4 series of 3	10'-10" to 3'-9"	132	1	10'-10" to 3'-9" by 3'-6½"									COLUMN	VERTICAL, BUNDLE AND TAG EACH SERIES SEPARATELY
C629	E	6	17'-2"	155	1	17'-2"									COLUMN	VERTICAL
C630	E	4	8'-0"	48	1	8'-0"									COLUMN	VERTICAL
C431	E	14	15'-1"	141	3	3'-8½"	3'-7"								COLUMN	TIES
C432	E	2 series of 7	14'-0" to 7'-1"	99	4	5'-4" to 1'-10½" by 6⅞"	3'-7"								COLUMN	TIES, BUNDLE AND TAG EACH SERIES SEPARATELY
C433	E	2	26'-1"	35	3	9'-2½"	3'-7"								COLUMN	TIES
C1140	E	8	45'-5"	1931	16	4'-2"	33'-10"						12.49		CAP	BOTTOM
C1141	E	6	38'-11"	1241	4	1'-11½"	35'-9"								CAP	BOTTOM
C1142	E	16	40'-9"	3464	1	40'-9"									CAP	TOP
C1143	E	16	24'-10"	2111	4	1'-11½"	21'-8"								CAP	TOP
C644	E	4 series of 4	24'-3" to 34'-5"	704	1	24'-3" to 34'-5" by 3'-4⅝"									CAP	SIDES, BUNDLE AND TAG EACH SERIES SEPARATELY
C645	E	4 series of 3	36'-8" to 37'-1"	664	1	36'-8" to 37'-1" by 2½"									CAP	SIDES, BUNDLE AND TAG EACH SERIES SEPARATELY
C646	E	10	16'-9"	252	1	16'-9"									CAP	BOTTOM @ ENDS
C547	E	98	20'-1"	2053	3	7'-1"	2'-8"								CAP	STIRRUPS
C548	E	4 series of 20	16'-5" to 12'-3"	1198	3	5'-3" to 3'-2" by 1⅜"	2'-8"								CAP	STIRRUPS @ ENDS, BUNDLE AND TAG EACH SERIES SEPARATELY
C549	E	12	7'-0"	88	17	2'-0"	3'-2"	2'-0"					62.51	75.00	CAP	VERTICAL ENDS
C450	E	22	4'-8"	69	4	8"	3'-7"								CAP	TIE
C451	E	15	7'-1"	71	4	2'-0"	3'-4"								CAP	VERTICAL GIRDER SEATS
C452	E	4	36'-0"	96	1	36'-0"									CAP	HORIZ. GIRDER SEATS
C453	E	8	12'-8"	68	1	12'-8"									CAP	HORIZ. GIRDER SEATS
C454	E	18	8'-7"	103	4	2'-9"	3'-4"								CAP	VERTICAL GIRDER SEATS
C455	E	4	25'-3"	67	1	25'-3"									CAP	HORIZ. GIRDER SEATS
C456	E	4	3'-7"	10	1	3'-7"									CAP	HORIZ. GIRDER SEATS



TOTAL NON-EPOXY REINFORCEMENT	WT (LB)	4682
TOTAL EPOXY REINFORCEMENT	WT (LB)	21559

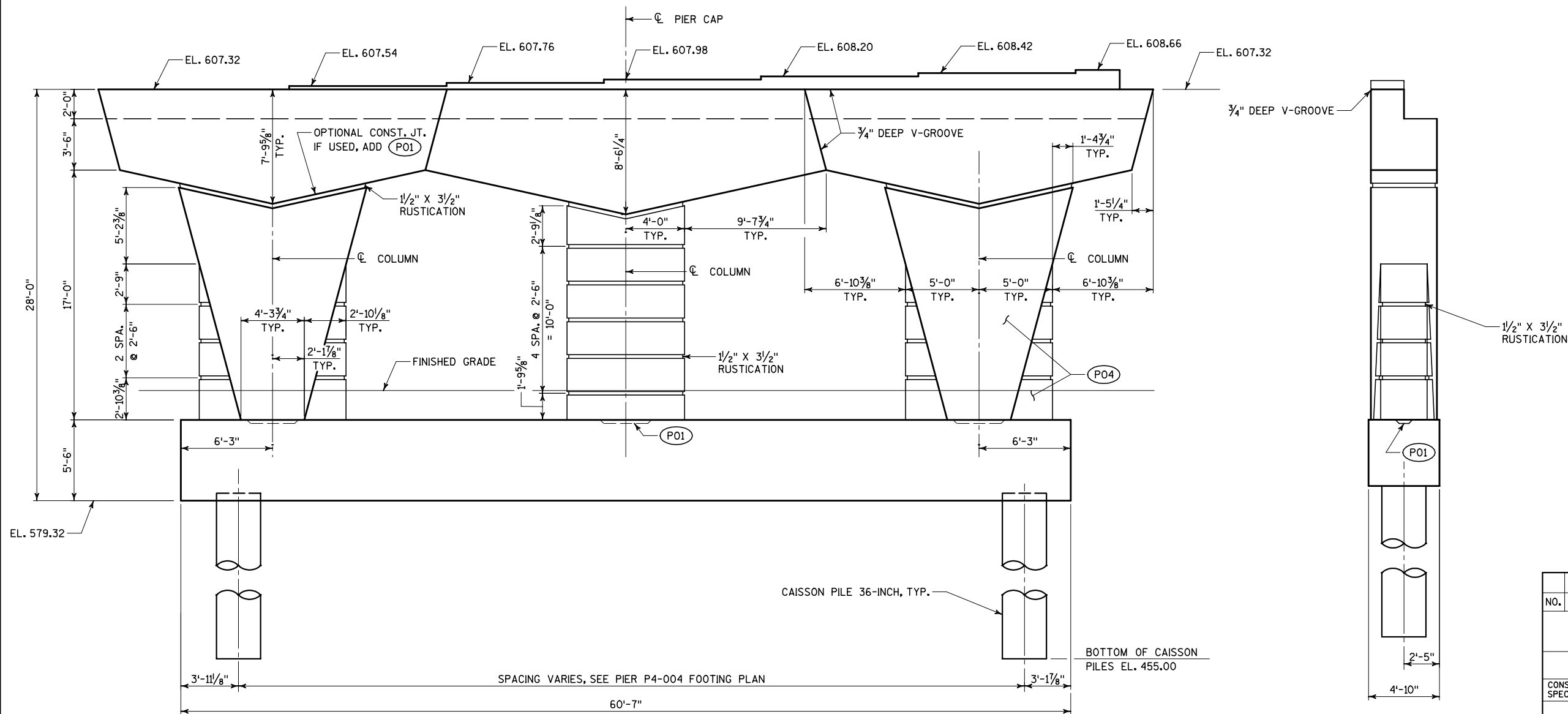
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CKD. KES
PIER P3-004 REINF. SCHEDULE			SHEET 227 OF 432



PLAN

NOTES

- (P01) KEYED CONSTRUCTION JOINT FORMED BY A SURFACED, BEVELED 3" X 1'-2" X 3'-6", TYPICAL BOTTOM OF ALL COLUMNS. ADD TO TOP OF COLUMNS IF THE COLUMN AND CAP CONCRETE ARE PLACED IN SEPARATE POURS.
- (P02) 1/2" X 8" X 2'-4" MASONRY PLATE, SEE "PLATE GIRDER BEARING DETAILS" SHEET FOR DETAILS.
- (P04) FOR CONCRETE STAINING DETAILS, SEE SHEET 406.
- * ELEVATIONS ARE GIVEN AT THE TOP OF THE CONCRETE AT THE INTERSECTION OF THE ϕ GIRDER AND ϕ PIER.



ELEVATION

(PIER P4-004 LOOKING EAST)

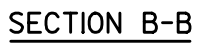
END ELEVATION

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-142 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CKD. KES
PIER P4-004			SHEET 228 OF 432



ELEVATION

(PIER P4-004 LOOKING EAST - SHOWING REINFORCEMENT)



SECTION C-C

SECTION D-D

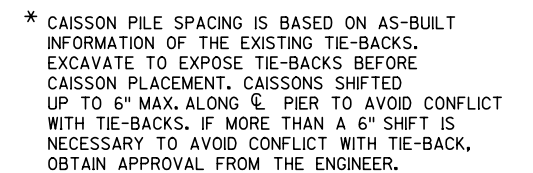


(PIER P4-004 - SHOWING REINFORCEMENT)



SECTION F-F

SPEC.			
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY	EKM PLANS CK'D. KES
PIER P4-004 REINF. LAYOUT & DETAILS		SHEET 229 OF 432	

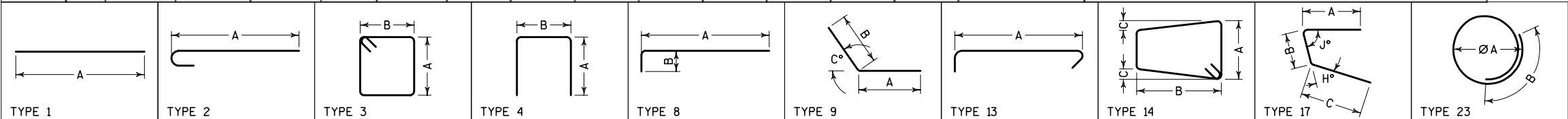


THE TEMPORARY RIVERWALK CONSISTING OF TEMPORARY CONCRETE BARRIER, ASPHALT PAVEMENT, LIGHTING, BENCHES, PLANTS AND WATERING FACILITIES SHALL BE RESTORED TO THE ORIGINAL CONDITION IF DAMAGED OR REMOVED DURING CONSTRUCTION. SEE SPECIAL PROVISIONS FOR LIMITATIONS ON CLOSING THE TEMPORARY RIVERWALK.

1. TIE BACKS, WHALER, AND THE CONCRETE MANHOLE IN THE FOOTPRINT OF PROPOSED PILE CAP TO BE REMOVED PRIOR TO CAISSON PILE CONSTRUCTION. COORDINATE WITH WE ENERGIES. WE ENERGIES IS RESPONSIBLE FOR THESE REMOVALS. SEE SPECIAL PROVISIONS.

NO.	DATE	REVISION					BY		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION									
STRUCTURE B-40-1412 (004)									
CONST. SPEC.		2004		DRAWN BY		EKM		PLANS CK'D. KES	
PIER P4-004 FOOTING PLAN							SHEET 230 OF 432		

BAR INFORMATION						BAR DIMENSIONS										LOCATION	REMARKS
BAR MARK	COAT	NO. REQ'D	CUT LENGTH	TOTAL WT (LB)	BEND TYPE	A	B	C	D	E	F	G	H	J			
D1001		36	60'-0"	9294	1	60'-0"										CAISSONS	VERTICAL - BOTTOM
D402		128	8'-11"	762	23	2'-6"	1'-0"									CAISSONS	TIES
D1103		20	60'-0"	6376	1	60'-0"										FOOTING	TOP AND BOTTOM
D404		244	8'-10"	1440	4	3'-0"	3'-0"									FOOTING	STIRRUPS
D905	E	102	12'-2"	4219	8	10'-10"	1'-7"									COLUMNS	VERTICAL - FTG. DOWEL
D906	E	102	19'-6"	6763	1	18'-4"										COLUMNS	VERTICAL
D407	E	15	22'-11"	230	3	3'-10"	7'-4"									COLUMNS	TIES
D408	E	32	14'-3"	305	3	3'-10"	3'-0"									COLUMNS	TIES
D409	E	64	12'-1"	517	14	3'-6"	2'-8"	5"								COLUMNS	TIES
D410	E	4 SERIES OF 13	9'-10" TO 16'-6"	457	3	4'-0"	8" TO 4'-0" BY 3 ³ / ₈ "									COLUMNS	TIES, BUNDLE AND TAG EACH SERIES SEPARATELY
D411	E	20	15'-6"	207	1	15'-6"										COLUMNS	VERTICAL
D612	E	8 SERIES OF 4	3'-2" TO 14'-11"	437	1	3'-2" TO 14'-11" BY 3'-11"										COLUMNS	VERTICAL, BUNDLE AND TAG EACH SERIES SEPARATELY
D413	E	8	7'-6"	40	1	7'-6"										COLUMNS	TOP
D614	E	10	10'-6"	158	1	10'-6"										CAP	BOTTOM @ ENDS
D1015	E	16	15'-6"	1067	1	15'-6"										CAP	BOTTOM
D1016	E	8	38'-0"	1308	9	19'-0"	19'-0"	25.00								CAP	BOTTOM
D617	E	4	13'-6"	81	1	13'-6"										CAP	SIDES
D618	E	4	10'-0"	60	1	10'-0"										CAP	SIDES
D619	E	4	19'-0"	114	1	19'-0"										CAP	SIDES
D820	E	24	36'-6"	2339	1	36'-6"										CAP	SIDES
D1021	E	8	53'-9"	1850	8	1'-9½"	52'-3"									CAP	TOP
D522	E	8 SERIES OF 11	12'-5" TO 14'-7"	1239	3	3'-1" TO 4'-2" BY 1 ¹ / ₄ "	2'-9"									CAP	STIRRUPS, BUNDLE AND TAG EACH SERIES SEPARATELY
D523	E	4 SERIES OF 10	12'-8" TO 16'-8"	615	3	3'-4" TO 5'-4" BY 2 ³ / ₈ "	2'-9"									CAP	STIRRUPS, BUNDLE AND TAG EACH SERIES SEPARATELY
D524	E	10	6'-10"	71	17	2'-0"	3'-3"	2'-0"					62.51	75.00		CAP	VERTICAL @ ENDS
D525	E	69	2'-0"	144	1	2'-0"										CAP	VERTICAL DIAPHRAGM DOWEL
D426	E	70	10'-8"	499	4	4'-6"	1'-10"									CAP	VERTICAL GIRDER SEATS
D427	E	3	2'-8"	5	1	2'-8"										CAP	HORIZONTAL GIRDER SEATS
D428	E	6	12'-0"	48	1	12'-0"										CAP	HORIZONTAL GIRDER SEATS
D1029	E	8	26'-6"	912	8	1'-9½"	25'-0"									CAP	TOP
D430	E	1	13'-8"	9	1	13'-8"										CAP	HORIZONTAL GIRDER SEATS
D431	E	12	37'-6"	301	1	37'-6"										CAP	HORIZONTAL GIRDER SEATS
D532	E	6	5'-8"	35	17	2'-0"	3'-9"	0"						75.00		CAP	VERTICAL @ ENDS
D433	E	2	34'-9"	46	1	34'-9"										CAP	HORIZONTAL GIRDER SEATS
D634		6	60'-0"	541	1	60'-0"										FOOTING	SIDES
D435	E	60	4'-6"	180	13	4'-6"										COLUMNS	TIES
D1036		18	21'-6"	1665	2	20'0"										CAISSONS	VERTICAL - TOP

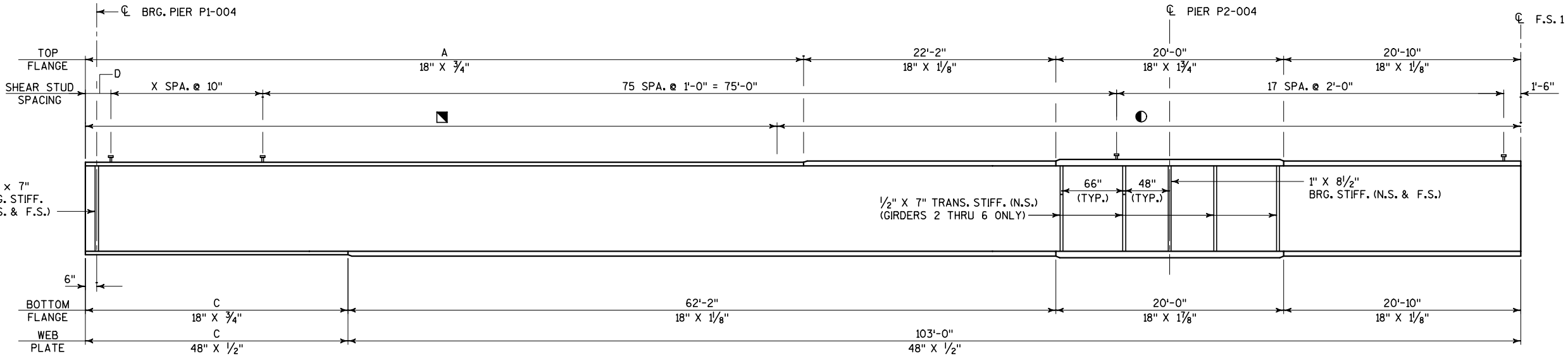


NOTES

1. REINFORCEMENT SCHEDULES AND BREAKDOWNS ARE FOR INFORMATION ONLY. SEE GENERAL NOTES ON SHEET 3 FOR ADDITIONAL INFORMATION.
2. THE FIRST ONE OR TWO DIGITS IN THE BAR MARK DENOTES THE BAR SIZE.
3. THE ENTRY IN THE 'COAT' COLUMN IS DEFINED AS FOLLOWS:
BLANK = UNCOATED
E = EPOXY COATED
4. ALL BENDS AND BAR EXTENSIONS ARE STANDARD AASHTO DIMENSIONS UNLESS OTHERWISE NOTED.
5. BARS ARE SYMMETRIC UNLESS OTHERWISE NOTED.
6. BAR SERIES ARE INDICATED BY A CUT LENGTH AND ONE DIMENSION THAT VARIES. BAR SERIES INFORMATION IS LOCATED IN THE BAR CHART.

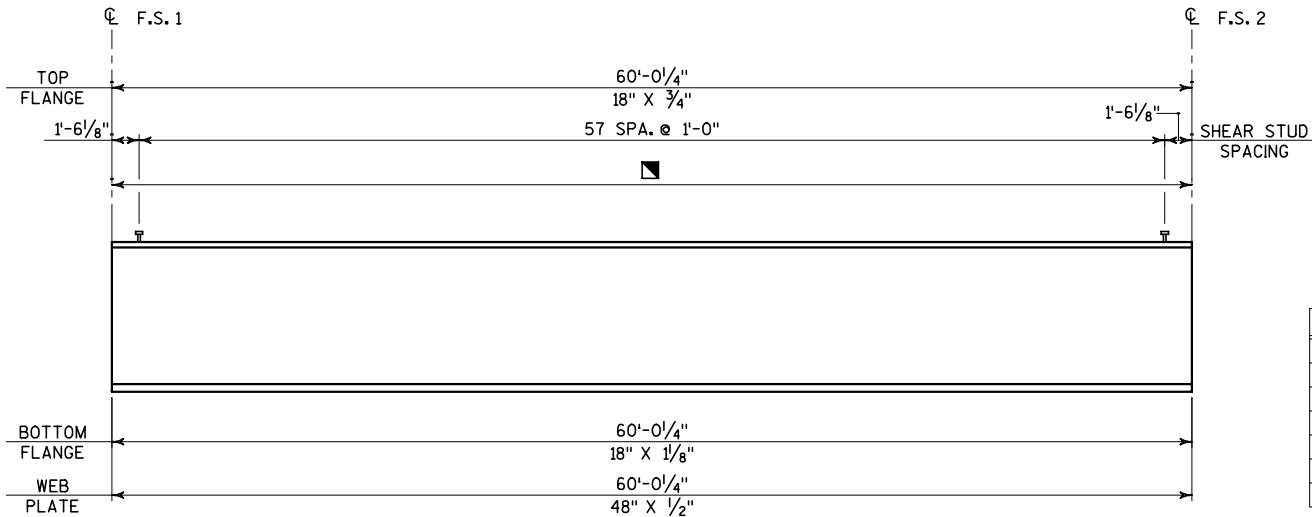
TOTAL NON-EPOXY REINFORCEMENT	WT (LB)	20,080
TOTAL EPOXY REINFORCEMENT	WT (LB)	24,260

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PIER P4-004 REINF. SCHEDULE			SHEET 231 OF 432



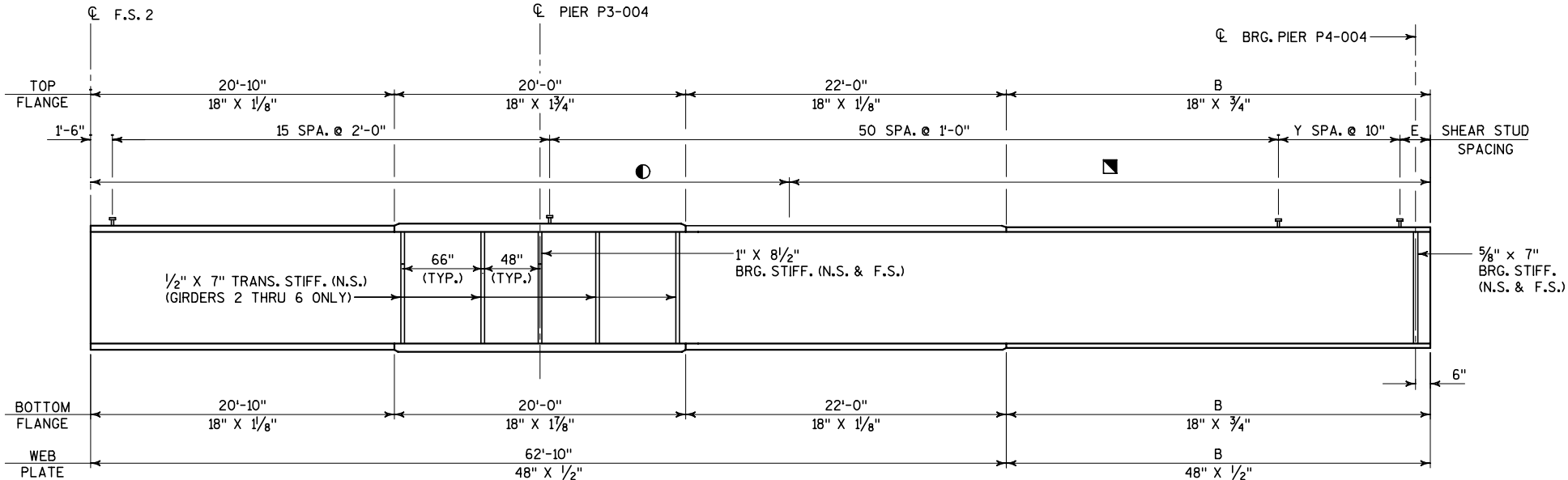
GIRDER ELEVATION

(CL PIER P1-004 TO CL F.S.1 - GIRDERS 1 THRU 7)



GIRDER ELEVATION

(CL F.S.1 TO CL F.S.2 - GIRDERS 1 THRU 7)



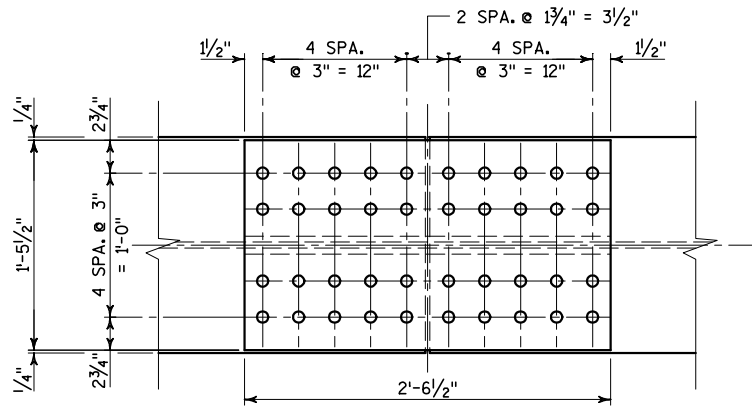
GIRDER ELEVATION

(CL F.S.2 TO CL PIER P4-004 - GIRDERS 1 THRU 7)

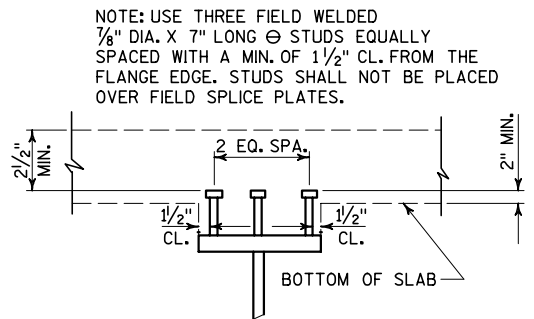
NOTES:

- WELD INTERMEDIATE STIFFENERS ON THE TOP FLANGE IN THIS AREA. FIELD WELDING ON THE BOTTOM FLANGE IS PROHIBITED IN THIS AREA.
- WELD INTERMEDIATE STIFFENERS ON THE BOTTOM FLANGE IN THIS AREA. FIELD WELDING ON THE TOP FLANGE FOR ANY PURPOSE IS PROHIBITED IN THIS AREA EXCEPT FOR SHEAR STUD CONNECTIONS.
- FOR ALL FLANGE AND WEB PLATES OVER 60'-0" LONG. IF USED, THE LOCATION OF THE SPLICE SHALL BE SHOWN ON SHOP DRAWINGS AND WILL BE SUBJECT TO THE APPROVAL OF THE STRUCTURES DESIGN SECTION.
- OPTIONAL FLANGE BUTT SPLICE. A FLANGE PLATE OF THE LARGER SIZE MAY BE FURNISHED FULL LENGTH, BUT PAY WEIGHT SHALL BE BASED ON SECTIONS AS DETAILED.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2003	DRAWN BY EKM	PLANS CK'D. KES
PLATE GIRDER ELEVATION			SHEET 232 OF 432

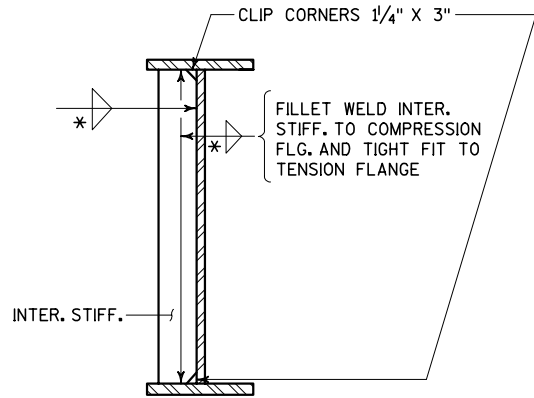


TOP FLANGE



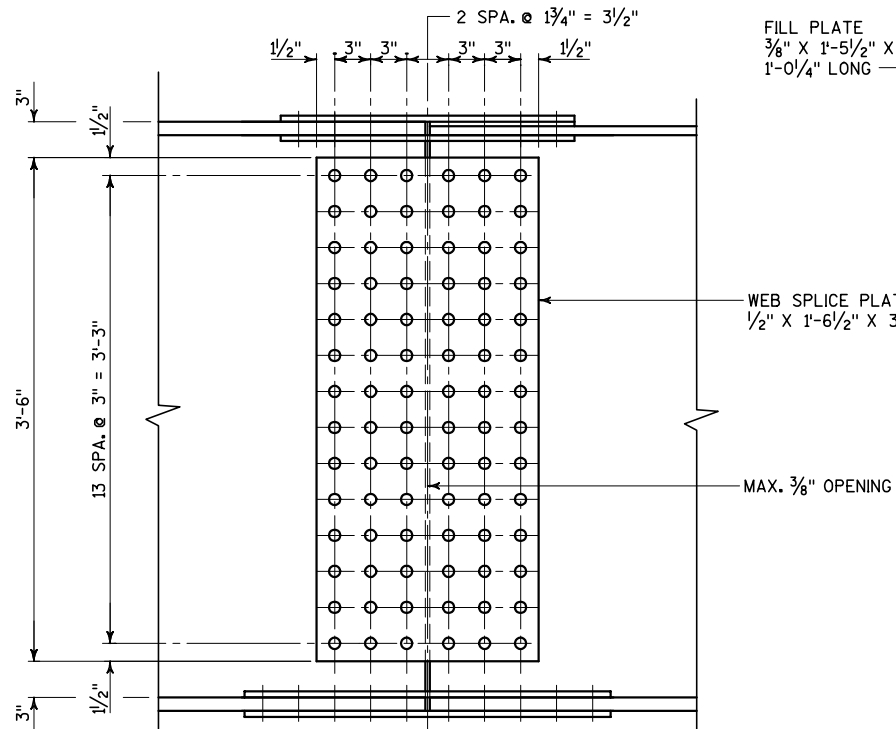
Ø USE DIFFERENT LENGTH STUDS IF 2" MIN. CLEARANCE OR EXTENSION CRITERIA IS VIOLATED.

SHEAR CONN. DETAILS

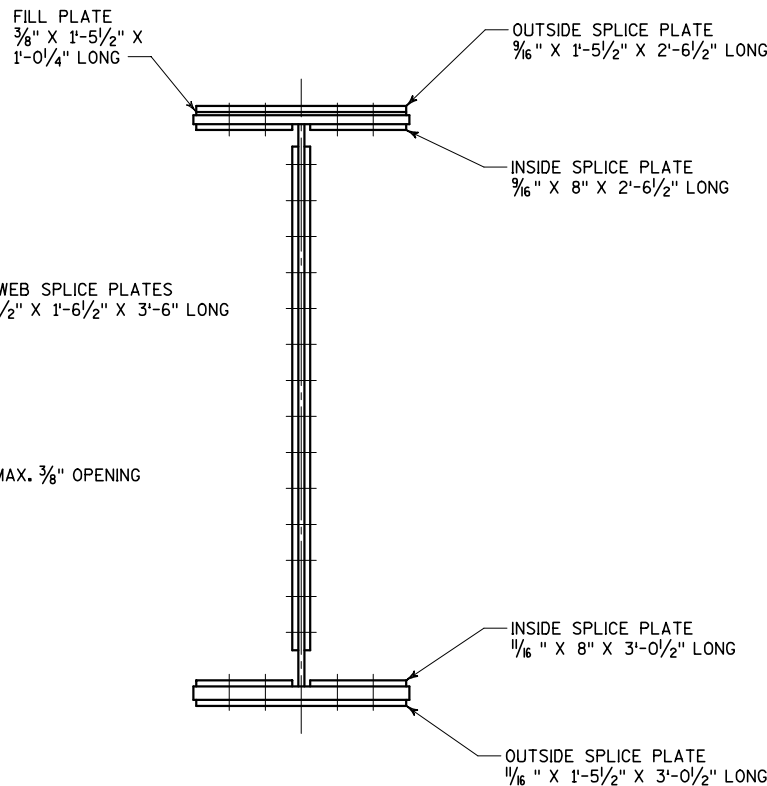


INTERMEDIATE STIFFENER DETAILS

(ALL GIRDERS)

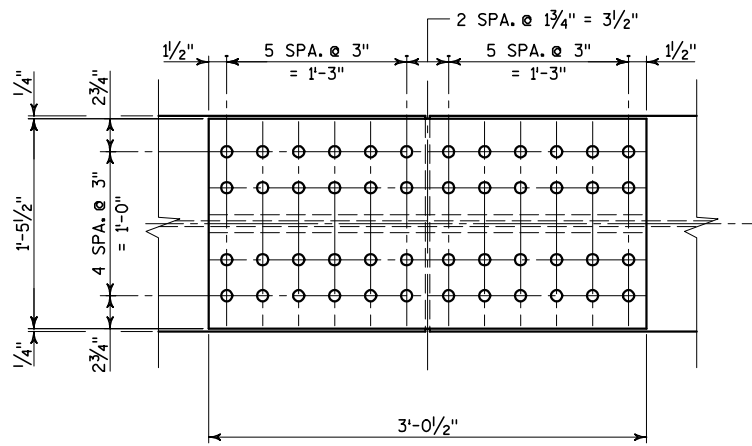


WEB



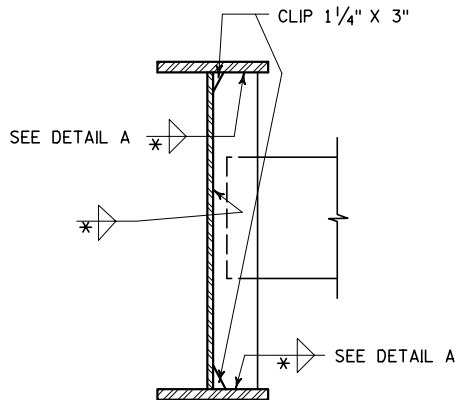
FIELD SPLICE 1 & 2 SECTION

ALL BOLTS 7/8" Ø A325 H.S. BOLTS
ALL BOLT HOLES STD. SIZE (15/16" Ø)

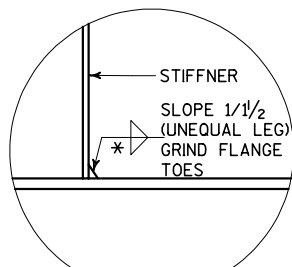


BOTTOM FLANGE

FIELD SPLICE 1 & 2 DETAIL

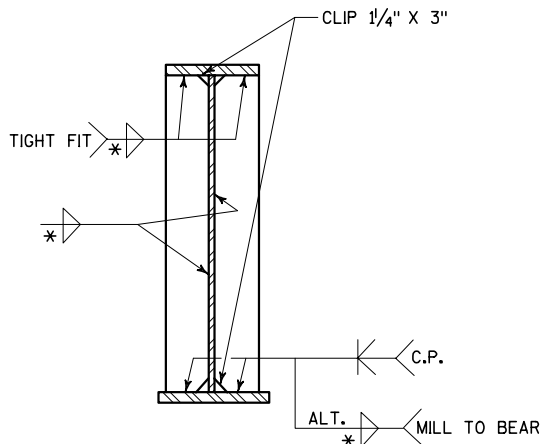


CONNECTION STIFF. DETAILS



DETAIL A

CONNECTION STIFFENER
DETAIL @ TENSION FLANGE



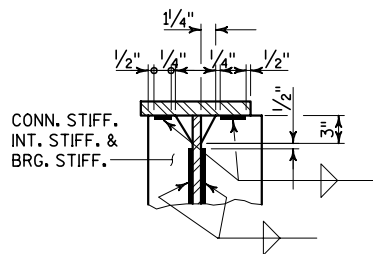
BRG. STIFF. DETAILS
TYP. AT PIERS

* TABLE OF FILLET WELD SIZES

MATERIAL THICKNESS OF THICKER PART JOINED.	± MIN. SIZE OF FILLET WELD
TO 1/2" INCLUSIVE	3/16"
OVER 1/2" TO 3/4"	1/4"
OVER 3/4" TO 1 1/2"	Δ 5/16"
OVER 1 1/2" TO 2 1/4"	Δ 3/8"
OVER 2 1/4" TO 6"	Δ 1/2"

± EXCEPT THAT THE WELD SIZE SHALL NOT EXCEED THE THICKNESS OF THE THINNER PART JOINED.

Δ MIN. PASS SIZE IS 5/16"

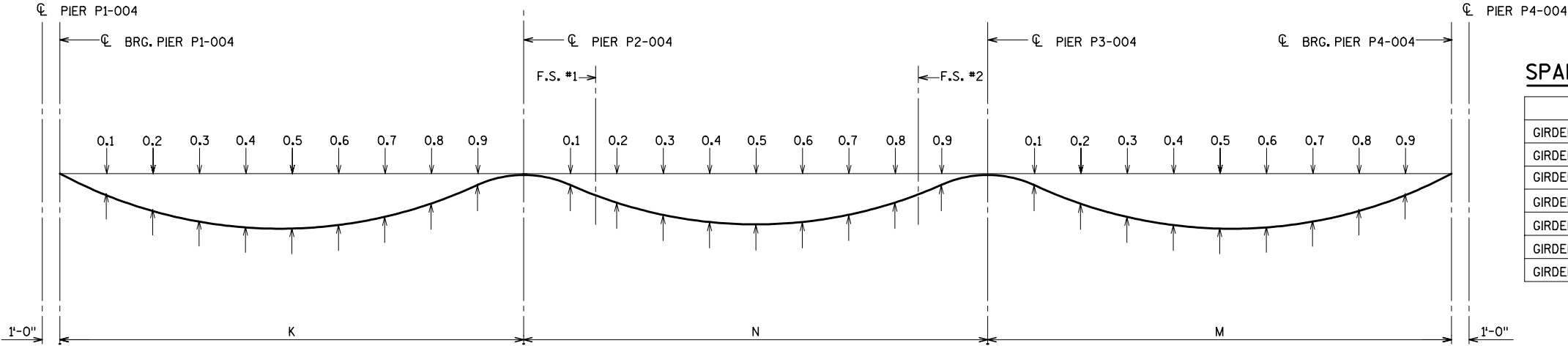


STIFF & CONN. STIFF.
TO WEB/FLANGE
CONN. WELDS

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PLATE GIRDER DETAILS			SHEET 233 OF 432

SPAN DIMENSIONS

	K	N	M
GIRDER 1	94'-8 ⁷ / ₈ "	121'-8 ¹ / ₄ "	60'-6 ¹ / ₈ "
GIRDER 2	93'-10 ¹ / ₂ "	121'-8 ¹ / ₄ "	61'-4 ³ / ₈ "
GIRDER 3	93'-0 ¹ / ₈ "	121'-8 ¹ / ₄ "	62'-2 ¹¹ / ₁₆ "
GIRDER 4	92'-1 ⁹ / ₁₆ "	121'-8 ¹ / ₄ "	63'-1"
GIRDER 5	91'-3 ¹ / ₂ "	121'-8 ¹ / ₄ "	63'-11 ⁵ / ₁₆ "
GIRDER 6	90'-5 ³ / ₁₆ "	121'-8 ¹ / ₄ "	64'-9 ¹¹ / ₁₆ "
GIRDER 7	89'-6 ⁷ / ₈ "	121'-8 ¹ / ₄ "	65'-8"



DEAD LOAD DEFLECTION DIAGRAM

DEAD LOAD DEFLECTIONS (FEET)

	SPAN POINT	PIER P1-004	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	PIER P2-004	0.1	0.2	F.S.*1	0.3	0.4	0.5	0.6	0.7	F.S.*2	0.8	0.9	PIER P3-004
GIRDER 1 THRU 7	CONC. DEFL.	0.000	0.039	0.070	0.089	0.095	0.089	0.072	0.048	0.024	0.006	0.000	0.013	0.043	0.062	0.079	0.105	0.115	0.104	0.077	0.061	0.042	0.012	0.000
	TOTAL DEFL.	0.000	0.053	0.095	0.122	0.130	0.122	0.098	0.066	0.032	0.008	0.000	0.020	0.065	0.091	0.115	0.152	0.165	0.150	0.112	0.088	0.061	0.017	0.000

	SPAN POINT	PIER P3-004	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	PIER P4-004
GIRDER 1 THRU 7	CONC. DEFL.	0.000	0.001	0.004	0.008	0.012	0.015	0.017	0.016	0.012	0.007	0.000
	TOTAL DEFL.	0.000	0.002	0.006	0.012	0.017	0.022	0.024	0.022	0.017	0.009	0.000

DEFLECTION NOTES

DEFLECTIONS ARE GIVEN IN DECIMALS OF A FOOT.

NEGATIVE VALUE INDICATES UPWARD DEFLECTION.

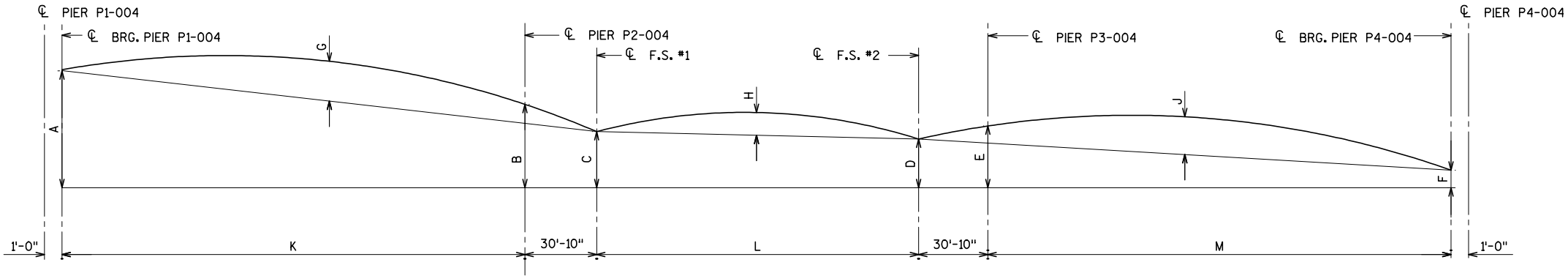
CONCRETE DEFLECTION INCLUDES CONCRETE SLAB, HAUNCH BARRIERS & WEARING SURFACE.

TOTAL DEFLECTION INCLUDES ALL OF ABOVE DEFLECTIONS DUE TO SELF WEIGHT OF STEEL.

TOP OF ERECTED STEEL

	PIER P1-004	PIER P2-004	F.S. #1	F.S. #2	PIER P3-004	PIER P4-004
GIRDER 1	616.99	614.85	614.02	612.96	612.66	611.83
GIRDER 2	617.23	615.10	614.26	613.20	612.90	612.05
GIRDER 3	617.47	615.35	614.51	613.44	613.13	612.27
GIRDER 4	617.71	615.61	614.76	613.68	613.37	612.49
GIRDER 5	617.94	615.86	615.01	613.92	613.61	612.71
GIRDER 6	618.18	616.11	615.27	614.16	613.85	612.93
GIRDER 7	618.44	616.39	615.54	614.42	614.10	613.17

THESE ELEVATIONS ARE TO TOP OF STEEL (SPlice AND COVER PLATE THICKNESS, IF APPLICABLE, ARE ACCOUNTED FOR) AND THEY ARE FOR THE MATERIAL AS ERECTED. THE ELEVATION OF THE TOP STEEL AT THE FIELD SPlice POINTS SHALL BE CHECKED, AND CORRECTED, IF POSSIBLE, AFTER ERECTION AND BEFORE PERMANENTLY BOLTING THE DIAPHRAGMS IN PLACE.



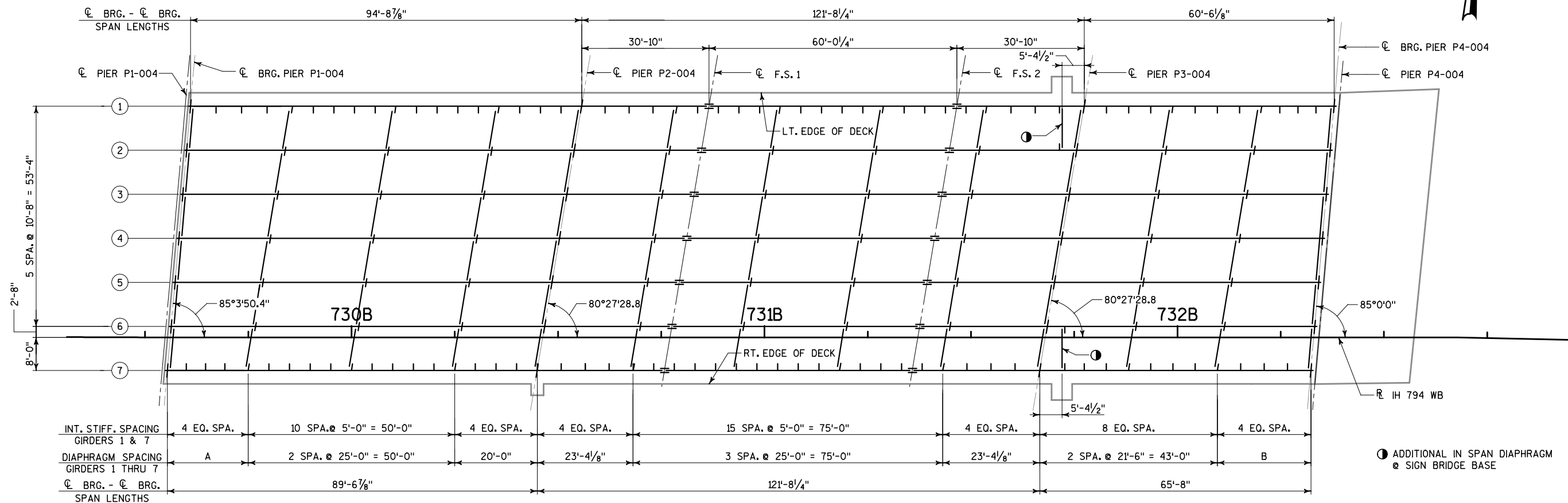
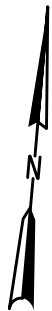
CAMBER & BLOCKING DIAGRAM, GIRDERS 1 THRU 7

CAMBER & BLOCKING DIMENSIONS

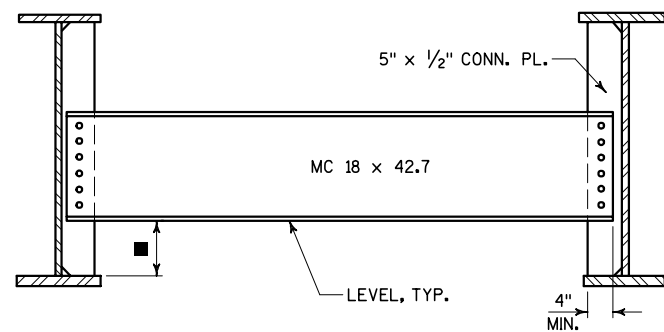
	A	B	C	D	E	F	G	H	J	K	L	M
GIRDER 1	5'-1 ⁵ / ₁₆ "	2'-11 ⁵ / ₁₆ "	2'-1 ³ / ₈ "	1'-0 ¹¹ / ₁₆ "	0'-9"	0'-0"	1 ⁵ / ₁₆ "	1 ¹³ / ₁₆ "	3 ³ / ₄ "	94'-8 ⁷ / ₈ "	60'-0 ¹ / ₄ "	60'-6 ¹ / ₈ "
GIRDER 2	5'-4 ³ / ₁₆ "	3'-2 ⁵ / ₁₆ "	2'-4 ⁵ / ₁₆ "	1'-3 ³ / ₁₆ "	11 ⁷ / ₈ "	0'-2 ⁵ / ₈ "	1 ⁵ / ₁₆ "	1 ¹³ / ₁₆ "	3 ³ / ₄ "	93'-10 ¹ / ₂ "	60'-0 ¹ / ₄ "	61'-4 ³ / ₈ "
GIRDER 3	5'-7 ¹¹ / ₁₆ "	3'-5 ⁵ / ₁₆ "	2'-7 ⁵ / ₁₆ "	1'-6 ⁷ / ₁₆ "	1'-2 ¹¹ / ₁₆ "	0-5 ¹ / ₄ "	1 ⁵ / ₁₆ "	1 ¹³ / ₁₆ "	3 ³ / ₄ "	93'-0 ¹ / ₈ "	60'-0 ¹ / ₄ "	62'-2 ¹¹ / ₁₆ "
GIRDER 4	5'-10 ⁹ / ₁₆ "	3'-8 ³ / ₈ "	2'-10 ⁹ / ₁₆ "	1'-9 ⁵ / ₁₆ "	1'-5 ⁵ / ₁₆ "	0'-7 ¹⁵ / ₁₆ "	1 ⁵ / ₁₆ "	1 ¹³ / ₁₆ "	3 ³ / ₄ "	92'-1 ³ / ₁₆ "	60'-0 ¹ / ₄ "	63'-1"
GIRDER 5	6'-1 ⁵ / ₁₆ "	3'-11 ³ / ₈ "	3'-1 ⁵ / ₁₆ "	2'-0 ¹ / ₄ "	1'-8 ⁷ / ₁₆ "	0'-10 ⁹ / ₁₆ "	1 ⁵ / ₁₆ "	1 ¹³ / ₁₆ "	3 ³ / ₄ "	91'-3 ¹ / ₂ "	60'-0 ¹ / ₄ "	63'-11 ⁵ / ₁₆ "
GIRDER 6	6'-4 ³ / ₁₆ "	4'-2 ¹ / ₂ "	3'-4 ³ / ₈ "	2'-3 ¹ / ₈ "	1'-11 ¹ / ₄ "	1'-1 ³ / ₁₆ "	1 ⁵ / ₁₆ "	1 ¹³ / ₁₆ "	3 ³ / ₄ "	90'-5 ³ / ₁₆ "	60'-0 ¹ / ₄ "	64'-9 ¹¹ / ₁₆ "
GIRDER 7	6'-7 ¹ / ₁₆ "	4'-5 ³ / ₄ "	3'-7 ⁵ / ₈ "	2'-6 ¹ / ₄ "	2'-2 ³ / ₈ "	1'-4 ¹ / ₁₆ "	1 ⁵ / ₁₆ "	1 ¹³ / ₁₆ "	3 ³ / ₄ "	89'-6 ⁷ / ₈ "	60'-0 ¹ / ₄ "	65'-8"

DIMENSIONS G, H, AND J PROVIDED AT MID-POINT OF FABRICATED GIRDER SEGMENT.

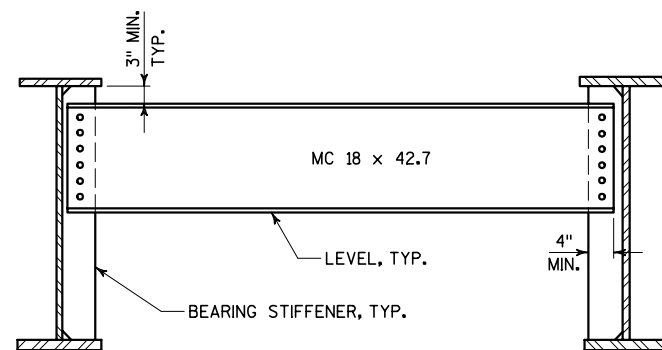
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CKD. KES
CAMBER, BLOCKING & DEFLECTIONS			SHEET 234 OF 432



FRAMING PLAN



DIAPHRAGM DETAIL IN SPANS & AT PIERS

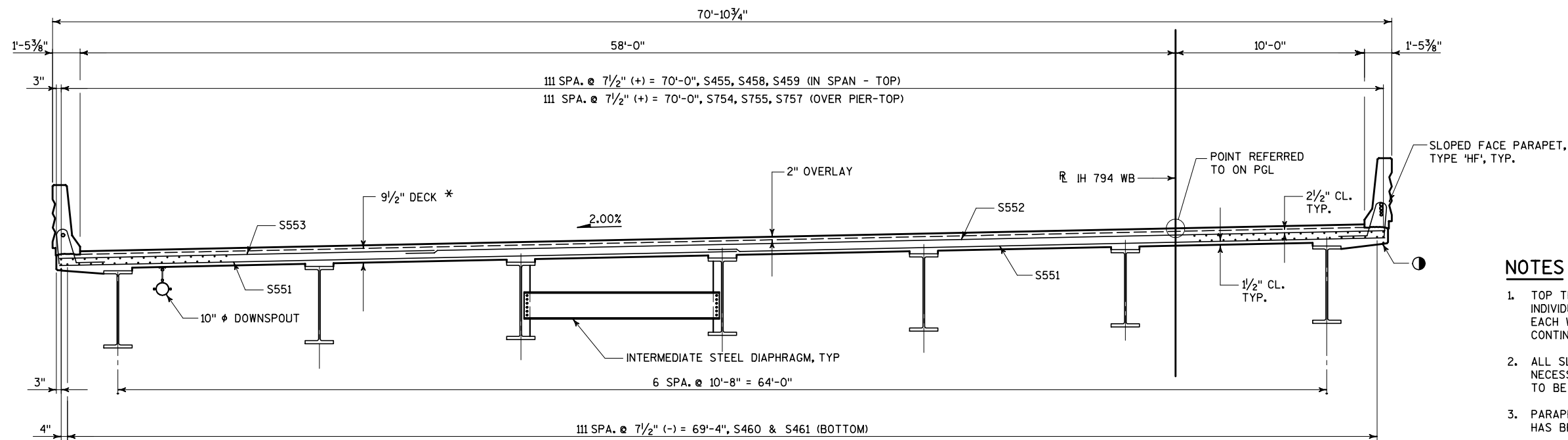


END DIAPHRAGM DETAIL

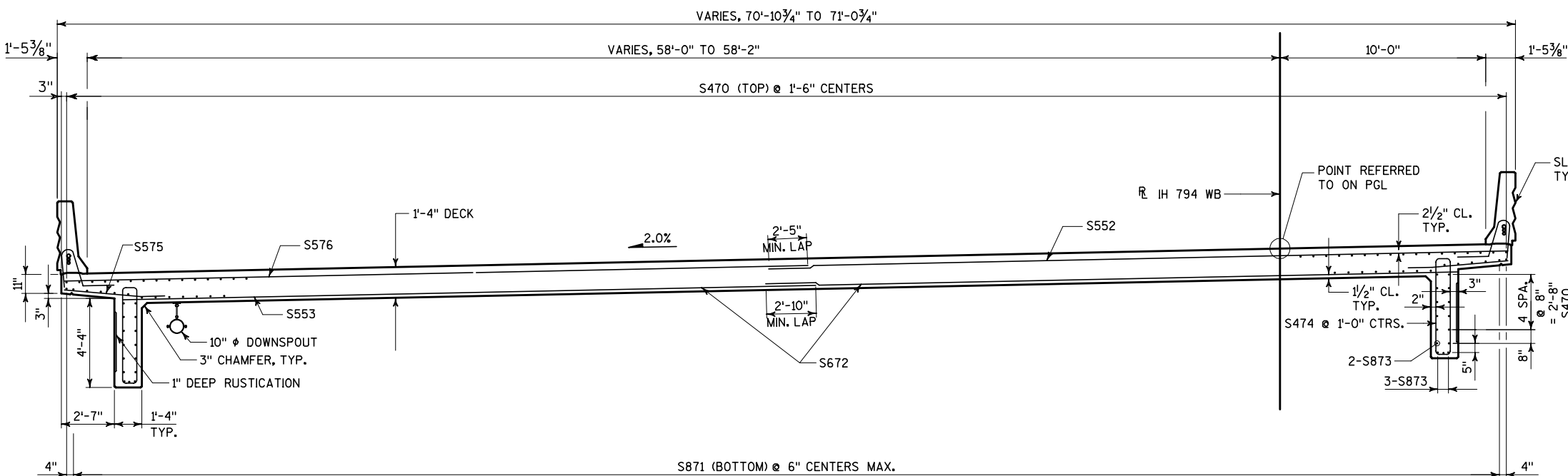
GIRDER NO.	A	B
1	24'-8 7/8"	17'-6 1/8"
2	23'-10 1/2"	18'-4 3/8"
3	23'-0 1/8"	19'-2 3/4"
4	22'-1 1/8"	20'-1"
5	21'-3 1/2"	20'-11 3/8"
6	20'-5 1/4"	21'-9 5/8"
7	19'-6 1/8"	22'-8"

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-142 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
GIRDER FRAMING PLAN			SHEET 235 OF 432

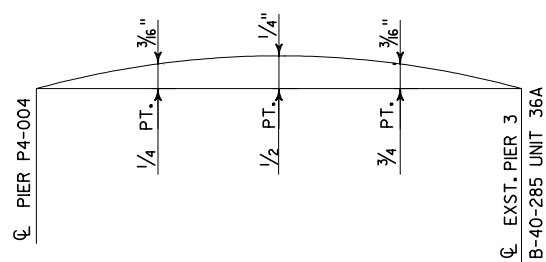
NO.	DATE	REVISION			BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION					
STRUCTURE B-40-1412 (004)					
CONST. SPEC.		2004	DRAWN BY	DJS	PLANS CK'D. KES
DECK PLAN/ REINFORCEMENT				SHEET 236 OF 432	

**TYPICAL SECTION AT PIER**

48" STEEL PLATE GIRDERS
(SPANS 1 THRU 3, LOOKING EAST, PIERS 2 & 3 SHOWN)

**FLAT SLAB SECTION**

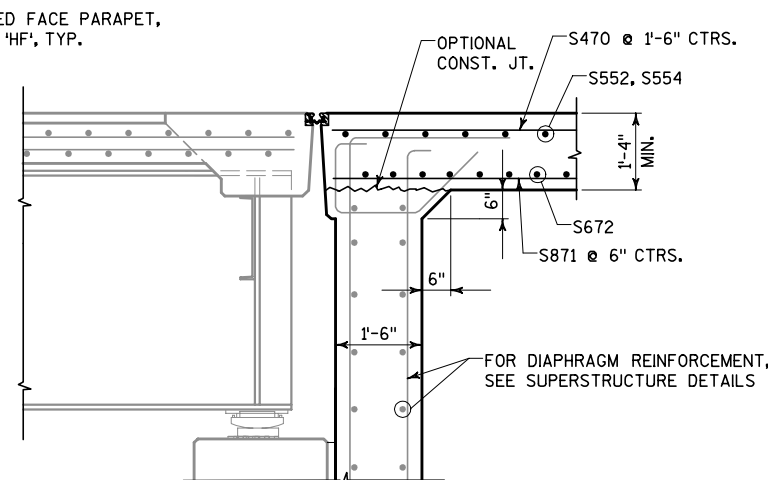
(SPAN 4, LOOKING EAST, PIERS 4 & EXISTING SHOWN)
(DIMENSIONS ARE GIVEN PERPENDICULAR TO R IH 794 WB)

**CAMBER DIAGRAM**

CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM OR FALSEWORK DEFLECTIONS.

