

WINNEBAGO
 PLOT NAME: 101
 REV. DATE: B-11-98
 6448-03-00
 6448-03-71
 3-11-98
 ORIGINAL DIST. 3 BALDWIN
 FILE NAME: D3_64480301.dgn

INDEX OF SHEETS

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- Sheet No. 2.1-2.32 Typical Sections and Details
- Sheet No. 3.1-3.8 Estimate of Quantities
- Sheet No. 3A-3.0 Miscellaneous Quantities
- Sheet No. 4.1-4.17 Right of Way Plat
- Sheet No. 5.1-5.14 Plan and Profile
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- Sheet No. 7.1-7.34 Sign Plates
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- Sheet No. 9.4-9.42 Cross Sections

TOTAL SHEETS = 189



STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

USH 45 - SPRINGROAD DRIVE

76 Co Rd II
~~STH 150~~

WINNEBAGO COUNTY

STATE PROJECT NUMBER
6448-03-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6448-03-71	_____	_____

BEGIN PROJECT

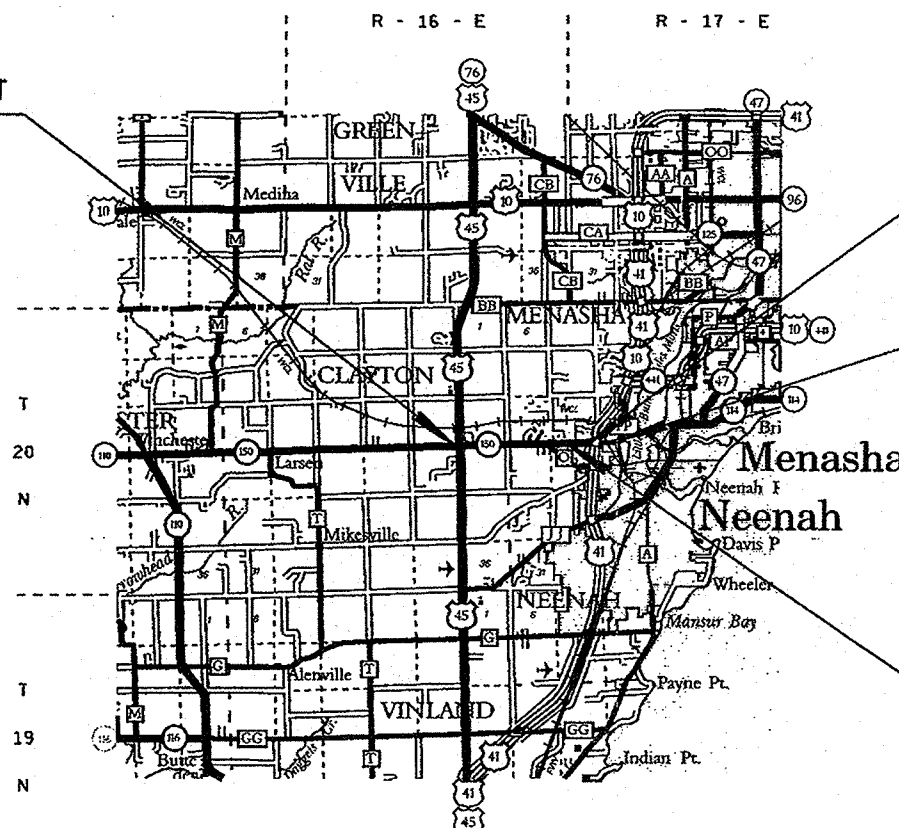
STA 13+560
N = 41 755.413
E = 725 954.933

END PROJECT

STA 17+979.406

END CONSTRUCTION LIMITS
STA 18+212.500

EXCEPTION TO NET & LENGTH
STA 17+071.0 TO 17+417.1

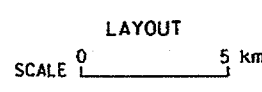


DESIGN DESIGNATION

A.D.T. 2000	=	7 700-12 300
A.D.T. 2020	=	5 850-16 000
D.H.V. 2020	=	950
D.	=	58-42
T.	=	7.8%
V.	=	60 KPH
ESALS	=	3 599 000

