STANDARD ABBREVIATIONS

ABANDON	ABND.	MAXIMUM	MAX.
ABSTRACT	ABS.	MEASURED	(M)
ACCESS POINT	A.P.	MILE	MI.
ACRES	AC.	MINIMUM	MIN
ADDITION	ADD.	MONUMENTS	MON.
AHEAD	AH.	MUNICIPAL	MCPL.
AND OTHERS	ET. AL.	NORTHEAST	NE
AND WIFE	ET. UX.	NORTHWEST	NW
APARTMENT	APT.	NUMBER	NO.
ASSUMED	(A)	OUTLOT	O.L.
AVENUE	AVE.	PAGE	P
BACK	BK.	PARALLEL	PLL.
BARN	B	PAVEMENT	PAV'T
BASE LINE	ℬ	PERMANENT	PERM.
BEARING LONG CHORD	B.L.C.	POINT OF CURVATURE	P.C.
BITUMINOUS	BIT.	POINT OF INTERSECTION	P.I.
BLOCK	BLK.	POINT OF TANGENCY	P.T.
BOULEVARD	BLVD.	POINT OF COMPOUND CURVE	P.C.C.
BRICK	BRK.	POINT OF REVERSE CURVE	P.R.C.
BUILDINGS	BLDGS.	POINT ON CURVE	P.O.C.
CATCH BASIN	C.B.	POINT ON LINE	P.O.L.
CEMETERY	CEM.	POINT ON SEMI-TANGENT	P.O.S.T.
CENTERLINE	℄	PROJECT	PROJ
CENTRAL ANGLE	Δ	PROPERTY LINE	P.L.
CHANNEL	CH.	QUIT CLAIM DEED	Q.C.D.
CHANNEL CHANGE	CH. CH.	RADIUS	R
COMMERCIAL	COMM.	RAILROAD	R.R.
COMPANY	COM	REFERENCE LINE	ℜ
COMPUTED	(C)	REQUIRED	REQ'D
CONCRETE	CONC.	RESIDENTIAL	RES.
CONSTRUCTION	CONST.	RESTAURANT	REST.
CORNER	COR.	RIGHT	RT.
CORPORATION	CORP.	RIGHT OF WAY	R/W
COUNTY	CO.	ROAD	RD.
COUNTY TRUNK HIGHWAY	C.T.H.	ROADWAY	RDWY.
CREEK	CR.	SANITARY	SAN.
CULVERT	CULV.	SCALED	(S)
DEED	(D)	SCHOOL	SCH.
DEGREE OF CURVE	D.	SECTION	SEC
DISPOSAL	DISP.	SERVICE STATION	S.S.
DISTRICT	DIST.	SEPTIC TANK	SEP.
DRIVE	DR.	SIDEWALK	SWK.
DRIVEWAY	DWY.	SHED	S
ESTATE	EST.	SOUTHEAST	SE
EXISTING	EX.	SOUTHWEST	SW
EXTERNAL DISTANCE	E	SQUARE	SQ.
FACTORY	FACT.	STANDARD	STD.
FEDERAL AID PROJECT	F.A.P.	STATE TRUNK HIGHWAY	S.T.H.
FIELD ENTRANCE	F.E.	STATION	STA.
FIRE HYDRANT	F.H.	STREET	ST.
FOOT (FEET)	FT.	SUBDIVISION	SUBD.
FOUNDATION	FDN.	SURVEY	(S)
GARAGE	G	TANGENT	TAN.
GOVERNMENT	GOV'T.	TANGENT LENGTH OF CURVE	T
HIGHWAY	HWY.	TAPER	TAP.
HOUSE	H	TAVERN	TAV.
INCHES	IN.	TEMPORARY	TEMP.
INCORPORATED	INC.	TRANSIT LINE	TL
INTERSECTION ANGLE	I	TRANSMISSION TOWER	T.T.
INTERSTATE HIGHWAY	I.H.	UNITED STATES COAST & GEODETIC SURVEY	U.S.C.&G.S.
IRON PIN	I.P.	UNITED STATES GEOLOGICAL SURVEY	U.S.G.S.
ISLAND	IS.	UNITED STATES HIGHWAY	U.S.H.
LEFT	LT.	VENDEE	VDE.
LENGTH OF CURVE	L	VENDOR	VDR.
LESSEE	LSE	VITRIFIED	VIT.
LESSOR	LSR	VOLUME	V
LIMITED HIGHWAY EASEMENT	L.H.E.	WAREHOUSE	W.H.
MAGNETIC	MAG.	WATER TOWER	W.T.
MAILING ADDRESS	# 0000	WATER	W
MANHOLE	M.H.	WINDMILL	W.M.
MANUFACTURING	MFG.	WOOD	WD.

PLAT OF RIGHT OF WAY REQUIRED FOR

C.T.H. "O" – C.T.H "M"

(BOSTWICK CREEK BRIDGE)

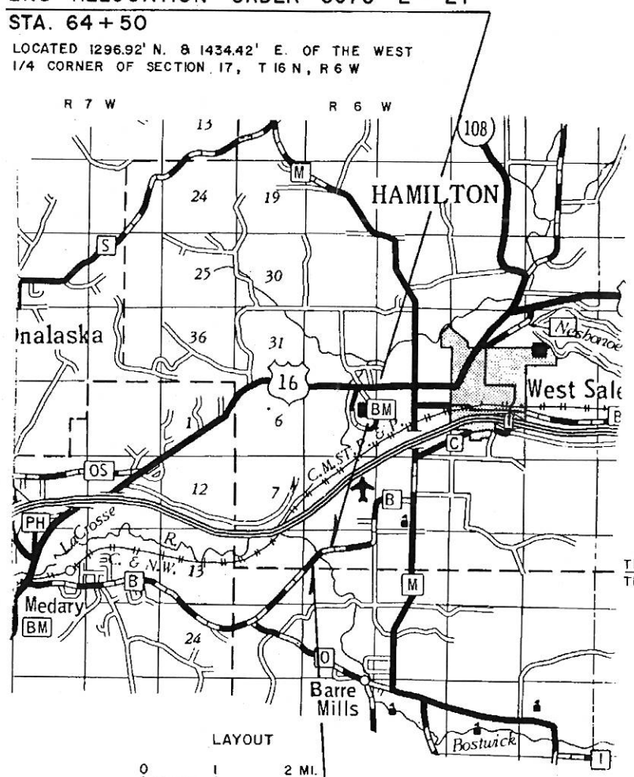
C.T.H. "B"

LA CROSSE COUNTY

END RELOCATION ORDER 5075-2-21

STA. 64+50

LOCATED 1296.92' N. & 1434.42' E. OF THE WEST 1/4 CORNER OF SECTION 17, T 16 N, R 6 W



LAYOUT

0 1 2 MI.

BEGIN RELOCATION ORDER 5075-2-21

STA. 49+74.11

LOCATED 118.41' N. & 618.38' E. OF THE WEST 1/4 CORNER OF SECTION 17, T16N, R 6W

NET LENGTH OF CENTERLINE = 0.280 MI.

REVISION DATE	R/W PROJECT NUMBER	SHEET NUMBER
	5075-2-21	4.0
	FEDERAL PROJECT NUMBER	
	PLAT OF RIGHT OF WAY REQUIRED FOR: LA CROSSE C. T. H. "B"	
	SCALE Ft.	DATE 8-13-80
	CONSTRUCTION PROJECT NUMBER 5075-2-71/4	

CONVENTIONAL SIGNS

STATE LINE		TRAVELED WAY (SHOWN ONLY IN AREA OF FRONTAGE ROADS, INTERCHANGES OR DUAL LANES)	
COUNTY LINE		CEMETERY	CEM.
TOWNSHIP AND RANGE LINE		FOUNDATION	FDN.
SECTION LINE		GAS PUMP ISLAND	GAS PUMP
QUARTER LINE		BUILDING	TYPE
SIXTEENTH LINE		IRON PIN	I.P.
NEW CENTER LINE		POWER POLE	
NEW R/W LINE		TELEPHONE POLE	
OLD R/W LINE		RAIL LINE	
PROPERTY LINE	P.L. +00.0	TRANSMISSION TOWER AND LINE	
CORPORATE LIMITS	(NAME)	UNDERGROUND CABLE MARKER	
SLOPE INTERCEPTS	SLOPE INTERCEPT	WELL	
LOT, TIE AND OTHER MINOR DASHED LINES		STONE MONUMENT	
UNDERGROUND FACILITY (POWER, TELEPHONE, TELEGRAPH, GAS, ETC.)	(TYPE)	SEPTIC TANK	
NO ACCESS		WINDMILL	
LIMITED HIGHWAY EASEMENT		CATTLE PASS	
HIGHWAY SEPARATION		℄ RELOCATED STREAM OR RIVER	
HIGHWAY OVERPASS		TELEPHONE PEDESTAL OR RISER	
RAIL LINE OVERPASS			
ALL OTHER BRIDGES			
STREAM OR RIVER	NAME		
LAKE	LAKE		

REVISION DATE	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
	Approved Date ____ District Transportation Director
	Approved Date ____ Director Bureau of Real Estate
	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION REGION 5 WISCONSIN DIVISION
	Approved Date ____ Division Administrator

APPROVED FOR

1-6-81 DATE — Harold O. Nelson COUNTY HIGHWAY COMMISSIONER

ORIGINAL PLAT PREPARED BY

OWEN AYRES & ASSOCIATES INC

CONSULTING ENGINEERS

EAU CLAIRE, WISCONSIN

DATE 12-15-80

R/W PROJECT NUMBER	SHEET NUMBER
5075-2-21	4.1
FEDERAL PROJECT NUMBER	

PLAT OF RIGHT OF WAY REQUIRED FOR

LA CROSSE C.T.H. "B"

SCALE Ft. DATE 8-13-80

CONSTRUCTION PROJECT NUMBER 5075-2-71 / 4.1

TOWN OF HAMILTON

CURVE DATA
P.I. 51+00.00
D = 3°00'
Δ = 7° 32' 32" LT.
R = 1909.86'
T = 125.88'
L = 251.40'
E = 4.14'
P.C. 49+74.11
P.T. 52+25.52

HAROLD & MARIE TAUSCHER
V. 606 P. 847
(1)

BEGIN RELOCATION ORDER 5075-2-21
STA. 49+74.11
LOCATED 118.41' N. & 618.38' E. OF THE WEST 1/4 CORNER OF SECTION 17, T16N, R6W

CURVE DATA
P.I. 63+10.07
D = 11° 00'
Δ = 62° 37' 36" RT.
R. = 520.87'
T = 316.86'
L = 569.33'
E = 88.81'
P.C. 59+93.21
P.T. 65+62.54 BK =
P.T. 65+42.92 AHD.

JOSEPH BAHR
(2)

RICHARD & ROBERTA BUTTERFIELD
(3) V. 610 P. 728

JOSEPH BAHR
(2)

NORTHERN STATES POWER COMPANY (4)

LA CROSSE TELEPHONE CORPORATION

SLOPE INTERCEPTS EXISTING R/W

1/16 LINE

P.L.

C.T.H. "B"

BOSTWICK CREEK

N 72° 05' E
723.97'

N 34° 03' E

N 26° 30' E

N 89° 08' E

NW - NW 17-16-6

NE - NW 17-16-6

SW - NW 17-16-6

SE - NW 17-16-6

END RELOCATION ORDER 5075-2-21
STA. 64+50
LOCATED 1296.92' N. & 1434.42' E. OF THE WEST 1/4 CORNER OF SECTION 17, T16N, R6W

JOSEPH BAHR
(2)

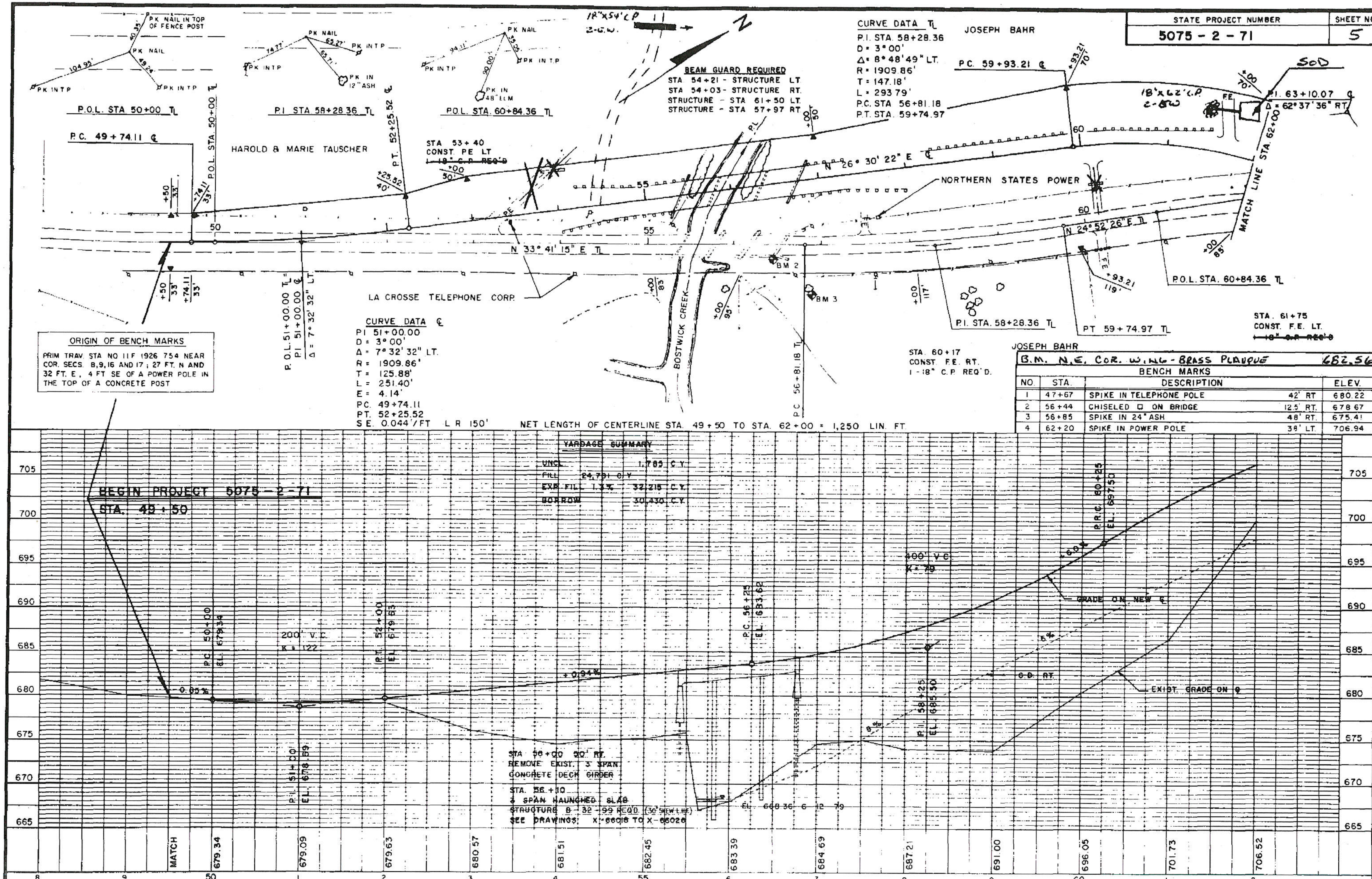
HAROLD & MARIE TAUSCHER
V. 606 P. 847
(1)

NOTE:
BEARINGS SHOWN ON THIS PLAT ARE THE TRUE BEARINGS OF EACH TANGENT TO THE NEAREST MINUTE.

