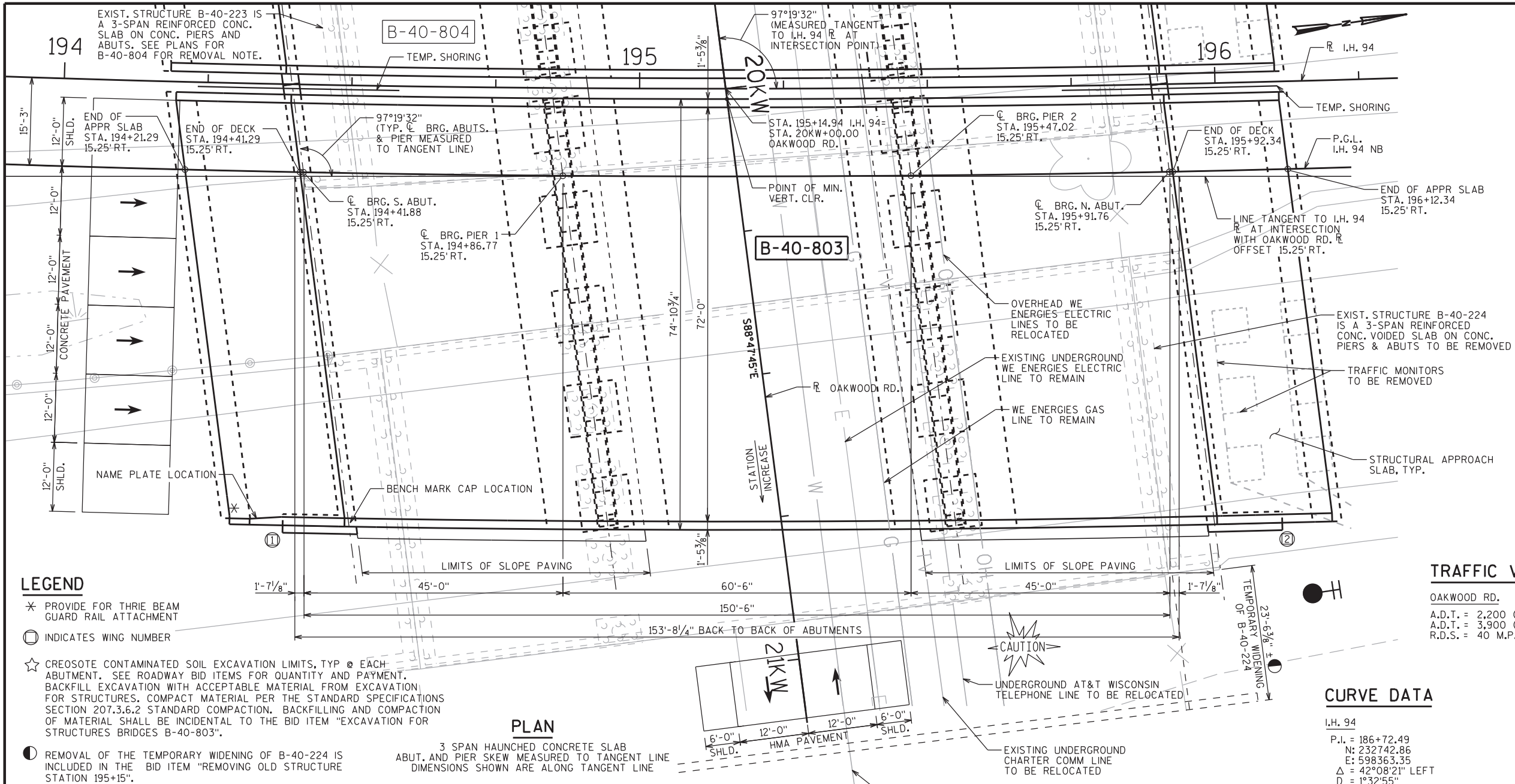


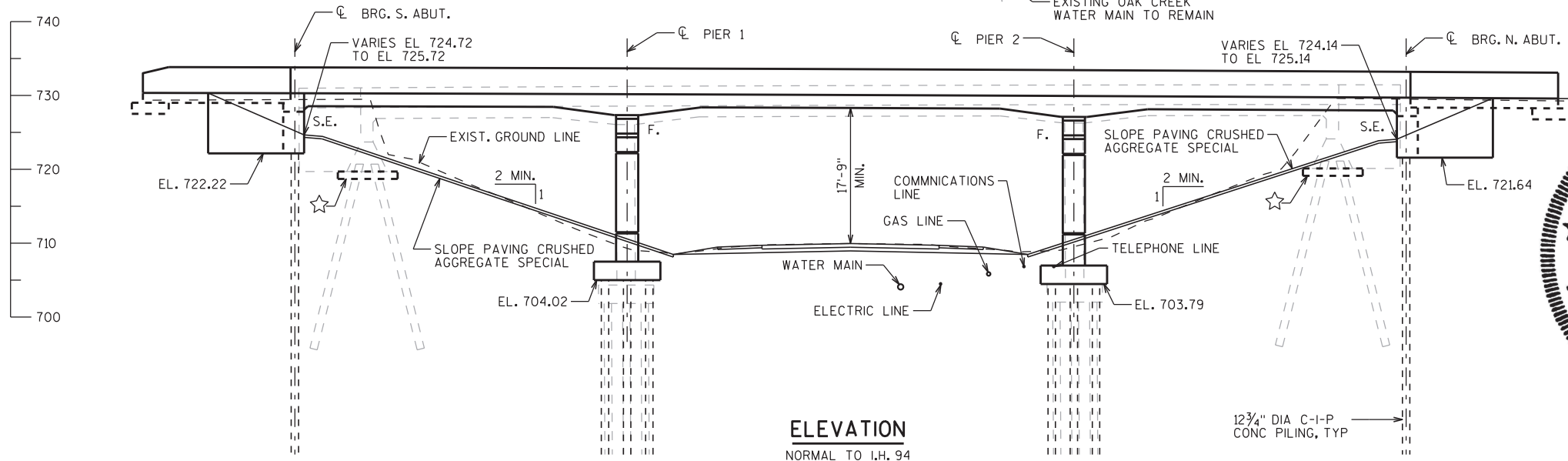


LEGEND

- * PROVIDE FOR THRE BEAM GUARD RAIL ATTACHMENT
- INDICATES WING NUMBER

☆ CREOSOTE CONTAMINATED SOIL EXCAVATION LIMITS, TYP @ EACH ABUTMENT. SEE ROADWAY BID ITEMS FOR QUANTITY AND PAYMENT. BACKFILL EXCAVATION WITH ACCEPTABLE MATERIAL FROM EXCAVATION. FOR STRUCTURES, COMPACT MATERIAL PER THE STANDARD SPECIFICATIONS SECTION 207.3.6.2 STANDARD COMPACTION. BACKFILLING AND COMPACTION OF MATERIAL SHALL BE INCIDENTAL TO THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-40-803".

- REMOVAL OF THE TEMPORARY WIDENING OF B-40-224 IS INCLUDED IN THE BID ITEM "REMOVING OLD STRUCTURE STATION 195+15".



STATE PROJECT NUMBER

1030-20-87

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. TYPICAL SECTIONS
3. QUANTITIES & PROFILE GRADE LINE
4. SUBSURFACE EXPLORATION
5. SOUTH ABUTMENT
6. SOUTH ABUTMENT PILE PLAN
7. SOUTH ABUTMENT DETAILS
8. SOUTH ABUTMENT WING DETAILS
9. NORTH ABUTMENT
10. NORTH ABUTMENT PILE PLAN
11. NORTH ABUTMENT DETAILS
12. NORTH ABUTMENT WING DETAILS
13. PIER 1
14. PIER 1 DETAILS (1 OF 2)
15. PIER 1 DETAILS (2 OF 2)
16. PIER 2
17. PIER 2 DETAILS (1 OF 2)
18. PIER 2 DETAILS (2 OF 2)
19. PIER PRECAST ALTERNATE
20. SUPERSTRUCTURE
21. SUPERSTRUCTURE DETAILS (1 OF 2)
22. SUPERSTRUCTURE DETAILS (2 OF 2)
23. SOUTH STRUCTURAL APPROACH SLAB
24. NORTH STRUCTURAL APPROACH SLAB
25. SINGLE SLOPE PARAPET 42SS MODIFIED (1 OF 3)
26. SINGLE SLOPE PARAPET 42SS MODIFIED (2 OF 3)
27. SINGLE SLOPE PARAPET 42SS MODIFIED (3 OF 3)
28. AESTHETIC DETAILS
29. SLOPE PAVING DETAILS
30. ALTERNATE CONSTRUCTION JOINT DETAIL

TRAFFIC VOLUME

OAKWOOD RD.	I.H. 94
A.D.T. = 2,200 (2017)	A.D.T. = 95,745 (2017)
A.D.T. = 3,900 (2035)	A.D.T. = 115,000 (2035)
R.D.S. = 40 M.P.H.	R.D.S. = 70 M.P.H.

CURVE DATA

I.H. 94

P.I. = 186+72.49

N: 232742.86

E: 598363.35

Δ = 42°08'21" LEFT

D = 1°32'55"

T = 1425.46'

L = 2721.23'

R = 3700.00'

P.C. = 172+47.03

P.T. = 199+68.26

STRUCTURES DESIGN CONTACTS

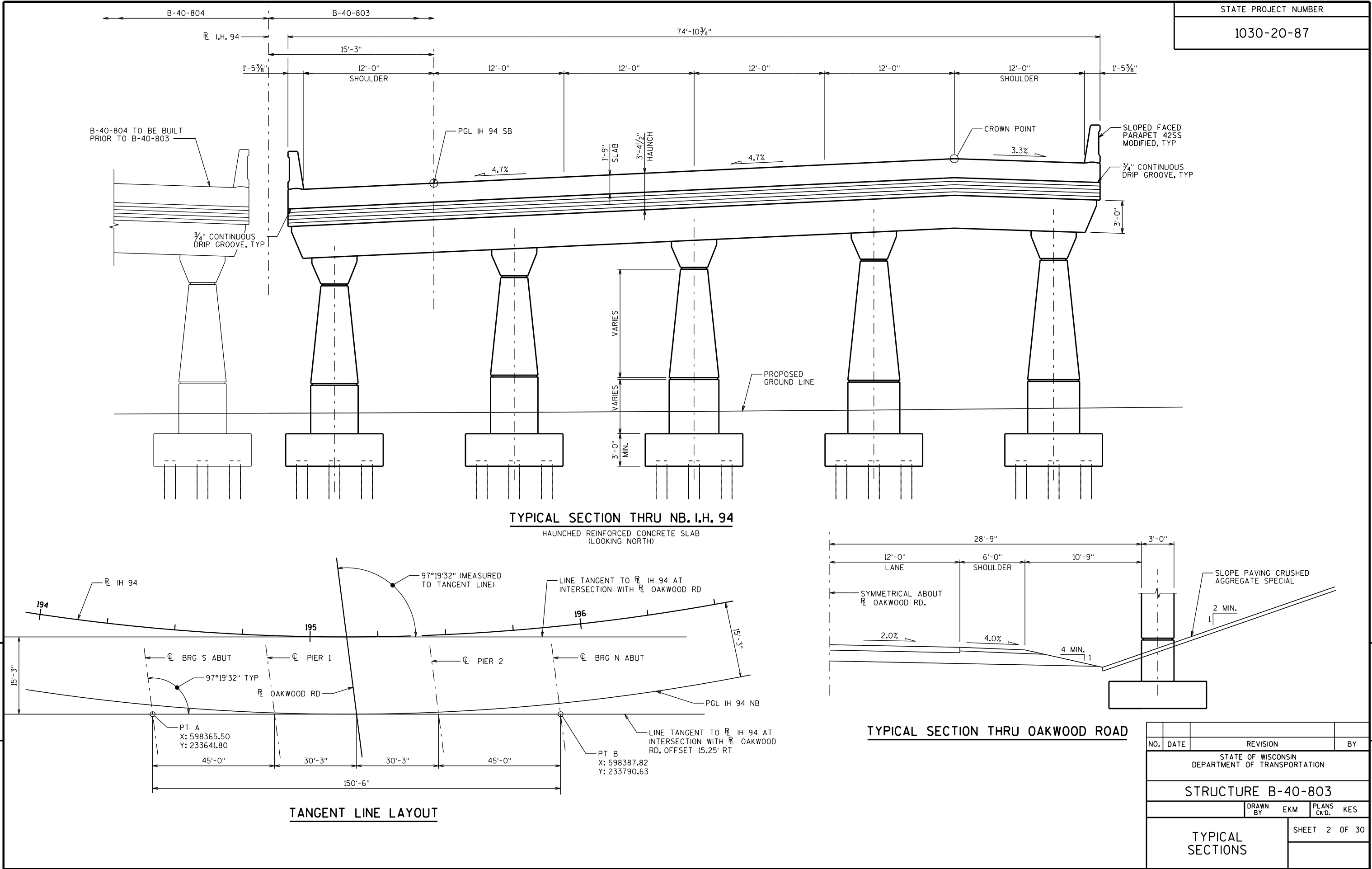
BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489

CONSULTANT:
ED MCCRIGHT (414) 272-2426

NO.	DATE	REVISION	BY
ch2m			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED		CHIEF STRUCTURES DESIGN ENGINEER	DATE
STRUCTURE B-40-803			
IH 94 WB OVER OAKWOOD ROAD			
COUNTY	MILWAUKEE	TOWN/CITY/VILLAGE	OAK CREEK
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	DKS	DESIGNED KES	DRAWN BY EKM
PLANS CK'D.	KES	PLANS CK'D.	KES
GENERAL PLAN & ELEVATION			SHEET 1 OF 30

8

8



STATE PROJECT NUMBER
1030-20-87

TYPICAL SECTION THRU NB. I.H. 94
HAUNCHED REINFORCED CONCRETE SLAB
(LOOKING NORTH)

TYPICAL SECTION THRU OAKWOOD ROAD

TANGENT LINE LAYOUT

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
TYPICAL SECTIONS		SHEET 2 OF 30	

TOTAL ESTIMATED QUANTITIES

BID ITEM NO.	BID ITEMS	UNIT	SOUTH APPROACH SLAB	SOUTH ABUTMENT	PIER 1	PIER 2	NORTH ABUTMENT	NORTH APPROACH SLAB	SUPER	TOTAL
203.0200.0005	REMOVING OLD STRUCTURE STATION 195+15	LS	-----	-----	-----	-----	-----	-----	-----	1
206.1000.4803	EXCAVATION FOR STRUCTURES BRIDGES B-40-803	LS	-----	-----	-----	-----	-----	-----	-----	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	-----	255	-----	-----	255	-----	-----	510
305.0125	BASE AGGREGATE DENSE 1 1/4-INCH	CY	150	-----	-----	-----	-----	150	-----	300
502.0100	CONCRETE MASONRY BRIDGES	CY	22	66	113	110	66	22	-----	399
502.3200	PROTECTIVE SURFACE TREATMENT	SY	170	-----	-----	-----	-----	170	1,210	1,550
502.3210	PIGMENTED SURFACE SEALER	SY	20	-----	-----	-----	-----	20	150	190
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	-----	-----	6,280	5,800	-----	-----	-----	12,080
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	16,790	6,360	30,620	30,620	6,360	16,740	159,210	266,700
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	-----	-----	-----	-----	-----	-----	690	690
511.1200.4030	TEMPORARY SHORING B-40-803	SF	-----	110	-----	-----	110	-----	-----	220
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	-----	17	-----	-----	17	-----	-----	34
517.1010.S.4008	CONCRETE STAINING B-40-803	SF	75	470	1,665	1,665	470	75	2,135	6,555
550.0600	PILE REDRIVING	EACH	-----	3	6	6	3	-----	-----	18
550.2128	PILING CIP CONCRETE 12 3/4 X 0.50-INCH	LF	-----	605	3,400	3,400	660	-----	-----	8,065
612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	-----	25	-----	-----	25	-----	-----	50
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	-----	90	-----	-----	90	-----	-----	180
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	1	-----	-----	-----	-----	-----	-----	1
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	-----	75	-----	-----	75	-----	-----	150
SPV.0035.4000	HPC MASONRY STRUCTURES	CY	80	-----	-----	-----	-----	80	908	1,068
SPV.0165.4001	LONGITUDINAL GROOVING BRIDGE DECK	SF	1,380	-----	-----	-----	-----	1,380	10,430	13,190
SPV.0180.4800	SLOPE PAVING CRUSHED AGGREGATE SPECIAL	SY	-----	475	-----	-----	470	-----	-----	945
	NON-BID ITEMS									
	PREFORMED JOINT FILLER	SIZE								1/2" & 3/4"
	NON-BITUMINOUS JOINT FILLER	SIZE								1/2" & 3/4"
	CORK FILLER	SIZE								3/4"
	NAME PLATE	EACH								1
	PRECAST PIER COLUMNS									
	GROUTED BAR COUPLERS									

ALL BID ITEMS ARE CATEGORY 2230

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING CRUSHED AGGREGATE SPECIAL TO THE EXTENT SHOWN ON THE GENERAL PLAN SHEET AND THE SLOPE PAVING DETAILS SHEET.

REMOVE PILING TO A MINIMUM OF 2'-0" BELOW FINISHED GRADE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

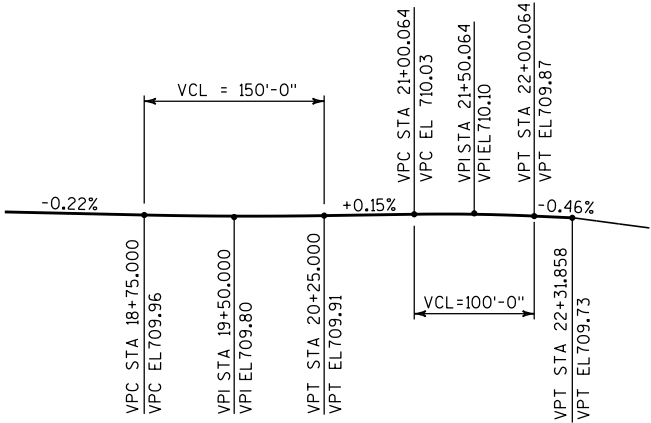
ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MILWAUKEE COUNTY ZONE, NAD 83 (2007). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF NAVD 88 (2007).

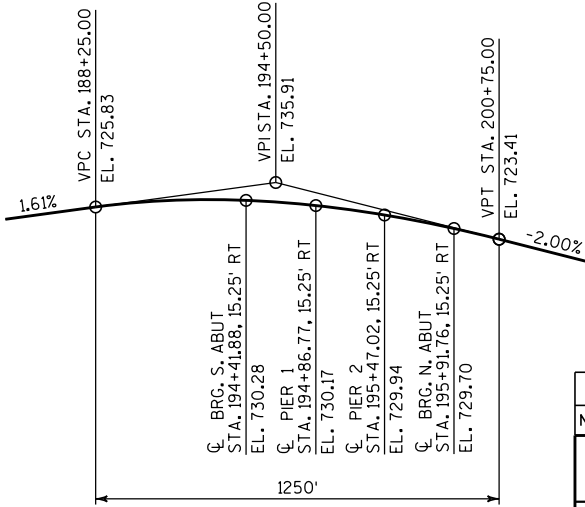
2-WAY TRAFFIC ON I-94 WILL BE MAINTAINED ON THE NEWLY CONSTRUCTED I-94 SOUTHBOUND LANES AND BRIDGE OVER OAKWOOD RD (B-40-804) DURING REMOVAL OF THE EXISTING I-94 NORTHBOUND STRUCTURE, (B-40-224) AND CONSTRUCTION OF THE REPLACEMENT I-94 NORTHBOUND STRUCTURE (B-40-803).

OAKWOOD ROAD WILL BE CLOSED DURING CONSTRUCTION OF B-40-803.

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE. UTILITIES LABELED AS PROPOSED MAY BE INSTALLED BY OTHERS PRIOR TO THIS CONTRACT.



PROFILE GRADE LINE OAKWOOD ROAD



PROFILE GRADE LINE I.H. 94 NB

DESIGN DATA

DESIGN SPECIFICATION: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION WITH 2016 INTERIMS

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.16
OPERATING RATING FACTOR: RF = 1.50
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

STRUCTURE IS DESIGNED FOR A WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES

CONCRETE MASONRY:
SUPERSTRUCTURE (HPC)..... f'c = 4,000 psi
SUBSTRUCTURE..... f'c = 4,000 psi
C-I-P CONCRETE PILING..... f'c = 3,500 psi
BAR STEEL REINFORCEMENT..... f_y = 60,000 psi
STAINLESS STEEL BAR REINFORCEMENT..... f_y = 60,000 psi
STEEL PILING SHELL..... f_y = 45,000 psi

FOUNDATION DATA

ABUTMENTS AND PIER SHALL BE SUPPORTED ON 12¾" DIAMETER CAST-IN-PLACE CONCRETE PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE AS DETERMINED BY THE MODIFIED GATES ACCEPTANCE METHOD. DRIVE PILING TO PLAN LENGTH UNLESS THE REQUIRED BEARING IS OBTAINED AT A SHORTER LENGTH. IF THE REQUIRED BEARING IS NOT OBTAINED WHEN THE PILE IS DRIVEN TO PLAN LENGTH, CONTACT THE BUREAU OF STRUCTURES.

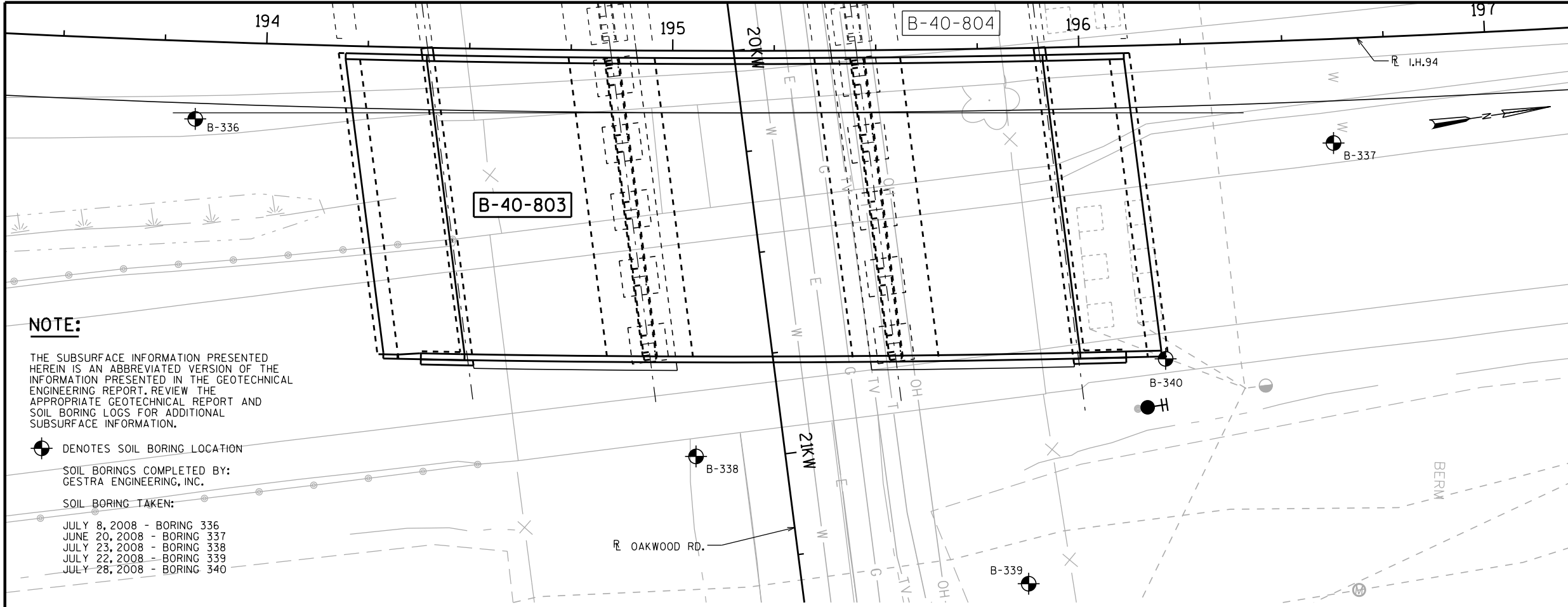
THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING THE MODIFIED GATES ACCEPTANCE METHOD TO DETERMINE DRIVEN PILE CAPACITY.

SUBSTRUCTURE UNIT:	ESTIMATED PILE LENGTHS:	REQ'D DRIVING RESISTANCE
SOUTH ABUT	55 FEET	140 TONS
PIER 1	85 FEET	210 TONS
PIER 2	85 FEET	210 TONS
NORTH ABUT	60 FEET	140 TONS

LEGEND

● PRECAST PIER NON-BID ITEMS (PRECAST PIER COLUMNS & GROUTED BAR COUPLERS) ARE FOR INFORMATIONAL PURPOSES ONLY. IF THE CONTRACTOR ELECTS TO UTILIZE PRECAST PIER COLUMNS, THE NON-BID ITEM SPECIAL PROVISIONS WITHIN THIS CONTRACT SHALL GOVERN THE WORK. PAYMENT FOR THE PRECAST PIER SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES" FOR THE CAST-IN-PLACE PIER.