CONVENTIONAL SYMBOLS

COUNTY LINE CORPORATE LIMITS PROPERTY LINE LOT LINE LIMITED EASEMENT EXISTING RIGHT OF WAY PROPOSED OR NEW R/W LINE SURVEY LINE SLOPE INTERCEPT ORIGINAL GROUND MARSH OR ROCK PROFILE EXISTING CULVERT PROPOSED CULVERT (Box or Pipe) CULVERT (Profile View)		
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TOTAL NET LENGTH OF CENTERLINE = 4.073 km

ALL COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM SOUTH ZONE.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	M. D. VANDEHEI
Surveyor	P. M. VRANEY
Designer	L. F. LONGLAIS
District Examiner	H. B. ENKE
District Supervisor	P. M. VRANEY
Proj. Dev. Engineer	M.A. MAILMAN
C.O. Examiner	
APPROVED FOR DISTRICT OFFICE	
DATE: 12/10/98	Paul M. Vraney (Signature)
AUTHORIZED FOR CENTRAL OFFICE DESIGN	
DATE: 2/4/99	Nathan R. Geck (Signature)

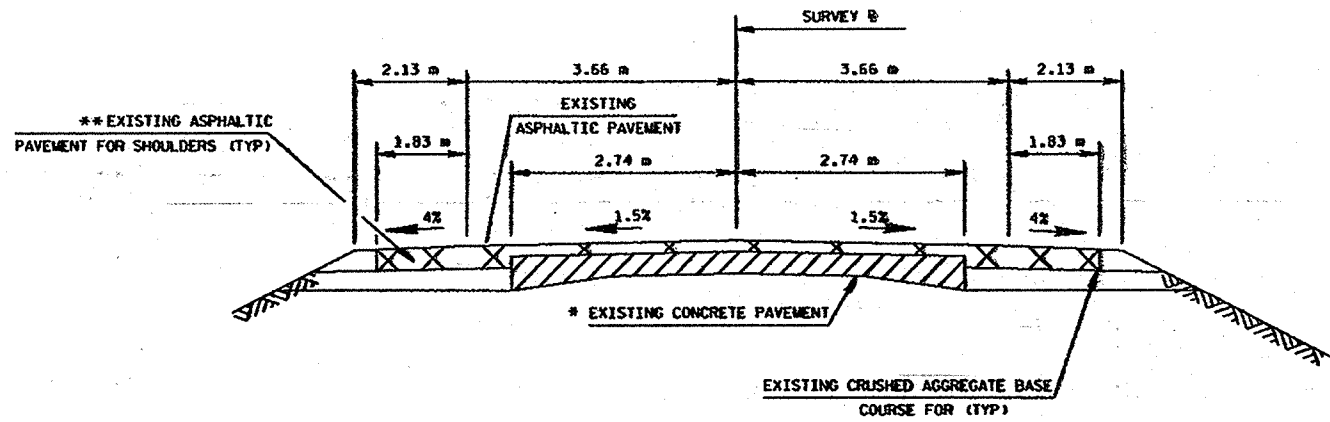
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PLOT NAME: 201d

REV. DATE: 12-18-98

ORIGINATOR: DIST 3

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EXISTING TYPICAL CROSS SECTION FOR STH 150

* 13-560 TO 16-460
17-890 TO 17-979
** 15-850 TO 17-979

SURFACING BORING LOG			
STATION	CORE NUMBERS	OFFSET FROM CENTERLINE	ASPHALTIC CORE THICKNESS
13-807	24	2.4m LT	180 mm
14-128	25	3.4m RT	210 mm
14-448	26	3.0m LT	200 mm
14-859	27	1.2m RT	185 mm
15-255	28	3.4m LT	210 mm
15-667	29	2.7m RT	160 mm
16-063	30	2.7m LT	155 mm
16-383	31	2.1m RT	270 mm
16-871	32	2.1m LT	235 mm
17-678	34	1.5m LT	320 mm

