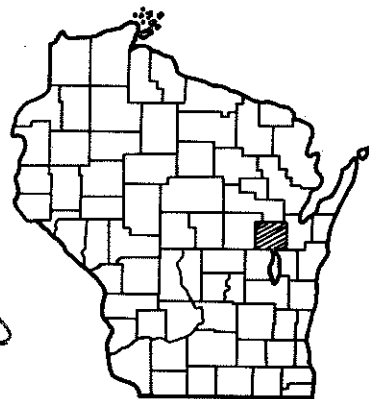


B-44-6084 CTY N

APPLR CRK

Sheet No.
Sheet No.
Sheet No.
Sheet No.
Sheet No.
Sheet No.
Sheet No.
Sheet No.
Sheet No.

TOTAL SHEETS = 14



Design Designation

A.D.T. (1978) 1355
A.D.T. (1998) 1810
D.H.V. (1998) 270
D. 50-50
T. (A.P.T.) 7.5%
V. 50 M.P.H.

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	-----	Right of Way Markers	-----
Corporate or City Limits	-----	Reference Stake for Hubs Only	-----
Property Line	-----	Marsh	-----
Traveled Way or P.E.	-----	Hedge	-----
Railroads	-----	Trees	-----
Base or Survey Line	-----	Ground Elevation	-----
Caution Symbol (combustible fluids under pressure)	-----	Grade Elevation	-----

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

C-32

RECEIVED

MAR 22 1978

OUTAGAMIE COUNTY
HIGHWAY COMMISSION

PLAN AND PROFILE OF PROPOSED
U.S.H.41-CT.H."E"
APPLE CREEK BRIDGE
C.T.H."N"
OUTAGAMIE COUNTY

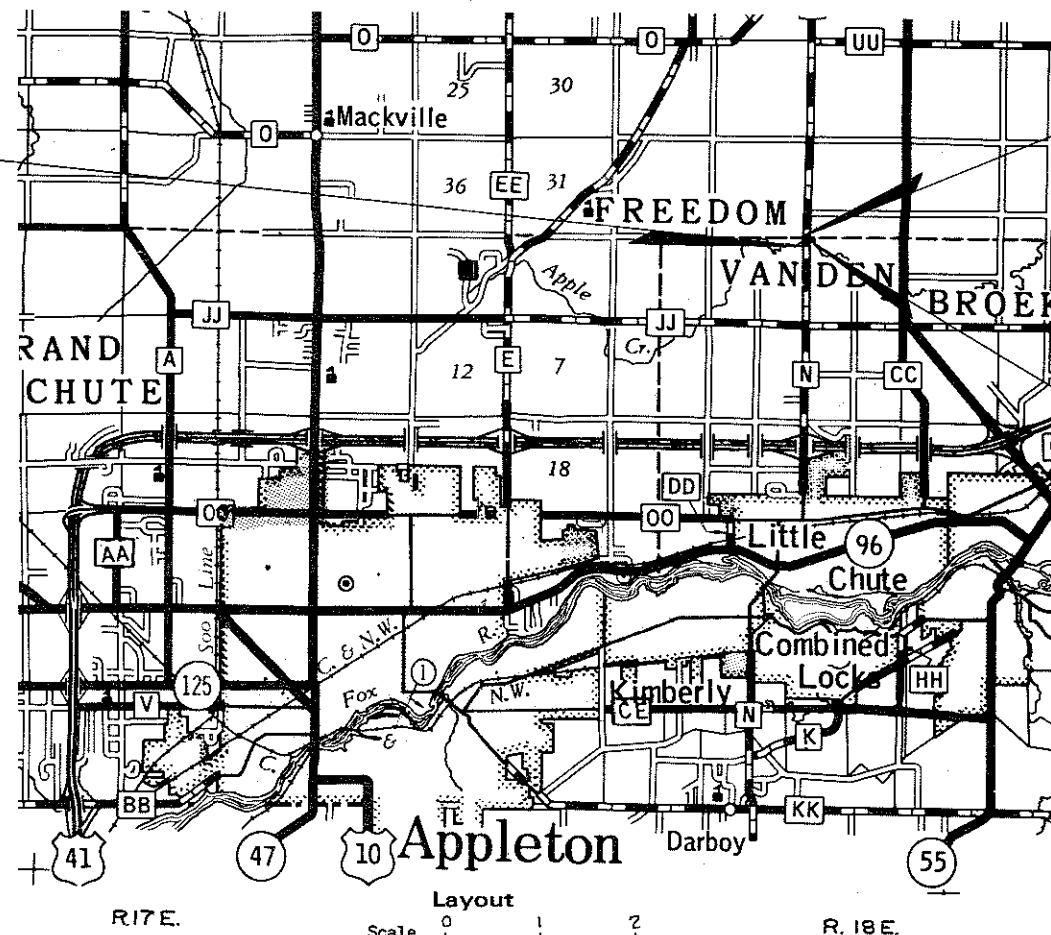
STATE PROJECT NUMBER
6027-1-71

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

T.22N

BEGIN PROJECT 6027-1-71
STA. 17+09.08
N = 184,960 (±200')
E = 2,441,560 (±200')
202.73° SOUTH & 6.78° EAST
OF N.E. CORNER SEC. 4, T.21 N. R.18 E.

T.21N



Layout

Scale 0 1 2
(MILES)

Total Net Length of Centerline = 0.016 Mi. (RURAL)

END PROJECT 6027-1-71
STA. 17+90.92
N = 185,040 (±200')
E = 2,441,560 (±200')
120.91° SOUTH & 4.82° EAST
OF N. E. CORNER SEC. 4, T.21 N. R.18 E.

STRUCTURE B-44-84
STA. 17+09.08 TO 17+90.92

All coordinates shown on this plan are
referenced to the WISCONSIN COORDINATE
SYSTEM, CENTRAL ZONE and are scaled
from the APPLETON QUADRANGLE for
identification only.

C-32

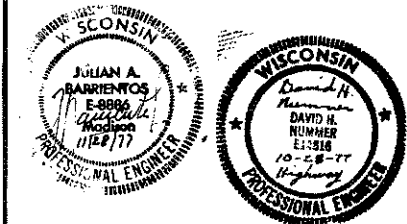
"192" 77

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6027-1-71	SOS 4499 (1)	1

APPROVED FOR
OUTAGAMIE COUNTY
BY

12-6-77 M.A. Muehle
(DATE) (COMMISSIONER)

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



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Surveyor District Checker D.P.C.
Designer BARRIENTOS C.O. Checker J.R.T.
District Supervisor J.E.F. C.O. Monitor J.R.T.

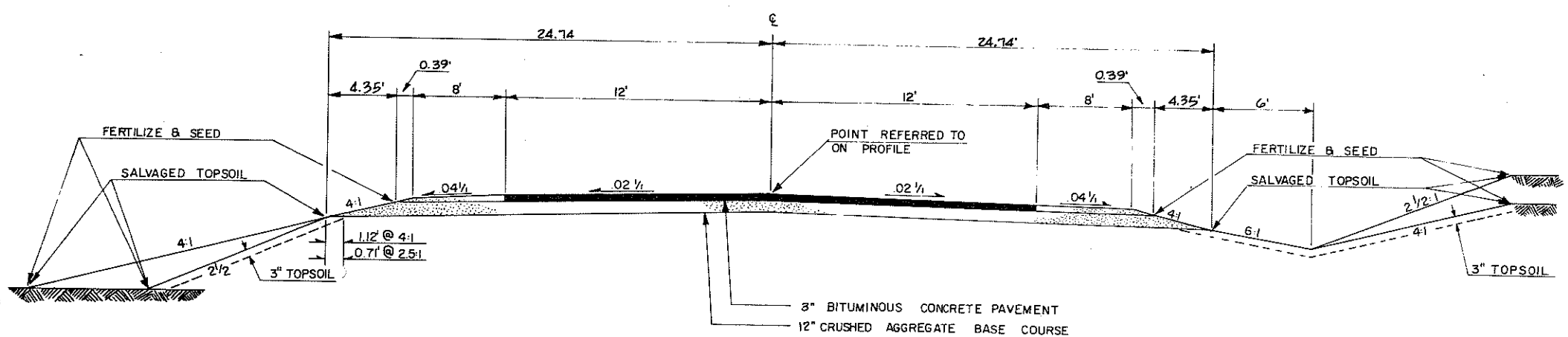
Correct:
Approved:
Date 12/14/77 C.A. Ryan
District Engineer

Approved:
Date 2-15-78 D.A. Strand
Chief of Facilities Development

Approved:
Date 2-21-78 H. Judler
State Highway Engineer

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

Approved:
Date Division Engineer



TYPICAL ROADWAY CROSS SECTION
(NOT PART OF THIS CONTRACT)

GENERAL NOTES

BEARINGS SHOWN ON THE PLANS ARE MAGNETIC BEARINGS TO THE NEAREST MINUTE.
PRIVATE UTILITY COMPANIES SHALL ADJUST OR MOVE ALL FACILITIES WHICH INTERFERE WITH NEW CONSTRUCTION.
UTILITY LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE. VERIFICATION AS TO THE LOCATION TO THE SATISFACTION OF THE CONTRACTOR OF ALL UTILITIES WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE ASSUMED AS A CONDITION OF THE CONTRACT.

THE WISCONSIN DIVISION OF HIGHWAYS SHALL FURNISH THE CONTRACTOR A BRASS MONUMENT WHICH SHALL BE SET IN THE STRUCTURE AS DESIGNATED BY THE ENGINEER.
ALL WORK SHOWN OUTSIDE OF THE PROJECT LIMITS WILL BE DONE BY OUTAGAMIE COUNTY FORCES AND IS SHOWN FOR INFORMATIONAL PURPOSES ONLY.

