

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9859-04-70	BRZ 3599(12)	I

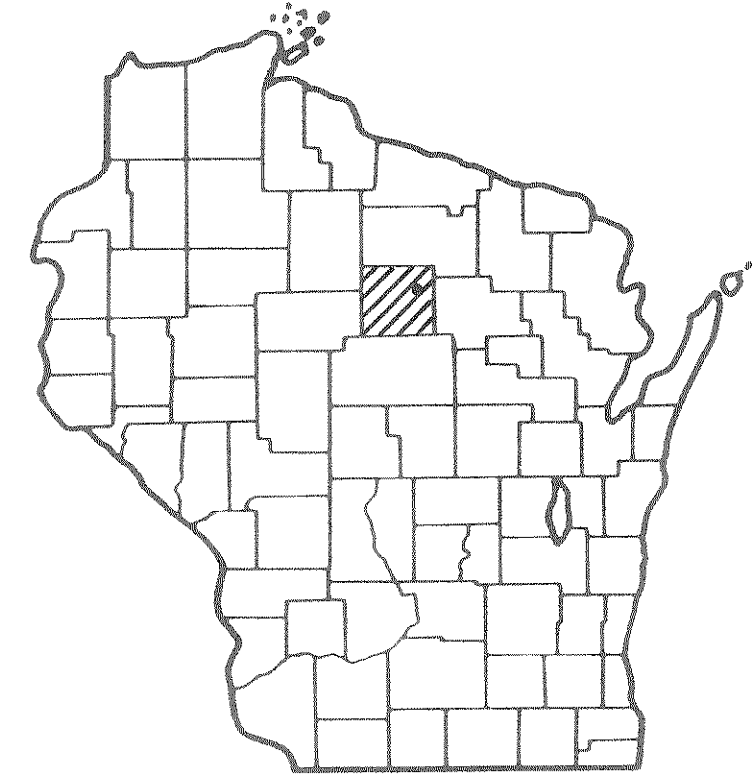
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT DUDLEY ROAD BRIDGE AND APPROACHES

Index of Sheets

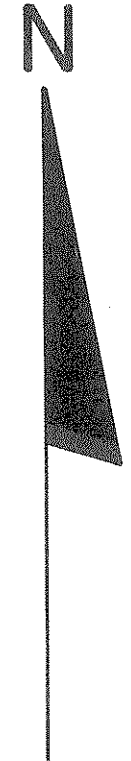
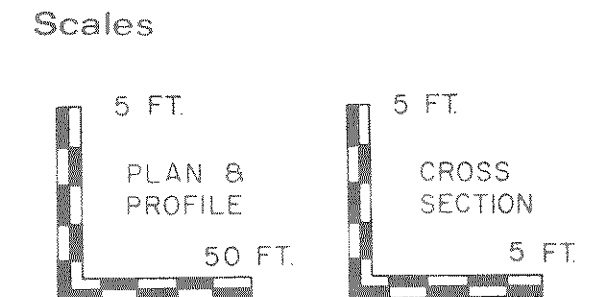
Sheet No. 1	Title
Sheet No.	Typical Sections and Details
Sheet No.	Estimate of Quantities
Sheet No.	Miscellaneous Quantities
Sheet No.	Right of Way Plat
Sheet No.	Plan and Profile Sta. 15+50 - Sta. 23+50
Sheet No.	Standard Detail Drawings
Sheet No.	Standard Sign Plates
Sheet No.	Structure Plans
Sheet No.	Computer Earthwork Data
Sheet No.	Cross Sections

TOTAL SHEETS =



DUDLEY ROAD
TOWN ROAD
LINCOLN COUNTY

STATE PROJECT NUMBER
9859-04-70

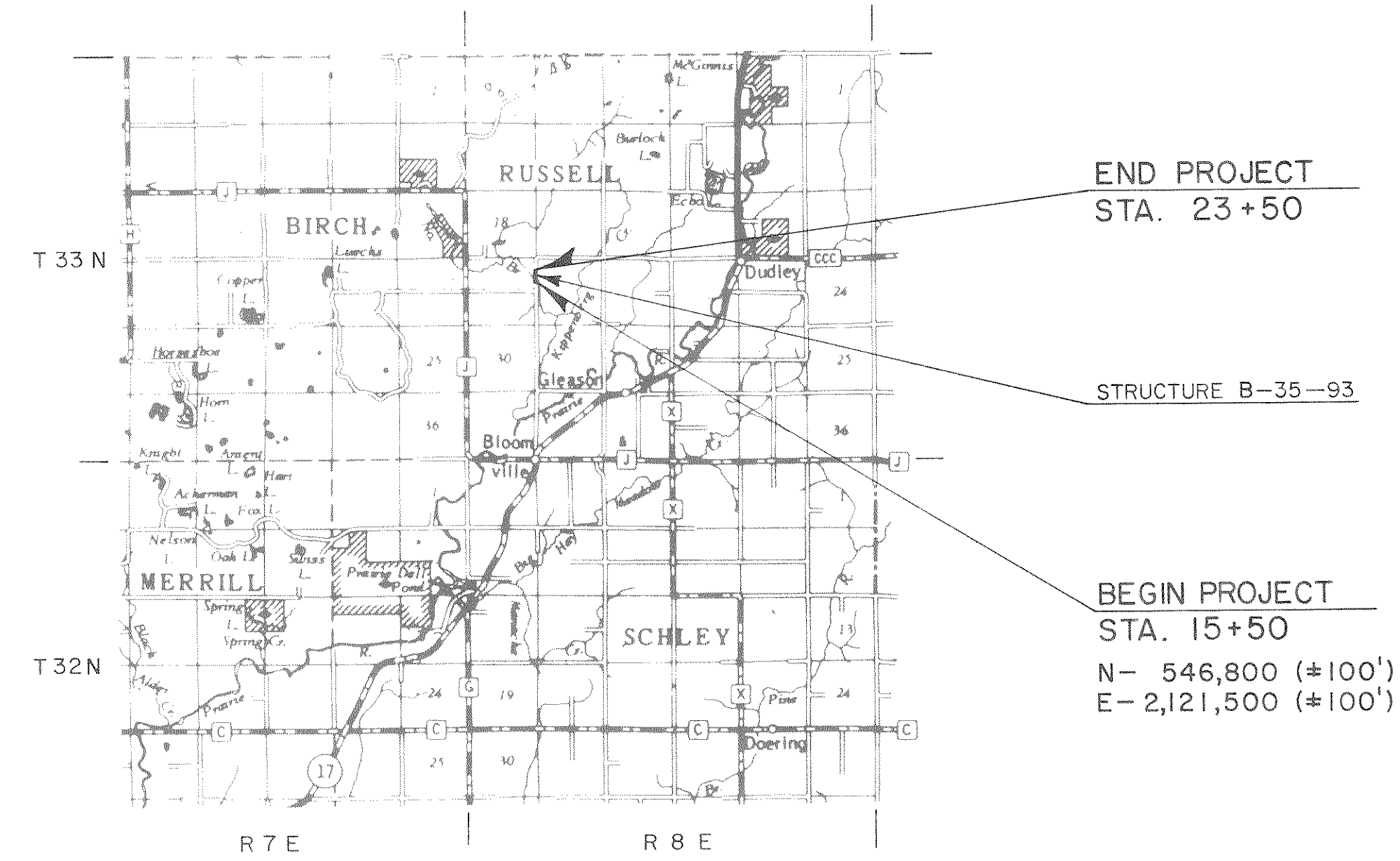


Design Designation

A.D.T. (1986)	= 80
A.D.T. (2006)	= 120
D.H.V. (2006)	= 18
D.	= 50%-50%
T.	= 6% A.D.T.
V.	= 40 MPH

Conventional Signs

County Line		Caution Symbol (Combustible fluids under pressure)	
Township or Range Line		Railroads	
Section Line		Fence	
Corporate or City Limits		Culverts in Place	
Property line		Culverts Required	
Lot Line		Power Pole	
Existing Right of Way Line		Telephone or Telegraph Pole	
New Right of Way Line		Right of Way Markers	
Base or Survey Line		Marsh	
Slope Intercept		Wooded Area	
Existing Roadway or Private Entrance		Grade Elevation	



Layout
Scale 0 1 2 Mi.

Total Net Length of Centerline = 0.152 Mi. Rural

NOTE: ALL COORDINATES SHOWN ON THIS PLAN ARE BASED ON THE WISCONSIN COORDINATE SYSTEM CENTRAL ZONE AND ARE SCALED FROM U.S.G.S. TOPOGRAPHIC MAP, BLOOMVILLE WISCONSIN QUADRANGLE, FOR IDENTIFICATION ONLY.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO U.S.C. & G.S. DATUM.

FILE COPY
FEB 19 1986
DONOHUE & ASSOC. INC.

APPROVED FOR RUSSELL TOWNSHIP

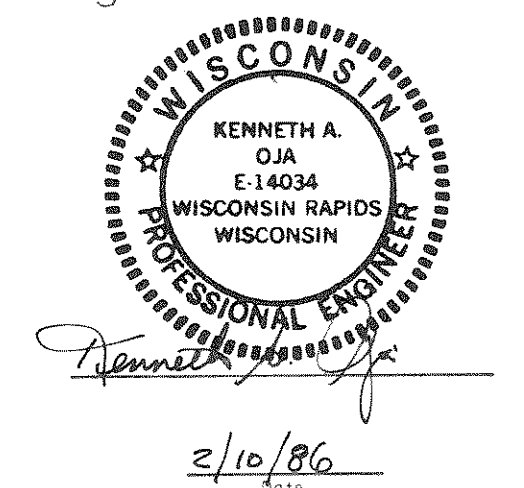
Feb 10, 86 Donohue W. Ross
Date Chairman

APPROVED FOR LINCOLN COUNTY

2/19/86 Michael J. Hep
Date Commissioner

ORIGINAL PLANS
PREPARED BY

Donohue
Engineers & Architects



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Surveyor Donohue & Assoc., Inc. District Checker R.D.K.
Designer Donohue & Assoc., Inc. C.O. Checker _____
District Supervisor R.J.S. C.O. Coordinator _____

Approved: _____
Date _____ District Transportation Director

Approved: _____
Date _____ Chief Design Engineer

Approved: _____
Date _____ Director of Development

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

Approved: _____
Date _____ Division Administrator

FINAL PLANS 2-21-86

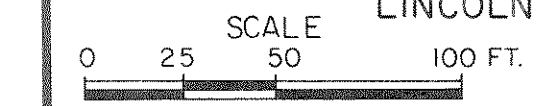
SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	OWNER	INTEREST * REQUIRED	TOTAL ACRES	R/W ACRES REQUIRED		TOTAL ACRES REMAINING
				NEW	EXISTING	
1	RICHARD J. WATROBA & MARY T. WATROBA	FEE	147.00 AC.	0.18 AC.	0.41 AC.	146.51 AC.
2	WAYNE ERNEST CATLIN	FEE	80.00 AC.	0.02 AC.	0.10 AC.	79.88 AC.
3	KAREN ALGIRE	FEE	40.00 AC.	0.14 AC.	0.17 AC.	39.69 AC.

* ACQUIRED IN THE NAME OF TOWN OF RUSSELL

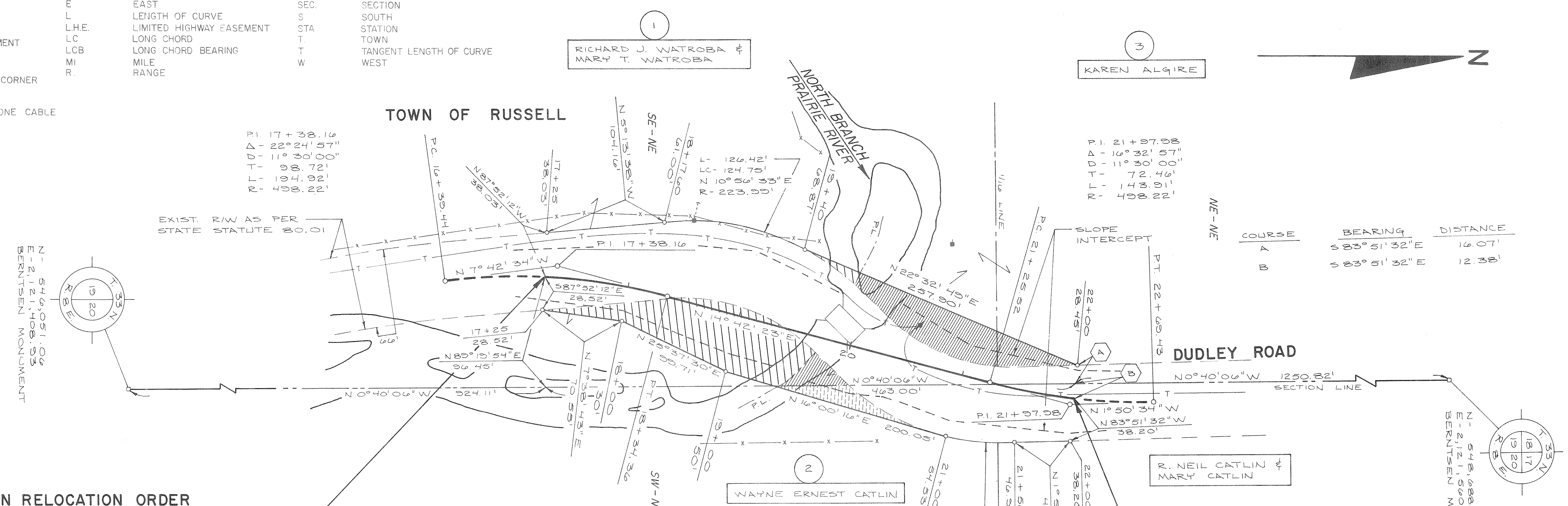
R/W PROJECT NUMBER	9859-04-70	SHEET NUMBER	4.0	TOTAL SHEETS	
FEDERAL PROJECT NUMBER					

PLAT OF RIGHT OF WAY REQUIRED FOR
DUDLEY ROAD BRIDGE AND APPROACHES
DUDLEY ROAD
TOWN ROAD
LINCOLN COUNTY



Conventional Signs and Abbreviations

- | | | | | |
|---------------------------------|--------|--------------------------|------|-------------------------|
| --- SECTION LINE | AC. | ACRES | N | NORTH |
| --- QUARTER LINE | ETUX | AND WIFE | P.C. | POINT OF CURVATURE |
| --- TOWNSHIP AND RANGE LINE | Δ | CENTRAL ANGLE | P.I. | POINT OF INTERSECTION |
| --- PROPOSED OR NEW CENTERLINE | COR. | CORNER | P.T. | POINT OF TANGENCY |
| --- PROPOSED OR NEW R/W LINE | C.T.H. | COUNTY TRUNK HIGHWAY | R | RADIUS |
| --- EXISTING R/W LINE | D | DEGREE OF CURVE | R/W | RIGHT OF WAY |
| PL --- PROPERTY LINE | E | EAST | SEC. | SECTION |
| --- SLOPE INTERCEPTS | L | LENGTH OF CURVE | S | SOUTH |
| --- LIMITED HIGHWAY EASEMENT | L.H.E. | LIMITED HIGHWAY EASEMENT | STA | STATION |
| o --- R/W POINT | LC | LONG CHORD | T | TOWN |
| -x-x-x- FENCE | LCB | LONG CHORD BEARING | T | TANGENT LENGTH OF CURVE |
| o SECTION OR QUARTER CORNER | MI | MILE | W | WEST |
| ■ POWER POLE | R. | RANGE | | |
| ⊕ TELEPHONE PEDESTAL | | | | |
| -T- UNDERGROUND TELEPHONE CABLE | | | | |

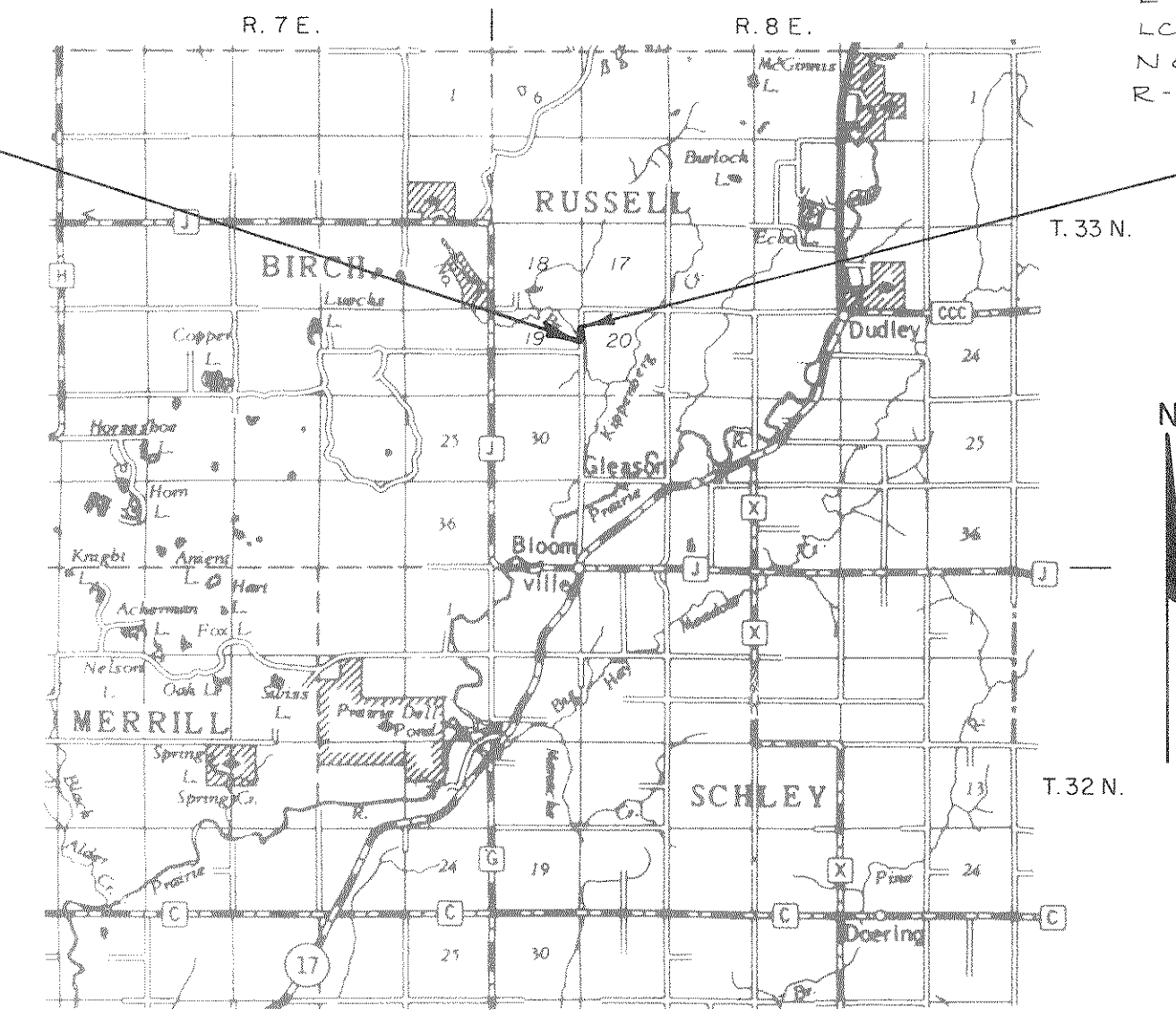


BEGIN RELOCATION ORDER

STA. 17+25
922.92' N. OF 8107.22' W. OF THE E1/4
COR. OF SEC. 19, T. 33 N., R. 8 E.
N- 546,973.99
E-2,121,516.16

END RELOCATION ORDER

STA. 22+00
1,252.06' S. OF & 26.90' E. OF THE NW
COR. OF SEC. 20, T. 33 N., R. 8 E.
N- 547,436.75
E-2,121,587.20



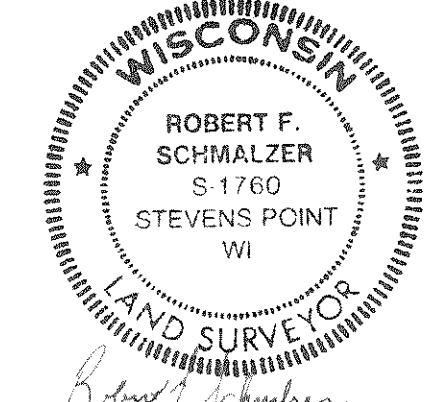
LAYOUT
SCALE 0 1 2 MI.
TOTAL NET LENGTH OF CENTERLINE = 0.090 MI.

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

BEARING ORIENTATION
RIGHT-OF-WAY PLAT BEARINGS ARE ORIENTED TO THE EAST LINE OF SECTION 19, T. 33 N., R. 8 E., WITH THE BEARING ESTABLISHED AS N 0° 40' 06" W (ASSUMED). THE DIFFERENCE BETWEEN PLAT BEARINGS REPRESENTS PLANE ANGLES IN DEGREES, MINUTES, AND SECONDS.

ALL COORDINATES SHOWN ON THIS PLAT ARE BASED ON THE WISCONSIN COORDINATE SYSTEM CENTRAL ZONE AND ARE SCALED FROM U.S.G.S. TOPOGRAPHIC MAP, BLOOMVILLE, WISCONSIN QUADRANGLE, FOR IDENTIFICATION ONLY.