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	SHEET NO.	OWNER	INTEREST REQUIRED	L.H.E. ACRES	ACRES REQUIRED NEW R/W	EXISTING R/W	TOTAL R/W REQUIRED	TOTAL REMAINING ACRES	OPERATIONS PROJECT I.D.
1	4.1	HAROLD & MARIE TAUSCHER	FEE TITLE		0.53	0.88	1.41		5075-2-21
2	4.1	JOSEPH BAHR	FEE TITLE		1.66	1.23	2.89		5075-2-21
3	4.1	RICHARD & ROBERTA BUTTERFIELD	FEE TITLE		0.08	0.08	0.16		5075-2-21
4	4.1	NORTHERN STATES POWER CO.	RELEASE OF RIGHTS						5075-2-21

STATE PROJECT NUMBER	SHEET NO.
5075 - 2 - 71	5



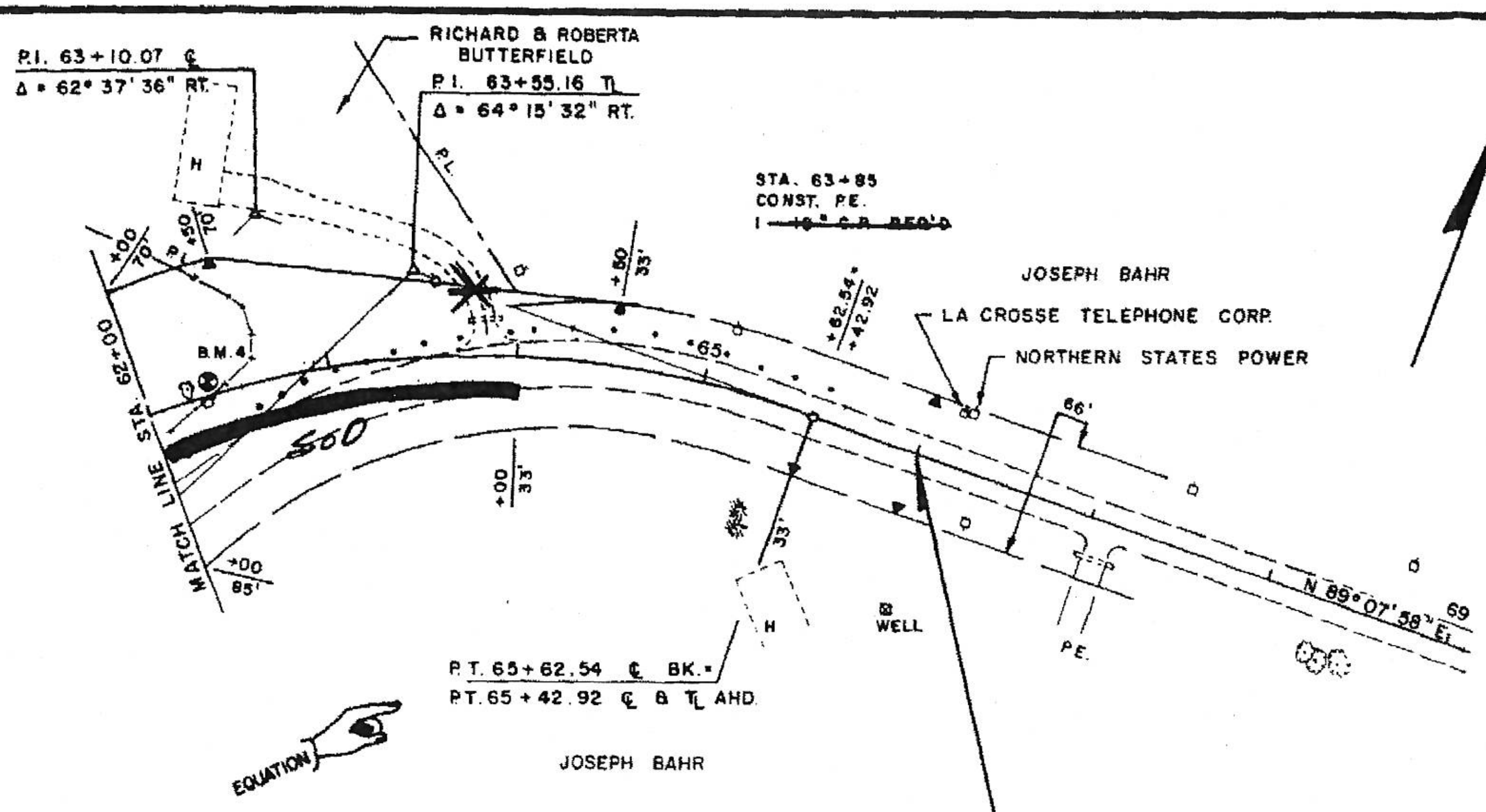
B.M. N.E. COR. WING - BRASS PLAQUE 682.56

BENCH MARKS

NO.	STA.	DESCRIPTION		ELEV.
1	47+67	SPIKE IN TELEPHONE POLE	42' RT	680.22
2	56+44	CHISELED ☐ ON BRIDGE	12.5' RT.	678.67
3	56+85	SPIKE IN 24" ASH	48' RT.	675.41
4	62+20	SPIKE IN POWER POLE	38' LT.	706.94

Cat. No. 2130 - 0140

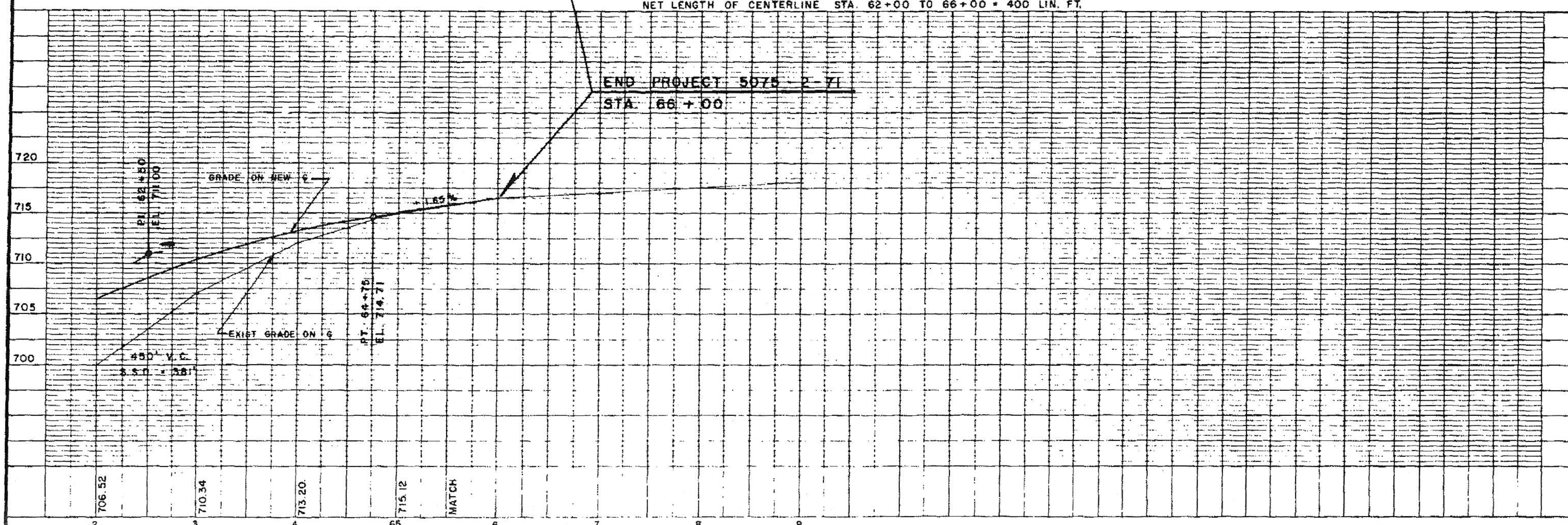
STATE PROJECT NUMBER	SHEET NO.
5075 - 2 - 71	5.1



CURVE DATA ℄

P.I. 63+10.07
D = 11° 00'
Δ = 62° 37' 36" RT.
R = 520.87'
T = 316.86'
L = 569.33'
E = 88.81'
P.C. 59+93.21
P.T. 65+62.54 BK =
P.T. 65+42.92 AHD.
S.E. = 0.06'/FT.
L.R. = 130'

NET LENGTH OF CENTERLINE STA. 62+00 TO 66+00 = 400 LIN. FT.



Index of Sheets

TOTAL SHEETS = 29

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C. T. H. "O" - C. T. H. "M"

(BOSTWICK CREEK BRIDGE AND APPROACHES)

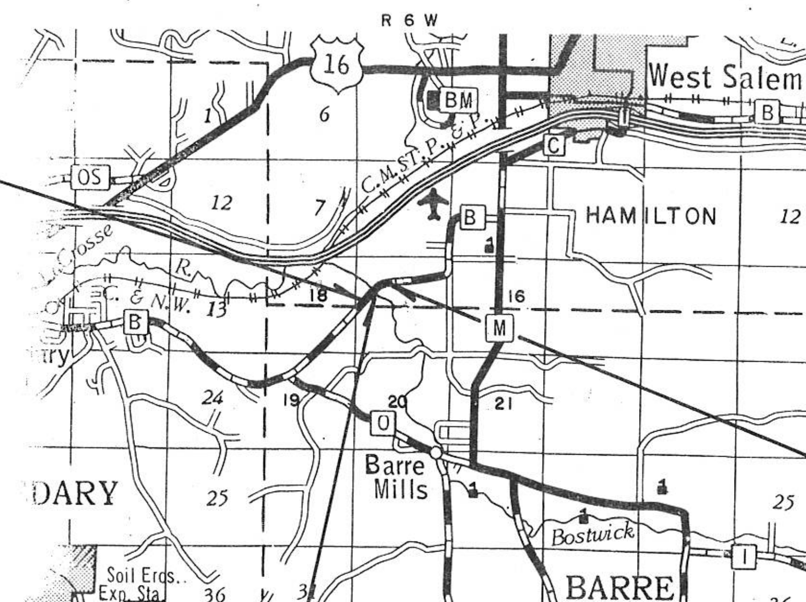
C. T. H. "B"
LA CROSSE COUNTY

STATE PROJECT NUMBER
5075-2-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5075 - 2 - 71	BRZ 3299(17)	1

Scales: 5' PLAN & PROFILE 50' ; 10' CROSS SECTIONS 10'

BEGIN PROJECT
STA. 49 + 00
N. 681,150 (± 200')
E. 1,702,360 (± 200')



N

END PROJECT
STA. 66+00

STRUCTURE B - 32 - 99

Design Designation

A.D.T.	1980	=	645
A.D.T.	2000	=	830
D.H.V.		=	141
D.		=	50 - 50
T.		=	8 %
V.		=	50 M.P.H.

Conventional Signs

County Line
Township or Range Line
Section Line
Corporate or City Limits
Property line
Lot Line
Existing Right of Way Line
New Right of Way Line
Base or Survey Line
Slope Intercept
Existing Roadway or Private Entrance

Caution Symbol (Combustible fluids under pressure) — CAUTION
Railroads
Fence — (TYPE)
Culverts in Place
Culverts Required
Power Pole
Telephone or Telegraph Pole
Right of Way Markers
Marsh
Wooded Area
Grade Elevation — 76.8

Layout Scale 0 — 1 MI.

Total Net Length of Centerline = 0.316 Mi.

COORDINATES SHOWN ON THIS PLAN ARE SCALED FROM THE LA CROSSE WISCONSIN QUADRANGLE MAP, SOUTH ZONE, AND ARE SHOWN FOR INFORMATION ONLY.

PLANS & GRADES APPROVED FOR LA CROSSE COUNTY

1-6-81 Harold G. Nelson
DATE COUNTY HIGHWAY COMMISSIONER

ORIGINAL PLANS PREPARED BY
OWEN AYRES & ASSOCIATES INC
CONSULTING ENGINEERS
EAU CLAIRE WISCONSIN

WISCONSIN KEVIN B. HAGEN E-17621 EAU CLAIRE, WIS. PROFESSIONAL ENGINEER [illegible]

DATE 12-15-80

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Surveyor OWEN AYRES & ASSOC. District Checker A.L.P.
Designer OWEN AYRES & ASSOC. C.O. Checker NRA
District Supervisor G.W.P. C.O. Coordinator [illegible]

Approved:
Date 6-2-82 T R Kuisey
District Transportation Director

Approved:
Date 9-27-82 [illegible]
Chief Design Engineer

Approved:
Date 9/27/82 E. J. Byrkit
Director of Development

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

Approved:
Date ______ ______
Division Administrator

ESTIMATE OF QUANTITIES

DATE 10/26/82

PROJECT ID: 5075-02-71
LA CROSSE COUNTY
C.T.H. O - C.T.H. M ROAD
BOSTWICK CREEK BRIDGE & APPROACHES
C.T.H. B

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	5075-02-71 QUANTITY
20101	CLEARING	STA.	5.00	5.00
20104	GRUBBING	STA.	5.00	5.00
20351	REMOVING OLD BRIDGE, STATION 56+00	L.S.	1.00	1.00
20503	UNCLASSIFIED EXCAVATION	C.Y.	1,785.00	1,785.00
20610	EXCAVATION FOR STRUCTURES, BRIDGES B-32-99	L.S.	1.00	1.00
20801	BORROW EXCAVATION	C.Y.	30,430.00	30,430.00
21301	FINISHING ROADWAY	L.S.	1.00	1.00
30403	CRUSHED AGGREGATE BASE COURSE	C.Y.	2,242.00	2,242.00
50201	CONCRETE MASONRY, BRIDGES	C.Y.	423.00	423.00
50504	HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LB.	60,400.00	60,400.00
51030	CAST-IN-PLACE CONCRETE PILING, DELIVERED AND DRIVEN, 10-3/4 INCH	L.F.	1,920.00	1,920.00
51340	TUBULAR RAILING, TYPE F, STRUCTURE B-32-99	L.S.	1.00	1.00
52003	CULVERT PIPE, CLASS III, 18-INCH	L.F.	118.00	118.00
52061	APRON ENDWALLS FOR CULVERT PIPE, 18-INCH	EACH	8.00	8.00
60602	HEAVY RIPRAP	C.Y.	365.00	365.00
61406	ANCHORAGES FOR STEEL PLATE BEAM GUARD	EACH	4.00	4.00
61408	STEEL PLATE BEAM GUARD, CLASS A	L.F.	848.00	848.00
61422	MARKER POSTS FOR RIGHT-OF-WAY	EACH	13.00	13.00
61910	MOBILIZATION	L.S.	1.00	1.00
62505	SALVAGED TOPSOIL	S.Y.	9,840.00	9,840.00
62702	MULCHING	S.Y.	8,960.00	8,960.00
62802	EROSION MAT	S.Y.	880.00	880.00
62810	EROSION BALES	EACH	70.00	70.00
62905	FERTILIZER, TYPE B	CWT.	11.00	11.00
63002	SEEDING	LB.	360.00	360.00
63101	SODDING	S.Y.	880.00	880.00
64201	FIELD OFFICE, TYPE A	L.S.	1.00	1.00
64301	TRAFFIC CONTROL	L.S.	1.00	1.00
90089	SINGLE AGGREGATE BITUMINOUS MIX	TON	450.00	450.00

