

WINNEBAGO

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TOTAL SHEETS = 36



STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

20TH STREET ROAD, TOWN OF ALGOMA

(SAWYER CREEK BRIDGE AND APPROACHES)

CTH "K"

AS BUILT PLAN

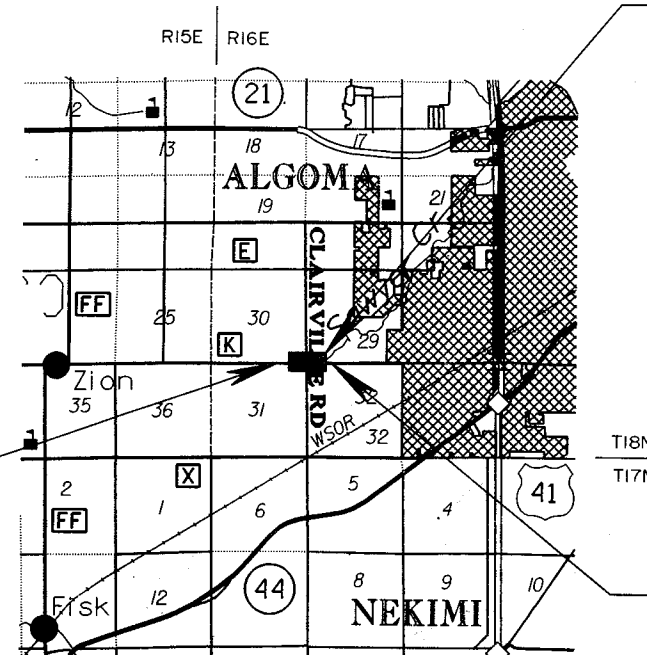
WINNEBAGO COUNTY NO.

STATE PROJECT NUMBER  
6473-02-71

SUPERVISOR RALPH FORSETH  
RESIDENT BRIAN STURTEVANT (COMM)  
CONTRACTOR PHEIFER BROS. CONST. CO.  
COMPLETED 6-5-96

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6473-02-71	BRO 1099 (13)	1

STRUCTURE  
B-70-153



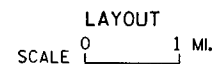
BEGIN PROJECT  
STA 16"K"+75  
Y=730700 (±100')  
X=2362000 (±100')

END PROJECT  
STA 23"K"+25

COORDINATES SHOWN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM SOUTH ZONE AND SCALED FROM THE VAN DYNE, WISCONSIN QUADRANGLE FOR IDENTIFICATION PURPOSES ONLY.

ORIGIN OF LEVELS

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO USGS BENCHMARK 293, A STANDARD NGS DISK STAMPED "Z 93 1934", LOCATED ABOUT 3.6 MILES SW. OF OSHKOSH ALONG THE C., M., ST. PAUL AND P. RR. FROM THE C. AND NW. RR. STATION; AT ABOUT 6 POLES NE. OF MILEPOST 185, AT THE CROSSING OF CTH "K", 33 FT. S. OF THE CENTER OF THE RD., 33 FT. NW. OF THE CENTER OF THE TRACK, 10 FT. E. OF A FENCE COR., 1 FT. S. OF A FENCE, IN SECTION 33, T18N, R16E. NOTE: BM "Z 93 1934" WAS RESET IN 1989 AND IS STAMPED WITH ELEVATION 810.42.



TOTAL NET LENGTH OF CENTERLINE = 0.123 MI. RURAL

DESIGN DESIGNATION

A.D.T. (1994)	=	2010
A.D.T. (2014)	=	2985
D.H.V. (2014)	=	450
D.	=	60-40
T. (% ADT)	=	9%
V. (MPH)	=	55
ESALS	=	461287

CONVENTIONAL SIGNS

COUNTY LINE		COMBUSTIBLE FLUIDS (UNDER PRESSURE)	
CORPORATE LIMITS		UNDERGROUND UTILITIES	
PROPERTY LINE		GAS	
LOT LINE		ELECTRIC	
LIMITED HIGHWAY EASEMENT		TELEPHONE	
EXISTING RIGHT OF WAY		SERVICE PEDESTAL	
NEW RIGHT OF WAY		CABLE MARKER	
REFERENCE LINE		POWER POLE	
SLOPE INTERCEPT		TELEPHONE POLE	
ORIGINAL GROUND		RAILROADS	
MARSH OR ROCK PROFILE		MARSH	
CULVERT IN PLACE		WOODED AREA	
CULVERT REQUIRED		RIGHT OF WAY MARKER	
CULVERT REQUIRED (Profile)		SILT FENCE	

APPROVED FOR WINNEBAGO COUNTY

8/11/93 DATE: Ralph Forseth COUNTY HIGHWAY COMMISSIONER

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

7/15/93 DATE: Russell A. Chumore (Signature)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	M & H
Designer	M & H
District Examiner	DHC
District Supervisor	JCL
Proj. Dev. Engineer	
C.O. Examiner	JEG

APPROVED FOR DISTRICT OFFICE

DATE: 7/21/94 James James (Signature)

6473-02-71

RUNOFF COEFFICIENT TABLE

LAND USE:	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 3.06 ACRES  
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.87 ACRES

GENERAL NOTES

NO TREES (AND/OR SHRUBS) ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.  
THE CONTRACTOR SHALL BACKFILL THE TEMPORARY BYPASS CHANNEL WITHIN THE ROADWAY AREAS WITH SUITABLE NATIVE MATERIAL.  
THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.  
THE EXACT LOCATION OF SILT FENCE SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD.  
SILT FENCE SHALL MEET THE MATERIAL SPECIFICATIONS FOR SILTY SOIL.  
THE DEPARTMENT OF TRANSPORTATION WILL FURNISH A MONUMENT TO BE INSTALLED ON THE STRUCTURE BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER.  
BEARINGS ARE TRUE BEARINGS TO THE NEAREST SECOND.  
ELEVATIONS SHOWN ON THE ROADWAY CROSS SECTIONS ARE EARTH GRADE ELEVATIONS AT THE CENTERLINE OF THE ROADWAY.  
DISTURBED AREAS WITHIN THE RIGHT-OF-WAY ARE TO BE TOPSOILED, MULCHED, FERTILIZED AND SEEDED AS DIRECTED BY THE ENGINEER.  
DURING THE MONTHS OF JULY AND AUGUST THE CONTRACTOR MAY PUMP THE WATERS OF THE SAWYER CREEK IN LIEU OF THE CHANNEL BYPASS. WISCONSIN DNR HAS APPROVED THIS OPTION.  
PUMPING WILL BE PAID FOR AT 1/2 OF THE PLAN QUANTITIES FOR THE DIVERSION CHANNEL CONSTRUCTION & RESTORATION ITEMS.  
PERPETUATION OF LANDMARKS AS REQUIRED BY STATUTE 59.635 WILL BE NECESSARY FOR THE SOUTHEAST CORNER OF SECTION 30, TOWN 18 NORTH, RANGE 16 EAST. THE MONUMENT MARKER WILL BE FURNISHED BY WINNEBAGO COUNTY. DIRECT ANY QUESTIONS REGARDING THIS TO DISTRICT THREE SURVEY SECTION.

STANDARD ABBREVIATIONS

ASPH.	ASPHALTIC	NO.	NUMBER
B.M.	BENCHMARK	PL.	PROPERTY LINE
CL	CENTERLINE	R.H.F.	RIGHT HAND FORWARD
CU. YD.	CUBIC YARD	RT.	RIGHT
CWT.	HUNDRED WEIGHT	R/W	RIGHT OF WAY
EL.	ELEVATION	SQ. FT.	SQUARE FEET
EXC.	EXCAVATION	SQ. YD.	SQUARE YARD
L.H.F.	LEFT HAND FORWARD	STA.	STATION
LIN. FT.	LINEAR FEET	T	TRANSIT LINE
LT.	LEFT	UNCL.	UNCLASSIFIED
LBS	POUNDS	T.L.E.	TEMPORARY LIMITED EASEMENT
MIN.	MINIMUM	VC.	VERTICAL CURVE
MAX.	MAXIMUM		

UTILITIES

DIGGER'S HOTLINE 1-800-242-8511 (TOLL FREE)  
AMERITECH WISCONSIN PUBLIC SERVICE CORPORATION  
ATTN: AL MATSCHI 414-929-1000 STEVEN L. OE MERRITT, P.E. 414-433-1716  
70 EAST DIVISION STREET FACILITIES SYSTEMS SUPERVISOR (A3)  
FOND DU LAC, WISCONSIN 54935 700 NORTH ADAMS STREET  
CABLE LOCATE : 1-800-242-8511 (TOLL FREE) P.O. BOX 19001  
GREEN BAY, WISCONSIN 54307-9001

D.N.R. AREA LIAISON

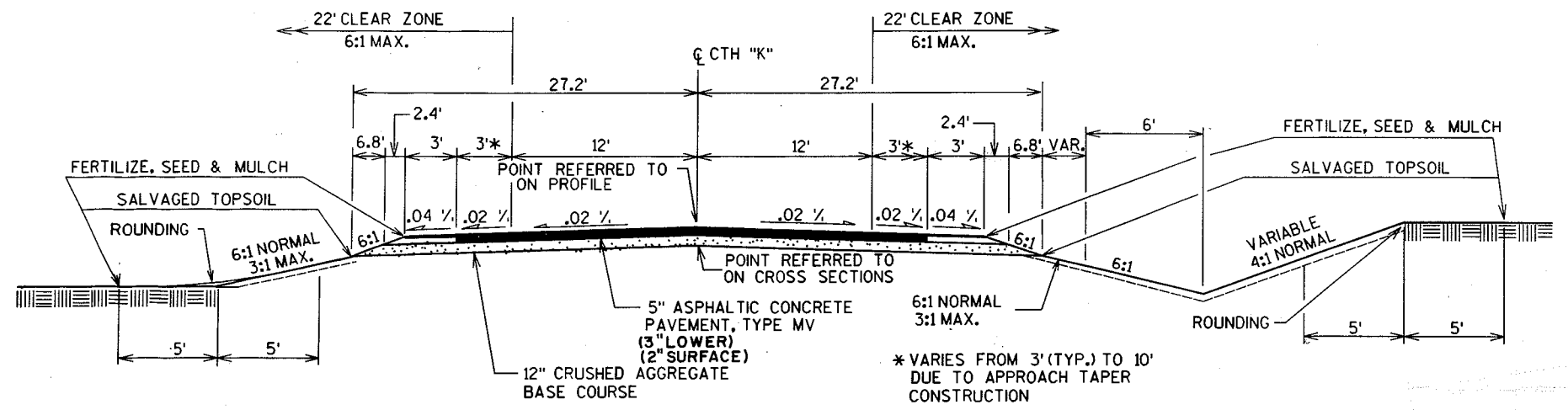
WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
KELLEY O'CONNOR 414-492-5809  
P.O. BOX 10448  
1125 NORTH MILITARY AVENUE  
GREEN BAY, WISCONSIN 54307-0448

STANDARD DETAIL DRAWINGS

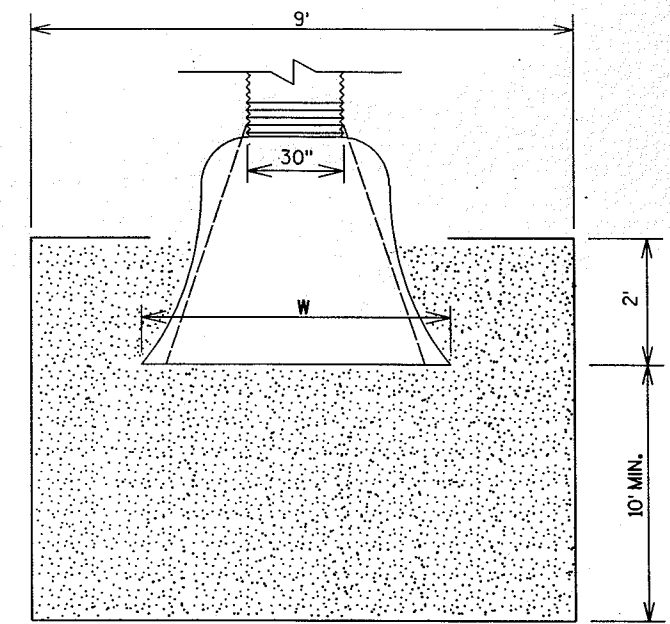
CONCRETE CURB, CONCRETE CURB AND GUTTER	801-11
AND PAVEMENT TIES	804-3
CONCRETE SURFACE DRAIN & ASPHALTIC FLUME	8E8-2
TYPICAL INSTALLATIONS OF EROSION BALES	8E9-4
SILT FENCE	8F1-10a
APRON ENDWALLS FOR CULVERT PIPE	
AT-GRADE SIDE ROAD INTERSECTIONS.	
TYPES "B", "C" AND "D"	9A1-8a
NAME PLATE-STRUCTURES	12A3-4
MARKER POSTS FOR RIGHT-OF-WAY	15A1-5
BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURES	15C2-2
PAVEMENT MARKING (MAINLINE & INTERSECTIONS)	15C8-5a
LANDMARK REFERENCE MONUMENTS AND COVERS	16A1-5

22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60.

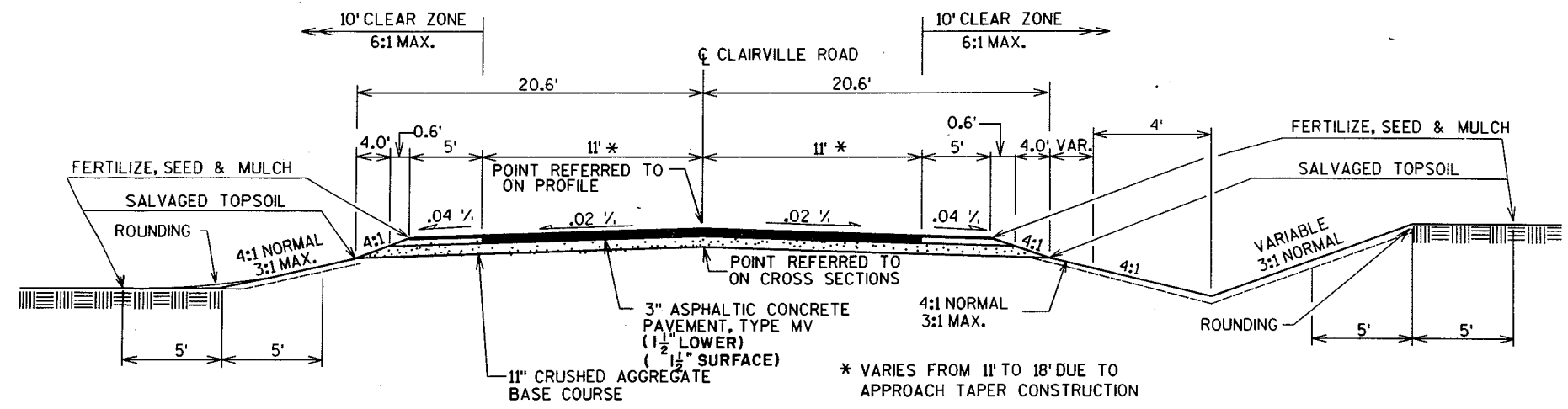
LEVELS ON =



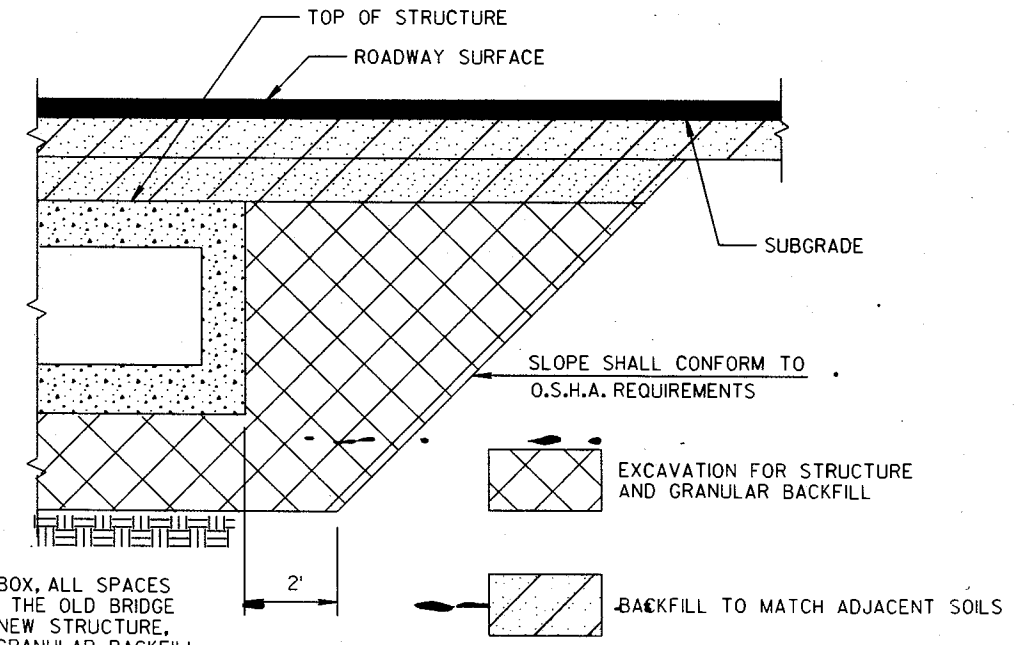
**TYPICAL ROADWAY CROSS SECTION  
CTH "K"**



**SOD AT PIPE DISCHARGE**

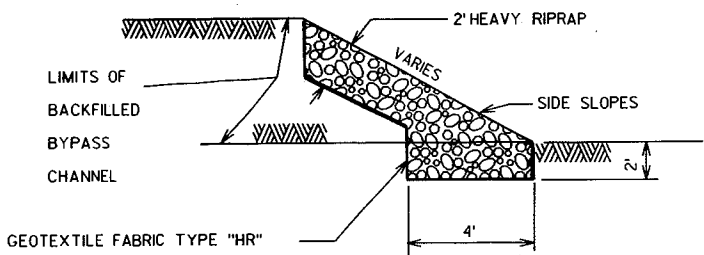
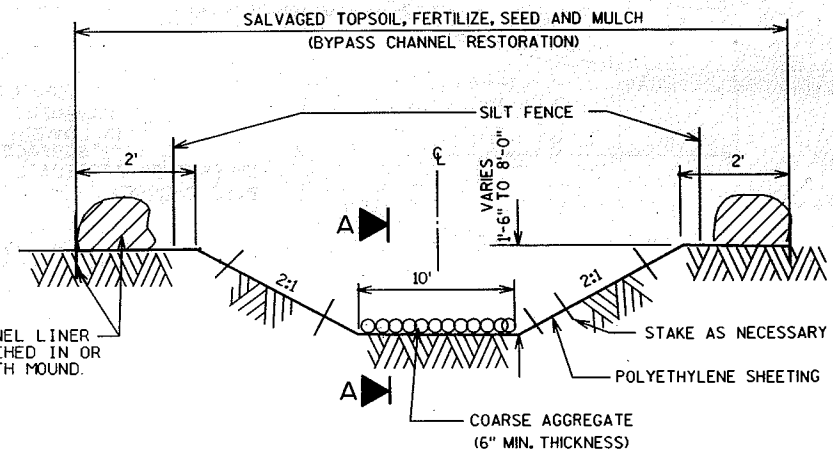
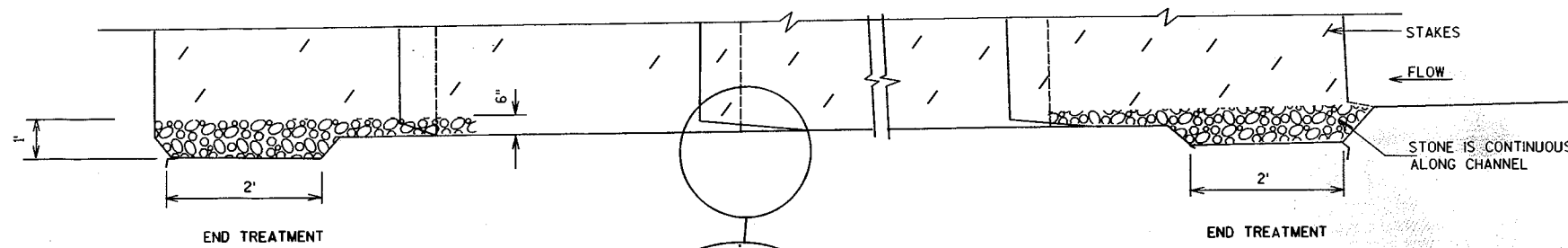


**TYPICAL SIDE ROAD CROSS SECTION  
CLAIRVILLE ROAD**



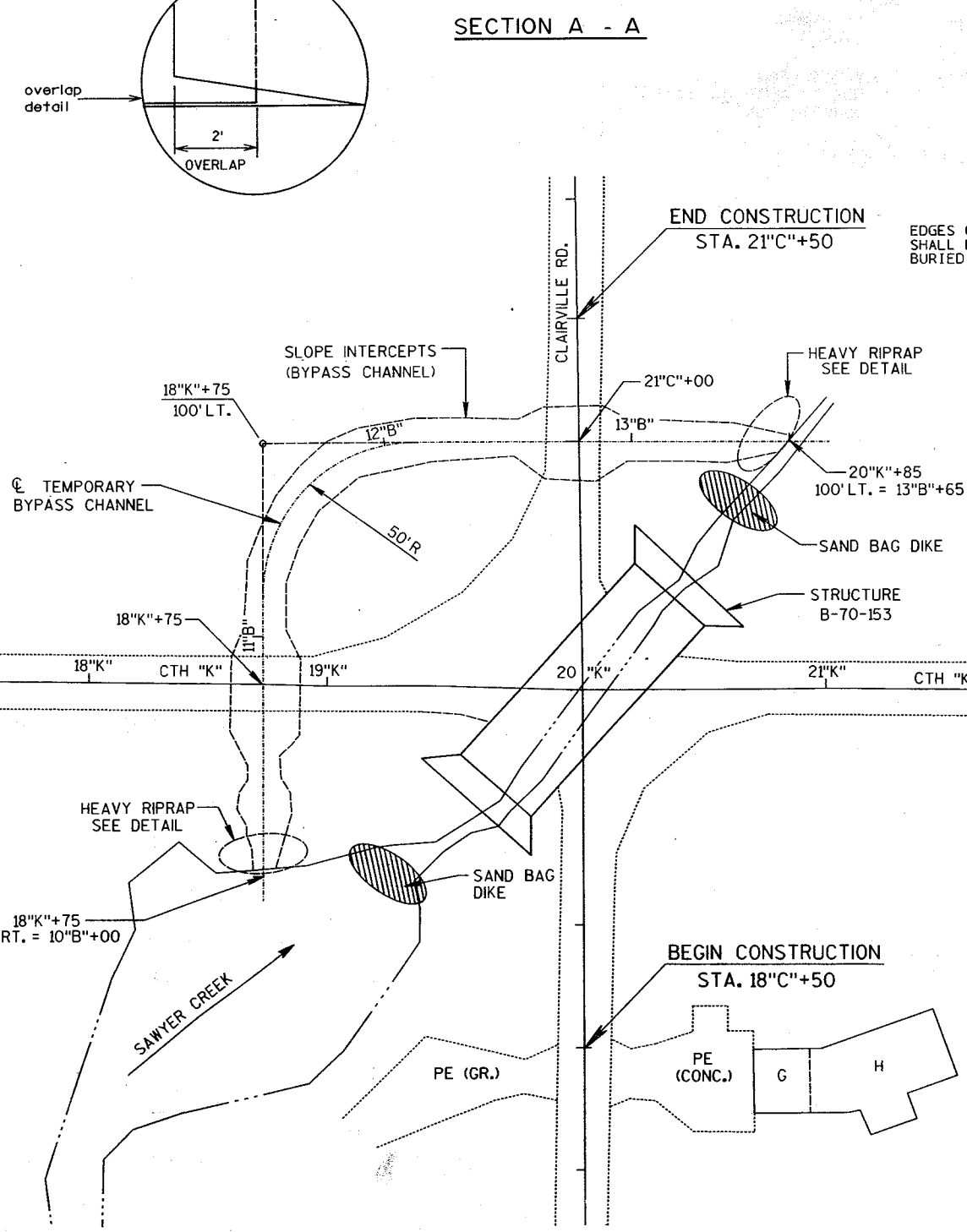
**EXCAVATION & BACKFILL DETAIL**

NOTE:  
WITHIN THE LENGTH OF THE BOX, ALL SPACES EXCAVATED OR OCCUPIED BY THE OLD BRIDGE AND NOT OCCUPIED BY THE NEW STRUCTURE, SHALL BE BACKFILLED WITH GRANULAR BACKFILL TO THE TOP OF THE BOX.



**HEAVY RIPRAP DETAIL FOR SIDE SLOPES AT ENDS OF BYPASS CHANNEL**

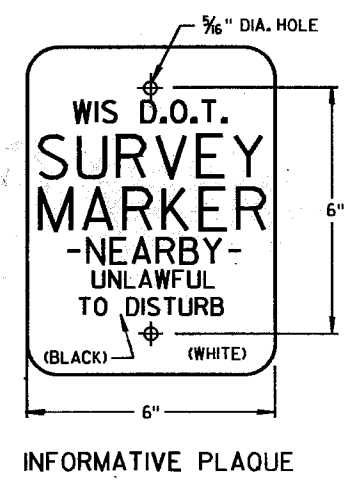
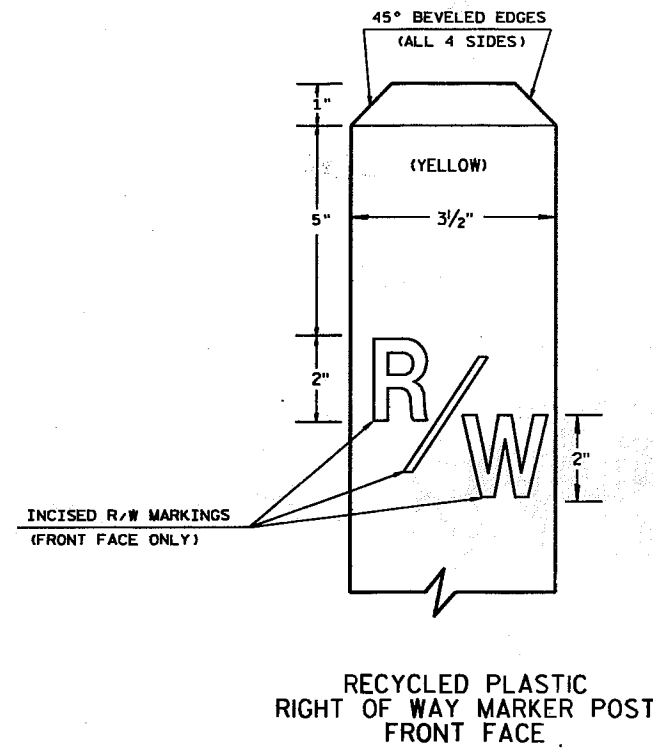
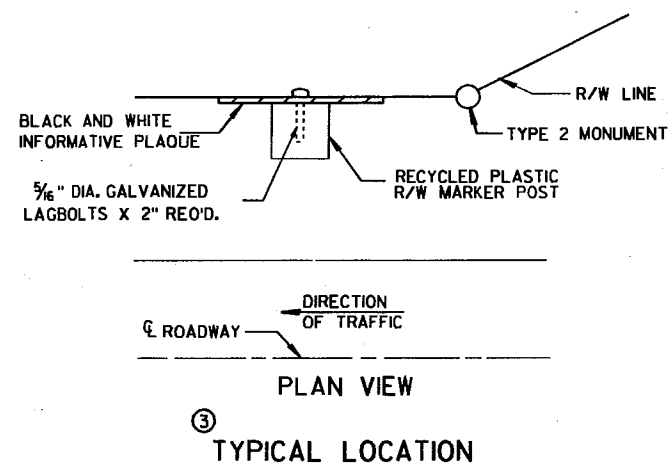
NOTE: PLACE HEAVY RIPRAP AT EACH END OF THE TEMPORARY BYPASS CHANNEL AFTER BACKFILLING AND RESTORATION OF CHANNEL TO SECURE THE STREAM BANK



**PLAN VIEW**  
(NOT TO SCALE)

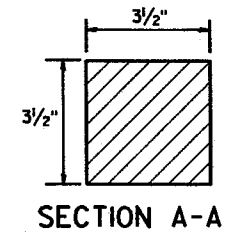
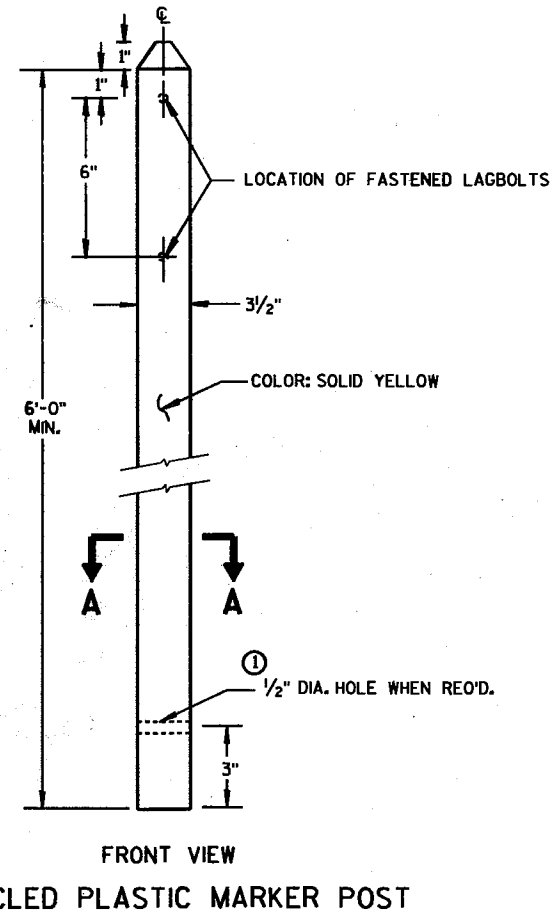
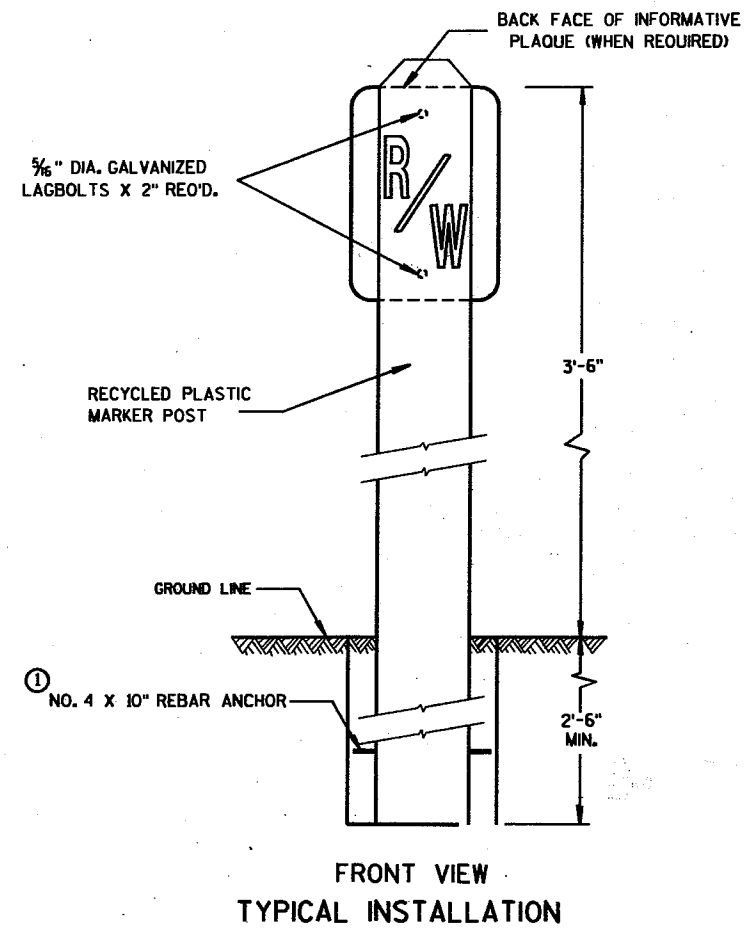
BEGIN PROJECT  
STA. 16"K"+75

END PROJECT  
STA. 23"K"+25



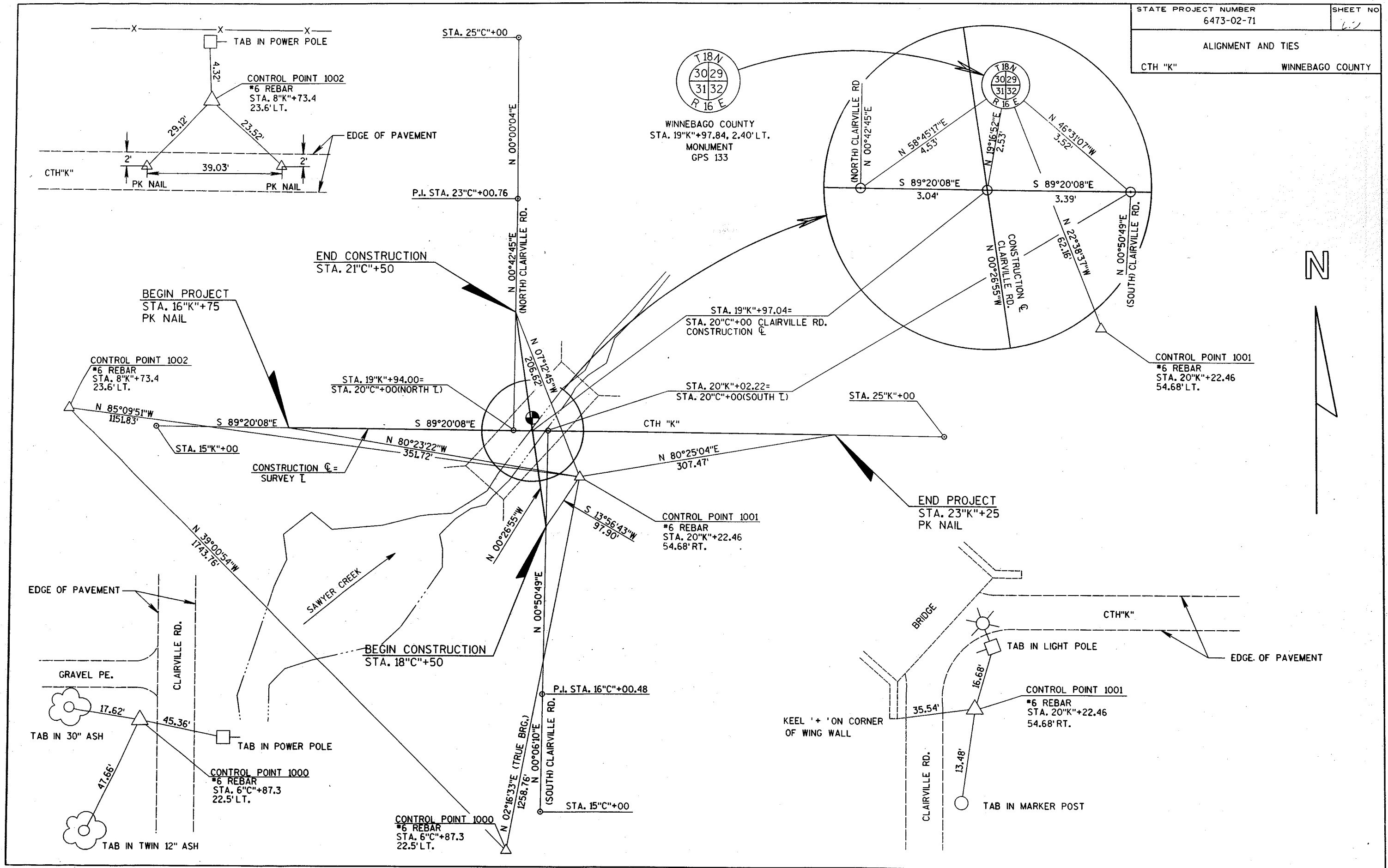
- NOTES:**
- POSTS SHALL BE SET IN EXCAVATED HOLES. POSTS SHALL BE ANCHORED AS ILLUSTRATED OR BY ALTERNATIVE POST ANCHORING DEVICES APPROVED BY THE ENGINEER.
  - INFORMATIVE PLAQUES WILL BE FURNISHED BY THE DEPARTMENT OF TRANSPORTATION.
  - A MARKER POST FOR RIGHT OF WAY SHALL BE PLACED ADJACENT TO EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

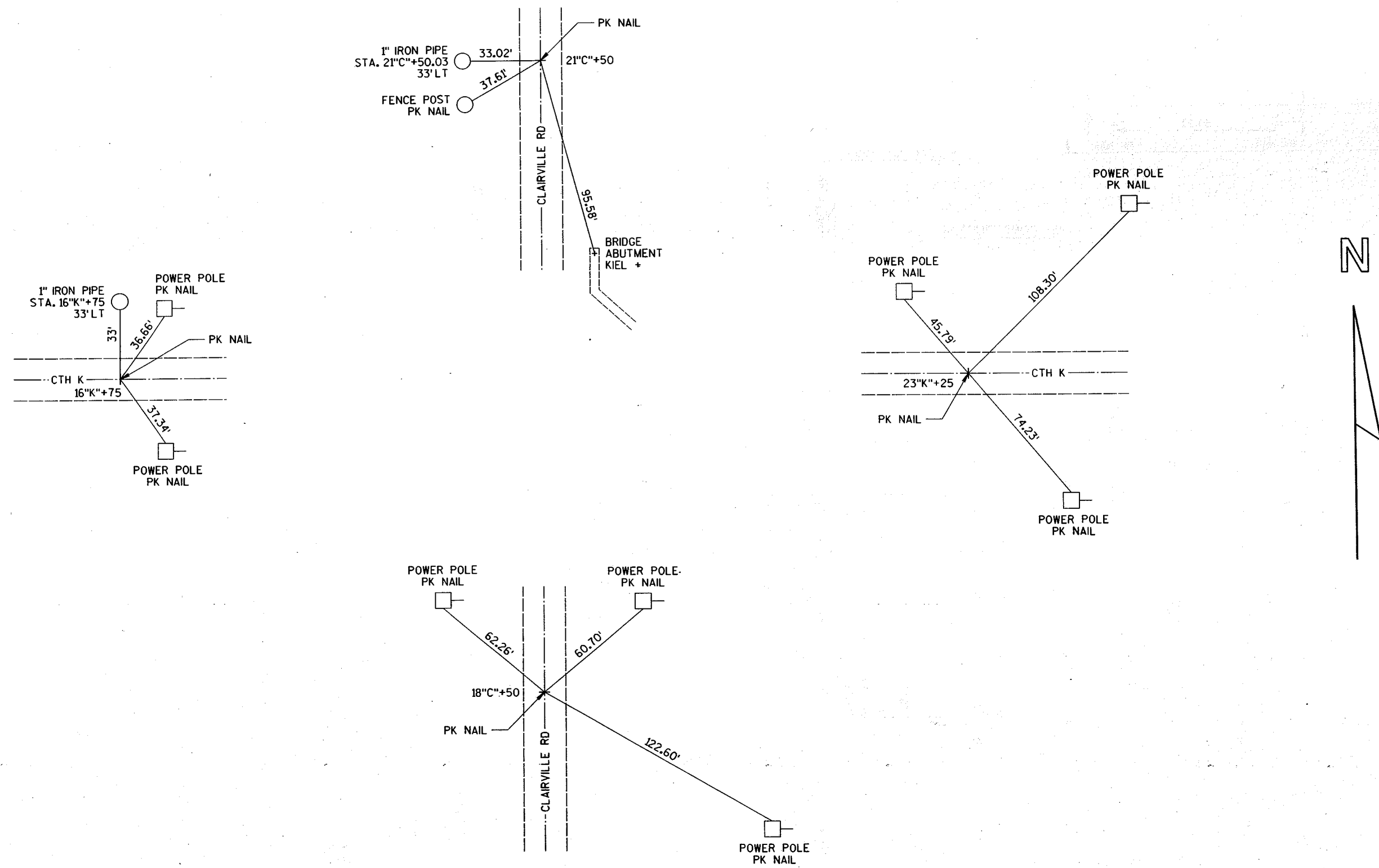
**② SIGN DETAILS**



22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60.









DATE 09/16/94

## ESTIMATE OF QUANTITIES

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6473-02-71 QUANTITY
20101	CLEARING	STA.	5.00	5.00
20104	GRUBBING	STA.	5.00	5.00
20351	REMOVING OLD BRIDGE, STATION 20+K'+00	L.S.	1.00	1.00
20503	UNCLASSIFIED EXCAVATION	C.Y.	3,800.00	3,800.00
20620	EXCAVATION FOR STRUCTURES, CULVERTS B-70-153	L.S.	1.00	1.00
20801	BORROW EXCAVATION	C.Y.	550.00	550.00
21302	FINISHING ROADWAY, PROJECT 6473-02-71	L.S.	1.00	1.00
30403	CRUSHED AGGREGATE BASE COURSE	C.Y.	1,635.00	1,635.00
40501	ASPHALTIC MATERIAL FOR PLANT MIXES	TON	55.00	55.00
40713	ASPHALTIC CONCRETE PAVEMENT, TYPE MV	TON	900.00	900.00
50401	CONCRETE MASONRY, CULVERTS	C.Y.	514.00	514.00
50505	HIGH-STRENGTH BAR STEEL REINFORCEMENT, CULVERTS	LB.	95,500.00	95,500.00
52007	CULVERT PIPE, CLASS III, 30-INCH	L.F.	132.00	132.00
52065	APRON ENDWALLS FOR CULVERT PIPE, 30-INCH	EACH	4.00	4.00
60170	CONCRETE CURB AND GUTTER, 36-INCH, TYPE D	L.F.	320.00	320.00
60601	RIPRAP	C.Y.	10.00	10.00
60602	HEAVY RIPRAP	C.Y.	88.00	88.00
61220	PIPE UNDERDRAIN, DRAIN TILE, 4-INCH	L.F.	50.00	50.00
61422	MARKER POSTS FOR RIGHT-OF-WAY	EACH	11.00	11.00
61910	MOBILIZATION	L.S.	.50	.50
62112	LANDMARK REFERENCE MONUMENTS AND ALUMINUM COVERS	EACH	1.00	1.00
62203	ASPHALTIC FLUMES	S.Y.	44.00	44.00
62505	SALVAGED TOPSOIL	S.Y.	4,580.00	4,580.00
62702	MULCHING	S.Y.	5,785.00	5,785.00
62811	EROSION BALES, DELIVERED	EACH	50.00	50.00
62812	EROSION BALES, INSTALLED	EACH	50.00	50.00
62815	SILT FENCE, DELIVERED	L.F.	2,000.00	2,000.00

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6473-02-71 QUANTITY
62816	SILT FENCE, INSTALLED	L.F.	2,000.00	2,000.00
62817	SILT FENCE MAINTENANCE	L.F.	4,000.00	4,000.00
62819	MOBILIZATIONS, EROSION CONTROL	EACH	1.00	1.00
62821	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	2.00	2.00
62824	EROSION MAT, DELIVERED, CLASS I, TYPE B	S.Y.	100.00	100.00
62825	EROSION MAT, INSTALLED, CLASS I, TYPE B	S.Y.	100.00	100.00
62905	FERTILIZER, TYPE B	CWT.	4.50	4.50
63002	SEEDING	LB.	80.00	80.00
63101	SODDING	S.Y.	24.00	24.00
64201	FIELD OFFICE, TYPE A	L.S.	.50	.50
64210	FIELD LABORATORY	L.S.	.50	.50
64302	TRAFFIC CONTROL, PROJECT 6473-02-71	L.S.	1.00	1.00
64406	PAVEMENT MARKING, EPOXY, 4-INCH	L.F.	1,855.00	1,855.00
64505	GEOTEXTILE FABRIC, TYPE R	S.Y.	30.00	30.00
64506	GEOTEXTILE FABRIC, TYPE HR	S.Y.	130.00	130.00
64601	SAWING EXISTING PAVEMENT	L.F.	92.00	92.00
90402	QUALITY MANAGEMENT PROGRAM, ASPHALTIC MIXTURE	TON	900.00	900.00
90416	COARSE AGGREGATE, SIZE NO. 2	C.Y.	75.00	75.00
90643	SAND BAGS	EACH	620.00	620.00
90651	POLYETHYLENE SHEETING, DELIVERED	S.Y.	1,660.00	1,660.00
90652	POLYETHYLENE SHEETING, INSTALLED	S.Y.	1,660.00	1,660.00

SHEET 2.1

EROSION CONTROL

STATION TO STATION	LOCATION	SALVAGED TOPSOIL S.Y.	MULCHING S.Y.	FERTILIZER TYPE B CWT.	SEEDING NO.10 LBS.
16"K"+75 - 23"K"+25	CTH "K"	2940	3980	2.5	54
18"C"+50 - 21"C"+50	CLAIRVILLE RD	1170	1335	1.0	18
10"B"+00 - 13"B"+65	TEMPORARY BYPASS CHANNEL RESTORATION	470	470	0.5	6
-----	BORROW PIT RESTORATION	-----	-----	0.5	2
	TOTAL	4580	5785	4.5	80

SILT FENCE

STATION	LOCATION	DELIVERED L.F.	INSTALLED L.F.	MAINTENANCE L.F.
10"B"+00 - 13"B"+65	TEMPORARY BYPASS CHANNEL LT & RT	600	600	1200
21"C"+00	30' LT @ CP INLET	40	40	80
21"K"+00	35' RT @ CP INLET	40	40	80
16"K"+75 - 23"K"+25	CTH "K", LT & RT	920	920	1840
18"C"+50 - 21"C"+50	CLAIRVILLE RD, LT & RT	400	400	800
	TOTAL	2000	2000	4000

CULVERT PIPE SCHEDULE

STATION	LOCATION	DIA. INCHES	LENGTH L.F.	TYPE	CLASS	THICKNESS (INCHES)		APRON ENDWALL EACH
						STEEL	ALUM.	
21"K"+00	CTH "K"	30	74	CP	III	0.079	0.075	2
21"C"+00	CLAIRVILLE ROAD	30	58	CP	III	0.079	0.075	2

SAND BAG DIKE

STATION	LOCATION	SAND BAGS EACH
19"K"+25	75' RT	310
20"K"+65	75' LT	310
	TOTAL	620

MARKER POSTS FOR RIGHT OF WAY

STATION	LOCATION	NUMBER
16"K"+75	33' LT & RT	2
17"K"+00	50' RT	1
19"K"+25	60' RT	1
19"C"+26.66	54.78' LT	1
23"K"+25	33' LT & RT	2
18"C"+49.95	33.00 LT	1
19"C"+00.00	34.14' RT	1
21"C"+49.36	32.99' RT	1
21"C"+50.03	33.00' LT	1
	TOTAL	11

EROSION BALES

LOCATION	DELIVERED EACH	INSTALLED EACH
UNDISTRIBUTED	50	50

EROSION MAT, CLASS I, TYPE B

LOCATION	DELIVERED S.Y.	INSTALLED S.Y.
UNDISTRIBUTED	100	100

GEOTEXTILE FABRIC, TYPE "HR"

STATION	LOCATION	S.Y.
10"B"+00	BEGINNING OF TEMPORARY BYPASS	35
13"B"+65	END OF TEMPORARY BYPASS	35
	TOTAL	70

GEOTEXTILE FABRIC, TYPE "R"

STATION	LOCATION	S.Y.
18"C"+58	28' LT @ SPRING DISCHARGE	30

POLYETHYLENE SHEETING

LOCATION	DELIVERED S.Y.	INSTALLED S.Y.
TEMPORARY BYPASS CHANNEL	1660	1660

PIPE UNDERDRAIN, DRAIN TILE 4-INCH

STATION	LOCATION	L.F.
19"K"+62	90' LT	50

CLEARING & GRUBBING		
STATION TO STATION	NO. OF STATIONS CLEARING	NO. OF STATIONS GRUBBING
11"B"+65 - 13"B"+65	2	2
20"K"+00 - 23"K"+00	3	3
TOTAL	5	5

ASPHALTIC MATERIAL FOR PLANT MIXES	
LOCATION	TONS
CTH "K"	43
CLAIRVILLE ROAD	12
TOTAL	55

SODDING		
STATION	LOCATION	S.Y.
21"K"+00	40' LT	12
21"C"+00	35' LT	12
TOTAL		24

SAWING EXISTING PAVEMENT	
STATION	L.F.
16"K"+75	24
23"K"+25	24
18"C"+50	22
21"C"+50	22
TOTAL	92

QUALITY MANAGEMENT PROGRAM, ASPHALTIC MIXTURE	
LOCATION	TONS
CTH "K"	715
CLAIRVILLE ROAD	185
TOTAL	900

HEAVY RIPRAP		
STATION	LOCATION	C.Y.
10"B"+00	BEGINNING OF TEMPORARY BYPASS CHANNEL	24
13"B"+65	END OF TEMPORARY BYPASS CHANNEL	24
TOTAL		48

COARSE AGGREGATE	
LOCATION	C.Y.
TEMPORARY BYPASS CHANNEL	75

ASPHALTIC CONCRETE PAVEMENT, TYPE MV	
LOCATION	TONS
CTH "K"	715
CLAIRVILLE ROAD	185
TOTAL	900

ASPHALTIC FLUMES	
LOCATION	S.Y.
19"C"+20, 20' LT	11
19"C"+37, 20' RT	11
20"C"+63, 20' LT	11
20"C"+80, 20' RT	11
TOTAL	44

RIPRAP		
STATION	LOCATION	C.Y.
18"C"+58	28' LT AT SPRING DISCHARGE	10

CRUSHED AGGREGATE BASE COURSE		
STATION TO STATION	LOCATION	C.Y.
16"K"+75 - 23"K"+25	CTH "K" BASE	1150
16"K"+25 - 23"K"+25	CTH "K" SHOULDERS	70
18"C"+50 - 21"C"+50	CLAIRVILLE ROAD BASE	400
18"C"+50 - 21"C"+50	CLAIRVILLE ROAD SHOULDERS	15
TOTAL		1635

CONCRETE CURB & GUTTER, 36-INCH, TYPE D	
LOCATION	L.F.
NW QUAD OF INTERSECTION	65
NE QUAD OF INTERSECTION	95
SW QUAD OF INTERSECTION	95
SE QUAD OF INTERSECTION	65
TOTAL	320

PAVEMENT MARKING, EPOXY, 4-INCH		
STATION TO STATION	LOCATION	L.F.
16"K"+76 - 19"K"+40	4" WHITE EDGE NW QUAD	265
16"K"+75 - 19"K"+24	4" WHITE EDGE SW QUAD	249
20"K"+70 - 23"K"+25	4" WHITE EDGE NE QUAD	255
20"K"+54 - 23"K"+25	4" WHITE EDGE SE QUAD	271
16"K"+75 - 23"K"+25	4" YELLOW CL SOLID & DASHED	815
TOTAL		1855

CONVENTIONAL SIGNS AND ABBREVIATIONS

R/W PROJECT NUMBER 6473-02-21	SHEET NUMBER 4.0	TOTAL SHEETS 2
FEDERAL PROJECT NUMBER		
PLAT OF RIGHT OF WAY REQUIRED FOR SAWYER CREEK BRIDGE		
C.T.H. "K"		WINNEBAGO COUNTY
6473-12 11		4.0

STATE LINE  
COUNTY LINE  
TOWNSHIP AND RANGE LINES  
SECTION LINES  
QUARTER LINE  
SIXTEENTH LINE  
NEW REFERENCE LINE  
NEW R/W LINE  
EXISTING R/W LINE  
PROPERTY LINE  
CORPORATE LIMITS  
LOT, TIE AND OTHER MINOR LINES  
SLOPE INTERCEPTS  
UNDERGROUND FACILITY (GAS, TELEPHONE, ELECTRIC, ETC.)  
FENCE  
TEMPORARY LIMITED EASEMENT  
PERMANENT LIMITED EASEMENT  
BEAM GUARD  
TRANSMISSION TOWER AND LINE

SECTION CORNER  
HAZARDOUS UTILITY SITE  
BRIDGE  
STREAM OR RIVER  
LAKE  
CULVERT (BOX, PIPE OR CATTLE PASS)  
RAIL LINE (SMALL SCALE) (LARGE SCALE)

FOUNDATION OR RUIN  
BUILDING  
CEMETERY  
GAS MARKER OR TELEPHONE PEDESTAL  
IRON PIN  
R/W MONUMENT  
VALVE  
WINDMILL  
SILO, MANHOLE, VENT, SEPTIC VENT, WELL, ETC.  
GAS PUMPS  
BUSHES  
TREES (DECIDUOUS) (CONIFEROUS)  
WOODS

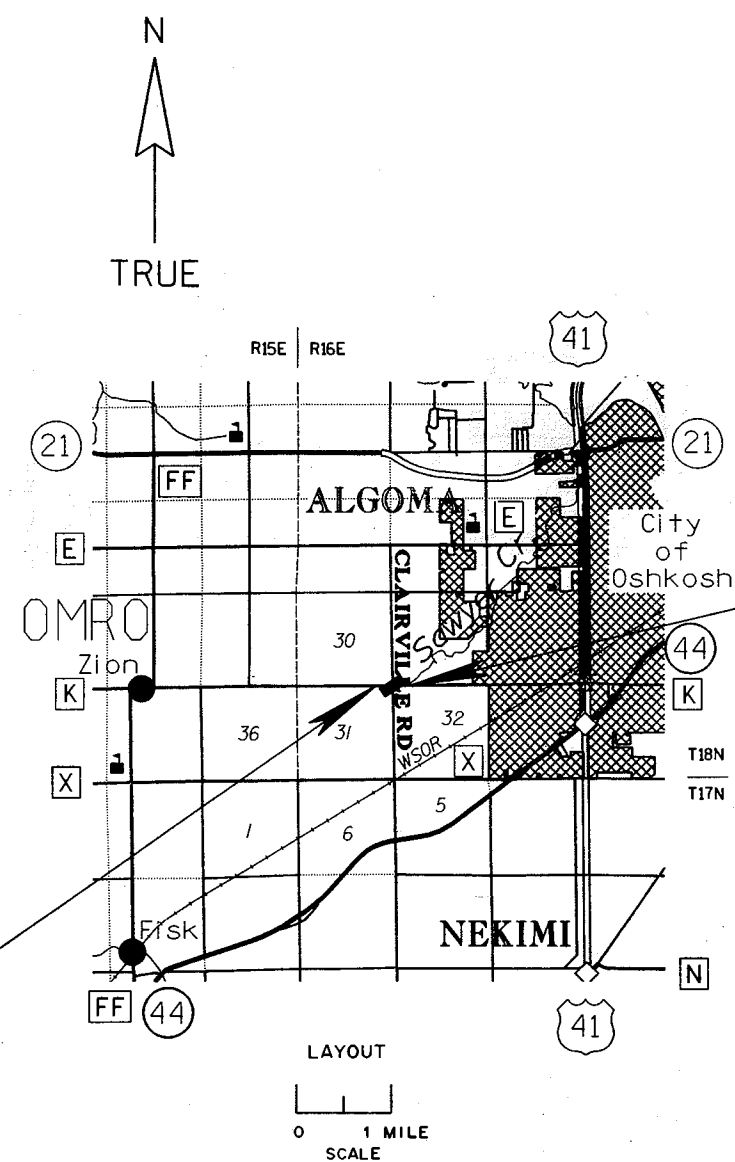
COMPENSABLE NON-COMPENSABLE  
POWER POLE  
TELEPHONE POLE  
ANCHOR  
TELEPHONE PEDESTAL

ACRES  
AHEAD  
AND OTHERS  
BACK  
BARN  
CENTERLINE  
CENTRAL ANGLE  
CONCRETE  
CORNER  
GARAGE  
HOUSE  
LENGTH  
LONG CHORD

AC  
AH  
ET AL  
BK  
B  
C  
Δ  
CONC  
COR  
G  
H  
L  
LC

LONG CHORD BEARING  
MONUMENT  
PARKER-KALON FASTENER  
PROPERTY LINE  
RADIUS  
RIGHT OF WAY  
SECTION  
SHED  
STATION  
TANGENT  
TEMPORARY LIMITED EASEMENT  
TRANSIT LINE

LCB  
MON  
PK  
PL  
R  
R/W  
SEC  
S  
STA  
T  
I



END RELOCATION ORDER  
STA. 23 "K" +25  
6.19 FEET SOUTH AND 327.11 FEET  
EAST OF THE SOUTHEAST CORNER  
OF SECTION 30, T18N, R16E.

BEGIN RELOCATION ORDER  
STA. 16 "K" +75  
1.35 FEET NORTH AND 322.85 FEET  
WEST OF THE SOUTHEAST CORNER  
OF SECTION 30, T18N, R16E.

NOTES

- DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.
- RIGHT OF WAY MONUMENTS ARE TYPE 2 AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.
- RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.
- ALL BEARINGS ARE TO THE NEAREST SECOND AND ARE REFERENCED TO A TRUE BEARING.
- EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE: CENTERLINE OF EXISTING HIGHWAY PAVEMENT.
- GOVERNMENTAL LAND LINE AND REFERENCE LINE ARE NOT COINCIDENTAL.

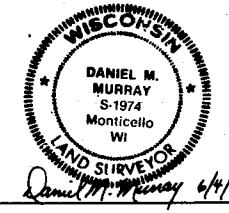
SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL	OWNER(S)	INTEREST REQUIRED	TOTAL ACRES	R/W ACRES REQUIRED			TOTAL ACRES REMAINING	T.L.E. ACRES	P.L.E. ACRES
				NEW	EXISTING	TOTAL			
1	KENNETH W. NEUBAUER	P.L.E.	80.0	--	0.23	0.23	79.77	--	0.38
2	VIRGINIA NEUBAUER	FEE	61.81	0.10	0.01	0.11	61.70	--	--
3	WILLIAM S. & ROBERTA J. BRAYTON	FEE	2.10	0.30	0.22	0.52	1.58	--	--
4	STEVEN L. & CARLA J. FOUST	FEE, T.L.E.	4.21	0.37	0.43	0.80	3.41	0.15	--
6	JERRY H. & JUDITH A. JORGENSEN	FEE	7.85	0.03	0.07	0.10	7.75	--	--
7	GORDEN & BETTY FOUST	FEE	1.00	0.004	0.03	0.03	0.97	--	--
10	WISCONSIN PUBLIC SERVICE	RELEASE OF RIGHTS	--	--	--	--	--	--	--
11	WISCONSIN BELL INC.	RELEASE OF RIGHTS	--	--	--	--	--	--	--

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

APPROVED FOR  
WINNEBAGO COUNTY  
BY  
8/23/93  
DATE  
County Highway Commissioner

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



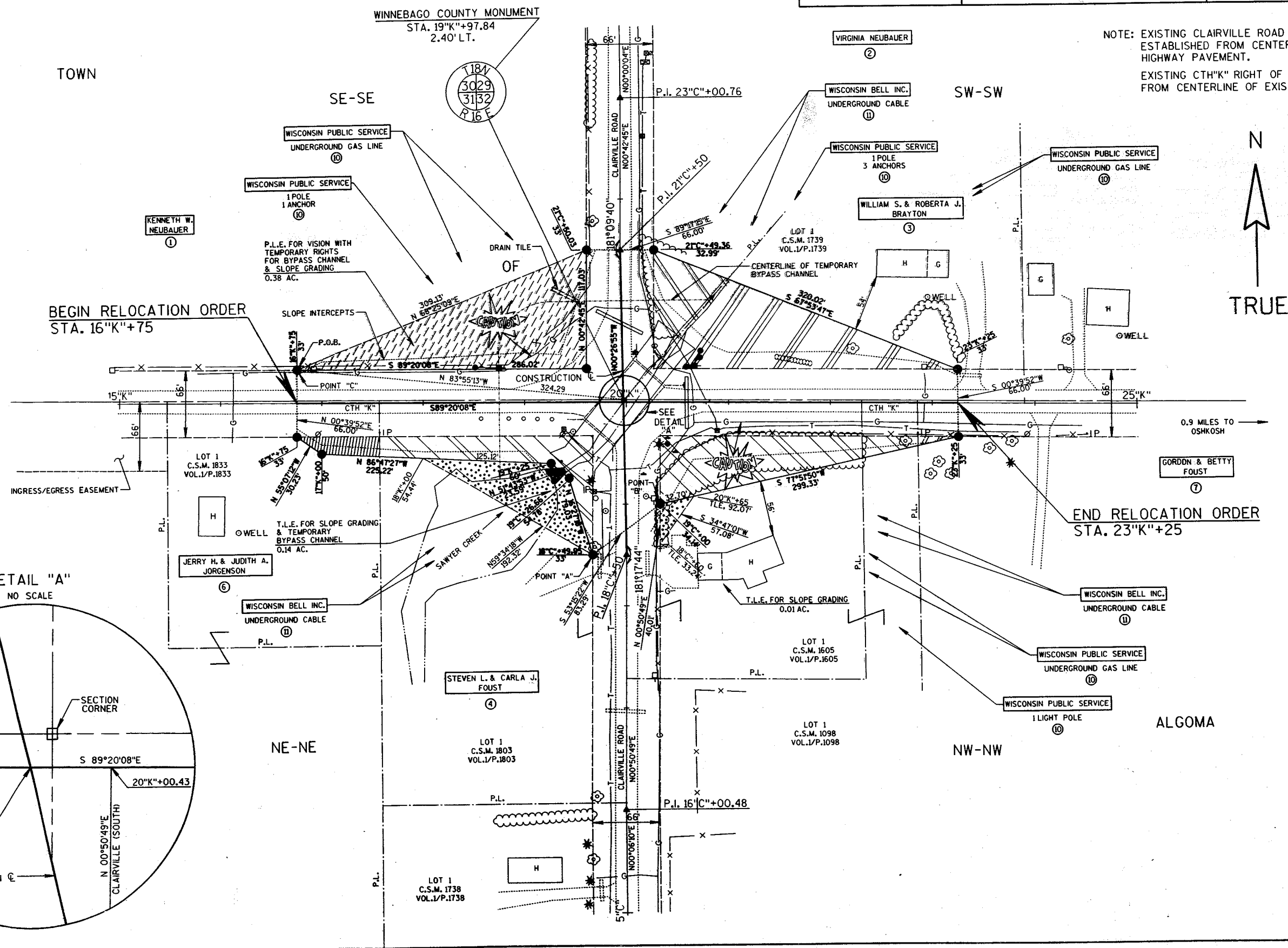
REVISION DATE  
1/6/94  
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED:  
DATE:  
DISTRICT DIRECTOR

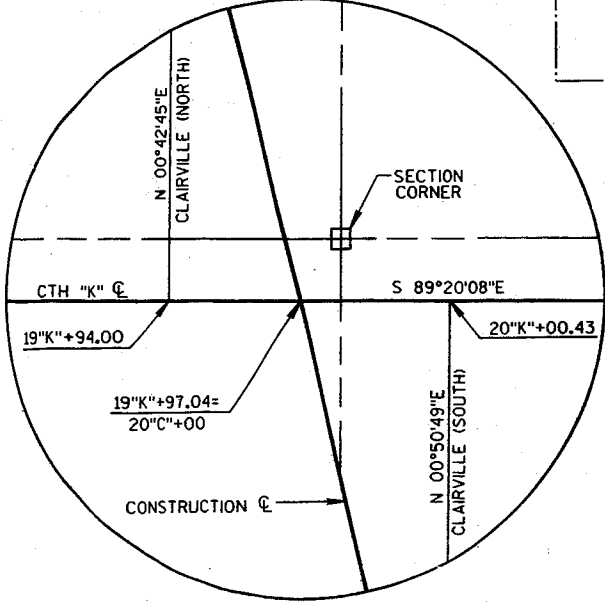
REVISION DATE 1/6/94	ROUTE CTH "K"	COUNTY WINNEBAGO	DATE 8/23/93	R/W PROJECT NUMBER 6473-02-21	SHEET NUMBER 4.1
SCALE, FT. 0 50 100				FEDERAL PROJECT NUMBER 6473-02-71	4.1

NOTE: EXISTING CLAIRVILLE ROAD RIGHT OF WAY ESTABLISHED FROM CENTERLINE OF EXISTING HIGHWAY PAVEMENT.  
EXISTING CTH "K" RIGHT OF WAY ESTABLISHED FROM CENTERLINE OF EXISTING HIGHWAY PAVEMENT.

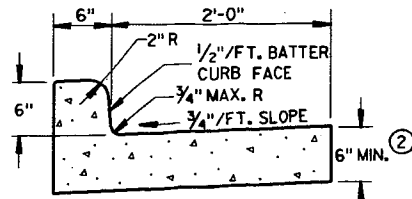
TOWN



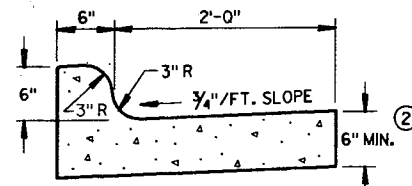
DETAIL "A"  
NO SCALE



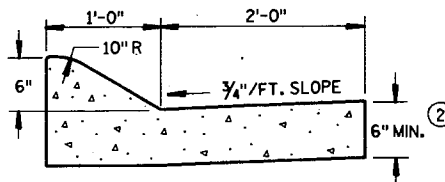




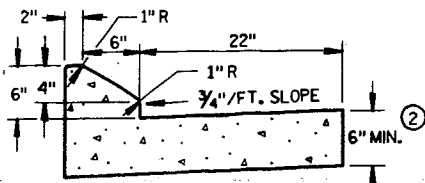
TYPES A & D



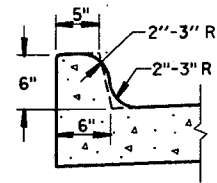
TYPES K & L



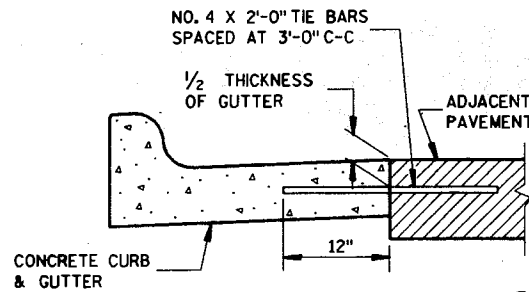
TYPES A & D  
CONCRETE CURB & GUTTER 36"



TYPES G & J

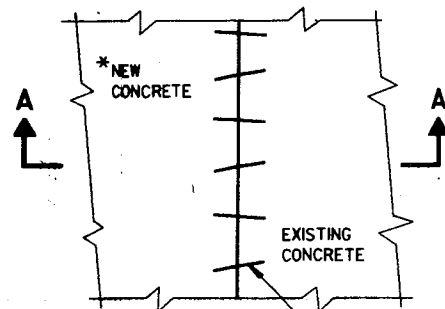


OPTIONAL CURB SHAPE  
FOR TYPES K & L



TYPICAL TIE BAR LOCATION

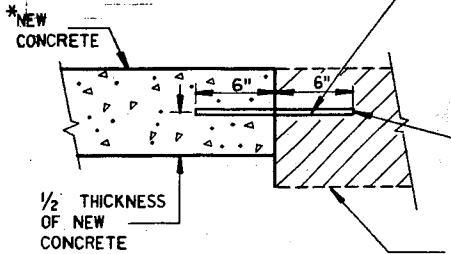
CONCRETE CURB & GUTTER 30"



PLAN VIEW

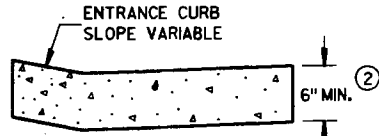
\*NEW CURB & GUTTER,  
SURFACE DRAINS,  
CONCRETE PAVEMENT  
OR OTHER NEW CONCRETE.

NO. 6 X 12" DEF. BARS  
SPACED 3'-0" C-C,  
INSTALLED ON 6:1 SKEW  
HORIZONTALLY. DIRECTION  
OF SKEW ALTERNATING AFTER  
EVERY ONE OR TWO BARS.

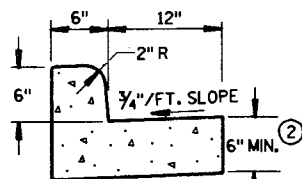


SECTION A-A  
PAVEMENT TIES

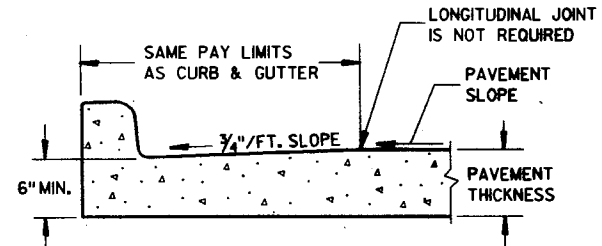
THE HOLE FOR THE BAR SHALL  
BE DRILLED TO A DEPTH OF  
7" AND TO SUCH A DIAMETER  
AS TO PROVIDE A TIGHT  
DRIVEN FIT



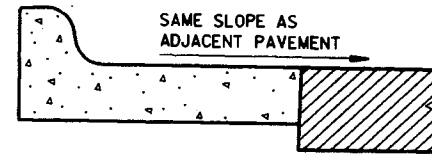
DRIVEWAY ENTRANCE CURB  
(WHEN DIRECTED BY THE ENGINEER)



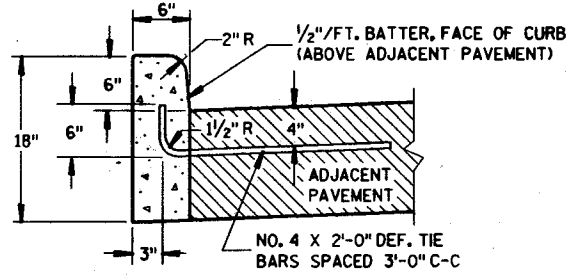
TYPES A & D  
CONCRETE CURB & GUTTER 18"



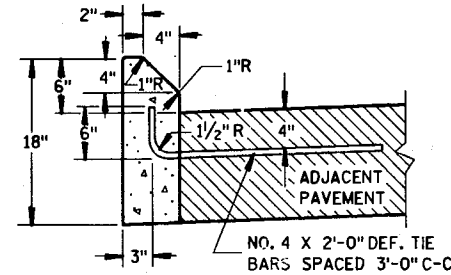
PARTIAL SECTION OF PAVEMENT  
WITH INTEGRAL CURB & GUTTER



REVERSE SLOPE GUTTER  
(TYPICAL FOR ALL CURB & GUTTER TYPES)



TYPES A & D



TYPES G & J

CONCRETE CURB

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEALANT IS NOT REQUIRED IN THE JOINTS OF CONCRETE CURB OR CONCRETE CURB & GUTTER EXCEPT AS REQUIRED FOR INTEGRAL GUTTER.

PAVEMENT TIES ARE REQUIRED, WHEN INCLUDED IN THE CONTRACT, WHERE CONCRETE CURB, CONCRETE CURB AND GUTTER OR CONCRETE PAVEMENT IS PLACED ADJACENT TO EXISTING CONCRETE.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. TIE BARS AND A LONGITUDINAL CONSTRUCTION JOINT ARE NOT REQUIRED WITH THIS ALTERNATE.

PAVEMENT JOINTS SHALL BE EXTENDED THROUGH INTEGRAL CURB & GUTTER. JOINTS IN INTEGRAL GUTTER SHALL HAVE THE SAME DIMENSIONS AS THE JOINTS IN THE ADJACENT PAVEMENT. JOINTS IN INTEGRAL CURB SHALL BE 1/8" WIDE.

JOINTS IN INTEGRAL CURB & GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME SEALANT SPECIFIED FOR THE PAVEMENT JOINT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB & GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE TWO FEET BEHIND THE BACK OF CURBS.

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G AND K.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATIONS WILL BE SHOWN ELSEWHERE IN THE PLAN.

CONCRETE CURB, CONCRETE  
CURB & GUTTER AND  
PAVEMENT TIES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

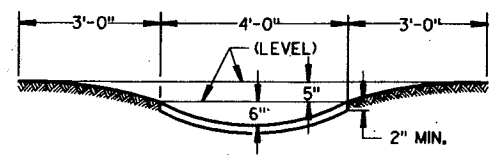
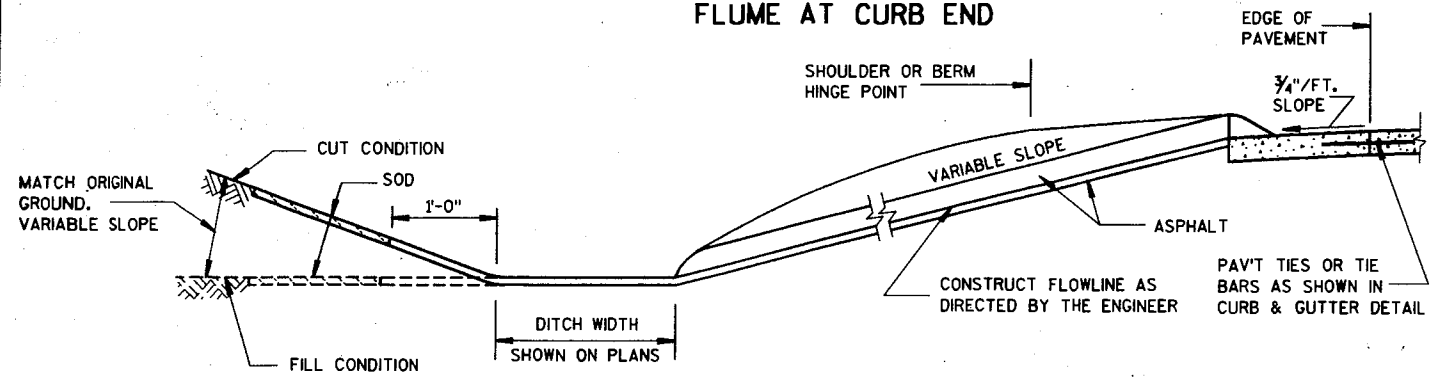
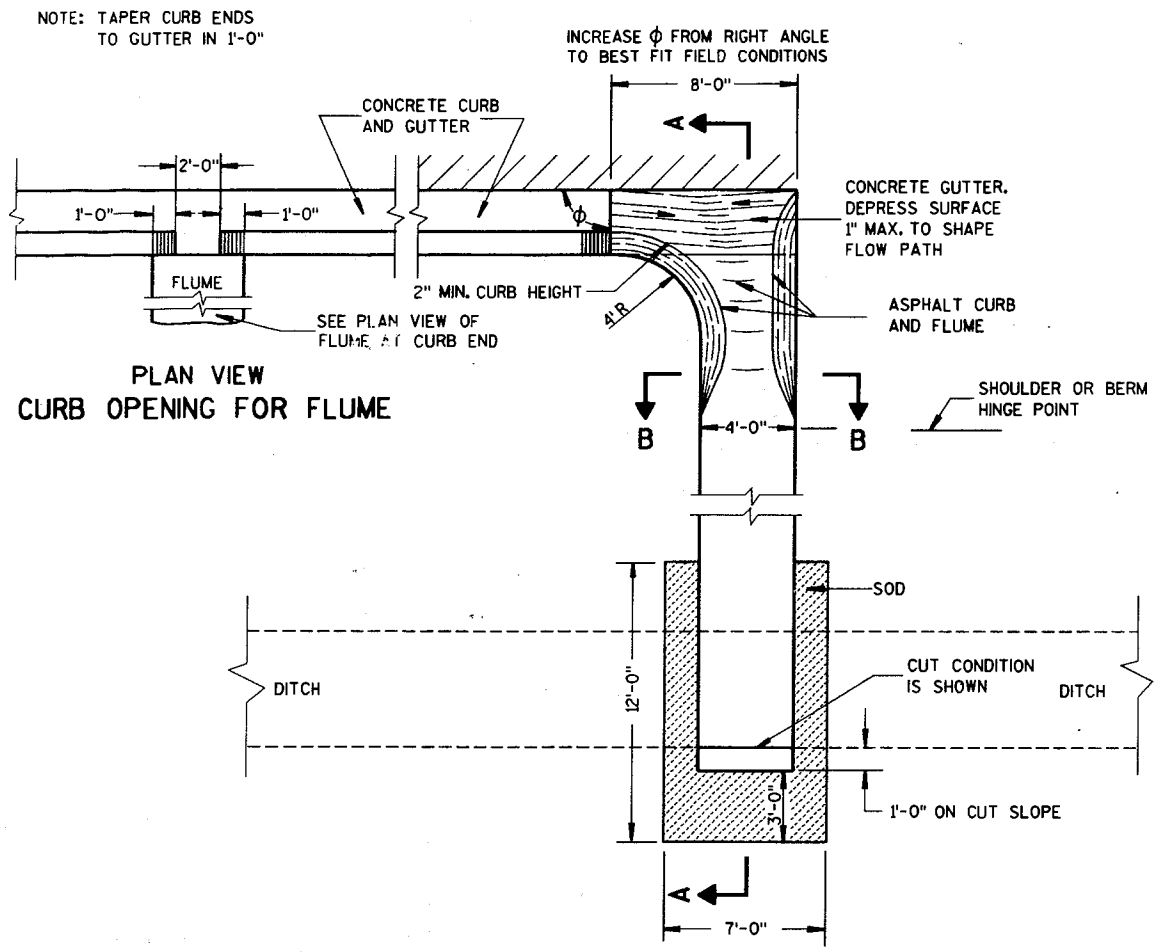
APPROVED  
10-23-86  
DATE

STATE DESIGN ENGINEER FOR HWYS

FHWA



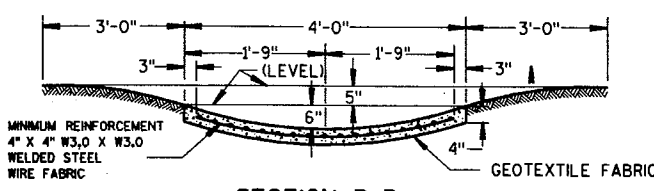
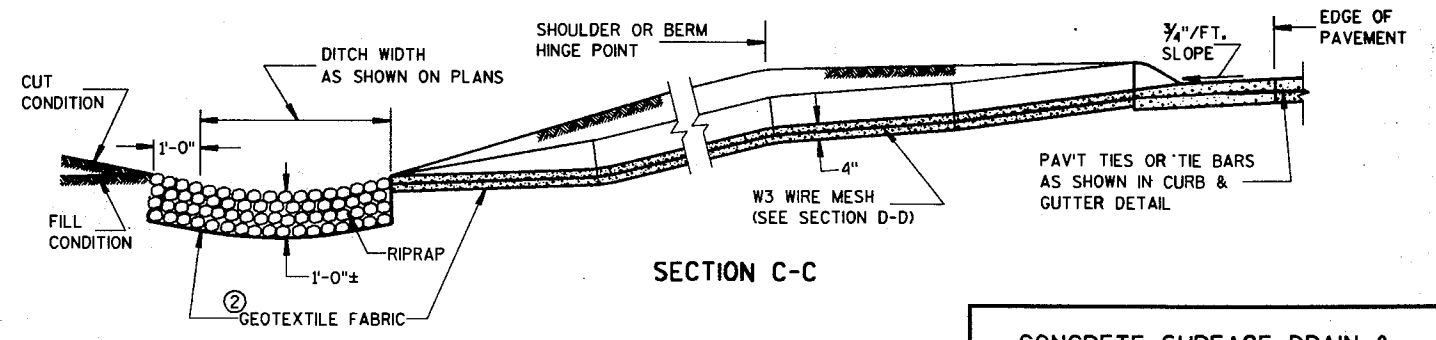
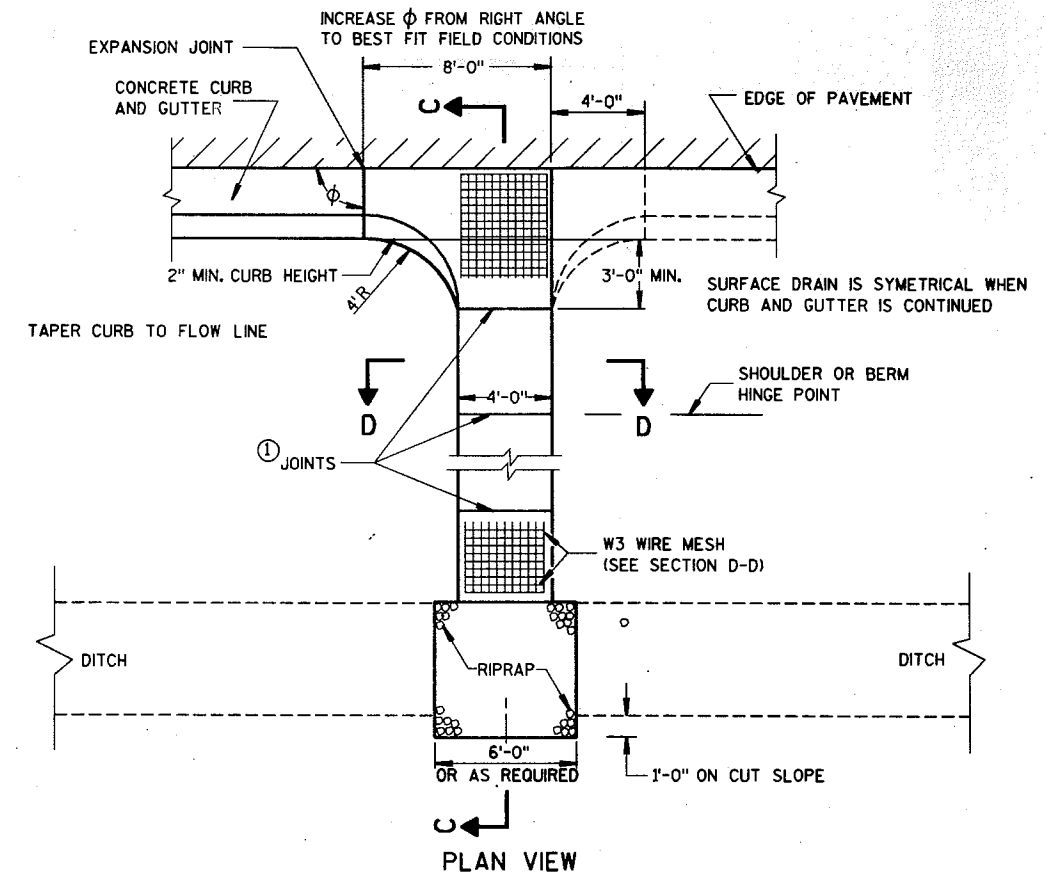
### ASPHALTIC FLUME



### GENERAL NOTES

- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.
- WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.
- JOINTS SHALL BE 1/8 TO 1/4 INCH WIDE BY 1 1/2 INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
  - GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
  - CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

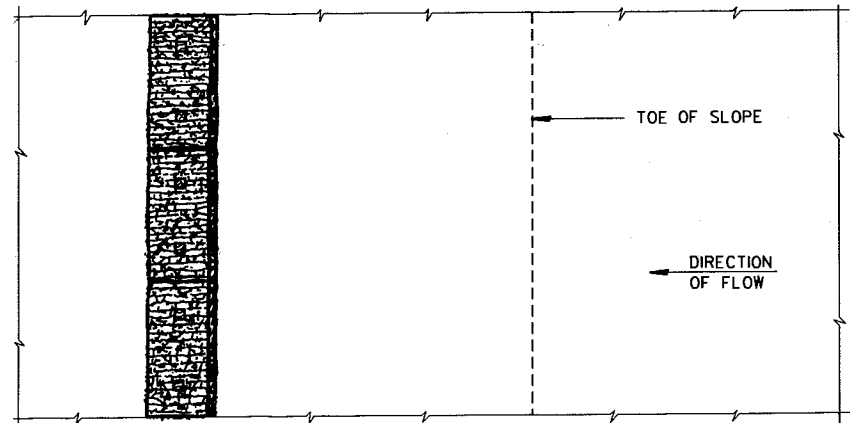
### CONCRETE SURFACE DRAIN



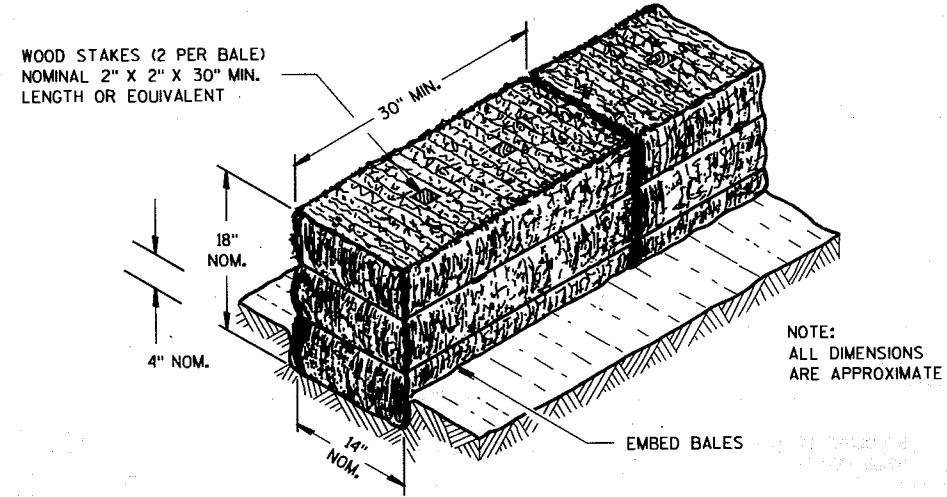
### CONCRETE SURFACE DRAIN & ASPHALTIC FLUME

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
10/23/09  
DATE  
STATE DESIGN ENGINEER FOR HWYS  
FHWA

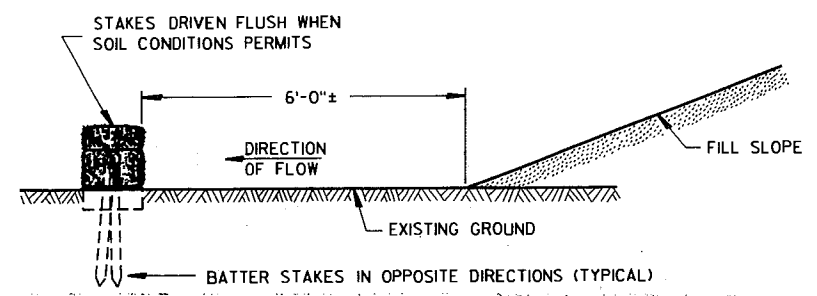


PLAN VIEW



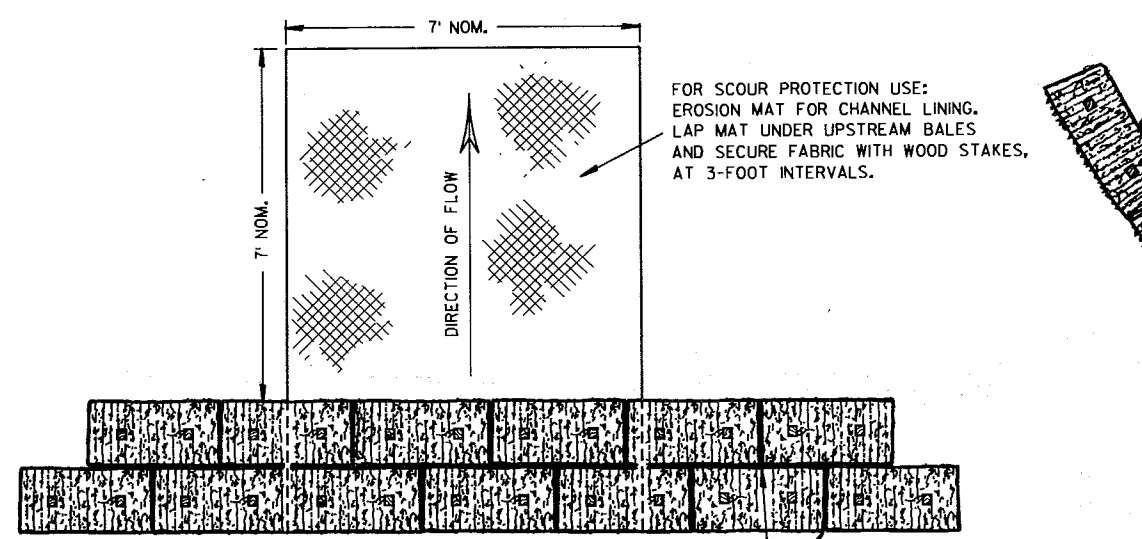
**GENERAL NOTES**

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.

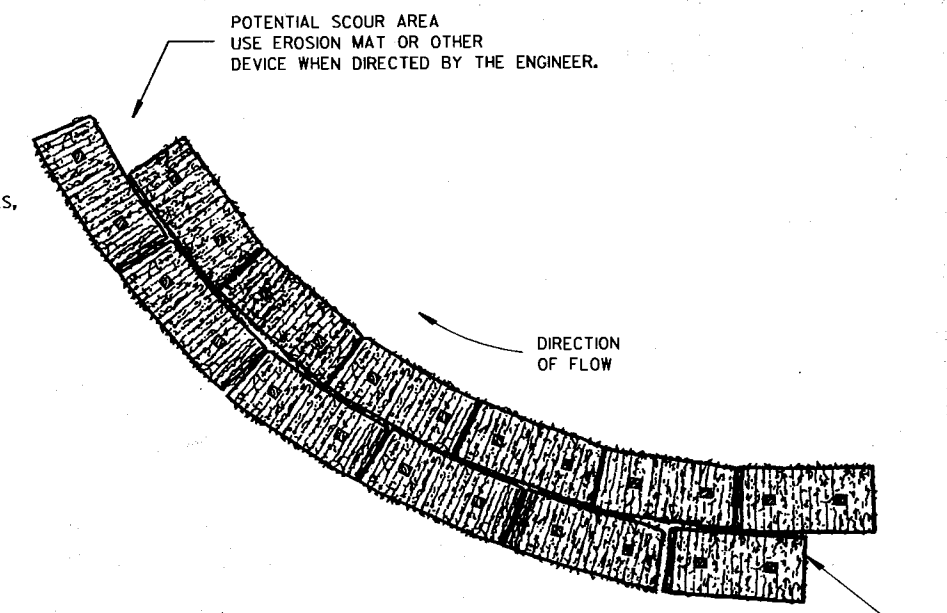


FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE  
**EROSION BALES FOR SHEET FLOW**

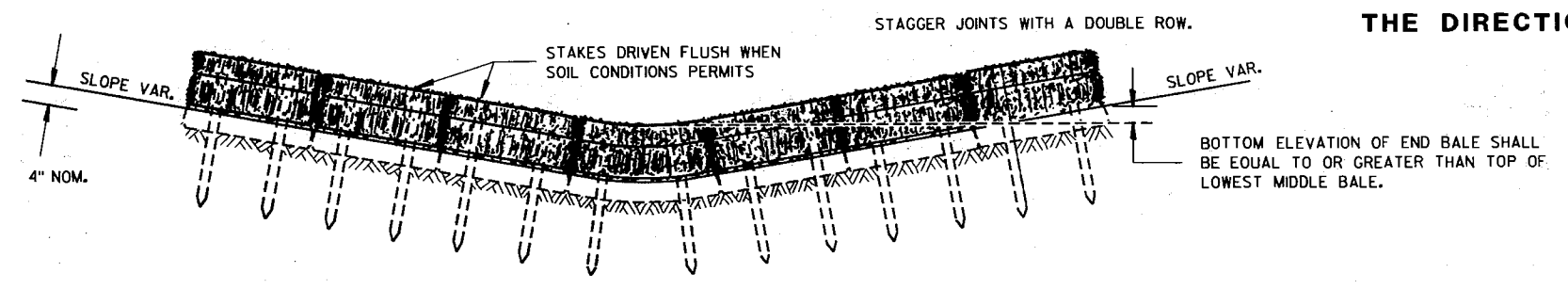


PLAN VIEW



PLAN VIEW

**EROSION BALES WHEN ALTERING  
THE DIRECTION OF FLOW**

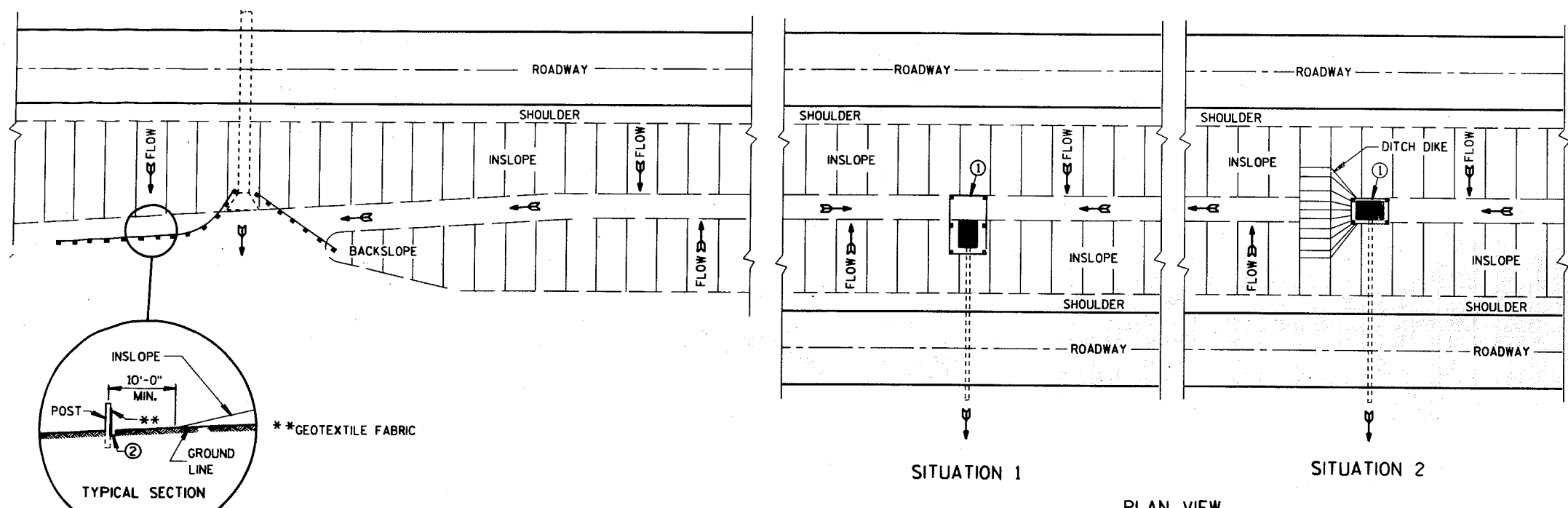


FRONT ELEVATION

**EROSION BALES FOR CHANNEL FLOW**

<b>TYPICAL INSTALLATIONS OF EROSION BALES</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 6/29/94	<i>[Signature]</i> CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

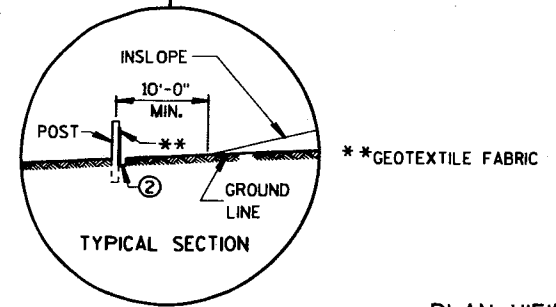
S.D.D. 8 E 8-2



**GENERAL NOTES**

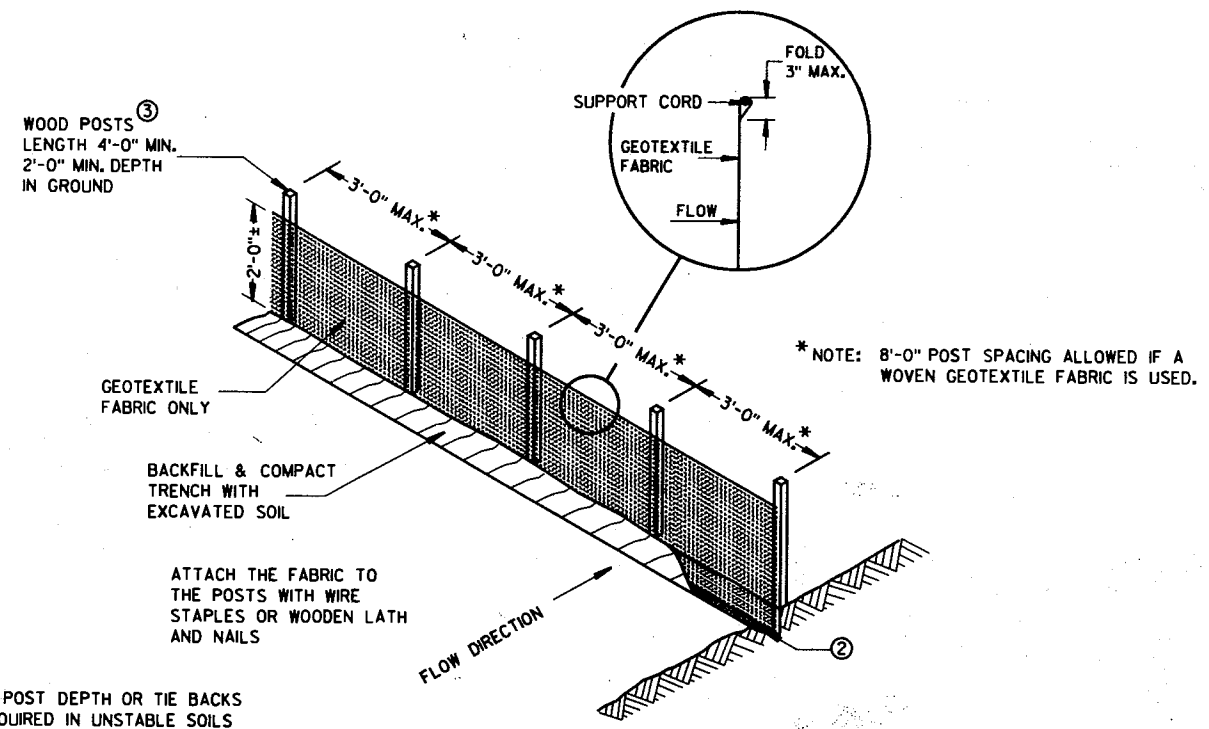
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE WITH 2" x 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.
- ② TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" x 1 1/8" OF OAK OR HICKORY.



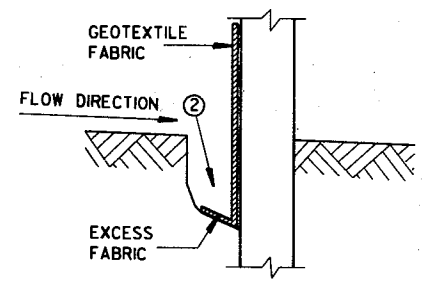
PLAN VIEW  
TYPICAL APPLICATIONS OF SILT FENCE

SITUATION 1      SITUATION 2  
PLAN VIEW  
SILT FENCE AT MEDIAN SURFACE DRAINS

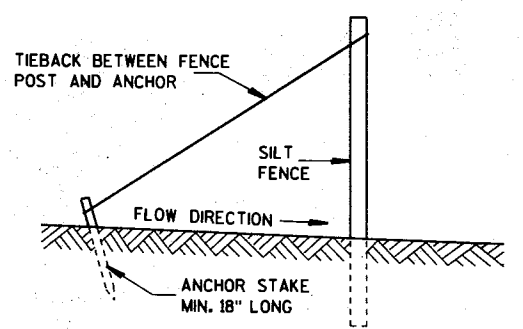


NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

SILT FENCE  
(NON-REINFORCED)



TRENCH DETAIL



SILT FENCE TIE BACK  
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	<i>[Signature]</i>
DATE	6/29/84
CHIEF ROADWAY DEVELOPMENT ENGINEER	
FHWA	

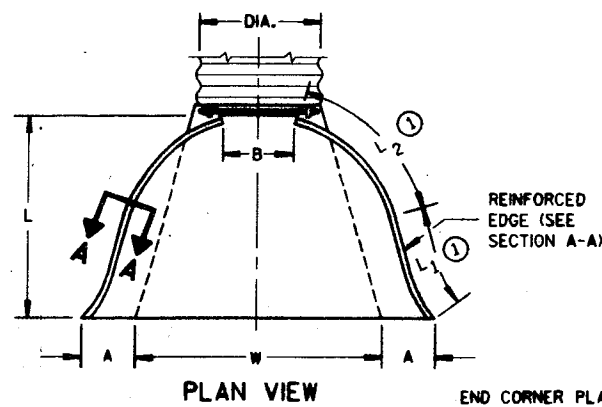
S.D.D. 8 E 9-4

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L <sub>1</sub> (1)	L <sub>2</sub> (1)	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 3/4	42	2 1/2 to 1	1 Pc.
24	.079	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.109	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 3/4	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/2 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/2 to 1	3 Pc.
60	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

\* EXCEPT CENTER PANEL SEE GENERAL NOTES

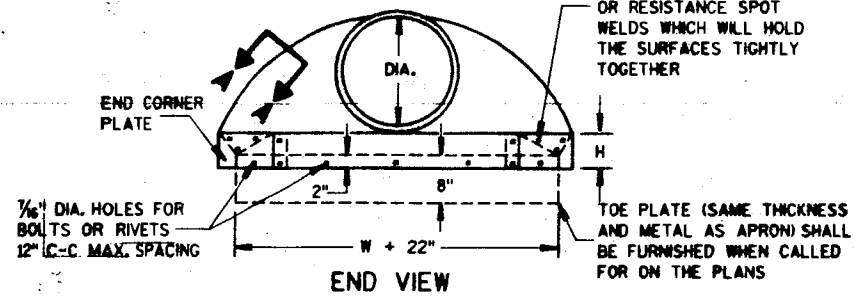
REINFORCED CONCRETE APRON ENDWALLS										
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE		
	T	A	B	C	D	E	G			
12	2	4	24	48 1/4	72 1/4	24	2	3 to 1		
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1		
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1		
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1		
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1		
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1		
30	3 1/2	12	54	19 1/4	73 1/2	60	3 1/2	3 to 1		
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1		
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1		
48	5	24	72	26	98	84	5	3 to 1		
54	5 1/2	27	65	33 1/4-35	98 1/4-100	90	5 1/2	2 3/8 to 1		
60	6	30-35	60	39	99	96	5	2 to 1		
66	6 1/2	24-30	72-78	21-27	99	102	5 1/2	2 to 1		
72	7	24-36	78	21	99	108	6	2 to 1		
78	7 1/2	24-36	78	21	99	114	6 1/2	2 to 1		
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1		
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1		

\* MINIMUM  
\*\* MAXIMUM

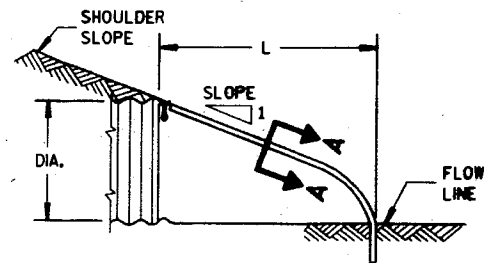


PLAN VIEW

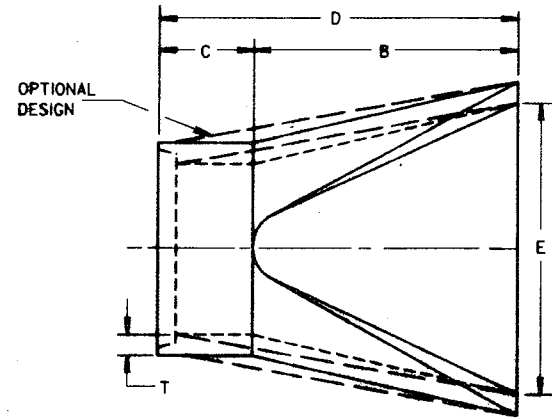
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



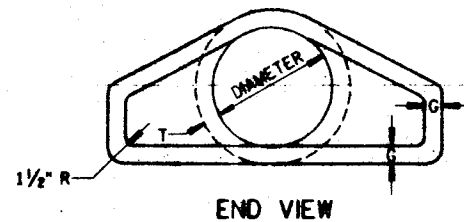
END VIEW



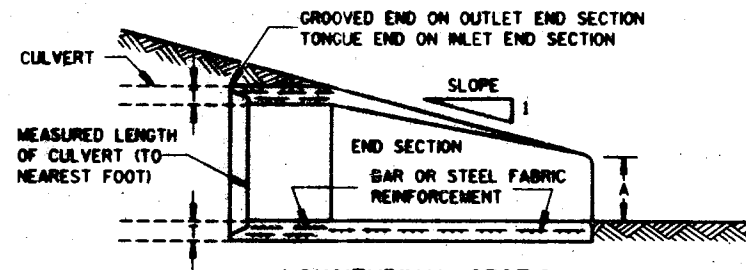
SIDE ELEVATION  
METAL ENDWALLS



PLAN

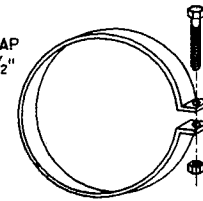


END VIEW



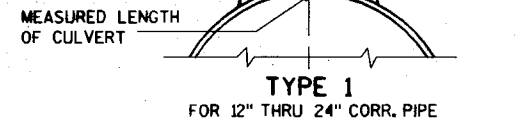
LONGITUDINAL SECTION  
CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



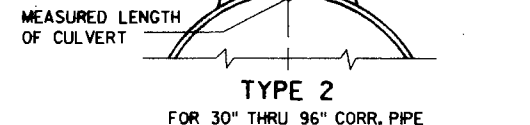
ALTERNATE FOR TYPE 1 CONNECTION  
END SECTION CONNECTOR STRAP

THREADED 7/16" DIA. ROD AROUND CULVERT & THROUGH TANK TYPE CONNECTOR LUG OR ALTERNATE CONNECTOR STRAP (SEE DETAIL)



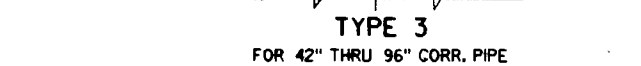
TYPE 1  
FOR 12" THRU 24" CORR. PIPE

THREADED 7/16" DIA. ROD OVER TOP OF APRON, SIDE LUGS TO BE RIVETED TO APRON



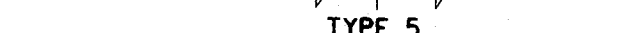
TYPE 2  
FOR 30" THRU 96" CORR. PIPE

CONNECTOR SECTION TO BE PAID FOR AS PART OF END SECTION



TYPE 3  
FOR 42" THRU 96" CORR. PIPE

RIVETED OR BOLTED AT DIMPLES (6" C-C FOR CORRUGATED BAND)



TYPE 5  
ALTERNATE FOR:  
ALL SIZES CORRUGATED CIRCULAR PIPE

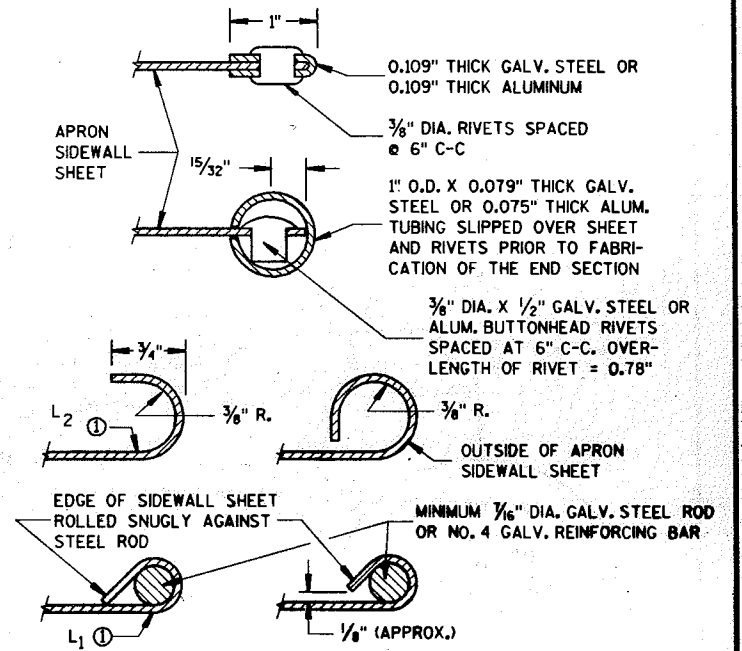
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

CONNECTION DETAILS



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.

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.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

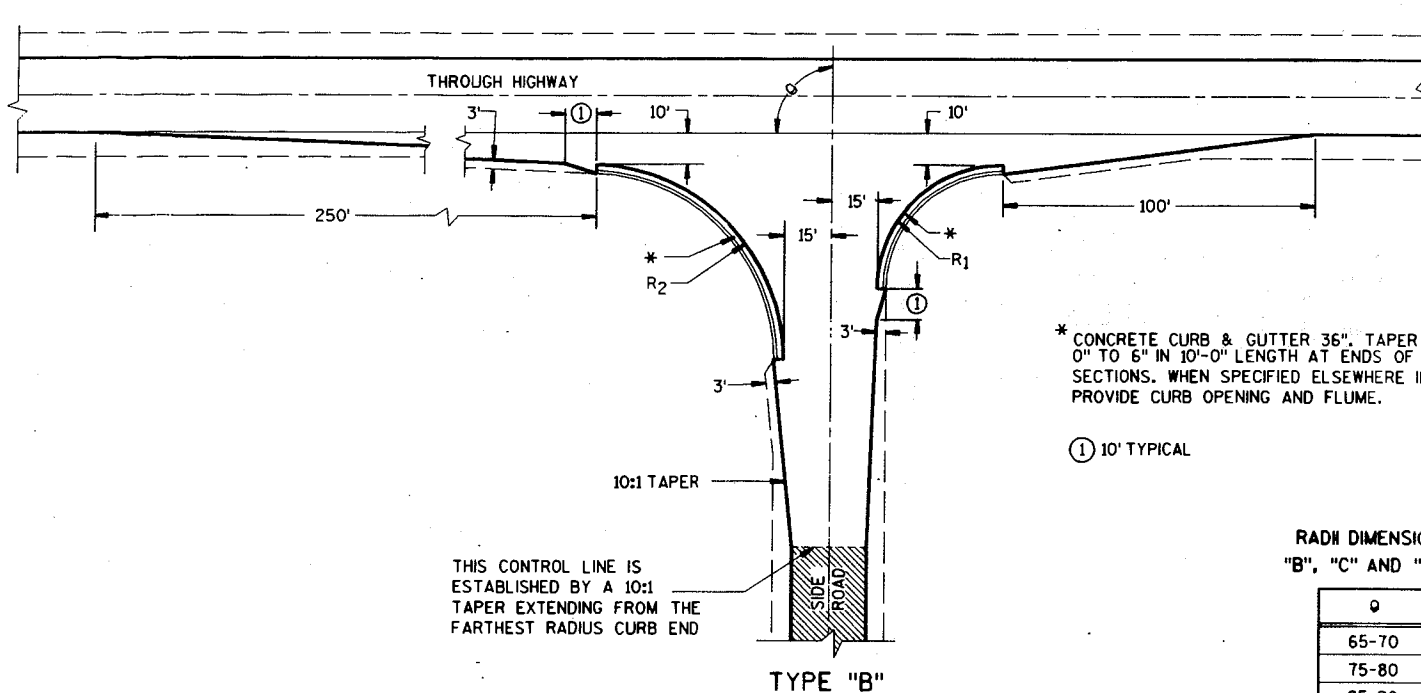
APRON ENDWALLS FOR  
CULVERT PIPE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
12/17/87  
DATE

*R. Cal*  
STATE DESIGN ENGINEER FOR HWYS

FHWA



THIS CONTROL LINE IS ESTABLISHED BY A 10:1 TAPER EXTENDING FROM THE FARTHEST RADIUS CURB END

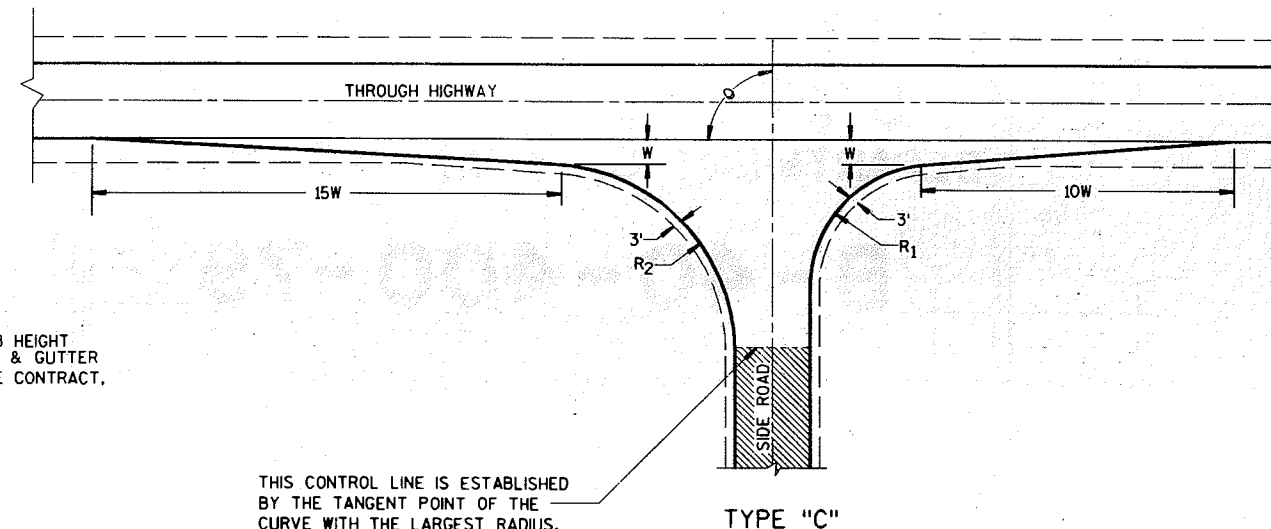
TYPE "B"

\* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10' TYPICAL

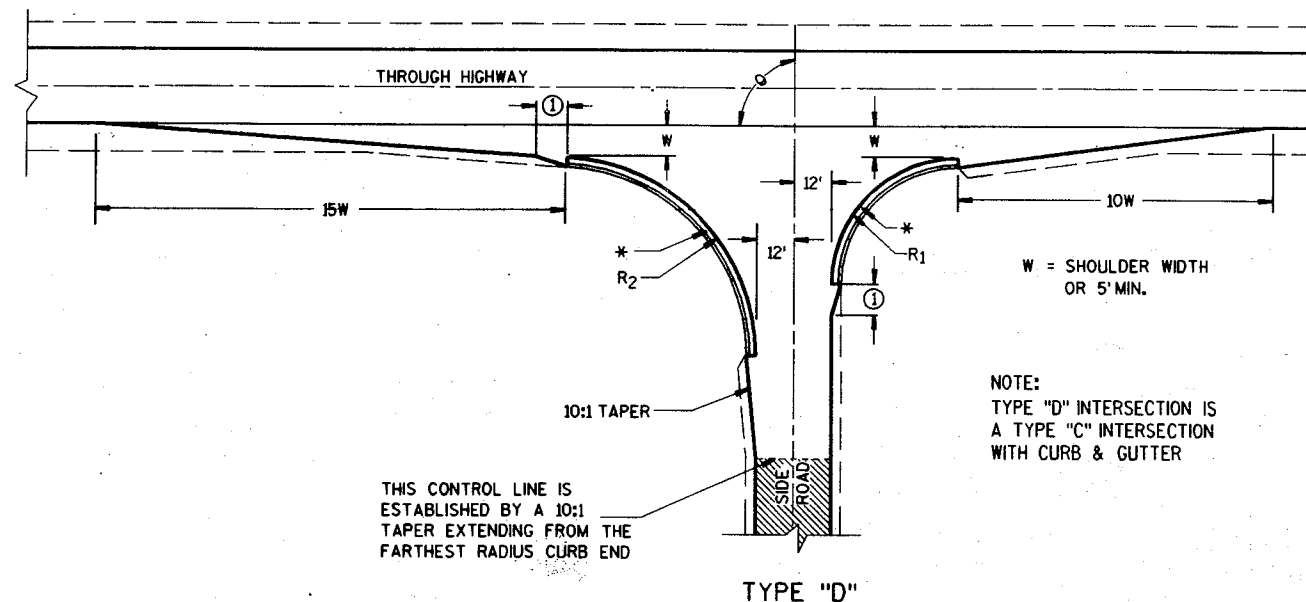
RADI DIMENSIONS FOR TYPES "B", "C" AND "D" INTERSECTIONS

Ø	R <sub>1</sub>	R <sub>2</sub>
65-70	35	70
75-80	40	70
85-90	40	60
100	50	55
105-110	60	45



THIS CONTROL LINE IS ESTABLISHED BY THE TANGENT POINT OF THE CURVE WITH THE LARGEST RADIUS.

TYPE "C"



THIS CONTROL LINE IS ESTABLISHED BY A 10:1 TAPER EXTENDING FROM THE FARTHEST RADIUS CURB END

TYPE "D"

W = SHOULDER WIDTH OR 5' MIN.

NOTE: TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB & GUTTER

**GENERAL NOTES**

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

**SIDE ROAD SURFACING NOTE**

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

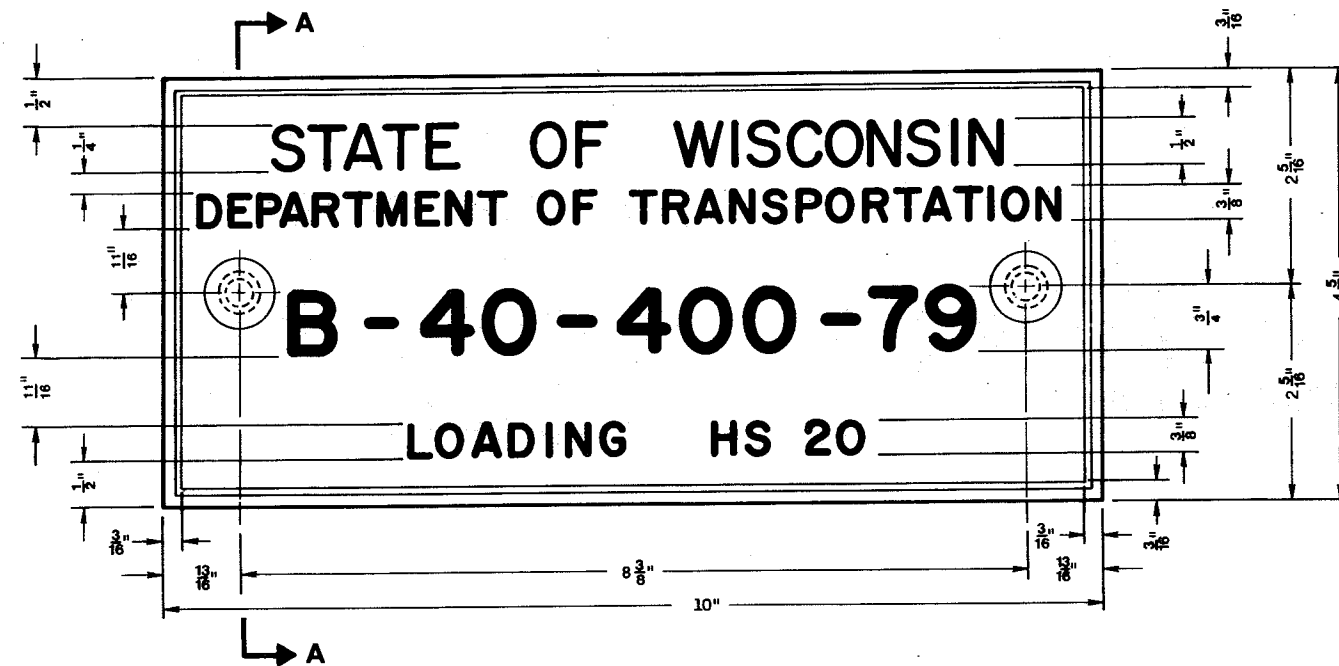
EXISTING SURFACE

**AT-GRADE SIDE ROAD INTERSECTION, TYPES 'B', 'C' AND 'D'**

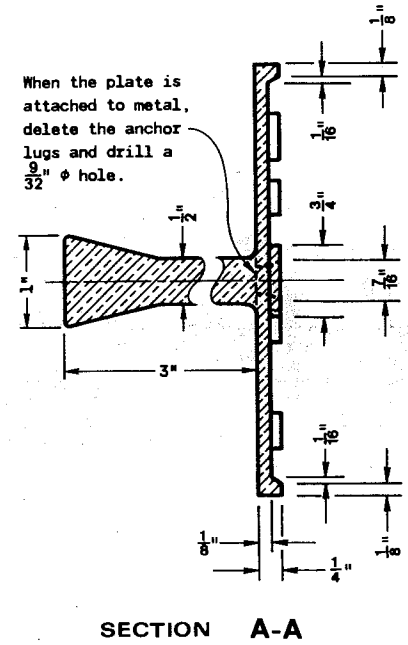
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED   
DATE 6/22/89 STATE DESIGN ENGINEER FOR HWYS

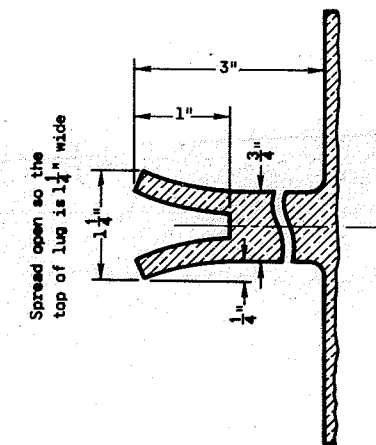
FHWA



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



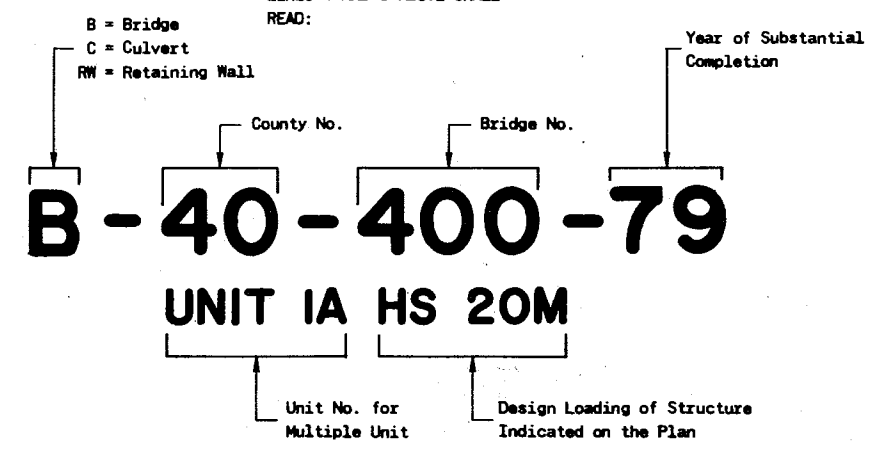
**SECTION A-A**



**ALTERNATE LUG**

When the plate is attached to metal, delete the anchor lugs and drill a  $\frac{9}{32}$ "  $\phi$  hole.

FOR MULTI-UNIT STRUCTURES  
LINES 4 AND 5 ABOVE SHALL  
READ:  
Year of Substantial Completion



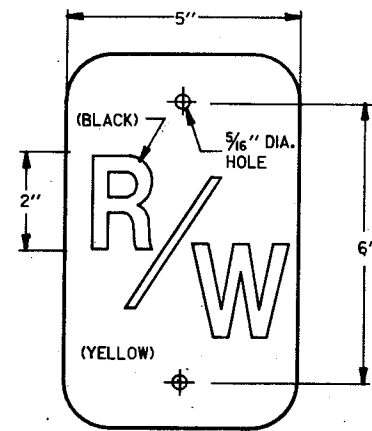
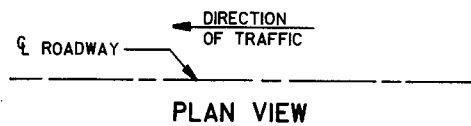
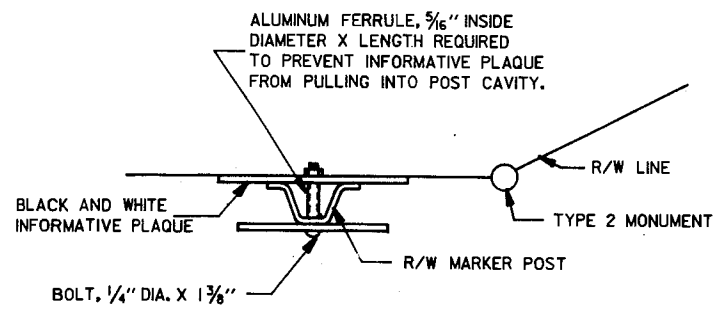
**NUMBERING AND LOADING DESIGNATION  
MULTI-UNIT STRUCTURES**

**GENERAL NOTES**  
Name Plates to be installed on Bridges, Culverts, and Retaining Walls shall conform to the requirements of Section 506.2.4 of the Standard Specifications.  
The Bridge Number and Design Loading shown on this drawing are examples only. See Construction Plans for individual numbering and design loading.

<b>NAME PLATE (STRUCTURES)</b>	
State of Wisconsin Department of Transportation Division of Transportation Facilities	
APPROVED DATE 9-27-79	<i>[Signature]</i> CHIEF DESIGN ENGINEER
<small>FHWA</small>	

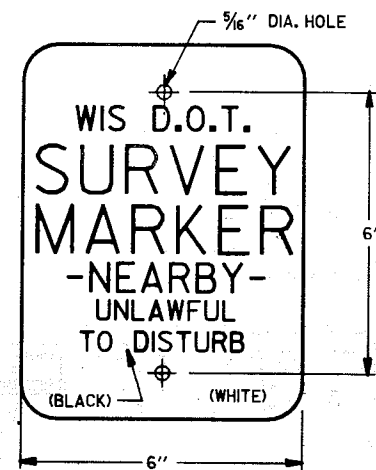
S.D.D. 12 A 3-4

S.D.D. 12 A 3-4



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.

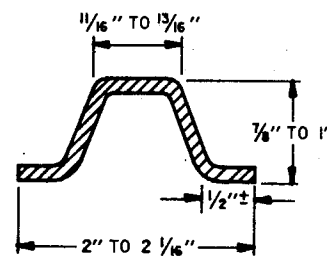
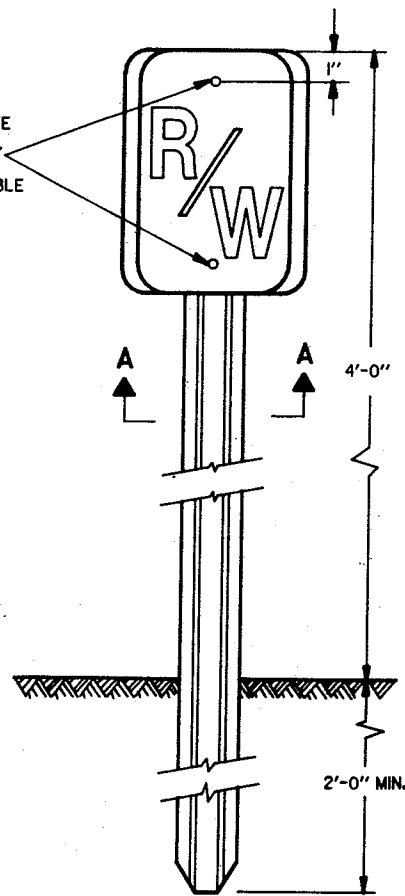
RIGHT OF WAY MARKER OR INFORMATIVE PLAQUE IS NOT REQUIRED ON WOOD MARKER POSTS.

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.

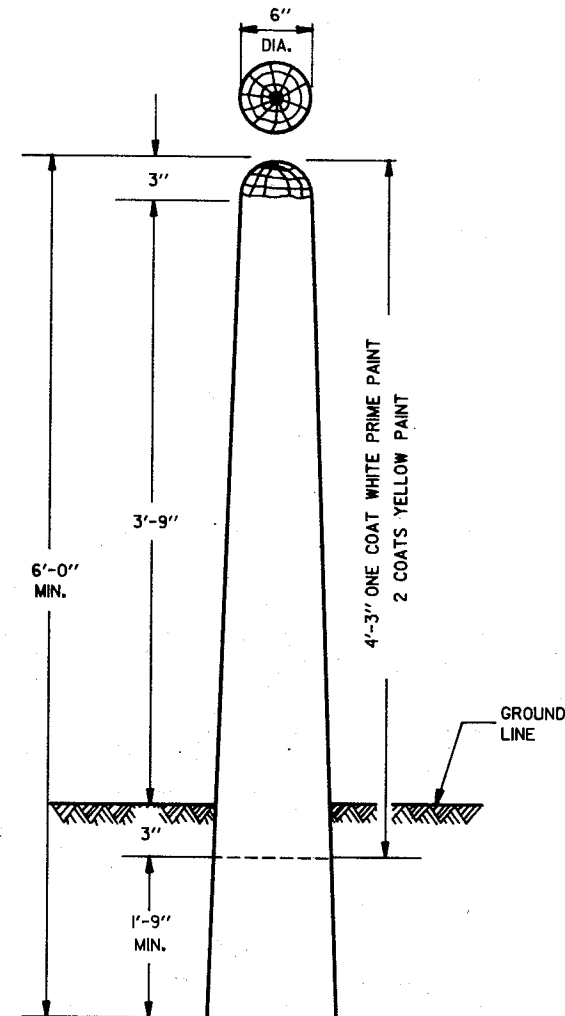
STEEL POSTS SHALL BE MADE FROM HIGH STRENGTH HOT ROLLED STEEL CONFORMING TO ASTM DESIGNATION A 499 OR EQUAL.

STEEL POSTS SHALL BE COATED WITH A FEDERAL HIGHWAY YELLOW ENAMEL.

STEEL POSTS SHALL HAVE 2 - 3/8" HOLES 6" APART. POST WITH ADDITIONAL HOLES WILL BE ACCEPTABLE



MIN. WEIGHT 1.08 LB./FT.  
SECTION A-A



MARKER POSTS  
FOR RIGHT OF WAY

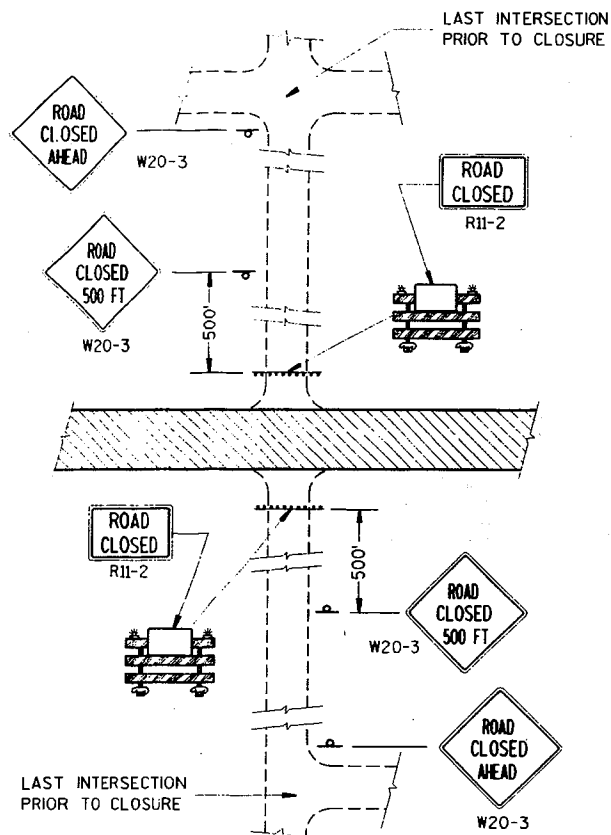
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
6-18-84  
DATE

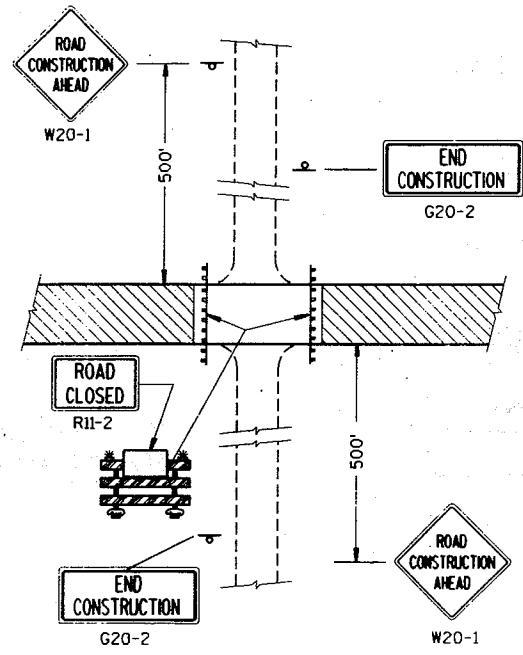
*D. D. Strand*  
CHIEF DESIGN ENGINEER

FHWA

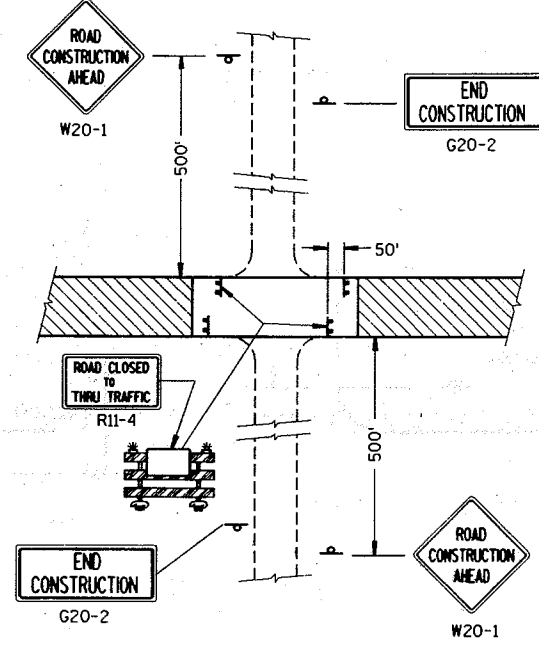
S.D.D. 15 A 1-5



**DETAIL 1**  
(NO ACCESS TO PROJECT)



**DETAIL 2**  
(PUBLIC CROSS-TRAFFIC MAINTAINED,  
NO ACCESS TO PROJECT).



**DETAIL 3**  
(PUBLIC CROSS-TRAFFIC MAINTAINED, CONTRACTOR,  
LOCAL BUSINESS AND RESIDENT ACCESS).

**GENERAL NOTES**

DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN MANUAL OF TRAFFIC CONTROL DEVICES, THE PLANS, SPECIFICATIONS AND CONTRACT.

SIGN AND BARRICADE LOCATIONS MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER. ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER. ALL "STOP" OR OTHER REGULATORY SIGNS ON THE SIDE ROADS SHALL NOT BE DISTURBED, EXCEPT WHEN NECESSARY TO COMPLETE THE WORK. THE SIGNS MUST THEN BE IMMEDIATELY REESTABLISHED.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL FOR FULL ROAD CLOSURES. TYPE "A" LOW INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

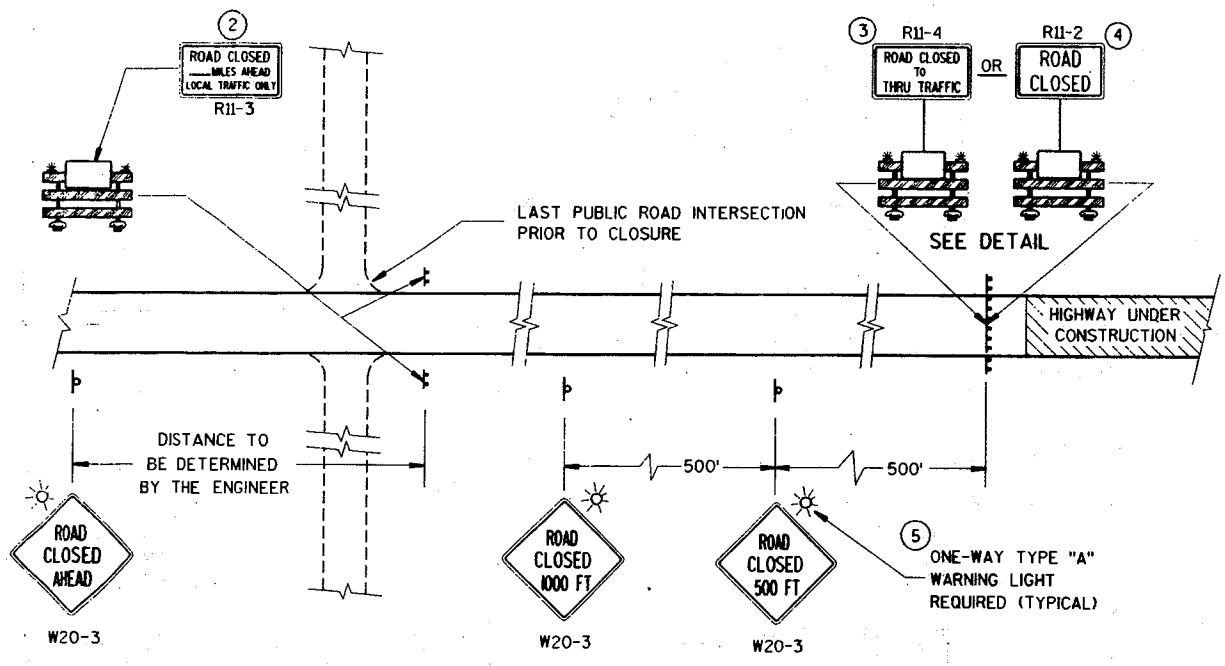
THE ROAD CLOSED SIGN (R11-2), ROAD CLOSED \_\_\_\_\_ MILES AHEAD SIGN (R11-3) AND THE ROAD CLOSED TO THRU TRAFFIC SIGN (R11-4) SHALL BE ATTACHED ONLY TO THE TOP RAIL OF THE TYPE III BARRICADE. THE SIGNS SHALL NOT COVER MIDDLE RAIL.

TYPE "H" REFLECTIVE SHEETING SHALL BE USED ON ALL BARRICADES, TYPE I, II AND III, AND ON ALL R11-2, R11-3 AND R11-4 SIGNS.

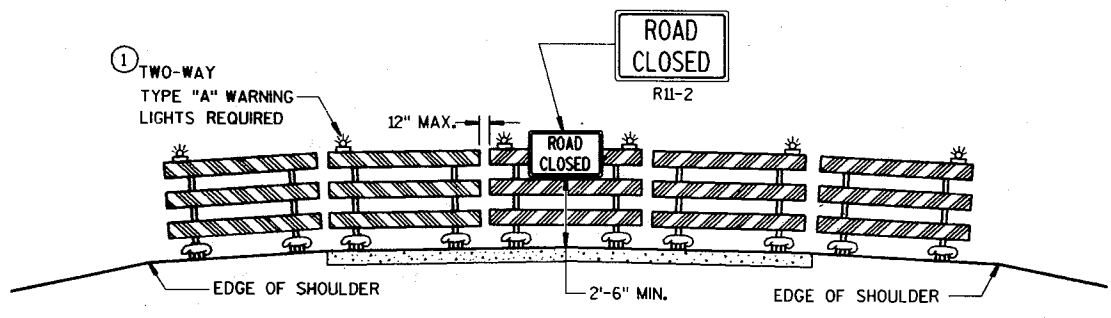
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:  
R11-2, "ROAD CLOSED" SIGNS SHALL BE 48" X 30".  
R11-3, AND R11-4 SIGNS SHALL BE 60" X 30".  
G20-2 SIGNS SHALL BE 60" X 24".

- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND AT LEAST ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN.
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- ③ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT. SEE LANE CLOSURE BARRICADE DETAIL.
- ④ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT. SEE ROAD CLOSURE BARRICADE DETAIL.
- ⑤ ONE-WAY LIGHTS SHALL BE PROVIDED ON ALL ADVANCE WARNING SIGNS. THE UNIT SHALL BE POSITIONED SUCH THAT THE LIGHT SOURCE IS OUTSIDE THE SIGN FACE AND AT THE TOP OF THE SIGN.

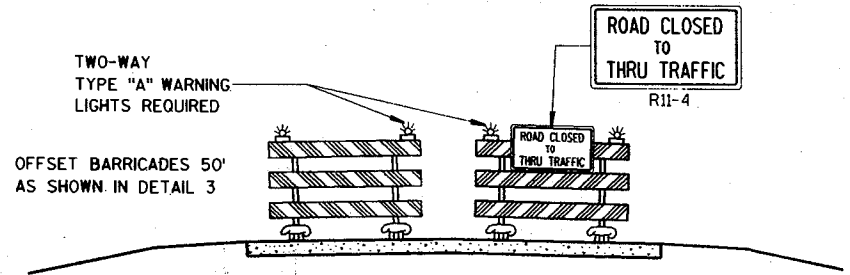
**SIDEROAD CLOSURES**



**MAINLINE CLOSURE**



**ROAD CLOSURE BARRICADE DETAIL**



**LANE CLOSURE BARRICADE DETAIL**

- LEGEND**
- ⊥ POST MOUNTED WARNING SIGN
  - ⊥ TYPE III BARRICADES WITH TYPE "H" REFLECTIVE SHEETING
  - ☀ TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
  - ▨ WORK AREA

**BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURES**

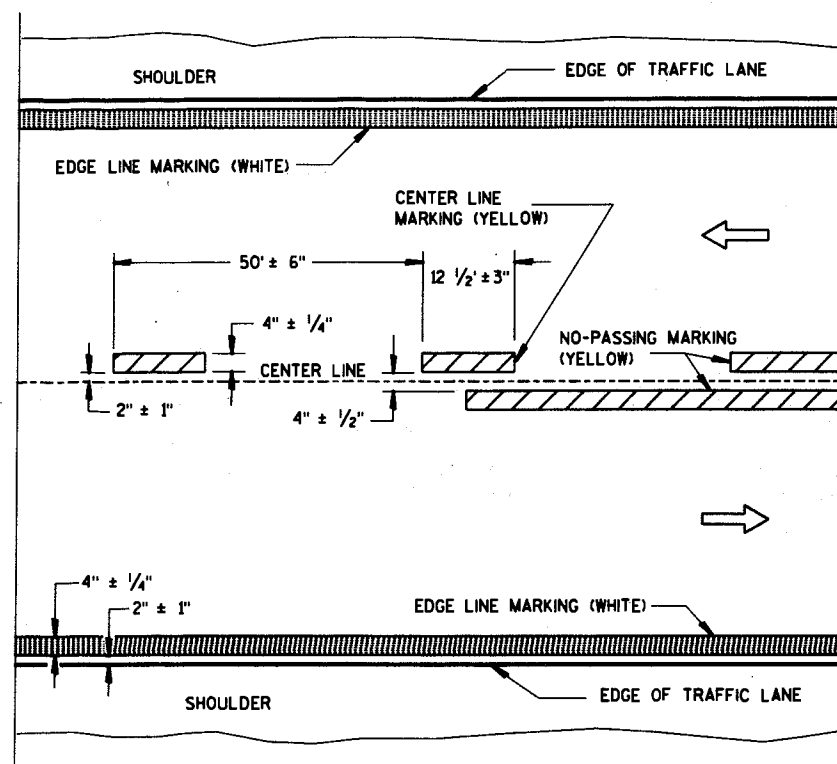
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
10-31-89 DATE  
STATE TRAFFIC ENGINEER FOR HWYS

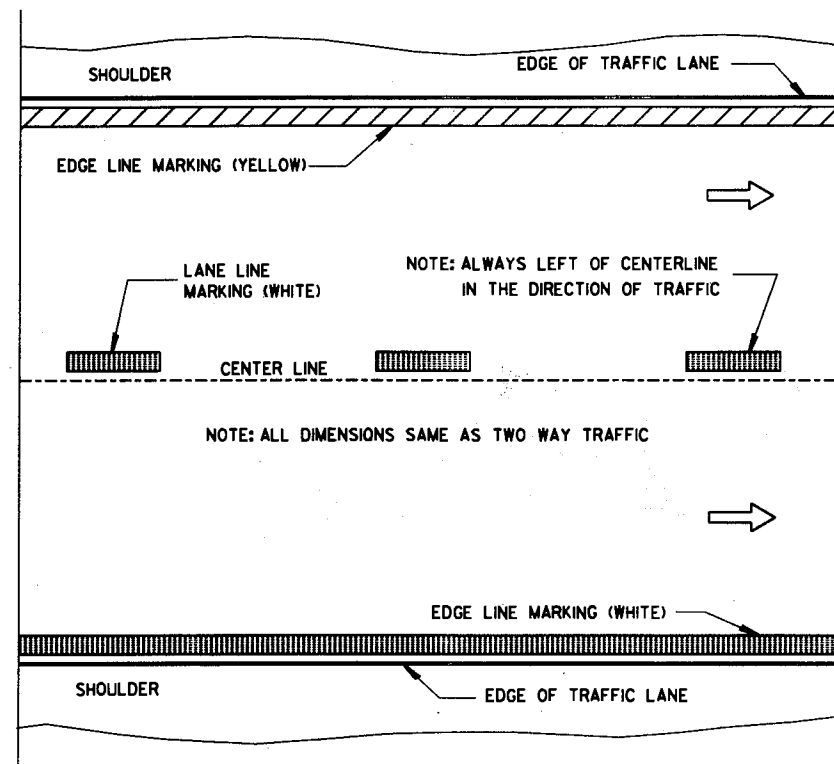
FHWA

S.D.D. 15 C 2-2



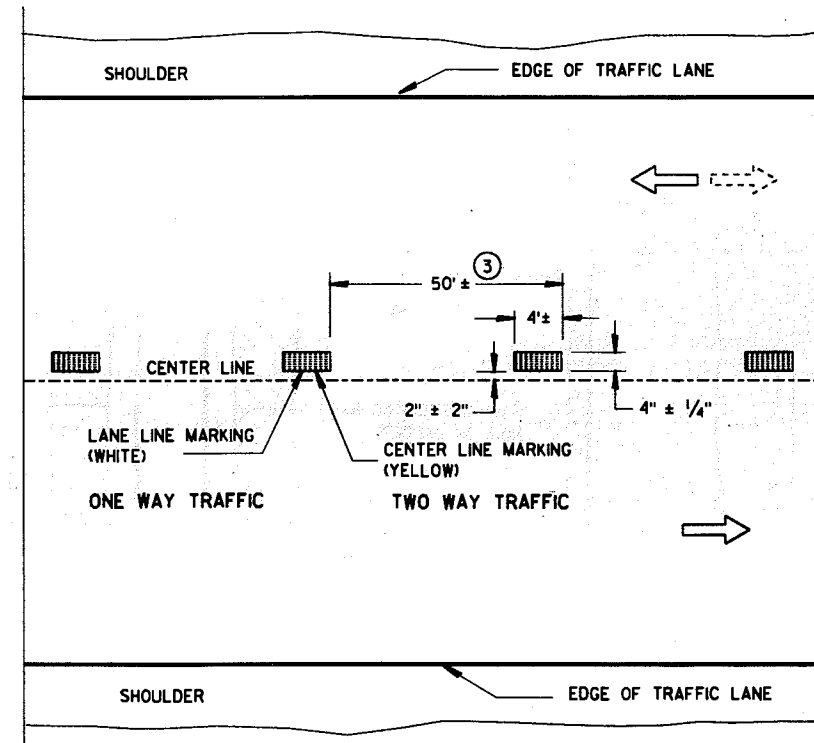


TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING  
(SHOWS CYCLE FOR PERMANENT CENTER LINE MARKING)

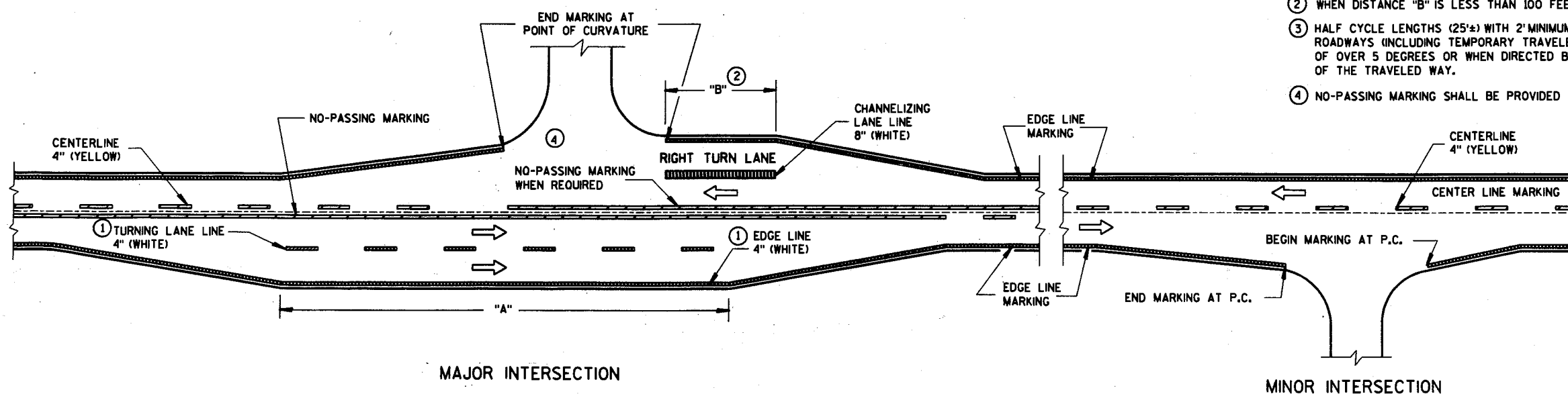


TEMPORARY PAVEMENT MARKING  
(SHOWS CYCLE FOR TEMPORARY CENTER LINE MARKING)

GENERAL NOTES

- DETAILS OF PAVEMENT MARKING NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT TURNING LANE MARKING.
  - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
  - ③ HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
  - ④ NO-PASSING MARKING SHALL BE PROVIDED WHERE SIGHT DISTANCE IS DEFICIENT.

NOTE:  
ARROW SYMBOL (➡)  
SHOWS DIRECTION OF TRAVEL



MAJOR INTERSECTION

MINOR INTERSECTION

TYPICAL PAVEMENT MARKING FOR RURAL INTERSECTIONS

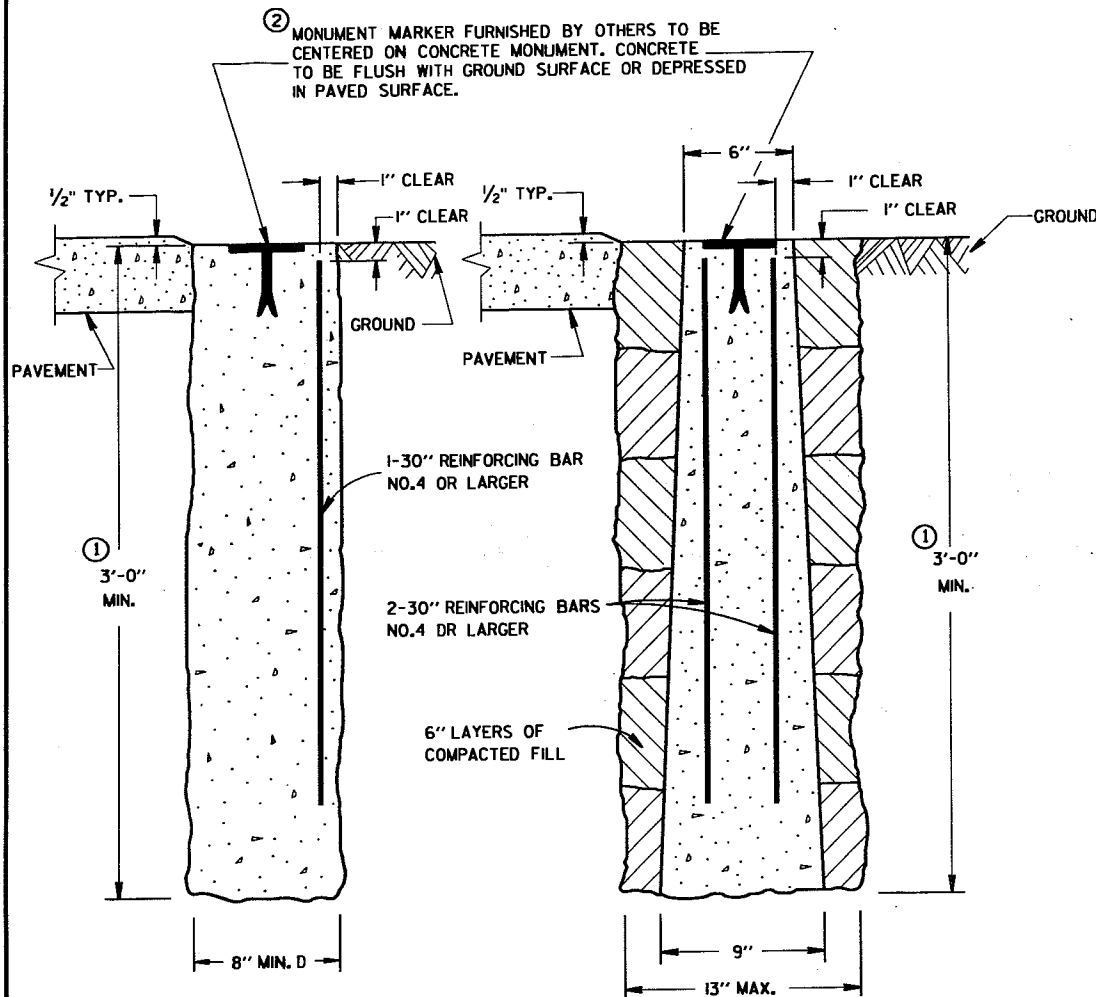
NOTE:  
THIS DRAWING CONSISTS OF UP TO FOUR SHEETS. SHEET 5c MAY BE USED ALONE OR SUPPLEMENTED BY SHEET 5b, SHEET 5c AND/OR SHEET 5d AS APPLICABLE

PAVEMENT MARKING  
(MAINLINE & INTERSECTIONS)

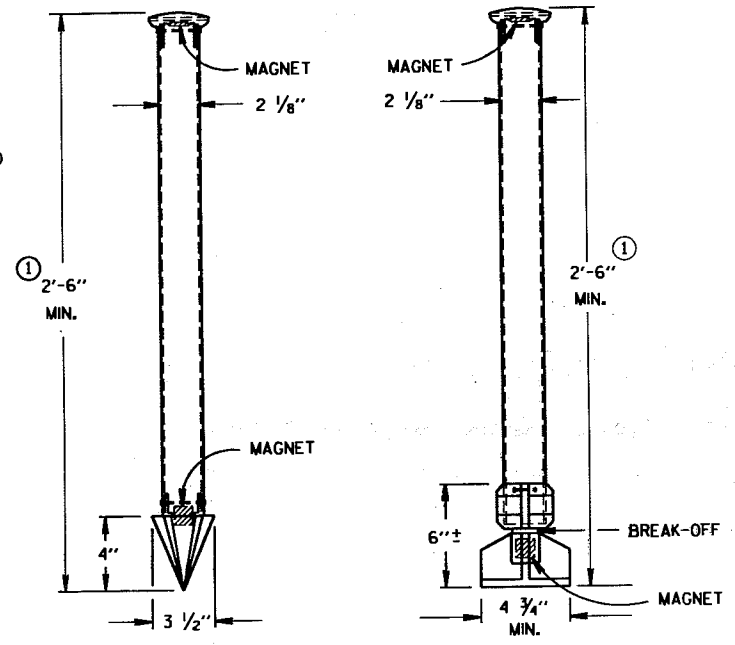
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
7/20/93  
DATE  
STATE TRAFFIC ENGINEER FOR HWYS

FHW



CAST-IN-PLACE  
PRECAST  
CONCRETE MONUMENTS  
TYPE A



TYPE C  
DRIVE-IN MONUMENT  
TYPE D  
BREAK-OFF MONUMENT  
ALUMINUM MONUMENTS  
(INCLUDES MARKER)

**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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

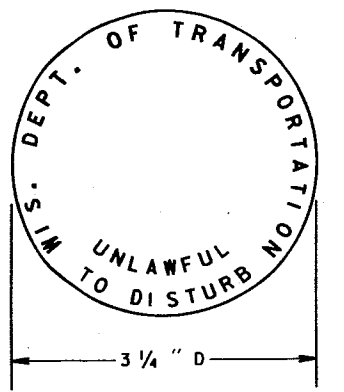
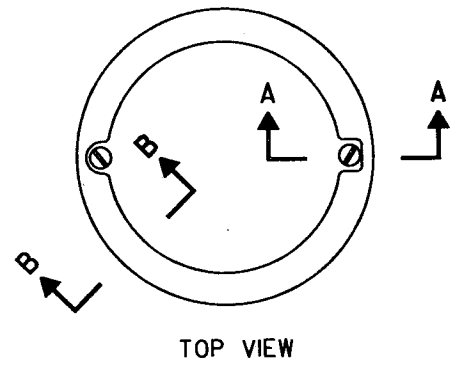
MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

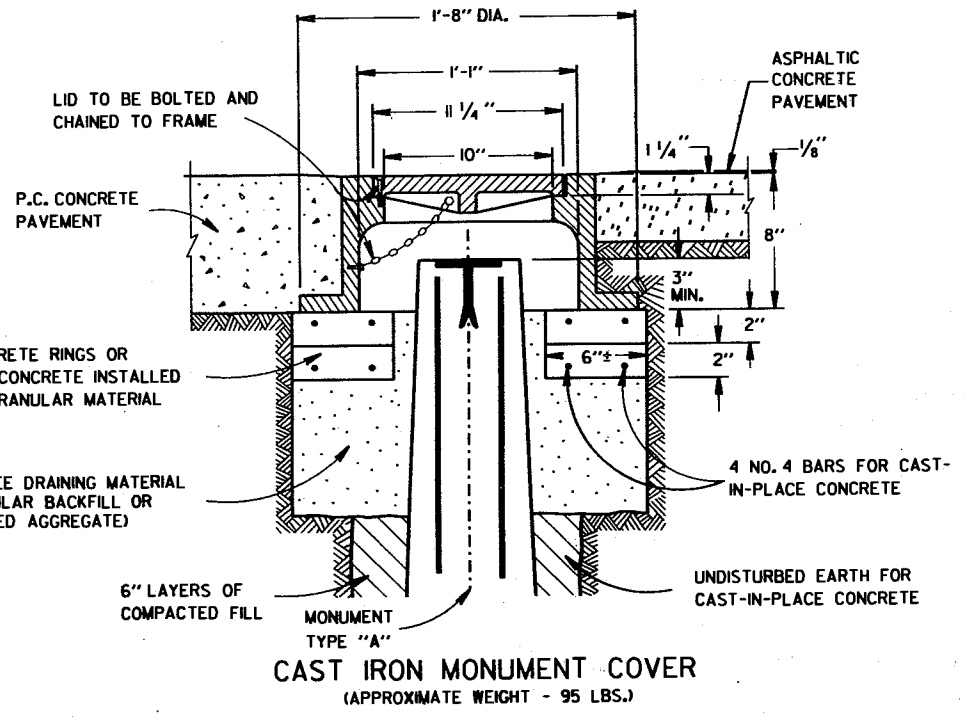
THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

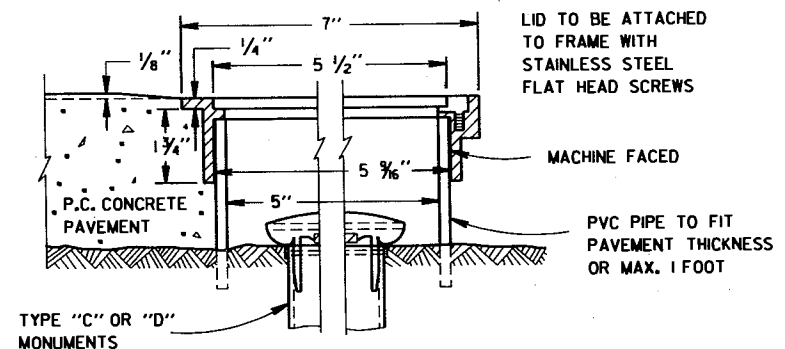
① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.  
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



② WIS DOT MONUMENT MARKER LOGO  
FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER  
(APPROXIMATE WEIGHT - 95 LBS.)



SECTION B-B SECTION A-A  
ALUMINUM MONUMENT COVER  
(APPROXIMATE WEIGHT 2 LBS)  
(FOR CONCRETE PAVEMENT ONLY)

<b>LANDMARK REFERENCE MONUMENTS AND COVERS</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/31/92 DATE	 STATE DESIGN ENGINEER FOR HWYS
FHWA	



BORINGS BY  
RIVER VALLEY TESTING CORPORATION  
APPLETON/WAUSAU, WISCONSIN  
ON SEPTEMBER 16, 1992

STATE PROJECT NUMBER SHEET NO

6473-02-71

31

ABBREVIATIONS  
F---FINE M---MEDIUM C---COARSE  
Ws---WEATHERED So---SOUND

MATERIAL SYMBOLS

	Topsoil		Silt		Sandstone
	Sand		Peat		Limestone
	Gravel		Clay		Igneous Rock

LEGEND OF PROBING

Probing No.  
Sta.  
Elevation

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

7 Average blows per foot

Refusal 95/6

LEGEND OF BORING

Elevation Boring No.  
Sta.

Unconfined strength → 7.7

Blows per foot using 140# wt. falling 30"

Wash sample

Shelby Tube → S.T.

Ground Water Elevation

No Ground Water Observed Above This Elevation

Sandy Gravel  
Boulders or Cobbles  
Sand  
Silty Clay  
So  
Limestone

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the Division of Highways does not warrant conditions below the depths investigated or that the classification of material encountered in these investigations is necessarily typical of the entire site.

NO	DATE	REVISION	BY

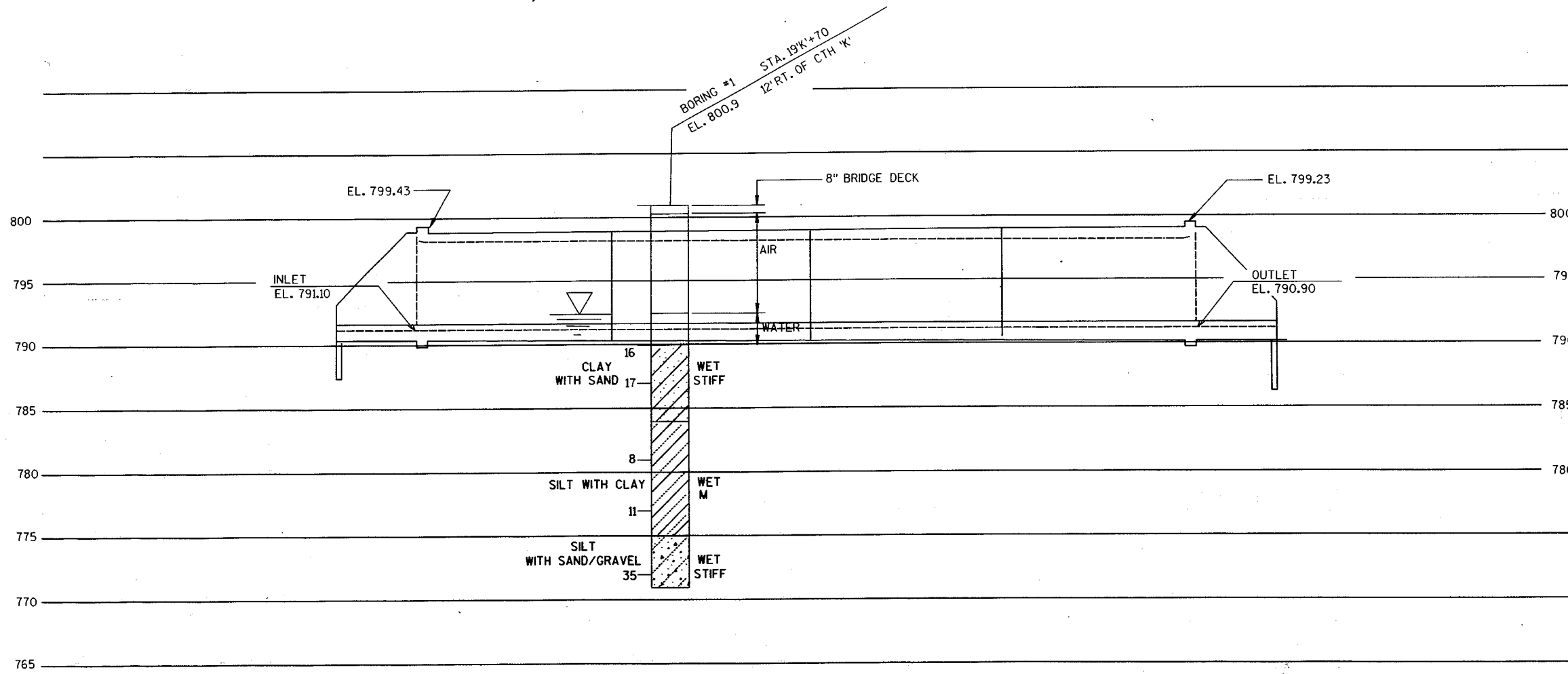
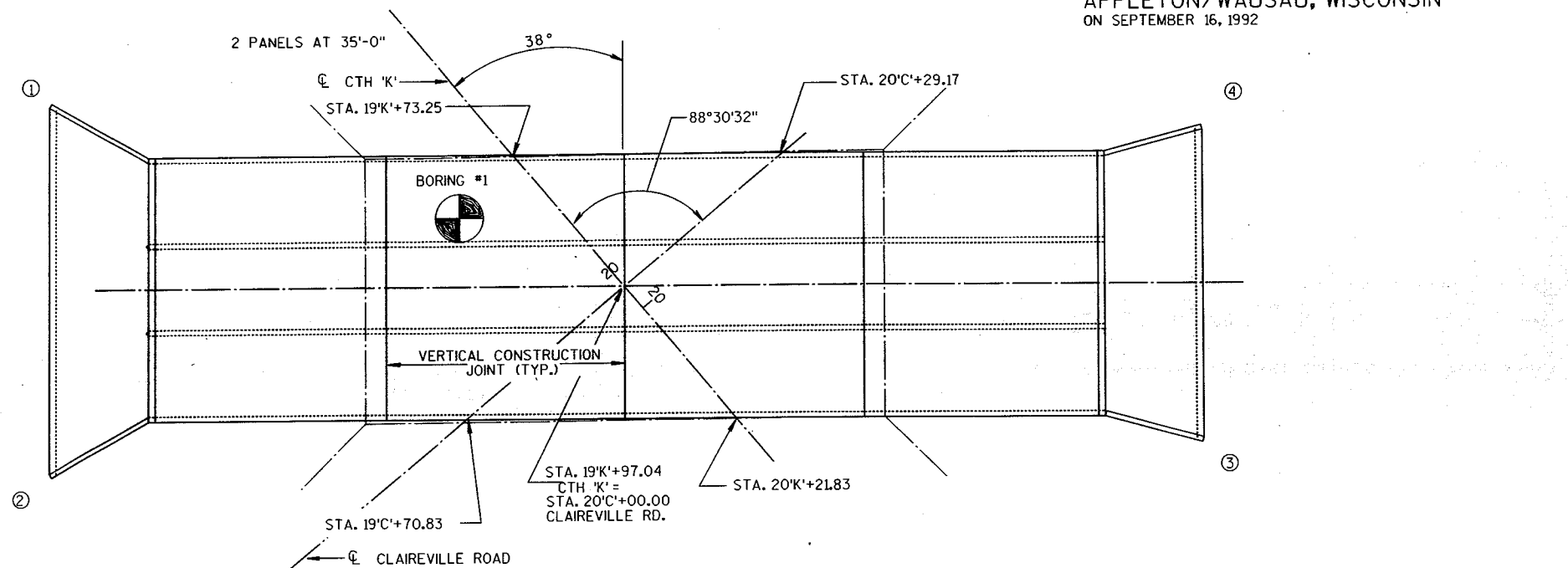
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-153

CONST SPEC	1989	DRAWN BY	NJA	PLANS CK'D	GAR
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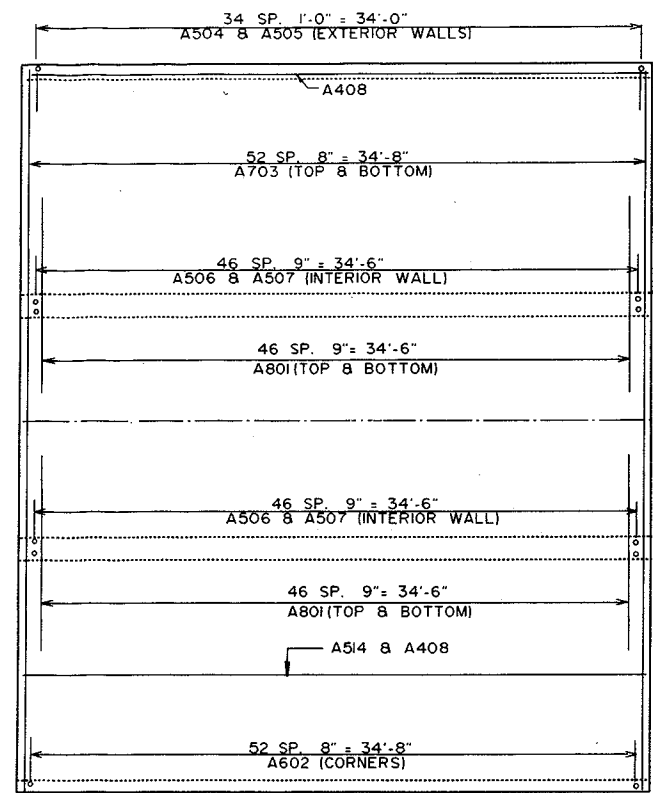
SUBSURFACE EXPLORATION

SHEET 2 OF 5

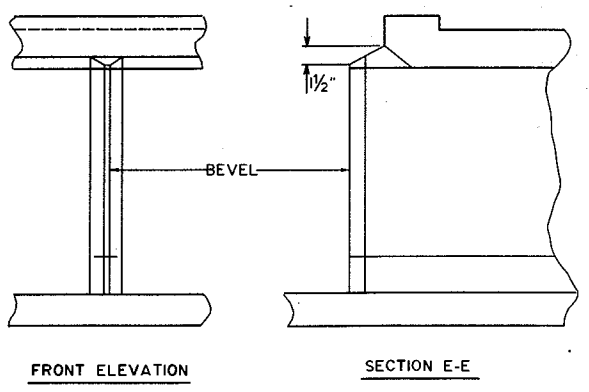
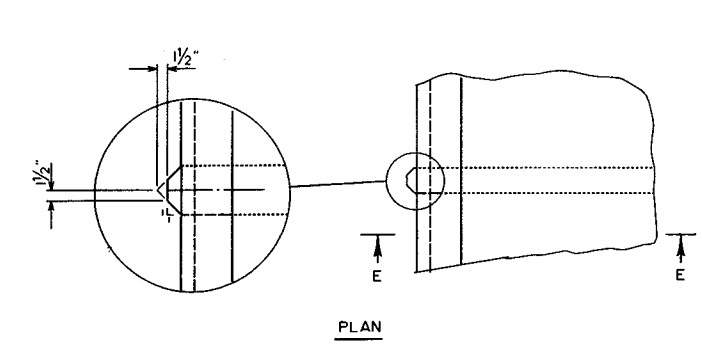


**BILL OF BARS**  
 THE FIRST DIGIT OR THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFY THE BAR SIZE. DIM.S IN BENDING DETAILS ARE OUT TO OUT OF BAR.

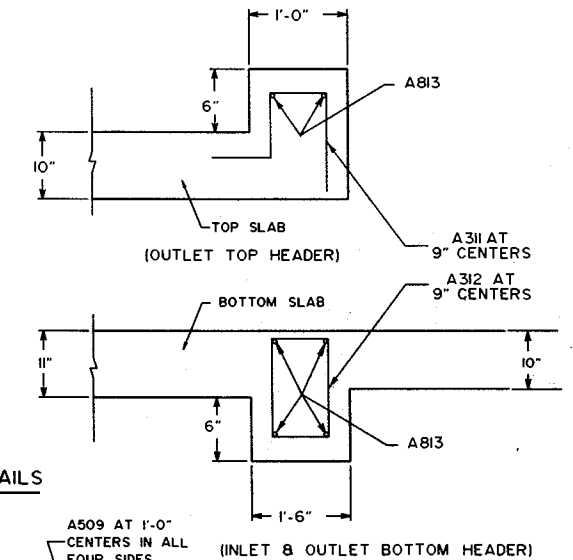
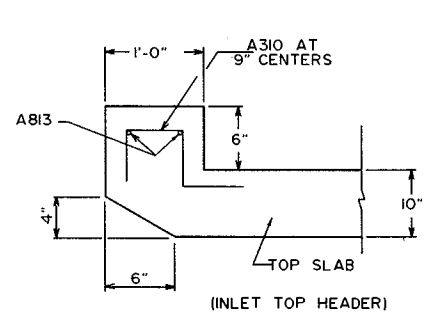
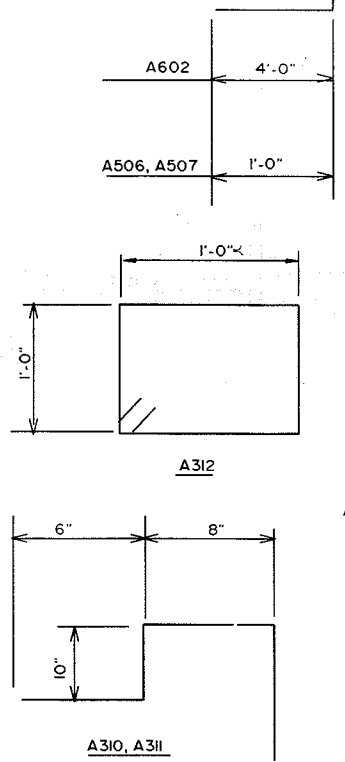
MARK	NO. REQ'D	LENGTH	BENT	LOCATION
A801	752	10'-4"		SLAB TOP & BOTTOM ALL PANELS TRANSVERSE
A602	848	9'-4"	X	SLAB CORNERS ALL PANELS
A703	424	37'-2"		SLAB TOP & BOTTOM ALL PANELS TRANSVERSE
A504	280	2'-5"		SLAB EXTERIOR WALLS ALL PANELS VERTICAL
A505	280	7'-0"		SLAB EXTERIOR WALLS ALL PANELS VERTICAL
A506	752	3'-5"	X	SLAB INTERIOR WALLS ALL PANELS VERTICAL
A507	752	7'-11"	X	SLAB INTERIOR WALLS ALL PANELS VERTICAL
A408	352	34'-8"		SLAB TOP, BOTTOM & WALLS ALL PANELS LONGITUDINAL
A509	309	4'-0"		VERTICAL CONSTRUCTION JOINT
A310	50	2'-7"	X	HEADERS INLET
A311	50	2'-11"	X	HEADERS OUTLET
A312	100	4'-2"	X	HEADERS INLET AND OUTLET BOTTOM
A813	12	37'-2"		HEADERS INLET AND OUTLET TRANS.
A514	132	34'-8"		SLAB TOP LONGITUDINAL



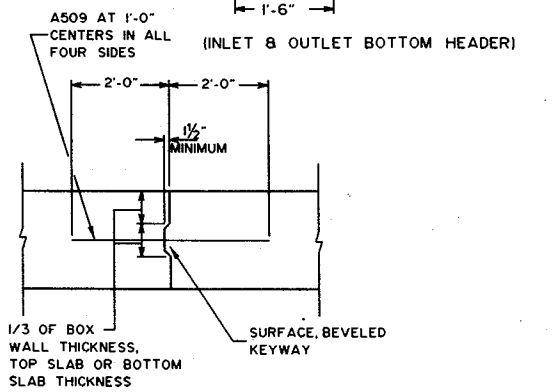
**PLAN SHOWING BAR STEEL REINFORCEMENT**  
ALL PANELS SIMILAR.



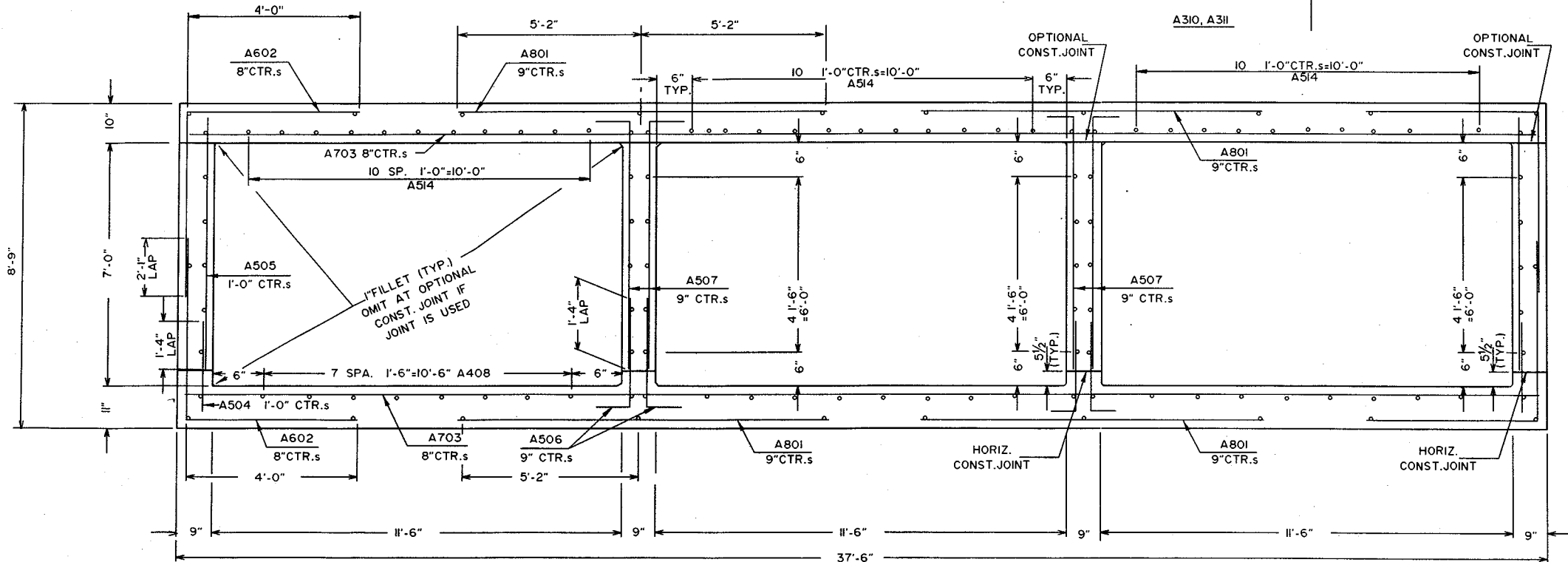
**INLET NOSE DETAILS**



**HEADER DETAILS**



**VERTICAL CONSTRUCTION JOINT**

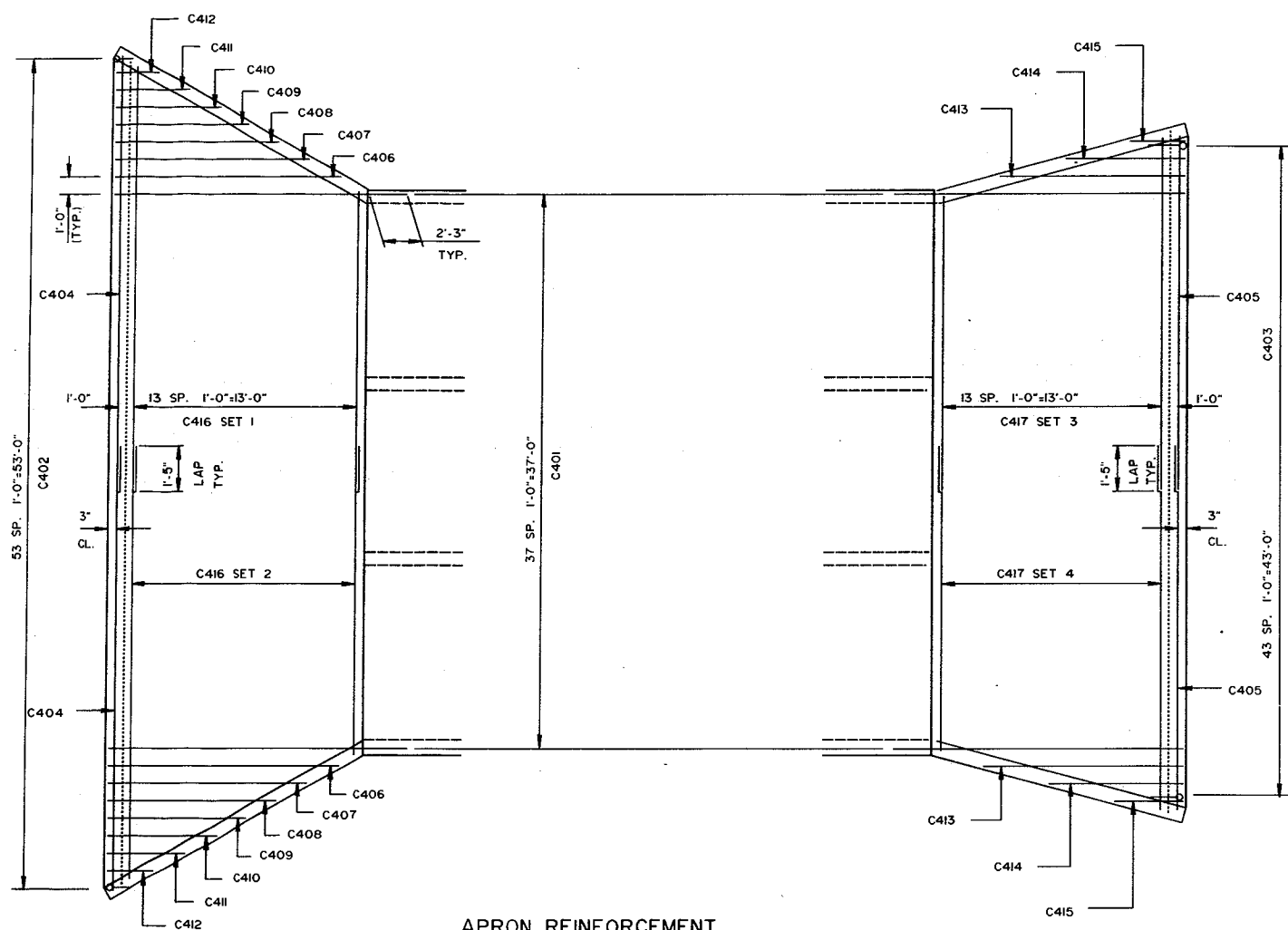


NOTE: ALL LONGIT. REINF. NOT LABELLED ARE A408 BARS

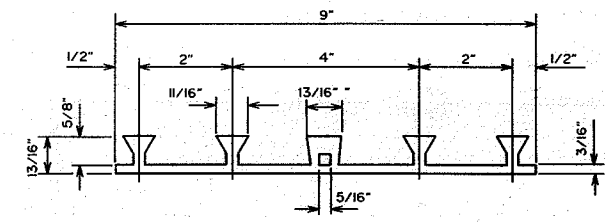
SYMMETRIC ABOUT C. STRUCTURE EXCEPT AS SHOWN OR NOTED OTHERWISE

**SECTION THRU BOX**

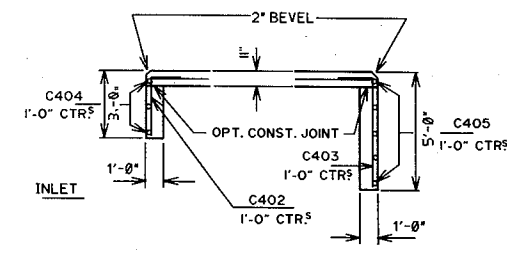
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-153</b>			
CONST SPEC	1989	DRAWN BY NJA	PLANS CK'D GAR
DETAILS			SHEET 3 OF 5



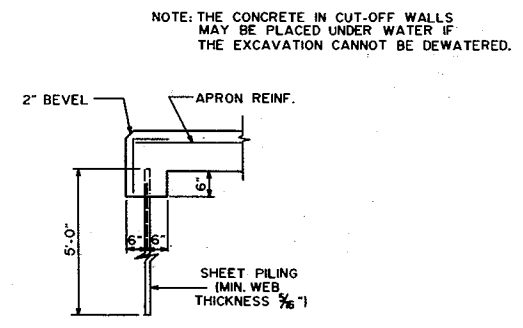
APRON REINFORCEMENT



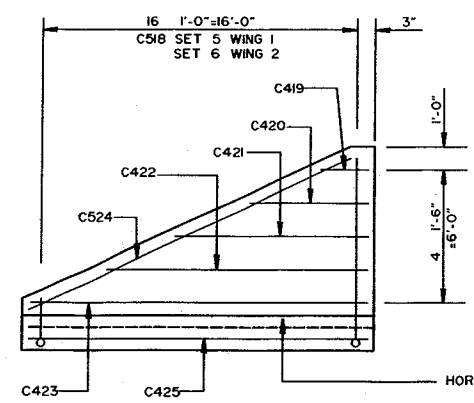
POLYVINYL CHLORIDE WATERSTOP  
FASTEN TO FORMS BY NAILING OUTSIDE OF OUTSIDE TAB.



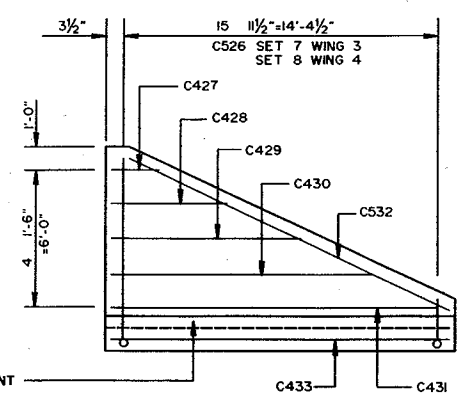
CUT-OFF WALL DETAILS



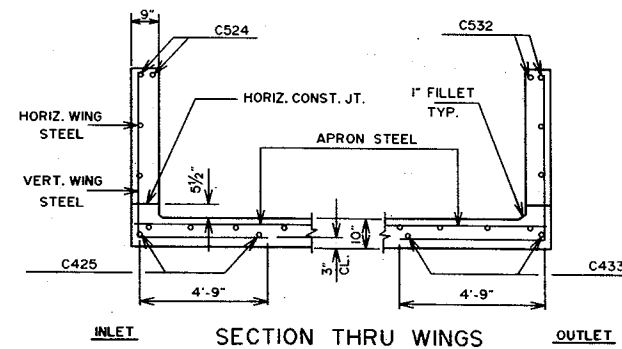
ALTERNATE CUT-OFF WALL  
(PAYMENT IS BASED ON CONCRETE CUT-OFF WALLS)



WINGS 1 & 2



WINGS 3 & 4



SECTION THRU WINGS  
(AT RIGHT ANGLES TO WINGS)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-153			
CONST SPEC	1989	DRAWN BY NJA	PLANS CK'D GAR
DETAILS			SHEET 4 OF 5

### BILL OF BARS

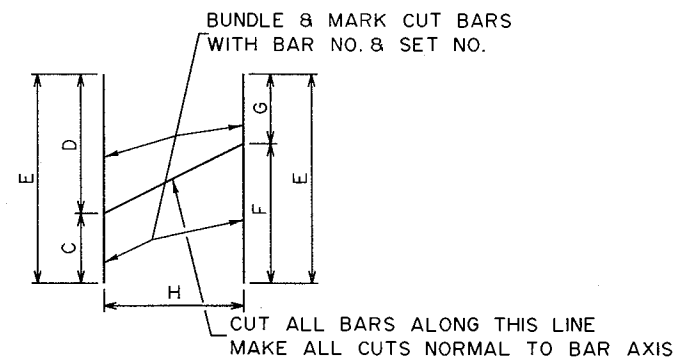
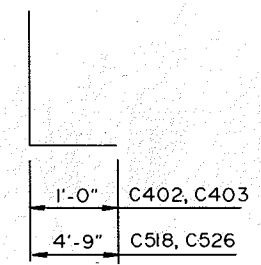
THE FIRST DIGIT OR THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFY THE BAR SIZE. DIM.s IN BENDING DETAILS ARE OUT TO OUT OF BAR. BENT BARS USED IN CUTTING DIAGRAMS SHALL BE BENT AFTER CUTTING.

MARK	NO. REQ'D	COAT	LENGTH	BENT	CUT DIAGR.	LOCATION
C401	76		16-8			INLET AND OUTLET APRONS
C402	54		3-6	*		INLET APRON & CUTOFF WALL
C403	44		5-6	*		OUTLET APRON & CUTOFF WALL
C404	6		27-3			INLET APRON & CUTOFF WALL
C405	10		23-0			OUTLET APRON & CUTOFF WALL
C406	2		12-8			INLET APRON
C407	2		11-1			INLET APRON
C408	2		9-4			INLET APRON
C409	2		7-6			INLET APRON
C410	2		5-9			INLET APRON
C411	2		4-2			INLET APRON
C412	2		2-4			INLET APRON
C413	2		10-10			OUTLET APRON
C414	2		7-2			OUTLET APRON
C415	2		3-5			OUTLET APRON
C416	14		46-6		*	INLET APRON
C417	14		42-0		*	OUTLET APRON
C518	17		19-10	*	*	WINGS 18 2
C419	2		2-7			WINGS 18 2
C420	2		6-8			WINGS 18 2
C421	2		10-9			WINGS 18 2
C422	2		14-10			WINGS 18 2
C423	2		16-1			WINGS 18 2
C524	4		16-10			WINGS 18 2
C425	4		16-6			WINGS 18 2
C526	16		19-10	*	*	WINGS 3 & 4
C427	2		2-4			WINGS 3 & 4
C428	2		6-1			WINGS 3 & 4
C429	2		9-9			WINGS 3 & 4
C430	2		13-5			WINGS 3 & 4
C431	2		14-7			WINGS 3 & 4
C532	4		15-5			WINGS 3 & 4
C433	4		14-11			WINGS 3 & 4

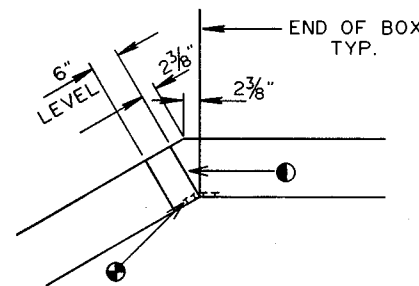
### CUTTING DIAGRAM

MARK	SET NO.	C	D	E	F	G	H	NO. SETS
C416	1	19-6		46-6	27-0		14	1
	2		27-0			19-6		1
A417	3	19-3		42-0	22-9		14	1
	4		22-9			19-3		1
A518	5	7-0		19-10	12-10		17	1
	6		12-10			7-0		1
A526	7	7-0		19-10	12-10		16	1
	8		12-10			7-0		1

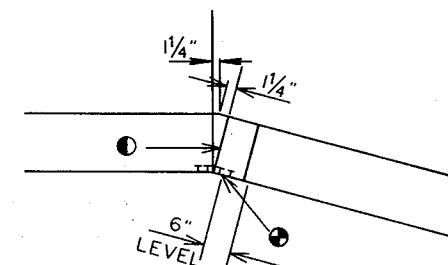
"H" IS NUMBER OF BARS REQ'D BEFORE CUTTING



- ① 3/4" FILLER: EXTEND FROM HORIZ. CONST. JOINT TO TOP OF WING. DO NOT RUN BAR STEEL THRU JOINT.
- ② POLYVINYL CHLORIDE WATERSTOP: EXTEND FROM HORIZ. CONST. JOINT TO TOP OF WING FLUSH WITH SURFACE OF CONCRETE.



CORNER 18 2



CORNER 3 & 4

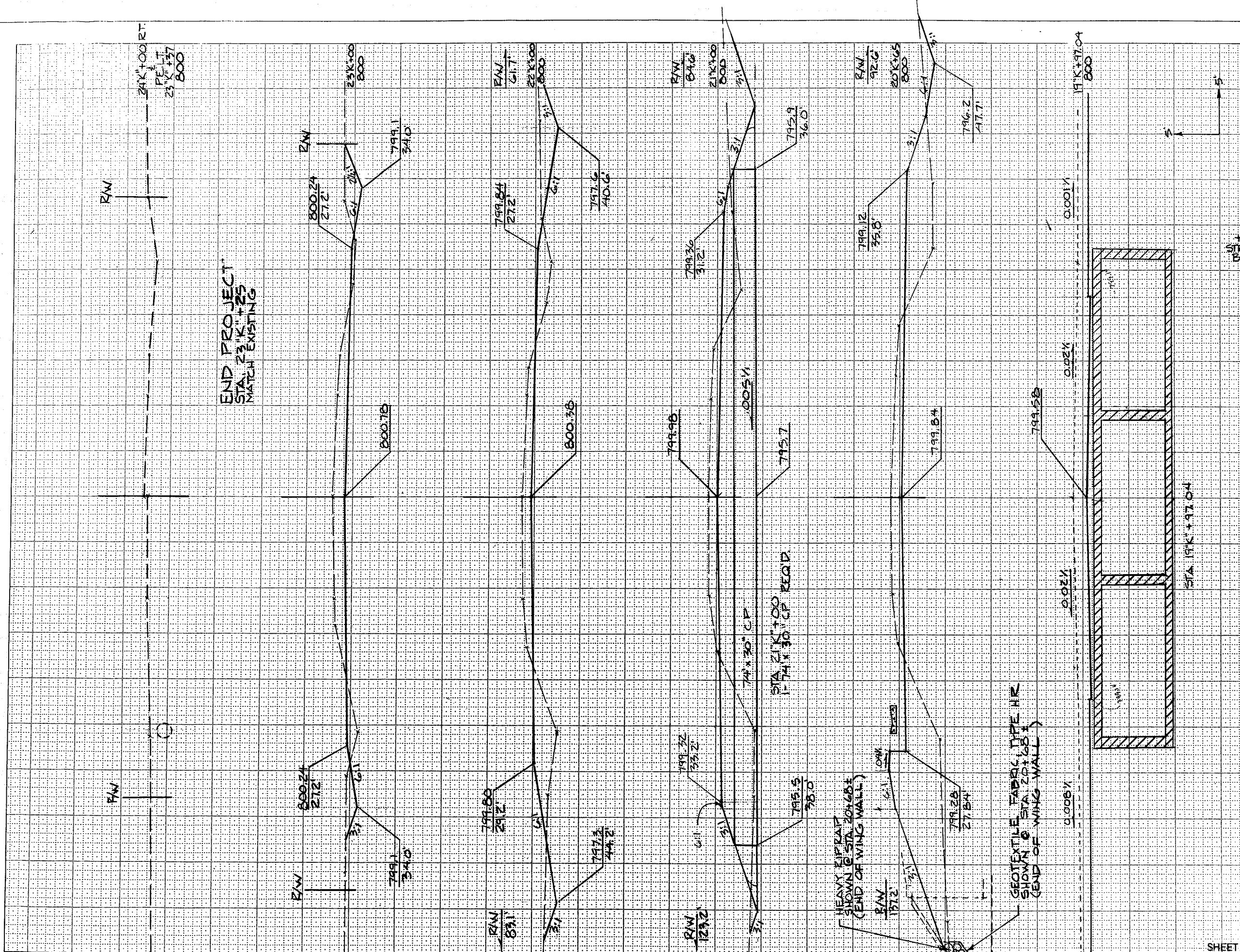
### CORNER DETAILS

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-153			
CONST. SPEC	1989	DRAWN BY NJA	PLANS CK'D GAR
DETAILS			SHEET 5 OF 5







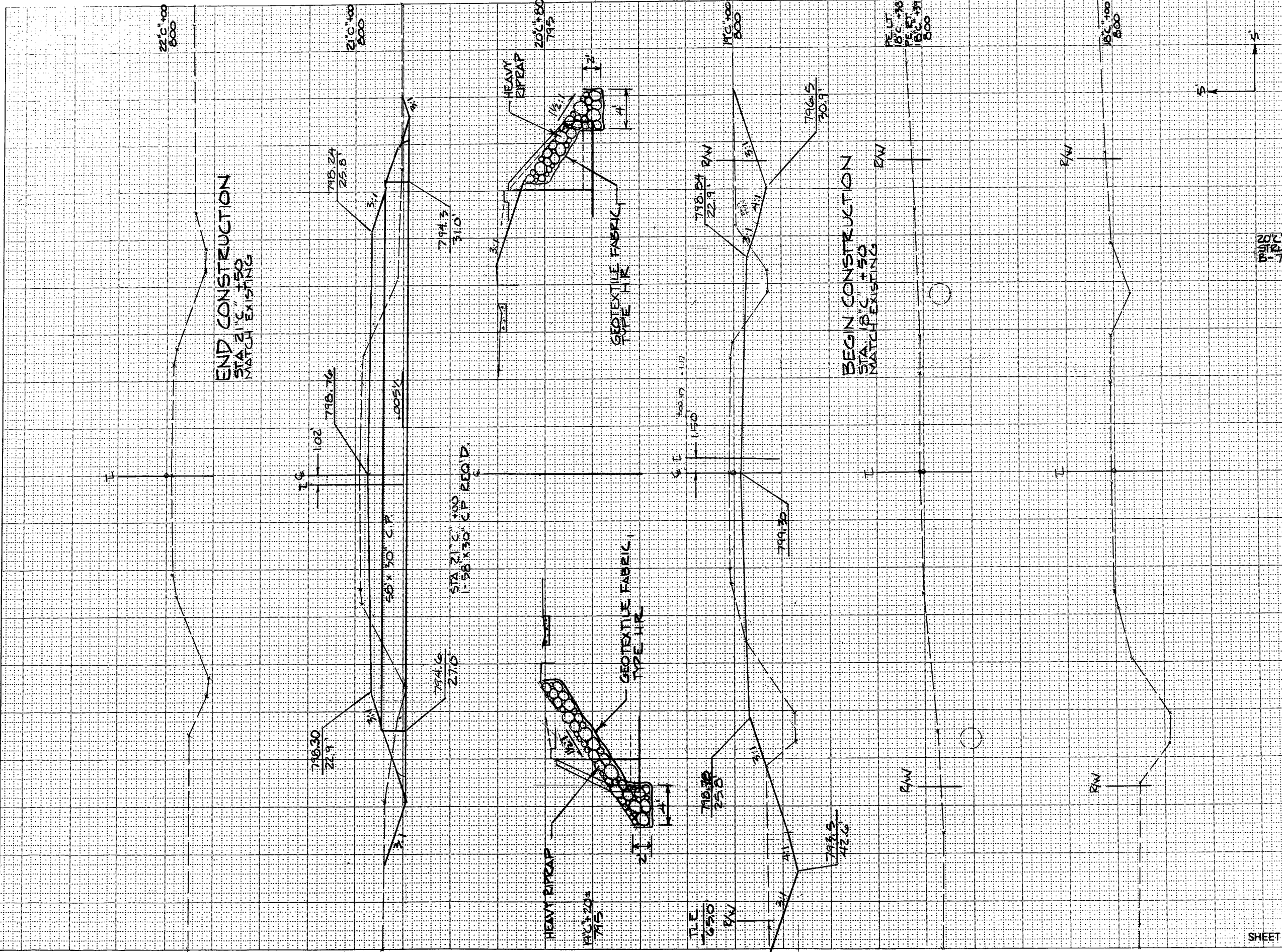


END PROJECT  
STA. 23K+25  
MATCH EXISTING

HEAVY RIPRAT  
SHOWN @ STA. 20+68.5  
(END OF WING WALL)

GEOTEXTILE FABRIC TYPE HR  
SHOWN @ STA. 20+68.5  
(END OF WING WALL)

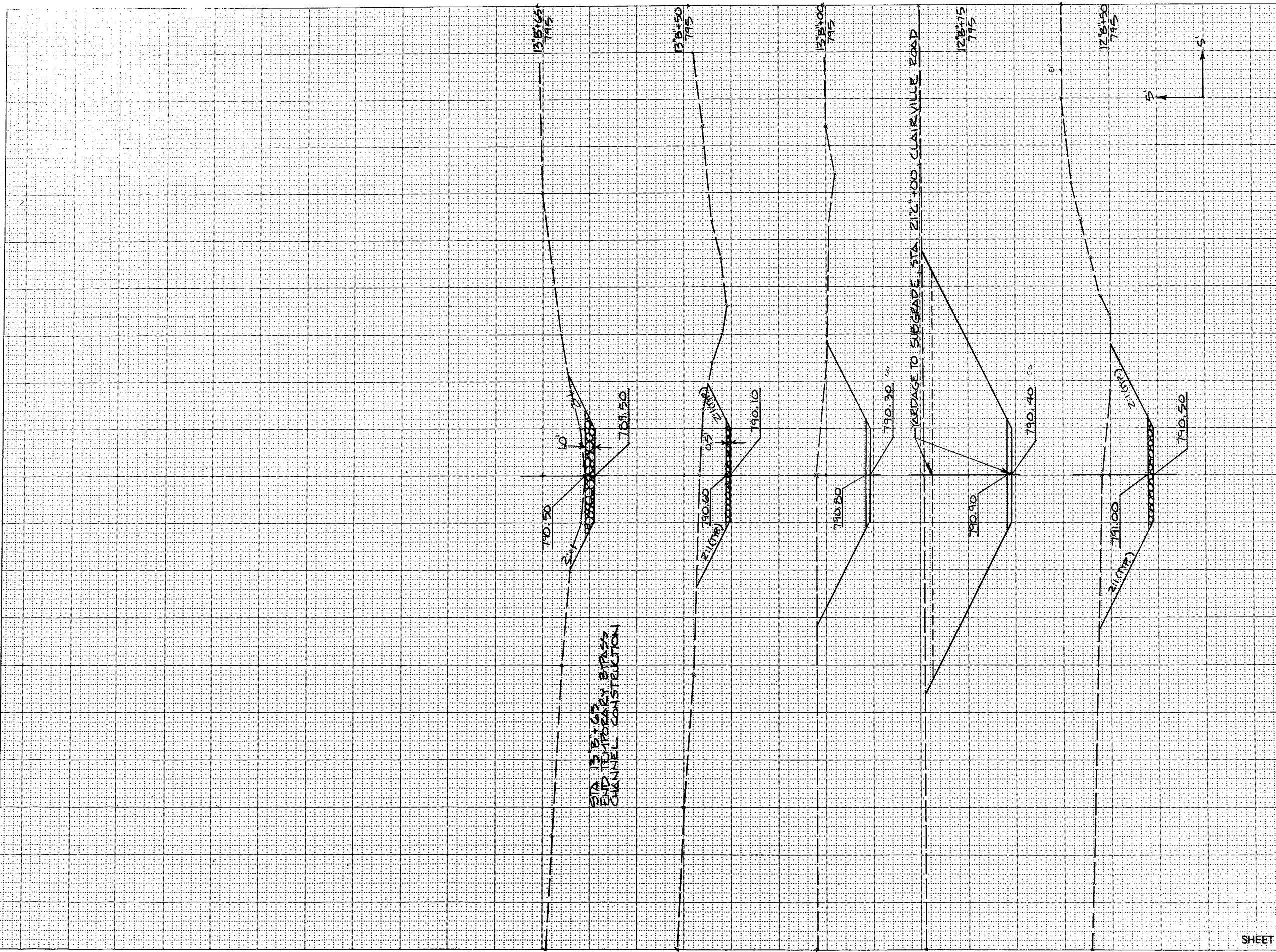
STATE PROJECT NUMBER		SHEET NUMBER	
6473-02-71		91	
STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
		UNCL.	
19K+35	62.4	85	89
197.04 STRUCTURE B-70-153	47.2	78	179
20K+65	35	89	140
21K	100	256	209
22K	100	237	83
23K	25	52	5
+25			
SHEET TOTAL		797	705



STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
180+00	50	150	42
190+00	100	272	153
200+00	100	100	155
210+00	50	68	65
<b>SHEET TOTAL</b>		<b>590</b>	<b>415</b>







STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
12B	50	233	233
12B+25	25	148	148
12B+50	25	144	144
12B+75	50	144	144
13B	50	21	21
13B+25	50		
13B+50	50		
13B+75	50		
<b>SHEET TOTAL</b>		<b>690</b>	<b>690</b>