PLAT PREPARED BY
DONOHUE & ASSOCIATES, INC.
ENGINEERS & ARCHITECTS
Plover, Wisconsin



Robert F. Schmalzer
1130186
Date

APPROVED FOR TOWN OF RUSSELL BY:

8/10/86 Leonard W. Paris
Date Town Chairman

REVISION DATE	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
Approved:	District Transportation Director
Date:	for Bureau of Real Estate
Approved:	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION WISCONSIN DIVISION
Date:	Division Administrator

BENCH MARKS

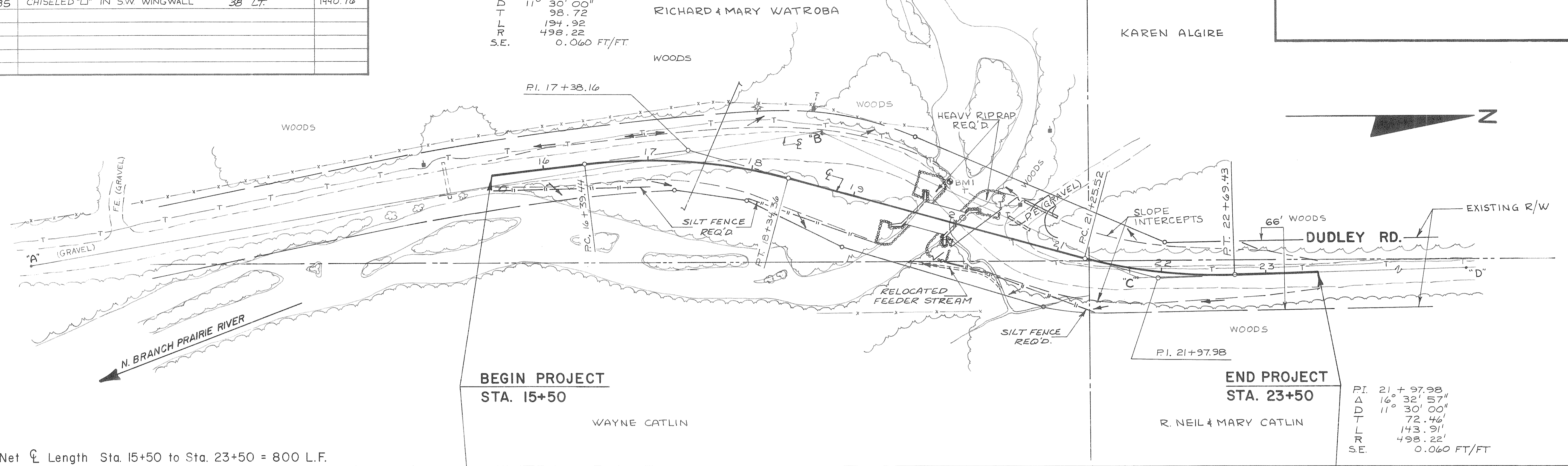
NO.	STA.	DESCRIPTION	ELEV.
1	19+85	CHISELED "C" IN S.W. WINGWALL 38' LT.	1440.76

PI. 17+38.16
 Δ 22° 24' 57"
 D 11° 30' 00"
 T 98.72
 L 194.92
 R 498.22
 S.E. 0.060 FT/FT

STA. 20+73, LT.
 RESTORE PE.
 1'-24" C.P. REQ'D.

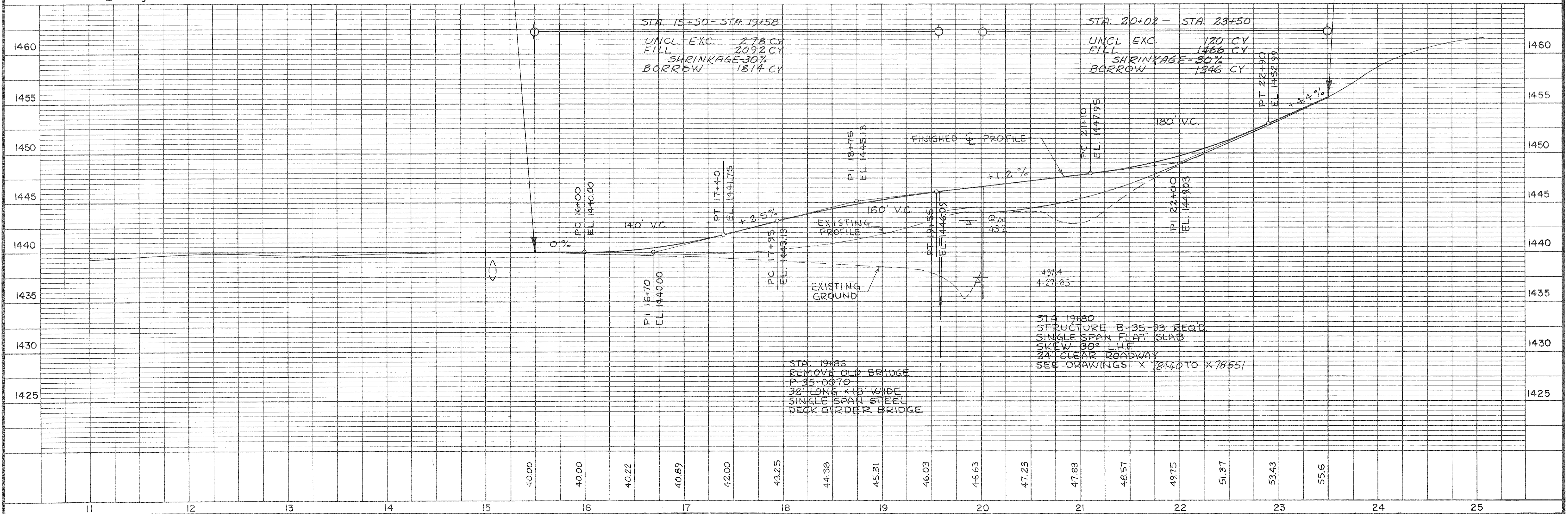
STATE PROJECT NUMBER
 9859-04-70

SHEET NO.



Net ℓ Length Sta. 15+50 to Sta. 23+50 = 800 L.F.

PI. 21+97.98
 Δ 16° 32' 57"
 D 11° 30' 00"
 T 72.46
 L 143.91
 R 498.22
 S.E. 0.060 FT/FT



DESIGN DATA

LIVELOAD

DESIGN RATING: H-20
 INVENTORY RATING: HS21
 OPERATIONAL RATING: HS36
 STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

ALLOWABLE DESIGN STRESSES

CONCRETE MASONRY - SLAB $f'_c = 4,000$ p.s.i.
 - ALL OTHER $f'_c = 3,500$ p.s.i.
 HIGH - STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 $f_y = 60,000$ p.s.i.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON $10\frac{3}{4}$ " ϕ C.I.P. CONCRETE PILES DRIVEN TO A MIN. BEARING VALVE OF 45 TONS PER PILE. EST. 35'-0" LONG.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q100 DRAINAGE AREA	1,200	C.F.S.
VELOCITY	35.2	SQ. MI.
WATERWAY AREA - BRIDGE	8.3	F.P.S.
- OVERFLOW	128	SQ. FT.
Q100 - THRU BRIDGE	47	SQ. FT.
- OVERFLOW	1068	C.F.S.
HIGH WATER 100 ELEVATION	132	C.F.S.
DESIGN ROADWAY FREQUENCY	1443.2	±
OVERFLOW FREQUENCY	7 YEARS	
Q7 HIGH WATER 7 ELEVATION	700	C.F.S.
	1441.3	±

TRAFFIC DATA

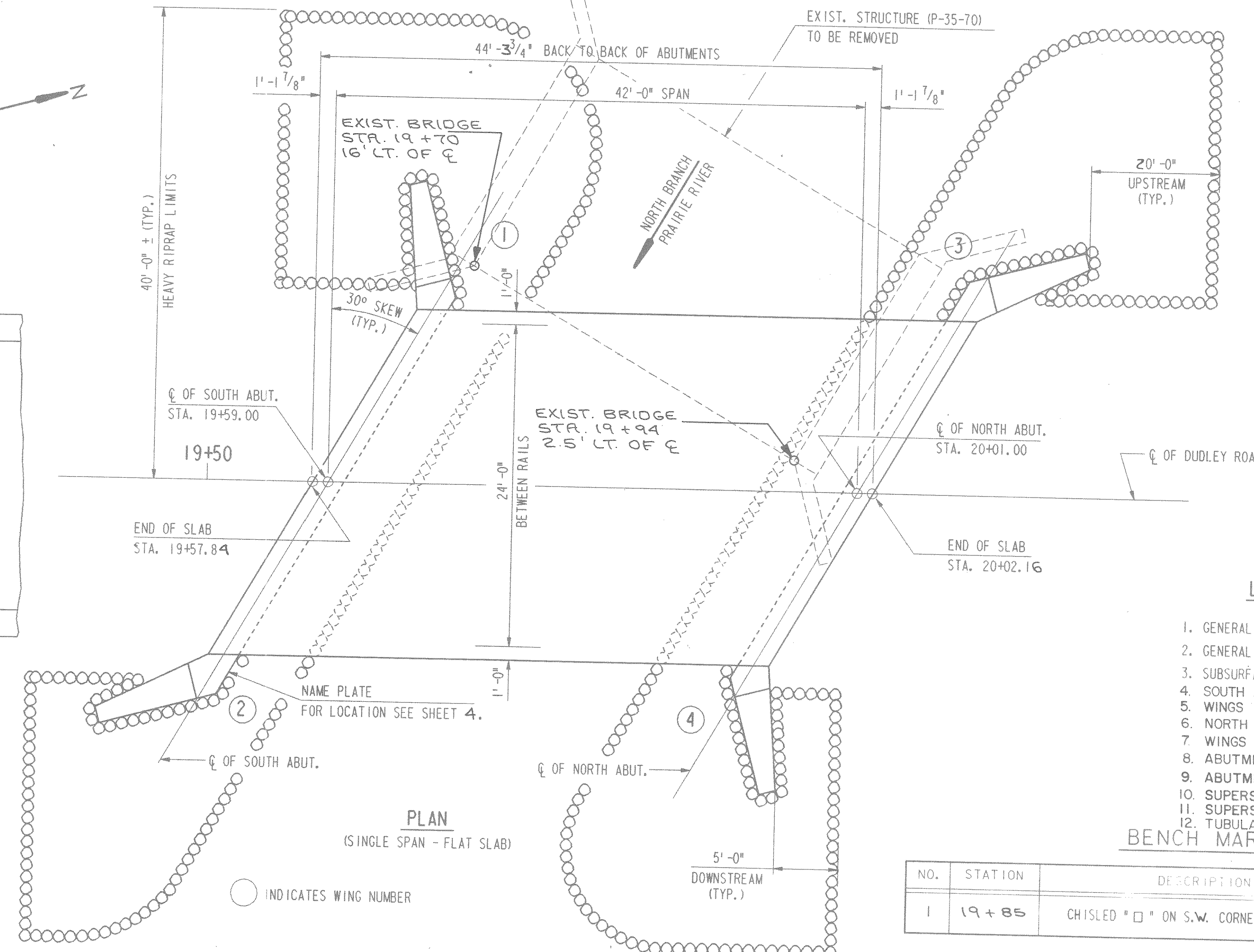
A. D. T. (1986) = 80
 A. D. T. (2006) = 120
 DESIGN SPEED = 40 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN — X78440
2. GENERAL PLAN — X78441
3. SUBSURFACE EXPLORATION — X78442
4. SOUTH ABUTMENT — X78443
5. WINGS 1 & 2 — X78444
6. NORTH ABUTMENT — X78445
7. WINGS 3 & 4 — X78446
8. ABUTMENT DETAILS — X78447
9. ABUTMENT DETAILS — X78448
10. SUPERSTRUCTURE — X78449
11. SUPERSTRUCTURE — X78450
12. TUBULAR RAILING, TYPE F — X78451

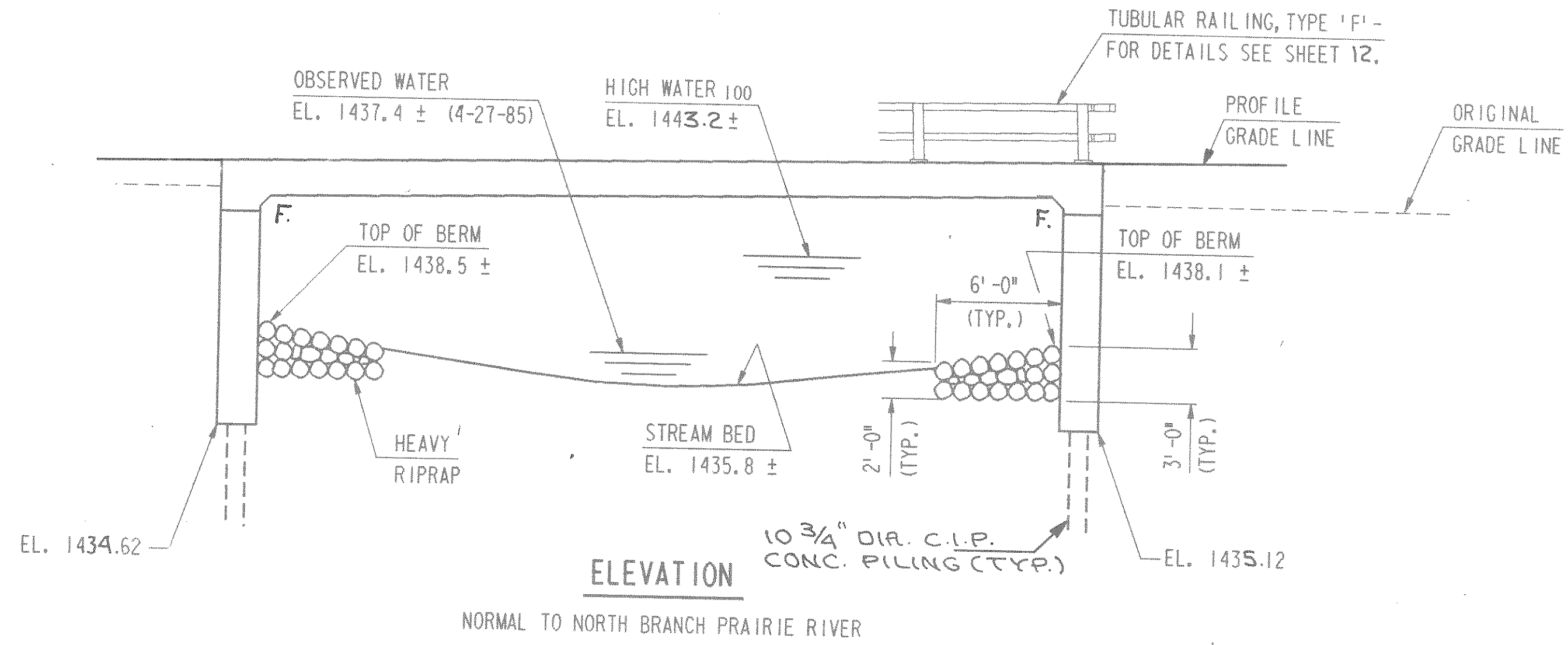
BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.
1	19+85	CHISEL "□" ON S.W. CORNER OF WING WALL	1440.76

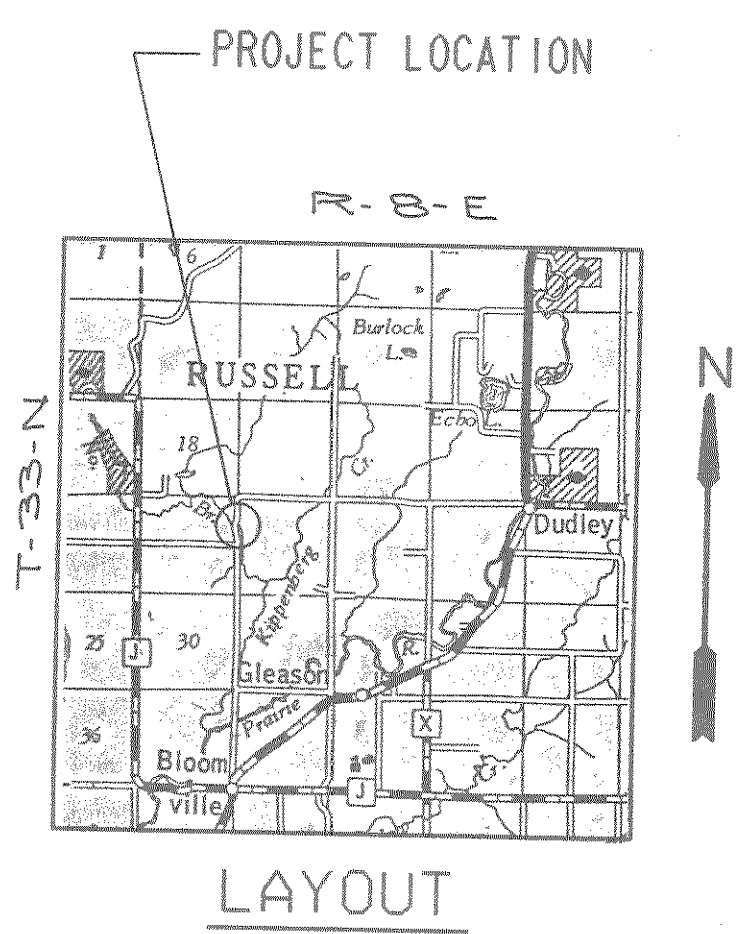
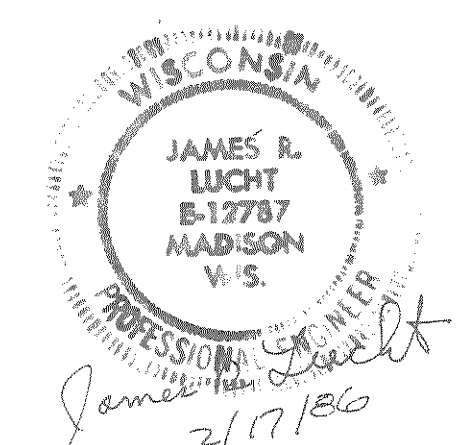


PLAN (SINGLE SPAN - FLAT SLAB)

○ INDICATES WING NUMBER

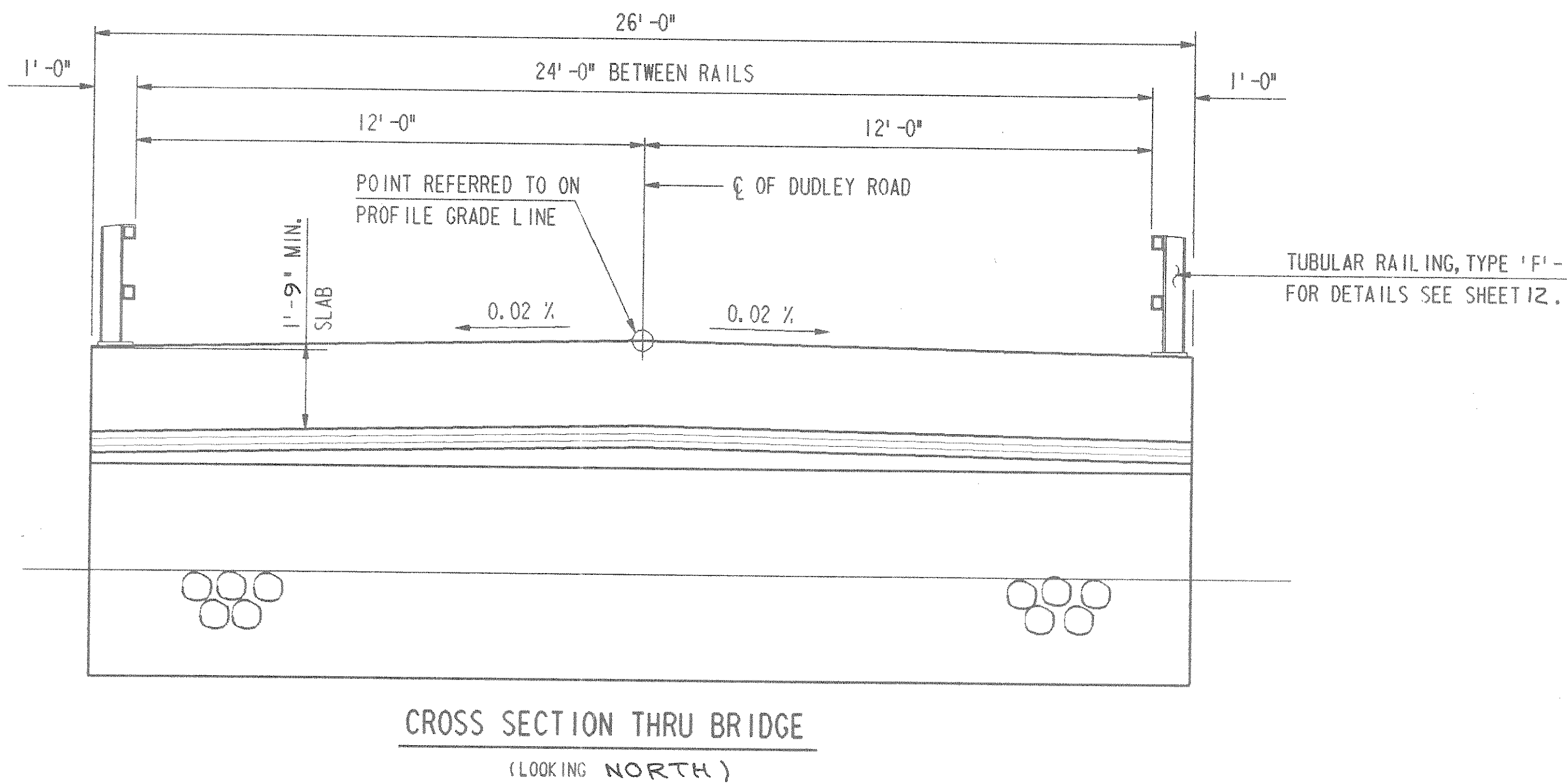


ELEVATION NORMAL TO NORTH BRANCH PRAIRIE RIVER



LAYOUT

No.	Date	Revision	By
Donohue Engineers & Architects COMPUTER AIDED DESIGN/DRAFTING			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-93			
DUDLEY ROAD OVER NORTH BRANCH PRAIRIE RIVER			
County L INCOLN		TOWN OF RUSSELL	
Design Spec. AASHTO 1984	Load H-20	Const. Spec. WIS. 1981	
Designed By B. D.	Design Checked JRL	Drawn By D. F. K.	Plans Checked JRL
Approved State Bridge Engineer		Date	
GENERAL PLAN			SHEET 1 OF 12 X78440