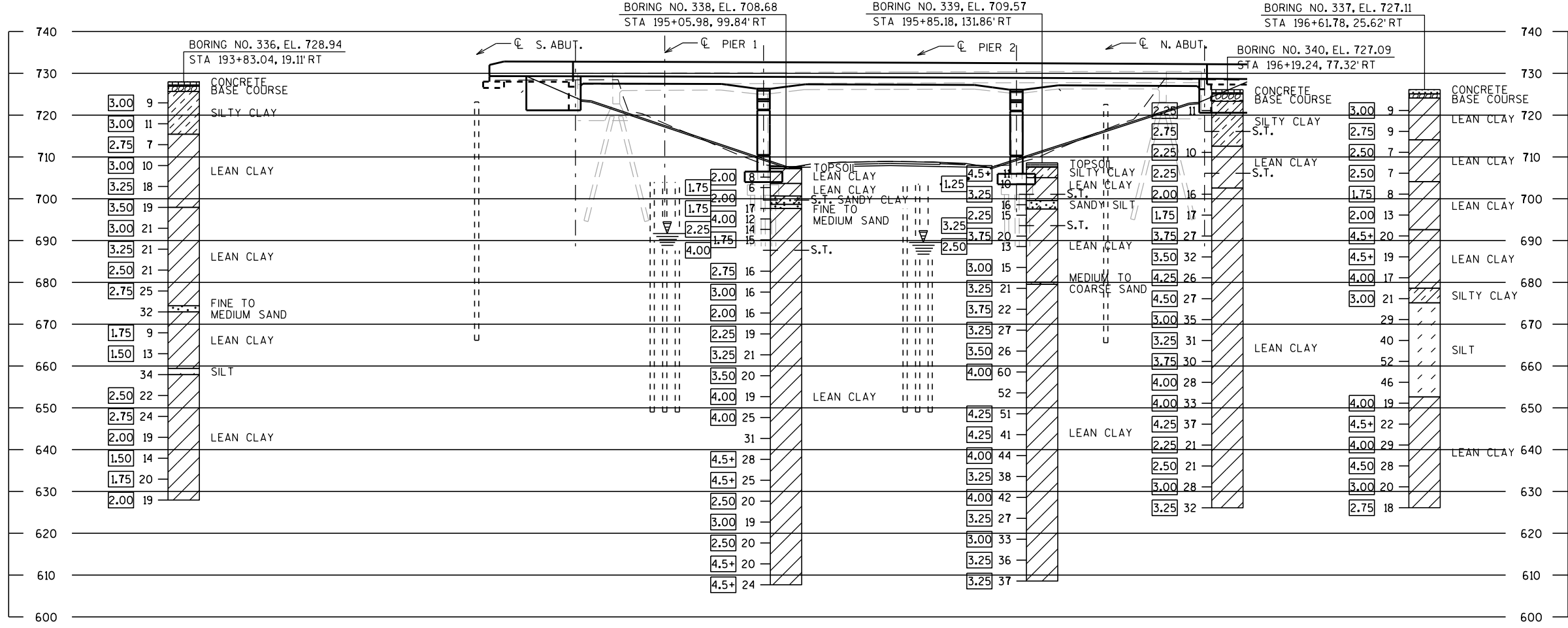
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
	DRAWN BY	EKM	PLANS CK'D. KES
QUANTITIES & PROFILE GRADE LINES		SHEET 3 OF 30	



NOTE:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

- DENOTES SOIL BORING LOCATION
- SOIL BORINGS COMPLETED BY:
GESTRA ENGINEERING, INC.
- SOIL BORING TAKEN:
 - JULY 8, 2008 - BORING 336
 - JUNE 20, 2008 - BORING 337
 - JULY 23, 2008 - BORING 338
 - JULY 22, 2008 - BORING 339
 - JULY 28, 2008 - BORING 340



STATE PROJECT NUMBER

1030-20-87

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 (TSF) 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

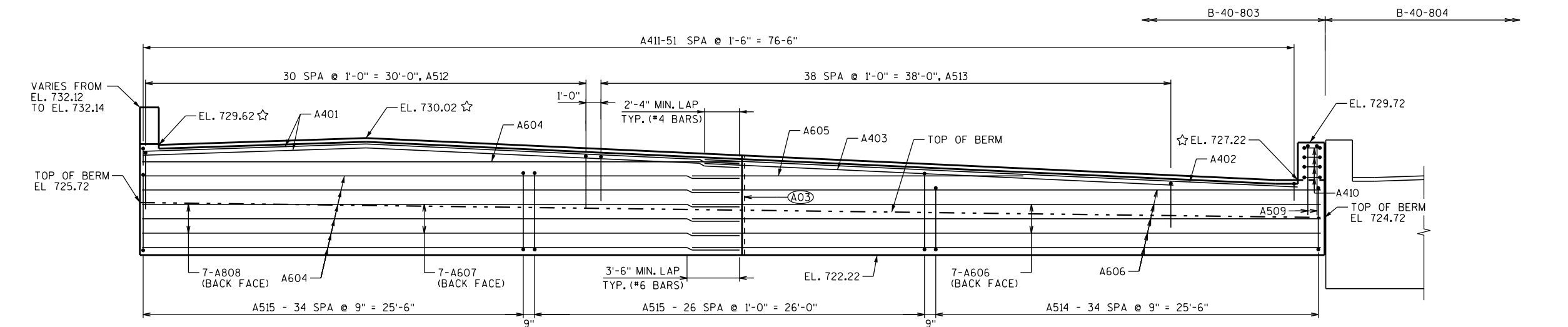
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO
LIMESTONE

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.

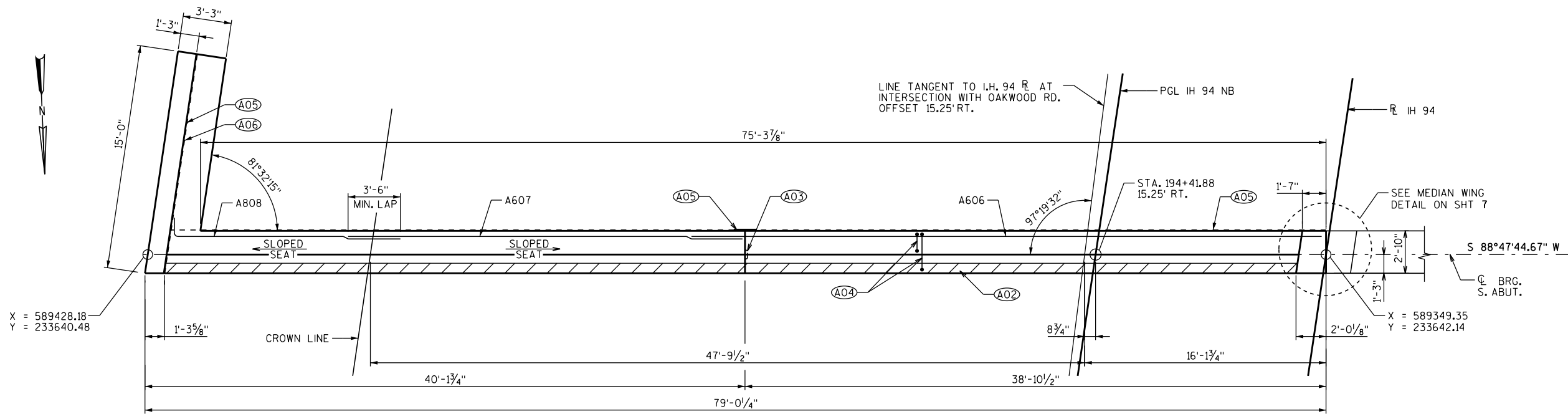
SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
SUBSURFACE EXPLORATION		SHEET 4 OF 30	

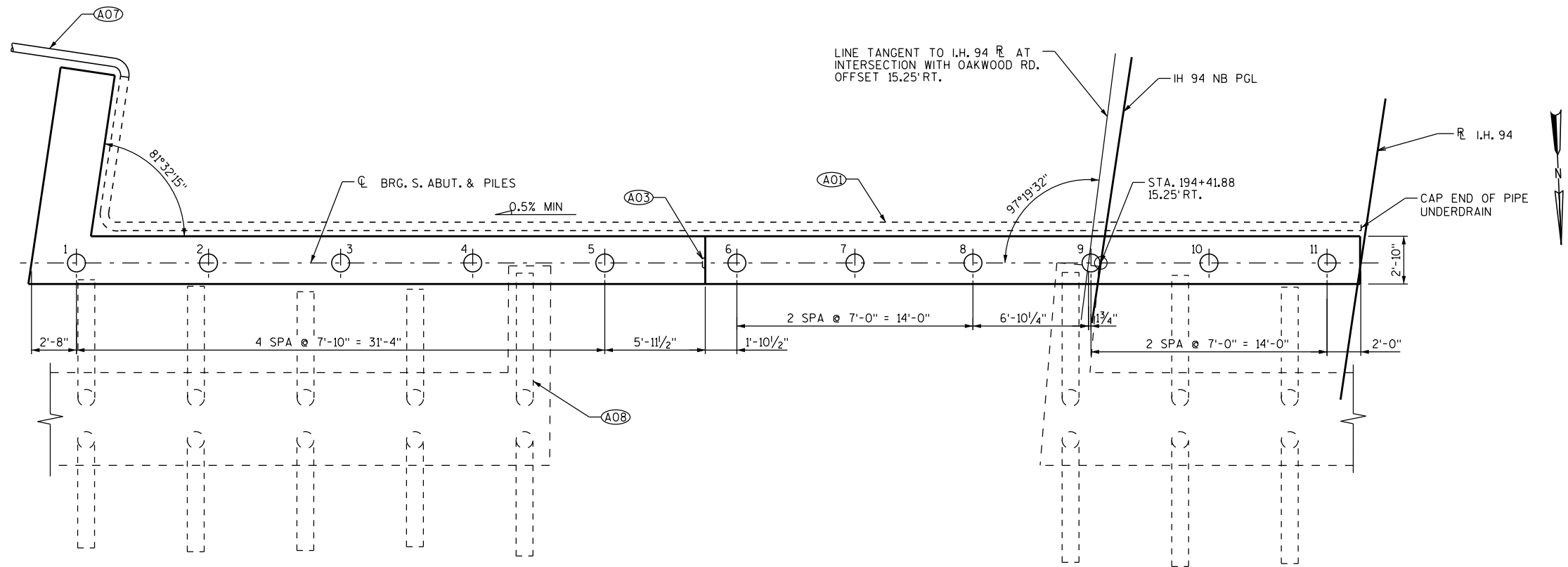
**ELEVATION**

(LOOKING SOUTH)

**PLAN****NOTES**

- (A02) 4" X 3/4" FILLER
- (A03) VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 8". PLACE 3/4" 'V' GROOVE @ THE FRONT FACE OF CONST JT.
- (A04) PLACE STIRRUPS AND U-SHAPED BARS NORMAL TO ABUTMENT BODY
- (A05) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE OF ABUTMENT
- (A06) 1/2" FILLER FROM ABUT SEAT TO TOP OF WING. SEAL ALL EXPOSED VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING NON-BITUMINOUS JOINT SEALER, COLOR TO MATCH CONCRETE STAIN. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).
- ☆ ELEVATIONS GIVEN AT THE CL BRG S ABUT

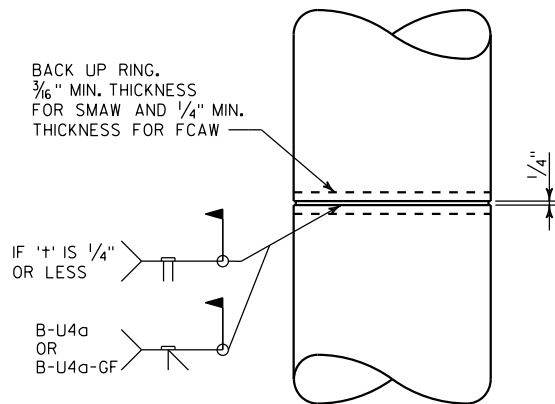
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
SOUTH ABUTMENT		SHEET 5 OF 30	



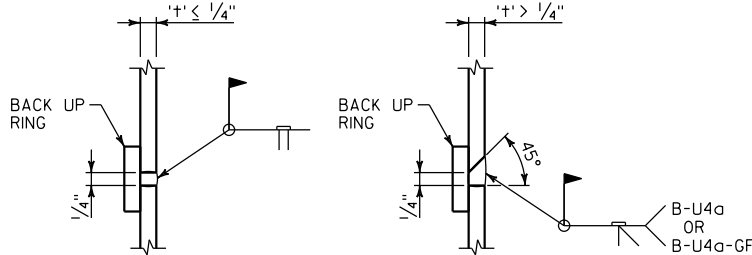
FOOTING PLAN

NOTES

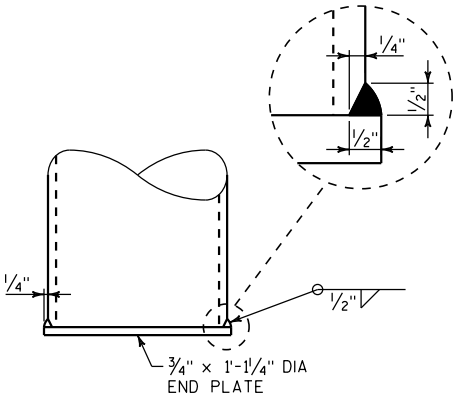
- (A01) PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN TO DRAIN
- (A03) VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 8". PLACE 3/4" 'V' GROOVE @ THE FRONT FACE OF CONST JOINT
- (A07) PIPE UNDERDRAIN UNPERFORATED 6-INCH, OUTLET TO EMBANKMENT SLOPE. INSTALL RODENT SHIELD AT OUTLET END OF PIPE UNDERDRAIN PER STANDARD DETAIL DRAWING 8F6-4 (RODENT SHIELD INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN UNPERFORATED 6-INCH".
- (A08) LOCATION AND PROJECTION OF EXISTING BATTERED PILES IS SHOWN BASED ON EXISTING STRUCTURE PLANS. VERIFY EXISTING PILE LOCATIONS IMMEDIATELY AFTER EXPOSURE AND NOTIFY THE ENGINEER OF ANY EXISTING PILES THAT INTERFERE WITH PROPOSED NEW PILES.
- IF NECESSARY, PROPOSED PILES THAT CONFLICT WITH EXISTING PILES MAY BE RELOCATED NOT MORE THAN 9" ALONG CL BRG FROM THE PROPOSED LOCATION SHOWN IN THE PLAN TO AVOID CONFLICTING WITH THE EXISTING PILES. DISTANCE FROM EDGE OF PILING TO EDGE OF ABUTMENT SHALL BE 9" MIN.
- (A09) 12 3/4-INCH CAST-IN-PLACE CONCRETE PILING WITH A REQUIRED DRIVING RESISTANCE OF 140 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES METHOD. ESTIMATED PILE LENGTH = 55 FEET.
- DRIVE PILING TO PLAN LENGTH UNLESS THE REQUIRED BEARING IS OBTAINED AT A SHORTER LENGTH. IF THE REQUIRED BEARING IS NOT OBTAINED WHEN THE PILE IS DRIVEN TO PLAN LENGTH, CONTACT THE BUREAU OF STRUCTURES.



CAST-IN-PLACE 'PIPE PILE' SPLICE



CIP PILE WELD DETAIL



CIP PILE END PLATE DETAIL

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
SOUTH ABUTMENT PILE PLAN			SHEET 6 OF 30

NOTES

(A01) PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN, OUTLET TO EMBANKMENT SLOPE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

(A02) 3/4" X 4" FILLER.

(A05) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-40-803" SHALL BE THE EXISTING GROUNDLINE.

BACKFILL PAY LIMITS. BACKFILL BEYOND THE PAY LIMITS SHALL BE INCIDENTAL TO THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-40-803".

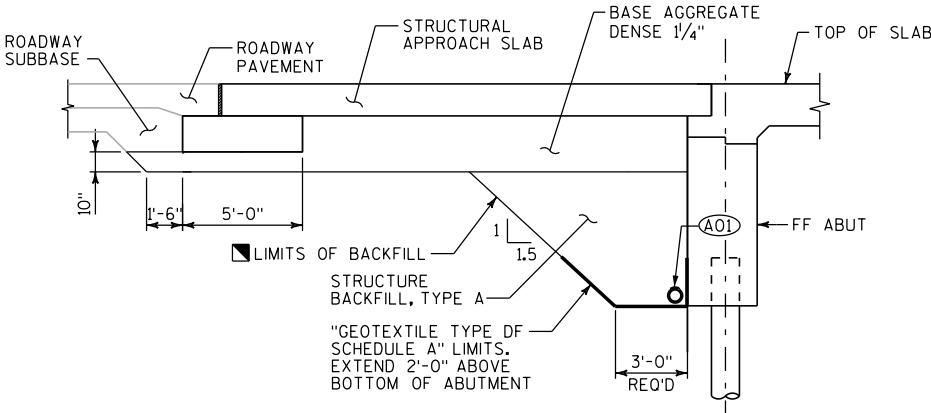
AT THE BACKFACE OF ABUTMENT, ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL. ALSO INCLUDED IS THE BASE AGGREGATE DENSE 1/4" AS DETAILED ON THE STRUCTURAL APPROACH SLAB SHEETS.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE FABRIC AND PIPE UNDERDRAIN SHALL BE SET AT THE BOTTOM OF EXCAVATION. GEOTEXTILE FABRIC SHALL EXTEND 2'-0" ABOVE THE BOTTOM OF ABUTMENT.

DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

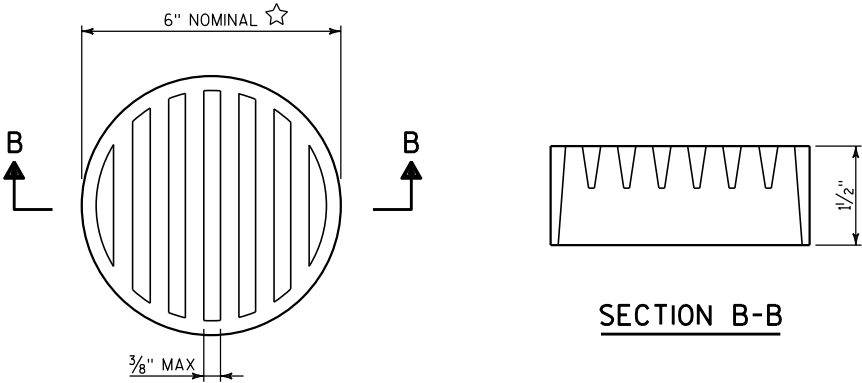
THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN UNPERFORATED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



BACKFILL LIMITS

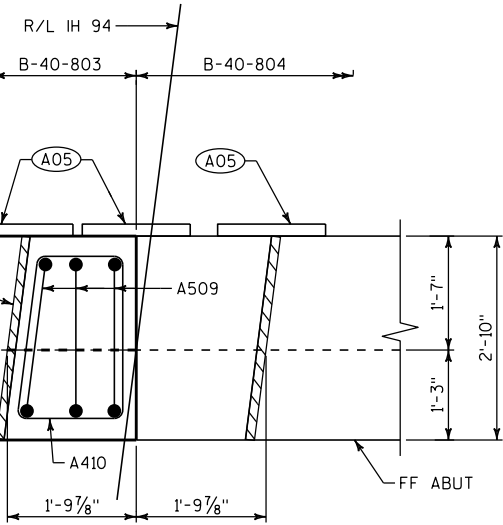
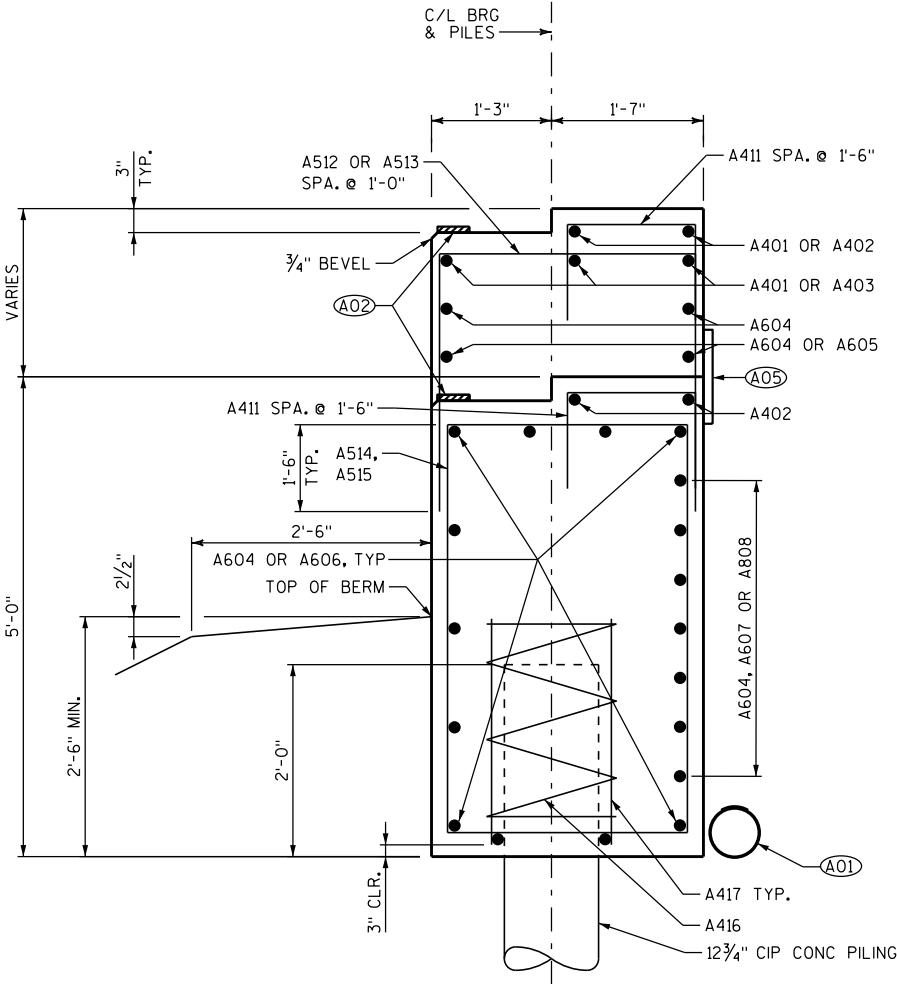
(DIMENSIONS ARE MEASURED NORMAL TO ABUTMENT)



RODENT SHIELD DETAIL

SECTION B-B

SECTION THRU ABUTMENT BODY



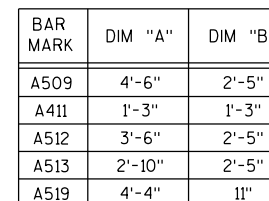
MEDIAN WING PLAN

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
SOUTH ABUTMENT DETAILS		SHEET 7 OF 30	

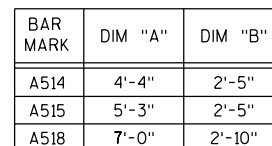
(A05) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINT ON BACKFACE OF ABUT.

(A06) 1/2" FILLER. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE), COLOR TO MATCH CONCRETE STAIN.

(A10) KEYWAY FORMED BY BEVELED 2" X 6"



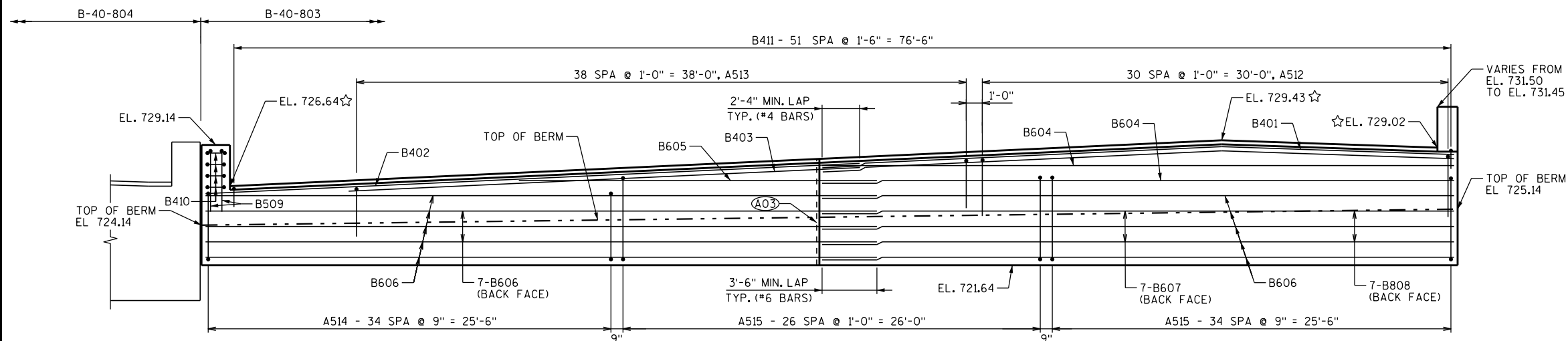
BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
A401	X	5	35'-1"			BODY - HORIZ - TOP
A402	X	2	45'-9"			BODY - HORIZ - TOP
A403	X	3	38'-0"			BODY - HORIZ - TOP
A604	X	22	35'-1"			BODY - HORIZ.
A605	X	2	27'-6"			BODY - HORIZ.
A606	X	11	47'-0"			BODY - HORIZ.
A607	X	7	36'-0"			BODY - HORIZ.
A808	X	7	15'-0"	X		BODY - HORIZ.
A509	X	3	11'-2"	X		BODY - MEDIAN VERT.
A410	X	4	8'-2"	X		BODY - MEDIAN STIRRUP
A411	X	52	3'-7"	X		BODY - VERTICAL - TOP
A512	X	31	9'-2"	X		BODY - VERTICAL - TOP
A513	X	39	7'-10"	X		BODY - VERTICAL - TOP
A514	X	35	14'-2"	X		BODY - STIRRUP
A515	X	62	16'-0"	X		BODY - STIRRUP
A416	X	11	28'-0"	X		BODY PILES - 1 PER PILE
A417	X	22	2'-3"			BODY PILES - 2 PER PILE
A518	X	12	20'-4"	X		WING - STIRRUP
A519	X	18	9'-4"	X		WING - VERTICAL
A420	X	8	14'-5"			WING - HORIZ.
A521	X	8	14'-5"			WING - HORIZ.
A622	X	10	13'-9"			WING - HORIZ.
A423	X	4	2'-10"	X		WING - HORIZ.



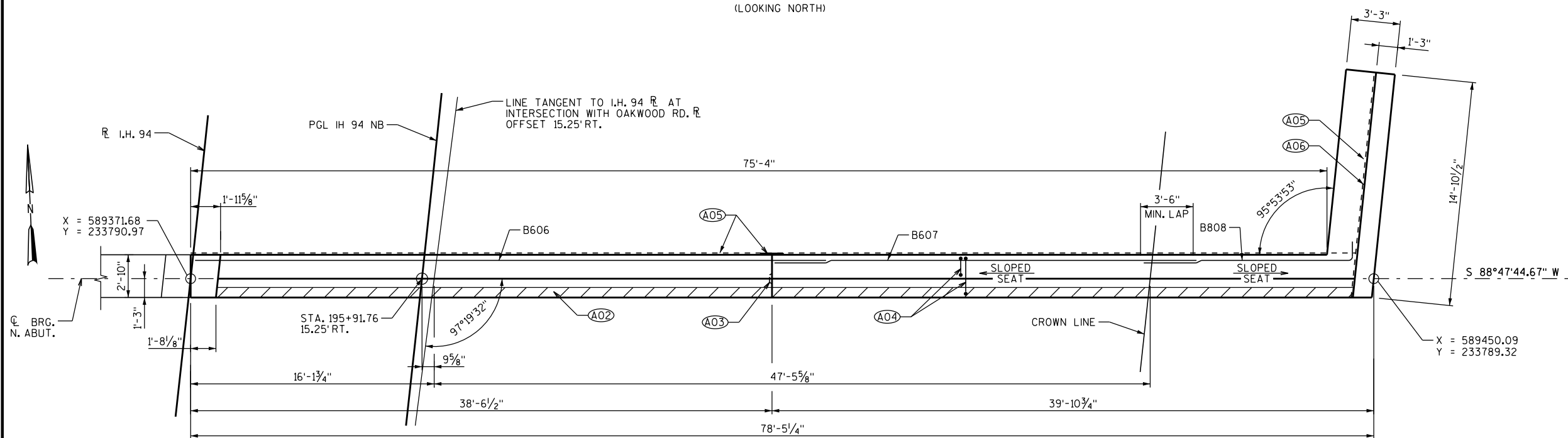
A514, A515, A518



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
		DRAWN BY	EKM
		PLANS CK'D.	KES
SOUTH ABUTMENT WING DETAILS			SHEET 8 OF 30

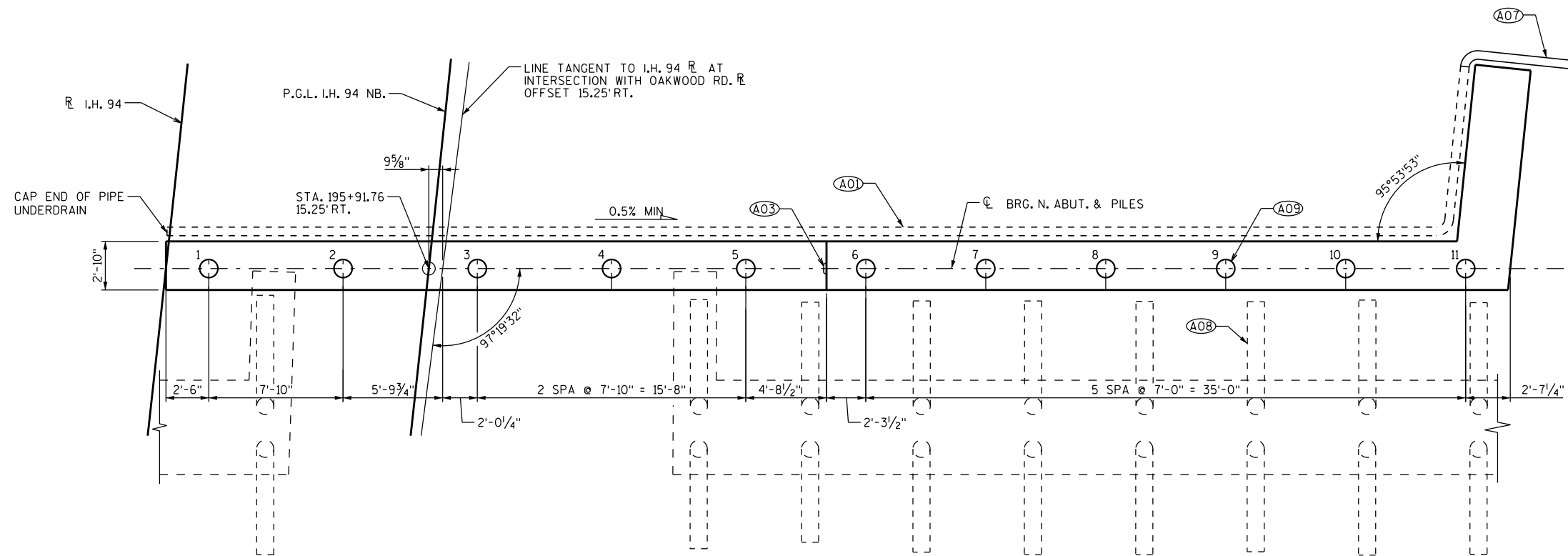
**ELEVATION**

(LOOKING NORTH)

**PLAN****NOTES**

- (A02) 4" X 3/4" FILLER
- (A03) VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 8". PLACE 3/4" V-GROOVE @ THE FRONT FACE OF CONST JT.
- (A04) PLACE STIRRUPS AND U-SHAPED BARS NORMAL TO ABUTMENT BODY
- (A05) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE OF ABUTMENT
- (A06) 1/2" FILLER FROM ABUT SEAT TO TOP OF WING. SEAL ALL EXPOSED VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING NON-BITUMINOUS JOINT SEALER, COLOR TO MATCH CONCRETE STAIN. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).
- ☆ ELEVATIONS GIVEN AT THE CL BRG N ABUT

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
NORTH ABUTMENT		SHEET 9 OF 30	



FOOTING PLAN

NOTES

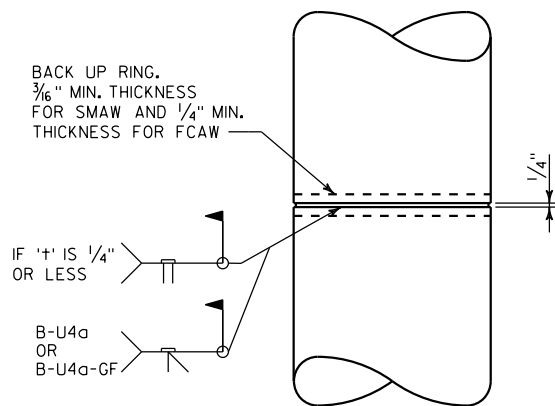
- (A01) PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN TO DRAIN
- (A03) VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 8". PLACE $\frac{3}{4}$ " V GROOVE @ THE FRONT FACE OF CONST JOINT
- (A07) PIPE UNDERDRAIN UNPERFORATED 6-INCH, OUTLET TO EMBANKMENT SLOPE. INSTALL RODENT SHIELD AT OUTLET END OF PIPE UNDERDRAIN PER STANDARD DETAIL DRAWING 8F6-4 (RODENT SHIELD INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN UNPERFORATED 6-INCH".