SHEET 2

STANDARD ABBREVIATIONS

ABANDON	ABND.	MAXIMUM	MAX.
ABSTRACT	ABS.	MEASURED	(M)
ACCESS POINT	A.P.	MILE	MI.
ACRES	AC.	MINIMUM	MIN
ADDITION	ADD.	MONUMENTS	MON.
AHEAD	AH.	MUNICIPAL	MCPL.
AND OTHERS	ET. AL.	NORTHEAST	NE
AND WIFE	ET. UX.	NORTHWEST	NW
APARTMENT	APT.	NUMBER	NO.
ASSUMED	(A)	OUTLOT	O.L.
AVENUE	AVE.	PAGE	P
BACK	BK.	PARALLEL	PLL.
BARN	B.	PAVEMENT	PAV'T
BASE LINE	ℬ	PERMANENT	PERM.
BEARING LONG CHORD	B.L.C.	POINT OF CURVATURE	P.C.
BITUMINOUS	BIT.	POINT OF INTERSECTION	P.I.
BLOCK	BLK.	POINT OF TANGENCY	P.T.
BOULEVARD	BLVD.	POINT OF COMPOUND CURVE	P.C.C.
BRICK	BRK.	POINT OF REVERSE CURVE	P.R.C.
BUILDINGS	BLDGS.	POINT ON CURVE	P.O.C.
CATCH BASIN	C.B.	POINT ON LINE	P.O.L.
CEMETERY	CEM.	POINT ON SEMI-TANGENT	P.O.S.T.
CENTERLINE	℄	PROJECT	PROJ.
CENTRAL ANGLE	Δ	PROPERTY LINE	P.L.
CHANNEL	CH.	QUIT CLAIM DEED	Q.C.D.
CHANNEL CHANGE	CH. CH.	RADIUS	R
COMMERCIAL	COMM.	RAILROAD	R.R.
COMPANY	COM	REFERENCE LINE	ℜ
COMPUTED	(C)	REQUIRED	REQ'D.
CONCRETE	CONC.	RESIDENTIAL	RES.
CONSTRUCTION	CONST.	RESTAURANT	REST.
CORNER	COR.	RIGHT	RT.
CORPORATION	CORP.	RIGHT OF WAY	R/W
COUNTY	CO.	ROAD	RD.
COUNTY TRUNK HIGHWAY	C.T.H.	ROADWAY	RDWY.
CREEK	CR.	SANITARY	SAN.
CULVERT	CULV.	SCALED	(S)
DEED	(D)	SCHOOL	SCH.
DEGREE OF CURVE	D.	SECTION	SEC.
DISPOSAL	DISP.	SERVICE STATION	S.S.
DISTRICT	DIST.	SEPTIC TANK	SEP.
DRIVE	DR.	SIDEWALK	SWK.
DRIVEWAY	DWY.	SHED	S
ESTATE	EST.	SOUTHEAST	SE
EXISTING	EX.	SOUTHWEST	SW
EXTERNAL DISTANCE	E	SQUARE	SQ.
FACTORY	FACT.	STANDARD	STD.
FEDERAL AID PROJECT	F.A.P.	STATE TRUNK HIGHWAY	S.T.H.
FIELD ENTRANCE	F.E.	STATION	STA.
FIRE HYDRANT	F.H.	STREET	ST.
FOOT (FEET)	FT.	SUBDIVISION	SUBD.
FOUNDATION	FDN.	SURVEY	(S)
GARAGE	G	TANGENT	TAN.
GOVERNMENT	GOV'T.	TANGENT LENGTH OF CURVE	T
HIGHWAY	HWY.	TAPER	TAP.
HOUSE	H	TAVERN	TAV.
INCHES	IN.	TEMPORARY	TEMP.
INCORPORATED	INC.	TRANSIT LINE	℄
INTERSECTION ANGLE	I	TRANSMISSION TOWER	T.T.
INTERSTATE HIGHWAY	I.H.	UNITED STATES COAST & GEODETIC SURVEY	U.S.C.&G.S.
IRON PIN	I.P.	UNITED STATES GEOLOGICAL SURVEY	U.S.G.S.
ISLAND	IS.	UNITED STATES HIGHWAY	U.S.H.
LEFT	LT.	VENDEE	VDE.
LENGTH OF CURVE	L	VENDOR	VDR.
LESSEE	LSE	VITRIFIED	VIT.
LESSOR	LSR	VOLUME	V
LIMITED HIGHWAY EASEMENT	L.H.E.	WAREHOUSE	W.H.
MAGNETIC	MAG.	WATER TOWER	W.T.
MAILING ADDRESS	# 0000	WATER	W
MANHOLE	M.H.	WINDMILL	W.M.
MANUFACTURING	MFG.	WOOD	WD.

PLAT OF RIGHT OF WAY REQUIRED FOR

C.T.H. "O" – C.T.H "M"

(BOSTWICK CREEK BRIDGE)

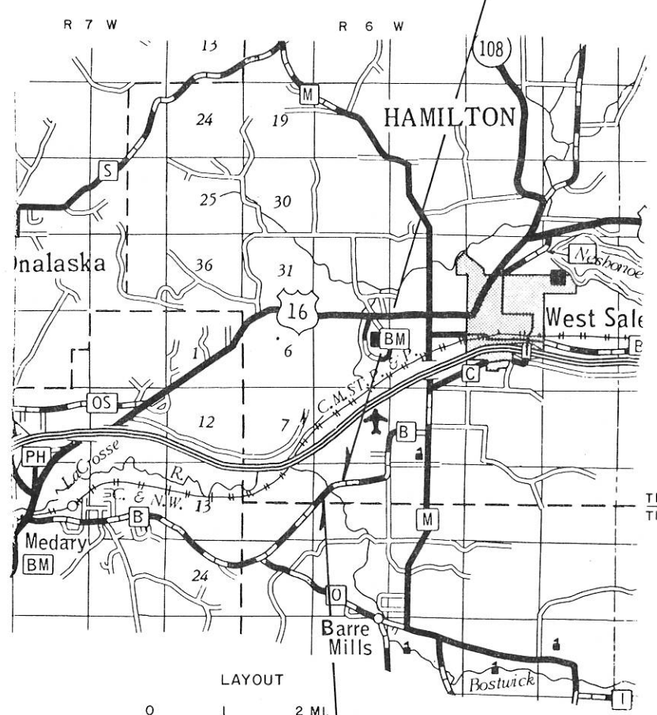
C.T.H. "B"

LA CROSSE COUNTY

END RELOCATION ORDER 5075-2-21

STA. 64+50

LOCATED 1296.92' N. & 1434.42' E. OF THE WEST 1/4 CORNER OF SECTION 17, T 16 N, R 6 W



LAYOUT

BEGIN RELOCATION ORDER 5075-2-21

STA. 49+74.11

LOCATED 118.41' N. & 618.38' E. OF THE WEST 1/4 CORNER OF SECTION 17, T16N, R 6 W

NET LENGTH OF CENTERLINE = 0.280 MI.

REVISION DATE	R/W PROJECT NUMBER	SHEET NUMBER
	5075-2-21	4.0
	FEDERAL PROJECT NUMBER	

PLAT OF RIGHT OF WAY REQUIRED FOR

LA CROSSE C. T. H. "B"

SCALE Ft. DATE 8-13-80

CONSTRUCTION PROJECT NUMBER 5075-2-71 / 4

CONVENTIONAL SIGNS

STATE LINE		TRAVELED WAY (SHOWN ONLY IN AREA OF FRONTAGE ROADS, INTERCHANGES OR DUAL LANES)	
COUNTY LINE		CEMETERY	CEM.
TOWNSHIP AND RANGE LINE		FOUNDATION	FDN.
SECTION LINE		GAS PUMP ISLAND	GAS PUMP
QUARTER LINE		BUILDING	TYPE
SIXTEENTH LINE		IRON PIN	I.P.
NEW CENTER LINE		POWER POLE	
NEW R/W LINE		TELEPHONE POLE	
OLD R/W LINE		RAIL LINE	
PROPERTY LINE	P.L. +00.0	TRANSMISSION TOWER AND LINE	
CORPORATE LIMITS	(NAME)	UNDERGROUND CABLE MARKER	
SLOPE INTERCEPTS	SLOPE INTERCEPT	WELL	
LOT, TIE AND OTHER MINOR DASHED LINES		STONE MONUMENT	
UNDERGROUND FACILITY (POWER, TELEPHONE, TELEGRAPH, GAS, ETC.)	(TYPE)	SEPTIC TANK	
NO ACCESS		WINDMILL	
LIMITED HIGHWAY EASEMENT		CATTLE PASS	
HIGHWAY SEPARATION		℄ RELOCATED STREAM OR RIVER	
HIGHWAY OVERPASS		TELEPHONE PEDESTAL OR RISER	
RAIL LINE OVERPASS			
ALL OTHER BRIDGES			
STREAM OR RIVER	NAME		
LAKE	LAKE		

REVISION DATE	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
	Approved Date ____ District Transportation Director
	Approved Date ____ Director, Bureau of Real Estate
	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION REGION 5 WISCONSIN DIVISION
	Approved Date ____ Division Administrator

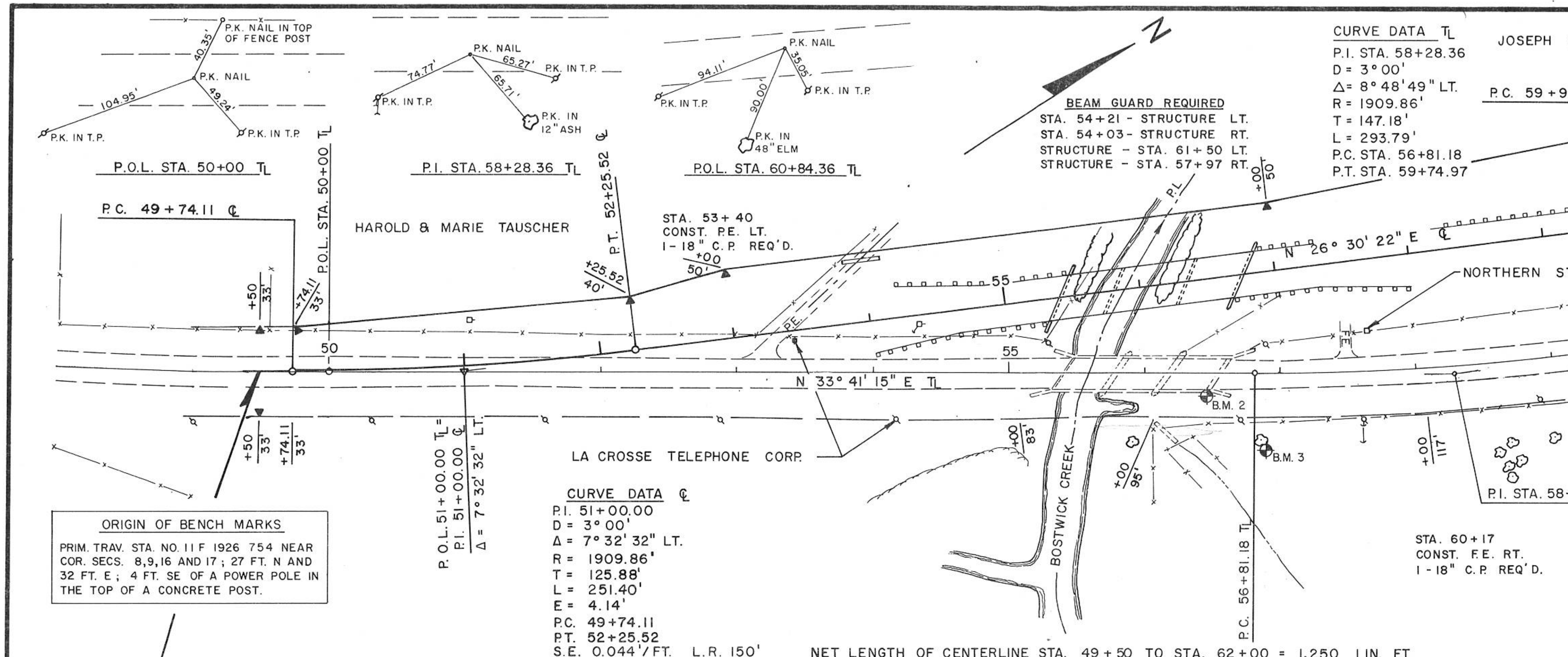
APPROVED FOR

1-6-81 Harold P. Nelson
DATE COUNTY HIGHWAY COMMISSIONER

ORIGINAL PLAT PREPARED BY

OWEN AYRES & ASSOCIATES INC
CONSULTING ENGINEERS
EAU CLAIRE, WISCONSIN
DATE 12-15-80

STATE PROJECT NUMBER	SHEET NO.
5075 - 2 - 71	5



BEAM GUARD REQUIRED
STA. 54+21 - STRUCTURE LT.
STA. 54+03 - STRUCTURE RT.
STRUCTURE - STA. 61+50 LT.
STRUCTURE - STA. 57+97 RT.

CURVE DATA TL
P.I. STA. 58+28.36
D = 3° 00'
Δ = 8° 48' 49" LT.
R = 1909.86'
T = 147.18'
L = 293.79'
P.C. STA. 56+81.18
P.T. STA. 59+74.97

ORIGIN OF BENCH MARKS
PRIM. TRAV. STA. NO. 11 F 1926 754 NEAR COR. SECS. 8,9,16 AND 17; 27 FT. N AND 32 FT. E; 4 FT. SE OF A POWER POLE IN THE TOP OF A CONCRETE POST.

CURVE DATA ℄
P.I. 51+00.00
D = 3° 00'
Δ = 7° 32' 32" LT.
R = 1909.86'
T = 125.88'
L = 251.40'
E = 4.14'
P.C. 49+74.11
P.T. 52+25.52
S.E. 0.044'/FT. L.R. 150'

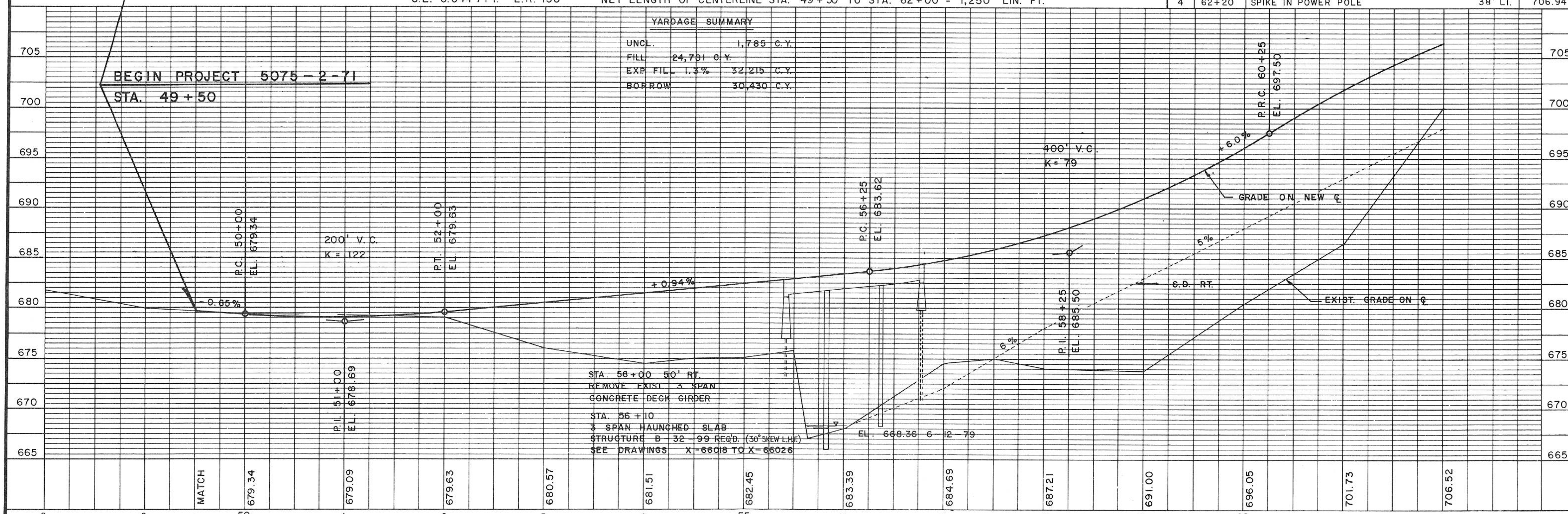
NET LENGTH OF CENTERLINE STA. 49 + 50 TO STA. 62 + 00 = 1,250 LIN. FT.