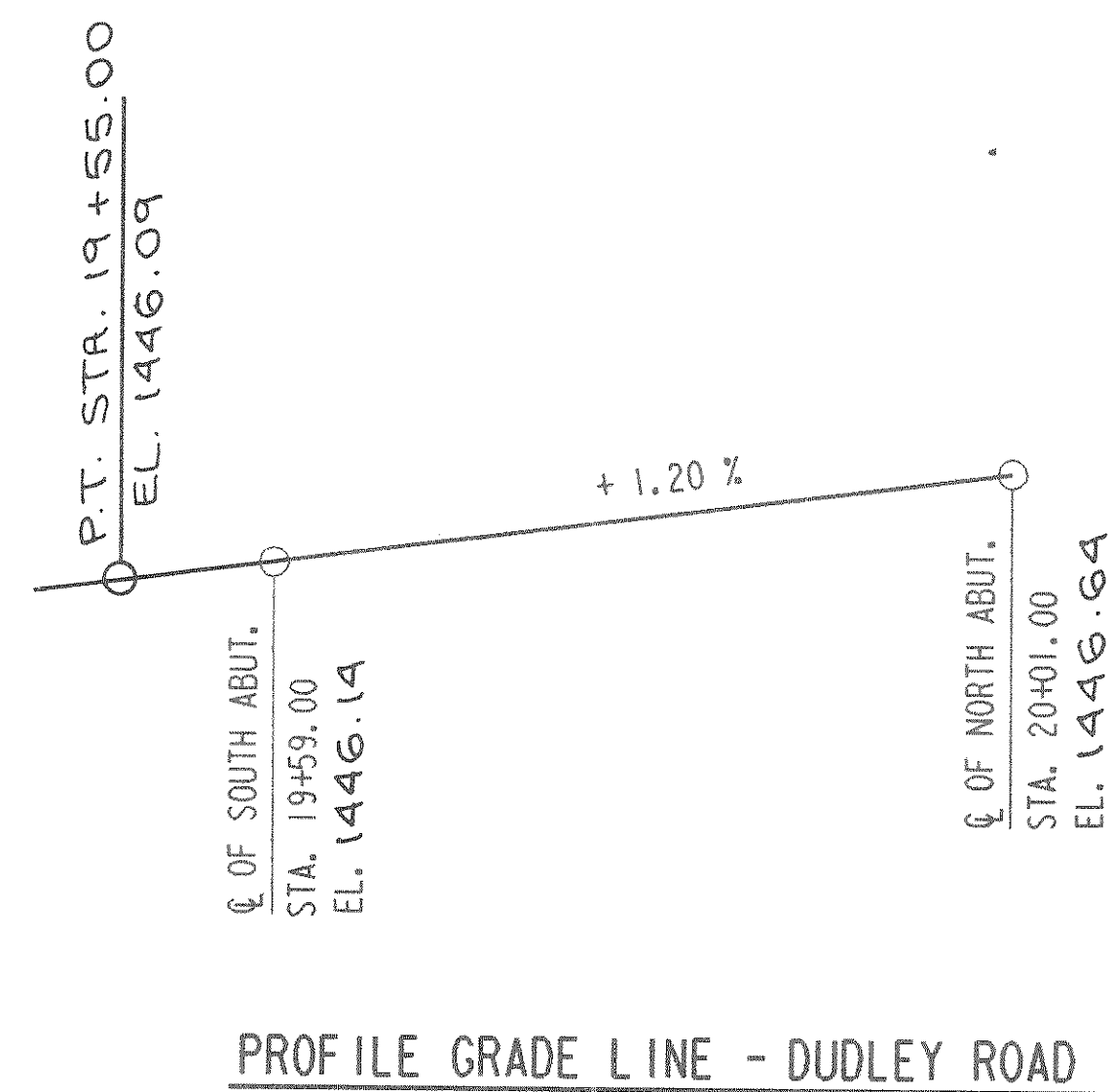


TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SOUTH ABUT.	NORTH ABUT.	SUPER.	TOTAL
REMOVING OLD BRIDGE, STATION 19+86	L.S.				1
EXCAVATION FOR STRUCTURES, BRIDGES B-35-93	L.S.				1
CONCRETE MASONRY, BRIDGES	C.Y.	34.2	34.3	79.5	148
STRUCTURAL CARBON STEEL	LBS.			300	300
HIGH STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LBS.	2780	2790	12130	17700
PROTECTIVE SURFACE TREATMENT	GAL.			6	6
CRST-IN-PLCE CONCRETE PILING, DELIVERED AND DRIVEN, 10 3/4-INCH	L.F.	245	245		490
TUBULAR RAILING, TYPE F, STRUCTURE B-35-93	L.S.				1
HEAVY RIPRAP	C.Y.	90	100		190
COATED HIGH STRENGTH BAR STEEL REINFORCEMENT	LBS.			1860	1860
GEOTEXTILE FABRIC	S.Y.	140	150		290
NON-BID ITEMS					
POLYVINYL CHLORIDE WATERSTOP	L.F.	36	36		72
FILLER	SIZE				1/2" & 3/4"

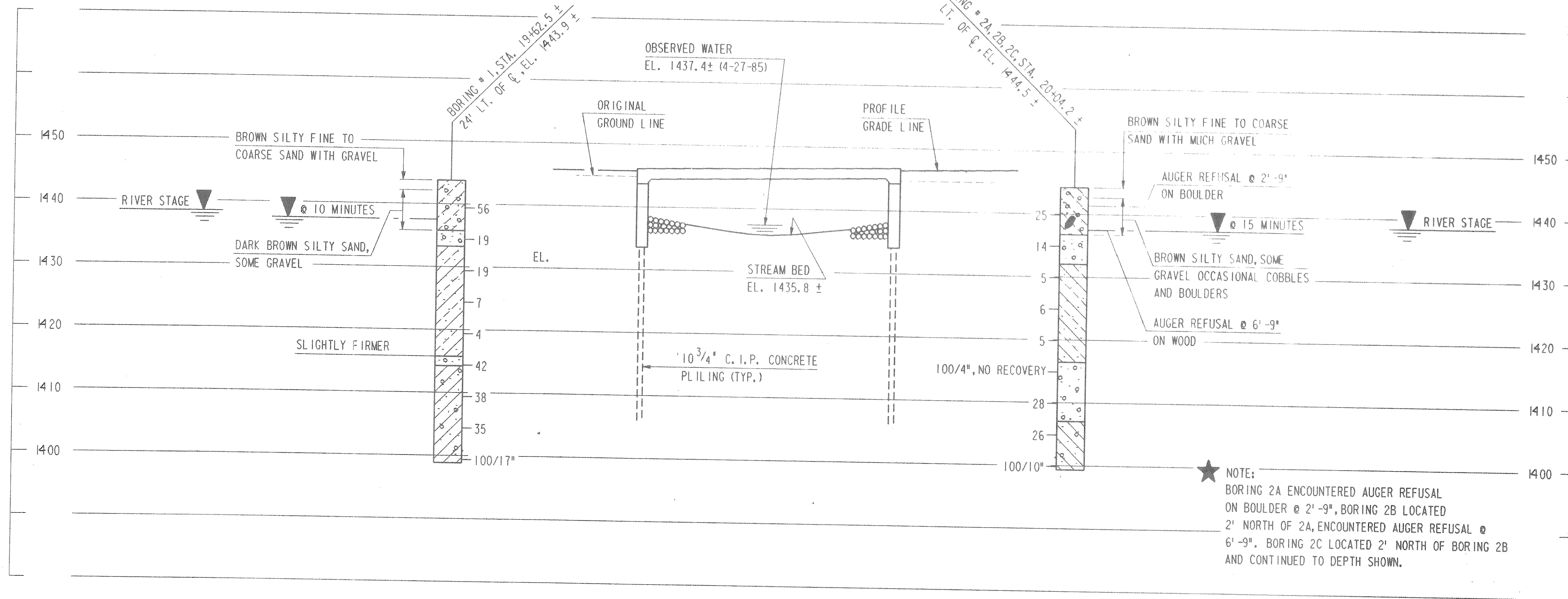
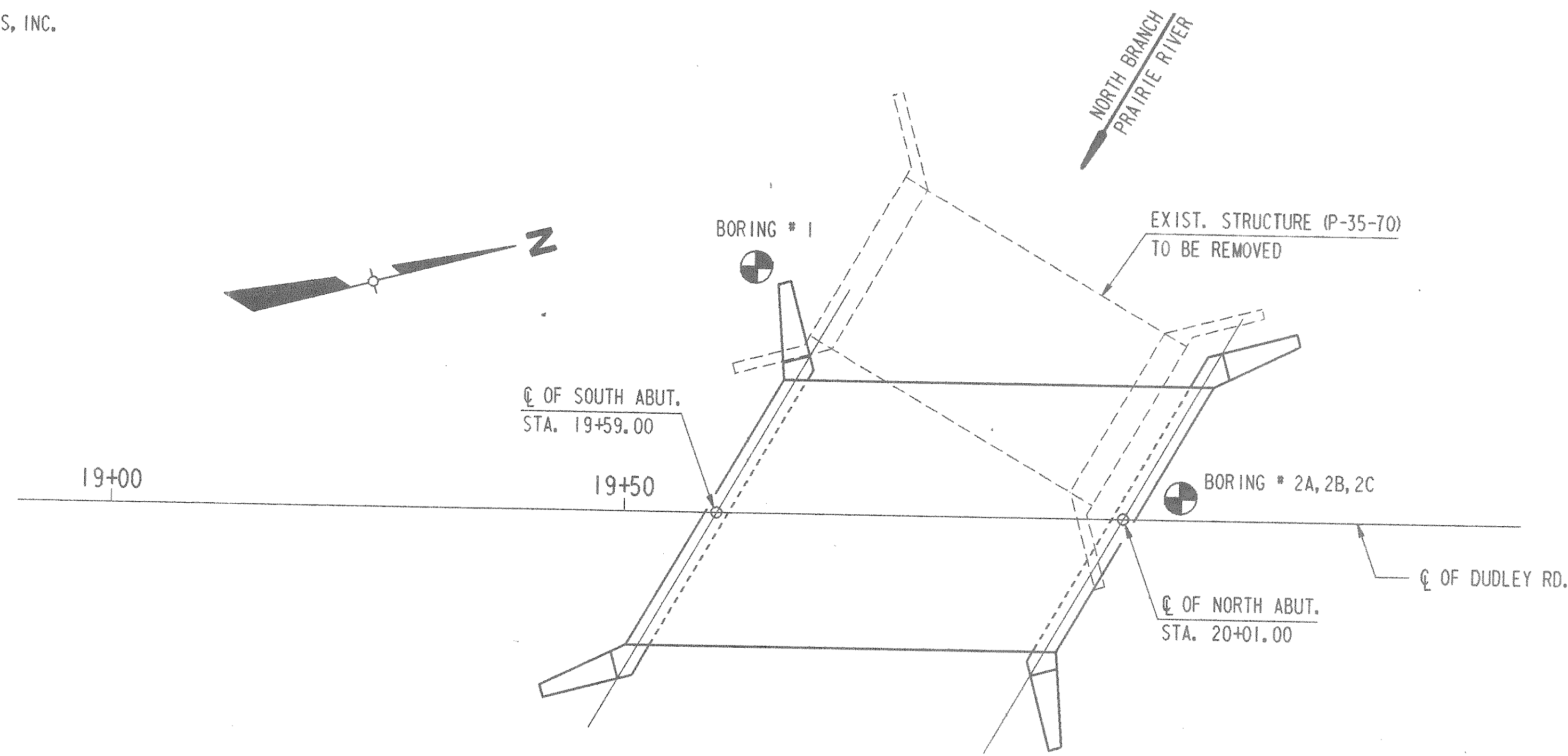
GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
- BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
- FILLER SHALL CONFORM TO A. A. S. H. T. O. DESIGNATION M153, TYPE I, II, III OR M213.
- THE FIRST DIGIT OF A THREE DIGIT BAR MARK SIGNIFIES THE BAR SIZE.
- THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP TO THE LIMITS SHOWN ON SHEET 1, ON THE ABUTMENT SHEET OR AS DIRECTED BY THE ENGINEER.
- SLAB FALSEWORK SHALL BE SUPPORTED ON PILES. ○
- THE EXISTING STRUCTURE IS A SINGLE SPAN STEEL DECK GIRDER BRIDGE, 32'-0" ± LONG
- ALTERNATE SUPPORT MAY BE PROVIDED SUBJECT TO THE APPROVAL OF THE ENGINEER.



No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-93			
Const. Spec.	Wis. 1981	Drawn By	D.F.K.
Plans Checked	JRL		
GENERAL PLAN		SHEET 2 OF 12	
		X78441	

BORINGS PERFORMED BY:
 SOILS & ENGINEERING SERVICES, INC.
 1102 STEWART STREET
 MADISON, WI. 53713
 BORINGS PERFORMED ON:
 AUGUST 12, 1985



★ NOTE:
 BORING 2A ENCOUNTERED AUGER REFUSAL ON BOULDER @ 2'-9", BORING 2B LOCATED 2' NORTH OF 2A, ENCOUNTERED AUGER REFUSAL @ 6'-9". BORING 2C LOCATED 2' NORTH OF BORING 2B AND CONTINUED TO DEPTH SHOWN.

STATE PROJECT NUMBER SHEET NO.

9859-04-70

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

MATERIAL SYMBOLS

Topsoil	Silt	Sandstone
Sand	Peat	Limestone
Gravel	Clay	Igneous Rock

LEGEND OF PROBING

Probing No. Sta. Elevation

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

7 Average Blows Per Foot
 Refusal 95/6

LEGEND OF BORING

Boring No. Sta. Elev.

Unconfined Strength → 7.7
 Blows Per Ft. Using 140# Wt. Falling 30"
 Wash Sample
 Shelby Tube — S.T.
 Ground Water Elevation
 No Ground Water Observed Above This Elevation

Sandy Gravel
 F. Boulders or Cobbles
 Sand
 Silty Clay
 So Limestone

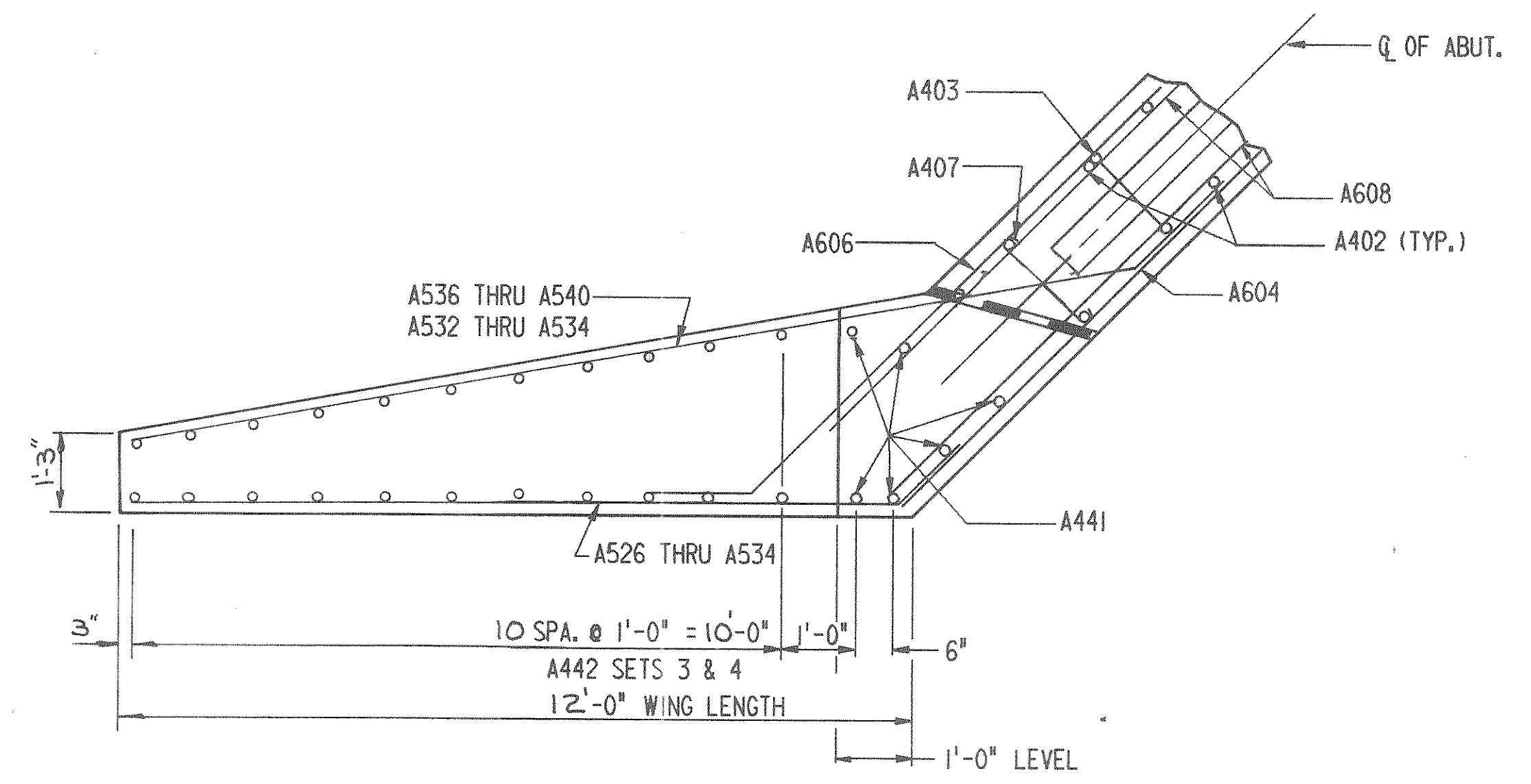
Unless otherwise specified, the blows per foot at the locations indicated are based on driving a 2" O.D. x 1.4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

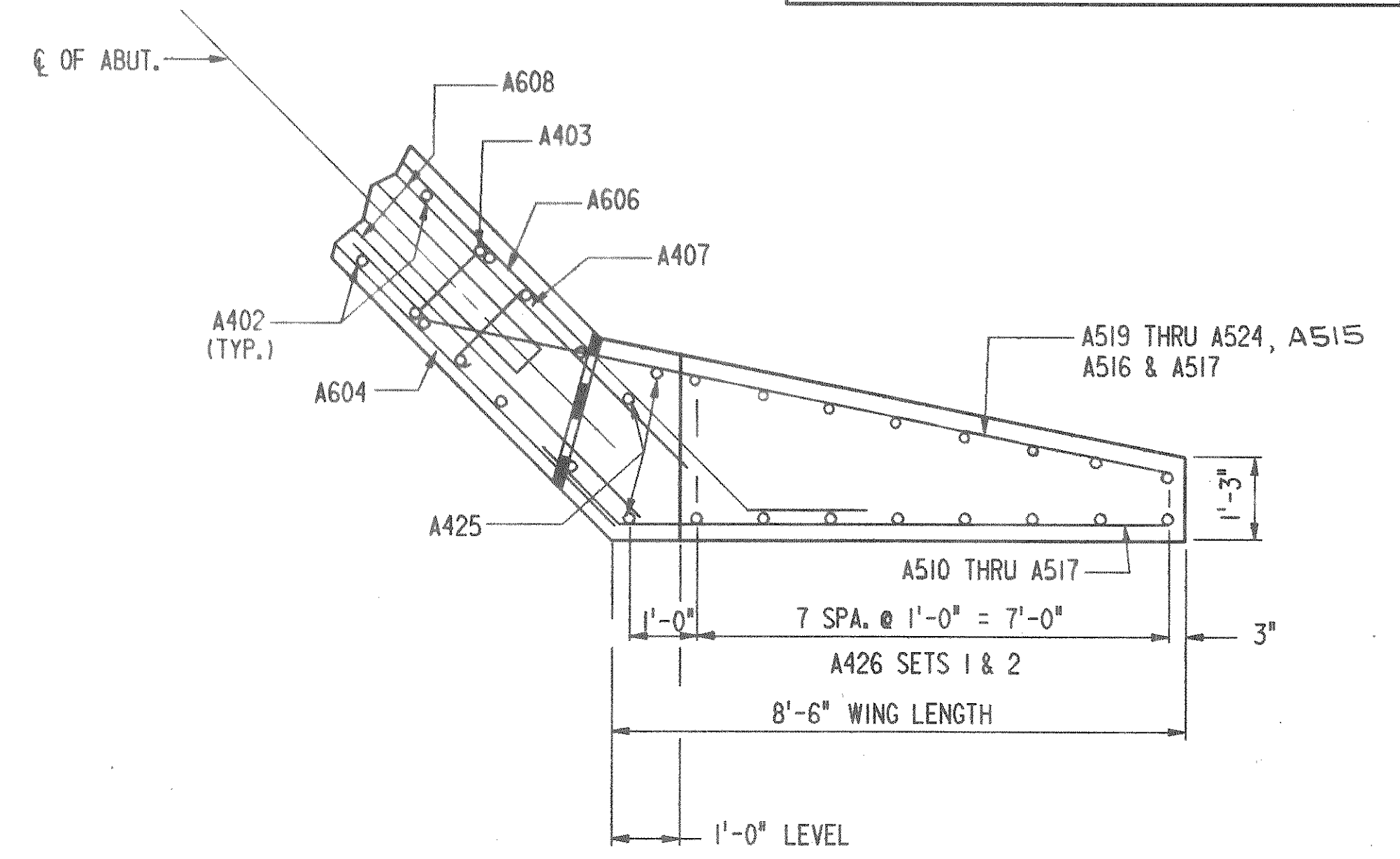
To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the 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			
STRUCTURE B-35-93			
Const. Spec.	WIS. 1981	Drawn By	D.F.K.
		Plans Checked	JRL
SUBSURFACE EXPLORATION		SHEET 3 OF 12	
		X78442	