- (A08) LOCATION AND PROJECTION OF EXISTING BATTERED PILES IS SHOWN BASED ON EXISTING STRUCTURE PLANS. VERIFY EXISTING PILE LOCATIONS IMMEDIATELY AFTER EXPOSURE AND NOTIFY THE ENGINEER OF ANY EXISTING PILES THAT INTERFERE WITH PROPOSED NEW PILES.

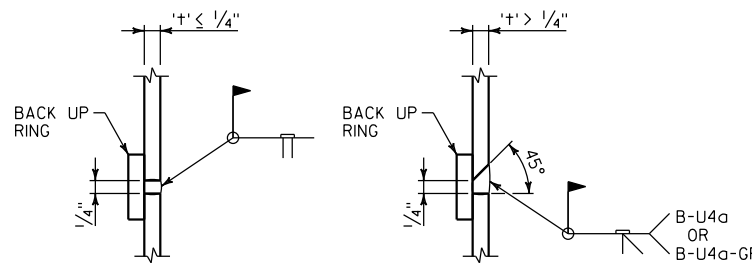
IF NECESSARY, PROPOSED PILES THAT CONFLICT WITH EXISTING PILES MAY BE RELOCATED NOT MORE THAN 9" ALONG ϕ BRG FROM THE PROPOSED LOCATION SHOWN IN THE PLAN TO AVOID CONFLICTING WITH THE EXISTING PILES. DISTANCE FROM EDGE OF PILING TO EDGE OF ABUTMENT SHALL BE 9" MIN.

- (A09) 12 $\frac{3}{4}$ -INCH CAST-IN-PLACE CONCRETE PILING WITH A REQUIRED DRIVING RESISTANCE OF 140 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES METHOD. ESTIMATED PILE LENGTH = 60 FEET.

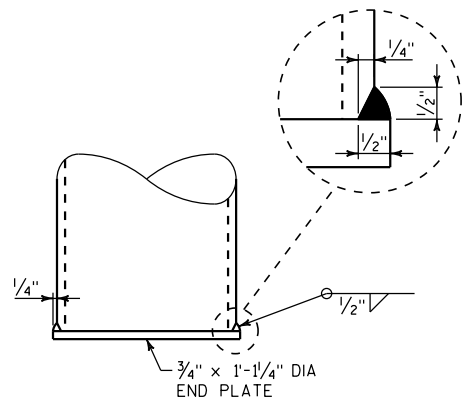
DRIVE PILING TO PLAN LENGTH UNLESS THE REQUIRED BEARING IS OBTAINED AT A SHORTER LENGTH. IF THE REQUIRED BEARING IS NOT OBTAINED WHEN THE PILE IS DRIVEN TO PLAN LENGTH, CONTACT THE BUREAU OF STRUCTURES.



CAST-IN-PLACE 'PIPE PILE' SPLICE

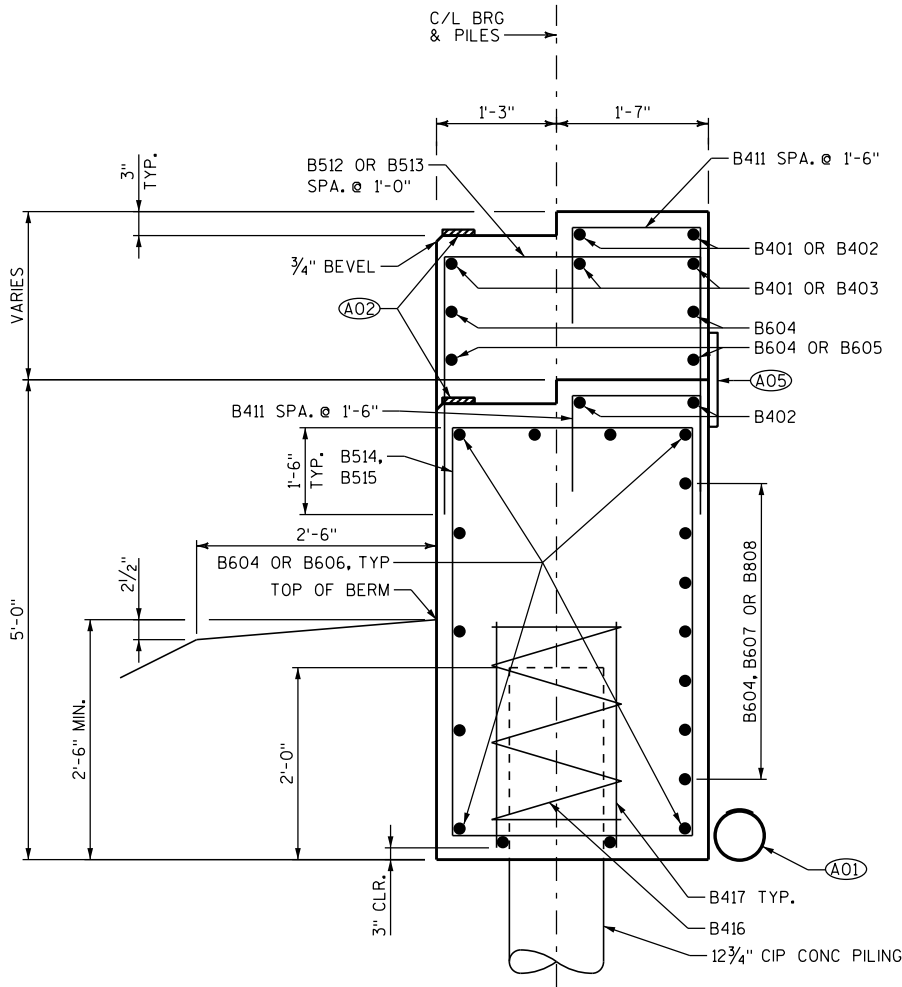


CIP PILE WELD DETAIL

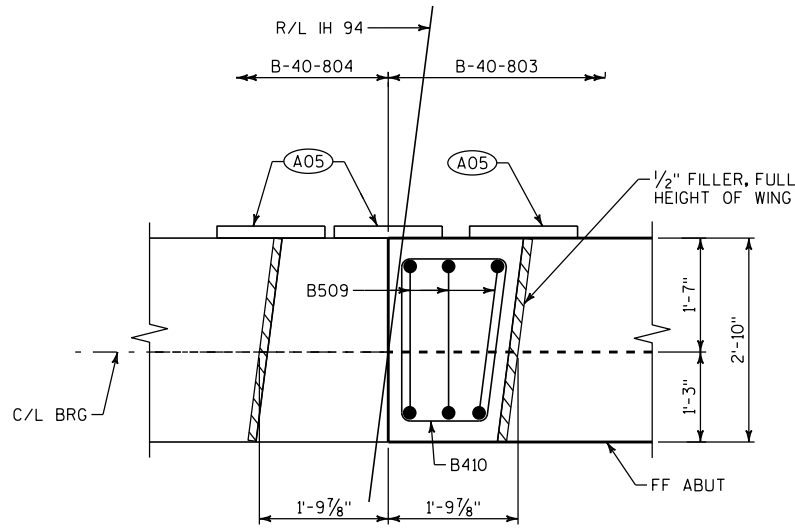


CIP PILE END PLATE DETAIL

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
NORTH ABUTMENT PILE PLAN			SHEET 10 OF 30



SECTION THRU ABUTMENT BODY



MEDIAN WING PLAN

NOTES

A01 PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN, OUTLET TO EMBANKMENT SLOPE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

A02 3/4" X 4" FILLER.

A05 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-40-803" SHALL BE THE EXISTING GROUNDLINE.

BACKFILL PAY LIMITS. BACKFILL BEYOND THE PAY LIMITS SHALL BE INCIDENTAL TO THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-40-803".

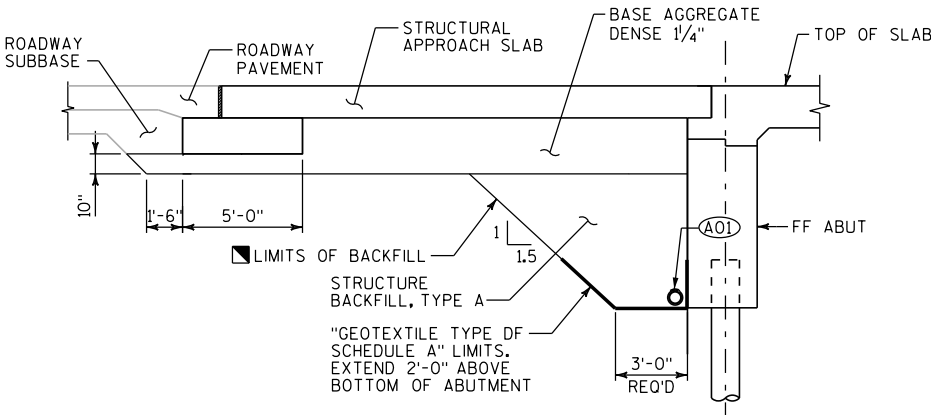
AT THE BACKFACE OF ABUTMENT, ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL. ALSO INCLUDED IS THE BASE AGGREGATE DENSE 1/4" AS DETAILED ON THE STRUCTURAL APPROACH SLAB SHEETS.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE FABRIC AND PIPE UNDERDRAIN SHALL BE SET AT THE BOTTOM OF EXCAVATION. GEOTEXTILE FABRIC SHALL EXTEND 2'-0" ABOVE THE BOTTOM OF ABUTMENT.

DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

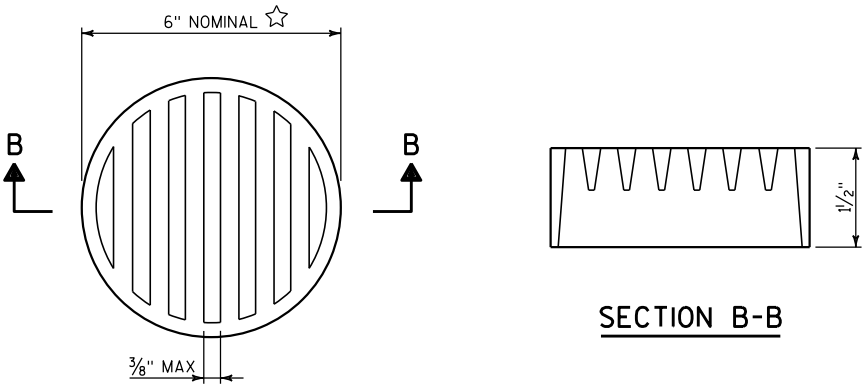
THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN UNPERFORATED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO.10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



BACKFILL LIMITS

(DIMENSIONS ARE MEASURED NORMAL TO ABUTMENT)

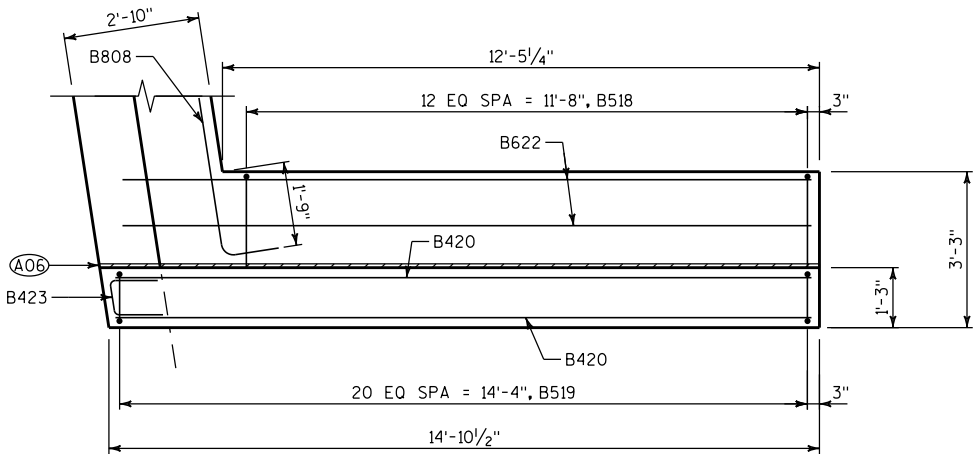


RODENT SHIELD DETAIL

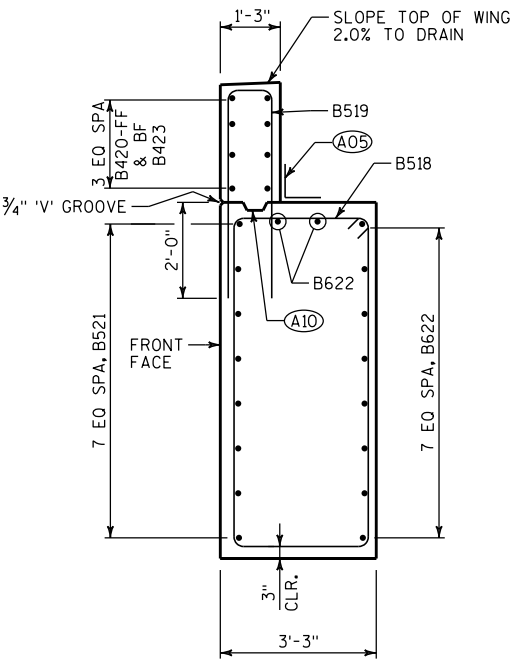
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
NORTH ABUTMENT DETAILS		SHEET 11 OF 30	

NOTES:

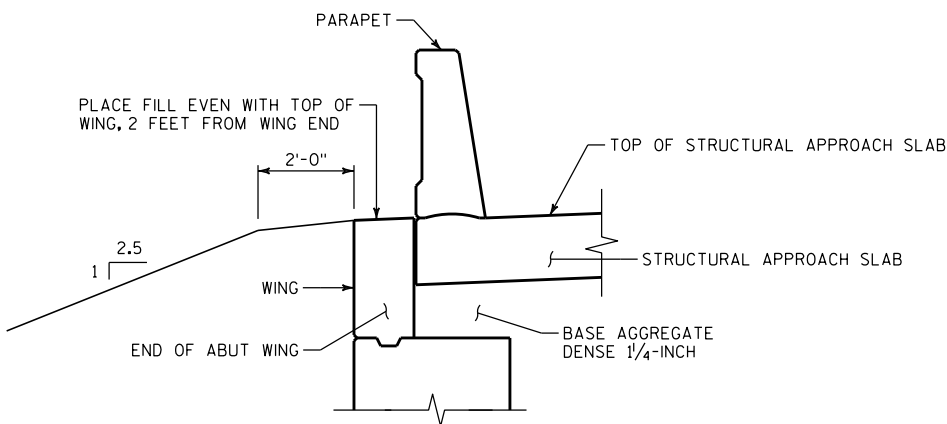
- (A05) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINT ON BACKFACE OF ABUT.
- (A06) 1/2" FILLER. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE), COLOR TO MATCH CONCRETE STAIN.
- (A10) KEYWAY FORMED BY BEVELED 2" X 6"



WING 2 PLAN



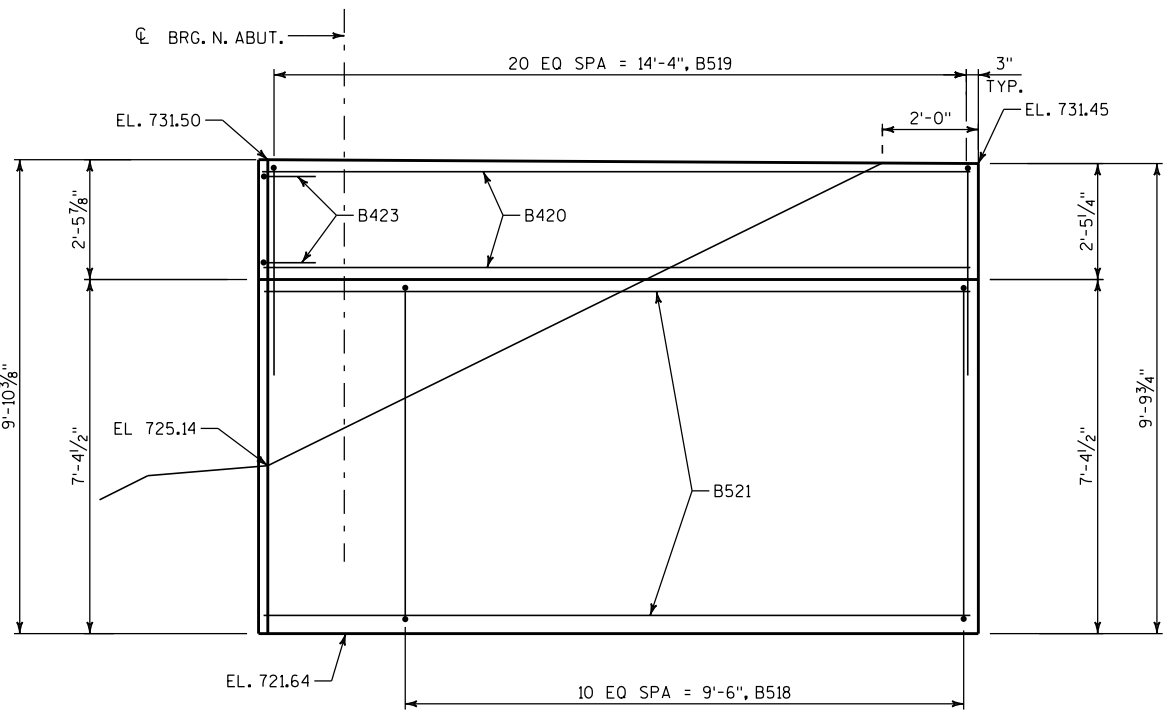
WING SECTION



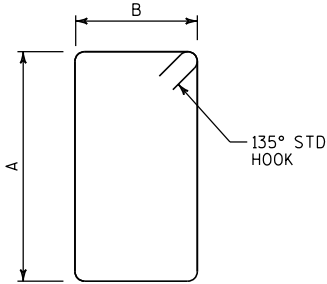
TYPICAL FILL SECTION AT END OF WING

BILL OF BARS

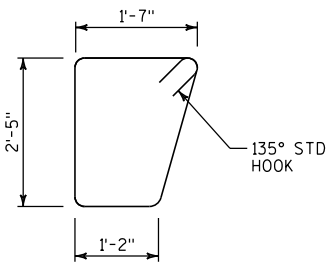
BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
B401	X	5	35'-1"			BODY - HORIZ - TOP
B402	X	2	45'-9"			BODY - HORIZ - TOP
B403	X	3	38'-0"			BODY - HORIZ - TOP
B604	X	22	35'-1"			BODY - HORIZ.
B605	X	2	27'-6"			BODY - HORIZ.
B606	X	11	47'-0"			BODY - HORIZ.
B607	X	7	36'-0"			BODY - HORIZ.
B808	X	7	15'-0"	X		BODY - HORIZ.
B509	X	3	11'-2"	X		BODY - MEDIAN VERT.
B410	X	4	8'-2"	X		BODY - MEDIAN STIRRUP
B411	X	52	3'-7"	X		BODY - VERTICAL - TOP
B512	X	31	9'-2"	X		BODY - VERTICAL - TOP
B513	X	39	7'-10"	X		BODY - VERTICAL - TOP
B514	X	35	14'-2"	X		BODY - STIRRUP
B515	X	62	16'-0"	X		BODY - STIRRUP
B416	X	11	28'-0"	X		BODY PILES - 1 PER PILE
B417	X	22	2'-3"			BODY PILES - 2 PER PILE
B518	X	11	20'-4"	X		WING - STIRRUP
B519	X	18	9'-4"	X		WING - VERTICAL
B420	X	8	14'-6"			WING - HORIZ.
B521	X	8	14'-6"			WING - HORIZ.
B622	X	10	13'-9"			WING - HORIZ.
B423	X	4	2'-10"	X		WING - HORIZ.



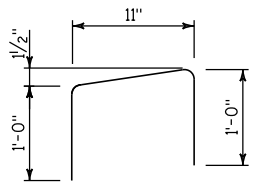
WING 2 ELEVATION
(FRONT FACE)



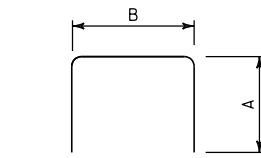
B514, B515, B518



B410

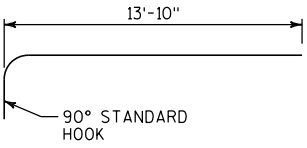


B423

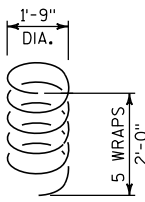


B509, B411, B512, B513, B519

BAR MARK	DIM "A"	DIM "B"
B509	4'-6"	2'-5"
B411	1'-3"	1'-3"
B512	3'-6"	2'-5"
B513	2'-10"	2'-5"
B519	4'-4"	11"

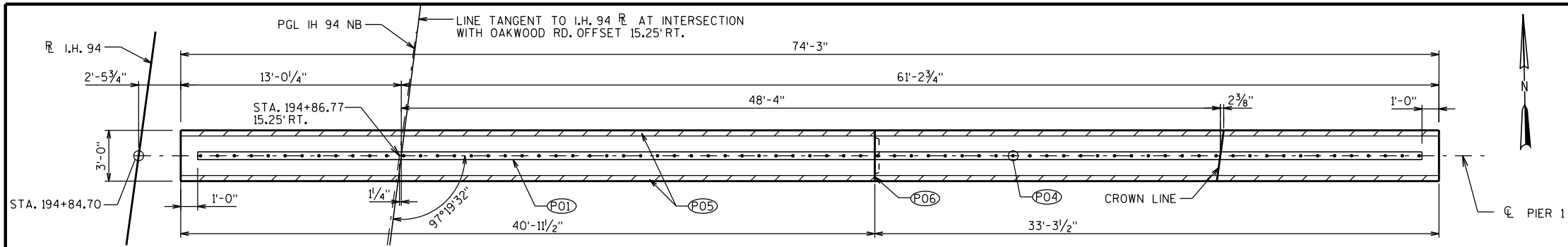


B808

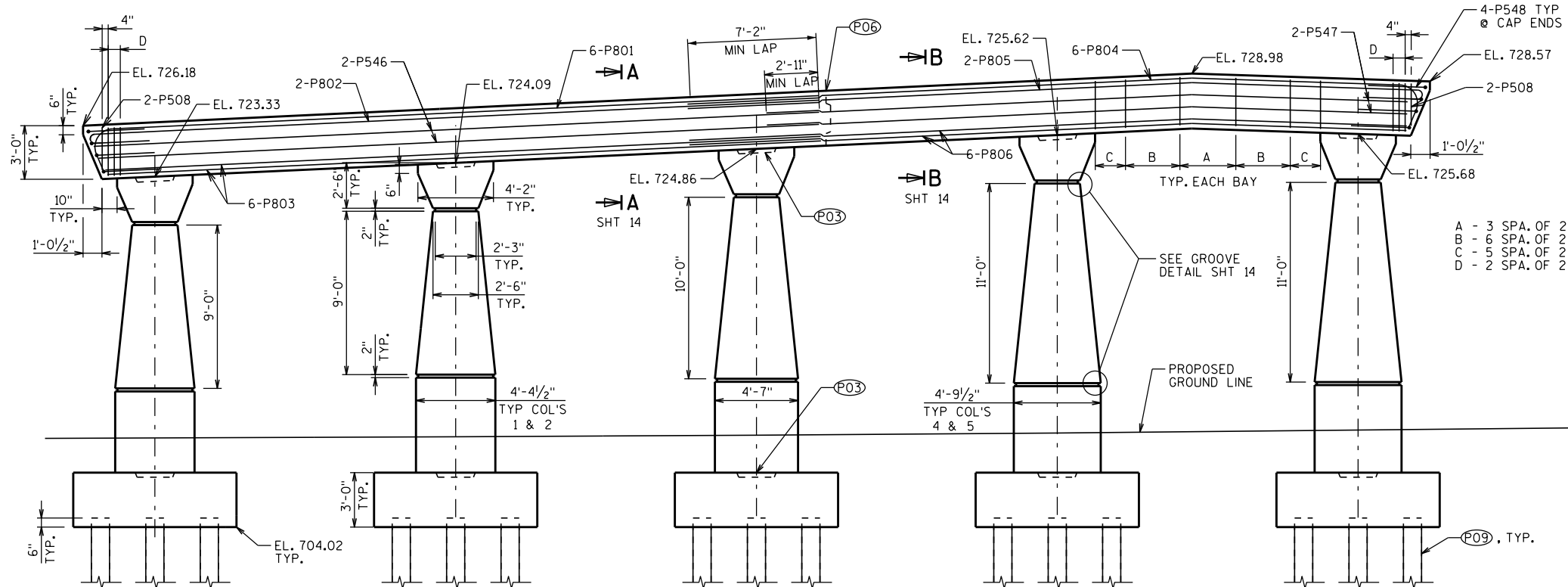


B416

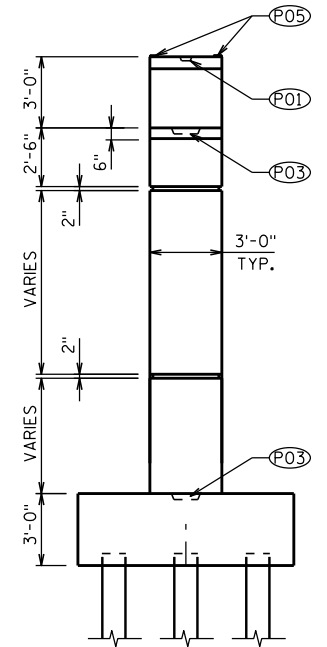
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
NORTH ABUTMENT WING DETAILS			SHEET 12 OF 30