STANDARD DETAIL DRAWINGS

INLET COVERS, TYPE A, H, A-S, AND H-S	8A5-150
INLET COVERS, TYPE B, B-A, C, MS, MS-A AND WM	8A5-150b
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MANHOLES, TYPE 1	8B6-3
MANHOLES, TYPES 2 AND 3	8B7-3
INLETS, TYPES 1, 2, 3 AND 4	8C1-5
INLETS, TYPES 8, 9, 10 AND 11	8C5-2
CONCRETE CURB, CONCRETE CURB AND GUTTER AND PAVEMENT TIES	8D1-12
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APRON ENDWALLS FOR CULVERT PIPE	8F1-11
APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE	8F2-1
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CONCRETE CORRUGATED MEDIAN	11B1-2
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CONCRETE PAVEMENT REPAIR AND DOWEL BAR INSTALLATION DETAILS	13C9-5b
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PAVEMENT MARKING SYMBOLS	15C7-6a
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PAVEMENT MARKING (INTERSECTIONS)	15C8-8b
PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)	15C8-8c
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)	15C12-2
LANDMARK REFERENCE MONUMENTS AND COVERS	16A1-5

GENERAL NOTES

THE CONTROL SURVEY FOR THIS PROJECT WAS CONDUCTED UNDER AND MET SPECIFICATIONS FOR THIRD ORDER CONTROL SURVEYS. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY FACILITIES AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE EXISTING RIGHT-OF-WAY IS RESERVED FOR HIGHWAY PURPOSES BY EASEMENT. THE CONTRACTOR SHALL MAKE HIS OWN NEGOTIATIONS WITH THE PROPERTY OWNERS RELATIVE TO THE DISPOSAL OF TREES CUT ON THEIR PROPERTY IN ACCORDANCE WITH SECTION 201 OF THE STANDARD SPECIFICATIONS.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

THE ITEM "REMOVING OLD CULVERTS" WILL PERTAIN ONLY TO THOSE CULVERTS ENUMERATED IN THE SUMMARY OF MISCELLANEOUS QUANTITIES. ALL OTHER CULVERTS TO BE REMOVED WILL BE INCIDENTAL TO CULVERT INSTALLATION OR COMMON EXCAVATION.

THE ELEVATIONS SHOWN ON THE ROADWAY CROSS SECTIONS ARE EARTH GRADE ELEVATIONS AT THE CENTERLINE OF THE ROADWAY.

ALL SILT FENCE REQUIRED FOR THIS PROJECT SHALL MEET THE REQUIREMENTS OF SILT FENCE FOR SILTY SOILS.

ALL ELEVATIONS ON THIS PROJECT ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (N.G.V.D.).

FILL AS SHOWN ON THE PLAN PERTAINS TO EMBANKMENT CONSTRUCTED FROM COMMON AND ROCK EXCAVATION. THE ALLOWANCE USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME OF MATERIAL REQUIRED IS 1.33.

REINFORCED CONCRETE APRON ENDWALLS AND ADJOINING TWO SECTIONS OF CONCRETE PIPE SHALL BE TIED TOGETHER AS SHOWN ON THE STANDARD DETAIL DRAWINGS AND AS LOCATED IN THE MISCELLANEOUS QUANTITIES. JOINT TIES SHALL BE INCIDENTAL TO VARIOUS ITEMS.

ALL COORDINATES SHOWN ON THIS PLAN ARE GROUND COORDINATES REFERENCED TO THE WISCONSIN COORDINATE SYSTEM, SOUTH ZONE.

ALL EXISTING INLET COVERS AND GUARDRAIL SHALL BE SALVAGED AND BECOME THE PROPERTY OF WINNEBAGO COUNTY.

PRIOR TO PROSECUTION OF MILLING OPERATIONS, THE CONTRACTOR SHALL CONTACT THE DISTRICT TRAFFIC UNIT AT (920) 492-5652 TO LOCATE TRAFFIC LOOP DETECTORS AT THE STH 150/USH 45 INTERSECTION. NOTICE SHALL BE 3 WORKING DAYS.

