

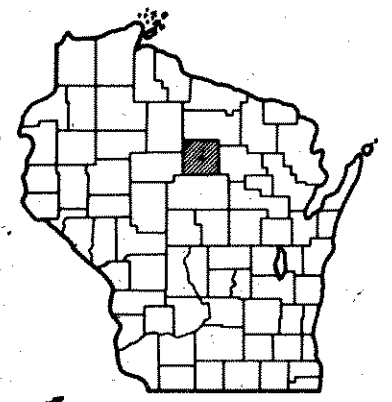
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9411-1-70	TQS-BRS 1327(I)	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Index of Sheets

Sheet No. 1	Title
Sheet No. 3	Typical Cross Sections
Sheet No. 3	Estimate of Quantities
Sheet No. 3A	Miscellaneous Quantities
Sheet No. 4	Right of Way Plat
Sheet No. 5	Plan and Profile STA. 12+55 - STA. 21+87
Sheet No. 6-6.6	Standard Details
Sheet No. 7-7.12	Structure Plans
Sheet No. —	Computer Earthwork Data
Sheet No. 8	Cross Sections

TOTAL SHEETS = 26



PLAN AND PROFILE OF PROPOSED

C.T.H. "E" - S.T.H. 107 ROAD
 (GRANDFATHER FALLS BRIDGE AND APPROACHES)
 C.T.H. "E"
 LINCOLN COUNTY

STATE PROJECT NUMBER
9411-1-70

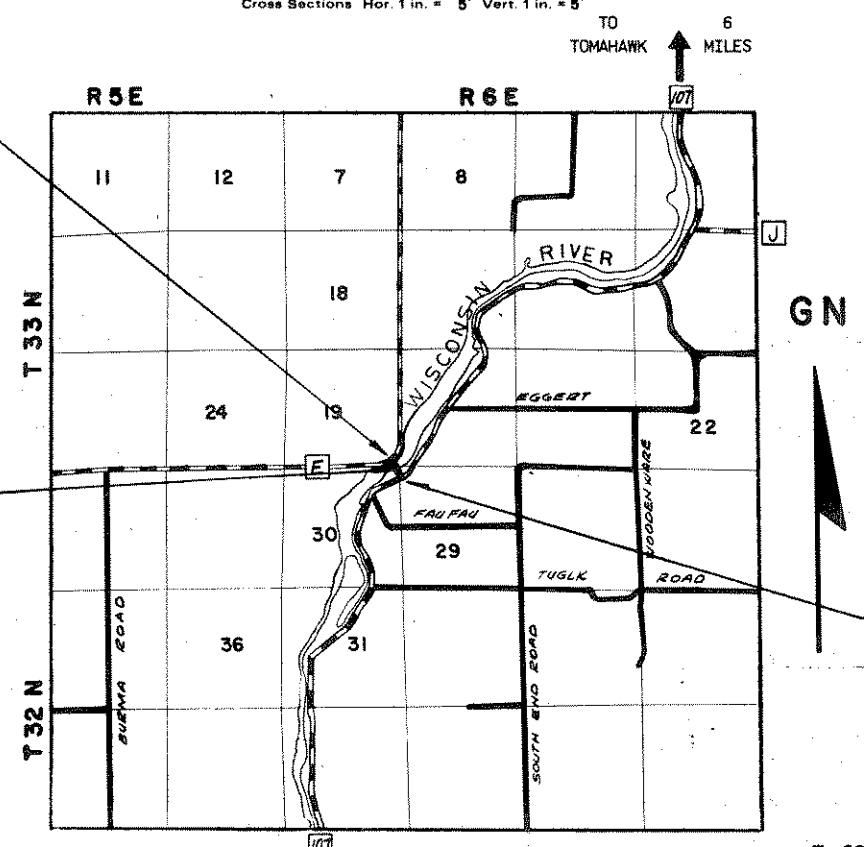
Scales: Plan 1 in. = 50 ft.
 Profile Hor. 1 in. = 50 ft. Vert. 1 in. = 5 ft.
 Cross Sections Hor. 1 in. = 5' Vert. 1 in. = 5'

Design Designation

A.D.T. 1973	=	110
A.D.T. 1997	=	200
D.H.V. 1997	=	30
D.	=	50 %
T.	=	20 %
V.	=	40 MPH

BEGIN PROJECT 9411-1-70
 STA. 12+55
 N 543,740 (±200)*
 E 2,057,360 (±200)*
 APPROX. 340' N & 320' W OF NE
 CORNER SEC. 30, T32N, R5E

**STRUCTURE
 B-35-75**



END PROJECT 9411-1-70
 STA. 21+87
 N 542,870 (±200)*
 E 2,057,700 (±200)*
 APPROX. 530' S & 20' E OF NE CORNER
 SEC. 30, T32N, R5E

Conventional Signs

County Line	-----	Culverts in Place	-----
Township or Range Line	-----	Culverts Required	-----
Section Line	-----	Drop Inlet	-----
New Right of Way Line	-----	Power Pole	-----
Present Right of Way Line	-----	Telephone or Telegraph Pole	-----
Wire Fence	x (type) x	Right of Way Markers	-----
Corporate or City Limits	-----	Reference Stake for Hubs Only	+61.7 -25.9
Property Line	P.L.	Marsh	-----
Traveled Way or P.E.	-----	Hedge	-----
Railroads	-----	Trees	-----
Base or Survey Line	-----	Ground Elevation	Datum Line
Caution Symbol (combustible fluids under pressure)	-----	Grade Elevation	Datum Line

Layout
 Scale 0 1 2
 MILES
 Total Net Length of Centerline = 0.177 Mi. Rural

* COORDINATES ARE SCALED FROM SPIRIT
 FALLS QUADRANGLE FOR IDENTIFICATION ONLY

ALL COORDINATES SHOWN ON PLAN ARE
 REFERENCED TO THE WISCONSIN COORDINATE
 SYSTEM CENTRAL ZONE

LINCOLN COUNTY HIGHWAY DEPARTMENT

APPROVED *Francis X. ...* 6-15-77
 COUNTY HIGHWAY COMMISSIONER DATE

PLANS PREPARED BY
MEAD AND HUNT INC
 CONSULTING ENGINEERS
 MADISON, WISCONSIN

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

Surveyor G.R.K. District Checker R.J.S.
 Designer G.R.K. C.O. Checker L.L.J.
 District Supervisor R.J.S. C.O. Monitor H.A.B.

Approved: *R.D. Schindler*
 Date 6/30/77 District Engineer

Approved: *D.D. ...*
 Date 7-19-77 Chief of Facilities Development

Approved: *H.H. ...*
 Date 7-19-77 State Highway Engineer

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

Approved: _____
 Date _____ Division Engineer

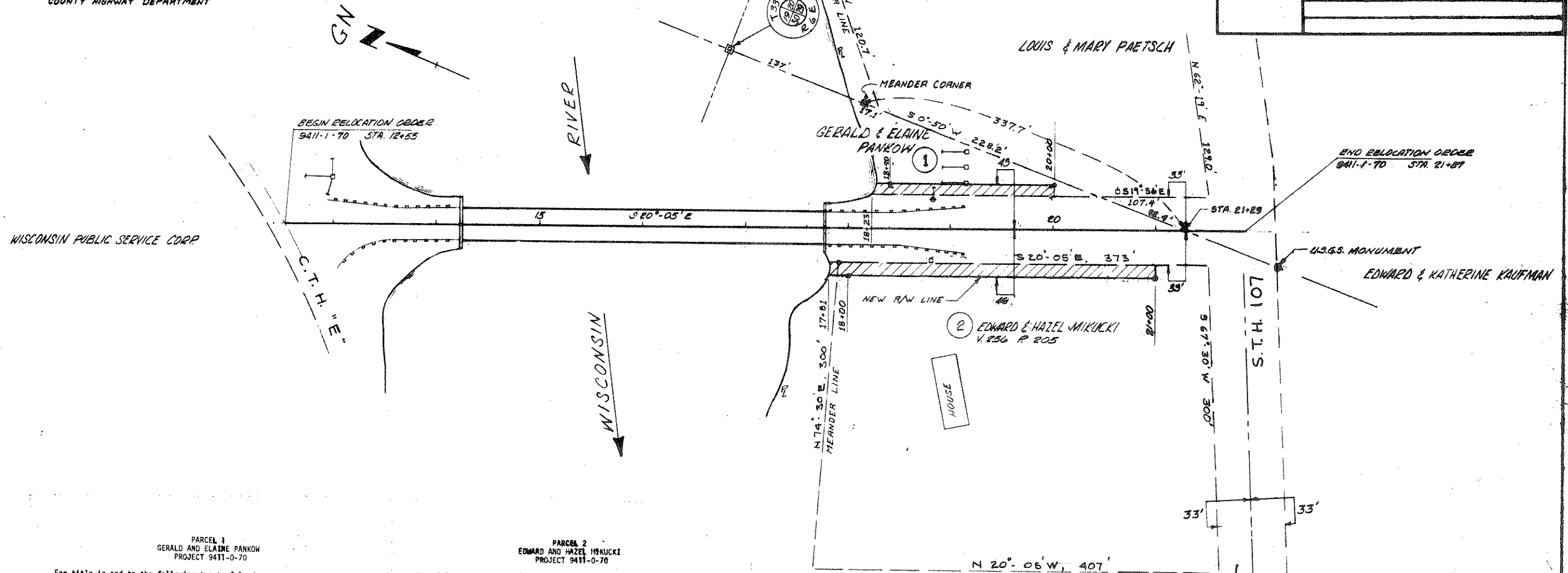
SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	* INTEREST REQUIRED	ACRES	OPERATIONS PROJECT I.D.
1		GERALD AND ELAINE PANKOW	FEE	.04	9411-1-70
2		EDWARD AND HAZEL MIKUCKI	FEE	.10	9411-1-70

* PARCELS TO BE ACQUIRED BY LINCOLN COUNTY HIGHWAY DEPARTMENT

ORIENTATION AND GRID CONVERSION
 BEARINGS AND RIGHT OF WAY PLAT BEARINGS ARE ORIENTED TO THE WISCONSIN
 GRID SYSTEM WITH 0 DEGREES, 0 MINUTES, 0 SECONDS BEING GRID NORTH.
 DIFFERENCE BETWEEN PROJECT PLAT BEARINGS REPRESENT PLANE ANGLES IN
 MINUTES AND SECONDS TO THE NEAREST SECOND. R/W PLAT DISTANCES
 LENGTHS UNLESS OTHERWISE NOTED AND MAY BE CONVERTED TO GRID
 BY MULTIPLYING PLAT DISTANCES BY

REVISION DATE	R/W PROJECT NUMBER
	FEDERAL PROJECT NUMBER
PLAT OF RIGHT OF WAY REQUIRED FOR STA. 18+00 - STA. 22+50 S.T.H. "E" ACROSS WISCONSIN RIVER ROCK FALLS TOWNSHIP - MARSHALL, WISCONSIN	
SCALE	DATE
1" = 50'	FEBRUARY 1977
CONSTRUCTION PROJECT NUMBER 9411-7-70-4	



PARCEL 1
 GERALD AND ELAINE PANKOW
 PROJECT 9411-0-70

Fee title in and to the following tract of land:
 That part of the NE 1/4 of the NE 1/4 of Section 30, T33N, R6E, Town of Rock Falls, Lincoln County, Wisconsin, described as follows:

Commencing at the meander corner located on the section line between Sections 29 and 30, 137 feet, more or less, south of the Northeast corner of Section 30 and located 15 feet, more or less, from the water's edge, thence S 0°-50' W (Mag.), 337.7 feet to the centerline of CTH "E" at Station 21+29.0; thence N 20°-05' W (Mag.), 129.0 feet along said centerline to the point of beginning.

Said parcel includes all land lying between the existing Easterly right-of-way line and a new right-of-way line located parallel to said centerline and located 43 feet Easterly therefrom, from the point of beginning Northerly, 177 feet, more or less, to the water's edge of the Wisconsin River.

Said parcel contains 0.04 acres, more or less.

PARCEL 2
 EDWARD AND HAZEL MIKUCKI
 PROJECT 9411-0-70

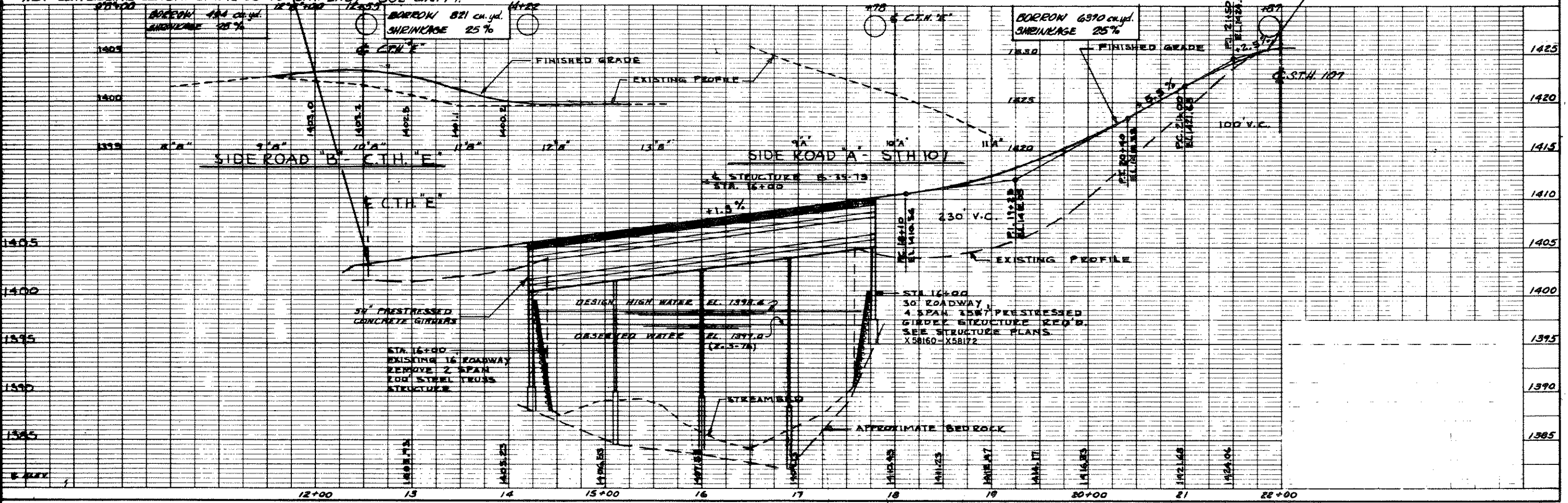
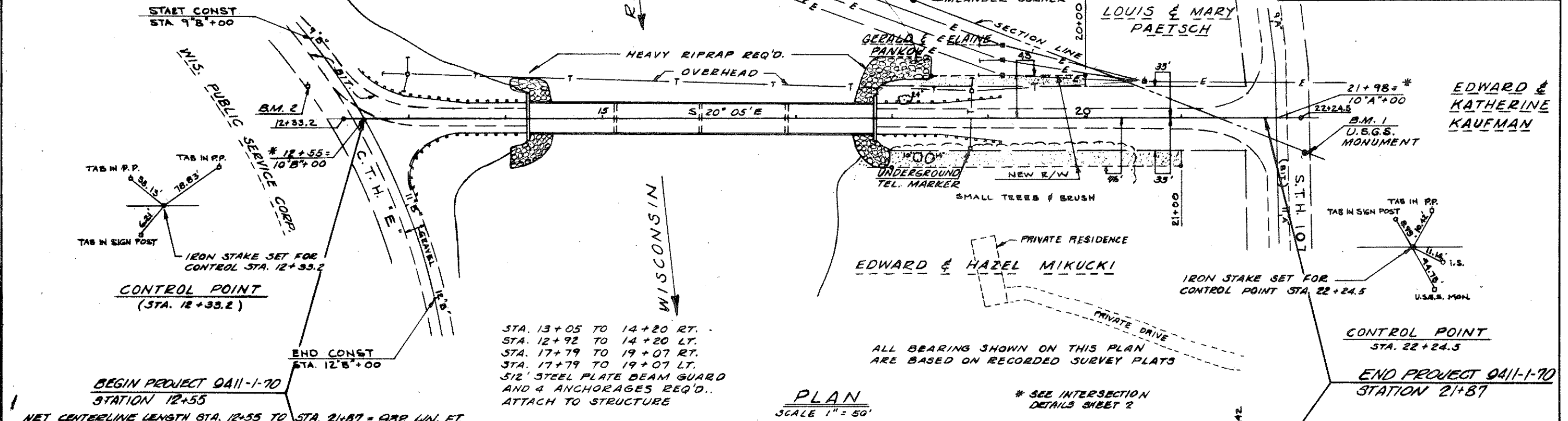
Fee title in and to the following tract of land:
 That part of the NE 1/4 of the NE 1/4 of Section 30, T33N, R6E, Town of Rock Falls, Lincoln County, Wisconsin, described as follows:

Commencing at the meander corner located on the section line between Sections 29 and 30, 137 feet, more or less, south of the Northeast corner of Section 30 and located 15 feet, more or less, from the water's edge; thence S 0°-50' W (Mag.), 337.7 feet to the centerline of CTH "E" at Station 21+29.0; thence N 20°-05' W (Mag.), 29.0 feet along said centerline to the point of beginning.

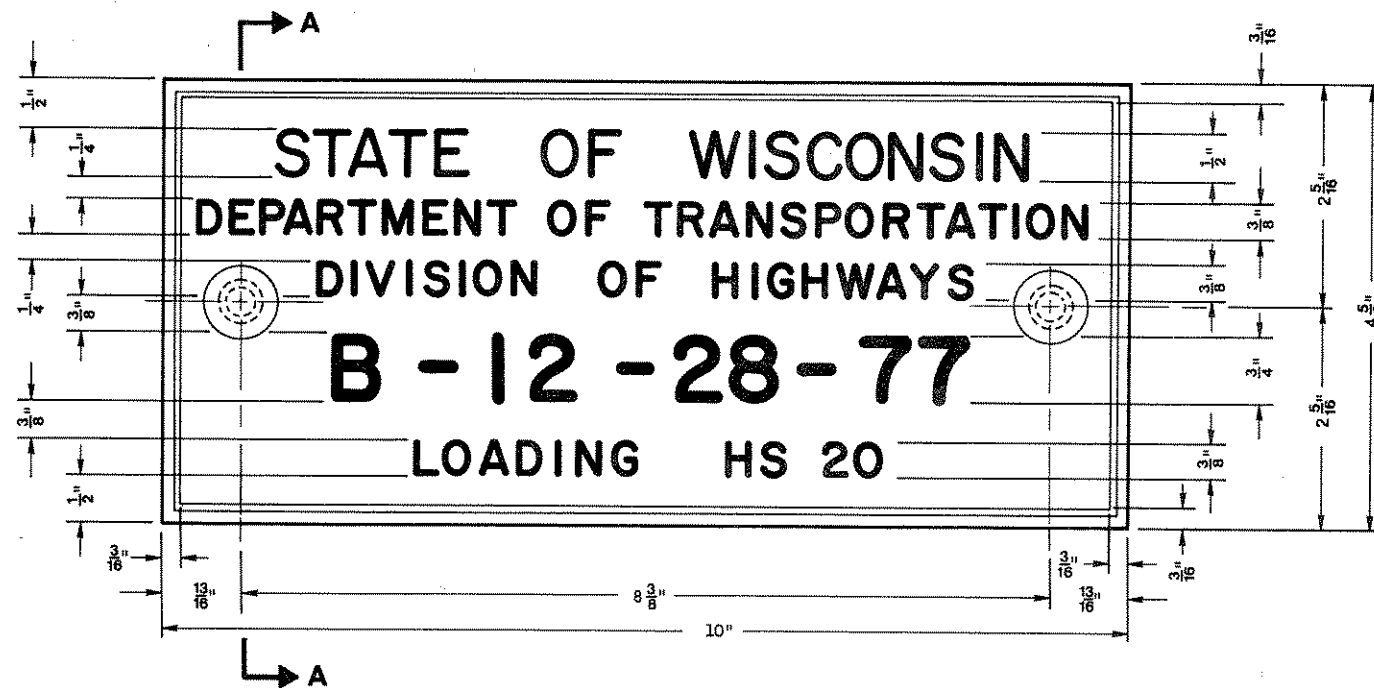
Said parcel includes all land lying between the existing westerly right-of-way line and a new right-of-way line located parallel to said centerline and located 46 feet Westerly therefrom, from the point of beginning Northerly, 319 feet, more or less, to the water's edge of the Wisconsin River.

