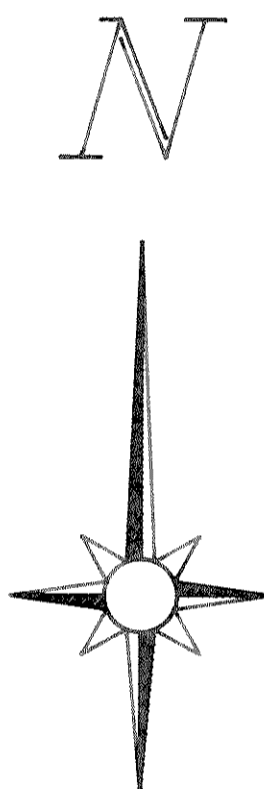
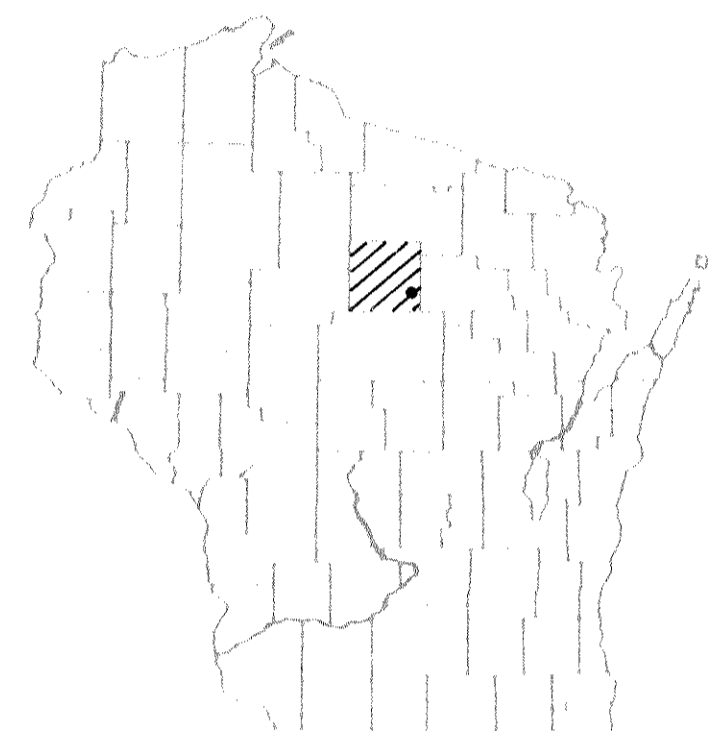


INDEX OF SHEETS

Sheet No. 1	Title
Sheet No.	Typical Sections and Details
Sheet No.	Estimate of Quantities
Sheet No.	Miscellaneous Quantities
Sheet No.	Right of Way Plat
Sheet No.	Plan and Profile
Sheet No.	Standard Detail Drawings
Sheet No.	Sign Plates
Sheet No.	Structure Plans
Sheet No.	Computer Earthwork Data
Sheet No.	Cross Sections

TOTAL SHEETS =



DESIGN DESIGNATION

A.D.T. (1989)	30
A.D.T. (2010)	35
D.H.V.	
IL	60-40%
L (% A.D.T.)	14

CONVENTIONAL SIGNS

COUNTY LINE	—————	COMBUSTIBLE FLUIDS (UNDER PRESSURE)	☠
CORPORATE LIMITS	-----	UNDERGROUND UTILITIES	
PROPERTY LINE	-----	GAS	— G —
LOT LINE	-----	ELECTRIC	— E —
LIMITED HIGHWAY EASEMENT	-----	TELEPHONE	— T —
EXISTING RIGHT OF WAY	-----	SERVICE PEDESTAL	⊠
NEW RIGHT OF WAY	-----	CABLE MARKER	⊞
REFERENCE LINE	-----	POWER POLE	⊞
SLOPE INTERCEPT	-----	TELEPHONE POLE	⊞
ORIGINAL GROUND	-----	RAILROADS	+++++
MARSH OR ROCK PROFILE	-----	MARSH	~~~~~
CULVERT IN PLACE	-----	WOODED AREA	
CULVERT REQUIRED	-----		
CULVERT REQUIRED (Profile)	-----		

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

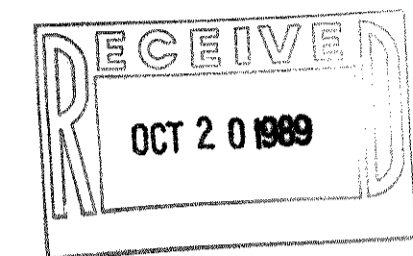
PLAN OF PROPOSED IMPROVEMENT

OXBO CREEK BRIDGE & APPROACHES

TOWN ROAD
LINCOLN COUNTY

STATE PROJECT NUMBER
9857-03-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9857-03-70		



*Final Plans Received
As Approved For
Submitted To WisDOT
M.K.H.
10/23/89*

APPROVED FOR
LINCOLN
COUNTY BY

10/23/89 DATE *Michael Hop* HIGHWAY COMMISSIONER

ORIGINAL
PLANS PREPARED BY
BARRIENTOS & ASSOC., INC.
CONSULTING ENGINEERS
MADISON, WISCONSIN

Lauren Buro
10-18-89

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Supervisor BAI District Engineer FWB
Designer BAI
District Engineer RJS

APPROVED:
DATE: _____ DISTRICT DIRECTOR

APPROVED:
DATE: _____ REGIONAL CHIEF ROAD DESIGN ENGINEER

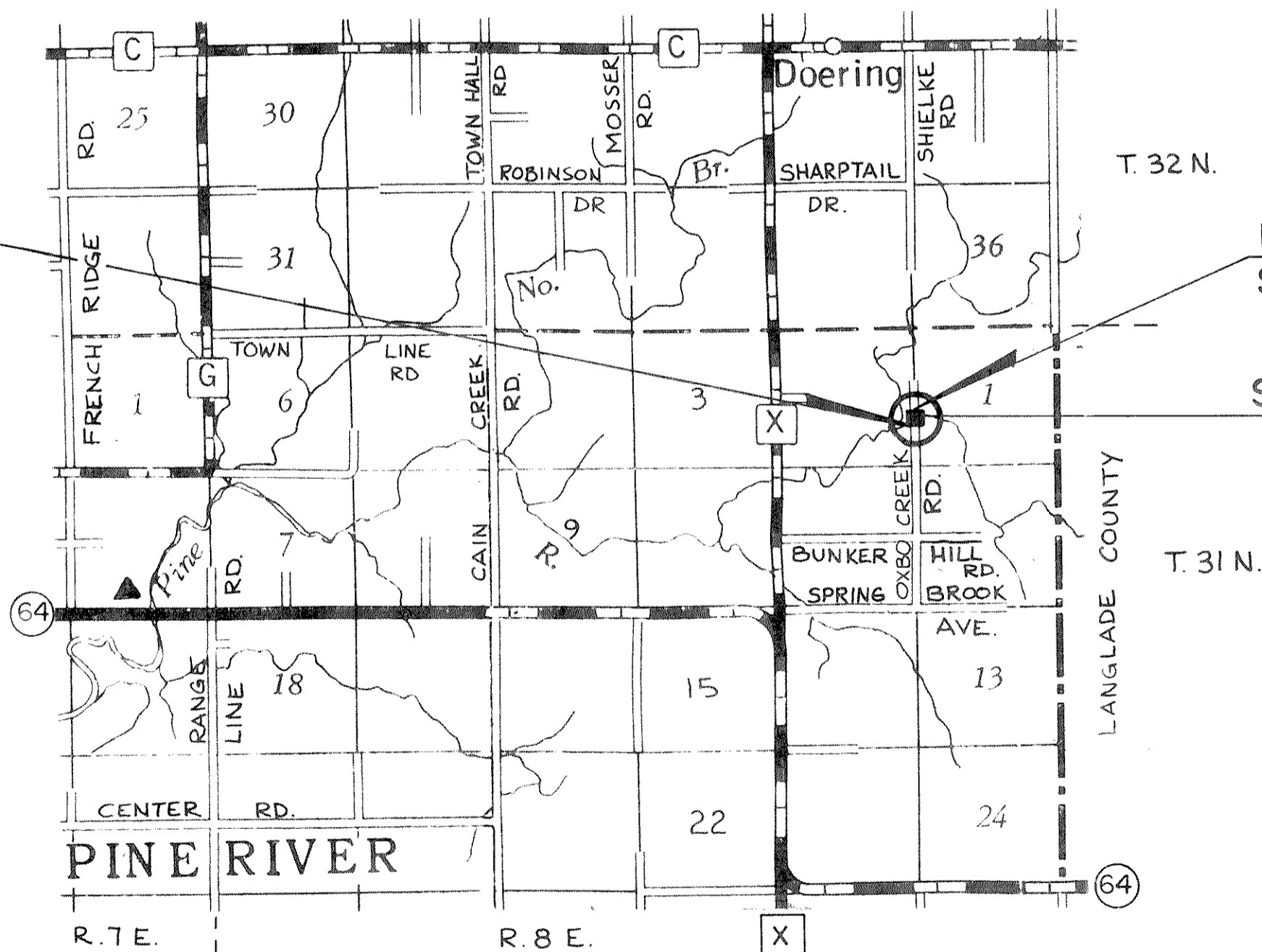
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 5 WISCONSIN DIVISION

APPROVED:
DATE: _____ DIVISION ADMINISTRATOR

BEGIN PROJECT
STA. 14 + 50
N = 498,700 (±100')
E = 2,141,400 (±100')

END PROJECT
STA. 18 + 60

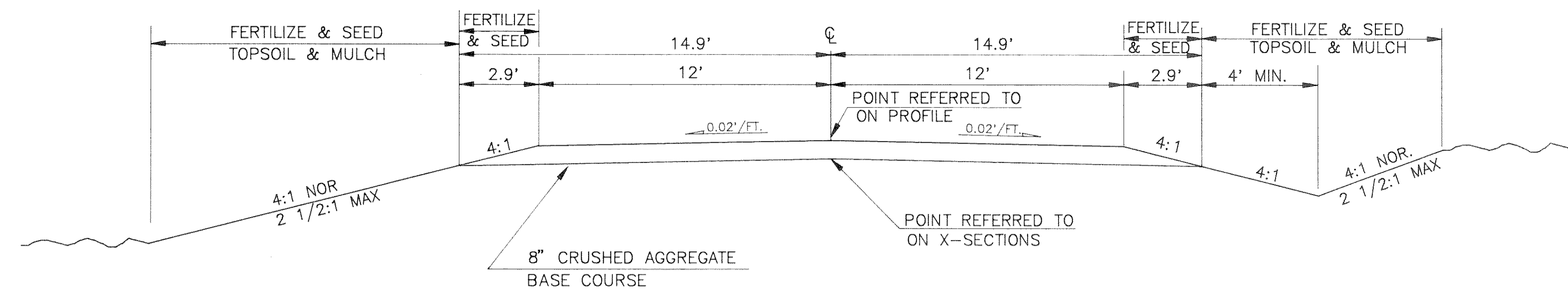
STRUCTURE B-35-107



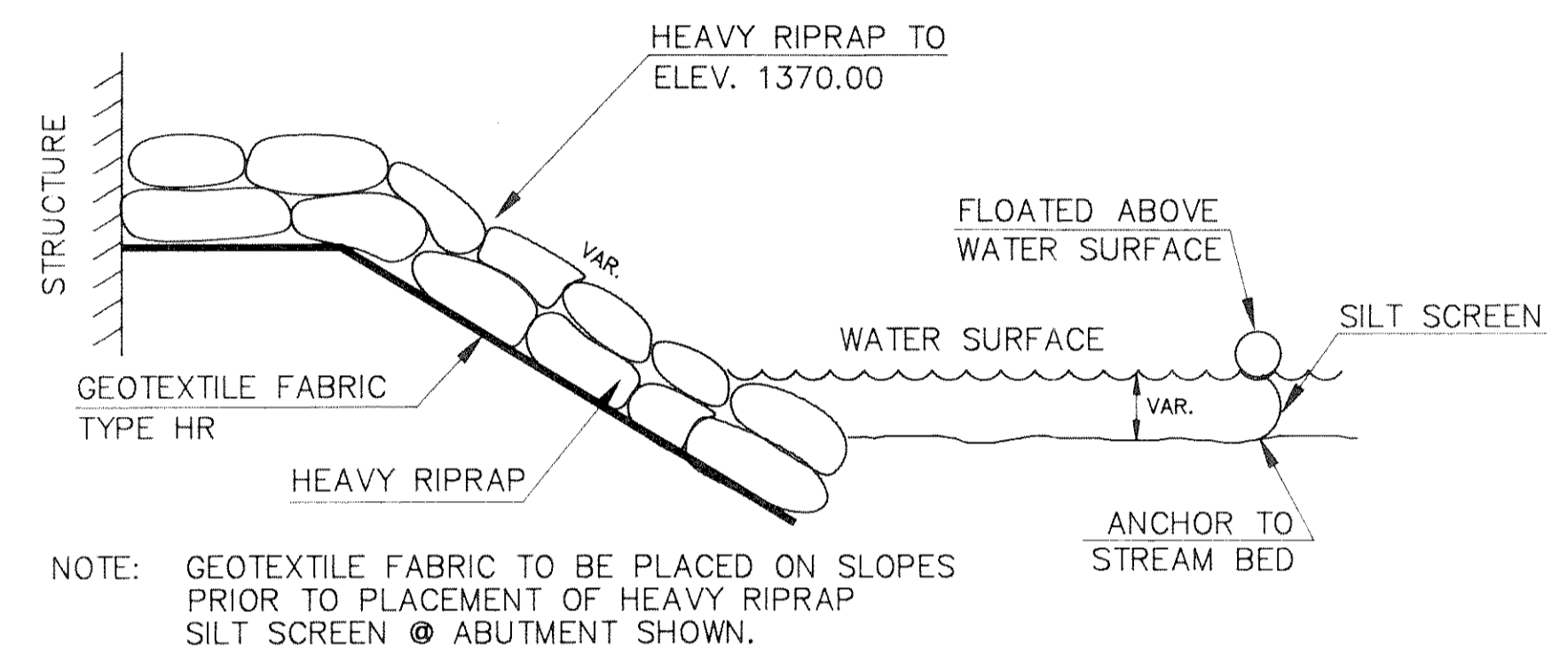
LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.078 MI. (RURAL)

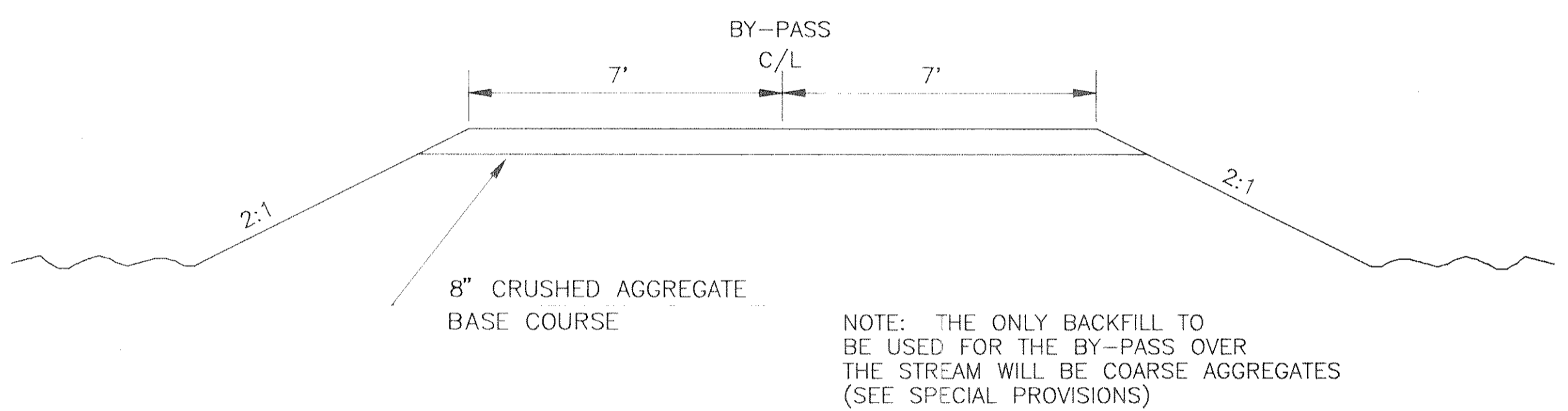
NOTE: All coordinates shown are referenced to the WISCONSIN COORDINATE SYSTEM, CENTRAL ZONE, and are scaled from the DOERING QUADRANGLE for identification purposes only.