ALL DISTANCES AND STATIONING SHOWN ON THIS PLAN ARE GROUND VALUES. GRID VALUES ARE OBTAINED BY MULTIPLYING GROUND VALUES BY 0.999945.

WHEN THE QUANTITY OF CRUSHED AGGREGATE BASE COURSE IS MEASURED FOR PAYMENT BY THE M₉, THE DEPTH OR THICKNESS AS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND UPON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

CURB AND GUTTER RADII ARE SHOWN TO THE FRONT FACE OF CURB. CURB HEIGHTS AT THE END OF CURB AND GUTTER SHALL BE TAPERED 150 MILLIMETERS IN 1.8 METERS.

THE QUANTITY OF SALVAGED TOPSOIL WAS COMPUTED FROM MEASUREMENTS BETWEEN THE FINISHED SUBGRADE POINTS AND THE SLOPE INTERCEPTS AS SHOWN ON THE CROSS SECTIONS PLUS 1.5 METERS PER STATION FOR ROUNDING.

ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS BETWEEN THE SUBGRADE SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED.

DISTURBED AREAS THAT WERE PREVIOUSLY LAWNS SHALL BE SEEDED WITH SEED MIXTURE NO. 40.

RUNOFF COEFFICIENT FOR THIS PROJECT: EXISTING PAVEMENT 0.85 EXISTING SLOPES 0.33; NEW PAVEMENT 0.85 NEW SLOPES 0.31

TOTAL PROJECT AREA 13.7 ha. (33.8 ACRES). TOTAL AREA DISTURBED 10.5 ha. (26.0 ACRES).

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN WITH THE ENGINEER.

TACK COAT HAS BEEN ESTIMATED AT AN APPROXIMATE RATE OF 0.113 LITERS PER SQUARE METER AND SHALL BE PLACED BETWEEN ALL LAYERS OF ASPHALTIC CONCRETE PAVEMENT.

PRIOR TO PLACING THE CONCRETE CURB AND GUTTER AT ALL RADII, THE TOWN OF MENASHA SHALL BE CONSULTED FOR THE EXACT LOCATION AND TYPE OF ALL CURB RAMPS.

UTILITIES

DIGGER'S HOTLINE 1-800-242-8511 (TOLL FREE)

AMERITECH JOE FEMLING 221 W WASHINGTON STREET 4TH FLOOR OSPE APPLETON WI 54911	920-735-3250 FAX 735-3073	TOWN OF NEENAH SANITARY DISTRICT NO 4 BILL EASTMAN PRESIDENT 1455 GLENVIEW DRIVE NEENAH WI 54956 SANITARY SEWER
ANR PIPELINE CO WILLIAM LAEHN 2717 N GRANDVIEW BLVD SUITE 300 PO BOX 149 WALKESHA WI 53187 GENERAL CORRESPONDENCE/TRANS 220	414-547-5528	WEPCO ELECTRIC OPERATIONS JACK ARTER 800 S LYNDALE DRIVE PO BOX 1699 APPLETON WI 54913-1699 920-380-3460
NORLIGHT TELECOMMUNICATIONS INC JIM KOSTUCH 275 NORTH CORPORATE DRIVE BROOKFIELD WI 53045-5818	414-792-7935	WEPCO GAS OPERATIONS DAVE BROOKS 800 S LYNDALE DRIVE PO BOX 907 APPLETON WI 54912-0907 920-380-3353
TIME WARNER CABLE STEVE POENLEIN 1001 KENNEDY AVENUE PO BOX 145 KIMBERLY WI 54136-0145	920-831-9207	WISCONSIN PUBLIC SERVICE CORP STEVEN L DEMERRITT 700 NORTH ADAMS STREET PO BOX 19001 GREEN BAY WI 54307-9001
TOWN OF MENASHA SANITARY DISTRICT NO 4 JEFF ROTH 2340 AMERICAN DRIVE NEENAH WI 54956 WATER	920-739-5128	