PLAN

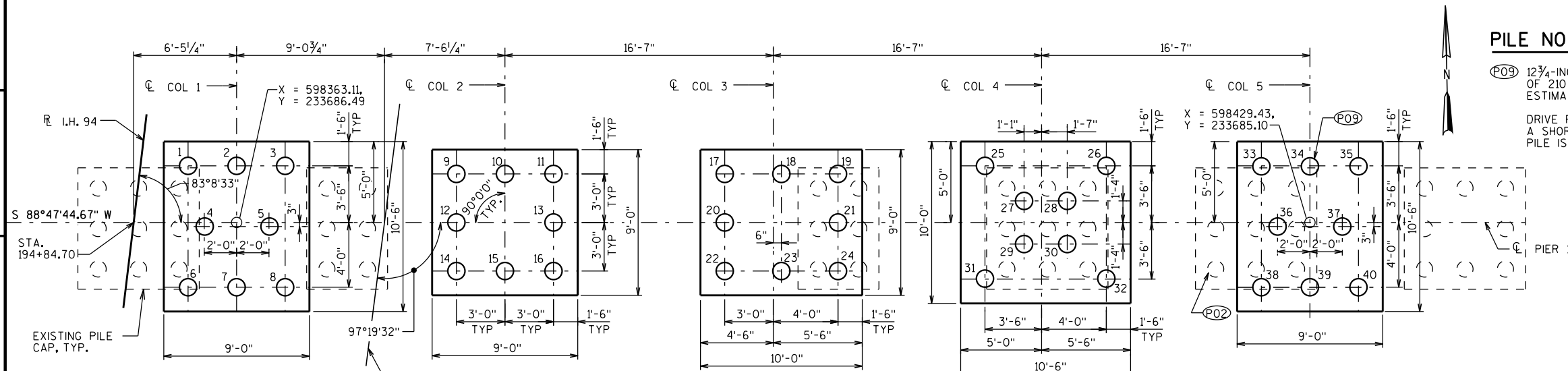


ELEVATION
(LOOKING NORTH)



END VIEW

SEE SHEET 14 FOR COLUMN REINFORCING DETAIL



FOOTING PLAN

NOTES

- (P01) KEYED CONSTRUCTION JOINT FORMED BY A SURFACE BEVELED 2" x 6".
- (P02) LOCATION OF EXISTING TIMBER PILES IS SHOWN BASED ON EXISTING STRUCTURE PLANS. VERIFY EXISTING PILE LOCATIONS IMMEDIATELY AFTER EXPOSURE AND NOTIFY THE ENGINEER OF ANY EXISTING PILES THAT INTERFERE WITH PROPOSED NEW PILES.
- IF NECESSARY, PROPOSED PILES THAT CONFLICT WITH EXISTING PILES MAY BE RELOCATED NOT MORE THAN 9" FROM THE PROPOSED LOCATION SHOWN IN THE PLAN TO AVOID CONFLICTING WITH EXISTING PILES. EXISTING PILES MAY BE EXTRACTED AND THE HOLE THEN FILLED WITH SAND. REMOVAL OF EXISTING PILES AND PLACEMENT OF SAND IS INCLUDED IN THE PAY ITEM "REMOVING OLD STRUCTURE STA 195+15".
- (P03) KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 1'-3" x 2'-0" x 4". TYPICAL AT TOP AND BOTTOM OF COLUMNS.
- (P04) P507 BARS AT 1'-0" CENTERS MUST BE EMBEDDED 1'-0" INTO CONCRETE.
- (P05) 4" x 3/4" FILLER
- (P06) VERT CONSTR JOINT FORMED BY SURFACED BEVELED 2" x 6" x 1'-6" KEYWAY. ALTERNATE CONSTRUCTION JOINT DETAIL NOT ALLOWED.

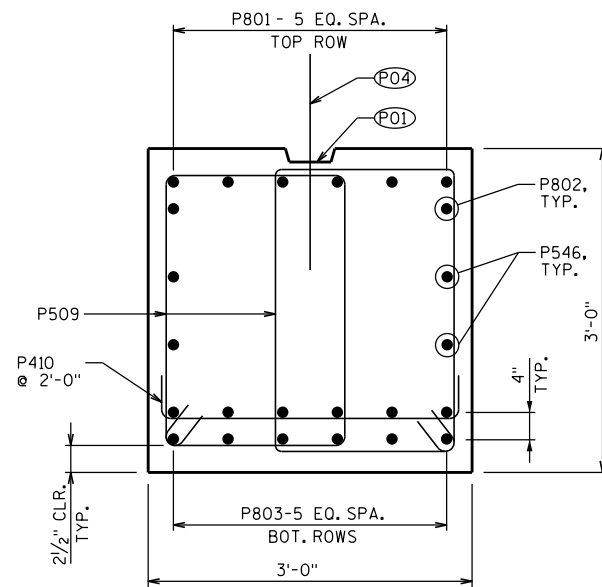
- A - 3 SPA. OF 2 P509 @ 1'-0" = 3'-0"
B - 6 SPA. OF 2 P509 @ 6" = 3'-0"
C - 5 SPA. OF 2 P509 @ 4" = 1'-8"
D - 2 SPA. OF 2 P509 @ 4" = 8"

PILE NOTES

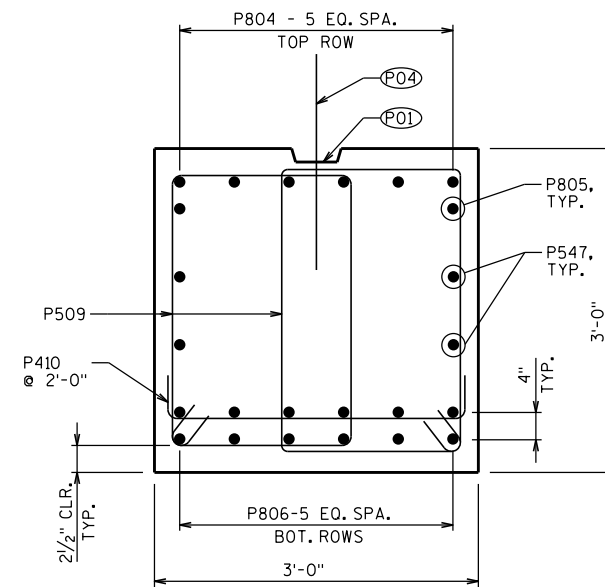
- (P09) 12 3/4-INCH CAST-IN-PLACE CONCRETE PILING WITH A REQUIRED DRIVING RESISTANCE OF 210 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES METHOD. ESTIMATED PILE LENGTH = 85 FEET.
- DRIVE PILING TO PLAN LENGTH UNLESS THE REQUIRED BEARING IS OBTAINED AT A SHORTER LENGTH. IF THE REQUIRED BEARING IS NOT OBTAINED WHEN THE PILE IS DRIVEN TO PLAN LENGTH, CONTACT THE BUREAU OF STRUCTURES.

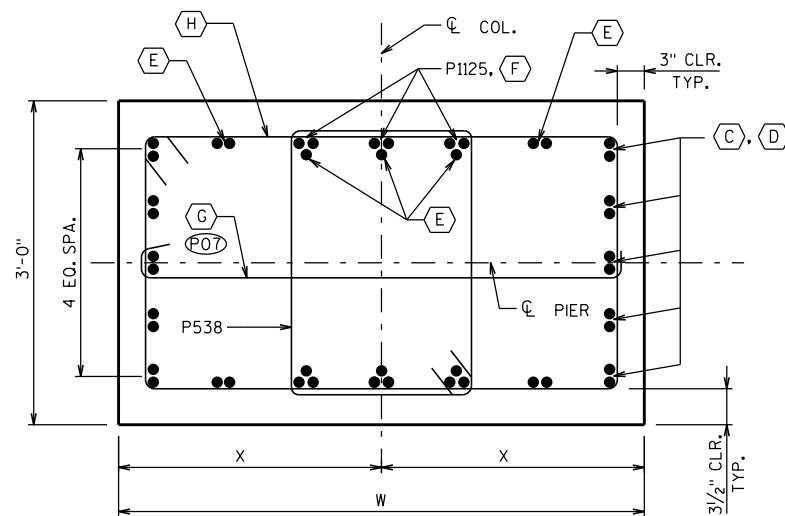
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CKD. KES
PIER 1		SHEET 13 OF 30	

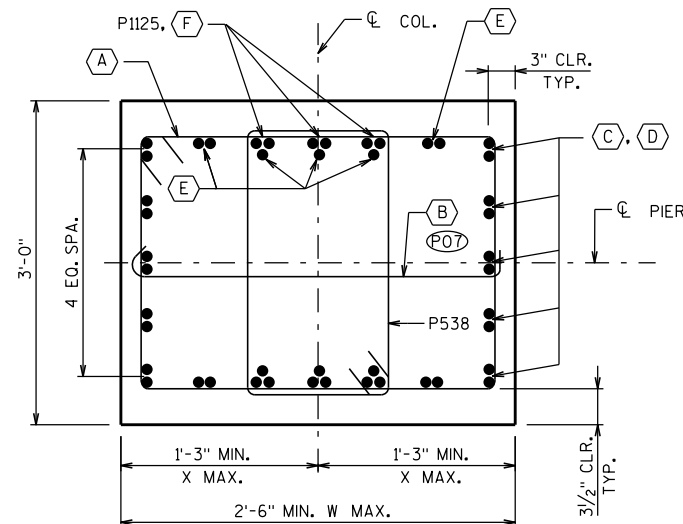
SEE SHEET 13 FOR LOCATION

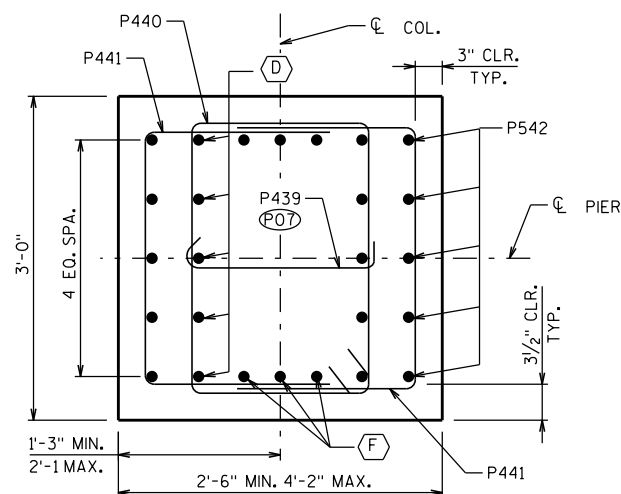


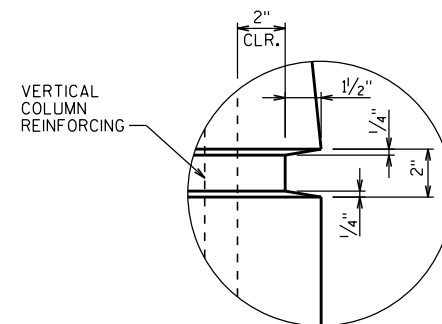
SEE SHEET 13 FOR LOCATION

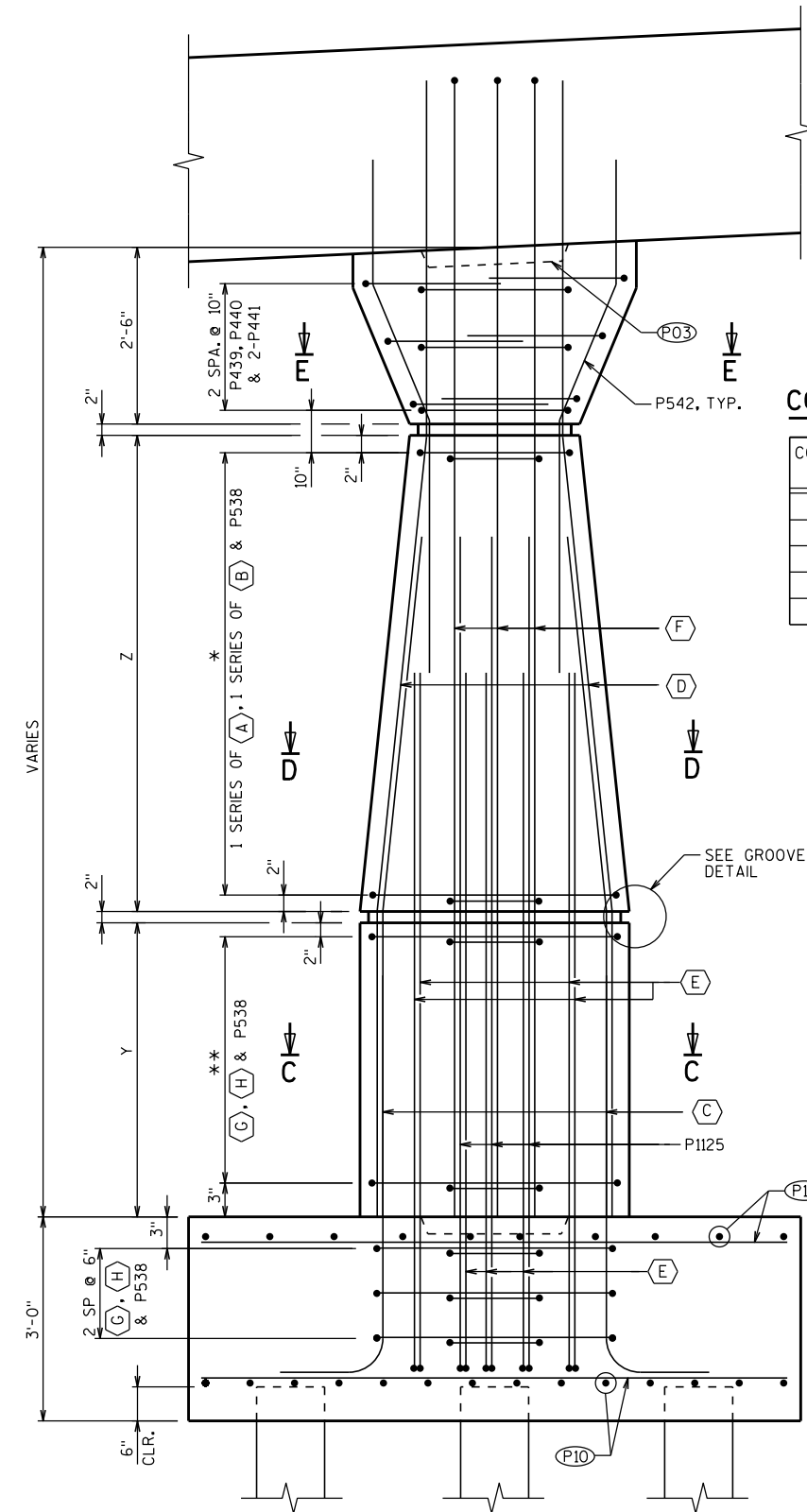












COLUMN NO.	W	X	Y	Z
1	4'-4 $\frac{1}{2}$ "	2'-2 $\frac{1}{4}$ "	4'-5 $\frac{3}{4}$ "	9'-0"
2	4'-4 $\frac{1}{2}$ "	2'-2 $\frac{1}{4}$ "	5'-2 $\frac{7}{8}$ "	9'-0"
3	4'-7"	2'-3 $\frac{1}{2}$ "	5'-0 $\frac{1}{8}$ "	10'-0"
4	4'-9 $\frac{1}{2}$ "	2'-4"	4'-9 $\frac{1}{4}$ "	11'-0"
5	4'-9 $\frac{1}{2}$ "	2'-4 $\frac{3}{4}$ "	4'-9 $\frac{7}{8}$ "	11'-0"

COLUMN NO.	*	A	B	**	G	H
1	17 EQ SPA	P526	P429	8 EQ SPA	P432	P535
2	17 EQ SPA	P526	P429	10 EQ SPA	P432	P535
3	19 EQ SPA	P527	P430	10 EQ SPA	P433	P536
4	21 EQ SPA	P528	P431	9 EQ SPA	P434	P537
5	21 EQ SPA	P528	P431	9 EQ SPA	P434	P537

COLUMN NO.	C	D	E	F
1	P1111	P1117	P1115	P1121
2	P1112	P1118	P1116	P1122
3	P1113	P1119	P1116	P1123
4 & 5	P1114	P1120	P1116	P1124

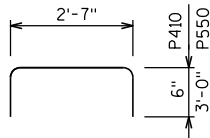
- (P01) KEYED CONSTRUCTION JOINT FORMED BY A SURFACE BEVELED 2" X 6".
- (P03) KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 3" X 1'-0" X 2'-2". TYPICAL AT TOP AND BOTTOM OF COLUMNS.
- (P04) P507 BARS AT 1'-0" CENTERS MUST BE EMBEDDED 1'-0" INTO CONCRETE.
- (P07) ALTERNATE HOOKED ENDS OF #4 TIES.
- (P10) SEE SHT 15 FOR FOOTING REINFORCEMENT BAR MARKS & SPACING

NO.		DATE		REVISION		BY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION							
STRUCTURE B-40-803							
				DRAWN BY		EKM	
				PLANS CK'D.		KES	
PIER 1 DETAILS (1 OF 2)						SHEET 14 OF 30	

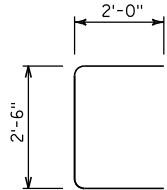
BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
P801	X	6	42'-4"	X		PIER CAP TOP
P802	X	2	41'-4"	X		PIER CAP TOP
P803	X	12	39'-9"			PIER CAP BOTTOM
P804	X	6	42'-11"			PIER CAP TOP
P805	X	2	41'-5"	X		PIER CAP TOP
P806	X	12	39'-9"	X		PIER CAP BOTTOM
P507	X	73	2'-0"			PIER CAP - DOWEL - VERT
P508	X	4	8'-6"	X		PIER CAP STIRRUP
P509	X	220	9'-2"	X		PIER CAP STIRRUP
P410	X	37	3'-5"	X		PIER CAP - TIE
P1111	X	10	14'-3"	X		COLUMN 1 - VERT - FTG DOWEL
P1112	X	10	14'-3"	X		COLUMN 2 - VERT - FTG DOWEL
P1113	X	10	14'-3"	X		COLUMN 3 - VERT FTG DOWEL
P1114	X	20	14'-3"	X		COL 4-5 - VERT - FTG DOWEL
P1115	X	14	12'-2"	X		COLUMN 1 - VERT - FTG DOWEL
P1116	X	56	12'-8"	X		COL 2-5 - VERT - FTG DOWEL
P1117	X	10	18'-8"	X		COLUMN 1 - VERT
P1118	X	10	19'-4"	X		COLUMN 2 - VERT
P1119	X	10	20'-2"	X		COLUMN 3 - VERT
P1120	X	20	21'-0"	X		COLUMN 4 & 5 - VERT
P1121	X	6	20'-2"	X		COLUMN 1 - VERT - TOP
P1122	X	6	21'-0"	X		COLUMN 2 - VERT - TOP
P1123	X	6	21'-9"	X		COLUMN 3 - VERT - TOP
P1124	X	12	22'-6"	X		COLUMN 4 & 5 - VERT - TOP
P1125	X	30	14'-2"	X		COL 1-5 - VERT - FTG DOWEL
P526	X	36	11'-6"	X	△	COLUMN 1 - TIES - MIDDLE
P527	X	20	11'-9"	X	△	COLUMN 2 & 3 - TIES - MIDDLE
P528	X	44	11'-11"	X	△	COLUMN 4 & 5 - TIES - MIDDLE
P429	X	36	3'-7"	X	△	COLUMN 1 - TIES - MIDDLE
P430	X	20	3'-9"	X	△	COLUMN 2 & 3 - TIES - MIDDLE
P431	X	44	3'-10"	X	△	COLUMN 4 & 5 - TIES - MIDDLE
P432	X	26	4'-6"	X		COLUMN 1 - TIES - BOTTOM
P433	X	14	4'-9"	X		COLUMN 2 & 3 - TIES - BOTT
P434	X	26	4'-11"	X		COLUMN 4 & 5 - TIES - BOTT
P535	X	26	13'-4"	X		COLUMN 1 - TIES - BOTTOM
P536	X	14	13'-10"	X		COLUMN 2 & 3 - TIES - BOTT
P537	X	26	14'-2"	X		COLUMN 4 & 5 - TIES - BOTT
P538	X	66	8'-8"			COLUMN - TIES
P439	X	15	2'-11"	X		COLUMN - TIES - TOP
P440	X	15	10'-0"			COLUMN - TIES - TOP
P441	X	30	6'-4"	X		COLUMN - TIES - TOP
P542	X	50	10'-6"	X		COLUMN - VERT - TOP
P543		68	8'-8"			FOOTING - TOP
P744		44	8'-8"			FOOTING - BOTTOM
P945		32	8'-8"			FOOTING - BOTTOM
P546	X	4	39'-10"			PIER CAP - HORIZ - SIDES
P547	X	4	35'-6"	X		PIER CAP - HORIZ - SIDES
P548	X	8	8'-4"	X		PIER CAP - HORIZ - ENDS
P549		39	10'-2"			FOOTING - TOP
P950		35	10'-2"			FOOTING - BOTTOM
P751		20	10'-2"			FOOTING - BOTTOM
P552		28	9'-8"			FOOTING - TOP
P953		35	9'-8"			FOOTING - BOTTOM

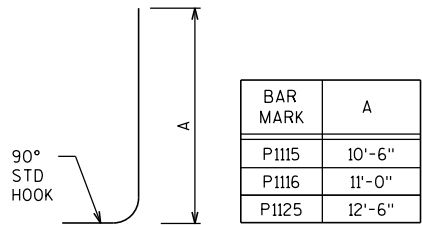
△ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATION (SEE BAR SERIES TABLE FOR ACTUAL LENGTH)



P410, P548

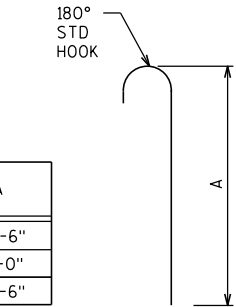


P441



P1115, P1116, P1125

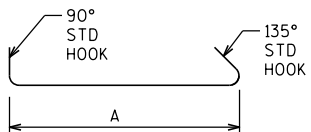
BAR MARK	A
P1115	10'-6"
P1116	11'-0"
P1125	12'-6"



P1121, P1122, P1123, P1124

BAR MARK	A
P1121	18'-6"
P1122	19'-4"
P1123	20'-1"
P1124	20'-10"

BAR MARK	A
P429	2'-0" TO 3'-9/2"
P430	2'-0" TO 4'-0/2"
P431	2'-0" TO 4'-2/2"
P432	3'-10"
P433	4'-1"
P434	4'-3"
P439	2'-3"



P429, P430, P431, P432, P433, P434, P439

BAR SERIES TABLE

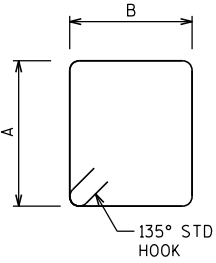
COLUMN NO.	BAR MARK	NO. REQ'D	LENGTH
1, 2	P526	2 SERIES OF 18	9'-8" TO 13'-3"
3	P527	1 SERIES OF 20	9'-8" TO 13'-9"
4, 5	P528	2 SERIES OF 22	9'-8" TO 14'-1"
1, 2	P429	2 SERIES OF 18	2'-8" TO 4'-6"
2	P430	1 SERIES OF 20	2'-8" TO 4'-9"
4, 5	P431	2 SERIES OF 22	2'-8" TO 4'-11"

BAR MARK	A	B
P508	2'-3"	1'-8"
P509	2'-7"	1'-8"
P526	2'-5"	2'-0" TO 3'-9/2"
P527	2'-5"	2'-0" TO 4'-0/2"
P528	2'-5"	2'-0" TO 4'-2/2"
P535	2'-5"	3'-10"
P536	2'-5"	4'-1"
P537	2'-5"	4'-3"
P538	2'-5"	1'-6"
P440	2'-5"	2'-3"

P508, P509, P526, P527, P528, P535, P536, P537, P538, P440

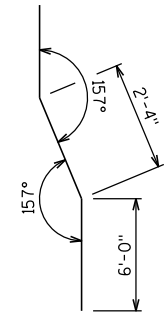
COLUMN NO.	BAR MARK	A	B
1	P1111	7'-0"	5'-7"
2	P1112	7'-9"	4'-10"
3	P1113	7'-7"	5'-0"
4 & 5	P1114	7'-4"	5'-3"

P1111, P1112, P1113, P1114

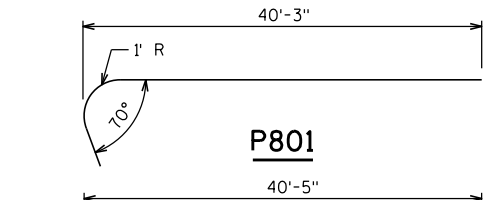


COLUMN NO.	BAR MARK	A	B	C
1	P1117	4'-8"	9'-2"	11/2"
2	P1118	5'-5"	9'-2"	11/2"
3	P1119	5'-2"	10'-2"	1'-1"
4 & 5	P1120	5'-0"	11'-2"	1'-2"

P1117, P1118, P1119, P1120

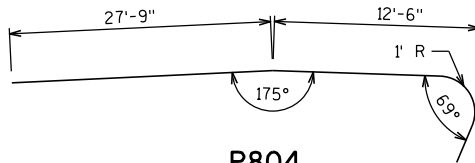


P542



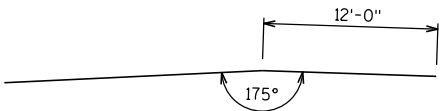
P801

P802



P804

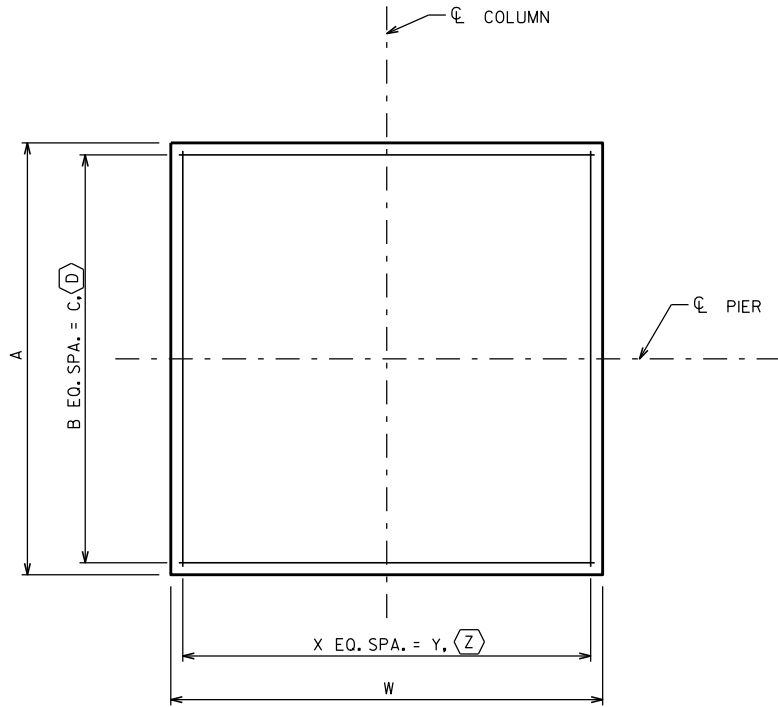
P805



P806, P547

STATE PROJECT NUMBER

1030-20-87



FOOTING REINFORCEMENT PLAN

FOOTING NO.	REINF LOCATION	A	B	C	D	W	X	Y	Z
1	TOP	10'-6"	14	10'-0"	P543	9'-0"	10	8'-6"	P549
1	BOTTOM		14		P744		17		P950
2	TOP	9'-0"	13	8'-6"	P543	9'-0"	10	8'-6"	P543
2	BOTTOM		14		P744		14		P945
3	TOP	9'-0"	13	8'-6"	P552	10'-0"	13	9'-6"	P543
3	BOTTOM		19		P953		16		P945
4	TOP	10'-0"	13	9'-6"	P549	10'-6"	13	10'-0"	P552
4	BOTTOM		19		P751		16		P953
5	TOP	10'-6"	13	10'-0"	P543	9'-0"	13	8'-6"	P549
5	BOTTOM		13		P744		16		P950

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
PIER 1 DETAILS (2 OF 2)			SHEET 15 OF 30

NOTES

(P01) KEYED CONSTRUCTION JOINT FORMED BY A SURFACE BEVELED 2" x 6".