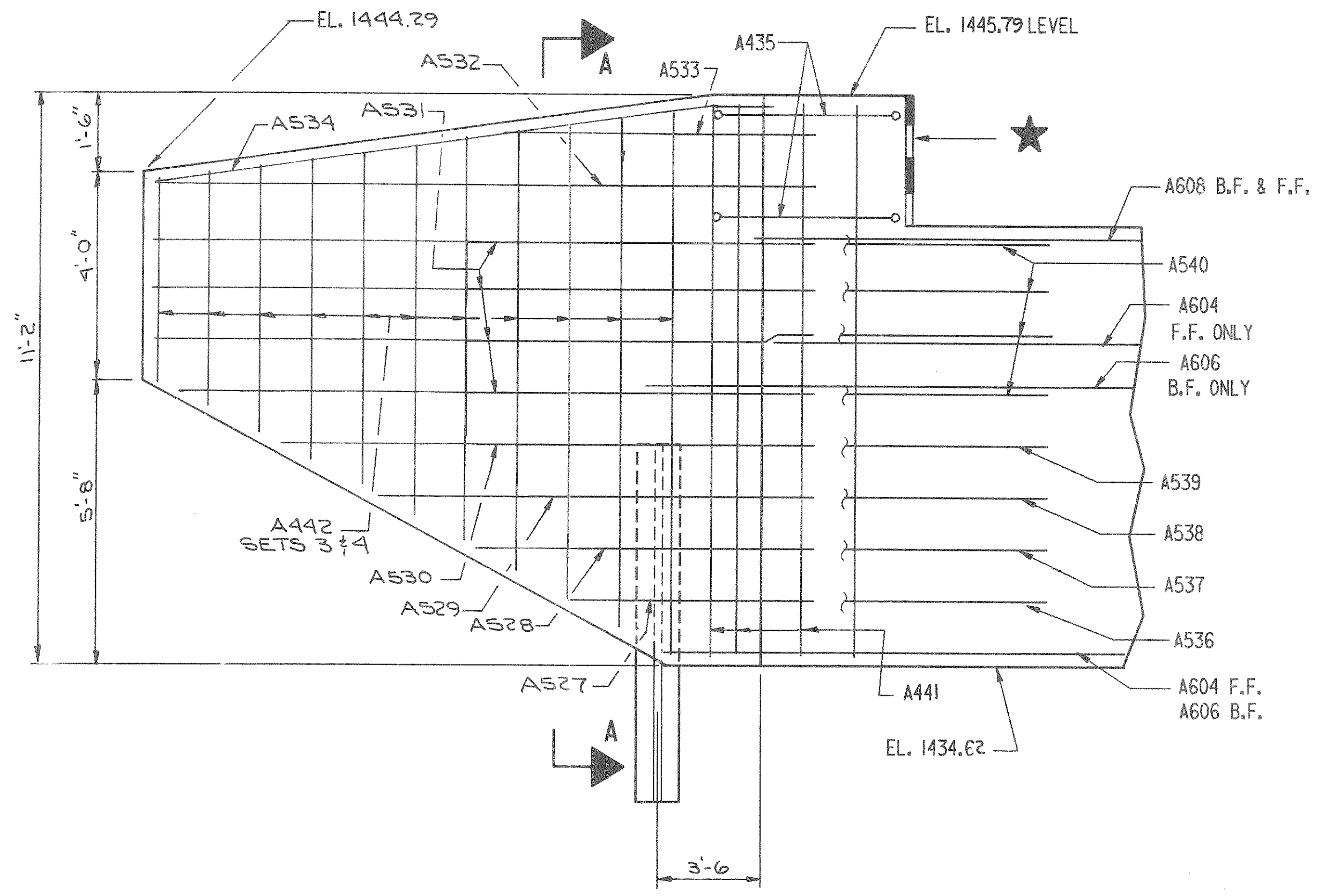
DATE =
 PRF= BORING
 FILE= BORING.PRE
 W.U.=
 W.U.=



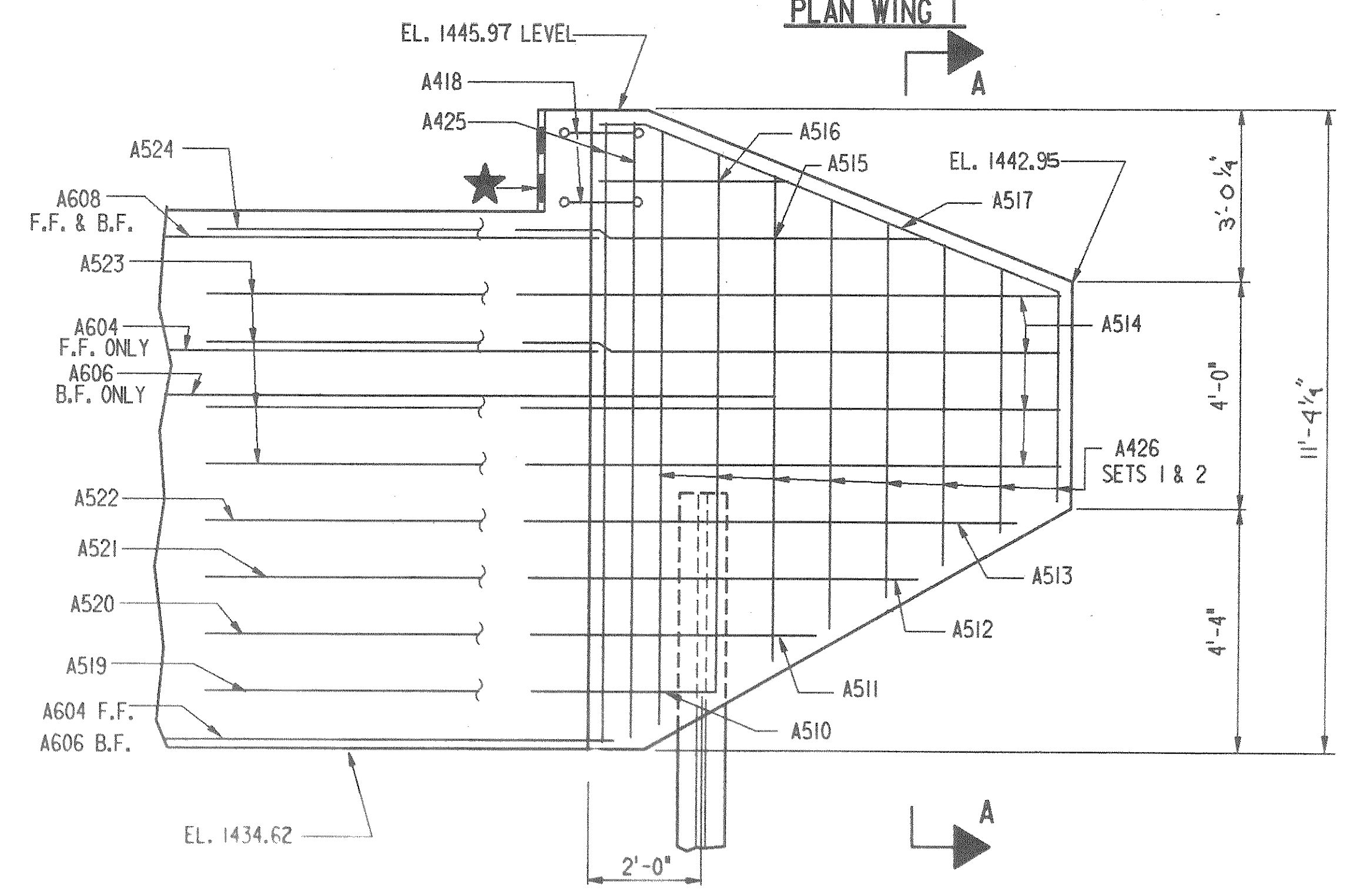
PLAN WING 2



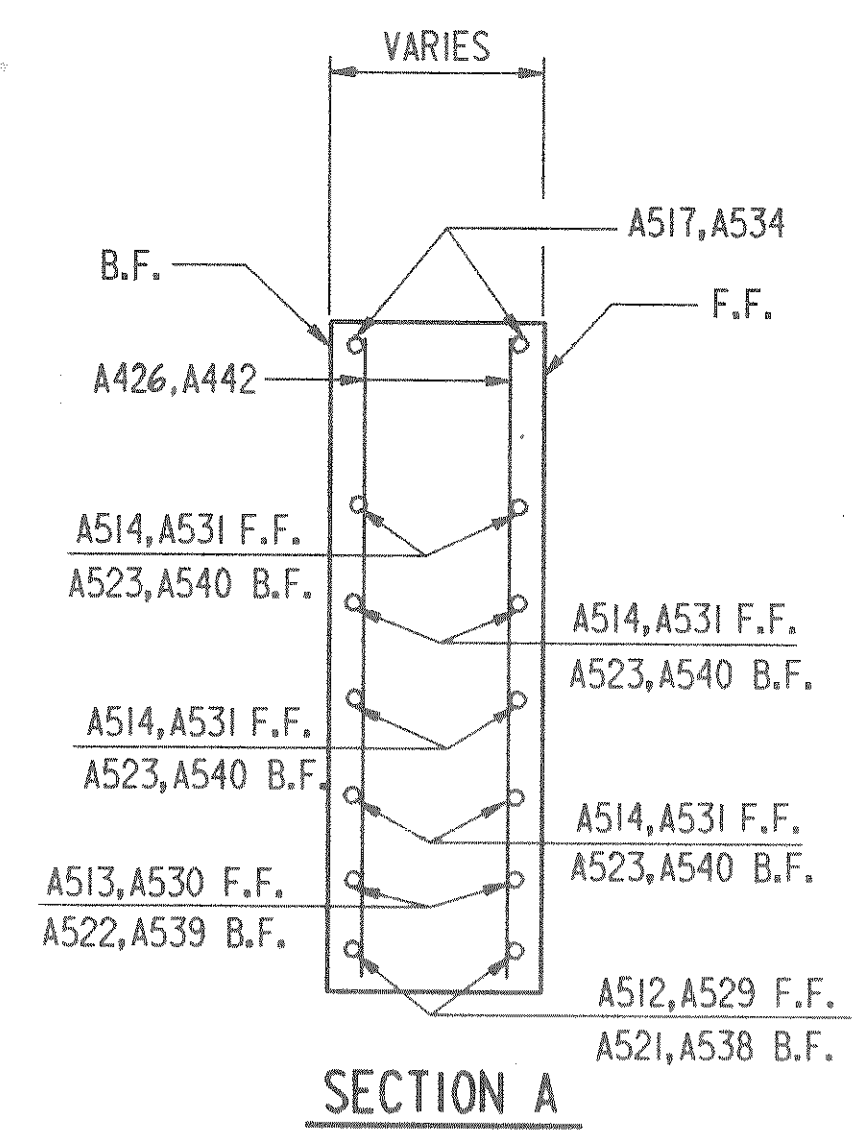
PLAN WING 1



ELEVATION WING 2



ELEVATION WING 1



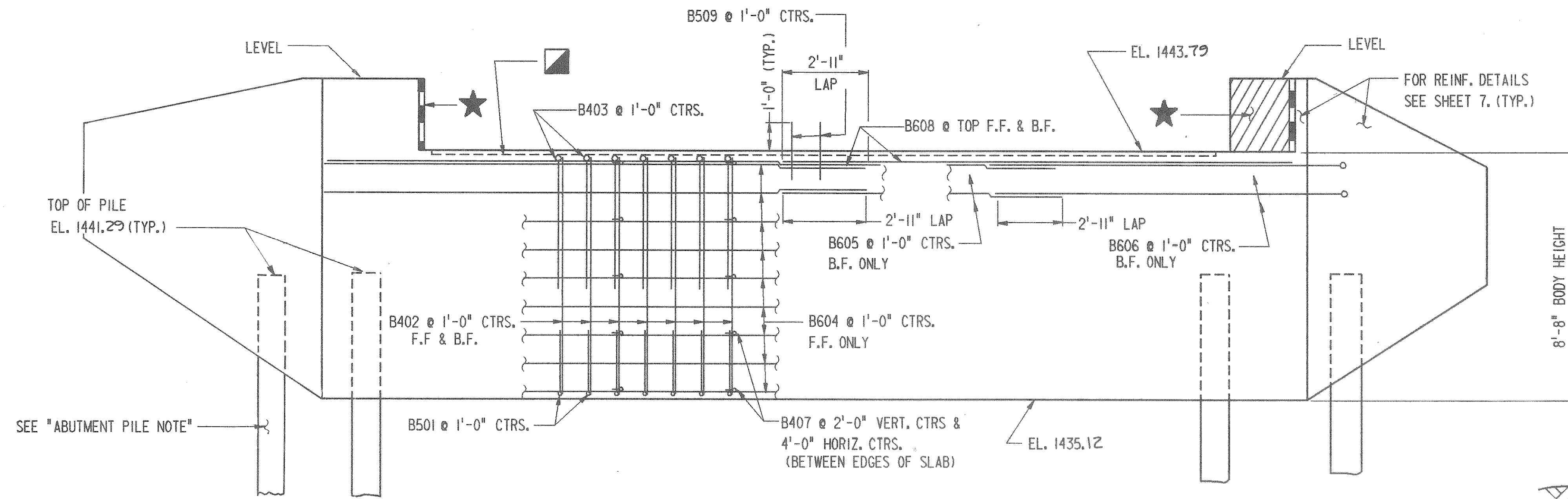
SECTION A

DATE= 12-27-85

PRF= WING12
 FILE= WING12.FIN
 W.U.= 1:12:16000
 W.U.=

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-93			
Const. Spec.	WIS. 1981	Drawn By	T.A.W.
		Plans Checked	JRL
WINGS 1 & 2			SHEET 5 OF 12
X78444			

NOTE: B509 BARS MAY BE PLACED AFTER CONCRETE IS POURED, BUT BEFORE THE INITIAL SET HAS TAKEN PLACE.

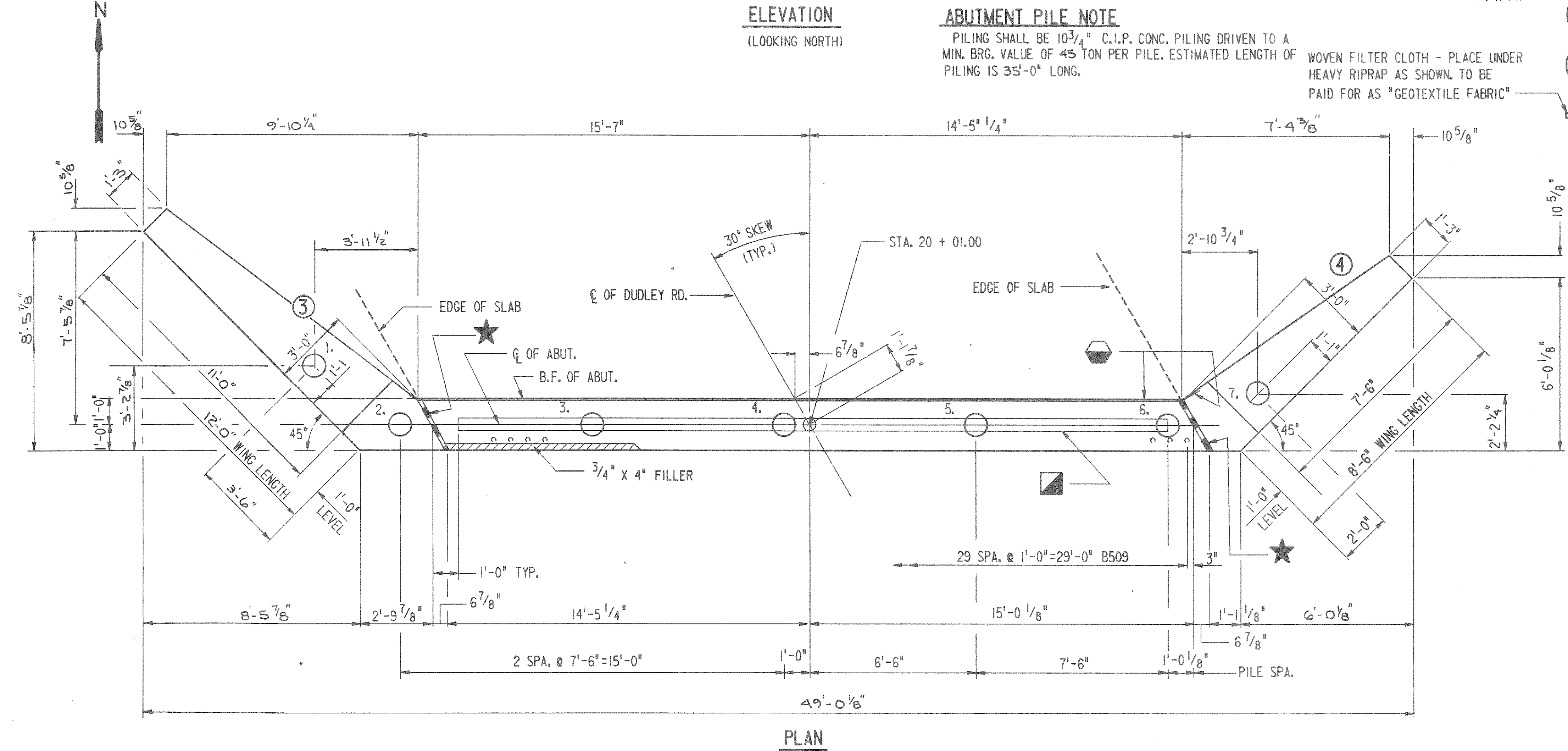


ELEVATION
(LOOKING NORTH)

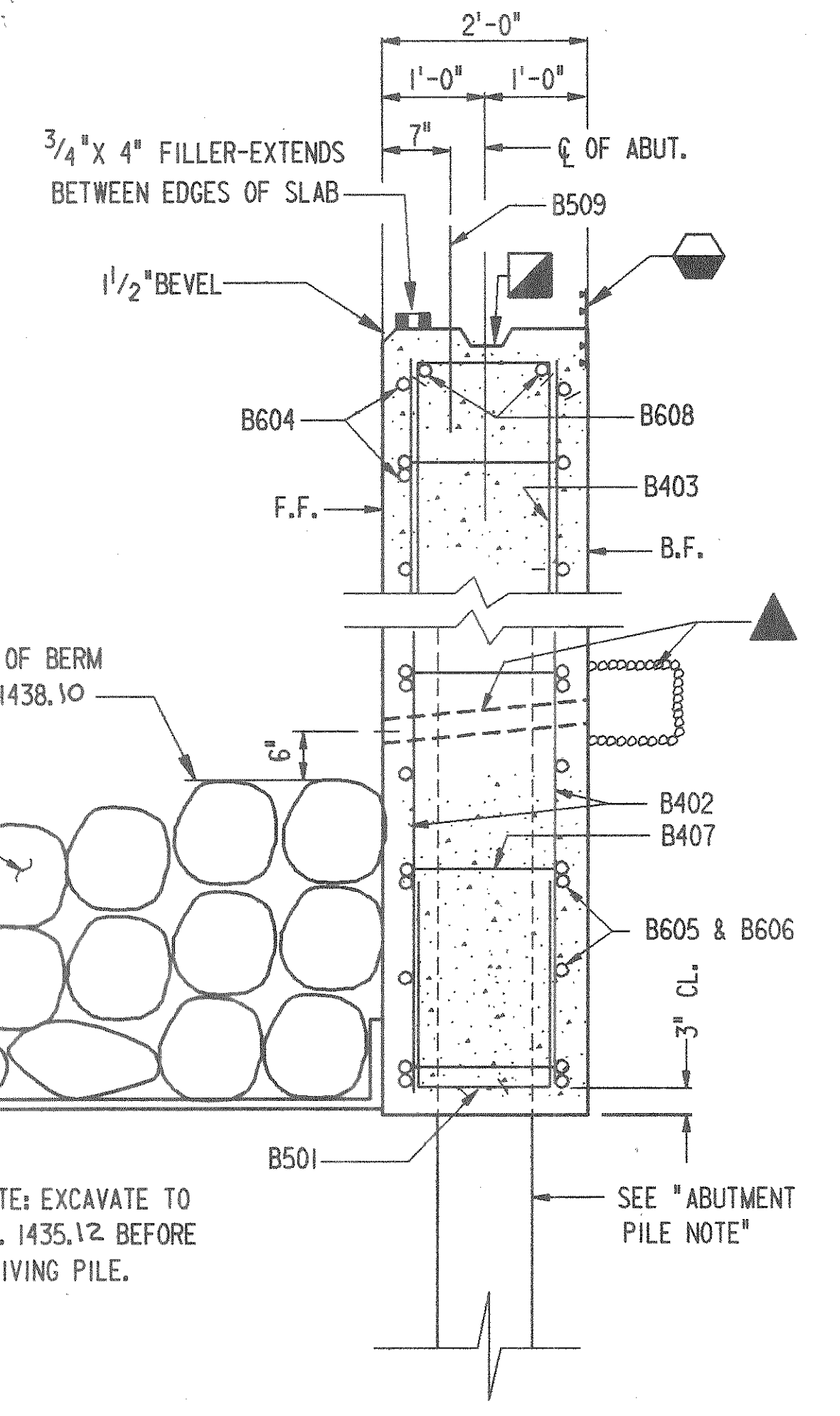
ABUTMENT PILE NOTE

PILING SHALL BE 10³/₄" C.I.P. CONC. PILING DRIVEN TO A MIN. BRG. VALUE OF 45 TON PER PILE. ESTIMATED LENGTH OF PILING IS 35'-0" LONG.