NOTES

- TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGIT. BARS SHALL BE SUPPORTED BY CONTINUOUS CHAIRS AT APPROXIMATELY 4'-0" CENTERS.
- ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).
- PARAPETS AND SIGN BRIDGE BASE SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED EXCEPT FOR STAGE CONSTRUCTION.
- $\frac{3}{4}$ " CONTINUOUS DRIP GROOVE TO END 2'-0" AWAY FROM FACE OF DIAPHRAGM, TYP. EACH SIDE OF SLAB.

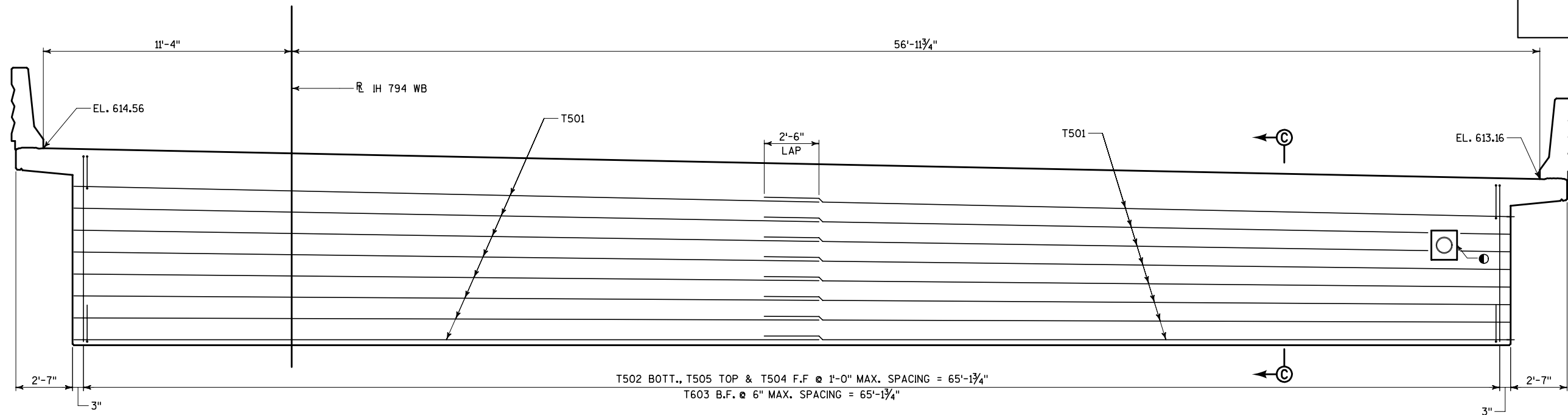
**PART. SECTION AT DIAPHRAGM**

(PIER P4-004 SHOWN, EXST. PIER 3 OF B-40-285 UNIT 36A SIMILAR)

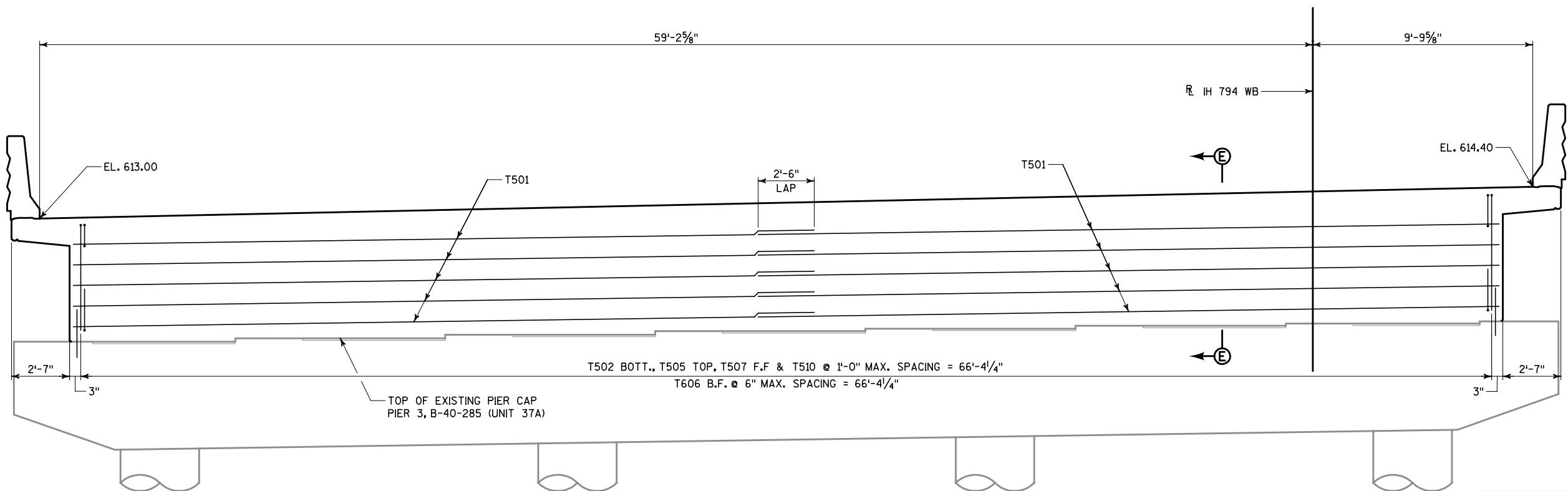
NOTE:

- * THE CONTRACTOR HAS THE OPTION TO USE PRECAST CONCRETE DECK PANELS INSTEAD OF TRADITIONAL FORMING METHODS. SEE SHEET 392 FOR DETAILS.

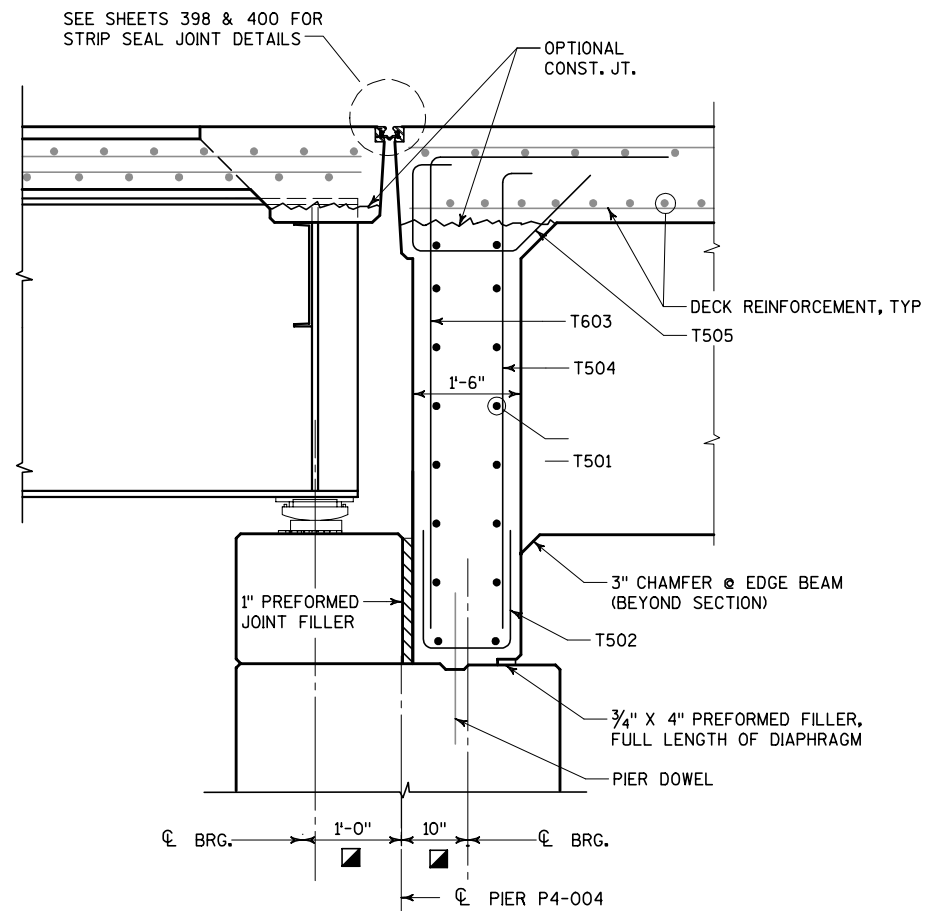
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-142 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CKD. KES
DECK CROSS SECTION			SHEET 237 OF 432

**ELEVATION VIEW AT PIER P4-004**(LOOKING WEST - DIMENSIONS & ELEVATIONS GIVEN ALONG $\mathcal{C}$ PIER P4-004)

1'-2" WIDE X 1'-4" HIGH BLOCKOUT FOR 10" ϕ DOWNSPOUT. FIELD CUT DIAPHRAGM REINFORCEMENT AROUND DOWNSPOUT BLOCKOUT

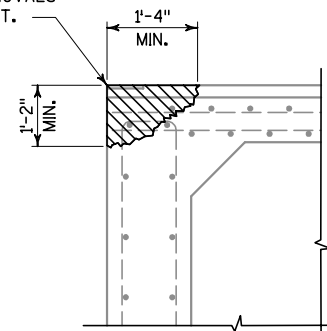
**ELEVATION VIEW AT EXISTING PIER 3**(LOOKING EAST - DIMENSIONS & ELEVATIONS GIVEN ALONG $\mathcal{C}$ EXISTING PIER 3, STRUCTURE B-40-285 UNIT 36A)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
SUPERSTRUCTURE DETAILS 1		SHEET 238 OF 432	

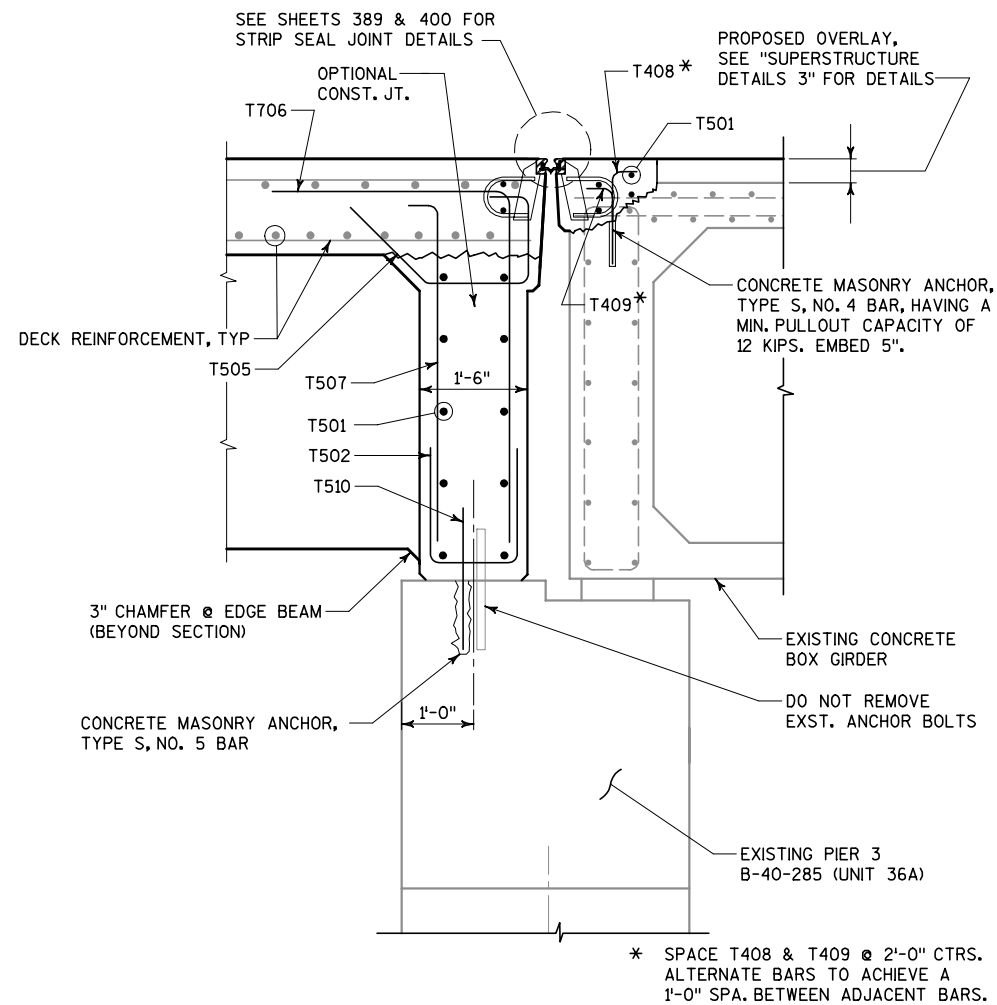


SECTION C-C

REMOVE EXISTING STEEL PLATE JOINT AND CONCRETE TO DIMENSIONS SHOWN. SALVAGE AND INCORPORATE LONGITUDINAL DECK STEEL AND STIRRUP INTO PROPOSED WORK. REMOVAL IS INCLUDED IN THE LUMP SUM PAY ITEM THAT COVERS ALL EXISTING STRUCTURAL REMOVALS REQUIRED IN THE CONTRACT.



REMOVAL DETAIL A



SECTION E-E

LEGEND

■ DIMENSIONS GIVEN PERPENDICULAR TO CL PIER

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
SUPERSTRUCTURE DETAILS 2			SHEET 239 OF 432

SEE "PARAPET SECTIONS" FOR
EXISTING SECTION DETAIL.2" MIN. POLYMER MODIFIED
ASPHALT OVERLAY. REMOVE
EXISTING 2" OVERLAY PRIOR
TO PLACEMENT.END OVERLAY
STA. 733B+30.00SAWCUT EXISTING OVERLAY.
THIS ITEM IS INCLUDED IN THE
PAY ITEM "REMOVING ASPHALT
SURFACE MILLING".

B-40-1312 (004)

STRIP SEAL EXP. DEVICE

STRIP SEAL EXP. DEVICE

732B

STA 732B+34.28

STA 732B+56.85

CL PIER P4-004

CL EXIST. PIER 3, B-40-285 (36A)

CL PIER 1
TEMPORARY
STRUCTURE T5

733B

R IH 794 WB

STA 733B+30.00

EXISTING STRUCTURE
B-40-285 (37A)

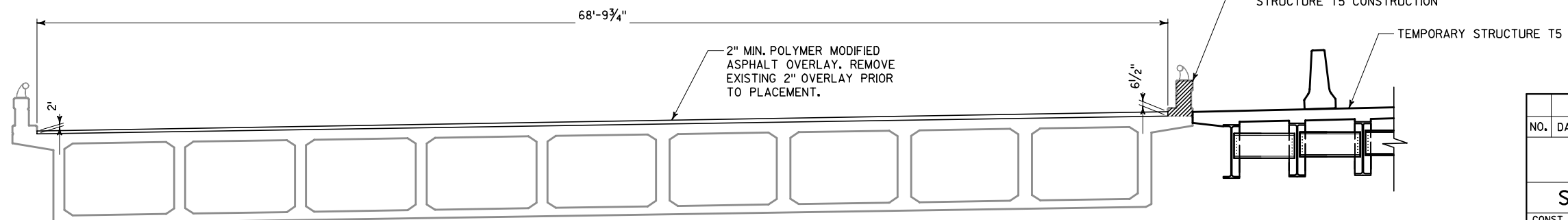
734B

STRUCTURE T5

CL PIER 2
TEMPORARY
STRUCTURE T5

PLAN

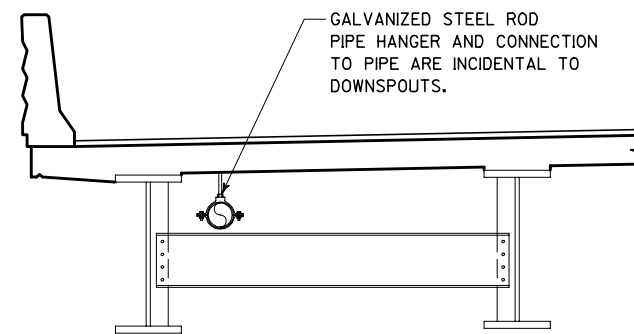
(STRUCTURE B-40-1412 (004), EXISTING STRUCTURE B-40-285 (37A), AND TEMPORARY STRUCTURE T5 SHOWN)



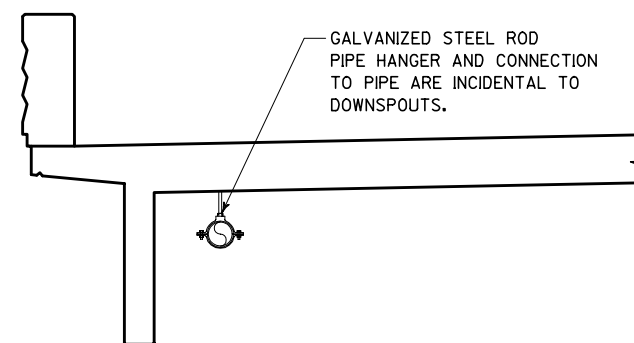
PARTIAL SECTION

(EXISTING STRUCTURE B-40-285 (37A) OVERLAY AT EXPANSION JOINT - STA. 732B+57.26)

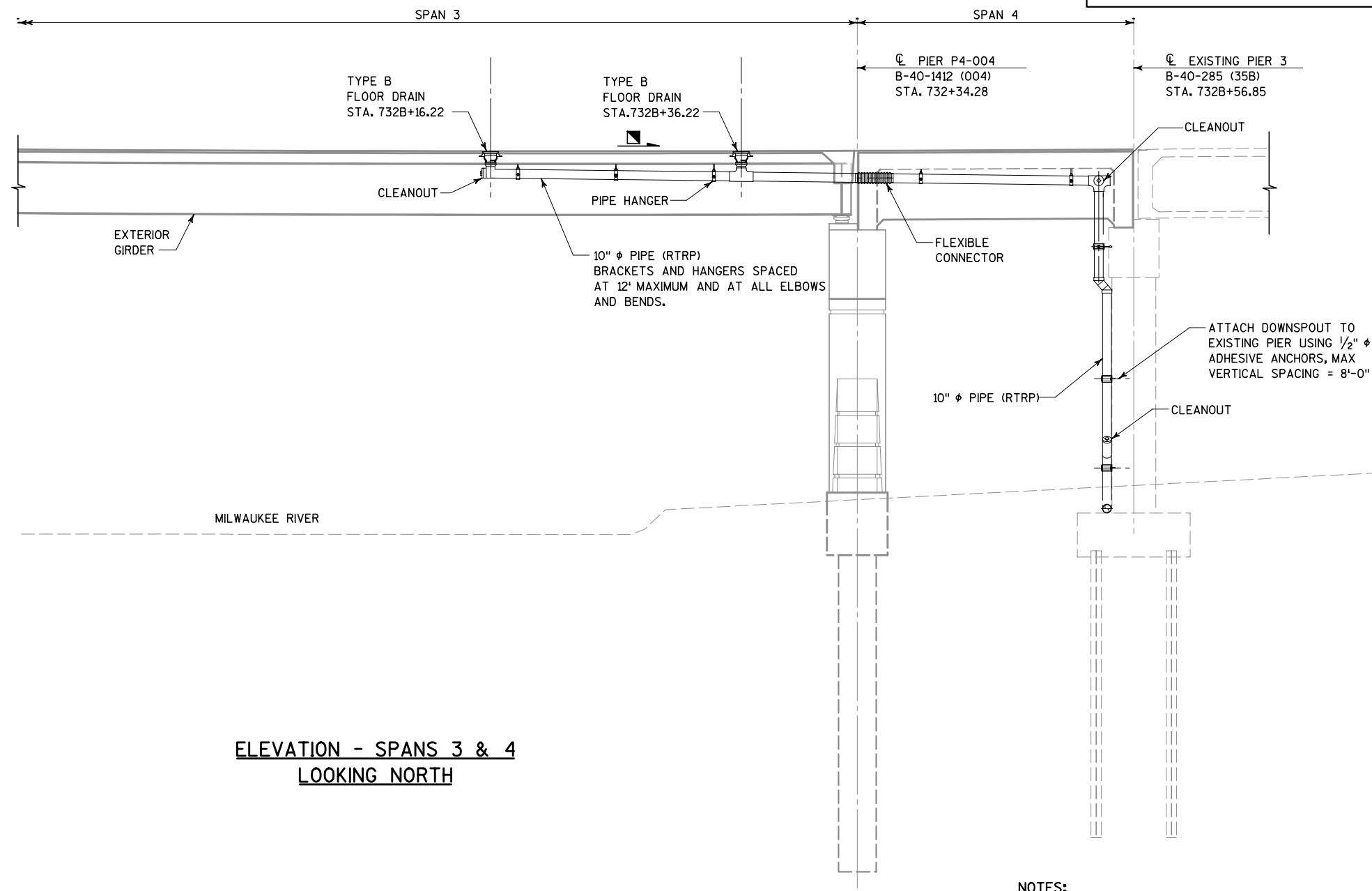
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
SUPERSTRUCTURE DETAILS 3			SHEET 240 OF 432

**HANGER DETAIL**

(SPAN 3)

**HANGER DETAIL**

(SPAN 4)

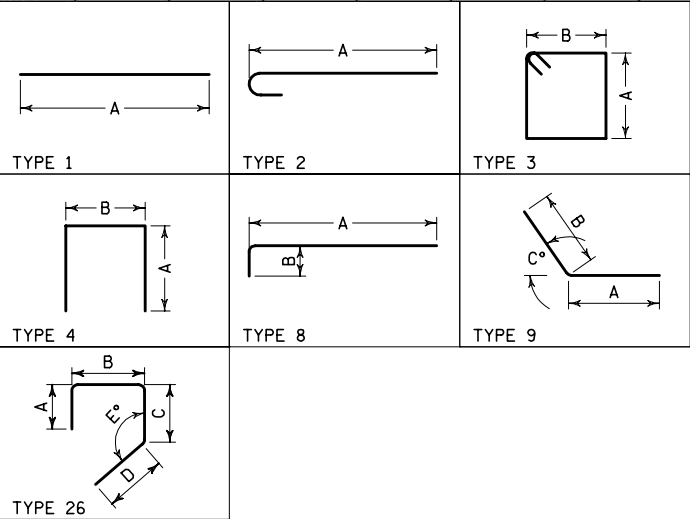
**ELEVATION - SPANS 3 & 4
LOOKING NORTH****NOTES:**

- THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE DOWNSPOUT MAY BE ALTERED TO AVOID INTERFERENCE WITH THE GIRDER CROSS FRAME DIAPHRAGMS. MAINTAIN 2% MINIMUM SLOPE AND TRANSITION TO STEEPER SLOPE AS SOON AS POSSIBLE.

ALL FITTINGS, ELBOWS, FUNNELS, CLEANOUTS, STRAPS, HANGERS, AND BOLTS REQUIRED FOR ATTACHING THE DOWNSPOUT TO THE STRUCTURE ARE INCIDENTAL TO THE BID ITEM "DOWNSPOUT 10-INCH".

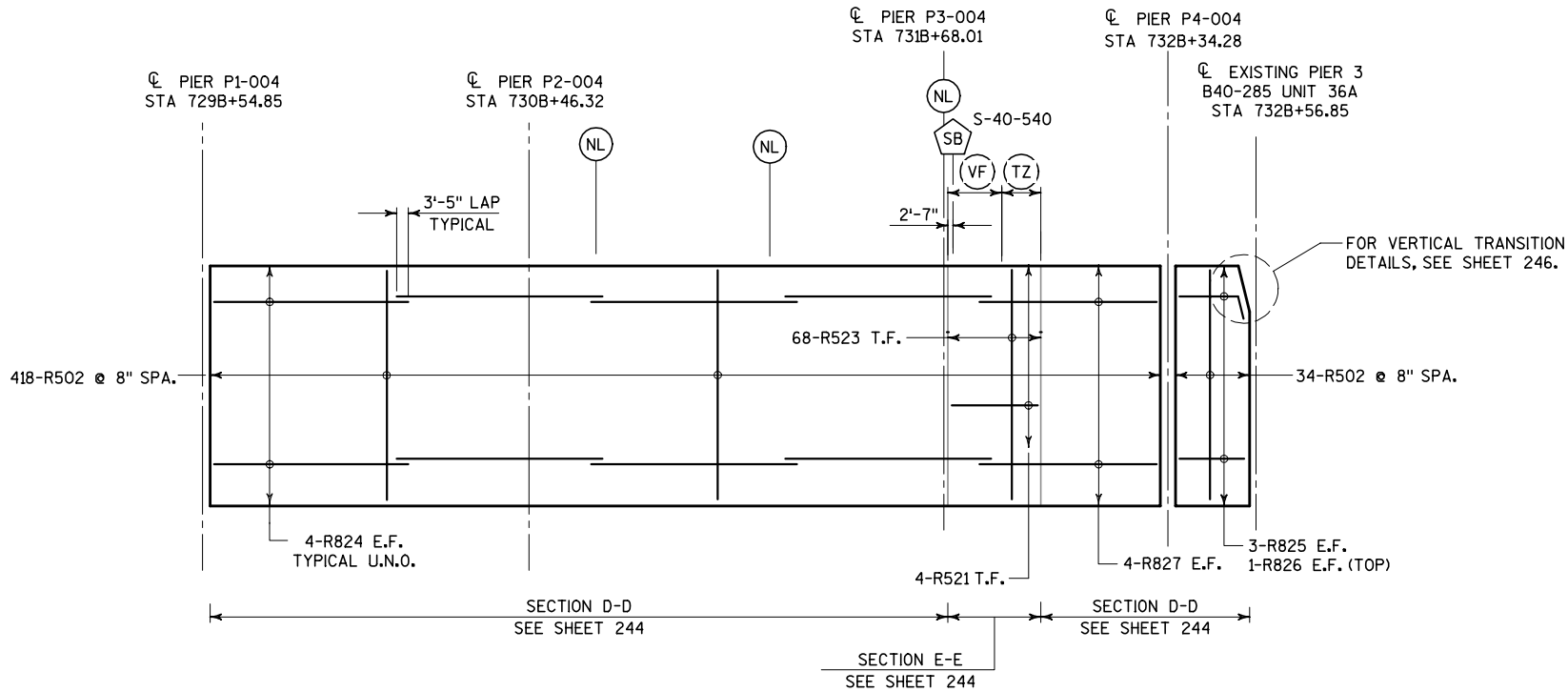
NO.	DATE	REVISION		BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION				
STRUCTURE B-40-1412 (004)				
CONST. SPEC.	2004	DRAWN BY	RWN	PLANS CK'D. PJC
SUPERSTRUCTURE DETAILS 4			SHEET 241 OF 432	

BAR INFORMATION						BAR DIMENSIONS										LOCATION	REMARKS
BAR MARK	COAT	NO. REQ'D	CUT LENGTH	TOTAL WT (LB)	BEND TYPE	A	B	C	D	E	F	G	H	J			
S501	E	936	5'-4"	5206	11	1'-9"	159°	2"	2'-0"	1'-0"	116°				STANDARD PARAPET DOWELS		
S602	E	7	6'-6"	68	9	3'-3'	3'-3'	83°							LIGHT POLE BASE PARAPET DOWELS		
S603	E	18	6'-5"	173	8	3'-3"	3'-3"								EXTRA TOP AT SIGN BRIDGES		
S605	E	12	14'-9"	266	2	14'-0"									LIGHT POLE BASE EXTRA TRANSVERSE		
S507	E	5	4'-2"	22	9	1'-11"	2'-3"	15°							LIGHT POLE BASE EXTRA DOWELS		
S811	E	64	18'-10"	3218	8	18'-0"	1'-0"								EXTRA TOP AT SIGN BRIDGES		
S817	E	24	12'-11"	828	2	12'-0"									EXTRA TOP/BOTTOM AT SIGN BRIDGES		
S551	E	880	36'-6"	33501	1	36'-6"									SLAB BOTTOM - TRANSVERSE - SPANS 1 THRU 3		
S552	E	437	44'-8"	20359	1	44'-8"									SLAB TOP - TRANSVERSE - SPANS 1 THRU 3		
S553	E	437	28'-4"	12914	1	28'-4"									SLAB TOP - TRANSVERSE - SPANS 1 THRU 3		
S754	E	113	55'-0"	12703	1	55'-0"									SLAB TOP - LONGITUDINAL - OVER PIER P3-004		
S455	E	226	29'-11"	4516	1	29'-11"									SLAB TOP - LONGITUDINAL - SPAN 1		
S756	E	113	15'-0"	3465	1	15'-0"									SLAB TOP - LONGITUDINAL - SPAN 1		
S757	E	113	60'-0"	13858	1	60'-0"									SLAB TOP - LONGITUDINAL - OVER PIER P2-004		
S458	E	226	30'-8"	4630	1	30'-8"									SLAB TOP - LONGITUDINAL - SPAN 2		
S459	E	226	24'-1"	3636	1	24'-1"									SLAB TOP - LONGITUDINAL - SPAN 3		
S460	E	798	40'-0"	21323	1	40'-0"									SLAB BOTTOM - LONGITUDINAL		
S461	E	114	10'-0"	762	1	10'-0"									SLAB BOTTOM - LONGITUDINAL - SPAN 3		
S562	E	60	31'-8"	1982	1	31'-8"									SLAB TOP - TRANSVERSE - AT ENDS	LENGTH VARIES FROM 6'-9" TO 56'-6" IN STEPS OF 7'-1¼" (2 SETS OF 8 BARS)	
S563	E	60	35'-2"	2201	1	35'-2"									SLAB BOTTOM - TRANSVERSE - AT ENDS	LENGTH VARIES FROM 10'-3" TO 60'-0" IN STEPS OF 7'-1¼" (2 SETS OF 8 BARS)	
S470	E	89	22'-0"	1308	1	22'-0"									SLAB TOP - LONGITUDINAL - SPAN 4		
S871	E	144	22'-0"	8459	1	22'-0"									SLAB BOTTOM - LONGITUDINAL - SPAN 4		
S672	E	66	36'-7"	3627	1	36'-7"									SLAB BOTTOM - TRANSVERSE - SPAN 4		
S873	E	10	22'-0"	587	1	22'-0"									EDGE BEAM - BOTTOM - SPAN 4		
S474	E	48	11'-8"	374	3	4'-9"	10"								EDGE BEAM - STIRRUPS - SPAN 4		
S575	E	66	5'-4"	367	1	5'-4"									SLAB BOTTOM - TRANSVERSE - SPAN 4		
S576	E	50	37'-0"	1930	1	37'-0"									SLAB TOP - TRANSVERSE - SPAN 4		
S590	E	36	20'-0"	751	1	20'-0"									SLAB - LONGITUDINAL @ DECK DRAINS		
S694	E	12	10'-11"	197	8	5'-6"	5'-6"								SLAB - TRANSVERSE @ DECK DRAINS		
S599	E	792	6'-0"	4956	2	5'-2"									SLAB TOP - TRANSVERSE @ PARAPET		
T501	E	60	33'-8"	2107	1	33'-8"									DIAPHRAGM HORIZONTAL		
T502	E	131	4'-11"	672	4	2'-0"	1'-1"								DIAPHRAGM VERTICAL		
T603	E	129	10'-2"	2681	8	6'-10"	4'-0"								DIAPHRAGM VERTICAL B.F. P4-004		
T504	E	65	7'-7"	514	8	6'-10"	10"								DIAPHRAGM VERTICAL F.F. P4-004		
T505	E	131	4'-10"	660	26	10"	1'-4"	1'-4"	1'-6"	135°					DIAPHRAGM VERTICAL		
T606	E	130	9'-0"	2391	8	5'-2"	4'-0"								DIAPHRAGM VERTICAL B.F. P3 B-40-285 (36A)		
T507	E	65	7'-11"	537	8	5'-2"	10"								DIAPHRAGM VERTICAL F.F. P3 B-40-285 (36A)		
T408	E	33	1'-9"	39	8	1'-4"	6"								EXIST. SLAB - TOP @ STRIP SEAL		
T409	E	32	1'-5"	30	8	1'-0"	6"								EXIST. SLAB - TOP @ STRIP SEAL		
T510	E	66	2'-0"	138	1	2'-0"									DIAPHRAGM DOWEL VERTICAL F.F. P3 B-40-285 (36A)		
T440	E	2	1'-7"	2	1	1'-7"									EXISTING CURB - HORIZONTAL		
T441	E	3	1'-4"	3	1	1'-4"									EXISTING CURB - DOWEL		
		TOTAL WEIGHT =			173740	LBS											

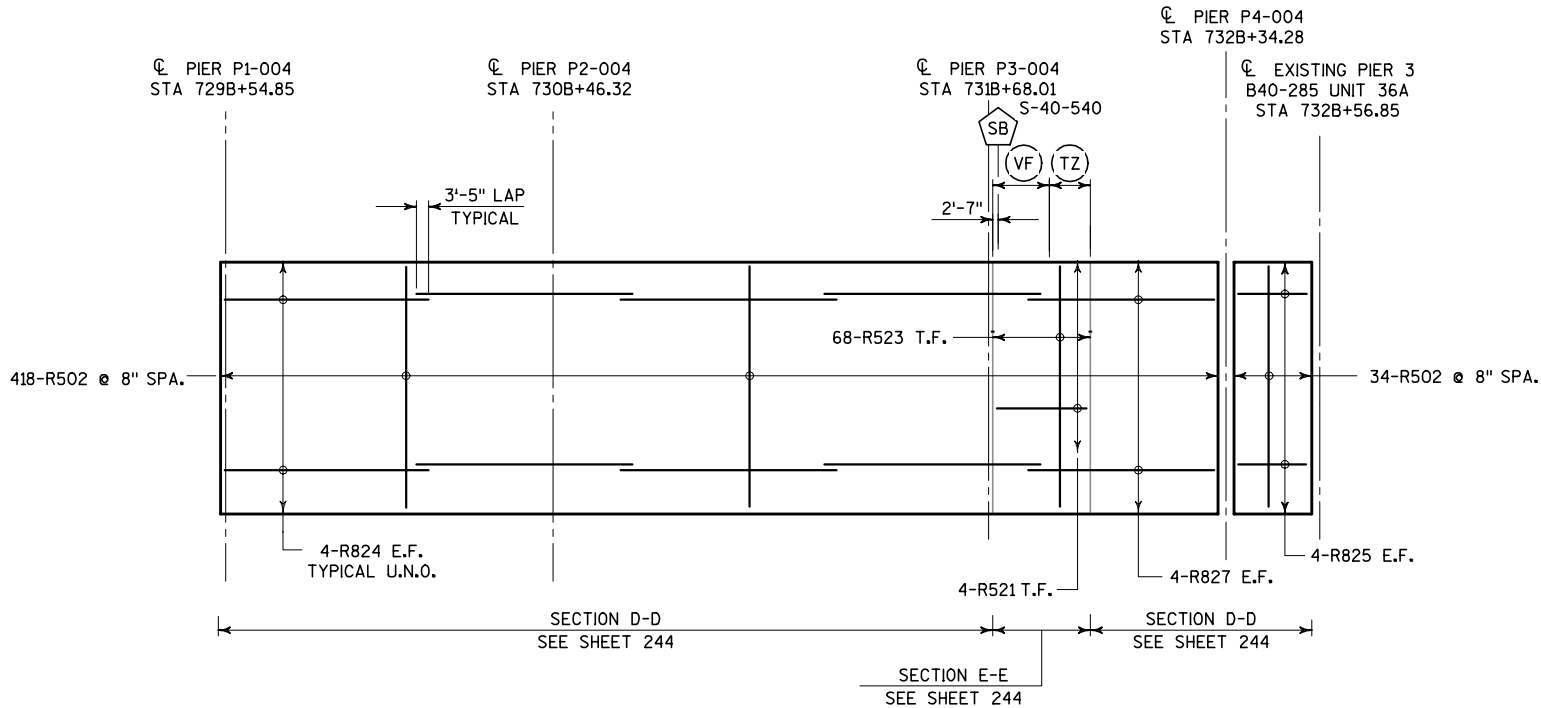


- NOTES:**
1. REINFORCEMENT SCHEDULES AND BREAKDOWNS ARE FOR INFORMATION ONLY. SEE GENERAL NOTES ON SHEET 3 FOR ADDITIONAL INFORMATION.
 2. THE FIRST ONE OR TWO DIGITS IN THE BAR MARK DENOTES THE BAR SIZE.
 3. THE ENTRY IN THE 'COAT' COLUMN IS DEFINED AS FOLLOWS:
BLANK = UNCOATED
E = EPOXY COATED
 4. BAR SERIES ARE INDICATED BY A CUT LENGTH AND ONE DIMENSION THAT VARIES. SEE THE ACCOMPANYING BAR SERIES TABLE FOR SET COUNT AND BAR LENGTHS.
 5. ALL BENDS AND BAR EXTENSIONS ARE STANDARD AASHTO DIMENSIONS UNLESS OTHERWISE NOTED.
 6. BARS ARE SYMMETRIC UNLESS OTHERWISE NOTED.
 7. * DENOTES AVERAGE DIMENSIONS FOR BAR SERIES. SEE 'REMARKS' COLUMN FOR COMPLETE SERIES INFORMATION.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
SUPERSTRUCTURE REINF. SCHEDULE			SHEET 242 OF 432



LEFT SIDE PARAPET ELEVATION
LOOKING LEFT AT TRAFFIC FACE
(NOT TO SCALE - SURFACE FEATURES NOT SHOWN)



RIGHT SIDE PARAPET ELEVATION
LOOKING LEFT AT EXTERIOR FACE
(NOT TO SCALE - SURFACE FEATURES NOT SHOWN)

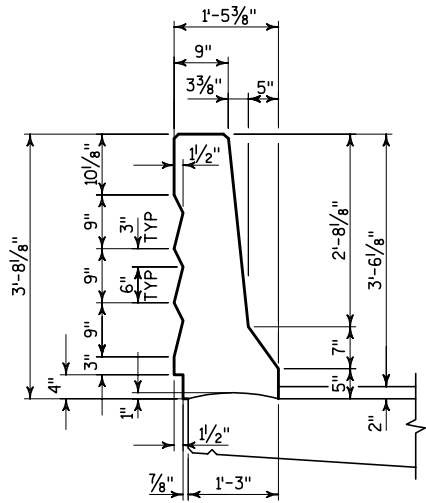
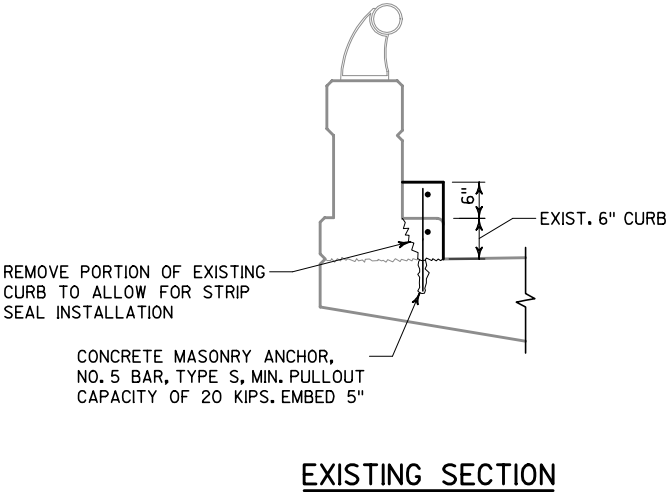
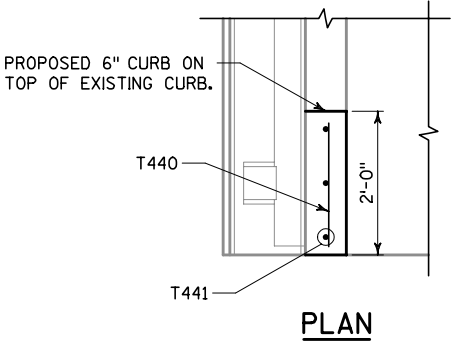
LEGEND

- SB** SIGN BRIDGE MOUNTING LOCATION.
SEE "DECK PLAN / REINFORCEMENT".
- VF** 22'-5" VERTICAL FACE BARRIER SECTION -
SEE SECTION E-E ON SHEET 244.
VERTICAL FACE BEGINS 25'-0" FROM
CENTERLINE SIGN BRIDGE AS SHOWN AND
TERMINATES AT THE DOWNSTREAM END OF
THE SIGN BRIDGE BASE.
- TZ** 20'-0" TRANSITION ZONE FROM SAFETY
SHAPE TO VERTICAL FACE BARRIER - SEE
SECTION E-E ON SHEET 244.
- T.F.** DENOTES BARS LOCATED ON 'TRAFFIC FACE'
OF PARAPET.
- E.F.** DENOTES BARS LOCATED ON BOTH FACES
OF PARAPET ('EACH FACE').
- NL** NAVIGATIONAL LIGHT MOUNTING LOCATION.
SEE LIGHTING SHEETS FOR DETAILS.

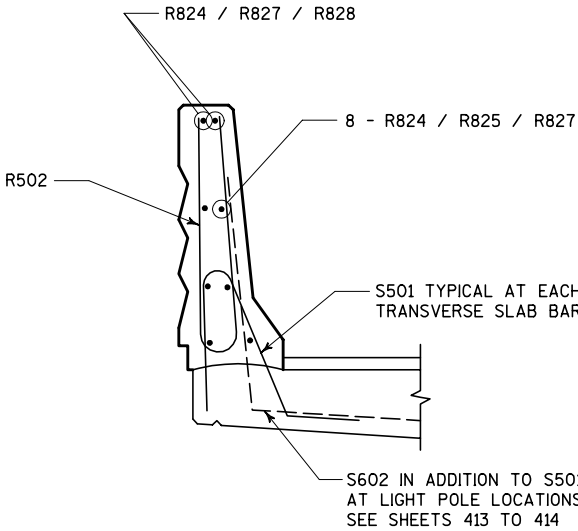
NOTES

- SEE SHEET 3 & 4 FOR GENERAL NOTES.
- UNLESS INSTALLATION IS EXPLICITLY
COVERED BY A SEPARATE PAY ITEM,
INSTALLATION OF ALL EMBEDMENTS IS
CONSIDERED INCIDENTAL TO PAY ITEM
SPV.0090.2040 - PARAPET BRIDGE FREEWAY
STRUCTURES.
SUPPLY OF EMBEDMENTS IS INCLUDED UNDER
OTHER PAY ITEMS - SEE QUANTITIES SHEETS.
SUPPLY OF EXPANSION FITTINGS FOR
CONDUIT IS CONSIDERED INCIDENTAL TO THE
PAY ITEM FOR THE CONDUIT BEING
CONNECTED.
- ALL EXPOSED CONDUIT ENDS SHALL BE
SUPPLIED WITH TEMPORARY WEATHERPROOF
CAPS TO PREVENT INGRESS OF MOISTURE
PRIOR TO LIGHT POLE OR SIGN BRIDGE
INSTALLATION.

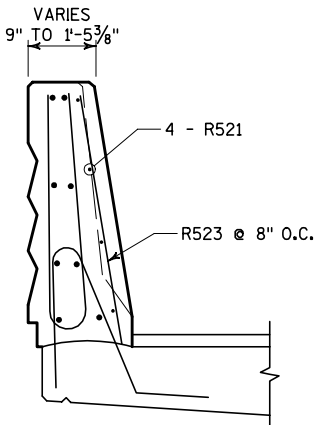
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PARAPET ELEVATIONS			SHEET 243 OF 432



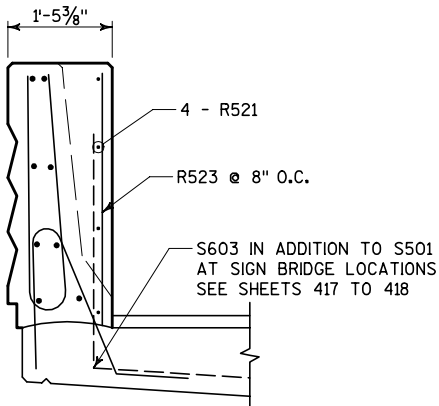
SECTION D-D
(SHOWING DIMENSIONS)



SECTION D-D
(SHOWING REINFORCEMENT)



TRANSITION ZONE

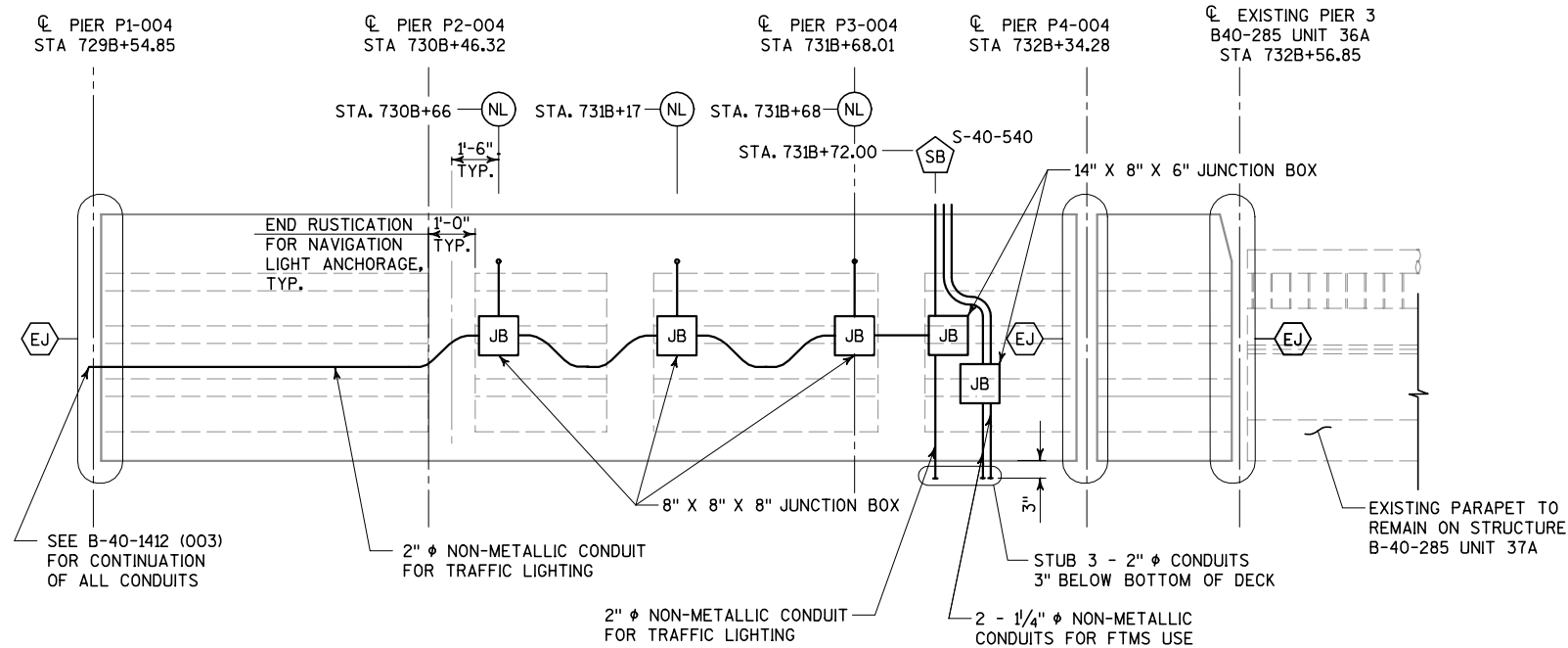


VERTICAL FACE

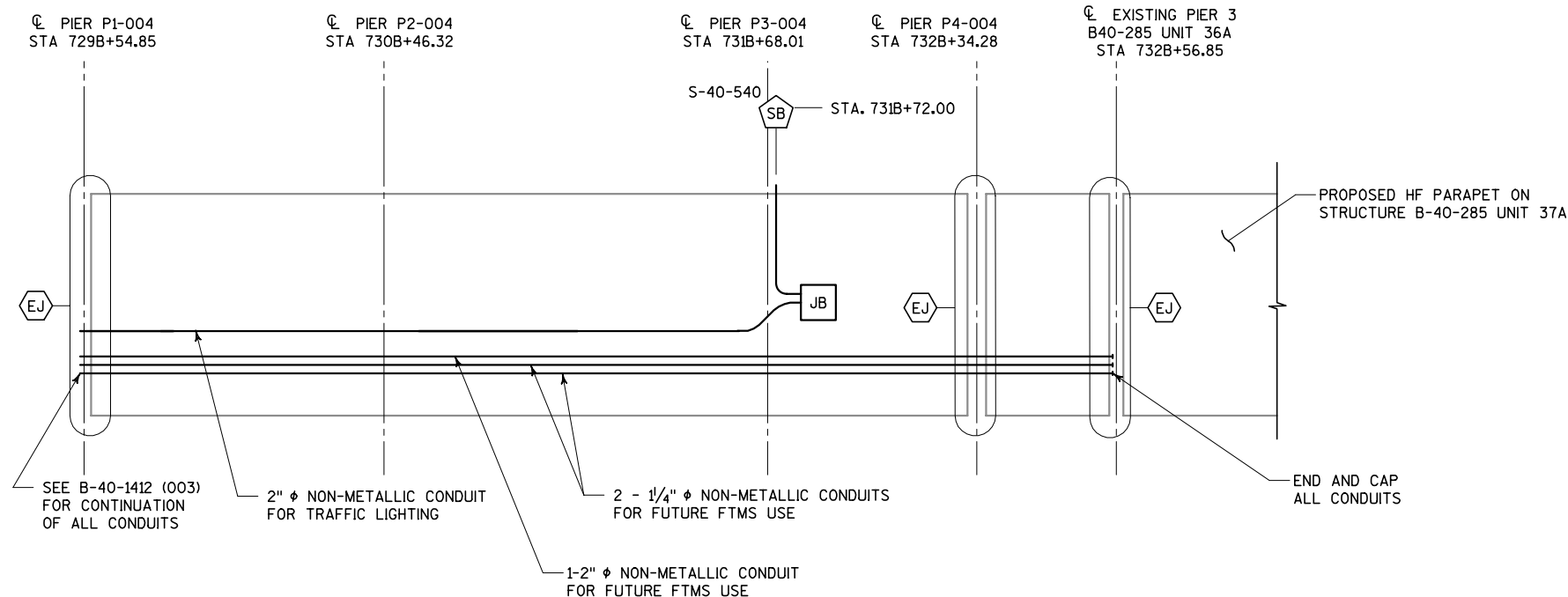
SECTION E-E

- NOTES**
- SEE SHEET 3 & 4 FOR GENERAL NOTES.
 - SEE SHEET 245 FOR SIZE AND EXTENT OF ALL CONDUITS SHOWN.
 - INSTALLATION OF ALL EMBEDDED ITEMS IS CONSIDERED INCIDENTAL TO PAY ITEM SPV.0090.2040 - PARAPET BRIDGE (FREEWAY STRUCTURES).
- SUPPLY OF EMBEDDED ITEMS IS INCLUDED UNDER OTHER PAY ITEMS - SEE QUANTITIES SHEETS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PARAPET SECTIONS			SHEET 244 OF 432

**LEFT SIDE PARAPET ELEVATION**

LOOKING LEFT AT TRAFFIC FACE
(NOT TO SCALE - SURFACE FEATURES ON BACK FACE SHOWN)

**RIGHT SIDE PARAPET ELEVATION**

LOOKING LEFT AT EXTERIOR FACE
(NOT TO SCALE - SURFACE FEATURES NOT SHOWN)

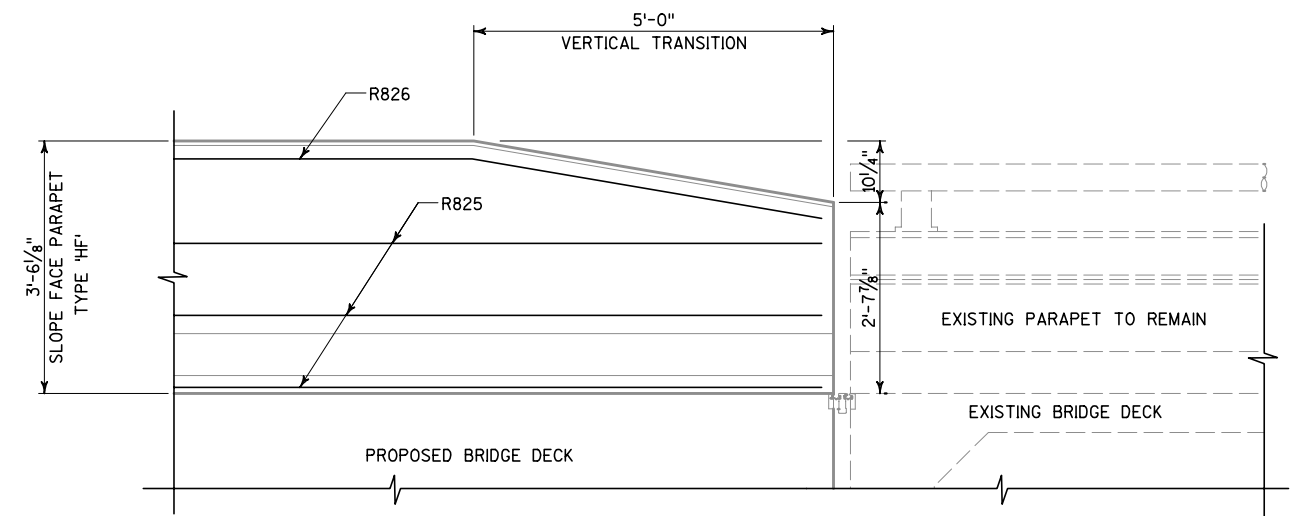
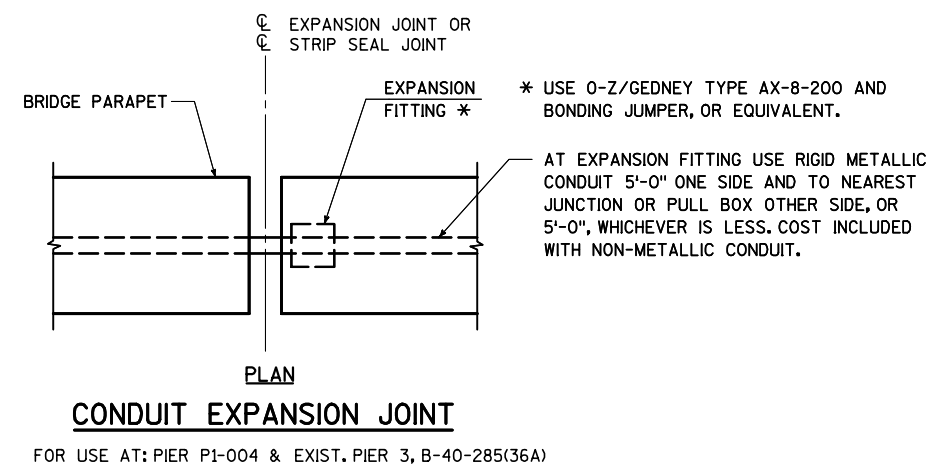
LEGEND

- EJ** EXPANSION JOINT LOCATION. SEE SHEET 246 FOR DETAILS OF CONDUIT JOINTS REQUIRED IN THIS AREA (IF CONDUITS ARE PRESENT).
- LP** LIGHT POLE MOUNTING LOCATION - INSTALLATION OF ANCHOR ASSEMBLY REQUIRED. SEE SHEETS 413 TO 414.
- SB** SIGN BRIDGE MOUNTING LOCATION - INSTALLATION OF ANCHOR ASSEMBLY REQUIRED. SEE SHEETS 417 TO 418.
- JB** JUNCTION BOX LOCATION - 14" X 8" X 6" OR 8" X 8" X 8" AS REQ'D. LOCATE ON TRAFFIC FACE OF BARRIER WITH TOP EDGE OF BOX 8" BELOW TOP OF PARAPET UNLESS OTHERWISE NOTED. RESPACE PARAPET REINFORCEMENT LOCALLY AS REQUIRED TO CLEAR.