D.N.R. AREA LIAISON

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
KELLEY O'CONNOR 920-492-5819
P.O. BOX 10448
1125 NORTH MILITARY AVENUE
GREEN BAY, WISCONSIN 54307-0448

DETAIL SHEET INDEX

SHEET TITLE	SHEET NUMBER
WRITTEN MATERIAL	2.1
TYPICAL CROSS SECTIONS	2.1-2.5
CONSTRUCTION DETAILS	2.6-2.15
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EROSION CONTROL & DRAINAGE	2.17-2.18
SIGNING	2.19-2.28
TRAFFIC SIGNALS	2.29
TRAFFIC CONTROL & CONSTRUCTION STAGING	2.30-2.31
ALIGNMENT	2.32

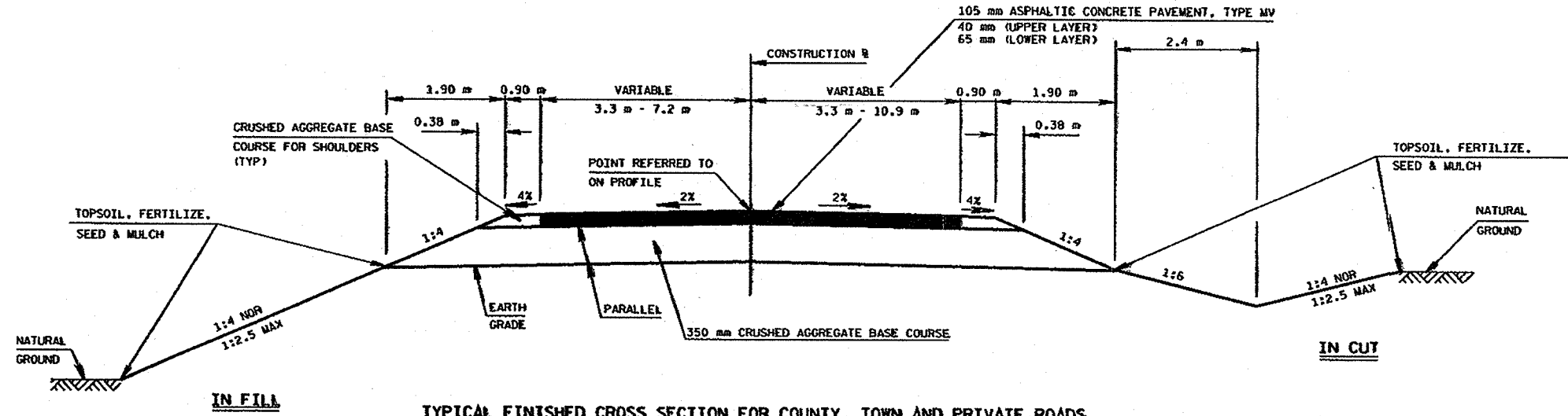
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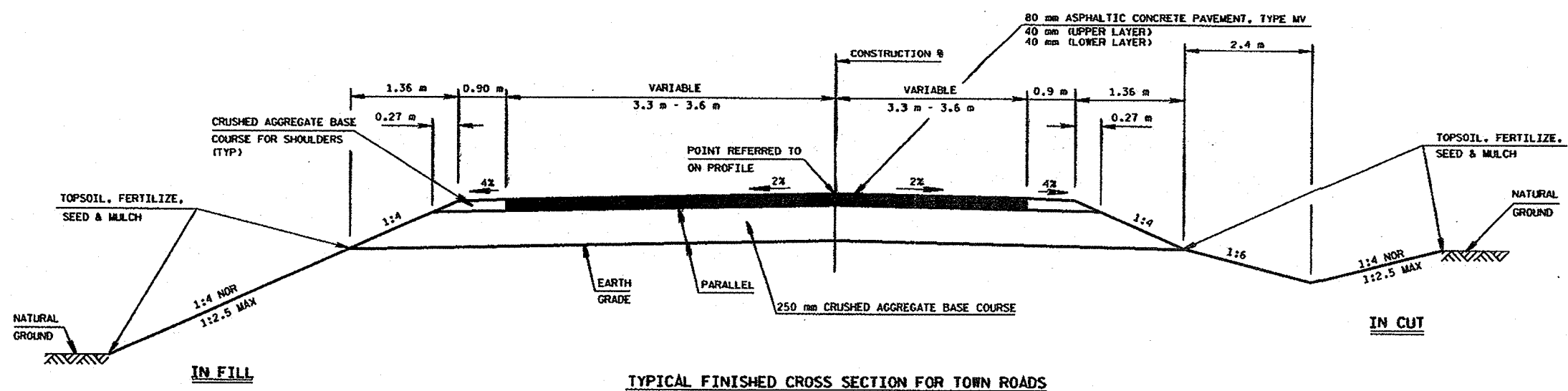
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TYPICAL FINISHED CROSS SECTION FOR COUNTY, TOWN AND PRIVATE ROADS