(P02) LOCATION OF EXISTING TIMBER PILES IS SHOWN BASED ON EXISTING STRUCTURE PLANS. VERIFY EXISTING PILE LOCATIONS IMMEDIATELY AFTER EXPOSURE AND NOTIFY THE ENGINEER OF ANY EXISTING PILES THAT INTERFERE WITH PROPOSED NEW PILES.

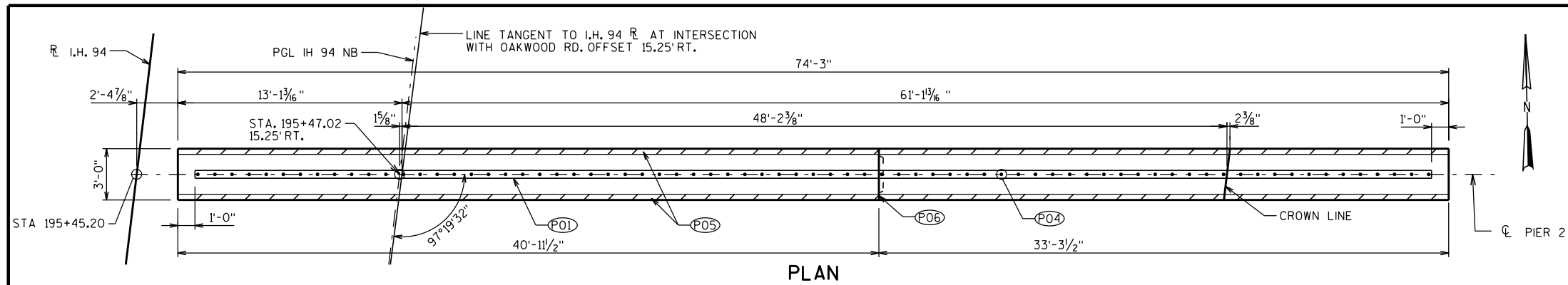
IF NECESSARY, PROPOSED PILES THAT CONFLICT WITH EXISTING PILES MAY BE RELOCATED NOT MORE THAN 9" FROM THE PROPOSED LOCATION SHOWN IN THE PLAN TO AVOID CONFLICTING WITH EXISTING PILES. EXISTING PILES MAY BE EXTRACTED AND THE HOLE THEN FILLED WITH SAND. REMOVAL OF EXISTING PILES AND PLACEMENT OF SAND IS INCLUDED IN THE PAY ITEM "REMOVING OLD STRUCTURE STA 195+15".

(P03) KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 1'-3" x 2'-0" x 4". TYPICAL AT TOP AND BOTTOM OF COLUMNS.

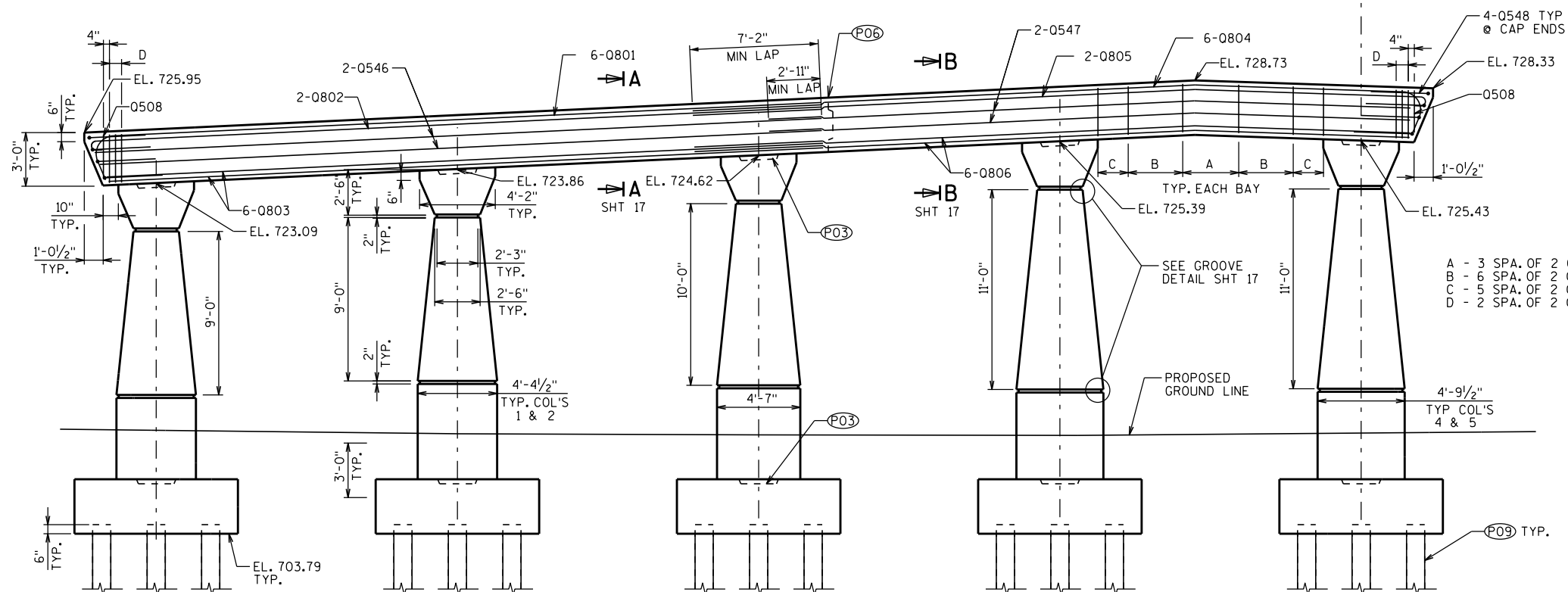
(P04) P507 BARS AT 1'-0" CENTERS MUST BE EMBEDDED 1'-0" INTO CONCRETE.

(P05) 4" x 3/4" FILLER

(P06) VERT CONSTR JOINT FORMED BY SURFACED BEVELED 2" x 6" x 1'-6" KEYWAY. ALTERNATE CONSTRUCTION JOINT DETAIL NOT ALLOWED.

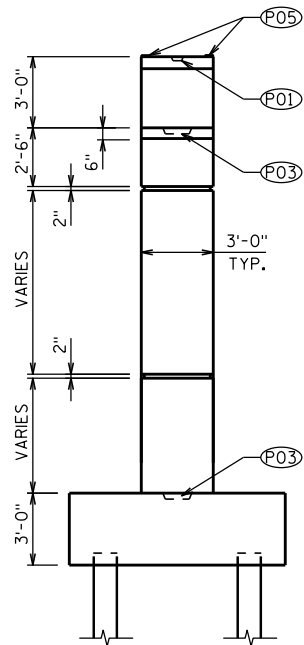


PLAN



ELEVATION

(LOOKING NORTH)



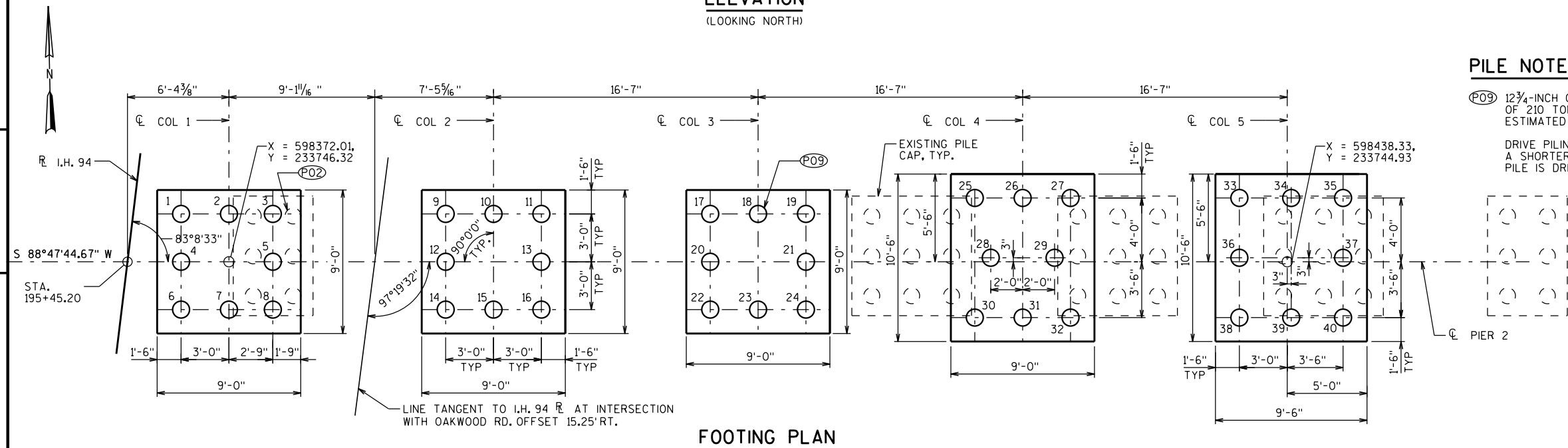
END VIEW

SEE SHEET 17 FOR COLUMN REINFORCING DETAIL

PILE NOTES

(P09) 12 3/4-INCH CAST-IN-PLACE CONCRETE PILING WITH A REQUIRED DRIVING RESISTANCE OF 210 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES METHOD. ESTIMATED PILE LENGTH = 85 FEET.

DRIVE PILING TO PLAN LENGTH UNLESS THE REQUIRED BEARING IS OBTAINED AT A SHORTER LENGTH. IF THE REQUIRED BEARING IS NOT OBTAINED WHEN THE PILE IS DRIVEN TO PLAN LENGTH, CONTACT THE BUREAU OF STRUCTURES.



FOOTING PLAN

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CKD. KES
PIER 2		SHEET 16 OF 30	

COLUMN DATA

COLUMN NO.	W	X	Y	Z
1	4'-4 1/2"	2'-2 1/4"	4'-5 3/4"	9'-0"
2	4'-4 1/2"	2'-2 1/4"	5'-2 7/8"	9'-0"
3	4'-7"	2'-3 1/2"	5'-0 1/8"	10'-0"
4	4'-9 1/2"	2'-4 3/4"	4'-9 1/4"	11'-0"
5	4'-9 1/2"	2'-4 3/4"	4'-9 7/8"	11'-0"

COLUMN TIES

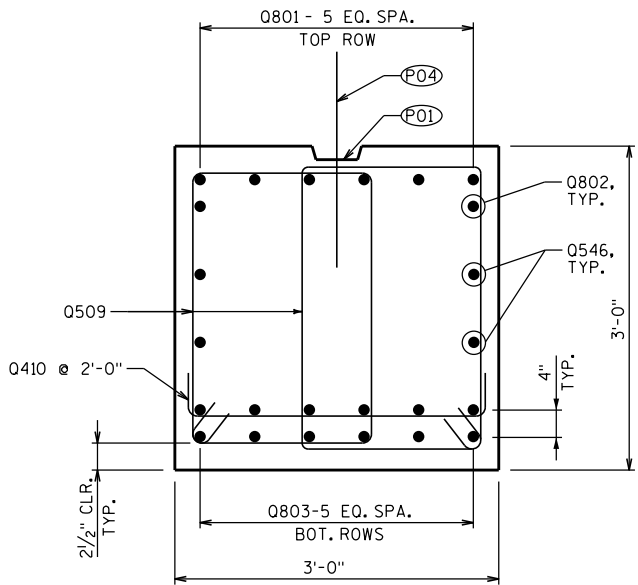
COLUMN NO.	*	(A)	(B)	**	(G)	(H)
1	17 EQ SPA	0526	0429	8 EQ SPA	0432	0535
2	17 EQ SPA	0526	0429	10 EQ SPA	0432	0535
3	19 EQ SPA	0527	0430	10 EQ SPA	0433	0536
4	21 EQ SPA	0528	0431	9 EQ SPA	0434	0537
5	21 EQ SPA	0528	0431	9 EQ SPA	0434	0537

COLUMN VERTICAL REINF.

COLUMN NO.	(C)	(D)	(E)	(F)
1	01111	01117	01115	01121
2	01112	01118	01116	01122
3	01113	01119	01116	01123
4 & 5	01114	01120	01116	01124

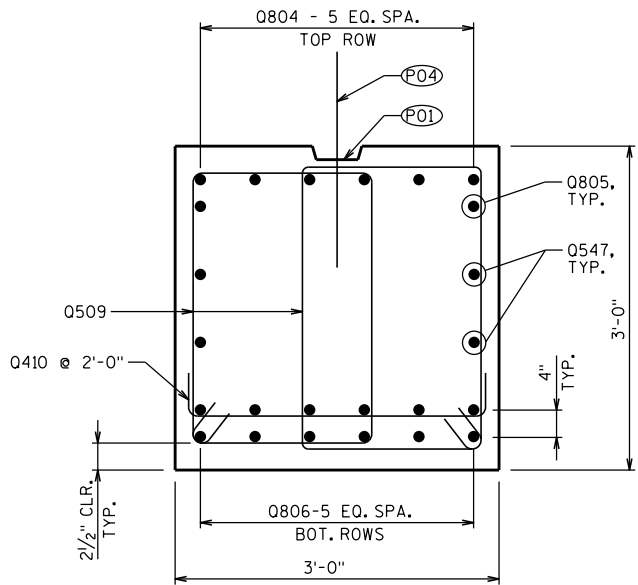
NOTES

- (P01) KEYED CONSTRUCTION JOINT FORMED BY A SURFACE BEVELED 2" X 6".
- (P03) KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 3" X 1'-0" X 2'-2". TYPICAL AT TOP AND BOTTOM OF COLUMNS.
- (P04) Q507 BARS AT 1'-0" CENTERS MUST BE EMBEDDED 1'-0" INTO CONCRETE.
- (P07) ALTERNATE HOOKED ENDS OF #4 TIES.
- (P10) SEE SHT 18 FOR FOOTING REINFORCEMENT BAR MARKS AND SPACING.



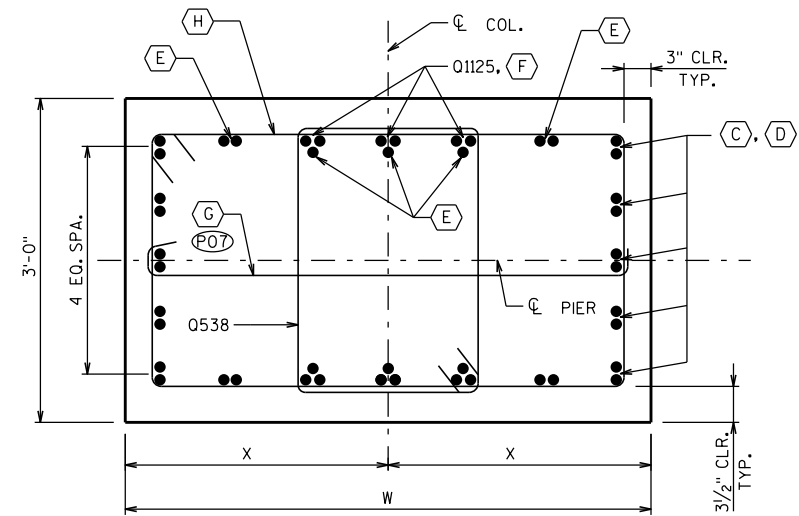
SECTION A-A

SEE SHEET 16 FOR LOCATION

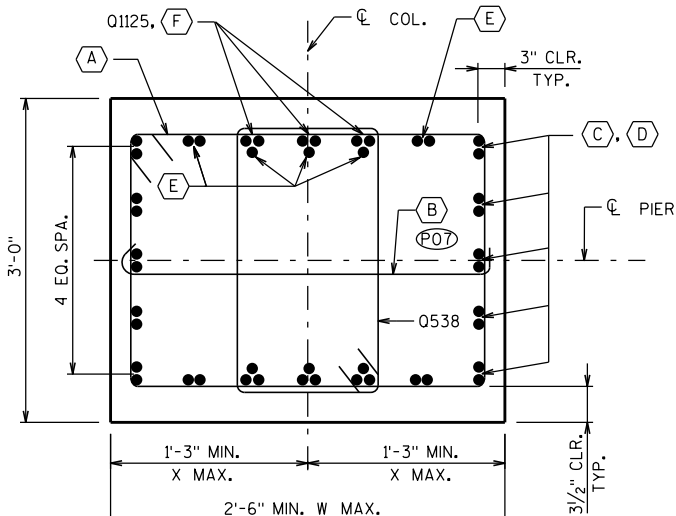


SECTION B-B

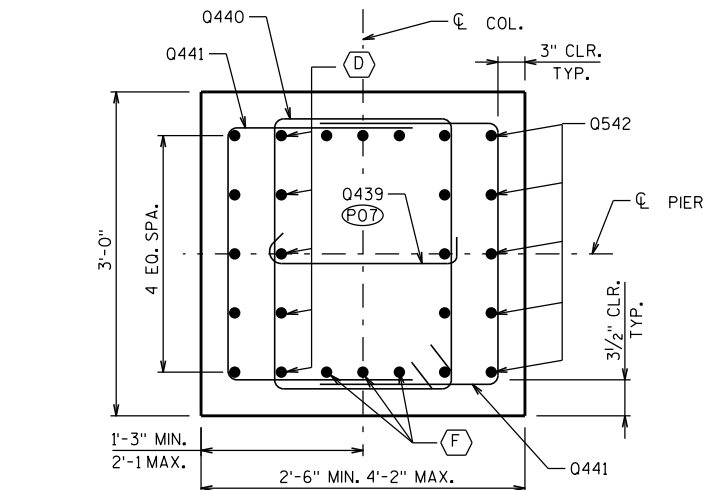
SEE SHEET 16 FOR LOCATION



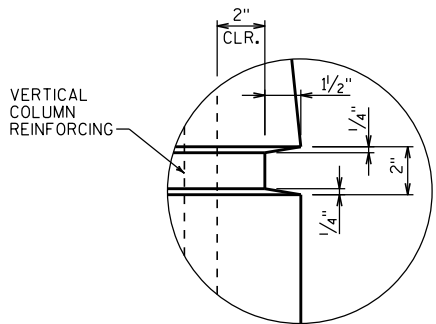
SECTION C-C



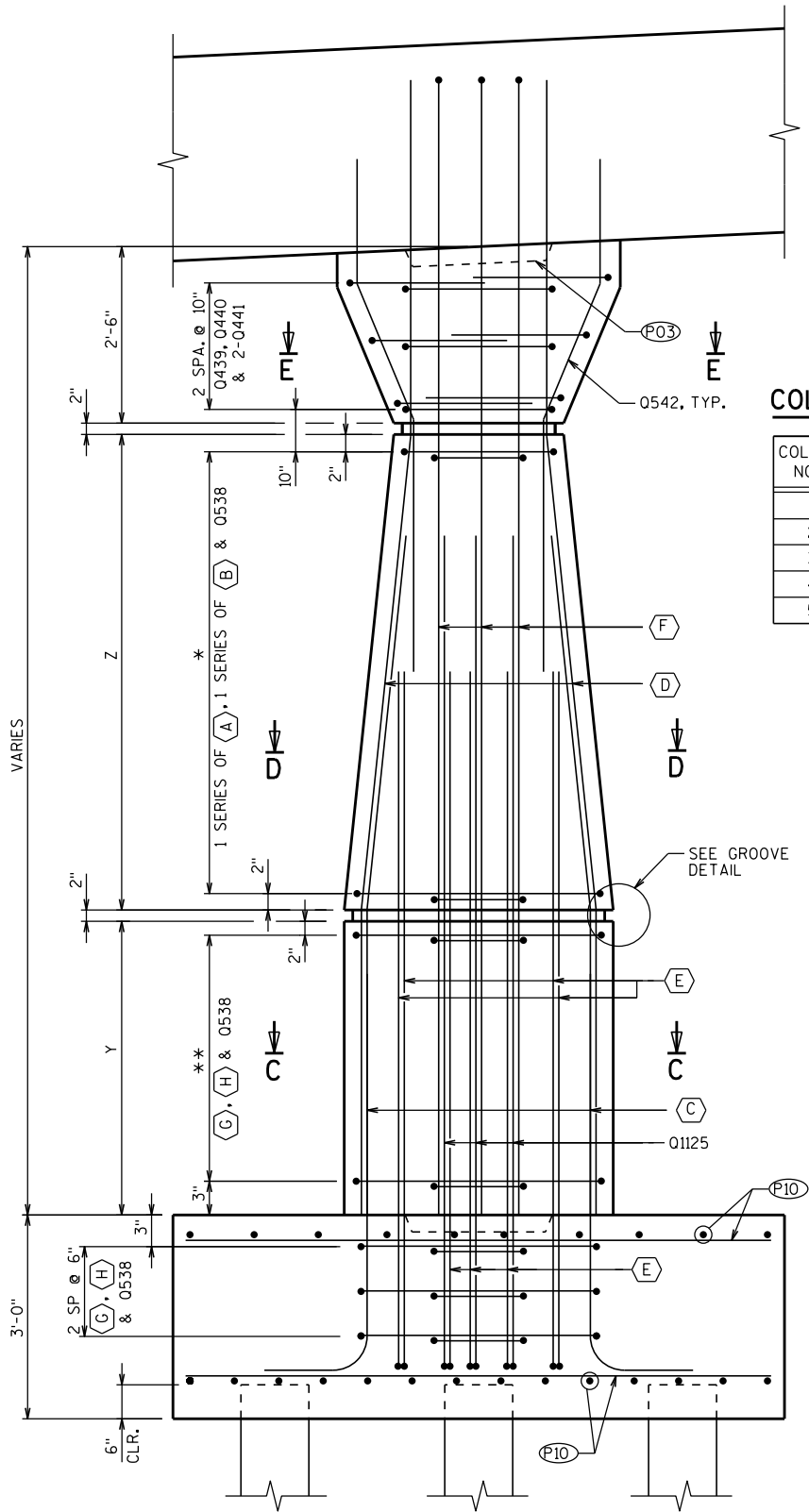
SECTION D-D



SECTION E-E



GROOVE DETAIL



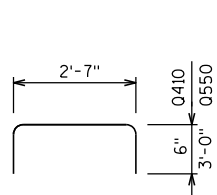
COLUMN ELEVATION

NO.	DATE	REVISION	BY
		STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
		STRUCTURE B-40-803	
		DRAWN BY EKM PLANS CKD. KES	
		PIER 2 DETAILS (1 OF 2)	SHEET 17 OF 30

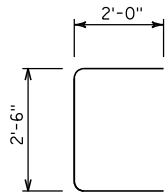
BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
Q801	X	6	42'-4"	X		PIER CAP TOP
Q802	X	2	41'-4"	X		PIER CAP TOP
Q803	X	12	39'-9"			PIER CAP BOTTOM
Q804	X	6	42'-11"			PIER CAP TOP
Q805	X	2	41'-5"	X		PIER CAP TOP
Q806	X	12	39'-9"	X		PIER CAP BOTTOM
Q507	X	73	2'-0"			PIER CAP - DOWEL - VERT
Q508	X	4	8'-6"	X		PIER CAP STIRRUP
Q509	X	220	9'-2"	X		PIER CAP STIRRUP
Q410	X	37	3'-5"	X		PIER CAP - TIE
Q1111	X	10	14'-3"	X		COLUMN 1 - VERT - FTG DOWEL
Q1112	X	10	14'-3"	X		COLUMN 2 - VERT - FTG DOWEL
Q1113	X	10	14'-3"	X		COLUMN 3 - VERT FTG DOWEL
Q1114	X	20	14'-3"	X		COL 4-5 - VERT - FTG DOWEL
Q1115	X	14	12'-2"	X		COLUMN 1 - VERT - FTG DOWEL
Q1116	X	56	12'-8"	X		COL 2-5 - VERT - FTG DOWEL
Q1117	X	10	18'-8"	X		COLUMN 1 - VERT
Q1118	X	10	19'-4"	X		COLUMN 2 - VERT
Q1119	X	10	20'-2"	X		COLUMN 3 - VERT
Q1120	X	20	21'-0"	X		COLUMN 4 & 5 - VERT
Q1121	X	6	20'-2"	X		COLUMN 1 - VERT - TOP
Q1122	X	6	21'-0"	X		COLUMN 2 - VERT - TOP
Q1123	X	6	21'-9"	X		COLUMN 3 - VERT - TOP
Q1124	X	12	22'-6"	X		COLUMN 4 & 5 - VERT - TOP
Q1125	X	30	14'-2"	X		COL 1-5 - VERT - FTG DOWEL
Q526	X	36	11'-6"	X	△	COLUMN 1 - TIES - MIDDLE
Q527	X	20	11'-9"	X	△	COLUMN 2 & 3 - TIES - MIDDLE
Q528	X	44	11'-11"	X	△	COLUMN 4 & 5 - TIES - MIDDLE
Q429	X	36	3'-7"	X	△	COLUMN 1 - TIES - MIDDLE
Q430	X	20	3'-9"	X	△	COLUMN 2 & 3 - TIES - MIDDLE
Q431	X	44	3'-10"	X	△	COLUMN 4 & 5 - TIES - MIDDLE
Q432	X	26	4'-6"	X		COLUMN 1 - TIES - BOTTOM
Q433	X	14	4'-9"	X		COLUMN 2 & 3 - TIES - BOTT
Q434	X	26	4'-11"	X		COLUMN 4 & 5 - TIES - BOTT
Q535	X	26	13'-4"	X		COLUMN 1 - TIES - BOTTOM
Q536	X	14	13'-10"	X		COLUMN 2 & 3 - TIES - BOTT
Q537	X	26	14'-2"	X		COLUMN 4 & 5 - TIES - BOTT
Q538	X	66	8'-8"			COLUMN - TIES
Q439	X	15	2'-11"	X		COLUMN - TIES - TOP
Q440	X	15	10'-0"			COLUMN - TIES - TOP
Q441	X	30	6'-4"	X		COLUMN - TIES - TOP
Q542	X	50	10'-6"	X		COLUMN - VERT - TOP
Q543		92	8'-8"			FOOTING - TOP
Q744		67	8'-8"			FOOTING - BOTTOM
Q945		50	8'-8"			FOOTING - BOTTOM
Q546	X	4	39'-10"			PIER CAP - HORIZ - SIDES
Q547	X	4	35'-6"	X		PIER CAP - HORIZ - SIDES
Q548	X	8	8'-4"	X		PIER CAP - HORIZ - ENDS
Q549		29	10'-2"			FOOTING - TOP
Q950		40	10'-2"			FOOTING - BOTTOM
Q751		17	9'-2"			FOOTING - BOTTOM
Q552		15	9'-2"			FOOTING - TOP