WOVEN FILTER CLOTH - PLACE UNDER HEAVY RIPRAP AS SHOWN, TO BE PAID FOR AS "GEOTEXTILE FABRIC"



PLAN



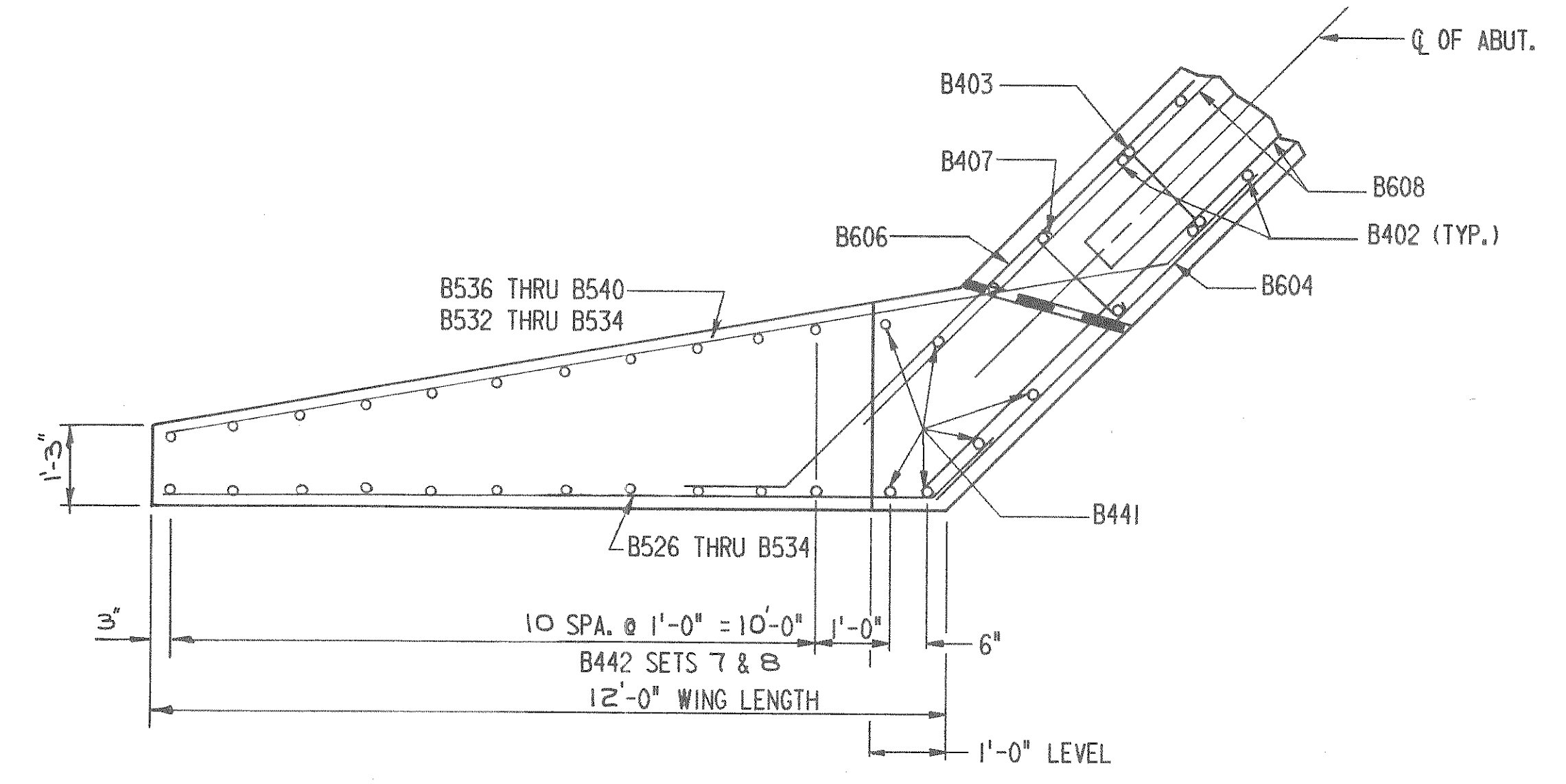
TYPICAL SECTION THRU BODY

NOTE: FOR SYMBOL ★, ◼ & ◻ DESCRIPTIONS SEE SHEET 8.

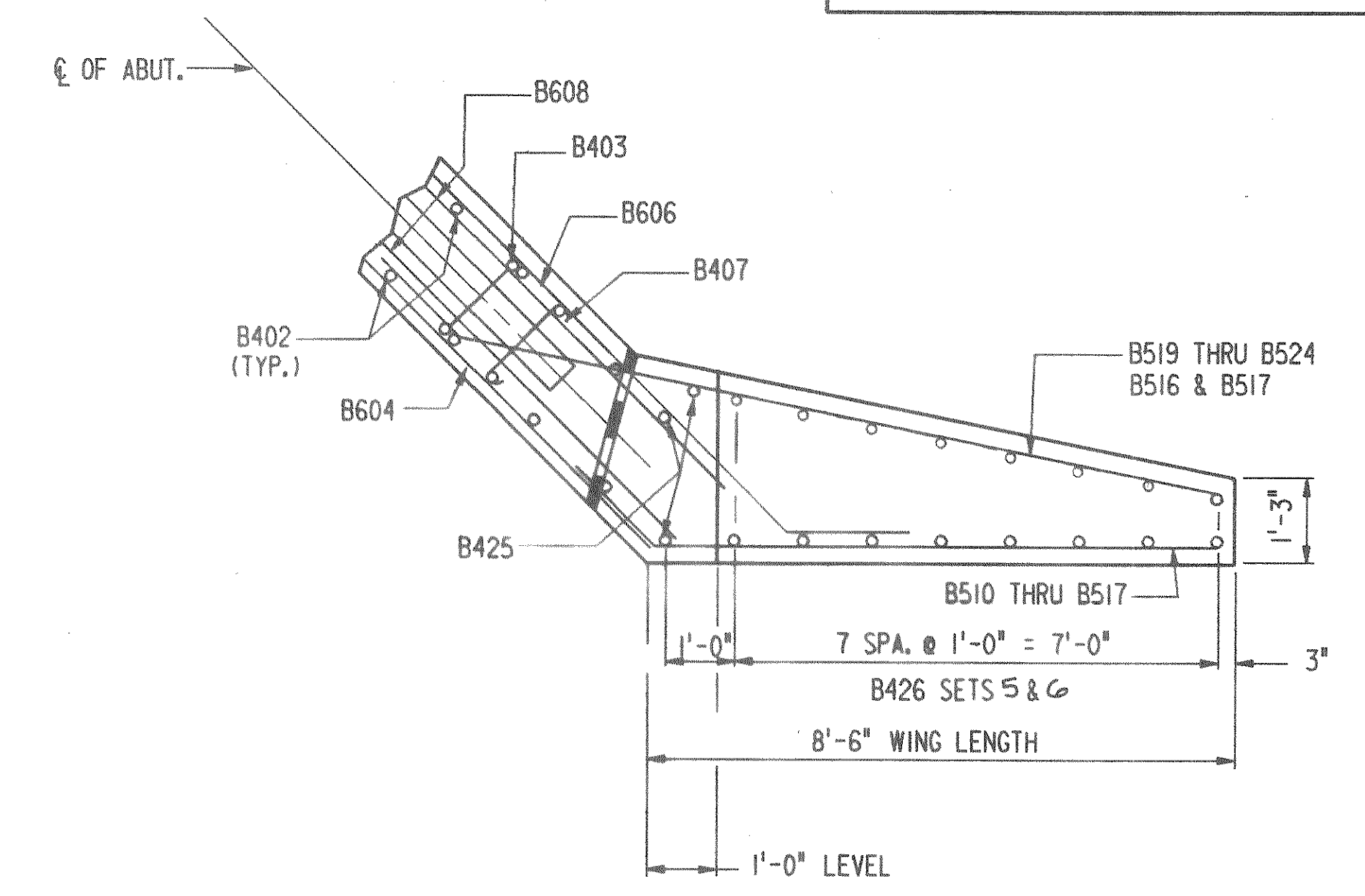
▲ - 2" DIA. WEEP HOLES AT 20'-0" CTRS. - USE FILTER CLOTH WITH SELECT GRANULAR MATERIAL AT EACH HOLE (ON B.F. 12" X 12" X 12" MIN.) COST INCIDENTAL TO "CONCRETE MASONRY, BRIDGES".

NOTE: DO NOT PLACE FILL ABOVE EL. 1437.1 ± UNTIL SUPERSTRUCTURE CONCRETE IS IN PLACE.

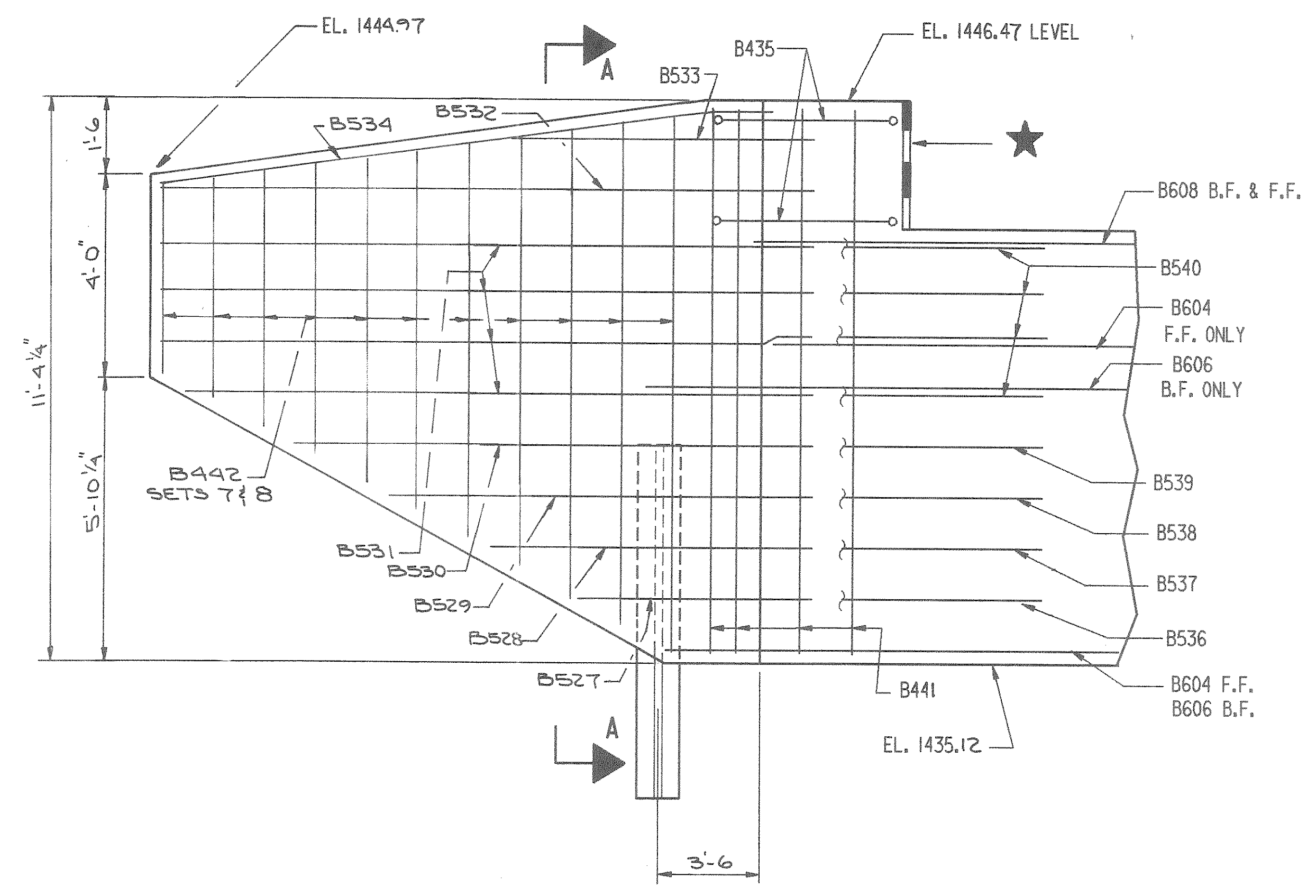
No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-93			
Const. Spec.	WIS. 1981	Drawn By	T.A.W.
		Plans Checked	JRL
NORTH ABUTMENT			SHEET 6 OF 12
			X78445



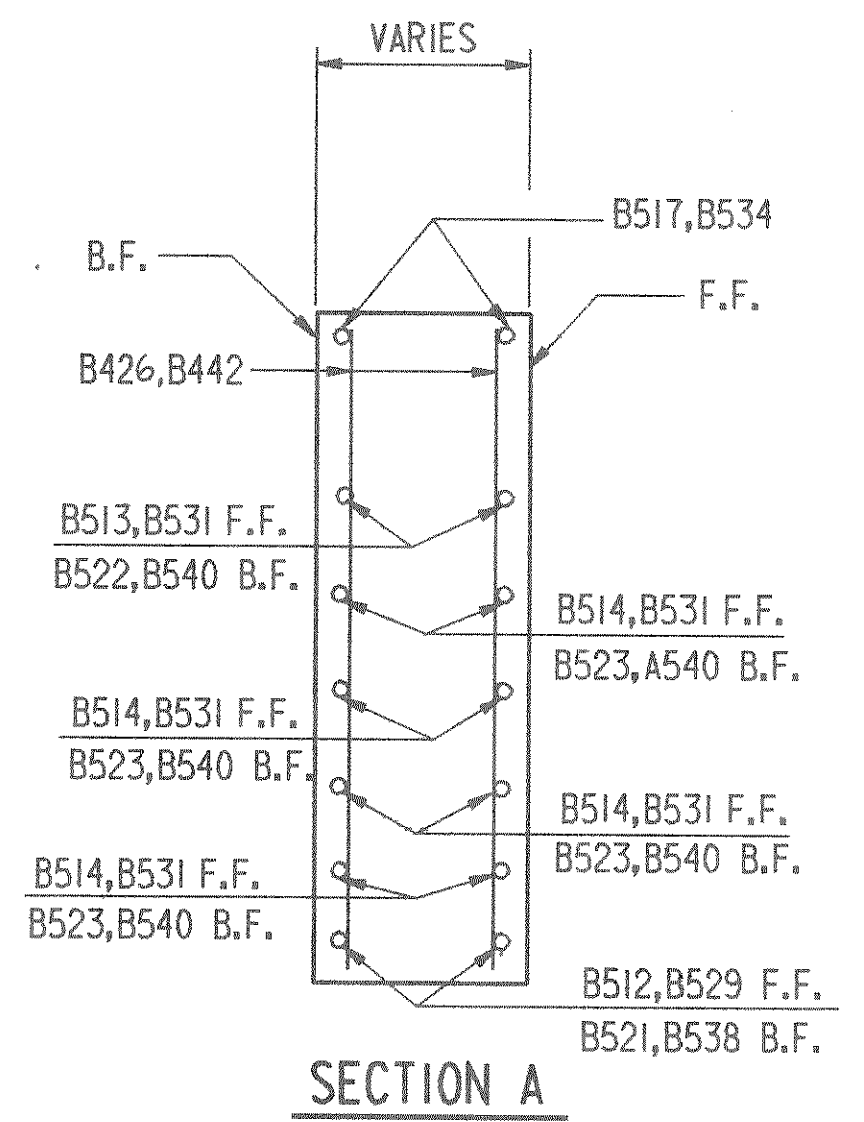
PLAN WING 3



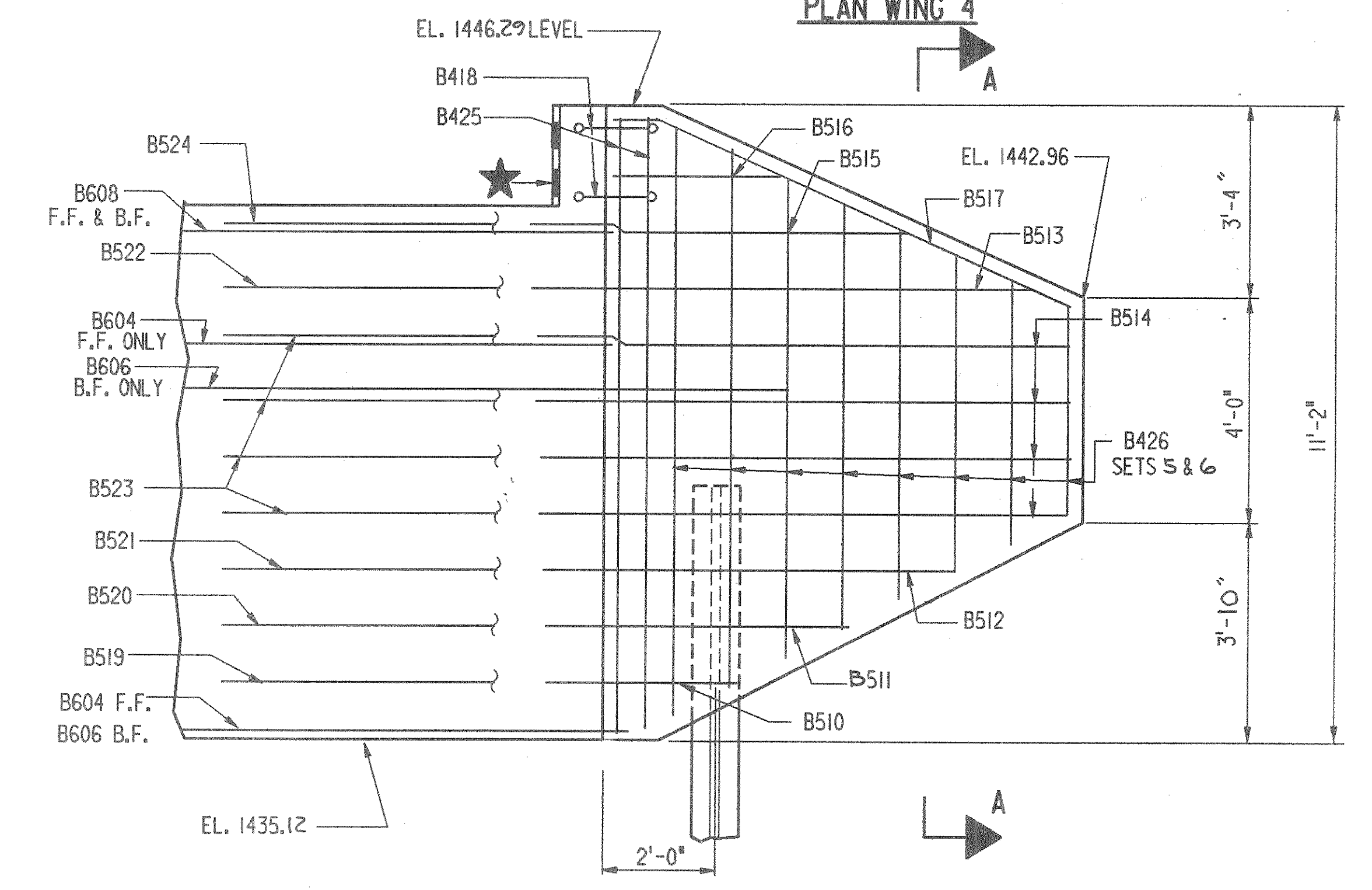
PLAN WING 4



ELEVATION WING 3



SECTION A



ELEVATION WING 4

DATE: 12-27-85
 PRF- WINGS34 [142001]
 FILE- WINGS34.FIN
 W.U. = 1:2:16000
 W.U. =

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-93			
Const. Spec.	WIS. 1981	Drawn By	T.A.W.
		Plans Checked	JRL
WINGS 3 & 4			SHEET 7 OF 12
X78446			

BILL OF BARS (SOUTH ABUTMENT)

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

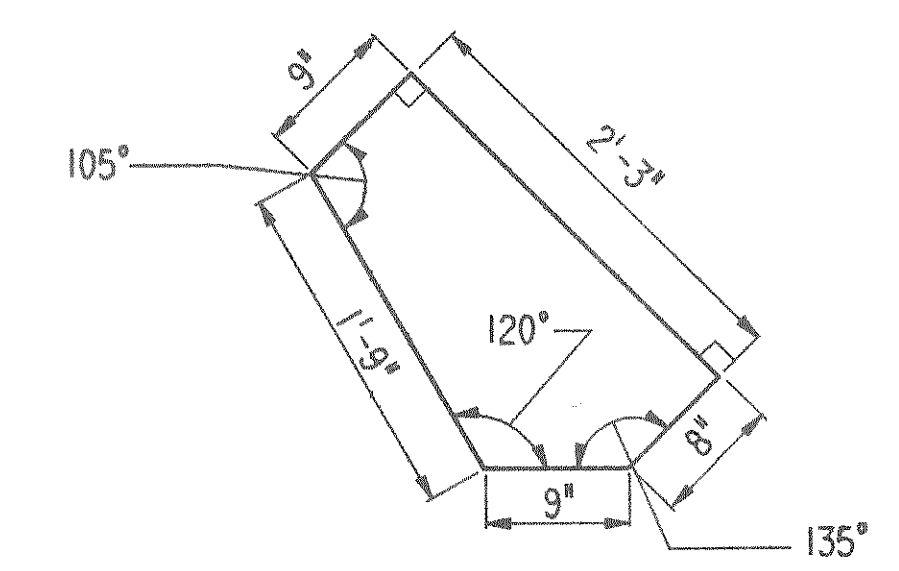
MARK	NO. REQ'D.	LENGTH	BENT	CUT. DIA.	LOCATION	TOTAL WEIGHT=
A501	33	5-3	X		BODY - BOTTOM	VERT. 2780 LBS.
A402	62	8-2			" - F.F. & B.F.	"
A403	30	8-0	X		" - TOP	"
A604	18	18-8			" - F.F.	HORIZ.
A605	9	23-3			" - B.F.	"
A606	18	11-6	X		" - B.F. @ ENDS	"
A407	40	2-4	X		" - TIE BARS	"
A608	4	18-9			" - TOP - F.F. & B.F.	"
A509	30	2-0			" - "	VERT.
A510	1	4-1	X		WING 1 - F.F.	HORIZ.
A511	1	5-8	X		" - "	"
A512	1	7-2	X		" - "	"
A513	1	8-11	X		" - "	"
A514	4	9-9	X		" - "	"
A515	2	6-0			" - " & B.F.	"
A516	2	3-5			" - " & B.F.	"
A517	2	8-9	X		" - " & " - TOP	"
A418	2	6-5	X		" - TOP	"
A519	1	6-9	X		" - B.F.	"
A520	1	8-8	X		" - "	"
A521	1	10-5	X		" - "	"
A522	1	12-0	X		" - "	"
A523	4	12-10	X		" - "	"
A524	1	10-9	X		" - "	"
A425	3	11-0			" - F.F. & B.F.	VERT.
A426	8	13-7		X	" - " & "	"
A527	1	5-3	X		" 2 - F.F.	HORIZ.
A528	1	7-0	X		" - "	"
A529	1	9-0	X		" - "	"
A530	1	10-9	X		" - "	"
A531	4	13-2	X		" - "	"
A532	2	13-0	X		" - "	"
A533	2	4-8			" - " & B.F.	"
A534	2	11-9	X		" - " & " - TOP	"
A435	2	8-10	X		" - TOP	"
A536	1	8-2	X		" - B.F.	"
A537	1	9-10	X		" - "	"
A538	1	11-9	X		" - "	"
A539	1	13-8	X		" - "	"
A540	4	16-0	X		" - "	"
A441	6	10-9			" - F.F. & B.F.	VERT.
A442	11	14-1		X	" - " & "	"

BILL OF BARS (NORTH ABUTMENT)