TYPICAL CROSS SECTION



DETAIL FOR SILT SCREEN



TYPICAL BY-PASS CROSS SECTION

STA. 15+12 - 16+05
STA. 16+27 - 17+20

GENERAL NOTES

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS UNCLASSIFIED EXCAVATION. THE LOCATION OF EBS WILL BE DETERMINED BY THE ENGINEER.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCLUSIVE OF THE ROADBED, ARE TO BE FERTILIZED AND SEEDED AS DIRECTED BY THE ENGINEER.

SHRINKAGE IS ESTIMATED AT 30% BASED ON VOLUME OF FILL.

SEED MIXTURE NUMBER 10 SHALL BE USED.

EXACT LOCATION OF ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

NO TREES (AND/OR SHRUBS) ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

FILL MATERIAL USED TO CONSTRUCT THE TEMPORARY BY-PASS SHALL BE REMOVED PRIOR TO COMPLETION OF THE PROJECT, PAID FOR AS UNCLASSIFIED EXCAVATION, AND USED AS SIDE SLOPE FILL ON THE NEW APPROACHES.

ORIGIN OF LEVELS - U.S.C.G.S. B.M. C 45. ABOUT 10.6 MILES EAST ALONG S.T.H. 64 FROM MERRILL, LINCOLN COUNTY, ABOUT 100 FEET WEST OF THE JUNCTION WITH C.T.H. "X", IN THE SOUTHWEST CORNER OF THE SPRINGBROOK SCHOOL YARD, ABOUT 50 FEET EAST OF THE STANDARD OIL CO. GASOLINE PUMPS, AND 25 FEET SOUTH OF THE CENTER LINE OF THE HIGHWAY. A STANDARD DISK, STAMPED "C 45 1934" AND SET IN THE TOP OF A CONCRETE POST PROJECTING ABOUT 3 INCHES ABOVE GROUND - ELEV. = 1425.19

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

CRUSHED AGGREGATE BASE COURSE

STATION TO STATION	LOCATION	C.Y.
14+50 - 16+08	MAINLINE	140
16+34 - 18+60	MAINLINE	200
15+12 - 16+05	BY-PASS	47
16+27 - 17+20	BY-PASS	47
18+60	P.E. RT.	6

EROSION BALES

STATION	LOCATION	EACH
15+75	LT. & RT.	10
16+75	LT.	5
16+85	RT.	5

WOOD POSTS, 4X4-INCH X 10 FT.

STATION	LOCATION	EACH
16+08	LT. & RT.	2
16+34	LT. & RT.	2

COARSE AGGREGATES

STATION TO STATION	LOCATION	C.Y.
16+05 - 16+27	BY-PASS	120

SILT SCREEN

STATION	LOCATION	L.F.
16+09	S. ABUT.	50
16+33	N. ABUT.	50

SIGNS, TYPE II, REFLECTIVE

STATION	LOCATION	S.F.
16+08	LT. & RT.	6
16+34	LT. & RT.	6

GEOTEXTILE FABRIC, TYPE HR

STATION TO STATION	LOCATION	S.Y.
16+05 - 16+27	BY-PASS	55

CLEARING

LOCATION	STA.	STA.
14+00 - 18+00	4	4

SILT FENCE (SILTY SOILS)

STATION TO STATION	DELIVERED & INSTALLED L.F.	MAINTENANCE L.F.
14+75 - 16+00 LT. & RT.	250	90
16+50 - 17+25 LT.	75	30
16+80 - 17+25 RT.	45	20
15+50 - 16+00 BY-PASS	50	20
16+25 - 16+75 BY-PASS	50	20

TOPSOIL, FERTILIZER, SEED & MULCH

LOCATION	TOPSOIL SQ. YD.	FERTILIZER CWT. (TYPE B)	SEEDING POUND	MULCHING SQ. YD.	TEMPORARY SEEDING POUND
STA. 14+50 TO STA. 16+08	210	0.3	5	210	---
STA. 16+34 TO STA. 18+60	215	0.3	6	215	---
BY-PASS	135	0.2	---	135	3
BORROW PIT	---	0.2	4	---	---

YARDAGE SUMMARY

STAGE 1 - CONSTRUCT TEMPORARY BY-PASS

UNCLASSIFIED EXCAVATION = 23 C.Y.
FILL = 141 C.Y.
BORROW EXCAVATION = 160 C.Y.
SHRINKAGE = 30%

STAGE 2 - CONSTRUCT APPROACHES & REMOVE BY-PASS

UNCLASSIFIED EXCAVATION = 387 C.Y.
FILL = 229 C.Y.
WASTE = 89 C.Y.
SHRINKAGE = 30%

STANDARD DETAIL DRAWINGS

- 8E8-1 TYPICAL INSTALLATIONS OF EROSION BALES
- 8E9-3 SILT FENCE
- 12A3-4 NAME PLATE - STRUCTURES
- 15C1-7 CONSTRUCTION BARRICADES AND STANDARD SIGNS
- 15C2-1 TRAFFIC CONTROL TO CLOSE HIGHWAY UNDER CONSTRUCTION

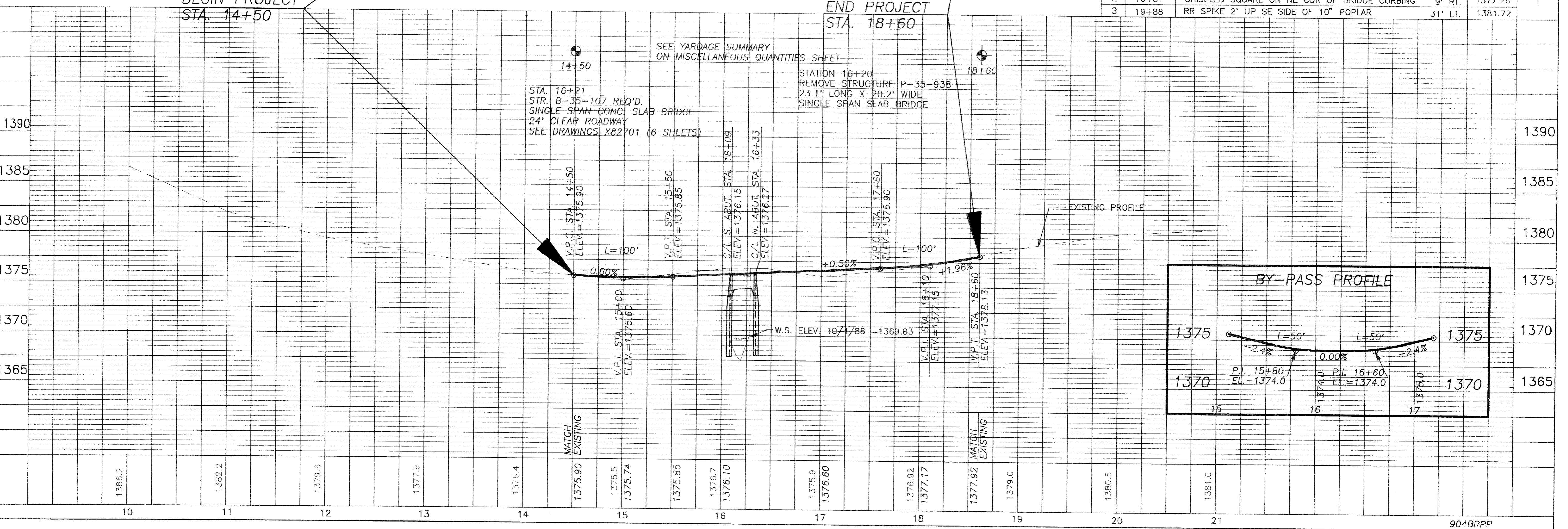
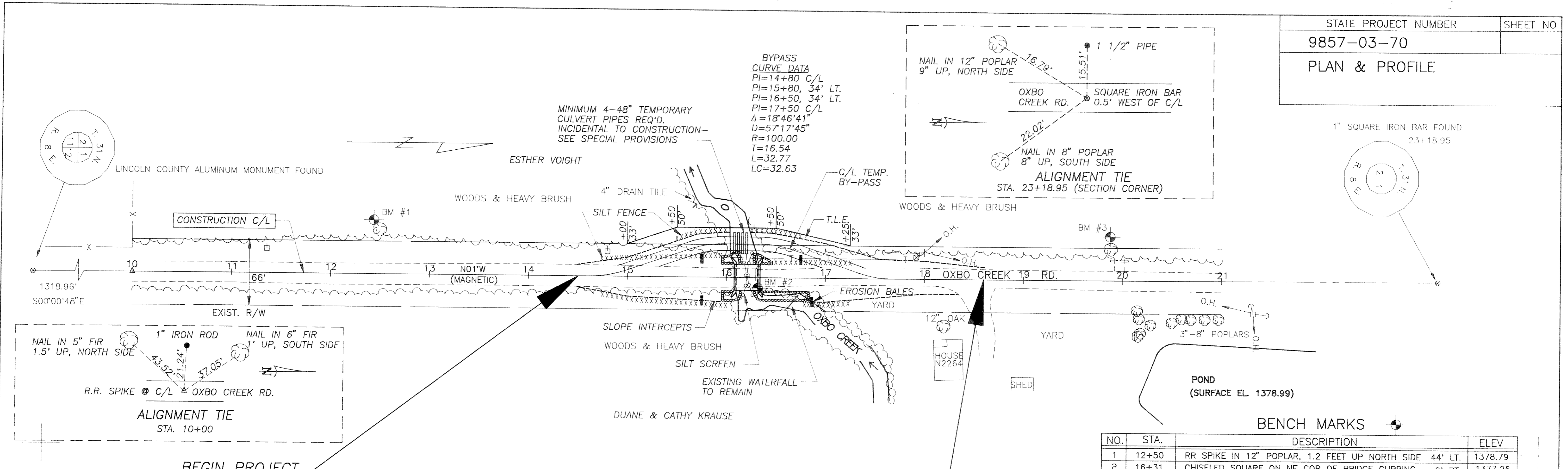
ABBREVIATIONS