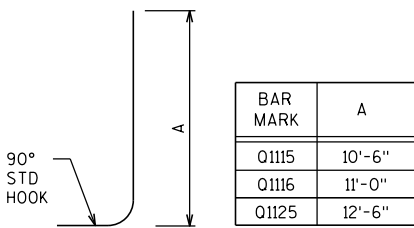
△ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATION (SEE BAR SERIES TABLE FOR ACTUAL LENGTHS)



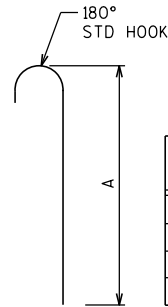
Q410, Q548



Q441



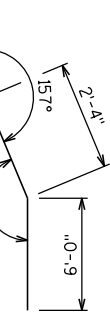
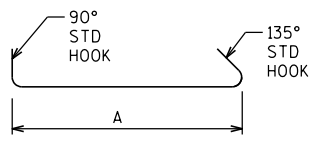
Q1115, Q1116, Q1125



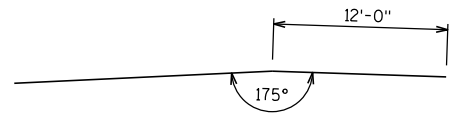
Q1121, Q1122, Q1123, Q1124

BAR MARK	A
Q429	2'-0" TO 3'-9/2"
Q430	2'-0" TO 4'-0/2"
Q431	2'-0" TO 4'-2/2"
Q432	3'-10"
Q433	4'-1"
Q434	4'-3"
Q439	2'-3"

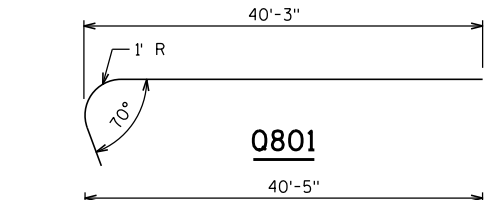
Q429, Q430, Q431, Q432, Q433, Q434, Q439



Q542

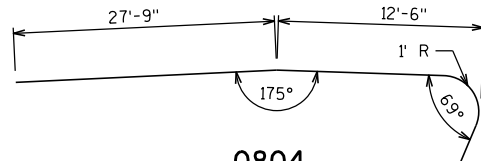


Q806, Q547, Q849

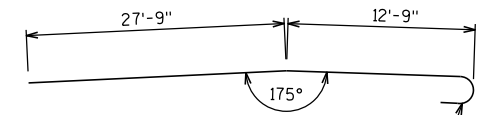


Q801

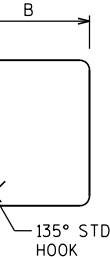
Q802



Q804



Q805



Q508, Q509, Q526, Q527, Q528, Q535, Q536, Q537, Q538, Q440

COLUMN NO.	BAR MARK	A	B	C
1	Q1117	4'-8"	9'-2"	11 1/2"
2	Q1118	5'-5"	9'-2"	11 1/2"
3	Q1119	5'-2"	10'-2"	1'-1"
4 & 5	Q1120	5'-0"	11'-2"	1'-2"

Q1117, Q1118, Q1119, Q1120

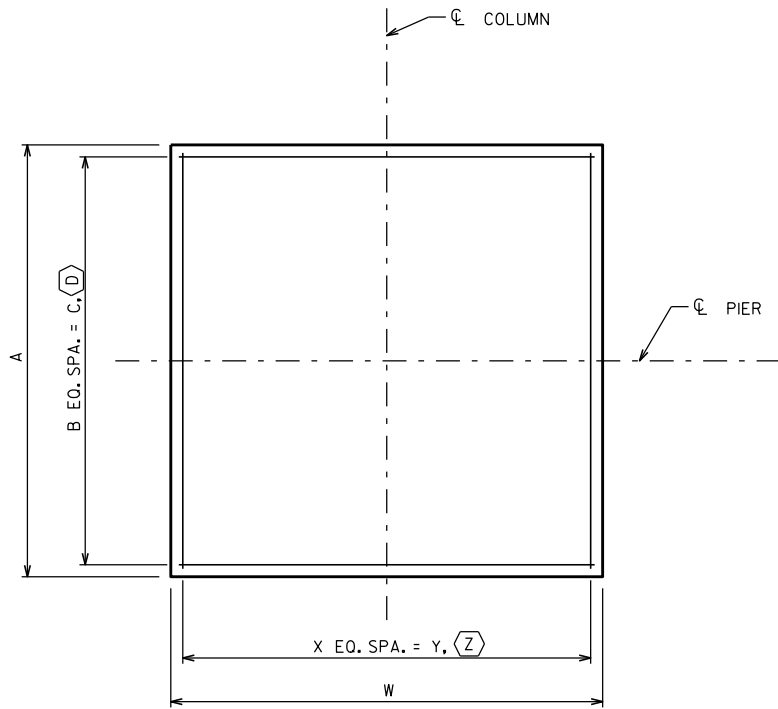
COLUMN NO.	BAR MARK	A	B
1	Q1111	7'-0"	5'-7"
2	Q1112	7'-9"	4'-10"
3	Q1113	7'-7"	5'-0"
4 & 5	Q1114	7'-4"	5'-3"

Q1111, Q1112, Q1113, Q1114

COLUMN NO.	BAR MARK	NO. REQ'D	LENGTH
1, 2	Q526	2 SERIES OF 18	9'-8" TO 13'-3"
3	Q527	1 SERIES OF 20	9'-8" TO 13'-9"
4, 5	Q528	2 SERIES OF 22	9'-8" TO 14'-1"
1, 2	Q429	2 SERIES OF 18	2'-8" TO 4'-6"
2	Q430	1 SERIES OF 20	2'-8" TO 4'-9"
4, 5	Q431	2 SERIES OF 22	2'-8" TO 4'-11"

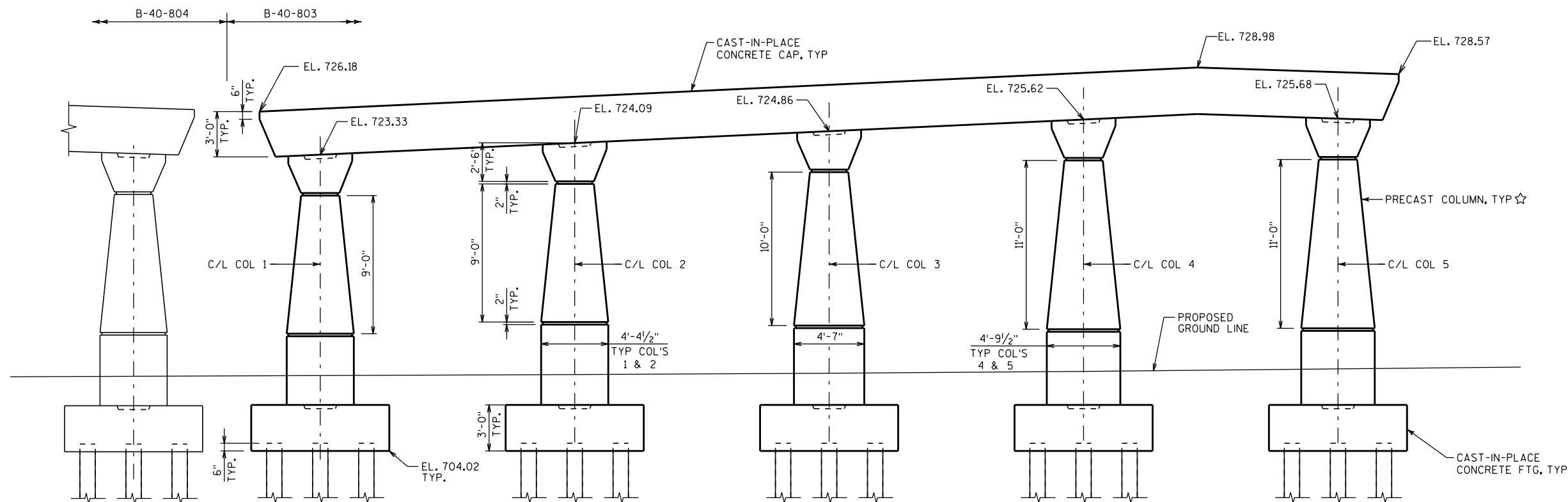
BAR MARK	A	B
Q508	2'-3"	1'-8"
Q509	2'-7"	1'-8"
Q526	2'-5"	2'-0" TO 3'-9/2"
Q527	2'-5"	2'-0" TO 4'-0/2"
Q528	2'-5"	2'-0" TO 4'-2/2"
Q535	2'-5"	3'-10"
Q536	2'-5"	4'-1"
Q537	2'-5"	4'-3"
Q538	2'-5"	1'-6"
Q440	2'-5"	2'-3"

FOOTING REINFORCEMENT PLAN



FOOTING NO.	REINF LOCATION	A	B	C	D	W	X	Y	Z
1	TOP	9'-0"	16	8'-6"	Q543	9'-0"	10	8'-6"	Q543
1	BOTTOM	9'-0"	15	8'-6"	Q744	9'-0"	18	8'-6"	Q945
2	TOP	9'-0"	13	8'-6"	Q543	9'-0"	10	8'-6"	Q543
2	BOTTOM	9'-0"	14	8'-6"	Q744	9'-0"	14	8'-6"	Q945
3	TOP	9'-0"	13	8'-6"	Q543	9'-0"	10	8'-6"	Q543
3	BOTTOM	9'-0"	15	8'-6"	Q744	9'-0"	14	8'-6"	Q945
4	TOP	10'-6"	14	10'-0"	Q543	9'-0"	13	8'-6"	Q549
4	BOTTOM	10'-6"	19	10'-0"	Q744	9'-0"	20	8'-6"	Q950
5	TOP	10'-6"	14	10'-0"	Q552	9'-6"	14	9'-0"	Q549
5	BOTTOM	10'-6"	16	10'-0"	Q751	9'-6"	18	9'-0"	Q950

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
PIER 2 DETAILS (2 OF 2)			SHEET 18 OF 30



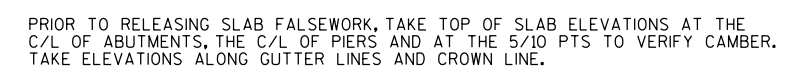
ELEVATION OF OPTIONAL PRECAST PIER

(FOR INFORMATION ONLY - PIER 1 SHOWN, PIER 2 SIMILAR)
CONTACT BUREAU OF STRUCTURES FOR PRECAST DETAILS

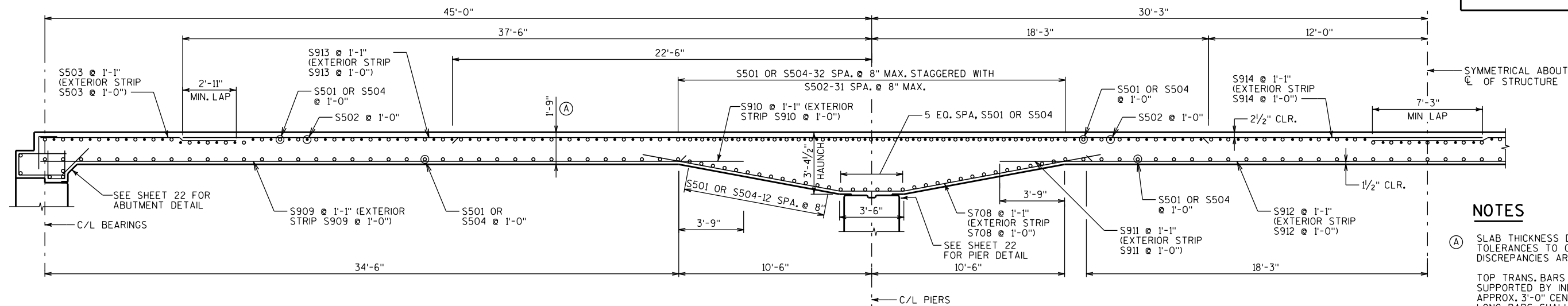
LEGEND

☆ THE CONTRACTOR MAY FURNISH PRECAST CONCRETE COLUMNS ONLY IN LIEU OF THE CAST-IN-PLACE COLUMNS WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. THE PRECAST CONCRETE COLUMNS SHALL CONFORM TO THE PRECAST DETAILS IN CHAPTER 7 STANDARDS OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL AND NON-BID ITEM SPECIAL PROVISIONS (PRECAST PIER COLUMNS AND GROUTED BAR COUPLERS) INCLUDED IN THIS CONTRACT. PAYMENT FOR THE PRECAST COLUMNS SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES" FOR THE CAST-IN-PLACE PIER.

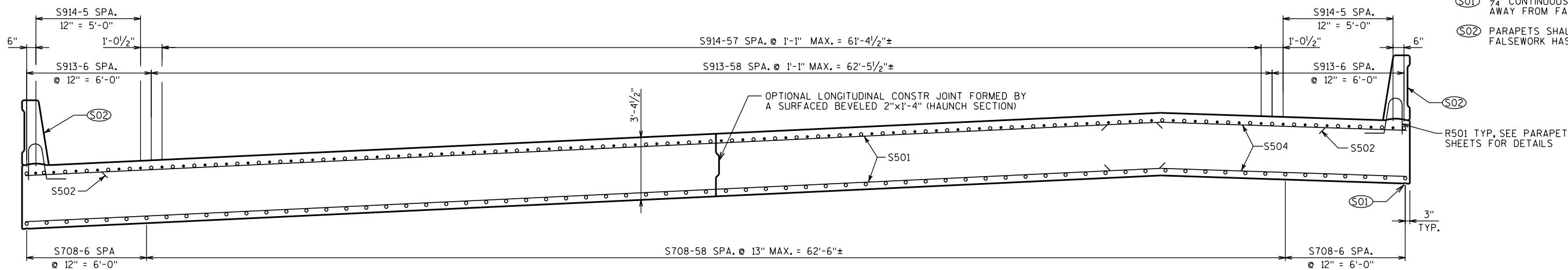
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY	EKM	PLANS CK'D.	KES
PIER PRECAST ALTERNATE		SHEET 19 OF 30	



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
SUPERSTRUCTURE		SHEET 20 OF 30	

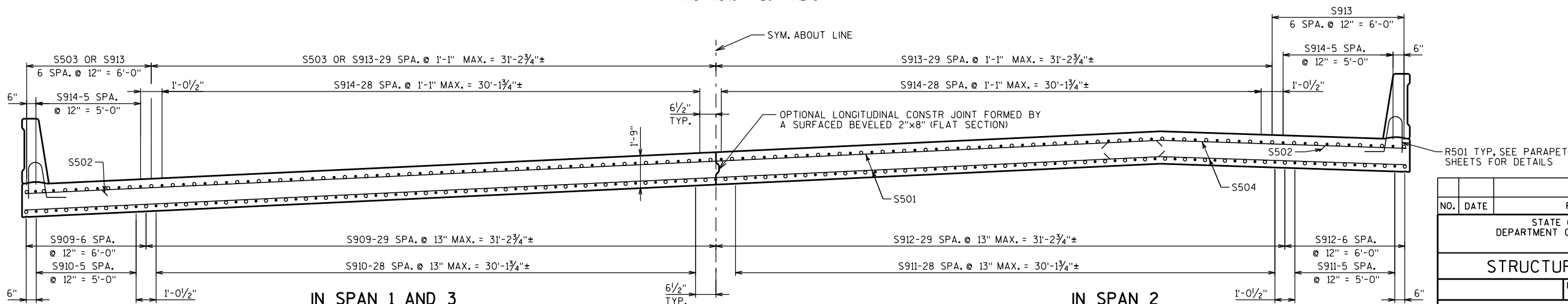


LONGITUDINAL SECTION



CROSS SECTION THRU SUPERSTRUCTURE

THRU HAUNCH - BOTH PIERS



IN SPAN 1 AND 3

CROSS SECTION THRU SUPERSTRUCTURE

IN SPAN

IN SPAN 2

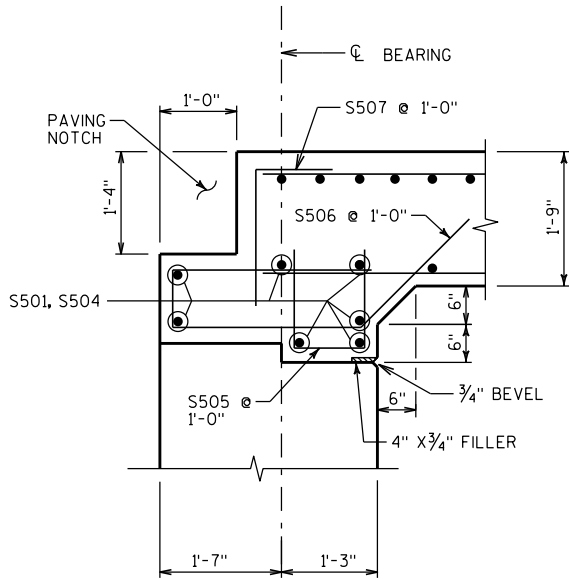
(AT C/L STRUCTURE)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
	DRAWN BY	EKM	PLANS CKD. KES
SUPERSTRUCTURE DETAILS (1 OF 2)			SHEET 21 OF 30

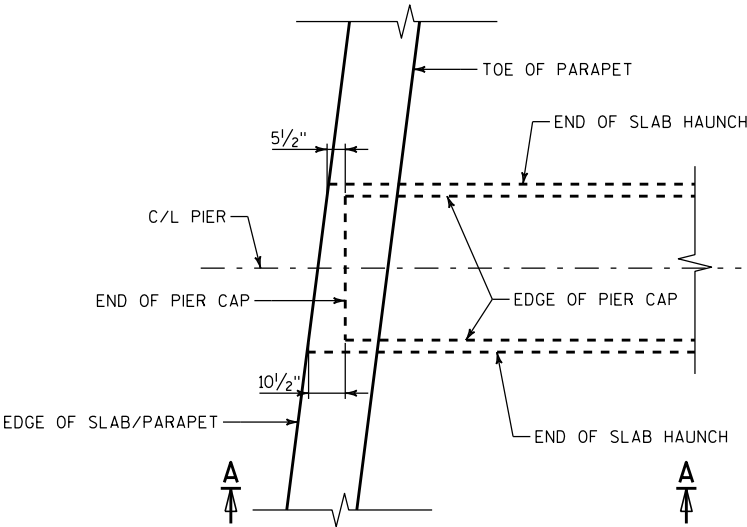
BILL OF BARS

BAR MARK	C ₀₄ T	NO. REQ'D	LENGTH	BENT	LOCATION
S501	X	358	60'-0"		SLAB TRANS. TOP & BOT.
S502	X	348	4'-9"		SLAB TRANS. TOP
S503	X	142	11'-7"		SLAB LONGIT. TOP SPANS 1 & 3
S504	X	358	19'-8"		SLAB TRANS. TOP & BOT.
S505	X	152	2'-4"	X	ABUT. DIAPH.
S506	X	152	6'-1"	X	ABUT. DIAPH.
S507	X	152	3'-2"	X	ABUT. DIAPH.
S708	X	142	25'-0"	X	HAUNCH LONGIT. BOT.
S909	X	142	35'-0"		SLAB LONGIT. BOT. SPANS 1 & 3
S910	X	140	38'-7"		SLAB LONGIT. BOT. SPANS 1 & 3
S911	X	70	47'-0"		SLAB LONGIT. BOT. SPAN 2
S912	X	71	36'-6"		SLAB LONGIT. BOT. SPAN 2
S913	X	142	55'-9"		SLAB LONGIT. TOP
S914	X	140	56'-5"		SLAB LONGIT. TOP
SS601		152	3'-0"		SLAB END @ ABUT TO APPR SLAB

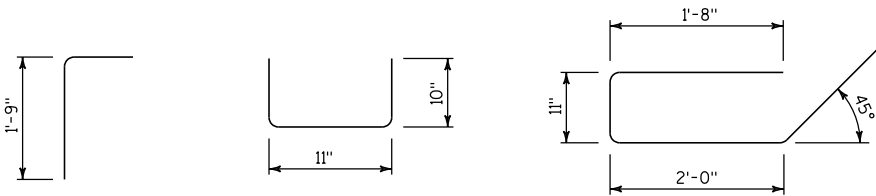
STAINLESS STEEL →



ABUTMENT DETAIL



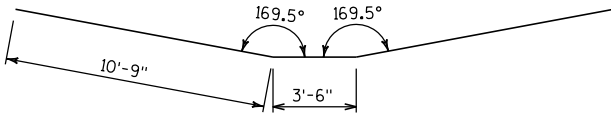
PLAN OF PIER



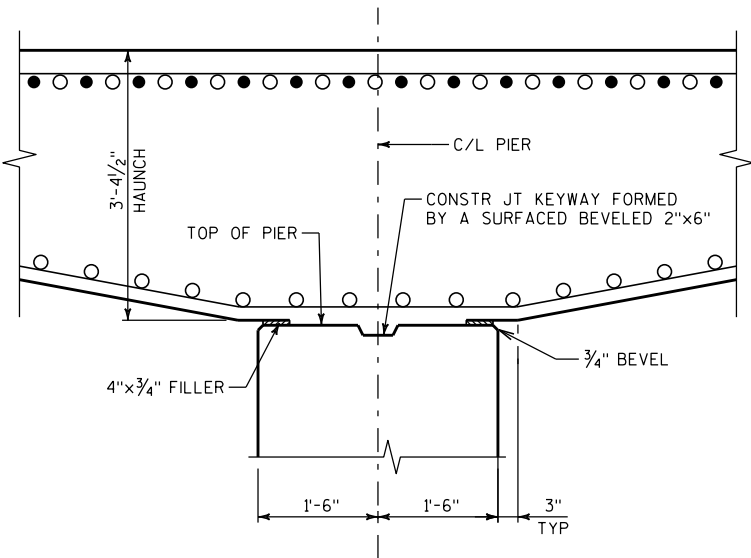
S507

S505

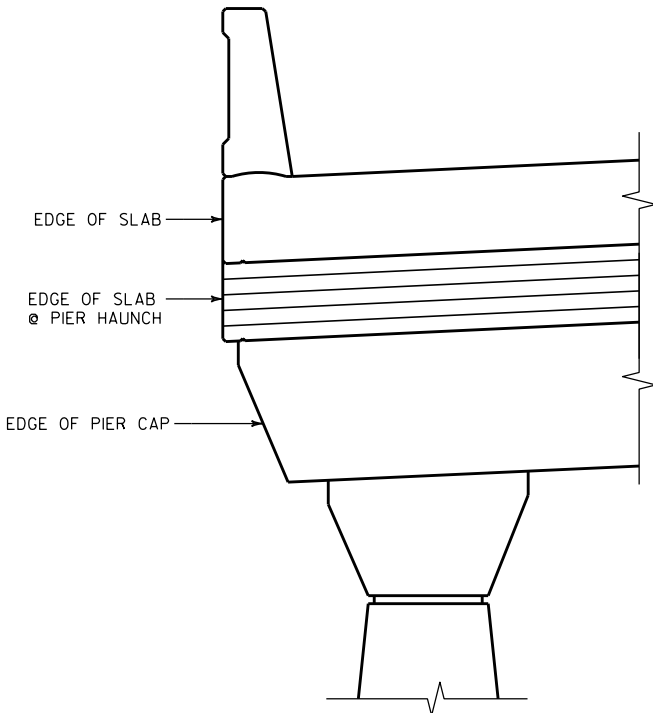
S506



S708

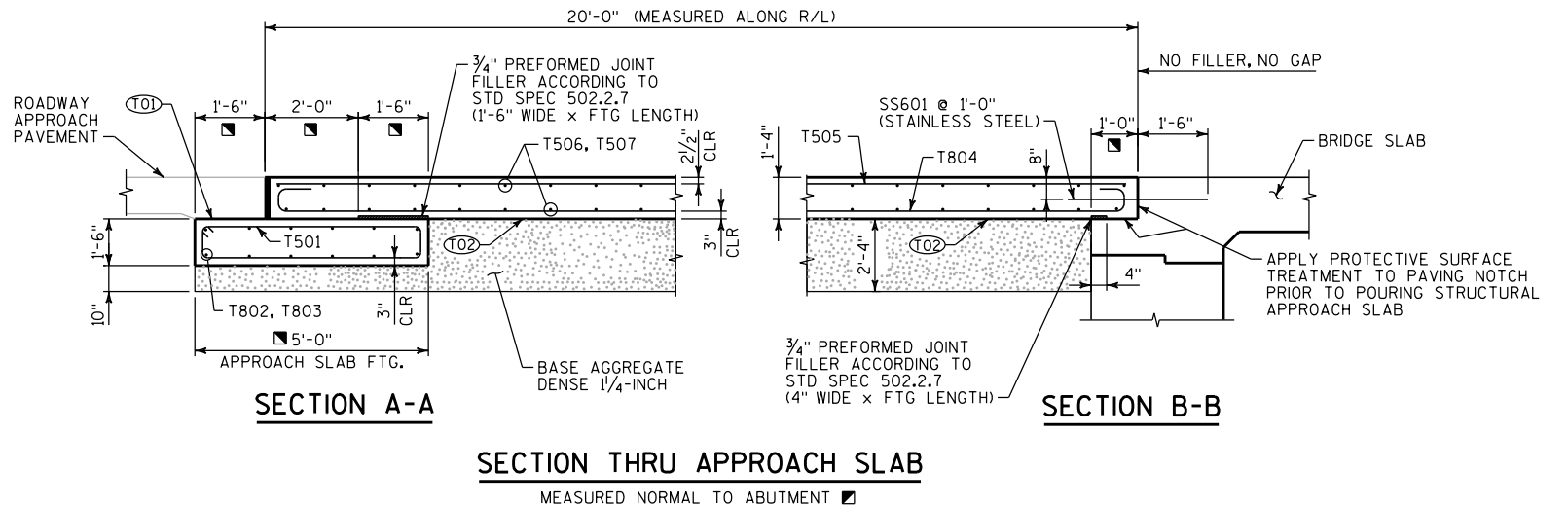
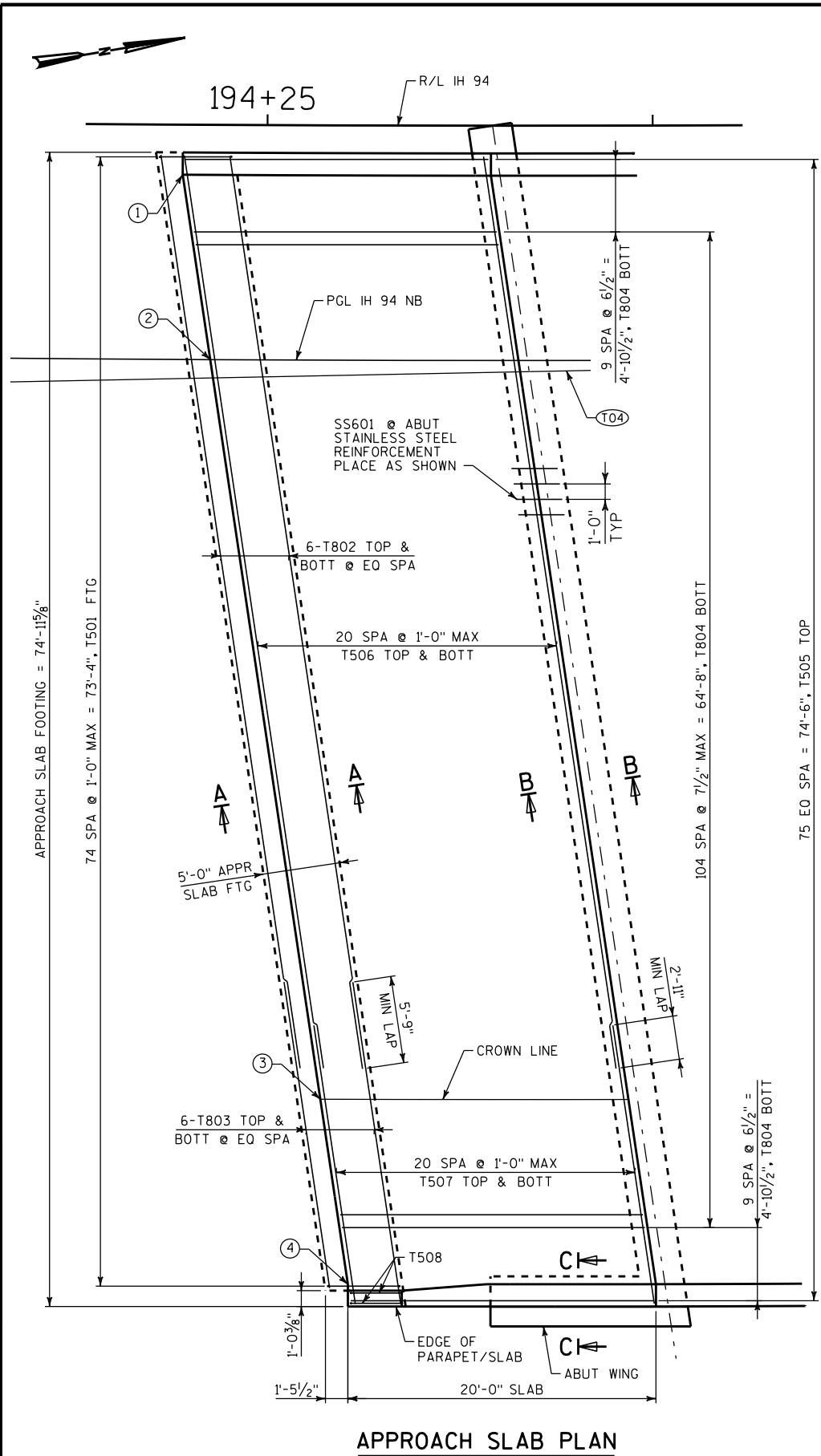