Said parcel contains 0.10 acres, more or less.

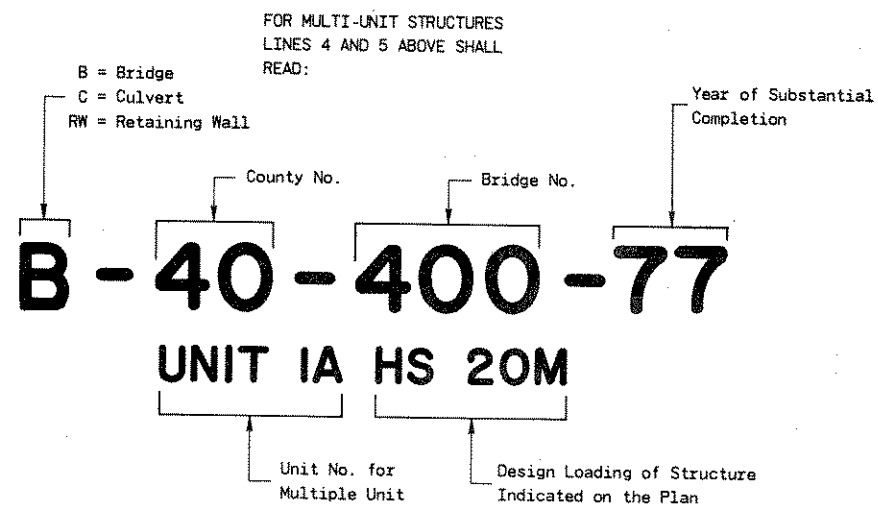
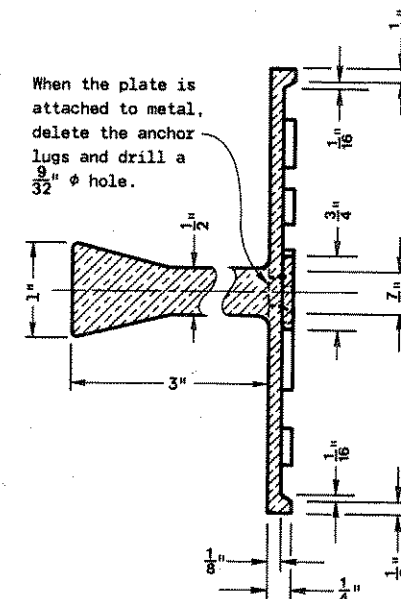
BENCH MARK			
NO.	STATION	DESCRIPTION	ELEVATION
7	22+32	SEC. LINE MONUMENT-44" R.	1426.23
8	9+30	R.R. SPIKE IN POWER POLE-30" R.	1401.66



AB679-4



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING AND LOADING DESIGNATION
MULTI-UNIT STRUCTURES

GENERAL NOTES

Name Plates to be installed on Bridges, Culverts, and Retaining Walls shall conform to the requirements of Section 506.2.4 of the Standard Specifications.

The Bridge Number and Design Loading shown on this drawing are examples only. See Construction Plans for individual numbering and design loading.

NAME PLATE
(STRUCTURES)

State of Wisconsin
Department of Transportation
Division of Highways

APPROVED
8-5-77
DATE

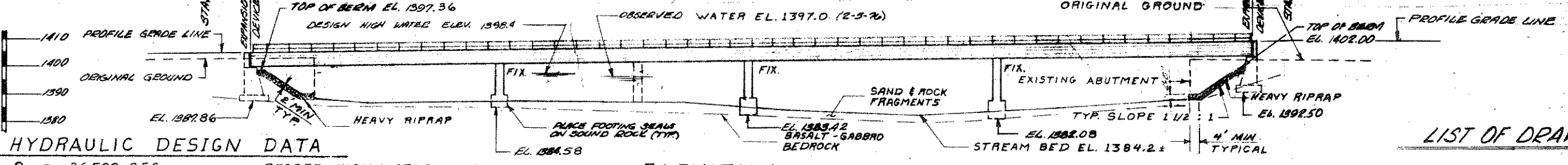
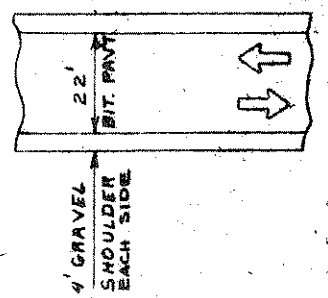
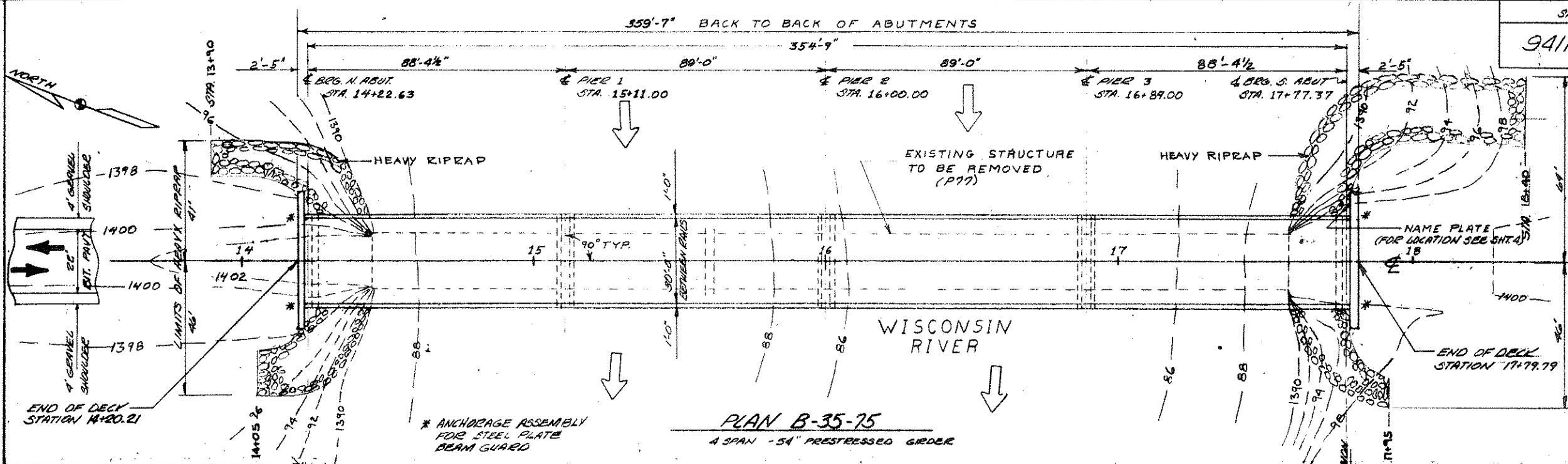
C.W. Baker
SUPERVISING DEVELOPMENT ENGINEER

APPROVED
8-8-77
DATE

D.J. Strand
CHIEF OF FACILITIES DEVELOPMENT

FHWA

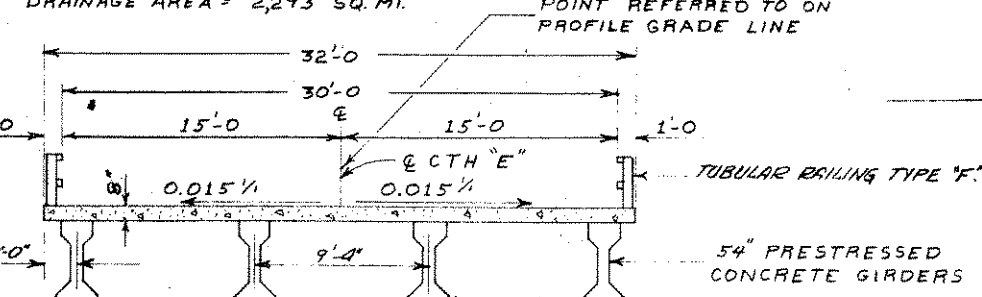
BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
1	22+31	SEC. LINE MON.	1426.23
2	98+38	RR SPIKE IN POWER POLE	1401.68



HYDRAULIC DESIGN DATA
 $Q_{100} = 26,500$ C.F.S.
 $V_{100} = 7.5$ F.P.S.
 WATERWAY AREA = 3540 S.F.
 H.W. = 1398.4
 DRAINAGE AREA = 2,293 SQ. MI.

ELEVATION

POINT	STA.	ELEV.
N. ABUT.	14+22.63	EL. 1405.51
PIER 1	15+11.00	EL. 1406.66
PIER 2	16+00.00	EL. 1407.53
PIER 3	16+89.00	EL. 1408.41
S. ABUT.	17+77.37	EL. 1410.15



TRAFFIC DATA
 A.D.T. = 200 (1977)
 R.D.S. = 40 MPH

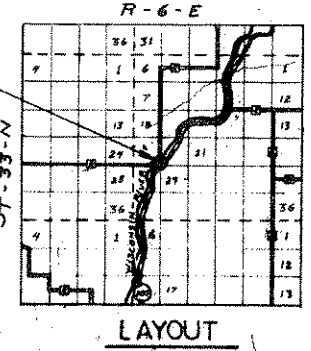
DESIGN DATA
 LIVE LOAD: H20
 ALLOWABLE DESIGN STRESSES:
 CONCRETE: SLAB $f_c = 4000$ P.S.I.
 ALL OTHER $f_c = 3500$ P.S.I.
 60# STEEL REINFORCEMENT, GRADE 60 $f_y = 60000$ P.S.I.
 54\"/>

FOUNDATION DATA
 NORTH ABUTMENT AND PIERS TO BE PLACED ON SOUND BASALT-GABBRO BEDROCK WITH 10,000 POUNDS PER SQUARE FOOT BEARING. SOUTH ABUTMENT TO BE PLACED ON SOUND BLACK AND WHITE GRANITE GNEISS MATERIAL WITH 10,000 POUNDS PER SQUARE FOOT CAPACITY.

NOTES

- DRAWINGS SHALL NOT BE SCALED. 60# STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
- THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPEAP TO THE EXTENT SHOWN ON THIS SHEET AND IN THE ABUTMENT DETAILS.
- ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.
- AT ABUTMENTS ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACK-FILLED WITH GRANULAR BACKFILL. FILLMENT WILL BE MADE ONLY FOR MATERIAL ACTUALLY PLACED WITHIN THE LIMITS FOR "EXCAVATION FOR STRUCTURES". THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" FOR THE ABUTMENTS AND PIERS SHALL BE THE ORIGINAL GROUND LINE.

RATINGS
 INVENTORY - H 25
 OPERATIONAL - HS 32(S.R.)

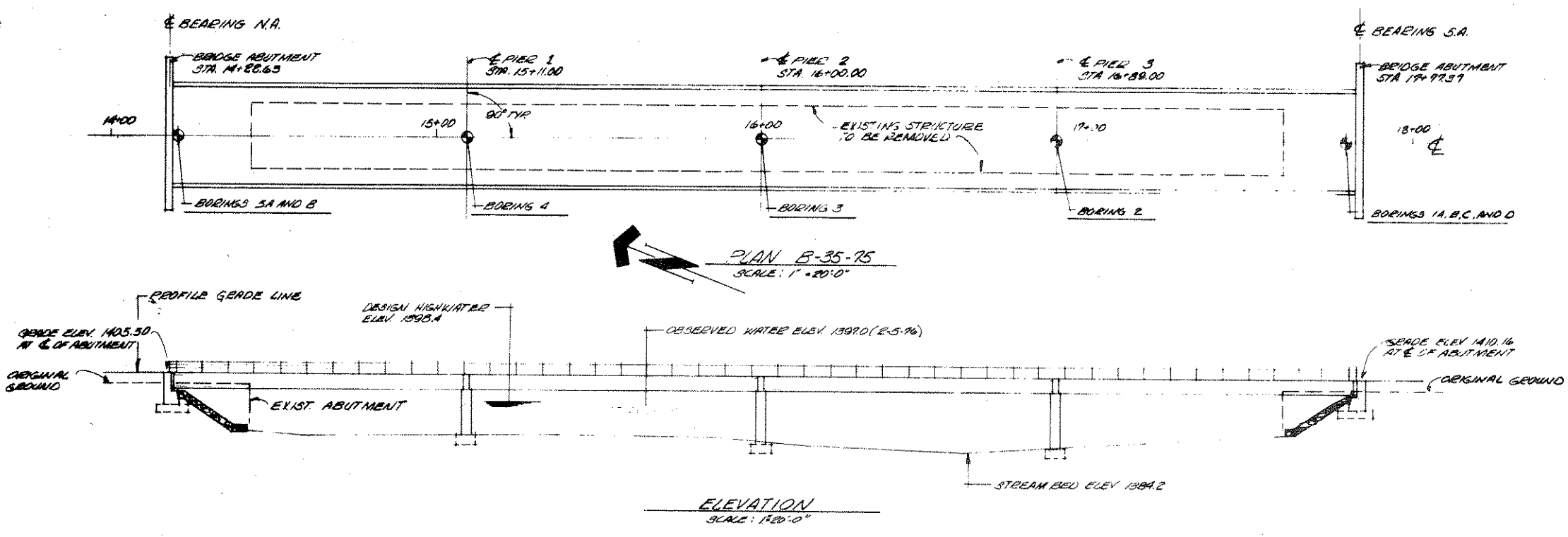


LIST OF DRAWINGS

1. GENERAL PLAN	X58160
2. SUBSURFACE EXPLORATION	X58161
3. NORTH ABUTMENT	X58162
4. SOUTH ABUTMENT	X58163
5. PIER 1	X58164
6. PIER 2	X58165
7. PIER 3	X58166
8. SUPERSTRUCTURE	X58167
9. SUPERSTRUCTURE DETAILS	X58168
10. 54\"/>	
11. BEARING DETAILS-TOTAL ESTIMATED QUANTITIES	X58170
12. ELASTOMERIC EXPANSION DEVICE	X58171
13. TUBULAR STEEL RAILING TYPE "F"	X58172

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-35-75			
CTH E OVER WISCONSIN RIVER			
COUNTY	LINCOLN	TOWN OF ROCK FALLS	
DESIGN SPEC. AND CONTRACT NO.	A.A.S.H.O. 1973	LOAD H20	CORNER DATE 1975
DESIGNED BY	G.E.K.	CHECKED	T.L.K.
APPROVED	W.A. Kline	7-15-77	
GENERAL PLAN			SHEET 1 OF 15
			X58160

MEAD AND HUNT



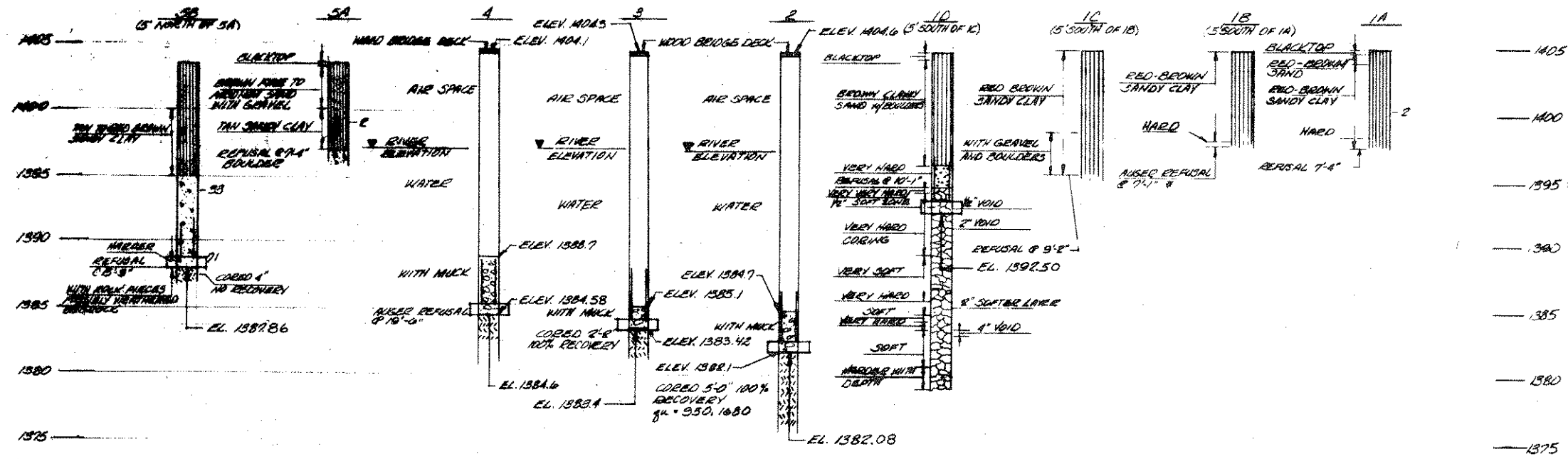
SUBSURFACE EXPLORATION FOR FOUND. DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND OBSOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA REPRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATION MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND OBSOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, MEAD AND HUNT INC. 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.