BENCH MARKS

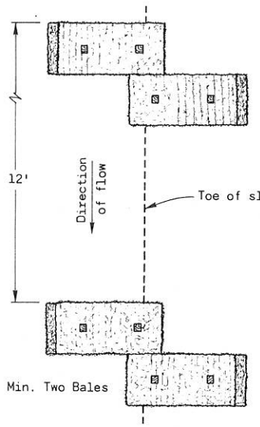
NO.	STA.	DESCRIPTION		ELEV.
1	47+67	SPIKE IN TELEPHONE POLE	42' RT.	680.22
2	56+44	CHISELED □ ON BRIDGE	12.5' RT.	678.67
3	56+85	SPIKE IN 24" ASH	48' RT.	675.41
4	62+20	SPIKE IN POWER POLE	38' LT.	706.94

YARDAGE SUMMARY

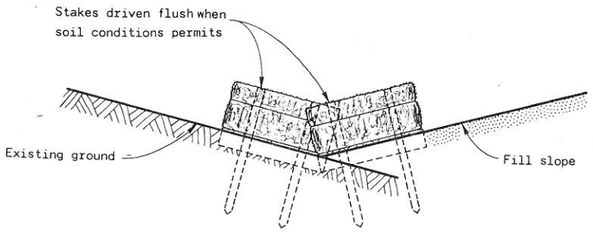
UNCL.		1,785 C.Y.
FILL	24,731 C.Y.	
EXP. FILL 1.3%		32,215 C.Y.
BORROW		30,430 C.Y.



Cat No 2130 - D140

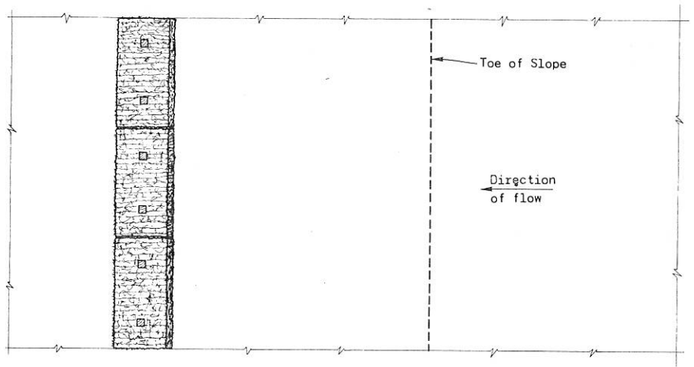


PLAN VIEW

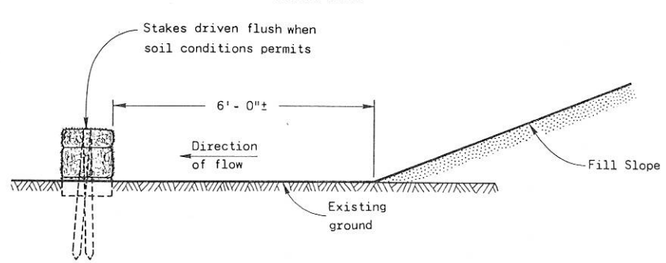


FRONT ELEVATION

WHEN EXISTING GROUND SLOPES TOWARD FILL SLOPE



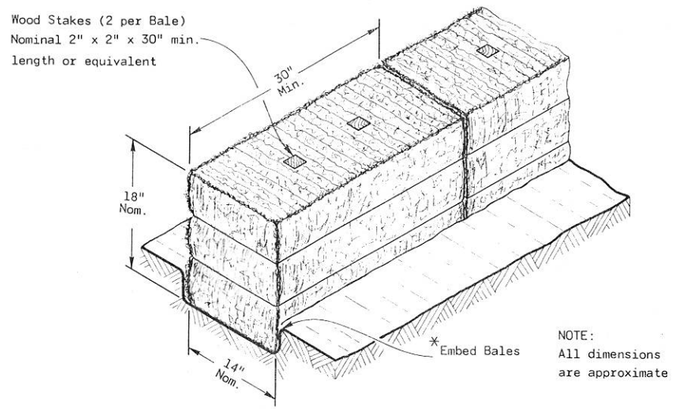
PLAN VIEW



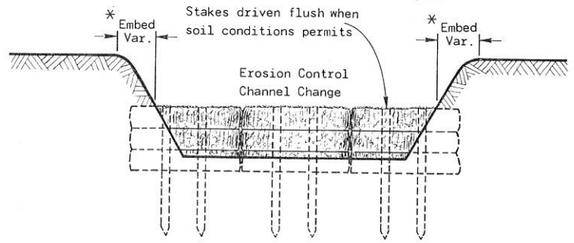
FRONT ELEVATION

EROSION BALES AT TOE OF SLOPE

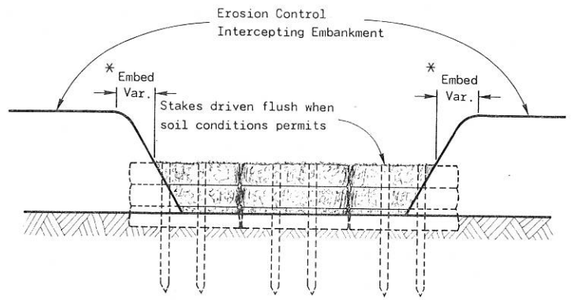
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE



DETAIL OF EROSION BALE INSTALLATION

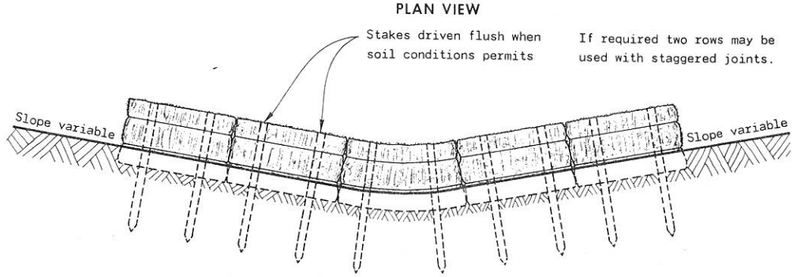


EROSION CONTROL CHANNEL CHANGE



EROSION CONTROL INTERCEPTING EMBANKMENT

PLAN VIEW



FRONT ELEVATION

EROSION BALES ACROSS DITCH BOTTOM

GENERAL NOTES

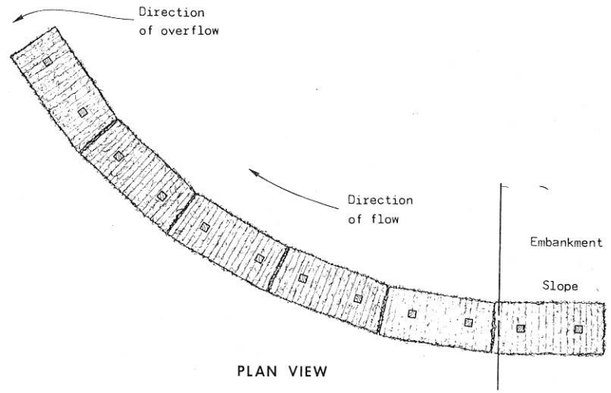
Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

Bales shall be placed end to end or overlapping at right angles to the direction of flow and far enough up the sides of the ditch to prevent eroding around ends.

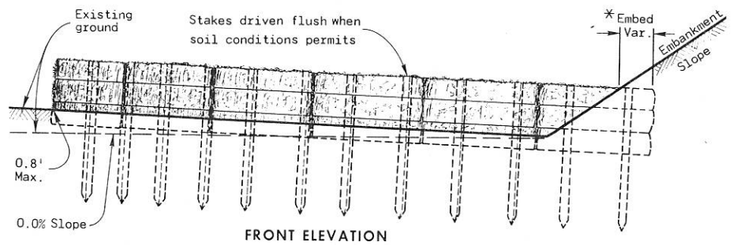
Bales shall be placed with twine or tie wires parallel to the ground.

Stakes to be battered in opposite directions.

* As determined by the Engineer.



PLAN VIEW



FRONT ELEVATION

EROSION BALES AT TOE OF SLOPE

TYPICAL INSTALLATIONS OF EROSION BALES

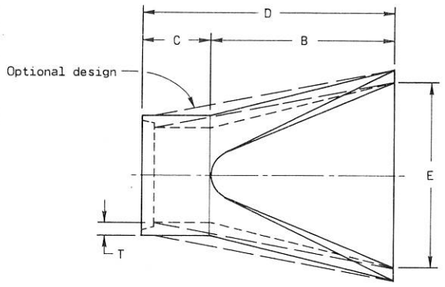
State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL
10/14/75 DATE
CHIEF of FACILITIES DEVELOPMENT

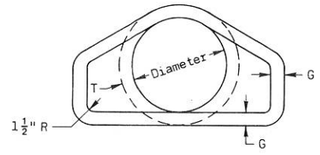
APPROVED
10/16/75 DATE
STATE HIGHWAY ENGINEER

S.D.D. 8E8-1

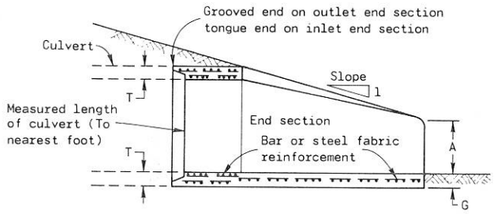
S.D.D. 8E8-1



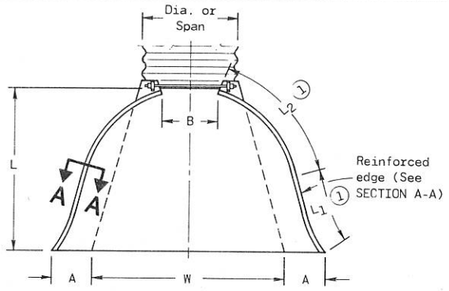
PLAN



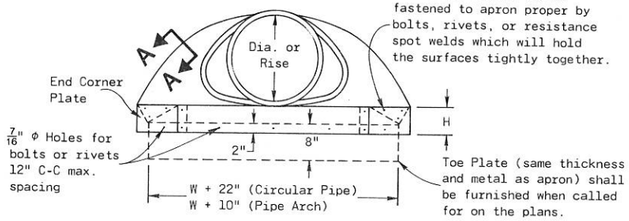
END VIEW



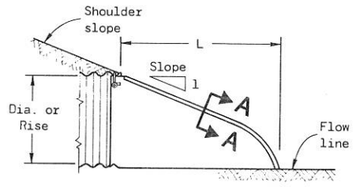
LONGITUDINAL SECTION



PLAN

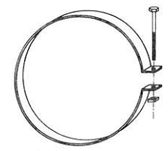


END VIEW

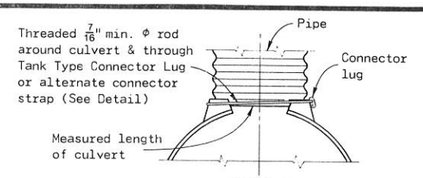


SIDE ELEVATION

1" Wide, 12 Ga. (0.109" thick) galvanized strap with standard 6" x ½" band bolt and nut.

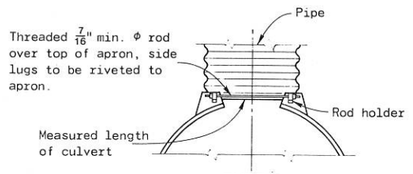


Alternate for Type 1 Connection
END SECTION CONNECTOR STRAP



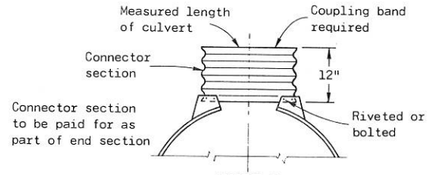
TYPE 1

For 12" thru 24" only (Circular pipe)



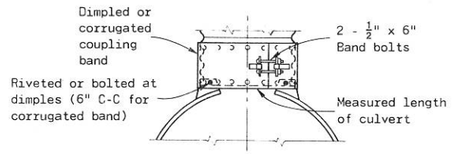
TYPE 2

For 30" & 36" only (Circular pipe)
For 17"x13" thru 57"x38" only (Pipe arch)



TYPE 3

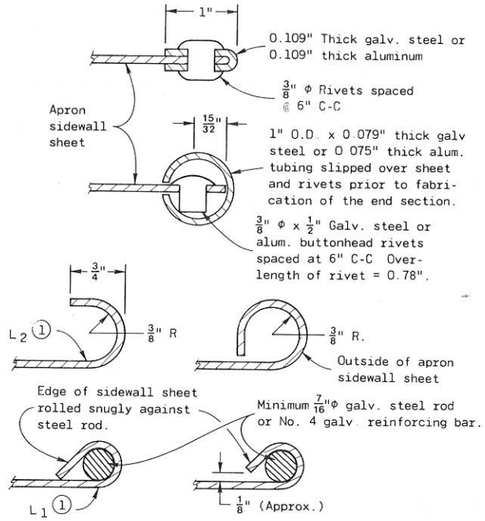
For 42" thru 84" only (Circular pipe)
For 64"x43" & 71"x47" (Pipe arch)



TYPE 5

Alternate for:
All sizes corrugated circular pipe & pipe arches

NOTE: Dimpled band fits over outside of endwall, and corrugated band fits inside endwall. Dimpled band may be used with helically corrugated pipe.



SECTION A–A

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.

Variations of the dimensions and designs shown hereon will be permitted providing equivalent capacity and structural integrity are attained, and prior approval of the Engineer is obtained.

Concrete culvert endwalls may not be used with galvanized steel or aluminum culvert pipe or vice versa.

Galvanized steel or aluminum endwalls shall normally be installed on culvert pipe of the same metal. The use of galvanized steel endwalls on aluminum pipes is permitted, provided the two metals at the joint interface are kept separated by a suitable insulating material approximately 1/16" thick or greater. Such material would be an asphalt impregnated fabric, a sheet plastic, a rubber gasket or other non-degradable material of substantial strength.

When two or more pipe arches with apron endwalls are to be laid adjacent to each other, they shall be separated by the following amount:

PIPES: Total width of apron endwall less the diameter of pipe plus 6 inches.

PIPE ARCHES: Total width of apron endwall less the span dimension of the pipe arch plus 6 inches.

(1) A combination of steel rod rolled into edge sidewall (L_1), and 180° roll on edge of sidewall (L_2), is permitted for metal apron endwalls up to 60" diameter for circular pipe, and 77" x 52" for pipe arches.

PIPE DIA. (In.)	APPROX. WEIGHT PER SECTION	DIMENSIONS (Inches)							APPROX. SLOPE
		T	A	B	C	D	E	G	
12	530	2	4	24	48 7/8	72 7/8	24	2	3 to 1
15	740	2 1/4	6	27	46	73	30	2 1/4	↑
18	990	2 1/2	9	27	46	73	36	2 1/2	↑
21	1,280	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	↑
24	1,520	3	9 1/2	43 1/2	30	73 1/2	48	3	↑
27	1,930	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	↑
30	2,190	3 1/2	12	54	19 3/4	73 3/4	60	3 1/2	↑
36	4,100	4	15	63	34 3/4	97 3/4	72	4	↑
42	5,380	4 1/2	21	63	35	98	78	4 1/2	↑
48	6,550	5	24	72	26	98	84	5	3 to 1
54	8,040	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5	2 2/5 to 1
60	8,730	6	* ** 30 - 35	60	39	99	96	5	2 to 1
66	10,630	6 1/2	* ** 24 - 30	* ** 72 - 78	* ** 21 - 27	↑	102	5 1/2	↑
72	12,520	7	* ** 24 - 36	78	21	↑	108	6	↑
78	14,430	7 1/2	* ** 24 - 36	78	21	99	114	6 1/2	2 to 1
84	18,160	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1

* Minimum ** Maximum

REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (In.)	MIN. THICKNESS (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE
	STEEL	ALUM.	A ±1"	B MAX.	H ±1"	L ±1 1/2"	L_1 (1)	L_2 (1)	W ±2"	
12	0.064	0.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1
15	↑	↑	7	8	↑	26	14	21 3/4	30	↑
18	↑	↑	8	10	↑	31	15	28 1/4	36	↑
21	↑	0.060	9	12	↑	36	18	29 5/8	42	↑
24	0.064	0.075	10	13	6	41	18	37 1/4	48	↑
30	0.079	0.075	12	16	8	51	18	52 1/4	60	↑
36	0.079	0.105	14	19	9	60	24	59 3/4	72	↑
42	0.109	0.105	16	22	11	69	24	76 5/8	84	2 1/2 to 1
48	↑	0.135	18	27	12	78	24	81	90	2 1/4 to 1
54	↑	0.135	↑	30	↑	84	30	85 1/2	102	2 to 1
60	↑	0.164	↑	33	↑	87	–	–	114	1 3/4 to 1
66	↑	↑	↑	36	↑	87	–	–	120	1 1/2 to 1
72	↑	↑	↑	39	↑	87	–	–	126	1 1/3 to 1
78	↑	↑	↑	42	↑	87	–	–	132	1 1/4 to 1
84	0.109	0.164	18	45	12	87	–	–	138	1 1/4 to 1

NOTE: All splices to be lap riveted or bolted.

METAL APRON ENDWALLS
FOR CIRCULAR PIPE

PIPE-ARCH DIMENSIONS (Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE
SPAN	RISE	STEEL	ALUM.	A ±1"	B MAX.	H ±1"	L ±1 1/2"	L_1 (1)	L_2 (1)	W ±2"	
17	13	0 064	0 060	7	9	6	19	14	16	30	2 1/2 to 1
21	15	↑	0.060	7	10	↑	23	14	19 3/8	36	↑
24	18	↑	0.060	8	12	↑	28	18	21 3/4	42	↑
28	20	0.064	0.075	9	14	↑	32	18	27 1/2	48	↑
35	24	0.079	0.075	10	16	6	39	18	37 5/8	60	↑
42	29	0 079	0.105	12	18	8	46	24	45 3/8	75	↑
49	33	0.109	0.105	13	21	9	53	↑	54 3/4	85	↑
57	38	↑	0 135	18	26	12	63	↑	68	90	2 1/2 to 1
64	43	↑	0 135	↑	30	↑	70	24	72 3/4	102	2 1/4 to 1
71	47	↑	0 164	↑	33	↑	77	30	82 1/4	114	2 1/4 to 1
77	52	↑	0.164	↑	36	↑	77	–	–	126	2 to 1
83	57	0 109	0.164	18	39	12	77	–	–	138	2 to 1

NOTE: All splices to be lap riveted or bolted.

METAL APRON ENDWALLS
FOR PIPE ARCHES

CONNECTION DETAILS

CIRCULAR PIPE

For circumferentially corrugated pipe use Endwall Connection Details 1, 2, 3 or 5 as applicable.

For helically corrugated pipe use Endwall Connection Details 1, 2 or 5.

For helically corrugated pipes with two circumferential corrugations at each end use Endwall Connection Details 1, 2 or 3.

PIPE ARCH

Use Endwall Connection Details 2, 3 or 5 as applicable.

APRON ENDWALLS FOR
CULVERT PIPE AND PIPE ARCHES

State of Wisconsin
Department of Transportation

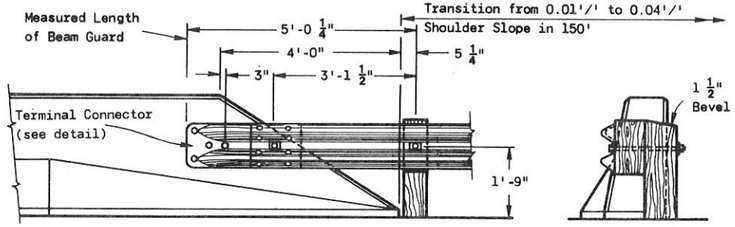
APPROVED 2-15-82
DATE

CHIEF DESIGN ENGINEER

FHWA

S.D.D. 8 F 1-9

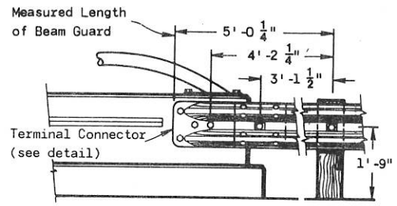
S.D.D. 8 F 1-9



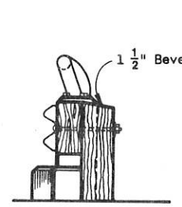
FRONT VIEW

END VIEW

SLOPED FACE PARAPET

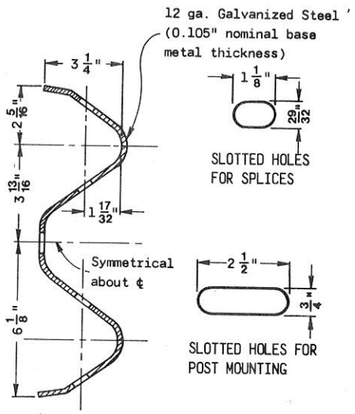


FRONT VIEW



END VIEW

VERTICAL FACE PARAPET



SECTION THRU RAIL ELEMENT

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 type of anchorage and the exact location of the beginning and end of each beam guard installation shall be as shown on the plans or as directed by the Engineer.

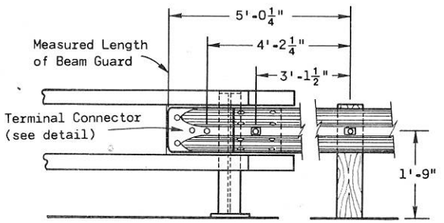
Shoulder widening to accommodate the anchored end of the beam guard shall be accomplished at a rate of widening not to exceed 5 to 1.

Standard Anchorages - Upon approval of the Engineer, the 6 foot offset may be reduced to nothing 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.

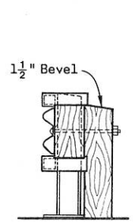
The "Post Footing Details at Piers" shall be used when beam guard posts are over structure footings and less than 3 feet - 6 inches of earth is provided over the top of the footing.

(1) The minimum clearance from the front face of beam guard to obstacle shall be 4 feet unless otherwise shown on contract plans. When clearance is less than 4 feet, post spacing shall be reduced to 3 feet - 1 1/2" C-C.

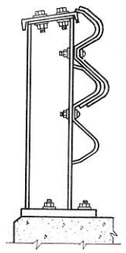
(2) This section shall include at least one 12'-6" Rail Element and a Terminal Connector when required for structure mounting.



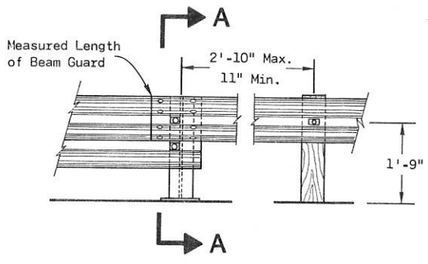
FRONT VIEW



END VIEW



SECTION A-A

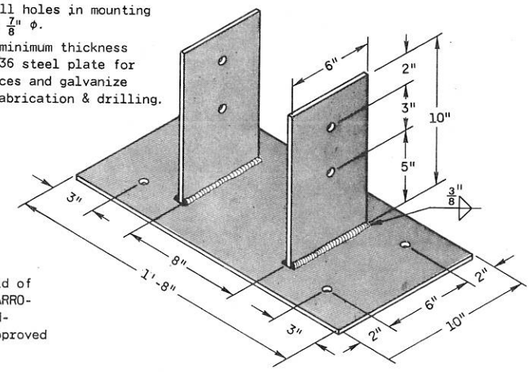


FRONT VIEW

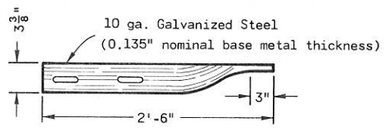
RAILING TYPE "F"

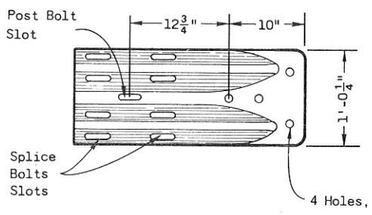
RAILING TYPE "W"

NOTE:
Drill all holes in mounting bracket 7/8" ϕ.
Use 3/8" minimum thickness ASTM A 36 steel plate for all pieces and galvanize after fabrication & drilling.

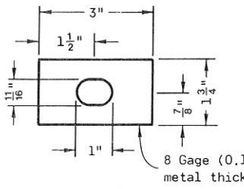


POST MOUNTING BRACKET





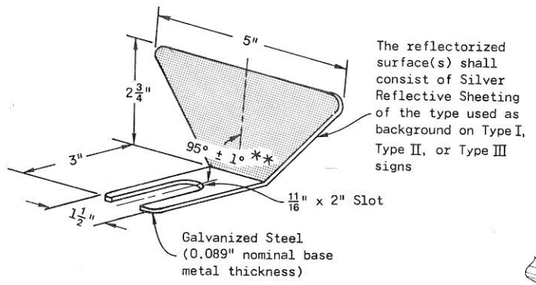
TERMINAL CONNECTOR



RECTANGULAR PLATE WASHER

(Shall be omitted at selected locations when Type 1 Anchorages are used. See TANGENT OFFSETS, Sheet 5c)

STRUCTURE MOUNTING DETAILS



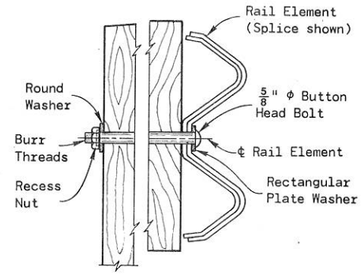
REFLECTOR SPACING

	Beam Guard Length	Reflector Spacing	No. Surfaces Reflectorized	Min. No. Reflectors
One Way Traffic	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
Two Way Traffic	< 200' *	25' C-C	1 *	6
	> 200' *	50' C-C	1 *	
Two Way Traffic	< 200'	50' C-C	2 **	3
	> 200'	100' C-C	2 **	

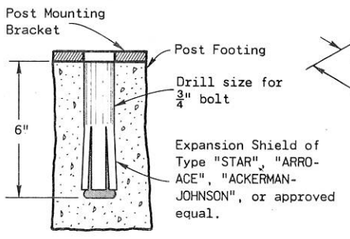
* Every other reflector reversed for 2-way visibility. Contractor may furnish two-sided reflectors in lieu of one-sided reflectors.

** Angle of bend to be 90° ± 1° for two-sided reflectors.

REFLECTOR DETAIL

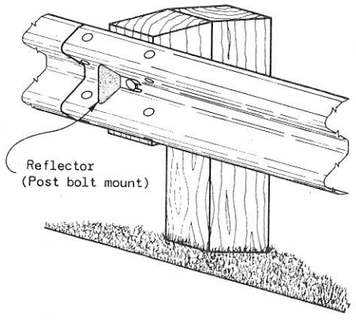


BUTTON HEAD BOLT DETAIL

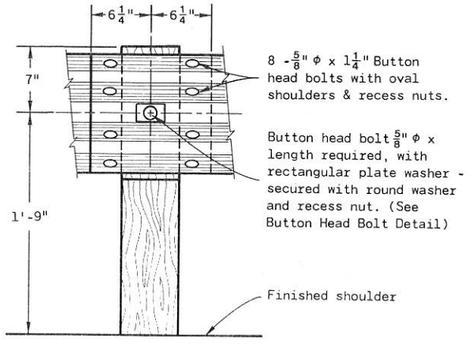


EXPANSION SHIELD DETAIL

POST FOOTING DETAIL AT PIERS



TYPICAL INSTALLATION



RAIL ELEMENT SPLICING AND POST MOUNTING DETAIL

NOTE:
THIS STANDARD DETAIL DRAWING HAS THREE SHEETS. SHEET 5c IS REQUIRED ONLY WHEN TYPE 1 OR TYPE 2 ANCHORAGES ARE SPECIFIED.

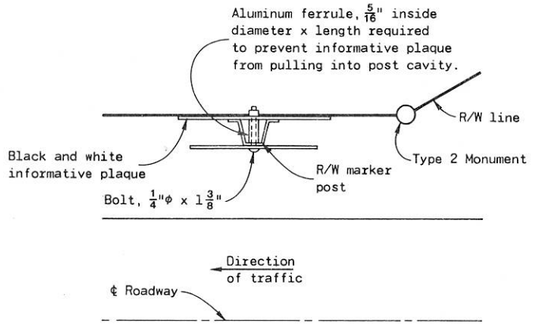
CLASS "A"
STEEL PLATE BEAM GUARD

State of Wisconsin
Department of Transportation

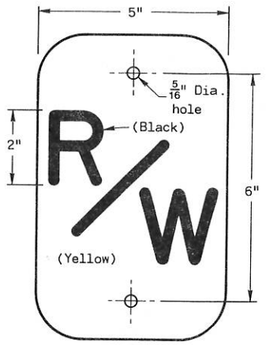
APPROVED 11-13-81
DATE
CHIEF DESIGN ENGINEER
FHWA

S.D.D. 14 B 2-5a

S.D.D. 14 B 2-5a

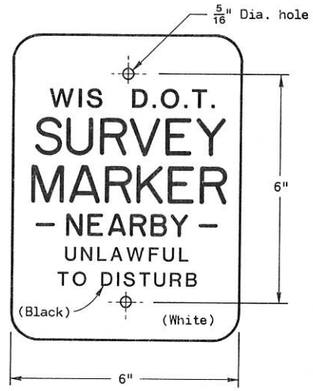


PLAN VIEW



RIGHT OF WAY MARKER

The right of way marker and informative plaque, when required, will be furnished by either the Wisconsin Department of Transportation or the Local Government.



INFORMATIVE PLAQUE

GENERAL NOTES

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

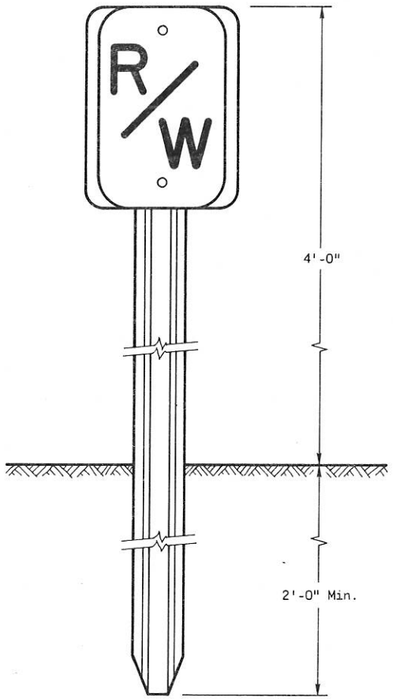
The contractor may install either Steel or Wood Marker Posts unless otherwise specified in the contract. Only one type of post shall be used throughout the project.

Right Of Way Marker or Informative Plaque is not required on Wood Marker Posts.

A Marker Post For Right Of Way shall be placed adjacent to each Type 2 Monument to serve as a guard post, and at other locations as shown on the plans or as directed by the Engineer.

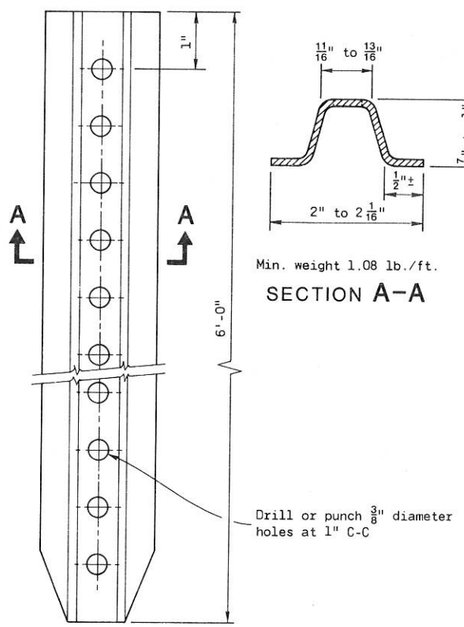
Steel Posts shall be made from high strength hot rolled steel conforming to ASTM designation A 499 or equal.

Steel Posts shall be coated with a Federal Highway yellow enamel.



FRONT VIEW

STEEL MARKER POST

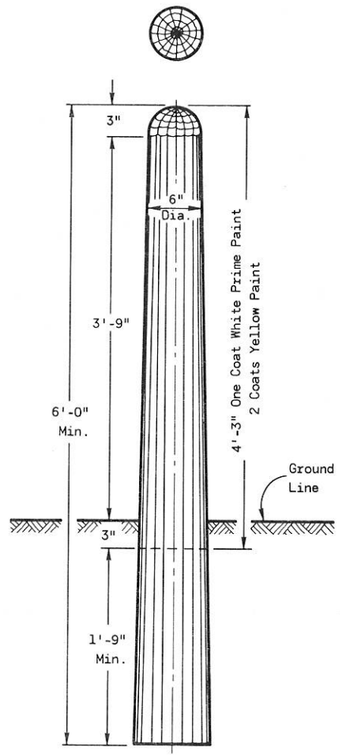


Min. weight 1.08 lb./ft.

SECTION A–A

FRONT VIEW

STEEL MARKER POST



ELEVATION

WOOD MARKER POST

MARKER POSTS
FOR RIGHT OF WAY

State of Wisconsin
Department of Transportation

APPROVED 4-15-82
DATE

CHIEF DESIGN ENGINEER

FHWA

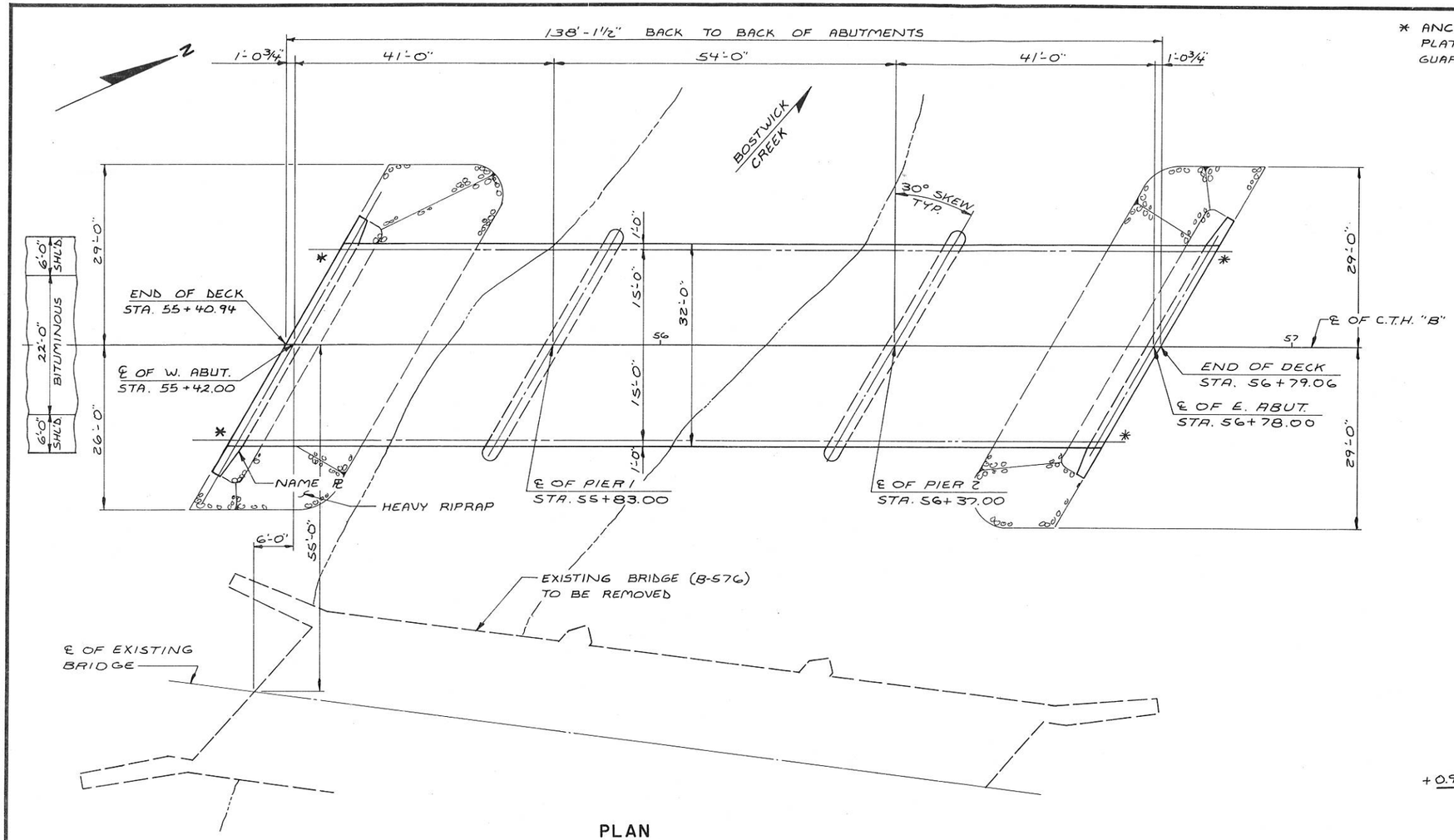
S.D.D. 15 A 1-4

S.D.D. 15 A 1-4

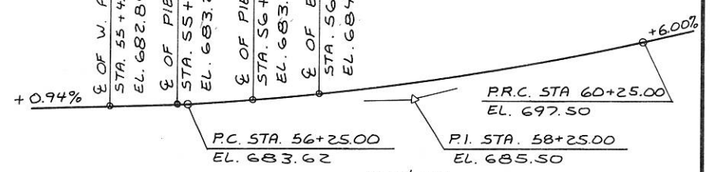
STATE PROJECT NUMBER	SHEET NO.
5075-2-71	8

* ANCHOR ASSEMBLY FOR PLATE BEAM TYPE GUARDRAIL.

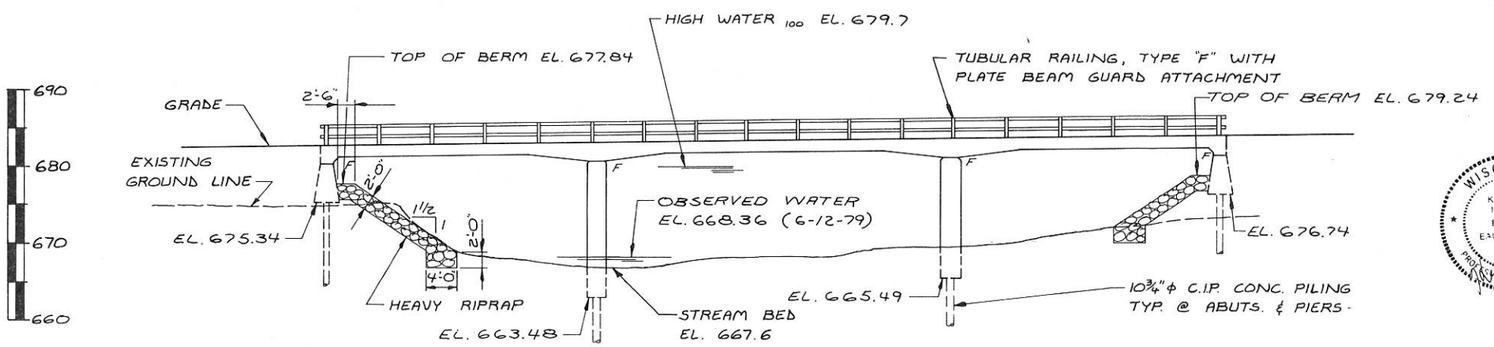
LIST OF DRAWINGS



PLAN



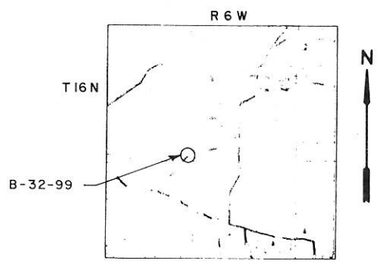
PROFILE GRADE LINE – C.T.H. "B"



ELEVATION

(TAKEN NORMAL TO ℄ CREEK)

WISCONSIN KEVIN D. HAGEN E-17691 EAU CLAIRE, WIS. PROFESSIONAL ENGINEER



LAYOUT

No.	Date	Revision	By

PLANS PREPARED BY
OWEN AYRES & ASSOCIATES
ARCHITECTS / ENGINEERS
EAU CLAIRE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-32-99

C.T.H. "B" OVER BOSTWICK CREEK

County LA CROSSE		Town ~~City/Village~~ OF HAMILTON	
Design Spec. A.A.S.H.T.O. '77		Load HS-20	Const. Spec. 1981
Designed By D.H.W.	Design Checked D.H.P.	Drawn By M.T.M-G.L.D.	Plans Checked D.H.W.

Approved Stanley W. Woods, Chief Bridge Engineer — Date 7-1-82

GENERAL PLAN

SHEET 1 OF 9

X66018

STATE PROJECT NUMBER	SHEET NO.
5075-2-71	8.2

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

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

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

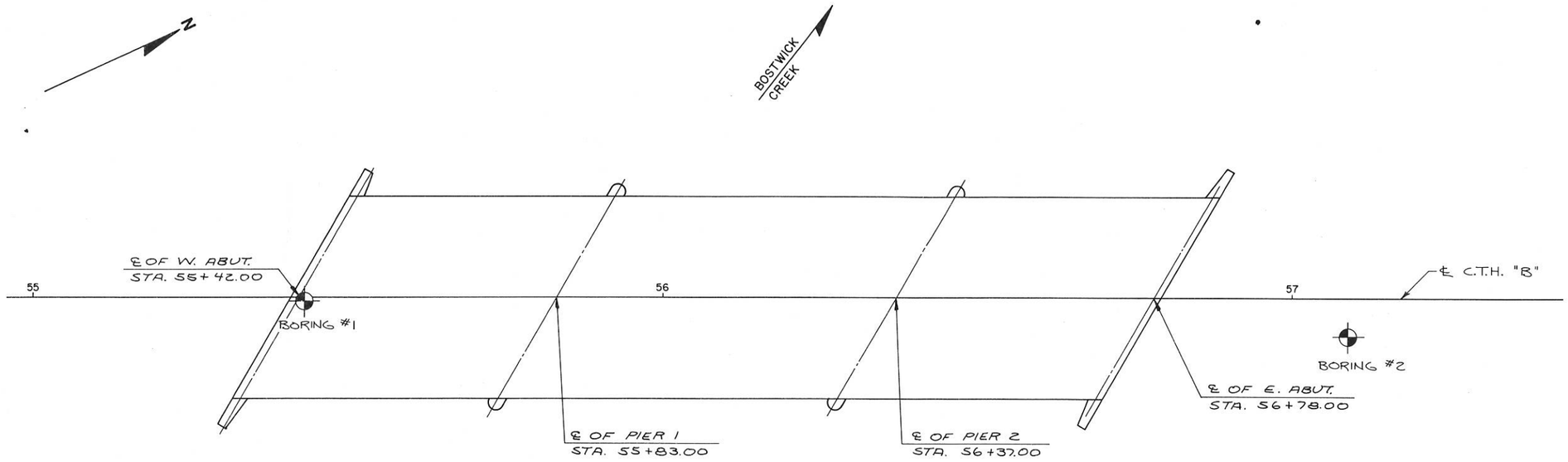
LEGEND OF BORING

Boring No.
Elev.
Sta.
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

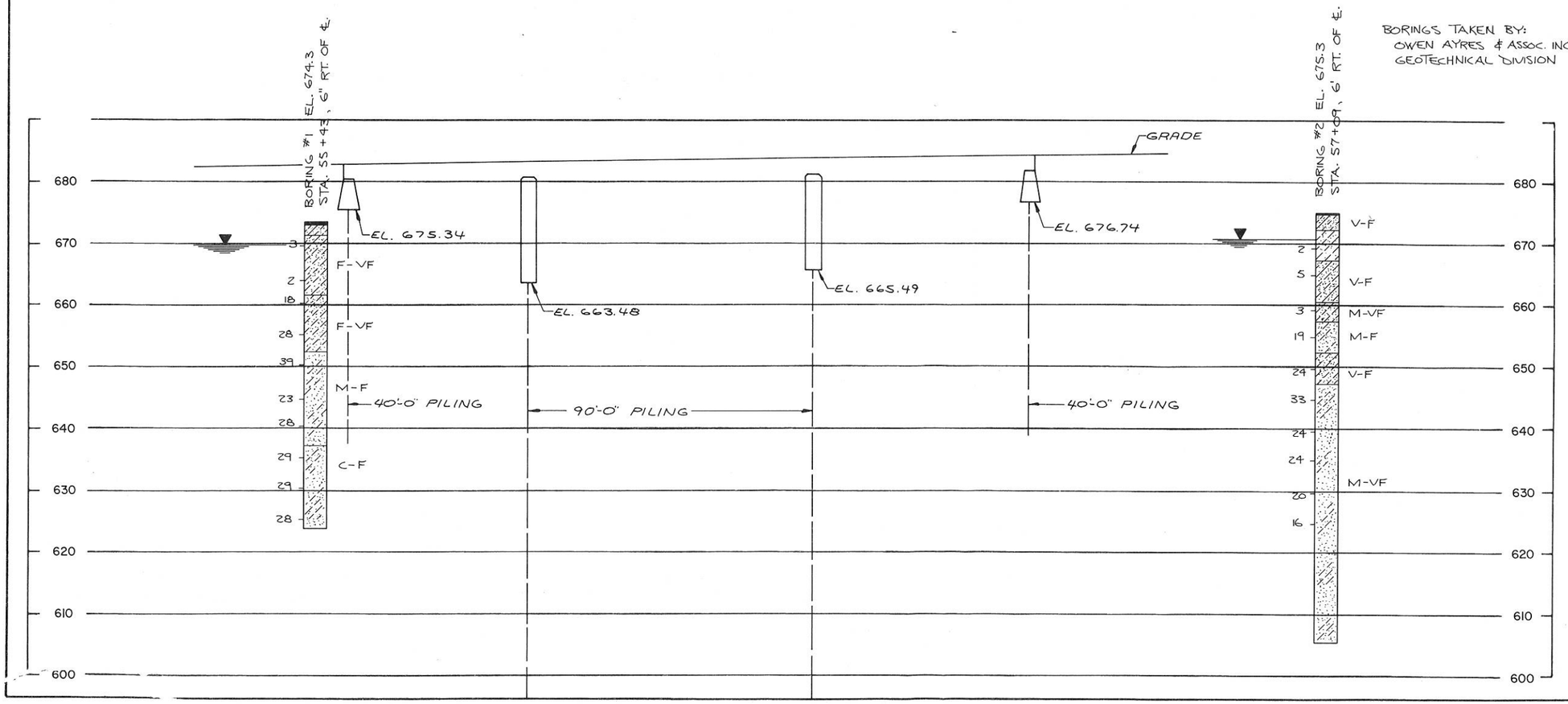
Unless otherwise specified, the blows per foot at the locations indicated are based on driving a 2" O. D. x 1.4" I. D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the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



BORINGS TAKEN BY:
OWEN AYRES & ASSOC. INC.
GEOTECHNICAL DIVISION



No.	Date.	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-32-99

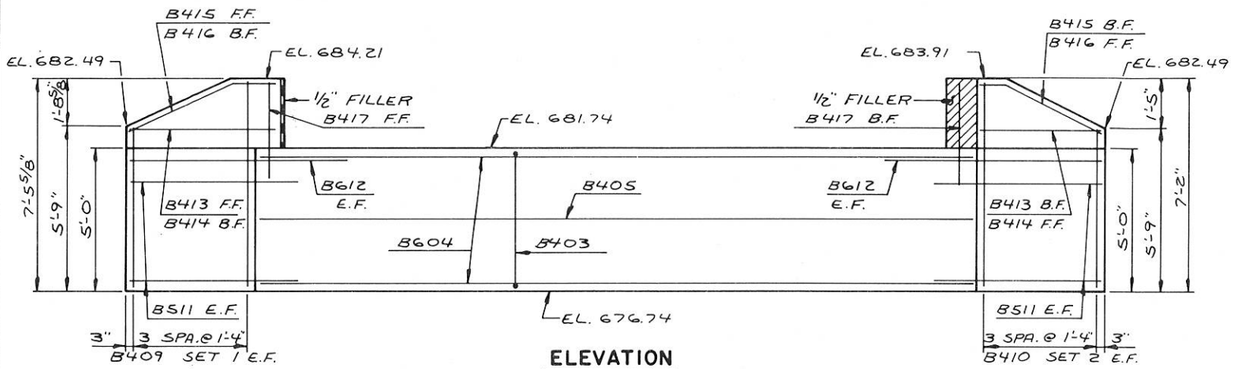
Const. Spec.	Drawn By	Plans Checked
1981	J.E.P. – G.L.D.	D.H.W.

SUBSURFACE EXPLORATION

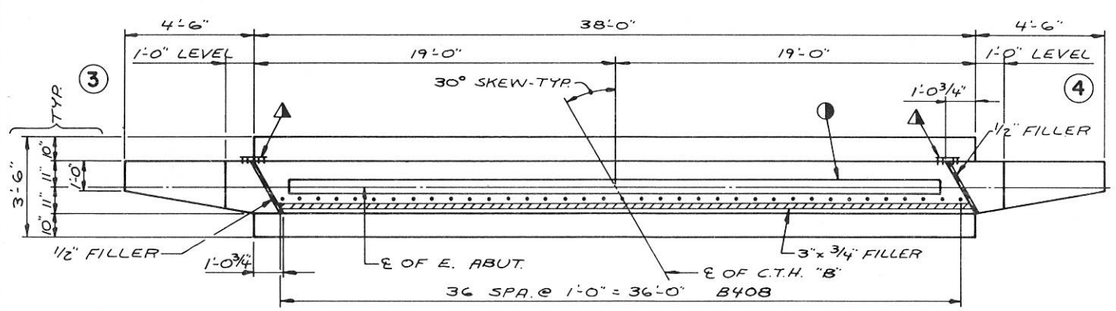
SHEET 3 OF 9

X66020

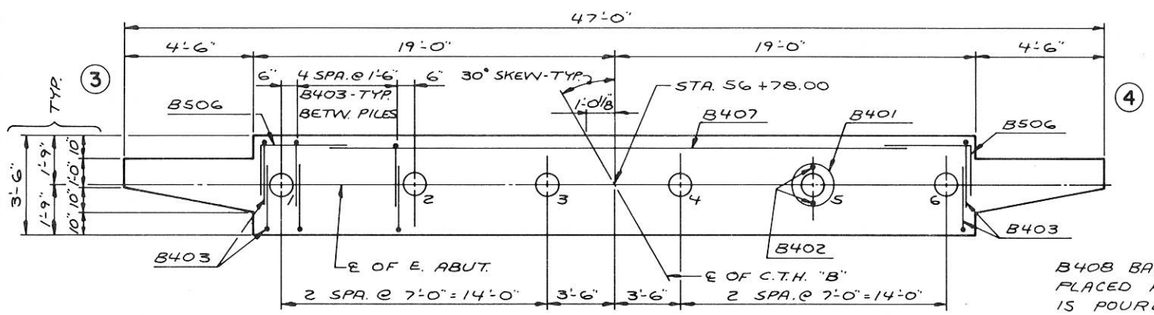
NOTE: SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE.)



ELEVATION



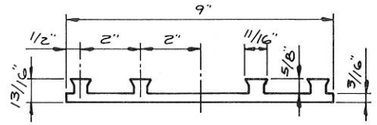
PLAN



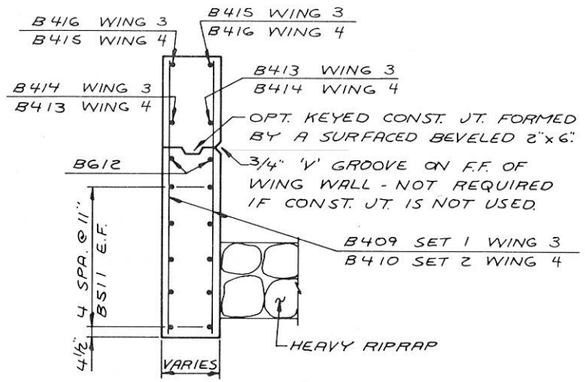
PILE LAYOUT

◑ KEYED CONST. JT. FORMED BY A SURFACED BEVELED 2"x6".

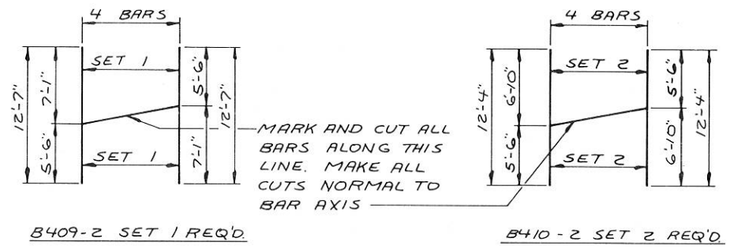
◭ P.C.W. TO EXTEND FROM BRIDGE SEAT TO TOP OF WING. VULCANIZE OR EPOXY AT JUNCTION WITH HORIZ. P.C.W.



POLYVINYL CHLORIDE WATERSTOP DETAIL
(P.C.W.)



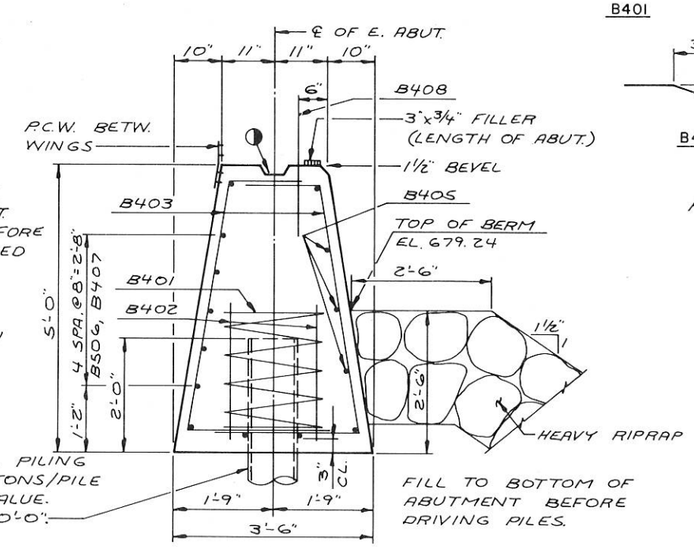
TYP. SECTION THRU WINGS



CUTTING DIAGRAMS

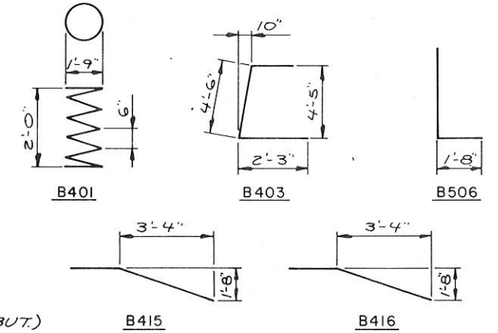
B408 BARS MAY BE PLACED AFTER ABUT. IS POURED BUT BEFORE CONC HAS SET. IMBED BAR 1'-0".

ALL HORIZ. BARS IN BODY ARE B604 UNLESS SHOWN OR NOTED OTHERWISE.



FILL TO BOTTOM OF ABUTMENT BEFORE DRIVING PILES.

SECTION THRU BODY



FOR PILE SPLICE DETAIL, SEE SHEET 6.

STATE PROJECT NUMBER	SHEET NO.
5075-2-71	8.4

BILL OF BARS

BAR NO	NO. REQ'D	LENGTH	BENT	CUT DIAG.	1,330 # LOCATION
B401	6	28-0	X		BODY @ PILES
B402	12	2-3			" " "
B403	54	8-1	X		" VERT.
B604	6	37-8			" HORIZ.
B405	3	37-8			" "
B506	10	6-1	X		" " @ WINGS
B407	5	32-6			" "
B408	37	2-0			" DOWELS
B409	4	12-7		X	WING 3 VERT. E.F.
B410	4	12-4		X	" 4 " "
B511	20	5-10			" 3&4 HORIZ. E.F.
B612	4	7-7			" 3&4 " "
B413	2	4-11			" 3 HORIZ. F.F, WING 4 HORIZ. B.F.
B414	2	4-2			" 3 " B.F., " 4 " F.F.
B415	2	5-3	X		" 3 DIAG. F.F., " 4 DIAG. B.F.
B416	2	4-6	X		" 3 " B.F., " 4 " F.F.
B417	2	6-7			" 3 VERT. F.F., " 4 VERT. B.F.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.
B.F. DENOTES BACK FACE.
F.F. DENOTES FRONT FACE.
E.F. DENOTES EACH FACE.

No.	Date	Revision	By

PLANS PREPARED BY
OWEN AYRES & ASSOCIATES
CONSULTING ENGINEERS
EAU CLAIRE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-32-99

Const. Spec.	Drawn By	Plans Checked
1981	G. L. D.	D. H. W.

EAST ABUTMENT

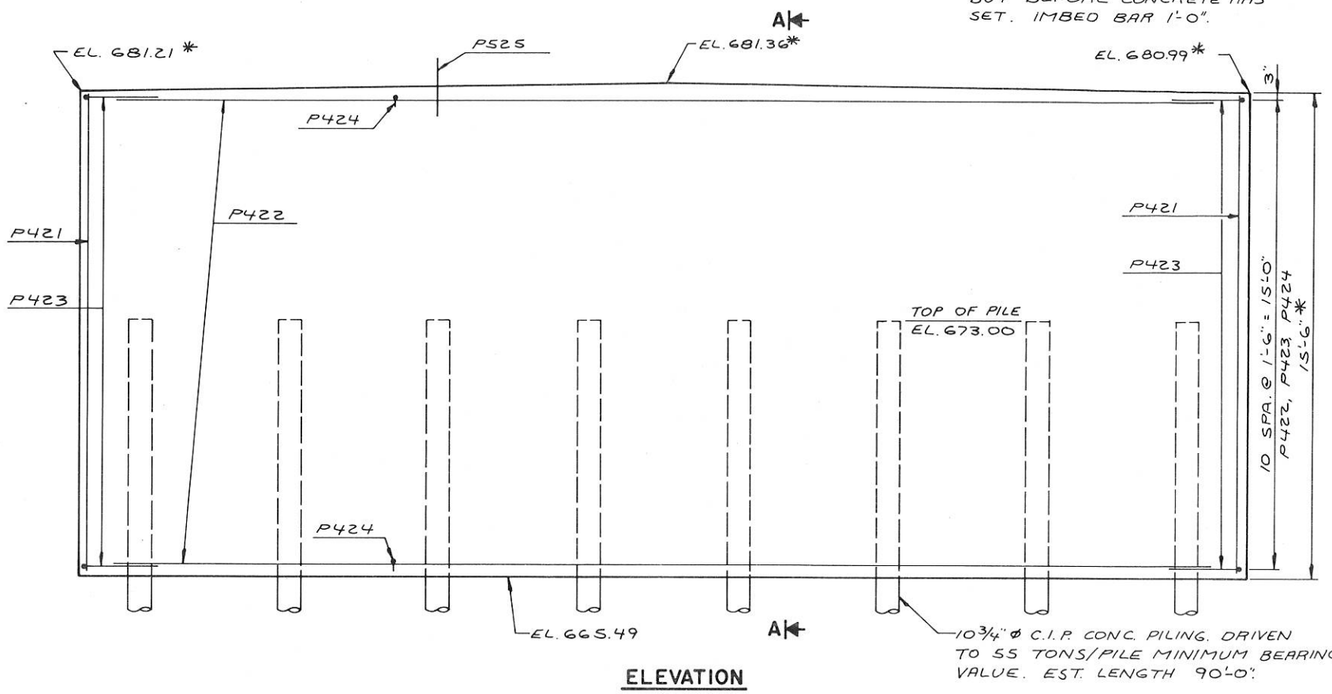
SHEET 5 OF 9

X66022

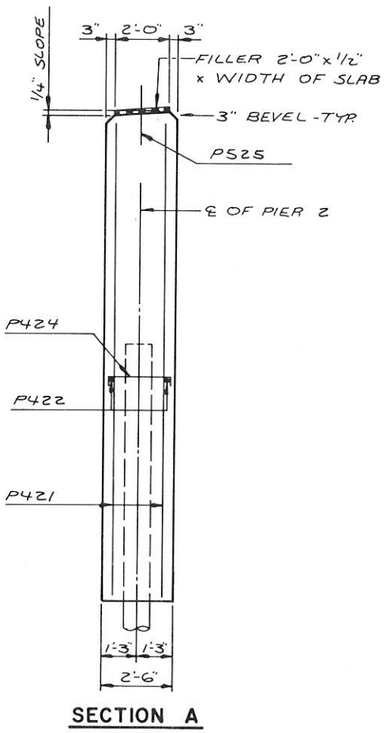
STATE PROJECT NUMBER	SHEET NO.
5075-2-71	8.6

* ELEVATIONS AND DIMENSIONS TAKEN ALONG ℄ OF PIER

PS25 BARS MAY BE PLACED AFTER COLUMN IS POURED BUT BEFORE CONCRETE HAS SET. IMBED BAR 1'-0".



ELEVATION

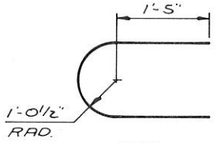


SECTION A

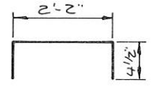
BILL OF BARS

BAR NO	NO. REQ'D.	LENGTH	BENT	1,500 # LOCATION
P421	58	15-2		COLUMN - VERT.
P422	22	38-6		" HORIZ.
P423	22	6-1	X	" "
P424	99	2-9	X	" TIES
PS25	37	2-0		" DOWELS

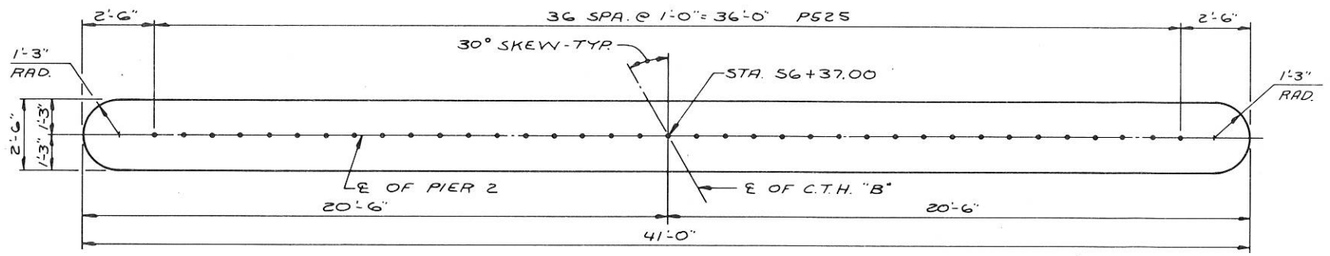
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



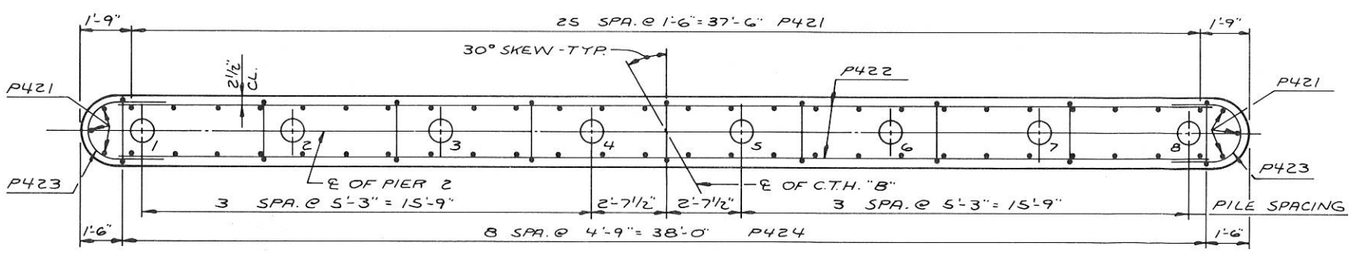
P423



P424



PLAN



PILE LAYOUT

FOR PILE SPLICE DETAIL SEE SHEET 6.

No.	Date	Revision	By

PLANS PREPARED BY
OWEN AYRES & ASSOCIATES
CONSULTING ENGINEERS
EAU CLAIRE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-32-99

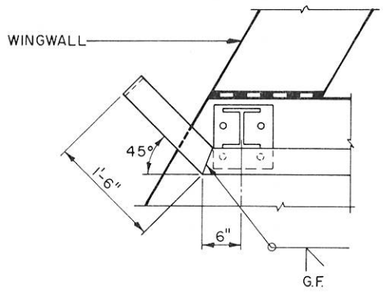
Const. Spec.	Drawn By	Plans Checked
1981	G.L.D.	D.H.W.

PIER 2

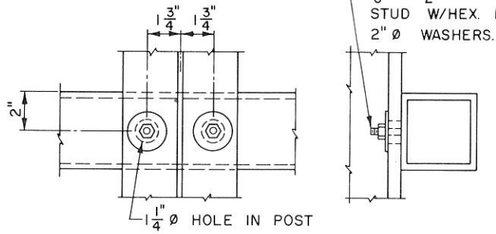
SHEET 7 OF 9

X66024

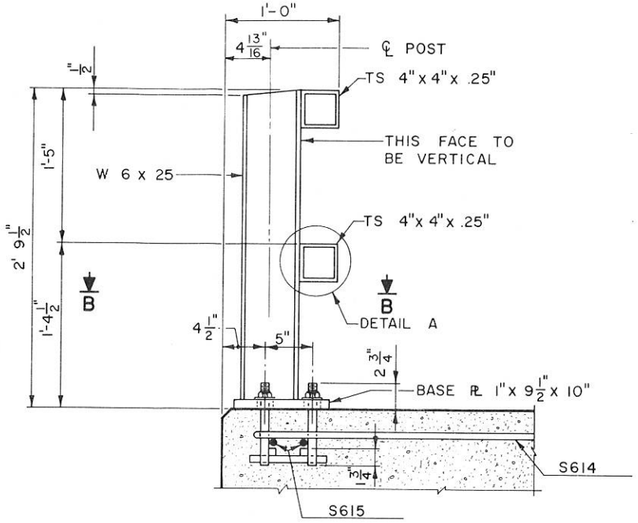
STATE PROJECT NUMBER	SHEET NO.
5075-2-71	8.8



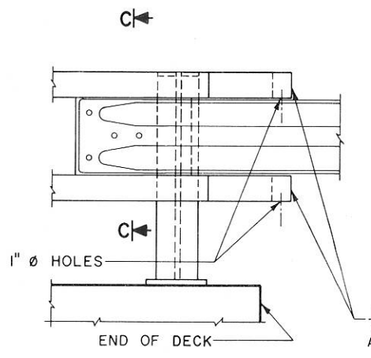
END DETAIL FOR WINGS

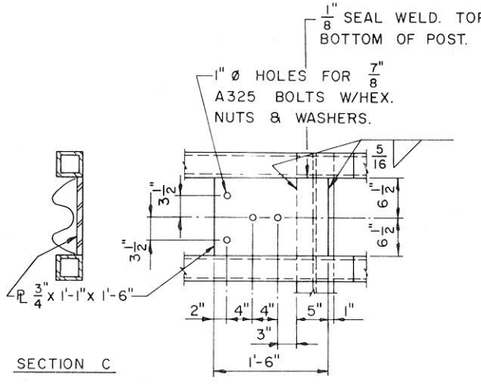


DETAIL A



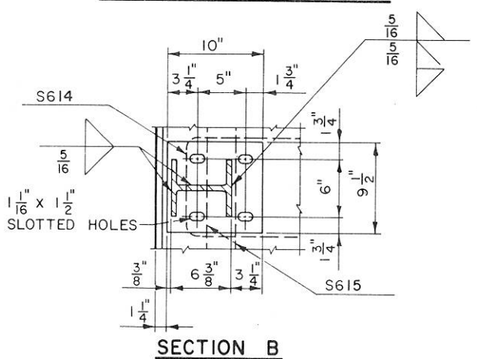
SECTION THRU RAILING



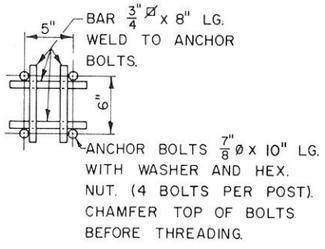


SECTION C

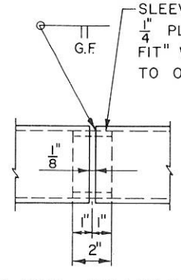
DETAIL AT END POST
(BEAM GUARD RAIL ATTACHMENT)



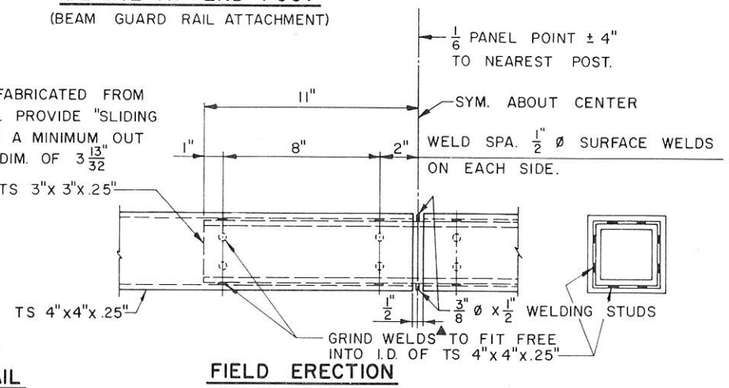
SECTION B



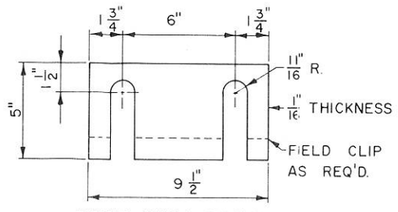
ANCHOR BOLT DETAIL



SHOP RAIL SPLICE DETAIL
(LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS)



FIELD ERECTION JOINT DETAIL



POST SHIM DETAIL
(4 PER POST)

GENERAL NOTES

1. BID ITEM SHALL BE "TUBULAR RAILING, TYPE F".
2. POST BASE PLATE SHALL BE FLAT WITH ALL SURFACES SMOOTH & FREE FROM WARP & ALL EDGES SMOOTH, STRAIGHT & VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.
3. RAILING SHALL BE 4" x 4" x .25" STRUCTURAL TUBING CONFORMING TO A.S.T.M. DESIGNATION A36.
4. ANCHOR BOLTS SHALL BE 7/8" Ø NOMINAL CONFORMING TO A.S.T.M. A449 WITH 3" THREAD AND HIGH STRENGTH NUTS AND WASHERS.
5. CAULK EXPOSED OPENINGS BETWEEN SHIMS.
6. POST, BASE PLATES & 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. STEEL SHIMS SHALL BE USED UNDER POSTS WHERE REQUIRED FOR ALIGNMENT.
12. RAILING SHALL BE FABRICATED IN 2 AND 3 PANEL LENGTHS.

▲ MINIMUM 5/8" FLAT SURFACE DIAMETER PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.

No.	Date	Revision	By

PLANS PREPARED BY
OWEN AYRES & ASSOCIATES
ARCHITECTS / ENGINEERS
EAU CLAIRE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

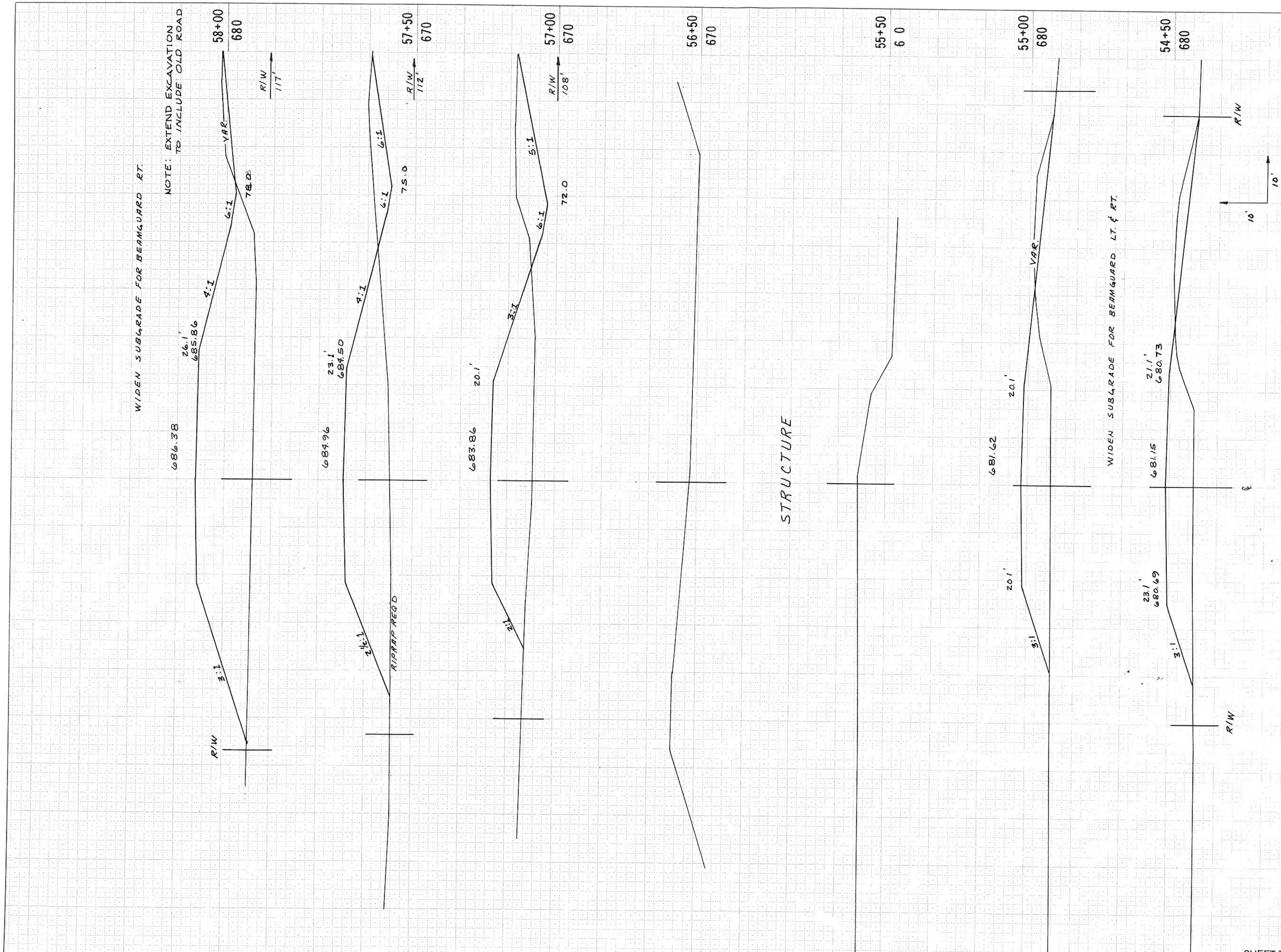
STRUCTURE B-32-99

Const. Spec	Drawn By	Plans Checked
1981	G.L.D.	D.H.W.

TUBULAR RAILING TYPE "F"

SHEET 9 OF 9

X66026



STATE PROJECT NUMBER	SHEET NUMBER
5075-2-71	9.1

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.			FILL
54+00					
	50	85			579
54+50					
	50	102			634
55+00					
	41	38			755
55+41					
		STRUCTURE			
56+79					
	21	105			404
57+00					
	50	236			1083
57+50					
	50	120			1528
58+00					
SHEET TOTAL		686			4983

STATE PROJECT NUMBER	SHEET NUMBER
5075-2-71	9.3

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
64+00					
	100	93			83
65+00					
	50	46			
65+50					
SHEET TOTAL		139			83