MAX. MIN. O.H. W.S.	MAXIMUM MINIMUM OVERHEAD WATER SURFACE
---------------------	--

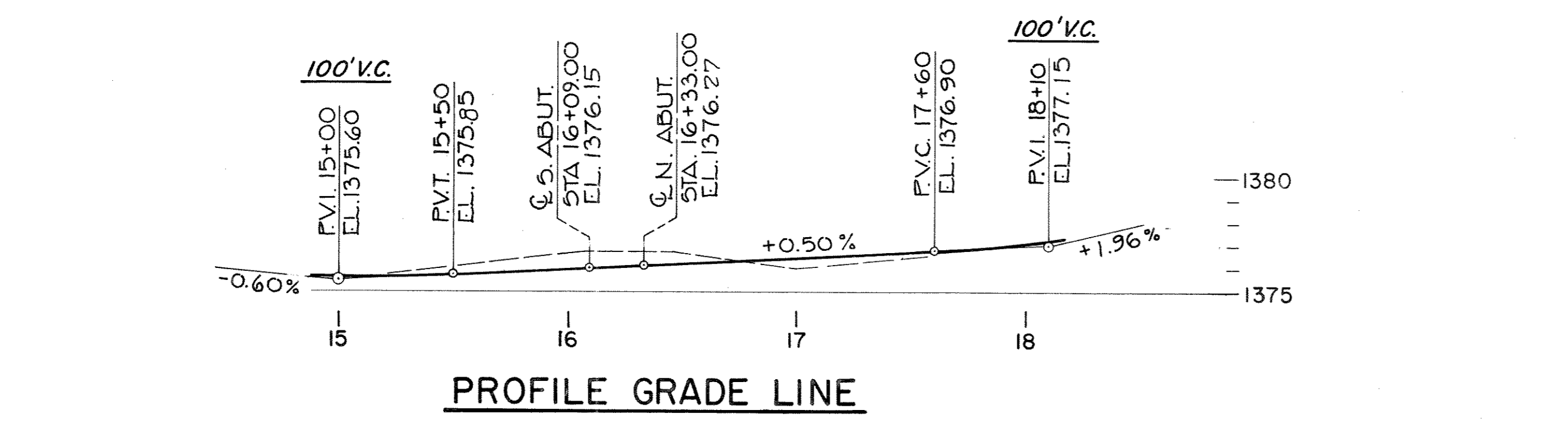
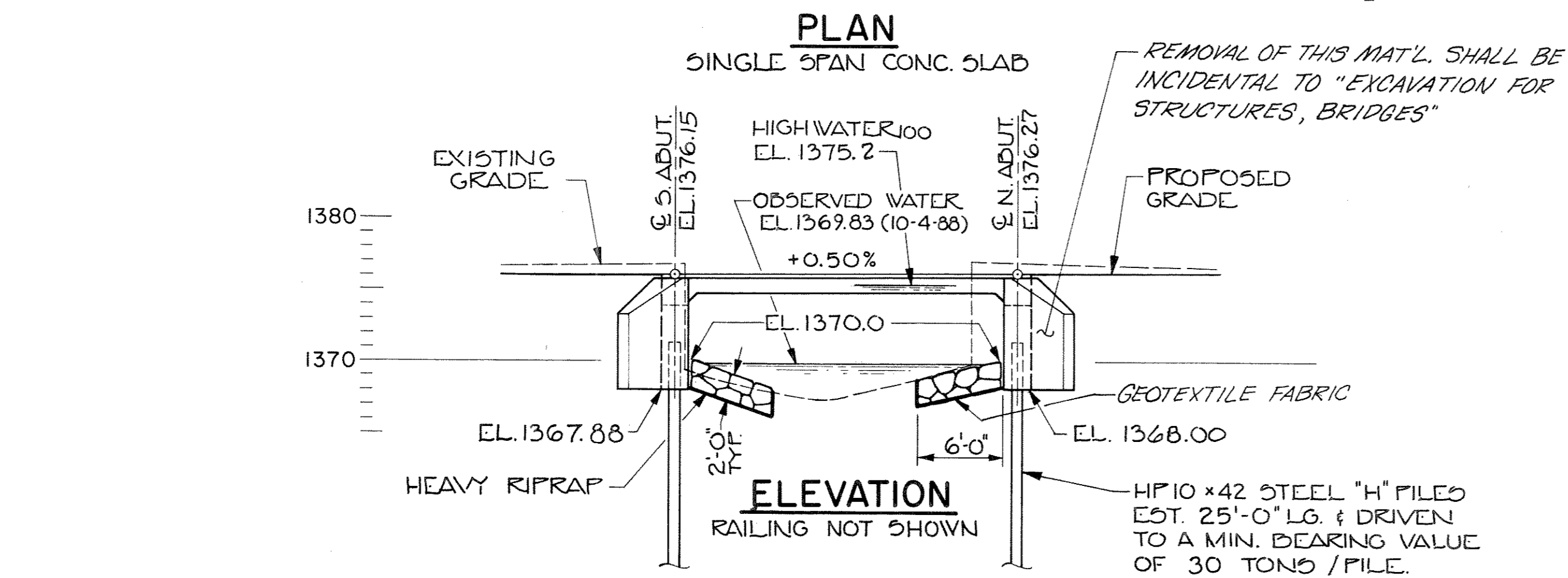
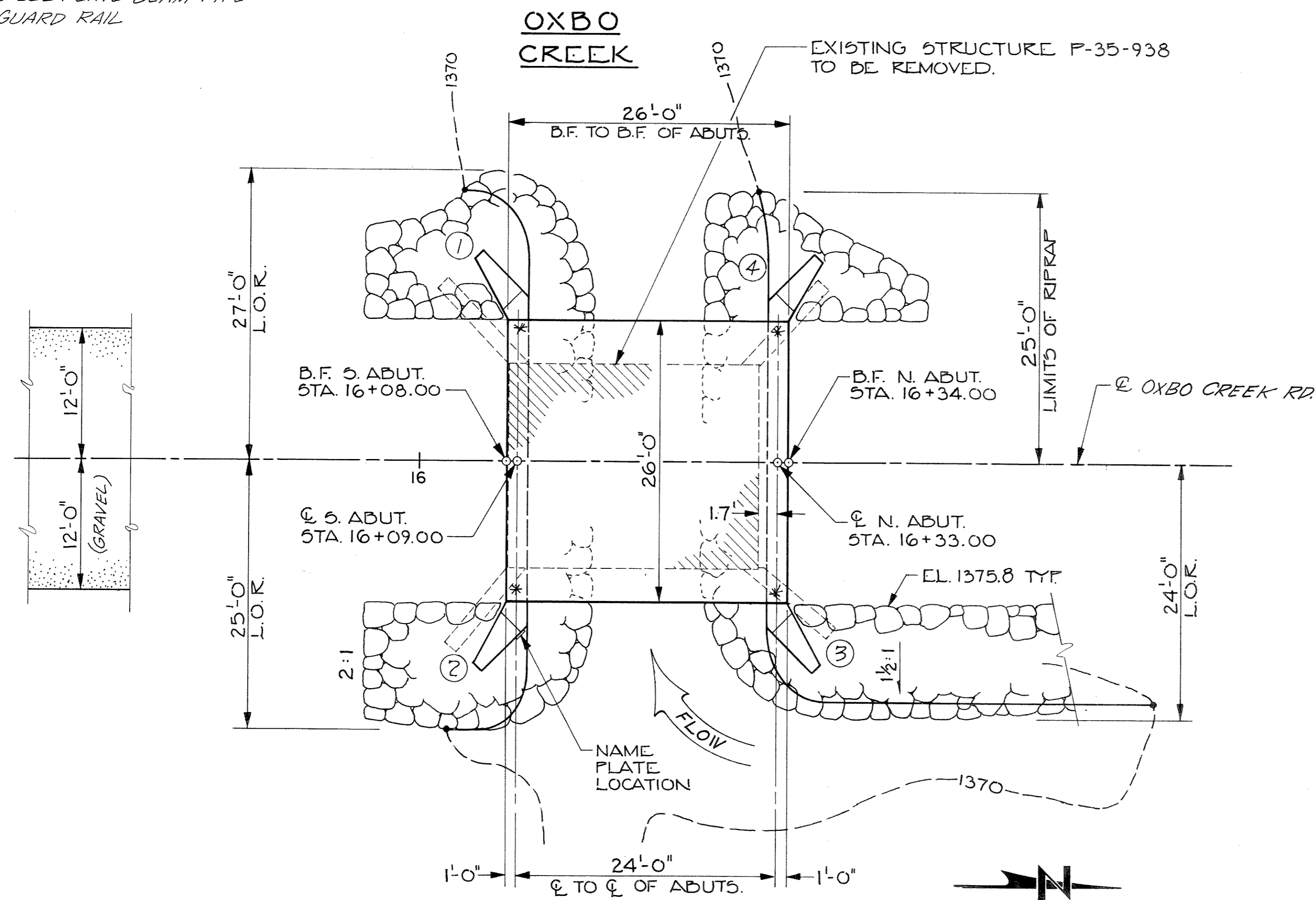
UTILITIES

GTE NORTH INCORPORATED
ATTN: RON KOLTON
202 CALLON STREET
WAUSAU, WI 54401
(715)847-1511

WPS
ATTN: GENE BONDIOLI
P.O. BOX 333
MERRILL, WI 54452
(715)536-5341



* ANCHOR ASSEMBLY FOR STEEL PLATE BEAM TYPE GUARD RAIL



ABBREVIATIONS
 F — Fine M — Medium C — Coarse
 Ws — Weathered So — Sound

MATERIAL SYMBOLS

LEGEND OF PROBING

95/6=95 Blows for 6" Penetration
 Probing taken with a 350# wt. Falling 18" on a 2" O. D. Point.

Probing No. Sta. Elevation
 7 Average Blows Per Foot
 Refusal 95/6

LEGEND OF BORING

Unconfined Strength — 7.7
 Blows Per Ft. Using 140# Wt. Falling 30"
 Wash Sample
 Shelby Tube — S. T.

Elev. Boring No. Sta.
 Sandy Gravel
 Boulders or Cobbles
 Sand
 Silty Clay
 Limestone

Ground Water Elevation
 No Ground Water Observed Above This Elevation

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 Division of Highways 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.

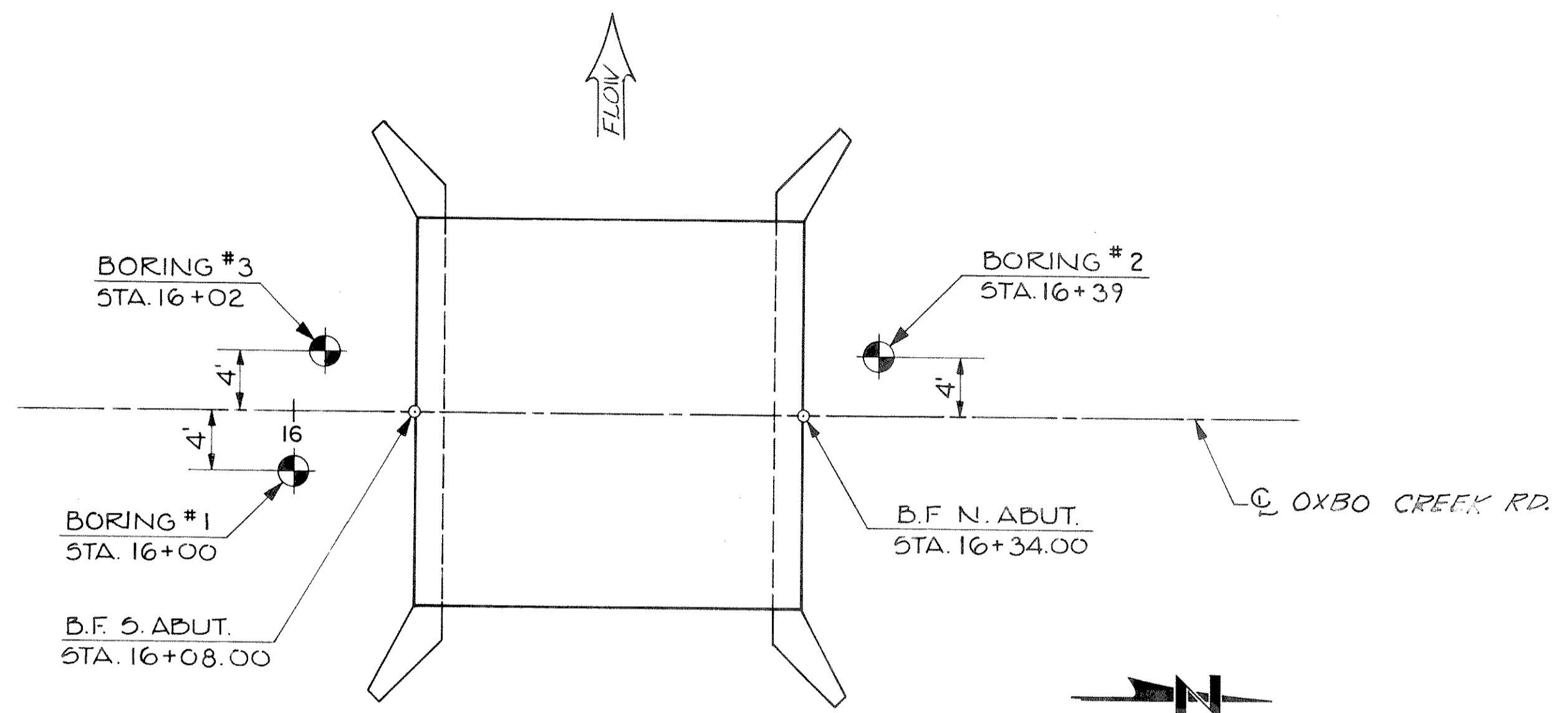
No.	Date.	Revision	By

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

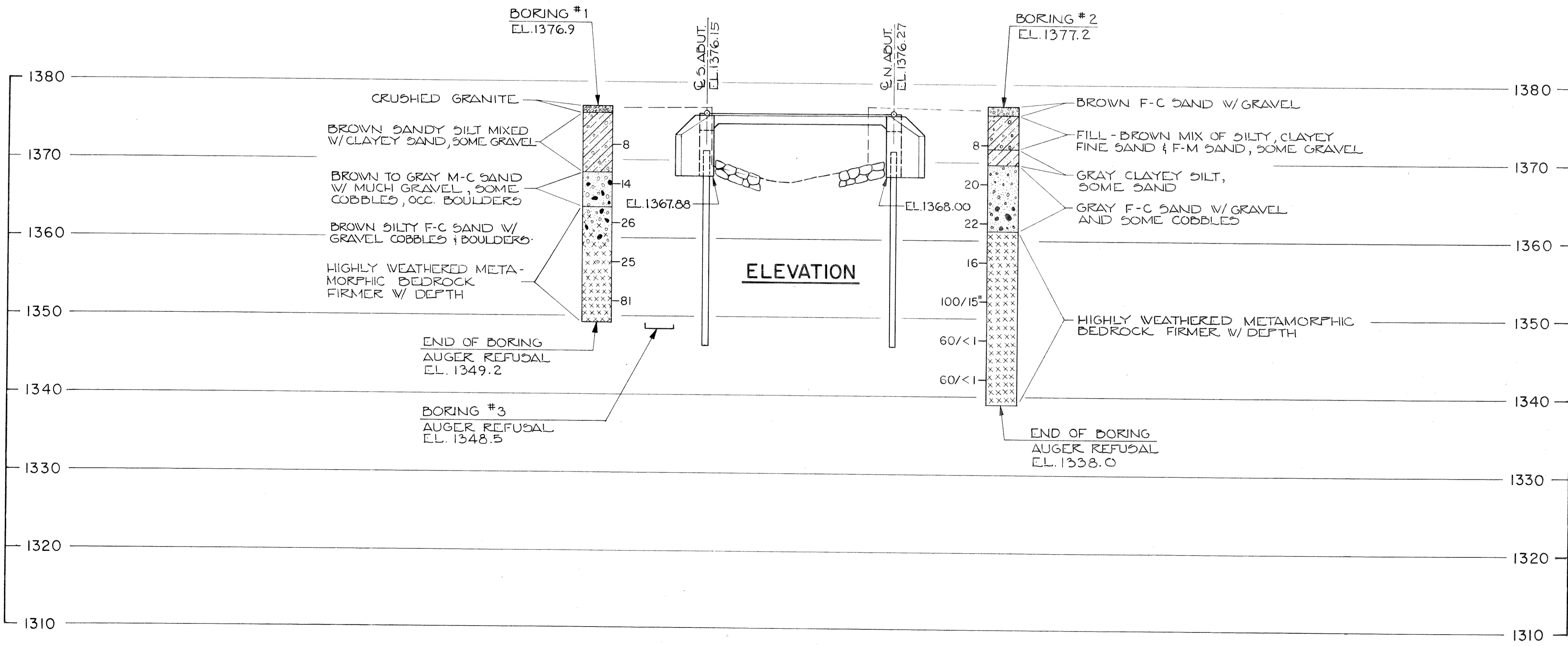
STRUCTURE B-35-107

Const. Spec. W15 '89 Drawn By S.R.L. Plans Checked L.M.D.