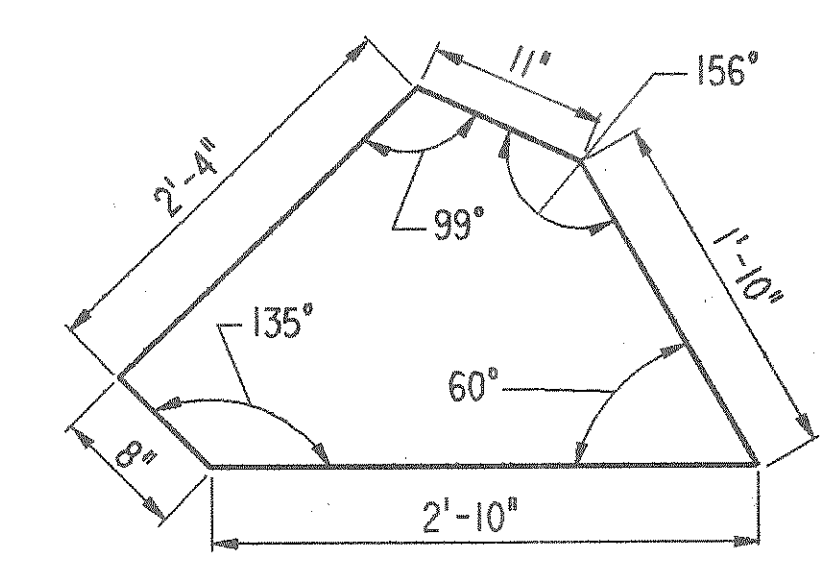
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

MARK	NO. REQ'D.	LENGTH	BENT	CUT. DIA.	LOCATION	TOTAL WEIGHT=
B501	33	5-3	X		BODY - BOTTOM	VERT. 2790 LBS.
B402	62	8-2			" - F.F. & B.F.	"
B403	30	8-0	X		" - TOP	"
B604	18	18-8			" - F.F.	HORIZ.
B605	9	23-3			" - B.F.	"
B606	18	11-6	X		" - B.F. @ ENDS	"
B407	40	2-4	X		" - TIE BARS	"
B608	4	18-9			" - TOP - F.F. & B.F.	"
B509	30	2-0			" - "	VERT.
B510	1	4-1	X		WING 4 - F.F.	HORIZ.
B511	1	5-8	X		" - "	"
B512	1	7-9	X		" - "	"
B513	1	8-11	X		" - "	"
B514	4	9-9	X		" - "	"
B515	2	5-6			" - " & B.F.	"
B516	2	3-0			" - " & B.F.	"
B517	2	8-9	X		" - " & " - TOP	"
B418	2	6-5	X		" - TOP	"
B519	1	7-0	X		" - B.F.	"
B520	1	8-11	X		" - "	"
B521	1	10-9	X		" - "	"
B522	1	12-2	X		" - "	"
B523	4	12-6	X		" - "	"
B524	1	10-6	X		" - "	"
B425	3	10-9			" - F.F. & B.F.	VERT.
B426	8	14-3		X	" - " & "	"
B527	1	5-2	X		" 3 - F.F.	HORIZ.
B528	1	6-10	X		" - "	"
B529	1	8-10	X		" - "	"
B530	1	10-9	X		" - "	"
B531	4	13-2	X		" - "	"
B532	2	13-2	X		" - " & B.F.	"
B533	2	6-0			" - " & "	"
B534	2	11-9	X		" - " & " - TOP	"
B435	2	8-10	X		" - TOP	"
B536	1	8-2	X		" - B.F.	"
B537	1	9-10	X		" - "	"
B538	1	11-9	X		" - "	"
B539	1	13-8	X		" - "	"
B540	4	16-0	X		" - "	"
B441	6	10-11			" - F.F. & B.F.	VERT.
B442	11	14-4		X	" - " & "	"

STATE PROJECT NUMBER	SHEET NO.
9859-04-70	



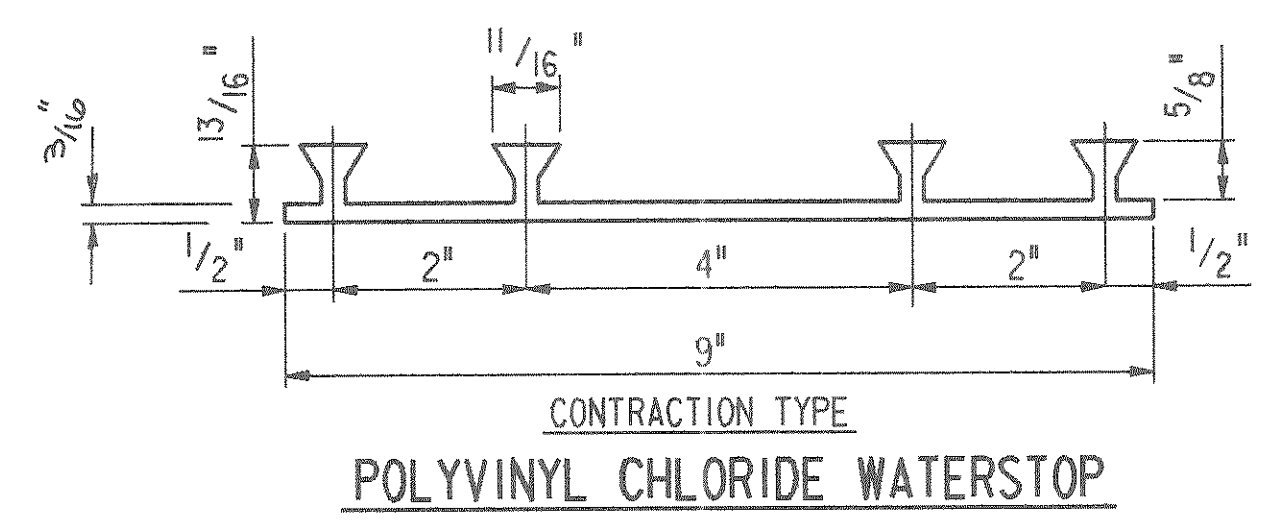
A418 & B418



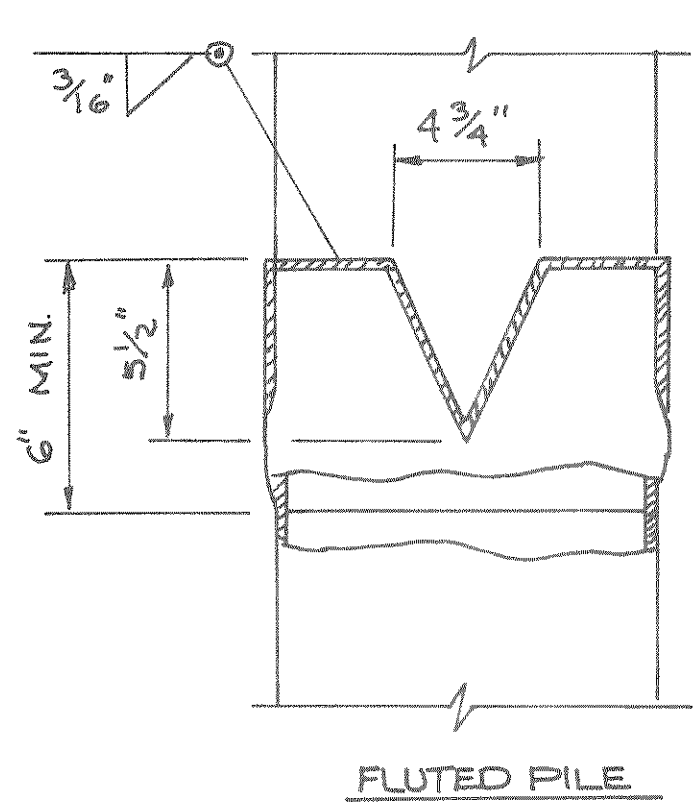
A435 & B435

LEGEND

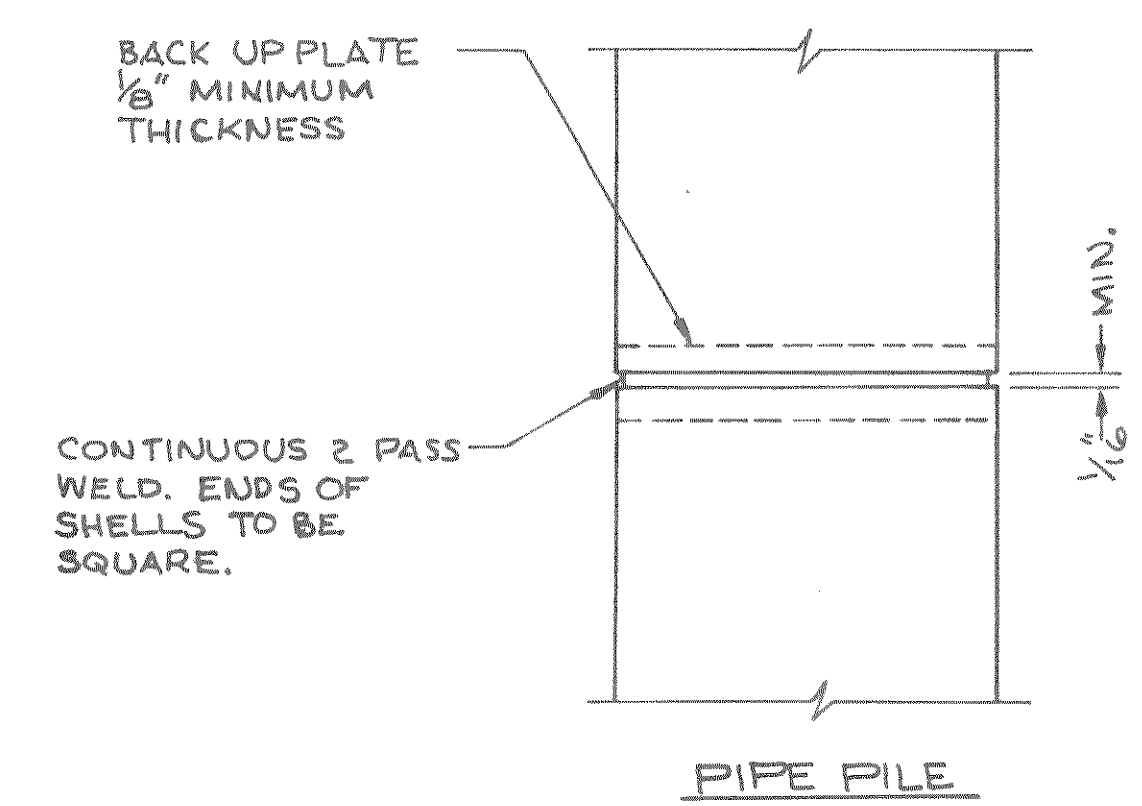
- ★ 1/2" FILLER - TO EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE.)
- ◻ POLYVINYL CHLORIDE WATERSTOP (P.C.W.) - TO EXTEND HORIZONTAL BETWEEN WINGS AND VERTICAL FROM TOP OF ABUTMENT BODY TO TOP OF WING. (HOLD FLUSH WITH FACE OF CONCRETE.) FOR DETAIL SEE THIS SHEET. P.C.W. SHALL BE BUTTSPLICED, AT JUNCTIONS, BY USING A SPLICING IRON. PLACE SEALER, SIMILAR TO THE ONE DESCRIBED ABOVE, BETWEEN THE 1/2" FILLER AND THE P.C.W. EXTENDING TO WITHIN 3" FROM THE CUTTER LINE. SEAL ALL VERT. ENDS WITH A SIMILAR SEALER.
- ◼ KEYED CONSTRUCTION JOINT FORMED BY A SURFACED, BEVELED 2" X 6".



CONTRACTION TYPE
POLYVINYL CHLORIDE WATERSTOP



FLUTED PILE



PIPE FILE

PILE SPLICE DETAIL

SEE SHEET 9 FOR CUTTING DIAGRAM AND BAR BENDING DETAIL.

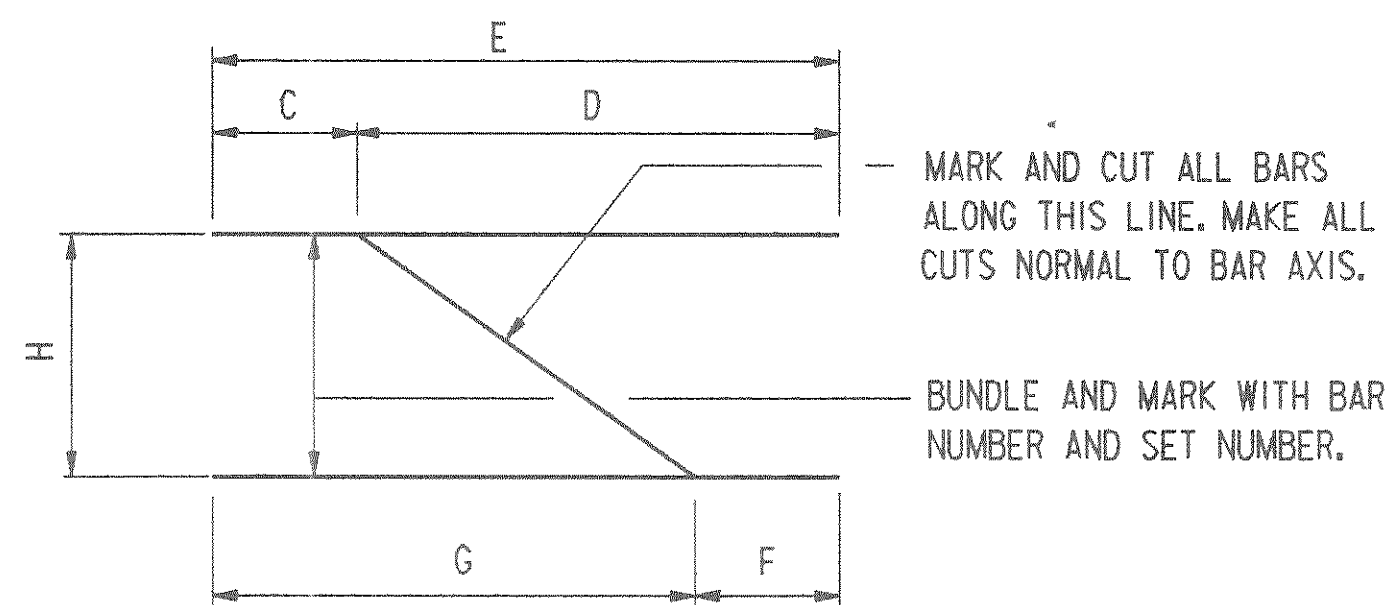
PRF= ABUTDET01 [140001]
FILE= BILLBAR.FIN
W.U.=
W.U.=

DATE= 12-15-85

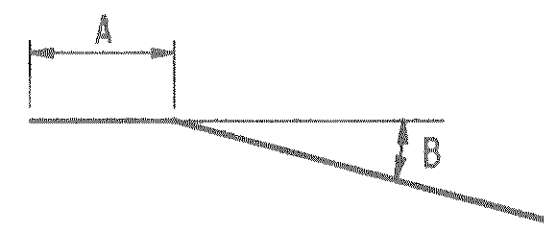
No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-93			
Const. Spec.	WIS. 1981	Drawn By	T.A.W.
		Plans Checked	JRL
ABUTMENT DETAILS			SHEET 8 OF 12
X784 47			

MARK		C	D	E	F	G	H	SETS REQ'D.
A426	SET 1	3-9		13-7		9-10	8	1 SET 1
	SET 2		9-10		3-9			1 SET 2
A442	SET 3	3-9		14-1		10-4	11	1 SET 3
	SET 4		10-4		3-9			1 SET 4
B426	SET 5	3-9		14-3		10-6	8	1 SET 5
	SET 6		10-6		3-9			1 SET 6
B442	SET 7	3-9		14-4		10-7	11	1 SET 7
	SET 8		10-7		3-9			1 SET 8

NOTE: "H" IS THE NUMBER OF BARS IN CUTTING DIAGRAM BEFORE THE CUT.

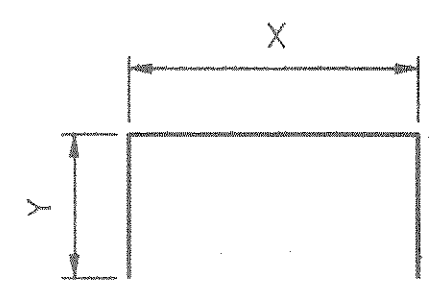


CUTTING DIAGRAM



MARK	A	ANGLE B
A606	1-6	45° - 00'
A510	1-6	45° - 00'
A511	1-6	45° - 00'
A512	1-6	45° - 00'
A513	1-6	45° - 00'
A514	1-6	45° - 00'
A517	8-0	24° - 00'
A519	1-6	31° - 00'
A520	1-6	31° - 00'
A521	1-6	31° - 00'
A523	1-6	31° - 00'
A524	1-6	31° - 00'
A527	1-6	45° - 00'
A528	1-6	45° - 00'
A529	1-6	45° - 00'
A530	1-6	45° - 00'
A531	1-6	45° - 00'
A534	11-0	38° - 00'
A536	1-6	36° - 00'
A537	1-6	36° - 00'
A538	1-6	36° - 00'
A539	1-6	36° - 00'
A540	1-6	36° - 00'
A532	1-6	45° - 00'

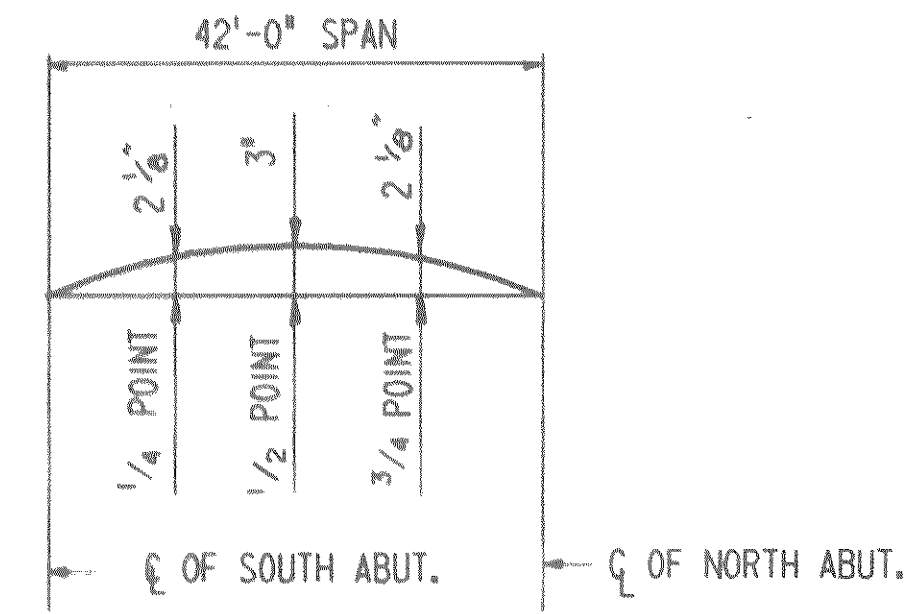
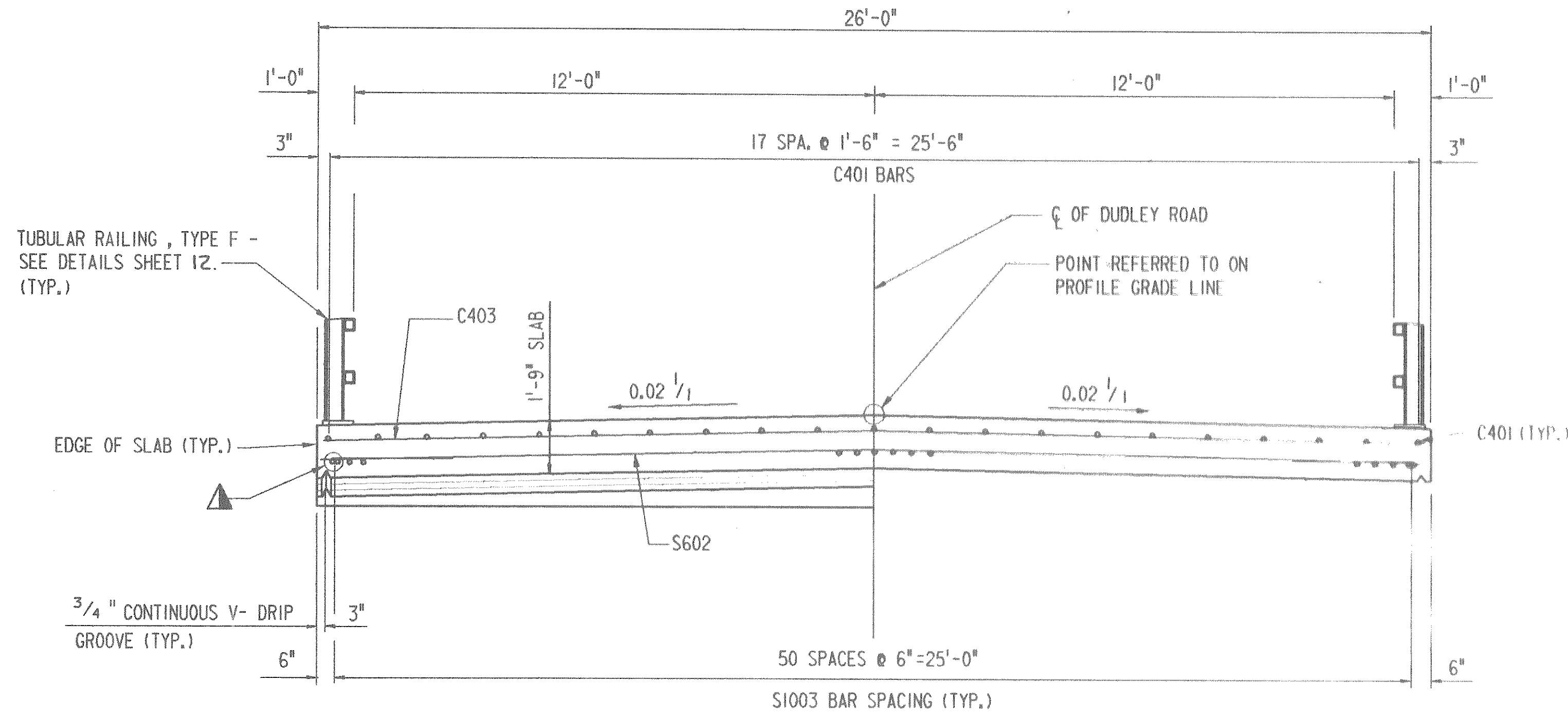
MARK	A	ANGLE B
B606	1-6	45° - 00'
B510	1-6	45° - 00'
B511	1-6	45° - 00'
B512	1-6	45° - 00'
B513	1-6	45° - 00'
B514	1-6	45° - 00'
B517	8-0	24° - 00'
B519	1-6	31° - 00'
B520	1-6	31° - 00'
B521	1-6	31° - 00'
B523	1-6	31° - 00'
B524	1-6	31° - 00'
B527	1-6	45° - 00'
B528	1-6	45° - 00'
B529	1-6	45° - 00'
B530	1-6	45° - 00'
B531	1-6	45° - 00'
B534	11-0	38° - 00'
B536	1-6	36° - 00'
B537	1-6	36° - 00'
B538	1-6	36° - 00'
B539	1-6	36° - 00'
B540	1-6	36° - 00'
B532	1-6	45° - 00'