PIER DETAIL



SECTION A-A

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
SUPERSTRUCTURE DETAILS (2 OF 2)			SHEET 22 OF 30



ELEVATIONS

- 194+19.51, 3.25' RT, EL 729.75
- 194+21.36, 15.25 RT, EL 730.31
- 194+28.64, 63.25 RT, EL 732.56
- 194+30.44, 75.26 RT, EL 732.16

NOTES

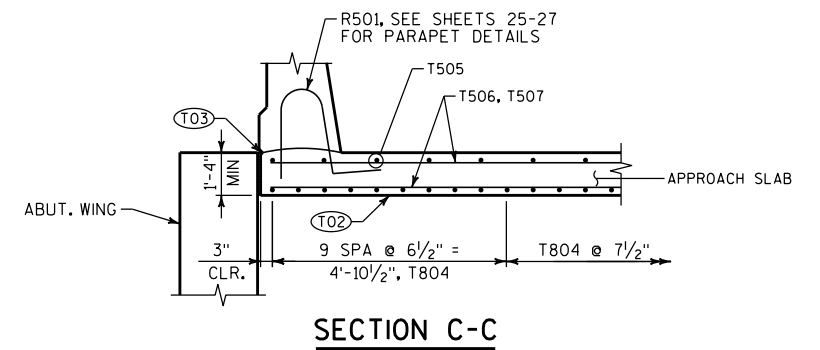
THE APPROACH SLAB SHALL HAVE LONGITUDINAL GROOVING, SEE SPECIAL PROVISIONS.

APPLY PROTECTIVE SURFACE TREATMENT TO THE TOP OF THE APPROACH SLAB AND AREAS OUTLINED IN THE SECTION THRU APPROACH SLAB.

POLYETHYLENE SHEETS SHALL BE CONSIDERED INCIDENTAL TO "CONCRETE MASONRY BRIDGES".

LEGEND

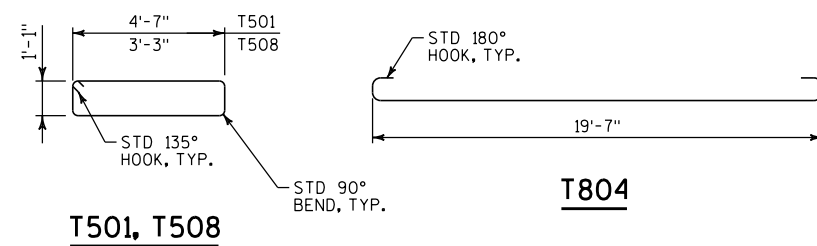
- (T01) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.
- (T02) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE.
- (T03) 1/2" PREFORMED JOINT FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE.
- (T04) LINE TANGENT TO R/L IH 94 @ INTERSECTION WITH R/L OAKWOOD RD, 15.25' OFFSET RIGHT



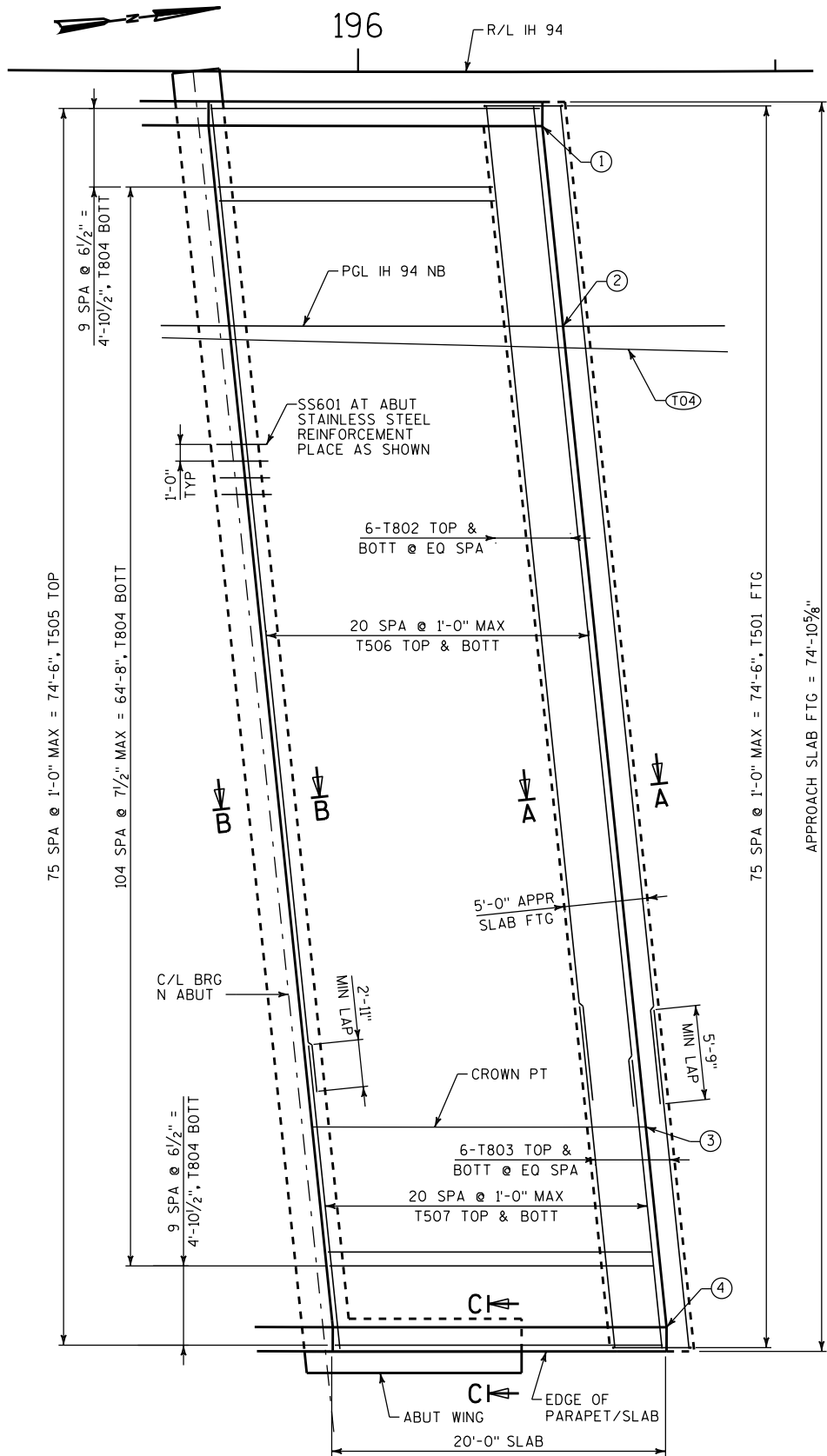
BILL OF BARS

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE

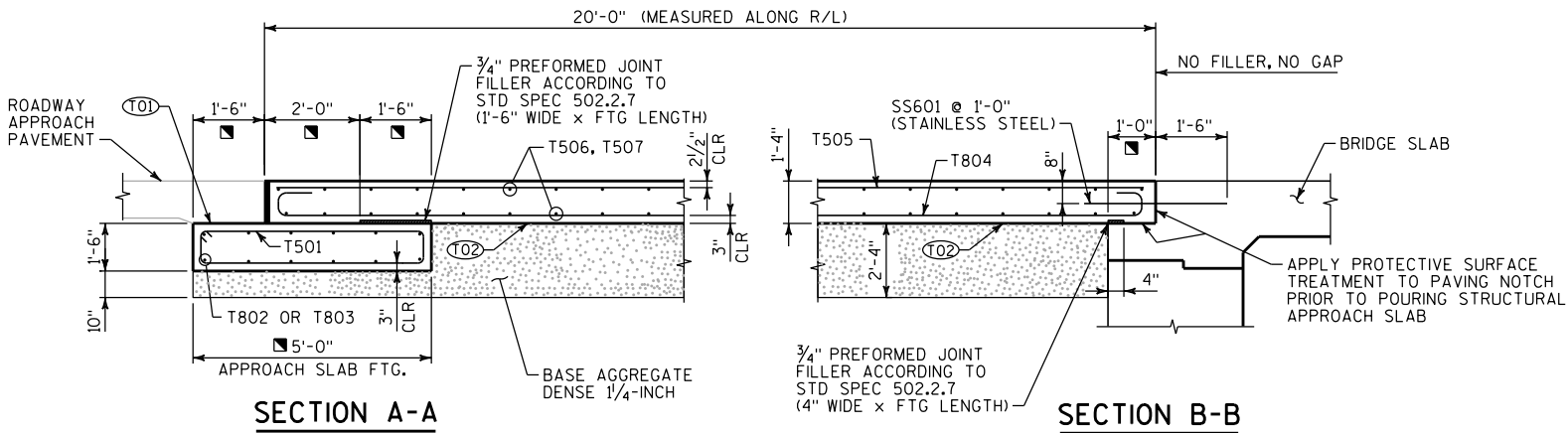
BAR MARK	COAT	NO. REQ'D		LENGTH	BENT	LOCATION
		S	APPRN			
T501	X	75	76	12'-0"	X	APPROACH SLAB FTG. - STIRRUP
T802	X	12	12	60'-0"		APPROACH SLAB FTG. - TRANS
T803	X	12	12	21'-3"		APPROACH SLAB FTG. - TRANS
T804	X	122	123	21'-10"	X	APPROACH SLAB - LONG. - BOT
T505	X	76	76	19'-8"		APPROACH SLAB - LONG. - TOP
T506	X	42	42	60'-0"		APPROACH SLAB - TRANS. - BOT
T507	X	42	42	18'-4"		APPROACH SLAB - TRANS. - BOT
T508	X	2	-	9'-4"	X	APPROACH SLAB FTG-STIRRUP @ NOTCH



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
SOUTH STRUCTURAL APPROACH SLAB			SHEET 23 OF 30



APPROACH SLAB PLAN



SECTION THRU APPROACH SLAB
MEASURED NORMAL TO ABUTMENT

ELEVATIONS

- ① 196+11.04, 3.25' RT, EL 729.01
- ② 196+12.26, 15.25' RT, EL 729.57
- ③ 196+17.07, 63.25' RT, EL 731.79
- ④ 196+18.25, 75.26' RT, EL 731.39

NOTES

THE APPROACH SLAB SHALL HAVE LONGITUDINAL GROOVING, SEE SPECIAL PROVISIONS.

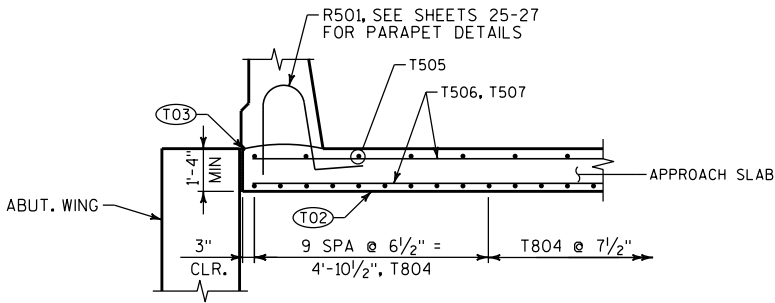
APPLY PROTECTIVE SURFACE TREATMENT TO THE TOP OF THE APPROACH SLAB AND AREAS OUTLINED IN THE SECTION THRU APPROACH SLAB.

POLYETHYLENE SHEETS SHALL BE CONSIDERED INCIDENTAL TO "CONCRETE MASONRY BRIDGES".

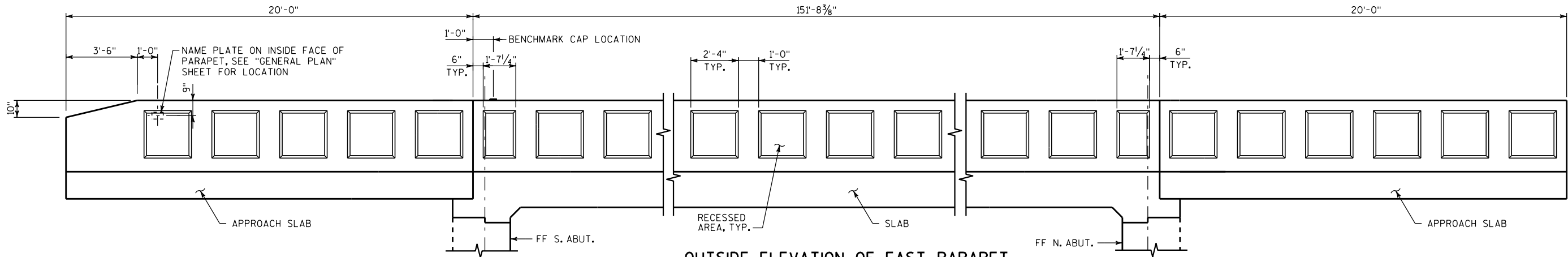
FOR BILL OF BARS AND BAR BENDING DIAGRAM, SEE SHEET 23.

LEGEND

- (T01) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.
- (T02) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE.
- (T03) 1*2" PREFORMED JOINT FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD 1*8" BELOW SURFACE OF CONCRETE.
- (T04) LINE TANGENT TO R/L IH 94 @ INTERSECTION WITH R/L OAKWOOD RD, 15.25' OFFSET RIGHT

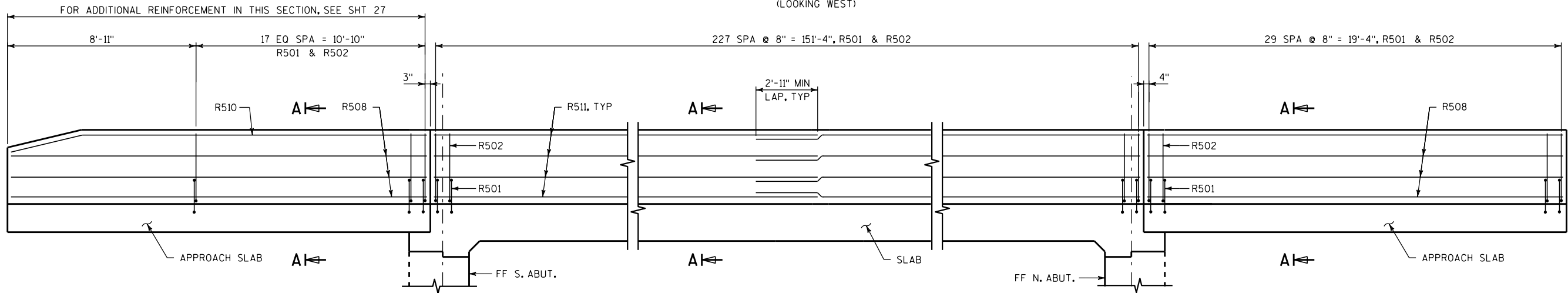


NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
NORTH STRUCTURAL APPROACH SLAB			SHEET 24 OF 30



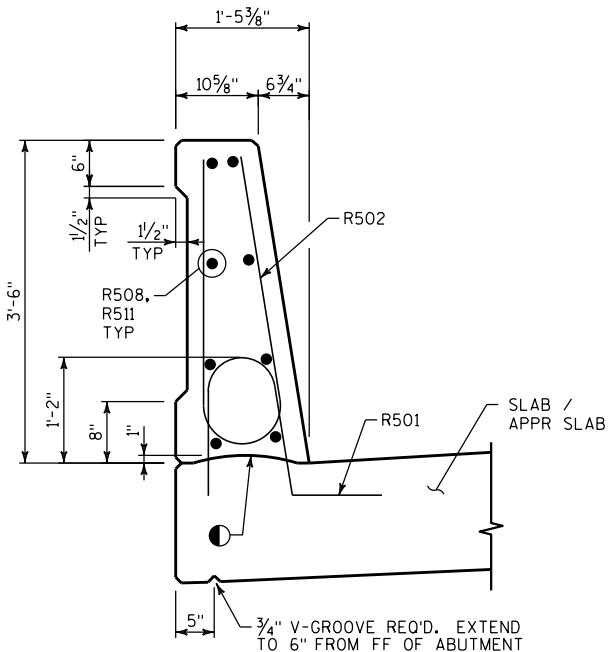
OUTSIDE ELEVATION OF EAST PARAPET

DIMENSIONS MEASURED ALONG OUTSIDE EDGE OF DECK / OUTSIDE FACE OF PARAPET (LOOKING WEST)



OUTSIDE ELEVATION OF EAST PARAPET SHOWING REINFORCEMENT

DIMENSIONS MEASURED ALONG OUTSIDE EDGE OF DECK / OUTSIDE FACE OF PARAPET (LOOKING WEST)



SECTION A

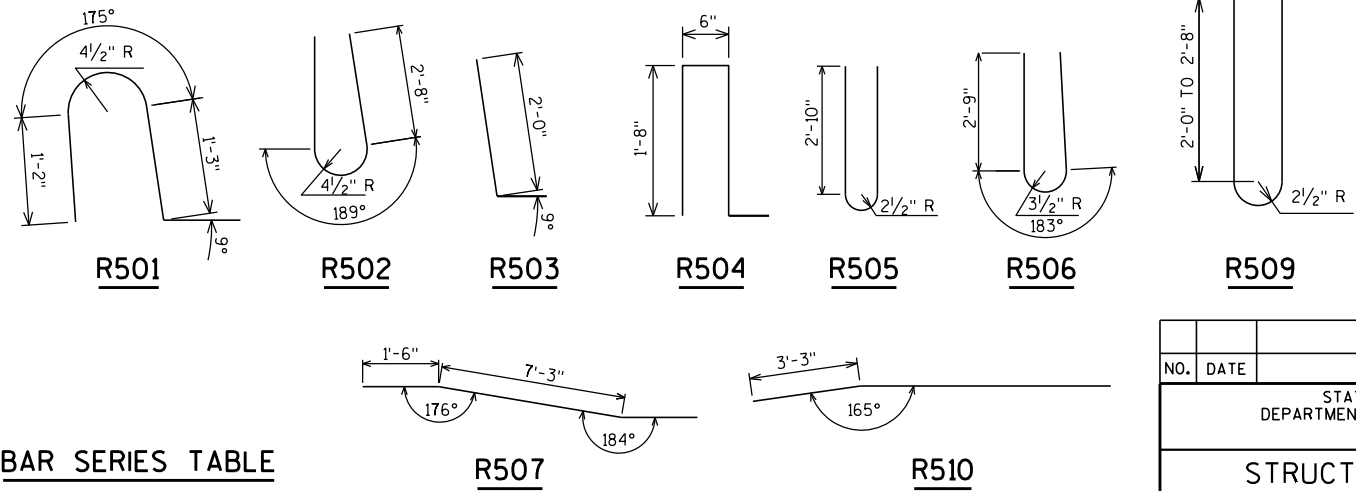
CONSTRUCTION JOINT - STRIKE OFF AS SHOWN

BILL OF BARS

BAR MARK	COAT	NO. REQ'D		LENGTH	BENT	BAR SERIES	LOCATION
		WEST	EAST				
R501	X	288	276	4'-5"	X		PARAPET VERT.
R502	X	288	276	6'-8"	X		PARAPET VERT.
R503	X	-	11	2'-9"	X		PARAPET VERT.
R504	X	-	17	4'-4"	X		PARAPET VERT.
R505	X	-	5	6'-5"	X		PARAPET VERT.
R506	X	-	6	6'-6"	X		PARAPET VERT.
R507	X	-	1	19'-8"	X		PARAPET HORIZ.
R508	X	16	14	19'-8"			PARAPET HORIZ.
R509	X	-	6	5'-5"	X	▲	PARAPET VERT.
R510	X	-	2	19'-8"	X		PARAPET HORIZ.
R511	X	24	24	52'-6"			PARAPET HORIZ.

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE

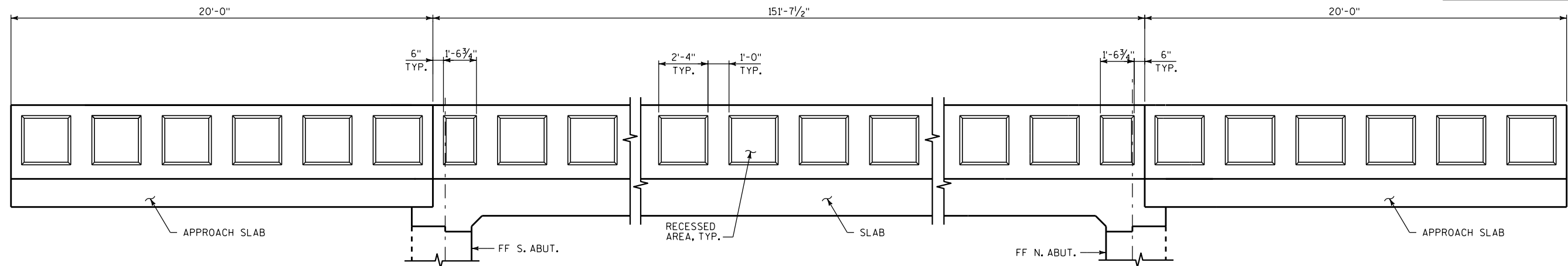
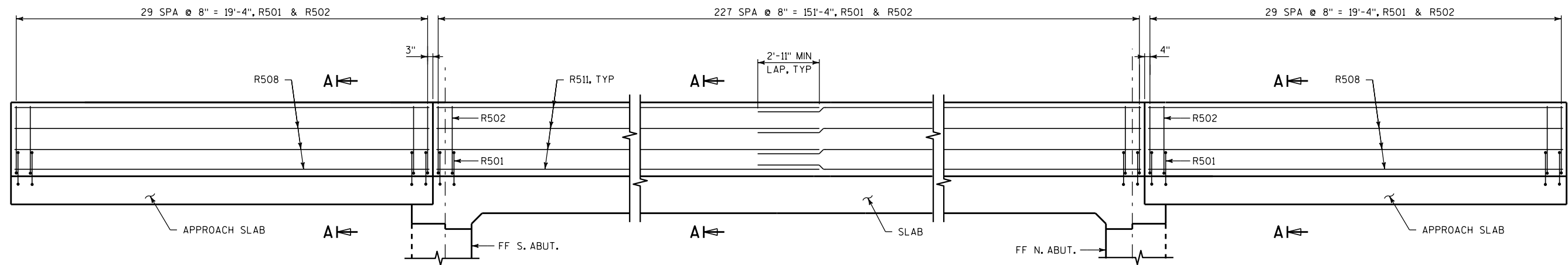
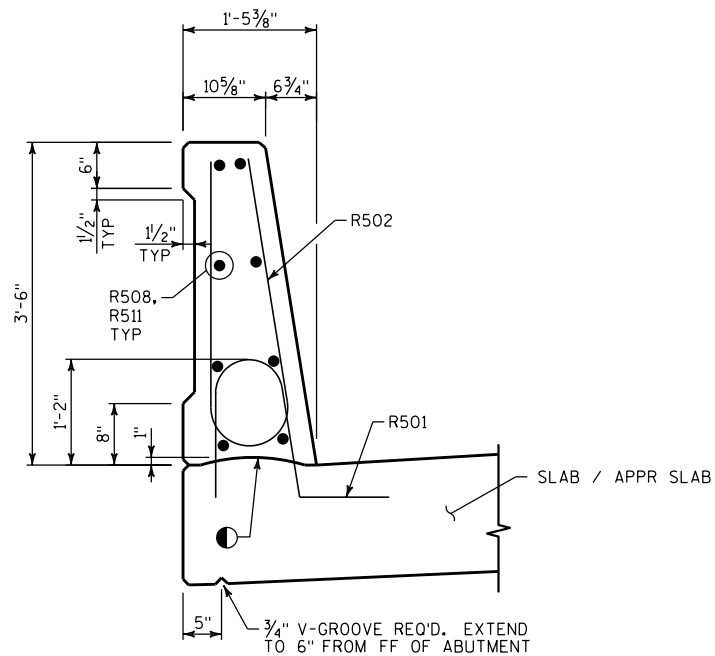
▲ LENGTH SHOWN FOR BAR IS AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATION. (SEE BAR SERIES TABLE FOR ACTUAL LENGTHS)



BAR SERIES TABLE

MARK	NO. REQ'D.	LENGTH
R509	1 SERIES OF 6	4'-9" TO 6'-1"

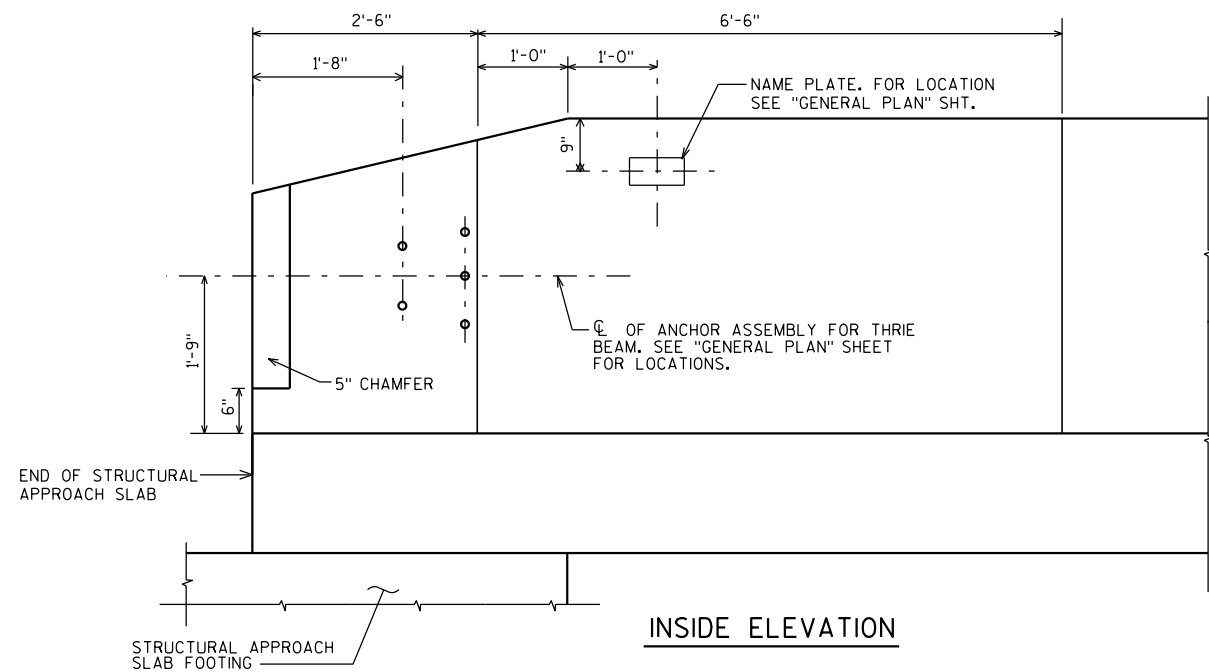
NO.	DATE	REVISION	BY
		STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
		STRUCTURE B-40-803	
		DRAWN BY EKM PLANS CK'D. KES	
		SINGLE SLOPE PARAPET 42SS MODIFIED (1 OF 3)	SHEET 25 OF 30

**OUTSIDE ELEVATION OF WEST PARAPET**DIMENSIONS MEASURED ALONG OUTSIDE EDGE OF DECK / OUTSIDE FACE OF PARAPET
(LOOKING WEST)**OUTSIDE ELEVATION OF WEST PARAPET SHOWING REINFORCEMENT**DIMENSIONS MEASURED ALONG OUTSIDE EDGE OF DECK / OUTSIDE FACE OF PARAPET
(LOOKING WEST)**SECTION A**

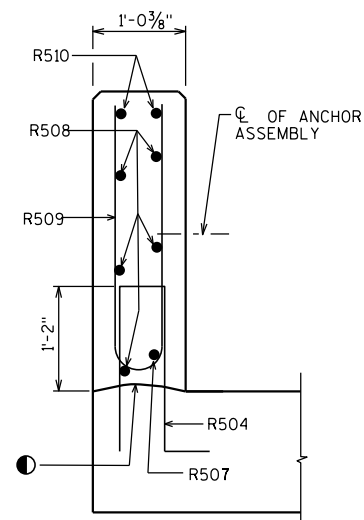
● CONSTRUCTION JOINT - STRIKE OFF AS SHOWN

NOTESSEE SHEET 25 FOR BILL OF BARS
AND BAR BENDING DIAGRAM.