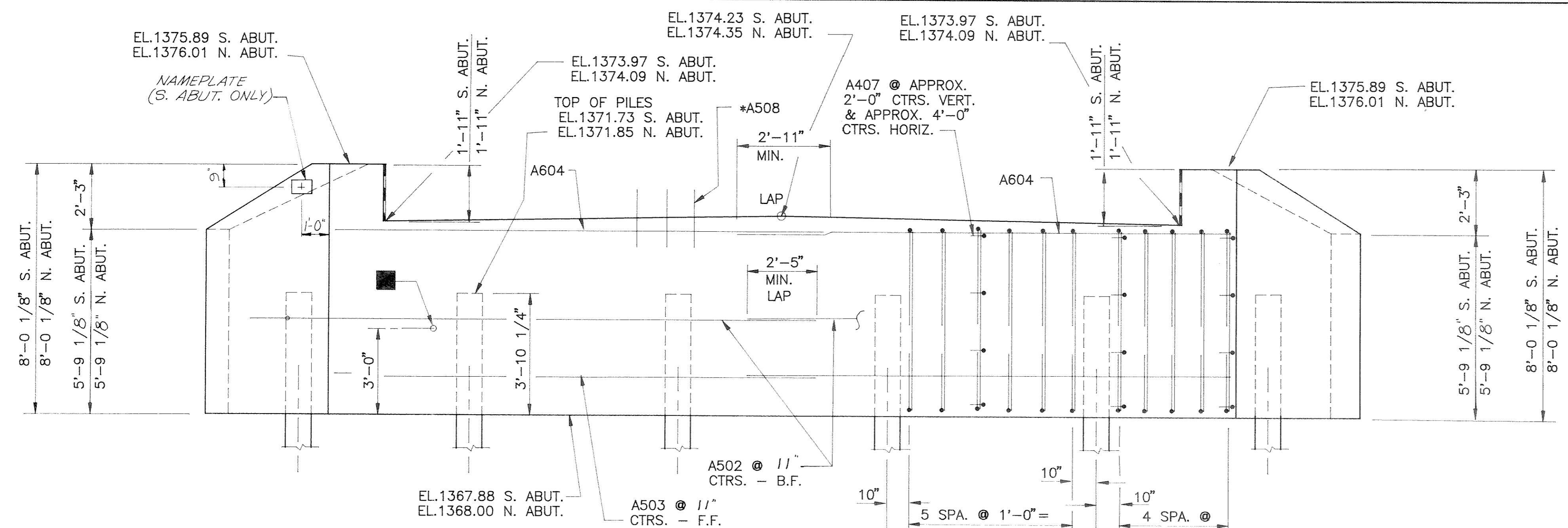
SUBSURFACE EXPLORATION SHEET 2 OF 6
 X 82701



PLAN



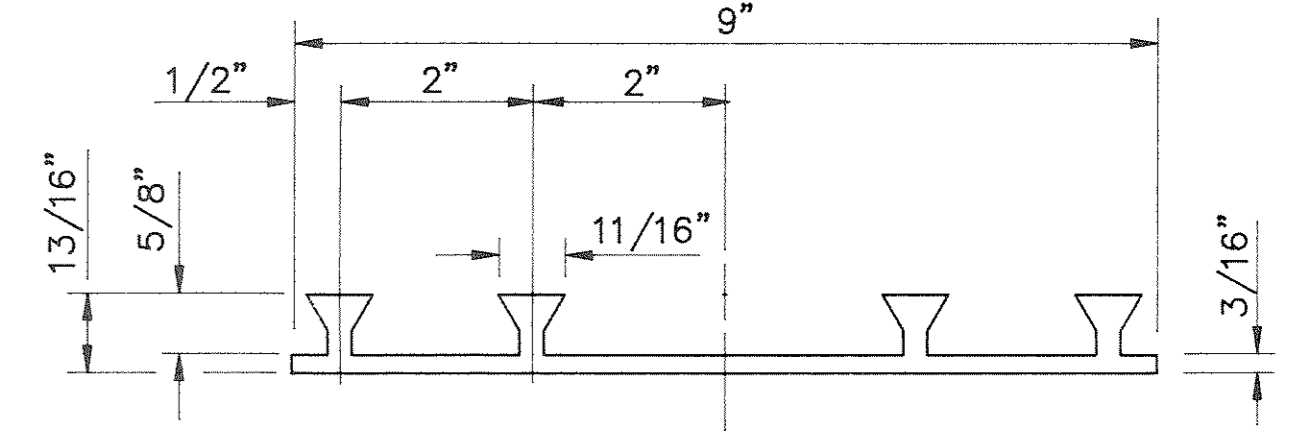
ELEVATION



WINGS 2 & 4

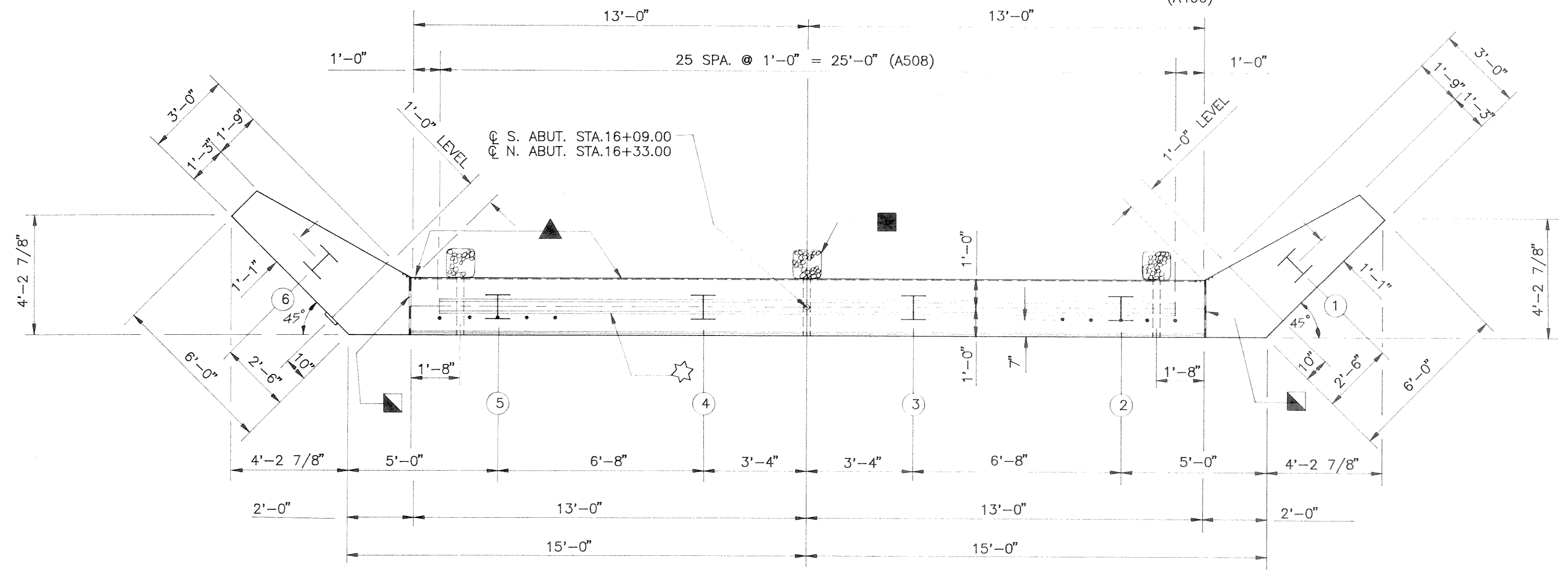
ELEVATION
LOOKING @ F.F.

WINGS 1 & 3

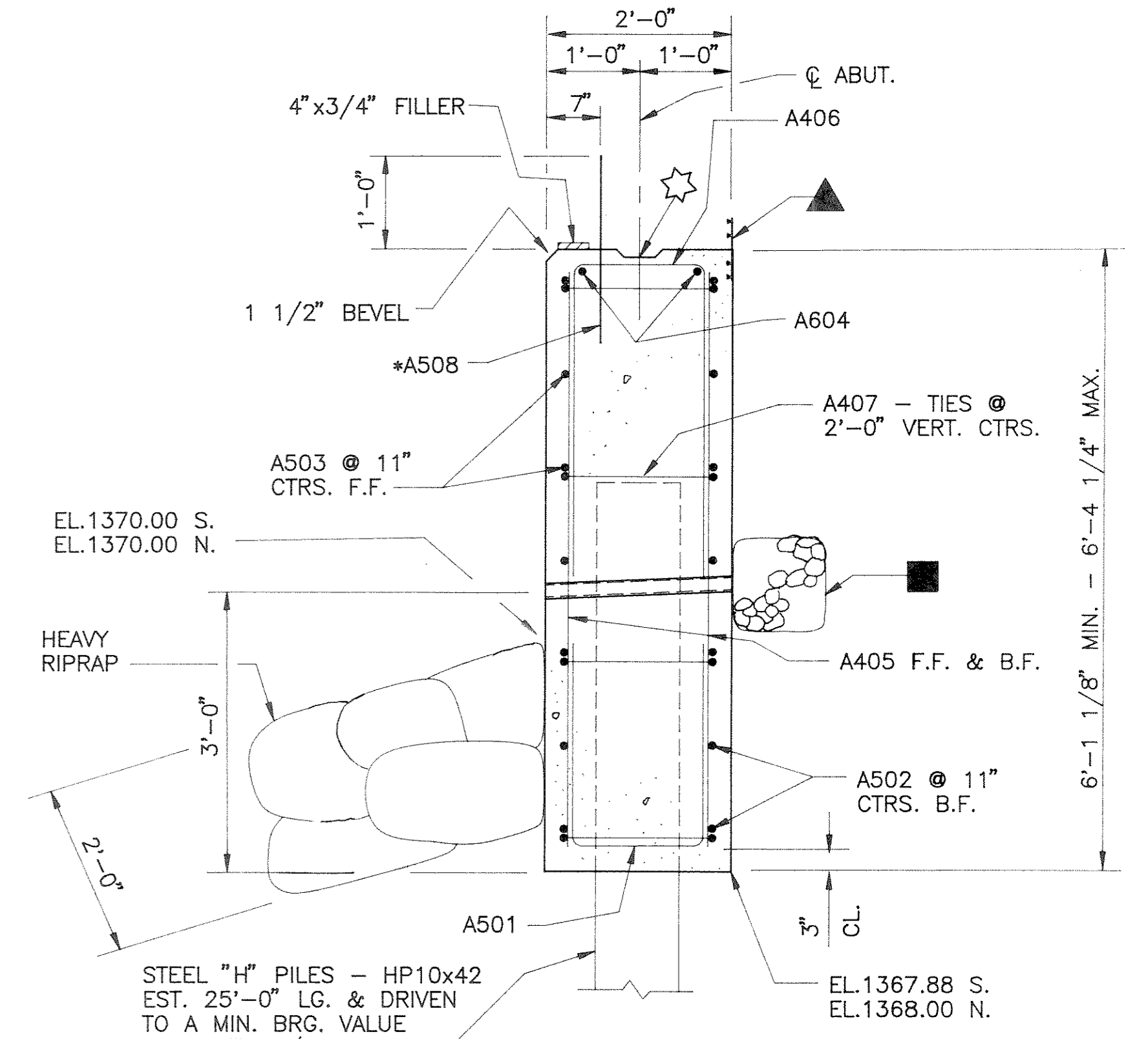


POLYVINYL CHLORIDE WATERSTOP

*A508 DOWEL BARS MAY BE PLACED AFTER CONCRETE IS POURED, BUT BEFORE INITIAL SET HAS TAKEN PLACE.