NOTES

- SEE SHEET 3 & 4 FOR GENERAL NOTES.
- UNLESS INSTALLATION IS EXPLICITLY COVERED BY A SEPARATE PAY ITEM, INSTALLATION OF ALL EMBEDMENTS IS CONSIDERED INCIDENTAL TO PAY ITEM SPV.0090.2040 - PARAPET BRIDGE FREEWAY STRUCTURES.
SUPPLY OF EMBEDMENTS IS INCLUDED UNDER OTHER PAY ITEMS - SEE QUANTITIES SHEETS.
SUPPLY OF EXPANSION FITTINGS FOR CONDUIT IS CONSIDERED INCIDENTAL TO THE PAY ITEM FOR THE CONDUIT BEING CONNECTED.
- ALL EXPOSED CONDUIT ENDS SHALL BE SUPPLIED WITH TEMPORARY WEATHERPROOF CAPS TO PREVENT INGRESS OF MOISTURE PRIOR TO LIGHT POLE OR SIGN BRIDGE INSTALLATION.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY KGW	PLANS CK'D. KES
PARAPET EMBEDDED WORK			SHEET 245 OF 432

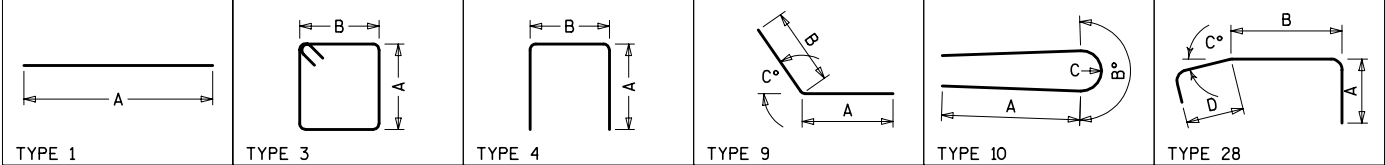


LEFT SIDE PARAPET ELEVATION
(LOOKING LEFT AT TRAFFIC FACE)

- NOTES**
- SEE SHEETS 3 & 4 FOR GENERAL NOTES.
 - UNLESS INSTALLATION IS EXPLICITLY COVERED BY A SEPARATE PAY ITEM, INSTALLATION OF ALL EMBEDMENTS IS CONSIDERED INCIDENTAL TO PAY ITEM SPV.0090.2040 - PARAPET BRIDGE FREEWAY STRUCTURES.
SUPPLY OF EMBEDMENTS IS INCLUDED UNDER OTHER PAY ITEMS - SEE QUANTITIES SHEET
SUPPLY OF EXPANSION FITTINGS FOR CONDUIT IS CONSIDERED INCIDENTAL TO THE PAY ITEM FOR THE CONDUIT BEING CONNECTED.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PARAPET DETAILS			SHEET 246 OF 432

BAR INFORMATION						BAR DIMENSIONS										LOCATION	REMARKS
BAR MARK	COAT	NO. REQ'D	CUT LENGTH	TOTAL WT (LB)	BEND TYPE	A	B	C	D	E	F	G	H	J			
PARAPET																	
R502	E	904	6'-10"	6443	10	3'-0"	184"	3"								PARAPET VERTICAL	HF PARAPET HAIRPINS
R521	E	8	44'-6"	371	1	44'-6"										HORIZONTAL AT SIGN BRIDGES	
R523	E	136	3'-5"	485	1	3'-5"										VERTICAL AT SIGN BRIDGES	
R824	E	64	60'-0"	10253	1	60'-0"										PARAPET HORIZONTAL	
R825	E	14	21'-6"	804	4	3'-2"	11"									PARAPET HORIZONTAL	
R827	E	16	53'-2"	2271	1	53'-2"										PARAPET HORIZONTAL	
R828	E	2	21'-8"	116	9	16'-8"	5'-0"	10°								PARAPET HORIZONTAL	TOP @ VERTICAL TRANSITION
HF PARAPET LIGHT POLE BASE																	
R504	E	7	6'-3"	46	4	2'-2"	2'-1"									LIGHT POLE BASE HORIZONTAL TIES	
R505	E	5	2'-5"	13	9	1'-3"	1'-3"	90°								LIGHT POLE BASE END FACE	
R506	E	7	7'-3"	53	4	2'-8"	2'-1"									LIGHT POLE BASE HORIZONTAL TIES	
R507	E	10	8'-1"	84	4	3'-0"	2'-3"									LIGHT POLE BASE VERTICAL TIES	
R508	E	1	10'-0"	10	3	2'-3"	2'-3"									LIGHT POLE BASE STIRRUPS	
R409	E	8	3'-7"	19	4	1'-0"	1'-8"									LIGHT POLE BASE SIDE FACE	DIM'N. 'B' VARIES FROM 1'-5" TO 1'-11" IN 3 STEPS OF 2" (2 SETS OF 4 BARS REQ'D)
R510	E	4	2'-9"	11	1	2'-9"										LIGHT POLE BASE SIDE FACE	
HF PARAPET SIGN BRIDGE BASE																	
R612	E	32	11'-7"	557	4	4'-0"	3'-9"									SIGN BRIDGE BASE HORIZONTAL TIES	
R613	E	20	6'-5"	193	28	1'-4"	4'-4"	76°	10"							SIGN BRIDGE BASE TOP BARS	
R414	E	40	5'-6"	147	4	1'-4"	2'-11"									SIGN BRIDGE PEDESTALS	
R615	E	36	10'-1"	545	4	3'-2"	3'-11"									SIGN BRIDGE BASE VERTICAL TIES	
R417	E	16	5'-1" *	54	4	1'-4"	2'-6" *									SIGN BRIDGE BASE SIDE FACE	DIM'N. 'B' VARIES FROM 2'-0 3/4" TO 2'-10 1/2" IN 3 STEPS OF 3 1/4" (SETS OF 4 BARS)
R519	E	12	4'-6"	56	1	4'-6"										SIGN BRIDGE BASE SIDE FACE	
R520	E	2	12'-10"	27	3	2'-0"	3'-11"									SIGN BRIDGE BASE STIRRUPS	
R421	E	16	4'-3"	45	4	1'-4"	1'-8" *									SIGN BRIDGE BASE SIDE FACE	DIM'N. 'B' VARIES FROM 1'-2 1/4" TO 2'-0" IN 3 STEPS OF 3 1/4" (SETS OF 4 BARS)
		TOTAL WEIGHT =			22,605	LBS											

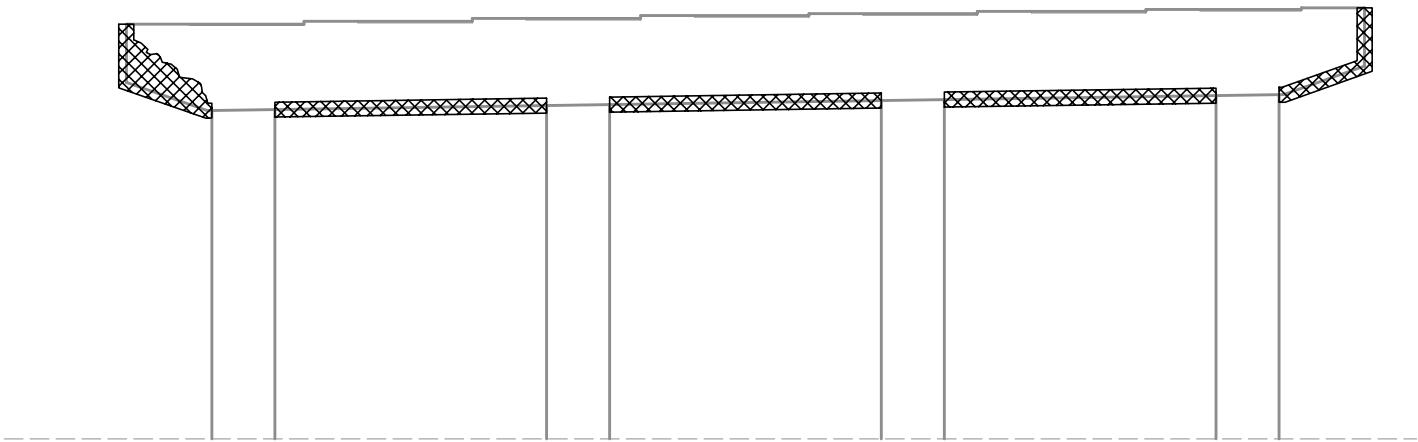


NOTES

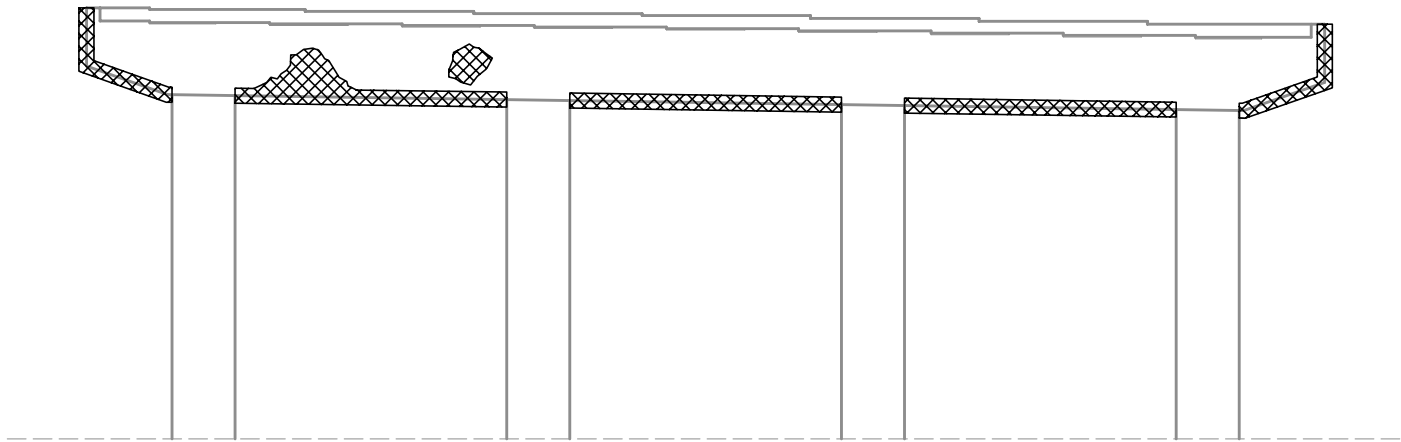
1. REINFORCEMENT SCHEDULES AND BREAKDOWNS ARE FOR INFORMATION ONLY. SEE GENERAL NOTES ON SHEET 3 & 4 FOR ADDITIONAL INFORMATION
2. THE FIRST ONE OR TWO DIGITS IN THE BAR MARK DENOTES THE BAR SIZE.
3. THE ENTRY IN THE 'COAT' COLUMN IS DEFINED AS FOLLOWS:
BLANK = UNCOATED
E = EPOXY COATED
4. ALL BENDS AND BAR EXTENSIONS ARE STANDARD AASHTO DIMENSIONS UNLESS OTHERWISE NOTED.
5. BARS ARE SYMMETRIC UNLESS OTHERWISE NOTED.
6. * DENOTES AVERAGE DIMENSIONS FOR BAR SERIES. SEE THE 'REMARKS' COLUMN FOR COMPLETE SERIES INFORMATION.
7. ALL REINFORCEMENT IN THIS TABLE IS INCLUDED UNDER PAY ITEMS SPV.0090.2040 AND SPV.0090.2045 - PARAPET BRIDGE TYPE LF AND HF.

NO SEPARATE PAYMENT WILL BE MADE - QUANTITIES ARE PROVIDED FOR INFORMATION ONLY.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY DJS	PLANS CK'D. KES
PARAPET REINFORCEMENT SCHEDULE			SHEET 247 OF 432



ELEVATION
(EXISTING PIER 3, B-40-285 UNIT 36A - LOOKING EAST)



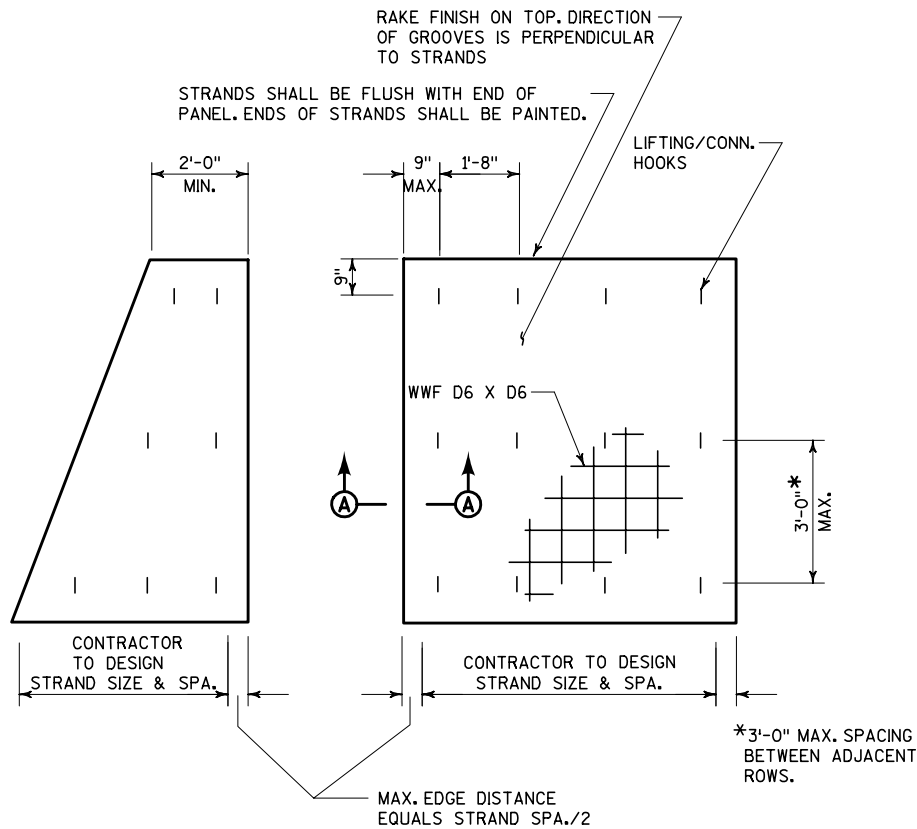
ELEVATION
(EXISTING PIER 3, B-40-285 UNIT 36A - LOOKING WEST)

NOTES

 BID ITEM "CONCRETE SURFACE REPAIR"
ESTIMATED QUANTITY = 300 FT²

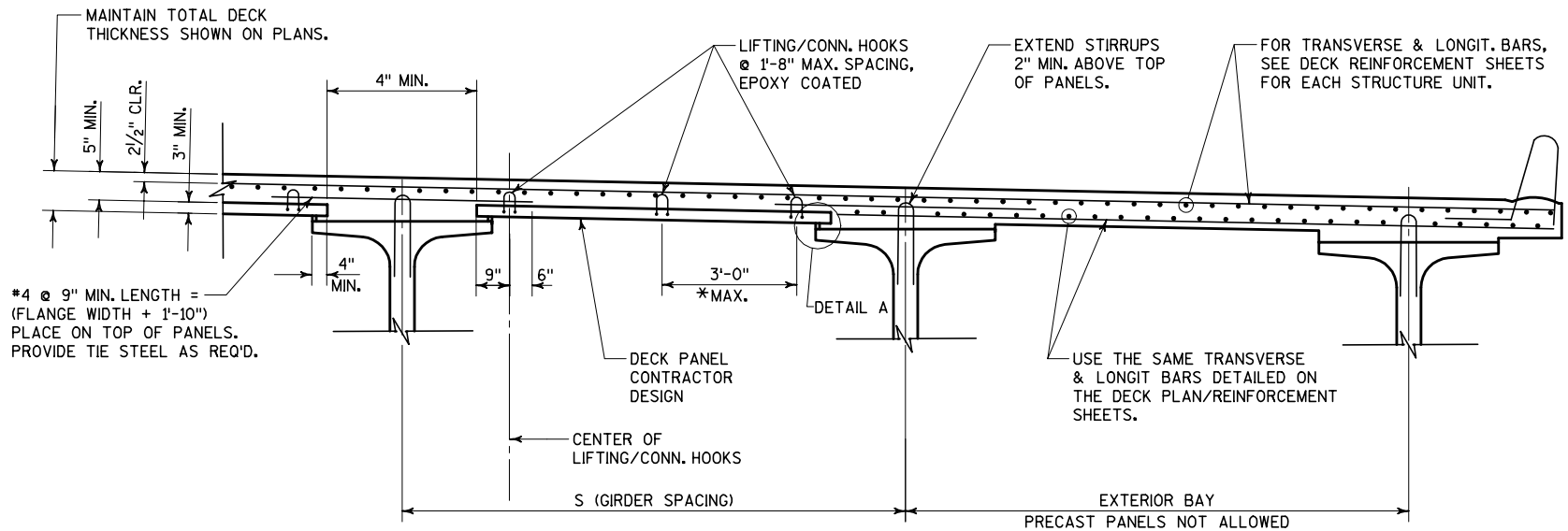
1. AFTER UTILITIES HAVE BEEN MOVED TO THE PROPOSED IH 794 EB STRUCTURE, REMOVE UTILITY ANCHOR BOLTS TO 2" BELOW SURFACE OF CONCRETE AND THEN REPAIR THE AREA AROUND THE BOLT. REMOVAL OF ANCHOR IS INCLUDED IN THE PAY ITEM "CONCRTE SURFACE REPAIR"

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412 (004)			
CONST. SPEC.	2004	DRAWN BY	EKM
		PLANS CK'D.	KES
EXISTING PIER 3 DETAILS		SHEET 248 OF 432	

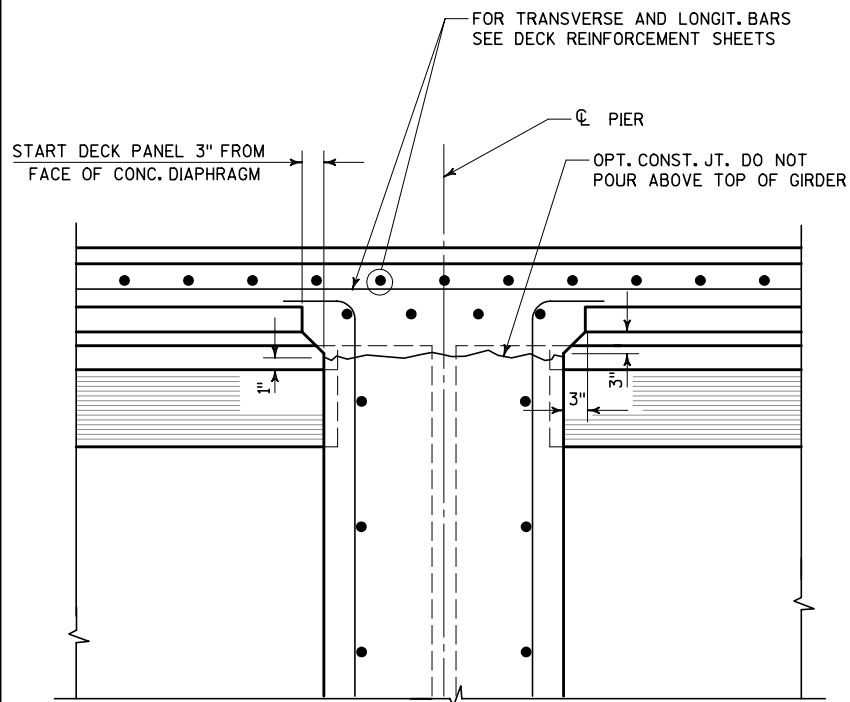


END SKEW DECK PANEL

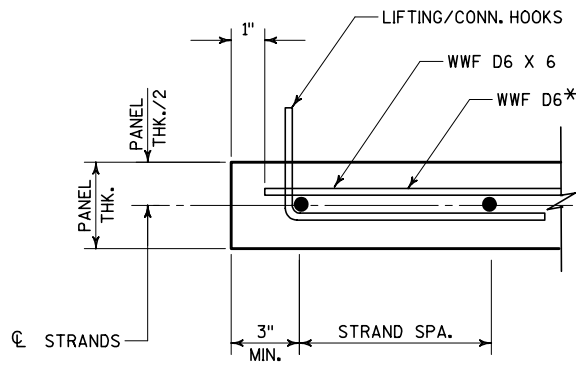
DECK PANEL



TRANSVERSE SECTION THRU SLAB ON GIRDERS WITH DECK PANELS

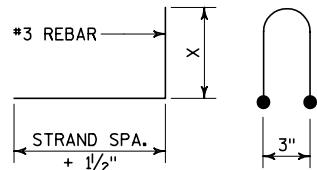


DIAPHRAGM DETAIL



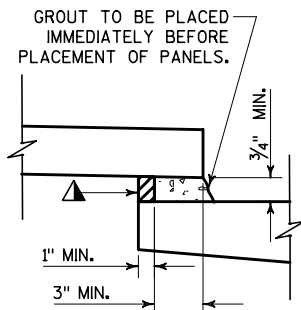
PART SECTION A-A

*BARS IN WWF WHICH ARE PARALLEL TO THE STRANDS MUST BE A MINIMUM OF 1" CLEAR FROM THE STRANDS.

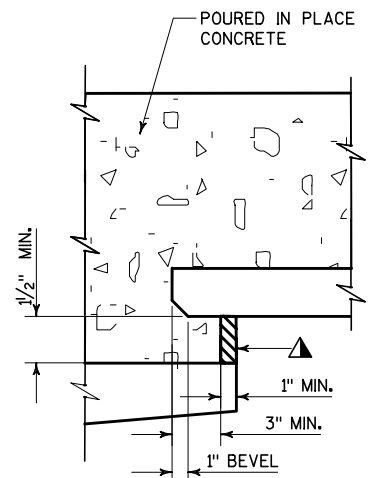


PANEL THK. (IN.)	X (IN.)
3, 3 1/2	4 1/2
4	5
4 1/2, 5, 5 1/2	5 1/2

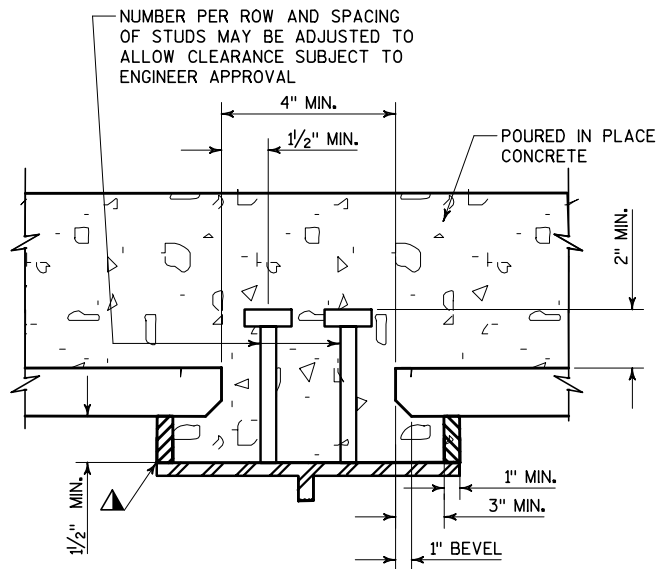
LIFTING/CONN. HOOK DETAIL



DETAIL A



ALTERNATIVE DETAIL A
PRESTRESSED GIRDER



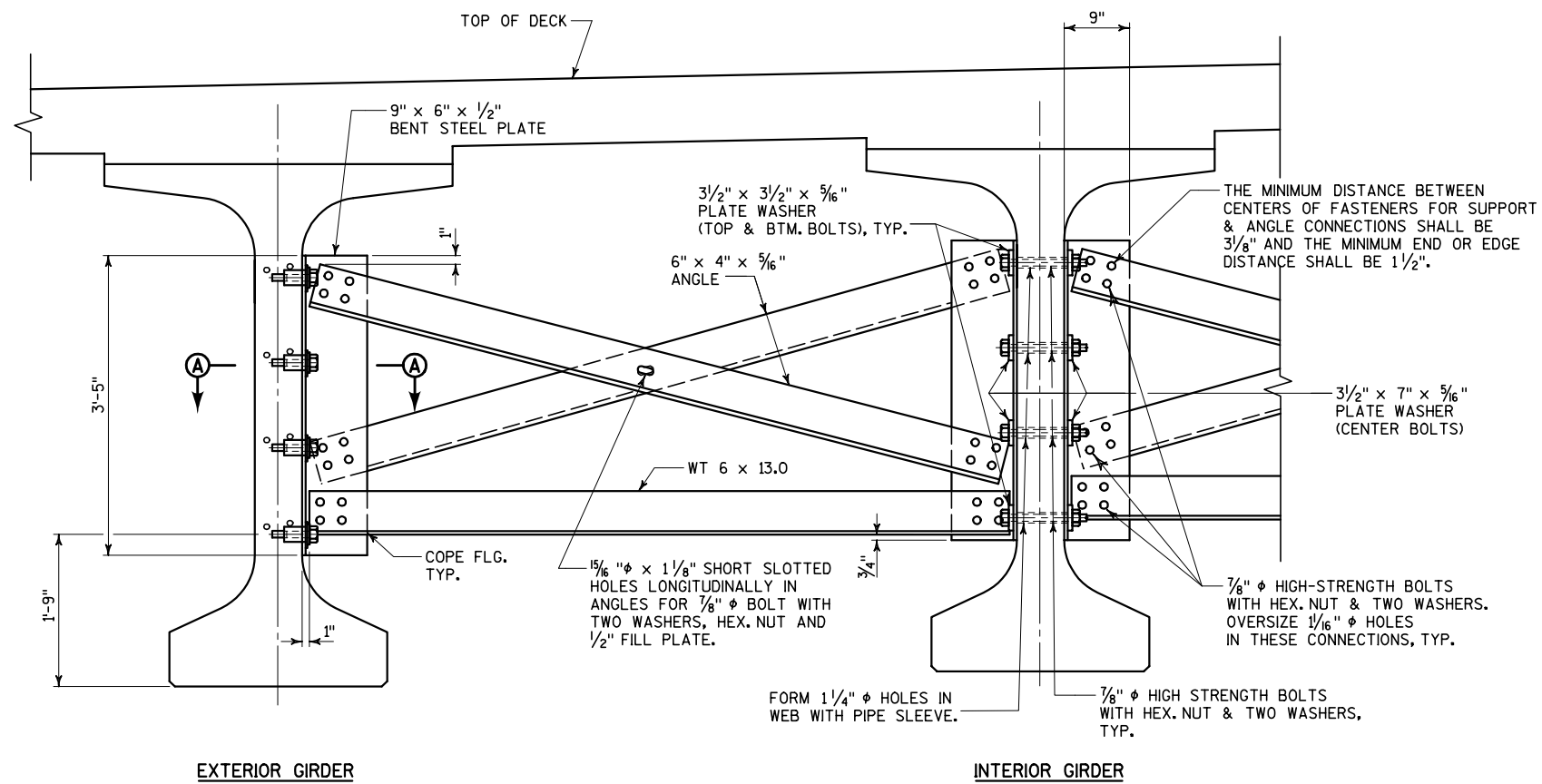
ALTERNATIVE DETAIL A
STEEL GIRDER

NOTES

▲ PANEL SUPPORTS TO BE HIGH DENSITY EXPANDED POLYSTYRENE GLUED TO THE TOP OF GIRDER OR NON-SHRINK GROUT.

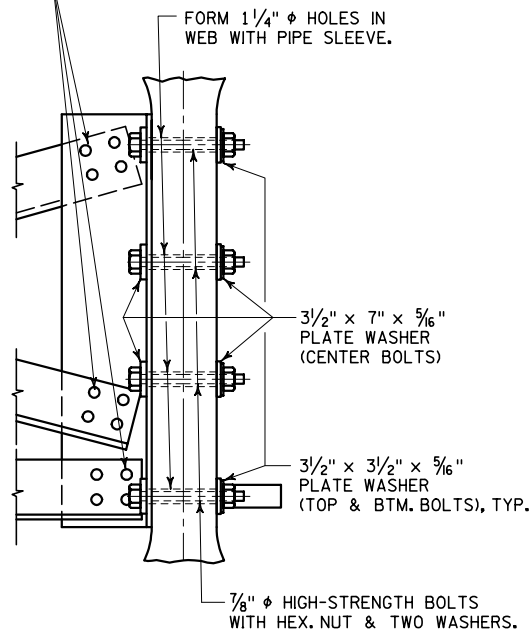
1. PRECAST PANELS MAY NOT BE USED WITHIN 10' (PARALLEL DISTANCE) OF A MODULAR OR STRIP SEAL EXPANSION JOINT.
2. PRECAST PANELS ARE NOT ALLOWED AT ALL EXTERIOR BAYS.
3. PRECAST PANELS ARE NOT ALLOWED WITHIN 15'-0" (LONGITUDINAL) ON EITHER SIDE OF A DRAIN LOCATED AT INTERIOR BAY.

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CONST. SPEC.	2004	DRAWN BY DJS	PLANS CK'D. KES
PRECAST DECK PANEL DETAILS			SHEET 392 OF 432



PART TRANSVERSE SECTION AT DIAPHRAGM

7/8" ϕ HIGH-STRENGTH BOLTS WITH HEX. NUT & TWO WASHERS. OVERSIZE 1/16" ϕ HOLES IN THESE CONNECTIONS, TYP.

SECTION AT INTERIOR GIRDERS
(FOR STAGGERED DIAPHRAGMS)

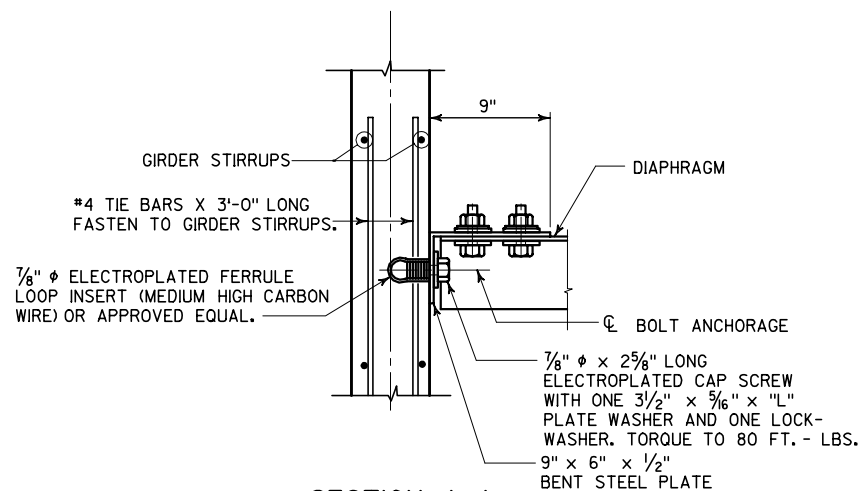
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGM, STRUCTURE B-40-1412", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

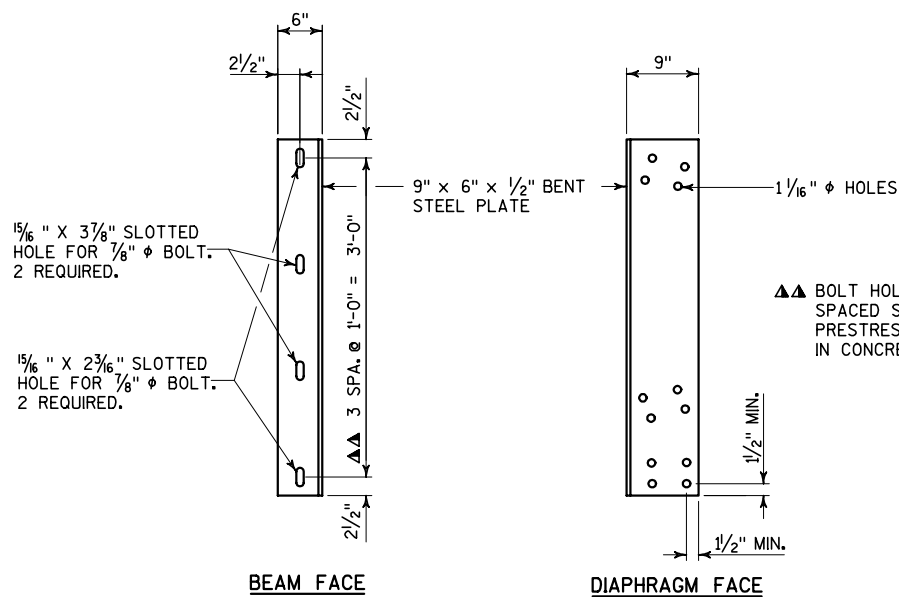
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

SECTION A-A
(FOR EXTERIOR ATTACHMENT)

"L" = 3 1/2" ; TOP & BOTTOM BOLTS

"L" = 7" ; CENTER BOLTS

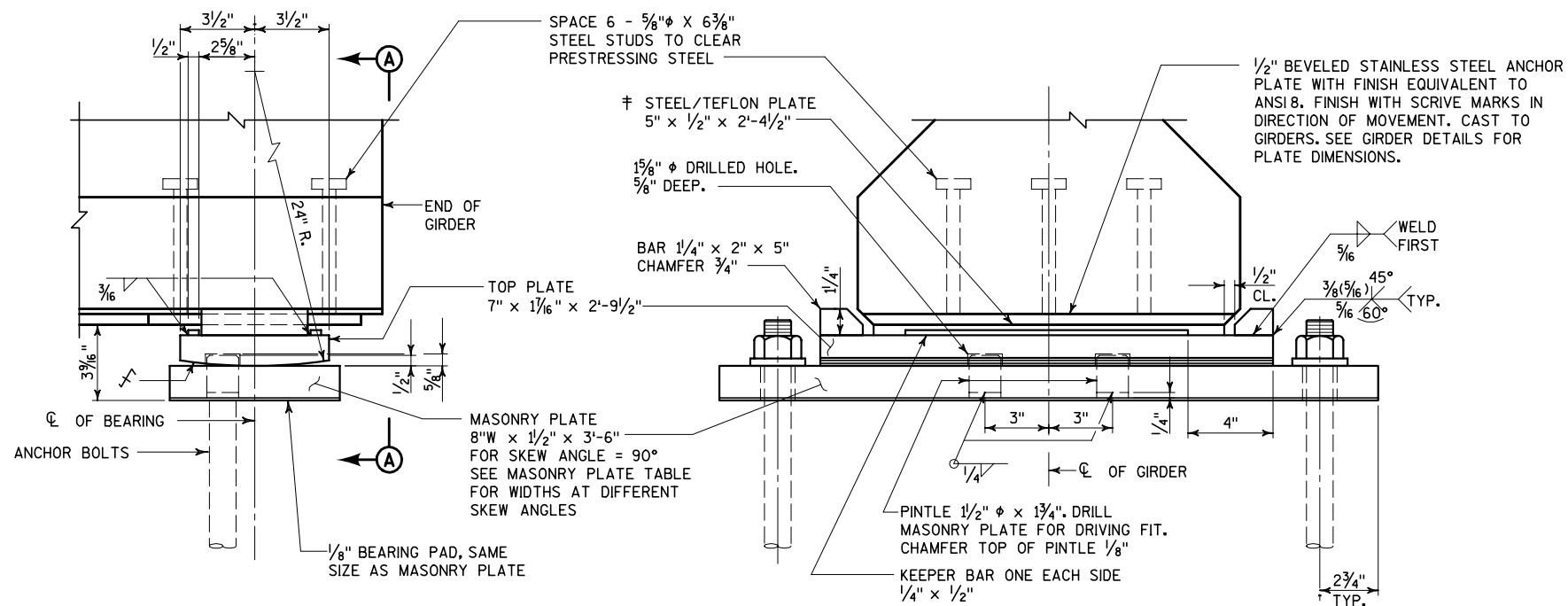
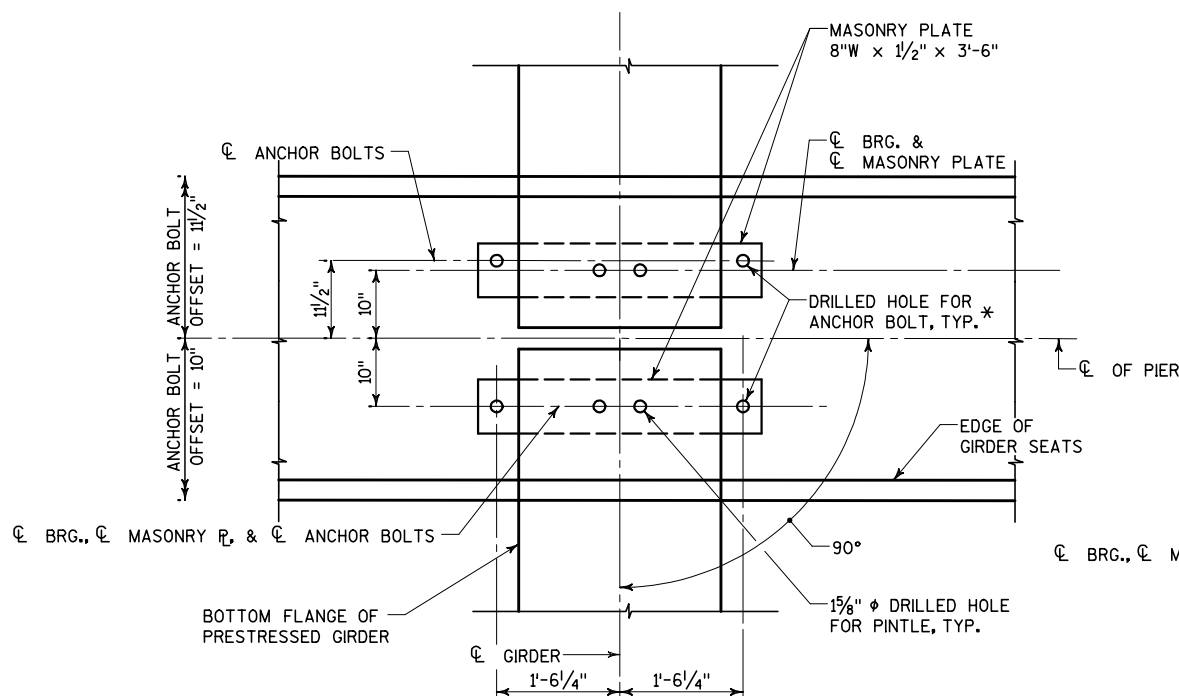


BEAM FACE

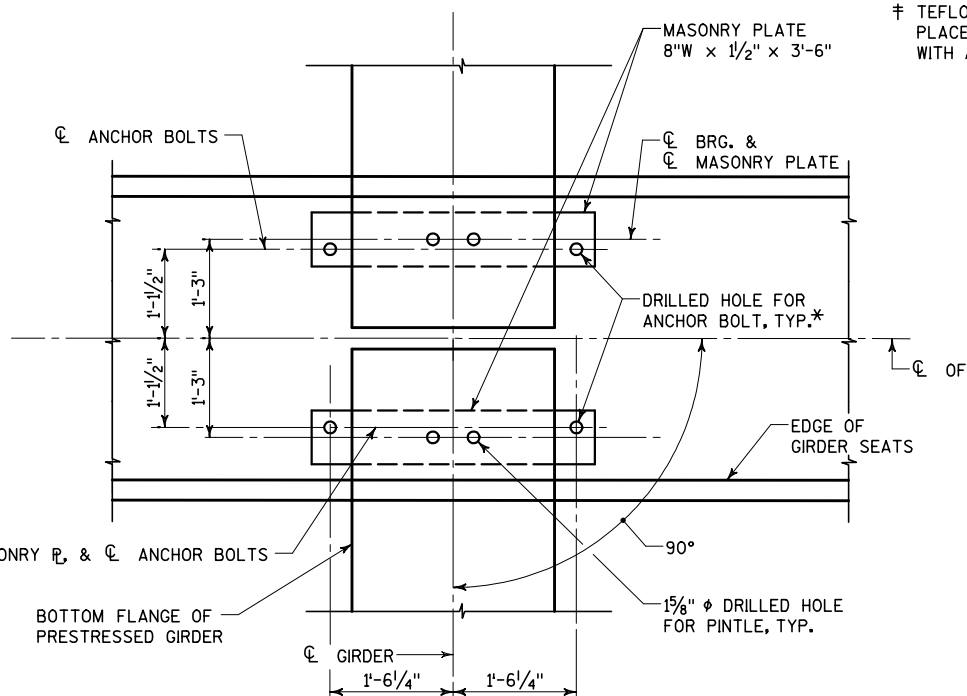
DIAPHRAGM FACE

DIAPHRAGM SUPPORT

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
72W" STEEL DIAPHRAGM DETAILS			SHEET 393 OF 432

**EXPANSION BEARING****SECTION A-A****EXPANSION BEARING MASONRY PLATE DETAIL**

(STD. 90° SKEW, SEE PIER PLANS FOR BOLT OFFSET DIMENSIONS)

**MASONRY PLATE DETAIL @ MODULAR EXPANSION JOINT**

(STD. 90° SKEW, SEE PIER PLANS FOR BOLT OFFSET DIMENSIONS)

NOTESALL BEARINGS ARE SYMMETRICAL ABOUT ϕ OF GIRDER AND ϕ OF BEARING.

ALL MATERIAL INCLUDING SHIMS, BUT EXCLUDING STAINLESS STEEL PLATE, TEFLON SURFACE, PINTLES, ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A709 GRADE 50W.

STAINLESS STEEL PLATE SHALL CONFORM TO A.S.T.M. A240, TYPE 304.

STEEL PINTLES SHALL CONFORM TO ASTM A449 OR MATERIAL OF EQUIVALENT YIELD STRENGTH AND ELONGATION.

FABRICATOR MAY INCREASE "MASONRY PLATE" THICKNESS AS AN ALTERNATE TO SHIMS.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT, AND VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL SURFACES MARKED $\times$ SHALL BE MACHINE FINISHED ANSI250 UNLESS OTHERWISE SHOWN.

ALL FINISHED SURFACES SHALL BE MACHINE FINISHED BY AN AUTOMATIC PROCESS.

ALL ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A709 GRADE 36, OR MATERIAL OF EQUIVALENT YIELD STRENGTH AND ELONGATION.

CHAMFER ANCHOR BOLTS PRIOR TO THREADING.

MASONRY PLATE, TOP PLATE, KEEPER BARS, ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AS REQUIRED BY ASTM DESIGNATION A153, CLASS "C". STEEL PLATE ATTACHED TO TEFLON SURFACE SHALL BE SHOP PAINTED.

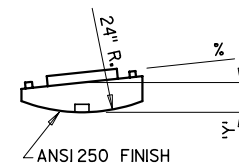
ANCHOR BOLTS SHALL BE THREADED 3". PROVIDE ONE STANDARD WROUGHT WASHER AND ONE HEX NUT PER BOLT. PROJECT ANCHOR BOLTS "MASONRY PLATE" THICKNESS +2 1/4" ABOVE TOP OF CONCRETE.

ALL MATERIALS IN "STEEL BEARINGS FOR PRESTRESSED CONCRETE GIRDERS", INCLUDING SHIMS, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR EITHER "EXPANSION BEARING ASSEMBLIES, EACH" OR "FIXED BEARING ASSEMBLIES, EACH".

* ALL ANCHOR BOLTS ARE 1/2" DIAMETER. DRILLED HOLES FOR ANCHOR BOLTS SHALL HAVE A DIAMETER OF 1 1/8".

† TEFLON SURFACE, USE UNFILLED SHEETS, DIMPLD AND LUBRICATED (MIN. 1/8" THICKNESS). PLACE WITH SCRIBE MARKS IN DIRECTION OF MOVEMENT. BOND STEEL AND TEFLON WITH ADHESIVE MATERIAL MEETING FED. SPEC. MMM-A-134, FEP FILM OR EQUAL.

BEVELED PLATE TABLE				
UNIT	PIER	PIER CAP SIDE	'Y'	%
006	P4-006	DOWNSTATION	1 5/8"	4.16%
006	P4-006	UPSTATION	1 5/8"	4.74%
006	A1-006	DOWNSTATION	1 5/8"	4.92%

**BEVELED TOP PLATE DETAIL**

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-142			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PRESTRESSED GIRDER BEARINGS 1			SHEET 394 OF 432

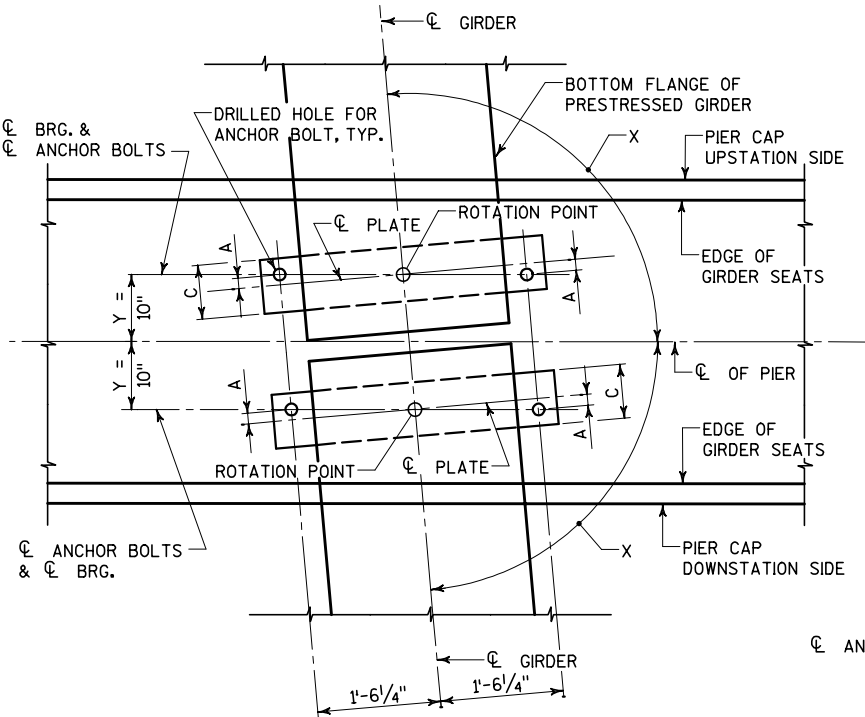
MASONRY PLATE DIMENSION TABLE

B-40-1412 UNIT 001								
PIER NO.	GIRDER	X	Y	PIER CAP SIDE	DETAIL	A	B	C
P1-001	1 - 2	92°31'10.2"	11 1/2"	UPSTATION	2	2 5/16"	11/16"	10"
P1-001	3 - 6	91°24'29.9"	11 1/2"	UPSTATION	2	1 15/16"	1 1/16"	9"
P1-001	1 - 6	86°40'45.1"	11 1/2"	DOWNSTATION	2	2 9/16"	7/16"	10 1/2"
P2-001	1 - 2	91°10'12.7"	11 1/2"	UPSTATION	2	1 7/8"	1 1/8"	9"
P2-001	3 - 6	90°01'34.3"	11 1/2"	UPSTATION	2	1 1/2"	1 1/2"	8"
P2-001	1 - 2	87°28'50.2"	11 1/2"	DOWNSTATION	2	2 5/16"	11/16"	10"
P2-001	3 - 6	88°35'52.4"	11 1/2"	DOWNSTATION	2	1 15/16"	1 1/16"	9"
P3-001	1 - 2	91°08'49.2"	10"	UPSTATION	1	3/8"	---	8"
P3-001	3	90°33'35.3"	10"	UPSTATION	1	3/16"	---	8"
P3-001	1 - 2	88°49'56.3"	10"	DOWNSTATION	1	3/8"	---	8"
P3-001	3 - 6	89°58'34.7"	10"	DOWNSTATION	1	0"	---	8"
P4-001	1 - 2	71°08'46.0"	9 3/8"	UPSTATION	5	2 1/4"	1 1/2"	10"
P4-001	3	70°35'12.8"	9 3/8"	UPSTATION	5	2 1/4"	1 1/2"	10"
P4-001	4 - 7	70°00'00.0"	9 3/8"	UPSTATION	5	2 1/4"	1 1/2"	10"
P4-001	1 - 2	108°51'11.2"	9 3/8"	DOWNSTATION	5	2 1/4"	1 1/2"	10"
P4-001	3	109°26'25.1"	9 3/8"	DOWNSTATION	5	2 1/4"	1 1/2"	10"
P4-001	4 - 7	110°00'00.0"	9 3/8"	DOWNSTATION	5	2 1/4"	1 1/2"	10"

B-40-1412 UNIT 002								
PIER NO.	GIRDER	X	Y	PIER CAP SIDE	DETAIL	A	B	C
P4A-002	1	89°16'54.1"	11 1/2"	UPSTATION	3	1 3/4"	1 1/4"	8 1/2"
P4A-002	1	90°18'35.3"	11 1/2"	DOWNSTATION	3	1 5/8"	1 3/8"	8 1/2"
P5A-002	1 - 4, Unit 6	89°18'50.8"	13 1/2"	UPSTATION	7	1 11/16"	1 5/16"	8 1/2"
P5A-002	1, Unit 3	86°12'40.7"	13 1/2"	UPSTATION	7	2 11/16"	5/16"	10 1/2"
P5A-002	2, Unit 3	88°06'14.8"	13 1/2"	UPSTATION	7	2 1/8"	7/8"	9 1/2"
P5A-002	1, Unit 2	90°43'05.9"	13 1/2"	DOWNSTATION	7	1 3/4"	1 1/4"	8 1/2"

B-40-1412 UNIT 003								
PIER NO.	GIRDER	X	Y	PIER CAP SIDE	DETAIL	A	B	C
P1-003	1	93°47'19.3"	11 1/2"	DOWNSTATION	3	2 11/16"	5/16"	10 1/2"
P1-003	2	91°53'45.2"	11 1/2"	DOWNSTATION	3	2 1/8"	7/8"	9 1/2"
P6-003	1 - 8	93°06'34.2"	11 1/2"	UPSTATION	2	2 1/2"	1/2"	10"
P6-003	1 - 8	88°05'44.9"	11 1/2"	DOWNSTATION	2	2 1/8"	7/8"	9 1/2"
P7-003	1 - 8	94°15'58.1"	11 1/2"	UPSTATION	2	2 7/8"	1/8"	11"
P7-003	1 - 8	86°53'26.0"	11 1/2"	DOWNSTATION	2	2 1/2"	1/2"	10"

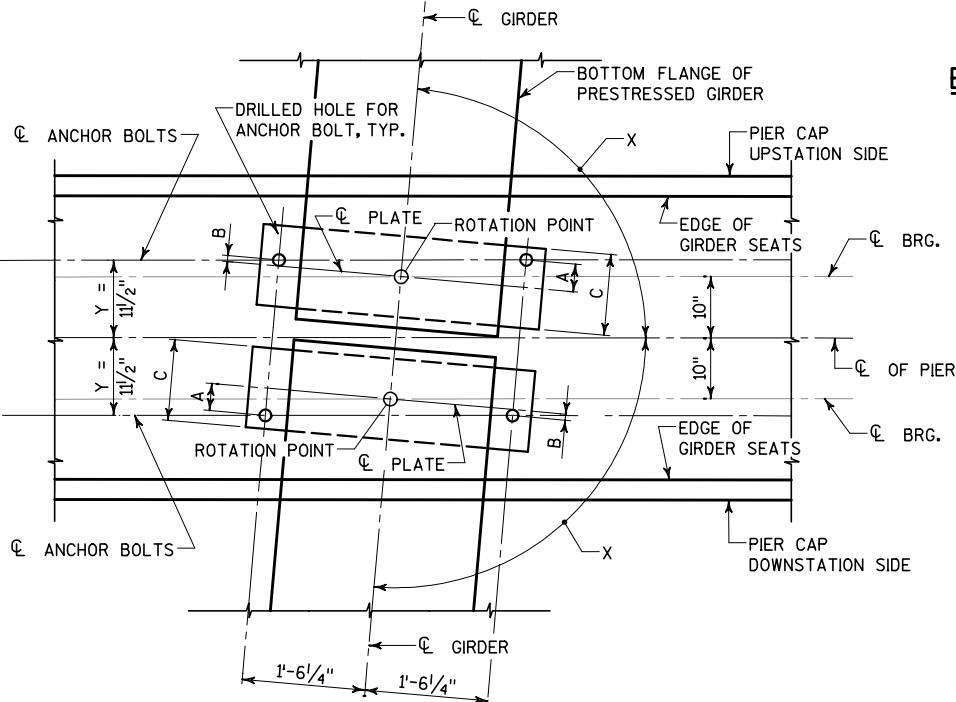
B-40-1412 UNIT 004								
PIER NO.	GIRDER	X	Y	PIER CAP SIDE	DETAIL	A	B	C
P1-004	1-8	85°43'21.7"	13 1/2"	DOWNSTATION	6	2 7/8"	1/8"	11"



EXPANSION BEARING MASONRY PLATE DETAIL 1

UPSTATION BEARING ROTATION ANGLE $X > 90^\circ$
DOWNSTATION BEARING ROTATION ANGLE $X < 90^\circ$

PINTLES NOT SHOWN IN EXPANSION BEARING MASONRY PLATE DETAILS. SEE DETAILS ON SHEET 394 FOR PINTLE LOCATIONS.

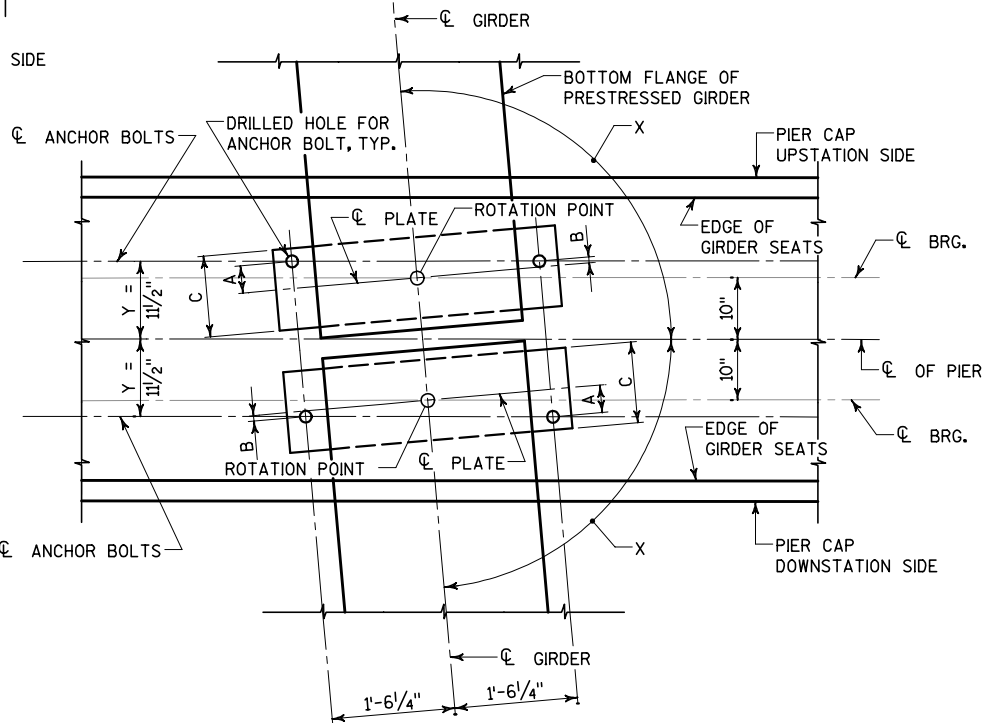


EXPANSION BEARING MASONRY PLATE DETAIL 3

UPSTATION BEARING ROTATION ANGLE $X < 90^\circ$
DOWNSTATION BEARING ROTATION ANGLE $X > 90^\circ$

NOTES

SEE SHEET 394 FOR PRESTRESSED GIRDER BEARING DETAILS.
SEE SHEET 396 FOR EXPANSION BEARING MASONRY PLATE DETAILS 5, 6, & 7.