BORING NOTES

- BORINGS PERFORMED BY STANDARD PROCEDURES (A.S.T.M. TEST DESIGNATION D1586-67).
- THE NUMBER OF BLOWS REQUIRED TO DRIVE THE 2-INCH O.D. SPLIT SPRAW SAMPLER 12 INCHES WITH A 140-10, WEIGHT FALLING 30 INCHES IS RECORDED ON THE RIGHT-HAND EDGE OF EACH BORING LOG. THIS IS THE "STANDARD PENETRATION TEST."
- BORINGS PERFORMED MAY 26, 1976

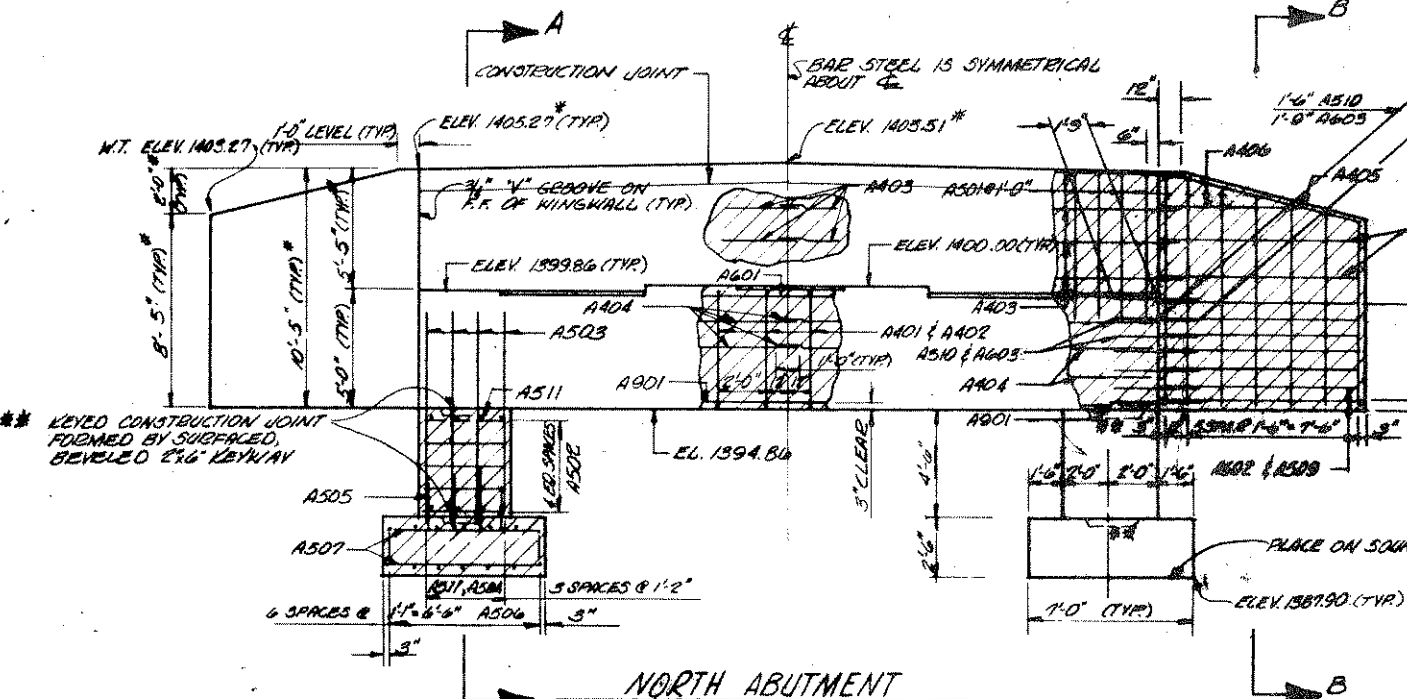
LOG OF BORINGS



LEGEND

- FILL
- AIR SPACE & WATER
- SAND AND GRAVEL WITH BOULDERS
- BRACKEN-GABBED BEDROCK
- RED-BROWN FINE TO COARSE SAND WITH IRON PIECES
- WATER LEVEL AT TIME SHOWN AFTER COMPLETION OF THE BORING.
- BLACK AND WHITE GRANITE GNEISS WITH FELDSPAR
- * POSSIBLE BOUNDARY

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-35-75			
CONST. SPEC.	1975	DRAWN BY	GRK
SUBSURFACE EXPLORATION		SHEET 2 OF 13	
		X58167	



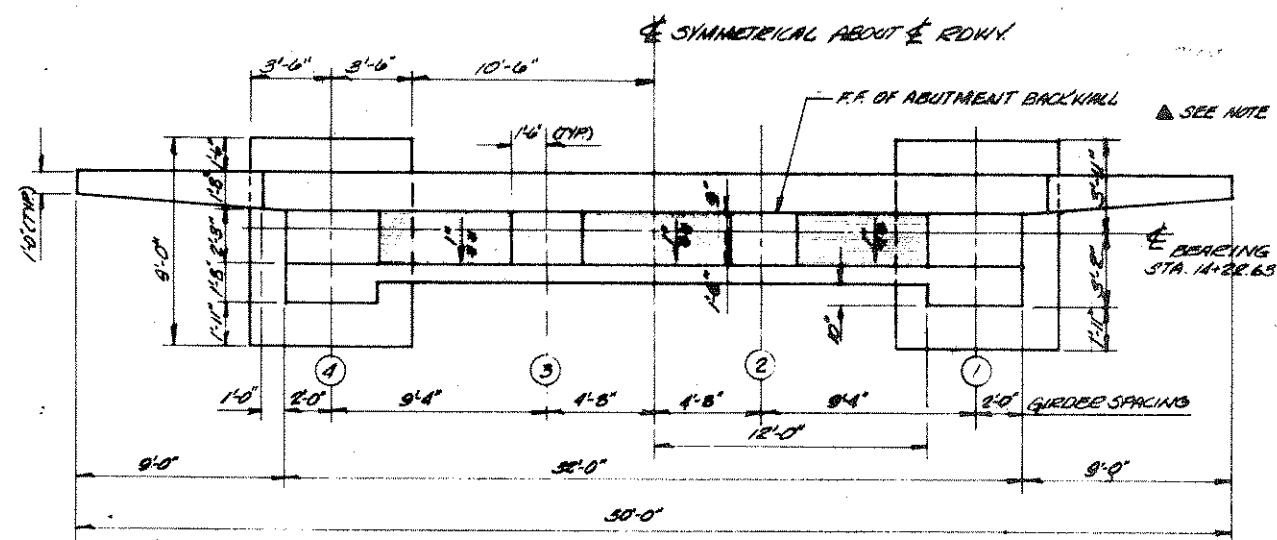
MARK	A	B
A401	2'-0"	4'-5"
A501	6'-5"	1'-4"

BILL OF BARS 4,135 LBS.

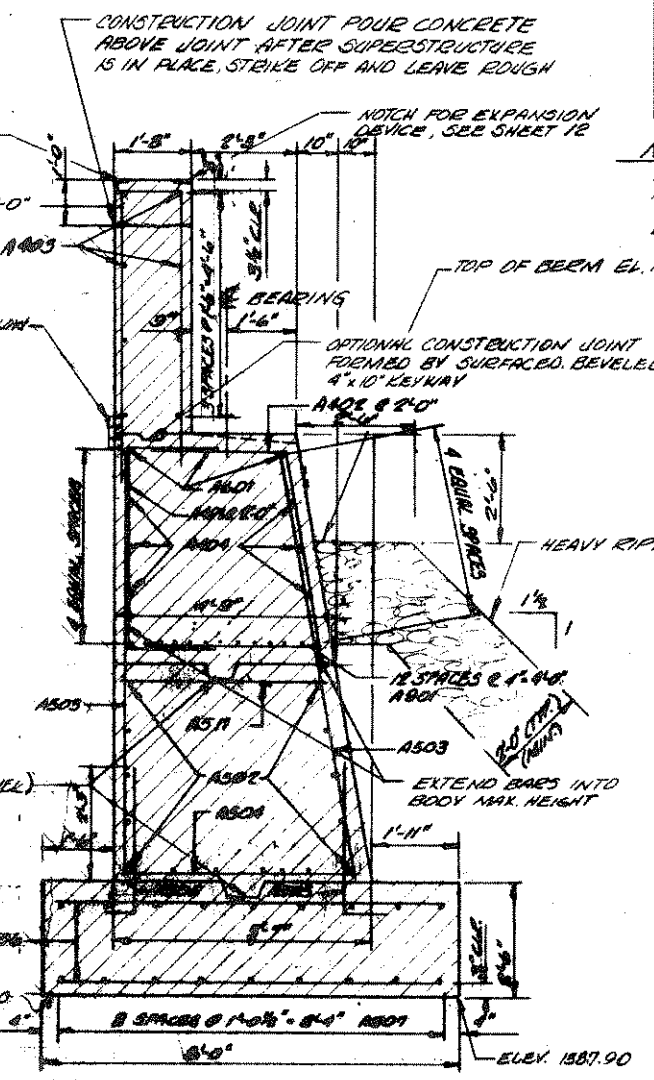
MARK	NO. REQD.	LENGTH	BENT	LOCATION
A401	16	8'-3"	✓	BODY - B.F. VERTICAL
A402	16	11'-0"	✓	BODY - F.F. VERTICAL
A501	52	13'-11"	✓	BODY - BACKWALL VERTICAL
A403	16	17'-9"		BODY - BACKWALL HORIZONTAL
A601	5	31'-6"		BODY - TOP HORIZONTAL
A901	19	31'-6"		BODY - BOTTOM HORIZONTAL
A404	12	16'-4"		BODY - F.F. & B.F. HORIZONTAL
A502	34	3'-6"		COLUMN - F.F., B.F., TOP & BOT. HORIZONTAL
A503	16	9'-5"		COLUMN - F.F., B.F., TOP & BOT. VERT. & HORIZ.
A504	8	5'-1"		COLUMN - BOTTOM HORIZONTAL
A505	16	3'-8"	✓	COL. & FOOTING DOWELS VERTICAL
A506	28	8'-6"		FOOTING - TOP & BOTTOM HORIZONTAL
A507	36	6'-6"		FOOTING - TOP & BOTTOM VERTICAL
A405	4	8'-7"	✓	WING - TOP HORIZONTAL
A406	4	7'-8"		WING - F.F. & B.F. HORIZONTAL
A407	8	8'-7"		WING - F.F. & B.F. HORIZONTAL
A509	14	8'-7"		WING - F.F. HORIZONTAL
A602	14	8'-7"		WING - B.F. HORIZONTAL
A603	14	3'-6"		WING & BODY - B.F. SPRIE BARS HORIZONTAL
A510	4	3'-0"		WING & BODY - F.F. SPRIE BARS HORIZONTAL
A408	12	17'-5"		WING VERTICAL
A409	4	9'-8"		WING & ABUTMENT VERTICAL
A511	8	4'-4"		COLUMN TOP HORIZONTAL

** DIMENSIONS AND ELEVATIONS TAKEN AT F.F. BACKWALL

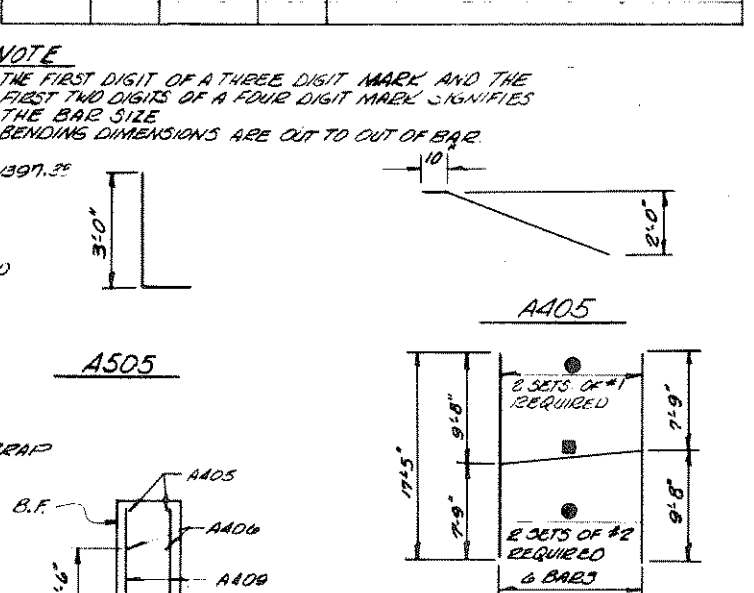
NORTH ABUTMENT (LOOKING NORTH) SCALE: 1/4" = 1'-0"



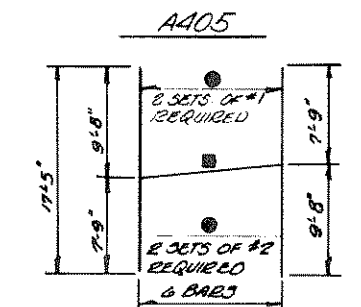
PLAN SCALE: 1/4" = 1'-0"



SECTION A-A SCALE: 1/2" = 1'-0"

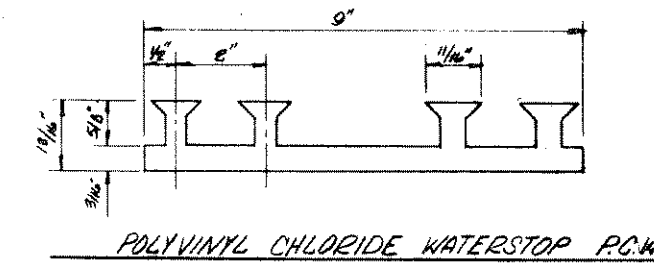


SECTION B-B SCALE: 1/2" = 1'-0"



A408 CUTTING DIAGRAM

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



POLYVINYL CHLORIDE WATERSTOP P.C.W.

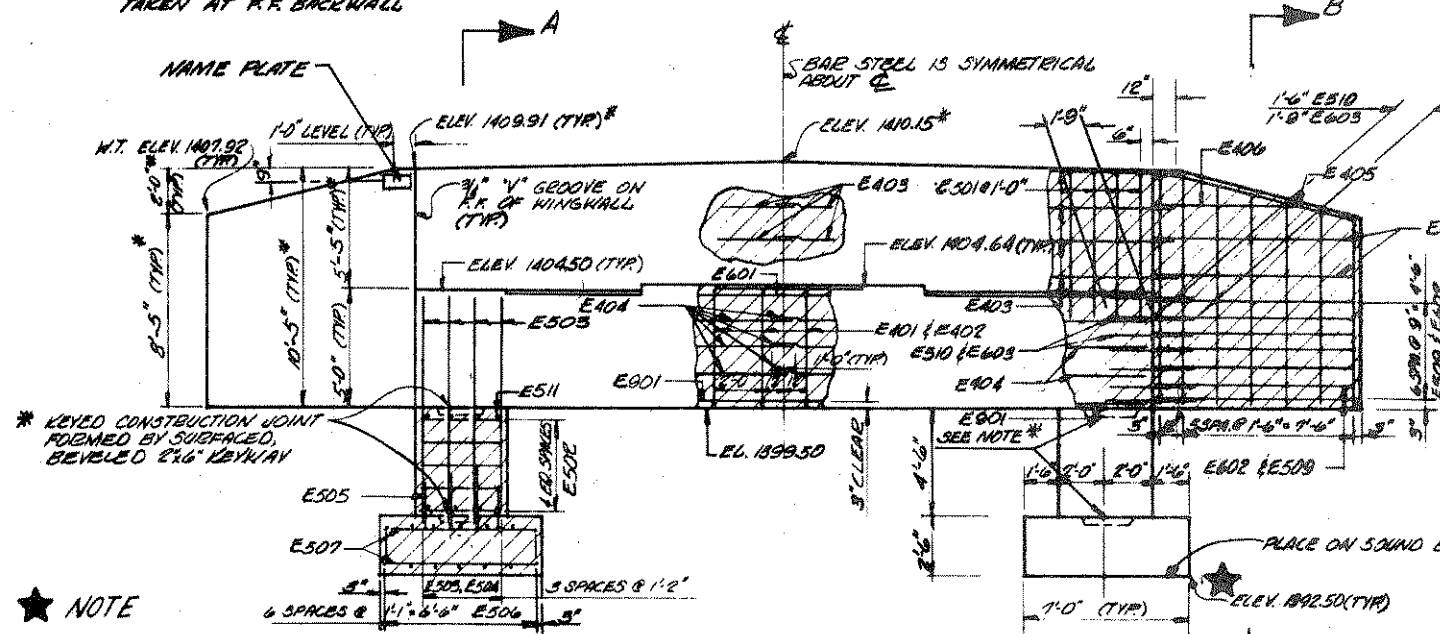
NOTE: EXCAVATED AREA BEHIND ABUTMENT SHALL BE BACKFILLED WITH GRANULAR BACKFILL

POLYVINYL CHLORIDE WATER STOP TO EXTEND BETWEEN ENDS OF ABUTMENT AND BE FLUSH WITH SURFACE OF CONCRETE. (REQUIRED ONLY WITH CONSTRUCTION JOINT)

NOTE THE FIRST DIGIT OF A THREE DIGIT MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT MARK SIGNIFIES THE BAR SIZE BENDING DIMENSIONS ARE OUT TO OUT OF BAR.

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-35-75			
Cont. Spec. 1975	Drawn By EJK	Price Checked GBL	
NORTH ABUTMENT			SHEET 3 OF 13
			X58162

* DIMENSIONS AND ELEVATIONS TAKEN AT R.F. BACKWALL



MARK	A	B
E401	2'-0"	4'-5"
E501	6'-5"	1'-4"

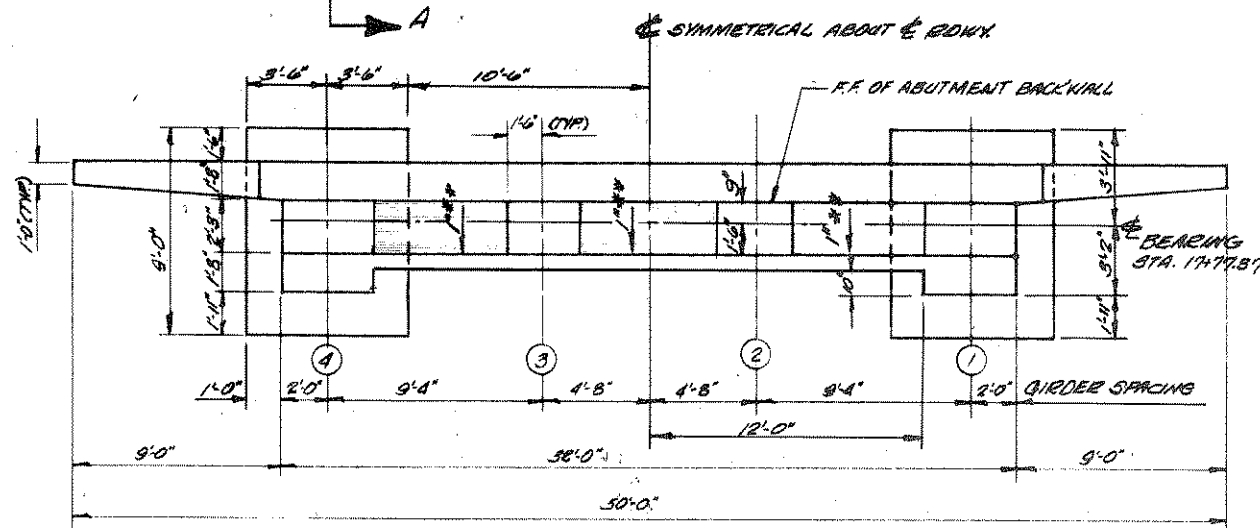
NOTE
 PLACE BOTTOM OF FOOTING ON SOUND BLACK AND WHITE GRANITE GNEISS BEDROCK MATERIAL SINCE THIS AREA CONSISTS OF BOULDERS AND FRACTURED OR WEATHERED BEDROCK WITH HARD AND SOFT LAYERS. CONTRACTOR SHALL REMOVE ALL MATERIAL WHICH CAN BE REMOVED WITH EQUIPMENT AND SHALL GROUT AROUND REMAINING BOULDERS AND ROCK SURFS TO PROVIDE A BEARING SURFACE CAPABLE OF SUPPORTING 10000 POUNDS PER SQUARE FOOT.

SOUTH ABUTMENT
 (LOOKING SOUTH)
 SCALE: 1/4" = 1'-0"

BILL OF BARS 4,135 LBS.

MARK	NO. REQD.	LENGTH	BENT	LOCATION
E401	16	8'-5"	✓	BODY - B.F. VERTICAL
E402	16	11'-0"	✓	BODY - F.F. VERTICAL
E501	32	13'-11"	✓	BODY - BACKWALL VERTICAL
E403	16	17'-9"		BODY - BACKWALL HORIZONTAL
E601	3	3'-6"		BODY - TOP HORIZONTAL
E901	13	3'-6"		BODY - BOTTOM HORIZONTAL
E404	12	16'-4"		BODY - F.F. & B.F. HORIZONTAL
E502	34	3'-6"		COLUMN - F.F., B.F., TOP & BOT. HORIZONTAL
E503	16	9'-5"		COLUMN - F.F., B.F., TOP & BOT. VERT. & HORIZ.
E504	8	5'-1"		COLUMN - BOTTOM HORIZONTAL
E505	16	3'-8"	✓	COL. & FOOTING CORNERS VERTICAL
E506	28	8'-6"		FOOTING - TOP & BOTTOM HORIZONTAL
E507	36	0'-6"		FOOTING - TOP & BOTTOM VERTICAL
E405	4	8'-7"	✓	WING - TOP HORIZONTAL
E406	4	7'-8"		WING - F.F. & B.F. HORIZONTAL
E407	8	8'-7"		WING - F.F. & B.F. HORIZONTAL
E508	14	8'-7"		KINGS - F.F. HORIZONTAL
E602	4	8'-9"		KINGS - B.F. HORIZONTAL
E603	4	3'-6"		KINGS & BODY - B.F. BRICE BARS HORIZONTAL
E510	14	8'-0"		WING & BODY - F.F. BRICE BARS HORIZONTAL
E408	16	17'-9"		WINGS VERTICAL
E409	4	9'-8"		KINGS & ABUTMENT VERTICAL
E511	8	4'-4"		COLUMN TOP HORIZONTAL

NOTE
 THE FIRST DIGIT OF A THREE DIGIT MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT MARK SIGNIFIES THE BAR SIZE. BENDING DIMENSIONS ARE OUT TO OUT BAR.

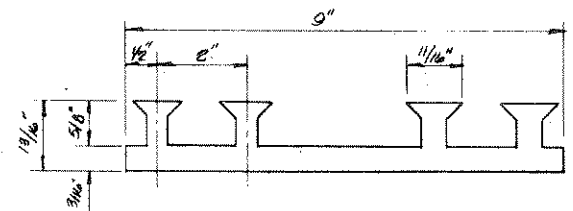


PLAN
 SCALE: 1/4" = 1'-0"

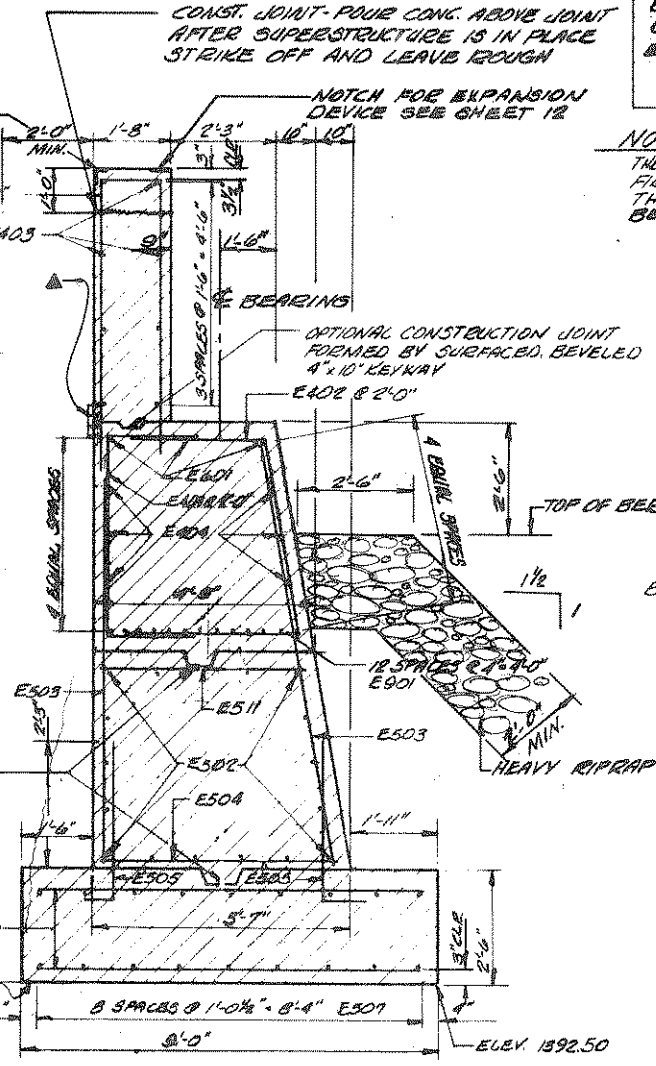
** SLOPE BEARING SEAT 1" BETWEEN BEARINGS * SEE NOTE UPPER LEFT

NOTE:
 EXCAVATED AREA BEHIND ABUTMENT TO BE BACKFILLED W/ GRANULAR BACKFILL

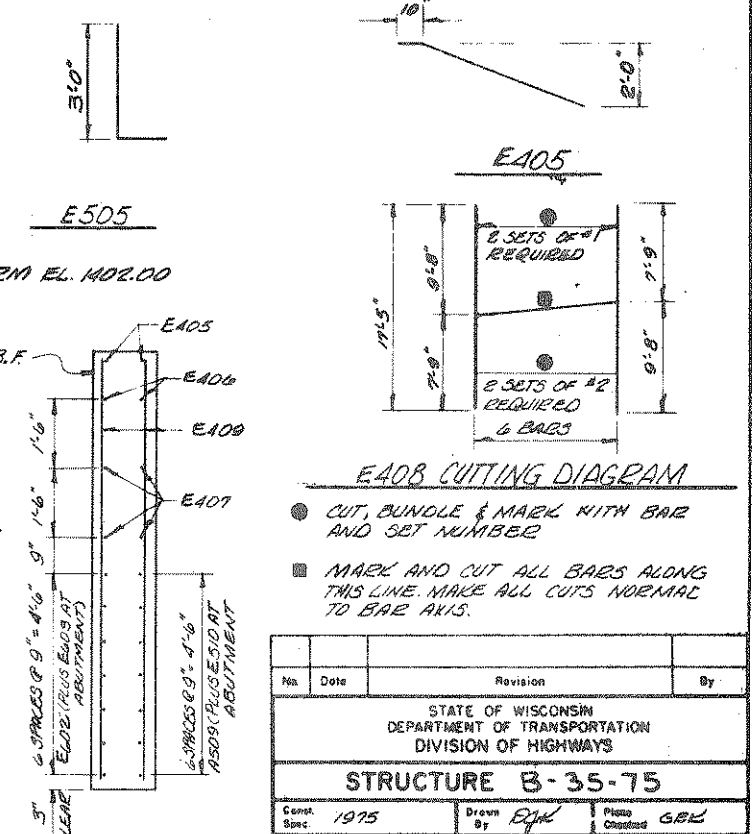
▲ POLYVINYL CHLORIDE WATERSTOP TO EXTEND BETWEEN ENDS OF ABUTMENT AND BE FLUSH WITH SURFACE OF CONG. (REQUIRED ONLY WITH CONST. JOINT.)



PROTECTION ANGLE SEE SHEET 3



SECTION A-A
 SCALE: 1/2" = 1'-0"



SECTION B-B
 SCALE: 1/2" = 1'-0"

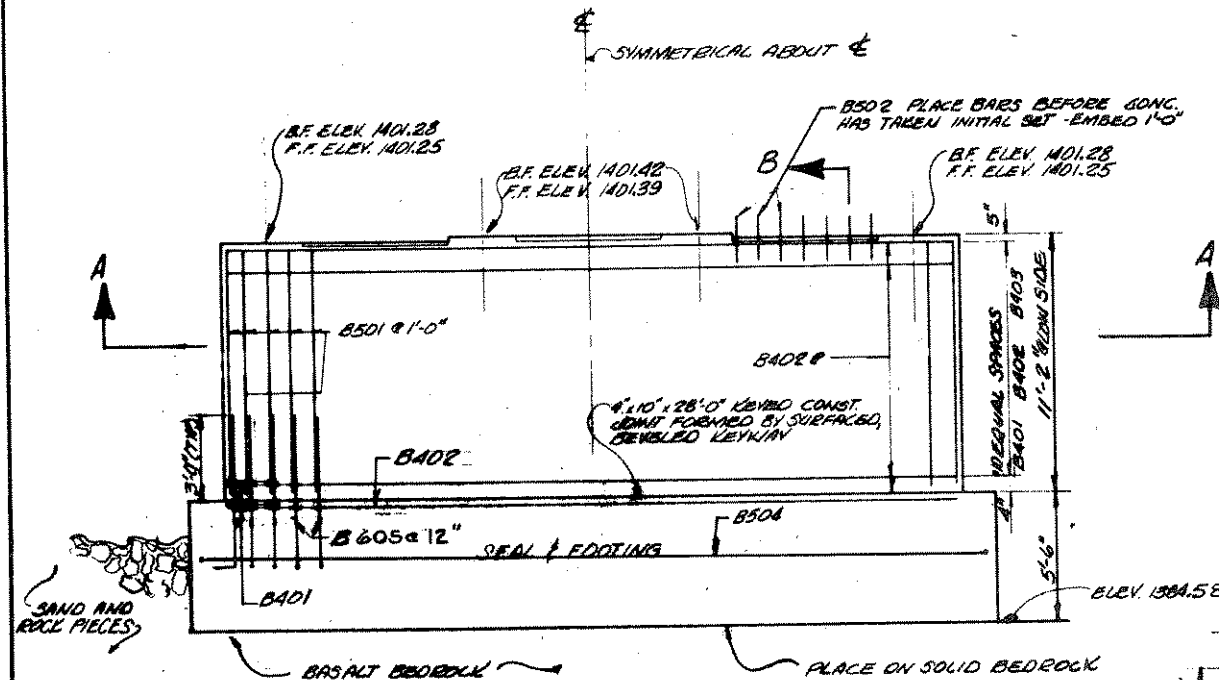
E408 CUTTING DIAGRAM
 ● CUT, BUNDLE & MARK WITH BAR AND SET NUMBER
 ■ MARK AND CUT ALL BARS ALONG THIS LINE. MAKE ALL CUTS NORMAL TO BAR AXIS.

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-35-75			
Scale: 1975	Drawn By: EJK	Check: GBL	
SOUTH ABUTMENT			SHEET 4 OF 13
			X58163

BILL OF BARS 2360 LBS

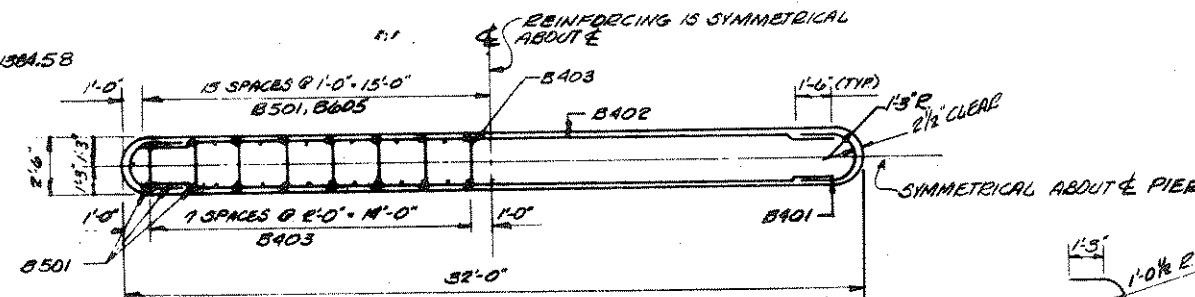
MARK	NO.	LENGTH	BENT	LOCATION
B502	21	2'-0"		SHAFT - BETWEEN GIRDERS VERT.
B401	24	5'-9"	✓	SHAFT & FOOTING HORIZ.
B402	24	31'-6"		SHAFT HORIZ.
B501	64	10'-8"		SHAFT VERT.
B403	176	3'-3"	✓	SHAFT - TIES HORIZ.
B504	2	34'-6"		FOOTING - TOP HORIZ.
B605	64	3'-8"	✓	SHAFT & FOOTING DOWELS VERT.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.



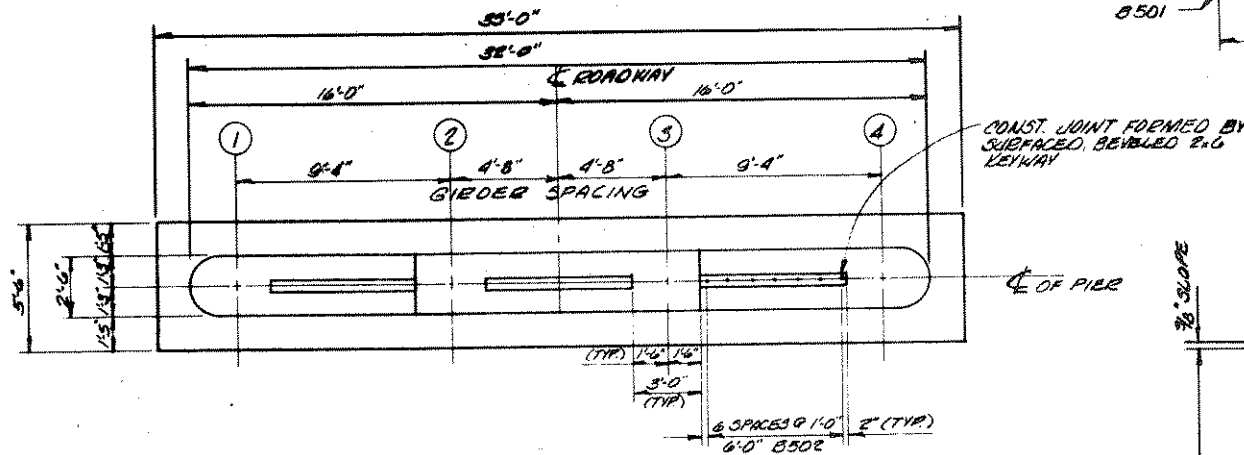
ELEVATION

(LOOKING SOUTH)
SCALE: 1/4" = 1'-0"



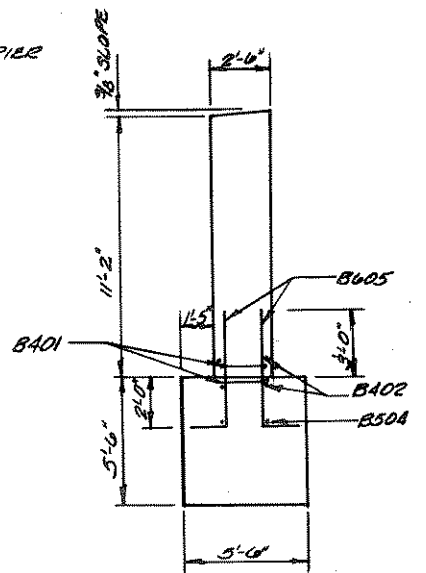
SECTION A-A

SCALE: 1/4" = 1'-0"



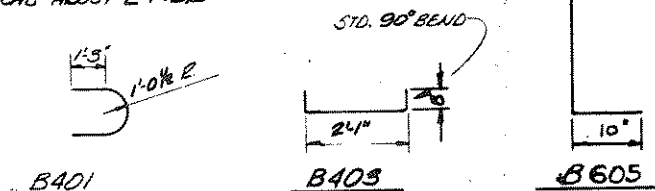
PLAN

SCALE: 1/4" = 1'-0"



SECTION B-B

SCALE: 1/4" = 1'-0"



ESTIMATED CONCRETE MASONRY

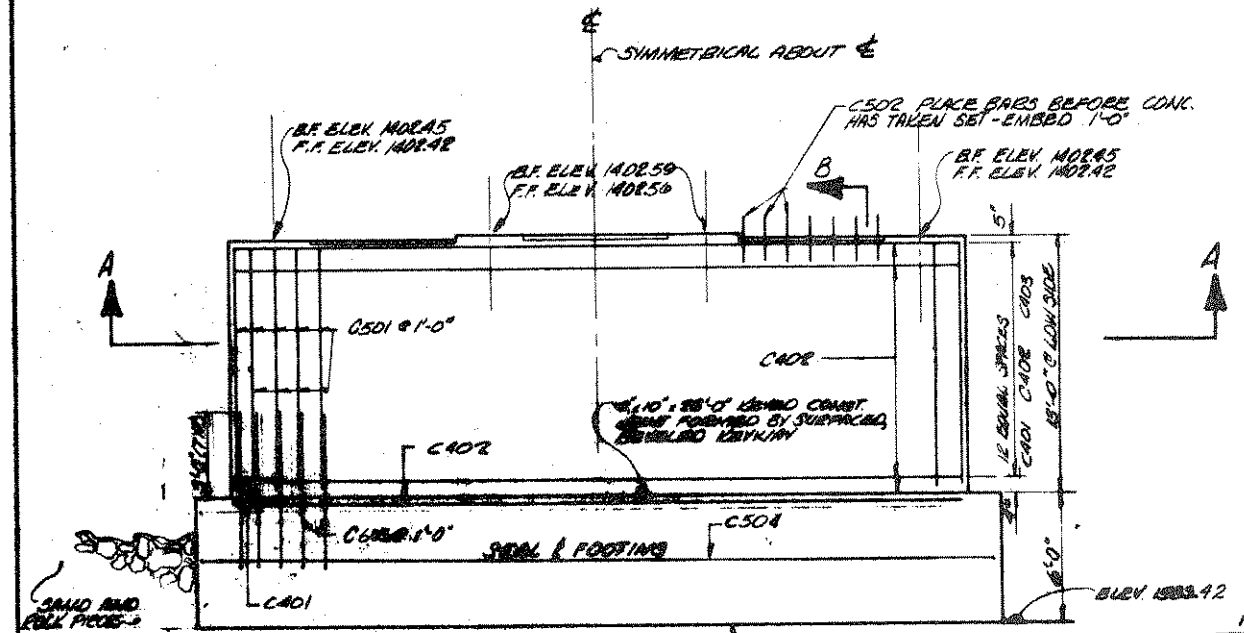
SEAL & FOOTING	40.1 C.Y.
SHAFT	33.2 C.Y.
TOTAL	73.3 C.Y.

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-35-75			
Const. Spec.	1975	Drawn By	EGK
		Plan Checked	GRK
PIER # 1			SHEET 5 OF 13
X58164			

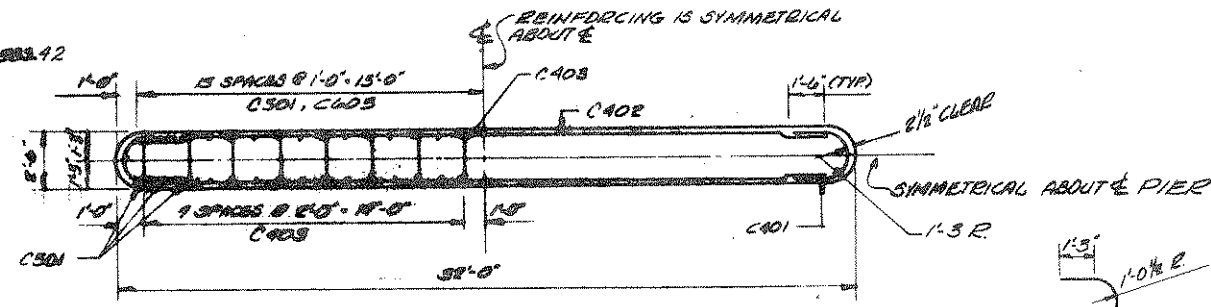
BILL OF BARS 2,290 LBS

MARK	NO.	LENGTH	BENT	LOCATION
C502	21	2'-0"		SHAFT - BETWEEN GIRDERS VERT.
C401	24	5'-9"	✓	SHAFT & FOOTING HORIZ.
C402	24	31'-6"		SHAFT HORIZ.
C501	64	18'-1"		SHAFT VERT.
C403	208	3'-3"	✓	SHAFT - TIES HORIZ.
C504	2	34'-6"		FOOTING - TOP HORIZ.
C605	64	3'-8"	✓	SHAFT & FOOTING DOWELS VERT.

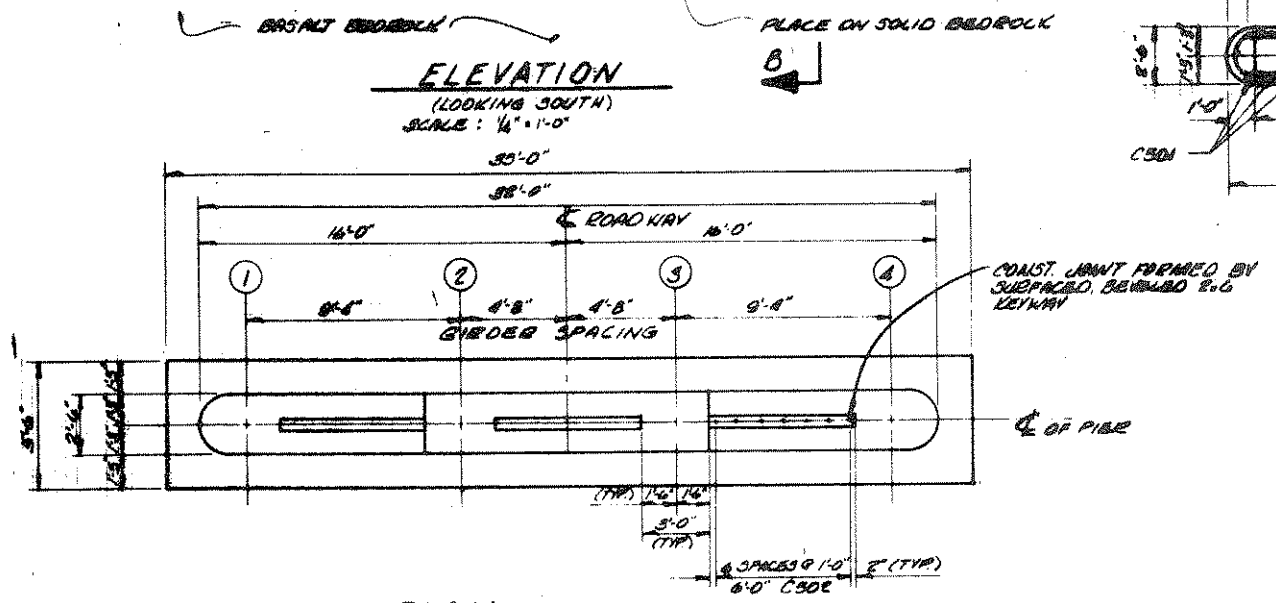
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.



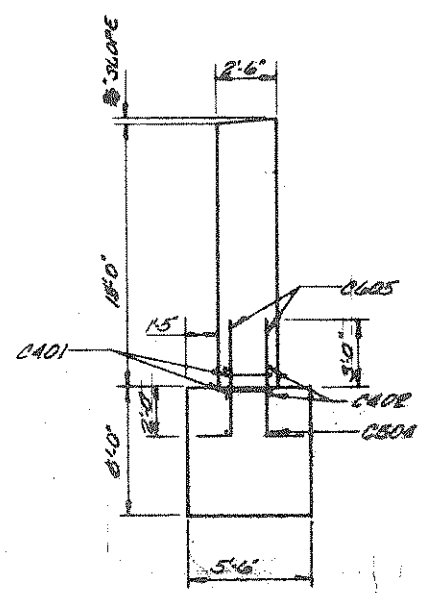
ELEVATION
 (LOOKING SOUTH)
 SCALE: 1/4" = 1'-0"



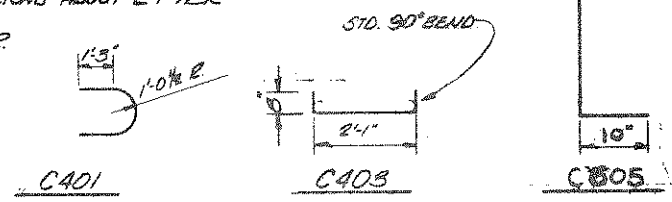
SECTION A-A
 SCALE: 1/4" = 1'-0"



PLAN
 SCALE: 1/4" = 1'-0"



SECTION B-B
 1/4" = 1'-0"



ESTIMATED CONCRETE MASONRY

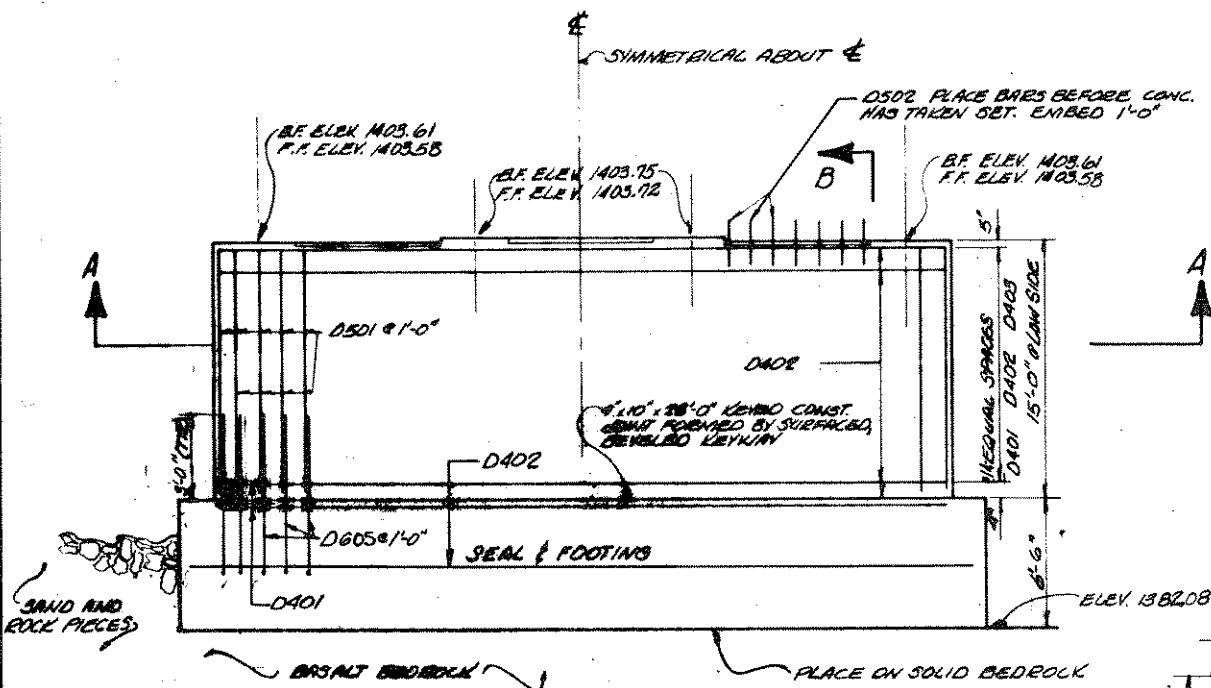
SEAL & FOOTING	42.8 C.Y.
SHAFT	38.8 C.Y.
TOTAL	81.6 C.Y.

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-35-75			
Scale	1978	Drawn	Checked
PIER # 2		SHEET # OF #	

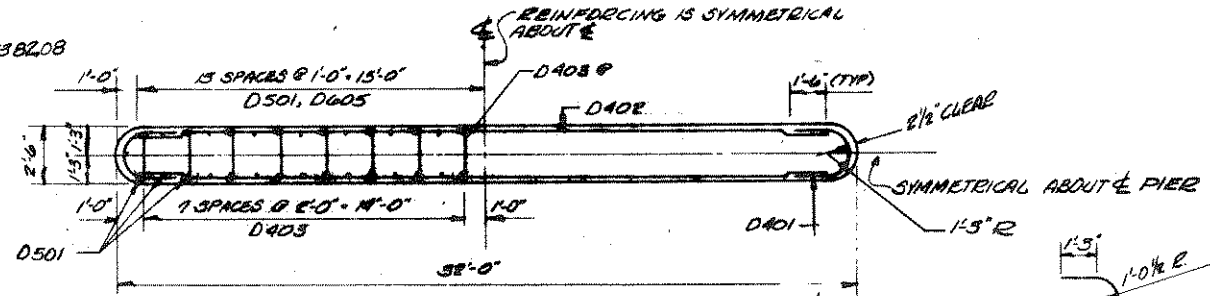
BILL OF BARS 2,985 LBS.

MARK	NO.	LENGTH	BENT	LOCATION
D502	21	2'-0"		SHAFT - BETWEEN GIRDERS VERT.
D401	92	5'-9"	✓	SHAFT & FOOTING HORIZ.
D402	32	31'-6"		SHAFT HORIZ.
D501	64	14'-4"		SHAFT VERT.
D403	240	3'-3"	✓	SHAFT - TIES HORIZ.
D504	2	34'-6"		FOOTING - TOP HORIZ.
D605	64	5'-8"	✓	SHAFT & FOOTING DOWELS VERT.

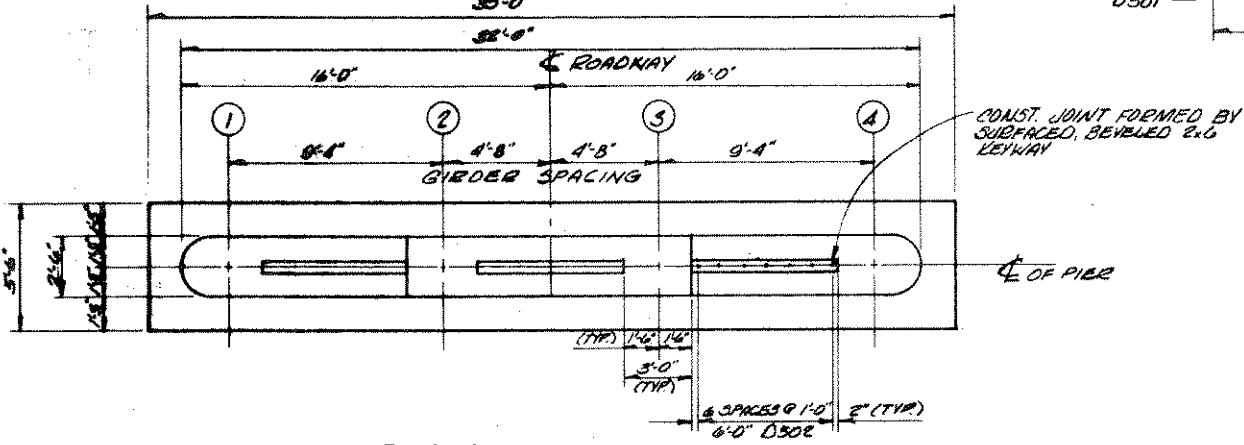
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.



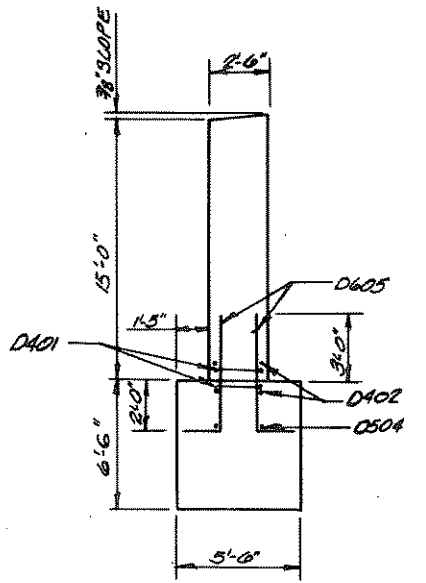
ELEVATION
(LOOKING SOUTH)
SCALE: 1/4" = 1'-0"



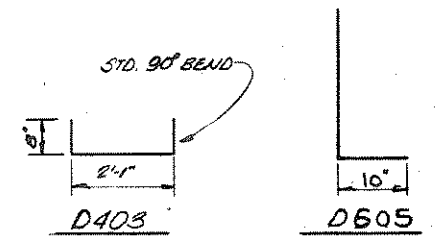
SECTION A-A
SCALE: 1/4" = 1'-0"



PLAN
SCALE: 1/4" = 1'-0"



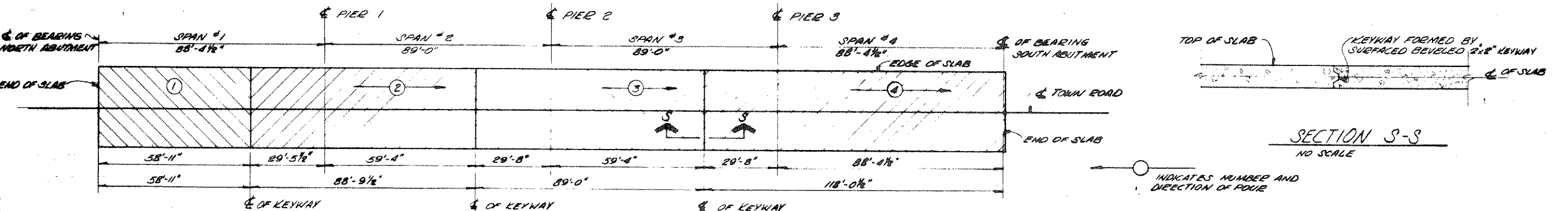
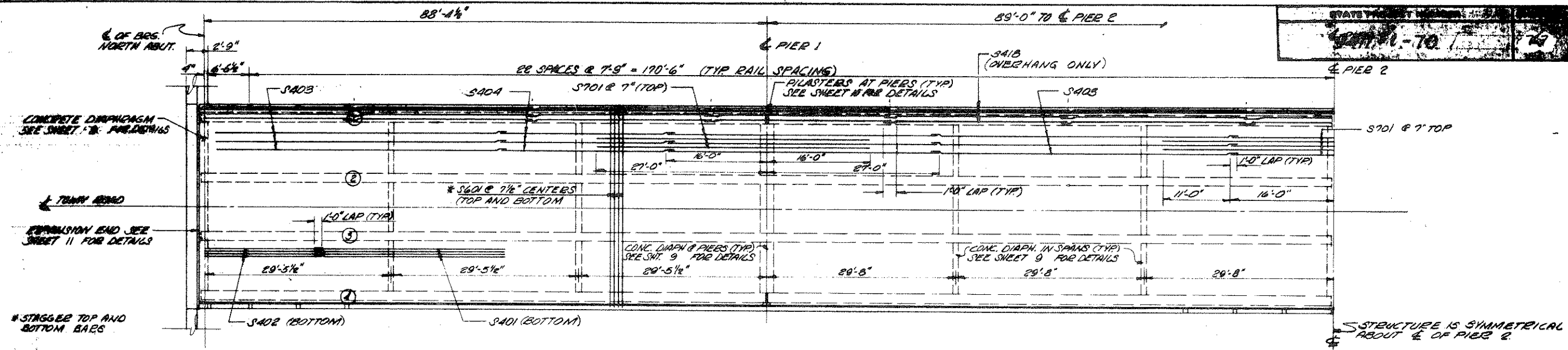
SECTION B-B
SCALE: 1/4" = 1'-0"



ESTIMATED CONCRETE MASONRY

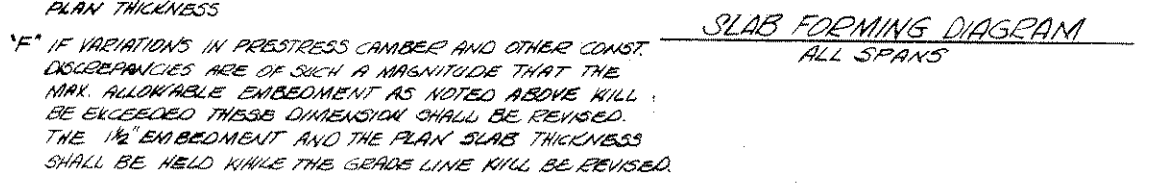
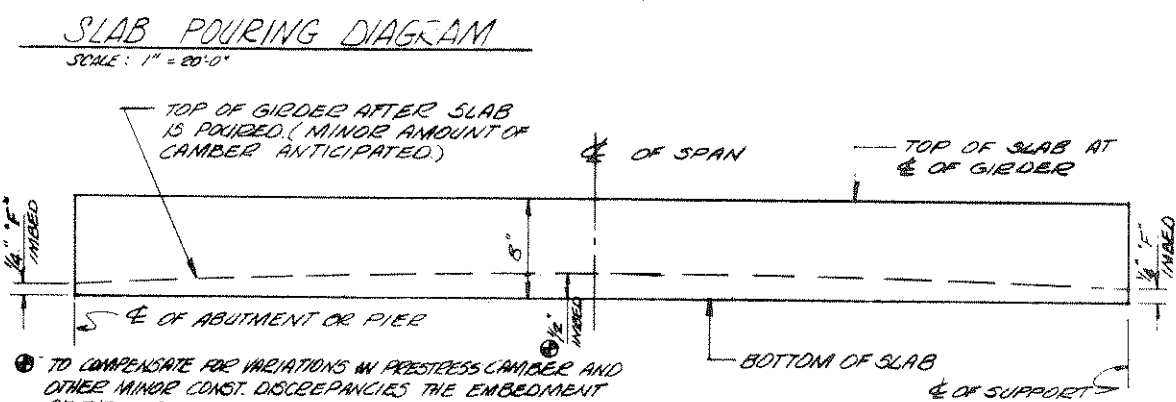
SEAL & FOOTING	47.1	C.Y.
SHAFT	44.8	C.Y.
TOTAL	91.9	C.Y.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
STRUCTURE B-35-75	
Const. Year: 1975	Drawn By: EGM
PIER #3	
SHEET 7 OF 13	
X 58166	



NOTE

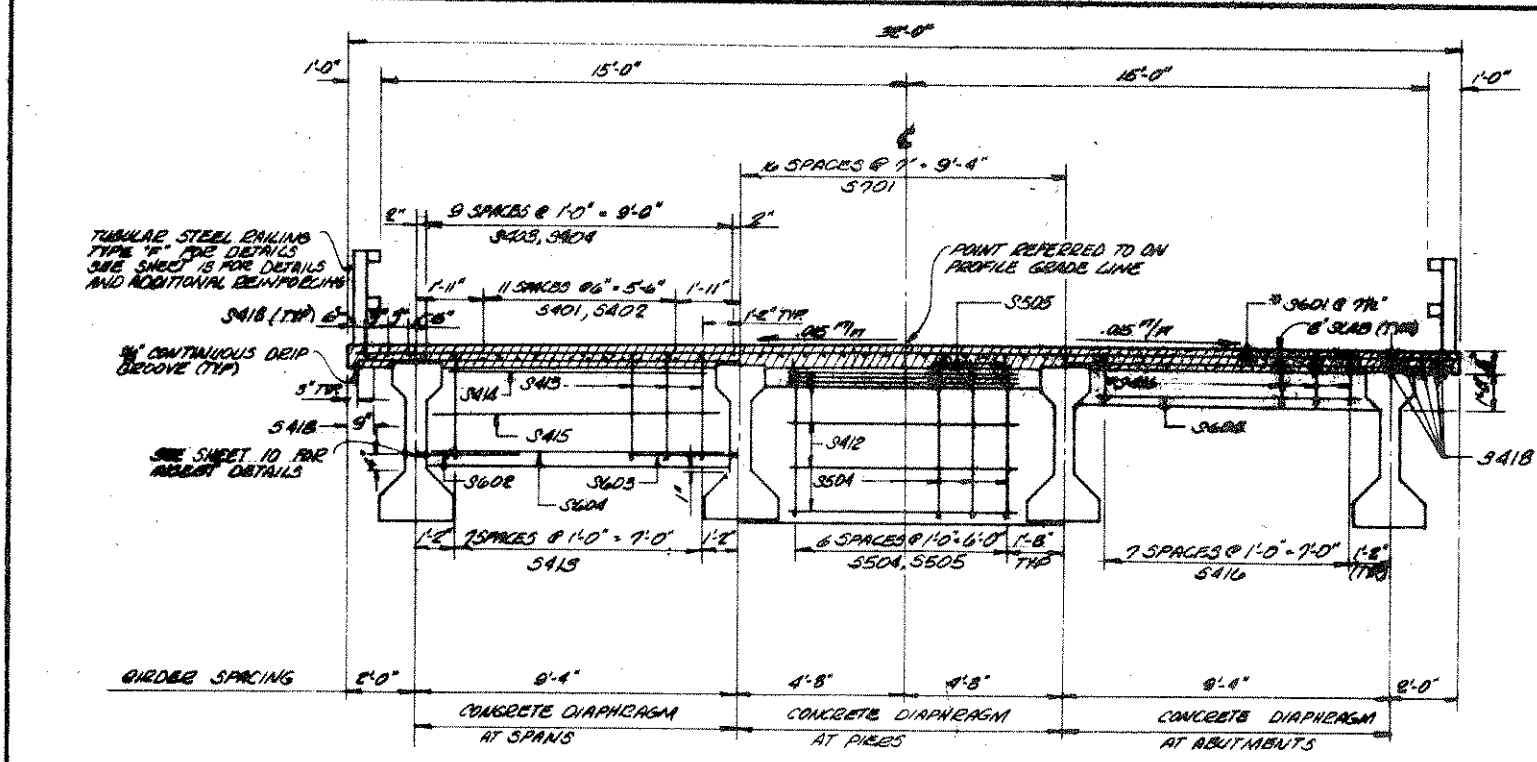
- 1- DIRECTION OF POUR MAY BE REVERSED IF PORTION OF POUR FROM THE PIER CAN BE COMPLETED IN A 4 HOUR PERIOD.
- 2- TWO OR MORE POURS MAY BE COMBINED AND THE TRANSVERSE CONSTRUCTION JOINTS OMITTED IF THE POUR FOR AN ENTIRE SPAN OR THE PORTION OF A SPAN TO A CONSTRUCTION JOINT CAN BE COMPLETED WITHIN 4 HOURS AFTER CONCRETE OVER THE ADJACENT PIER IS PLACED.



TO COMPENSATE FOR VARIATIONS IN PRESTRESS CAMBER AND OTHER MINOR CONST. DISCREPANCIES THE EMBEDMENT OF THE GIRDER INTO SLAB MAY BE VARIED WITH A MAX. OF 1/2" ALLOWABLE EMBEDMENT AND THE SLAB HELD TO PLAN THICKNESS

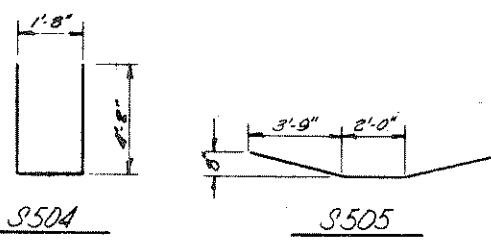
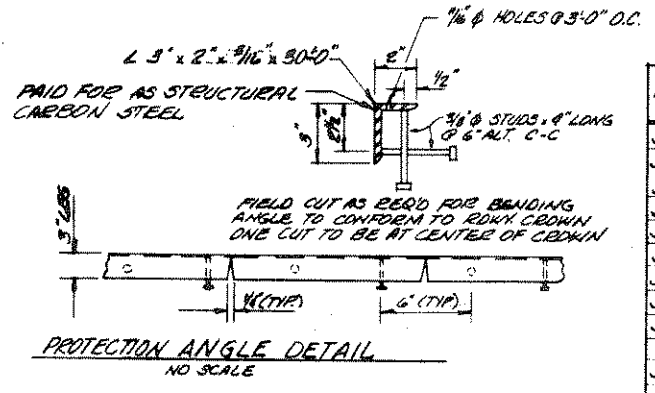
* IF VARIATIONS IN PRESTRESS CAMBER AND OTHER CONST. DISCREPANCIES ARE OF SUCH A MAGNITUDE THAT THE MAX. ALLOWABLE EMBEDMENT AS NOTED ABOVE WILL BE EXCEEDED THESE DIMENSIONS SHALL BE REVISED. THE 1/2" EMBEDMENT AND THE PLAN SLAB THICKNESS SHALL BE HELD WHILE THE GRADE LINE WILL BE REVISED.

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-35-75			
Const. Dist.	1975	Drawn By	Plan Checked
		EDM	GRE
SUPERSTRUCTURE			SHEET 8 OF 18
			X58167



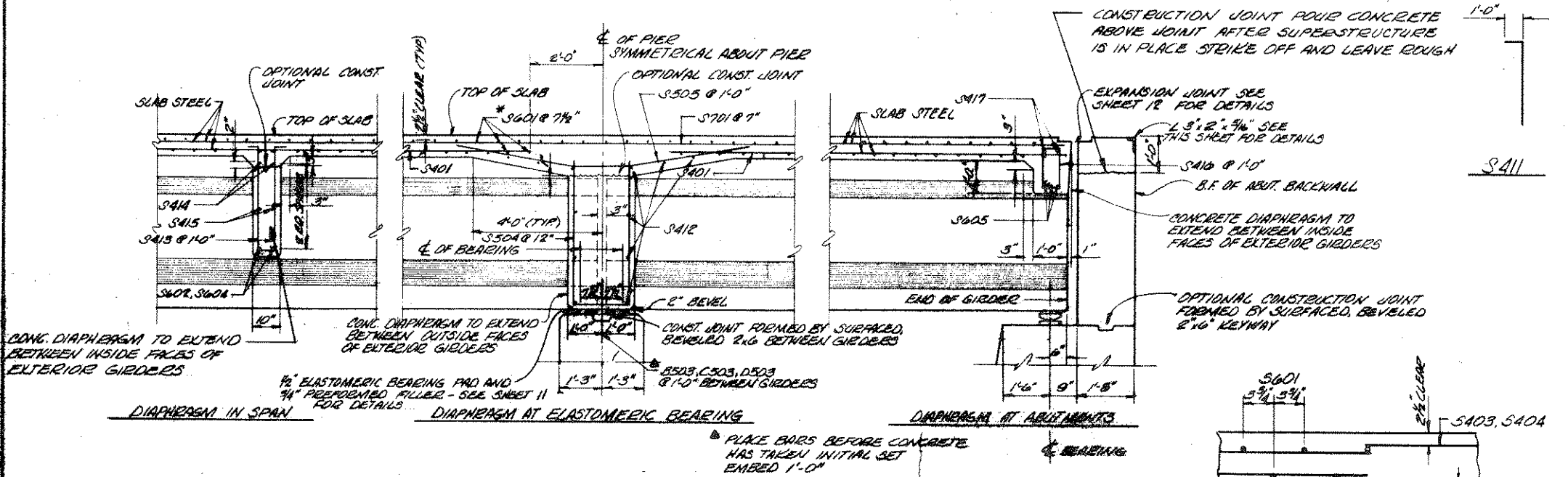
CROSS SECTION THRU ROADWAY
SCALE: 3/8" = 1'-0"

NOTE:
DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT. THE FIRST DIGIT OF A THREE DIGIT MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT MARK SIGNIFIES THE BAR SIZE.



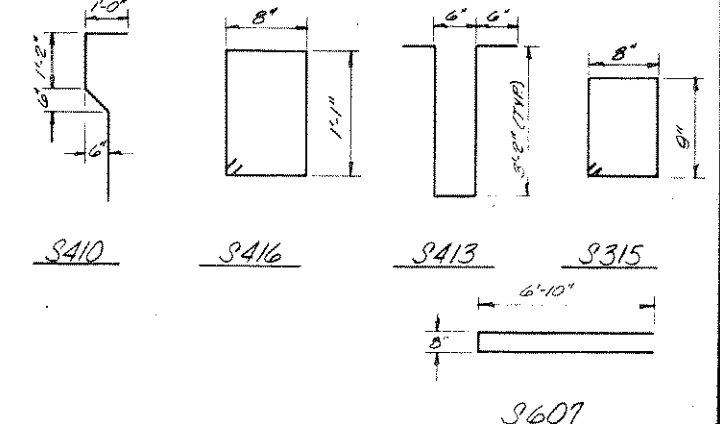
BILL OF BARS 98,175 LBS.

MARK	NO REQD	LENGTH	BENT	LOCATION
S601	1140	31'-7"		SLAB - TOP & BOTTOM TRANS.
S701	165	43'-0"		SLAB - TOP SYM. & PIERS LONGIT.
S803	180	48'-0"		SLAB - TOP LONGIT.
S804	60	27'-1"		SLAB - TOP LONGIT.
S401	704	30'-0"		SLAB - BOTTOM LONGIT.
S402	128	18'-5"		SLAB - BOTTOM LONGIT.
S410	12	4'-5"	✓	PILASTER - PIERS VERTICAL
S411	12	5'-7"	✓	PILASTER - PIERS VERTICAL
S515	18	3'-4"	✓	PILASTER - PIERS HORIZ.
S504	63	9'-9"	✓	PILASTER - PIERS VERTICAL
S412	108	8'-4"		PILASTER - PIERS HORIZ.
S505	63	9'-8"	✓	DIAPHRAGM - PIERS HORIZ.
S413	192	7'-6"	✓	DIAPHRAGM - SPAN VERTICAL
S602	32	3'-2"		DIAPHRAGM - SPAN HORIZ.
S603	32	6'-2"		DIAPHRAGM - SPAN HORIZ.
S604	48	8'-4"		DIAPHRAGM - SPAN HORIZ.
S414	48	7'-4"		DIAPHRAGM - SPAN HORIZ.
S415	48	8'-4"		DIAPHRAGM - SPAN HORIZ.
S605	18	7'-4"		DIAPHRAGM - ABUTMENT HORIZ.
S416	48	4'-0"	✓	DIAPHRAGM - ABUTMENT VERTICAL
S417	12	7'-4"		DIAPHRAGM - ABUTMENT HORIZ.
S606	188	4'-0"		AT RAIL POSTS HORIZ.
S607	94	14'-0"	✓	SLAB - AT RAIL POSTS HORIZ.
S418	104	28'-3"		SLAB - TOP AND BOTTOM HORIZ.



PARTIAL LONGITUDINAL SECTION
SCALE: 1/2" = 1'-0"

SECTION THRU SLAB
TYPICAL LONGITUDINAL SECTION AT MIDSPAN

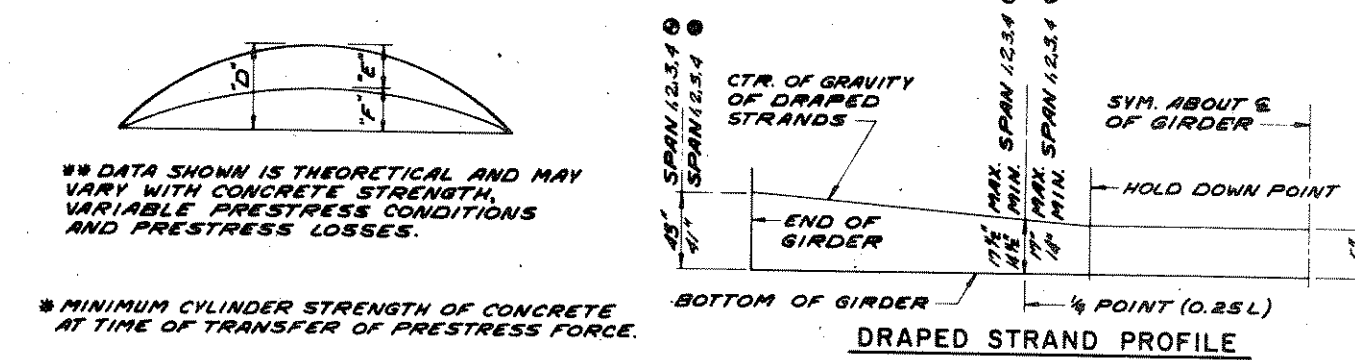
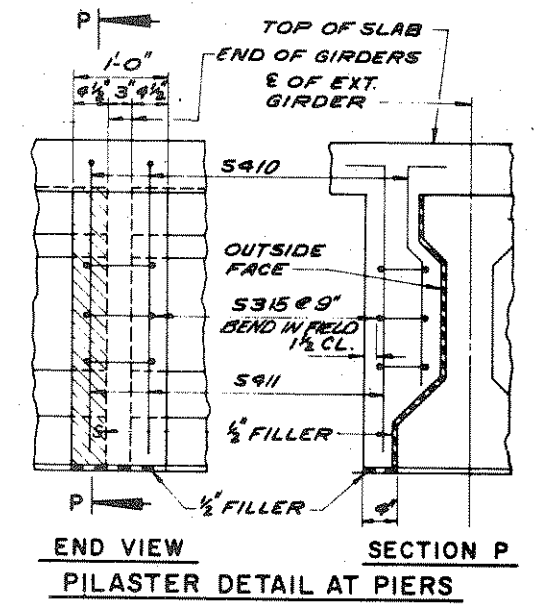
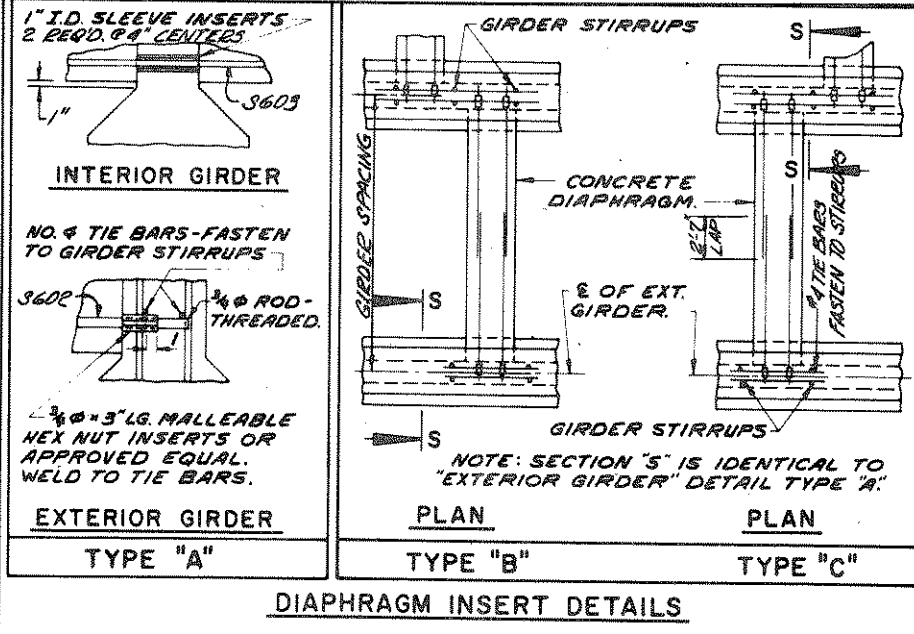
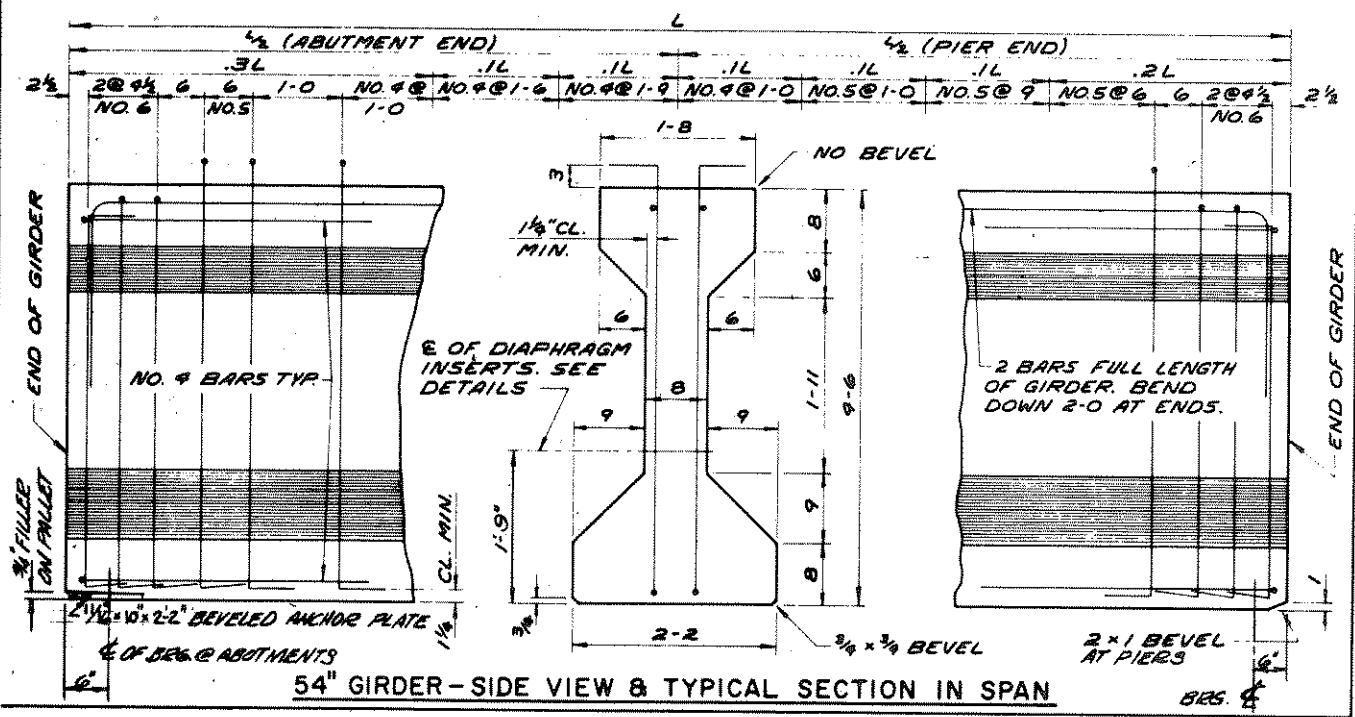


BAR CHAIR NOTES

BOTTOM TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS ON OR ADJACENT TO EACH GIRDER AND BY INDIVIDUAL BAR CHAIRS PLACED AT 3'-0" CENTERS AT APPROXIMATELY 1/3 POINTS BETWEEN GIRDERS.

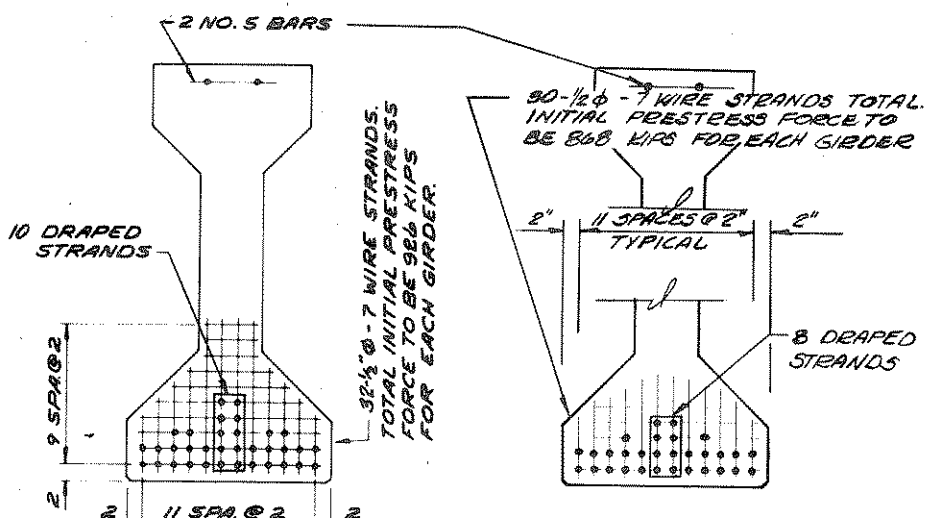
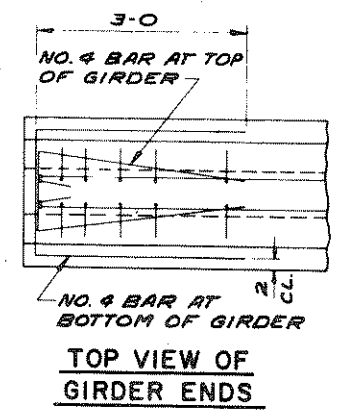
TOP LONGITUDINAL BAR STEEL SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-35-75			
Consd. Date	Drawn By	Plan Checked	
1975	EGK	SEK	
SUPERSTRUCTURE DETAILS			SHEET 9 OF 13
			X58168



GIRDER DATA			
		ALL SPANS	ALL SPANS
GIRDER LENGTH "L" REQUIRED		88'-9"	88'-9"
f'ci (psi) *	DRAPED PATTERN	4800	4800
	SPREAD PATTERN		
DEFLECTION DATA **	PRESTRESS CAMBER "D"	1 1/4"	1 1/4"
	DEAD LOAD DEFLECTION "E"	1"	1"
	RESIDUAL CAMBER "F"	1/4"	1/4"

USE DIAPHRAGM INSERT DETAIL TYPE "A"



NOTES

TOP OF GIRDERS TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY FOR BONDING TO THE SLAB.

THE GIRDER MANUFACTURER SHALL PROVIDE A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

PRESTRESSING STRANDS SHALL HAVE AN ULTIMATE STRENGTH OF 270,000 P.S.I. AND SHALL BE FLUSH WITH THE ENDS OF THE GIRDER.

INSERTS SHALL BE PLACED ON 4" CENTERS SYMMETRICALLY ABOUT THE C. OF DIAPHRAGMS IN SPANS.

ALL STIRRUPS SHALL BE IN PAIRS AND THE SPACING SHOWN IN "SIDE VIEW" IS MAXIMUM. THE LOCATION SHALL BE SHOWN IN THE SHOP DRAWINGS.

BEND EACH END OF NO. 4 AND NO. 5 STIRRUPS 6" AND NO. 6 STIRRUPS 6 1/2".

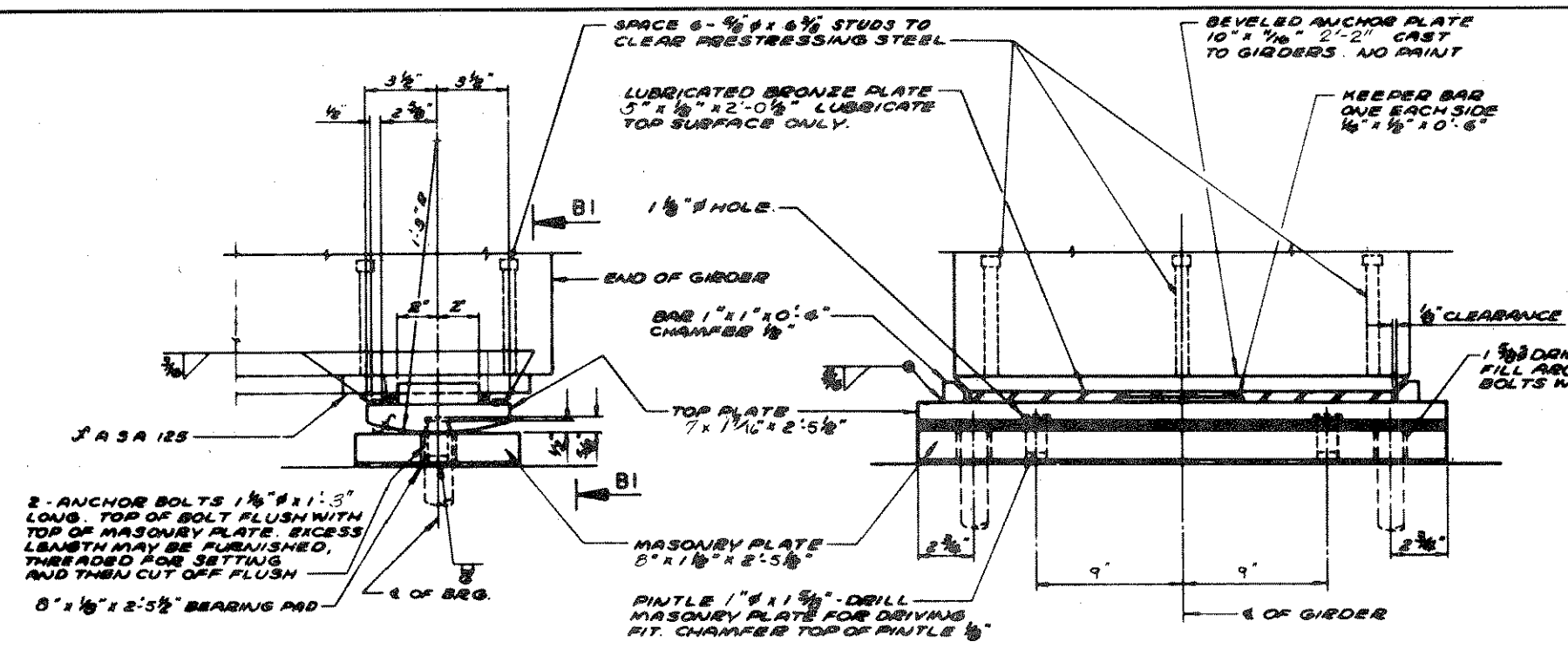
ENDS OF STRANDS SHALL BE PAINTED WITH NON-STAINING GRAY NON BITUMINOUS JOINT SEALER. (THIS APPLIES ONLY TO THOSE ENDS OF GIRDER THAT ARE FINALLY EXPOSED.)

TOP LONGITUDINAL BARS IN GIRDER MAY BE SPliced BY USING 4G BAR DIAMETER LAPS. PLACE ONE LAP AT C. OF GIRDER IF LENGTH IS < 70'-0". PLACE LAPS AT THE 1/3 RD POINTS OF GIRDER IF LENGTH IS > 70'-0".

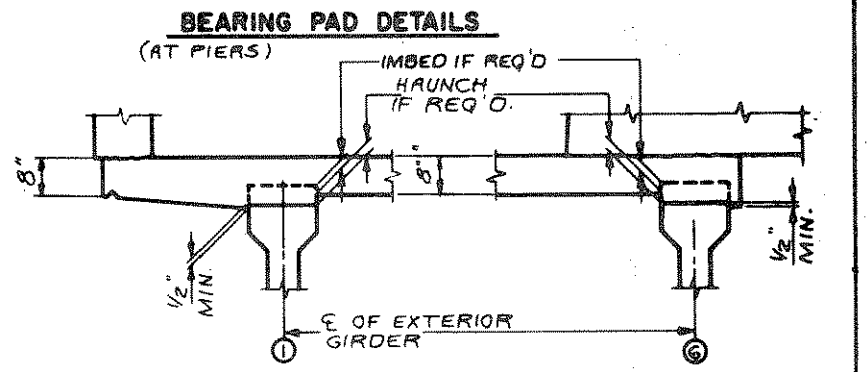
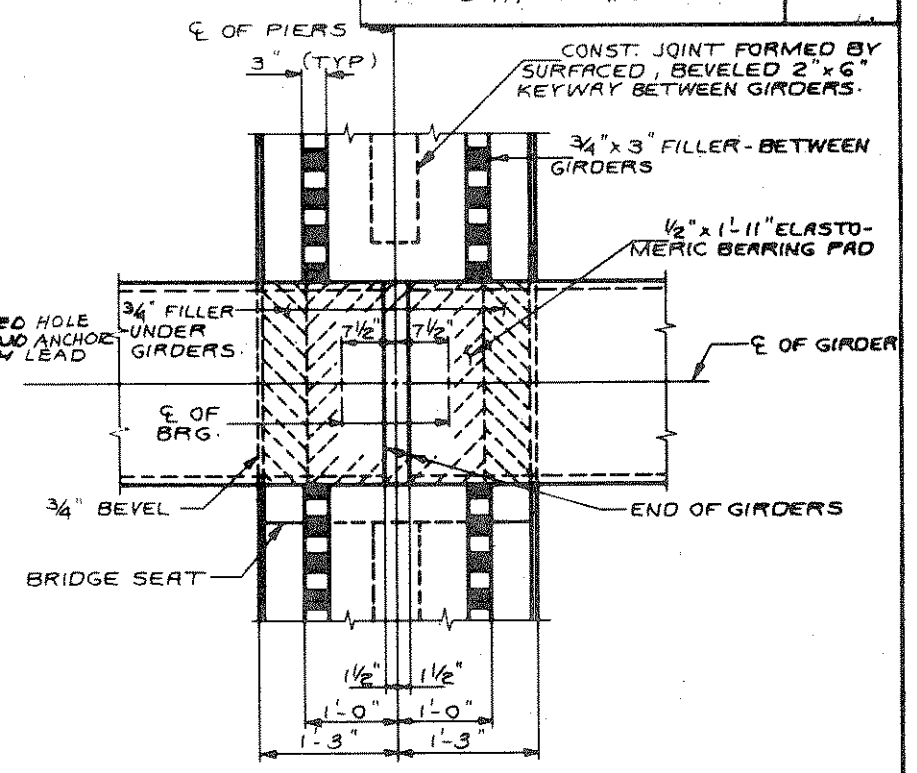
BAR STEEL IN GIRDERS SHALL BE HIGH STRENGTH BAR STEEL REINFORCEMENT.

- ⊙ STRESS RELIEVED
- LOW RELAXATION

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-35-75			
Const. Spec.	1975	Drawn By	EDK
		Plans Checked	GRK
54' PRESTRESSED GIRDER DETAILS		SHEET 10 OF 13	
		X58169	



EXPANSION BEARING
4 REQ'D @ EACH ABUTMENT (8 TOTAL)



BEARING NOTES

ALL BEARING MATERIAL EXCEPT ANCHOR BOLTS & PINTLES SHALL CONFORM TO A.S.T.M. SPECIFICATION TYPE A588 STEEL. ANCHOR BOLTS & PINTLES SHALL CONFORM TO A.S.T.M. SPECIFICATION A36 STEEL AND A449 STEEL RESPECTIVELY.

ALL BEARING MATERIAL EXCEPT BRONZE PLATES, BEARING PADS, AND ANCHOR PLATES SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STRUCTURAL LOW ALLOY STEEL."

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

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL SURFACES MARKED 'J' SHALL BE MACHINE FINISHED BY AN AUTOMATIC PROCESS.

TOTAL ESTIMATED QUANTITIES

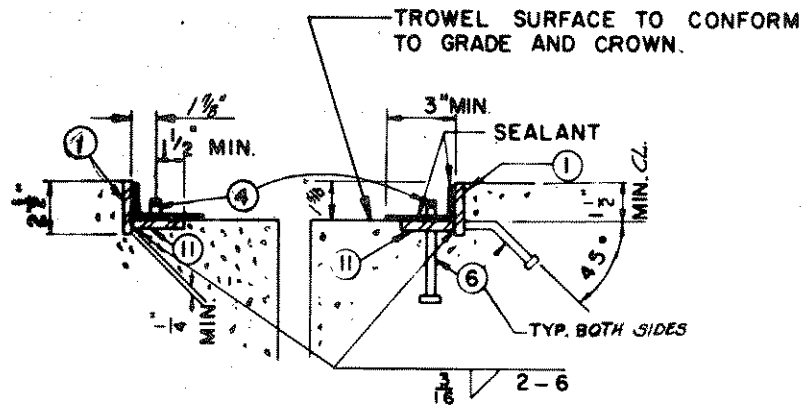
BID ITEMS	UNIT	SUPER.	ABUT.	PIER #1	PIER #2	PIER #3	S.ABUT.	TOTAL
REMOVE OLD BRIDGE	L.S.							1
EXCAVATION FOR STRUCTURES	L.S.							1
CONCRETE MASONRY	C.Y.	332.6	62.1	33.2	38.8	44.8	62.1	574
PRESTRESSED GIRDER, 11 INCH	L.F.	1424						1424
HIGH STRENGTH BAR STEEL REINF.	LBS.	98,175	4135	2360	2590	2955	4135	114,890
BEARING PADS, ELASTOMERIC	S.F.	48						48
STRUCTURAL CARBON STEEL	LBS.	320						320
STEEL BRACING TYPE 'E'	L.S.							1
HEAVY RIBBAP	C.Y.		190				290	480
CONC. MASONRY SEAL	C.Y.			40.1	42.8	47.1		130
EXPANSION DEVICE	L.S.							1
COFFERDAMS	L.S.							1
NON-BID ITEMS								
FILLER	SIZE							1/2" x 3/4"
POLYVINYL CHLORIDE WATERSTOP	L.F.		32				32	64

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-35-75

Const. Date: 1976 Drawn By: BAK Plan Checked: GRK

BEARINGS AND TOTAL ESTIMATED QUANTITIES SHEET 11 OF 13
X5070

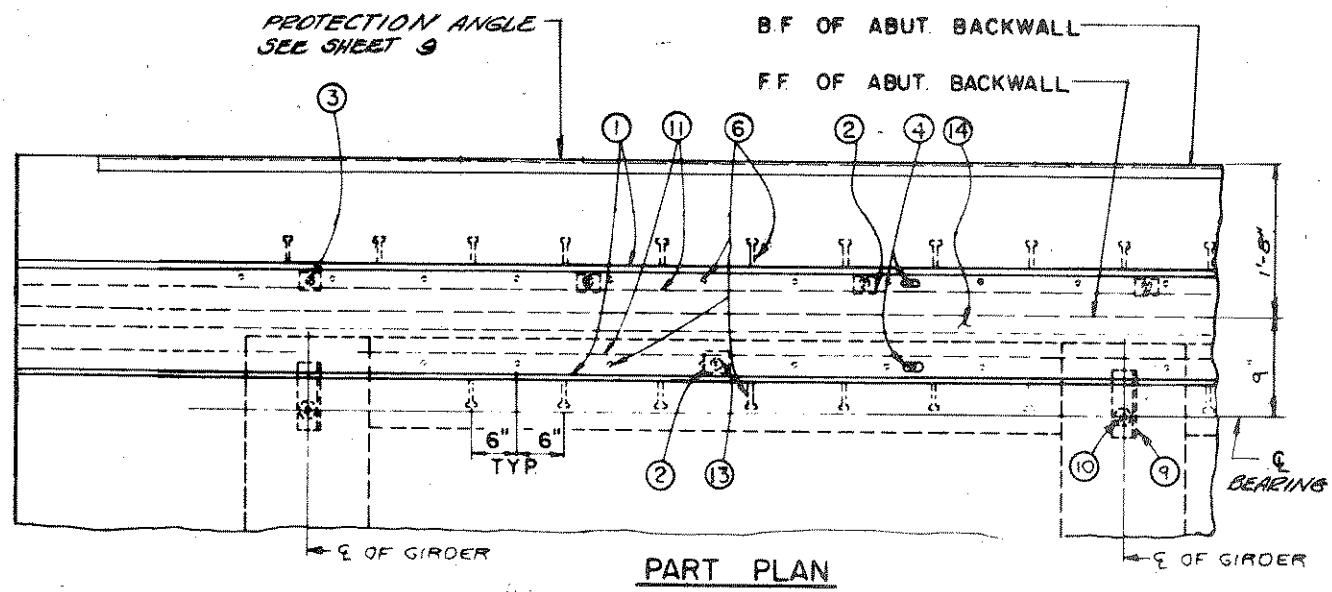


ANCHORAGE DETAILS
(ROADWAY SECTION)

SHADED UNDERSIDE DECK TEMPERATURE
 JOINT OPENING

90°	1 3/16
80°	1 3/8
70°	1 1/2
60°	1 5/8
50°	1 3/4
40°	1 7/8
30°	2 1/8

▲ TEMPERATURE TABLE



PART PLAN

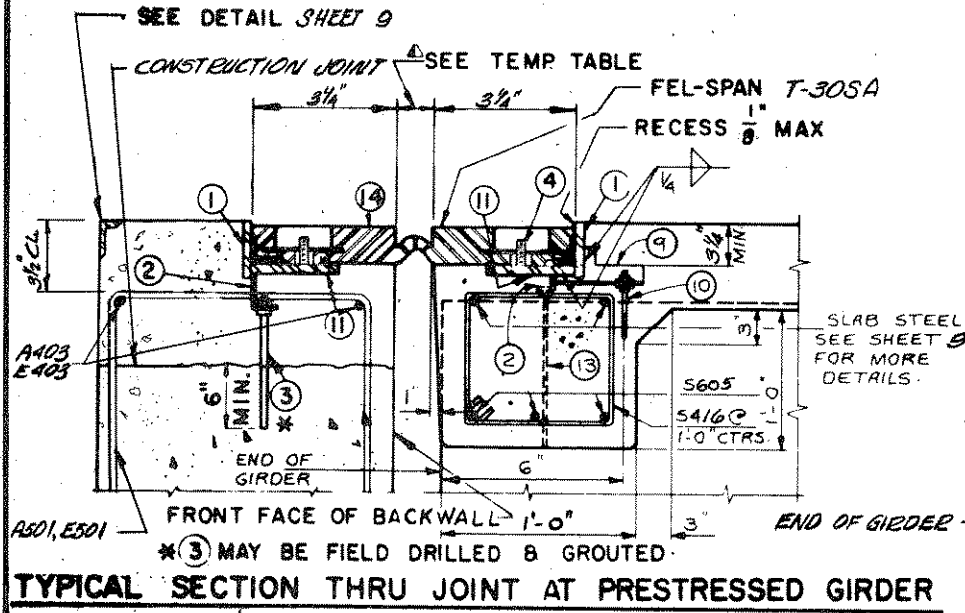
- LEGEND**
1. BAR 2 1/2" x 3/8", BUILD TO CONFORM TO ROADWAY CROWN.
 2. L3" x 2 1/2" x 3/8" x 3" LONG. PLACE MIDWAY BETWEEN GIRDERS AND AT 3'-0" CENTERS ON ABUTMENT SIDE. IF NECESSARY TURN L 180°. WELD TO NO. 11. PROVIDE 1/8" HOLE IN 2 1/2" LEG FOR NO. 3 & 13.
 3. 3/8" ROD, W/2 STD. NUTS & WASHERS, THREAD 4".
 4. THREADED STUDS PROVIDED BY MANUF. WELD TO NO. 11.
 6. 1/2" x 0'-6" STUDS AT 0'-6" ALTERNATE CENTERS. BEND AFTER WELDING TO NO. 1.
 9. ANGLE 4" x 3" x 3/8" WITH 1 1/2" DIA. HOLE FOR NO. 10 IN 4" LEG.
 10. 3/4" DIA. EXPANSION BOLT WITH 2 NUTS AND 2 WASHERS, FIELD SET ON C OF GIRDER TO A MIN. DEPTH OF 0'-4".
 11. BAR 3/8" x 2 1/2", WELD TO NO. 1.
 13. 3/8" ROD, THREAD 4" WELD NUT TO NO. 2.
 14. FEL-SPAN MODEL T-305A FOR EXP. MOVEMENT OF 3" OR LESS.

APPLY SEALANT ALONG BOTTOM AND SIDES OF TROUGH AS RECOMMENDED BY MANUFACTURER PRIOR TO PLACING EXPANSION DEVICE. CONCRETE MUST BE FREE OF ALL DEBRIS.

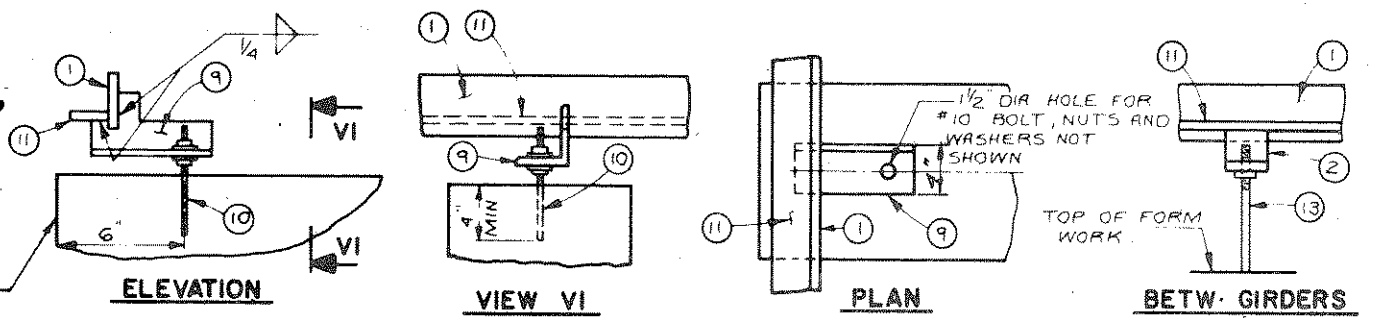
EACH STUD NO. 4 SHALL HAVE A WASHER AND HEX. NUT OR TORQUE NUT. TIGHTEN ALL NUTS TO MANUFACTURERS RECOMMENDED TORQUE.

CLEAN BOLT HOLE CAVITY AND FILL CAVITY DEPTH WITH SEALANT AND /OR BOLT HOLE PLUG. CLEAN EXCESS SEALANT FROM SURFACE.

ELASTOMERIC JOINT ASSEMBLY, INCLUDING ANCHORAGE ARMOR AND HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE FOR "EXPANSION DEVICE".

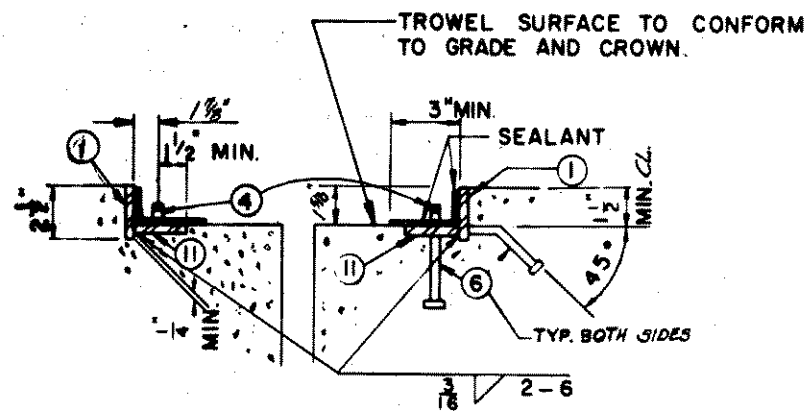


TYPICAL SECTION THRU JOINT AT PRESTRESSED GIRDER



SEATING ADJUSTMENT AT GIRDERS

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-35-75			
Const. Spec.	1975	Drawn By	Plans Checked
		DRK	GRK
<i>ELASTOMERIC EXPANSION DEVICE</i>			SHEET 12 OF 13
			X58171

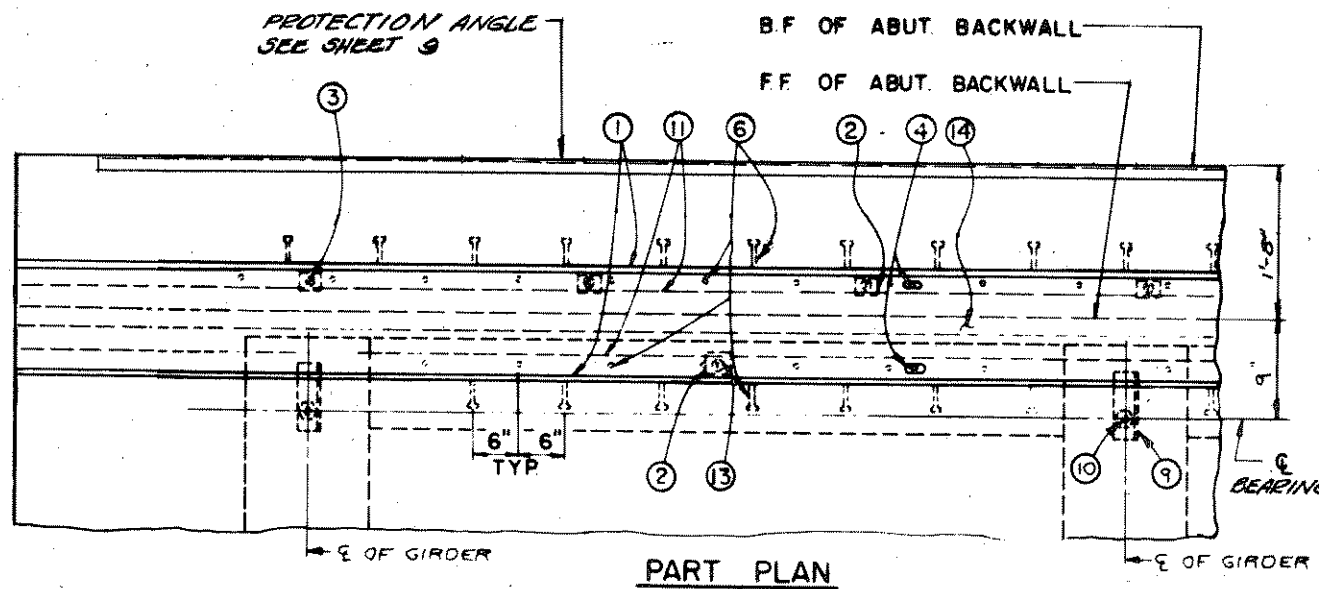


ANCHORAGE DETAILS
(ROADWAY SECTION)

SHADED UNDERSIDE DECK TEMPERATURE
JOINT OPENING

90°	1 5/16
80°	1 3/8
70°	1 1/2
60°	1 5/8
50°	1 3/4
40°	1 5/8
30°	2 1/8

▲ TEMPERATURE TABLE



PART PLAN

LEGEND

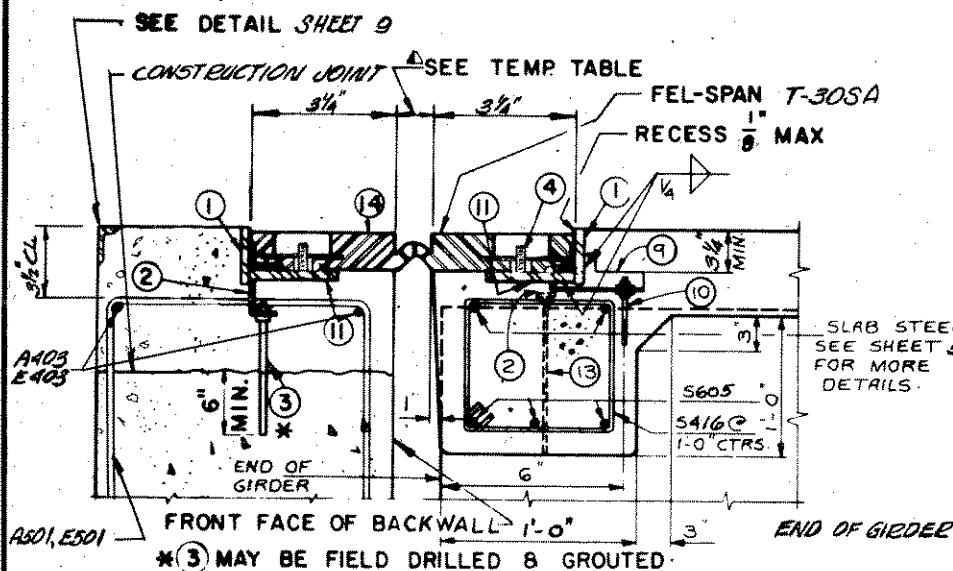
1. BAR 2 1/2" x 3/8" BUILD TO CONFORM TO ROADWAY CROWN.
2. L 3" x 2 1/2" x 3/8" x 3" LONG. PLACE MIDWAY BETWEEN GIRDERS AND AT 3'-0" CENTERS ON ABUTMENT SIDE. IF NECESSARY TURN L 180°. WELD TO NO. 11. PROVIDE 1/8" HOLE IN 2 1/2" LEG FOR NO. 3 & 13.
3. 3/8" ROD, W/2 STD. NUTS & WASHERS, THREAD 4".
4. THREADED STUDS PROVIDED BY MANUF. WELD TO NO. 11.
6. 1/2" x 0'-6" STUDS AT 0'-6" ALTERNATE CENTERS. BEND AFTER WELDING TO NO. 1.
9. ANGLE 4" x 3" x 3/8" WITH 1 1/2" DIA. HOLE FOR NO. 10 IN 4" LEG.
10. 3/4" DIA. EXPANSION BOLT WITH 2 NUTS AND 2 WASHERS, FIELD SET ON 1/2" OF GIRDER TO A MIN. DEPTH OF 0'-4".
11. BAR 3/8" x 2 1/2", WELD TO NO. 1.
13. 3/8" ROD, THREAD 4" WELD NUT TO NO. 2.
14. FEL-SPAN MODEL T-305A FOR EXP. MOVEMENT OF 3" OR LESS.

APPLY SEALANT ALONG BOTTOM AND SIDES OF TROUGH AS RECOMMENDED BY MANUFACTURER PRIOR TO PLACING EXPANSION DEVICE. CONCRETE MUST BE FREE OF ALL DEBRIS.

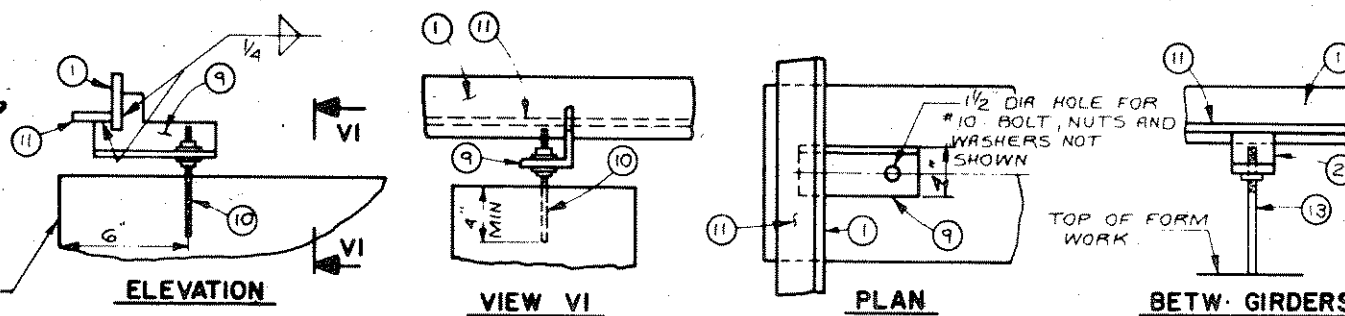
EACH STUD NO. 4 SHALL HAVE A WASHER AND HEX NUT OR TORQUE NUT. TIGHTEN ALL NUTS TO MANUFACTURERS RECOMMENDED TORQUE.

CLEAN BOLT HOLE CAVITY AND FILL CAVITY DEPTH WITH SEALANT AND/OR BOLT HOLE PLUG. CLEAN EXCESS SEALANT FROM SURFACE.

ELASTOMERIC JOINT ASSEMBLY, INCLUDING ANCHORAGE ARMOR AND HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE FOR "EXPANSION DEVICE".

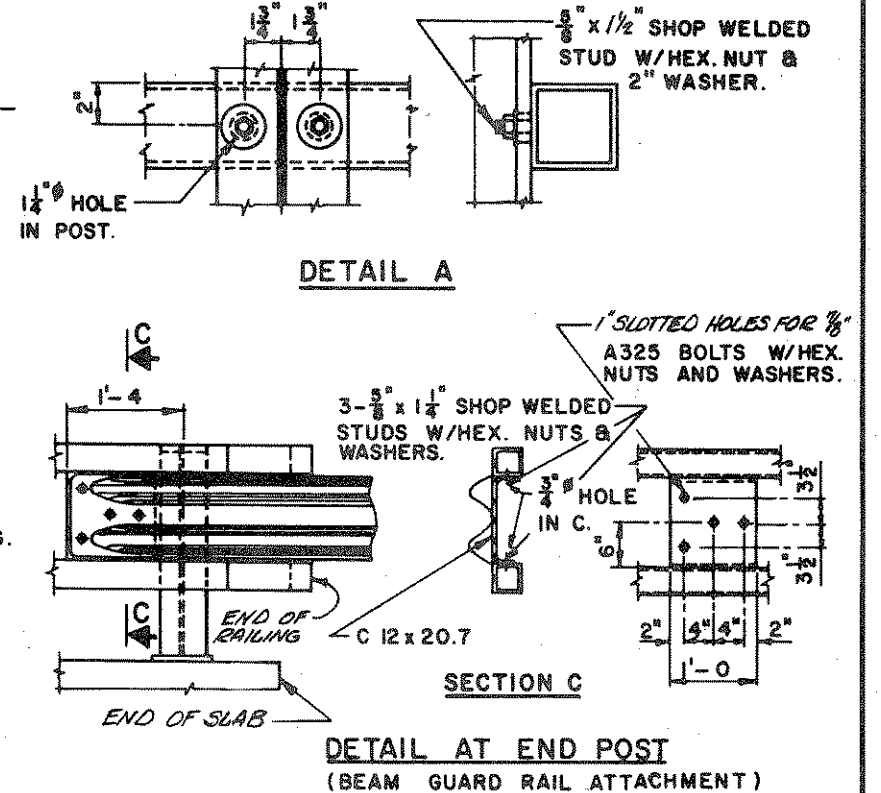
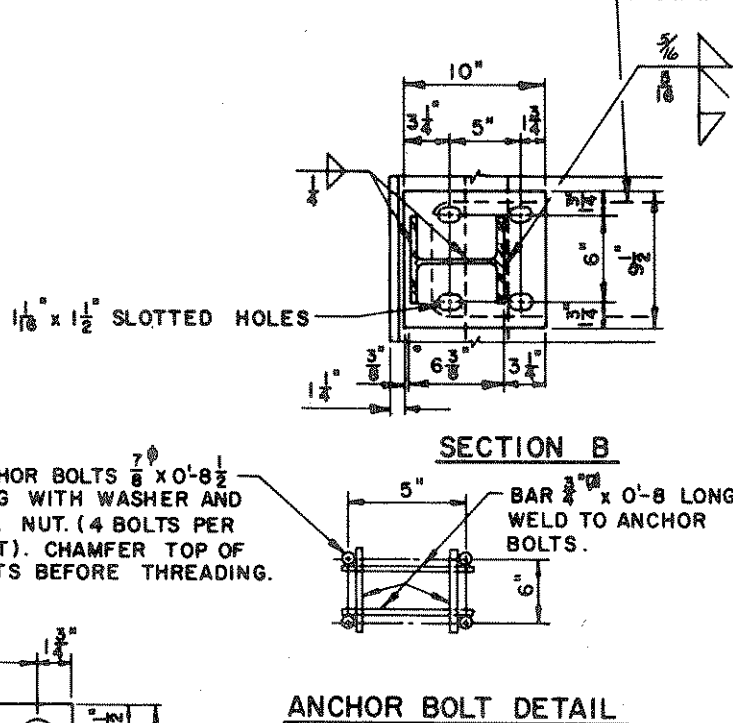
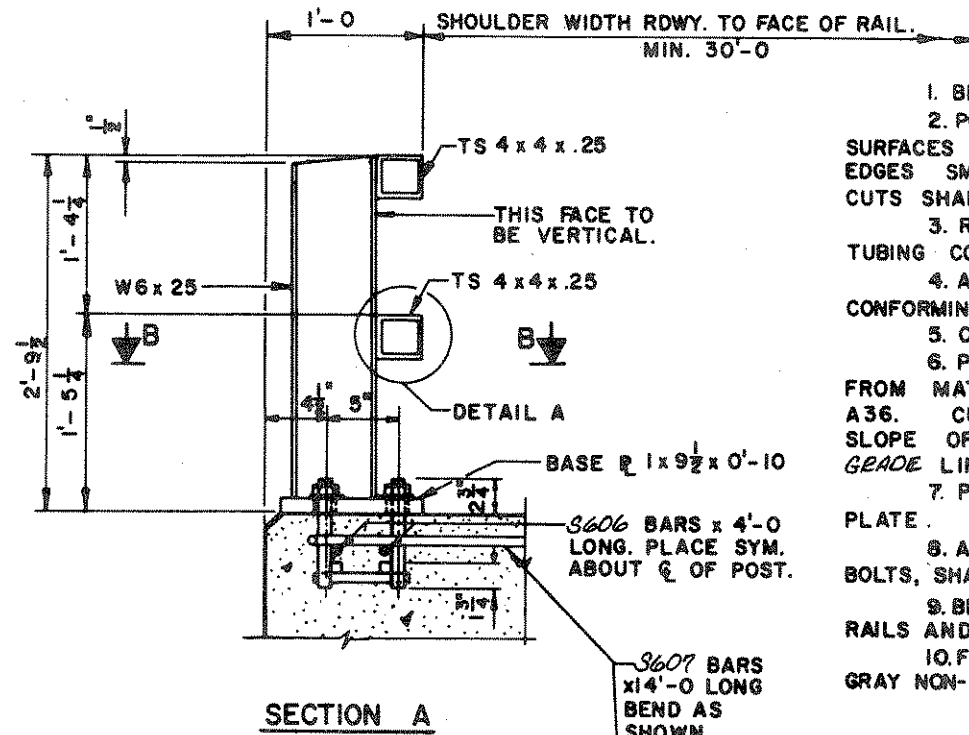
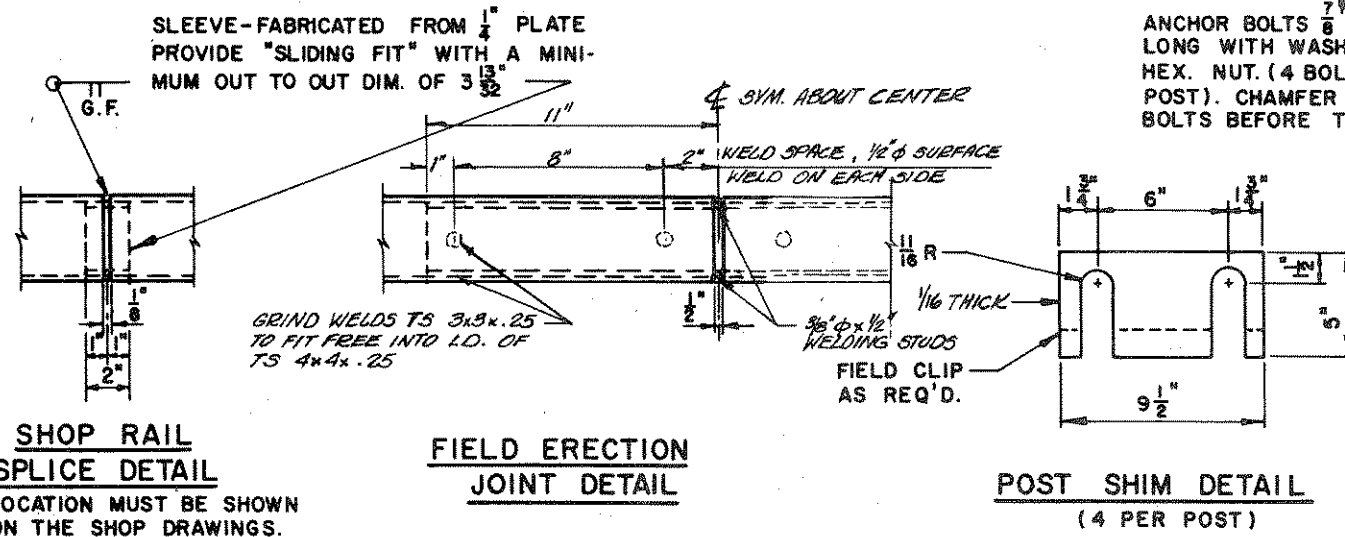
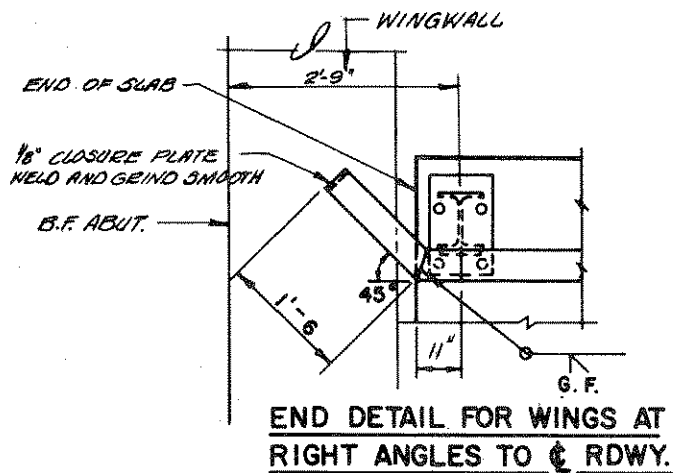
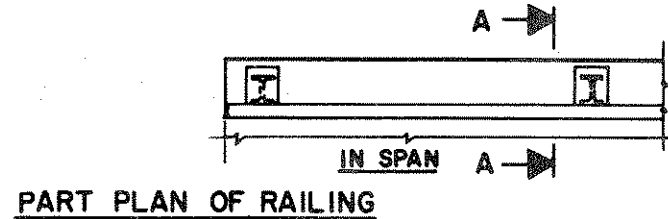
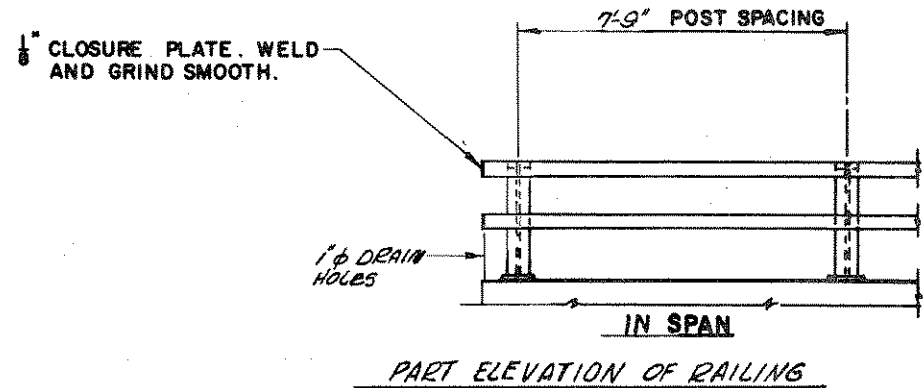


TYPICAL SECTION THRU JOINT AT PRESTRESSED GIRDER



SEATING ADJUSTMENT AT GIRDERS

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-35-75			
Const. Spec.	1975	Drawn By	Plans Checked
		GRK	GRK
ELASTOMERIC EXPANSION DEVICE			SHEET 12 OF 13
			X58171



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" NOMINAL CONFORMING TO A.S.T.M. A325 WITH 3" THREAD.
- CALK EXPOSED OPENINGS BETWEEN SHIMS.
- POST, 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 POST NORMAL TO GRADE LINE.
- PLACE ANCHOR BOLTS NORMAL TO BASE PLATE.
- ALL MEMBERS, INCLUDING UPPER 4" OF ANCHOR BOLTS, SHALL BE GALVANIZED AFTER FABRICATION.
- BEAM GUARD ATTACHMENT MAY BE WELDED TO RAILS AND RAILS MAY BE WELDED TO POSTS.
- FILL POST ANCHOR BOLT HOLES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		
STRUCTURE B-35-75		
Const. Spec. 1915	Drawn By RPK	Plans Checked GPK
TUBULAR STEEL RAILING - TYPE "F"		SHEET 13 OF 13 X.58172