UTILITIES LOCATED WITHIN THE PROJECT

WISCONSIN MICHIGAN POWER COMPANY
MR. O.R. BOLL 414-734-1411
807 SOUTH ONEIDA
APPLETON, WISCONSIN 54911

WISCONSIN TELEPHONE COMPANY
JAMES BROPHY 414-734-6020
221 W. WASHINGTON ST.
APPLETON, WISCONSIN 54911

STANDARD DETAIL DRAWINGS

12A3-2 NAME PLATE FOR STRUCTURES
14B2-4a & b CLASS "A" STEEL PLATE BEAM GUARD AND STEEL BEAM MEDIAN GUARD (TWO SHEETS)
15C1-5 CONSTRUCTION BARRICADES AND STANDARD SIGNS

CONTRACT NO. 1 STRUCTURE B-44-84

STATE PROJECT NUMBER

SHEET NO.

6027-1-71

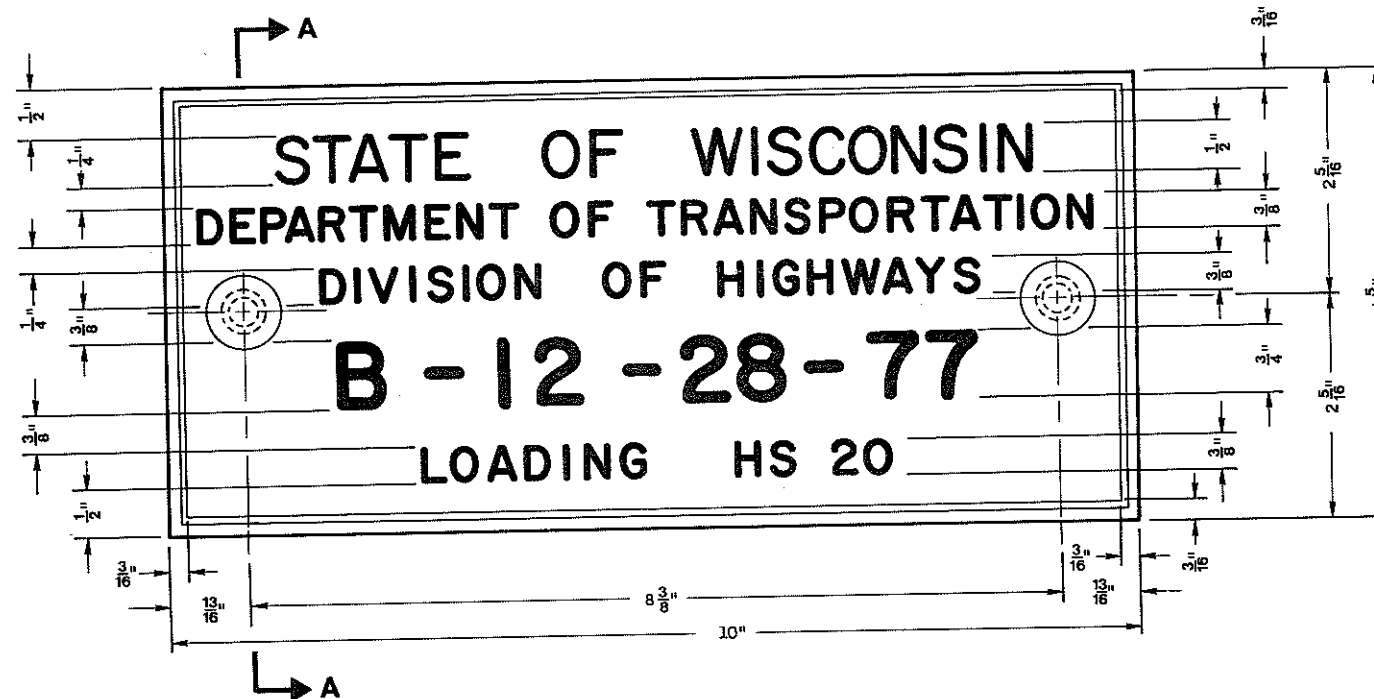
3

CONTRACT NO.	STATION TO STATION	NET LENGTH OF CENTER LINE	UNCLASSIFIED EXCAVATION	BORROW EXCAVATION	FINISHING ROADWAY	CRUSHED AGGREGATE BASE COURSE	BITUMINOUS CONCRETE PAVEMENT	BITUMINOUS MATERIAL FOR SURFACE COURSE	CULVERT PIPE, CLASS III, 18-INCH	ANCHORAGES FOR STEEL PLATE BEAM GUARD.	STEEL PLATE BEAM GUARD, CLASS A	MOBILIZATION	SALVAGED TOP SOIL	MULCHING	FERTILIZER	SEEDING	FIELD OFFICE, TYPE A	APRON ENDWALLS FOR CULVERT PIPE, 18-INCH		
	ITEM NO. UNIT	LIN FT.	20503 CU. YD.	20801 CU. YD.	21301 L.S.	30403 CU. YD.	40701 TON	40402 TON	52003 LIN.	61406 EACH	61408 LIN. FT.	61910 L.S.	62505 SQ. YD.	62702 SQ YD.	62901 CWT.	63002 POUND	64201 L.S.	52061 EACH		
I	STA 17+09.08-17+90.92	81.84								4	451	1					1			
	PROJECT TOTALS	81.84								4	451	1					1			

		BRIDGES (STRUCTURES OVER 20' SPAN)										
		REMOVING OLD BRIDGE, STATION 17+53	EXCAVATION FOR STRUCTURES, BRIDGES B-44-84	CONCRETE MASONRY, BRIDGES	HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	STRUCTURAL CARBON STEEL	CAST-IN-PLACE CONCRETE PILING, DELIVERED AND DRIVEN, 12"	TUBULAR RAILING, TYPE "F", STRUCTURE B-44-84	HEAVY RIPRAP			
		20351	20610	50201	50504	50601	51031	51340	60602			
		L.S.	L.S.	CU. YD.	LBS.	LBS.	LIN. FT	L.S.	CU. YD.			
1		1	1	234	45,580	430	720	1	160			
		1	1	234	45,580	430	720	1	160			

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

STEEL PLATE BEAM GUARD, CLASS A				
STA. TO STA.		LOCATION	LIN. FT.	ANCHOR
15+81	17+10	LT.	129	1
15+81	17+10	RT.	129	1
17+90	18+54	LT.	64	1
17+90	19+19	RT.	129	1

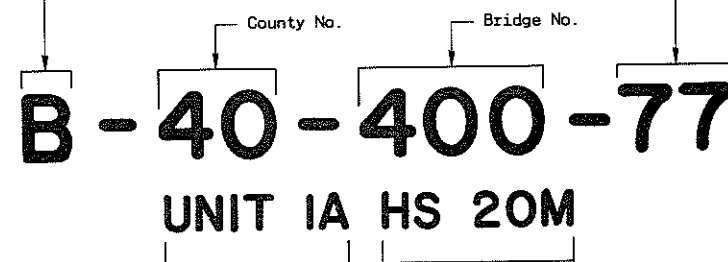


TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

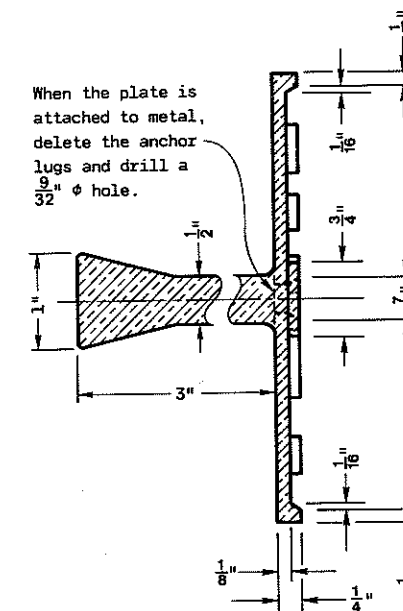
FOR MULTI-UNIT STRUCTURES
LINES 4 AND 5 ABOVE SHALL
READ:

B = Bridge
C = Culvert
RW = Retaining Wall

Year of Substantial
Completion



NUMBERING AND LOADING DESIGNATION
MULTI-UNIT STRUCTURES



SECTION A-A

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

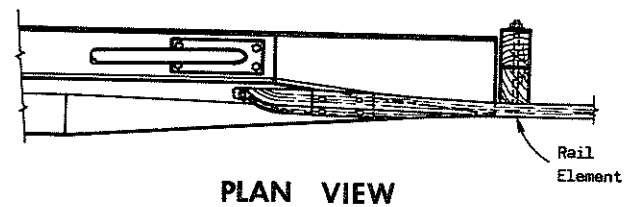
APPROVED
8-5-77
DATE

Red Barber
SUPERVISING DEVELOPMENT ENGINEER

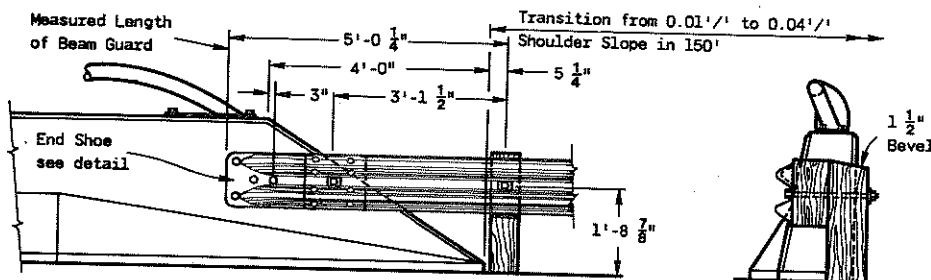
APPROVED
8-8-77
DATE

D. J. Strand
CHIEF OF FACILITIES DEVELOPMENT

FHWA



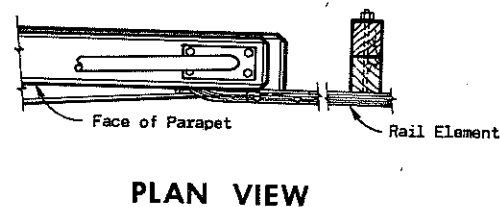
PLAN VIEW



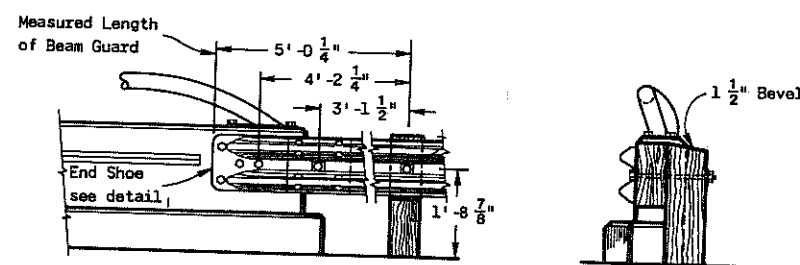
FRONT ELEVATION

END ELEVATION

STRUCTURE MOUNTING DETAIL
SLOPING TYPE PARAPET WALL



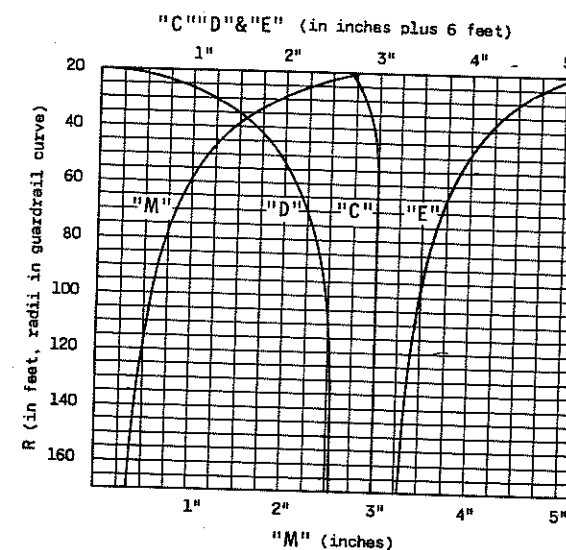
PLAN VIEW



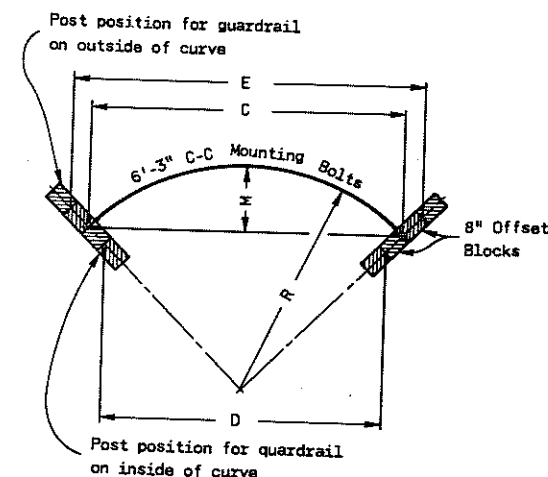
FRONT ELEVATION

END ELEVATION

STRUCTURE MOUNTING DETAIL
VERTICAL TYPE PARAPET WALL



CURVE DATA FOR POST SPACING AND BEAM CURVING



CHORD LENGTHS FOR POST SPACING AND
MIDDLE ORDINATES FOR BEAM CURVING

GENERAL NOTES

Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

The exact location of the beginning and end of each Guardrail installation shall be as shown on the plans or as directed by the Engineer.

Square anchor alternates will be permitted. Square anchors shall be a minimum of 24 inches x 24 inches.

The shoulder widening to accommodate the anchored end of the guardrail shall be accomplished at the rate of widening not to exceed 15 to 1.

Upon approval of the Engineer, the 6 foot anchor offset may be reduced to nothing for replacement installations where existing conditions will not permit the desirable offset. However, when no offset greater than or equal to 3 feet can be provided, the minimum length of guardrail in advance of an obstacle (obstacle to anchor) shall be 150 feet.

The minimum clearance from the front face of guardrail to obstacle shall be 3 feet unless otherwise shown on contract plans. When clearance is less than 3 feet post spacing shall be reduced to 3 feet - 1 1/2 inches C.C.

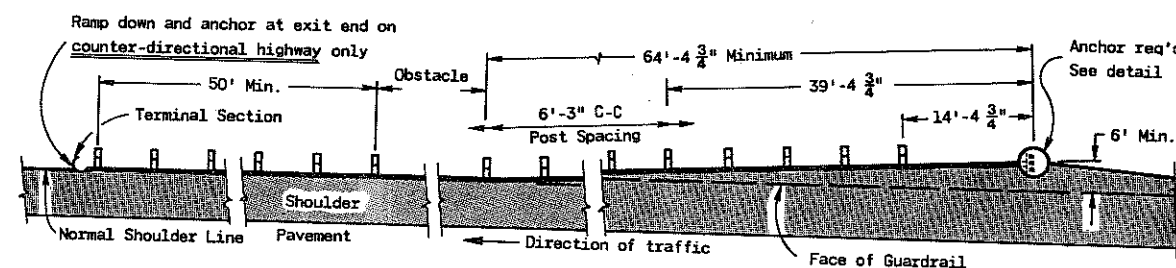
The "Post Footing Details At Piers" shall be used when guardrail posts are over structure footings and less than 3 feet - 6 inches of earth is provided over the top of the footing.

NOTE:
THIS STANDARD DETAIL DRAWING CONSISTS OF
TWO PLATES, AND BOTH PLATES ARE REQUIRED
WHEN THIS STANDARD IS CALLED FOR IN THE
PLANS.

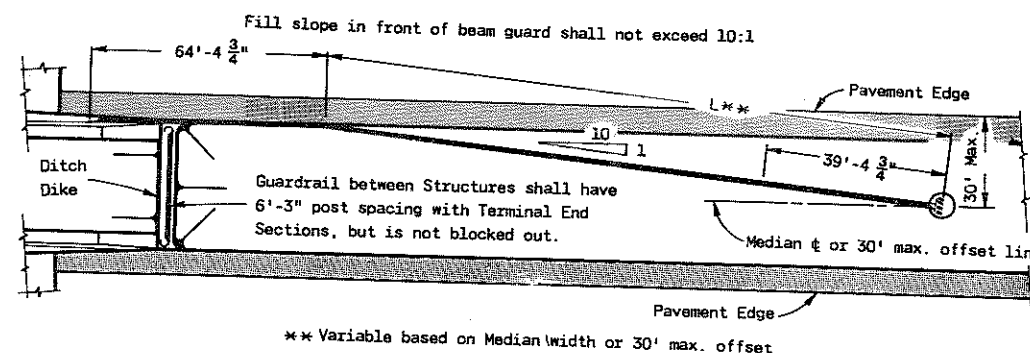
CLASS "A"
STEEL PLATE BEAM GUARD &
STEEL PLATE BEAM MEDIAN GUARD

State of Wisconsin
Department of Transportation
Division of Highways

S.D.D. 14 B 2-4a

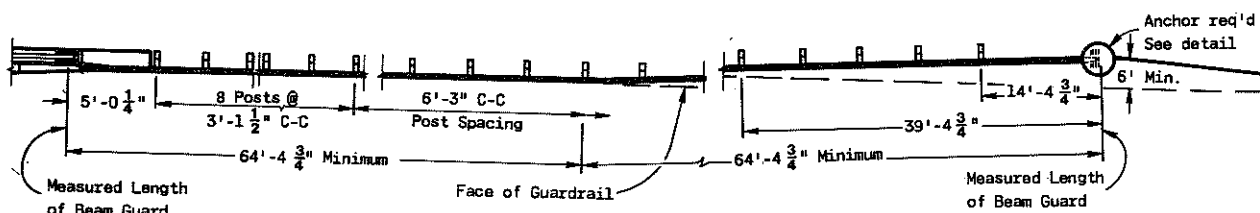


PLAN VIEW
TYPICAL INSTALLATION AT
LOCATIONS OTHER THAN STRUCTURES

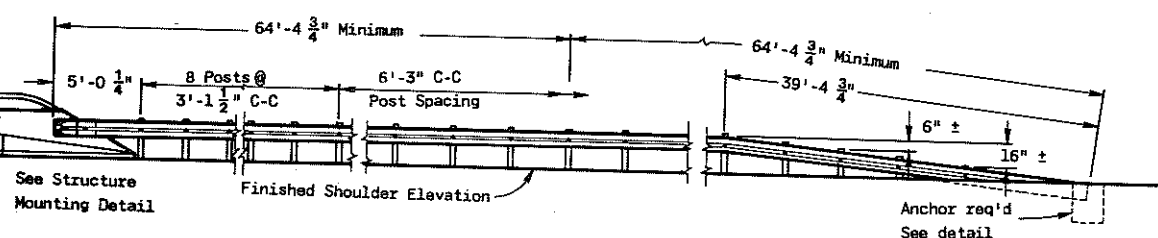


** Variable based on Median width or 30' max. offset

PLAN VIEW
MEDIAN PROTECTION



PLAN VIEW



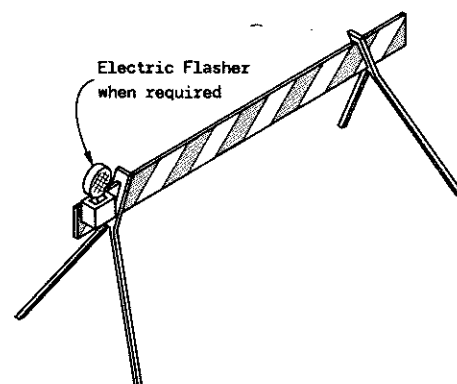
FRONT ELEVATION

TYPICAL INSTALLATION AT STRUCTURES

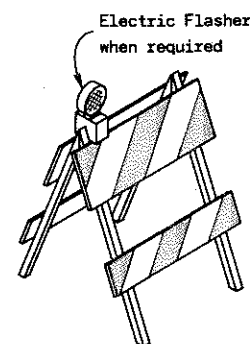
TABLE OF BARRICADE CHARACTERISTICS

BARRICADE TYPE	I	II	III
Height	3' Minimum		5' Minimum
* Rail Width	8" Minimum to 12" Maximum		
Rail Length	2' Minimum to variable Maximum		
** Stripe Width	6" at 45° Angle		
Stripe Colors	Reflectorized Orange & White		

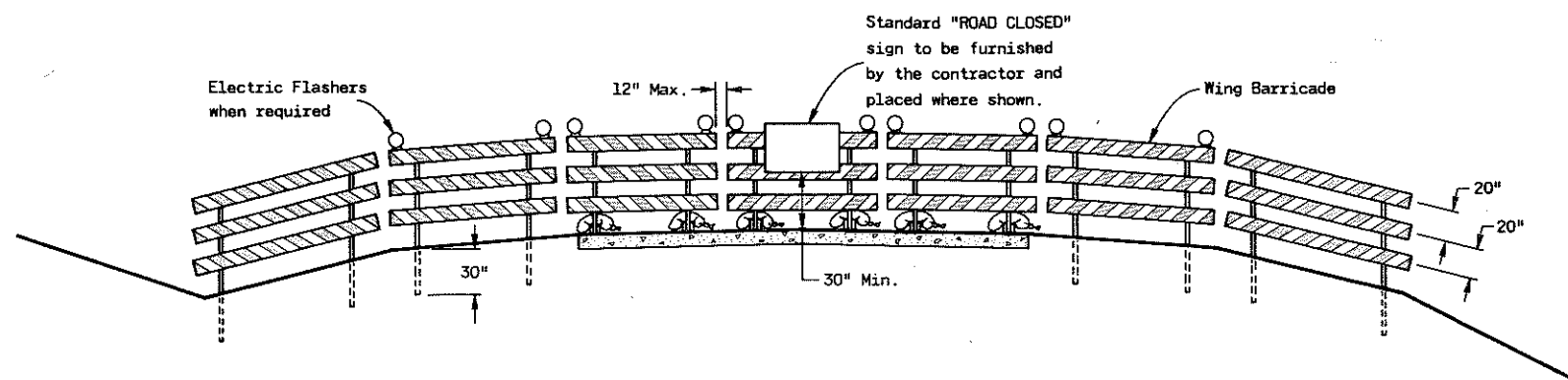
* Nominal dimensions when barricade is constructed of lumber.
 ** May be 4" for rail lengths less than 3'.



TYPICAL TYPE I BARRICADE

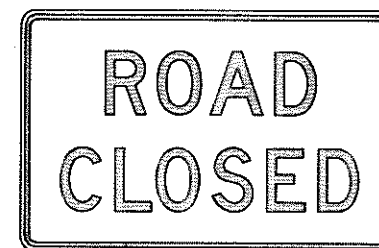


TYPICAL TYPE II BARRICADE



TYPICAL INSTALLATION SHOWING TYPE III BARRICADE

CONSTRUCTION BARRICADES



R11-2

48" x 30"

Black Lettering on Reflective
 White Background
 Letter Series "D"
 Letter height 8"



W20-3

48" x 48"

Black Lettering on Reflective
 Orange Background
 Letter Series "D"
 Letter height 7"

STANDARD SIGNS-TYPE II

GENERAL NOTES

The contractor shall furnish, erect and maintain Barricades and Signs. Details regarding location, spacing, dimensions, fabrication, material, sign lettering, lighting devices and color of Barricades and Signs shall conform to this drawing, the Wisconsin Manual on Uniform Traffic Control Devices, the Standard Specifications, Special Provisions and/or plans.

Type III Barricades and Signs shall be erected at the termini of projects and at other road or street locations where it is necessary to control or eliminate public access to the construction area.

Type I and II Barricades shall be used on projects when traffic is to be maintained through the construction area.

The actual field location of barricade installations and advance signs shall be as directed by the Engineer.

Each barricade shall have the name and telephone number of a person responsible for 24 hour emergency service printed in letters at least 3/4 inch in height.

CONSTRUCTION BARRICADES & STANDARD SIGNS

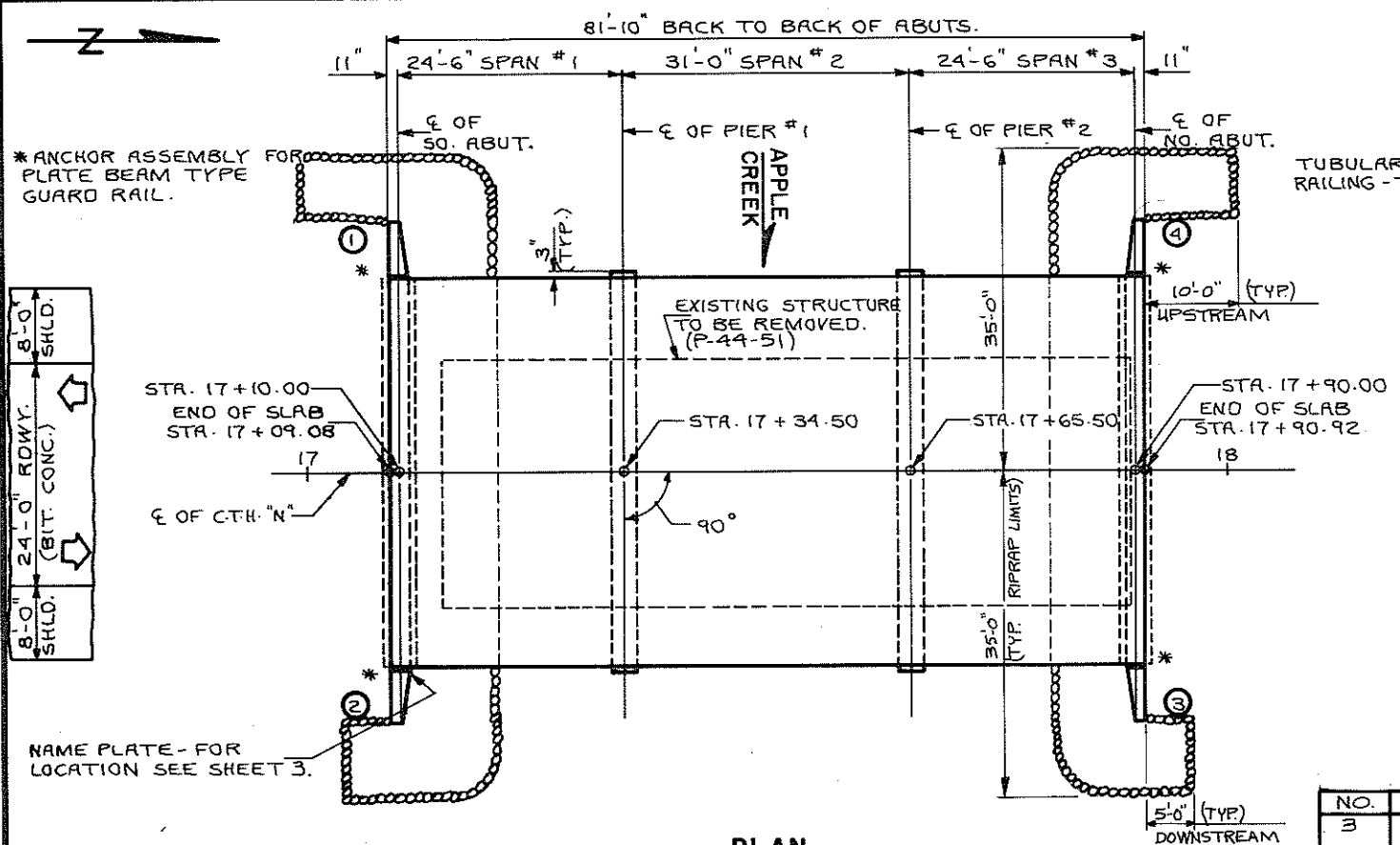
State of Wisconsin
 Department of Transportation
 Division of Highways

APPROVED
 10-1-76
 DATE

[Signature]
 CHIEF OF FACILITIES DEVELOPMENT

APPROVED
 10-1-76
 DATE

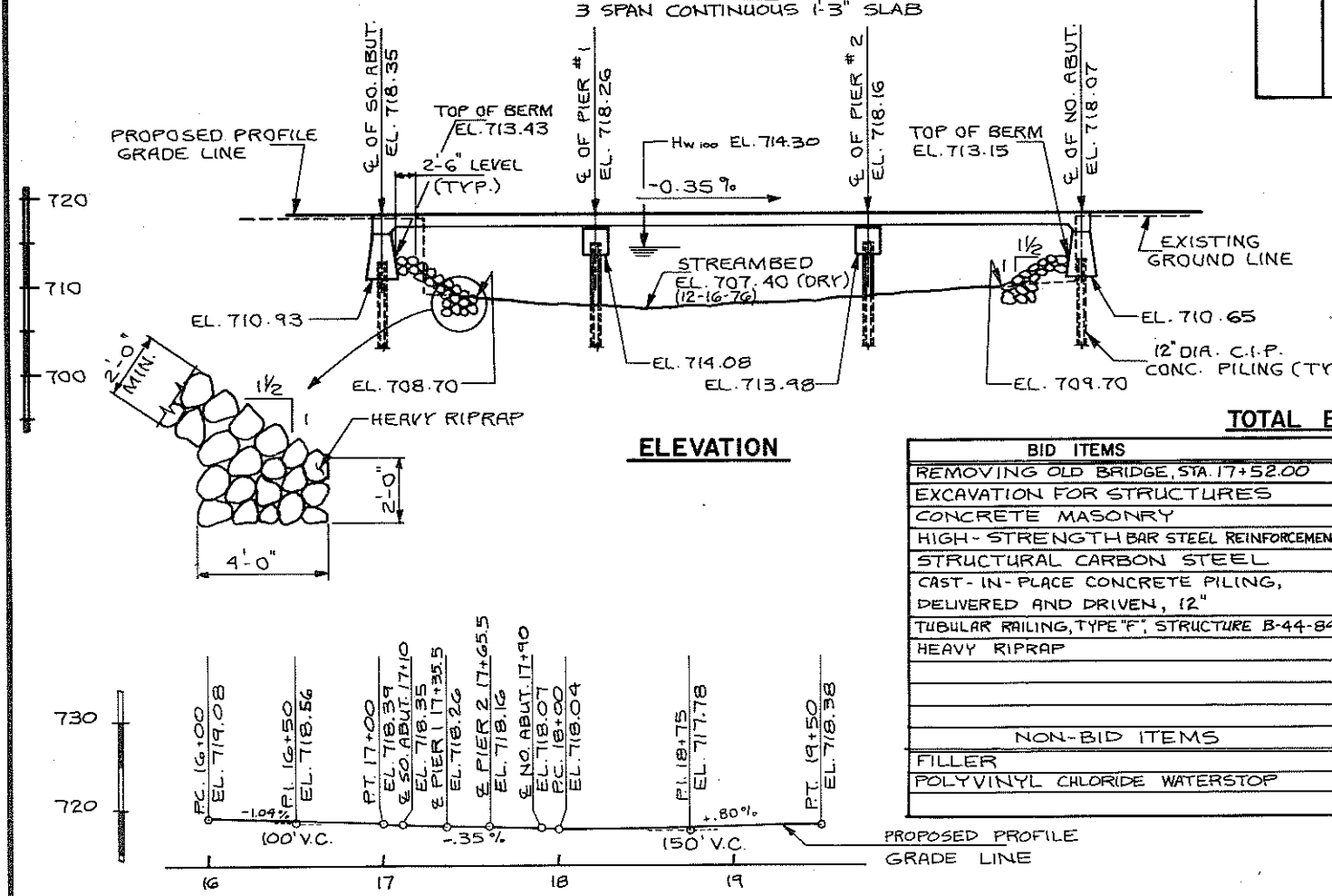
[Signature]
 STATE HIGHWAY ENGINEER



8'-0" SHLD.
24'-0" RDWY.
(BIT. CONC.)
8'-0" SHLD.

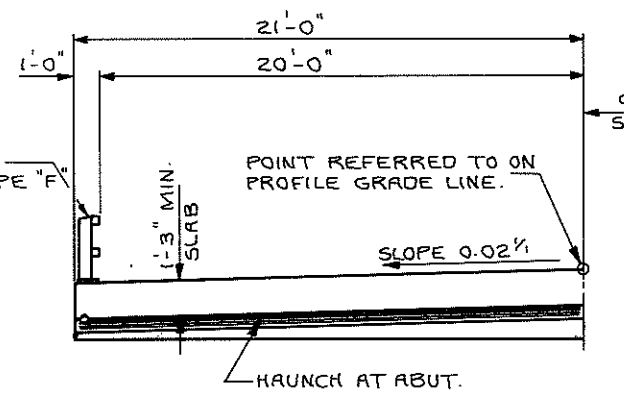
NAME PLATE - FOR
LOCATION SEE SHEET 3.

PLAN



ELEVATION

PROFILE GRADE LINE - C.T.H. "N"



HALF CROSS SECTION THRU ROADWAY

LIST OF DRAWINGS

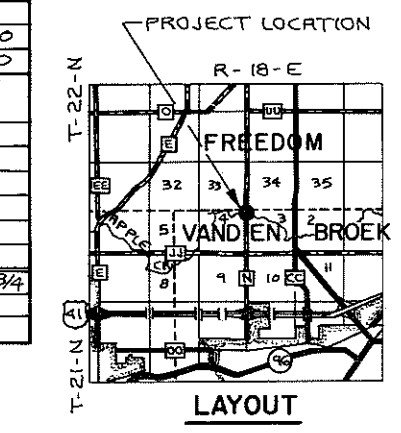
1. GENERAL PLAN	X 59641
2. SUBSURFACE EXPLORATION	X 59642
3. ABUTMENTS	X 59643
4. PIERS	X 59644
5. SUPERSTRUCTURE	X 59645
6. TUBULAR STEEL RAILING, TYPE "F"	X 59646

BENCH MARK

NO.	LOCATION	STATION	ELEV.
3	20 PENNY NAIL IN POWER POLE NO. G5-2053, 0.5' ABOVE GROUND, RIGHT OF C. HWY. "N" 42.0'	24+42	719.71

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SUPER	SO. ABUT.	PIER 1	PIER 2	NO. ABUT.	TOTAL
REMOVING OLD BRIDGE, STA. 17+52.00	L.S.						1
EXCAVATION FOR STRUCTURES	L.S.						1
CONCRETE MASONRY	C.Y.	165.4	24.0	10.3	10.3	24.0	234
HIGH-STRENGTH BAR STEEL REINFORCEMENT	LBS.	33,480	1,480	4,570	4,570	1,480	45,580
STRUCTURAL CARBON STEEL	LBS.	430					430
CAST-IN-PLACE CONCRETE PILING, DELIVERED AND DRIVEN, 12"	L.F.		150	210	210	150	720
TUBULAR RAILING, TYPE "F", STRUCTURE B-44-84	L.S.						1
HEAVY RIPRAP	C.Y.		90			70	160
NON-BID ITEMS							
FILLER	SIZE					1/4, 1/2, 3/4	
POLYVINYL CHLORIDE WATERSTOP	L.F.		42			42	84



LAYOUT

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
BAR 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 RIPRAP TO THE LIMITS SHOWN ON THIS SHEET AND ON THE ABUTMENT SHEET.
SLAB FALSEWORK SHALL BE SUPPORTED ON PILES.
JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION: M153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION: M213.

DESIGN DATA

LIVELOAD:
STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.
DESIGN RATING — HS-20
INVENTORY RATING — HS-20
OPERATIONAL RATING — HS-40
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 SHALL BE SUPPORTED ON 12" DIA. C.I.P. CONCRETE PILES EST. 25'-0" LONG AND DRIVEN TO A MIN. BRG. VALUE OF 30 TONS PER PILE.
PIERS SHALL BE SUPPORTED ON 12" DIA. C.I.P. CONCRETE PILES EST. 30'-0" LONG AND DRIVEN TO A MIN. BRG. VALUE OF 30 TONS PER PILE.

HYDRAULIC DATA

100 YEAR FREQUENCY
Q — 2,700 C.F.S.
VELOCITY — 8.0 F.P.S.
WATERWAY AREA — 337 SQ. FT.
DRAINAGE AREA — 13.2 SQ. MI.
HIGH WATER 100 — EL. = 714.30

TRAFFIC DATA

A.D.T. (1978) — 970
A.D.T. (1998) — 1,300
R.D.S. — 50 M.P.H.

BARRIENTOS & ASSOCIATES, INC.
CONSULTING ENGINEERS
2020 UNIVERSITY AVE. MADISON, WISC. 53706
(608) 263-6761

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-44-84			
C.T.H. "N" OVER APPLE CREEK			
County	OUTAGAMIE	Town/City/Village	VANDEN BROEK
Design Spec.	A.A.S.H.T.O. '73 & INTERIM '75	Load	HS-20
Drawn	R.I.S.	Checked	G.A.G.
By		By	L.N.F./M.D.P.
Approved	W.A. K... Chief Bridge Engineer		1-17-78 Date
GENERAL PLAN			SHEET 1 OF 6 X59641



APPLE
CREEK

BORINGS PERFORMED BY:
SOILS & ENGINEERING SERVICES INC.
MADISON, WISCONSIN
BORINGS PERFORMED ON:
NOVEMBER 29, 1976

STATE PROJECT NUMBER	SHEET NO.
6027-1-71	7.1

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
7 Average Blows Per Foot
Refusal 95, 6

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

LEGEND OF BORING

Boring No.
Sta.
Elev.

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

Ground Water Elevation
No Ground Water Observed Above This Elevation

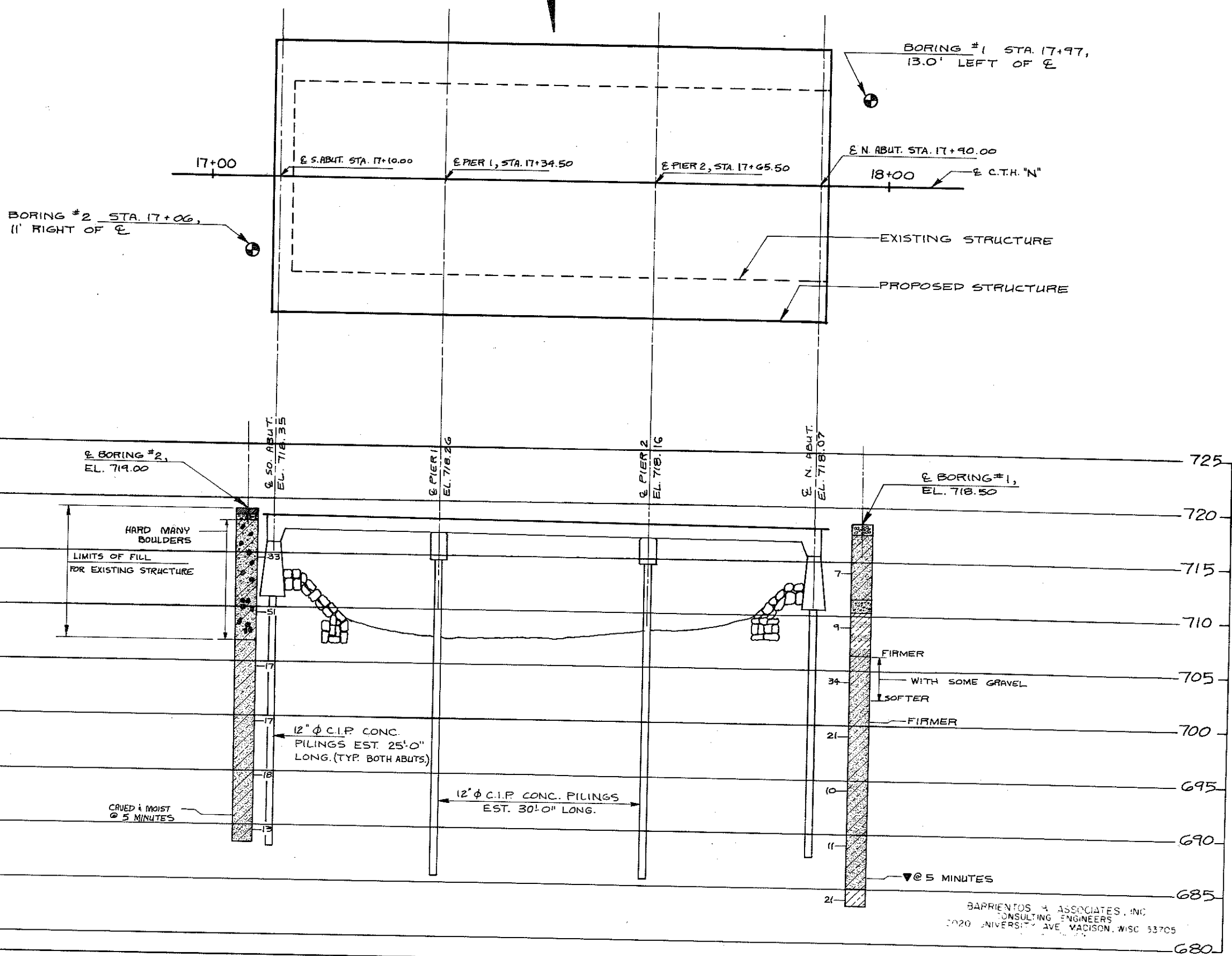
Sandy Gravel
F.
Boulders or Cobbles
Sand
Silty Clay
So
Limestone

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the 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-44-84			
Const. Spec.	WIS. '75	Drawn By M.D.P.	Plans Checked L.N.F.
SUBSURFACE EXPLORATION			SHEET 2 OF 6
			X59642



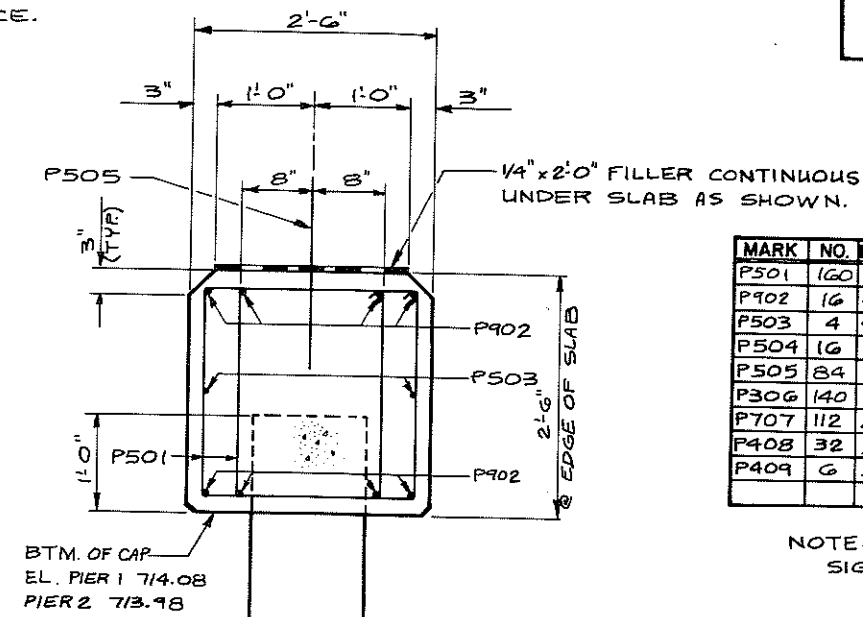
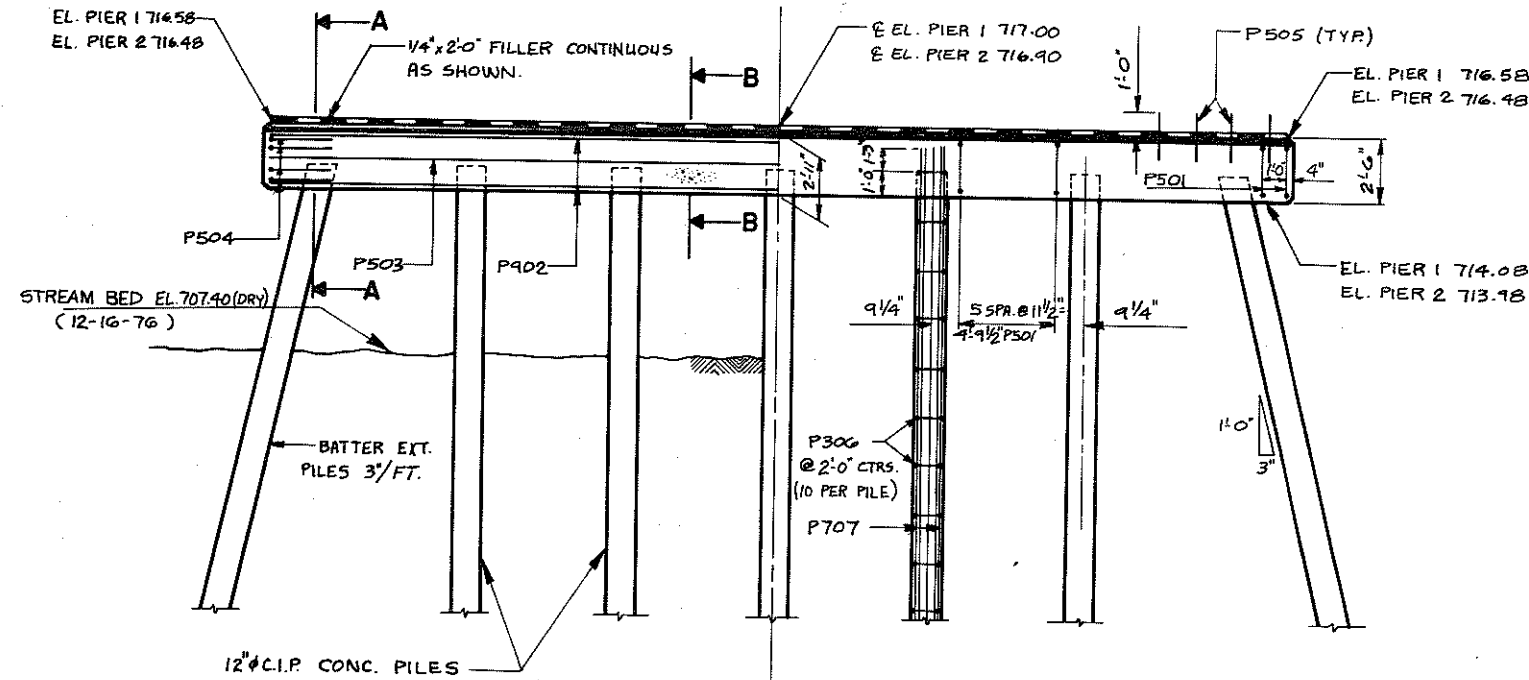
BARRIENTOS & ASSOCIATES, INC.
CONSULTING ENGINEERS
2020 UNIVERSITY AVE. MADISON, WISC 53705

INDICATES BATTERED PILE. BATTER 3/4" IN DIRECTION SHOWN.

NOTE: P505 BARS MAY BE PLACED AFTER THE CONCRETE IS POURED BUT BEFORE THE INITIAL SET HAS TAKEN PLACE.

STATE PROJECT NUMBER
6027-1-71

SHEET NO.
7.3

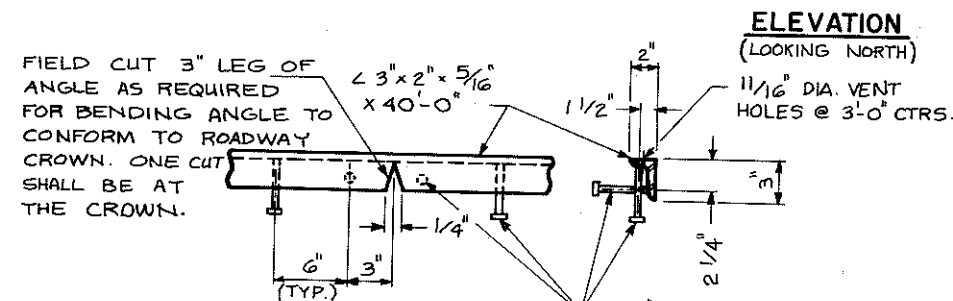


BILL OF BARS - 2 PIERS

MARK	NO.	LENGTH	BEND	LOCATION	TOTAL 9,140'
P501	160	8'-4"	X	PIER CAP DOUBLE STIRRUPS	
P402	16	42'-2"		" " LONG. TOP & BOTTOM	
P503	4	42'-2"		" " MIDDLE	
P504	16	6'-9"	X	" " @ ENDS	
P505	84	2'-0"		" " DOWELS	
P306	140	3'-8"	X	PILES - TIES	
P707	112	20'-0"		" - VERT.	
P408	32	5'-0"	X	PIER CAP TOP	
P409	6	23'-0"		" " "	

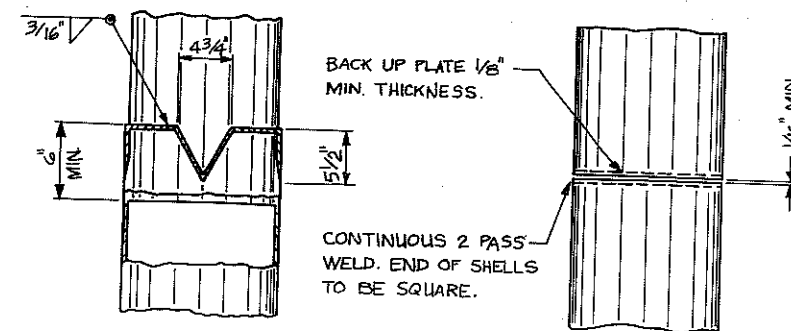
NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.

DIMENSIONS IN THE BENDING DETAILS ARE GIVEN OUT TO OUT OF BAR.



PROTECTION ANGLE DETAIL

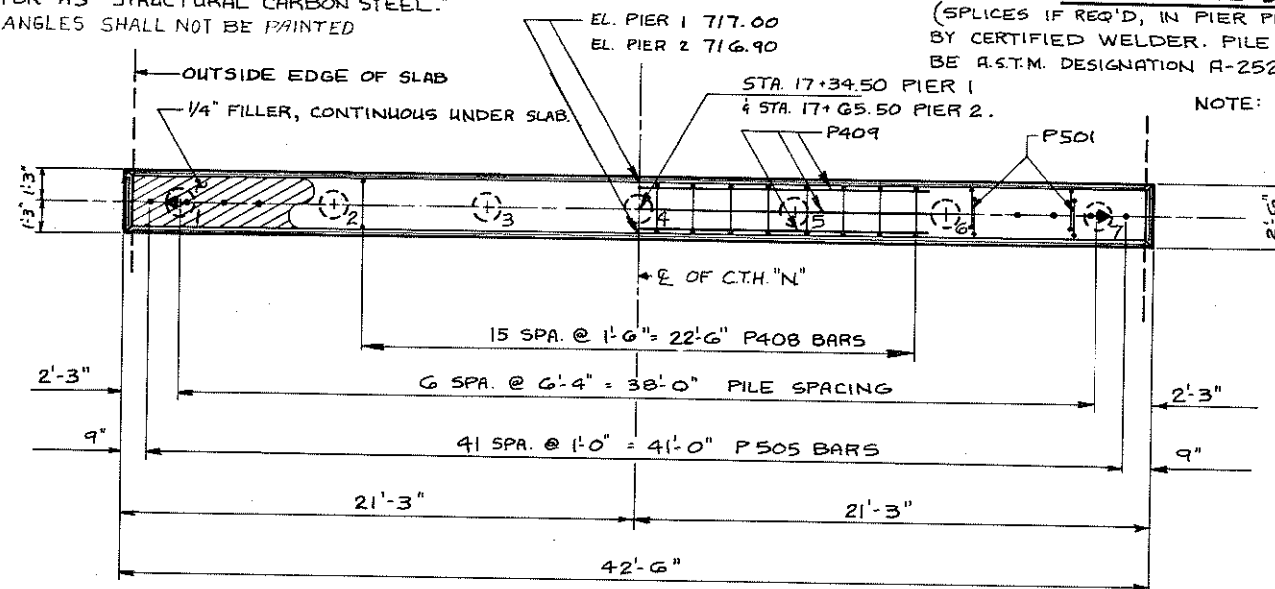
NOTE: ANGLE & STUDS SHALL BE PAID FOR AS "STRUCTURAL CARBON STEEL." ANGLES SHALL NOT BE PAINTED.



PILE SPLICE DETAIL

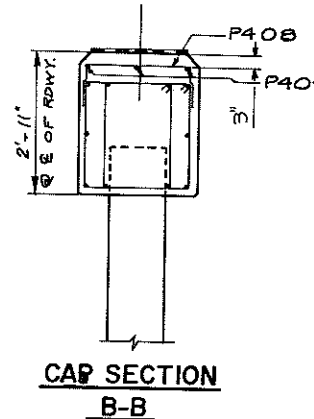
(SPLICES IF REQ'D, IN PIER PILE SHALL BE MADE BY CERTIFIED WELDER. PILE SHELL MATERIAL SHALL BE A.S.T.M. DESIGNATION A-252, GRADE 2 OR EQUAL.)

NOTE: PILE SPACING IS GIVEN AT BOTTOM OF PIER CAP.



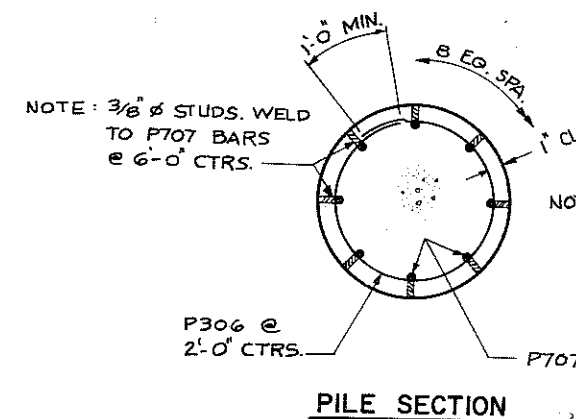
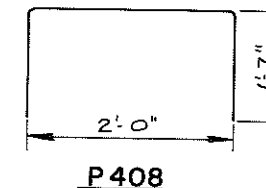
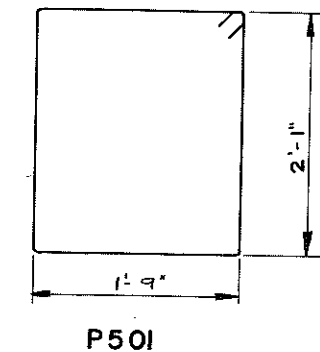
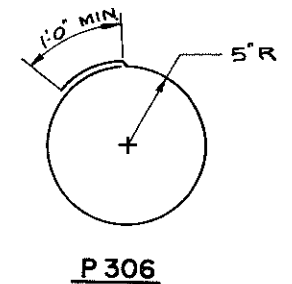
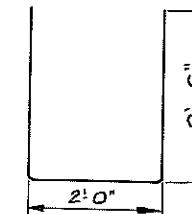
PLAN

CAP SECTION A-A



CAP SECTION B-B

P504



PILE SECTION

NOTE: ALL VERT. REINF. BARS IN PILES ARE P707 BARS. TO EXTEND 1'-3" ABOVE PILES INTO CONC. PIER CAP.

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-44-84			
Const. Spec. WIS '75	Drawn By M.D.P.	Plans Checked L.N.F.	
PIERS			SHEET 4 OF 6
			X59644

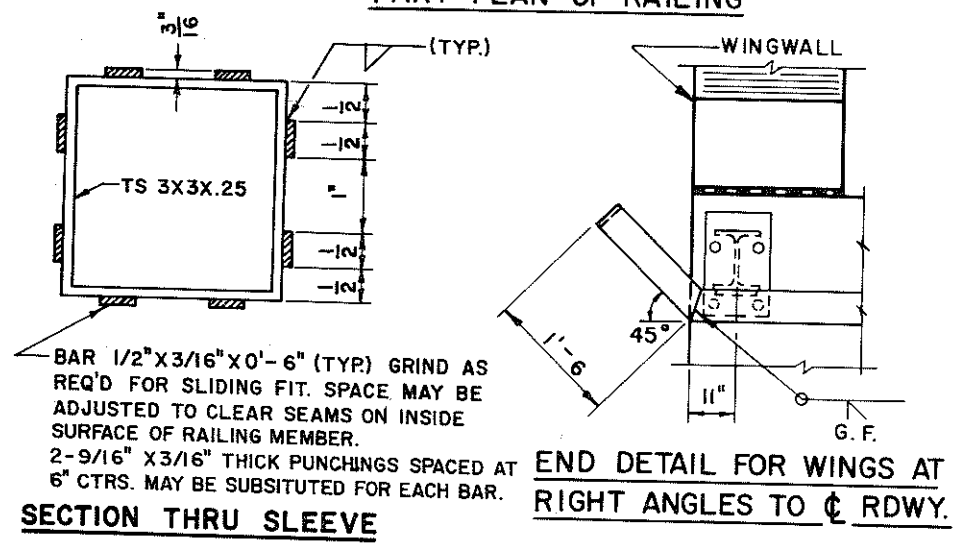
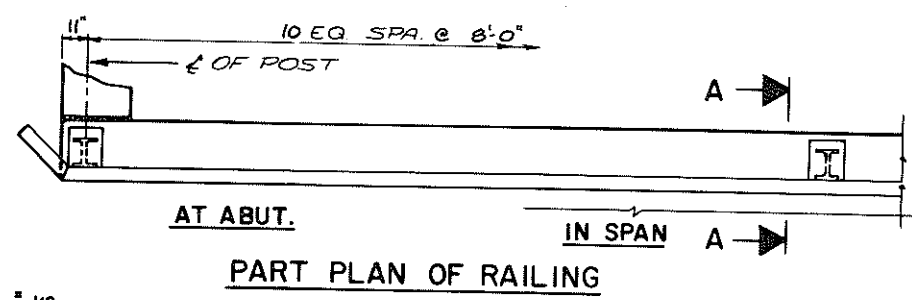
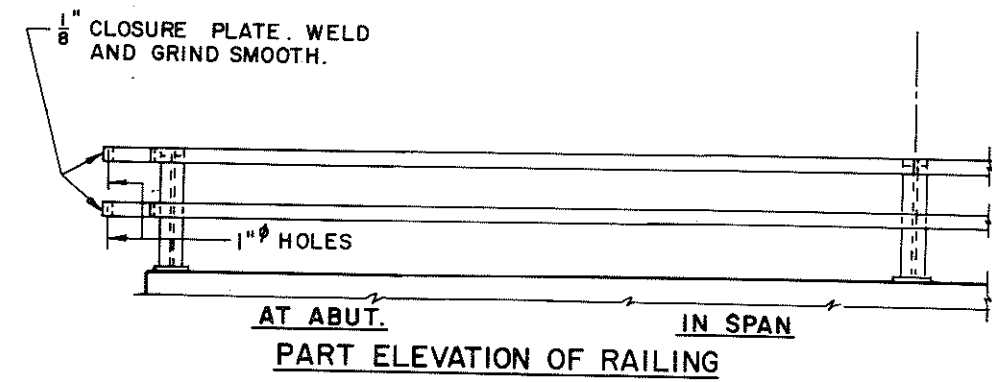
Form E-B-12-69