EXPANSION BEARING MASONRY PLATE DETAIL 2

UPSTATION BEARING ROTATION ANGLE $X > 90^\circ$
DOWNSTATION BEARING ROTATION ANGLE $X < 90^\circ$

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PRESTRESSED GIRDER BEARINGS 2			SHEET 395 OF 432

MASONRY PLATE DIMENSION TABLE

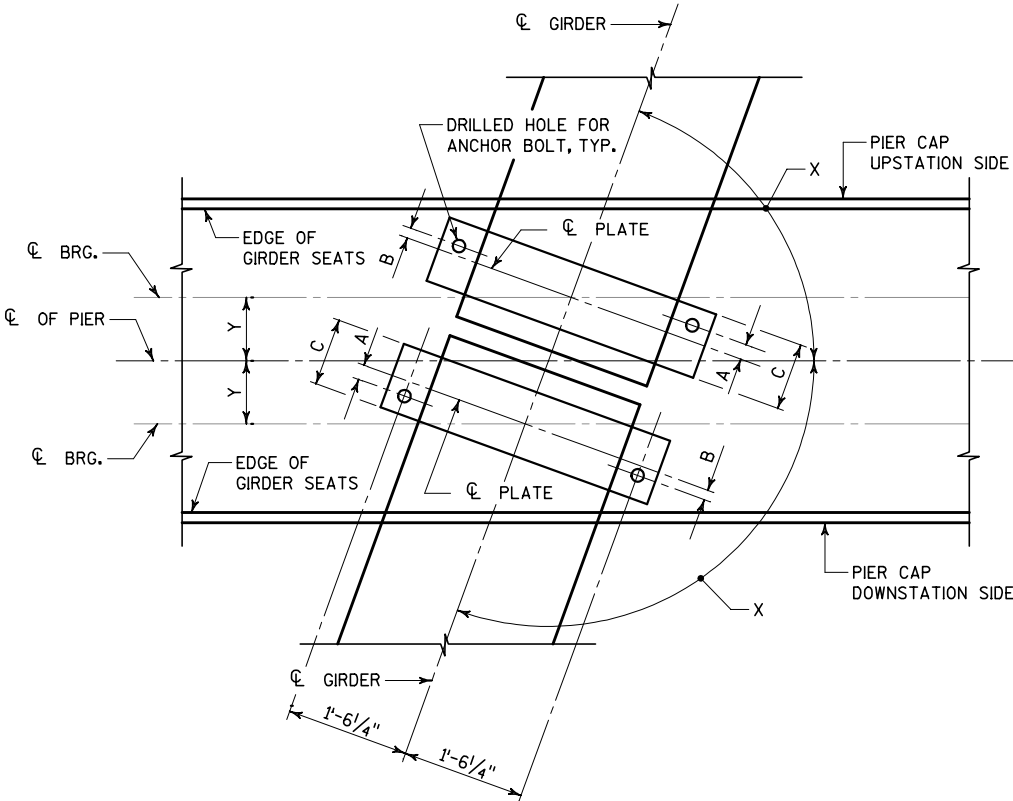
B-40-1412 UNIT 005								
PIER NO.	GIRDER	X	Y	PIER CAP SIDE	DETAIL	A	B	C
P1-005	6, UNIT 5	90°06'19.0"	13 1/2"	UPSTATION	6	1 9/16"	1 7/16"	8 1/2"
P1-005	4, UNIT 7	89°00'18.7"	13 1/2"	DOWNSTATION	6	1 13/16"	1 3/16"	9"
P1-005	5 - 7, UNIT 7	88°00'25.6"	13 1/2"	DOWNSTATION	6	2 1/8"	7/8"	9 1/2"
P2-005	1 - 6	70°00'00.0"	9 3/8"	UPSTATION	5	2 1/4"	1 1/2"	10"
P2-005	1 - 5	110°00'00.0"	9 3/8"	DOWNSTATION	5	2 1/4"	1 1/2"	10"
P2-005	6	109°14'22.9"	9 3/8"	DOWNSTATION	5	2 1/4"	1 1/2"	10"
P3-005	1 - 6	70°00'00.0"	9 3/8"	UPSTATION	5	2 1/4"	1 1/2"	10"
P3-005	1 - 6	110°00'00.0"	9 3/8"	DOWNSTATION	5	2 1/4"	1 1/2"	10"
B-40-1412 UNIT 007								
PIER NO.	GIRDER	X	Y	PIER CAP SIDE	DETAIL	A	B	C
P2-007	1 - 3	89°28'47.6"	11 1/2"	UPSTATION	3	1 11/16"	1 5/16"	8 1/2"
P2-007	4	91°24'07.9"	11 1/2"	UPSTATION	2	1 15/16"	1 1/16"	9"
P2-007	5 - 8	93°20'12.5"	11 1/2"	UPSTATION	2	2 9/16"	7/16"	10 1/2"
P2-007	1 - 3	91°07'03.0"	11 1/2"	DOWNSTATION	3	1 7/8"	1 1/8"	9"
P2-007	4	89°40'22.4"	11 1/2"	DOWNSTATION	2	1 5/8"	1 3/8"	8 1/2"
P2-007	5	88°05'01.7"	11 1/2"	DOWNSTATION	2	2 1/8"	7/8"	9 1/2"
P2-007	6 - 9	86°39'50.4"	11 1/2"	DOWNSTATION	2	2 9/16"	7/16"	10 1/2"

NOTES

EXPANSION BEARING MASONRY PLATE
DETAIL 4 NOT USED FOR STRUCTURE B-40-1412.

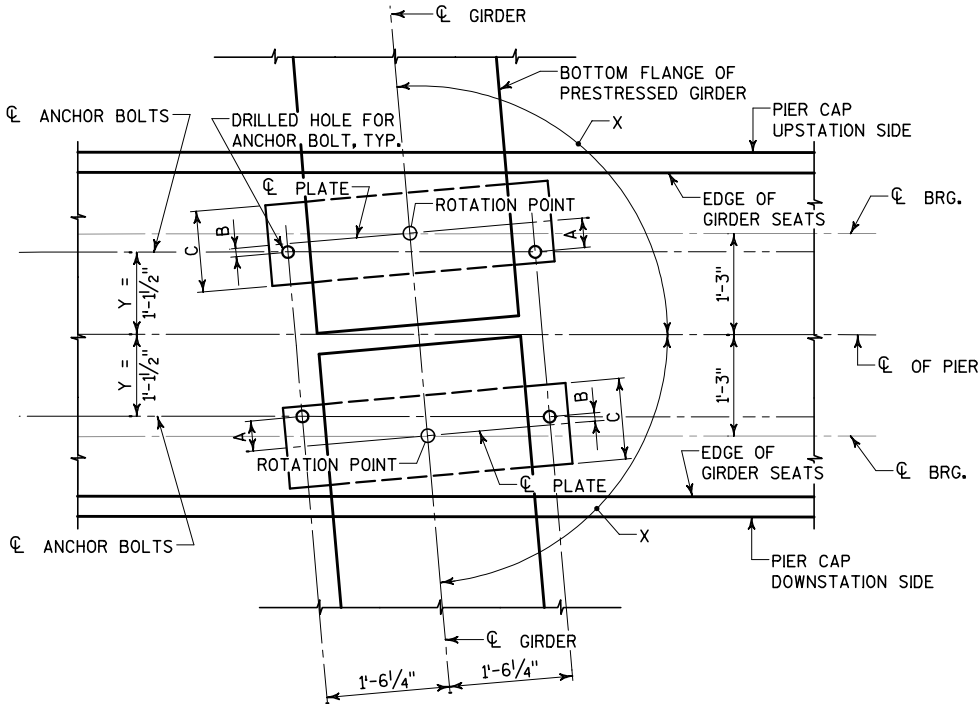
SEE SHEET 394 FOR PRESTRESSED GIRDER
BEARING DETAILS.

SEE SHEET 395 FOR EXPANSION BEARING
MASONRY PLATE DETAILS 2 & 3.



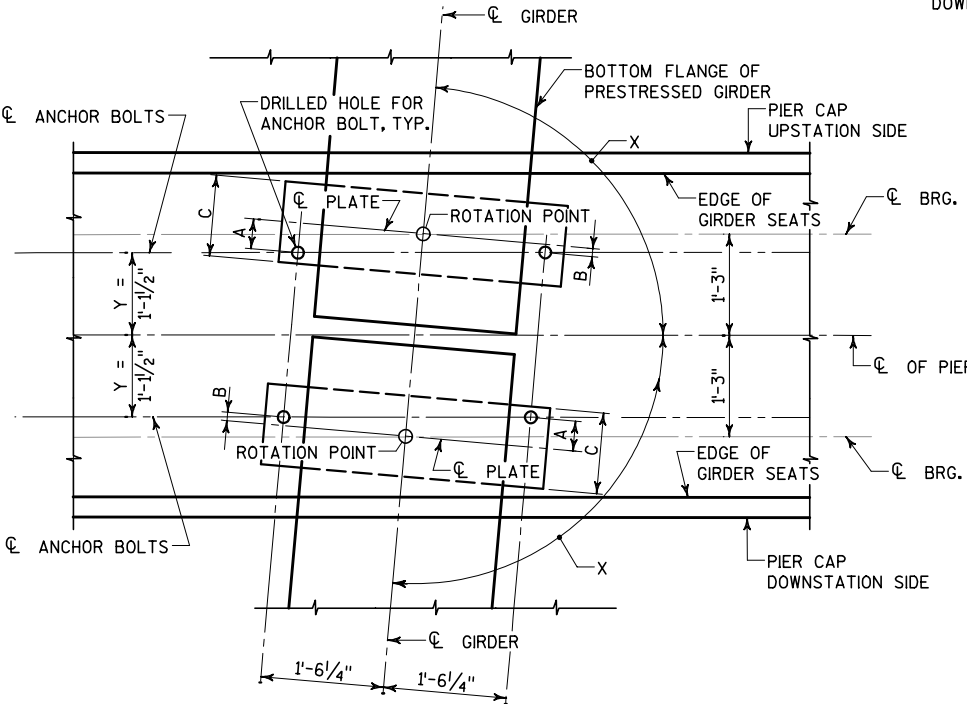
EXPANSION BEARING MASONRY PLATE DETAIL 5

UPSTATION BEARING ROTATION ANGLE $X > 90^\circ$
DOWNSTATION BEARING ROTATION ANGLE $X < 90^\circ$



EXPANSION BEARING MASONRY PLATE DETAIL 6

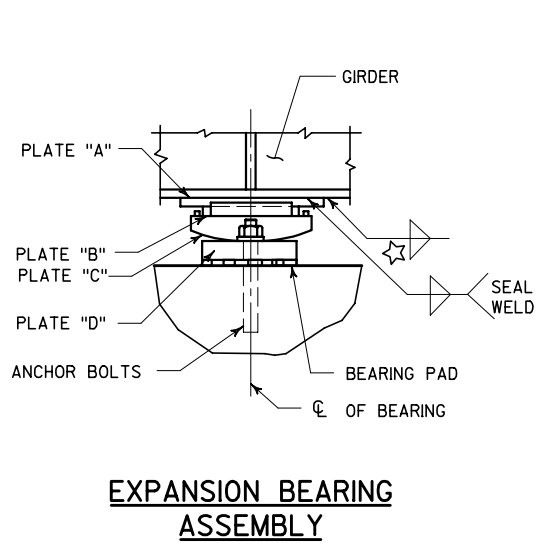
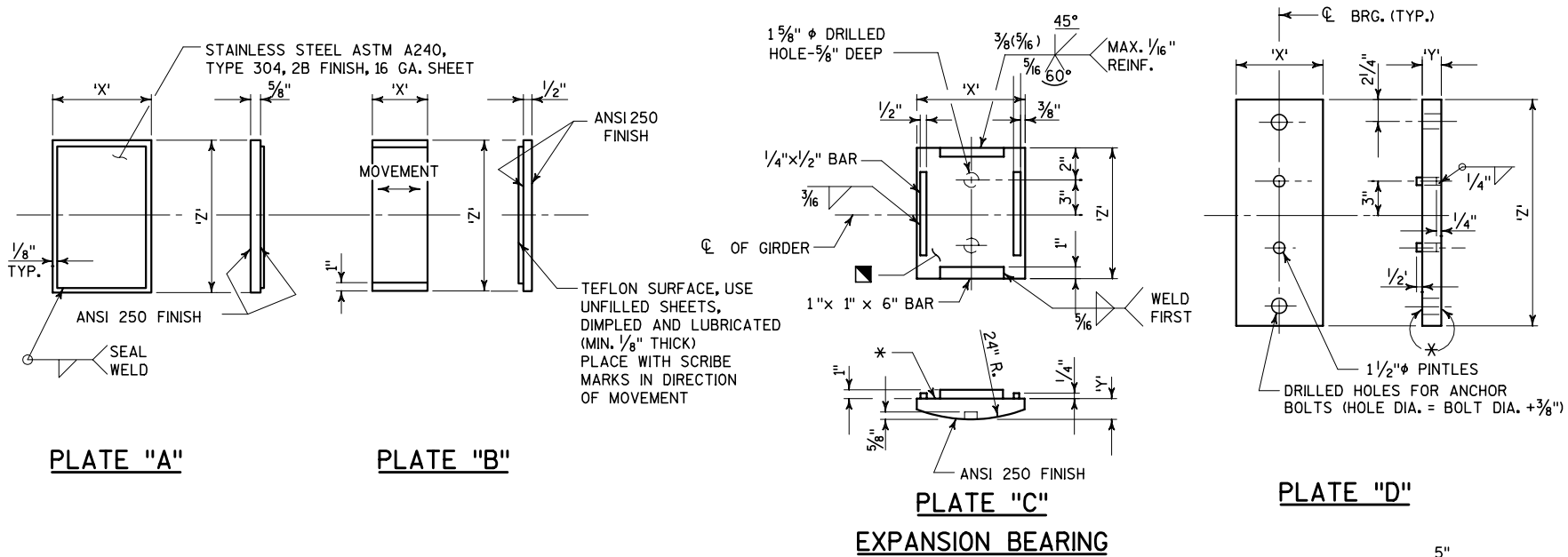
EXPANSION BEARINGS AT MODULAR JOINTS.



EXPANSION BEARING MASONRY PLATE DETAIL 7

EXPANSION BEARINGS AT MODULAR JOINTS.

NO.	DATE	REVISION	BY
		STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION	
		STRUCTURE B-40-1412	
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CKD. KES
		PRESTRESSED GIRDER BEARINGS 3	SHEET 396 OF 432



BEARING NOTES

ALL BEARINGS ARE SYMMETRICAL ABOUT ϕ OF GIRDER AND ϕ OF BEARINGS.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL FINISHED SURFACES SHALL BE MACHINE FINISHED BY AN AUTOMATIC PROCESS.

CHAMFER ANCHOR BOLTS PRIOR TO THREADING. ANCHOR BOLTS SHALL BE THREADED 3". PROVIDE ONE STANDARD WROUGHT WASHER AND ONE HEX NUT PER BOLT. BOLT LENGTH TO BE 1'-5 FOR 1/4" ϕ AND 1'-10 FOR 1/2" ϕ BOLTS. PROJECT ANCHOR BOLTS "D" PLATE THICKNESS +2 1/4" ABOVE TOP OF CONCRETE.

CHAMFER TOP OF PINTLES 1/8". DRILL HOLES FOR PINTLES IN ALL "D" PLATES FOR DRIVING FIT.

ALL MATERIAL INCLUDING SHIMS BUT EXCLUDING ANCHOR BOLTS, STAINLESS STEEL, TEFLON SURFACE, PINTLES, NUTS AND STEEL WASHERS SHALL BE MADE OF ASTM A709 GRADE 50W. STEEL PINTLES SHALL BE MADE OF ASTM A449 STEEL OR MATERIAL OF EQUAL YIELD STRENGTH & ELONGATION. ANCHOR BOLTS, NUTS & WASHERS SHALL CONFORM TO ASTM A709 GRADE 36 OR MATERIAL OF EQUIV. STRENGTH & ELONGATION.

PROVIDE 1/8" THICK BEARING PAD SAME SIZE AS PLATE "D" FOR EACH BEARING.

ALL MATERIAL IN BEARINGS, INCLUDING BEARING PADS & SHIM PLATES SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "EXPANSION BEARING ASSEMBLIES" OR "FIXED BEARING ASSEMBLIES" RESPECTIVELY.

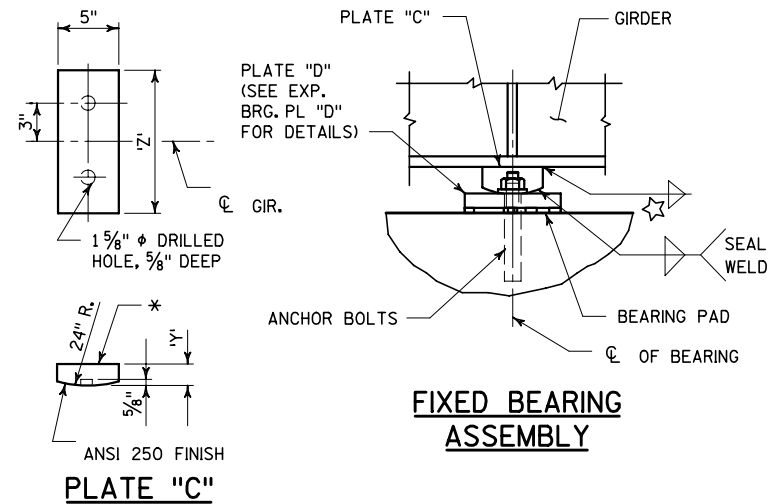
ANCHOR BOLTS, NUTS & WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C.

ALL SURFACES OF BEARING PLATES, EXCEPT STAINLESS STEEL & TEFLON SURFACES SHALL BE BE PAINTED AFTER GALVANIZING WITH A TIE COAT, INTERMEDIATE COAT & TOP COAT. FOR UNPAINTED STRUCURES, BEARING PLATE WELDED TO THE GIRDER NEED NOT BE PAINTED.

* FINISH THESE SURFACES ANSI 250 FINISH IF 'Y' DIM. IS GREATER THAN 2".

■ PROVIDE A METHOD FOR HANDLING PLATE "C" DURING GALVANIZING.

	PLATE "A"		PLATE "B"		PLATE "C"			PLATE "D"			ANCHOR BOLT SIZE	NO. OF BRG'S REQ'D.	LOCATION
	'X'	'Z'	'X'	'Z'	'X'	'Y'	'Z'	'X'	'Y'	'Z'			
EXPANSION BEARING	11"	1'-6"	7"	1'-6"	9"	1 1/16"	1'-8 1/4"	8"	1 1/2"	2'-4"	1 1/2" ϕ	14	P1-004 & P4-004
	1'-9"	1'-6"	1'-5"	1'-6"	1'-7"	3 7/8"	1'-8 1/4"	1'-4"	2 7/8"	2'-5"	1 1/2" ϕ	7	P2-004
FIXED BEARING													
FIXED BEARING													

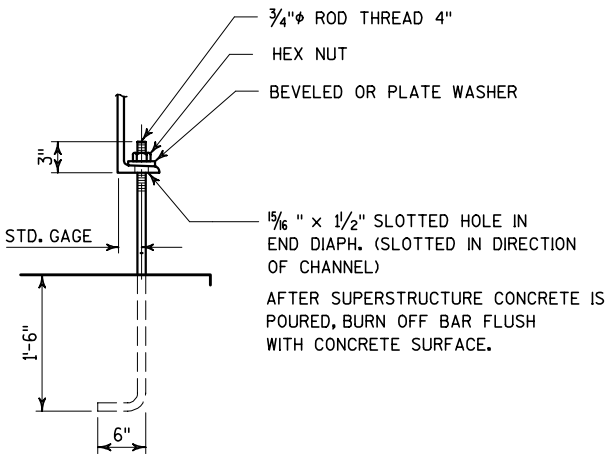


FIXED BEARING

TABLE OF FILLET WELD SIZES

THICKNESS OF THICKER PART JOINED	$\mp$ MIN. SIZE OF FILLET WELD
TO 1/2" INCLUSIVE	3/16"
OVER 1/2" TO 3/4"	1/4"
OVER 3/4" TO 1 1/2"	5/16"
OVER 1 1/2" TO 2 1/4"	3/8"
OVER 2 1/4" TO 6"	1/2"

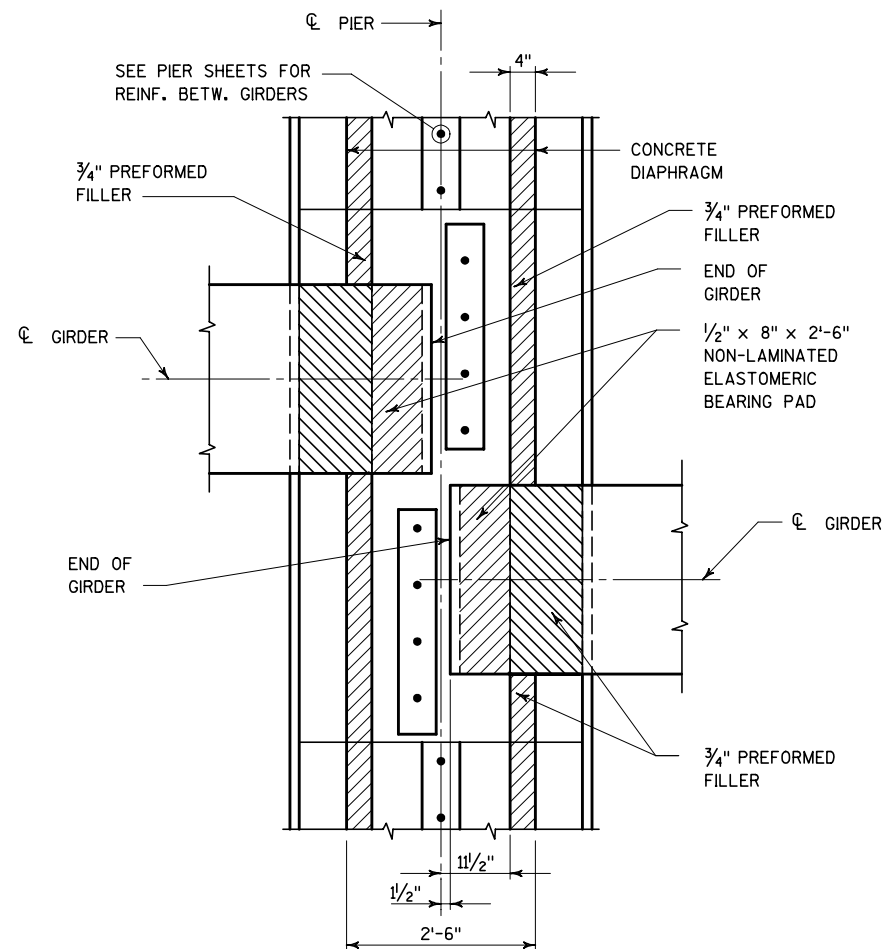
$\mp$ EXCEPT THAT WELD SIZE SHALL NOT EXCEED THICKNESS OF THINNER PART JOINED.



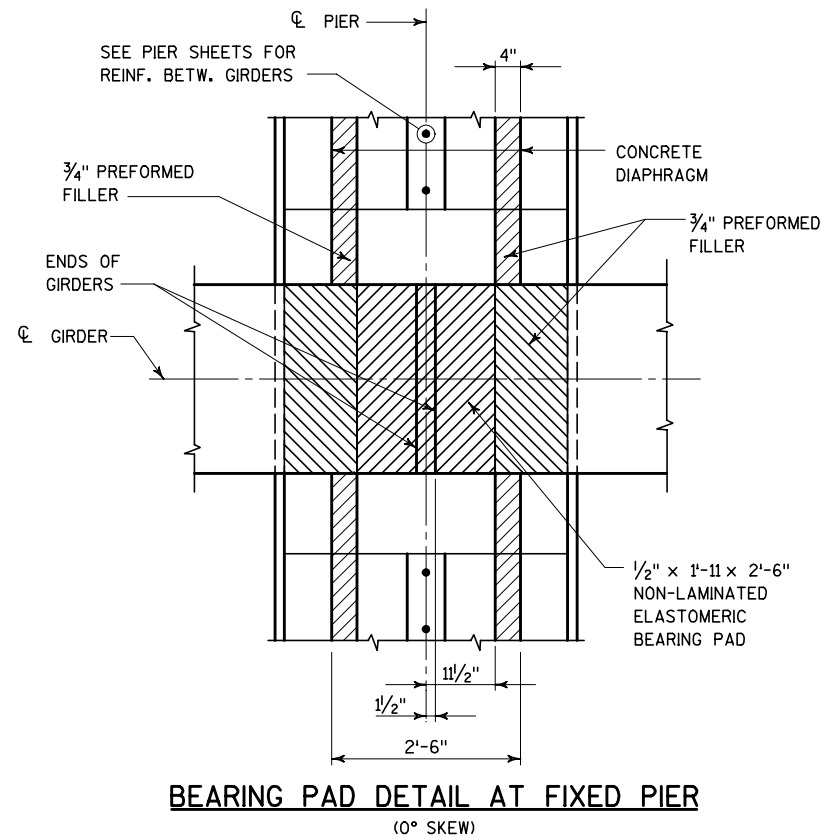
TEMPORARY HOLD DOWN

PLACE ONE PER GIRDER AT PIER WHERE SLAB POUR TERMINATES. LOCATE 1'-6 (NORMAL) OFF ϕ OF GIRDER. TO BE PAID FOR AS "STRUCTURAL CARBON STEEL".

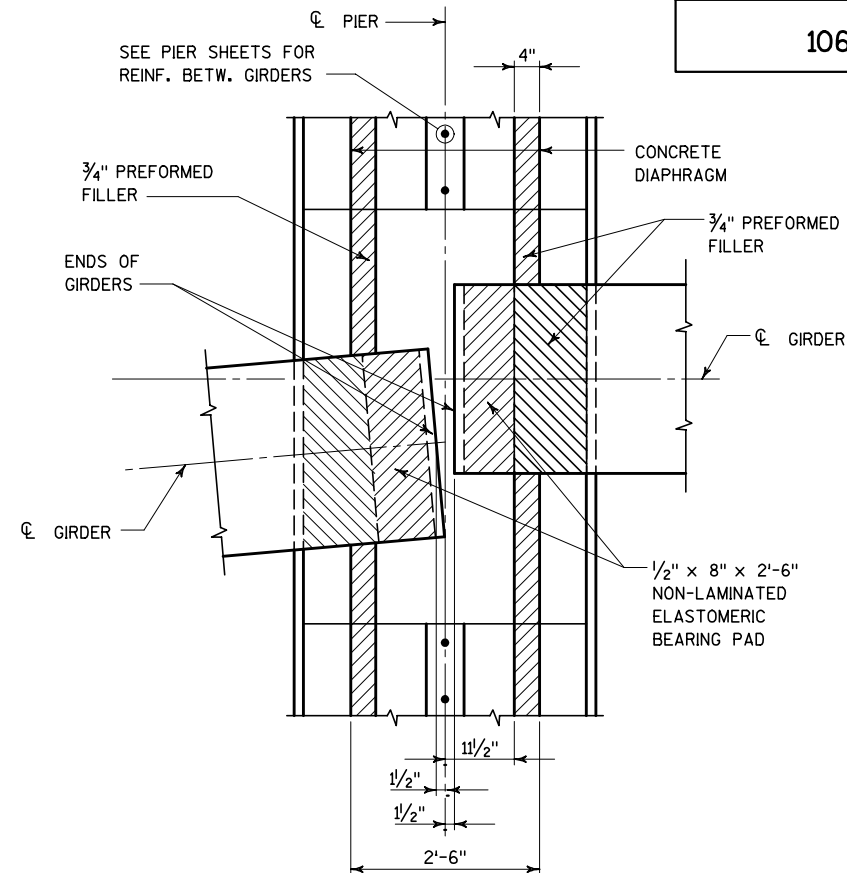
NO.	DATE	REVISION	BY
		STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION	
		STRUCTURE B-40-1412	
CONST. SPEC.	2004	DRAWN BY LJA	PLANS CKD. KES
		PLATE GIRDER BEARINGS	SHEET 397 OF 432



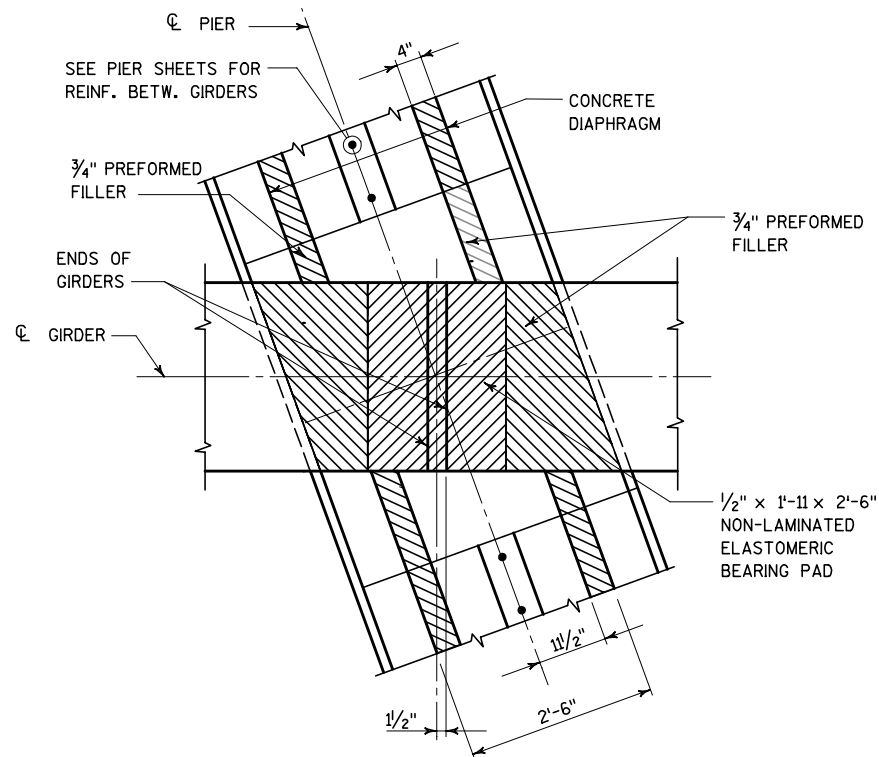
BEARING PAD DETAIL AT FIXED PIER
(0° SKEW)



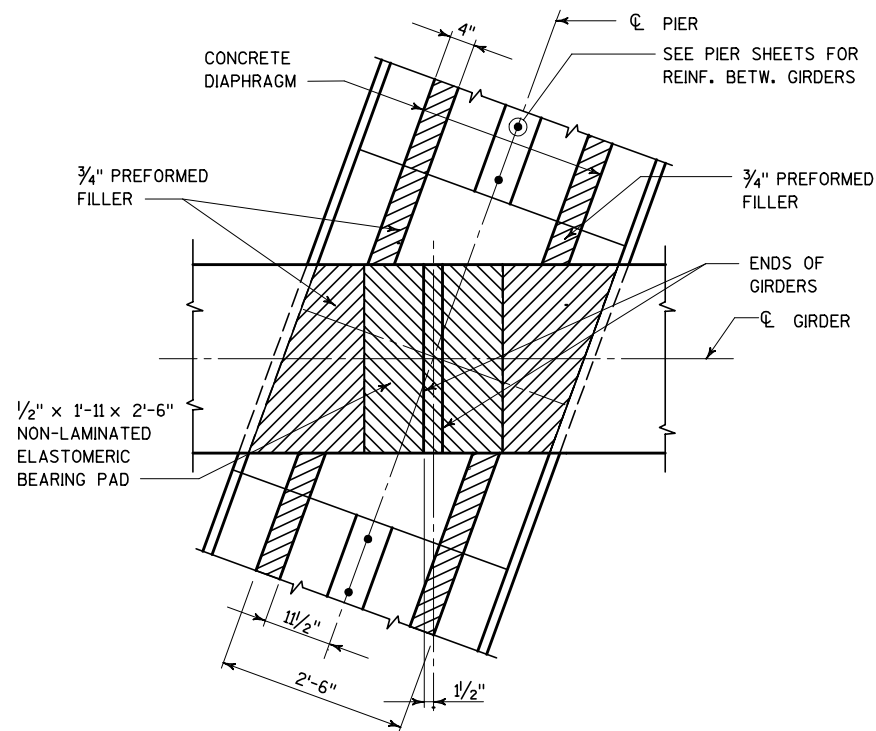
BEARING PAD DETAIL AT FIXED PIER
(0° SKEW)



BEARING PAD DETAIL AT FIXED PIER



BEARING PAD DETAIL AT FIXED PIER
(RHF SKEW)



BEARING PAD DETAIL AT FIXED PIER
(LHF SKEW)

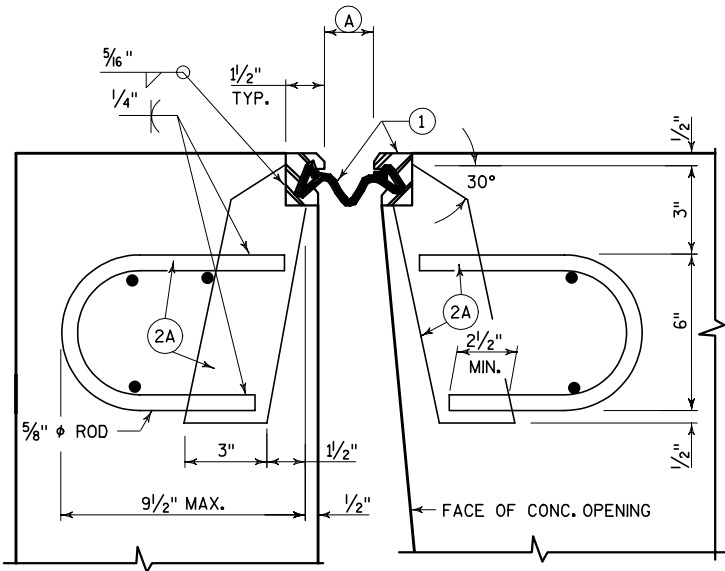
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
ELASTOMERIC BEARING PAD DETAILS			SHEET 398 OF 432

NOTES

- ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.
- AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST & SWEEP.
- FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN & SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.
- SANDBLAST PLATES & EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING THE PLATES & EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED.
- ANCHOR SYSTEM NO. 8 & NO. 9 SHALL CONFORM TO ASTM A307 & SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C & D.
- STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS & HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE".

LEGEND

- NEOPRENE STRIP SEAL & STEEL EXTRUSIONS.
- STUDS $\frac{5}{8}$ " ϕ X 6 $\frac{3}{8}$ " LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS & BEND AS SHOWN AFTER WELDING.
- $\frac{1}{2}$ " THICK ANCHOR PLATE WITH $\frac{5}{8}$ " ϕ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PLATE TO NO.1AT 1'-6" CTRS. BETWEEN GIRDERS.
- $\frac{3}{4}$ " ϕ THREADED ROD WITH 2 NUTS AND WASHERS. FIELD SET ON ϕ OF GIRDER AT ABUTMENTS, AT ABUTMENT BACKWALLS, CONCRETE DIAPHRAGMS, OR EXISTING CONCRETE BACKWALLS. GROUT THREADED ROD INTO FIELD DRILLED HOLES AS SHOWN.
- $\frac{3}{4}$ " ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
- FABRICATE SUPPORT FROM 3" X $\frac{1}{2}$ " BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. FIELD OR SHOP WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY- COATING MATERIAL. PROVIDE $\frac{1}{2}$ " ϕ HOLE FOR NO. 3 & 1" ϕ HOLE FOR NO. 4.
- PLATE $\frac{3}{8}$ " $\times$ 10 $\frac{1}{2}$ " $\times$ (2'-0" LONG FOR SKEWS 10° TO 45° AND 3'-0" LONG FOR SKEWS > 45°) WITH HOLES FOR NO. 7. BEND AS SHOWN.
- $\frac{3}{4}$ " ϕ $\times$ 1 $\frac{1}{2}$ " STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. RECESS $\frac{1}{16}$ " BELOW PLATE SURFACE.
- $\frac{3}{4}$ " ϕ $\times$ 4" GALV. HEX HEAD BOLT. BEND 45°.
- $\frac{3}{4}$ " ϕ $\times$ 2 $\frac{1}{4}$ " GALV. THREADED COUPLING.
- 1" $\times$ 5" SLOTTED CSK. HOLE FOR NO. 7. SLOT PARALLEL TO DIRECTION OF MOVEMENT.

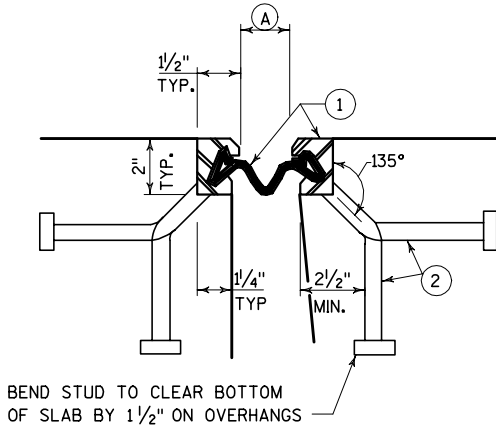


AT PAVING BLOCK

AT SLAB

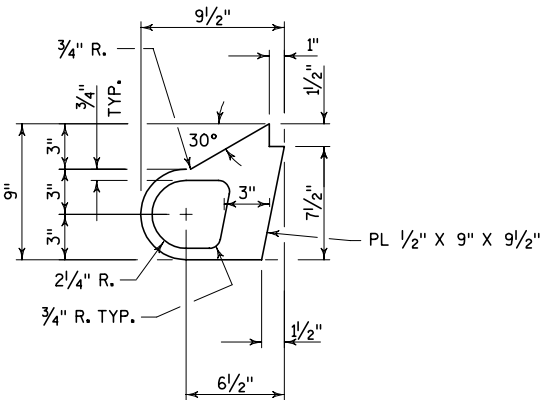
SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS

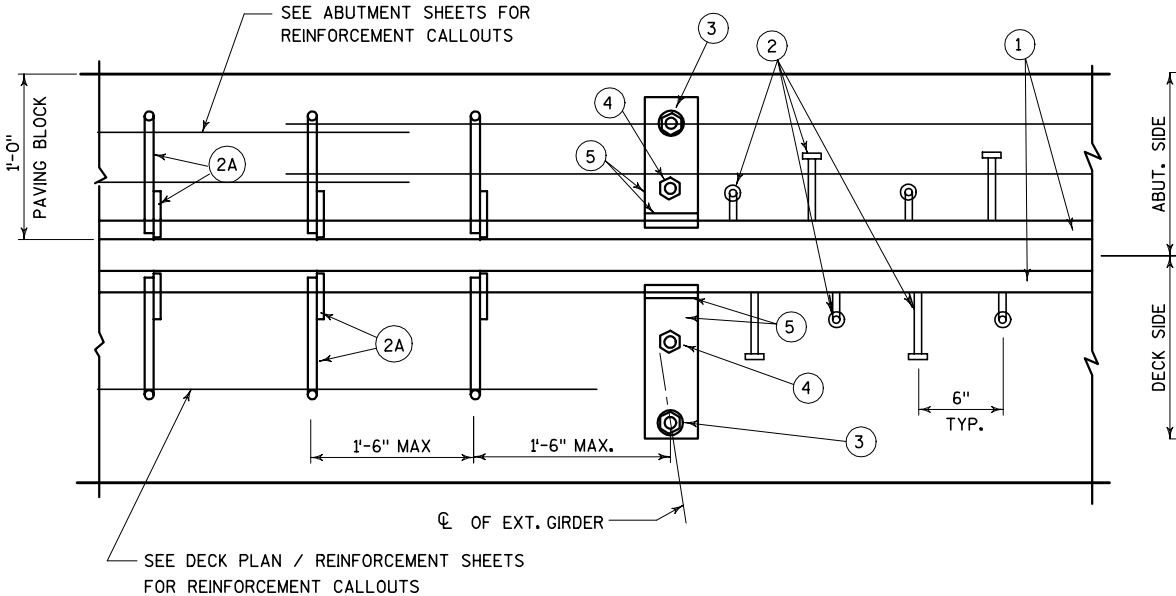


SECTION THRU JOINT

EXTERIOR GIRDER TO EDGE OF SLAB & AT PARAPETS, MEDIAN & SIDEWALKS

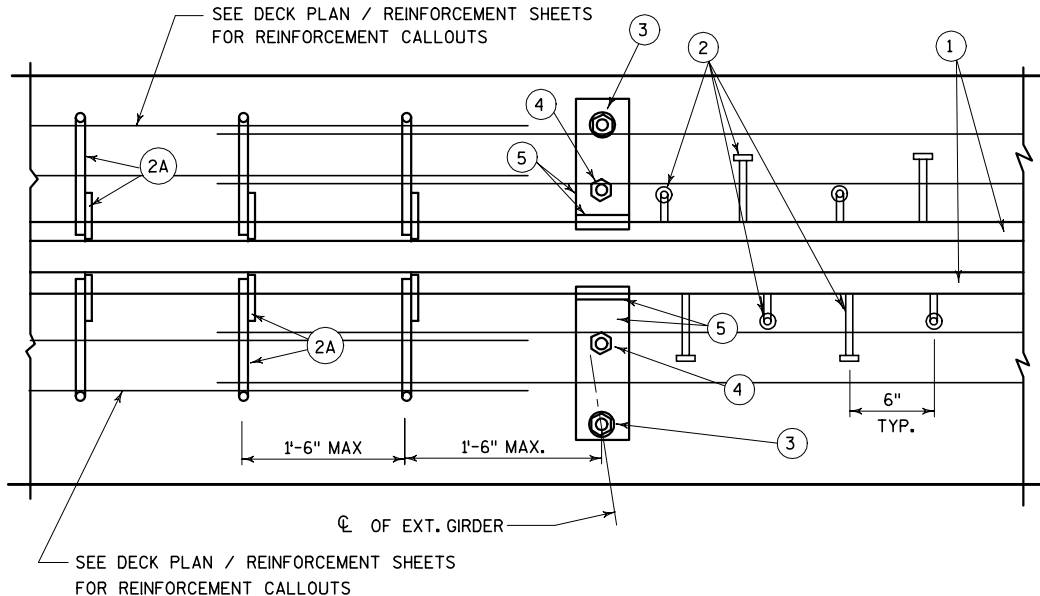


ALTERNATE STRIP SEAL ANCHOR



PARTIAL PLAN AT ABUTMENT

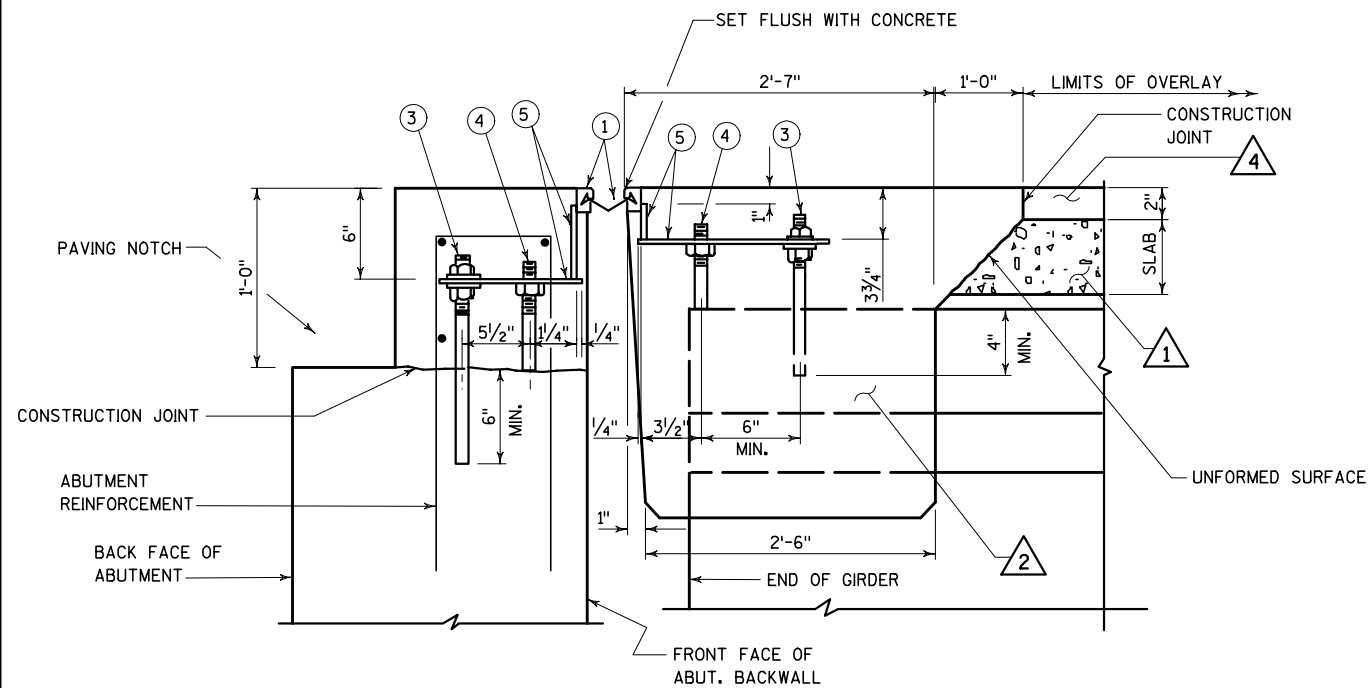
(PLAN APPLIES TO ABUTMENT A1-006)



PARTIAL PLAN AT PIER

(PLAN APPLIES TO P4-004 & EXST. PIER 3 OF B-40-285 (36B))

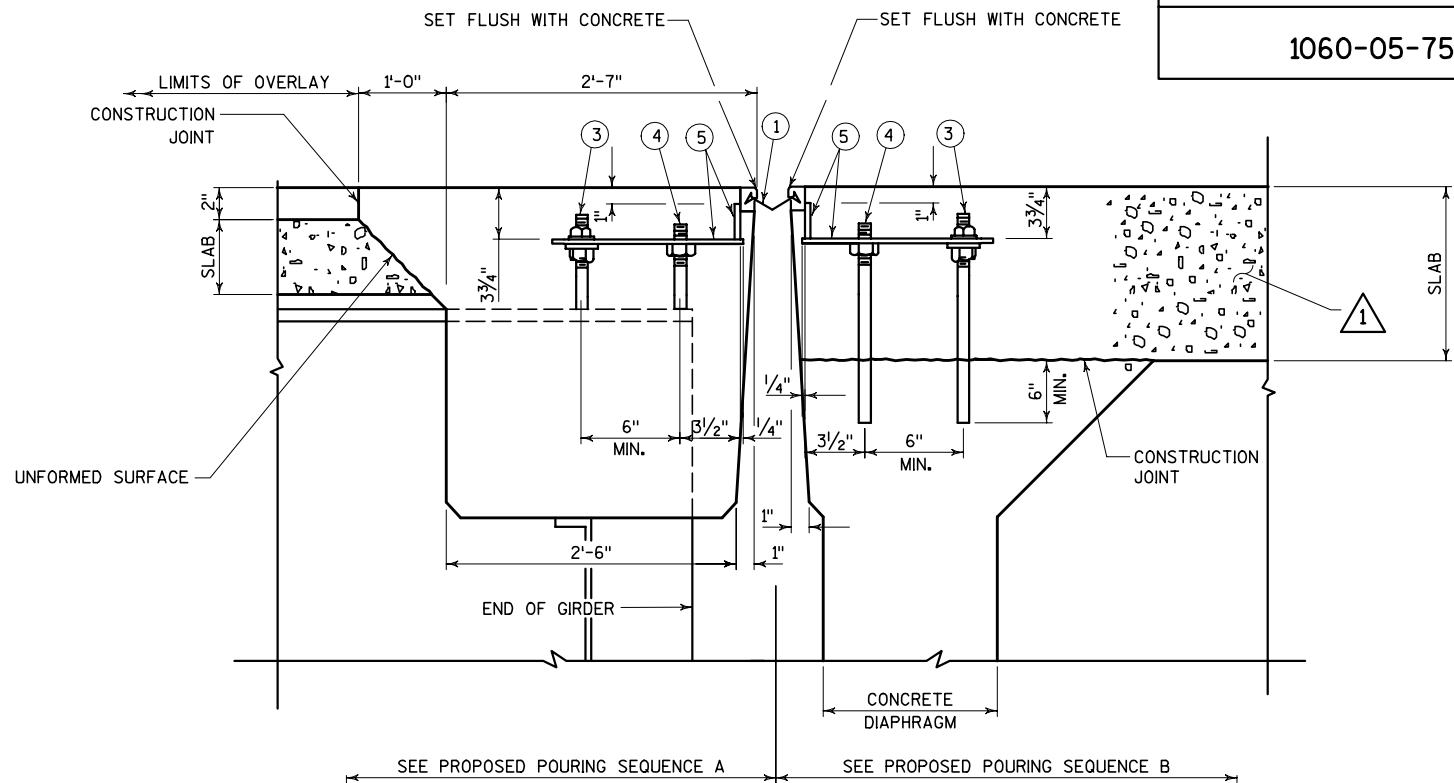
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY	EKM
		PLANS CK'D.	KES
STRIP SEAL DETAILS 1		SHEET 399 OF 432	



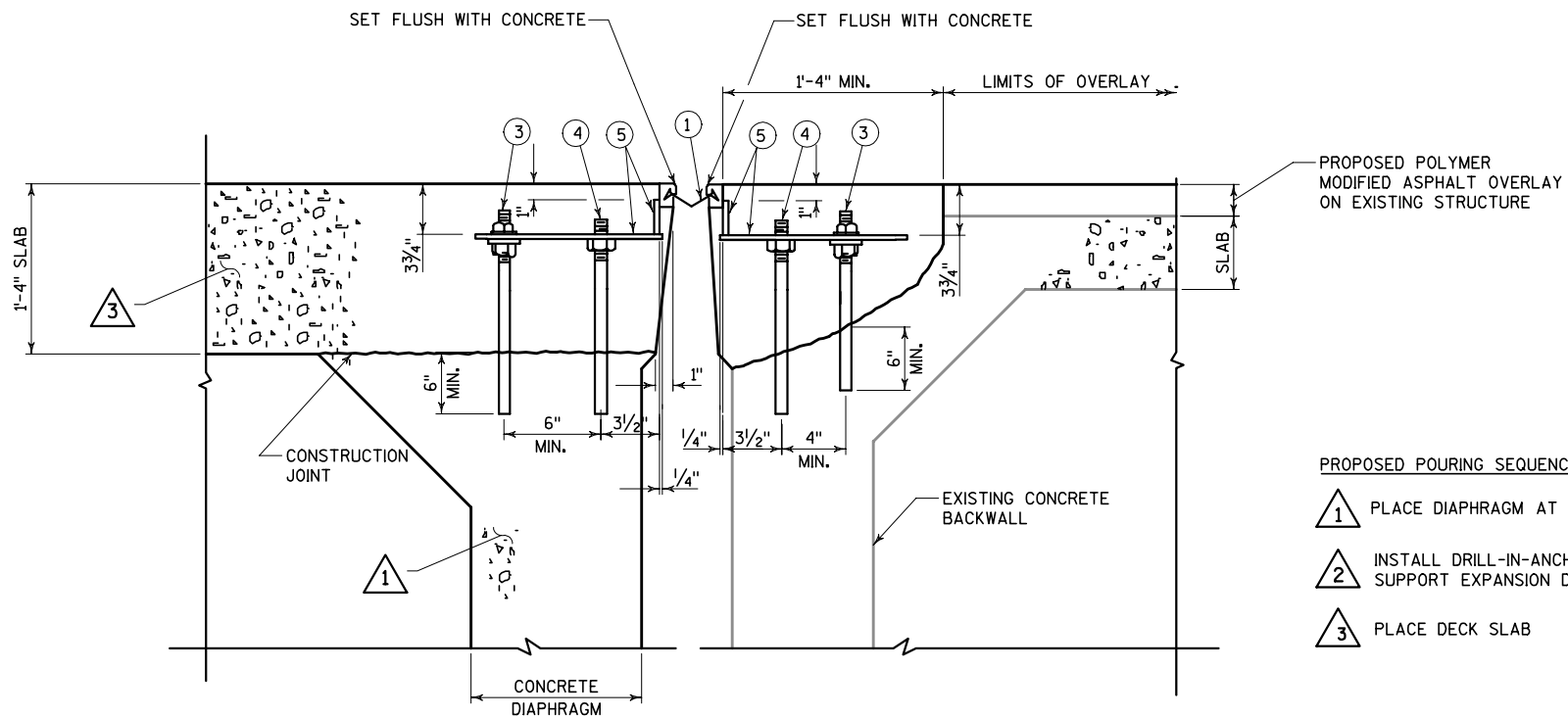
PROPOSED POURING SEQUENCE A

- 1 PLACE DECK SLAB
2 PLACE DIAPHRAGM AT ABUTMENT (INCLUDING FULL-DEPTH SLAB AND EMBEDMENT OF EXPANSION DEVICE)
3 PLACE PARAPETS (NOT SHOWN)
4 PLACE 2" OVERLAY

SECTION THRU JOINT @ PRESTRESSED GIRDER

NORMAL TO ϕ SUBSTRUCTURE

SECTION THRU JOINT AT STEEL PLATE GIRDER AND CONCRETE SLAB

NORMAL TO ϕ SUBSTRUCTURE

PROPOSED POLYMER MODIFIED ASPHALT OVERLAY ON EXISTING STRUCTURE

PROPOSED POURING SEQUENCE B

- 1 PLACE DIAPHRAGM AT PIER
2 INSTALL DRILL-IN-ANCHORS TO SUPPORT EXPANSION DEVICE
3 PLACE DECK SLAB

SECTION THRU JOINT AT CONCRETE SLAB AND EXISTING STRUCTURE

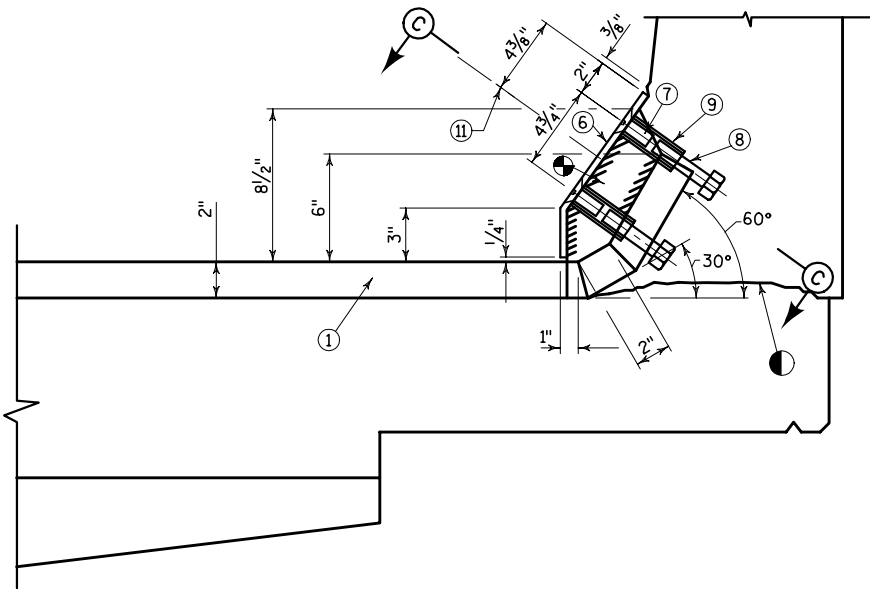
NORMAL TO ϕ EXISTING SUBSTRUCTURE

JOINT LOCATION	(A)	STRIP SEAL SIZE
ABUTMENT A1-006, STA. 123SP+09.66	1 3/4"	4"
PIER P4-004, STA. 632+33.91	1 3/4"	4"
EXIST. PIER, STA. 632+55.92	1 3/4"	4"