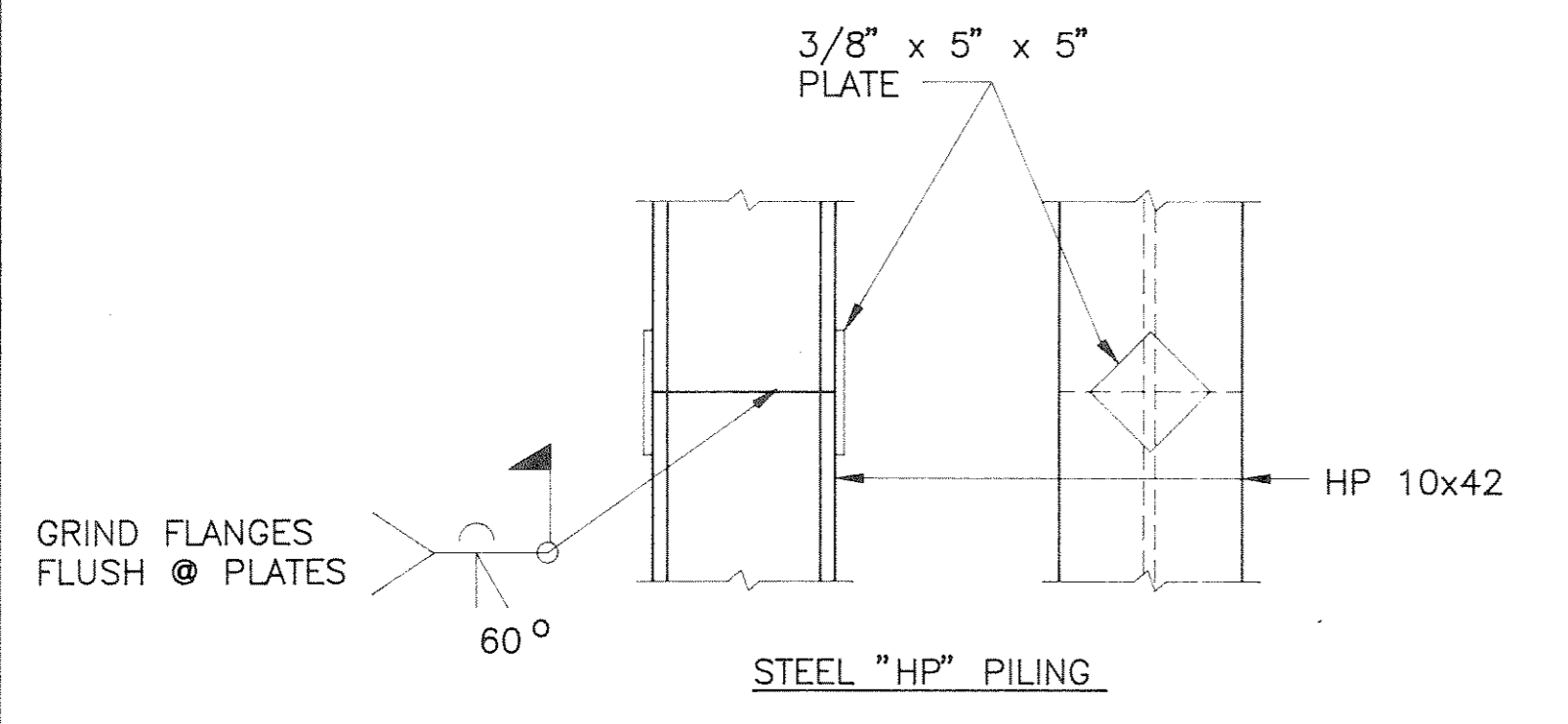


PLAN



SECTION THRU
ABUTMENT BODY

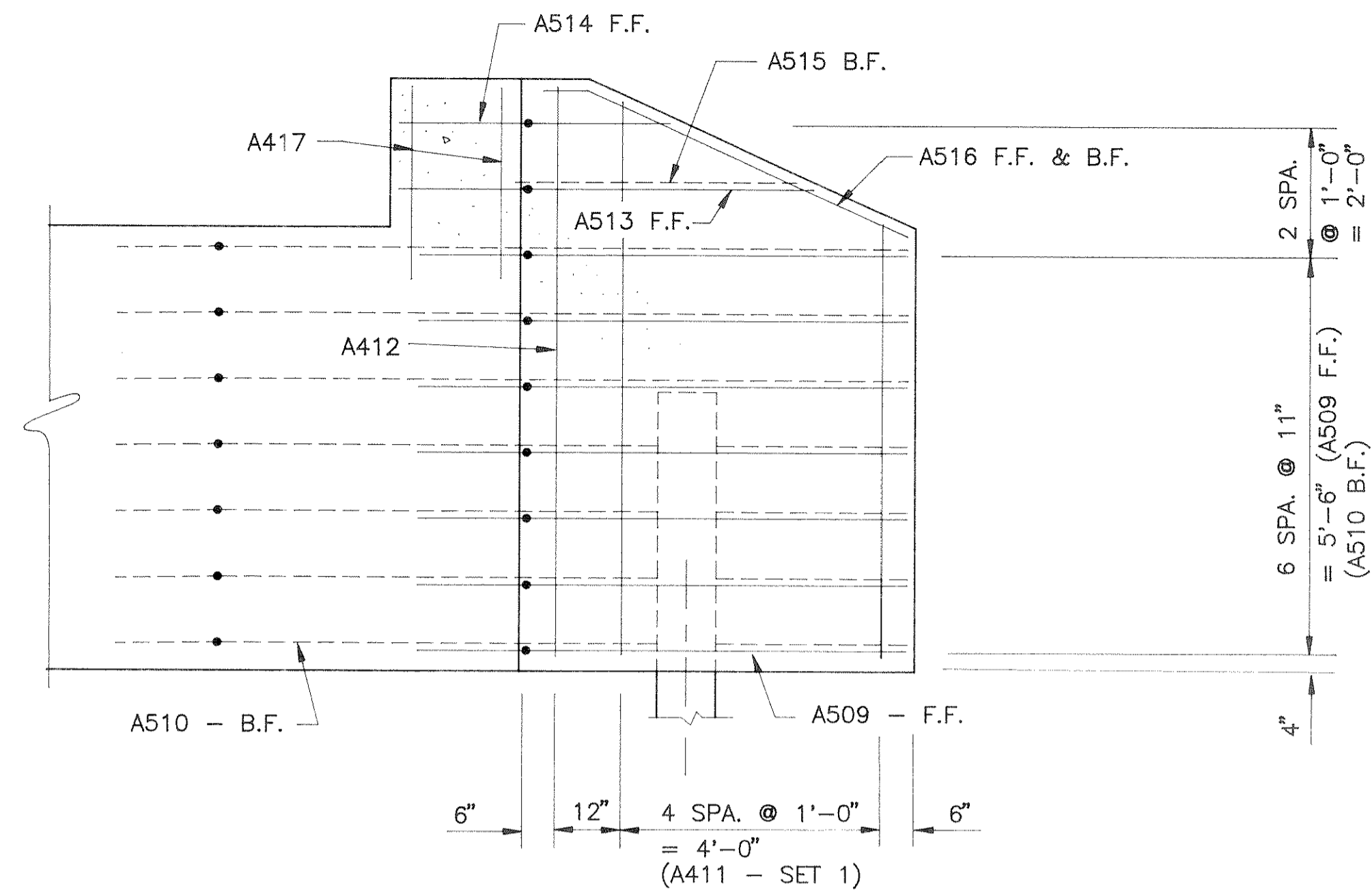
NOTE: DO NOT PLACE FILL ABOVE TWO FEET FROM BOTTOM OF ABUTMENT BODY UNTIL SUPERSTRUCTURE IS IN PLACE.



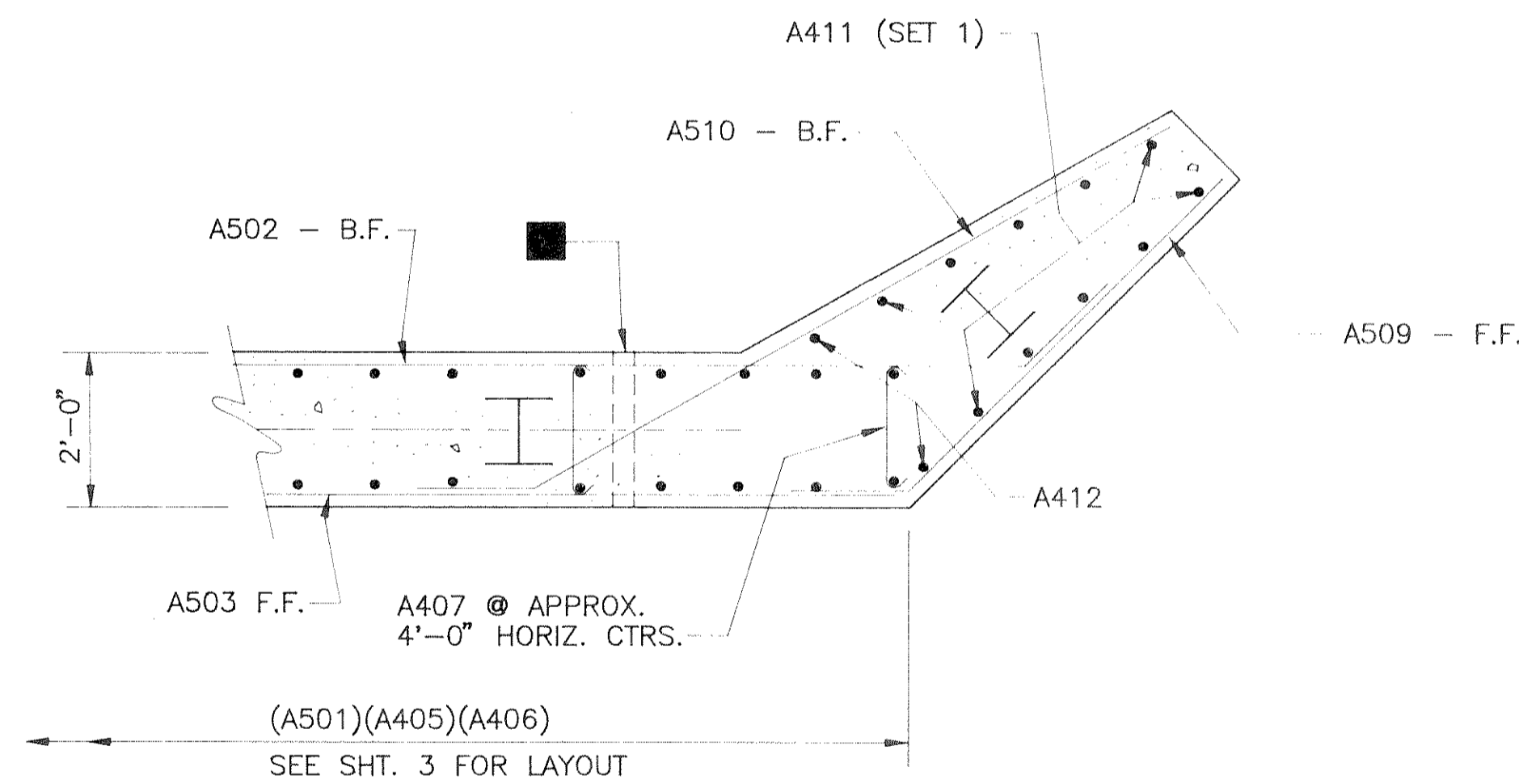
PILE SPLICE DETAILS

- 2" DIA. WEEP HOLE @ LOCATIONS SHOWN. USE FILTER CLOTH W/SELECT GRANULAR MATERIAL @ EA. HOLE (ON B.F. 12"x12"x12" MIN.) COST TO BE INCIDENTAL TO "CONCRETE MASONRY BRIDGES."
- ★ CONST. JOINT KEYWAY FORMED WITH A SURFACED, BEVELED 2"x 6".
- SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONC.)
- ▲ POLYVINYL CHLORIDE WATERSTOP TO EXTEND FULL WIDTH OF ABUT. SEAT & VERT. FROM SEAT TO TOP OF WINGS. P.C.W. SHALL BE BUTT-SPLICED AT ALL INTERSECTIONS BY USING A HEATED SPLICING IRON. HOLD FLUSH TO CONC.

No.	Date.	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-35-107			
Const. Spec.	WIS. 89	Drawn By	T.R.L.
		Plans Checked	L.M.B.
ABUTMENTS			SHEET 3 OF 6
			X 82701



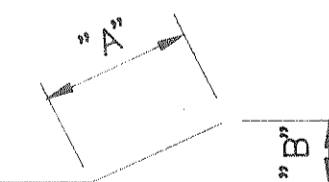
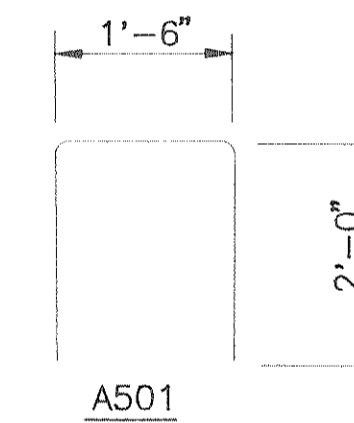
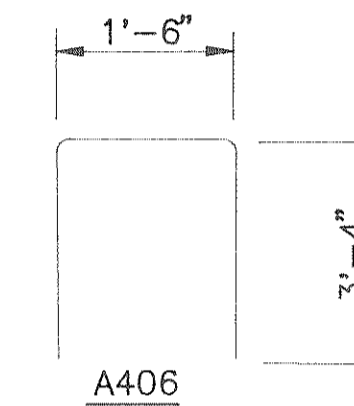
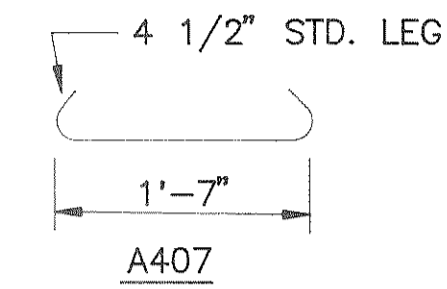
ELEVATION OF WINGS



TYP. PLAN SECTION

SHOWING BAR STEEL BELOW SEAT

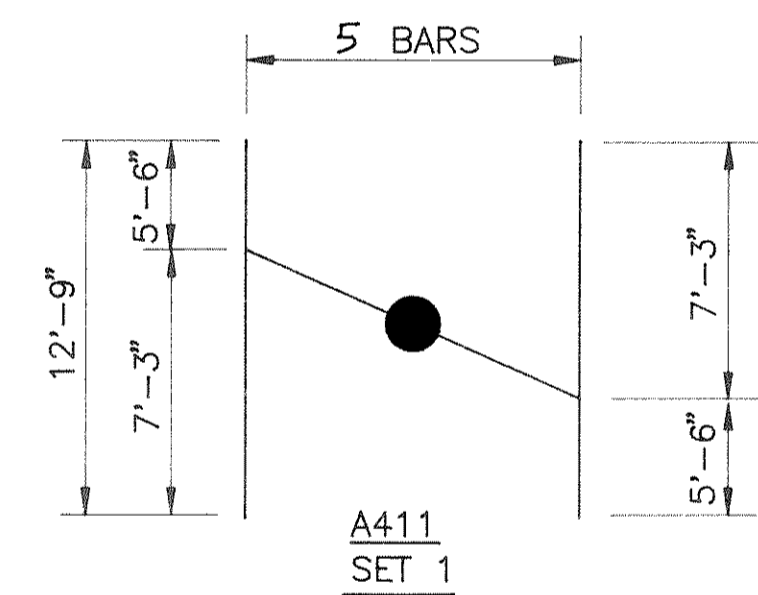
2" DIA. WEEP HOLE @ LOCATIONS SHOWN. USE FILTER CLOTH W/SELECT GRANULAR MATERIAL @ EA. HOLE (ON B.F. 12"x12"x12" MIN.) COST TO BE INCIDENTAL TO "CONCRETE MASONRY BRIDGES."



BILL OF BARS 3,140# (2 ABUTS.)

MARK	NO.	LENGTH	BENT	CUT	LOCATION
A501	56	5'-3"	X		BODY - VERT. - STIRRUP @ BTM.
A502	28	19'-7"	X		BODY - HORIZ. - B.F.
A503	28	16'-3"			BODY - HORIZ. - F.F.
A604	8	16'-6"			BODY - HORIZ. - TOP
A405	56	5'-8"			BODY - VERT. B.F. & F.F.
A406	56	8'-0"	X		BODY - VERT. - STIRRUPS @ TOP
A407	64	2'-4"	X		BODY - HORIZ. TIES
A508	52	2'-0"			BODY - VERT. - DOWELS @ TOP
A509	28	7'-3"	X		WINGS - HORIZ. - F.F.
A510	28	10'-10"	X		WINGS - HORIZ. - B.F.
A411	20	12'-9"		X	WINGS - VERT. - F.F. & B.F.
A412	8	7'-7"			WINGS - VERT. - F.F. & B.F.
A513	4	5'-6"	X		WINGS - HORIZ. - F.F.
A514	4	5'-1"	X		WINGS - HORIZ. - F.F.
A515	4	4'-5"			WINGS - HORIZ. - B.F.
A516	8	5'-9"	X		WINGS - HORIZ. - F.F. & B.F.
A417	8	2'-9"			WINGS - VERT. - CORNERS

BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

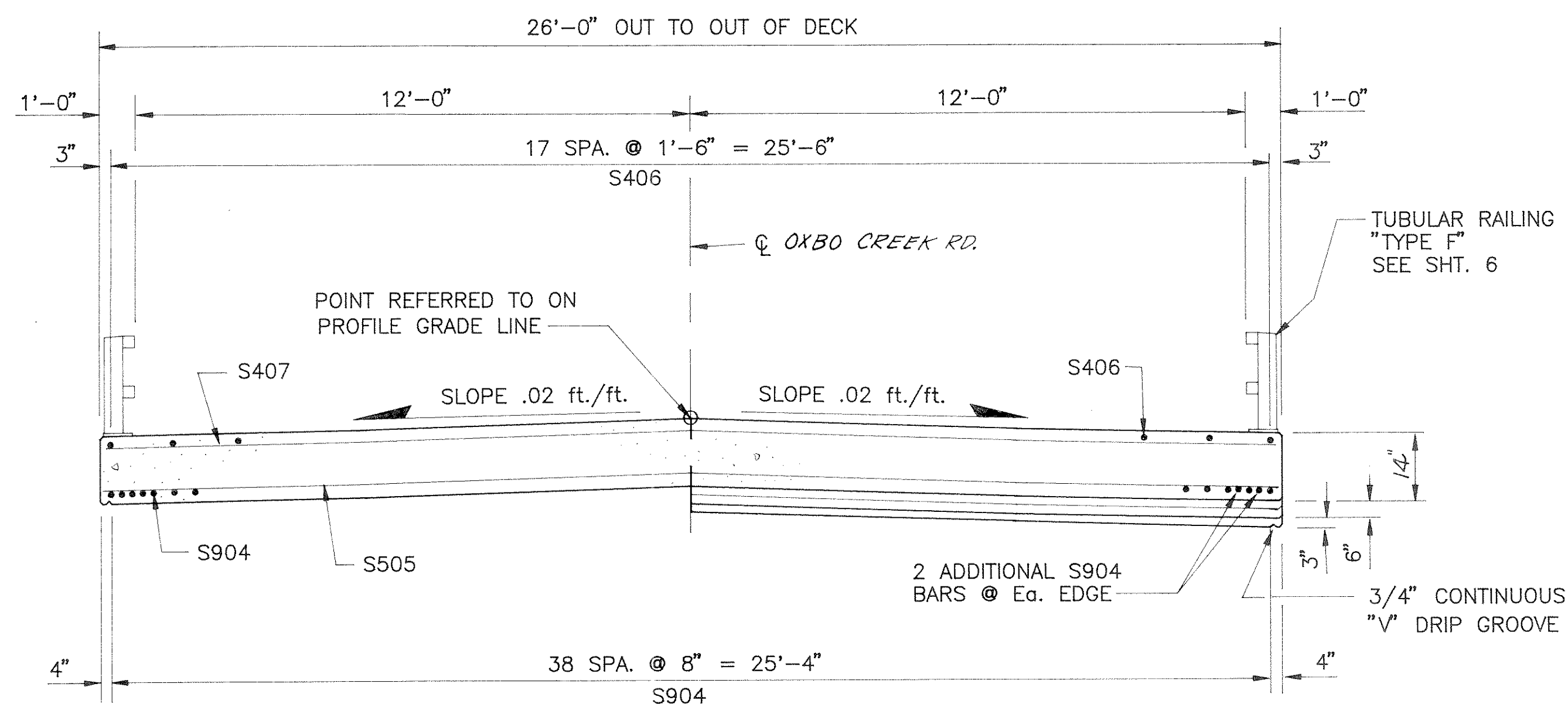


CUTTING DIAGRAMS

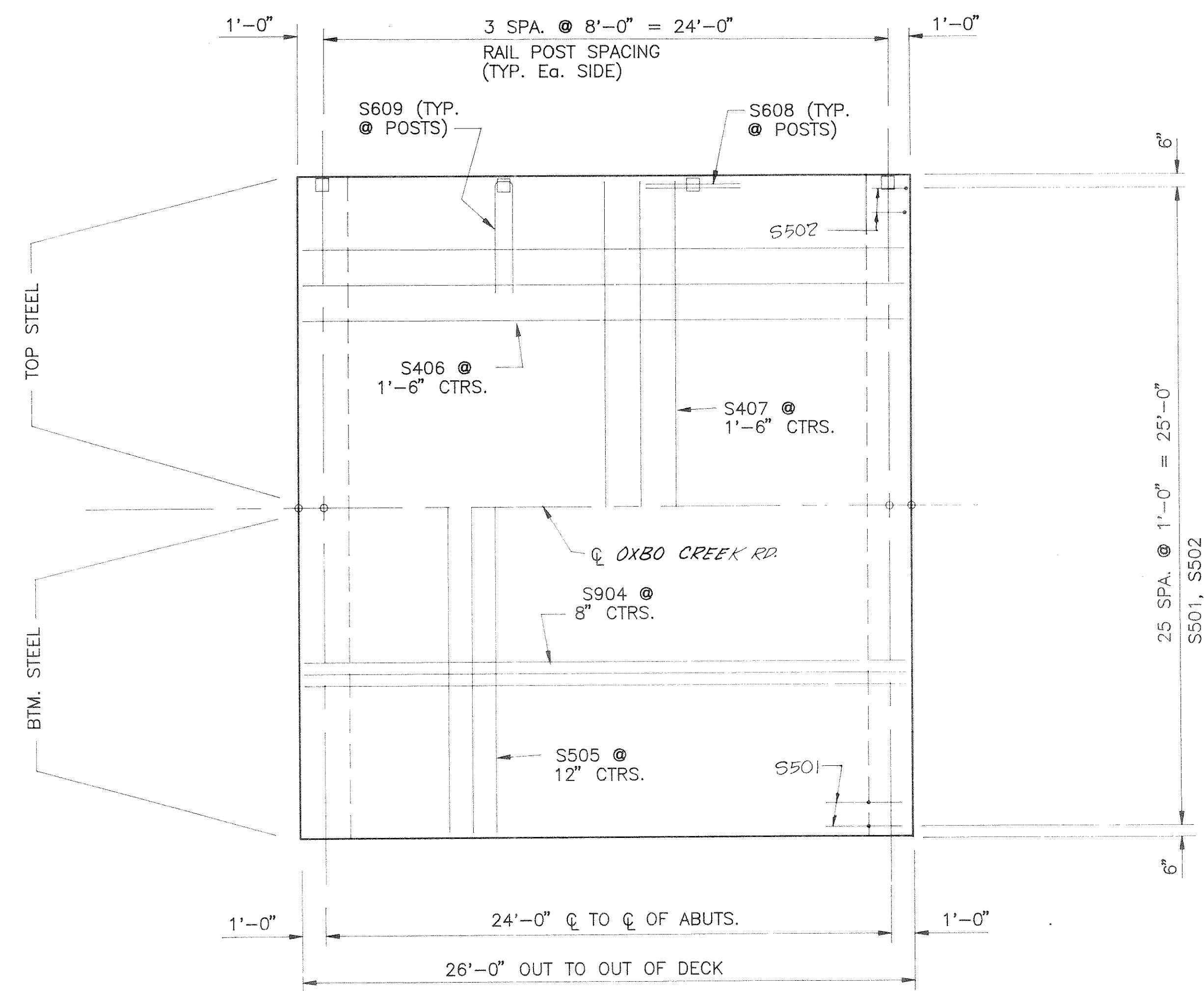
CUT ALL BARS ALONG THIS LINE. MAKE ALL CUTS NORMAL TO BAR AXIS. BUNDLE AND MARK CUT BARS WITH BAR AND SET NUMBER.

MARK	"A"	"B"
A502	1'-6"	1'-1"
A509	1'-6"	1'-1"
A510	1'-6"	11"
A513	1'-9"	1'-3"
A514	1'-9"	1'-3"
A516	8"	4"

No.	Date.	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-35-107			
Const. Spec.	WIS. '89	Drawn By	T.R.L.
		Plans Checked	L.M.B.
WINGS			SHEET 4 OF 6
			X 82701

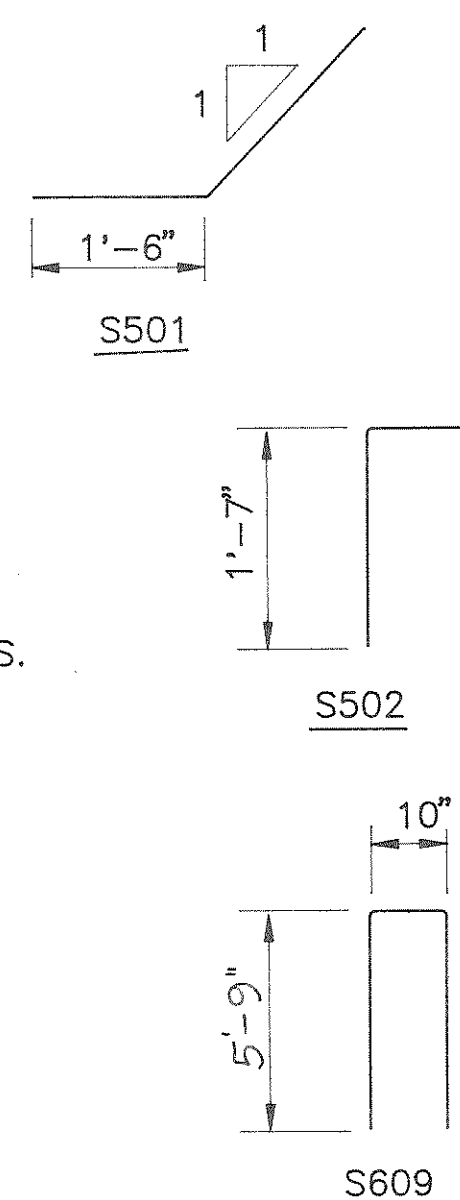


CROSS SECTION THRU ROADWAY



PLAN

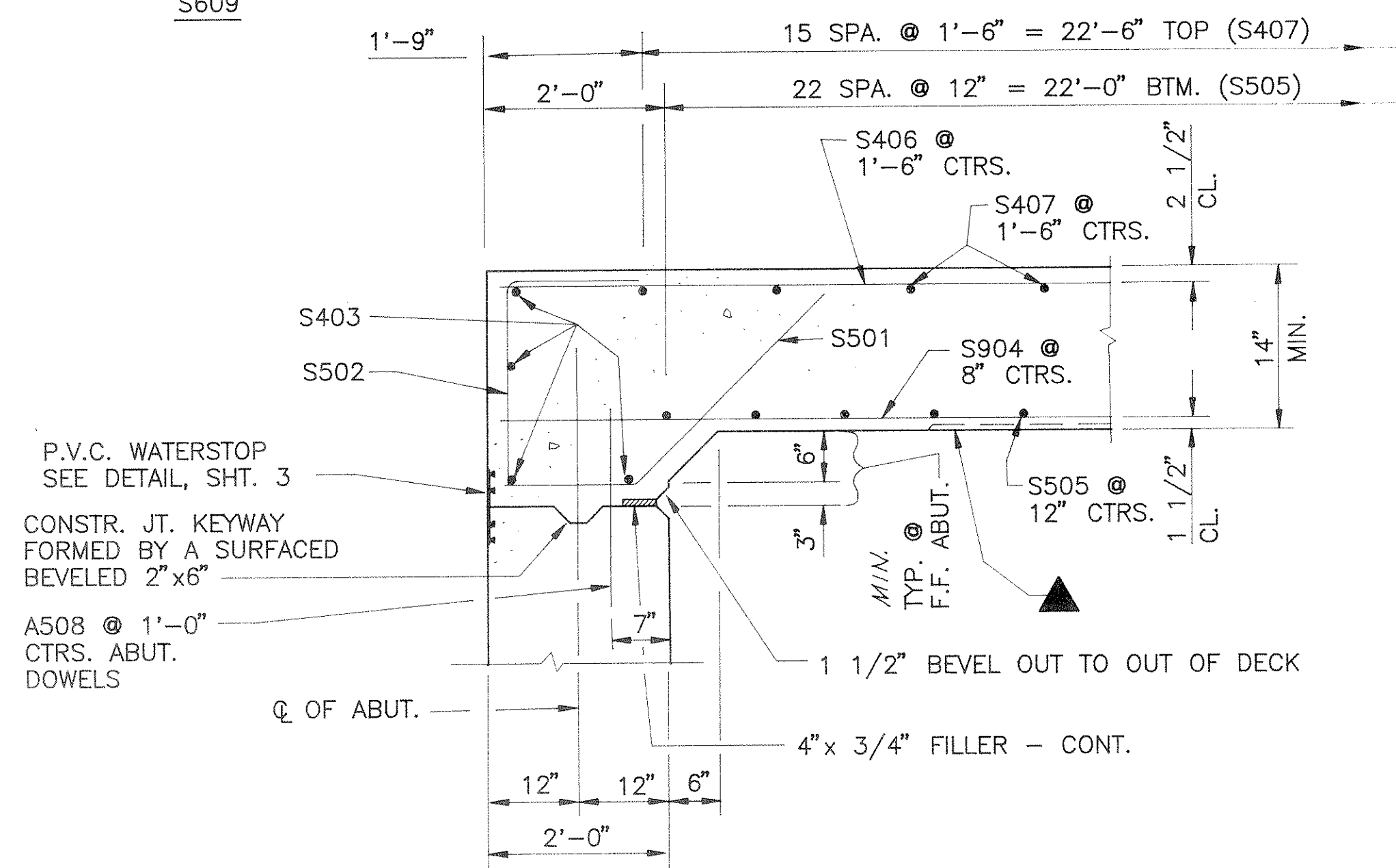
NOTE: ALTERNATE TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CTRS. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CTRS.



BILL OF BARS 4,370# (UNCOATED) 1,275 (COATED)

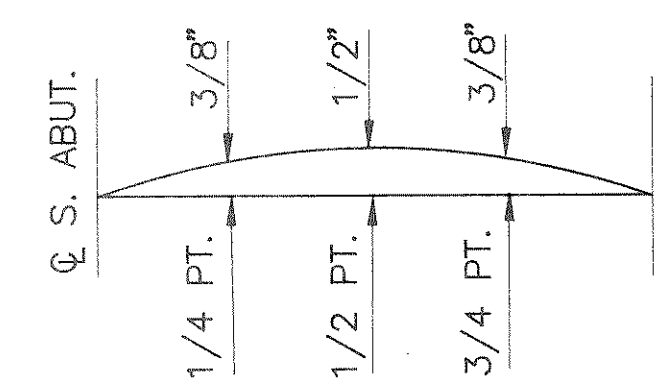
MARK	NO.	LENGTH	COAT	BENT	LOCATION
S501	52	3'-6"	X	X	HAUNCH @ ABUT.- VERT. STIRRUP
S502	52	2'-9"	X	X	HAUNCH @ ABUT.- VERT. STIRRUP
S403	8	25'-8"	X		HAUNCH @ ABUT. HORIZ.
S904	43	25'-8"			SLAB - LONGIT. - BTM.
S505	23	25'-8"			SLAB - TRANSV. - BTM.
S406	18	25'-8"	X		SLAB - LONGIT - TOP
S407	16	25'-8"	X		SLAB - TRANSV. - TOP
S608	16	4'-0"	X		SLAB @ RAIL POSTS - 2 Ea. POSTS
S609	8	12'-0"	X	X	SLAB @ RAIL POSTS

THE FIRST DIGIT, OR THE FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE. DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BARS.



PARTIAL LONGITUDINAL SECTION

▲ 3/4" CONTINUOUS "V" DRIP GROOVE TERMINATE 2'-0" FROM Ea. ABUTMENT



CAMBER DIAGRAM

PROVIDE CAMBER AS SHOWN ABOVE TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE PLASTIC FLOW THIS DOES NOT INCLUDE AN ALLOWANCE FOR FORM SETTLEMENT. DEAD LOAD DEFLECTION ONLY EQUALS APPROXIMATELY 1/4 OF CAMBER VALUES SHOWN.

No.	Date.	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-35-107			
Const. Spec.	WIS. 89	Drawn By	T.L.
Plans Checked	L.M.B.		
SUPERSTRUCTURE			SHEET 5 OF 6
			X 82701

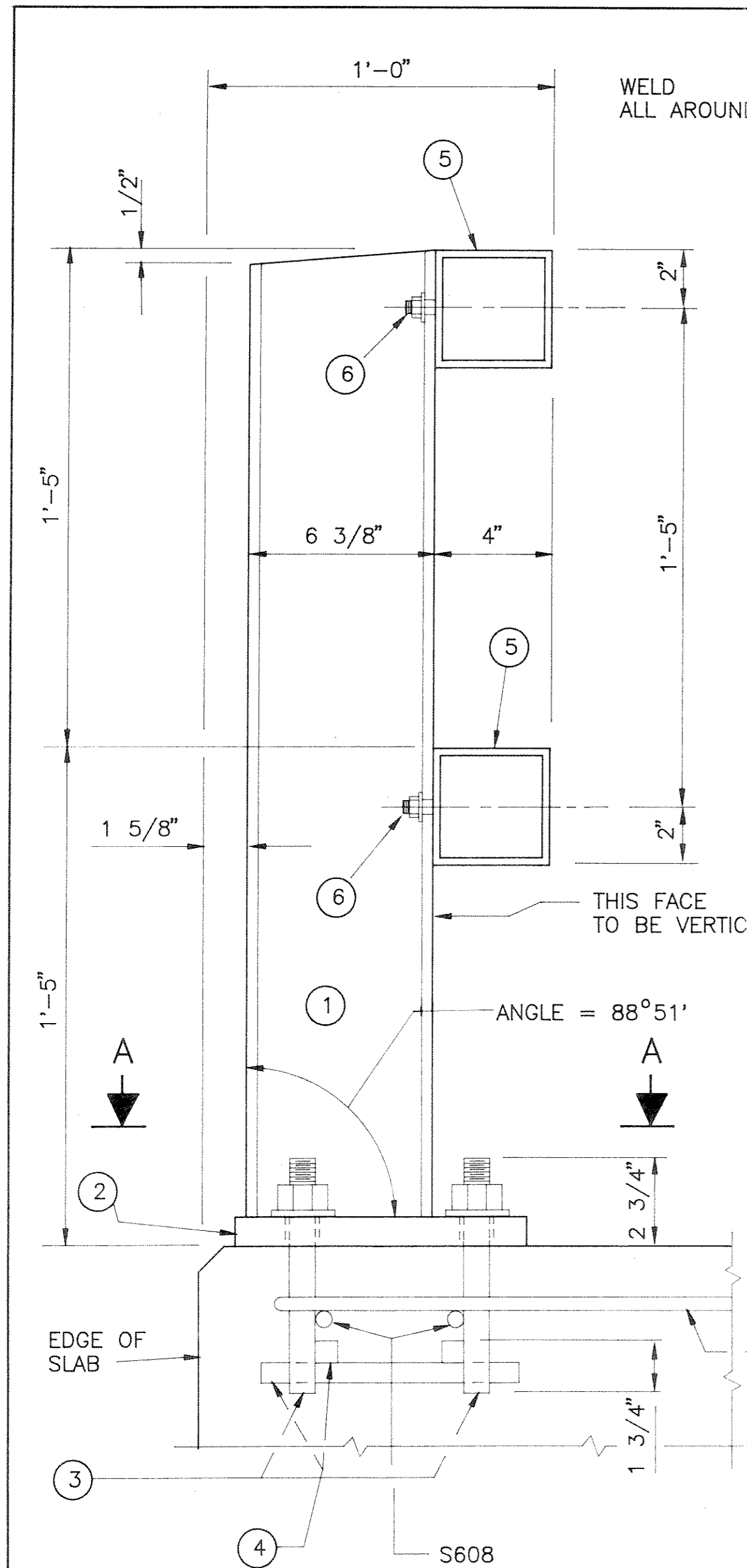
LEGEND

- ① W6x25 WITH 1 1/4" DIA. HOLES ON EACH SIDE OF POST FLANGE. FOR STUD NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POST NORMAL TO GRADE LINE.
- ② PLATE 1"x9 1/2"x0'-10", WITH 1 1/16"x1 1/2" SLOTTED HOLES FOR ANCHOR BARS NO.3. WELD TO NO. 1 AS SHOWN.
- ③ A449 OR MATERIAL OF EQUIVALENT YIELD STRENGTH AND ELONGATION ANCHOR BAR 7/8" DIA. x 1'-3" LONG AT END POSTS AND 10" LONG AT ALL OTHER POST LOCATIONS FOR CONCRETE SLAB STRUCTURES AND 8 1/2" LONG AT ALL OTHER POST LOCATIONS FOR PRESTRESSED GIRDER STRUCTURES. (MIN. YIELD OF 92 K.S.I. AND ELONGATION OF 14%) WITH A325 NUT AND WASHER. 4 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 3. CHAMFER TOP OF BOLTS BEFORE THREADING.
- ④ BAR 3/4" SQ. x 0'-8" LONG. WELD TO ANCHOR BAR NO. 3
- ⑤ TS 4x4x.25 STRUCTURAL TUBING, CONFORMING TO A.S.T.M. DESIGNATION A36. ATTACH TO NO. 1 WITH STUDS NO. 6.
- ⑥ 1 5/8" DIA. x 1 1/2" LONG SHOP WELDED STUDS, WITH HEX. NUT AND 2" WASHERS. 4 PER POSTS REQ'D. (2 REQ'D. AT EACH LOCATION.)
- ⑦ PLATE 3/4"x1'-0"x1'-6". WELD TO END RAIL POST AS SHOWN IN DETAIL. REQUIRED AT BEAM GUARD ATTACHMENTS ONLY.
- ⑧ 1" DIA. HOLES IN PLATE NO.7 FOR 7/8" DIA. A325 BOLTS W/HEX NUTS AND WASHERS.
- ⑨ SQUARE SLEEVE FABRICATED FROM 1/4" PLATE. PROVIDE "SLIDING FIT" WITH A MINIMUM OUT TO OUT DIMENSION OF 3 13/32".
- ⑩ TS 3x3x.25x1'-10" LONG. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO.5 PROVIDE 3/8" DIA. x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

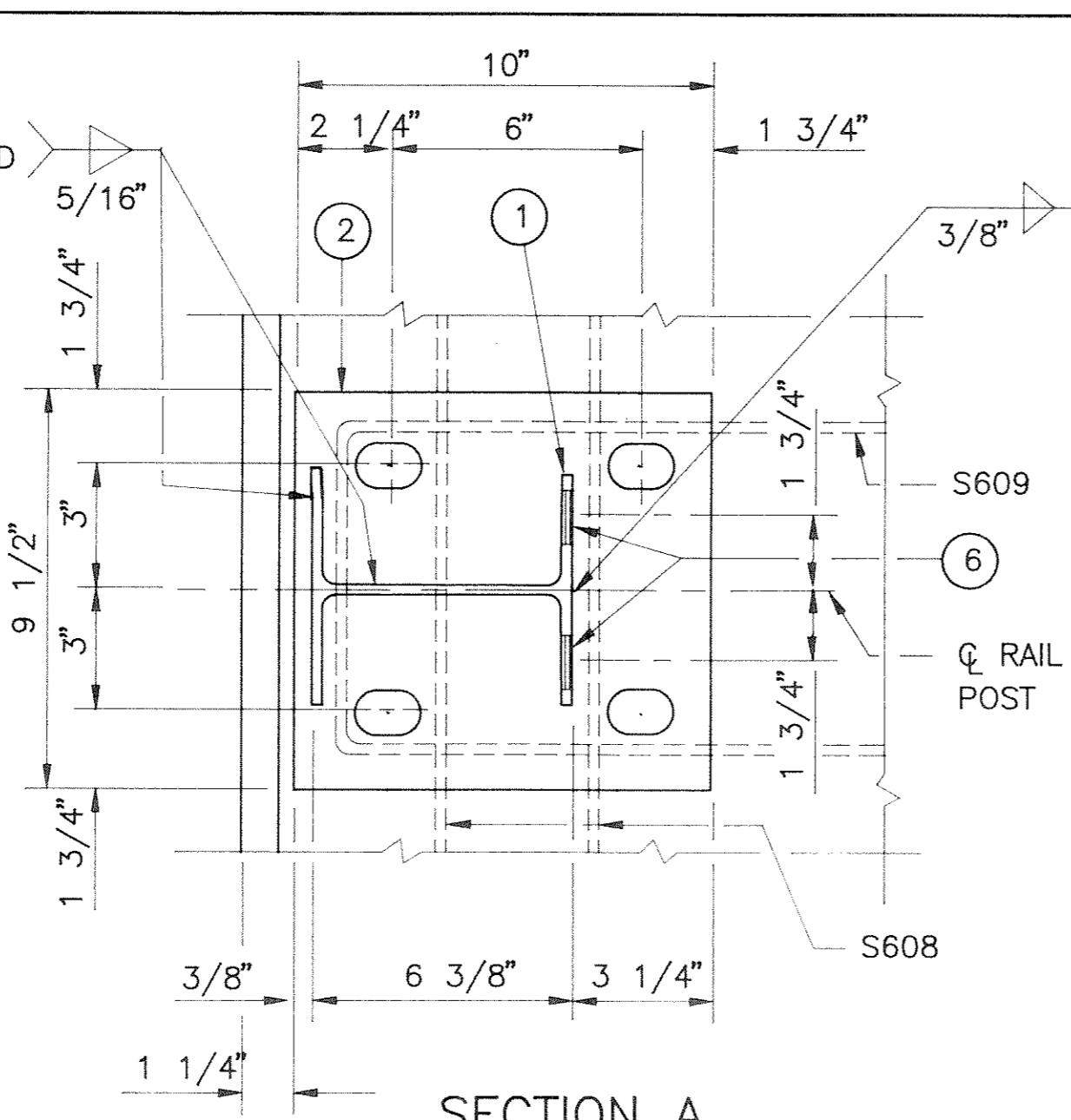
GENERAL NOTES

BID ITEM SHALL BE "TUBULAR RAILING TYPE 'F'. WHICH INCLUDES ALL ITEMS SHOWN.
 RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.
 POSTS BASE PLATES, NO.2, SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.
 ALL MEMBERS INCLUDING UPPER 4" OF NO.3 SHALL BE GALVANIZED AFTER FABRICATION.
 FILL BOLT SLOT OPENINGS IN POSTS SHIMS AND PLATE NO.2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.
 ALL MATERIALS USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO A.S.T.M. DESIGNATION A36 UNLESS NOTED OTHERWISE.
 STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.
 PRIOR TO GALVANIZING, ALL STEEL RAILING SHALL BE GIVEN A NO.6 COMMERCIAL BLAST CLEANING BY S.S.P.C. SPECIFICATIONS. BLAST CLEANING IS NOT REQUIRED FOR COLD FORMED TUBING ⑤. EXCEPT TO REMOVE WELDING SLAG AND IMPERVIOUS SUBSTANCES. WELD WITH E70 ELECTRODES.

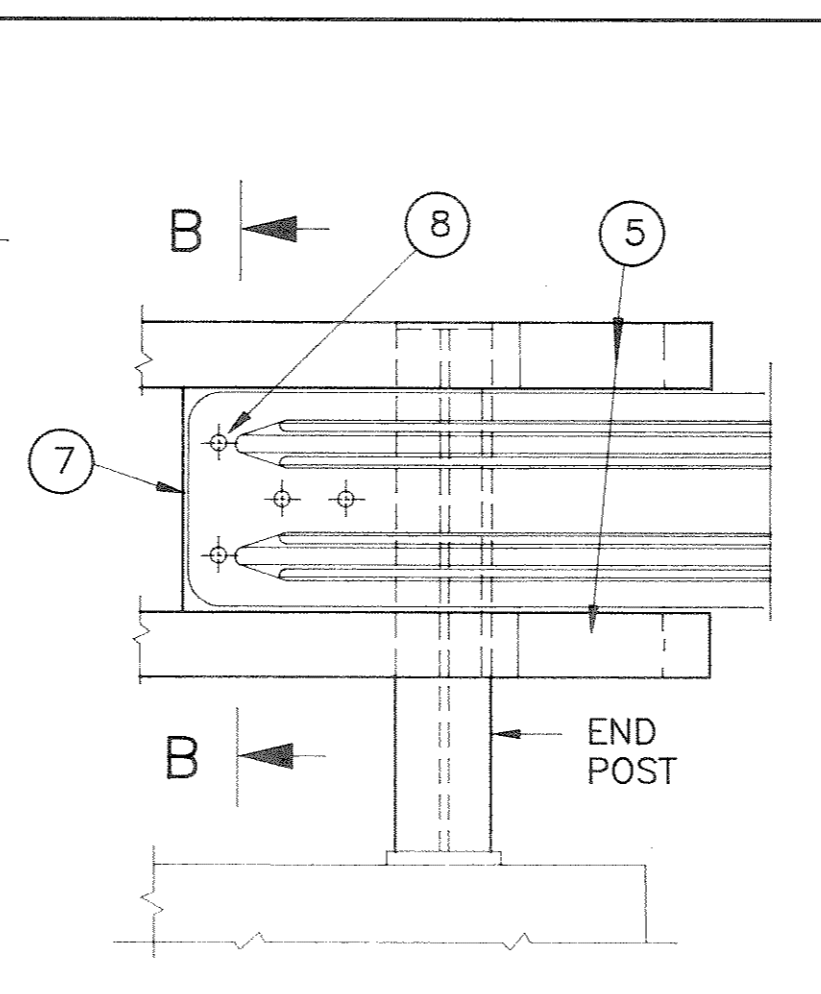
No.	Date.	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-35-107			
Const. Spec.	WIS. '81	Drawn By	T.L.
		Plans Checked	
TUBULAR RAILING TYPE "F"			SHEET 6 OF 6 X 82701