MARK	X	Y
A501	1-6	2-0
A403	1-6	3-4
A407	1-8	0-5
B501	1-6	2-0
B403	1-6	3-4
B407	1-8	0-5

PRF= ABUTDET02 [140001]
 FILE= BILLBAR2.FIN
 W.U.= 1128000
 W.U.=
 DATE= 12-27-85

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-93			
Constr. Spec.	WIS. 1981	Drawn By	T.A.W. Plans Checked JRL
ABUTMENT DETAILS			SHEET 9 OF 12 X78448



CAMBER DIAGRAM

NOTE: ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM, ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

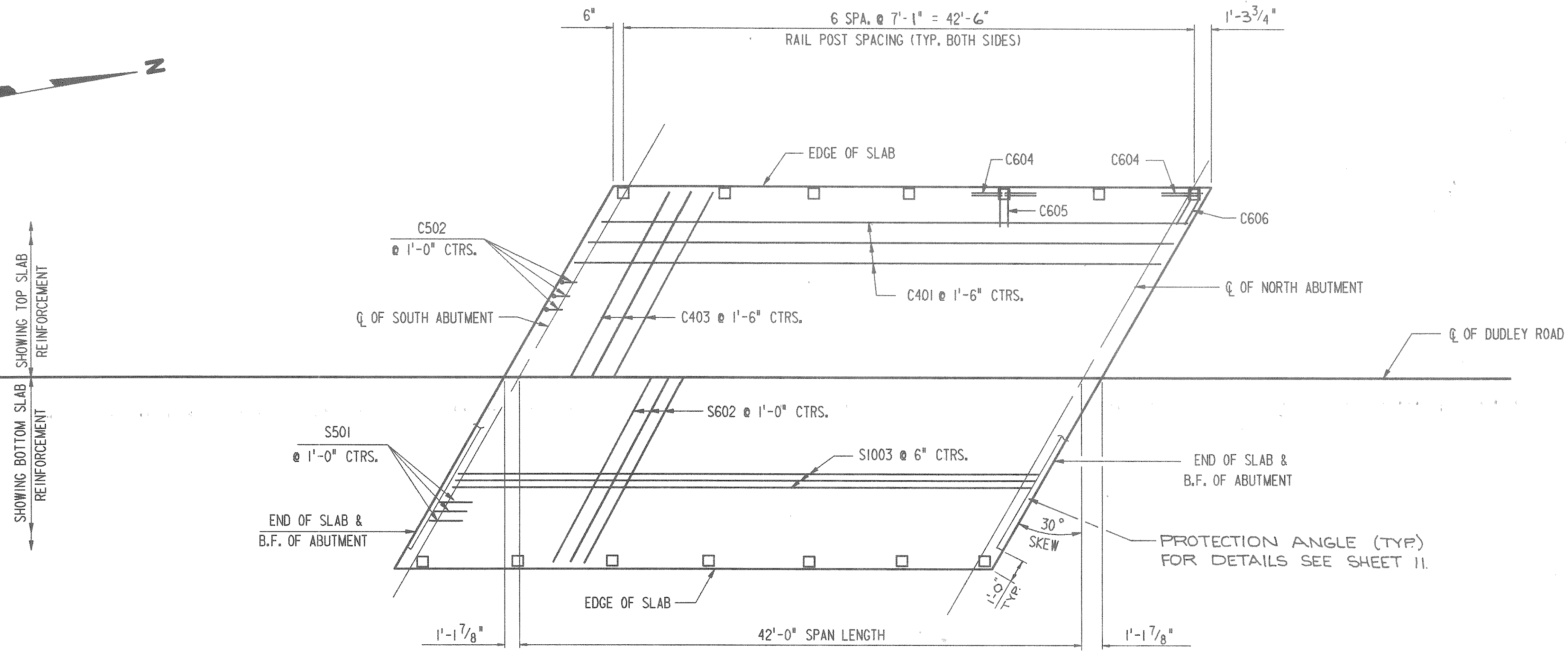
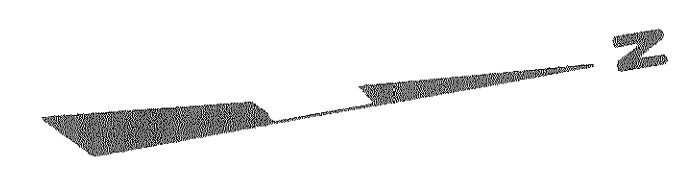
CAMBER SPANS AS SHOWN TO PROVIDE FOR DEADLOAD DEFLECTION AND FUTURE PLASTIC FLOW. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT. DEADLOAD DEFLECTION ONLY EQUALS APPROXIMATELY 1/3 OF CAMBER VALUES SHOWN.

▲ BUNDLE EXTERIOR S1003 BARS AS SHOWN. FOR BUNDLING DETAIL SEE SHEET 11. (TYP. @ BOTH EDGES OF SLAB)

AT ABUTMENTS IN SPAN

CROSS SECTION THRU ROADWAY

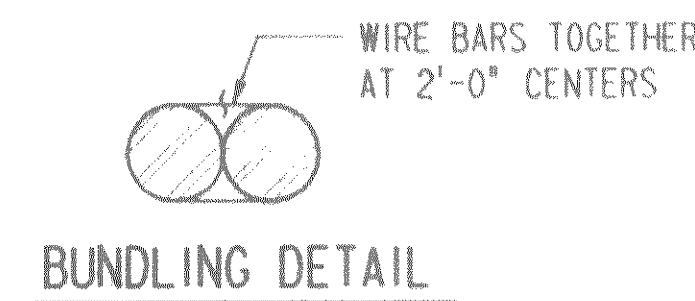
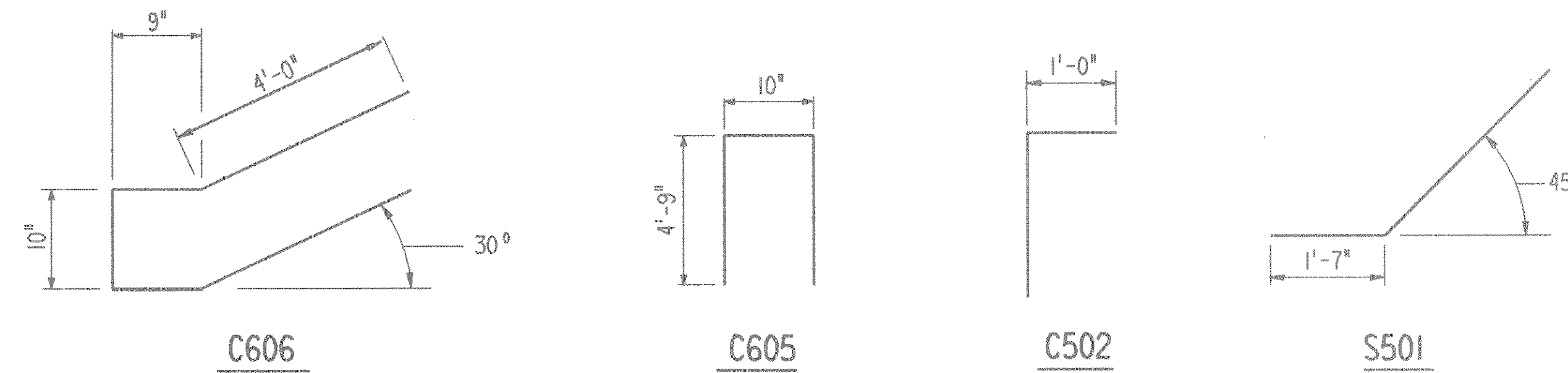
(LOOKING NORTH)



PLAN

PRF= SUPERPLOT
 FILE= SUPER.PLA
 W.U.= 11/21/2000 (CROSS SECTION)
 W.U.= 11/21/2000 (PLAN)
 DATE= 12-9-85

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-93			
Const. Spec.	WIS.1981	Drawn By	T.A.W.
		Plans Checked	JRL
SUPERSTRUCTURE			SHEET 10 OF 12
			X78449

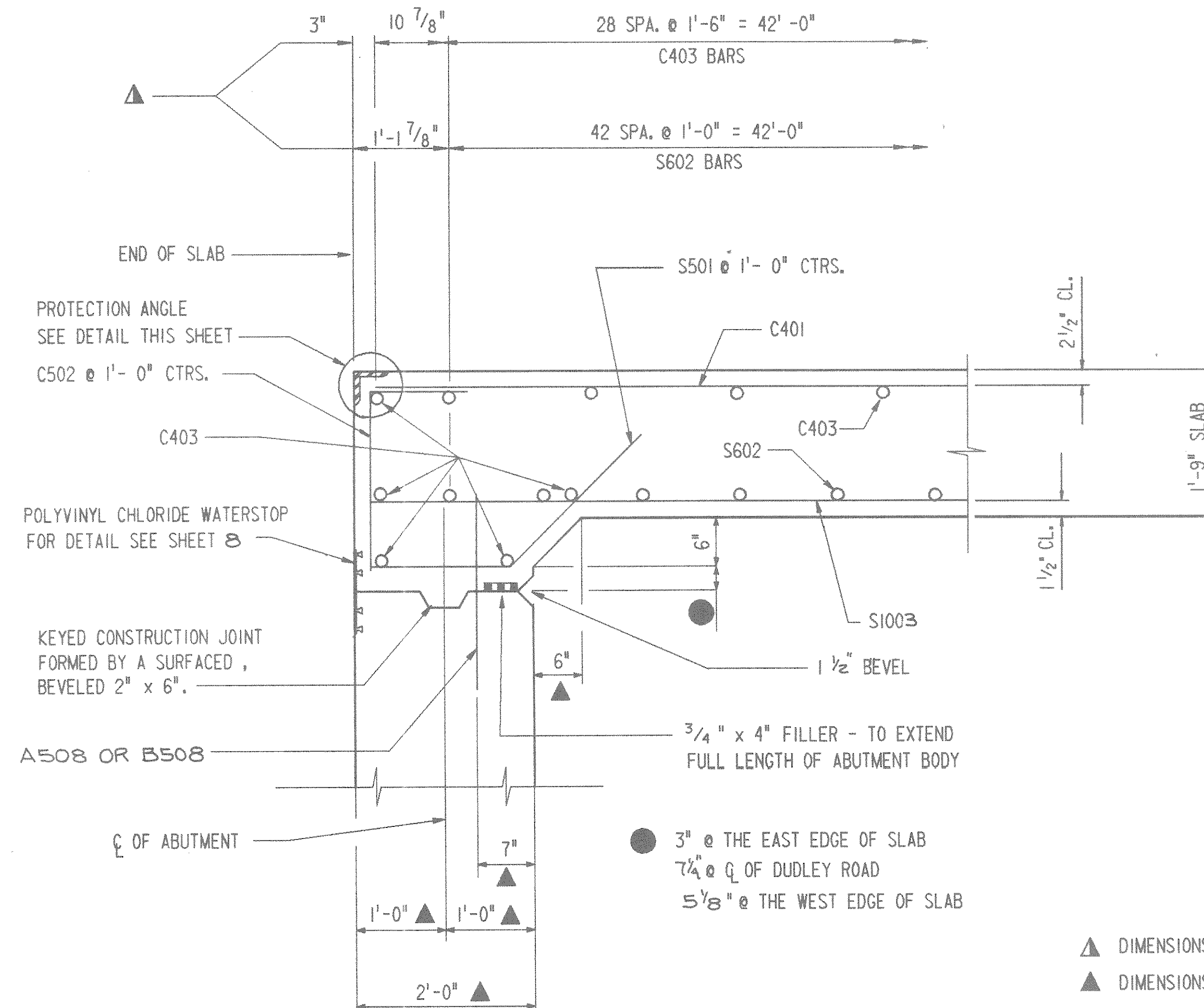


BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

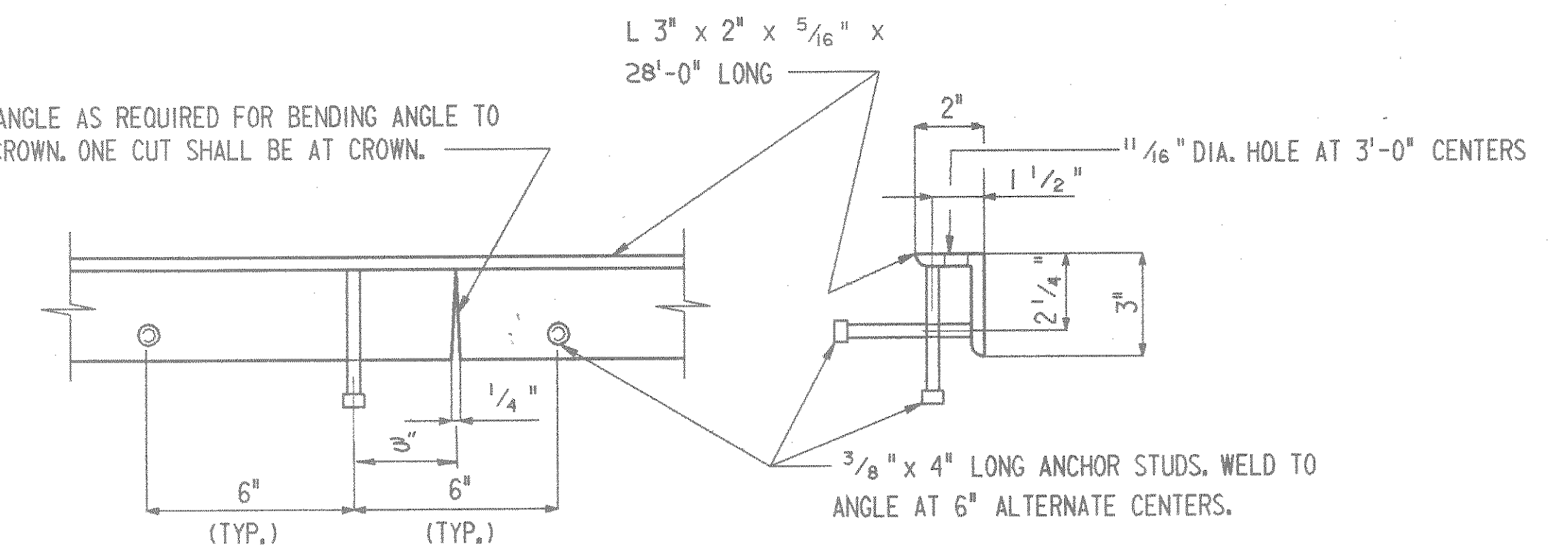
MARK	NO. REQ'D.	LENGTH	BENT	CUT. DIA.	LOCATION	
NON-COATED BARS						TOTAL WEIGHT = 12130 LBS.
S501	52	3-7	X		DIAPH. @ ABUTMENT	VERT.
S602	43	29-8			SLAB - BOTTOM	TRANS.
S1003	53	43-11			SLAB - BOTTOM	LONGIT.
COATED BARS						TOTAL WEIGHT = 1860 LBS.
C401	18	43-11			SLAB - TOP	LONGIT.
C502	52	3-2	X		DIAPH. @ ABUTMENT	VERT.
C403	39	29-8			SLAB - TOP	TRANS.
C604	28	4-0			SLAB - 2 PER RAIL POST	LONGIT.
C605	12	10-0	X		SLAB - 1 PER RAIL POST	TRANS.
C606	2	10-0	X		SLAB - 1 PER RAIL POST @ WINGS 2 & 3 ONLY	TRANS.

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



▲ DIMENSIONS ARE GIVEN PARALLEL TO THE C OF DUDLEY ROAD.
▲ DIMENSIONS ARE GIVEN NORMAL TO C OF THE SUBSTRUCTURE UNITS.

FIELD CUT 3" LEG OF ANGLE AS REQUIRED FOR BENDING ANGLE TO CONFORM TO ROADWAY CROWN. ONE CUT SHALL BE AT CROWN.



ONE FIELD SPLICE SHALL BE PERMITTED.

PROTECTION ANGLE DETAIL

NOTE: ANGLE AND STUDS SHALL BE PAID FOR AS "STRUCTURAL CARBON STEEL". NO PAINT REQUIRED.