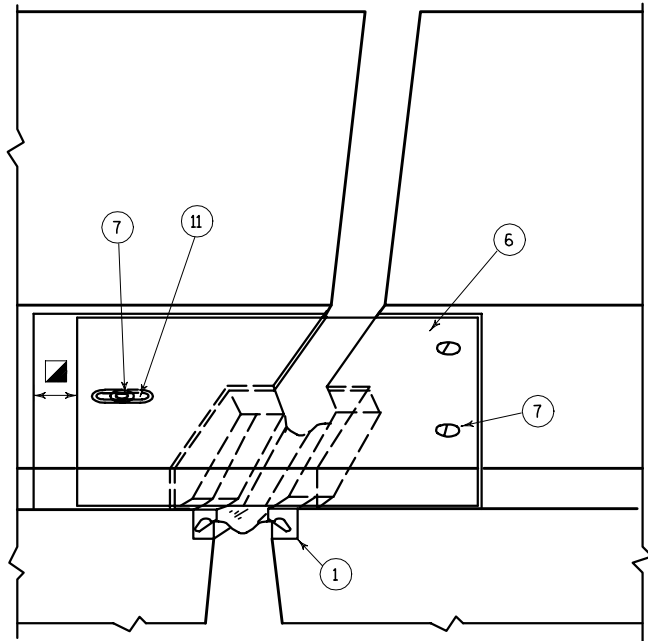
NOTE

FOR LEGEND, SEE SHEET 398

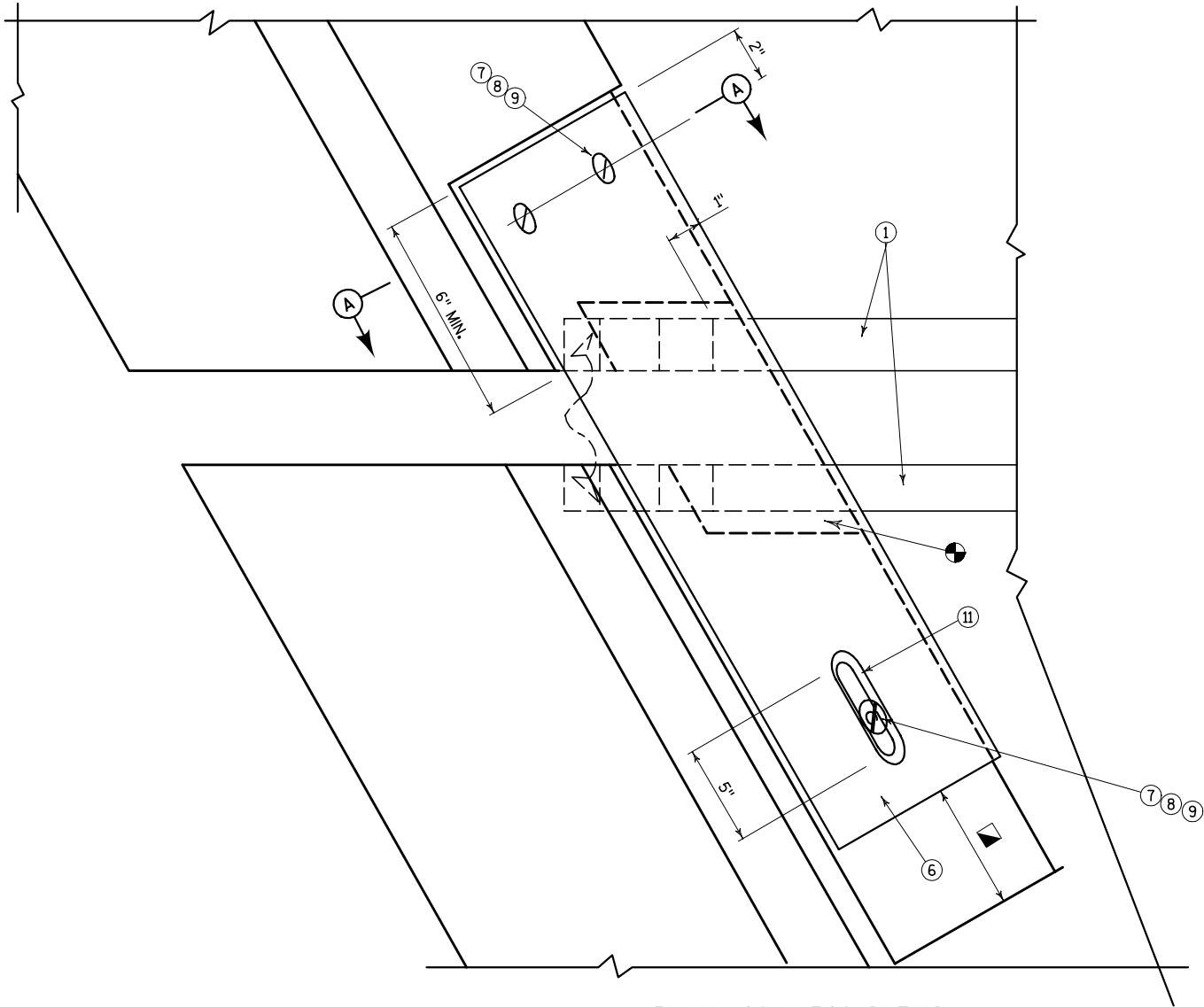
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
STRIP SEAL DETAILS 2			SHEET 400 OF 432



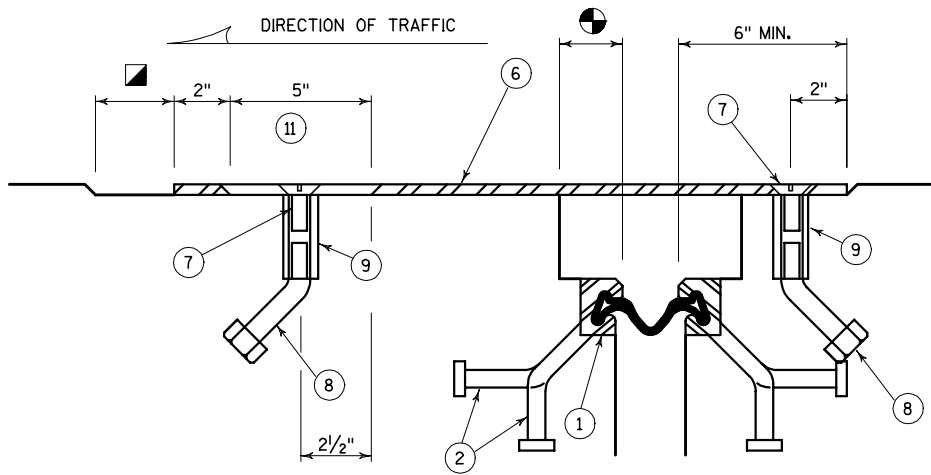
SECTION A-A



VIEW OF PARAPET PLATES
FROM ROADWAY



PLAN 10° < 30° SKEWS



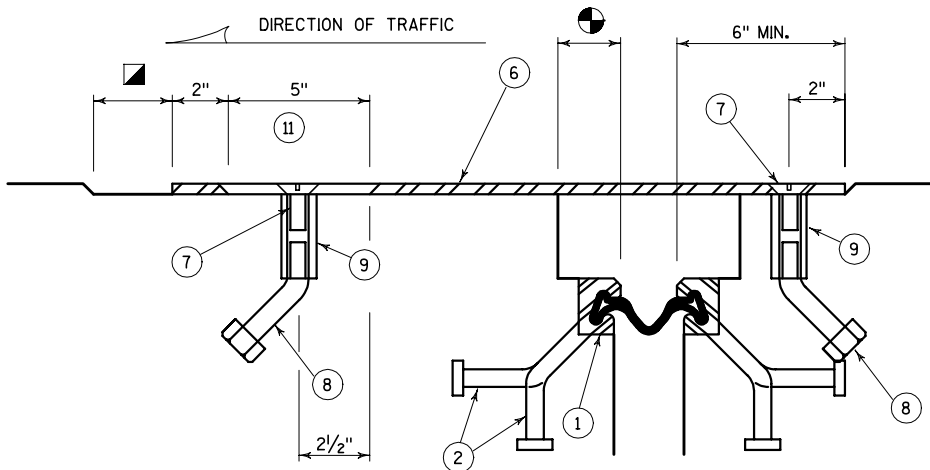
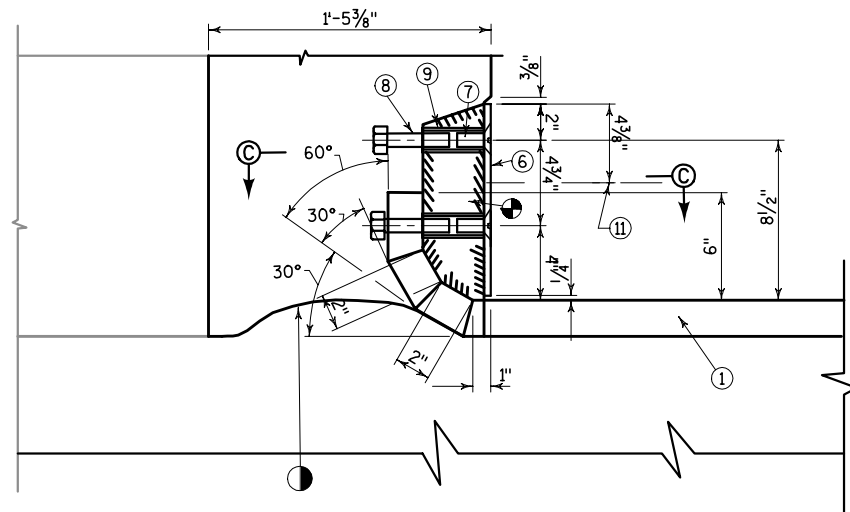
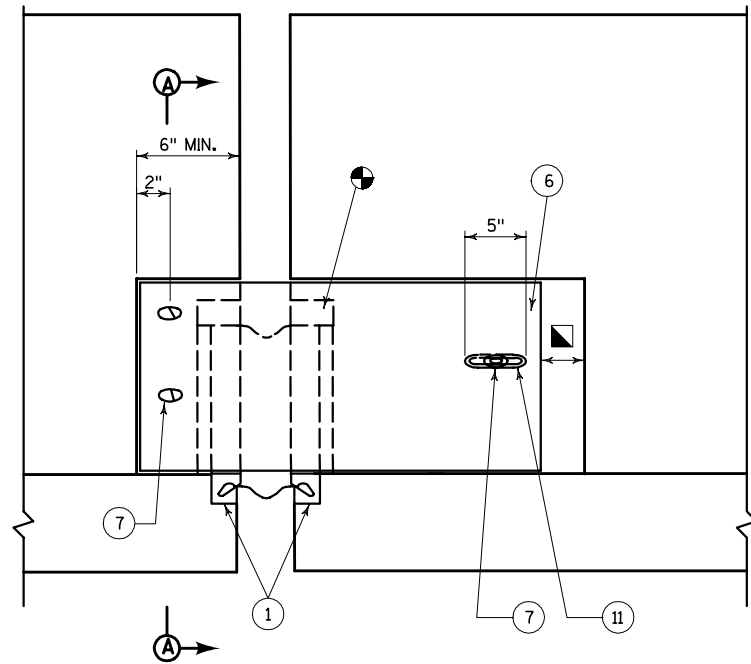
SECTION C-C

NOTES

- BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.
- ▣ JOINT OPENING DIM. ALONG SKEW PLUS 1/2 "
- CONST. JOINT - STRIKE OFF AS SHOWN.

FOR LEGEND, SEE SHEET 398

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
COVER PLATES FOR LF/HF PARAPET STRIP SEAL JOINTS			SHEET 401 OF 432



NOTES

- ⊕ BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.
- ▣ JOINT OPENING DIM. ALONG SKEW PLUS 1/2"
- CONST. JOINT - STRIKE OFF AS SHOWN.

FOR LEGEND, SEE SHEET 398

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
COVER PLATES FOR VERT. FACE PARAPET STRIP SEAL JOINTS			SHEET 402 OF 432

NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS. DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE GLAND.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST & SWEEP.

NO EXPANSION JOINT PROTRUSIONS PERMITTED ABOVE ROADWAY SURFACE, ON PARAPET ROADWAY FACE OR ABOVE SIDEWALK SURFACE (FOR RAISED SIDEWALK).

THE EXPANSION JOINT SEALS SHALL BE PLACED, BONDED & SEALED AS RECOMMENDED BY THE MANUFACTURER. FORM WORK SHALL BE PLACED BETWEEN THE SUPPORT BOXES TO PREVENT CONCRETE INTRUSION INTO THE SUPPORT BOX. A TECHNICAL REPRESENTATIVE OF THE MANUFACTURER SHALL BE PRESENT DURING INSTALLATION. PRIOR TO SETTING THE JOINT ASSEMBLY INTO POSITION, THE PROJECT ENGINEER SHALL DETERMINE THE PROPER JOINT OPENING.

EXPANSION JOINT EXTRUSIONS SHALL BE FABRICATED TO CONFORM TO ROADWAY CROWN & GRADE. FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN & SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST BARS, PLATES, WT-SECTION, ANCHORAGE LOOP, & EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THIS ASSEMBLY SHALL BE HOT DIPPED GALVANIZED.

COST OF FURNISHING & PLACING OF THE EXPANSION JOINTS COMPLETE WITH PARAPET PLATES & SIDEWALK PLATES SHALL BE PAID FOR UNDER THE PRICE BID FOR "MODULAR EXPANSION DEVICE, STRUCTURE B-40-1412".

BAR STEEL REINF. IN DECK AND CONC. DIAPHRAGM SHALL BE RESPALED AS NECESSARY TO ALLOW PLACEMENT OF JOINT ASSEMBLY.

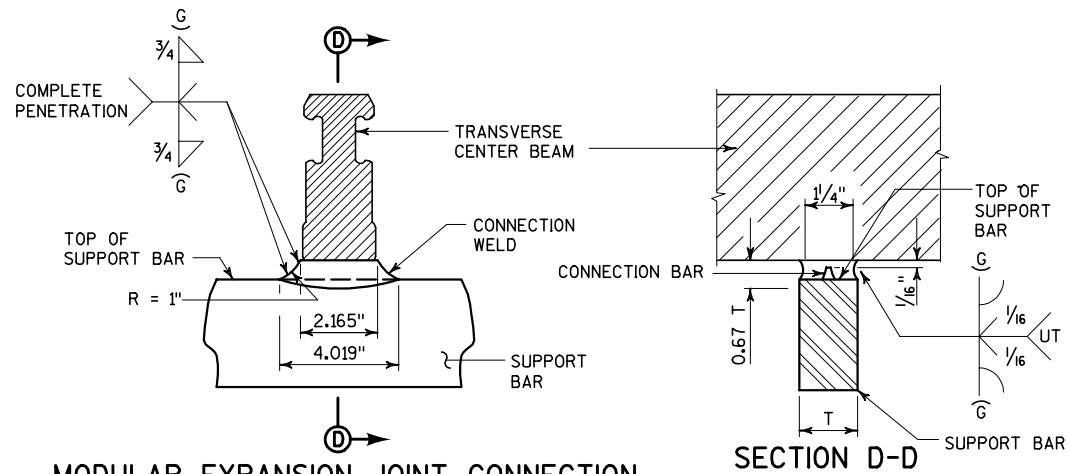
LEGEND

- ① MODULAR EXPANSION JOINT DEVICE.
- ② $\frac{1}{2}$ " PLATE, ONE PER GIRDER MIN. PROVIDE 2 - 1" X 2" MIN. SLOTTED HOLES PLACED HORIZONTALLY FOR NO. 4.
- ③ WT 6 X 29 (OR EQUIVALENT BUILT UP T-SECTION). ONE PER GIRDER. PROVIDE 2 - 1" X 3" MIN. SLOTTED HOLES PLACED VERTICALLY IN WEB OF WT FOR BOLTS NO. 4.
- ④ $\frac{3}{4}$ " ϕ HIGH STRENGTH BOLTS WITH NUTS & WASHERS. (A325 GALV.)
- ⑤ $\frac{3}{4}$ " ϕ THREADED ROD WITH 2 NUTS & WASHERS. GROUT THREADED ROD INTO FIELD DRILLED HOLES. (GALV.)
- ⑥ SUPPORT BOX ASSEMBLY FOR SUPPORT BAR (SPA. PER MANUFACTURER). SPACE TO MISS GIRDERS. FABRICATE BOX FROM $\frac{1}{2}$ " PLATES.
- ⑦ $\frac{3}{8}$ " BULKHEAD PLATE. WELD TO NO. 1, NO. 8 AND NO. 14.
- ⑧ INSIDE PLATE. FABRICATE FROM $\frac{3}{8}$ " PLATE.
- ⑨ OUTSIDE PLATE. FABRICATE FROM $\frac{5}{8}$ " PLATE.
- ⑩ $\frac{7}{8}$ " SQUARE BAR. WELD TO NO. 8 AS SHOWN.
- ⑪ $\frac{3}{4}$ " ϕ X 4" LONG STUDS. WELD TO NO. 8, NO. 7 & NO. 14 AS SHOWN.
- ⑫ $\frac{3}{4}$ " ϕ X 2" STAINLESS STEEL FLAT CTSK. SLOTTED HEAD CAP SCREWS. RECESS $\frac{1}{16}$ " BELOW PLATE SURFACE.
- ⑬ $\frac{1}{2}$ " PLATE WITH $\frac{5}{8}$ " ϕ LOOP ANCHOR FABRICATED AS SHOWN. SPACED AT MANUFACTURER'S SPEC.
- ⑭ INSIDE PLATE. FABRICATE FROM $\frac{5}{8}$ " PLATE
- ⑮ ADIPRENE BUTTON. SEE DETAIL. SET IN OUTSIDE PLATE.
- ⑯ 1" X $\frac{5}{8}$ " BAR WELDED TO NO. 14 AS SHOWN.

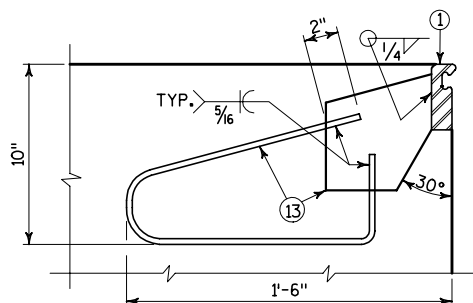
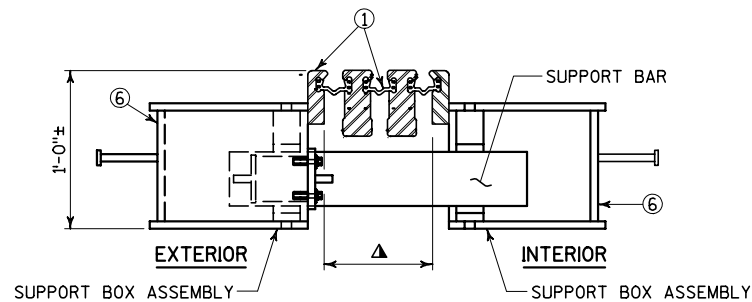
▲ MANUFACTURER'S RECOMMENDED JOINT OPENING BASED ON THE TEMPERATURE ON THE DAY OF PLACEMENT PER TEMPERATURE TABLE

SEE SHEET 404 FOR TEMPERATURE TABLE

▲ JOINT MANUFACTURER SHALL INFORM AND PROVIDE NECESSARY DETAILS TO THE PRESTRESSED GIRDER FABRICATOR, WHEN FORM-OUT OF THE TOP FLANGE IS REQ'D. TO ALLOW PLACEMENT OF SUPPORT BOX ASSEMBLY

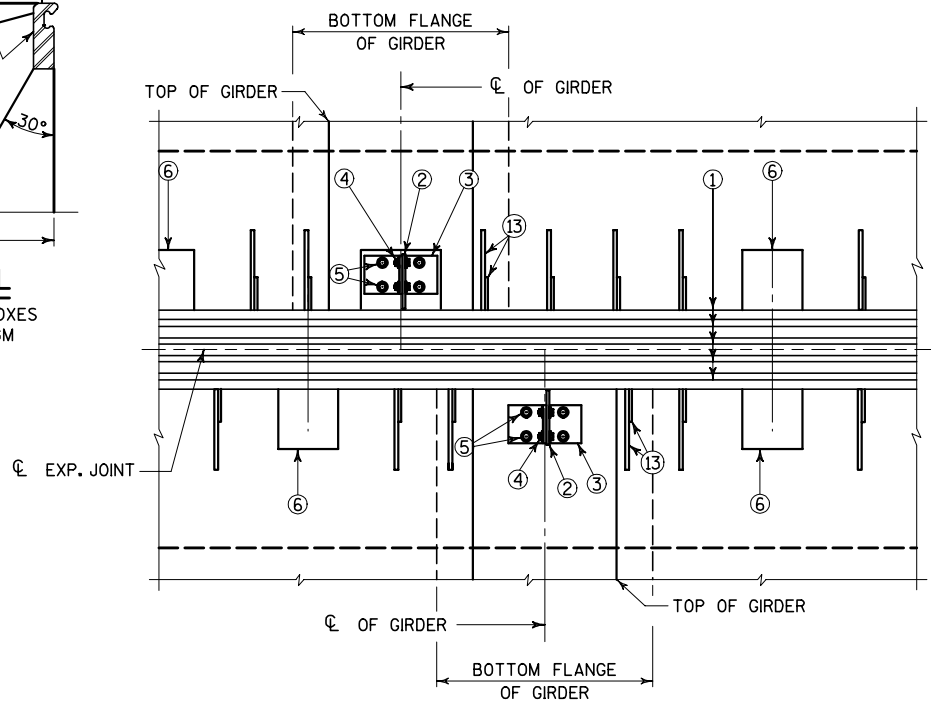


MODULAR EXPANSION JOINT CONNECTION
DETAIL AND WELD SPECIFICATION

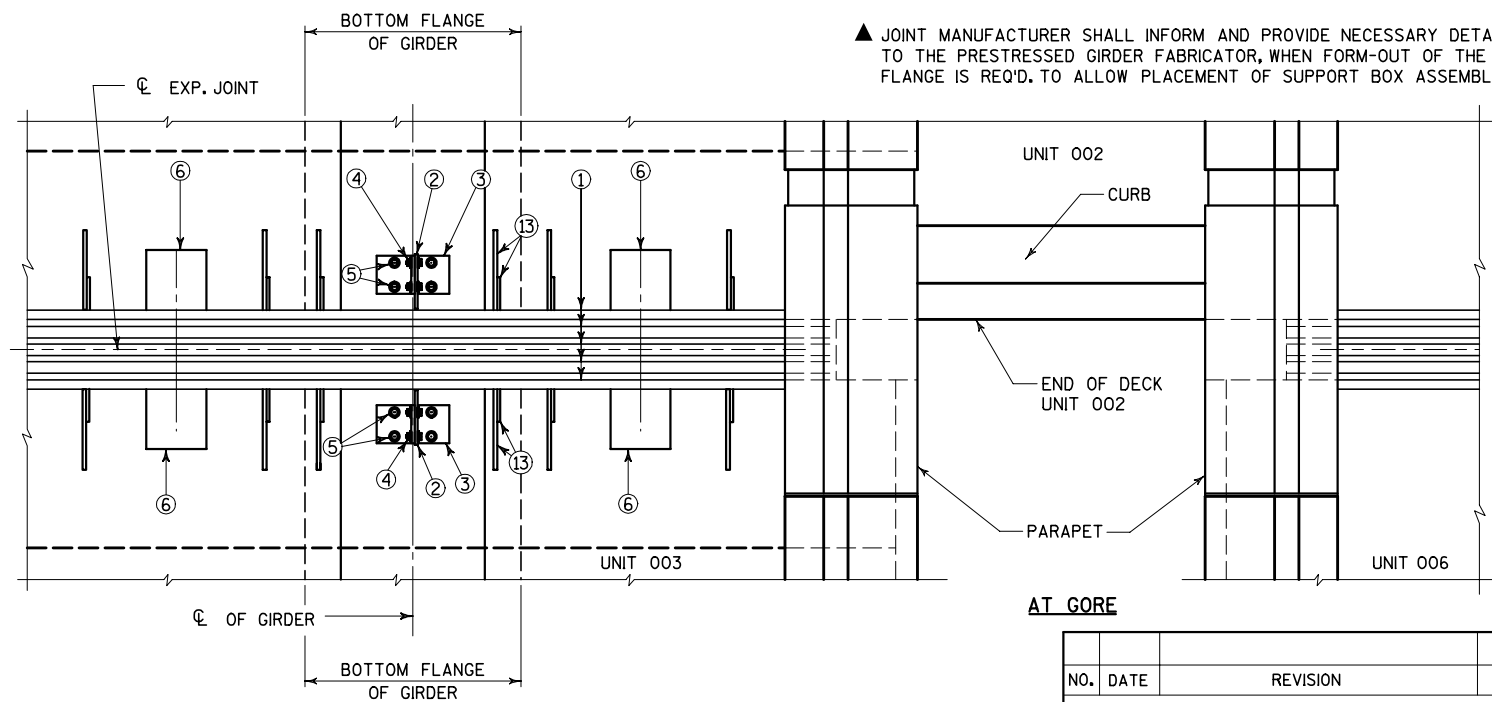


ANCHORAGE DETAIL

PLACE ADJACENT TO SUPPORT BOXES
IN DECK & CONCRETE DIAPHRAGM



PART PLAN (GIRDERS OFFSET AT JOINT)

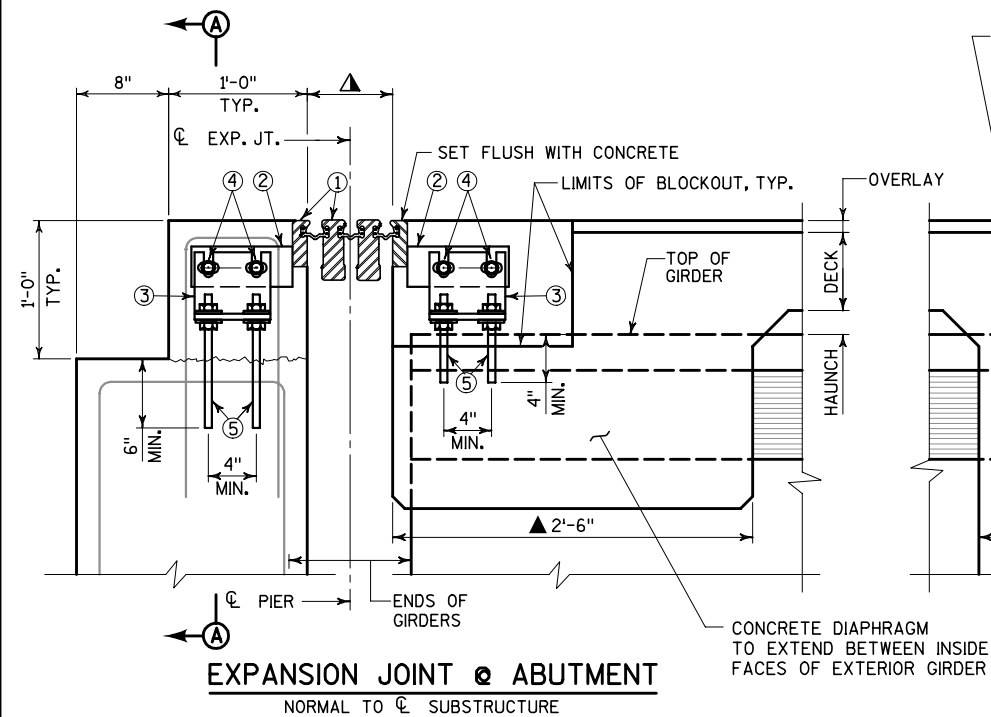


PART PLAN

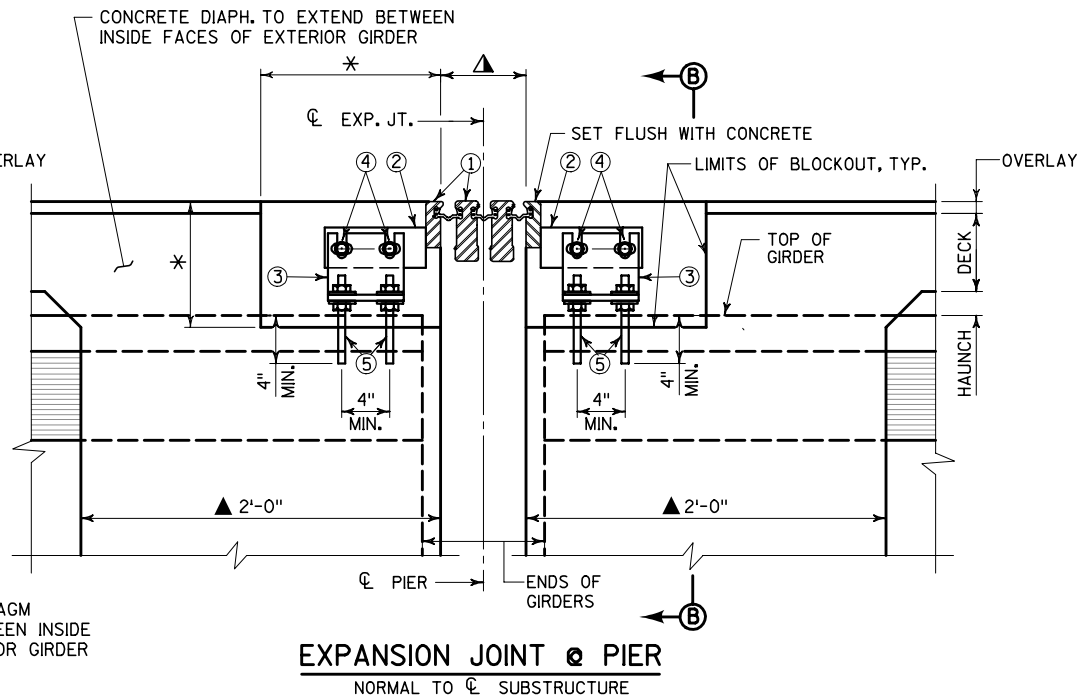
NOTES

FABRICATOR WILL DESIGN EACH JOINT DEPENDING ON THE CONDITIONS AND THE DESIGN CRITERIA USED BY THE SUPPLIER. FABRICATION DRAWING IS SUBJECT TO THE APPROVAL OF THE BUREAU OF STRUCTURES.

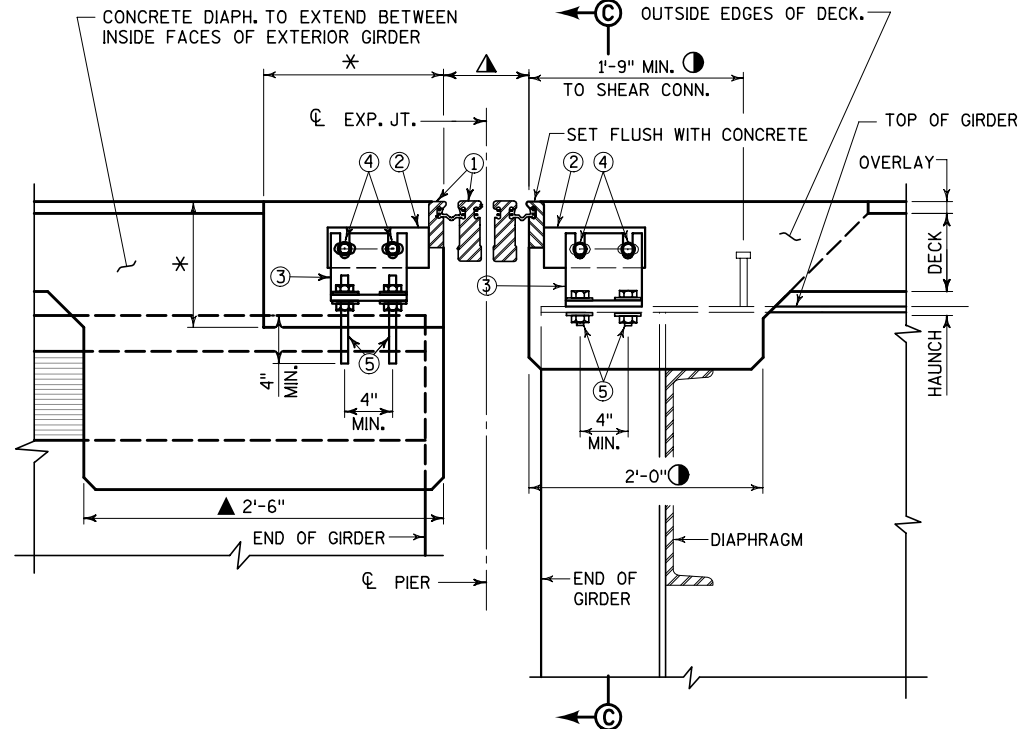
SUPPORT BOXES ARE SHOWN FOR GENERAL INFORMATION AND LOCATION MAY VARY ACCORDING TO FABRICATOR DESIGN.



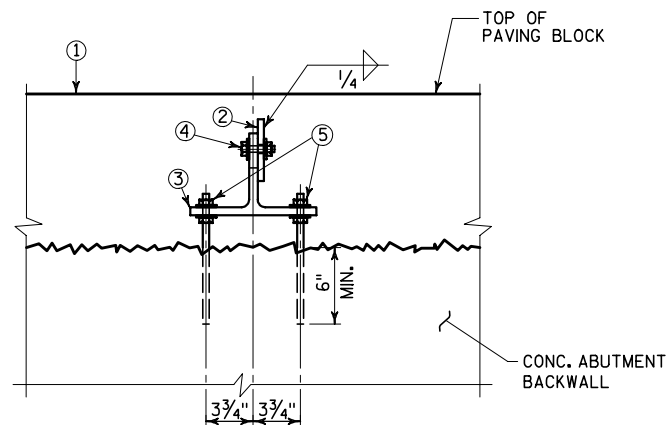
EXPANSION JOINT @ ABUTMENT

NORMAL TO ϕ SUBSTRUCTURE

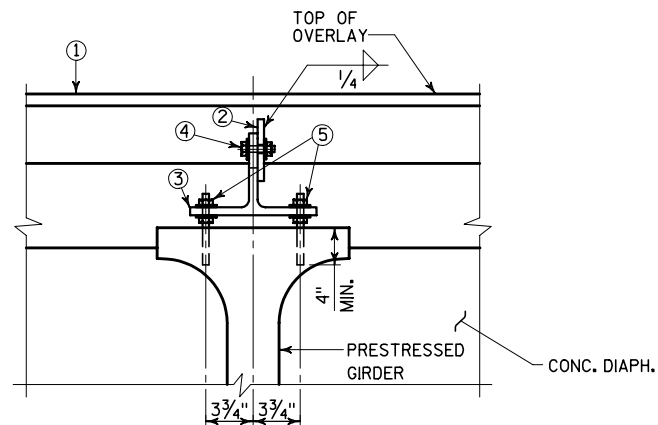
EXPANSION JOINT @ PIER

NORMAL TO ϕ SUBSTRUCTURE

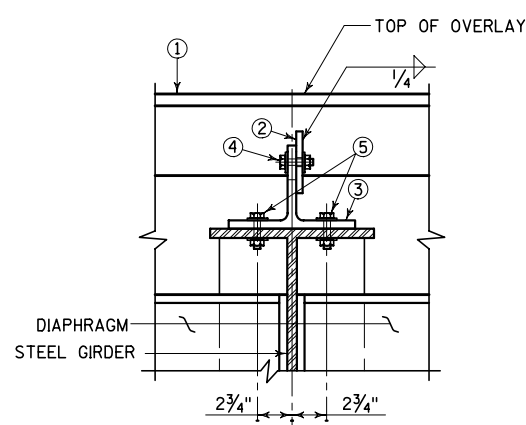
EXPANSION JOINT @ PIER

NORMAL TO ϕ SUBSTRUCTURE
PRESTRESSED GIRDER TO STEEL PLATE GIRDER TRANSITION

SECTION A-A

(WT 6x29 SUPPORTED ON
TOP OF ABUTMENT BACKWALL)

SECTION B-B

(WT 6x29 SUPPORTED ON
TOP OF PRESTRESSED GIRDER)

SECTION C-C

(WT 6x29 SUPPORTED ON
TOP OF STEEL PLATE GIRDER)

JOINT LOCATION	(A)	(B)
ABUTMENT A1-001, STA. 701B+59.49	0.45"	2.25"
PIER P1-002, STA. 34EN+26.89	0.50"	2.50"
PIER P6-002, STA. 713B+97.91	0.65"	3.25"
PIER P5-002, STA. 39EN+56.89	0.41"	2.125"
PIER P10-002, STA. 719B+27.91	0.56"	2.85"
PIER P1-004, STA. 729B+54.84	0.55"	2.00"
PIER P1-005, STA. 25EN+81.74	0.46"	2.125"

RAMP MODULAR EXPANSION JOINTS QUANTIFIED IN RAMP STRUCTURE PLANS.

TEMPERATURE TABLE

TEMPERATURE TABLE FOR SETTING JOINT OPENINGS
TO BE DETERMINED BY JOINT MANUFACTURER WITH
THE FOLLOWING DESIGN DATA:

- (A) IN. OF MOVEMENT PER 10° F
- MEDIAN TEMPERATURE OF 45° F
- TEMP. RANGE IN TABLE FROM (- 5° F) TO (+ 95° F)
- ADJUST INITIAL JOINT OPENINGS BY A REDUCTION OF (B) IN., WHICH ACCOUNTS FOR SHRINKAGE (CREEP) OF THE SUPERSTRUCTURE OVER TIME, TO PRODUCE FINAL JOINT OPENINGS FOR TABLE.

A TABLE OF JOINT OPENINGS BASED ON ABOVE DATA
SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

NOTES

FOR LEGEND, SEE SHT. 398.

▲ MANUFACTURER'S RECOMMENDED JOINT OPENING BASED ON THE
TEMPERATURE ON THE DAY OF PLACEMENT PER TEMPERATURE TABLE▲ JOINT MANUFACTURER SHALL INFORM AND PROVIDE NECESSARY DETAILS
TO THE PRESTRESSED GIRDER FABRICATOR, WHEN FORM-OUT OF THE TOP
FLANGE IS REQ'D. TO ALLOW PLACEMENT OF SUPPORT BOX ASSEMBLY● DIMENSION IS PARALLEL TO ϕ GIRDER.

* SIZE BLOCK OUT BASED ON JOINT MANUFACTURER'S RECOMMENDATIONS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CKD. KES
MODULAR EXPANSION JOINT DETAILS 2			SHEET 404 OF 432



TYPE LF SHOWN



15 NOT SHOWN ON
TRAFFIC FACE
FOR CLARITY

NOT SHOWN ON
TRAFFIC FACE
FOR CLARITY



DIRECTION OF
TRAFFIC



DIRECTION OF
TRAFFIC

TYPE LF SHOWN
OTHER TYPES SIMILAR



FIXED (TRAFFIC UPSTREAM) SIDE

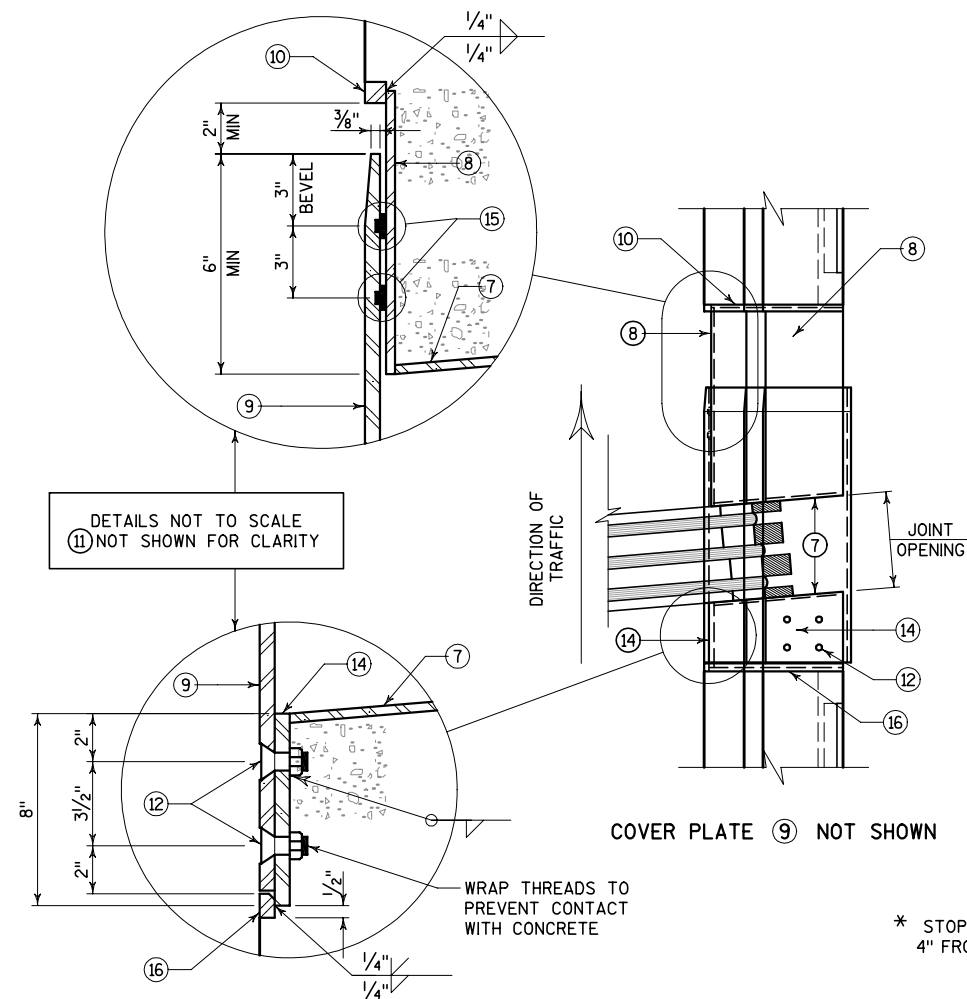


SLIDING (TRAFFIC DOWNSTREAM) SIDE

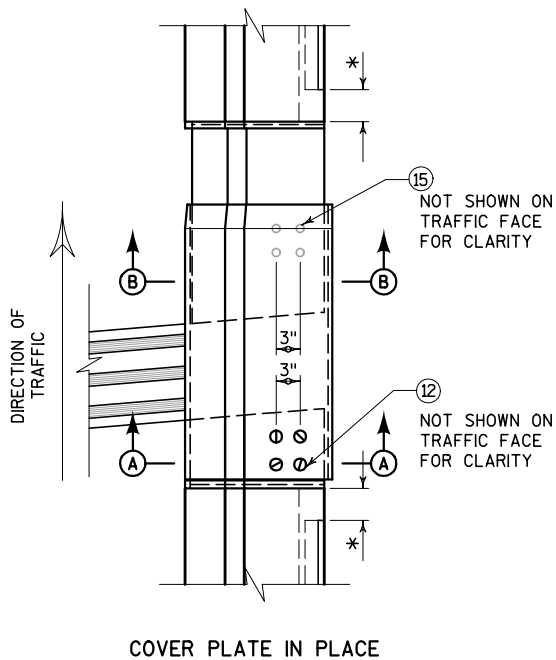


FOR LEGEND, SEE SHT. 365

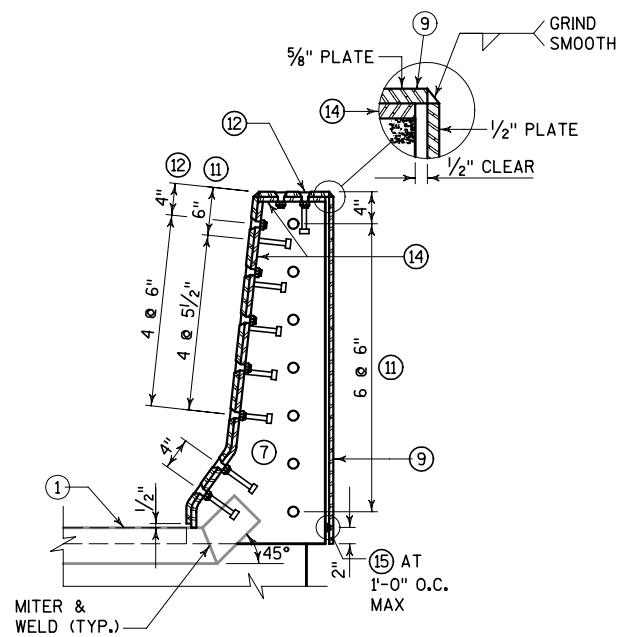
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
COVER PLATES FOR LF PARAPET MOD. EXPANSION JOINT			SHEET 405 OF 432



COVER PLATE ⑨ NOT SHOWN

PLAN* STOP PARAPET RUSTICATIONS
4" FROM EDGE OF PLATE, TYP

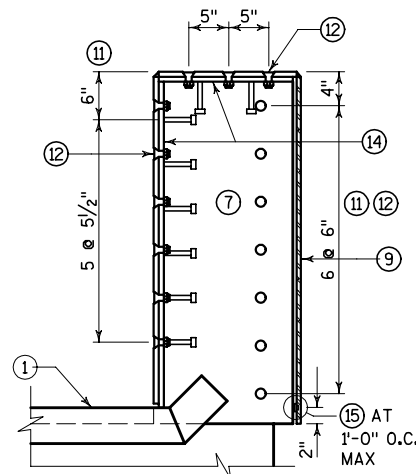
COVER PLATE IN PLACE



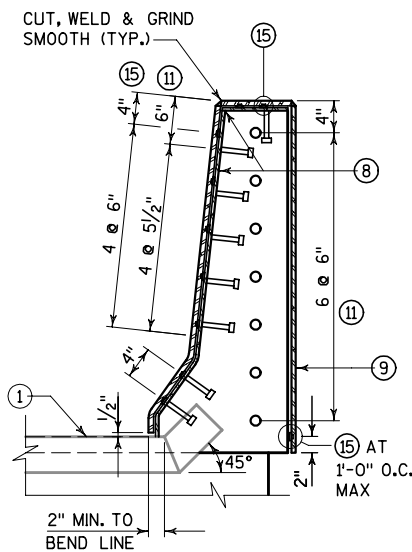
TYPE HF

SECTION A-A

FIXED (TRAFFIC UPSTREAM) SIDE



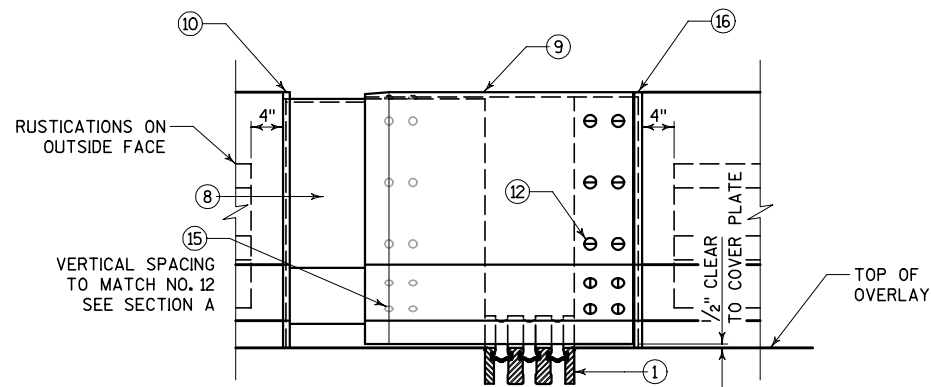
TYPE HF VERTICAL



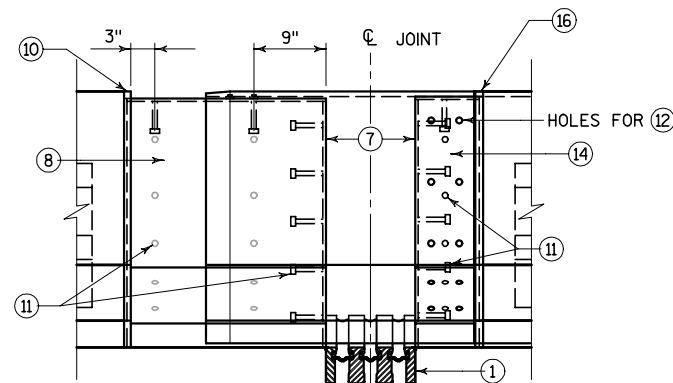
TYPE HF

SECTION B-B

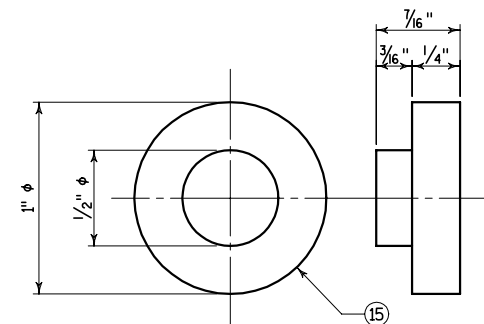
SLIDING (TRAFFIC DOWNSTREAM) SIDE



COVER PLATE IN PLACE

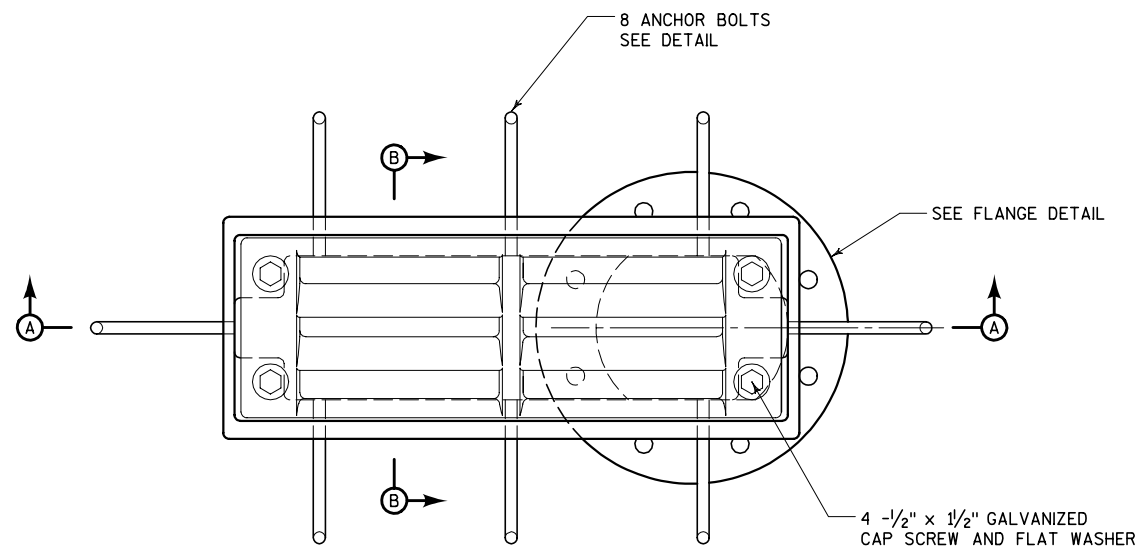


COVER PLATE ⑨ NOT SHOWN

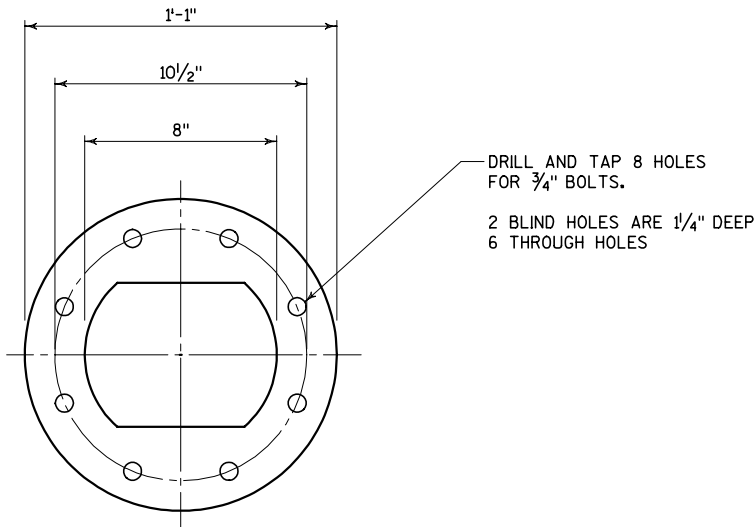
INSIDE FACE ELEVATION**ADIPRENE BUTTON****NOTE**

FOR LEGEND, SEE SHT. 398.