- CLAYTON ROAD
- WEST KIMBERLY - CLARK ENTRANCE
- * MAIN KIMBERLY - CLARK ENTRANCE
- TOWN OF NEENAH DEAD END ROAD
- EAST KIMBERLY - CLARK ENTRANCE
- SOUTH JUNCTION FIELDCREST DRIVE
- CTH O
- IRISH ROAD
- BONDOW DRIVE

* NOTE: MEDIAN REQUIRED AT MAIN KIMBERLY CLARK ENTRANCE. SEE CONSTRUCTION DETAILS



TYPICAL FINISHED CROSS SECTION FOR TOWN ROADS

- AUGUSTINE ROAD
- NORTH JUNCTION FIELDCREST DRIVE
- WANDA AVENUE
- VERA AVENUE
- ZEH AVENUE

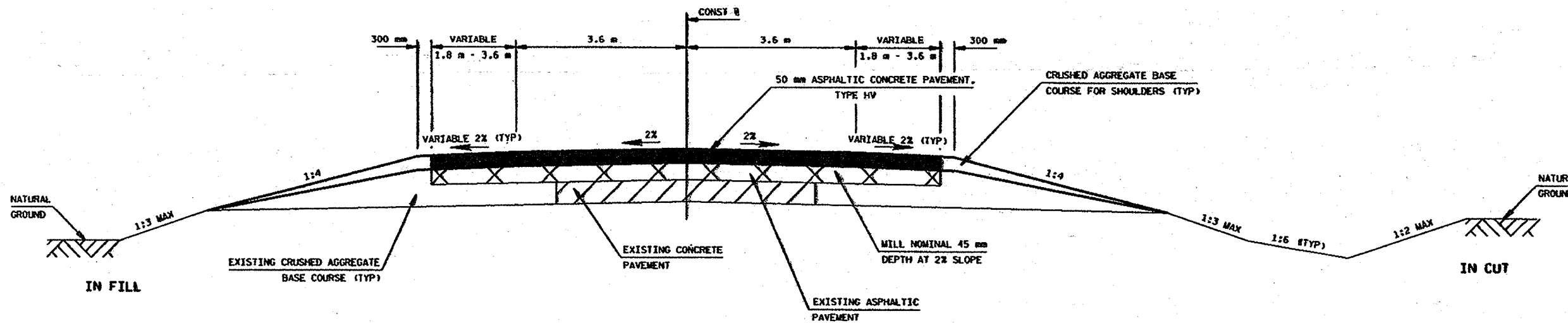
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REV. DATE: 12-16-98