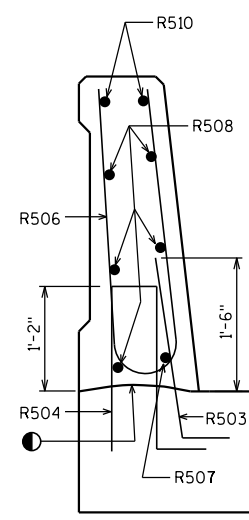
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
SINGLE SLOPE PARAPET 42SS MODIFIED (2 OF 3)		SHEET 26 OF 30	



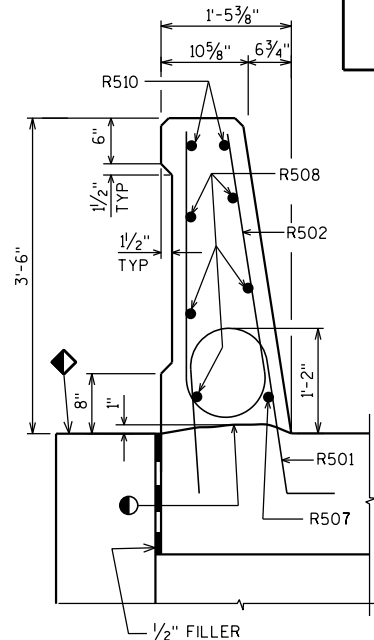
INSIDE ELEVATION



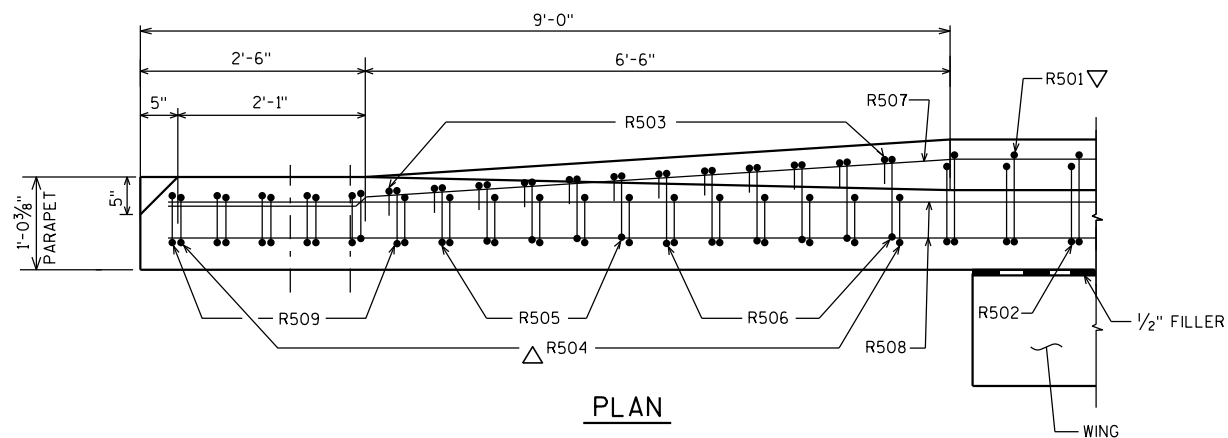
SECTION A



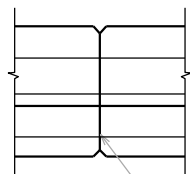
SECTION B



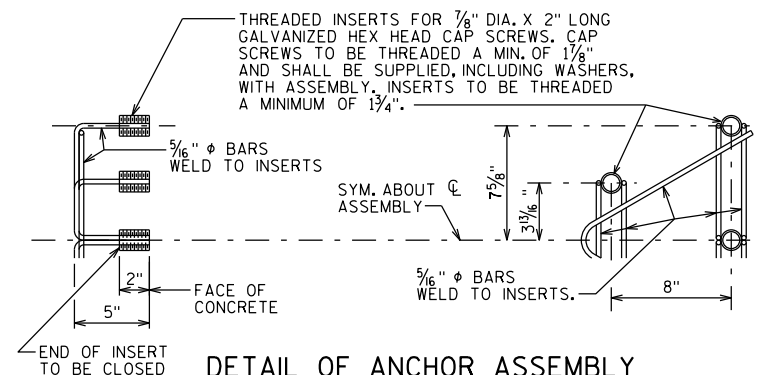
SECTION C



PLAN



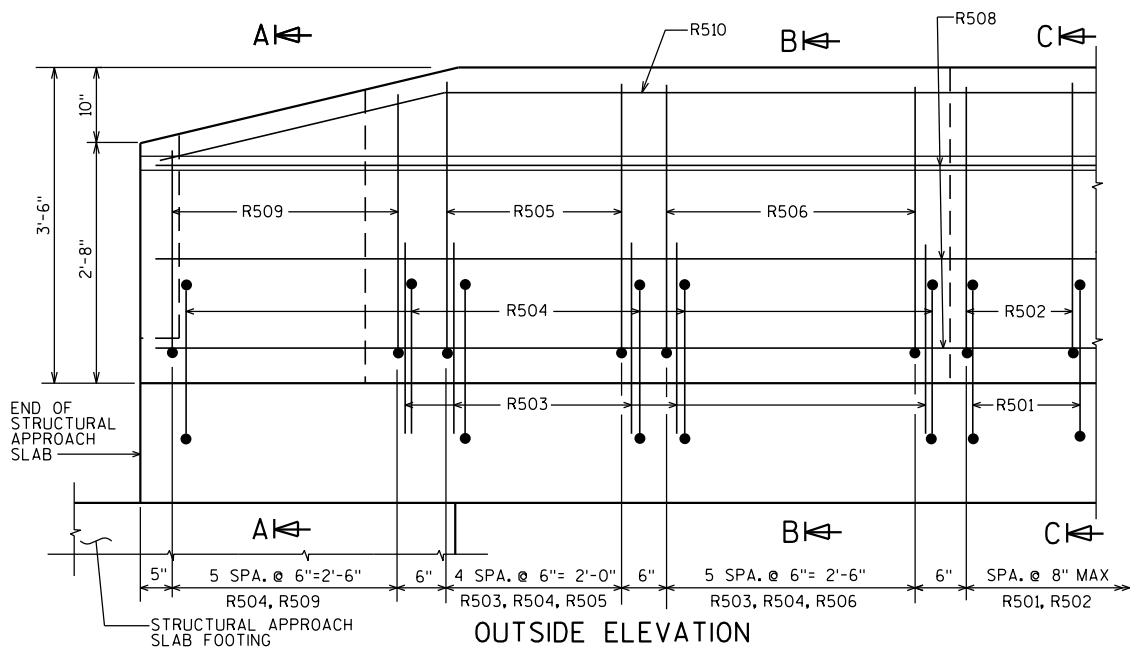
OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MIN. JOINT SPACING OF 80'-0". DEFINE CONST. JOINT WITH A 3/4" - 'V' GROOVE.



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.



OUTSIDE ELEVATION

(WING NOT SHOWN FOR CLARITY)

NOTES

SEE SHEET 25 FOR BILL OF BARS AND BAR BENDING DIAGRAMS

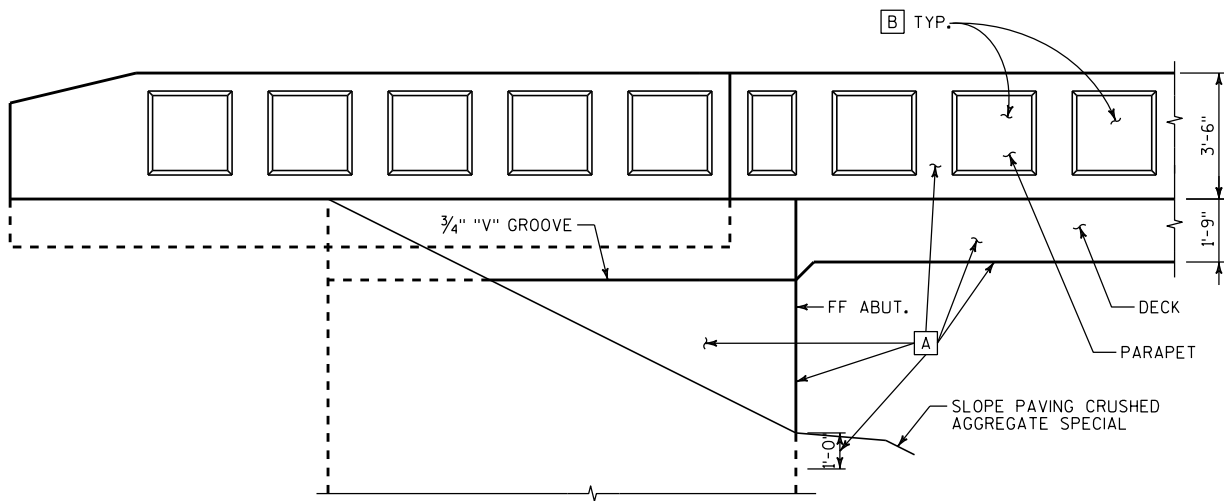
LEGEND

● CONST. JOINT - STRIKE OFF AS SHOWN.

◆ SLOPE FOR DRAINAGE

▽ R501 AND R504 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
SINGLE SLOPE PARAPET 42SS MODIFIED (3 OF 3)			SHEET 27 OF 30

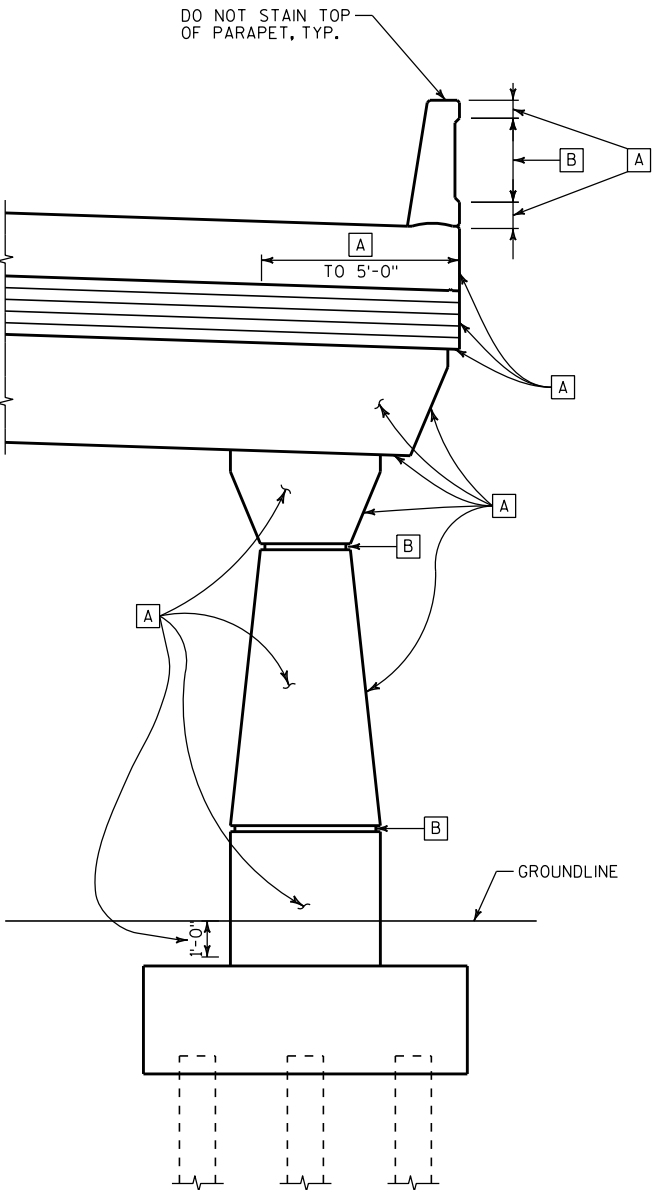


OUTSIDE ELEVATION OF PARAPET

CONCRETE STAINING SCHEDULE

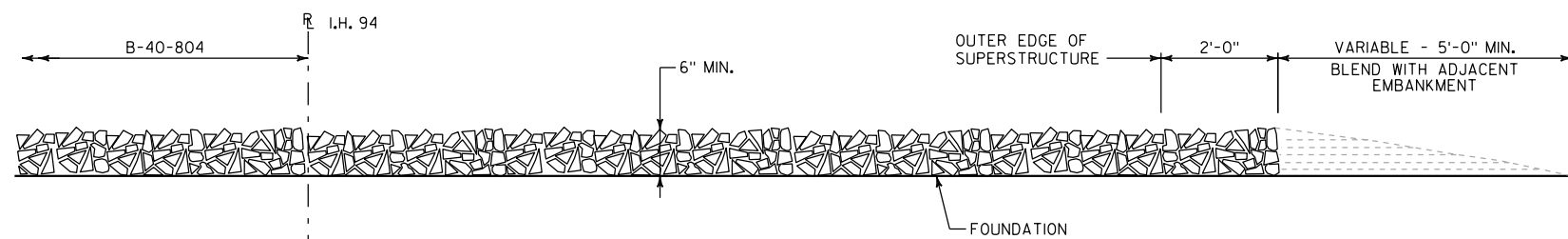
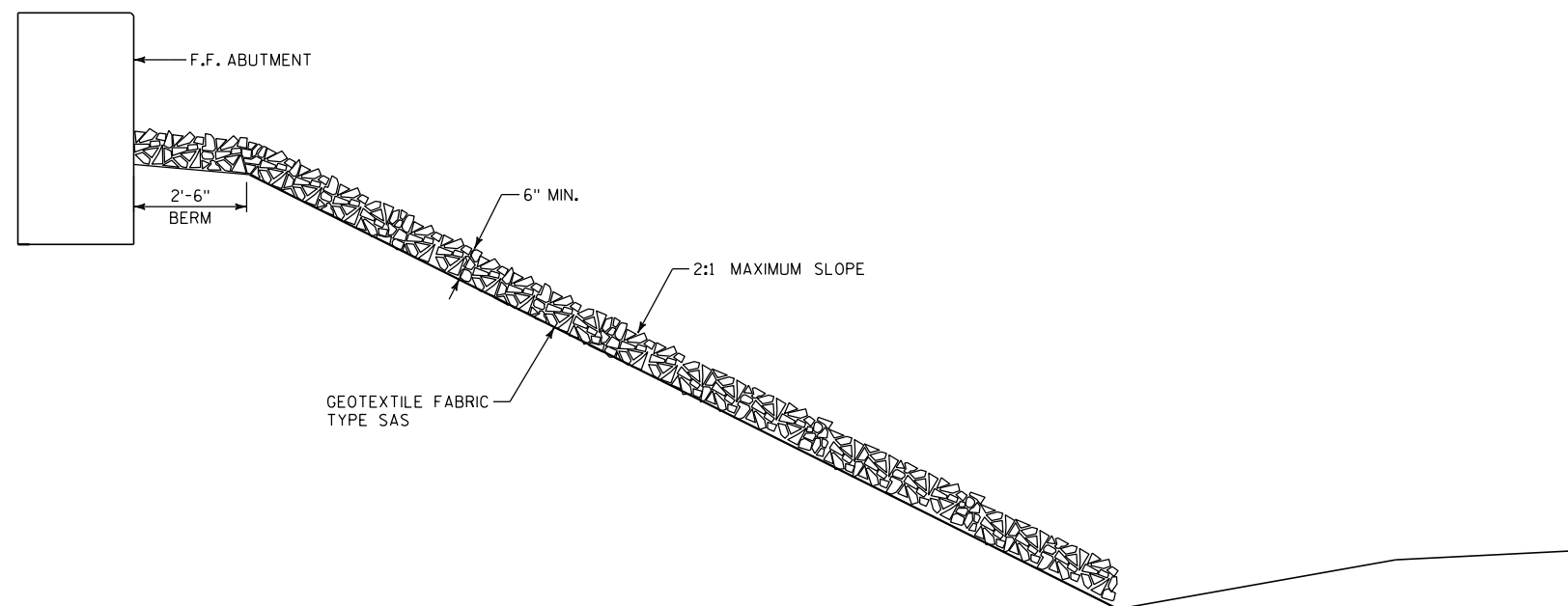
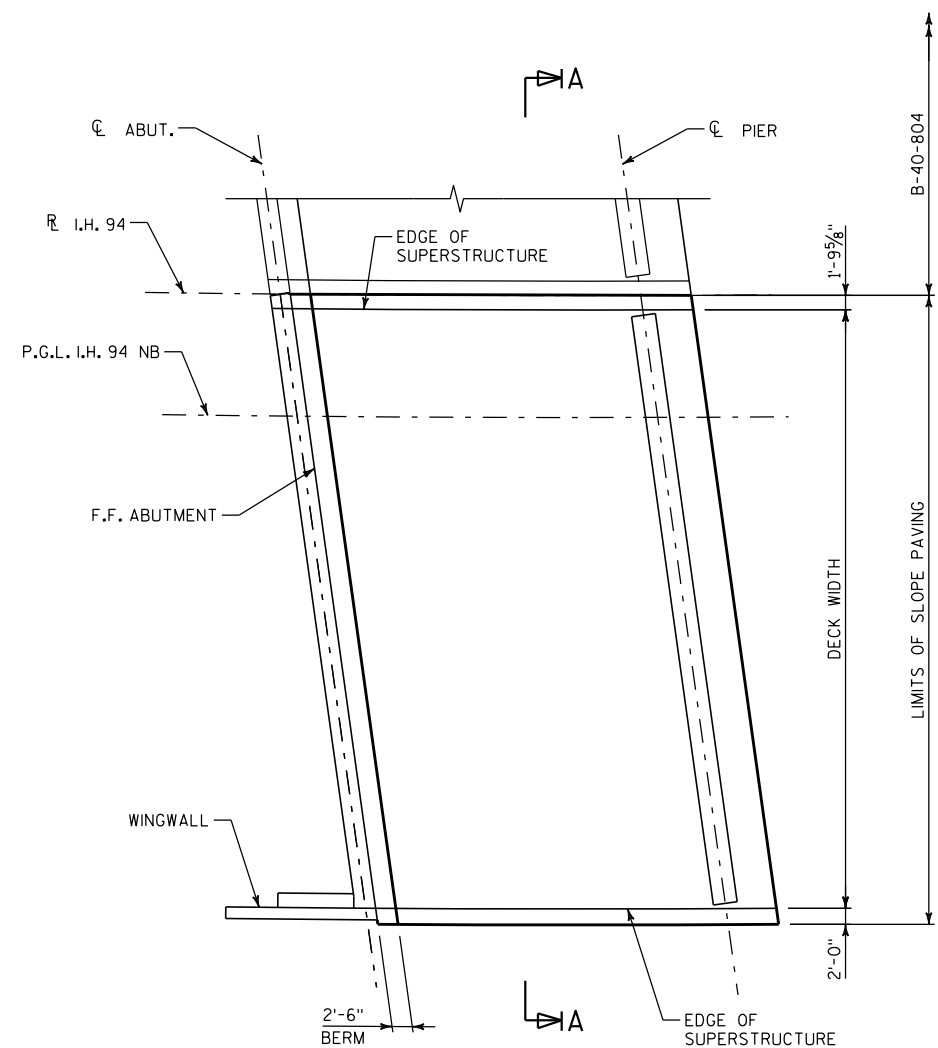
MARK	COLOR	LOCATION	NOTES
A	BASE COLOR	PARAPETS	EXTERIOR, EXCEPT AS NOTED FOR ACCENT COLORS, DO NOT STAIN TOP OR FRONT
		DECK	FASCIA & EXTERIOR 5'-0" OF EXPOSED UNDERSIDE
		ABUTMENT	WINGWALLS, ENDS, AND FRONT FACE FROM SLAB TO 1'-0" BELOW FINAL GRADE
		PIERS	PIER CAP & COLUMNS, EXCEPT AS NOTED FOR ACCENT COLORS, FROM BEAM SEAT TO 1'-0" BELOW FINAL GRADE
B	ACCENT COLOR #1	PARAPETS	RECESSED PANELS
		COLUMNS	HORIZONTAL RUSTICATIONS

THE FINAL COLOR OF THE CONCRETE FOLLOWING APPLICATION OF THE STAIN SYSTEM SHALL MATCH THE FEDERAL STANDARD COLOR SYSTEM LISTED:
BASE COLOR: 33564
ACCENT COLOR #1: 33448



ELEVATION OF PIER
LOOKING NORTH

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
AESTHETIC DETAILS		SHEET 28 OF 30	

SECTION A-ASTANDARD CROSS SECTION THRU CRUSHED AGGREGATE SPECIALPLAN**NOTES**

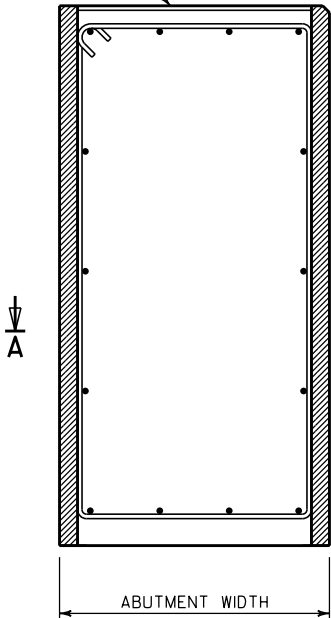
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

PLACE GEOTEXTILE TYPE SAS UNDER ALL AREAS OF SLOPE PAVING. GEOTEXTILE TYPE SAS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SLOPE PAVING CRUSHED AGGREGATE SPECIAL".

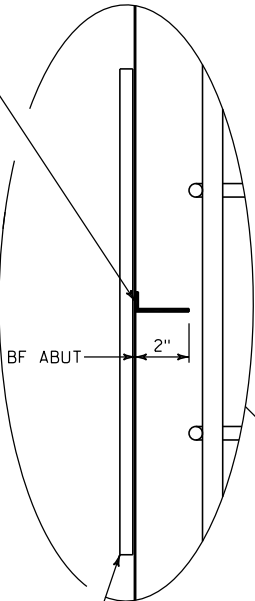
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
SLOPE PAVING DETAILS		SHEET 29 OF 30	

USE A JOINT TOOL TO
FORM A CONTRACTION
JOINT APPROXIMATELY 1/2" DEEP



SECTION THRU ABUTMENT BODY

BENT ZINC OR PLASTIC
STRIP, (1/16" TO 1/8" THICK)
TACK TO FORM WORK. (NO
WELDING TO REINFORCING STEEL)

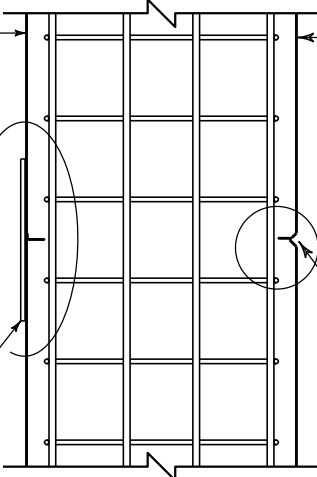


BF ABUT

18" RUBBERIZED
MEMBRANE
WATERPROOFING BF

BF ABUT

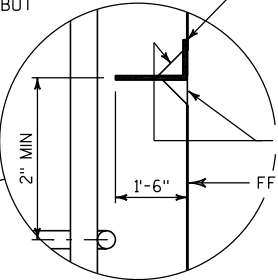
FF ABUT



SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

BENT ZINC OR PLASTIC
STRIP, (1/16" TO 1/8" THICK)
TACK TO FORM WORK. NO WELDING
TO REINFORCING STEEL. REMOVE OR
TRIM AFTER FORM REMOVAL



3/4" CHAMFER STRIPS

FF ABUT

FILL WITH NON-STAINING NON-BITUMINOUS
JOINT SEALER (COLOR TO MATCH CONCRETE
STAIN) AFTER TRIMMING OR REMOVING STRIP

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED
AS AN ALTERNATE CONSTRUCTION JOINT WITH THE
PERMISSION OF THE ENGINEER AT THE CONTRACTOR'S
EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED
WHEN USING AN ALTERNATIVE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND
BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT
OF THE BULKHEAD.

SAW CUTTING JOINT IS NOT ALLOWED.

ALTERNATE CONSTRUCTION JOINT IS NOT ALLOWED IN
PIER CAP.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-803			
DRAWN BY		EKM	PLANS CK'D. KES
ALTERNATE CONSTRUCTION JOINT DETAIL		SHEET 30 OF 30	