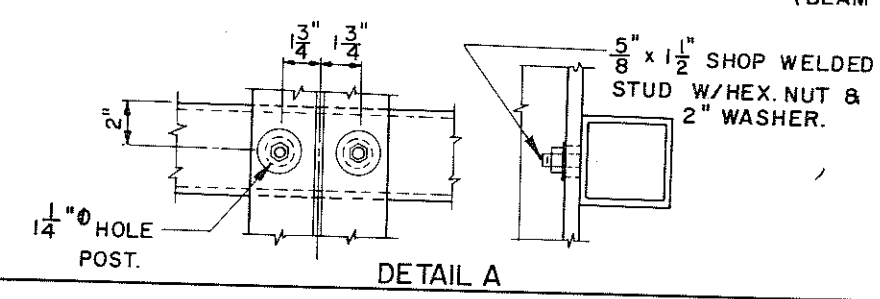
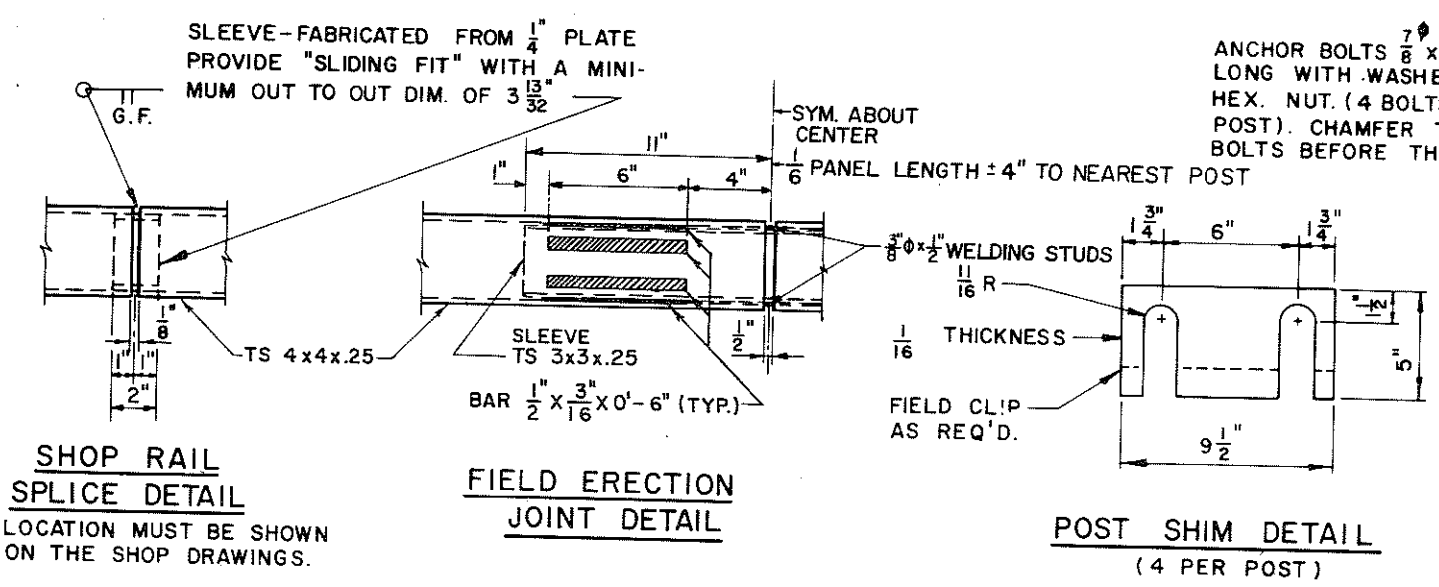
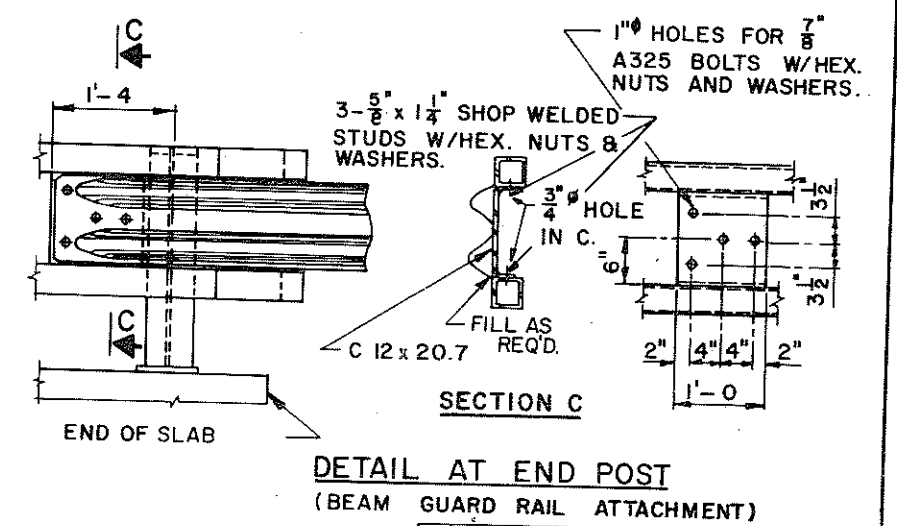
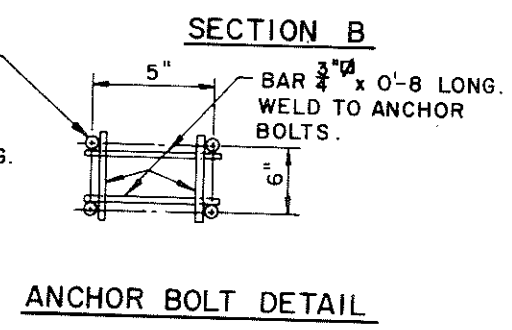
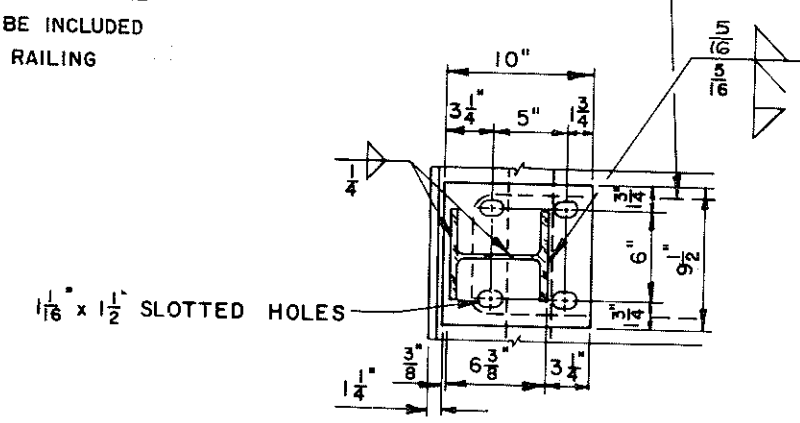
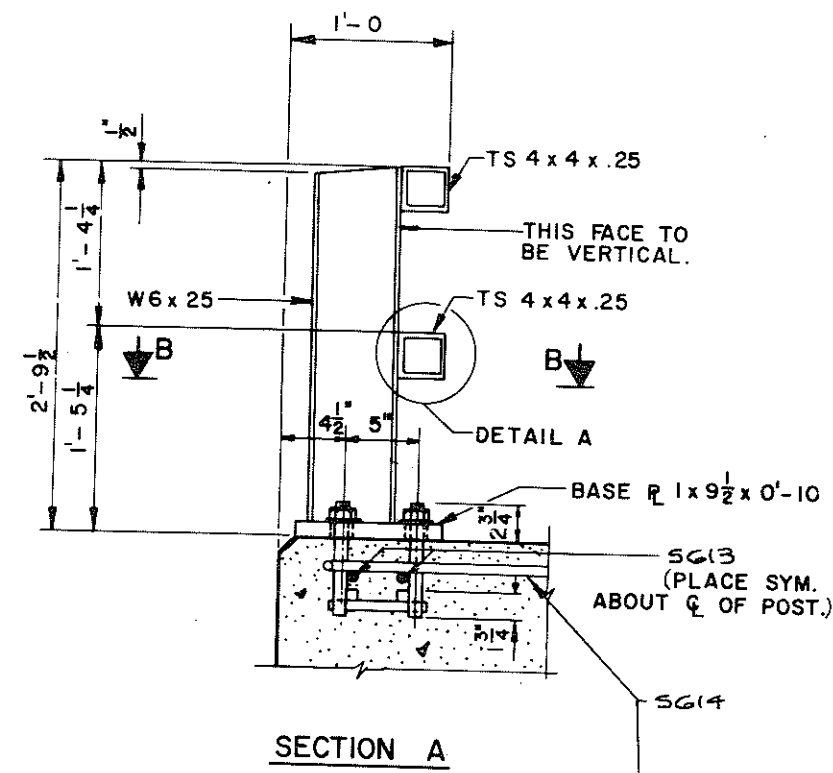
GENERAL NOTES

1. BID ITEM SHALL BE 'TUBULAR RAILING, TYPE F'.
2. 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.
3. RAILING SHALL BE 4x4x.25 STRUCTURAL TUBING CONFORMING TO A.S.T.M. DESIGNATION A36.
5. CALK EXPOSED OPENINGS BETWEEN SHIMS.
6. 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.
7. PLACE ANCHOR BOLTS NORMAL TO BASE PLATE.
8. ALL MEMBERS, INCLUDING UPPER 4" OF ANCHOR BOLTS, SHALL BE GALVANIZED AFTER FABRICATION.
9. BEAM GUARD ATTACHMENT MAY BE WELDED TO RAILS AND RAILS MAY BE WELDED TO POSTS.
10. FILL POST ANCHOR BOLT HOLES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.
11. RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.
12. STEEL SHIMS SHALL BE USED UNDER POST WHERE REQ'D. FOR ALIGNMENT.
13. ANCHOR BOLTS SHALL BE $\frac{7}{8}$ " NOMINAL CONFORMING TO A.S.T.M. A449 WITH 3" THREADS AND HIGH STRENGTH NUTS AND WASHERS.

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PH 608-238-6761



NOTE: BEAM GUARD RAIL ATTACHMENTS TO BE INCLUDED IN BID ITEMS FOR RAILING



SHOP RAIL SPLICE DETAIL
LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS.

No.	Date	Revision	By
		STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
STRUCTURE B-44-84			
CONST. WIS. '75	DRAWN BY M.D.P.	PLANS CHECKED L.N.F.	
TUBULAR STEEL RAILING, TYPE "F"			SHEET 6 OF 6
			X59646