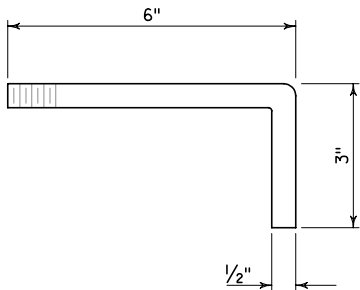
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
COVER PLATES FOR HF PARAPET MOD. EXPANSION JOINT			SHEET 406 OF 432



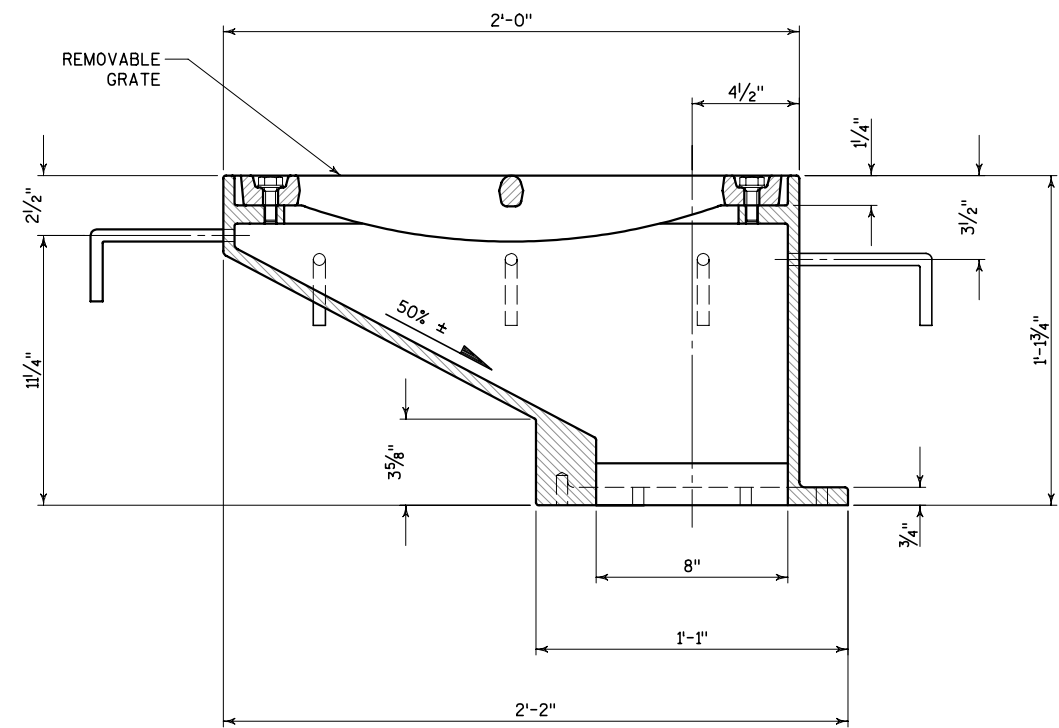
PLAN



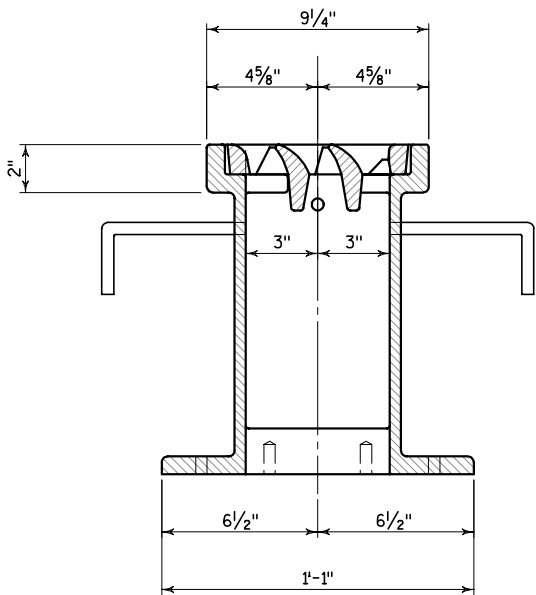
PLAN - FLANGE ONLY



ANCHOR BOLT DETAIL



SECTION A-A



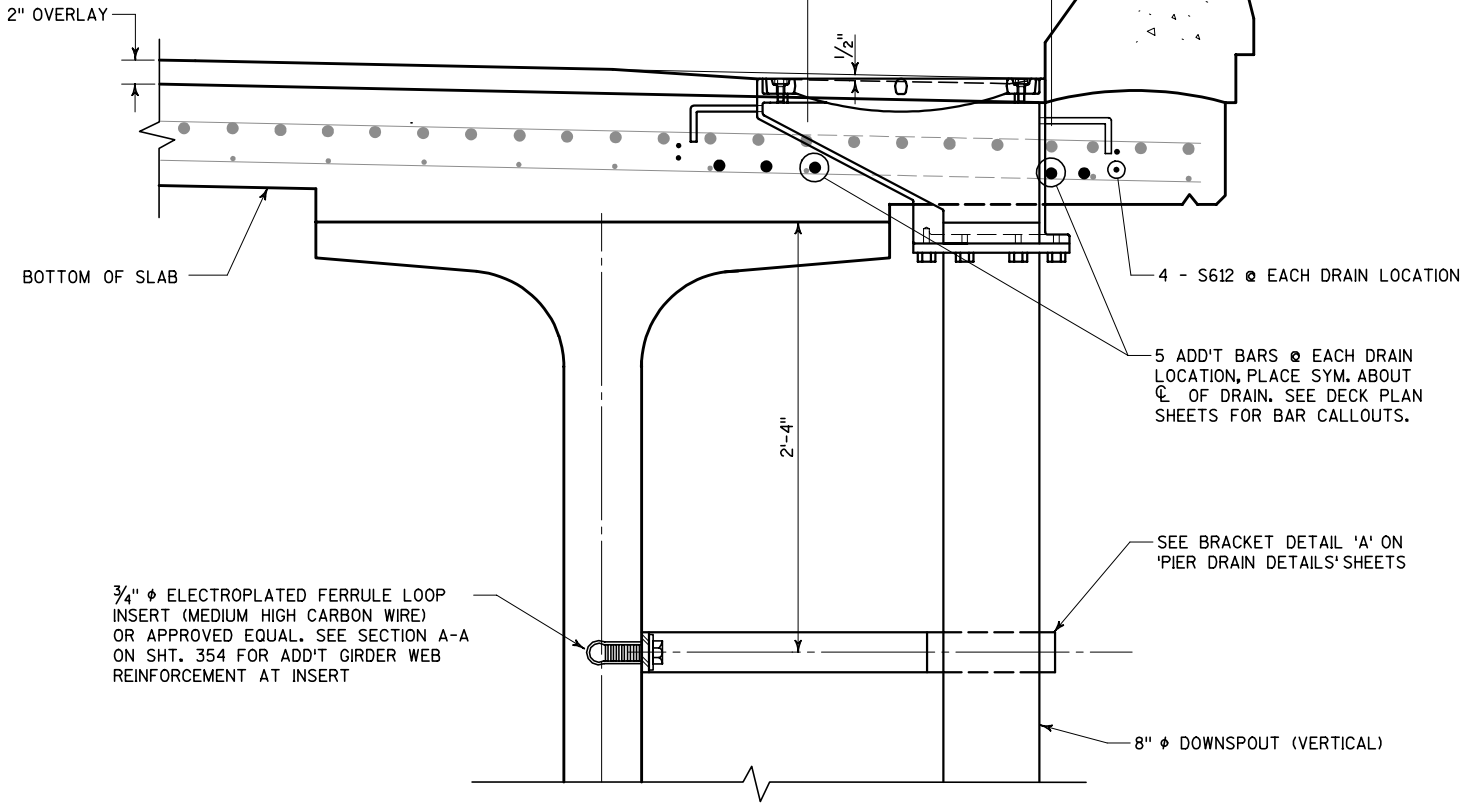
SECTION B-B

NOTES

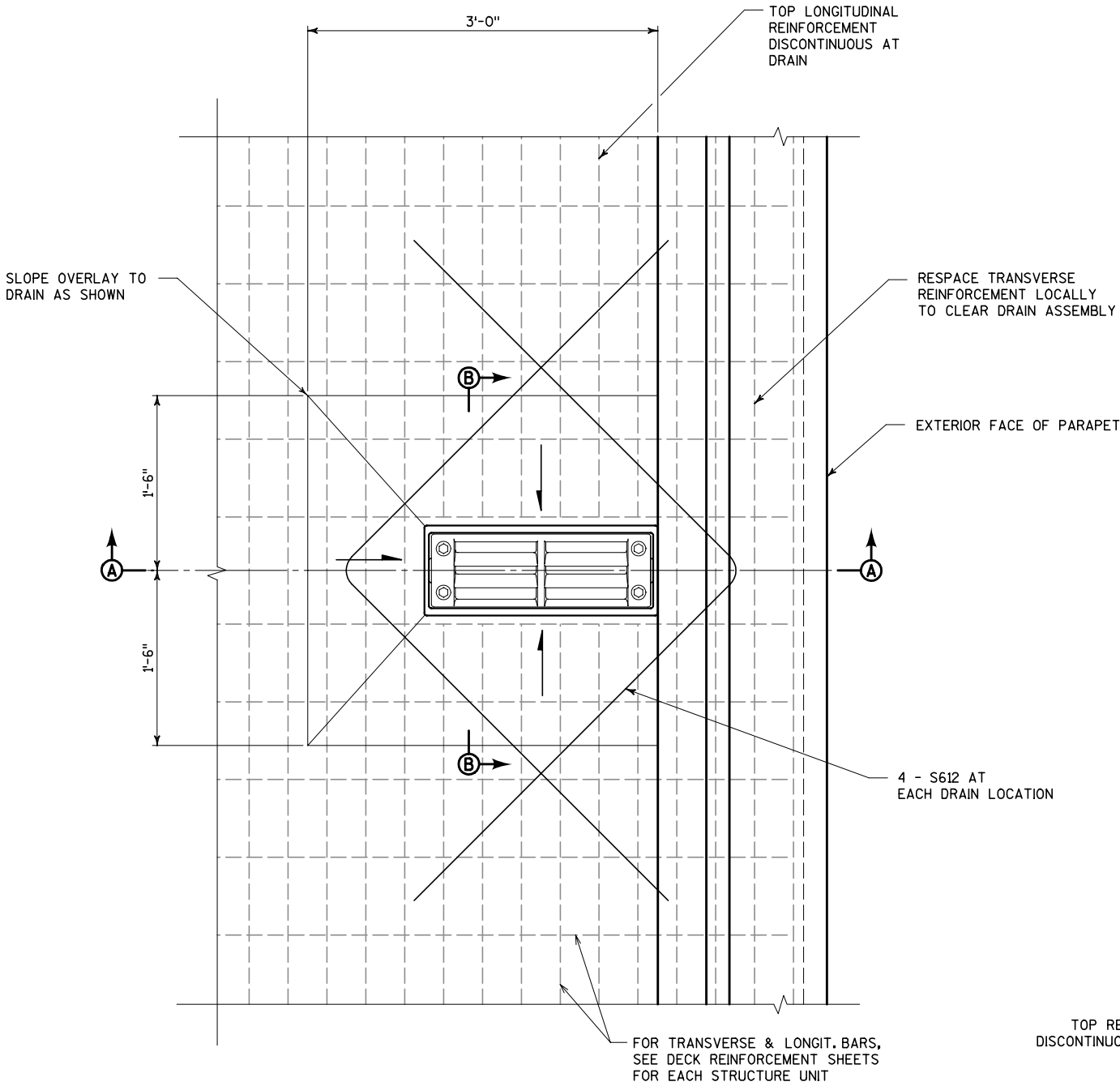
1. THE DRAIN CASTING SHOWN IS BASED ON PART NUMBER R-3921-V1 FROM THE NEENAH FOUNDRY COMPANY WITH MODIFICATIONS AS REQUIRED TO PERMIT AN 8" DOWNSPOUT TO BE USED.
2. A FABRICATED DRAIN ASSEMBLY MAY BE SUBSTITUTED IF THE HYDRAULIC PROPERTIES OF THE SPECIFIED CASTING CAN BE MAINTAINED, IF THE GEOMETRY OF THE REPLACEMENT IS ACCEPTABLE AND IF APPROVED BY THE ENGINEER. FABRICATED DRAINS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A153.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY DJS	PLANS CK'D. KES
FLOOR DRAIN TYPE A			SHEET 407 OF 432

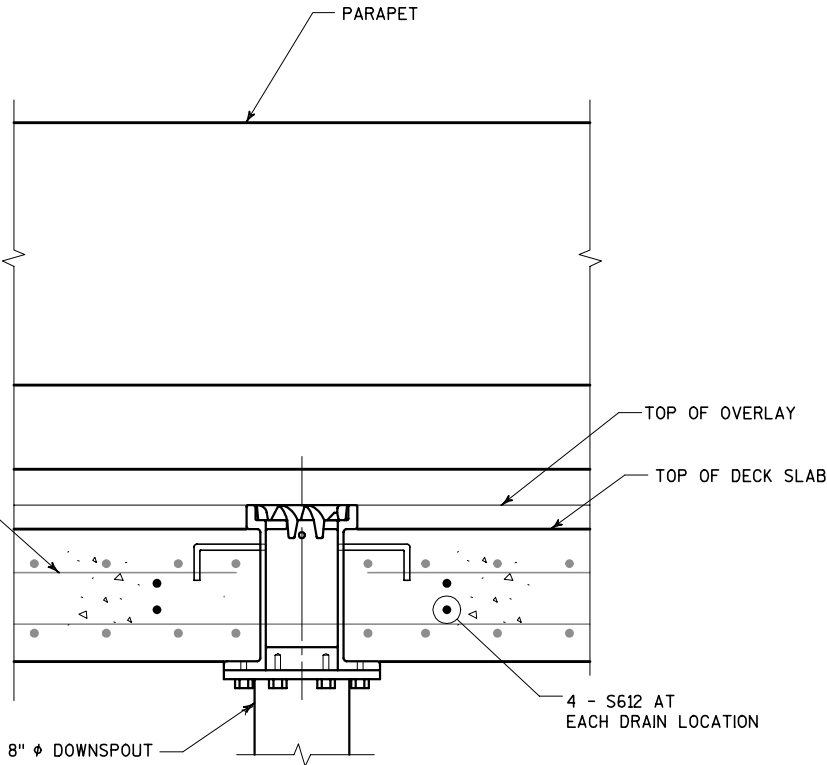
CUT TOP & BOTTOM LONGIT. DECK REINF. A MAX. OF 1" CLEAR FROM DRAIN FRAME WHERE BARS INTERFERE WITH FRAME, DISPLACE BARS WHERE POSSIBLE



SECTION A-A



PLAN

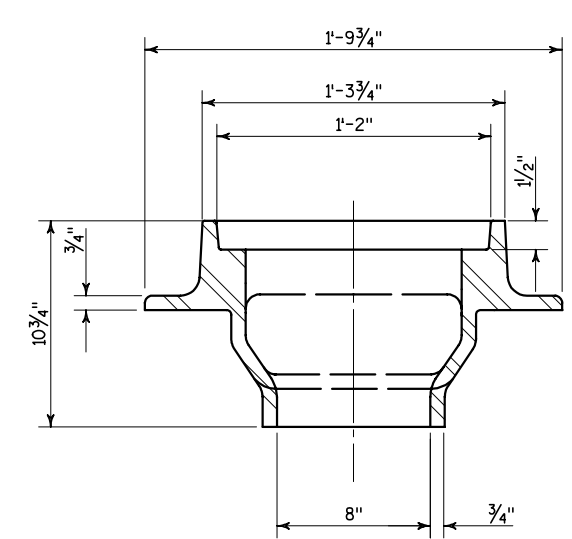
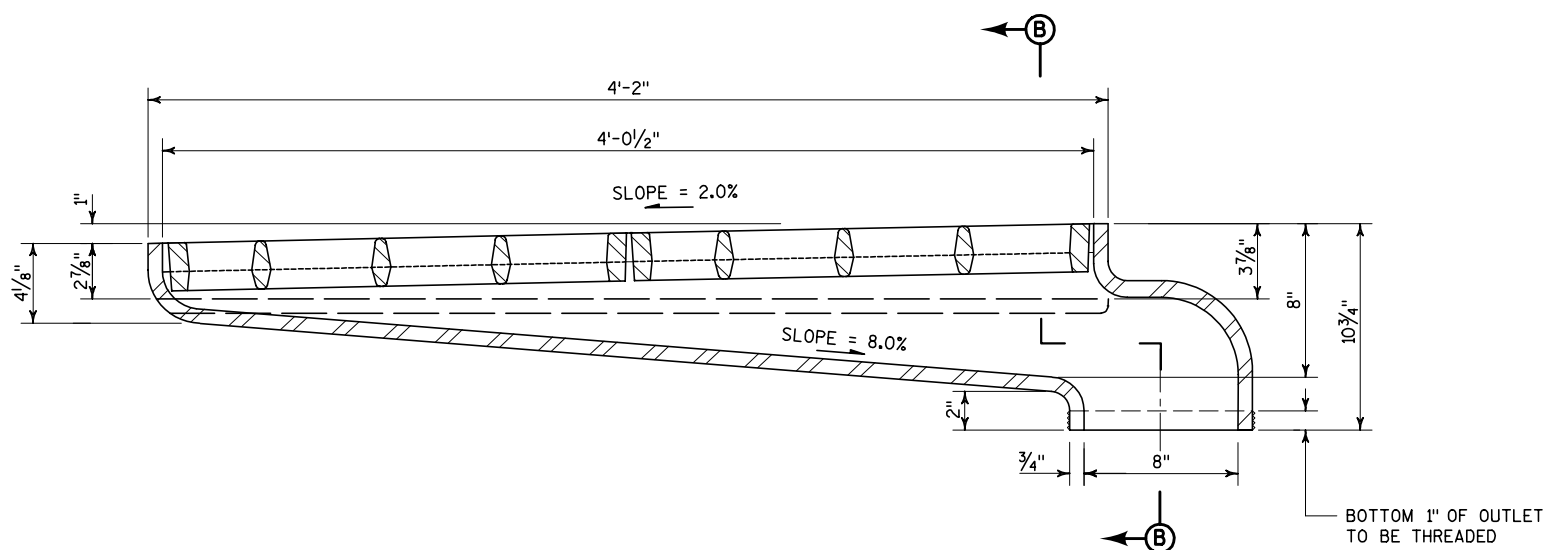
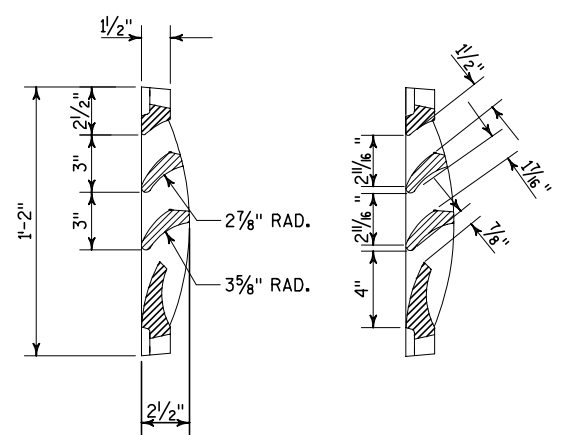
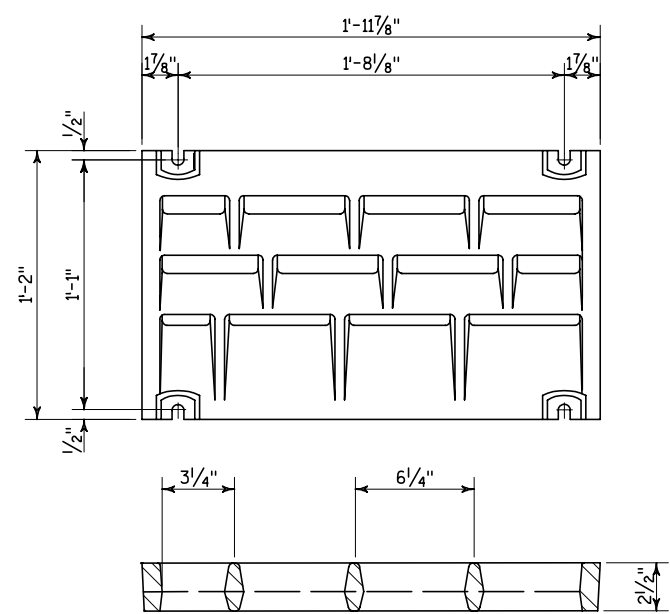
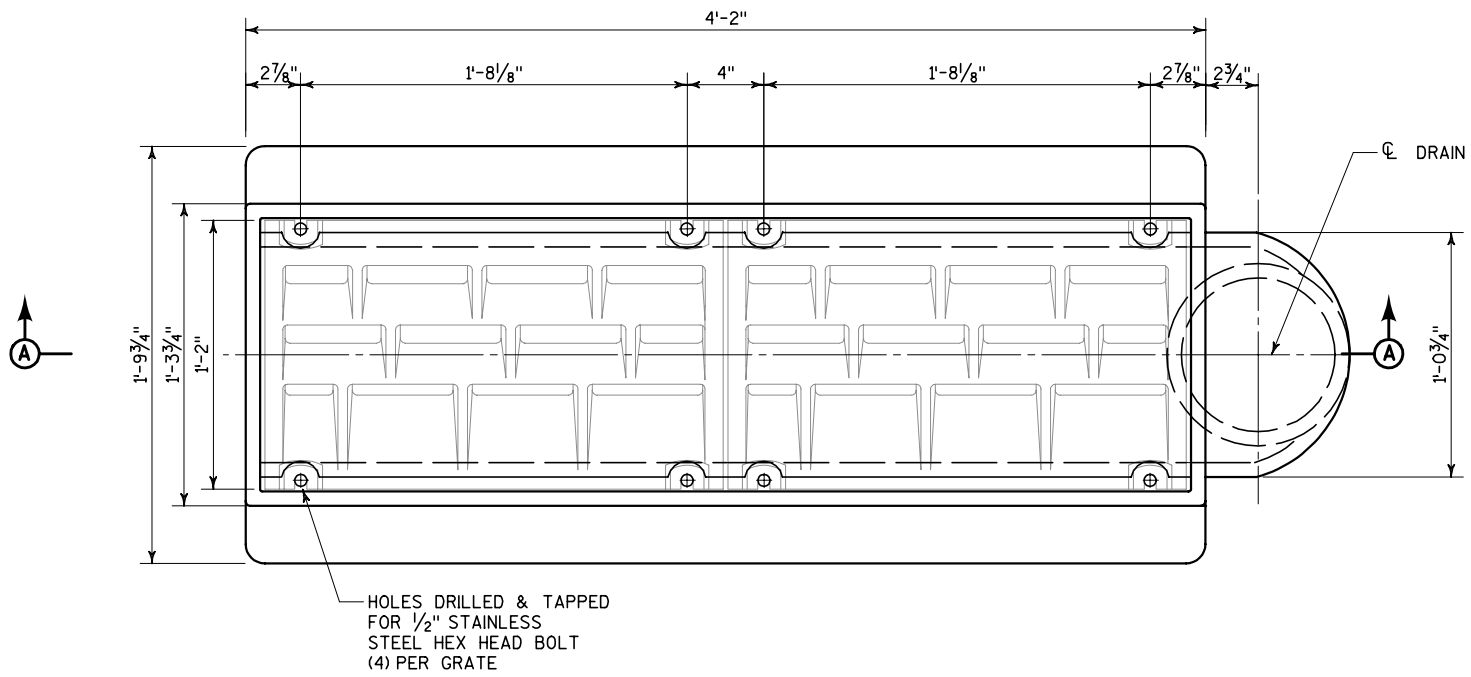


SECTION B-B

NOTES

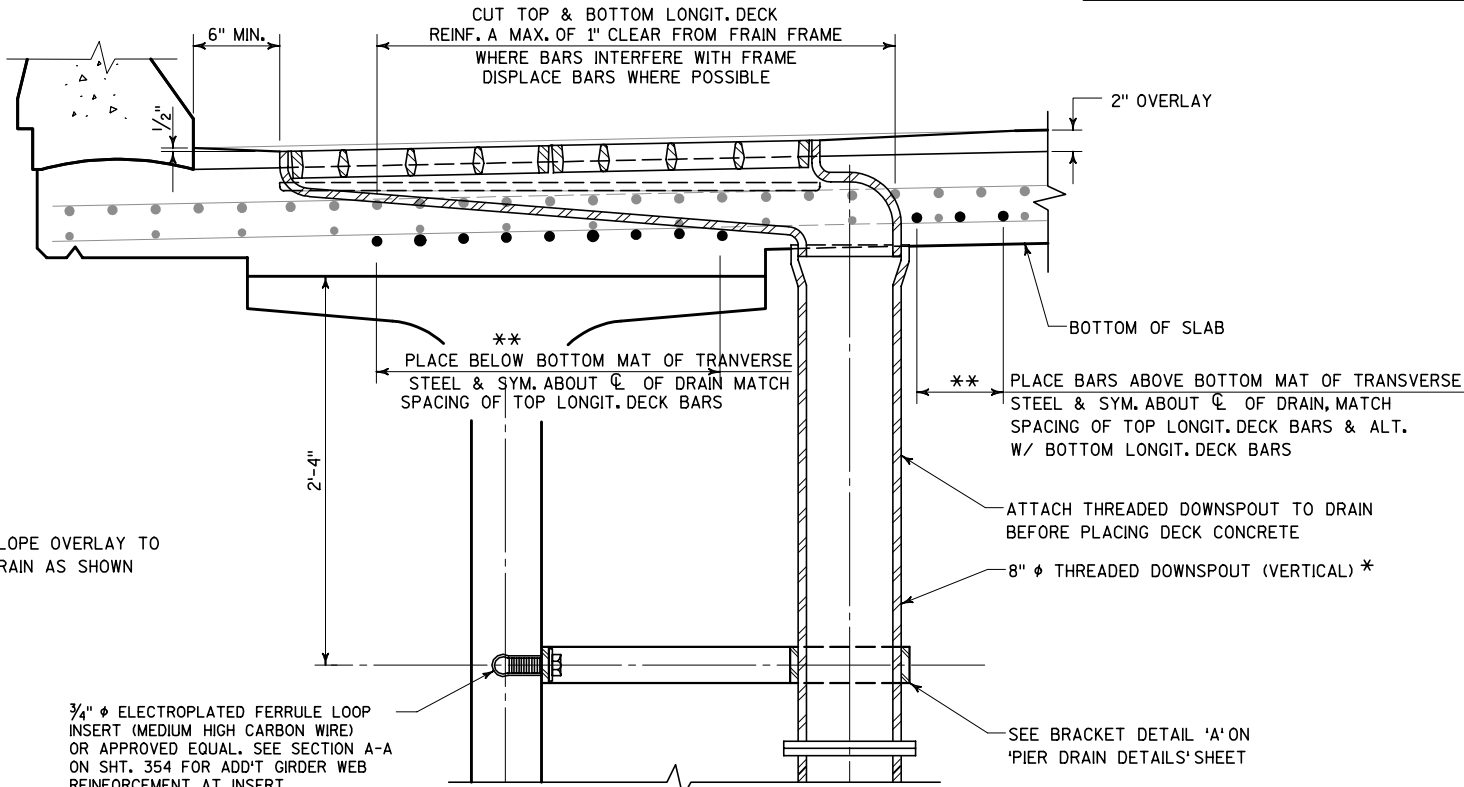
1. PARAPET REINFORCEMENT AND DOWELS NOT SHOWN FOR CLARITY - RESPACE LOCALLY AS REQUIRED TO CLEAR DECK DRAIN.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY DJS	PLANS CK'D. KES
FLOOR DRAIN TYPE A DETAILS			SHEET 408 OF 432



- NOTES
1. THE DRAIN CASTING SHOWN IS BASED ON PART NUMBER R-3951 FROM THE NEENAH FOUNDRY COMPANY WITH MODIFICATIONS AS REQUIRED TO PROVIDE A BOTTOM SLOPE DRAIN OF 8%.
 2. A FABRICATED DRAIN ASSEMBLY MAY BE SUBSTITUTED IF THE HYDRAULIC PROPERTIES OF THE SPECIFIED CASTING CAN BE MAINTAINED, IF THE GEOMETRY OF THE REPLACEMENT IS ACCEPTABLE AND IF APPROVED BY THE ENGINEER. FABRICATED DRAINS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A153.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY KGW	PLANS CK'D. KES
FLOOR DRAIN TYPE B			SHEET 409 OF 432



SECTION A-A

(PRESTRESSED GIRDER SHOWN, STEEL PLATE GIRDER DETAIL SIMILAR)

NOTES

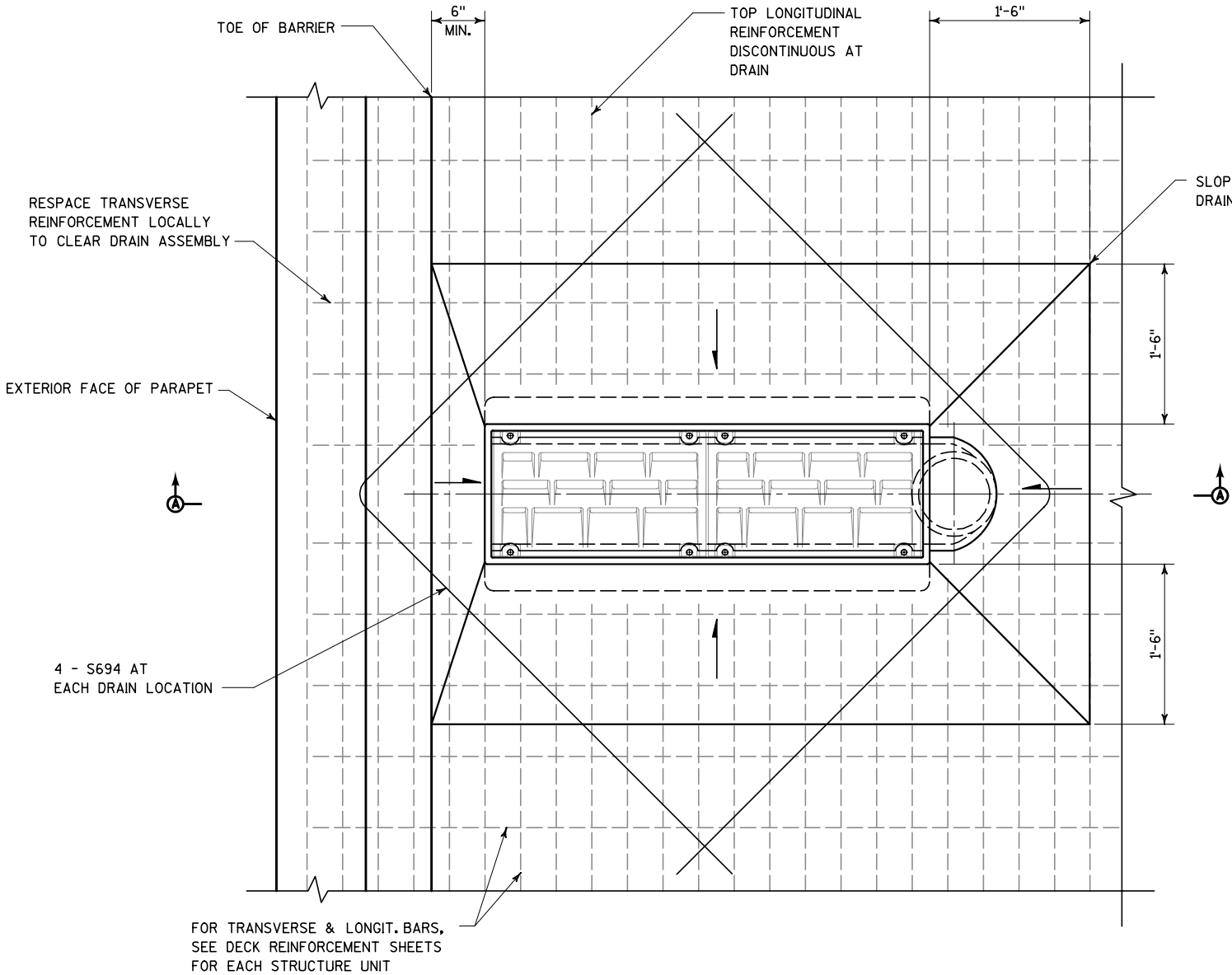
FOR DRAIN CASTING DETAILS, SEE SHEET 409.

MATERIAL FOR BRACKETS SHALL CONFORM TO ASTM A36.

THE CONTRACTOR MAY PROPOSE AN ALTERNATE TYPE OF BRACKET. THE PROPOSED ALTERNATE DETAILS SHALL BE SUBMITTED AND SUBJECT TO THE APPROVAL OF THE ENGINEER.

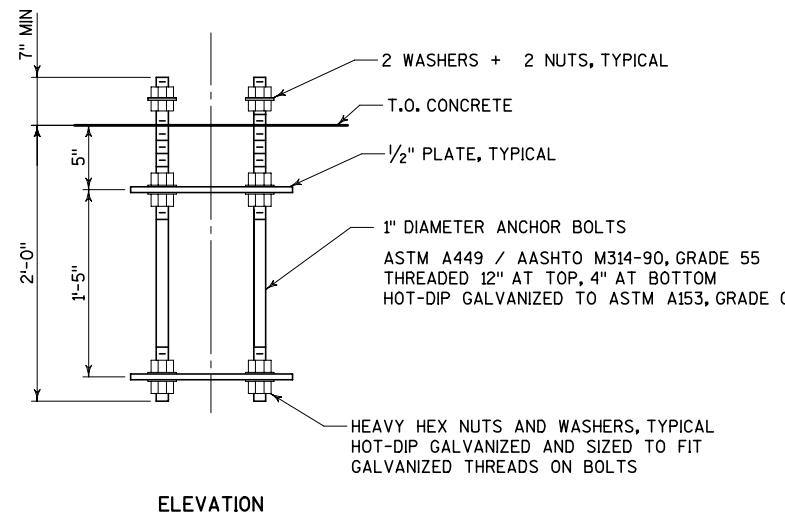
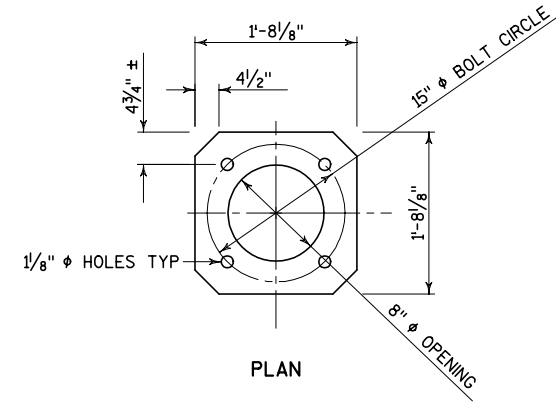
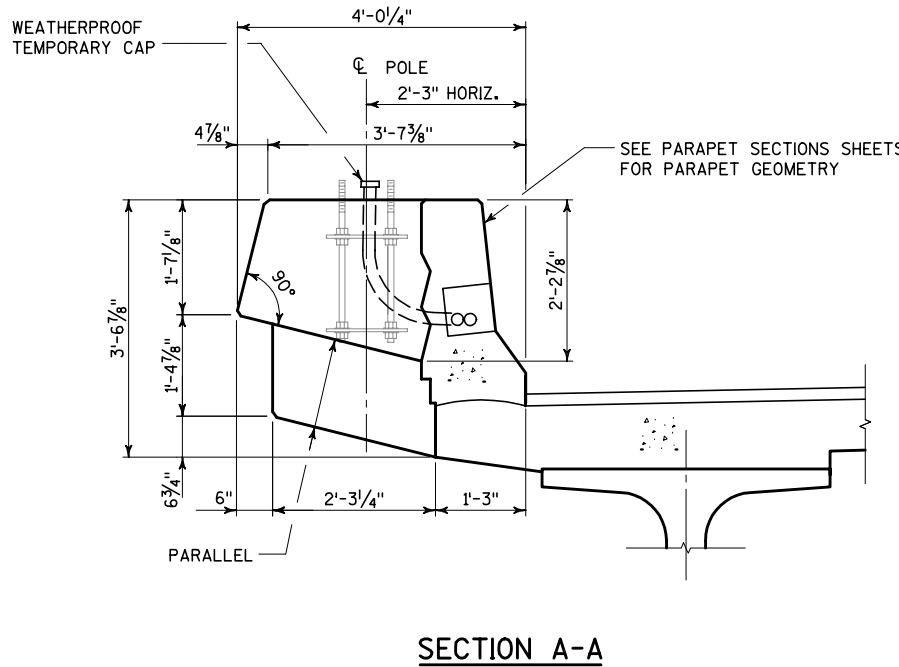
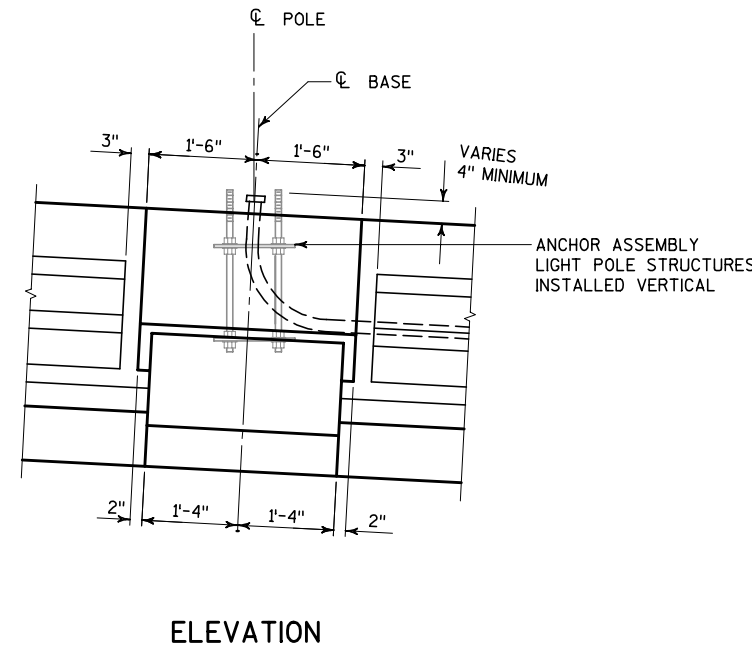
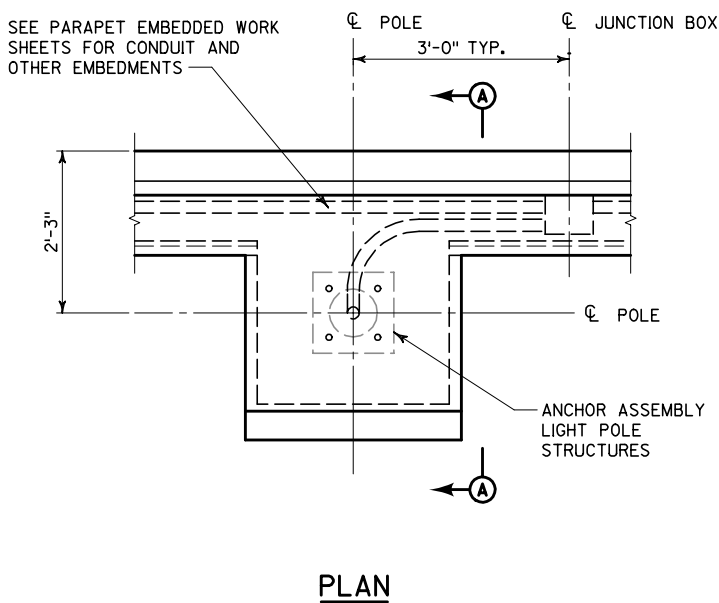
* 8" DIA. DOWNSPOUTS AND FITTINGS SHALL BE REINFORCED THERMOSETTING RESIN PIPING (RTRP).

** FOR BAR CALLOUTS OF ADDITIONAL REINFORCEMENT, SEE DECK PLAN/REINFORCEMENT SHEETS.



PLAN

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY RWN	PLANS CK'D. KES
FLOOR DRAIN TYPE B DETAILS			SHEET 410 OF 432

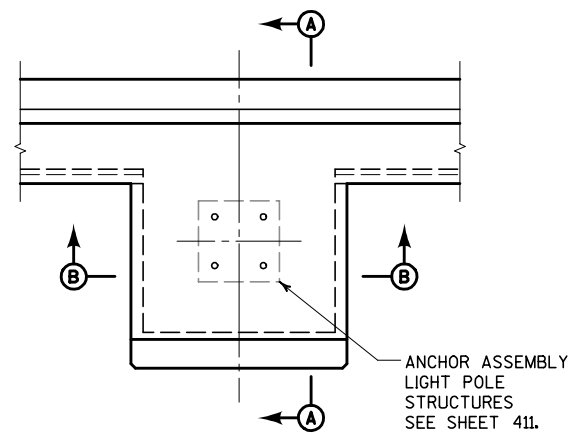
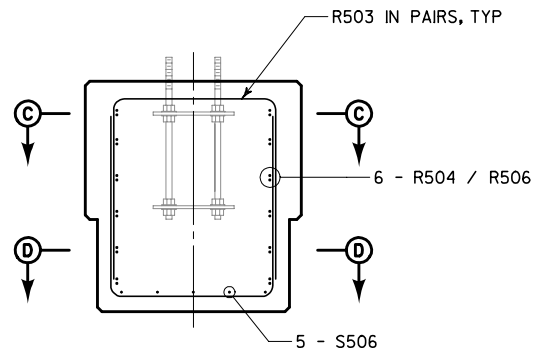
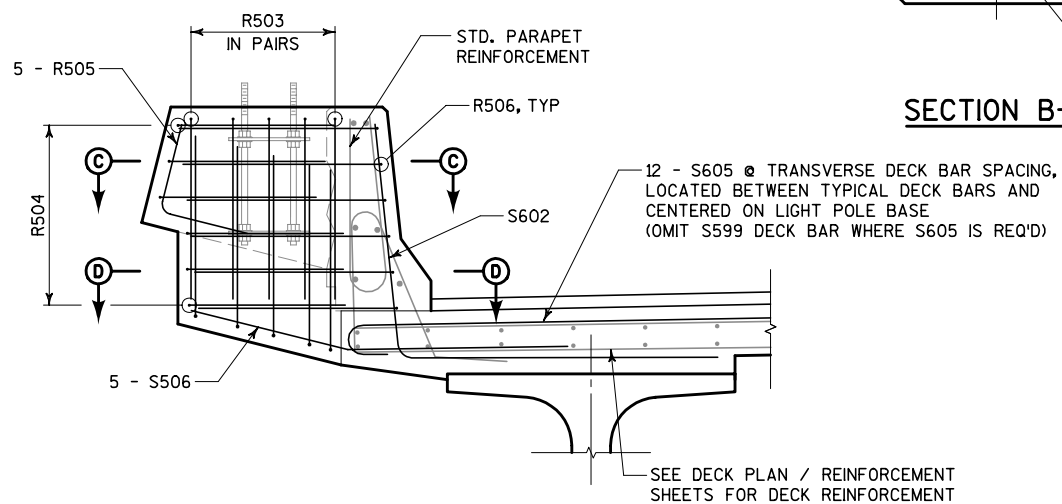
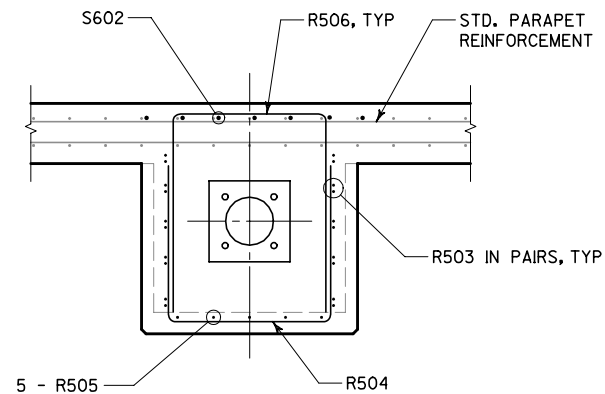
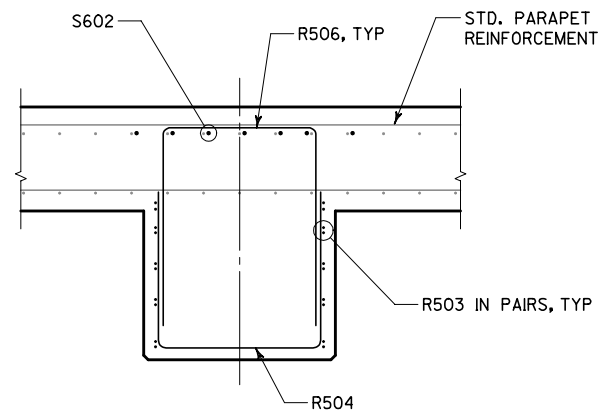


ANCHOR ASSEMBLY
LIGHT POLE STRUCTURES
NOT TO SCALE

NOTES

- SEE SHEET 3 & 4 FOR GENERAL NOTES.
- EXCEPT AS NOTED BELOW, LIGHT POLE BASES ARE INCLUDED WITH (AND CONSIDERED INCIDENTAL TO) ITEM SPV.0090.2040 AND SPV.00900.2045 - PARAPET BRIDGE TYPE LF AND HF.
- SUPPLY OF LIGHT POLE ANCHOR ASSEMBLIES IS COVERED UNDER SEPARATE PAY ITEM(S). INSTALLATION OF ANCHOR ASSEMBLIES IS CONSIDERED INCIDENTAL TO THE PARAPET BRIDGE PAY ITEM(S).
- LIGHT POLE INSTALLATION IS COVERED UNDER A SEPARATE PAY ITEM.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
LF PARAPET LIGHT POLE BASE			SHEET 411 OF 432

PLANSECTION B-BSECTION A-ASECTION C-CSECTION D-DNOTES

1. SEE SHEET 3 & 4 FOR GENERAL NOTES.
2. EXCEPT AS NOTED BELOW, LIGHT POLE BASES ARE INCLUDED WITH (AND CONSIDERED INCIDENTAL TO) ITEM SPV.0090.2040 AND SPV.00900.2045 - PARAPET BRIDGE TYPE LF AND HF.
3. SUPPLY OF LIGHT POLE ANCHOR ASSEMBLIES IS COVERED UNDER SEPARATE PAY ITEM(S). INSTALLATION OF ANCHOR ASSEMBLIES IS CONSIDERED INCIDENTAL TO THE PARAPET BRIDGE PAY ITEM(S).
4. LIGHT POLE INSTALLATION IS COVERED UNDER A SEPARATE PAY ITEM.
5. REINFORCEMENT MARKS STARTING WITH 'R' ARE INCLUDED UNDER THE PARAPET BRIDGE PAY ITEMS. ALL OTHER MARK PREFIXES ARE COVERED UNDER OTHER PAY ITEM(S).

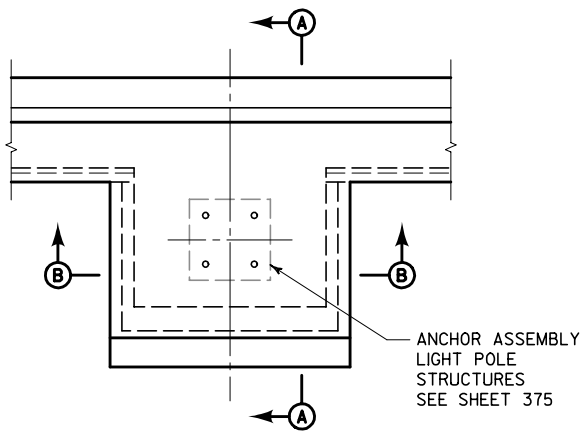
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
LF PARAPET LIGHT POLE BASE REINFORCEMENT			SHEET 412 OF 432



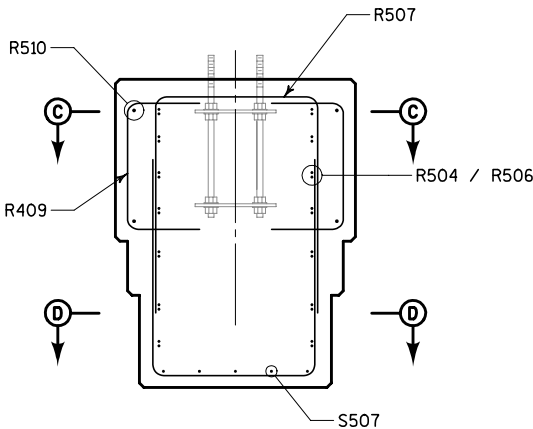
NOT TO SCALE

1. SEE SHEET 3 & 4 FOR GENERAL NOTES.
2. EXCEPT AS NOTED BELOW, LIGHT POLE BASES ARE INCLUDED WITH (AND CONSIDERED INCIDENTAL TO) ITEM SPV.00900.2040 AND SPV.00900.2045 - PARAPET BRIDGE TYPE LF AND HF.
3. SUPPLY OF LIGHT POLE ANCHOR ASSEMBLIES IS COVERED UNDER SEPARATE PAY ITEM(S). INSTALLATION OF ANCHOR ASSEMBLIES IS CONSIDERED INCIDENTAL TO THE PARAPET BRIDGE PAY ITEM(S).
4. LIGHT POLE INSTALLATION IS COVERED UNDER A SEPARATE PAY ITEM.

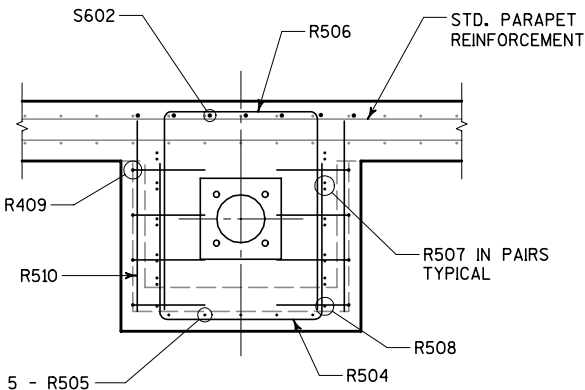
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STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION							
STRUCTURE B-40-141Z							
CONST. SPEC.		2004		DRAWN BY EKM		PLANS CK'D. KES	
HF PARAPET LIGHT POLE BASE						SHEET 413 OF 432	



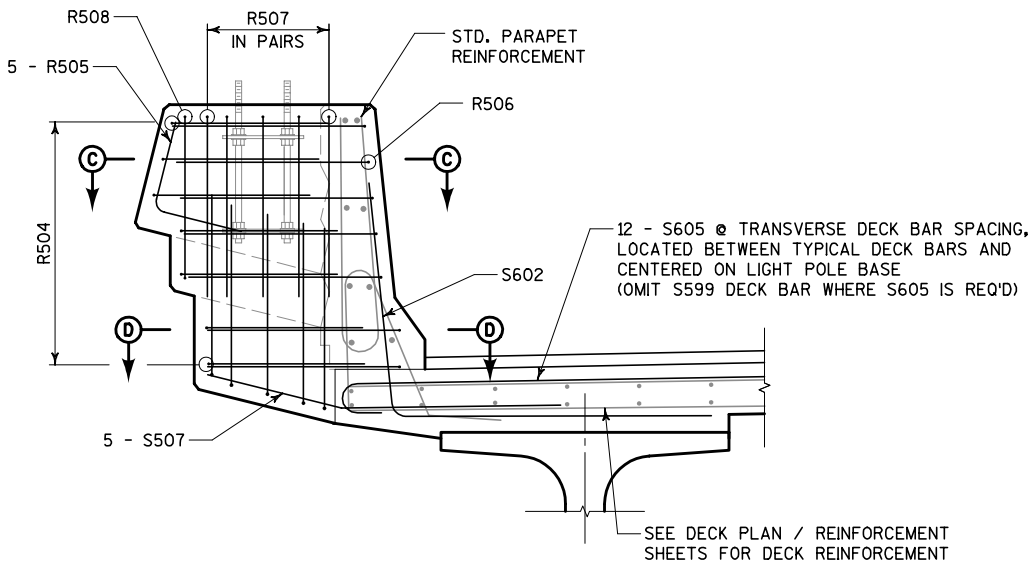
PLAN



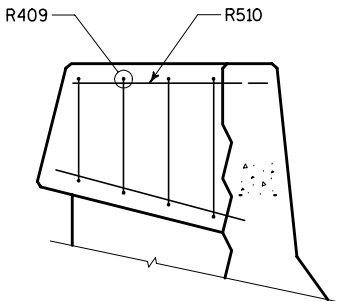
SECTION B-B



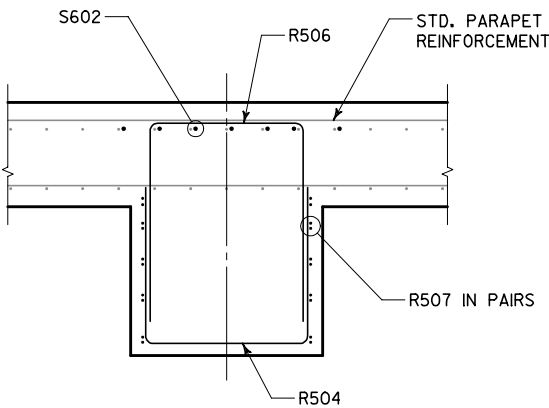
SECTION C-C



SECTION A-A



SIDE FACE DETAIL

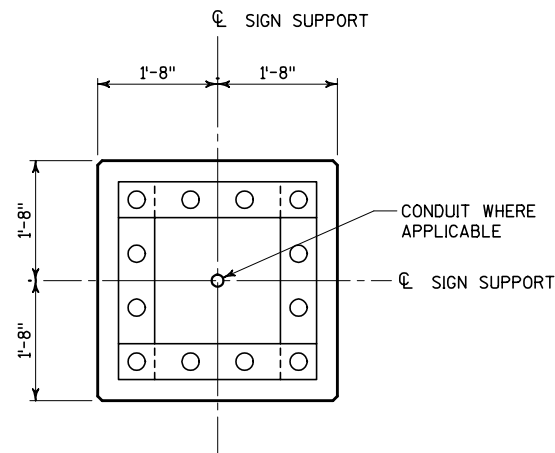
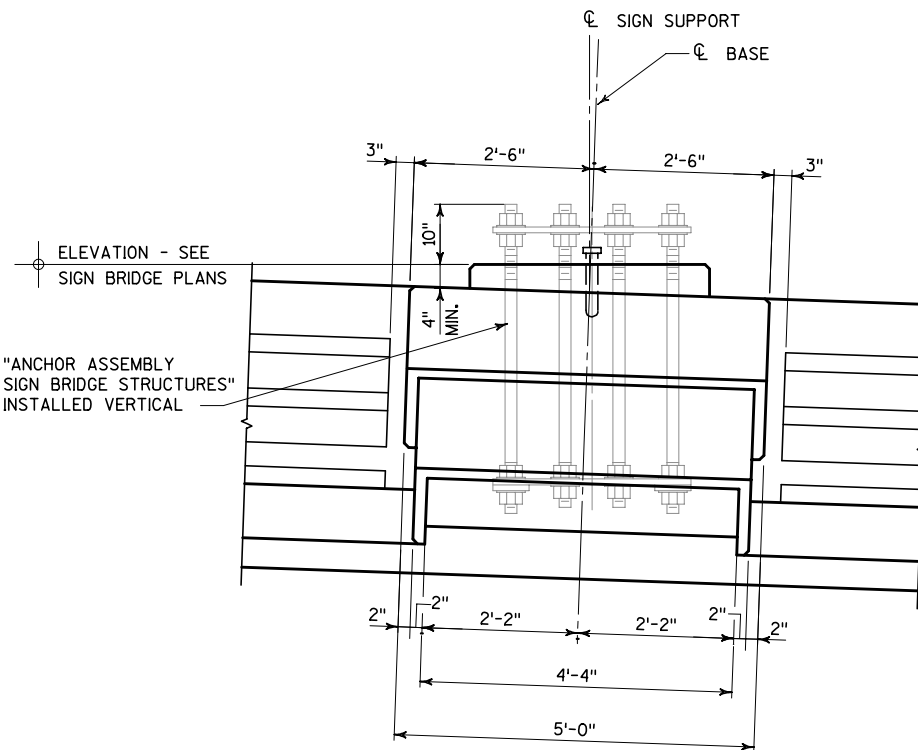
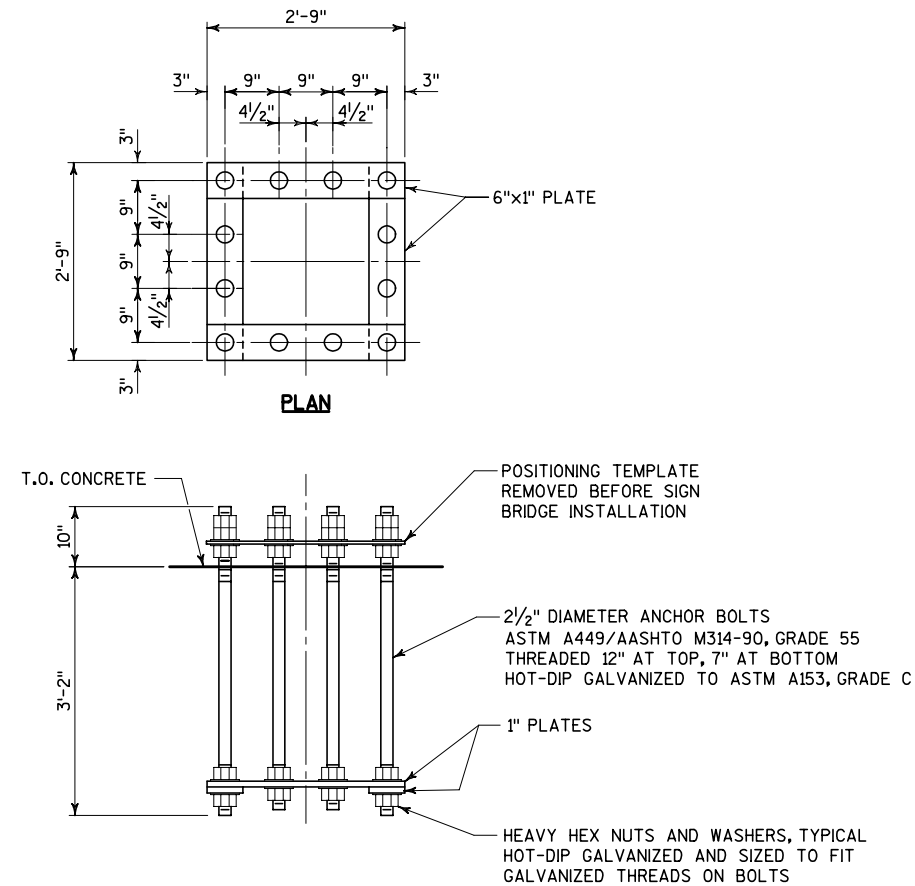
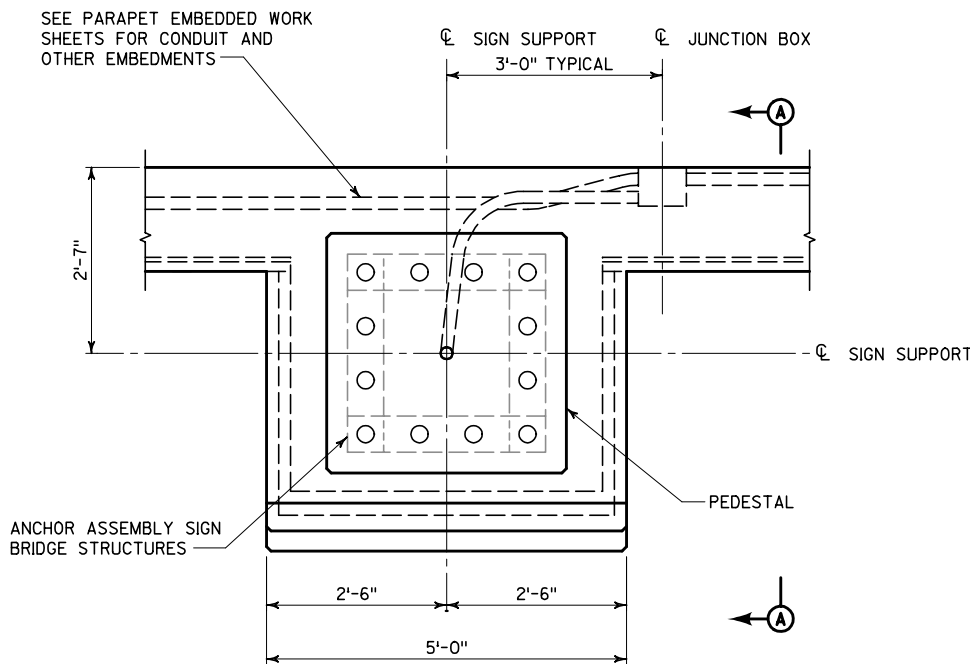
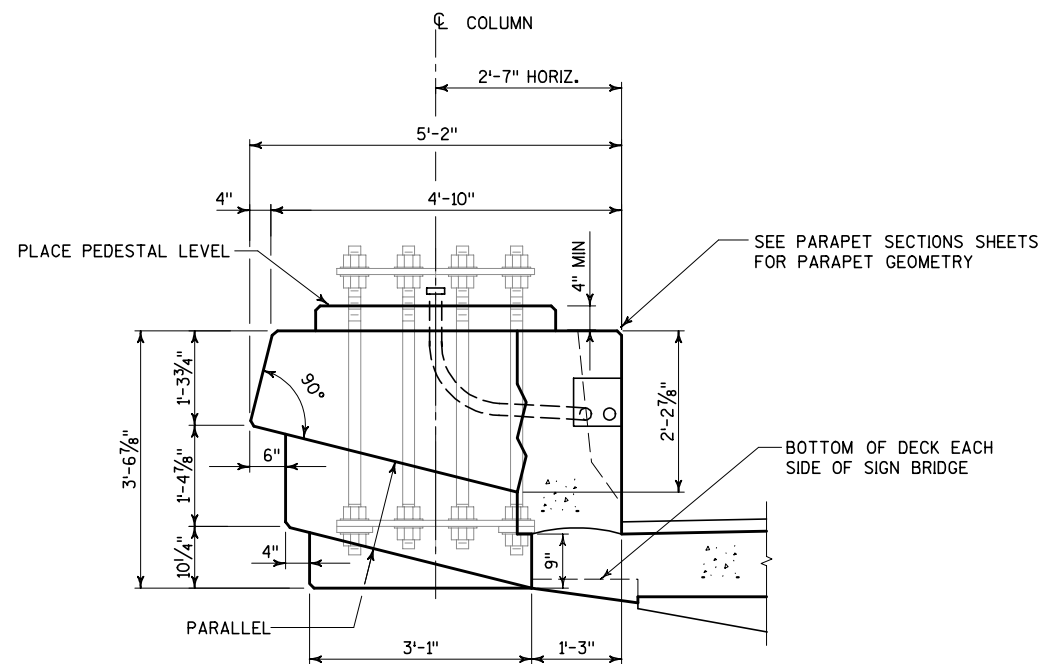


SECTION D-D

NOTES

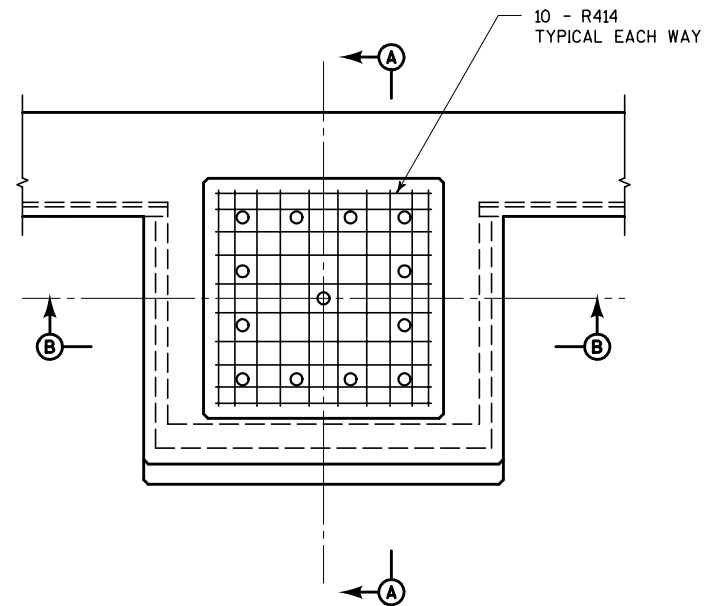
- SEE SHEET 3 & 4 FOR GENERAL NOTES.
- EXCEPT AS NOTED BELOW, LIGHT POLE BASES ARE INCLUDED WITH (AND CONSIDERED INCIDENTAL TO) ITEM SPV.0090.2040 AND SPV.00900.2045 - PARAPET BRIDGE TYPE LF AND HF.
- SUPPLY OF LIGHT POLE ANCHOR ASSEMBLIES IS COVERED UNDER SEPARATE PAY ITEM(S). INSTALLATION OF ANCHOR ASSEMBLIES IS CONSIDERED INCIDENTAL TO THE PARAPET BRIDGE PAY ITEM(S).
- LIGHT POLE INSTALLATION IS COVERED UNDER A SEPARATE PAY ITEM.
- REINFORCEMENT MARKS STARTING WITH 'R' ARE INCLUDED UNDER THE PARAPET BRIDGE PAY ITEMS. ALL OTHER MARK PREFIXES ARE COVERED UNDER OTHER PAY ITEM(S).