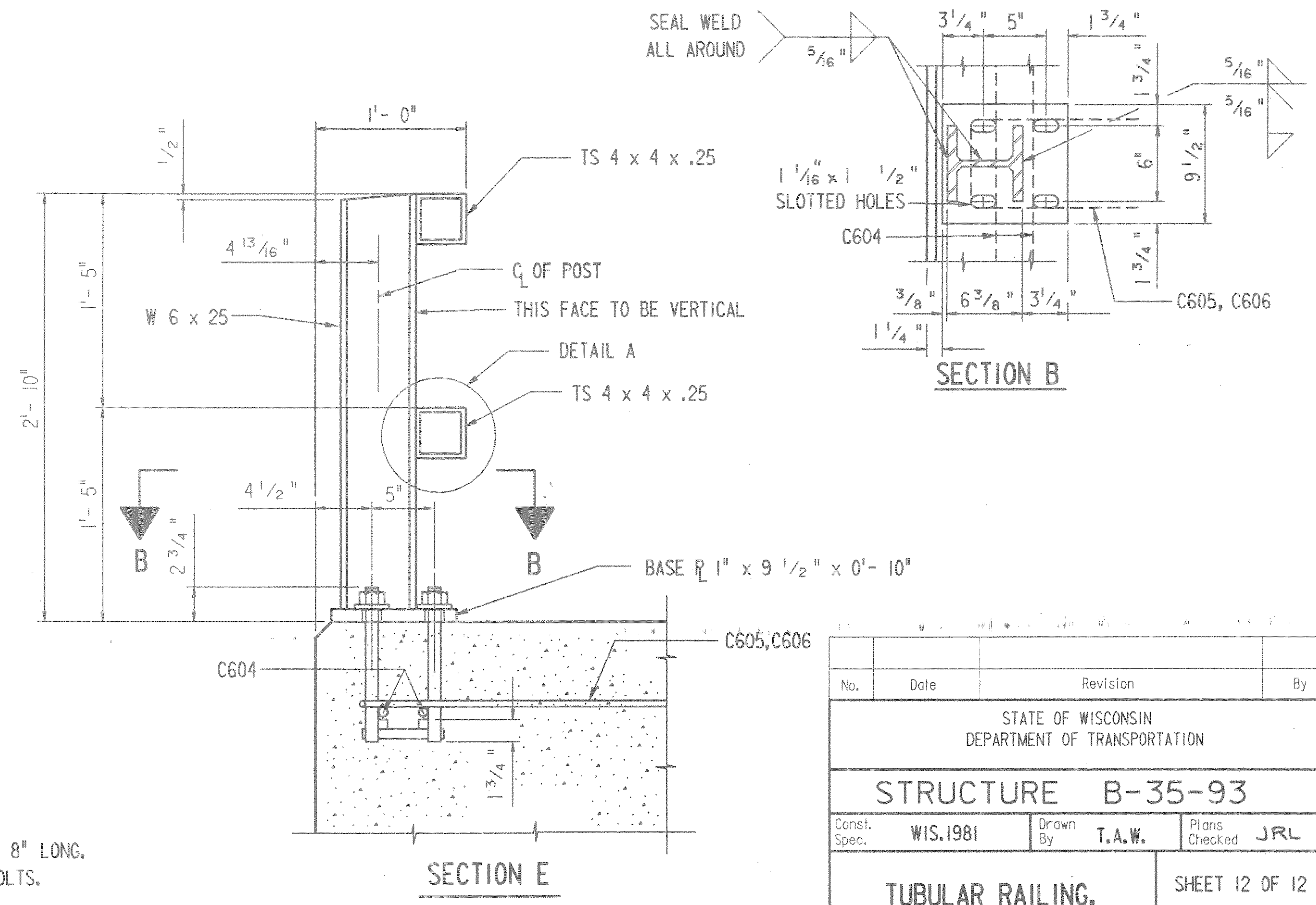
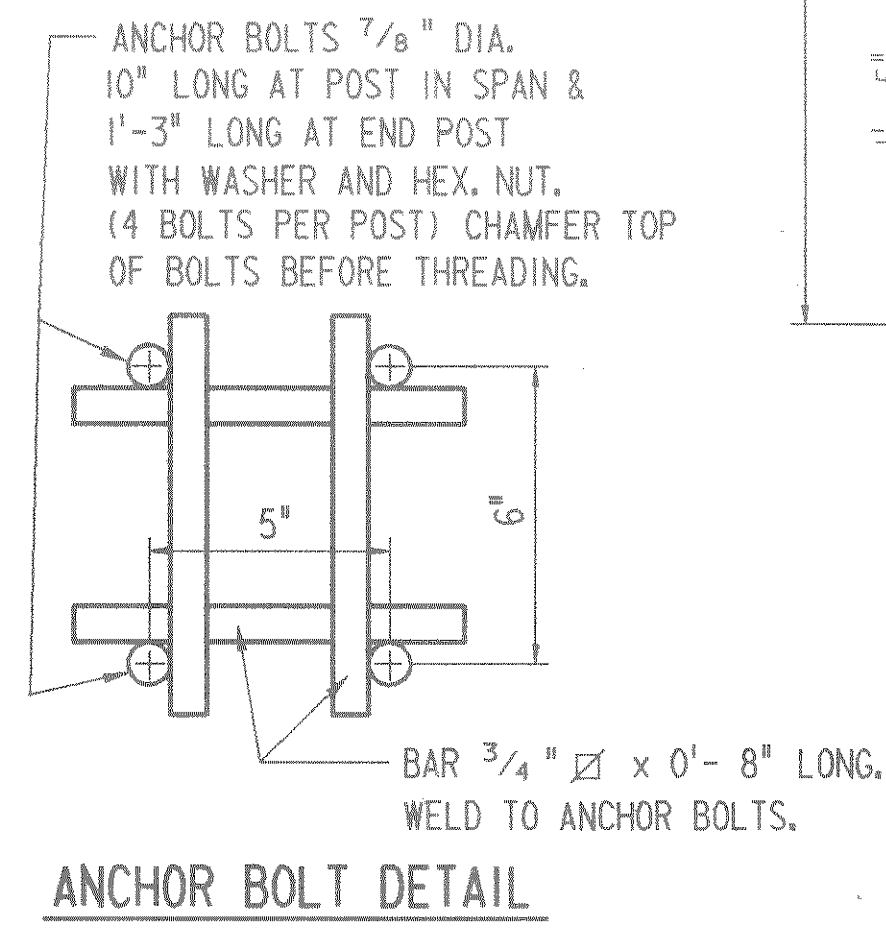
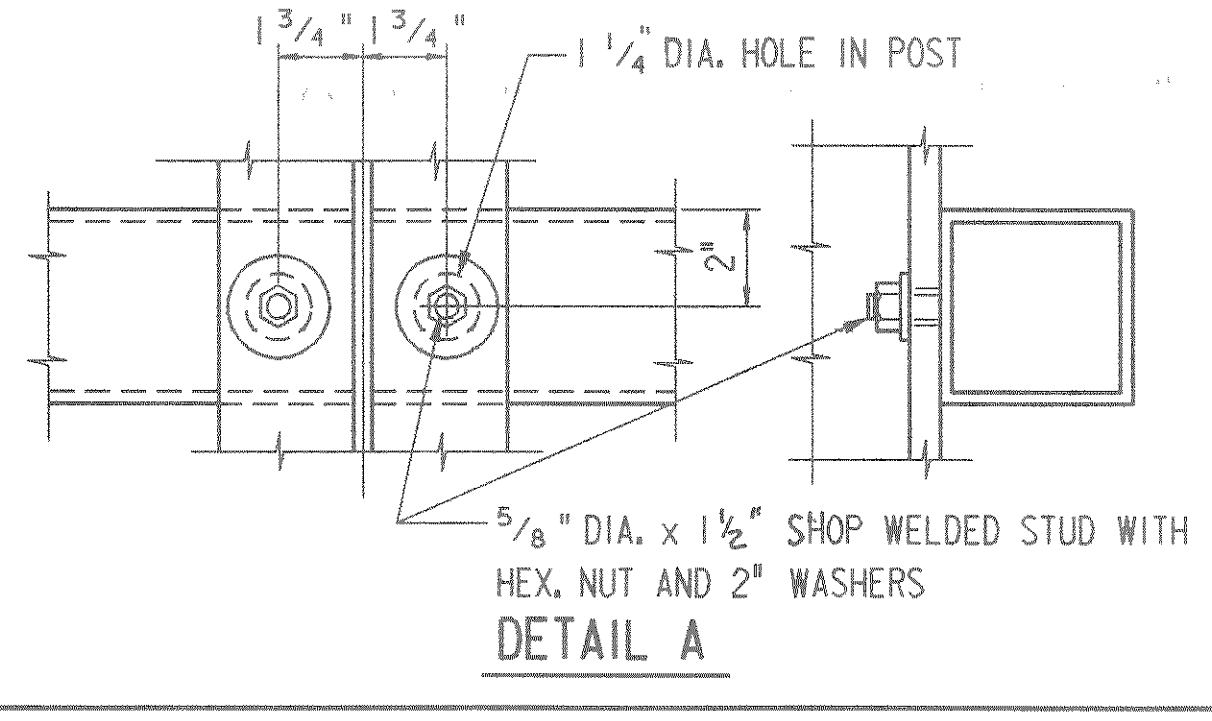
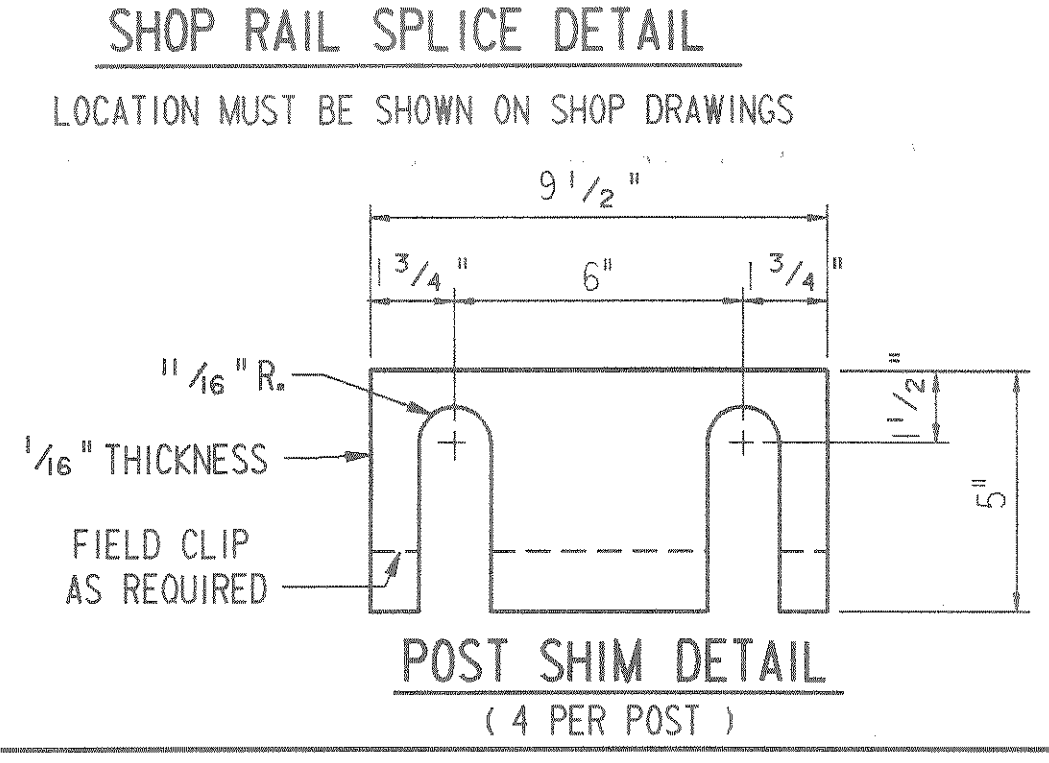
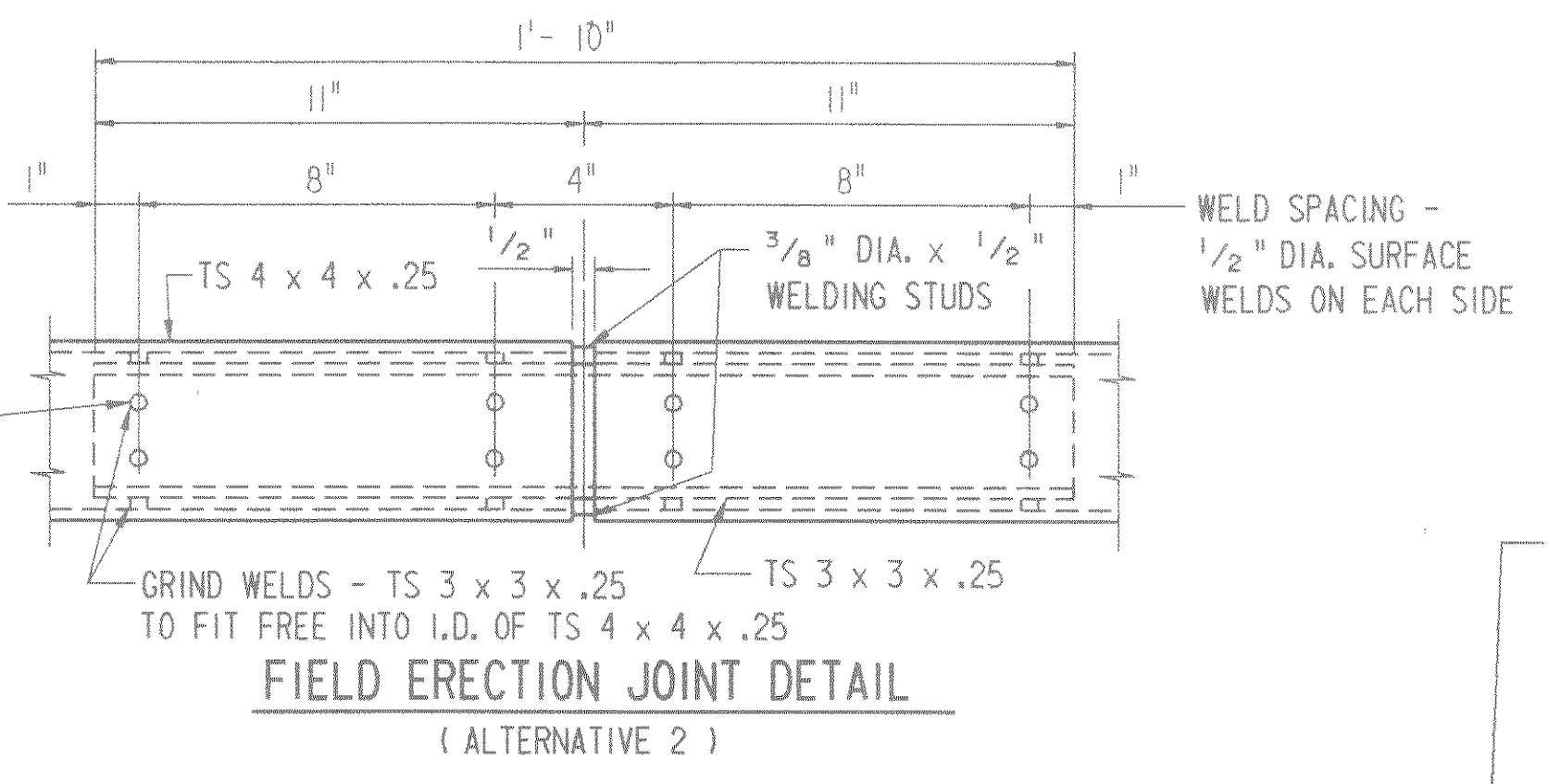
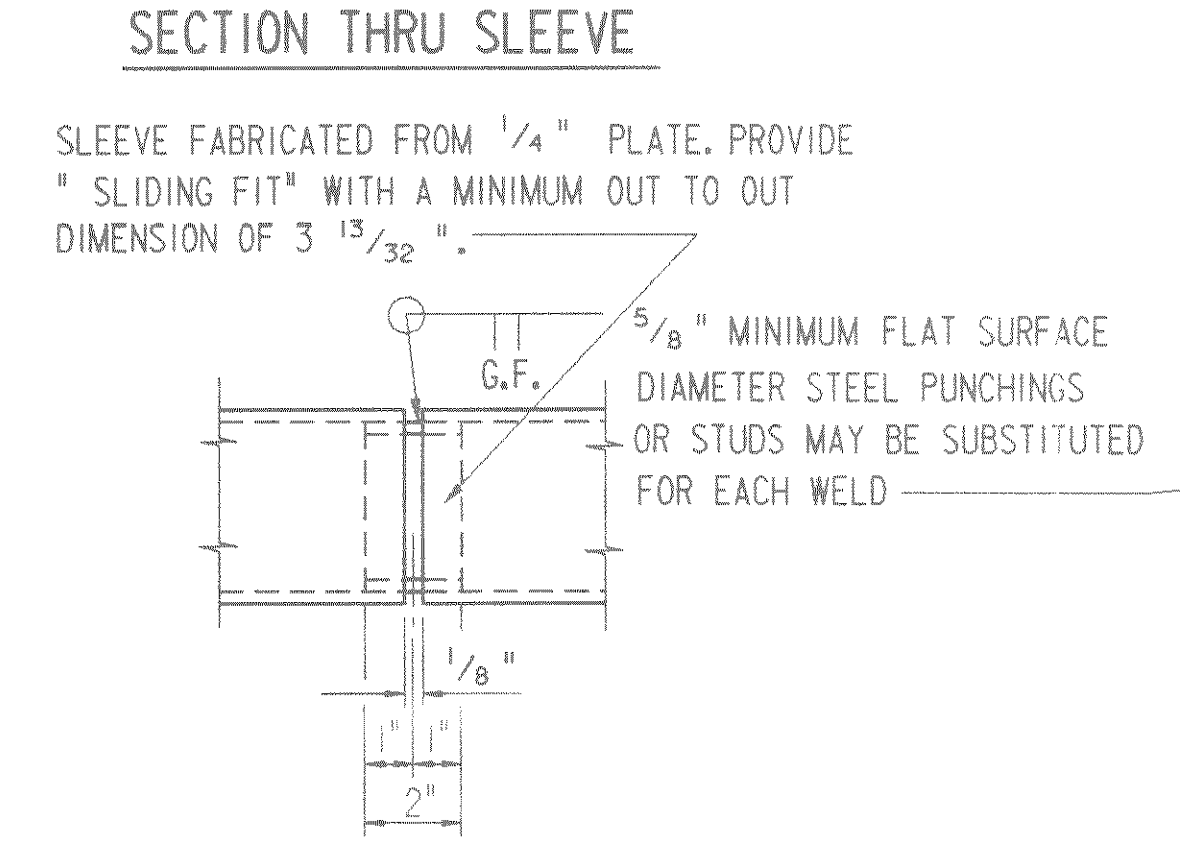
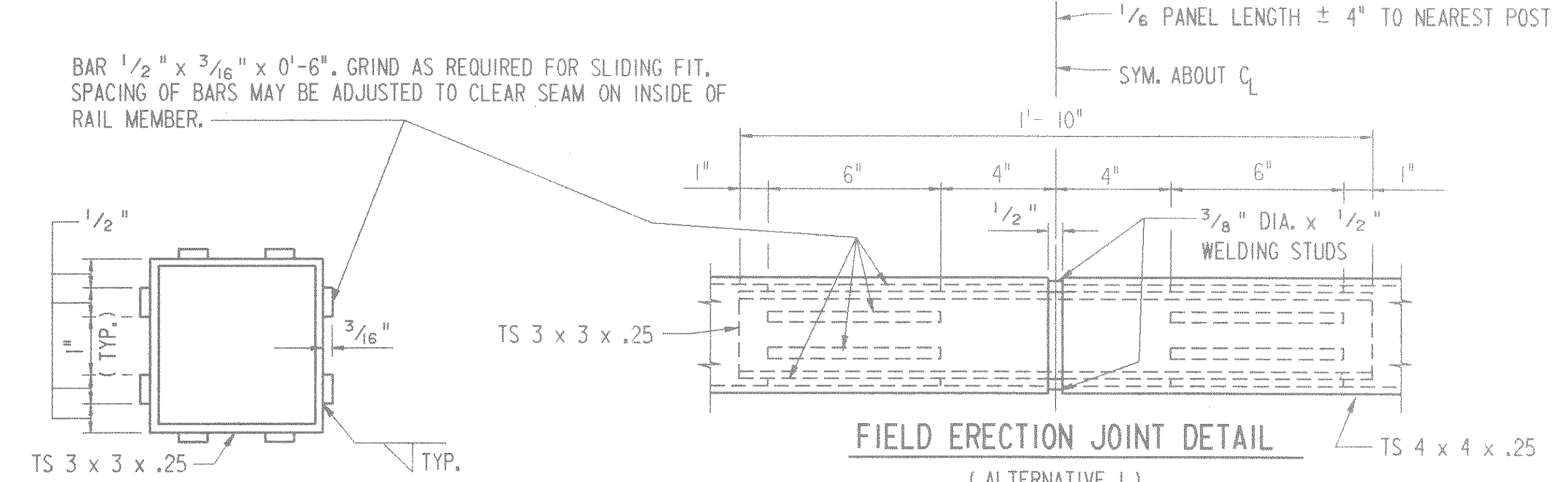
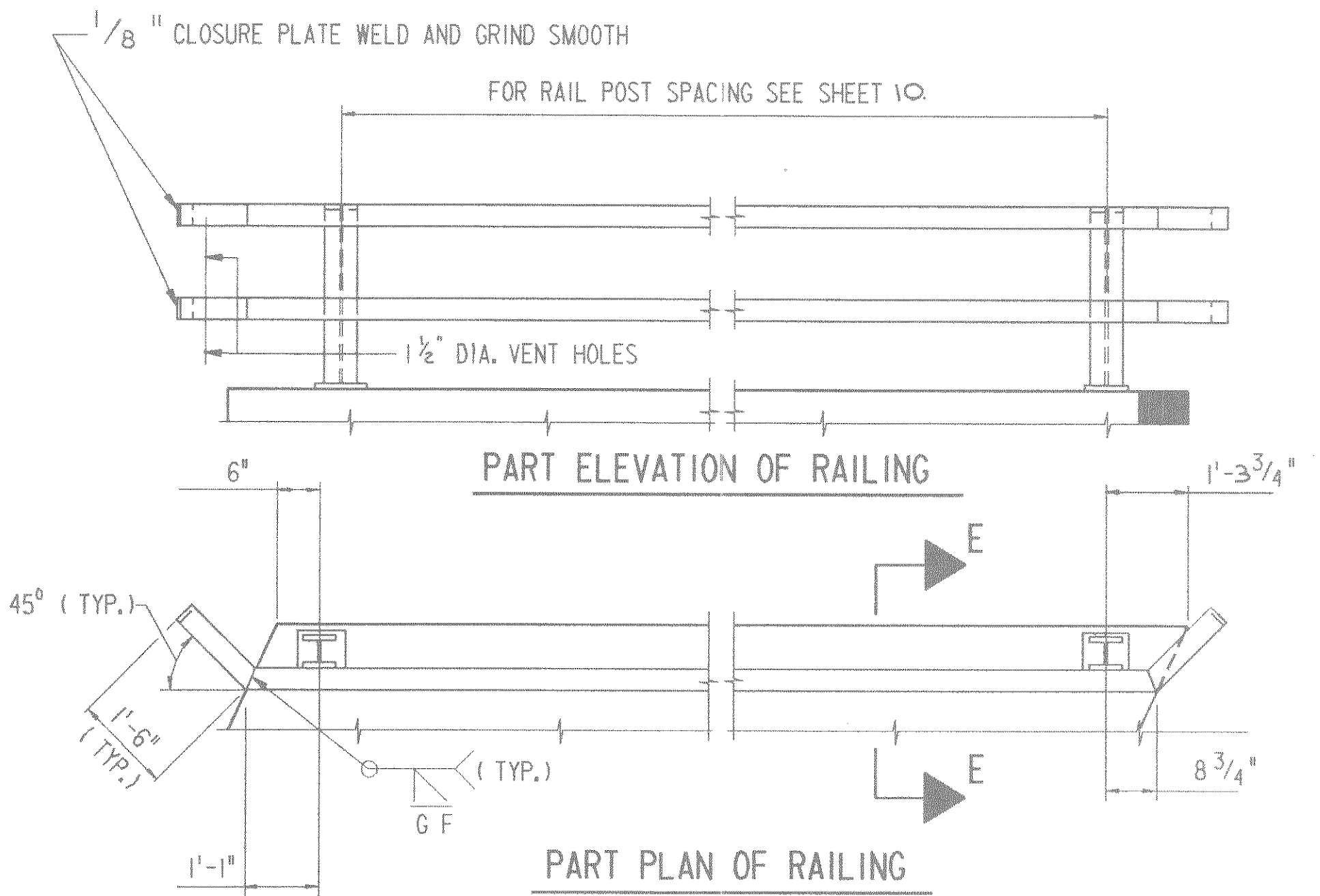
PART LONGITUDINAL SECTION

PRF= SUPERPLO2 [142001]
FILE= SUPER.DET
W.U.= 112132.000 (SECTION) DATE= 12-9-85

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-93			
Const. Spec.	WIS. 1981	Drawn By	T.A.W.
		Plans Checked	JRL
SUPERSTRUCTURE			SHEET 11 OF 12
			X78450

GENERAL NOTES

- BID ITEM SHALL BE " TUBULAR RAILING , TYPE F ".
- POST BASE PLATES 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 CUTS.
- RAILING SHALL BE 4 x 4 x .25 STRUCTURAL TUBING CONFORMING TO A.S.T.M. DESIGNATION A36.
- ANCHOR BOLTS SHALL BE 7/8" DIA. NOMINAL CONFORMING TO A.S.T.M. A449 OR MATERIAL OF EQUIVALENT YIELD STRENGTH AND ELONGATION (MIN. YIELD OF 92 K.S.I. AND ELONGATION OF 14%) WITH 3" THREAD AND HIGH STRENGTH NUTS AND WASHERS(A325).
- CAULK EXPOSED OPENINGS BETWEEN SHIMS.
- POSTS ,BASE PLATES AND SHIMS SHALL BE MADE FROM MATERIAL CONFORMING TO A.S.T.M. DESIGNATION A36. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE NORMAL TO GRADE LINE.
- PLACE ANCHOR BOLTS NORMAL TO BASE PLATE.
- ALL MEMBERS, INCLUDING UPPER 4" OF ANCHOR BOLTS , SHALL BE GALVANIZED AFTER FABRICATION.
- RAILS MAY BE WELDED TO POSTS.
- FILL POST ANCHOR BOLT HOLES WITH NON - STAINING GRAY NON - BITUMINOUS JOINT SEALER.
- RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.
- STEEL SHIMS SHALL BE USED UNDER POSTS WHERE REQUIRED FOR ALIGNMENT.
- FIELD ERECTION JOINTS SHALL BE ALTERNATIVE 1 OR ALTERNATIVE 2.
- PRIOR TO GALVANIZING, ALL STEEL RAILING SHALL BE GIVEN A NO. 6 COMMERCIAL BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.



No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-35-93			
Const. Spec.	WIS.1981	Drawn By	T.A.W.
		Plans Checked	JRL
TUBULAR RAILING, TYPE F			SHEET 12 OF 12 X78451

DATE: 12-9-85
[142001]
PRF: FRALO1
FILE: FRAILING.FIN
WLU:
WLU: