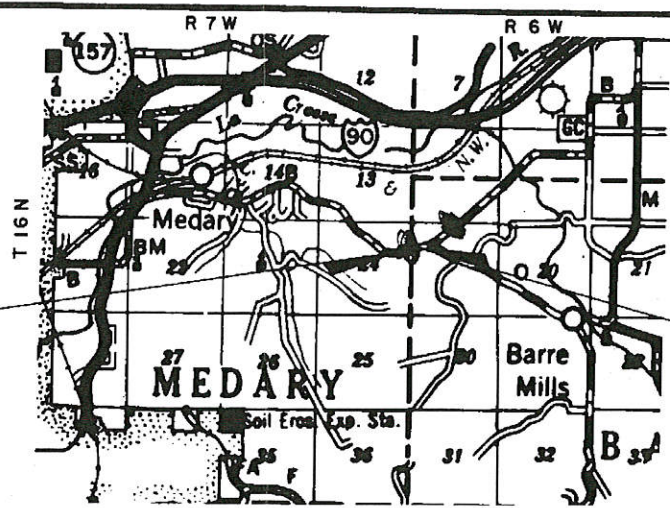


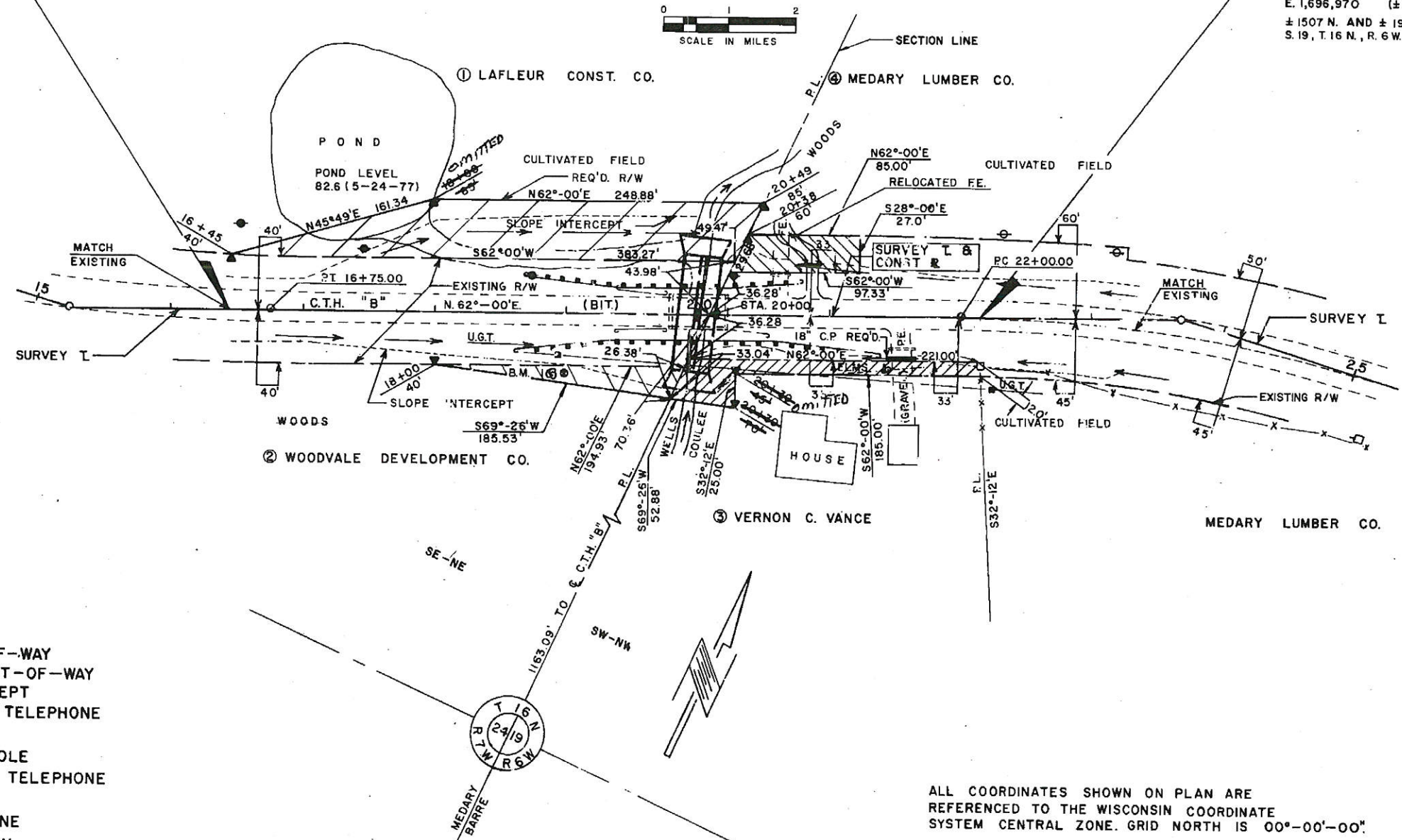
PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	ACRES REQUIRED	TOTAL REMAINING ACRES	OPERATIONS PROJECT I.D.
1		LAFLEUR CONST. CO.	FEE	0.326	72.66	5075-1-21
2		WOODVALE DEVELOPMENT CO.	FEE	0.054		5075-1-21
3		VERNON C. VANCE	FEE	0.086	2.86	5075-1-21
4		MEDARY LUMBER CO.	FEE	0.056		5075-1-21



REVISION DATE	R/W PROJECT NUMBER 5075-1-21	SHEET NUMBER
	FEDERAL PROJECT NUMBER	
PLAT OF RIGHT OF WAY REQUIRED FOR U.S.H. 16 - C.T.H. "M" C.T.H. "B"		
LA CROSSE COUNTY, WISCONSIN		DATE
SCALE 0 25 50 100 Ft.		
CONSTRUCTION PROJECT NUMBER 5075-1-71		4

BEGIN RELOCATION ORDER
PROJECT I.D. 5075-1-21
STATION 16+45
N. 676,720' (± 200')
E. 1,696,470' (± 200')
± 660' N. AND ± 320' W. OF E. 1/4 CORNER
S. 24, T. 16 N., R. 7 W.

END RELOCATION ORDER
PROJECT I.D. 5075-1-21
STATION 22+15
N. 677,000' (± 200')
E. 1,696,970' (± 200')
± 1507' N. AND ± 190' E. OF W. 1/4 CORNER
S. 19, T. 16 N., R. 6 W.



LEGEND

- NEW RIGHT-OF-WAY
- - - - EXISTING RIGHT-OF-WAY
- . - . SLOPE INTERCEPT
- UNDERGROUND TELEPHONE
- POWER POLE
- TELEPHONE POLE
- U.G.T. UNDERGROUND TELEPHONE
- T TRANSIT LINE
- R REFERENCE LINE
- R/W RIGHT-OF-WAY
- ▼ CHANGE IN R/W (MARKER POST)
- P.L. PROPERTY LINE

ALL COORDINATES SHOWN ON PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM CENTRAL ZONE. GRID NORTH IS 00°-00'-00".

BEARINGS SHOWN ARE TRUE BEARINGS
COORDINATES ARE
SCALED FROM U.S.G.S. TOPOGRAPHIC MAP,
LA CROSSE QUADRANGLE, FOR IDENTIFICATION
ONLY.

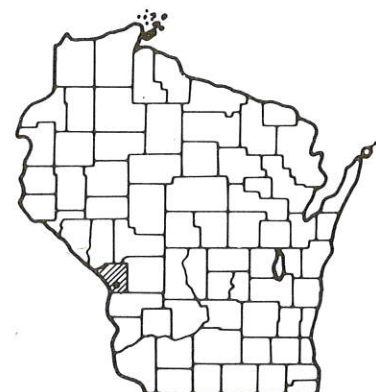
LA CROSSE CO. HIGHWAY DEPARTMENT
APPROVED *Harold G. Nelson* 3-7-78
COUNTY HIGHWAY COMMISSIONER DATE

13

Index of Sheets

Sheet No. 1	Title
Sheet No. 2	Typical Cross Sections
Sheet No. 3	Estimate of Quantities
Sheet No. 3	Miscellaneous Quantities
Sheet No. 4	Right of Way Plat
Sheet No. 5	Plan and Profile
Sheet No. 6 - 6.7	Standard Details
Sheet No. -	Structure Plans
Sheet No. -	Computer Earthwork Data
Sheet No. 8 - 8.1	Cross Sections

TOTAL SHEETS = 15



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

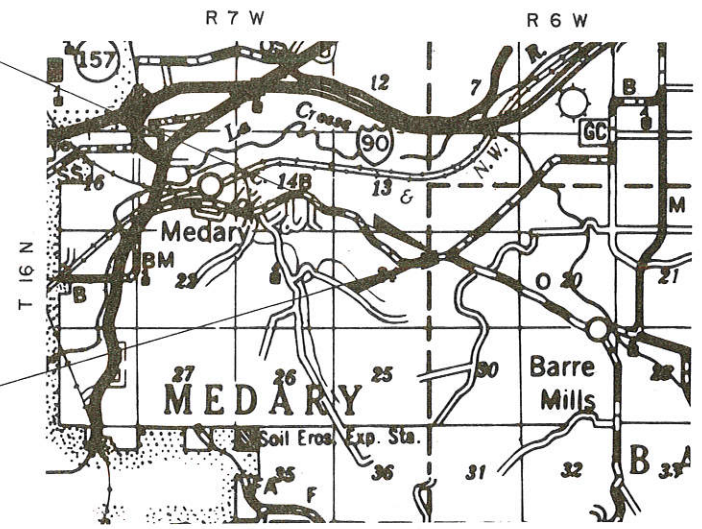
PLAN AND PROFILE OF PROPOSED
U.S.H. 16 — C.T.H. "M"
 C.T.H. "B"
 LA CROSSE COUNTY

STATE PROJECT NUMBER
5075-1-71

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

END PROJECT 5075-1-71
STATION 23 + 35.00
 N. 677,000' (± 200)*
 E. 1,697,100' (± 200)*
 APPROX. 1400' S. OF N.W. CORNER
 S. 19, T. 16 N., R. 6 W.

BEGIN PROJECT 5075-1-71
STATION 16 + 45.00
 N. 676,720' (± 200)*
 E. 1,696,470' (± 200)*
 APPROX. 1680' S. OF N.E. CORNER
 S. 24, T. 16 N., R. 7 W.

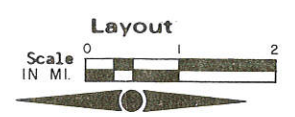


Design Designation

A.D.T.	1978	=	1370
A.D.T.	1998	=	2570
D.H.V.	15 %	=	386
D.		=	50-50
T.		=	6 % A.D.T.
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	— x (1798) x —	Right of Way Markers	— — — — —
Corporate or City Limits	— / / / / —	Reference Stake for Hubs Only	+51.7 -25.9
Property Line	— P.L. —	Marsh	— — — — —
Traveled Way or P.E.	— — — — —	Hedge	— — — — —
Railroads	— — — — —	Trees	— — — — —
Base or Survey Line	— — — — —	Ground Elevation	Datum Line 60
Caution Symbol (combustible fluids under pressure)	— — — — —	Grade Elevation	Datum Line 12



Total Net Length of Centerline = 5075-1-71 0.131 MI.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5075-1-71	RS 0701(9)	1

APPROVED FOR
 LA CROSSE COUNTY
 BY
 DATE 3-7-78
 COUNTY HIGHWAY COMMISSIONER

PLANS PREPARED
 BY
MEAD & HUNT, INC.
 CONSULTING ENGINEERS
 MADISON, WISCONSIN



STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

Surveyor _____ District Checker _____
 Designer _____ C. O. Checker J.R.T.
 District Supervisor _____ C. O. Monitor E.H.

Approved: _____
 Date 6-5-78
 District Engineer

Approved: _____
 Date 6-5-78
 Chief of Facilities Development

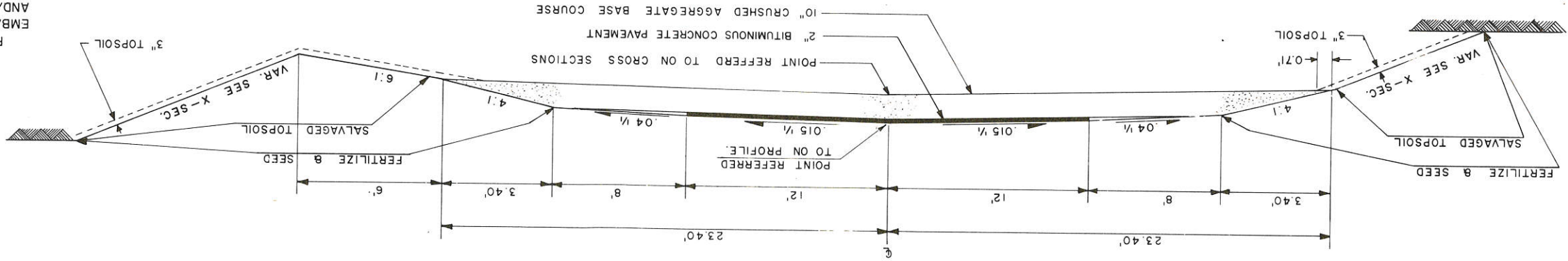
Approved: _____
 Date 6-6-78
 State Highway Engineer

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

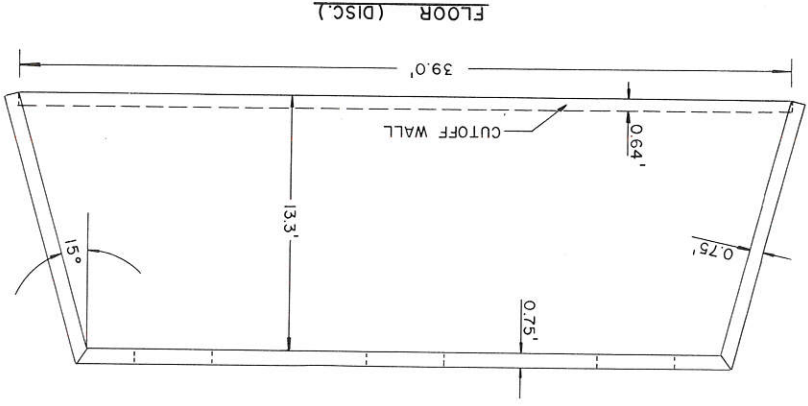
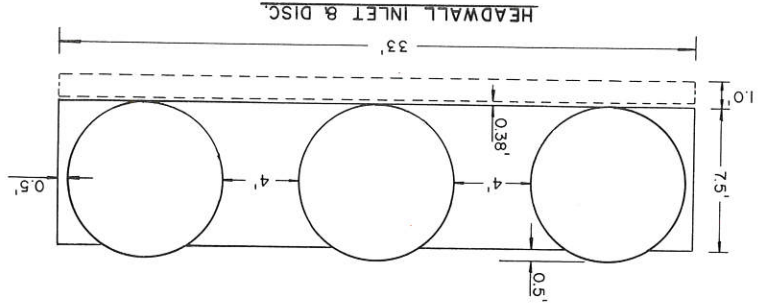
Approved: _____
 Date _____
 Division Engineer

* ALL COORDINATES SHOWN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEMS CENTRAL ZONE AND SCALED FROM U.S.G.S. TOPOGRAPHIC MAP, LA CROSSE QUADRANGLE FOR IDENTIFICATION ONLY.

SHEET NO.	STATE PROJECT NUMBER	5075-1-71	2
	TYPICAL CROSS SECTIONS	LA CROSSE CO.	
	C.T.H. "B"		

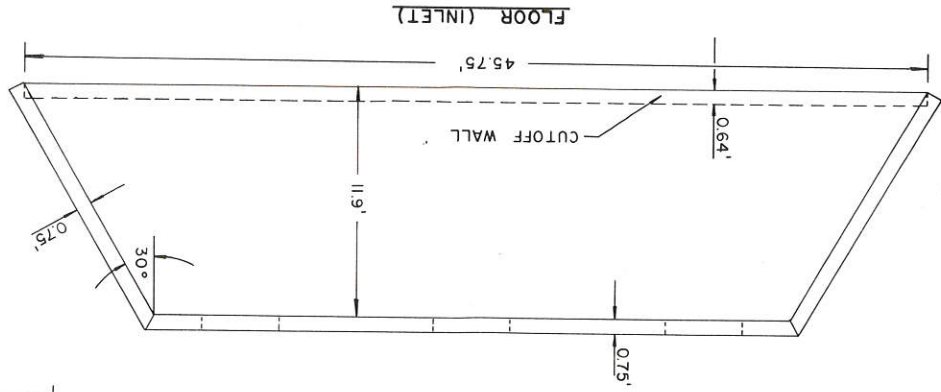


TYPICAL ROADWAY CROSS SECTION
STA. 16 + 45.00 — STA. 23 + 35.00

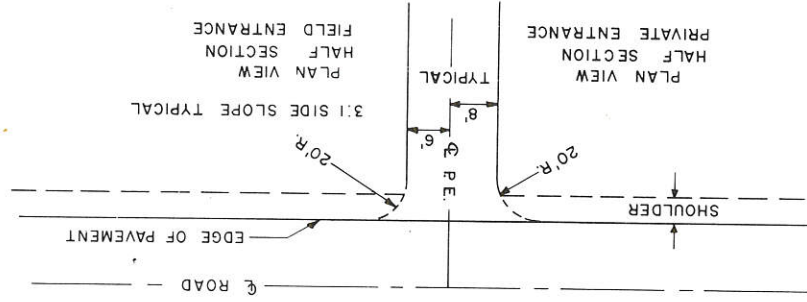


DETAIL
(CONCRETE MASONRY ENDWALL)

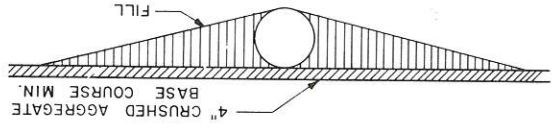
NOTE: DETAILS OF CONSTRUCTION NOT SHOWN
ON THIS DRAWING SHALL CONFORM
TO THE STANDARD DETAIL DRAWING
8 E 6-3.



PRIVATE ENTRANCE DETAIL



PROFILE OF PRIVATE ENTRANCE



STANDARD DETAIL DRAWINGS

- 8E6-3 CONCRETE MASONRY ENDWALLS (CIRCULAR PIPE & PIPE ARCHES)
- 8E8-1 TYPICAL INSTALLATIONS OF EROSION BALES
- 14B2-4 & 8b CLASS "A" STEEL PLATE-BEAM GUARD AND STEEL PLATE BEAM MEDIAN (TWO SHEETS)
- 15C1-5 CONSTRUCTION BARRICADES AND STANDARD SIGNS
- 8E7-1 EROSION MAT
- 8F1-8 APRON ENDWALLS FOR CULVERT PIPE & PIPE ARCH
- 15A1-3 MARKER POSTS FOR RIGHT OF WAY

CURVE DATA IS BASED ON THE ARC DEFINITION. ALL SLOPES 4:1 AND STEEPER, WHICH ARE TO BE TOPSOILED SHALL BE COVERED WITH MULCH OR AS DIRECTED BY THE ENGINEER. THE EXACT LOCATION OF PRIVATE ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. OPTIONAL VERTICAL AND HORIZONTAL CONSTRUCTION JOINTS MAY BE USED ON CONCRETE MASONRY ENDWALLS TO MEET FIELD CONDITIONS WITH THE APPROVAL OF THE ENGINEER. THE DEPTH OF BASE AND SURFACE COURSE SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL DEPTH WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER. EXCAVATION BELOW SUBGRADE (E.B.S.) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS UNCLASSIFIED EXCAVATION. THE LOCATION FOR E.B.S. WILL BE DETERMINED BY THE ENGINEER. PAY LENGTH FOR STRUCTURAL PLATE PIPE TO BE MEASURED AS SHOWN ON CROSS SECTIONS

FILL AS SHOWN ON THE PLAN SHEETS PERTAINS TO EMBANKMENT CONSTRUCTED FROM BORROW-EXCAVATION AND/OR UNCLASSIFIED EXCAVATION. THE SHRINKAGE ALLOWANCE USED TO COMPUTE THE VOLUME OF MATERIAL NECESSARY TO COMPLETE THE FILL WAS 30% FOR UNCLASSIFIED EXCAVATION AND 30% FOR BORROW EXCAVATION. DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCLUSIVE OF THE ROADBED, ARE TO BE FERTILIZED AND SEEDS AS DIRECTED BY THE ENGINEER. SEED MIXTURE NUMBER 3 SHALL BE USED. BEARINGS SHOWN ON THE PLANS ARE TRUE BEARINGS TO THE NEAREST MINUTE. SALVAGED TOPSOIL SHALL BE PLACED ON THE SLOPES TO THE POINT OF INTERCEPT WITH THE ORIGINAL GROUND SHOWN ON THE CROSS SECTIONS TO A DEPTH OF 3 INCHES AT THE TIME OF PLACEMENT. NO TREES ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

GENERAL NOTES

ESTIMATE OF QUANTITIES

CONTRACT NO. 1 GRADE, BASE, BITUMINOUS SURFACE

STATE PROJECT NUMBER	SHEET NO.
5075-1-71	3

* INCLUDES 100 C.Y. E.B.S.

CONTRACT	STATION TO STATION	NET LENGTH OF CENTER LINE	CLEARING	GRUBBING	REMOVING OLD BRIDGE, STATION 20+00	UNCLASSIFIED EXCAVATION	BORROW EXCAVATION	FINISHING ROADWAY, PROJ. 5075-1-71	CRUSHED AGGREGATE BASE COURSE	BITUMINOUS CONCRETE SURFACING	CONCRETE MASONRY, ENDWALLS	CULVERT PIPE, CLASS III, 18 INCH	APRON ENDWALLS FOR CULVERT PIPE, 18 INCH	STRUCTURAL PLATE PIPE, 96-INCH	ANCHORAGES FOR STEEL PLATE BEAM GUARD	STEEL PLATE BEAM GUARD, CLASS A	MOBILIZATION PROJ. 5075-1-71	SALVAGED TOPSOIL	
																			ITEM NO.
	UNIT	LIN. FT.	STATION	STATION	LUMP SUM	CU. YD.	CU. YD.	LUMP SUM	CU. YD.	TON	CU. YD.	LIN. FT.	EACH	LIN. FT.	EACH	LIN. FT.	LUMP SUM	SQ. YD.	
1	PROJ. ID. 5075-1-71	690	2	2	1	* 900	3523	1	1310	212	30	40	4	276	4	347	1	3700	
TOTALS			690	2	2	1	900	3523	1	1310	212	30	40	4	276	4	347	1	3700

CONTRACT	STATION TO STATION	SODDING	MULCHING	EROSION MAT	EROSION BALES	FERTILIZER	SEEDING	HEAVY RIPRAP	FIELD OFFICE, TYPE A	TRAFFIC CONTROL PROJ. 5075-1-71	MARKER POSTS FOR RIGHT-OF-WAY
	UNIT	SQ. YD.	SQ. YD.	SQ. YD.	EACH	C.W.T.	POUND	CU. YD.	LUMP SUM	LUMP SUM	EACH
	PROJ. ID. 5075-1-71	830	3700	830	20	4	110	55	1	1	7
TOTALS		830	3700	830	20	4	110	55	1	1	7

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

CLEARING & GRUBBING

LOCATION	QUANTITY (STATIONS)
STATION-STATION	CLEARING GRUBBING
19+00-21+00	2 2

PRIVATE ENTRANCE PIPES

STATION	LOCATION	DIA. (IN.)	LENGTH (FT.)	TYPE	CLASS	THICKNESS (IN.)	APRON ENDWALLS
						METAL ALUMINUM	
20+88	FE.-LT.	18	18	C.P.	III	0.064	2
21+56	PE.-RT.	"	22	"	"	0.060	"

RIPRAP (HEAVY)

STATION	LOCATION	QUANTITY (C.Y.)
19+85-20+15	STREAM BANK	9
20+25-20+40	DITCH LT.	3
20+15-20+30	DITCH RT.	3
20+00-	DISC. S.P.P.	40

CRUSHED AGGREGATE BASE COURSE

LOCATION	QUANTITY
16+45-23+35	1125
SHOULDERS	45
TEMP. ROAD	100
P.E.'S	40

STEEL PLATE BEAM GUARD CLASS A

STATION TO STATION	LOCATION (FT.)	LENGTH	ANCHORAGES
19+10	20+77	LT. 167	2
19+10	20+90	RT. 180	2

STANDARD ABBREVIATIONS

- S.P.P. STRUCTURAL PLATE PIPE
- LT. LEFT
- RT. RIGHT
- PE. PRIVATE ENTRANCE
- FE. FIELD ENTRANCE
- IN. INCH
- FT. FEET
- R. REFERENCE LINE
- L. TRANSIT LINE
- R/W RIGHT-OF-WAY
- B.M. BENCH MARK
- E.B.S. EXCAVATION BELOW SUBGRADE

UTILITIES

- NORTHERN STATES POWER CO.
122 5TH AVE. N.
LA CROSSE, WIS. 54601
- CHARLES B. DENARDO
1-608-782-8110
- LA CROSSE TELEPHONE CORP.
206 5TH AVE. S.
LA CROSSE, WIS. 54601
- JESS GRAHAM
1-608-782-9928
- WISCONSIN TELEPHONE
206 5TH AVE. S.
LA CROSSE, WIS. 54601
- GENE DAUGHERTY
1-608-782-9983

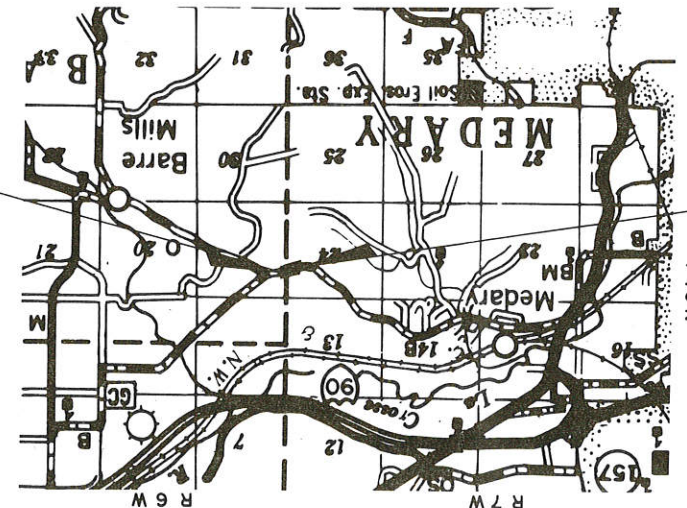
EROSION BALES SEEDING AND FERTILIZER

LOCATION	QUANTITY (EACH)	STA. TO STA.	LOC.	QUANTITY	SEED	FERT.
				LT.&RT.	LBS.	CWT.
19+70 LT. & RT.	10	16+45-23+35	LT.&RT.	100	3.0	
20+30 LT. & RT.	10	BORROW PITS		10	1.0	

S.P.P. EROSION MAT & SOD

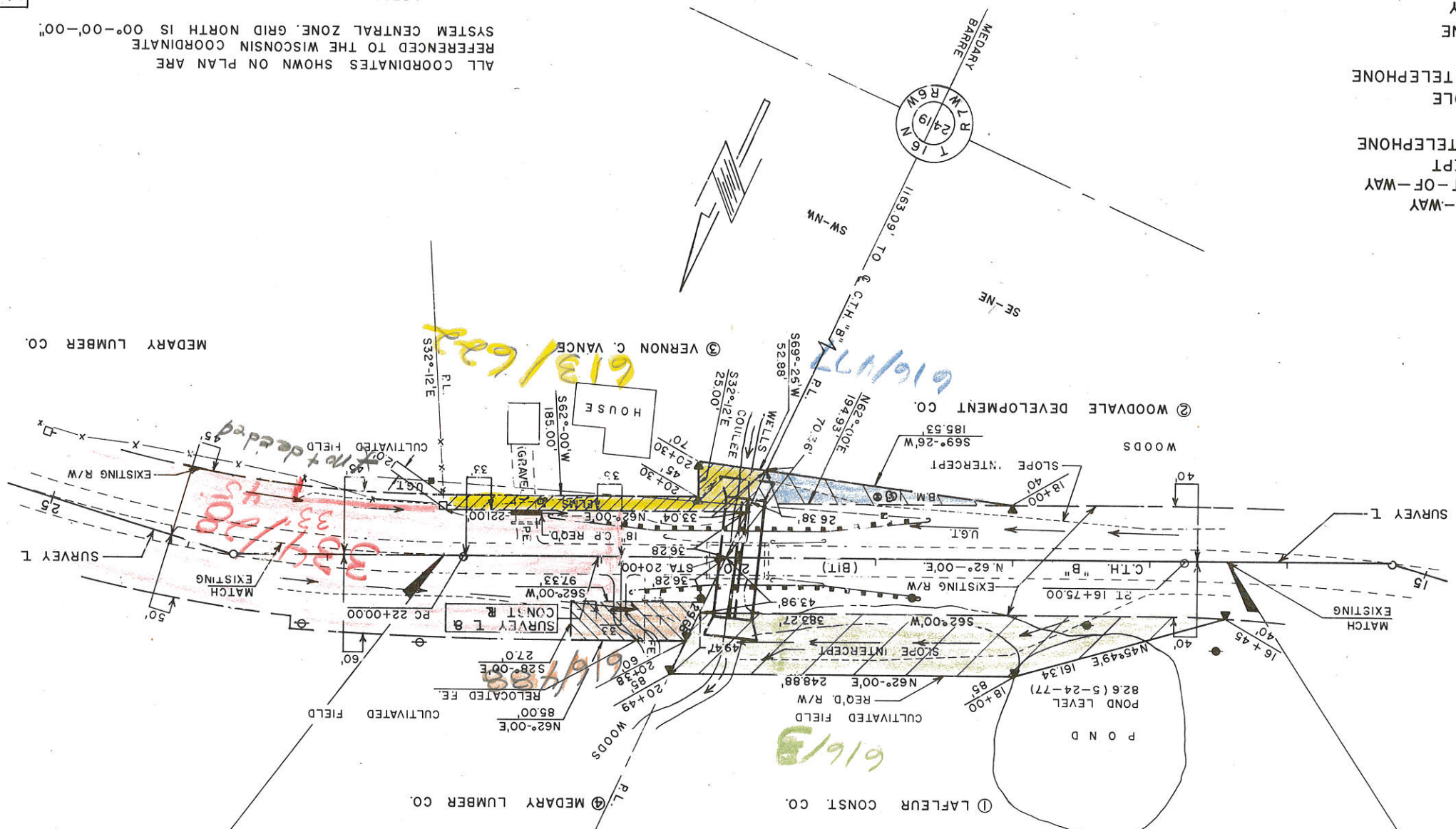
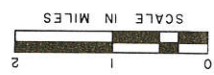
STATION	NUMBER	SIZE	ELEVATION	END TREATMENT	METAL THICK. (IN.)	STATION TO STATION	LOCATION	QUANTITY (SQ. YD.)
20+00	3	96"	678.60	678.00	0.109	17+85-19+75	DITCH RT.	190
						20+15-23+35	DITCH LT.&RT.	640

SHEET NUMBER	R/W PROJECT NUMBER	
	5075-1-21	5075-1-71
REVISION	DATE	FEDERAL PROJECT NUMBER
PLAT OF RIGHT OF WAY REQUIRED FOR U.S.H. 16 - C.T.H. "M" C.T.H. "B" WISCONSIN SCALE 1" = 100 FT. DATE		
CONSTRUCTION PROJECT NUMBER		
5075-1-71		



END RELOCATION ORDER
PROJECT I.D. 5075-1-21
STATION 22+15
N 677,000' (±200')*
E 1,696,970' (±200')*
±1507 N. AND ±190' E. OF W. & CORNER
S 19,116 N. R. 6 W.

BEGIN RELOCATION ORDER
PROJECT I.D. 5075-1-21
STATION 16+45
N 676,720' (±200')*
E 1,696,470' (±200')*
±660' N. AND ±320' W. OF E. & CORNER
S 24,116 N. R. 7 W.



LEGEND

NEW RIGHT-OF-WAY	—
EXISTING RIGHT-OF-WAY	- - -
SLOPE INTERCEPT	—
UNDERGROUND TELEPHONE	—
POWER POLE	—
TELEPHONE POLE	—
UNDERGROUND TELEPHONE	—
TRANSIT LINE	—
REFERENCE LINE	—
RIGHT-OF-WAY	—
P.L.	—

ALL COORDINATES SHOWN ON PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM CENTRAL ZONE. GRID NORTH IS 00°-00'-00". BEARINGS SHOWN ARE TRUE BEARINGS LA CROSSE CO. HIGHWAY DEPARTMENT

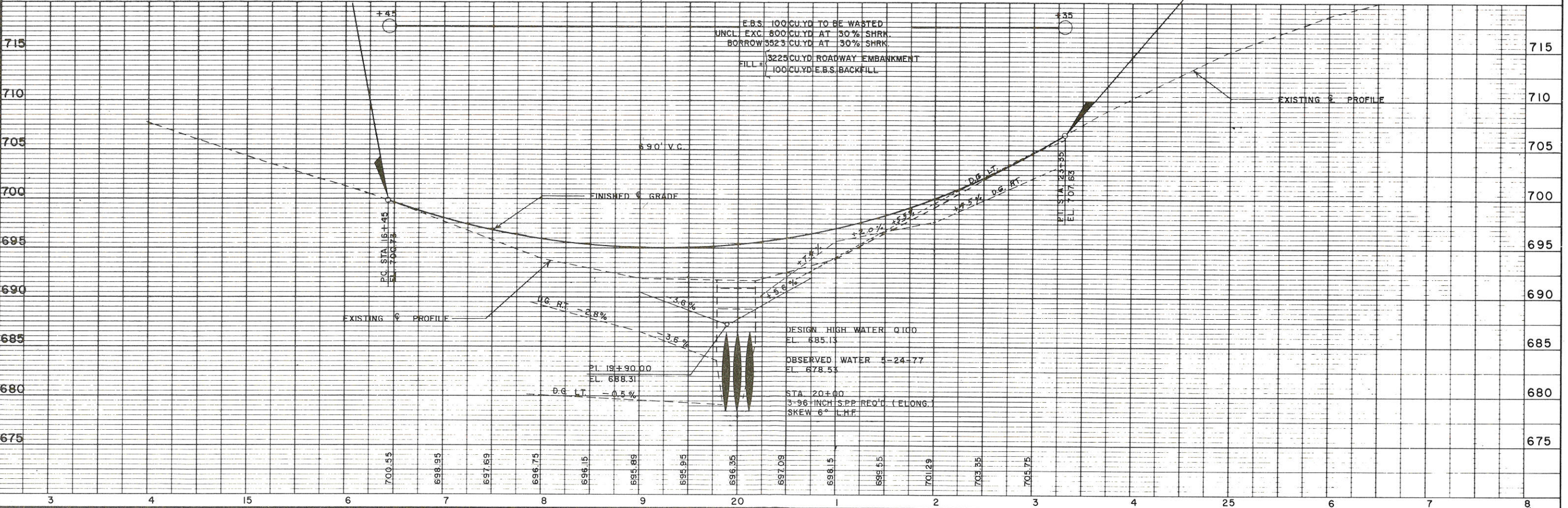
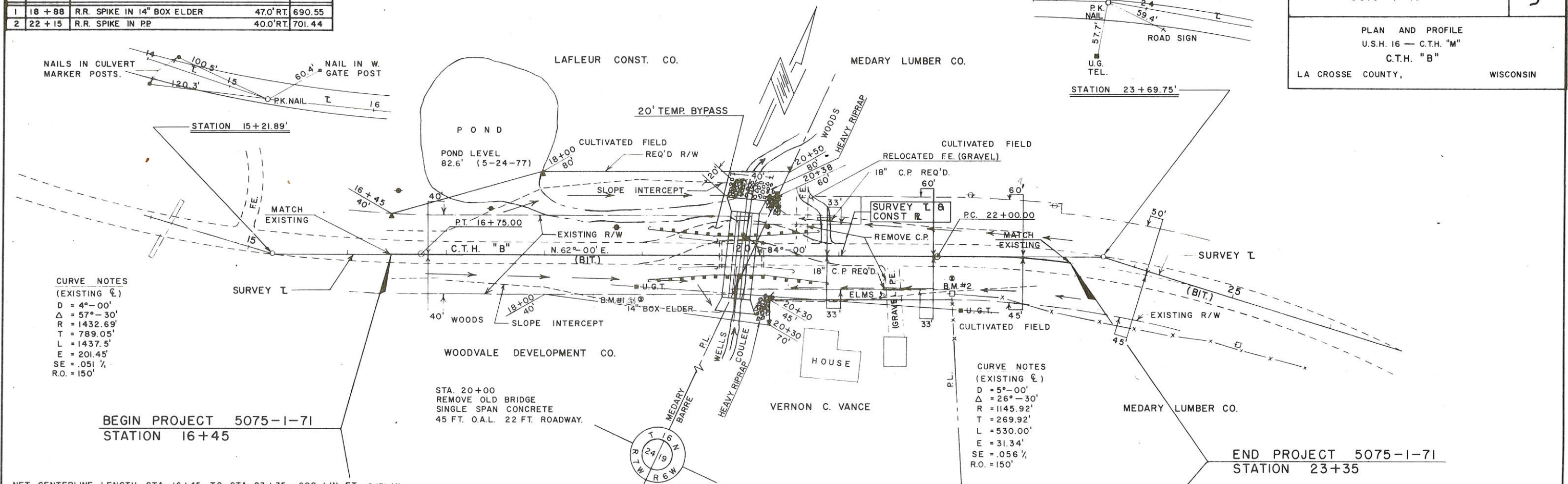
APPROVED: [Signature]
DATE: 3-7-78
COUNTY HIGHWAY COMMISSIONER

PARCEL SHEET	NUMBER	OWNER	INTEREST	ACRES REQUIRED	TOTAL REMAINING ACRES	OPERATIONS PROJECT I.D.
1		LAFLEUR CONST. CO.	FEE	0.326	72.66	5075-1-21
2		WOODVALE DEVELOPMENT CO.	FEE	0.054		5075-1-21
3		VERNON C. VANCE	FEE	0.086	2.86	5075-1-21
4		MEDARY LUMBER CO.	FEE	0.056		5075-1-21

NO.	STATION	DESCRIPTION	ELEV.
1	18 + 88	R.R. SPIKE IN 14" BOX ELDER	47.0' RT. 690.55
2	22 + 15	R.R. SPIKE IN PP	40.0' RT. 701.44

5075-1-71 5

PLAN AND PROFILE
U.S.H. 16 - C.T.H. "M"
C.T.H. "B"
LA CROSSE COUNTY, WISCONSIN



CONCRETE MASONRY ENDWALLS
(CIRCULAR PIPE & PIPE ARCHES)

State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL: *[Signature]* DATE: 6-6-75

APPROVED: *[Signature]* DATE: 6-6-75

STATE HIGHWAY ENGINEER

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.

Fill slopes flatter than 2 1/2:1 shall be warped to meet the top of the wingwall.

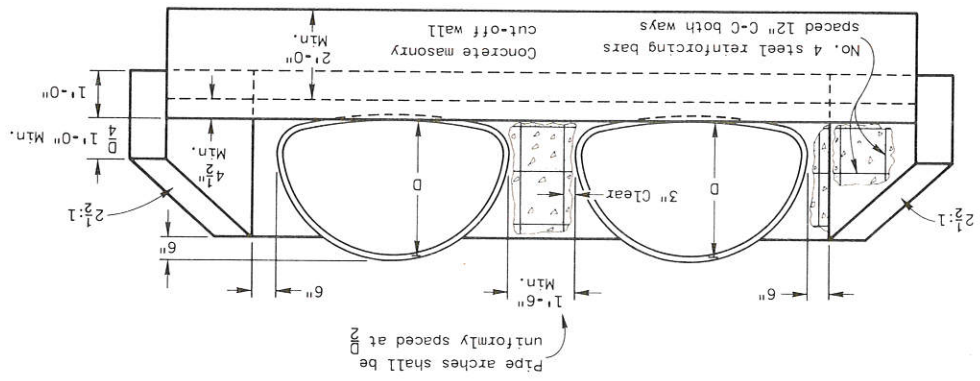
All headwalls, aprons and cut-off walls shall be constructed of concrete masonry reinforced as shown on this drawing. Construction methods, materials, measurement and payment for concrete masonry endwalls shall conform to the pertinent requirements of section 504 of the Standard Specifications and with any applicable Supplemental Specifications and Special Provisions.

Steel reinforcing bars and welded steel wire fabric shall be of the size and spacing shown on this drawing. Construction methods and materials for steel reinforcing bars (high strength bars not required) and welded steel wire fabric shall conform to the requirements of section 505 of the Standard Specifications and with any applicable Supplemental Specifications and Special Provisions.

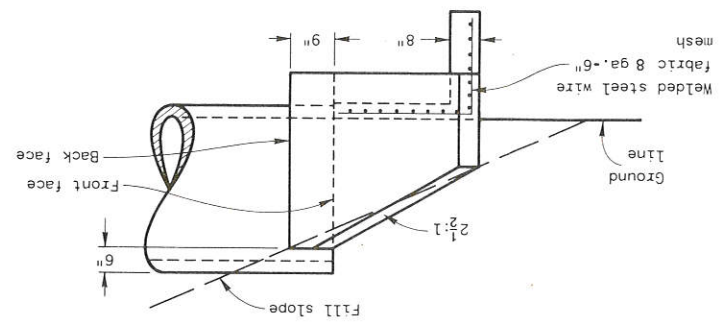
All steel reinforcement and welded steel wire fabric shall be embedded 2 inches clear unless otherwise noted.

* R = Number of degrees right or left hand forward.

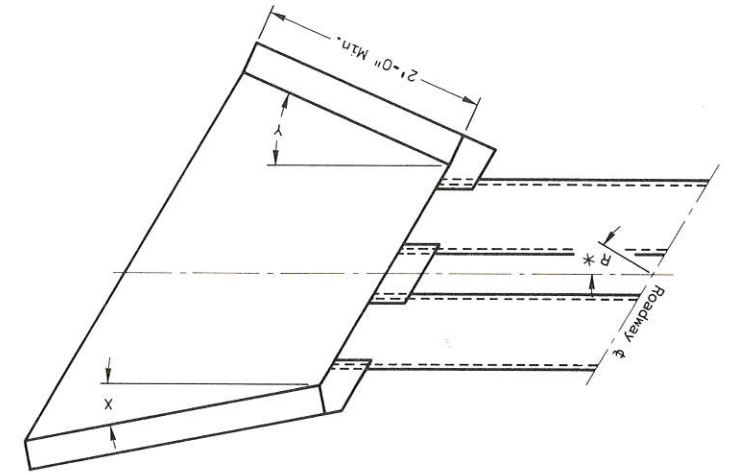
INLET	R*	X	Y
OUTLET	R*	X	Y
	0 - 7°	30°	30°
	0 - 15°	15°	15°
	8 - 22°	25°	10°
	16 - 45°	10°	"
	23 - 37°	20°	5°
	46 - 75°	5°	"
	38 - 52°	15°	0°
	over 75°	0°	"
	53 - 67°	10°	"
	68 - 82°	5°	"
	over 82°	0°	"



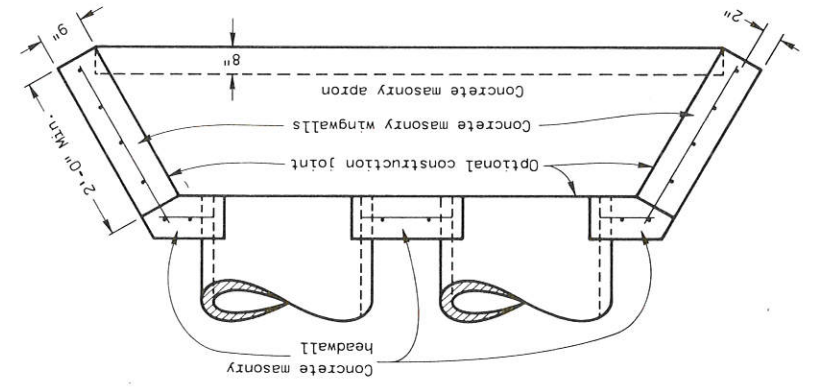
END ELEVATION
PIPE ARCH



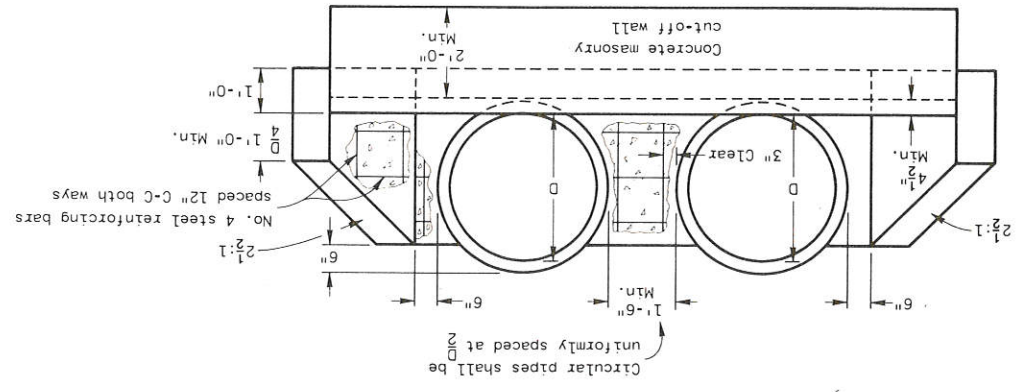
SIDE ELEVATION
CIRCULAR PIPE AND PIPE ARCH



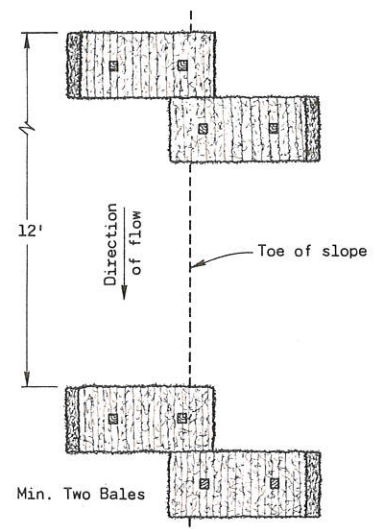
WINGWALL ANGLE DETAILS



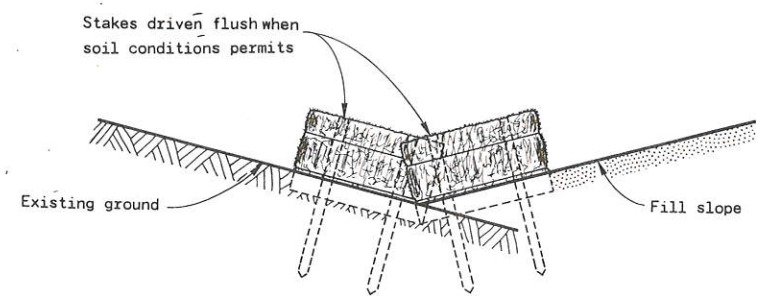
PLAN VIEW
CIRCULAR PIPE AND PIPE ARCH



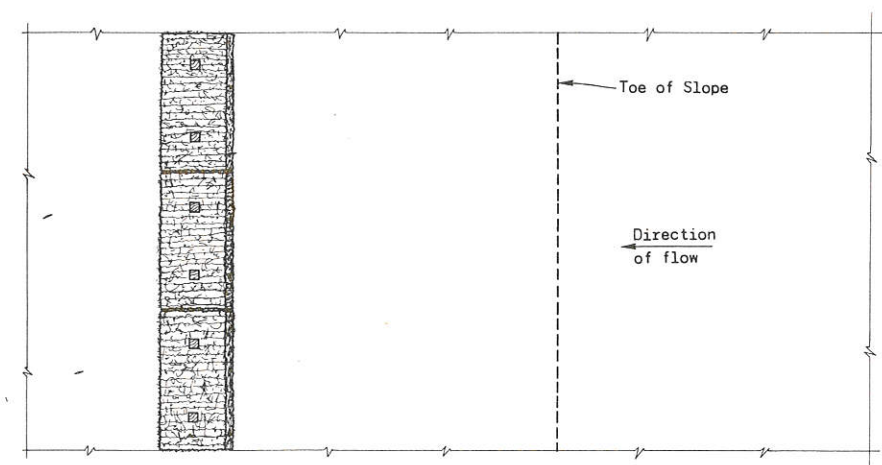
END ELEVATION
CIRCULAR PIPE



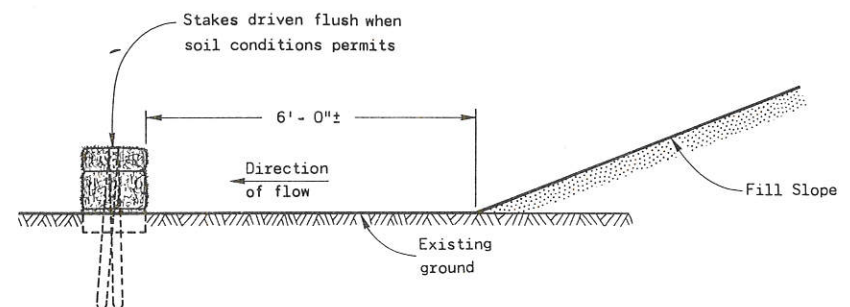
PLAN VIEW



FRONT ELEVATION
WHEN EXISTING GROUND
SLOPES TOWARD FILL SLOPE

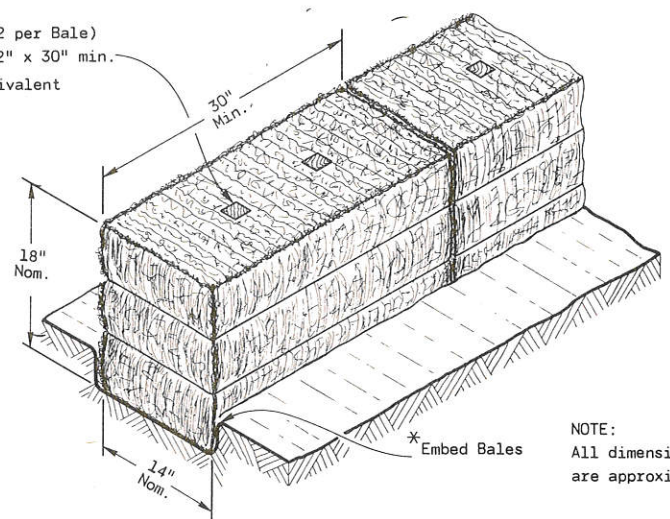


PLAN VIEW

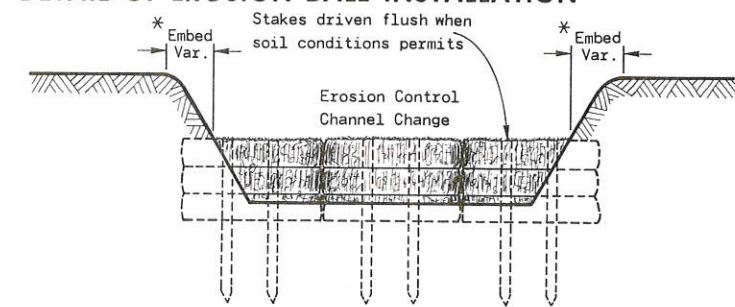


FRONT ELEVATION
EROSION BALES AT TOE OF SLOPE
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

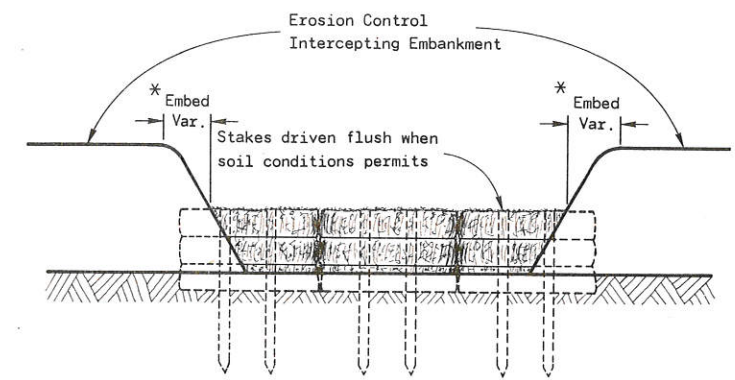
Wood Stakes (2 per Bale)
Nominal 2" x 2" x 30" min.
length or equivalent



DETAIL OF EROSION BALE INSTALLATION



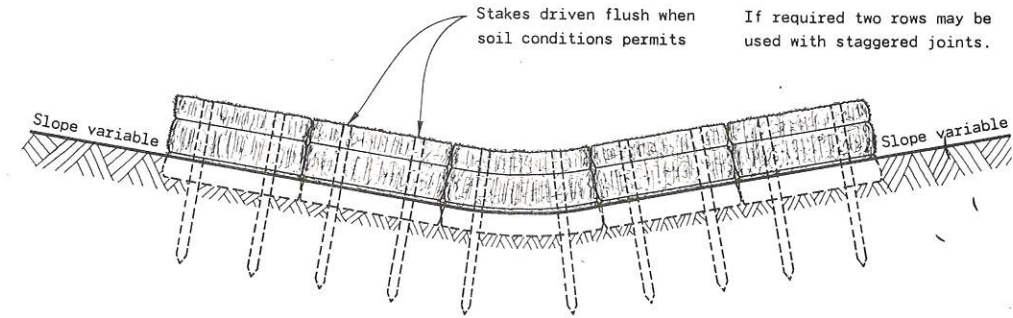
EROSION CONTROL CHANNEL CHANGE



EROSION CONTROL INTERCEPTING EMBANKMENT



PLAN VIEW



FRONT ELEVATION
EROSION BALES ACROSS DITCH BOTTOM

GENERAL NOTES

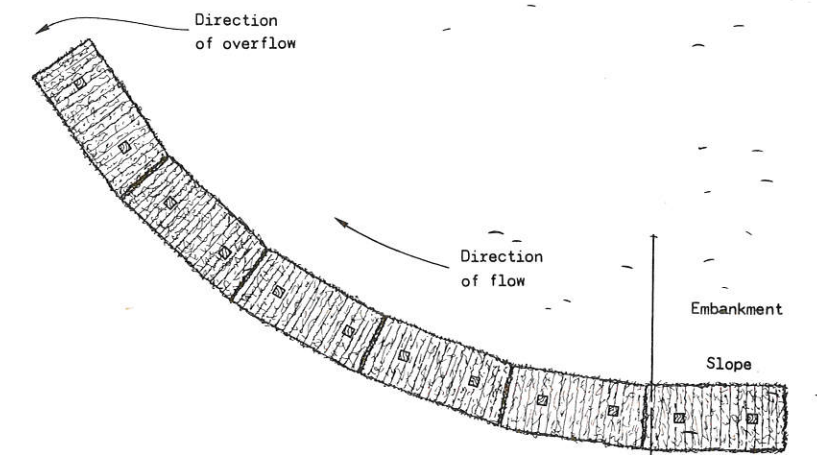
Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

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.

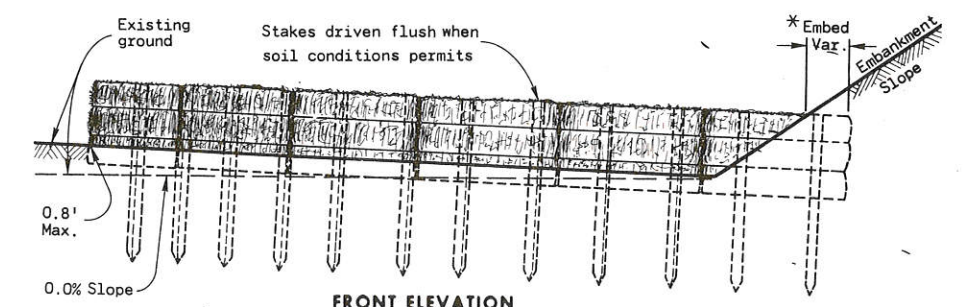
Bales shall be placed with twine or tie wires parallel to the ground.

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**

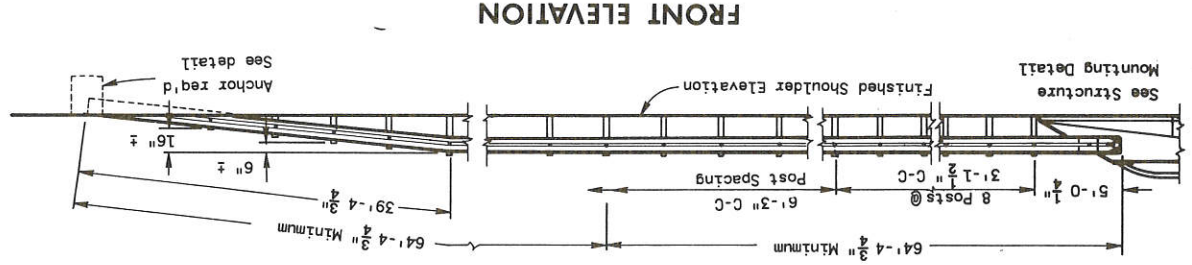
State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:
DATE 10/14/75
APPROVED: [Signature]
CHIEF OF FACILITIES DEVELOPMENT

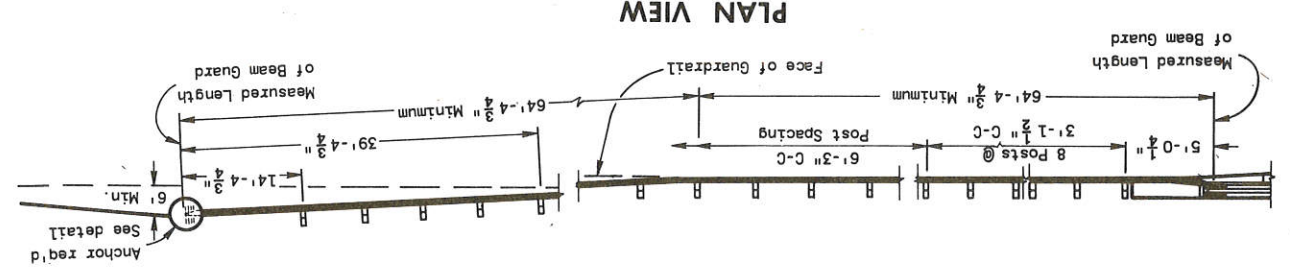
APPROVED: [Signature]
DATE 10/16/75
STATE HIGHWAY ENGINEER

S.D.D. 8E8-1

TYPICAL INSTALLATION AT STRUCTURES



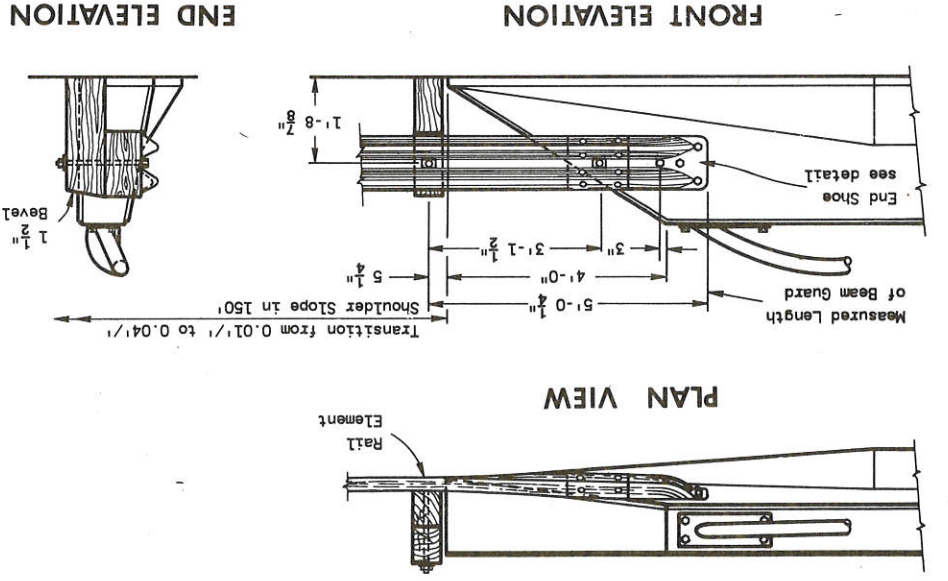
FRONT ELEVATION



PLAN VIEW

SLOPING TYPE PARAPET WALL

STRUCTURE MOUNTING DETAIL

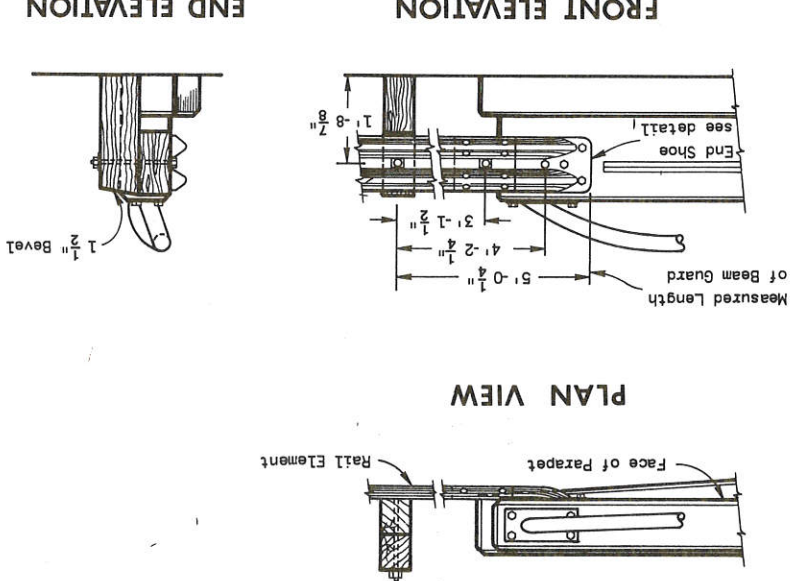


FRONT ELEVATION

PLAN VIEW

VERTICAL TYPE PARAPET WALL

STRUCTURE MOUNTING DETAIL

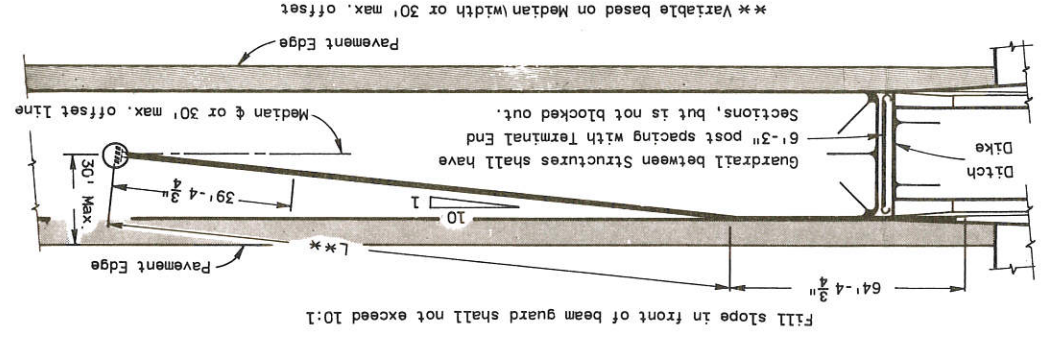


FRONT ELEVATION

PLAN VIEW

MEDIAN PROTECTION

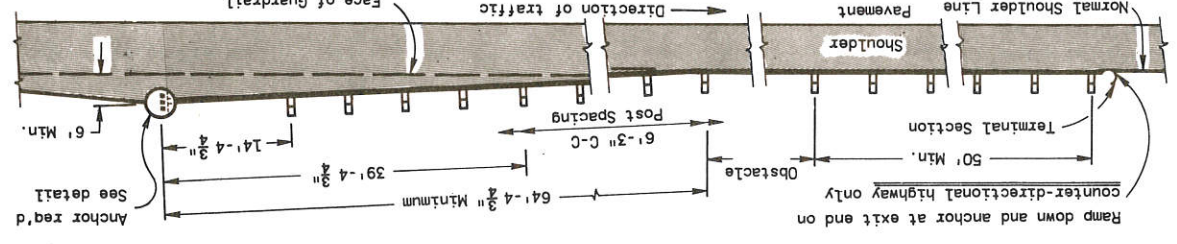
PLAN VIEW



LOCATIONS OTHER THAN STRUCTURES

TYPICAL INSTALLATION AT

PLAN VIEW



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

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.

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.

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.

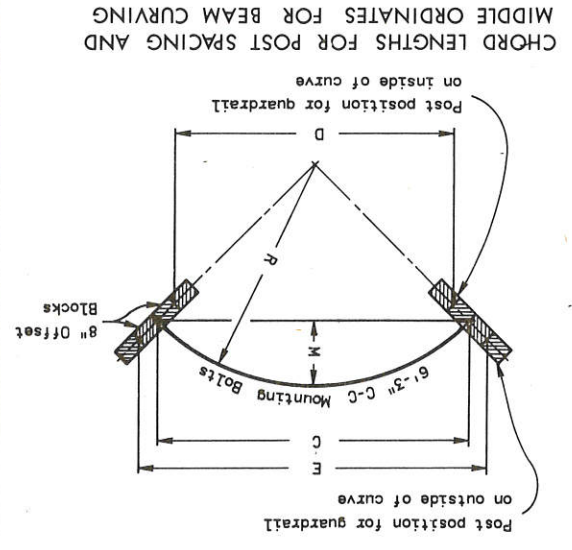
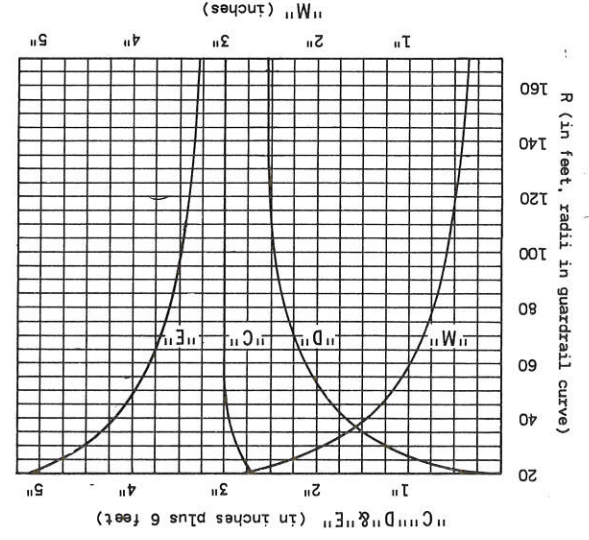
The exact location of the beginning and end of each guardrail installation shall be as shown on the plans or as directed by the Engineer.

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.

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.

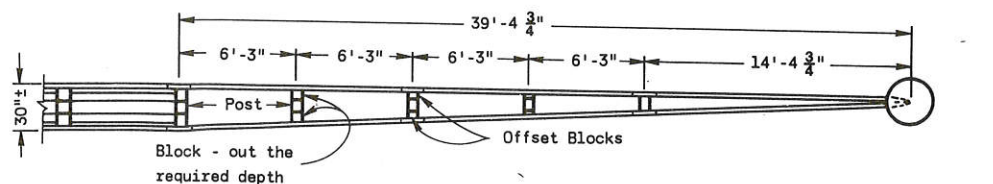
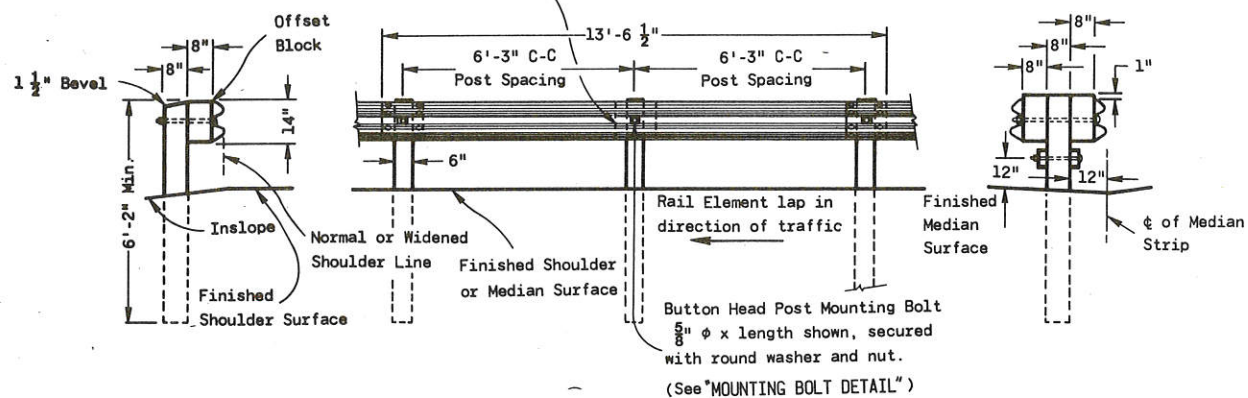
GENERAL NOTES

CURVE DATA FOR POST SPACING AND BEAM CURVING

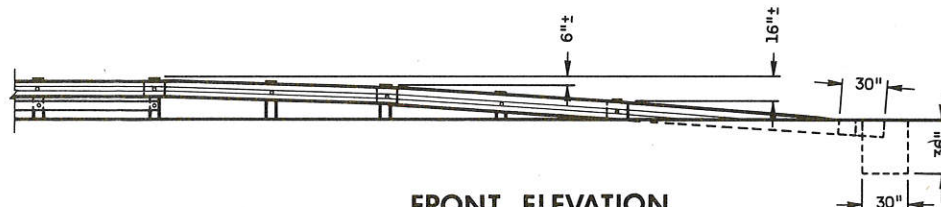


One foot long section of rail element, with a $\frac{3}{4}$ " slotted hole for mounting, shall be placed behind the continuous rail element at the intermediate posts.

Sawn and treated timber posts and offset blocks shall be furnished and placed in accordance with Standard Specifications. Posts shall be 6" x 8" x 6'-6" and have 6" x 8" x 14" offset blocks.

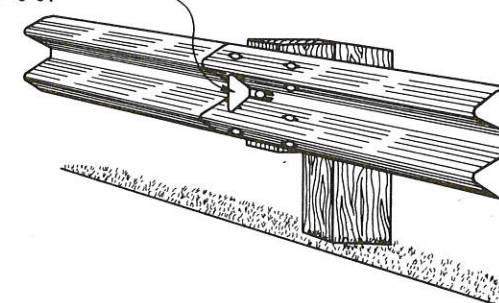


PLAN VIEW



FRONT ELEVATION

NOTE: (DIVIDED HIGHWAYS) Reflector spacing shall be 50' C-C on installations less than 200' long, with a minimum of 3 reflectors on any installation. For installations 200' or longer, spacing shall be 100' C-C. (COUNTER-DIRECTIONAL HIGHWAYS) Reflector spacing shall be 25' C-C on installations less than 200' long, with a minimum of 6 reflectors on any installation, and every other reflectorized surface shall be reversed. For installations 200' or longer, spacing shall be 50' C-C.



TYPICAL INSTALLATION

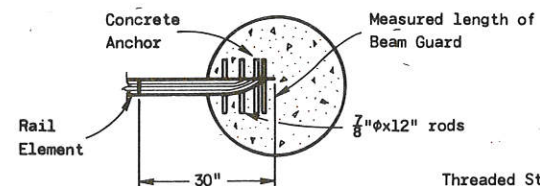
**END ELEVATION
STEEL PLATE BEAM GUARD**

FRONT ELEVATION

**END ELEVATION
STEEL PLATE BEAM MEDIAN GUARD**

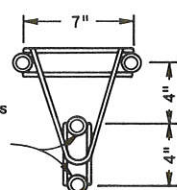
ANCHOR DETAIL FOR DOUBLE RAIL ELEMENT INSTALLATION

STEEL PLATE BEAM GUARD OR STEEL PLATE BEAM MEDIAN GUARD

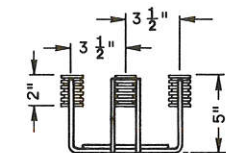


PLAN VIEW

Threaded Steel Inserts for $\frac{7}{8}$ " ϕ x 2" Hex Head Cap Screws with round washers.

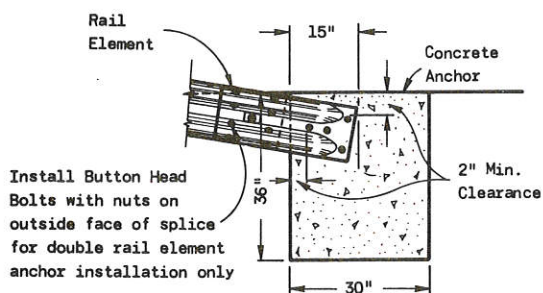


PLAN VIEW



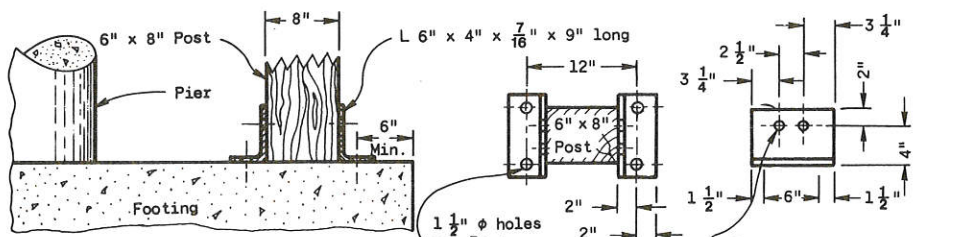
**ELEVATION
4 BOLT INSERT
ASSEMBLY**

NOTE: Installation of 4 Bolt Insert Assembly (with Cap Screws inserted) to be part of Bridge Contract.



**SECTION VIEW
ANCHOR DETAIL**

SINGLE RAIL ELEMENT INSTALLATION

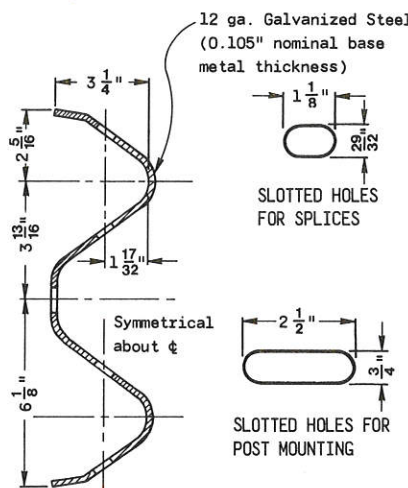


SECTION VIEW

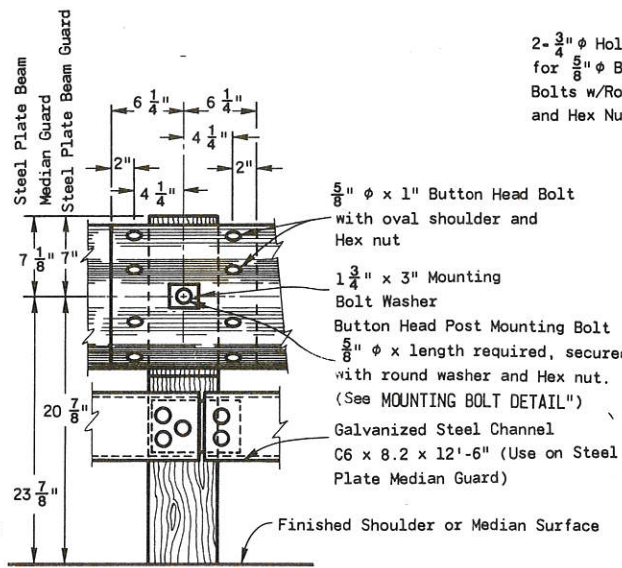
PLAN VIEW

ELEVATION

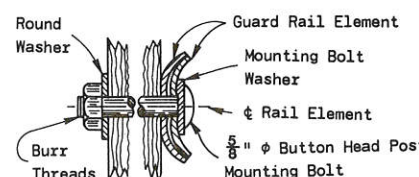
POST FOOTING DETAIL AT PIERS



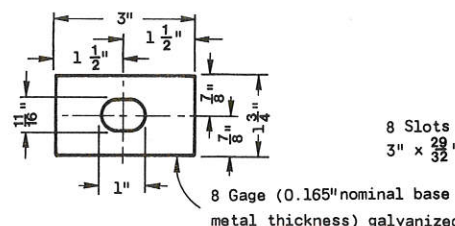
SECTION THRU RAIL ELEMENT



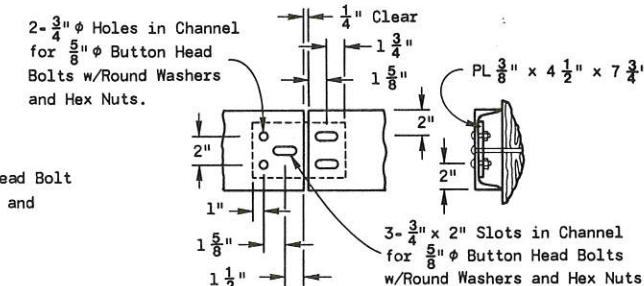
**RAIL ELEMENT SPLICING
AND POST MOUNTING DETAIL**



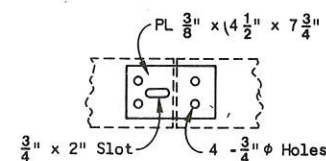
MOUNTING BOLT DETAIL



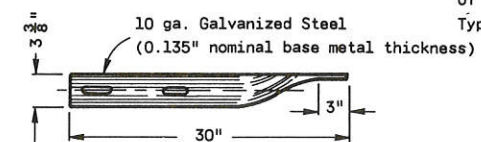
MOUNTING BOLT WASHER



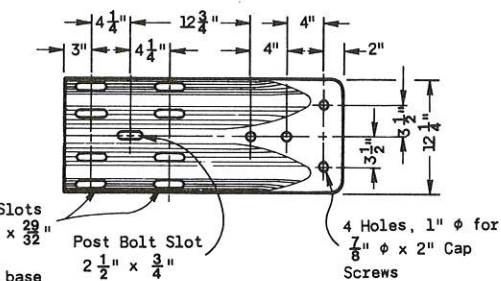
RUB RAIL SPLICE DETAIL



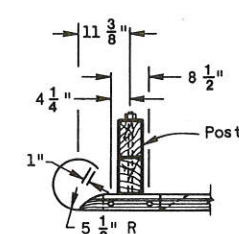
SPLICE PLATE



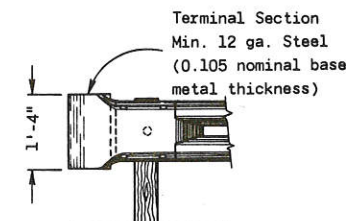
END SHOE DETAIL



MOUNTING BOLT WASHER



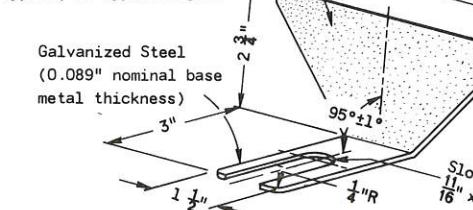
PLAN VIEW



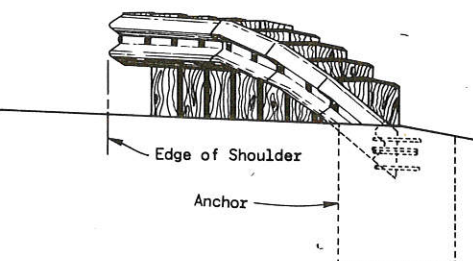
FRONT ELEVATION

TERMINAL SECTION DETAILS

The reflectorized surface shall consist of Silver Reflective Sheetting of the type used as background on TypeI, TypeII, or TypeIII signs.



REFLECTOR DETAIL



TYPICAL TERMINAL END ELEVATION

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

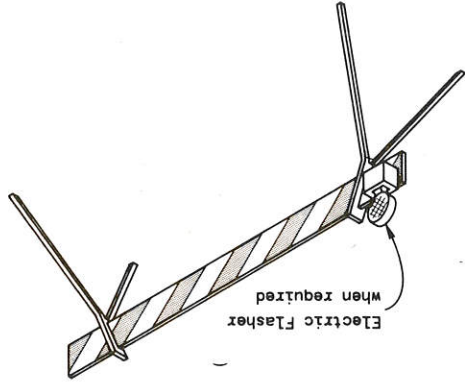
RECOMMENDED FOR APPROVAL
5-7-76
DATE
D. J. Stant
CHIEF OF FACILITIES DEVELOPMENT

APPROVED
5-11-76
DATE
W. J. Sudler
STATE HIGHWAY ENGINEER

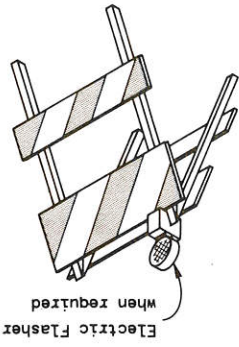
BARRICADE TYPE	Height		*Rail Width	*Rail Length	* Stripe Width	Stripe Colors
	3' Minimum	5' Minimum				
I	3' Minimum	5' Minimum	8" Minimum to 12" Maximum	2' Minimum to variable Maximum	6" at 45° Angle	ReflectORIZED Orange & White
II						
III						

TABLE OF BARRICADE CHARACTERISTICS

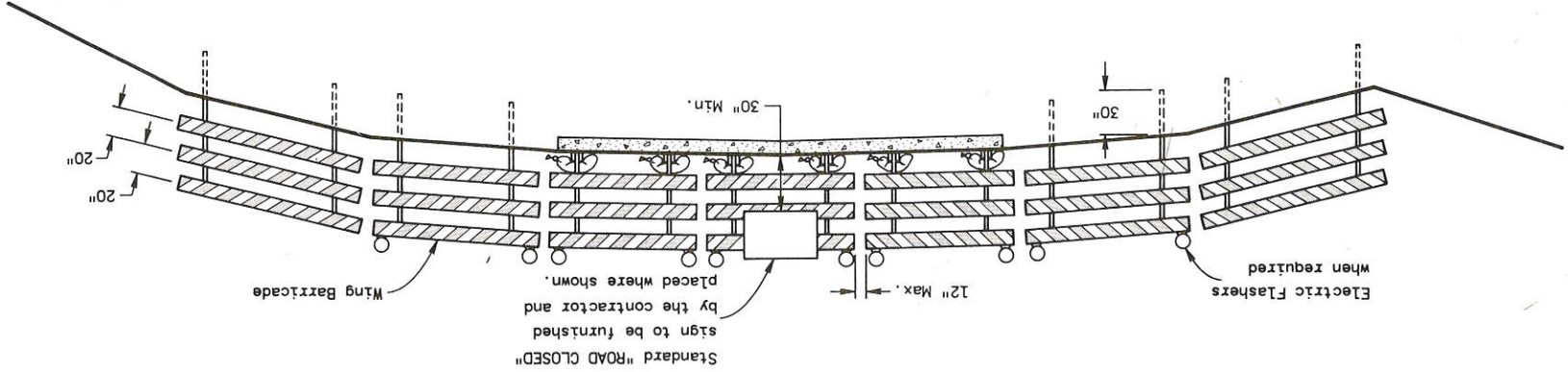
*Nominal dimensions when barricade is constructed of lumber.
 **May be 4" for rail lengths less than 3'.



TYPICAL TYPE I BARRICADE

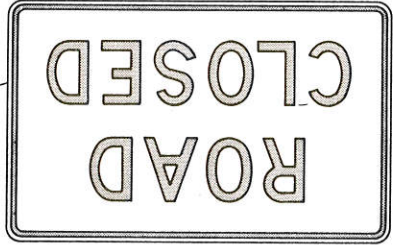


TYPICAL TYPE II BARRICADE



CONSTRUCTION BARRICADES

TYPICAL INSTALLATION SHOWING TYPE III BARRICADE



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

CHIEF OF FACILITIES DEVELOPMENT

[Signature]

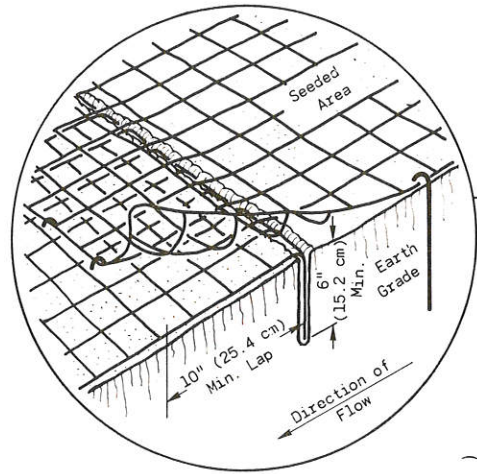
APPROVED

10-1-76

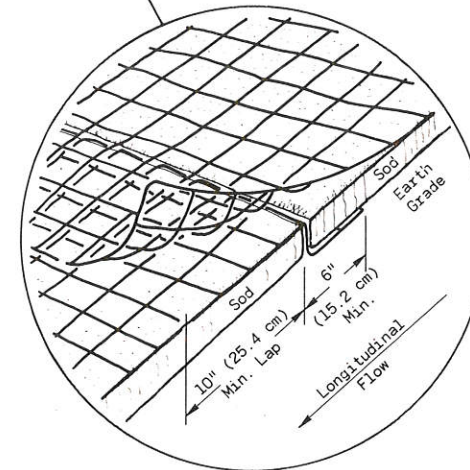
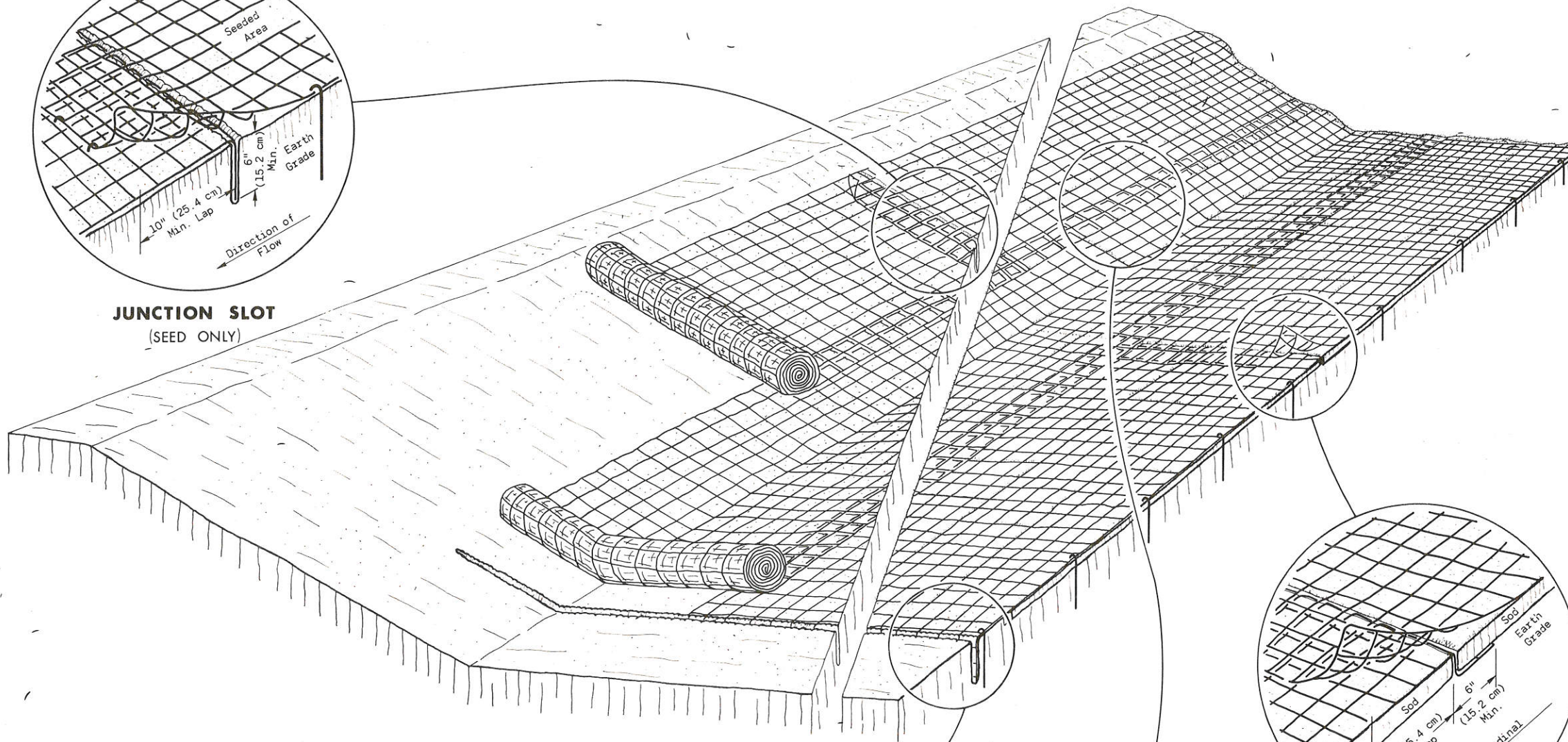
DATE

STATE HIGHWAY ENGINEER

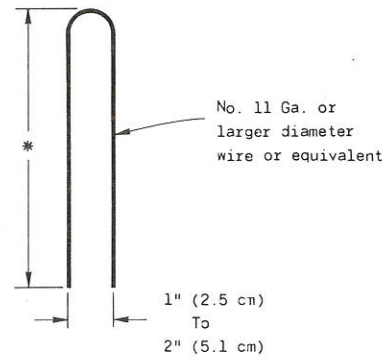
[Signature]



JUNCTION SLOT
(SEED ONLY)

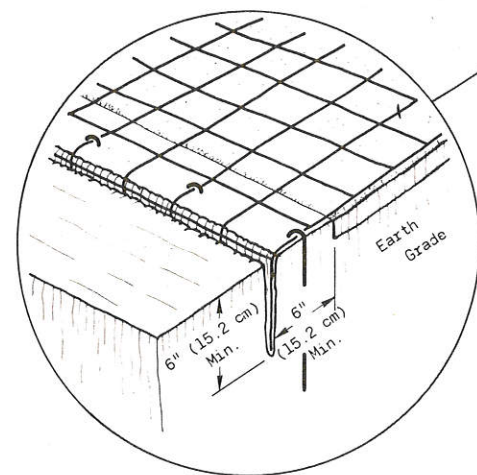


JUNCTION SLOT
(SOD ONLY)

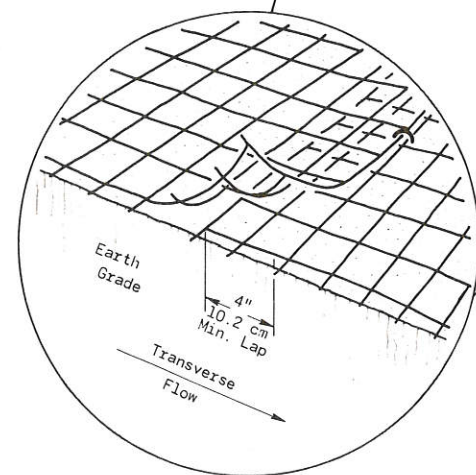


DETAIL OF
TYPICAL STAPLE

* 6" (15.2 cm) Min for firm soils
12" (30.5 cm) Min for loose soils
8" (20.3 cm) Min. where both sod and mats are being used.



ANCHOR SLOT
AT BEGINNING AND END OF EROSION MAT
(SEED AND SOD)



LAP JOINT
(SEED AND SOD)

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 in the dimensions or materials shown hereon shall be permitted if they provide equivalent protection and material strength and if prior approval of the Engineer is obtained.

Lap Joints shall not be placed in the bottom of V-shaped ditches.

Junction Slots on adjacent strips of Matting shall be staggered a minimum of 4 feet (1.219 m) apart.

Edges of the Erosion Mat shall be impressed in the soil.

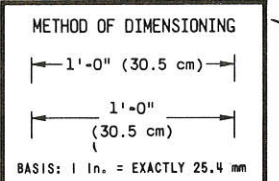
Erosion Mat shall be measured and paid for in accordance with the Standard Specifications.

EROSION MAT OVER SOD

- a. Only Jute Fabric will be permitted over sod.
- b. Wood Stakes for Sod may be omitted by the Engineer if the existing slope and soil conditions so warrant.
- c. The width of Erosion Mat shall always equal the Sod width.
- d. Sod strips may be placed either longitudinally or transversely to the flow line of the Ditch.

EROSION MAT OVER SEEDING

Junction or Anchor Slots shall be at minimum intervals of 100 feet (30.48 m) on grades up to and including 3 percent, and 50 feet (15.24 m) on grades exceeding 3 percent.



EROSION MAT

State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:

12-3-73
DATE

J. C. Henrich
CHIEF OF FACILITIES DEVELOPMENT

APPROVED
1-15-74
DATE

H. J. Siedler
STATE HIGHWAY ENGINEER

REINFORCED CONCRETE APRON ENDWALLS

Table with columns: DIA. APPROX., WEIGHT, SECTION, T, A, B, C, D, E, G. Rows list various dimensions and weights for reinforced concrete apron endwalls.

METAL OR ALUMINUM APRON ENDWALLS FOR CIRCULAR PIPES

Table with columns: D, PIPE MIN., THICKNESS, DIAM. APPROX., SLOPE. Rows list dimensions and slopes for metal or aluminum apron endwalls.

NOTE: All splices to be lap riveted or bolted

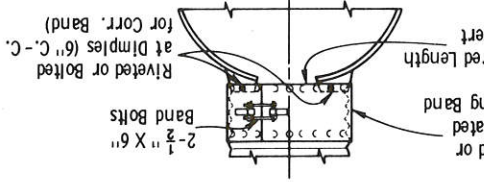
METAL APRON ENDWALLS FOR PIPE ARCHES

Table with columns: APPROX. SLOPE, DIMENSIONS METAL, PIPE - ARCH MIN., THICK., DIMENSIONS. Rows list dimensions for metal apron endwalls for pipe arches.

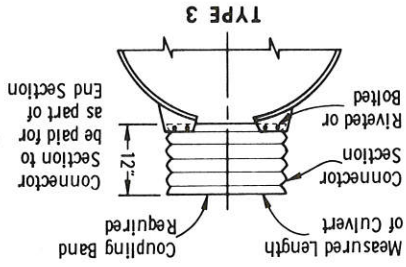
NOTE: All splices to be lap riveted or bolted

CONNECTION DETAILS

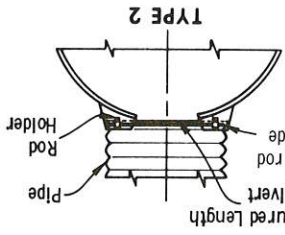
NOTE: Dimpled Band fits over Outside of Endwall, and Corr. Band fits Inside Endwall, Dimpled Band may be used with Helically Corrugated Pipe



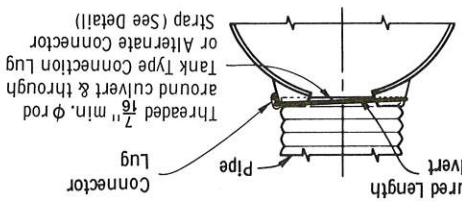
For 42" thru 84" only (Circular Pipe) For 64" X 43" & 71" X 47" (Pipe Arch)



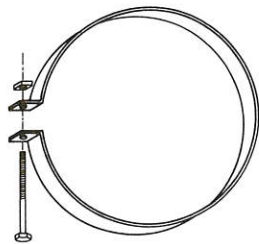
For 17" X 13" thru 57" X 38" only (Pipe Arch) For 30" and 36" only (Circular Pipe)



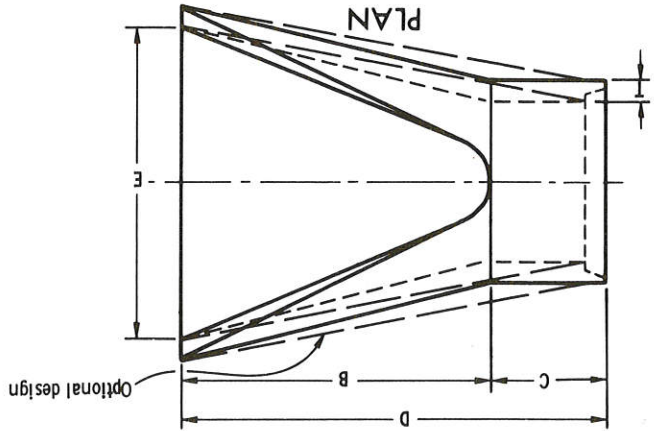
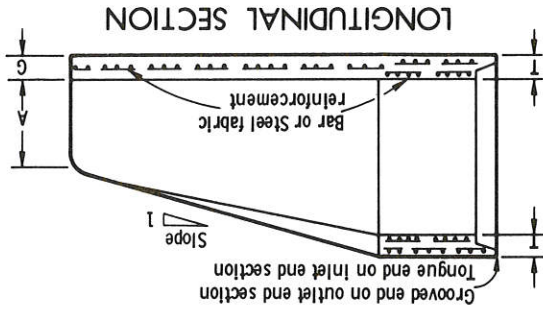
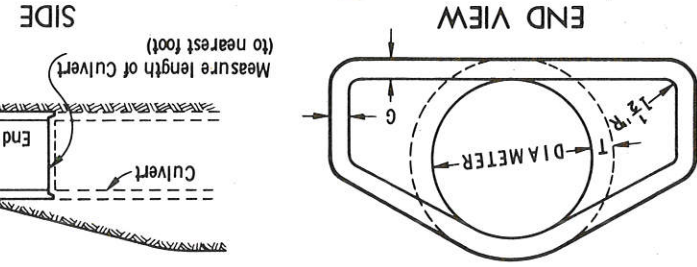
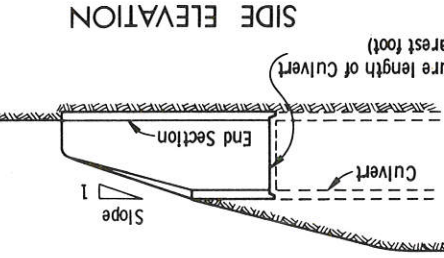
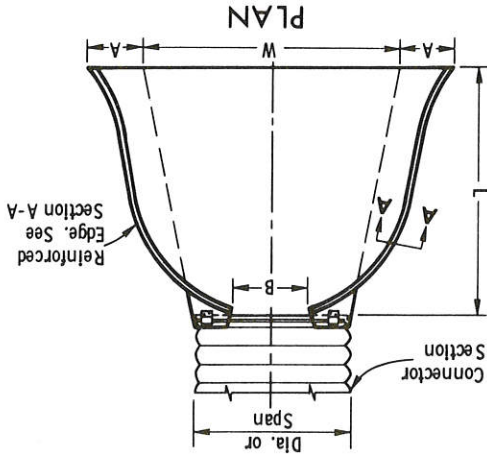
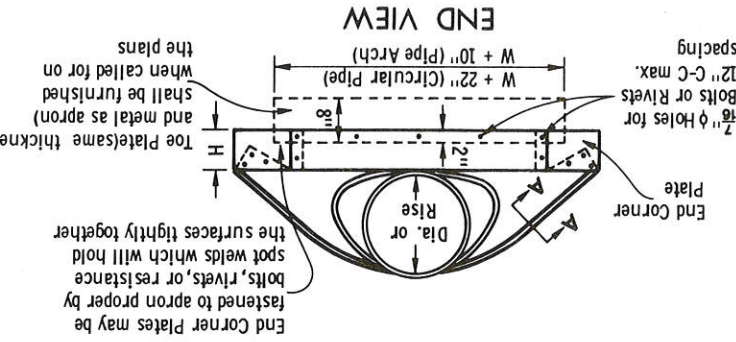
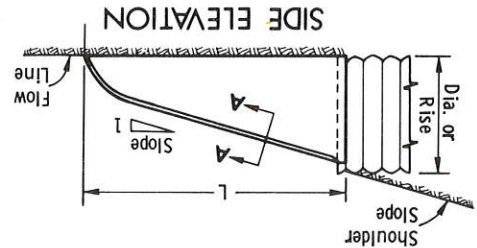
For 12" thru 24" only (Circular Pipe)



END SECTION CONNECTOR STRAP



1" wide, 12 Ga. galvanized 6" x 2" band bolt and nut



APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

State of Wisconsin Department of Transportation Division of Highways

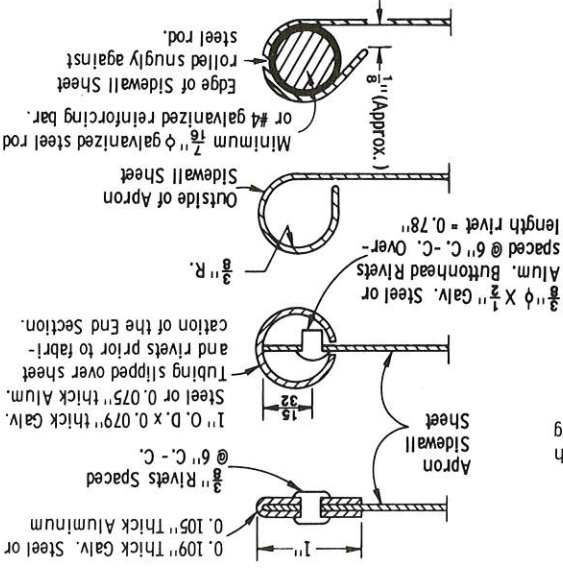
APPROVED 7-14-78 DATE 7-17-78 DATE

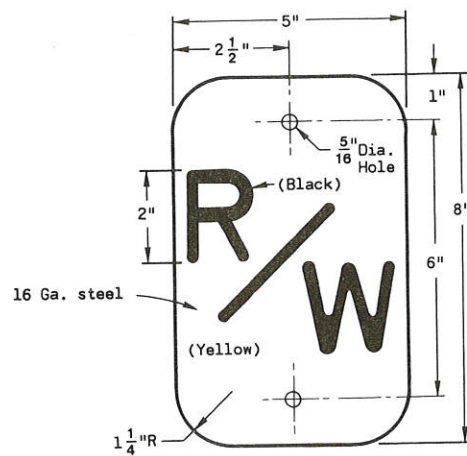
GENERAL NOTES

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.

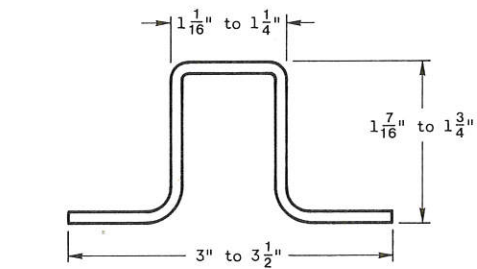
Calvanized steel or aluminum endwalls shall normally be installed on culvert pipe of the same metal. The use of galvanized steel endwalls on aluminum pipes is permitted, provided the two metals at the joint interface are kept separated by a suitable insulating material approximately 1/8" thick or greater.

SECTION A-A

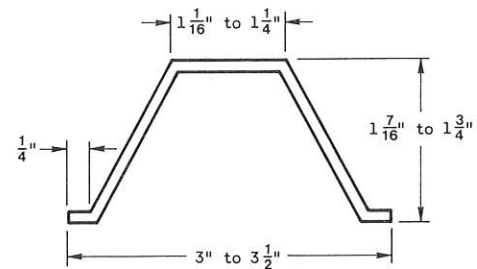




RIGHT OF WAY MARKER
(Letters to be raised $\frac{3}{32}$ " Min.)



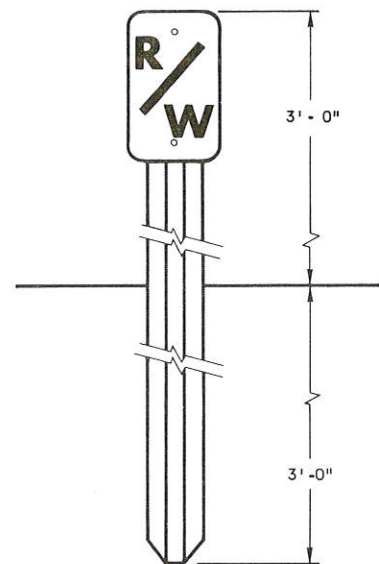
SECTION A-A



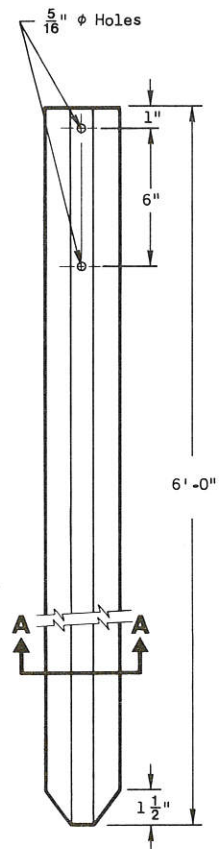
ALTERNATE SECTION A-A
(Minimum weight 2.0 lbs. per ft.)



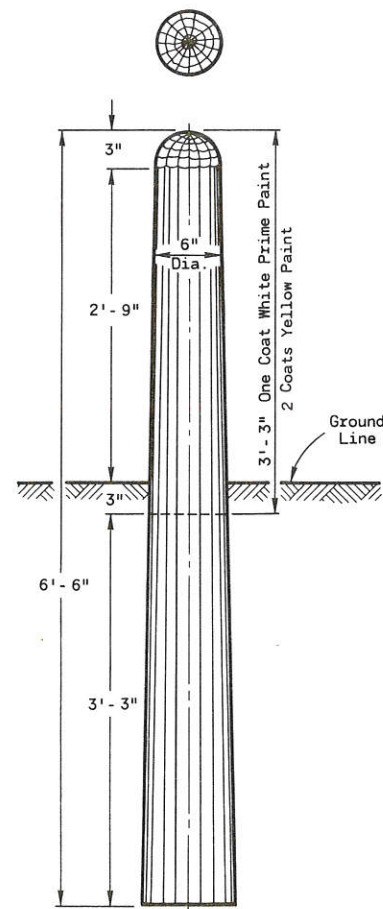
PLAN



ELEVATION
STEEL MARKER POST
FOR RIGHT OF WAY



ELEVATION
STEEL MARKER POST
FOR RIGHT OF WAY



ELEVATION
WOOD MARKER POST
FOR RIGHT OF WAY

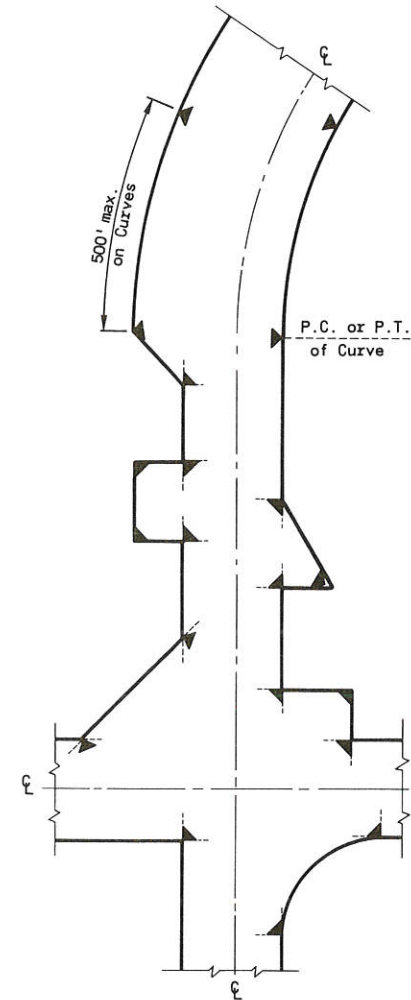


DIAGRAM SHOWING
TYPICAL LOCATIONS
OF MARKER POSTS
FOR RIGHT OF WAY

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.

MARKER POST FOR RIGHT OF WAY

Right of Way Marker Posts may be either wood or steel and shall be erected in advance of grading operations. Posts shall normally be placed at the outer limits of the highway Right of Way, but entirely within the Right of Way, and shall be so placed that the outer edge of the posts shall be tangent to the Right of Way line or lines extended. The exact location of all Right of Way posts will be staked in the field by the Engineer. Location and spacing of Marker Posts shall be as shown elsewhere on the plan or as directed by the Engineer.

MARKER POSTS
FOR RIGHT OF WAY

State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:
10-3-74
DATE

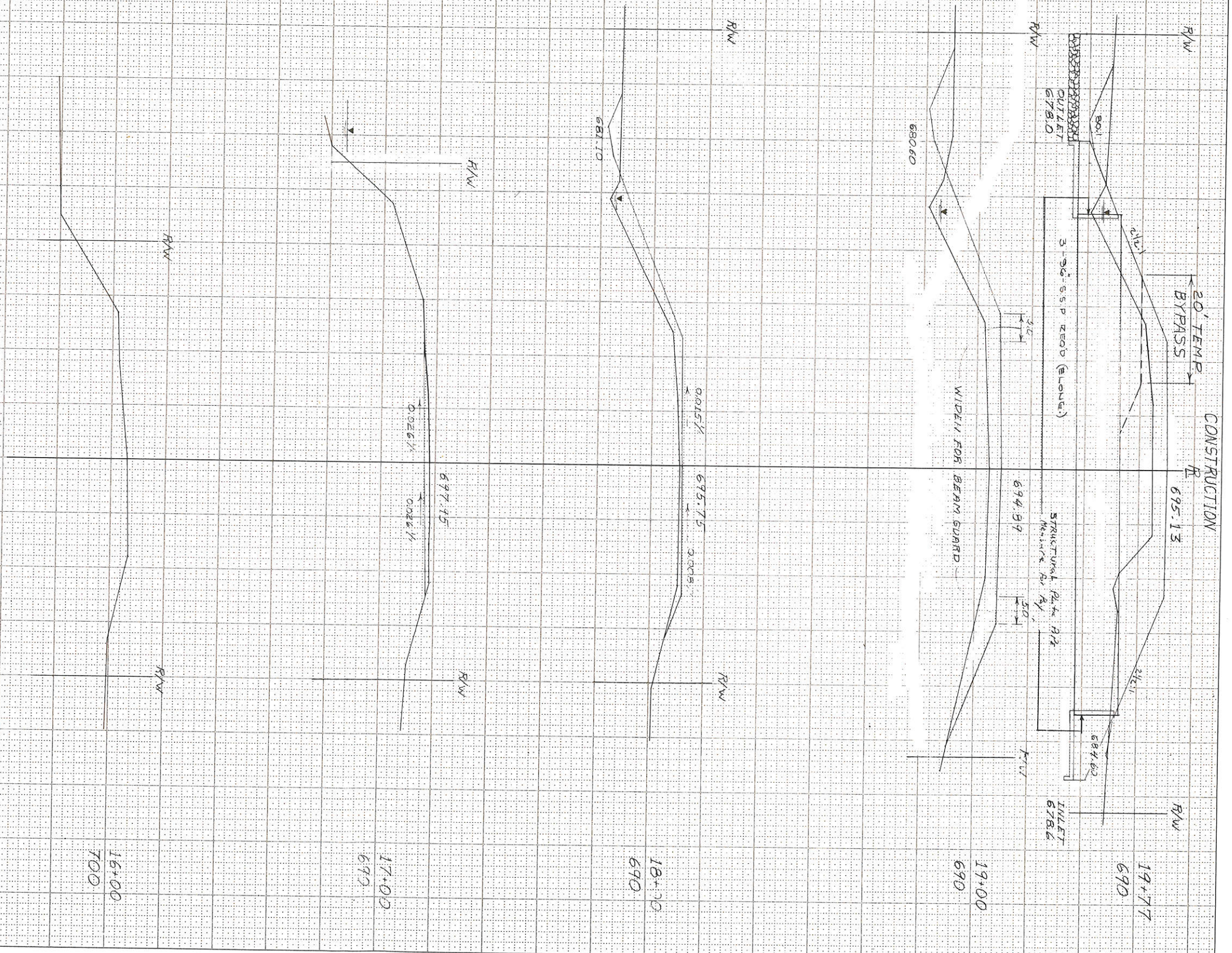
J.C. Henning
CHIEF OF FACILITIES DEVELOPMENT

APPROVED:
10-14-74
DATE

H.J. Siedler
STATE HIGHWAY ENGINEER

STATE PROJECT NUMBER	5075-1-71										SHEET NUMBER	8
YARDAGE											FILL	
EXCAVATION												
UNCL.												
DISTANCE	16	45	55	17	18	17	110	140	145	50	20	23
STATION	16	45	55	17	18	17	110	140	145	50	20	23
SHEET TOTAL	480											
	2220											

SCALE: H 1"=10'
V 1"=10'



16+00
700

17+00
699

18+10
690

19+00
690

19+77
690

CONSTRUCTION R
 2/19/10
 2/10

STATE PROJECT NUMBER
 5075-1-71

SHEET NUMBER
 8.1

24+00
 710

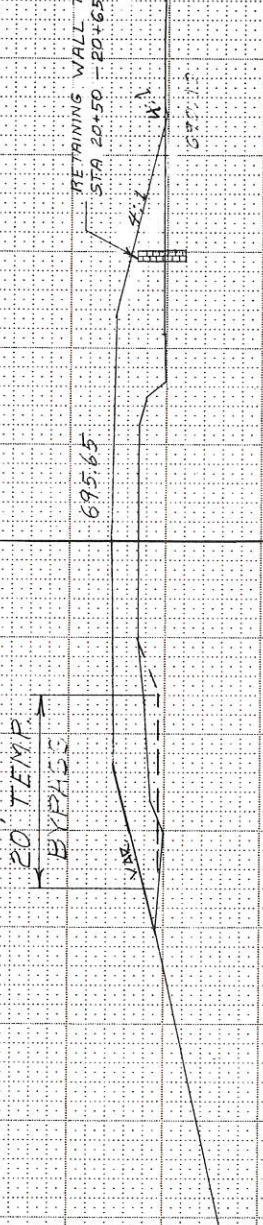
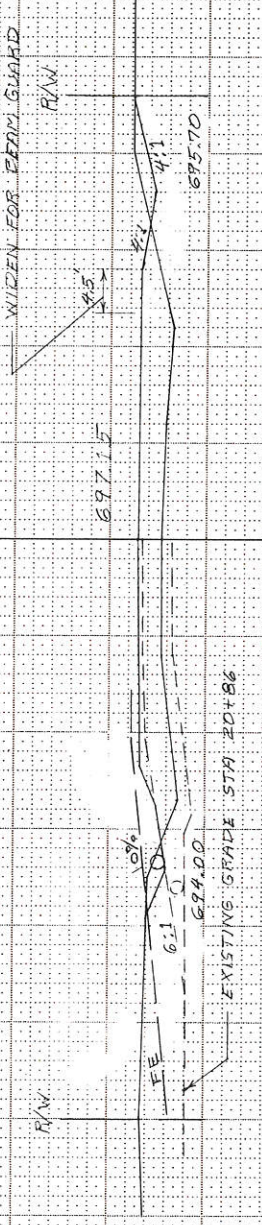
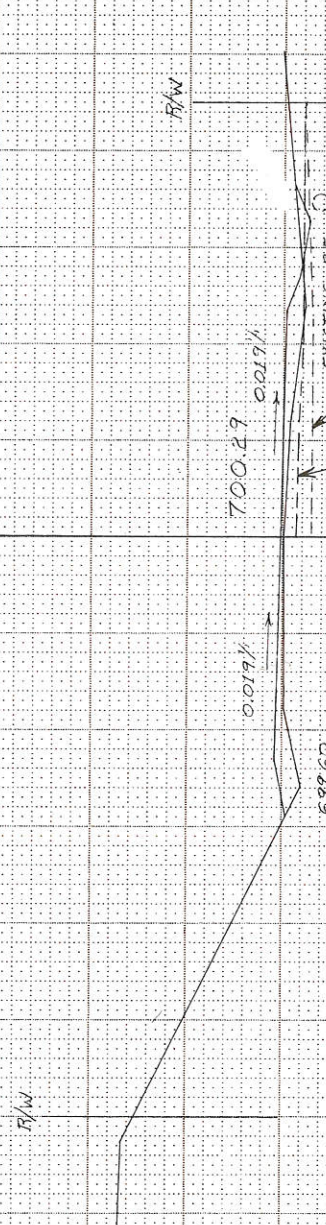
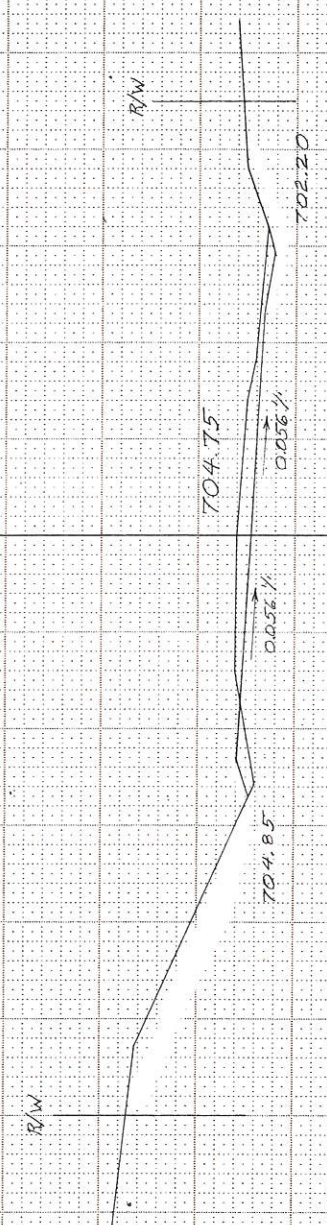
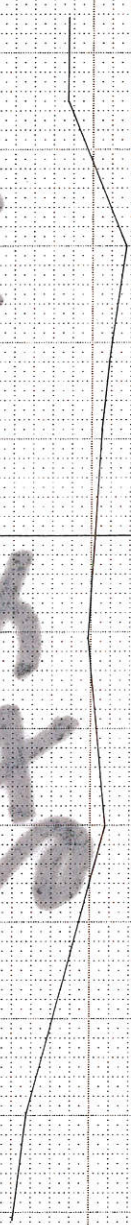
23+00
 700

22+00
 700

21+00
 690

20+23
 690

SCALE H 1"=10'
 V 1"=10'



STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
20+23	77	70	515
21		90	370
22		120	110
23		35	40
23+35			
SHEET TOTAL		320	1005

Plan # 246