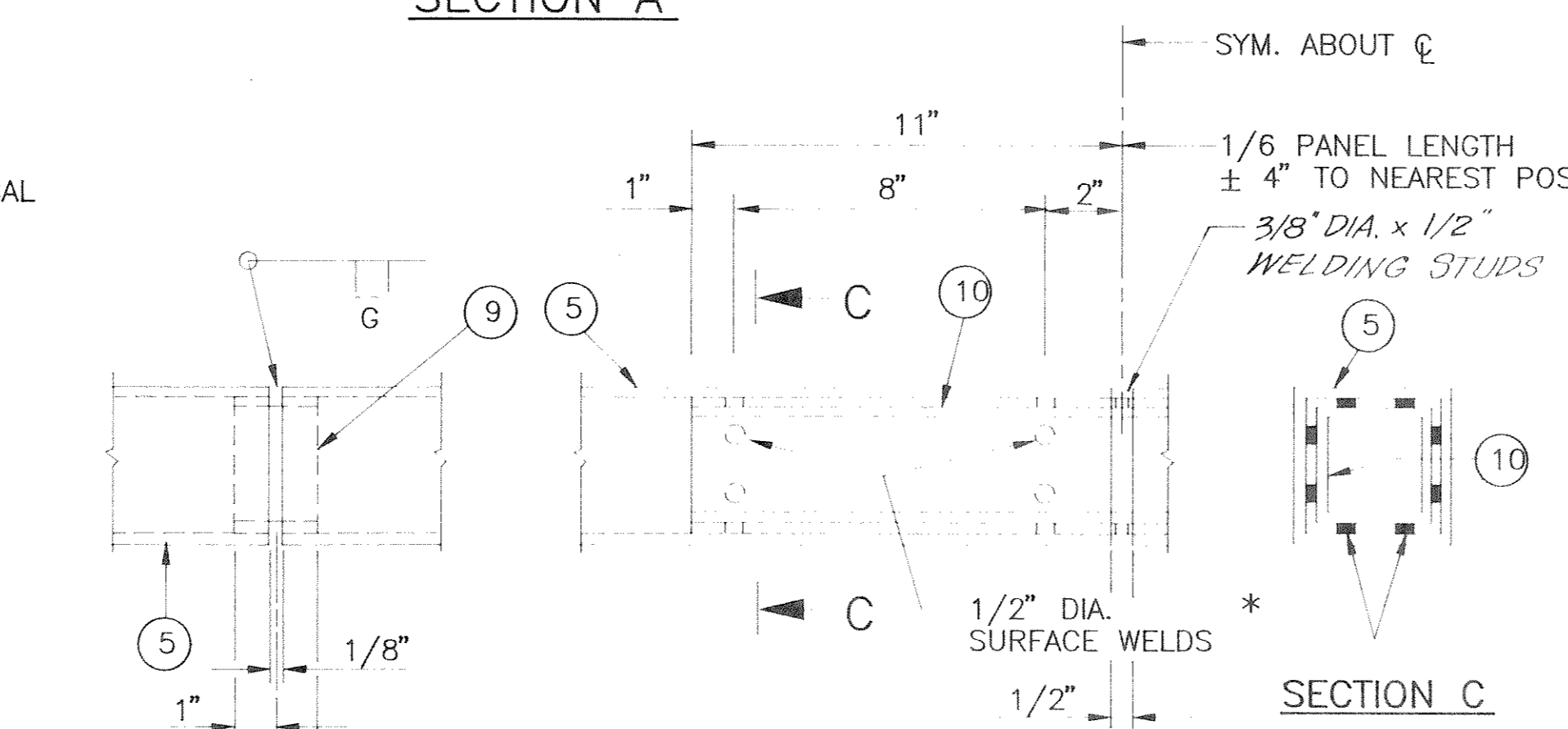
SECTION THRU RAILING



SECTION A

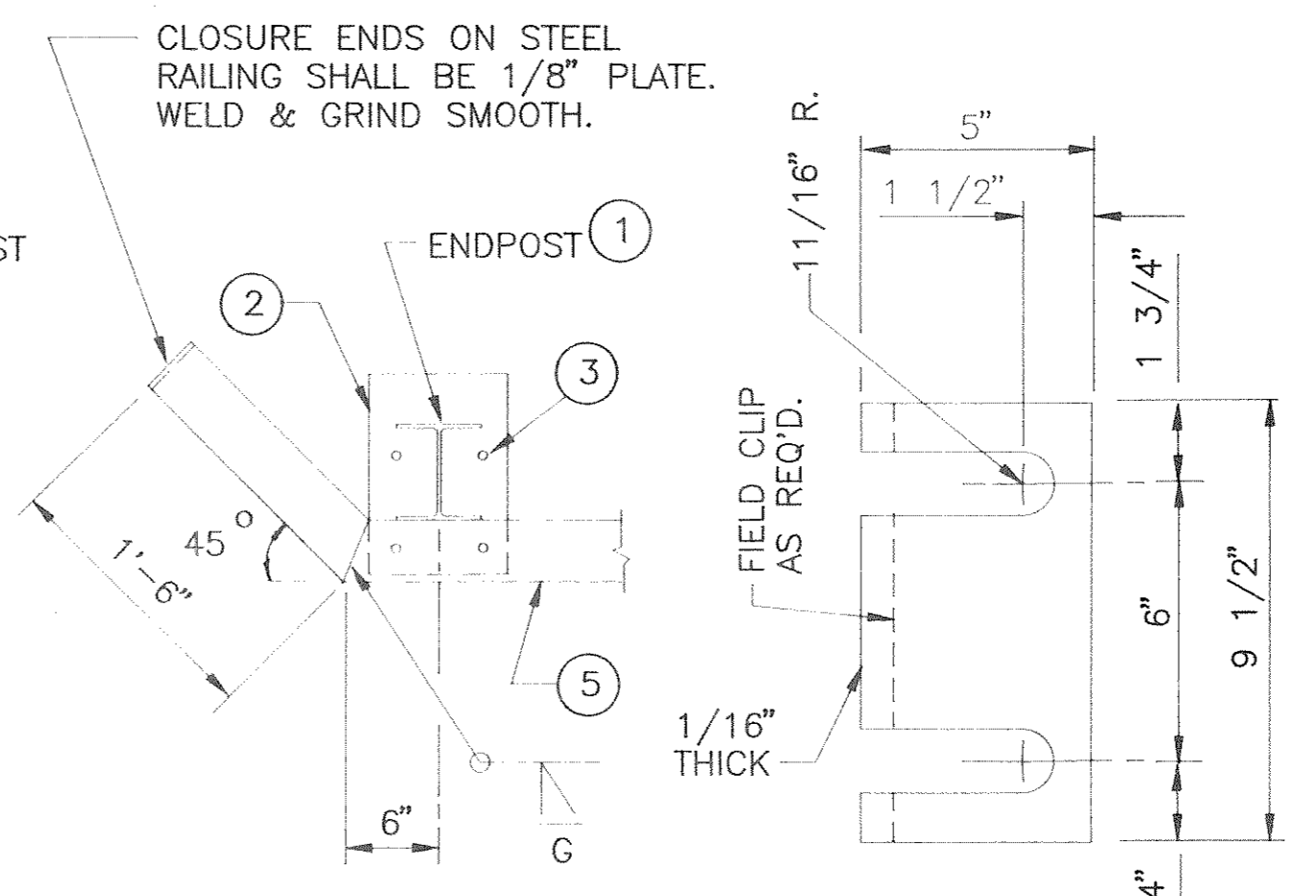


DETAIL AT END POST (PLATE BEAM GUARD RAIL ATTACHMENT)

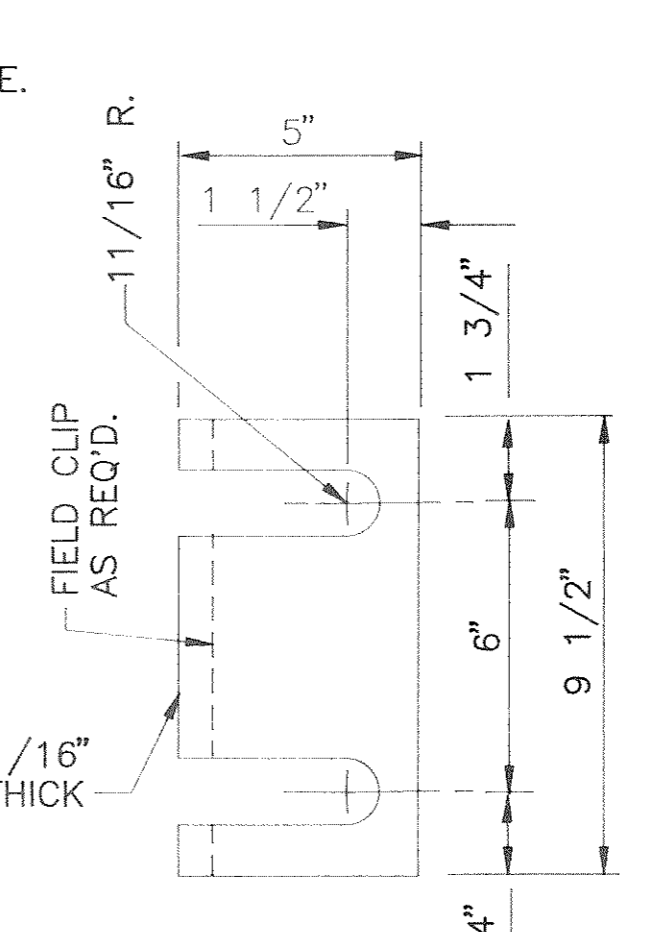


FIELD ERECTION JOINT DETAIL

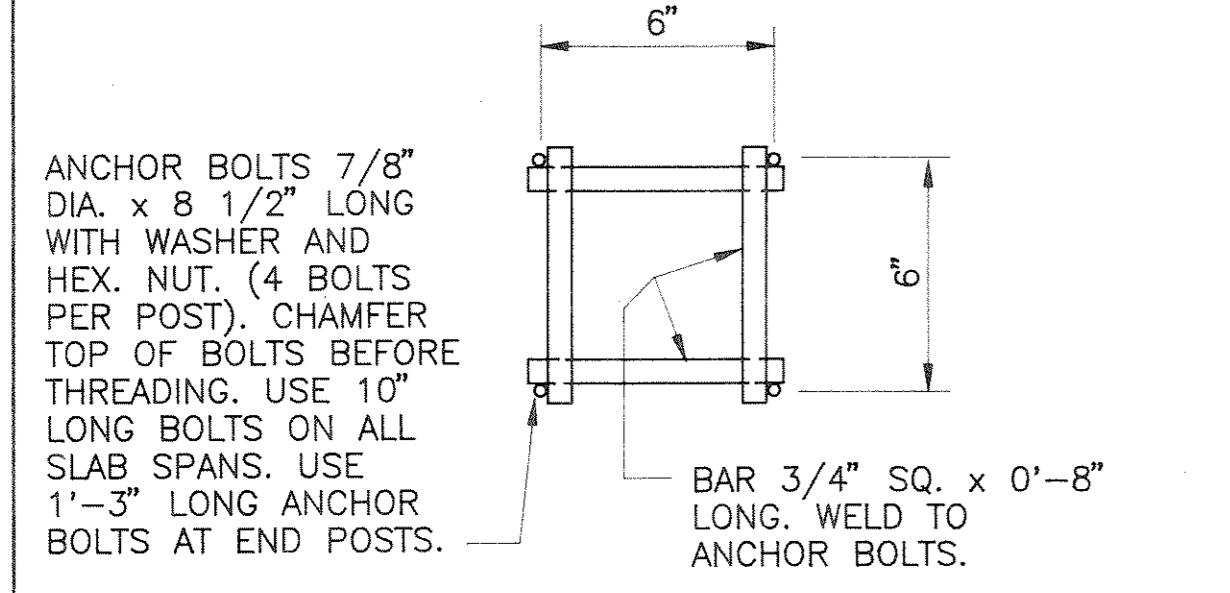
* MIN. 5/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



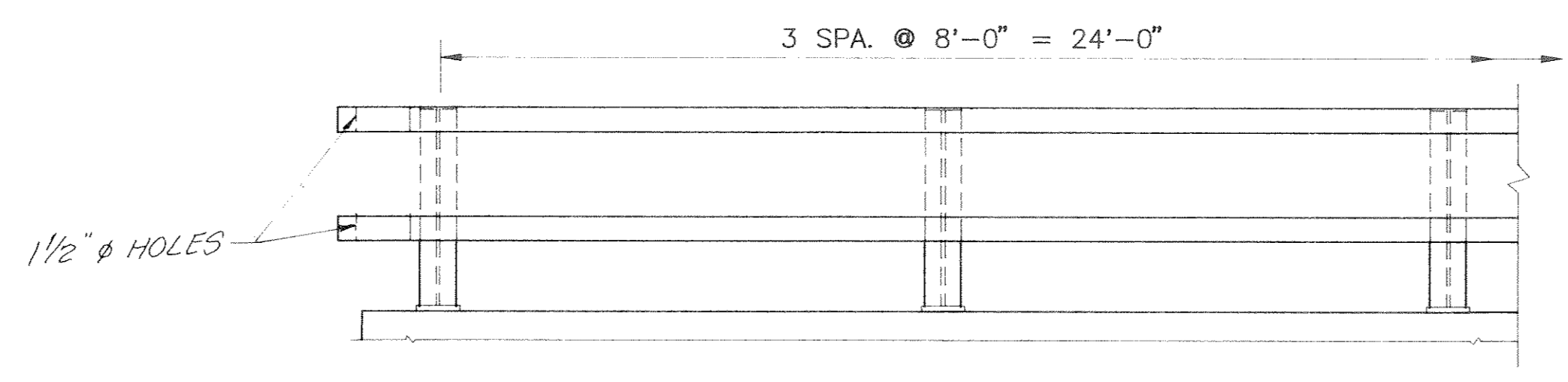
END DETAIL FOR WINGS



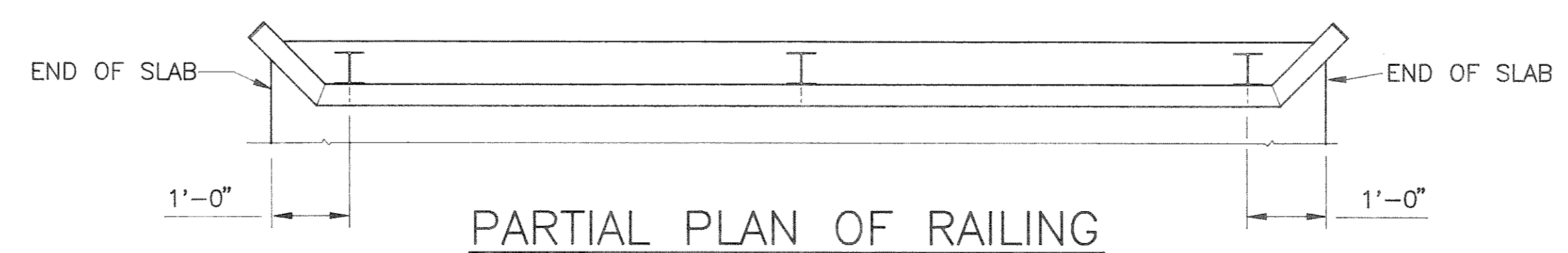
POST SHIM DETAIL (4 PER POST)



ANCHOR BOLT DETAIL



PARTIAL ELEVATION OF RAILING



PARTIAL PLAN OF RAILING