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
HF PARAPET LIGHT POLE BASE REINFORCEMENT			SHEET 414 OF 432

**PEDESTAL PLAN****ELEVATION****ANCHOR ASSEMBLY
SIGN BRIDGE STRUCTURES**
NOT TO SCALE**PLAN****SECTION A-A****NOTES**

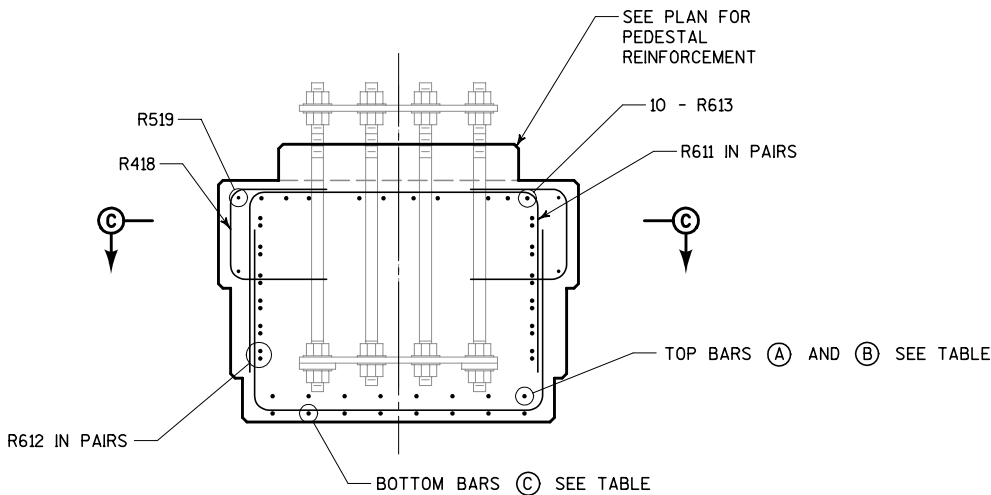
1. SEE SHEET 3 AND 4 FOR GENERAL NOTES.
2. EXCEPT AS NOTED BELOW, SIGN BRIDGE BASES ARE INCLUDED WITH (AND CONSIDERED INCIDENTAL TO) ITEM SPV.0090.2040 - PARAPET BRIDGE TYPE LF.
3. SUPPLY OF SIGN BRIDGE ANCHOR ASSEMBLIES IS COVERED UNDER SEPARATE PAY ITEM(S). INSTALLATION OF ANCHOR ASSEMBLIES IS CONSIDERED INCIDENTAL TO ITEM SPV.0090.2040.
4. SIGN BRIDGE INSTALLATION IS COVERED UNDER SEPARATE PAY ITEM(S).

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
LF PARAPET SIGN BRIDGE BASE LAYOUT			SHEET 415 OF 432

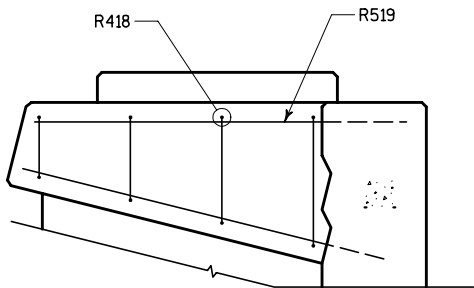


PLAN

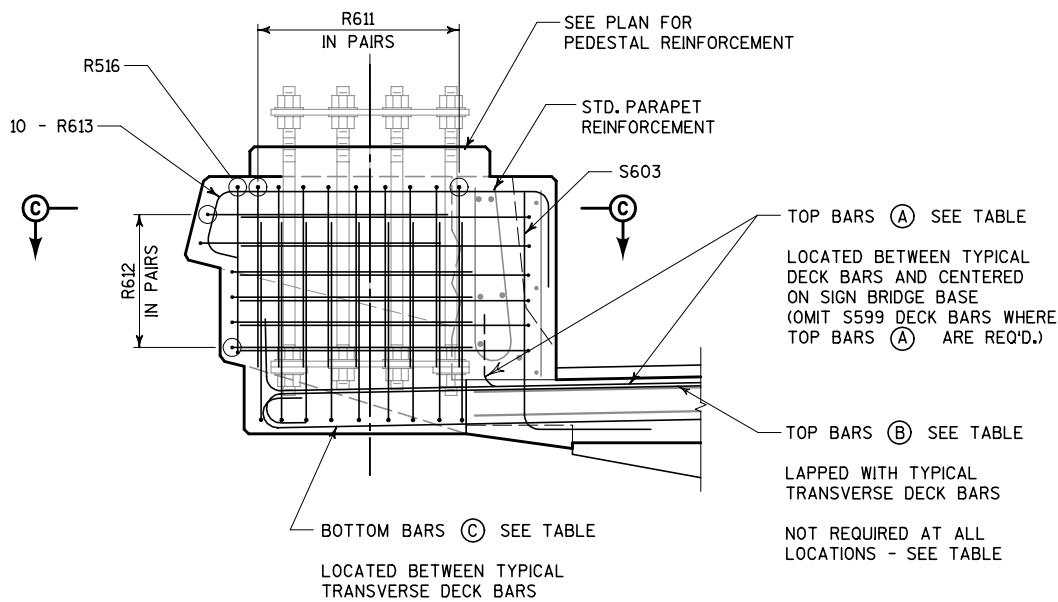
(SHOWING PEDESTAL REINFORCEMENT ONLY)



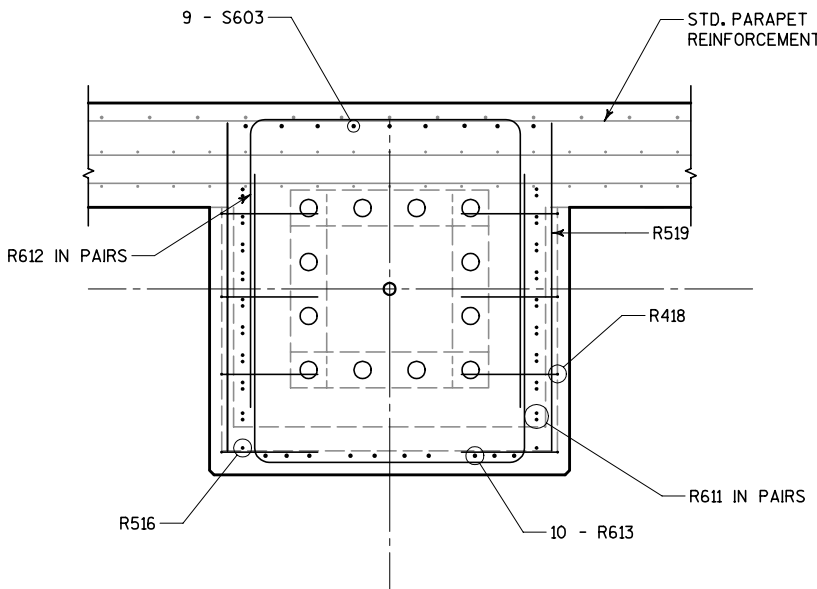
SECTION B-B



SIDE FACE DETAIL



SECTION A-A



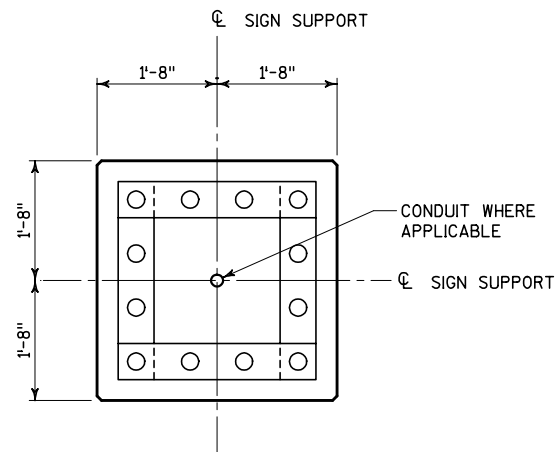
SECTION C-C

STRUCTURE	BAR TYPES		
	(A)	(B)	(C)
S-40-533	26 - S710		6 - S515
S-40-534	26 - S811		6 - S616
S-40-535	28 - S811	6 - S616	6 - S817

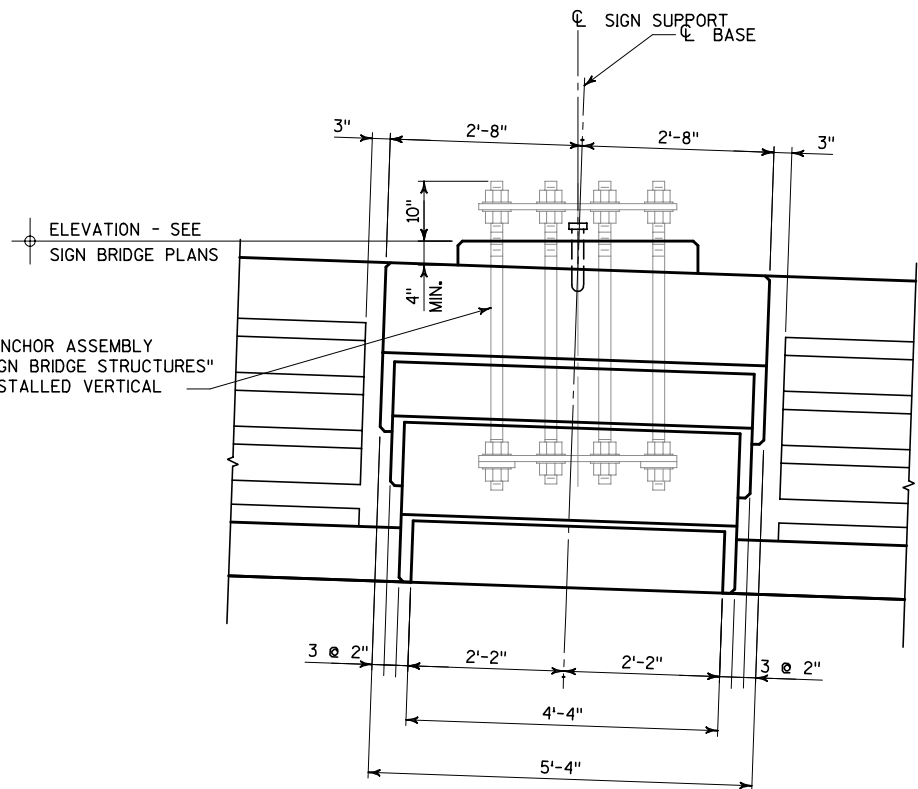
NOTES

- SEE SHEET 3 AND 4 FOR GENERAL NOTES.
- EXCEPT AS NOTED BELOW, SIGN BRIDGE BASES ARE INCLUDED WITH (AND CONSIDERED INCIDENTAL TO) ITEM SPV.0090.2040 - PARAPET BRIDGE TYPE LF.
- SUPPLY OF SIGN BRIDGE ANCHOR ASSEMBLIES IS COVERED UNDER SEPARATE PAY ITEM(S). INSTALLATION OF ANCHOR ASSEMBLIES IS CONSIDERED INCIDENTAL TO ITEM SPV.0090.2040.
- SIGN BRIDGE INSTALLATION IS COVERED UNDER SEPARATE PAY ITEM(S).
- REINFORCEMENT MARKS STARTING WITH 'R' ARE INCLUDED UNDER SPV.0090.2040. ALL OTHER MARK PREFIXES ARE COVERED UNDER OTHER PAY ITEMS.

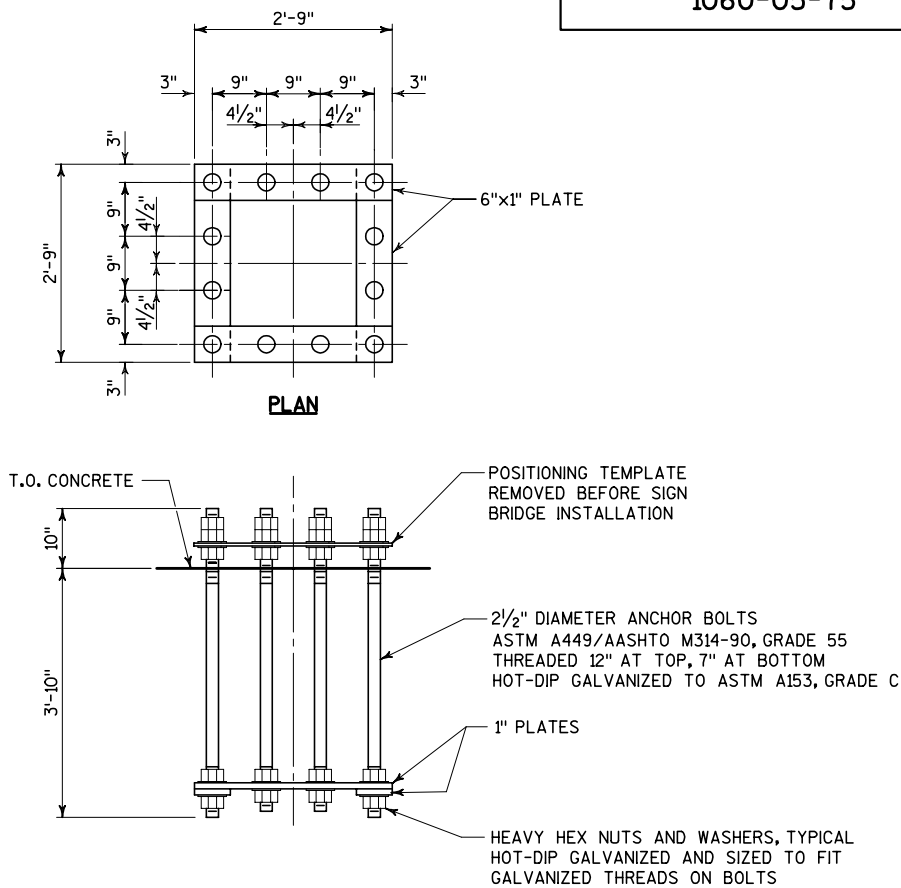
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
LF PARAPET SIGN BRIDGE BASE REINFORCEMENT			SHEET 416 OF 432



PEDESTAL PLAN



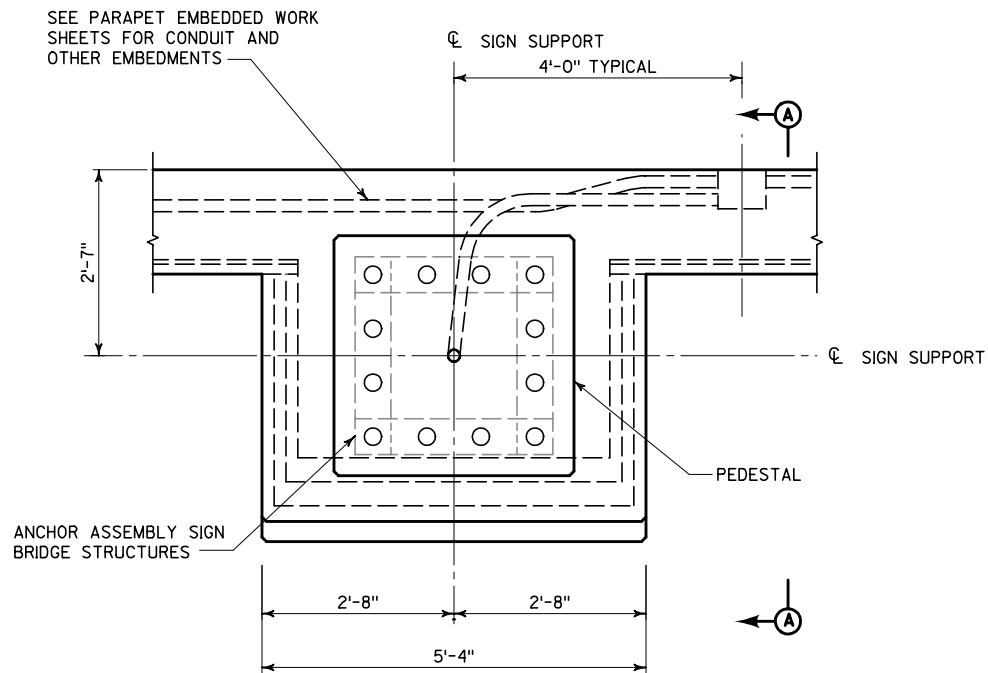
ELEVATION



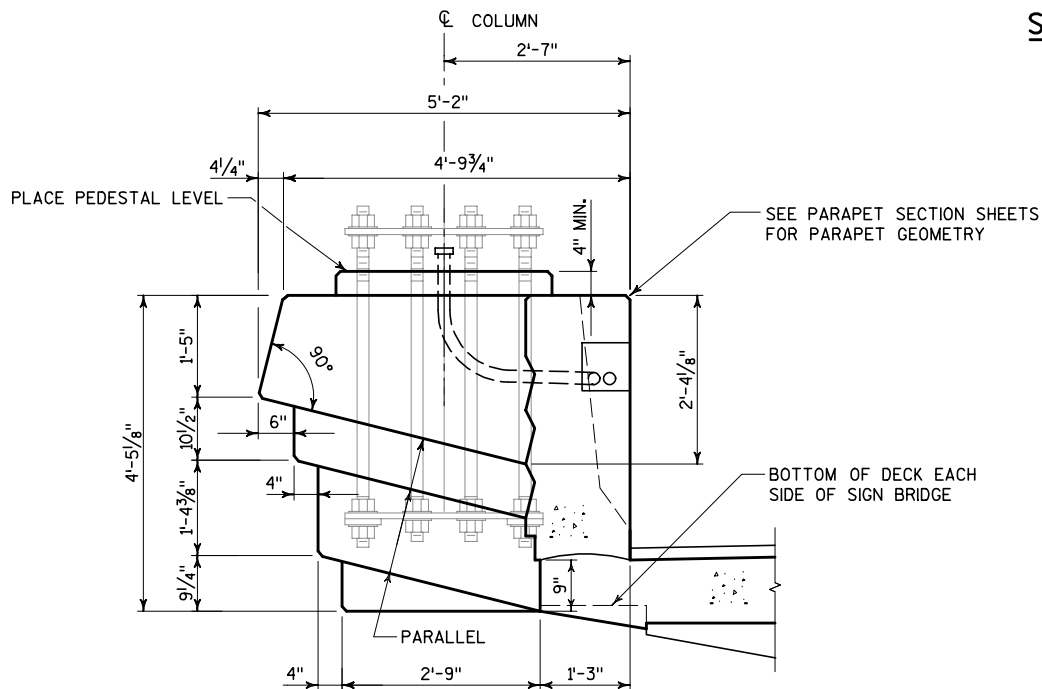
ELEVATION

**ANCHOR ASSEMBLY
SIGN BRIDGE STRUCTURES**
NOT TO SCALE

SEE NEXT SHEET FOR ANCHOR ASSEMBLY FOR SIGN STRUCTURE S-40-718. THE DETAIL ON THIS SHEET APPLIES TO ALL OTHER SIGN BASE LOCATIONS.



PLAN

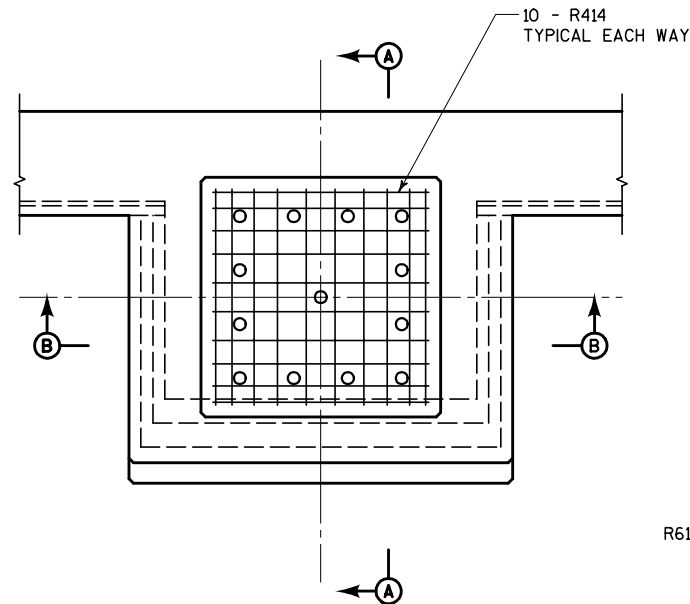


SECTION A-A

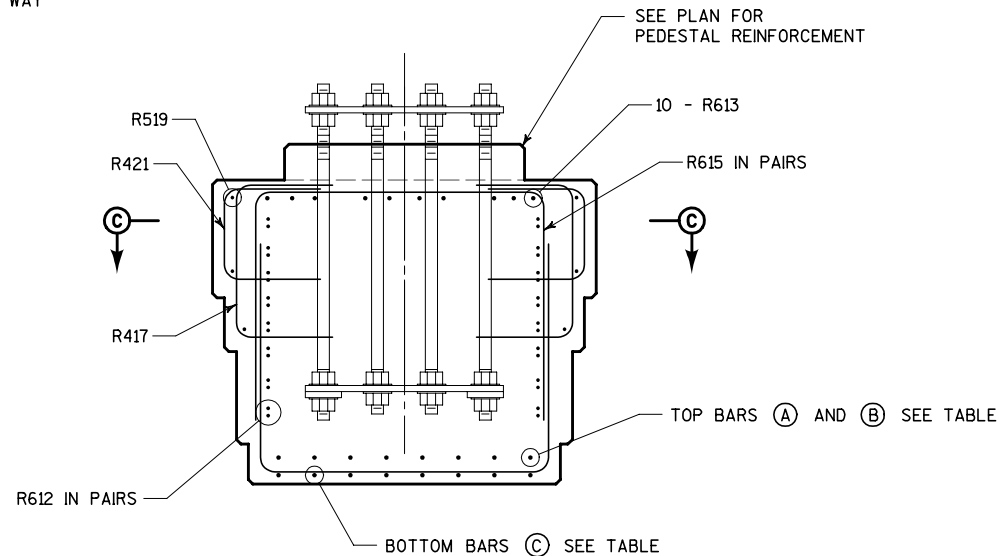
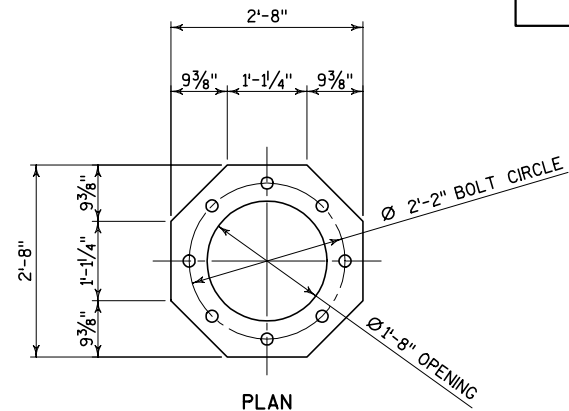
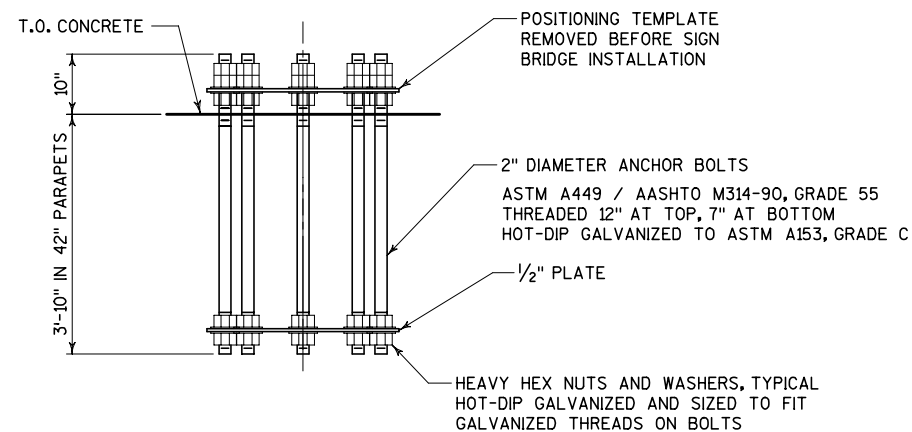
NOTES

1. SEE SHEET 3 AND 4 FOR GENERAL NOTES.
2. EXCEPT AS NOTED BELOW, SIGN BRIDGE BASES ARE INCLUDED WITH (AND CONSIDERED INCIDENTAL TO) ITEM SPV.0090.2045 - PARAPET BRIDGE TYPE HF.
3. SUPPLY OF SIGN BRIDGE ANCHOR ASSEMBLIES IS COVERED UNDER SEPARATE PAY ITEM(S). INSTALLATION OF ANCHOR ASSEMBLIES IS CONSIDERED INCIDENTAL TO ITEM SPV.0090.2045.
4. SIGN BRIDGE INSTALLATION IS COVERED UNDER SEPARATE PAY ITEM(S).

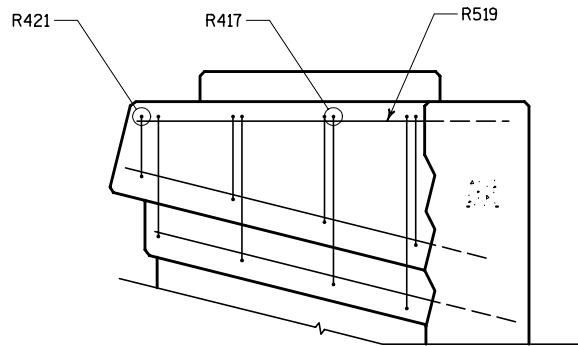
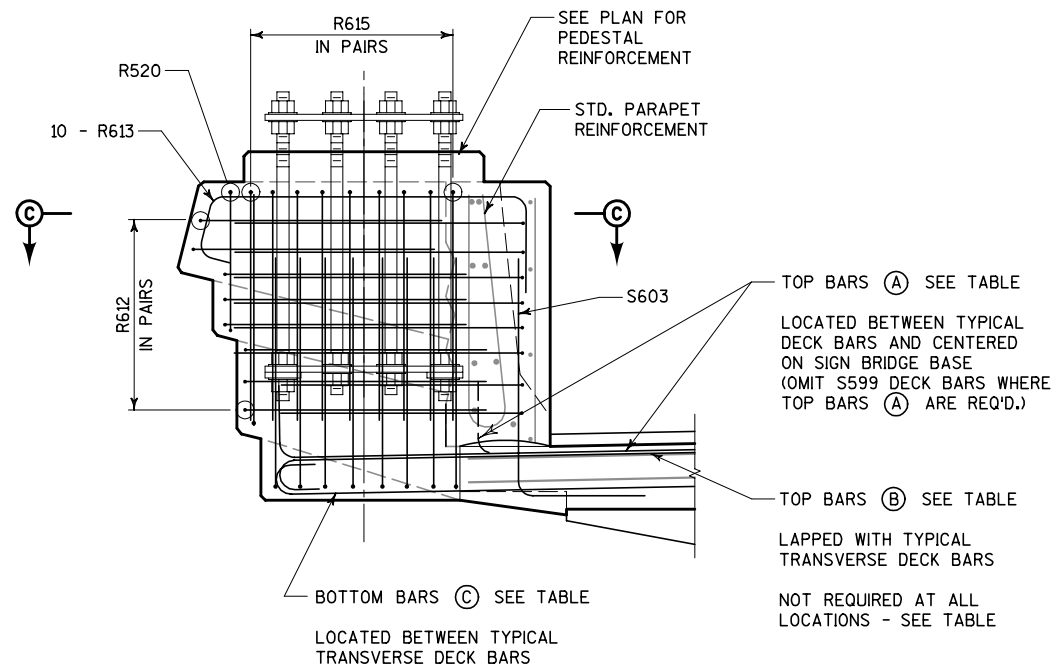
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CKD. KES
HF PARAPET SIGN BRIDGE BASE LAYOUT			SHEET 417 OF 432

**PLAN**

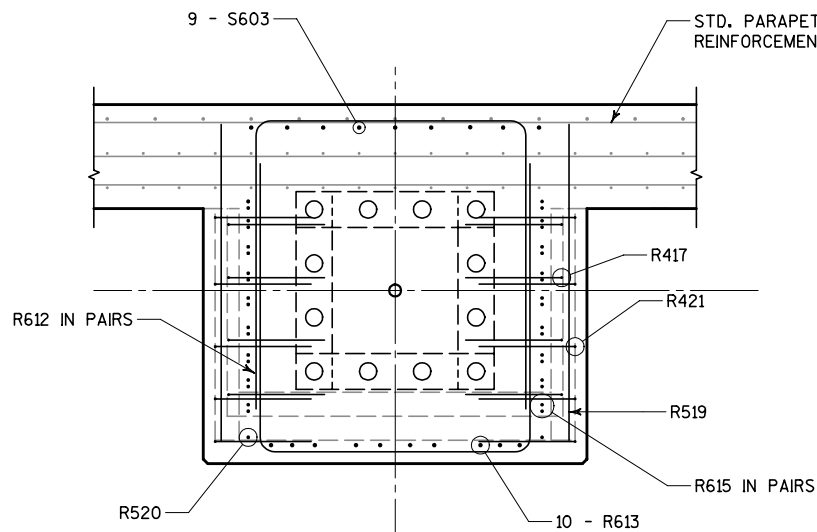
(SHOWING PEDESTAL REINFORCEMENT ONLY)

**SECTION B-B****PLAN****ELEVATION****ANCHOR ASSEMBLY
SIGN BRIDGE STRUCTURES**

NOT TO SCALE

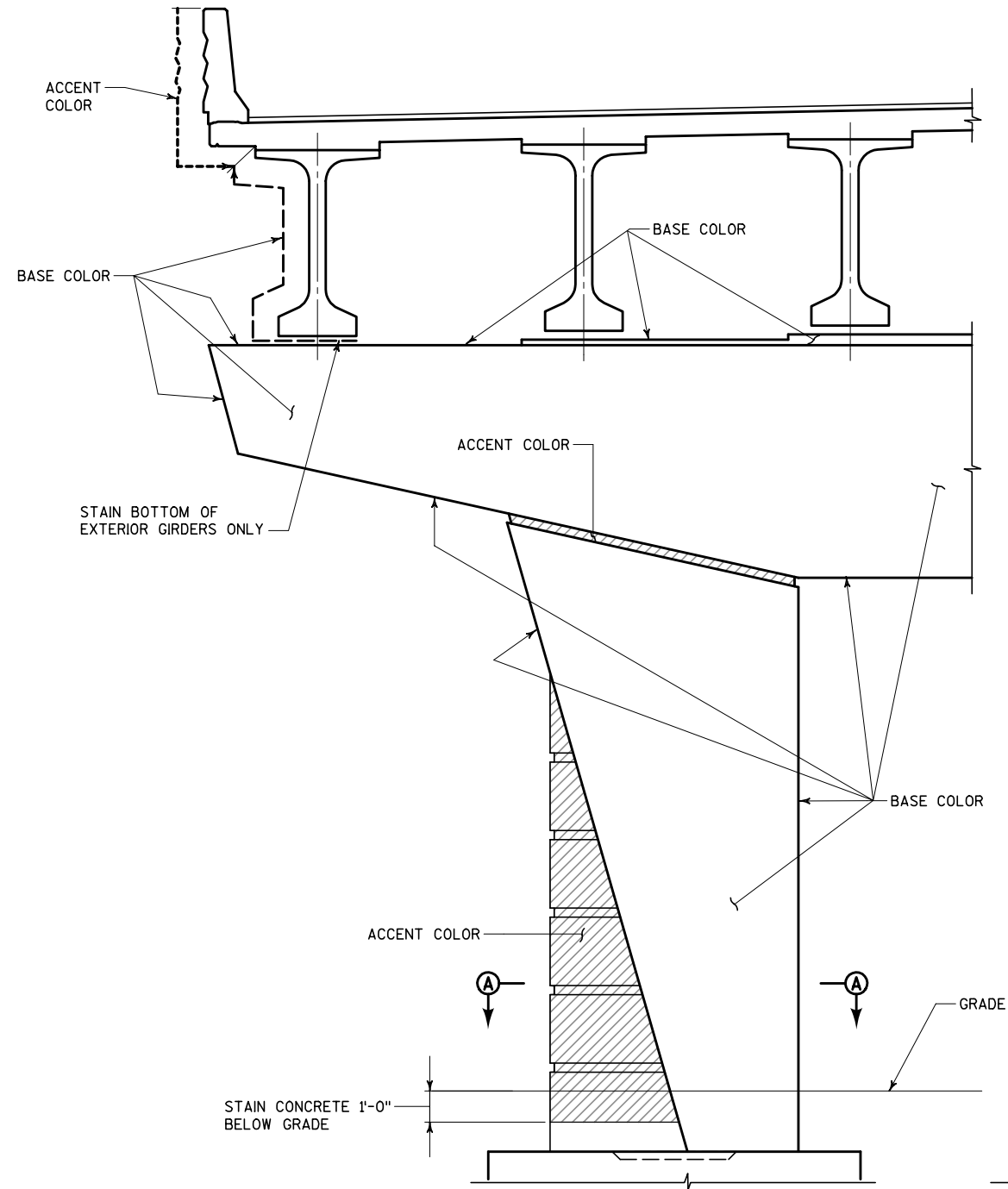
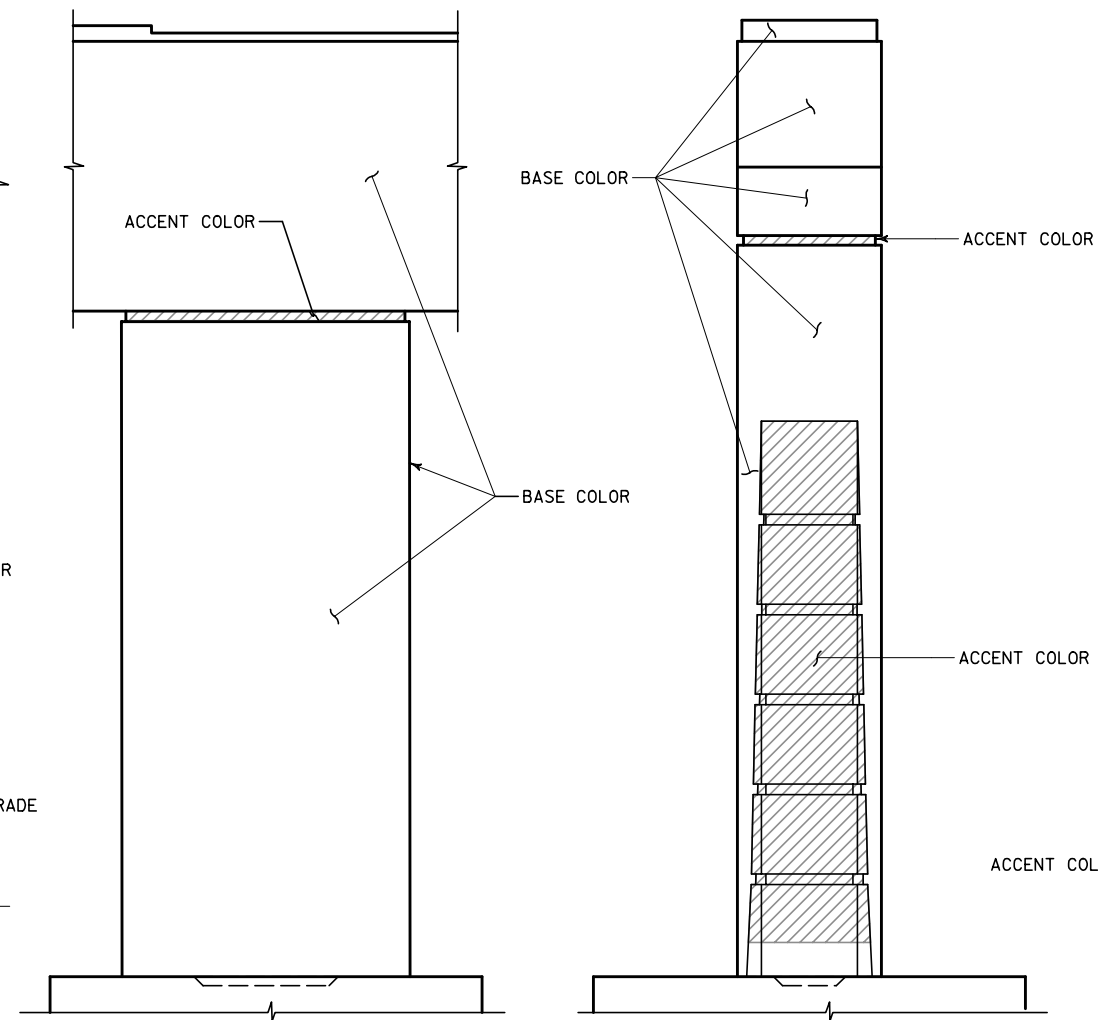
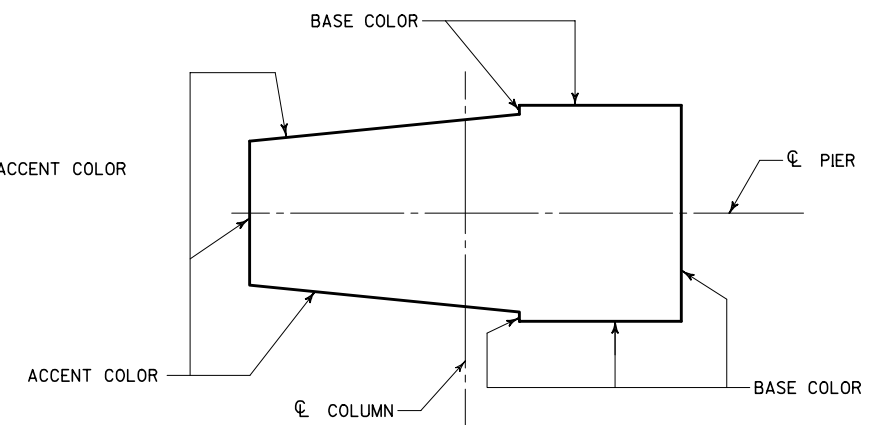
THIS DETAIL IS FOR SIGN
STRUCTURE S-40-718 ONLY.**SIDE FACE DETAIL****SECTION A-A**

STRUCTURE	BAR TYPES		
	(A)	(B)	(C)
S-40-533	26 - S710		6 - S515
S-40-534	26 - S811		6 - S616
S-40-535	28 - S811	6 - S616	6 - S817
S-40-536	26 - S710		6 - S515
S-40-537	30 - S811	6 - S616	6 - S616
S-40-538	32 - S811	6 - S817	6 - S817
S-40-540	28 - S811	6 - S817	6 - S817
S-40-718	26 - S710		6 - S515

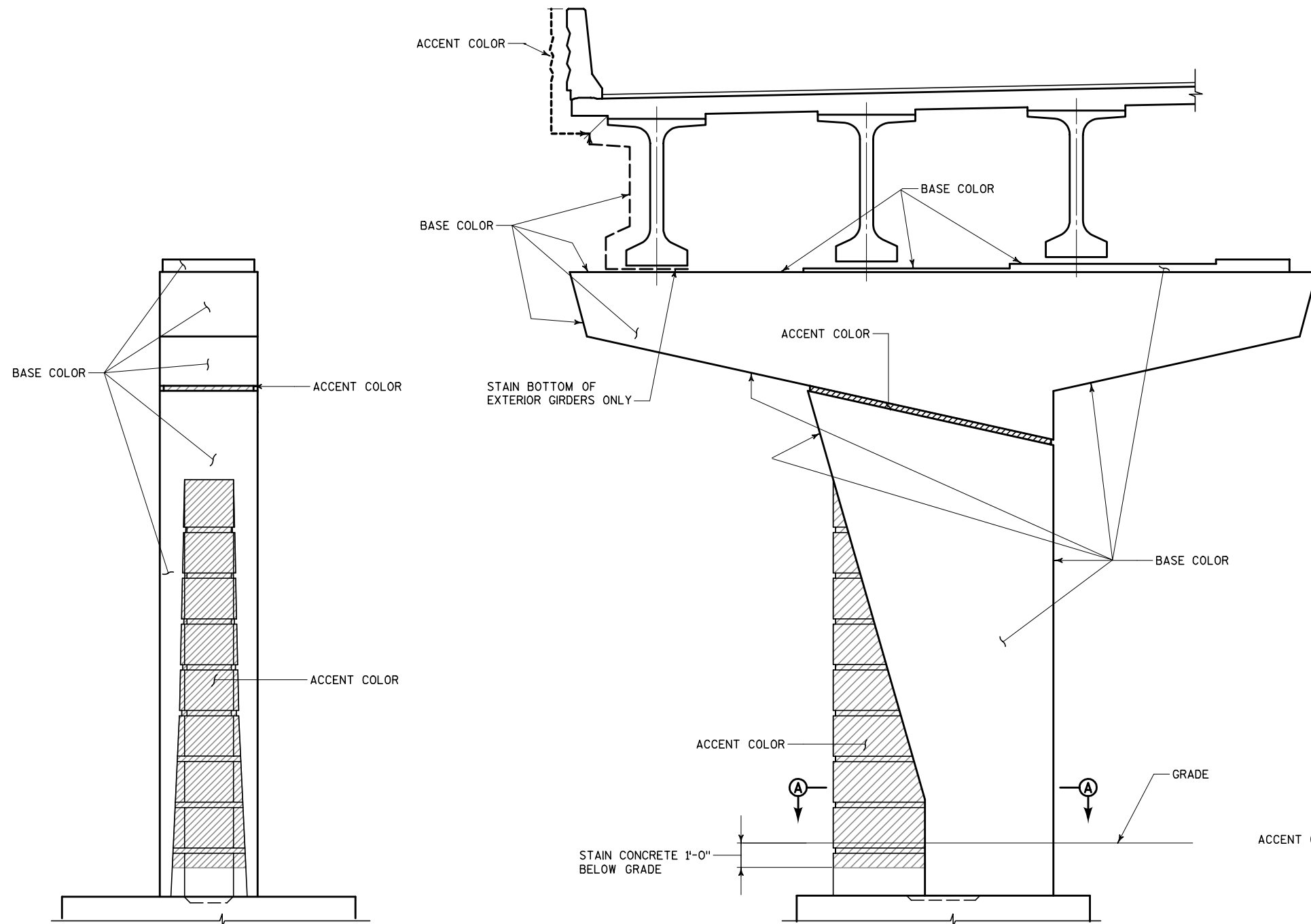
**SECTION C-C****NOTES**

- SEE SHEET 3 AND 4 FOR GENERAL NOTES.
- EXCEPT AS NOTED BELOW, SIGN BRIDGE BASES ARE INCLUDED WITH (AND CONSIDERED INCIDENTAL TO) ITEM SPV.0090.2045 - PARAPET BRIDGE TYPE HF.
- SUPPLY OF SIGN BRIDGE ANCHOR ASSEMBLIES IS COVERED UNDER SEPARATE PAY ITEM(S). INSTALLATION OF ANCHOR ASSEMBLIES IS CONSIDERED INCIDENTAL TO ITEM SPV.0090.2045.
- SIGN BRIDGE INSTALLATION IS COVERED UNDER SEPARATE PAY ITEM(S).
- REINFORCEMENT MARKS STARTING WITH 'R' ARE INCLUDED UNDER SPV.0090.2045. ALL OTHER MARK PREFIXES ARE COVERED UNDER OTHER PAY ITEMS.

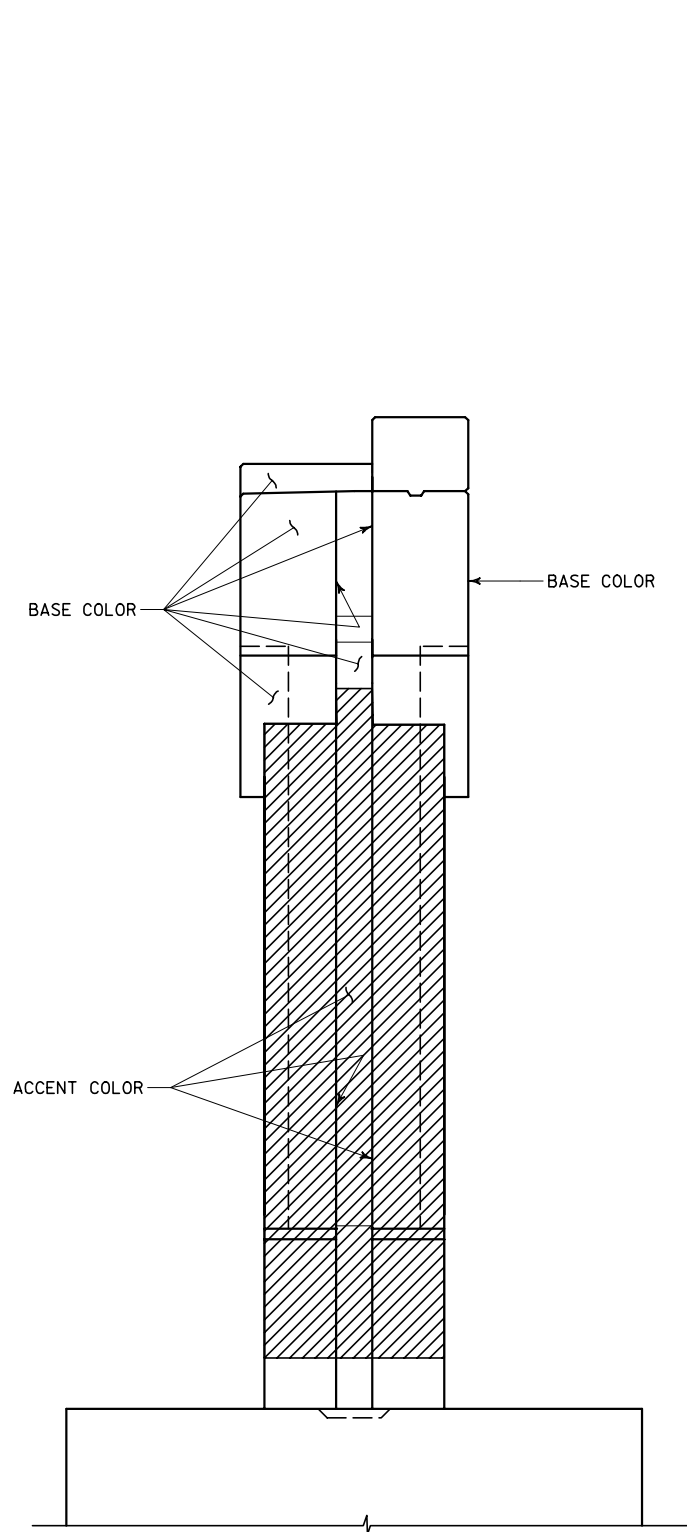
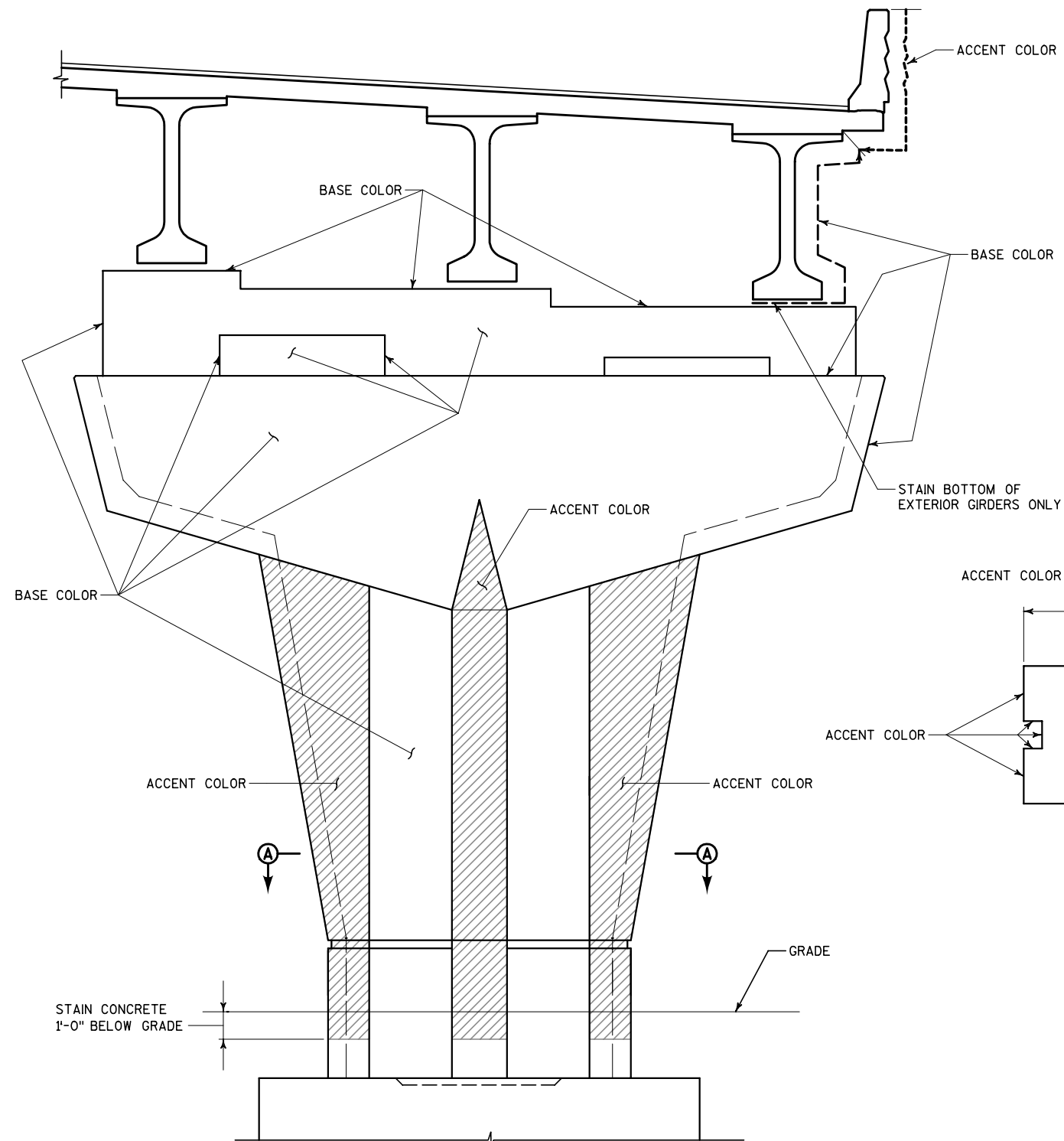
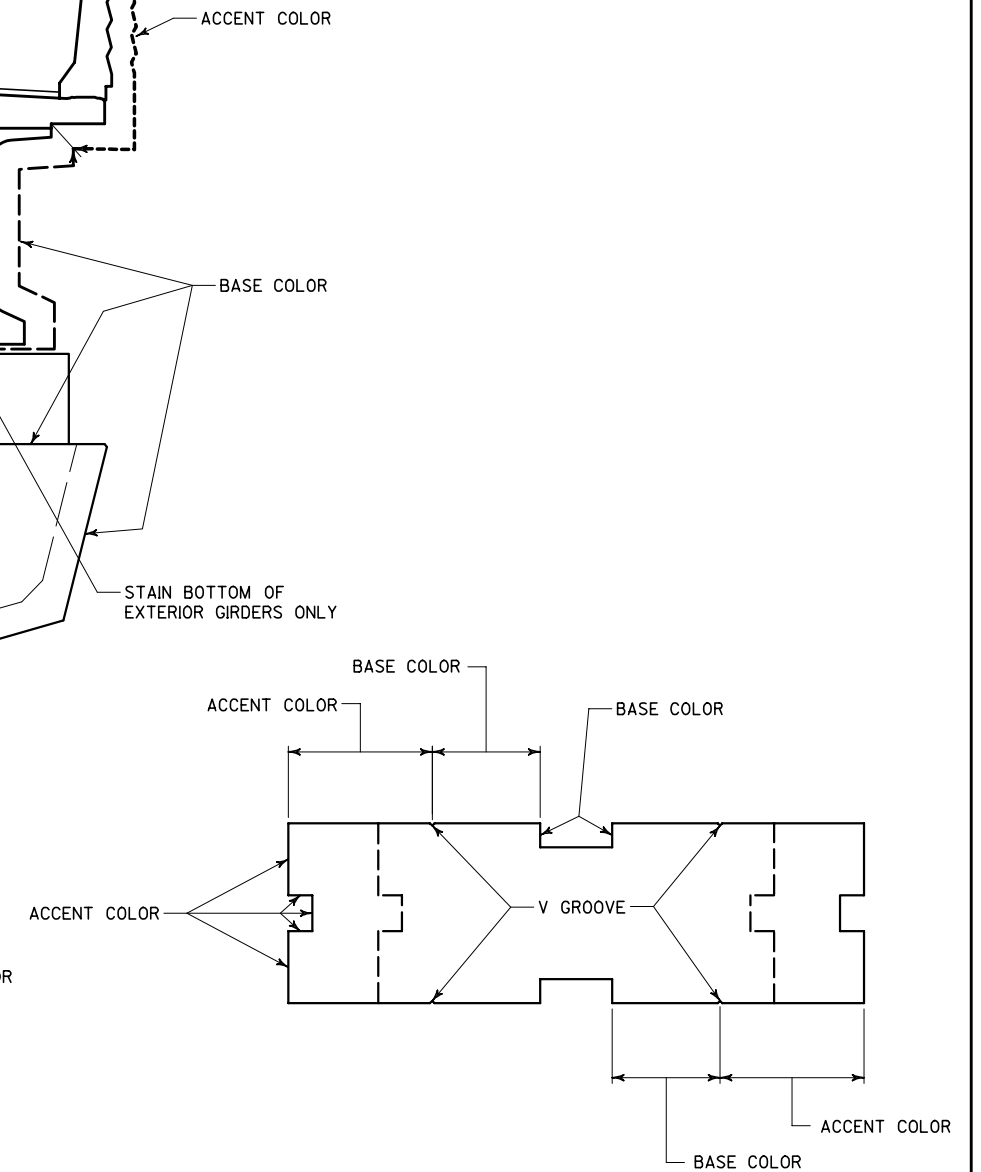
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-142			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
HF PARAPET SIGN BRIDGE BASE REINFORCEMENT			SHEET 418 OF 432

