

N-6

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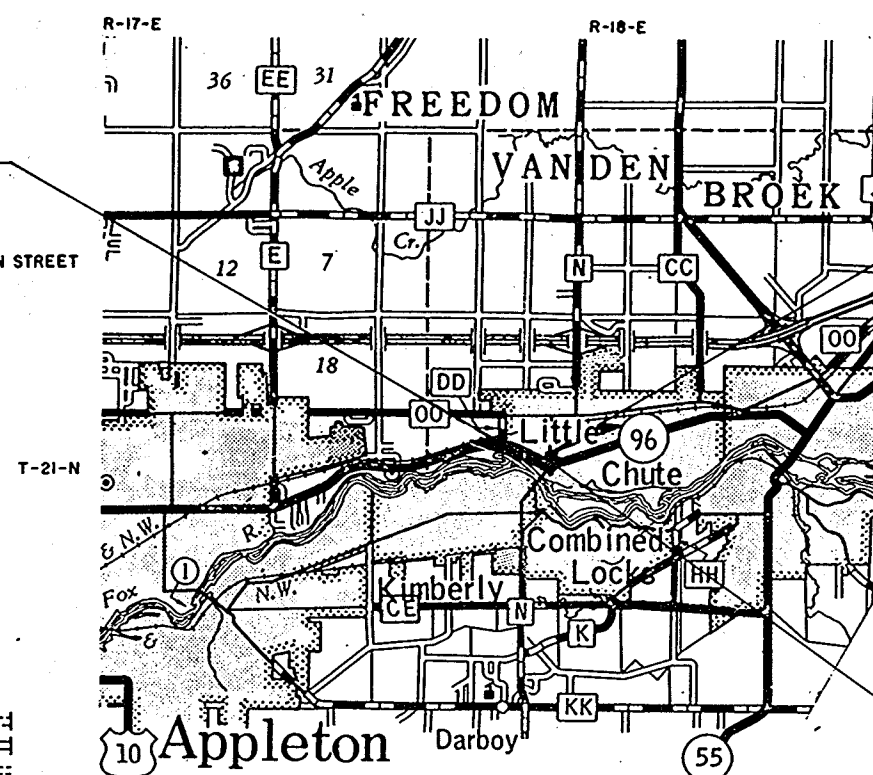
TOTAL SHEETS = 26

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED S.T.H. 96 & C.T.H. "N" INTERSECTION VILLAGE OF LITTLE CHUTE C.T.H. "N" OUTAGAMIE COUNTY

STATE PROJECT NUMBER
4990-0-02

Scales
Plan 1 in. = 20 ft.
Profile Hor. 1 in. = 20 ft. Vert. 1 in. = 2 ft.
Cross Sections Hor. 1 in. = 5 ft. Vert. 1 in. = 5 ft.



BEGIN PROJECT 4990-0-02
STATION 18+67.00

N 166,930 ± 200 FT. #
E 2,440,310 ± 200 FT. #

100' SOUTHWEST OF THE INTERSECTION OF LINCOLN STREET
AND MADISON STREET (C.T.H. "N").

* SCALED FROM THE U.S.G.S. 15 MINUTE SERIES
APPLETON QUADRANGLE.

END PROJECT 4990-0-02
STATION 53+00.00

N 167,710 ± 200 FT. #
E 2,440,420 ± 200 FT. #

300' NORTH OF INTERSECTION OF MAIN STREET (S.T.H. 96)
AND MADISON STREET (C.T.H. "N").

* SCALED FROM THE U.S.G.S. 15 MINUTE SERIES
APPLETON QUADRANGLE.

STA. 23+27.32 BK. # EQUATION
STA. 50+00.00 AH.

Design Designation (C.T.H. "N")

A.D.T. 1978	= 13,144
A.D.T. 1998	= 13,443
D.H.V.	= 1,316
D.	= 60%
T.	= 4.5%
V.	= 25 M.P.H.

Conventional Signs

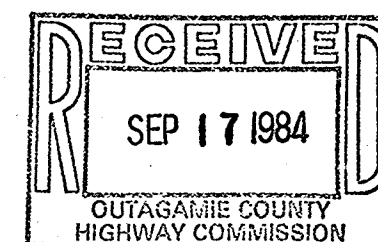
County Line	— — — — —
Township or Range Line	— — — — —
Section Line	— — — — —
New Right of Way Line	— — — — —
Present Right of Way Line	— — — — —
Wire Fence	— — — — —
Corporate or City Limits	— — — — —
Property Line	— — — — —
Traveled Way or P.E.	— — — — —
Railroads	— — — — —
Base or Survey Line	— — — — —
Caution Symbol (combustible fluids under pressure)	— — — — —

Culverts in Place	— — — — —
Culverts Required	— — — — —
Drop Inlet	— — — — —
Power Pole	— — — — —
Telephone or Telegraph Pole	— — — — —
Right of Way Markers	— — — — —
Reference Stake for Hubs Only	— — — — —
Marsh	— — — — —
Hedge	— — — — —
Trees	— — — — —
Ground Elevation	— — — — —
Grade Elevation	— — — — —

Layout
Scale 0 1/2 1 MI.

Total Net Length of Centerline = 0.144 Mi. (URBAN)

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4990-0-02	M1201 (004)	1



APPROVED
FOR
COUNTY BOARD OF SUPERVISORS BY:
OUTAGAMIE COUNTY
DATE 11-29-77
SIGNATURE OF OFFICIAL

PLANS PREPARED
BY
OWEN AYRES & ASSOCIATES
CONSULTING ENGINEERS
GREEN BAY, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
Surveyor: W.P.W.
Designer: OWEN & AYRES C.O. Checker: R.A.H.
District Supervisor: J.E.F. C.O. Monitor: C.E.

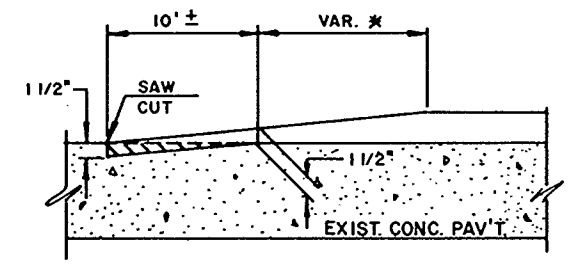
Approved:
Date 3-13-78 C.R. Ryan District Engineer
Approved:
Date 4-14-78 J.H. Smith State Traffic Engineer
Date 4-18-78 R.A. H. Chief of Facilities Development
Approved:
Date 4/19/78 J.L. Giedler State Highway Engineer

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 6 WISCONSIN DIVISION
Approved:
Date Division Engineer

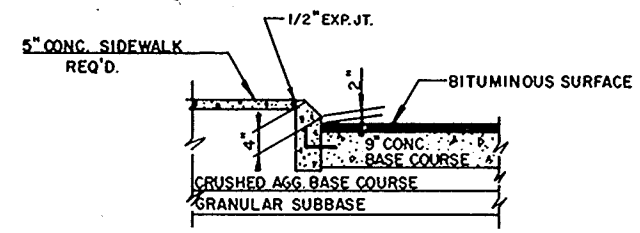
"191" 77

CATCH BASIN, MANHOLE & INLET COVERS	8A5-3a
CATCH BASINS, TYPE 3 & 5	8A7-2
MANHOLES, TYPE 2 & 3	8B7-2
INLETS, TYPE 1 & 2	8C1-3
CONCRETE CURB, GUTTER, COMBINATION CURB & GUTTER, OR INTEGRAL CURB	8D1-3
CURB RAMPS FOR HANDICAPPED PERSONS	8D5-4
METAL CONDUIT & FIBER CONDUIT	9B2-1
TRAFFIC SIGNAL & TRAFFIC COUNTER DETAILS	9B3-2
CONSTRUCTION BARRICADES AND STANDARD SIGNS	15C1-5

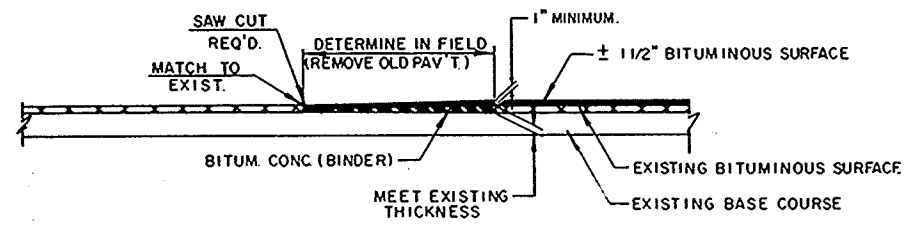
STATE PROJECT NUMBER	SHEET NO.
4990-0-02	2.1
CONSTRUCTION DETAILS	
FOR	
C.T.H. "N"	OUTAGAMIE COUNTY



BUTT JOINT
(CONCRETE PAVEMENT)

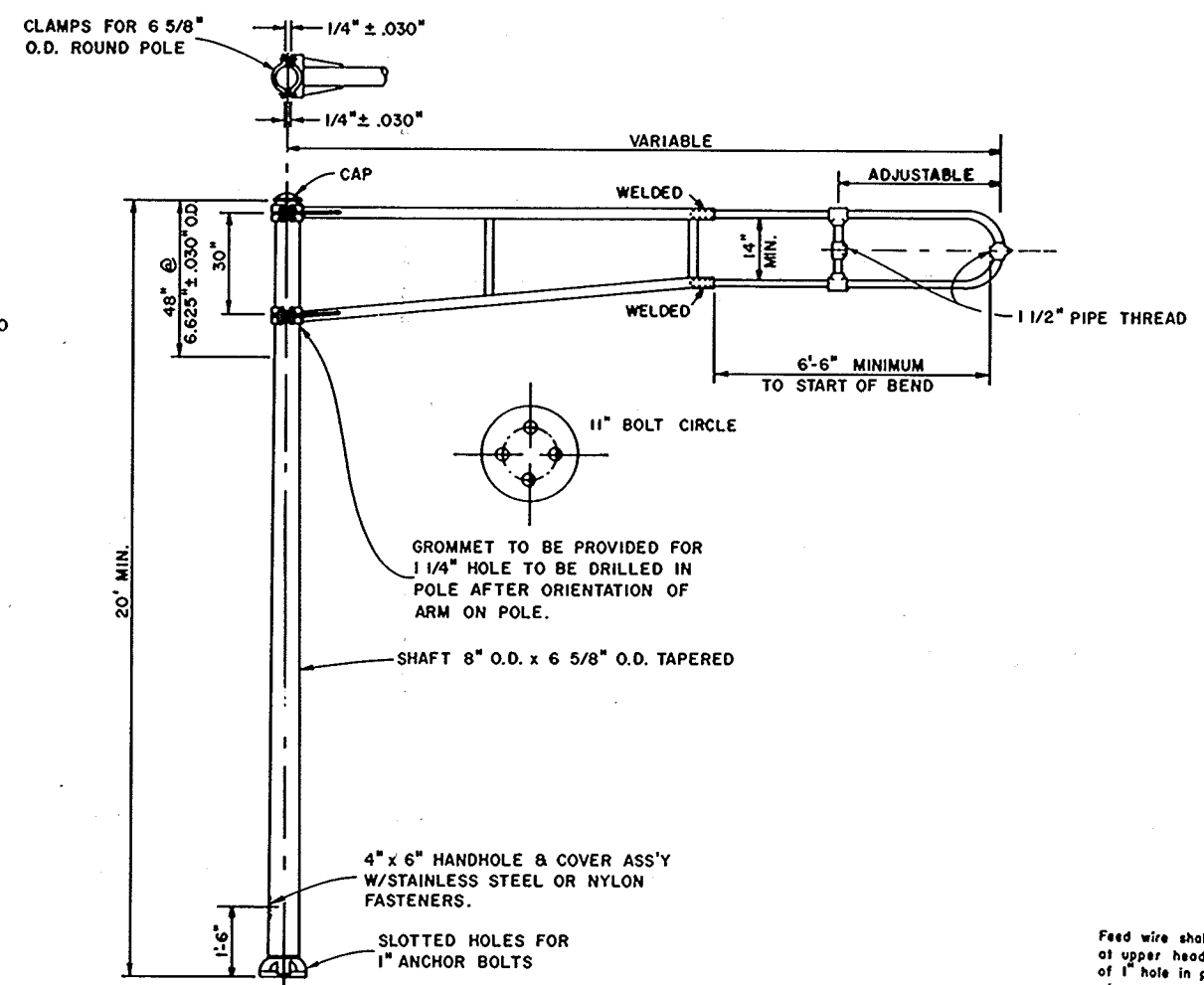


PART SECTION AT ISLAND
STA. 23 ± 00 RT.



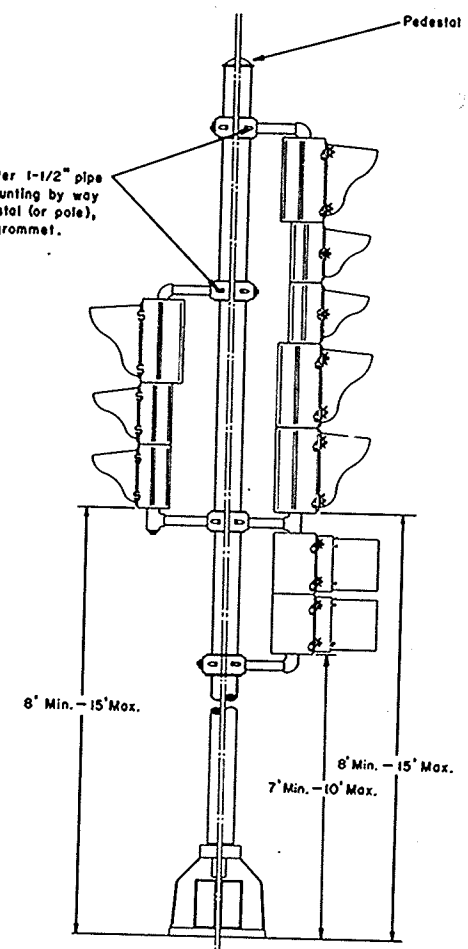
BUTT JOINT
(BITUMINOUS PAVEMENT)

EXISTING PAVEMENT TO BE REMOVED.



TYPE II POLE & OVERHEAD TRAFFIC SIGNAL ARM

Feed wire shall enter 1-1/2" pipe at upper head mounting by way of 1" hole in pedestal (or pole), wire protected by grommet.



TYPICAL MOUNTING DETAIL
ADJUST TO CONDITION SHOWN ON THE PLAN

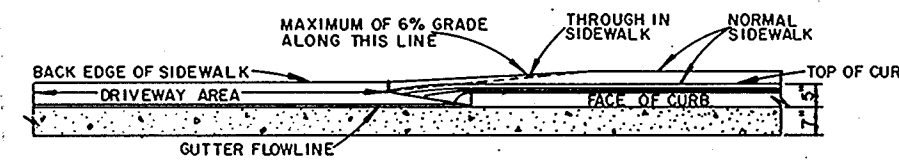
STATE PROJECT NUMBER	SHEET NO.
4990-0-02	2.2
DRIVEWAY CONSTRUCTION DETAILS	



NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G₁ AND G₂ EXTENDED IN FILLS MAX. 15%.



WHEN SIDEWALK IS IMMEDIATELY ADJACENT TO CURB



PROFILES PARALLEL TO CENTERLINE OF ROADWAY

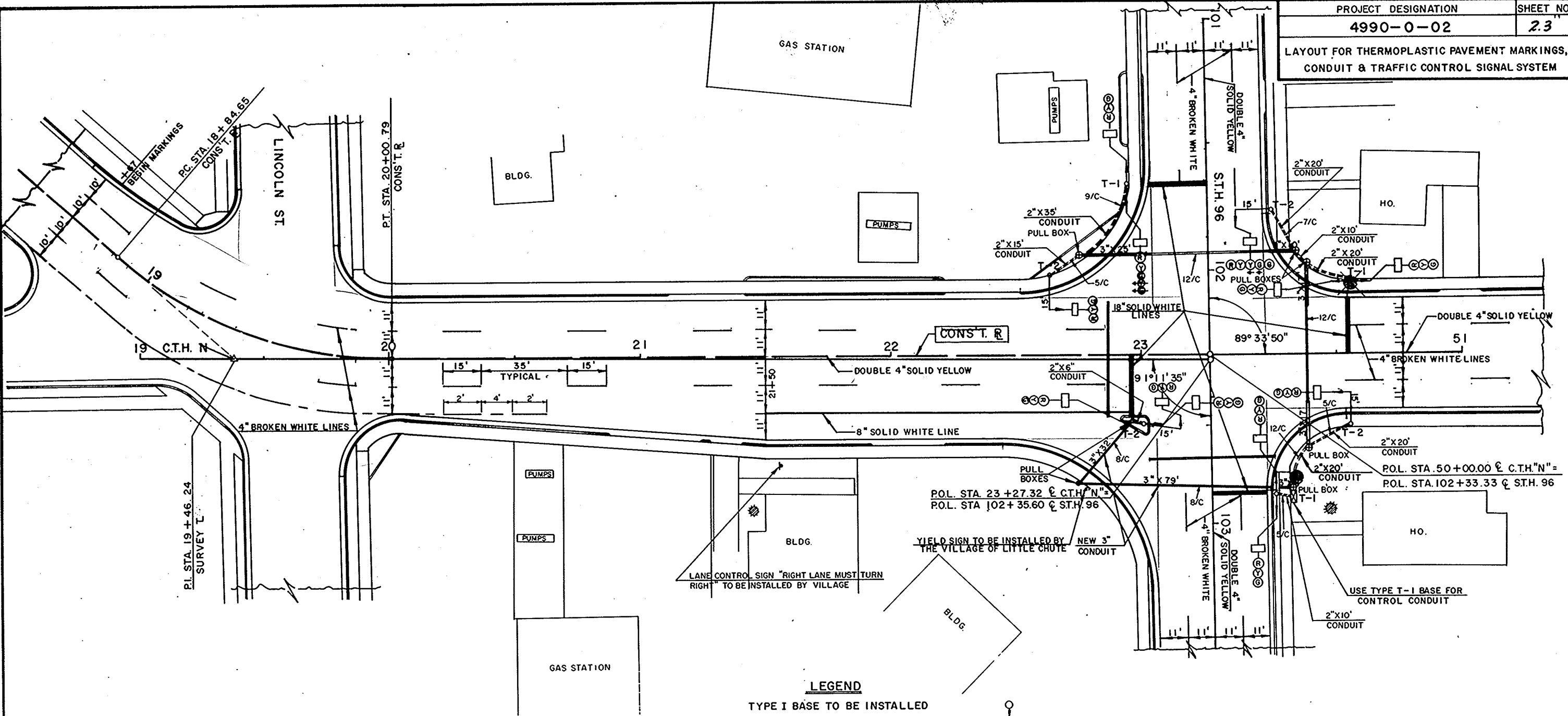
NOTE :

FOR ALL OTHER CONSTRUCTION DETAILS AND REQUIREMENTS.
FOR THE WORK DETAILED ON THIS DRAWING SEE THE STANDARD SPECIFICATIONS.
CONCRETE USED IN THE WORK OF "CONCRETE DRIVEWAYS" SHALL BE GRADE "A". CONCRETE USED IN THE WORK OF "CONCRETE CURB AND GUTTER" AND "CONCRETE SIDEWALKS" SHALL BE GRADE "A" IN CONFORMITY WITH THE STANDARD SPECIFICATIONS.

SINGLE OR COMBINATION MEASURED AT RIGHT ANGLES
TO CENTERLINE OF DRIVEWAY.

RURAL - NON-COMMERCIAL	24 FT. MAX.
URBAN - NON-COMMERCIAL	24 FT. MAX.
URBAN - COMMERCIAL	35 FT. MAX.

FOR NON-RIGID SURFACED DRIVEWAYS USE 6" DEPTH CRUSHED AGGREGATE BASE COURSE.



LEGEND

- TYPE I BASE TO BE INSTALLED
- TYPE II BASE TO BE INSTALLED
- SIGNAL CABINET
- 3 - INCH SIGNAL CONDUIT TO BE PLACED
- PULL BOX
- EXISTING 3 - INCH SIGNAL CONDUIT
- 2 - INCH SIGNAL CONDUIT TO BE PLACED

LIMITS FOR THERMOPLASTIC PAVEMENT MARKINGS

STREET	4" BROKEN WHITE	8" WHITE	DOUBLE 4" YELLOW	18" WHITE
C.T.H."N"	18+67-22+95 50+55-53+00	21+50-22+95	18+67-22+95 50+55-53+00	22+95 & 50+55
S.T.H.96	99+50-104+82		99+50-101+64 102+87-104+82	101+65 & 10+88

SIGNAL SEQUENCE

INTERVAL	C.T.H."N"		S.T.H. 96		TIME IN SECONDS	% OF DIAL
	N. BND.	S. BND.	W. BND.	E. BND.		
1	R	R	←G G	R	14.4	.24
2	R	R	←Y G	R	3.0	.05
3	R	R	G	G	16.2	.27
4	R	R	Y	Y	3.0	.05
5	G	G	R	R	20.4	.34
6	Y	Y	R	R	3.0	.05
PROGRAMED* & EMERGENCY FLASH	F. Y.		F. R.			
TOTALS					60.0	1.00

* Programmed Flashing operation shall begin at 11:30 P.M. and return to normal operation at 5:30 A.M. The change from Stop-and-Go to flashing operation shall be made at the end of interval 6 and the change from flashing to Stop-and-Go operation shall be made at the beginning of interval 3.

ESTIMATE OF QUANTITIES

CONTRACT NO. 1 GRADE, BASE
COURSE, TRAFFIC SIGNALS AND
SURFACE (BITUMINOUS CONC.)

STATE PROJECT NUMBER
4990-0-02

SHEET NO.
3

CONTRACT	STATION TO STATION		NET LENGTH OF CENTER LINE	CLEARING	GRUBBING	REMOVING							ABANDONING CATCH BASINS	UNCLASSIFIED EXCAVATION	PREPARATION OF FOUNDATION FOR BITUMINOUS PAVING	GRANULAR SUBBASE COURSE	CRUSHED AGGREGATE BASE COURSE	H.E.S. CONCRETE BASE COURSE 9-INCH		BITUMINOUS CONCRETE PAVEMENT	BITUMINOUS MATERIAL FOR SURFACE COURSE	H.E.S. CONCRETE DRIVEWAY		
						PAVEMENT	BITUMINOUS SURFACE	CURB	CURB AND GUTTER	CONCRETE SIDEWALK	GUARD- RAIL	CATCH BASINS												
		ITEM NO. UNIT	LIN. FT.	20102 IN. DIA.	20105 IN. DIA.	20401 S.Y.	20402 S.Y.	20403 L.F.	20405 L.F.	20406 S.Y.	20411 L.F.	20415 EA.	20481 EA.	20503 C.Y.	21101 LS.	21201 C.Y.	30403 C.Y.	30729 S.Y.		40701 TON	40702 TON	40941 S.Y.		
1	STA. 18+67.0 TO STA. 53+00.0		760.32	60	60	430	75	65	1,250	920	12	7	1	647	1	180	450	675		850	50	155		
1	TOTALS		760.32	60	60	430	75	65	1,250	920	12	7	1	647	1	180	450	675		850	50	155		

CONTRACT	CONCRETE						CONCRETE PIPE, CLASS III STORM SEWER			CATCH BASINS TYPE 3	MANHOLES TYPE 2	INLETS TYPE I	RECON-STRUCTING CATCH BASINS		CATCH BASIN COVERS TYPE A	MANHOLE COVERS TYPE J	INLET COVERS TYPE A	ADJUSTING MANHOLE COVERS		CONDUIT 3-INCH	CONDUIT 2-INCH	MOBILI-ZATION	FERTILIZER	SEEDING	SODDING	FIELD OFFICE TYPE A
	CURB TYPE G		CURB AND GUTTER 30-INCH TYPE A	CURB AND GUTTER 30-INCH TYPE D	SIDEWALK 5-INCH		NON-REINFORCED 8-INCH	REINFORCED 12-INCH																		
60103		60123	60133	60205		60712	60825		61103	61111	61121	61127		61131	61151	61161	61182		90010	90011	61910	62901	63002	63101	64201	
L.F.		L.F.	L.F.	S.F.		L.F.	L.F.		EA.	EA.	EA.	EA.		EA.	EA.	EA.	EA.		L.F.	L.F.	L.S.	CWT.	LBS.	S.Y.	L.S.	
1	35		875	535	5,450		114	10		6	3	2	1		6	3	2	9		186	156	1	1	5	225	1
1	35		875	535	5,450		114	10		6	3	2	1		6	3	2	9		186	156	1	1	5	225	1

CONTRACT	TRAFFIC CONTROL		PULL BOXES	TRAFFIC SIGNAL BASE TYPE "1"	TRAFFIC SIGNAL BASE TYPE "2"				TRAFFIC SIGNALS		THERMOPLASTIC PAVEMENT MARKING				REMOVING CONCRETE PAVEMENT, BUTT JOINTS	PRE-TIMED TRAFFIC SIGNAL CONTROLLER AND CABINET	
											4-INCH WHITE	8-INCH WHITE	18-INCH WHITE	4-INCH YELLOW			
	64301		90003	90001	90002				90004		90006	90007	90008	90005	90009	90012	
	L.S.		EA.	EA.	EA.				L.S.		L.F.	L.F.	L.F.	L.F.	S.Y.	L.S.	
I	I		7	4	4				I		690	145	90	2,170	50	I	
I	I		7	4	4				I		690	145	90	2,170	50	I	

DETAIL SUMMARY SHEET OF MISCELLANEOUS QUANTITIES

STATE PROJECT NUMBER	SHEET NO.
4990-0-02	3A

INLETS, MANHOLES & COVERS

STRUCTURE NUMBER	LOCATION	DISTANCE LT./RT.	STRUCTURE	TYPE	COVER	GRATE	EDGE OF/OR PAV'T ELEV.	FLOWLINE ELEVATION	DEPTH	REMARKS
1	18 + 97	25.5' LT.	CATCH BASIN	3	A	RT.	732.0	729.0	4.30	
2	19 + 00	21' LT.	MANHOLE	2	J		732.0	728.14	2.6	BUILD AROUND EXISTING PIPES
3	20 + 04	23.5' LT.	INLET	1	A	LT.	730.85	728.17	1.60	
6	20 + 04	23.5' RT.	CATCH BASIN	3	A	RT.	730.78	727.00	5.28	
8	103 + 28 (S.T.H. 96)	23.5' RT.	INLET	1	A	RT.	733.20	730.37	1.75	
9	22 + 80	46' RT.	CATCH BASIN	3	A	RT.	732.40	730.00	2.82	
10	22 + 83	24' RT.	MANHOLE	2	J		732.75	729.78	1.72	CONNECT TO EXISTING PIPE
11	102 + 78 (S.T.H. 96)	24.5' LT.	CATCH BASIN	3	A	LT.	732.90	730.10	3.22	
13	52 + 31	21.5' LT.	CATCH BASIN	3	A	RT.	730.97	727.80	3.59	
15	52 + 23	22' RT.	CATCH BASIN	3	A	LT.	731.04	728.15	3.31	
16	52 + 23	17' RT.	MANHOLE	2	J		731.0	728.0	1.75	BUILD AROUND EXISTING PIPES

STORM SEWERS

LOCATION FROM	TO	SIZE INCH	LENGTH FEET	TYPE	ELEVATION INLET	DISCHARGE	REMARKS
1	2	12	4	R.C.P., CL. III, S.S.	729.0	728.8	
3	4	8	3	NON-R.C.P., CL. III, S.S.	728.17	728.08	CONNECT TO EXISTING
6	5	12	6	R.C.P., CL. III, S.S.	727.0	726.8	CONNECT TO EXISTING
7	6	8	3	NON-R.C.P., CL. III, S.S.	727.37	727.25	CONNECT TO EXISTING
8	9	8	54	NON-R.C.P., CL. III, S.S.	730.37	730.10	
9	10	8	20	NON-R.C.P., CL. III, S.S.	730.00	729.78	
11	12	8	12	NON-R.C.P., CL. III, S.S.	730.10	729.90	CONNECT TO EXISTING
13	14	8	4	NON-R.C.P., CL. III, S.S.	727.80	727.67	CONNECT TO EXISTING
15	16	8	4	NON-R.C.P., CL. III, S.S.	728.15	728.06	CONNECT TO EXISTING
18	15	8	7	NON-R.C.P., CL. III, S.S.	731.3	±729.0	DRAINS YARD
17	13	8	7	NON-R.C.P., CL. III, S.S.	730.7	±729.0	DRAINS YARD

ADJUSTING MANHOLE COVERS

STATION	LOCATION	TYPE	ADJUST COVER (EACH)
19 + 32	17' LT.	STORM	1
19 + 49	8' RT.	SANITARY	1
19 + 58	18' RT.	STORM	1
19 + 70	32' LT.	WATER *	1
23 + 07	3' LT.	WATER *	1
23 + 37	6' LT.	WATER *	1
23 + 05	12' RT.	STORM	1
23 + 21	2' LT.	SANITARY	1
50 + 01	2' LT.	SANITARY	1
50 + 17	31' LT.	SANITARY	1
50 + 21	7' RT.	STORM	1
100 + 93(S.T.H. 96)	20' LT.	STORM	1

* BY OTHERS

EXISTING CATCH BASINS

STATION	LOCATION	ABANDON	REMOVE	RECONSTRUCT
19 + 00	21.5' LT.		1	
19 + 19	45' LT.			1
20 + 04	21.5' LT.		1	
20 + 04	21.5' RT.		1	
22 + 83	24' RT.		1	
23 + 04	43' RT.	1		
50 + 24	35' RT.		1	
52 + 23	17.5' LT.		1	
52 + 30	17.5' RT.		1	

CONCRETE CURB, CURB & GUTTER

LOCATION	CONCRETE C. & G. 30 TYPE "A" (L.F.)	CONCRETE C. & G. 30 TYPE "D" (L.F.)	CONCRETE CURB TYPE "C" (L.F.)
18 + 55 - 23 + 27	875		
50 + 00 - 53 + 00		535	
23 + 00 ISLAND RT.			35

SEEDING

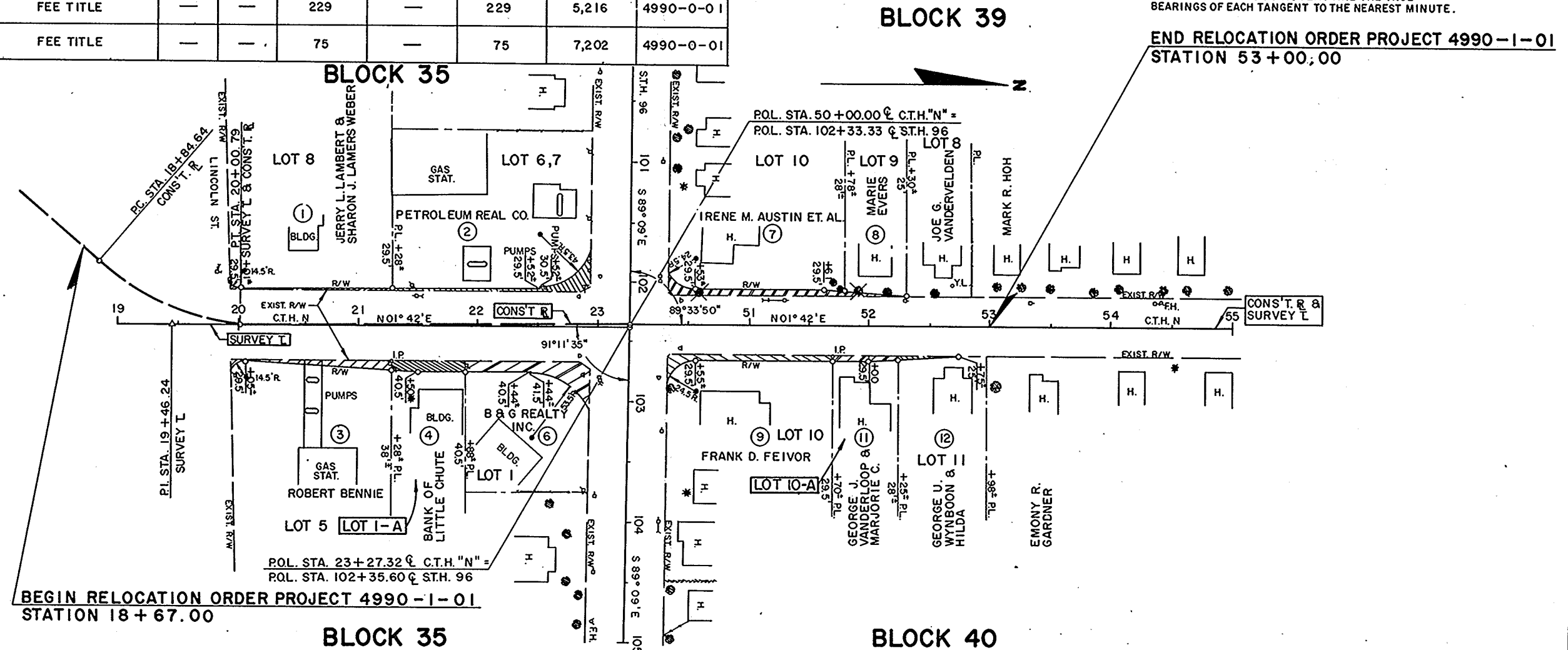
LOCATION	MIXTURE #	LBS.
MISC. AREAS	#4	5

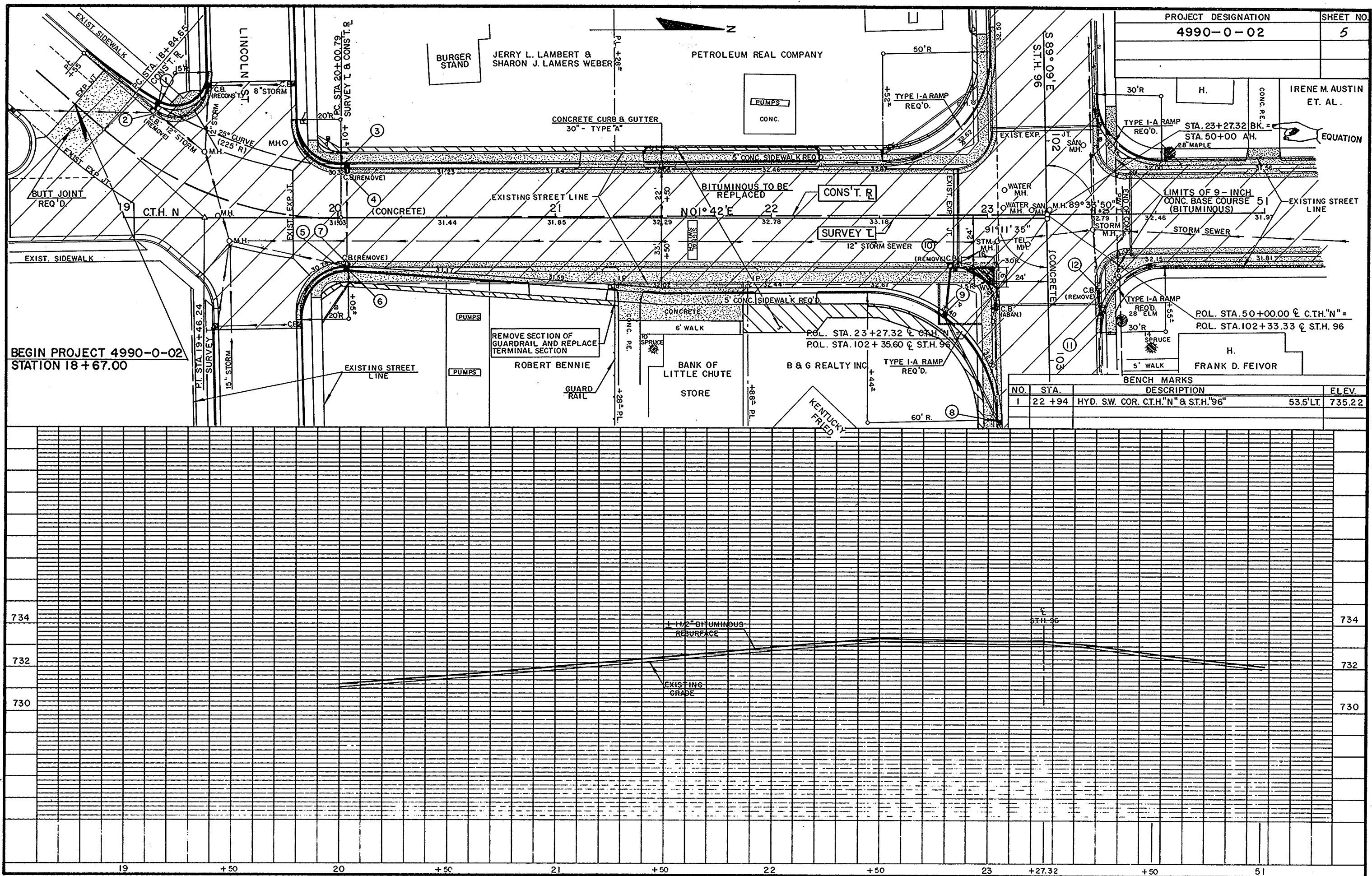
SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	L.H.E. ACRES		SQUARE FEET REQUIRED			TOTAL REMAINING S.F.	OPERATIONS PROJECT NUMBER
			TEMP	PERM.	NEW R/W REQUIRED	EXISTING R/W	TOTAL R/W REQUIRED		
1	JERRY L. LAMBERT AND SHARON J. LAMERS WEBER	FEE TITLE	—	—	107	1,373	1,480	8,871	4990-0-01
2	PETROLEUM REAL CO.	FEE TITLE	—	—	593	1,713	2,306	20,486	4990-0-01
3	ROBERT BENNIE	FEE TITLE	—	—	540	686	1,226	17,243	4990-0-01
4	BANK OF LITTLE CHUTE	FEE TITLE	—	—	556	303	859	6,344	4990-0-01
6	B & G REALTY INC.	FEE TITLE	—	—	1,456	563	2,019	10,917	4990-0-01
7	IRENE M. AUSTIN ET. AL.	FEE TITLE	—	—	680	—	680	8,536	4990-0-01
8	MARIE EVERS	FEE TITLE	—	—	99	—	99	6,831	4990-0-01
9	FRANK D. FEIVOR	FEE TITLE	—	—	728	—	728	13,290	4990-0-01
11	GEORGE J. VANDERLOOP SR. & MARJORIE C.	FEE TITLE	—	—	229	—	229	5,216	4990-0-01
12	GEORGE U. WYNBOON & HILDA	FEE TITLE	—	—	75	—	75	7,202	4990-0-01

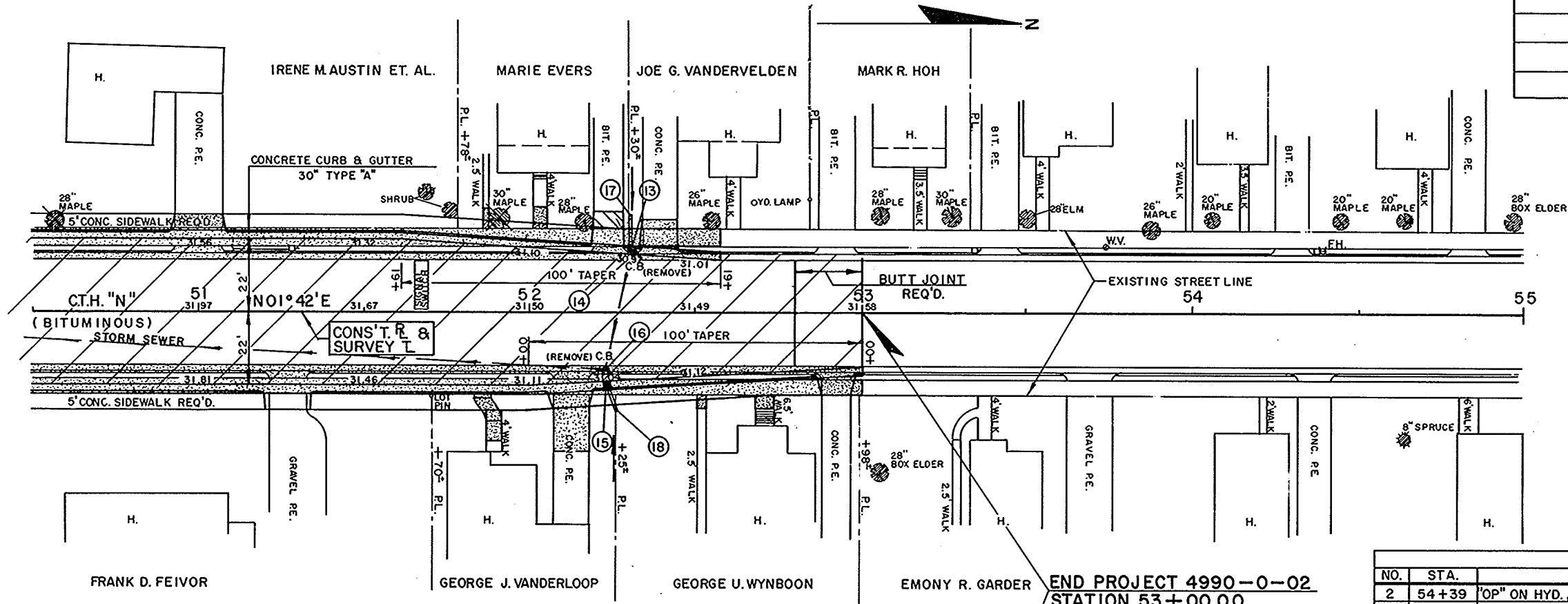
REVISION DATE	R/W PROJECT NUMBER	SHEET NUMBER
3-3-78	4990-0-01	4.1
FEDERAL PROJECT NUMBER		
PLAT OF RIGHT OF WAY REQUIRED FOR C.T.H. "N" & S.T.H. 96 OUTAGAMIE COUNTY		
SCALE 0 25 50 100 Ft.		DATE 12-16-77
CONSTRUCTION PROJECT NUMBER		
4990-0-02		4

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



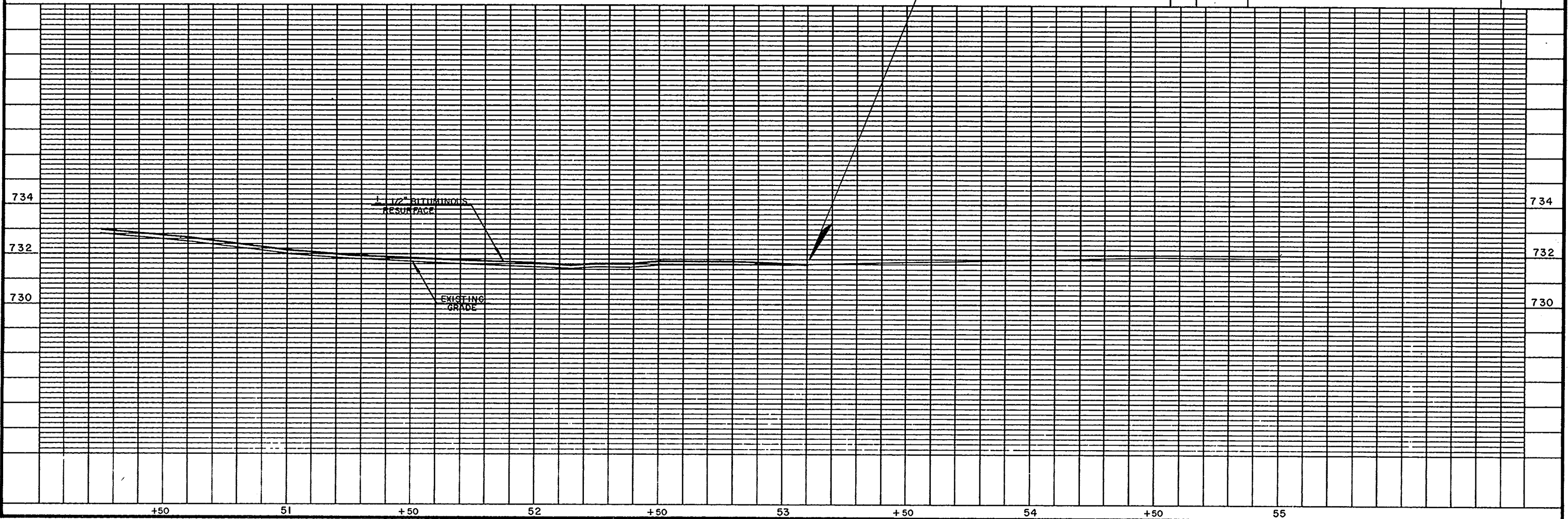


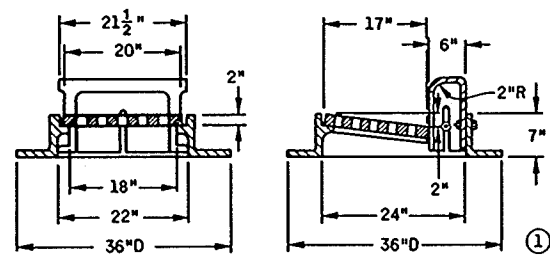
PROJECT DESIGNATION	SHEET NO.
4990-0-02	5.1



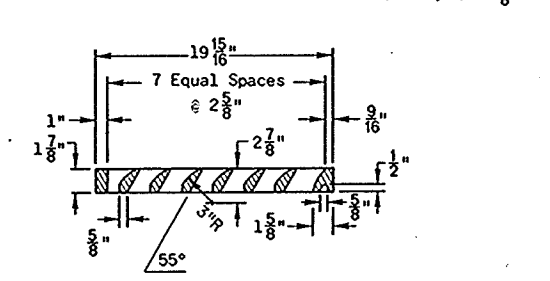
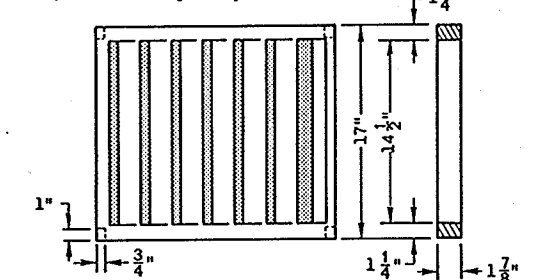
BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
2	54+39	'OP" ON HYD., W. OF C.T.H. "N", HO. #709 19.5' LT.	734.12

END PROJECT 4990-0-02
STATION 53+00.00

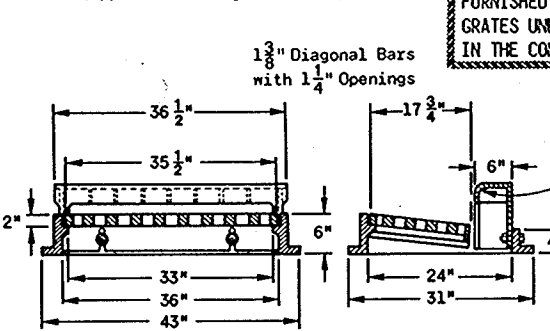




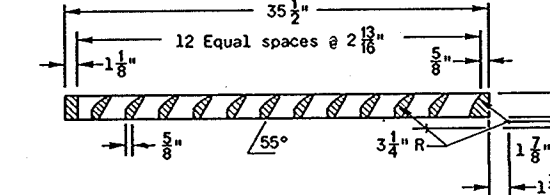
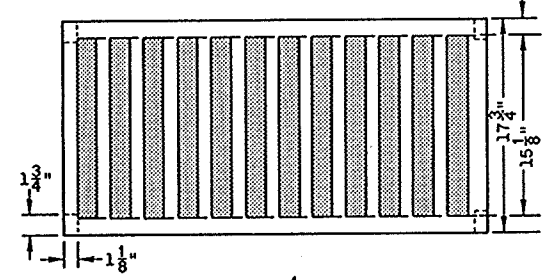
Details of Curb Box, Frame and Diagonally Slotted Grate
(Curb Box height adjustable 4" to 9")



**SPECIAL GRATE NO. 1
FOR TYPE "A" COVER**
(Approximate Weight 70 lbs.)



Details of Curb Box, Frame and Diagonally Slotted Grate
(Curb Box height adjustable 6" to 9")

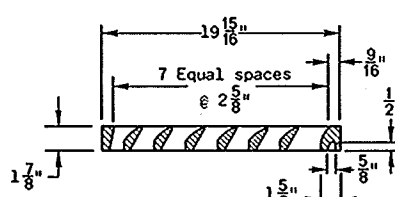
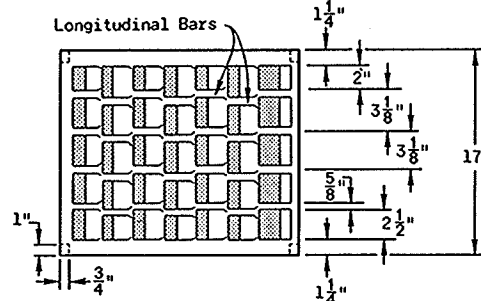


**SPECIAL GRATE NO. 1
FOR TYPE "H" COVER**
(Approximate Weight 140 lbs.)

1" Diagonal Bars
with 1/2" Openings

TYPE "A"

(Approximate Weight 405 lbs.)
Frame Weight 250 lbs.
Grate Weight 85 lbs.
Box Weight 70 lbs.



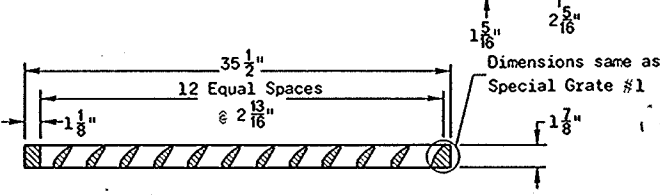
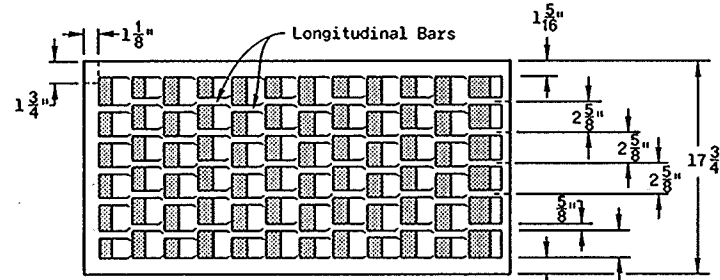
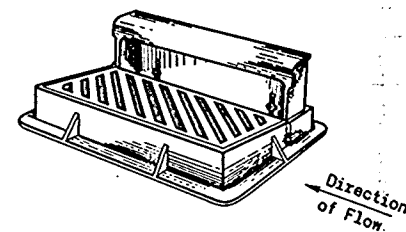
**SPECIAL GRATE NO. 2
FOR TYPE "A" COVER**
(Approximate Weight 84 lbs.)

TYPES "A" AND "H" COVERS SHALL BE
FURNISHED WITH DIAGONALLY SLOTTED
GRATES UNLESS OTHERWISE SPECIFIED
IN THE CONTRACT

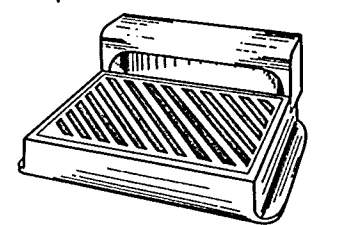
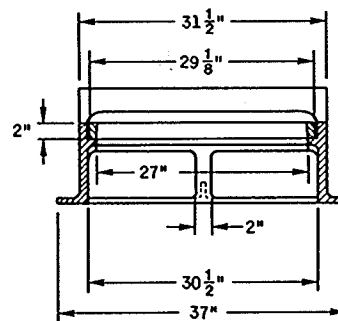
MOUNTABLE CURB BOX FOR TYPES "A" & "H" COVERS

TYPE "H"

(Approximate Weight 510 lbs.)
Frame Weight 220 lbs.
Grate Weight 175 lbs.
Box Weight 115 lbs.



**SPECIAL GRATE NO. 2
FOR TYPE "H" COVER**
(Approximate Weight 165 lbs.)

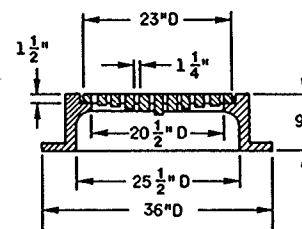


TYPE "WM"

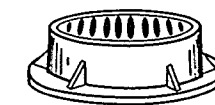
(Approximate Weight 670 lbs.)
Frame Weight 350 lbs.
Grate Weight 185 lbs.
Box Weight 135 lbs.

NOTE: Curb Box height adjustable 6" to 9"

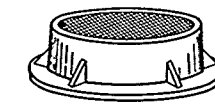
CAUTION: DO NOT USE GRATES WITH
LONGITUDINAL SLOTS WHERE BICYCLE
TRAFFIC IS PERMITTED.



TYPE "C" - TYPE "J"
Frame Weight 250 lbs.
Slotted Grate Weight 125 lbs.
Solid Cover Weight 150 lbs.

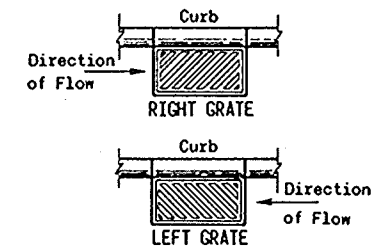


TYPE "C"
Slotted Grate



TYPE "J"
Solid Cover

Diagonal Slots shall be oriented
to the direction of flow. RIGHT
and LEFT grates or grates that are
manufactured to be reversible and
can be used as either RIGHT or
LEFT grates shall be furnished
depending on direction of flow
(See sketch below)



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.

Detail drawings for proposed alternate designs for Catch Basin, Manhole
and Inlet Covers shall be submitted to the Engineer for approval
providing that such alternate designs make provision for equivalent
capacity and strength.

All Catch Basin, Manhole and Inlet Covers which are placed in vehicular
traffic areas shall be "Non-Rocking" type.

Adjustment of the cover to grade may be accomplished by the use of mortar
and brick, or by precast concrete grade rings. Precast concrete grade
rings shall conform to the specifications for Precast Reinforced
Concrete Manhole Sections, AASHTO Designation M199, except that when
such units are wet cast, they shall be made with air-entraining portland
cement. Maximum adjustment shall be 8 inches.

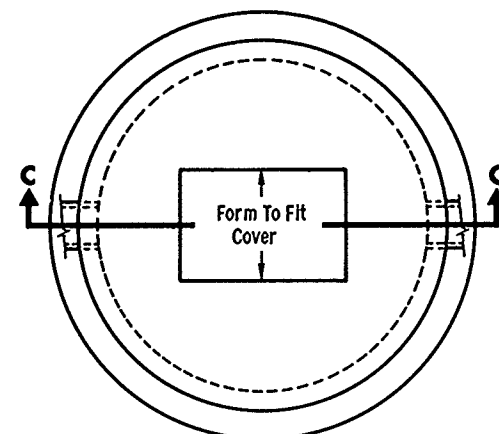
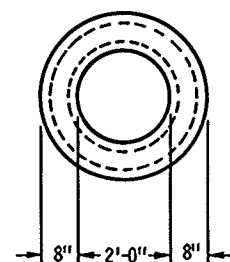
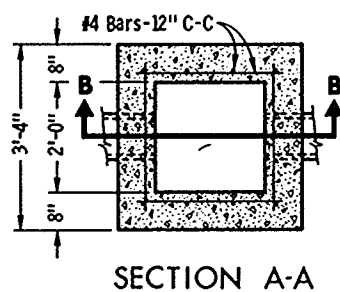
The actual weight of covers may vary within 5 percent, plus or minus,
of the approximate weight.

CATCH BASIN MANHOLE AND INLET COVERS

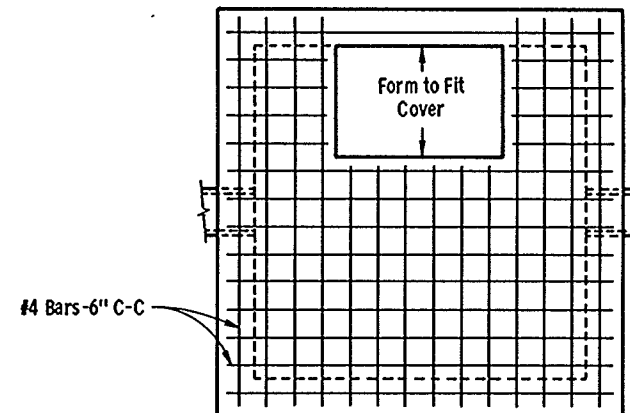
State of Wisconsin
Department of Transportation
Division of Highways

APPROVED
11-23-77
DATE
APPROVED
11-25-77
DATE
FRWA

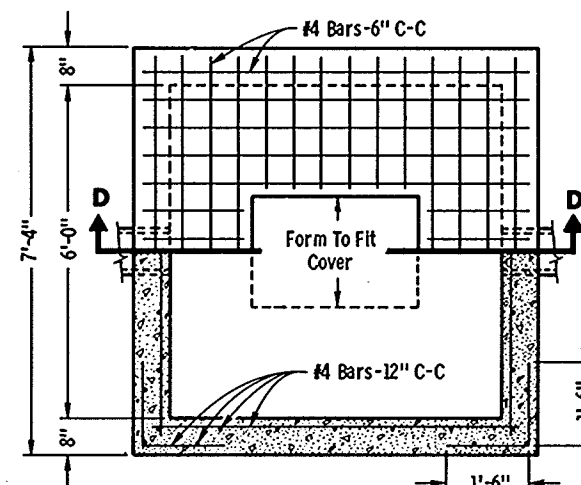
W. B. Buler
SUPERVISING DEVELOPMENT ENGINEER
D. J. Stank
CHIEF OF FACILITIES DEVELOPMENT



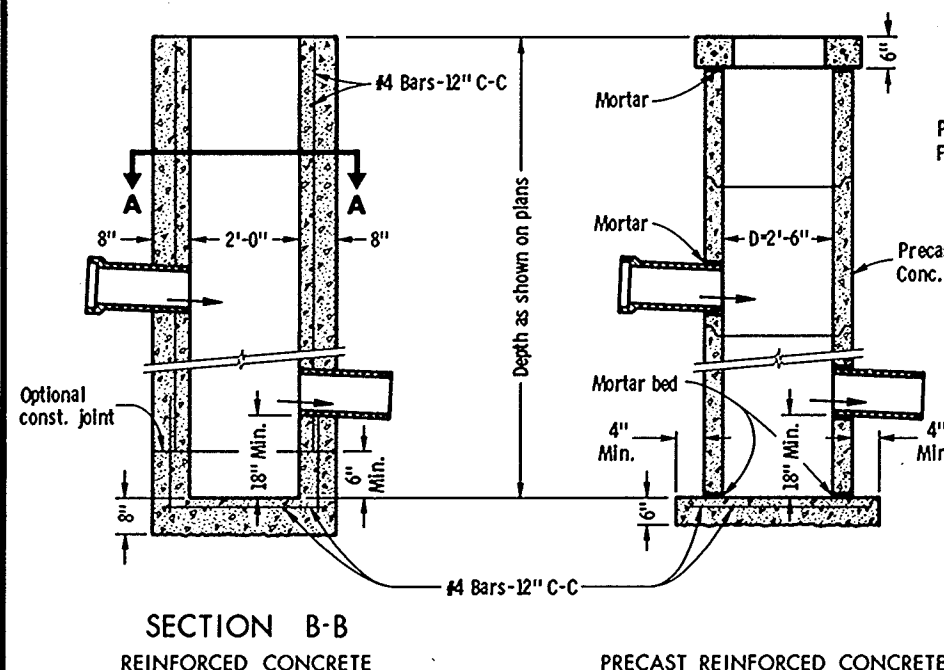
PLAN VIEW



PLAN VIEW SHOWING
ALTERNATE OPENING



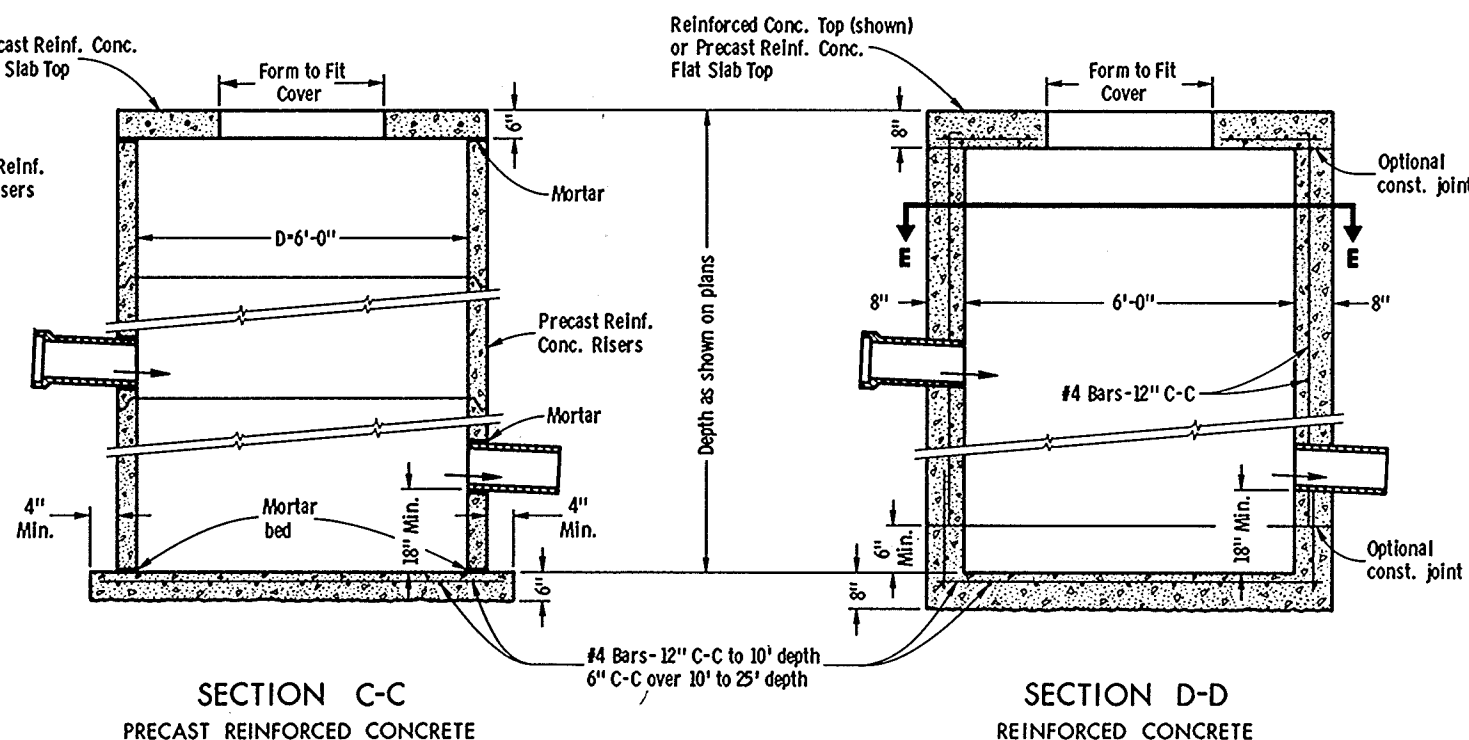
HALF SECTION E-E



SECTION B-B
REINFORCED CONCRETE

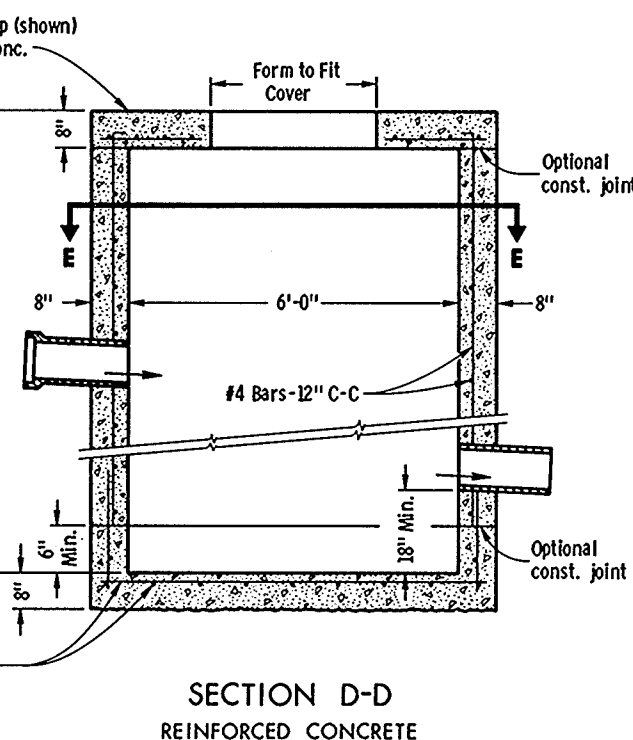
PRECAST REINFORCED CONCRETE

CATCH BASINS TYPE 3



SECTION C-C
PRECAST REINFORCED CONCRETE

CATCH BASINS TYPE 5



SECTION D-D
REINFORCED CONCRETE

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 for proposed alternate designs for underground drainage structures shall be submitted to the Engineer for approval providing that such alternate designs make provision for equivalent capacity and strength.

All drainage structures are designated on the plans as "Manholes 1 - C", "Catch Basins 1 - B", "Inlets 1 - H", etc. The first digit designates the masonry portion of the structure, and the following letter designates the type of cover to be used to comprise the complete unit.

Precast Reinforced Bases shall be placed on a bed of material at least 6 inches in depth, which meets the requirements for Granular Backfill. This bedding shall be compacted and provide uniform support for the entire area of the base.

Steps meeting the following requirements shall be installed in all structures over 5 feet in depth: 16 inch C-C maximum spacing; project a minimum clear distance of 4 inches from the wall at the point of embedment; minimum length of 10 inches; minimum wall embedment of 3 inches; and be capable of supporting a concentrated load of 300 lbs. Ferrous metal steps not painted or treated to resist corrosion shall have a minimum cross sectional dimension of 1 inch.

Solid Aluminum steps shall have a minimum cross sectional dimension of 0.75 inch. Aluminum surfaces to be embedded in concrete shall be given one coat of suitable quality paint, such as zinc chromate primer conforming to federal specification TT-P-645 or equivalent. Steps of approved Polypropylene plastic coated reinforcement bar will be acceptable.

All bar steel reinforcement shall be embedded 2 inches clear unless otherwise shown or noted.

Precast Reinforced Concrete Risers may be placed with tongue up or down.

CATCH BASINS TYPE 3&5

State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:

12-3-75

DATE

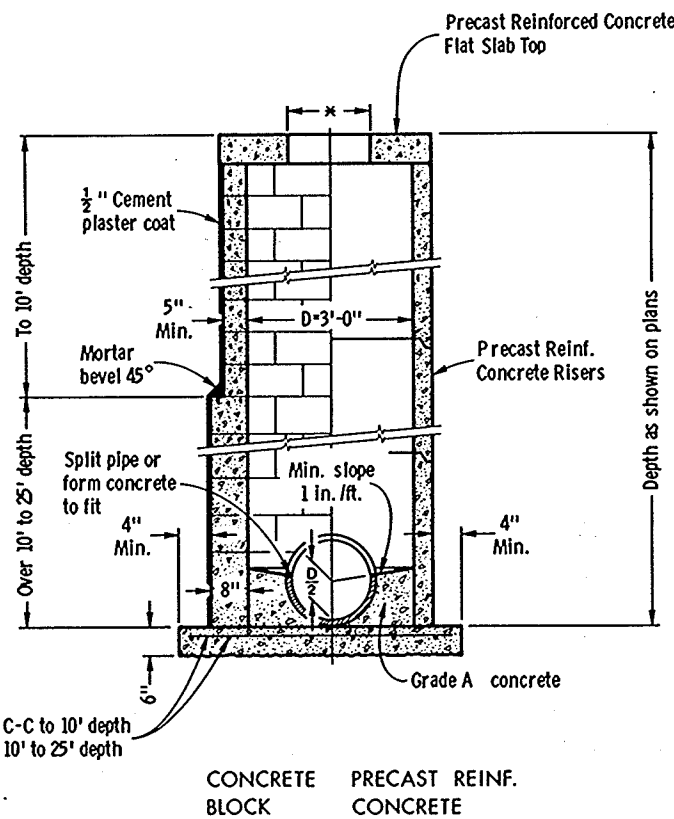
APPROVED

12-9-75

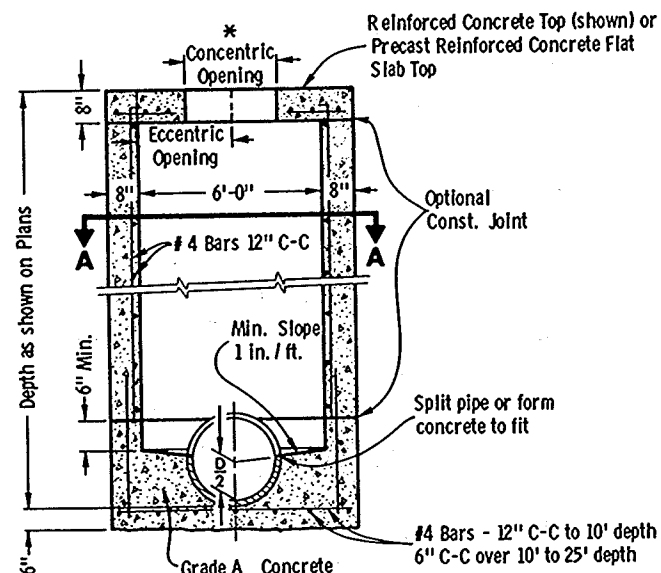
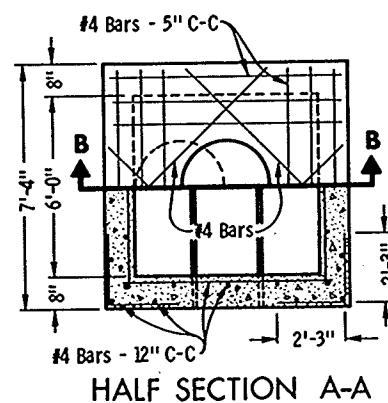
DATE

J. C. Hermal
CHIEF OF FACILITIES DEVELOPMENT

H. J. Siedler
STATE HIGHWAY ENGINEER

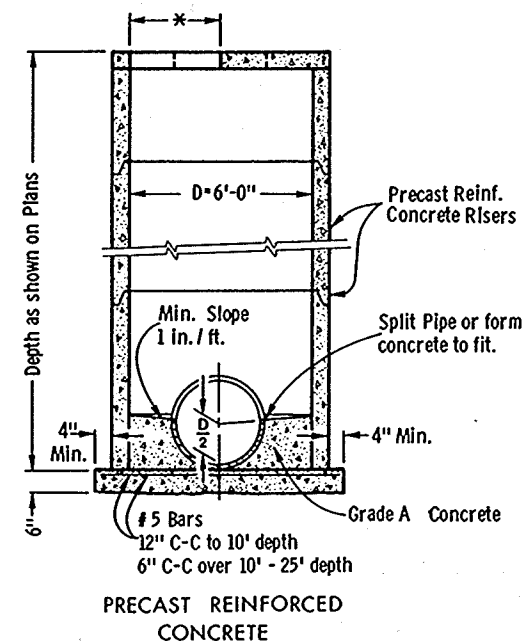


MANHOLES TYPE 2



**SECTION B-B
REINFORCED CONCRETE**

MANHOLES TYPE 3



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 for proposed alternate designs for underground drainage structures shall be submitted to the Engineer for approval providing that such alternate designs make provision for equivalent capacity and strength.

All drainage structures are designated on the plans as "Manholes 1 - C", "Catch Basins 1 - B", "Inlets 1 - H", etc. The first digit designates the masonry portion of the structure, and the following letter designates the type of cover to be used to comprise the complete unit.

Precast Reinforced Bases shall be placed on a bed of material at least 6 inches in depth, which meets the requirements for Granular Backfill. This bedding shall be compacted and provide uniform support for the entire area of the base.

Steps meeting the following requirements shall be installed in all structures over 5 feet in depth: 16 inch C-C maximum spacing; project a minimum clear distance of 4 inches from the wall at the point of embedment; minimum length of 10 inches; minimum wall embedment of 3 inches; and be capable of supporting a concentrated load of 300 lbs. Ferrous metal steps not painted or treated to resist corrosion shall have a minimum cross sectional dimension of 1 inch.

Solid Aluminum steps shall have a minimum cross sectional dimension of 0.75 inch. Aluminum surfaces to be embedded in concrete shall be given one coat of suitable quality paint, such as zinc chromate primer conforming to federal specification TT-P-645 or equivalent. Steps of approved Polypropylene plastic coated reinforcement bar will be acceptable.

All bar steel reinforcement shall be embedded 2 inches clear unless otherwise shown or noted.

Precast Reinforced Concrete Risers may be placed with tongue up or down.

* Use 2'-0" diameter opening with type "C", "L" and "J" covers, or 3'-0" diameter with type "K" and "M" covers.

MANHOLES TYPE 2 & 3

State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:

12-3-75
DATE

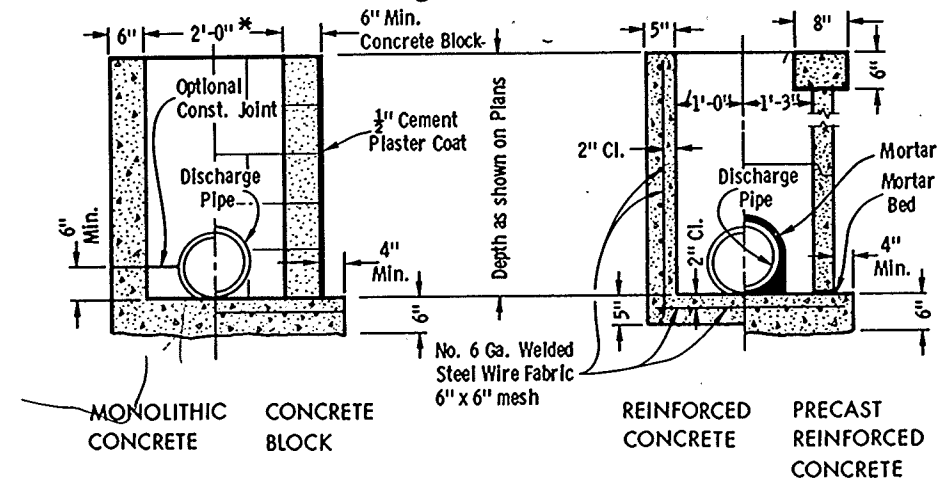
J.C. Hennrich
CHIEF OF FACILITIES DEVELOPMENT

APPROVED

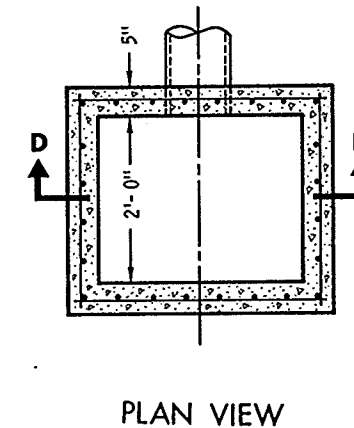
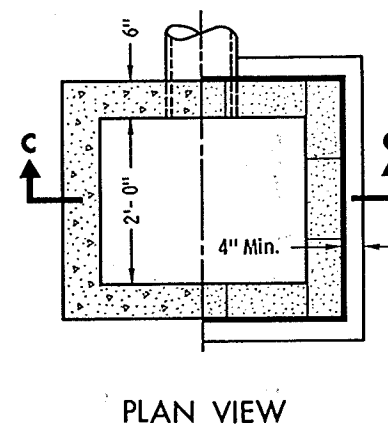
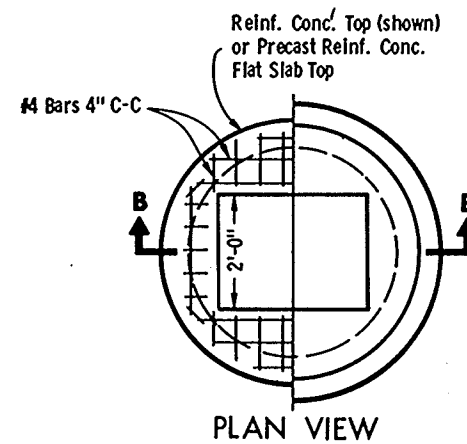
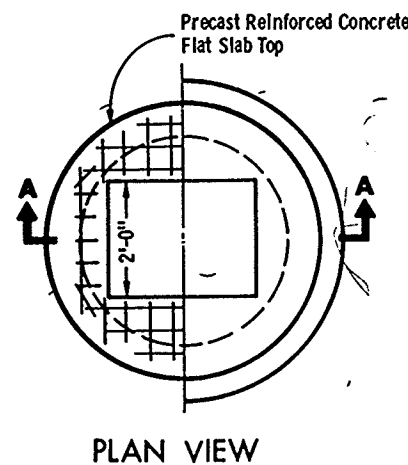
12-9-75
DATE

W.S. Siddle
STATE HIGHWAY ENGINEER

* Selection of Square or Circular Design will be based on the pipe sizes and the Inlet Cover being utilized.



INLETS TYPE 1



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 for proposed alternate designs for underground drainage structures shall be submitted to the Engineer for approval providing that such alternate designs make provision for equivalent capacity and strength.

Square Precast Inlet units shall conform to the pertinent requirements of AASHTO Designation M 199.

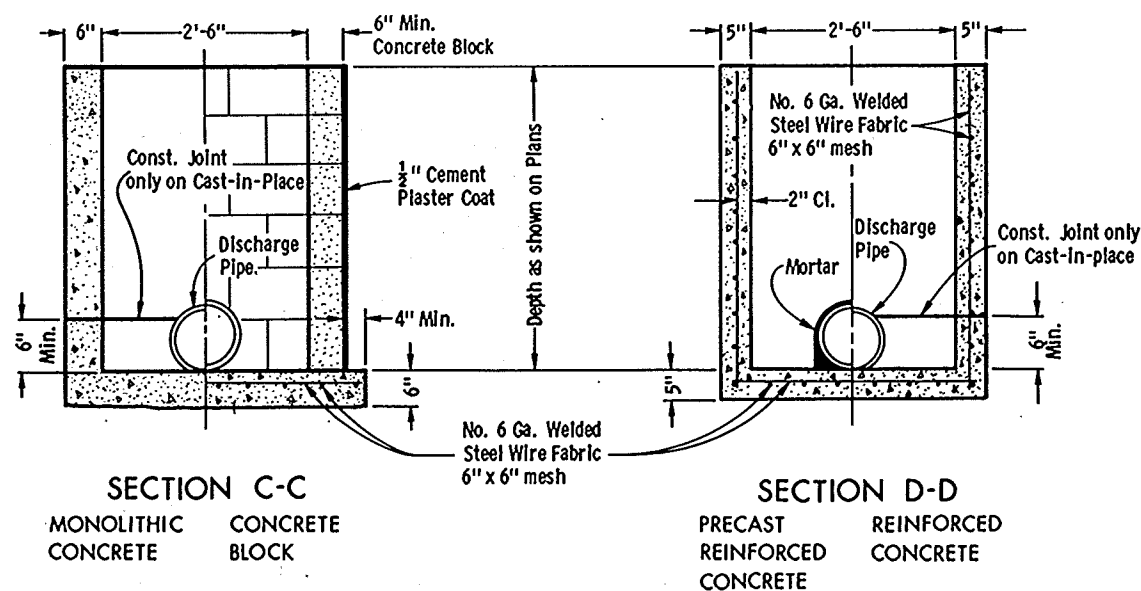
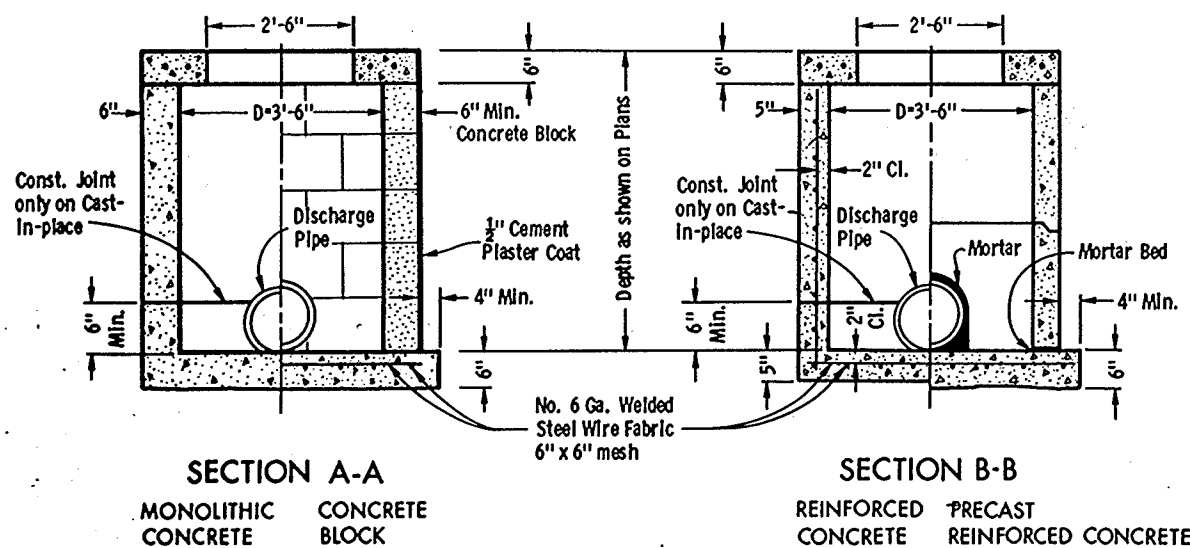
All drainage structures are designated on the plans as "Manholes 1 - C", "Catch Basins 1 - B", "Inlets 1 - H", etc. The first digit designates the masonry portion of the structure, and the following letter designates the type of cover to be used to comprise the complete unit.

Precast Reinforced Bases shall be placed on a bed of material at least 6 inches in depth, which meets the requirements for Granular Backfill. This bedding shall be compacted and provide uniform support for the entire area of the base.

Precast Reinforced Concrete Flat Slab Tops may be used on the structures. The Tops shall be installed on a bed of mortar.

All bar steel reinforced reinforcement shall be embedded 2 inches clear unless otherwise shown or noted.

Precast Reinforced Concrete Risers may be placed with tongue up or down.



INLETS TYPE 2

INLETS TYPE 1 & 2

State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL

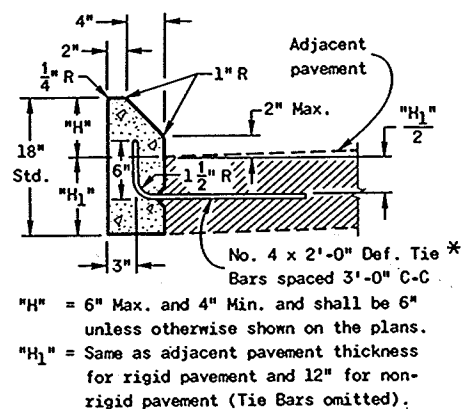
10-16-75
DATE

APPROVED

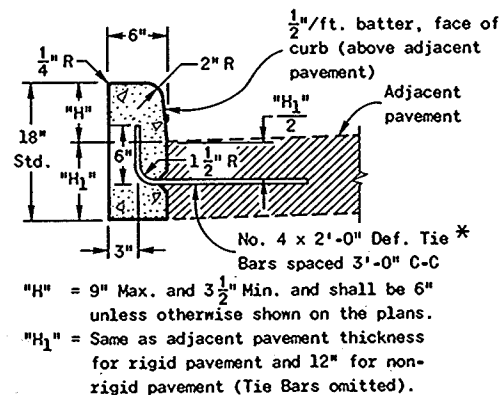
10-16-75
DATE

L. C. Hennrich
CHIEF OF FACILITIES DEVELOPMENT

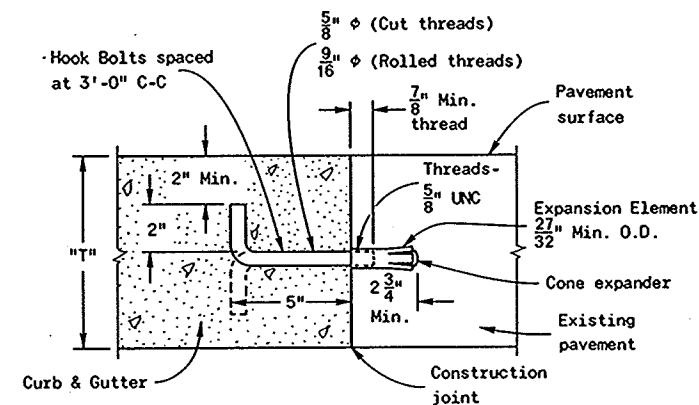
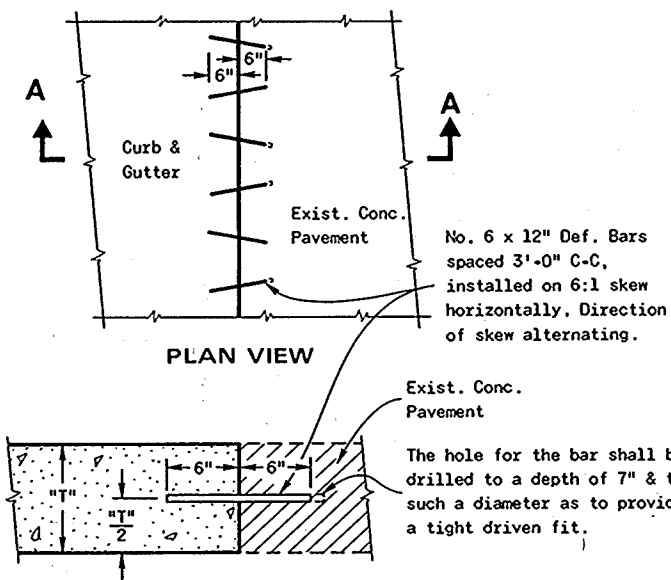
W. J. Sinden
STATE HIGHWAY ENGINEER



TYPE "J"
(EXCLUDING TIE BARS)



TYPE "D"
(EXCLUDING TIE BARS)



HOOK BOLT

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.

Joints shall not be sealed in Concrete Curb, or Concrete Curb & Gutter.

*Where Concrete Curb or Concrete Curb & Gutter is poured adjacent to existing pavement, a "Hook Bolt" or "Alternate Tie Bar Installation" shown on this sheet is required.

INTEGRAL CURB ALTERNATE

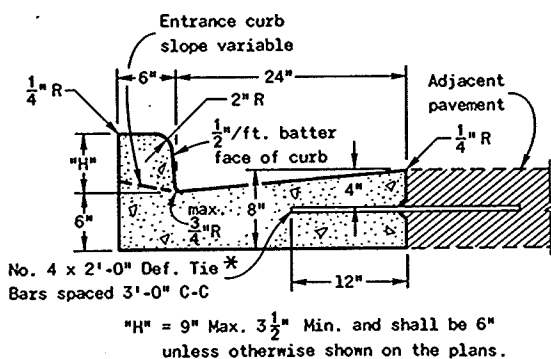
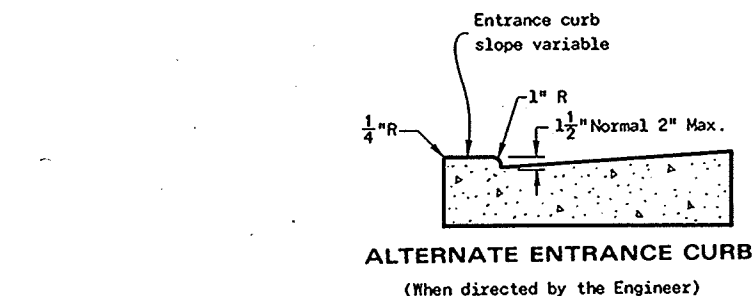
Unless otherwise specified in the contract, Integral Curb may be built as an alternative to Curb & Gutter.

Integral Curb shall be measured and paid for as Curb & Gutter.

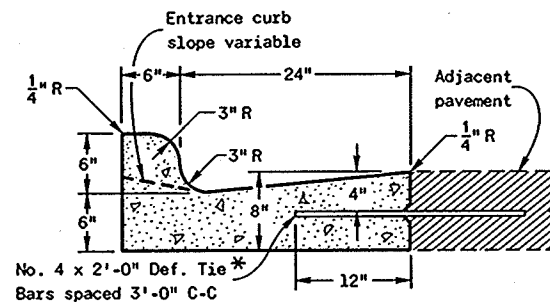
Pavement reinforcing steel and load transfer dowels will not be required within the pay limits of Integral Curb.

Contraction, construction or expansion joints shall be continuous through the Integral Curb.

"T" = Pavement thickness.

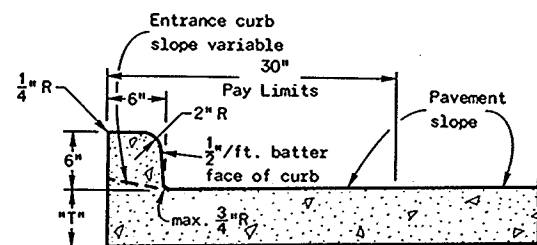


TYPE "D"
(EXCLUDING TIE BARS)

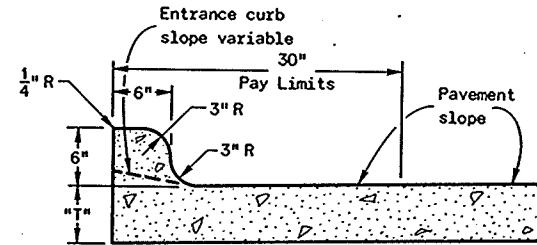


TYPE "L"
(EXCLUDING TIE BARS)

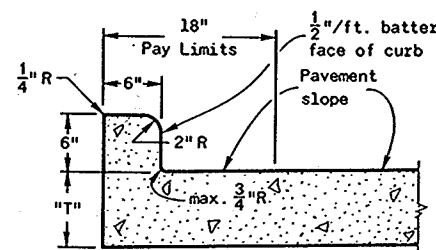
CONCRETE CURB & GUTTER



INTEGRAL CURB ALTERNATE 30"

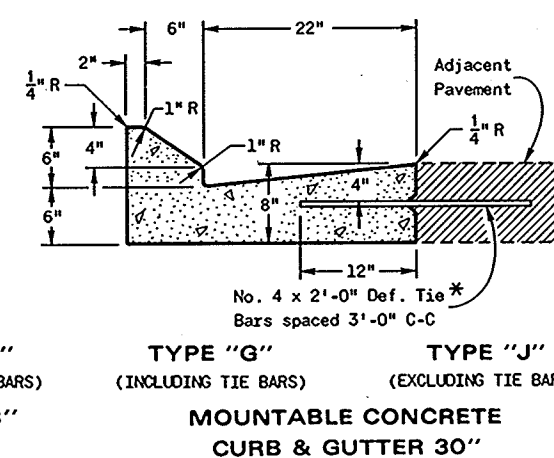


TYPE "K" AND "L"

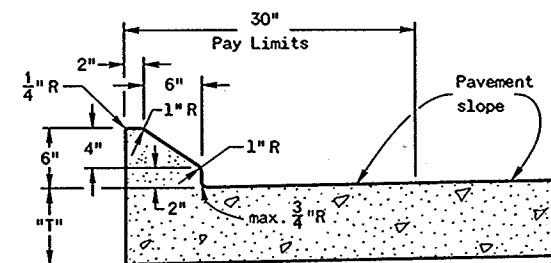


INTEGRAL CURB ALTERNATE 18"

CONCRETE INTEGRAL CURB



TYPE "J"
(EXCLUDING TIE BARS)



INTEGRAL CURB ALTERNATE MOUNTABLE 30"

CONCRETE CURB, CONCRETE CURB & GUTTER, OR INTEGRAL CURB

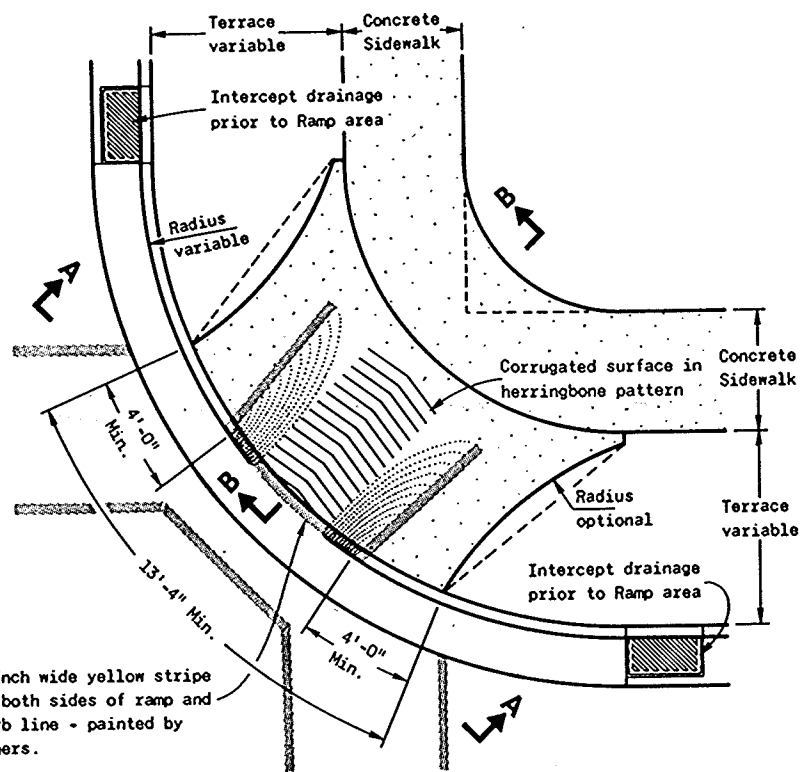
State of Wisconsin
Department of Transportation
Division of Highways

APPROVED
11-9-76
DATE

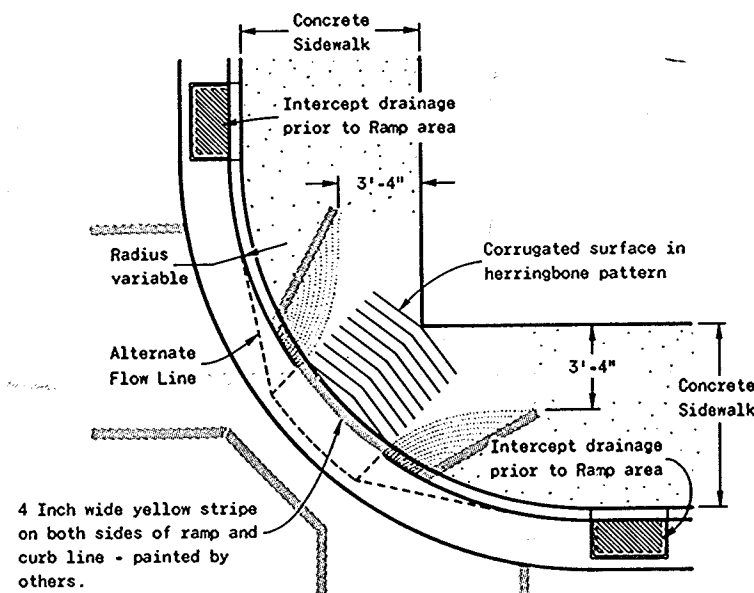
R. J. Schank
CHIEF OF FACILITIES DEVELOPMENT

APPROVED
11-12-76
DATE

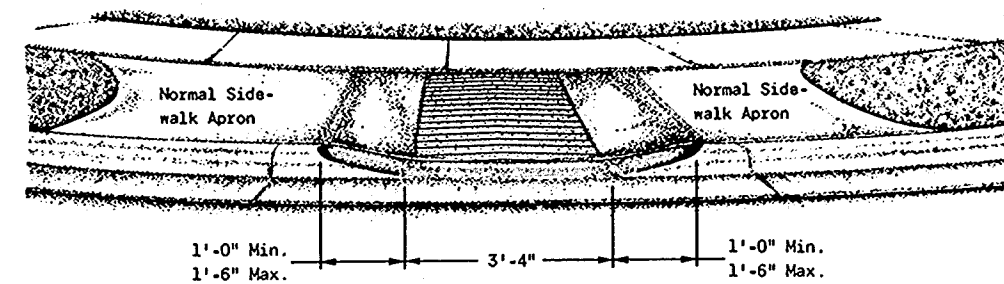
W. J. Siedler
STATE HIGHWAY ENGINEER



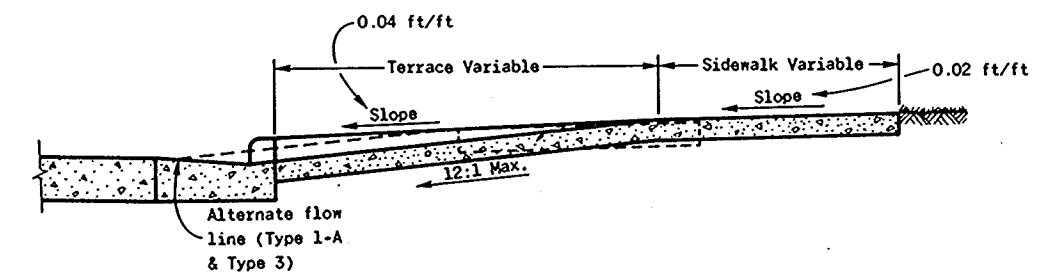
PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)



VIEW A-A



SECTION B-B

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.

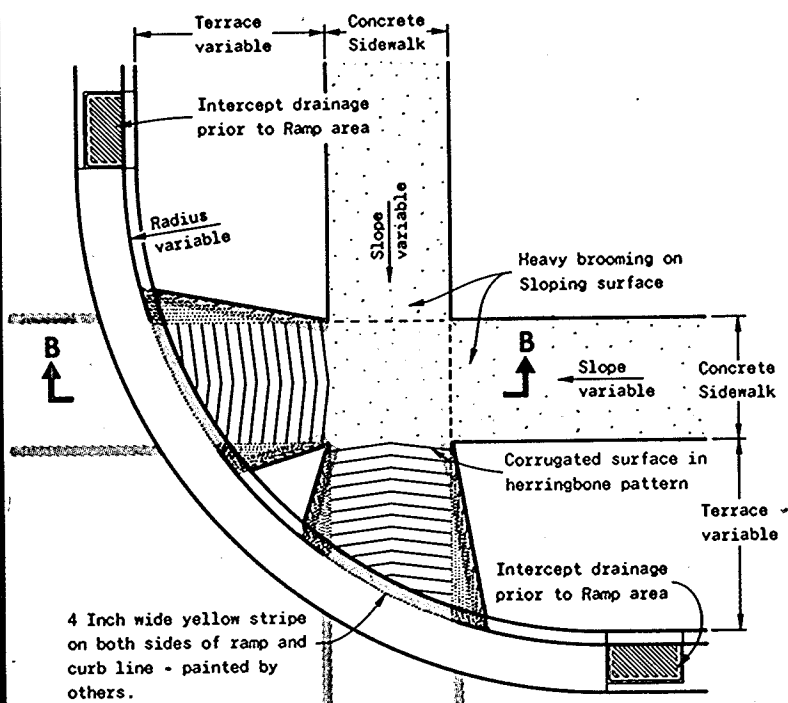
Ramps shall be built at 12:1 or flatter. When necessary, the sidewalk elevation may be lowered to meet the high point on the ramp.

Type 1 or Type 1-A Ramps shall have a normal sidewalk apron and curb on both sides of ramp. Entire curb radius shall not be made into ramp.

Curb ramps shall be measured and paid for as Concrete Sidewalk and Concrete Curb and Gutter.

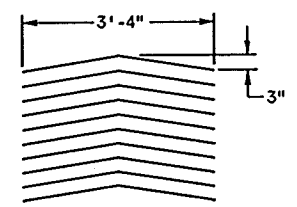
Section 66.616, Wisconsin Statutes requires curb ramping for handicapped persons. This law also states that "the ramp shall be either bordered on both sides and the curb line with a four inch wide yellow stripe, or the surface treatment on the ramp shall have integral coloration".

The paint stripe alternate is shown to alert users of this drawing of the requirement for delineation of the ramp. The paint stripes will be applied by State or Municipal signing crews unless otherwise indicated by Special Provision.

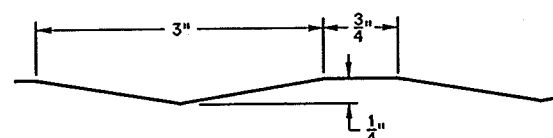


PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)

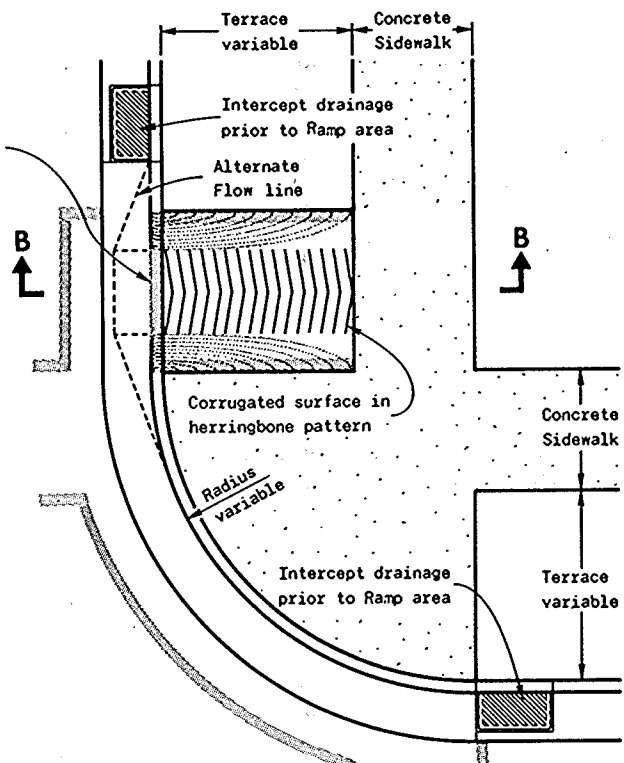
4 Inch wide yellow stripe on both sides of ramp and curb line - painted by others.



DETAIL OF
HERRINGBONE PATTERN



DETAIL OF
SURFACE CORRUGATION



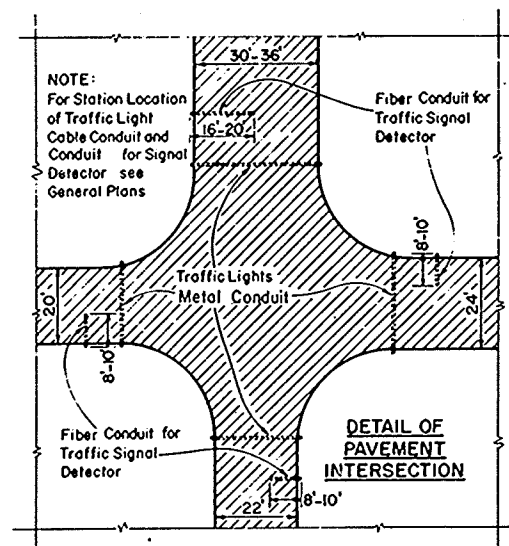
PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMP FOR HANDICAPPED PERSONS

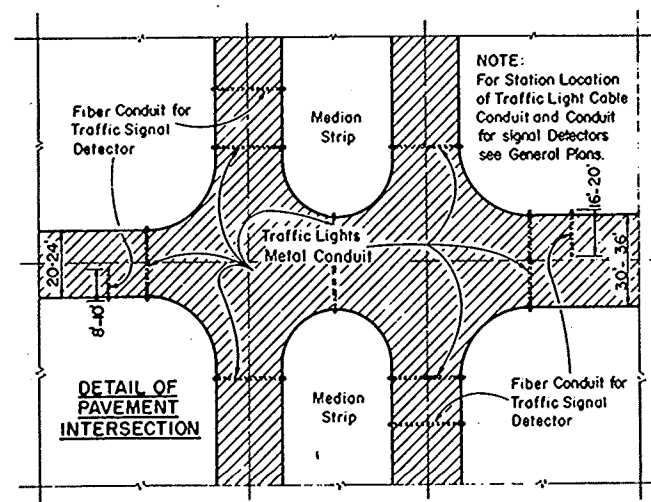
State of Wisconsin
Department of Transportation
Division of Highways

APPROVED
12-27-77
DATE
APPROVED
12-27-77
DATE
FHWA

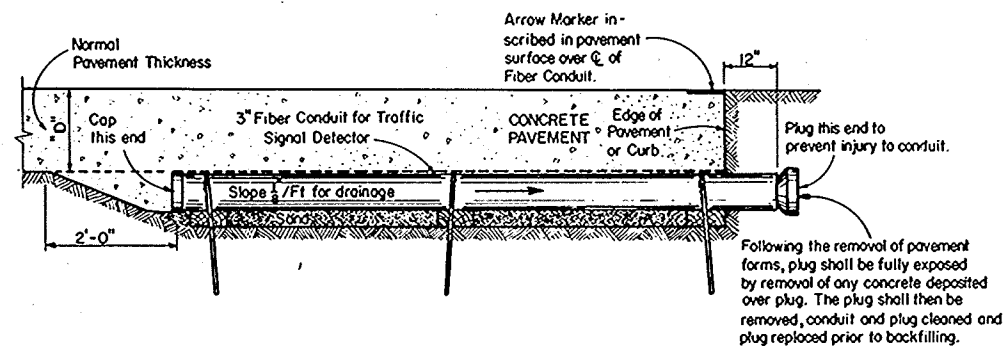
Bill Baker
SUPERVISING DEVELOPMENT ENGINEER
D. J. Stund
CHIEF OF FACILITIES DEVELOPMENT



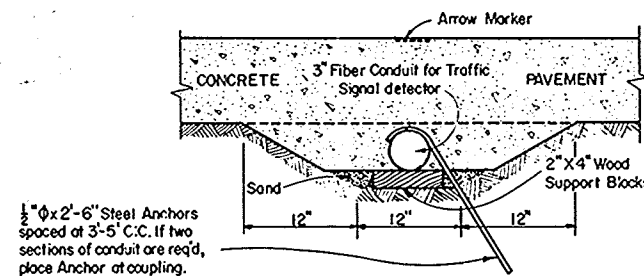
PLAN VIEW
SHOWING RELATIVE POSITION OF
TRAFFIC LIGHT CONDUITS AND
TRAFFIC SIGNAL DETECTOR CONDUITS
AT UNDIVIDED HIGHWAY INTERSECTIONS



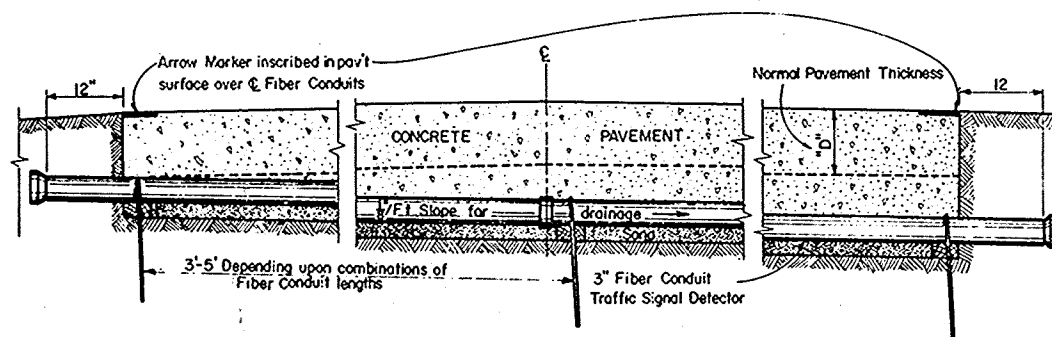
PLAN VIEW
SHOWING RELATIVE POSITION OF
TRAFFIC LIGHT CONDUITS AND
TRAFFIC SIGNAL DETECTOR CONDUITS
AT DIVIDED HIGHWAY INTERSECTIONS



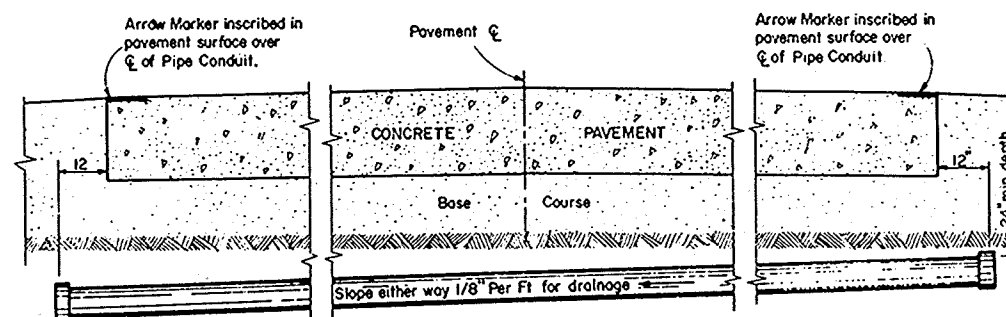
TRAFFIC SIGNAL DETECTOR FOR
UNDIVIDED HIGHWAYS



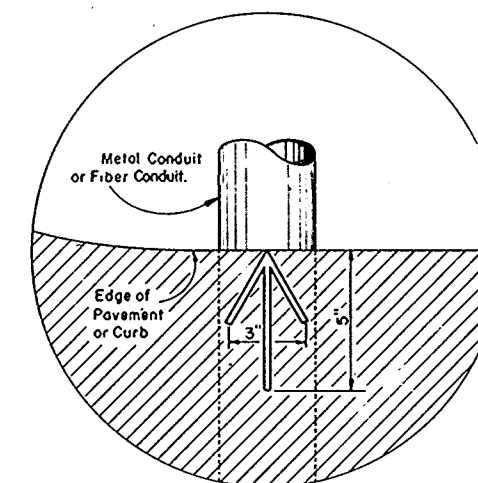
SIDE & END ELEVATIONS
SHOWING PLACEMENT DETAILS
FOR TRAFFIC SIGNAL DETECTOR CONDUIT



TRAFFIC SIGNAL DETECTOR FOR
DIVIDED HIGHWAYS



ELEVATION ON CENTERLINE
SHOWING PLACEMENT DETAILS
FOR TRAFFIC SIGNAL CONDUIT



Arrow Marker to be inscribed in fresh concrete and/or bituminous surfacing $\frac{1}{4}$ to $\frac{3}{8}$ deep at each location where pipe conduit or fiber cond. are placed under rigid surfacing.

PLAN VIEW - ARROW MARKER

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.

MATERIALS

Metal Conduit shall be furnished and placed as shown hereon and in accord with the Standard Specifications.

Fiber Conduit shall be furnished and placed as shown hereon and in accord with the Standard Specifications.

MEASUREMENT & PAYMENT

The item of Fiber Conduit shall be measured and paid for by the linear foot complete in place and in accord with Standard Specifications

CONDUIT SIZE

Unless shown or required otherwise on the plans, Metal Conduit shall be 2" I.D.

METAL CONDUIT & FIBER CONDUIT

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

4-3-63
DATE

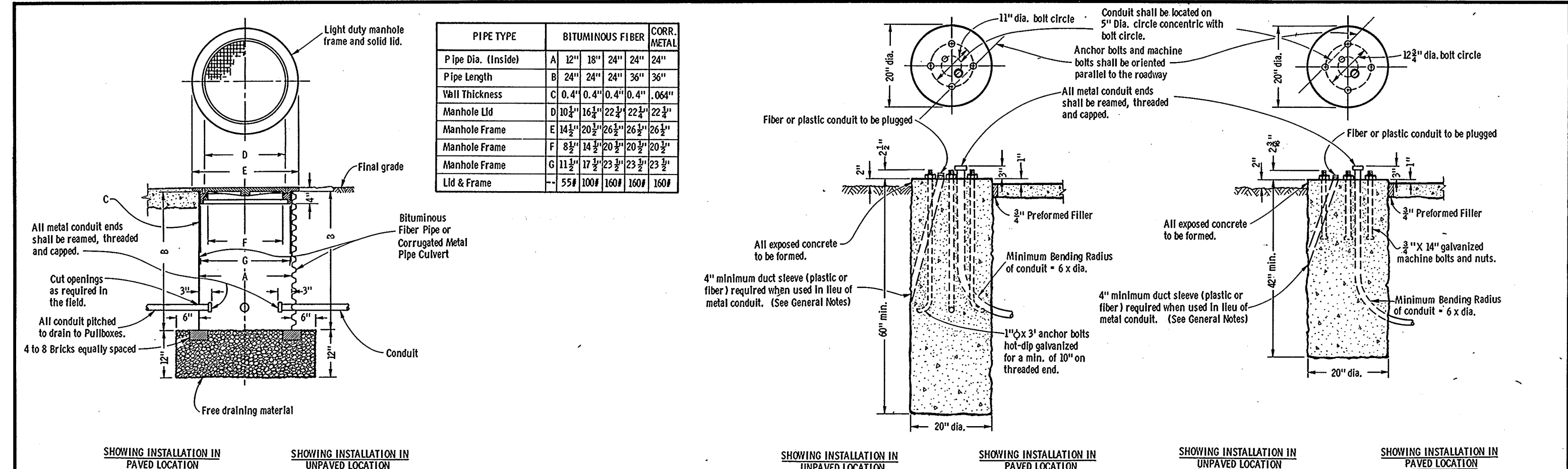
J. J. Pelt
ENGINEER OF DESIGN

APPROVED:

4/5/63
DATE

E. L. Rottiger
STATE HIGHWAY ENGINEER

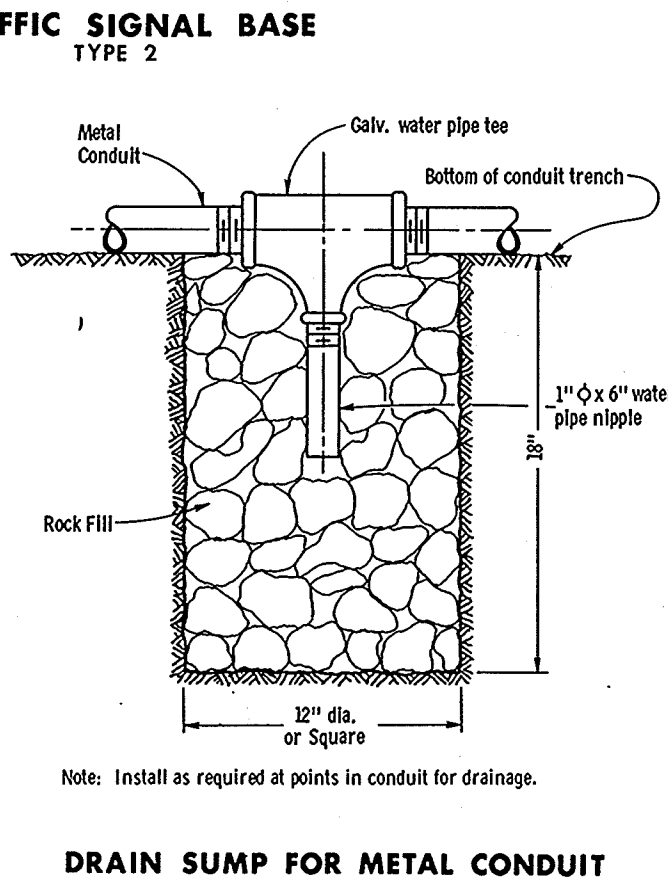
S.D.D. 9B3-2



PIPE TYPE	BITUMINOUS FIBER	CORR. METAL
Pipe Dia. (Inside)	A 12" 18" 24" 24" 24"	24"
Pipe Length	B 24" 24" 24" 36" 36"	36"
Wall Thickness	C 0.4" 0.4" 0.4" 0.4" 0.4"	.064"
Manhole Lid	D 10 1/4" 16 1/4" 22 3/4" 22 3/4" 22 3/4"	22 3/4"
Manhole Frame	E 14 1/2" 20 1/2" 26 1/2" 26 1/2" 26 1/2"	26 1/2"
Manhole Frame	F 8 1/2" 14 1/2" 20 1/2" 20 1/2" 20 1/2"	20 1/2"
Manhole Frame	G 11 1/2" 17 1/2" 23 1/2" 23 1/2" 23 1/2"	23 1/2"
Lid & Frame	-- 55# 100# 160# 160# 160#	160#

Control Cabinet Base	H	J	K
Type 1 - 30" Cabinet	34"	27 1/4"	13 5/8"
Type 11 - 38" Cabinet	42"	35 1/4"	17 5/8"

TRAFFIC SIGNAL AND TRAFFIC COUNTER CONTROL CABINET BASE
TYPE 1 and 2



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.

Conduit may be metal, fiber or plastic. Locate as required. 12-inch min. bending radius applies to metal conduit only.

Concrete masonry shall be grade "AA".

Conduit installed as a continuous system between Pullboxes shall have a min. depth of 12 inches and shall always be below the pavement.

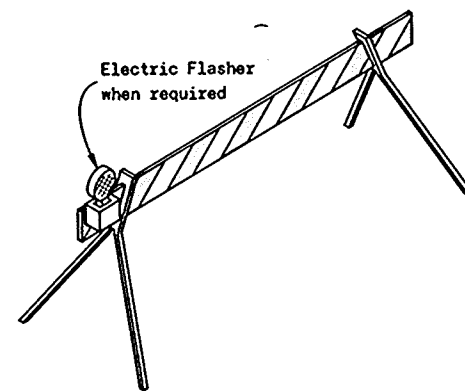
Detailed drawings for proposed alternate designs for "Traffic Signal and Traffic Counter Details" shall be submitted to the Engineer for approval.

TRAFFIC SIGNAL AND TRAFFIC COUNTER DETAILS	
State of Wisconsin Department of Transportation Division of Highways	
RECOMMENDED FOR APPROVAL: DATE 4-13-72	<i>[Signature]</i> CHIEF DESIGN ENGINEER
APPROVED DATE 4-13-72	<i>[Signature]</i> STATE HIGHWAY ENGINEER

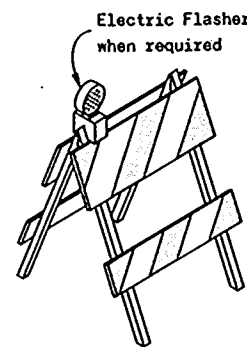
TABLE OF BARRICADE CHARACTERISTICS

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

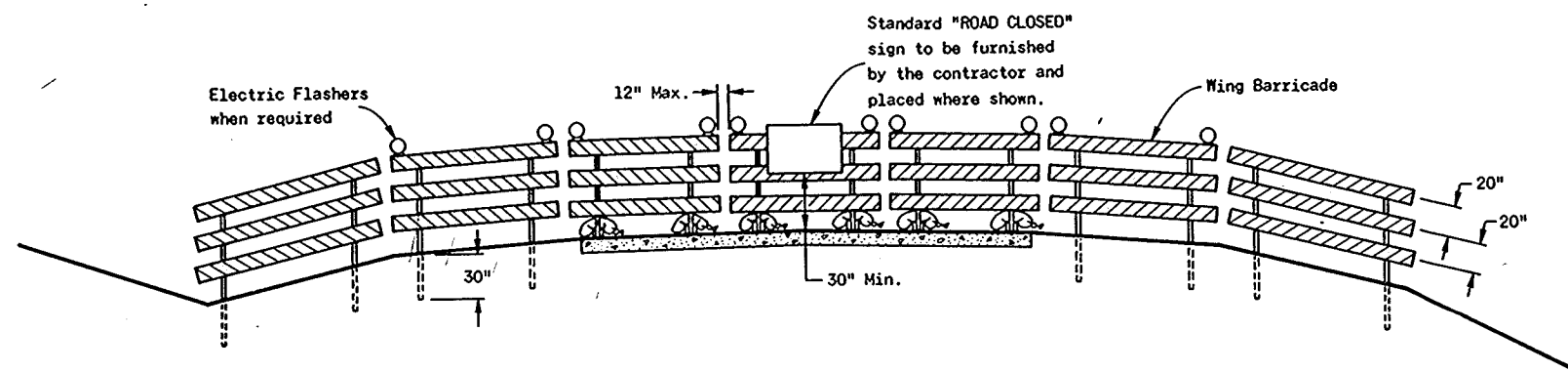
* Nominal dimensions when barricade is constructed of lumber.
 ** May be 4" for rail lengths less than 3'.



TYPICAL TYPE I BARRICADE



TYPICAL TYPE II BARRICADE



TYPICAL INSTALLATION SHOWING TYPE III BARRICADE

CONSTRUCTION BARRICADES



R11-2
48" x 30"

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



W20-3
48" x 48"

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

STANDARD SIGNS-TYPE II

GENERAL NOTES

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

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

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

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

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

CONSTRUCTION BARRICADES & STANDARD SIGNS

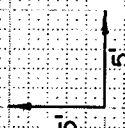
State of Wisconsin
 Department of Transportation
 Division of Highways

APPROVED
 10-1-76
 DATE

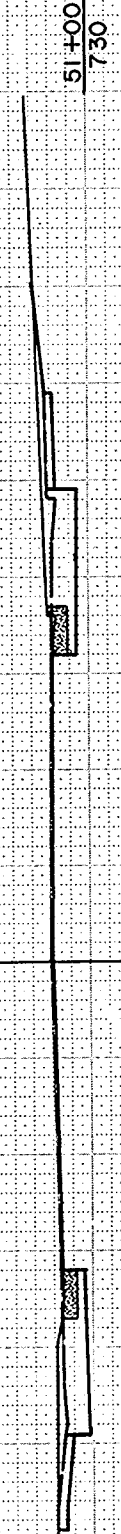
D. J. Starn
 CHIEF OF FACILITIES DEVELOPMENT

APPROVED
 10-1-76
 DATE

W. J. Siddle
 STATE HIGHWAY ENGINEER



STATE PROJECT NUMBER					SHEET NUMBER
4990-0-02					8
STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
18 +55		8			
19		7			
+50					
20		28			
+50		44			
21					

[illegible]