PARTIAL ELEVATIONEND VIEWSECTION A-A

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY DJS	PLANS CK'D. KES
CONCRETE STAINING DETAILS 1			SHEET 419 OF 432

END VIEWPARTIAL ELEVATIONSECTION A-A

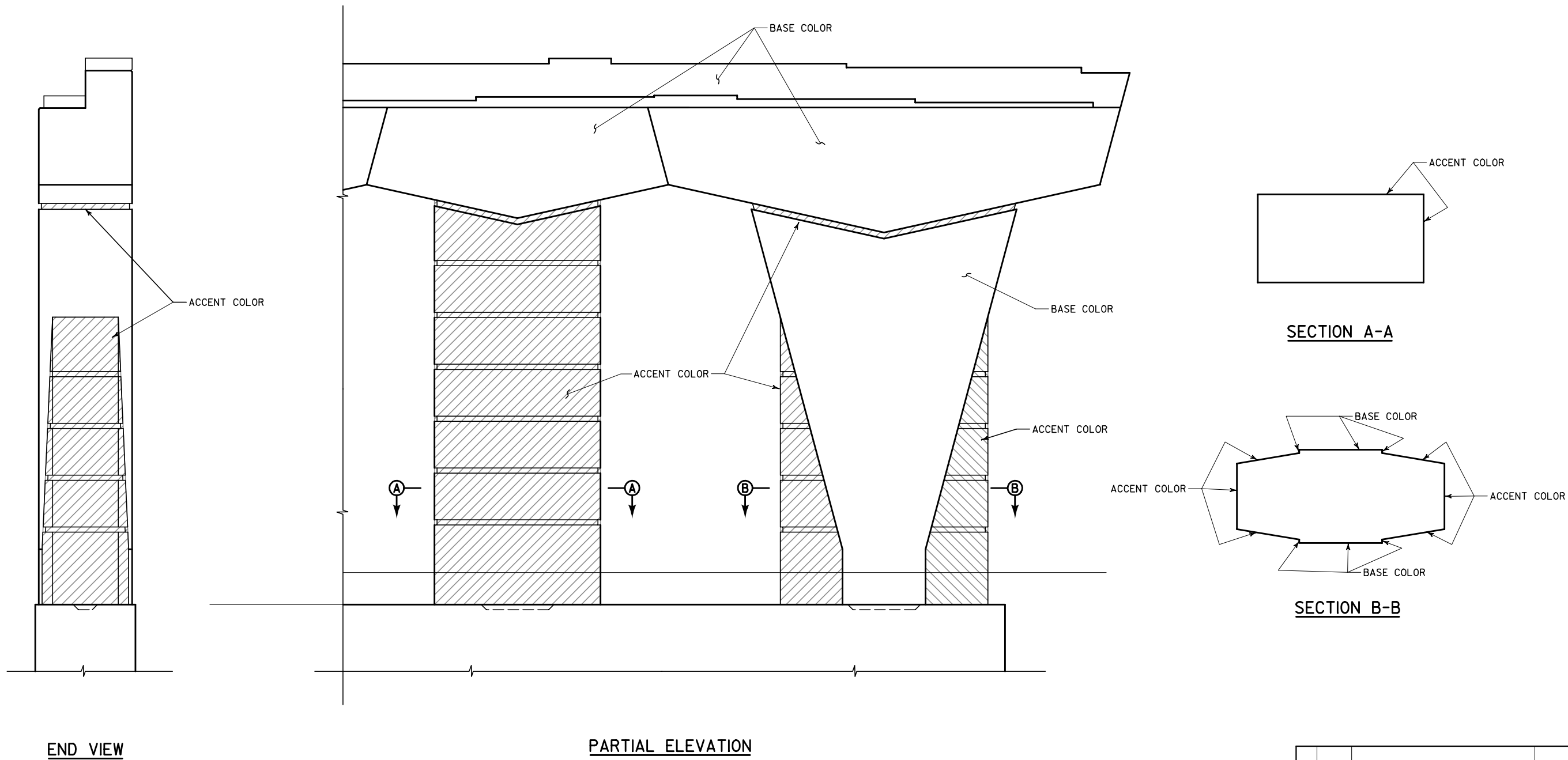
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY DJS	PLANS CK'D. KES
CONCRETE STAINING DETAILS 2			SHEET 420 OF 432

END VIEWPARTIAL ELEVATIONSECTION A-A

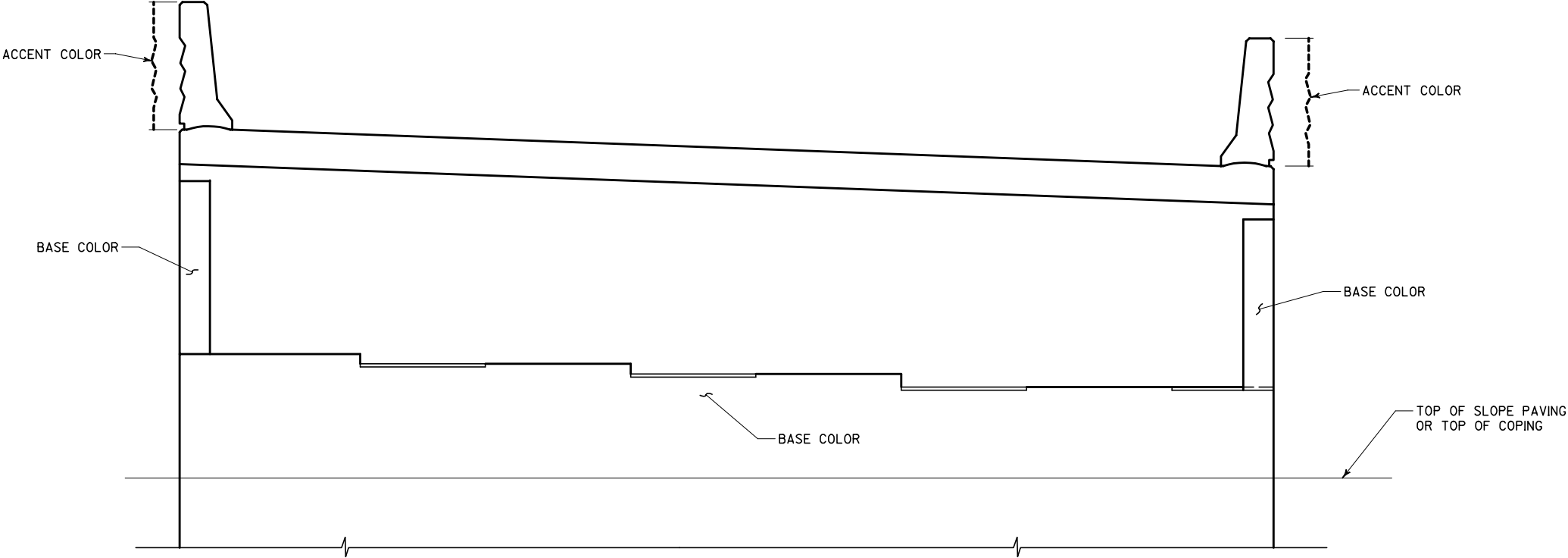
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY DJS	PLANS CK'D. KES
CONCRETE STAINING DETAILS 3			SHEET 421 OF 432



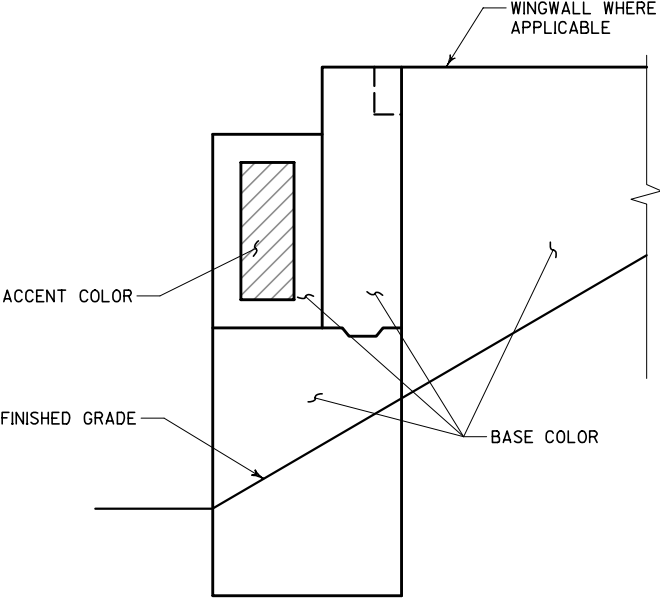
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY	PLANS CK'D.
		DJS	KES
CONCRETE STAINING DETAILS 4		SHEET 422 OF 432	



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY DJS	PLANS CK'D. KES
CONCRETE STAINING DETAILS 5			SHEET 423 OF 432



ABUTMENT ELEVATION



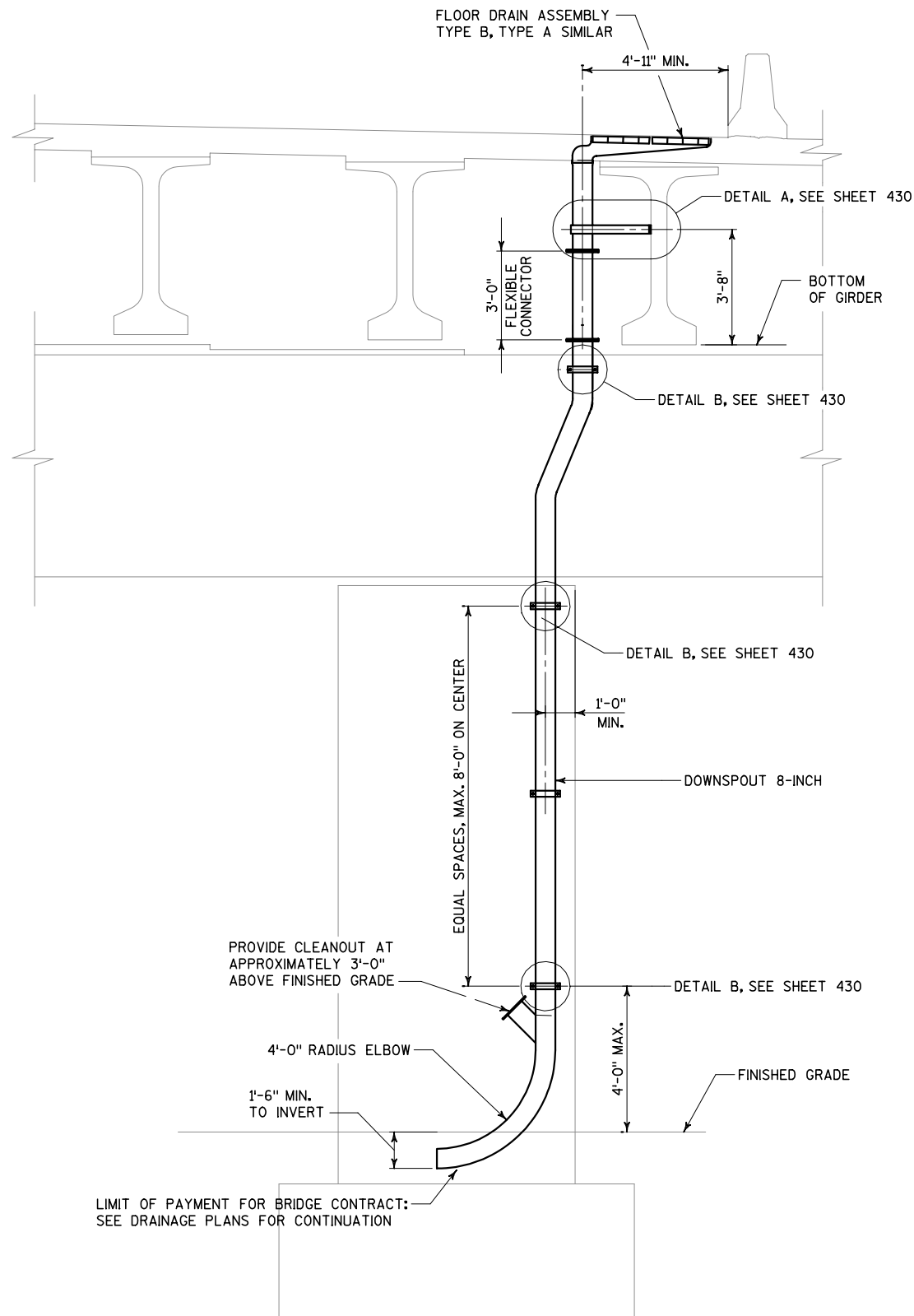
END VIEW
ABUT. A1-001

ABUT. A1-006 STAINED
SIMILAR - NO WING

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
CONCRETE STAINING DETAILS 6			SHEET 424 OF 432

UNIT	PIER NUMBER	COLUMN	DOWNSPOUT LOCATION
001	P1-001	SOUTH	WEST SIDE
001	P2-001	SOUTH	EAST SIDE
001	P5-001	NORTH	EAST SIDE
001	P5-001	SOUTH	EAST SIDE
001	P9-001	NORTH	WEST SIDE
001	P9-001	SOUTH	WEST SIDE
002	P2A-002	NORTH	WEST SIDE
002	P2B-002	SOUTH	WEST SIDE
002	P2B-002	CENTER	WEST SIDE
002	P3A-002	NORTH	WEST SIDE
002	P3B-002	CENTER	WEST SIDE
002	P4A-002	NORTH	WEST SIDE
002	P4B-002	CENTER	WEST SIDE
002	P5B-002	NORTH	EAST SIDE
002	P5B-002	SOUTH	EAST SIDE
002	P5A-002	NORTH	EAST SIDE
003	P2-003	NORTH	WEST SIDE
003	P2-003	SOUTH	WEST SIDE
003	P3-003	NORTH	EAST SIDE
003	P5-003	NORTH	WEST SIDE
003	P7-003	NORTH	EAST SIDE
005	P2-005	SOUTH	EAST SIDE
005	P3-005	SOUTH	WEST SIDE
005	P4-005	NORTH	WEST SIDE
005	P7-005	NORTH	WEST SIDE
007	P3-007	SOUTH	EAST SIDE

PARTIAL ELEVATION

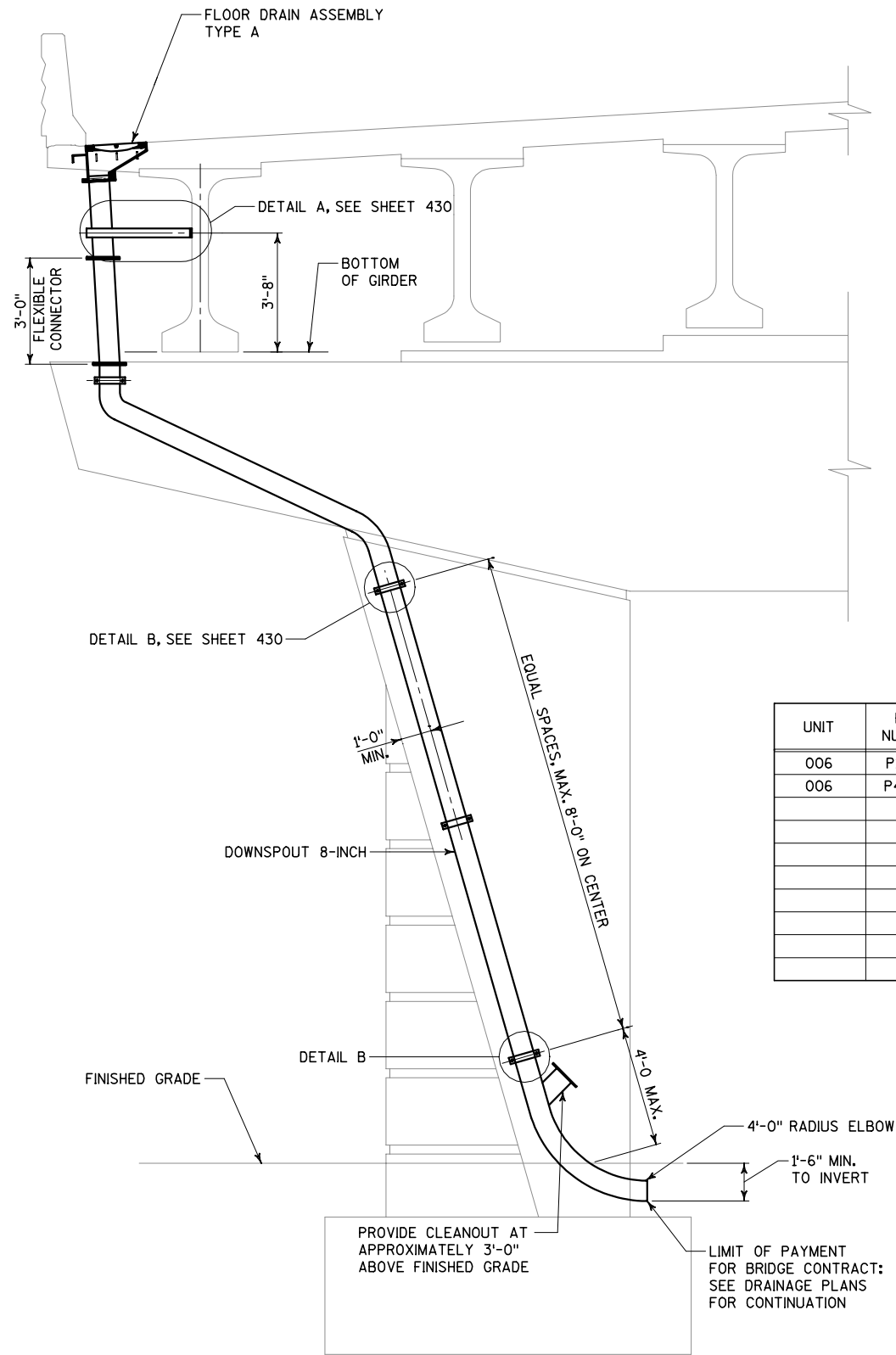


PARTIAL ELEVATION

NOTES

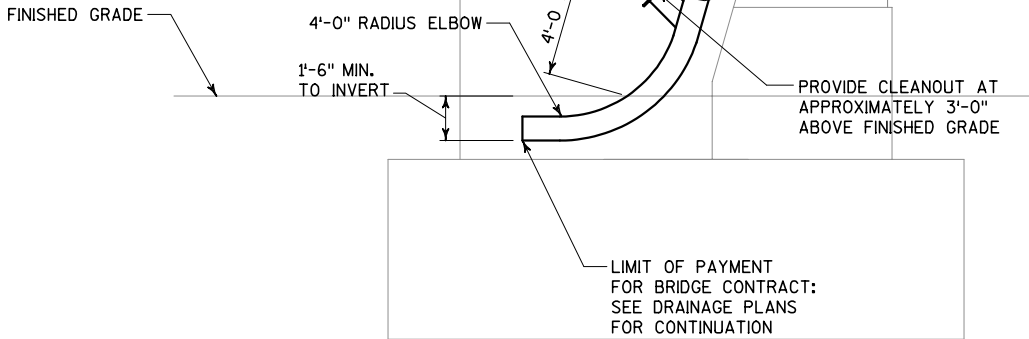
- SEE SHEETS 3 & 4 FOR GENERAL NOTES.
- SEE SHEET 430 FOR ADDITIONAL DETAILS OF THE FLOOR DRAIN ASSEMBLY.
- DOWNSPOUT SHALL BE REINFORCED THERMOSETTING RESIN PIPING (RTRP).
- VERIFY ALL DIMENSIONS PRIOR TO FABRICATING DOWNSPOUT.
- CONNECTION HARDWARE SHALL BE STAINLESS STEEL. ALL OTHER CONNECTION ELEMENTS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
- MASONRY ANCHORS SHALL MEET THE REQUIREMENTS FOR TYPE 'S' AS DESCRIBED IN THE STANDARD SPECIFICATIONS.
- FOR PAYMENT PURPOSES, FLEXIBLE CONNECTORS AND ALL CONNECTION AND INSTALLATION HARDWARE (INCLUDING MASONRY ANCHORS) ARE CONSIDERED INCIDENTAL TO ITEM SPV.0090.2030 - DOWNSPOUT 8-INCH.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-142			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PIER DRAIN ELEVATION 1			SHEET 425 OF 432



PARTIAL ELEVATION

UNIT	PIER NUMBER	COLUMN	DOWNSPOUT LOCATION
006	P1-006	NORTH	EAST SIDE
006	P4-006	NORTH	WEST SIDE

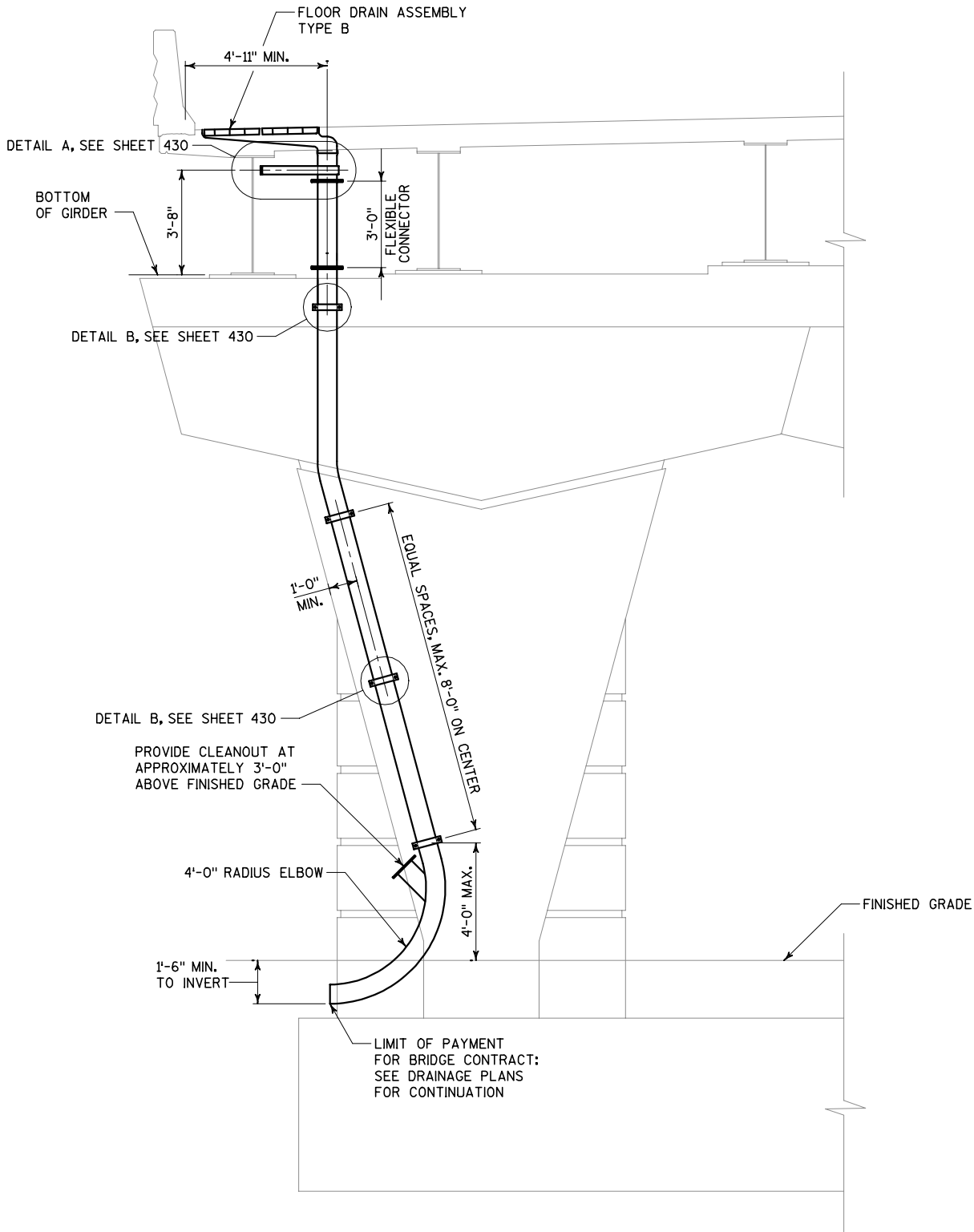


PARTIAL ELEVATION

NOTES

1. SEE SHEETS 3 & 4 FOR GENERAL NOTES.
2. SEE SHEET 430 FOR ADDITIONAL DETAILS OF THE FLOOR DRAIN ASSEMBLY.
3. DOWNSPOUT SHALL BE REINFORCED THERMOSETTING RESIN PIPING (RTRP).
4. VERIFY ALL DIMENSIONS PRIOR TO FABRICATING DOWNSPOUT.
5. CONNECTION HARDWARE SHALL BE STAINLESS STEEL. ALL OTHER CONNECTION ELEMENTS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
6. MASONRY ANCHORS SHALL MEET THE REQUIREMENTS FOR TYPE 'S' AS DESCRIBED IN THE STANDARD SPECIFICATIONS.
7. FOR PAYMENT PURPOSES, FLEXIBLE CONNECTORS AND ALL CONNECTION AND INSTALLATION HARDWARE (INCLUDING MASONRY ANCHORS) ARE CONSIDERED INCIDENTAL TO ITEM SPV.0090.2030 - DOWNSPOUT 8-INCH.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY KES	PLANS CK'D. KES
PIER DRAIN ELEVATION 2			SHEET 426 OF 432



PARTIAL ELEVATION

NOTES

1. SEE SHEETS 3 & 4 FOR GENERAL NOTES.
2. SEE SHEET 430 FOR ADDITIONAL DETAILS.
3. DOWNSPOUT SHALL BE REINFORCED THERMOSETTING RESIN PIPING (RTRP).
4. VERIFY ALL DIMENSIONS PRIOR TO FABRICATING DOWNSPOUT.
5. CONNECTION HARDWARE SHALL BE STAINLESS STEEL. ALL OTHER CONNECTION ELEMENTS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
6. MASONRY ANCHORS SHALL MEET THE REQUIREMENTS FOR TYPE 'S' AS DESCRIBED IN THE STANDARD SPECIFICATIONS.
7. FOR PAYMENT PURPOSES, FLEXIBLE CONNECTORS AND ALL CONNECTION AND INSTALLATION HARDWARE (INCLUDING MASONRY ANCHORS) ARE CONSIDERED INCIDENTAL TO ITEM SPV.0090.2030 - DOWNSPOUT 8-INCH.

UNIT	PIER NUMBER	COLUMN	DOWNSPOUT LOCATION
004	P1-004	NORTH	EAST SIDE
004	P1-004	NORTH	WEST SIDE

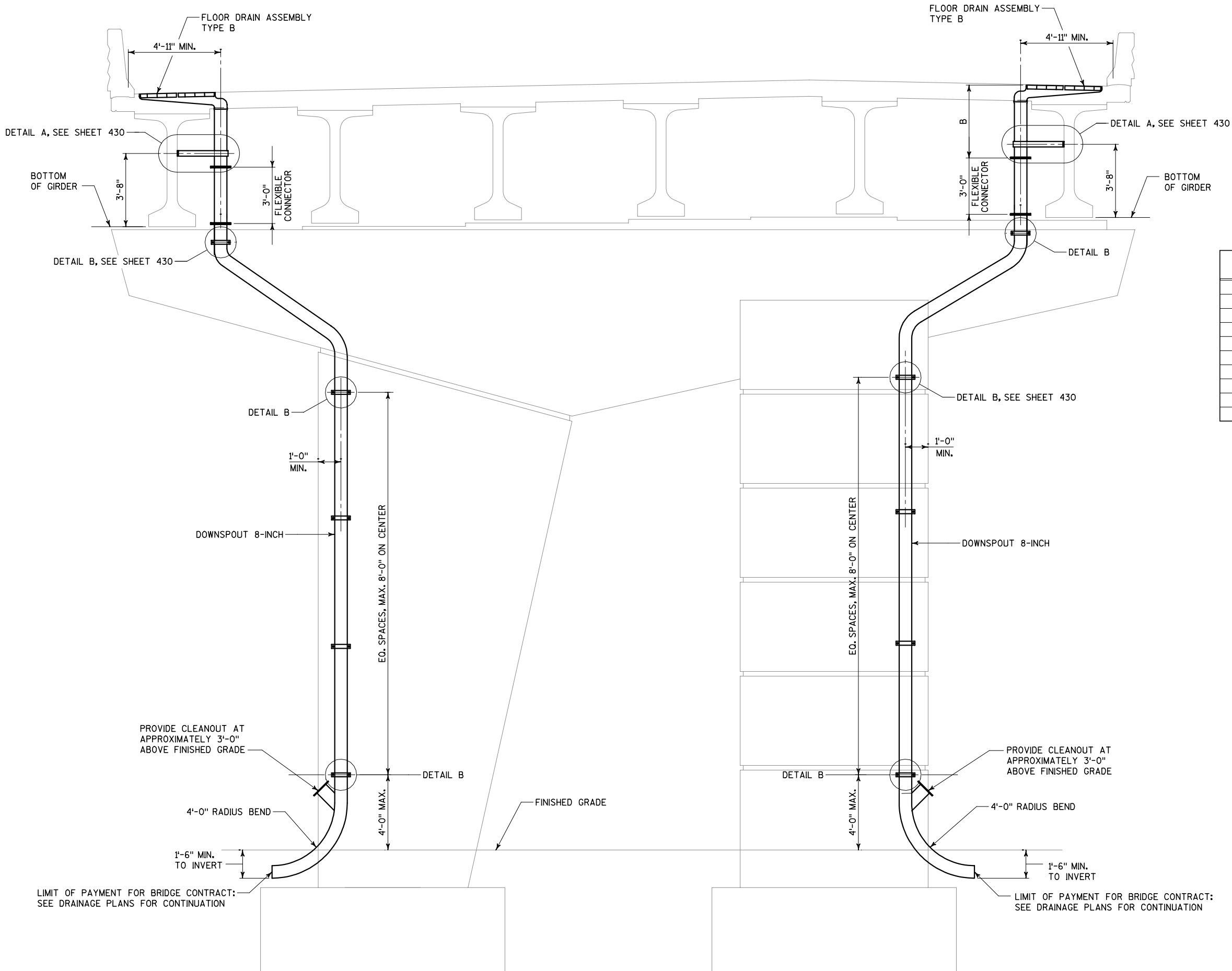
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PIER DRAIN ELEVATION 3			SHEET 427 OF 432

UNIT	PIER NUMBER	COLUMN	DOWNSPOUT LOCATION
001	P7-001	NORTH	EAST SIDE
001	P7-001	SOUTH	EAST SIDE
005	P5-005	NORTH	WEST SIDE

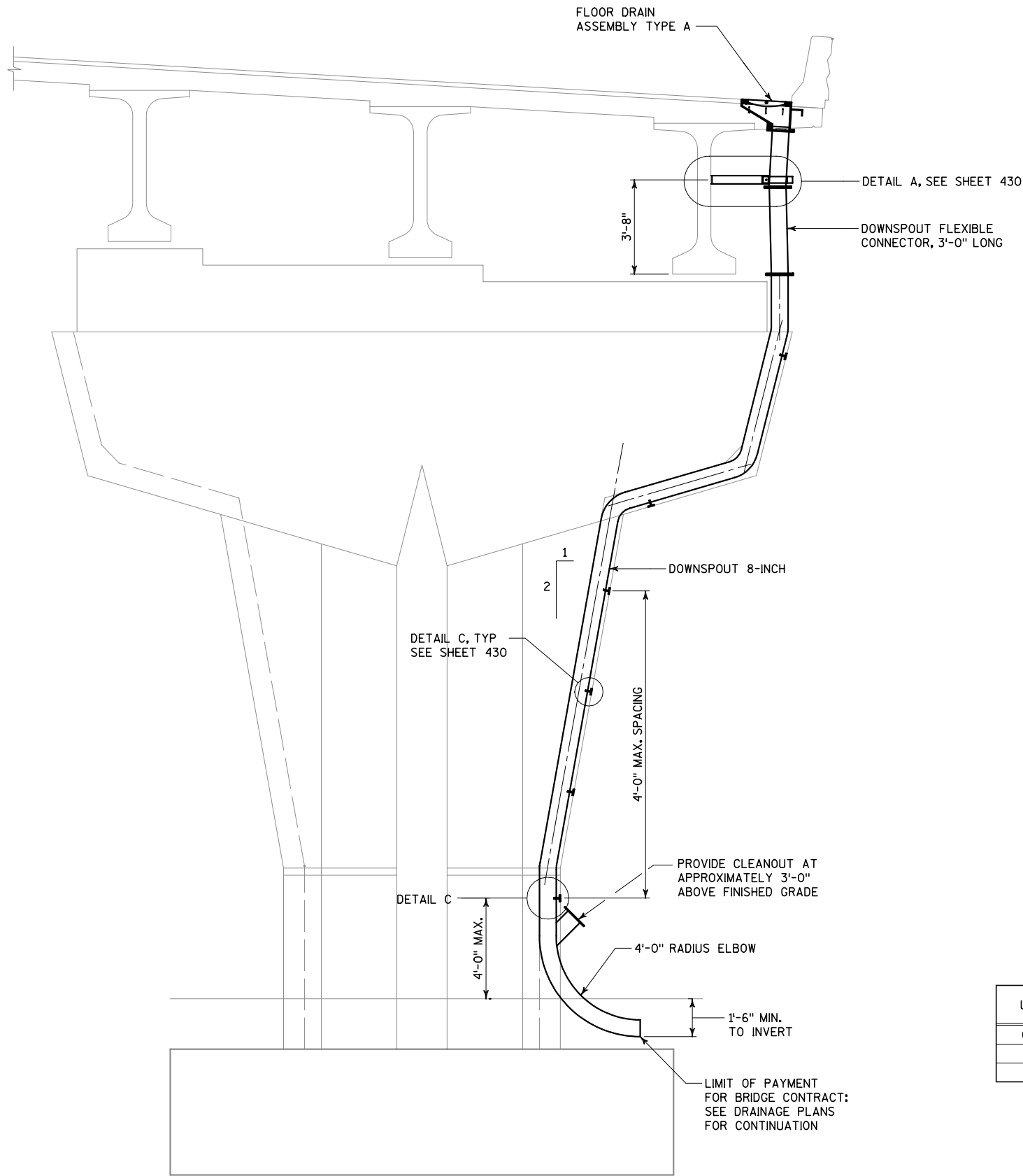
NOTES

- SEE SHEETS 3 & 4 FOR GENERAL NOTES.
- SEE SHEET 430 FOR ADDITIONAL DETAILS OF THE FLOOR DRAIN ASSEMBLY.
- DOWNSPOUT SHALL BE REINFORCED THERMOSETTING RESIN PIPING (RTRP).
- VERIFY ALL DIMENSIONS PRIOR TO FABRICATING DOWNSPOUT.
- CONNECTION HARDWARE SHALL BE STAINLESS STEEL. ALL OTHER CONNECTION ELEMENTS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
- MASONRY ANCHORS SHALL MEET THE REQUIREMENTS FOR TYPE 'S' AS DESCRIBED IN THE STANDARD SPECIFICATIONS.
- FOR PAYMENT PURPOSES, FLEXIBLE CONNECTORS AND ALL CONNECTION AND INSTALLATION HARDWARE (INCLUDING MASONRY ANCHORS) ARE CONSIDERED INCIDENTAL TO ITEM SPV.0090.2030 - DOWNSPOUT 8-INCH.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PIER DRAIN ELEVATION 4			SHEET 428 OF 432



ELEVATION



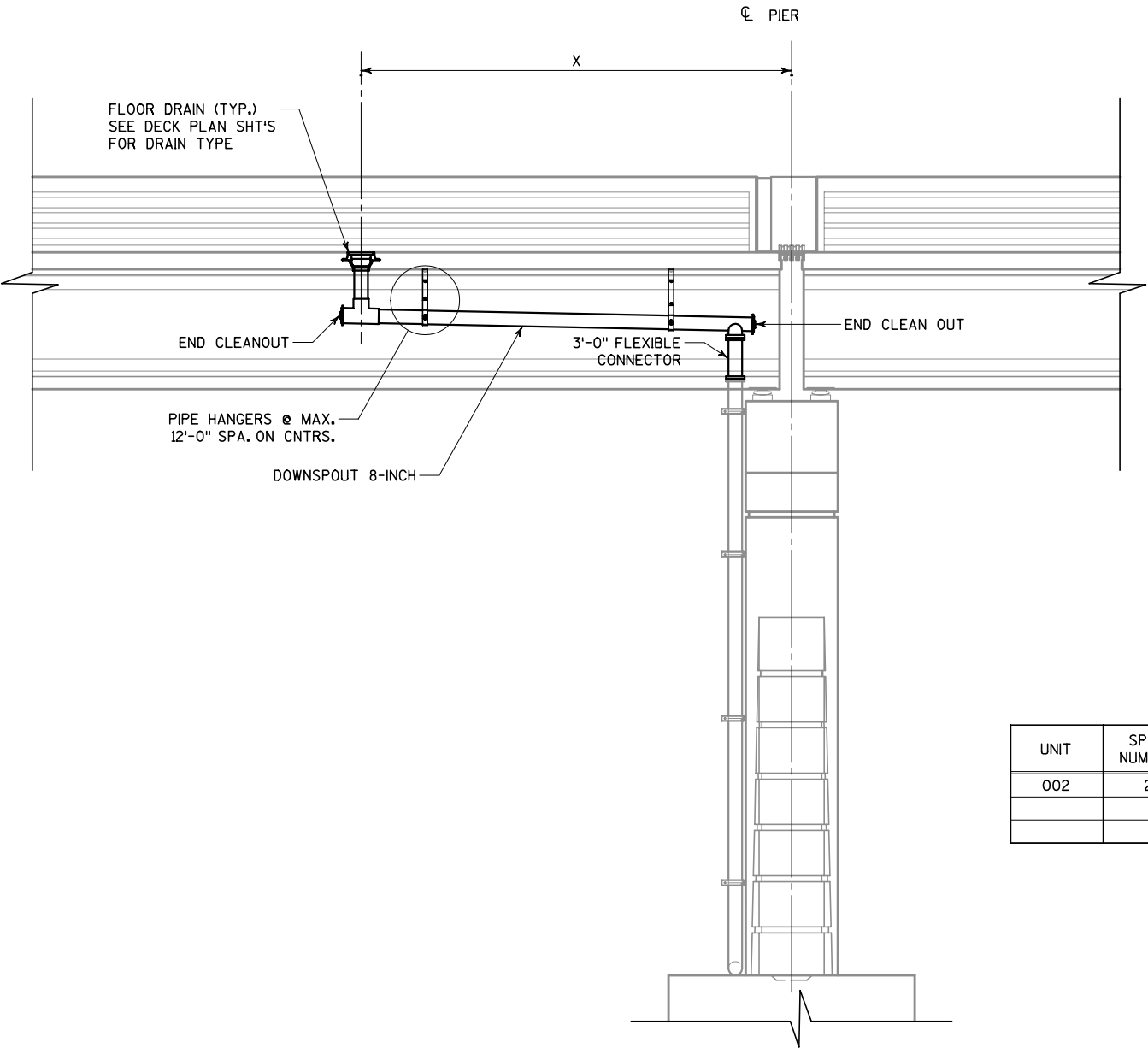
ELEVATION

NOTES

- 1. SEE SHEETS 3 & 4 FOR GENERAL NOTES.
- 2. SEE SHEET 430 FOR ADDITIONAL DETAILS OF THE FLOOR DRAIN ASSEMBLY.
- 3. DOWNSPOUT SHALL BE REINFORCED THERMOSETTING RESIN PIPING (RTRP).
- 4. VERIFY ALL DIMENSIONS PRIOR TO FABRICATING DOWNSPOUT.
- 5. CONNECTION HARDWARE SHALL BE STAINLESS STEEL. ALL OTHER CONNECTION ELEMENTS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
- 6. MASONRY ANCHORS SHALL MEET THE REQUIREMENTS FOR TYPE 'S' AS DESCRIBED IN THE STANDARD SPECIFICATIONS.
- 7. FOR PAYMENT PURPOSES, FLEXIBLE CONNECTORS AND ALL CONNECTION AND INSTALLATION HARDWARE (INCLUDING MASONRY ANCHORS) ARE CONSIDERED INCIDENTAL TO ITEM SPV.0090.2030 - DOWNSPOUT 8-INCH.

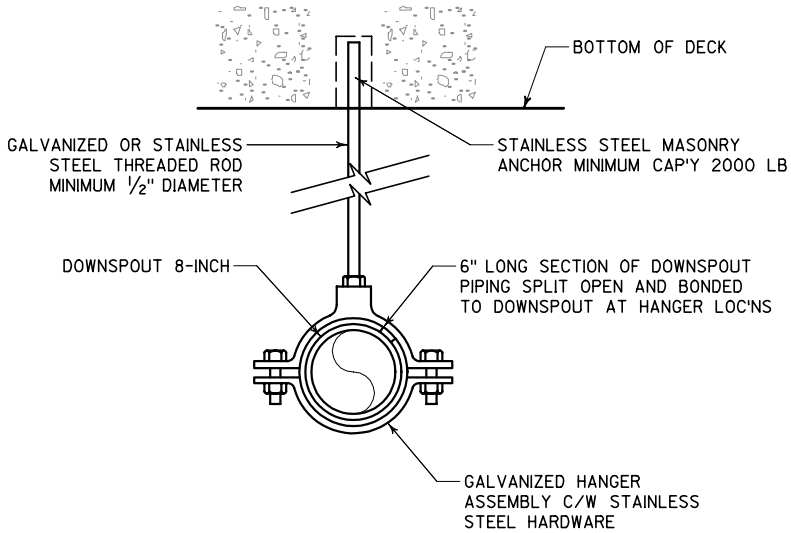
UNIT	PIER NUMBER	COLUMN	DOWNSPOUT LOCATION
007	P1-007	SOUTH	WEST SIDE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PIER DRAIN ELEVATION 5			SHEET 429 OF 432



ELEVATION

UNIT	SPAN NUMBER	X
002	2	14'-1 7/8"

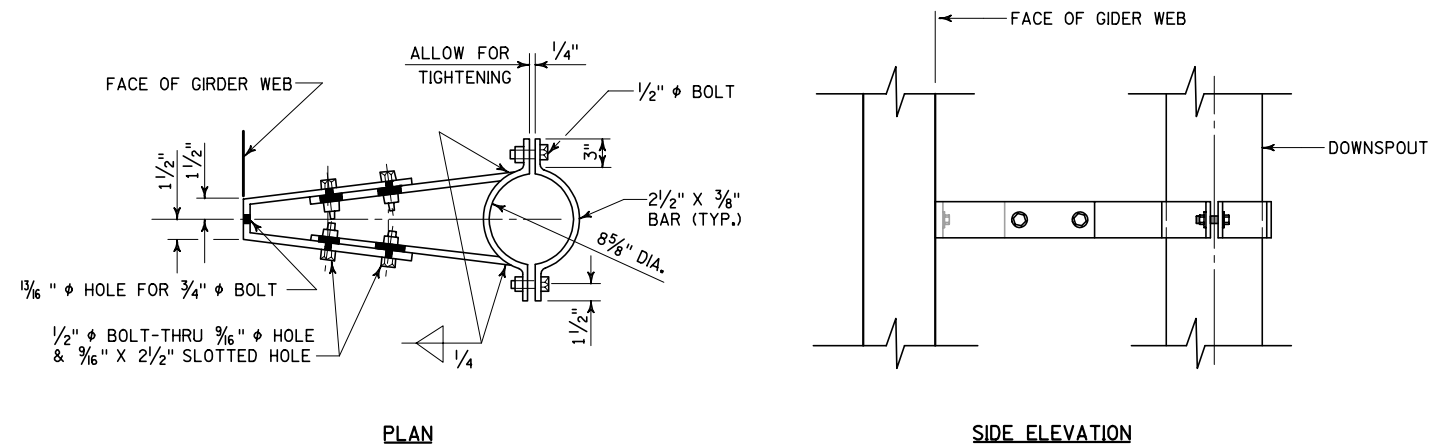
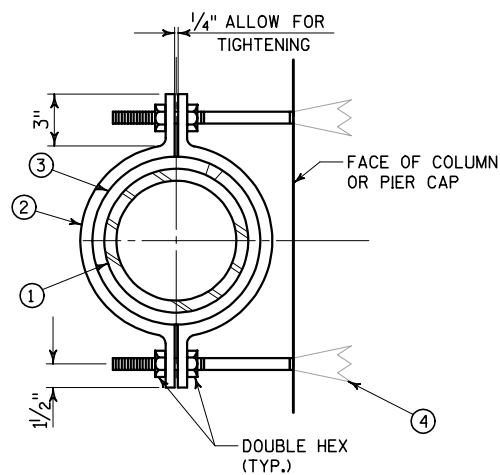
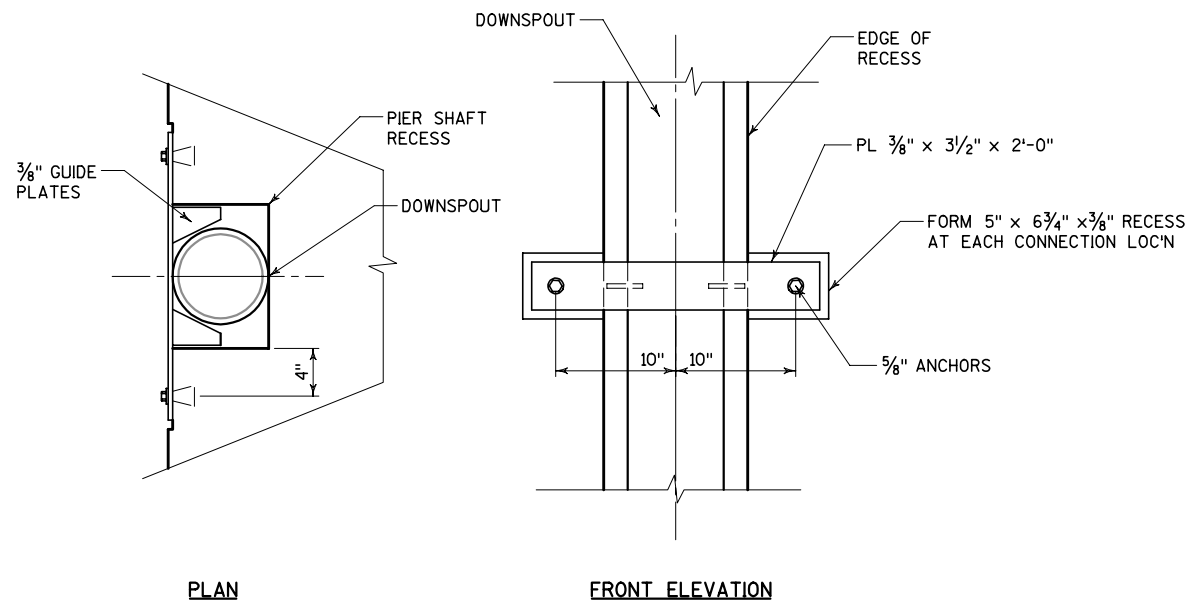


PIPE HANGER DETAIL

NOTES

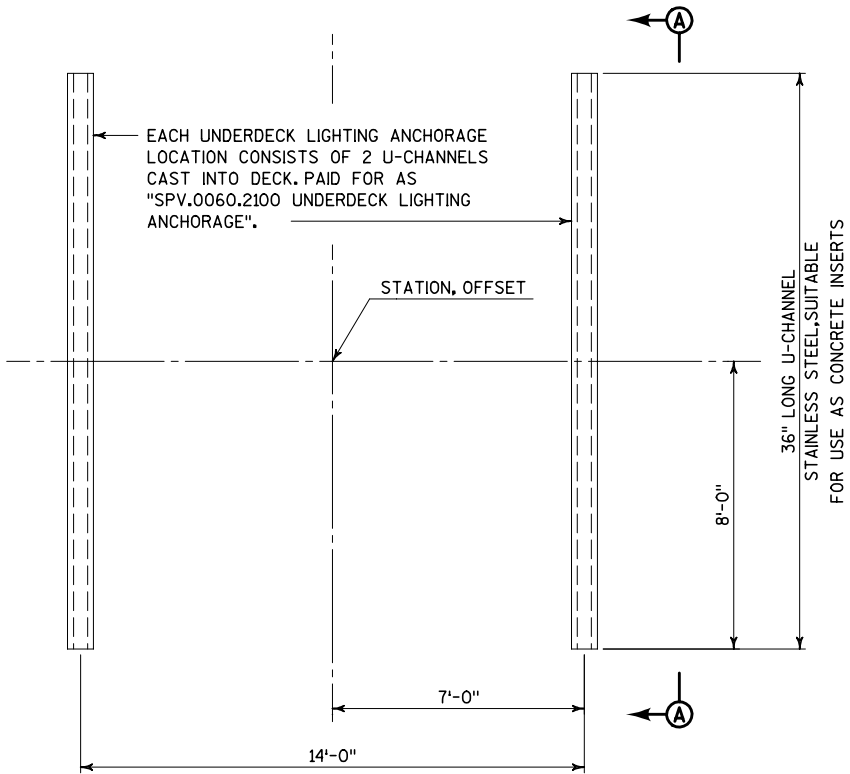
- 1. SEE SHEET 3 & 4 FOR GENERAL NOTES.
- 2. INSTALL PIPING AT THE STEEPEST GRADE POSSIBLE, MINIMUM 3 PERCENT.
- 3. ALL FITTINGS, ELBOWS, CLEANOUTS, HANGERS, MASONRY ANCHORS, BOLTS AND OTHER HARDWARE REQUIRED FOR MOUNTING THE DOWNSPOUT AND/OR FLOOR DRAINS IS CONSIDERED INCIDENTAL TO PAY ITEM SPV.0090.2030 'DOWNSPOUT 8-INCH'.
- 4. 'END CLEANOUTS' SHALL CONSIST OF A REMOVABLE COVER SEALING THE PIPE END INDICATED. OTHER CLEANOUTS SHALL USE THE INTERMEDIATE CLEANOUT DETAIL GIVEN ON THIS SHEET.
- 5. CUT HOLES AND INSTALL INTERMEDIATE CLEANOUTS IN THE FIELD AFTER DOWNSPOUT HAS BEEN INSTALLED.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
PIER DRAIN DETAILS 1			SHEET 430 OF 432

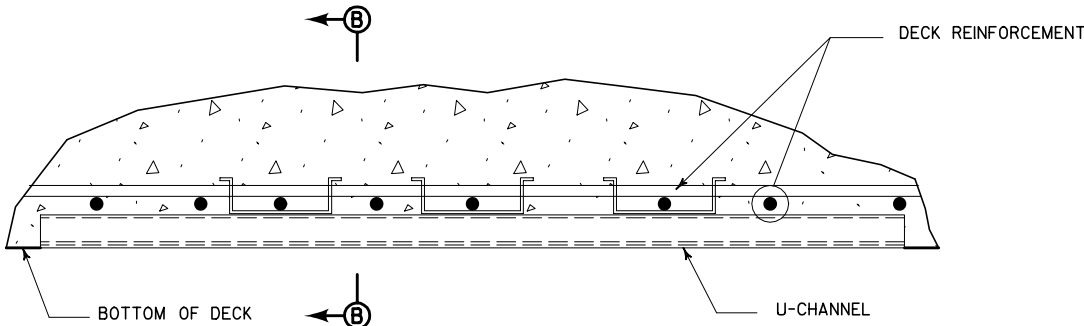
DETAIL ADETAIL BDETAIL CLEGEND

- ① 8" ϕ DOWNSPOUT
- ② 2 1/2" X 3/8" BAR (TYP.)
- ③ 6" LG. SPLIT RTRP STRIP. BOND TO *1, PLACE AT ALL CLAMP LOC'S.
- ④ 5/8" ϕ TYPE S ANCHORS. (ST. STL. BOLT & WASHER - TYP.)

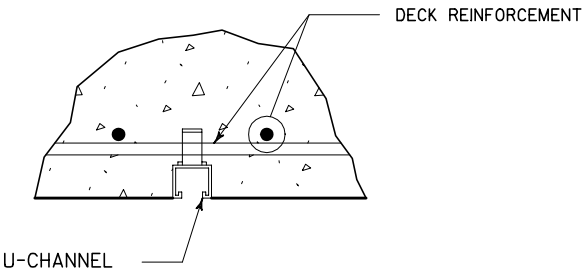
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY RWN	PLANS CK'D. KES
PIER DRAIN DETAILS 2			SHEET 431 OF 432



PLAN

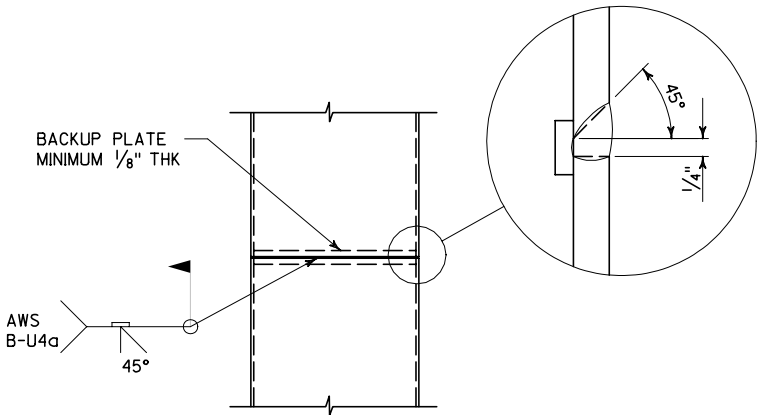


SECTION A-A

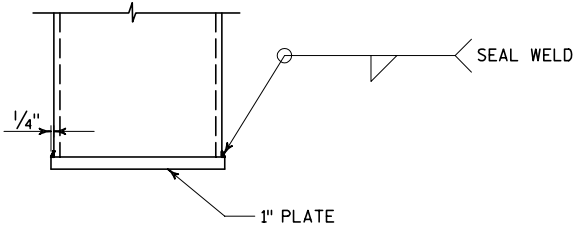


SECTION B-B

UNDERDECK LIGHTING ANCHORAGE DETAILS



PILE SPLICE DETAIL



PILE TIP DETAIL

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-40-1412			
CONST. SPEC.	2004	DRAWN BY EKM	PLANS CK'D. KES
MISCELLANEOUS DETAILS			SHEET 432 OF 432