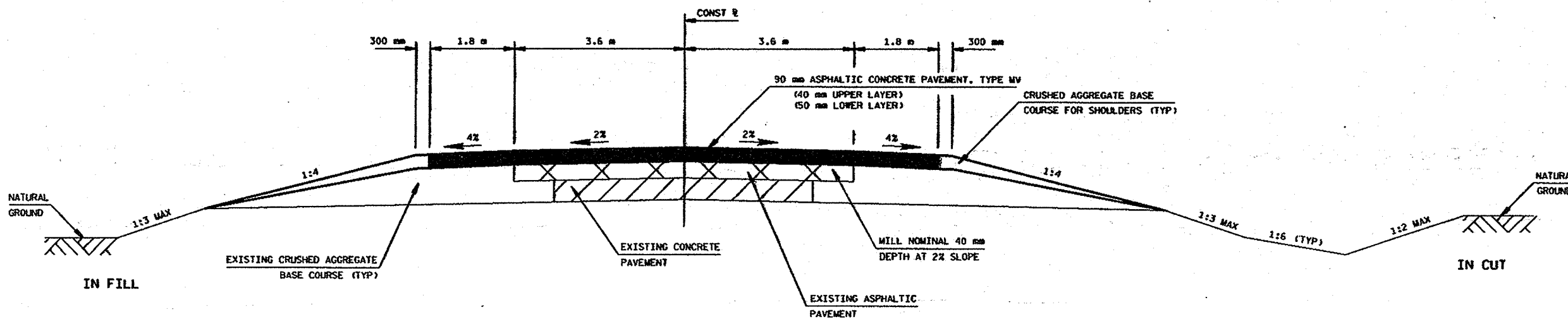
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TYPICAL FINISHED CROSS SECTION FOR STH 150 + USH 45 INTERSECTION

13+560 - 13+700 STH 150
0+940 - 1+054 USH 45



TYPICAL FINISHED CROSS SECTION FOR STH 150

13+700 - 15+100

NOTE: SEE PLAN SHEETS AND CONSTRUCTION DETAIL FOR VARYING PAVEMENT WIDTHS
AT BEGINNING OF TWO - LANE TO FOUR - LANE TRANSITION. 15+020 - 15+100

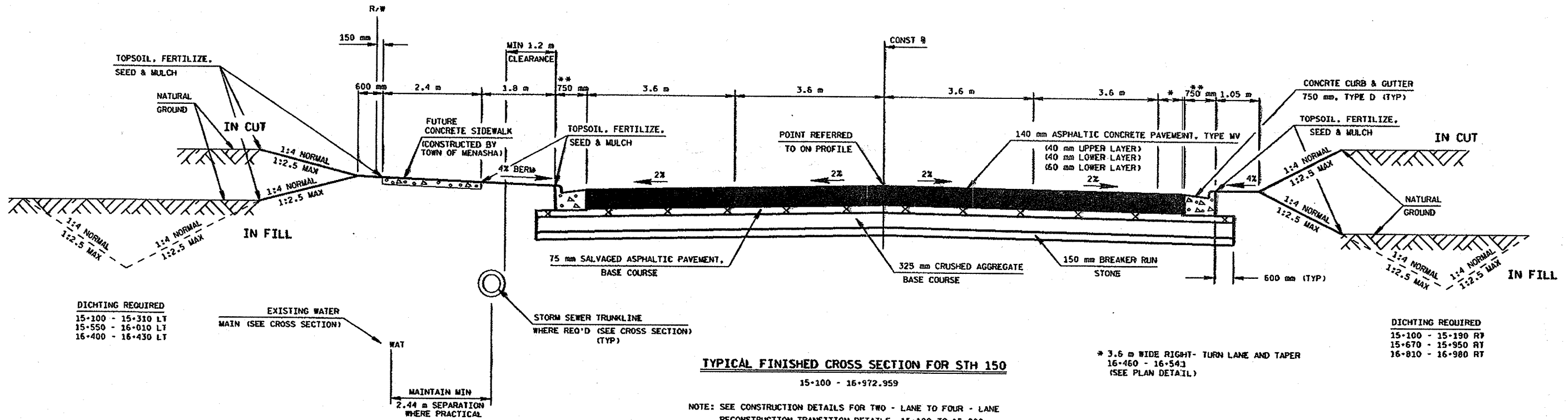
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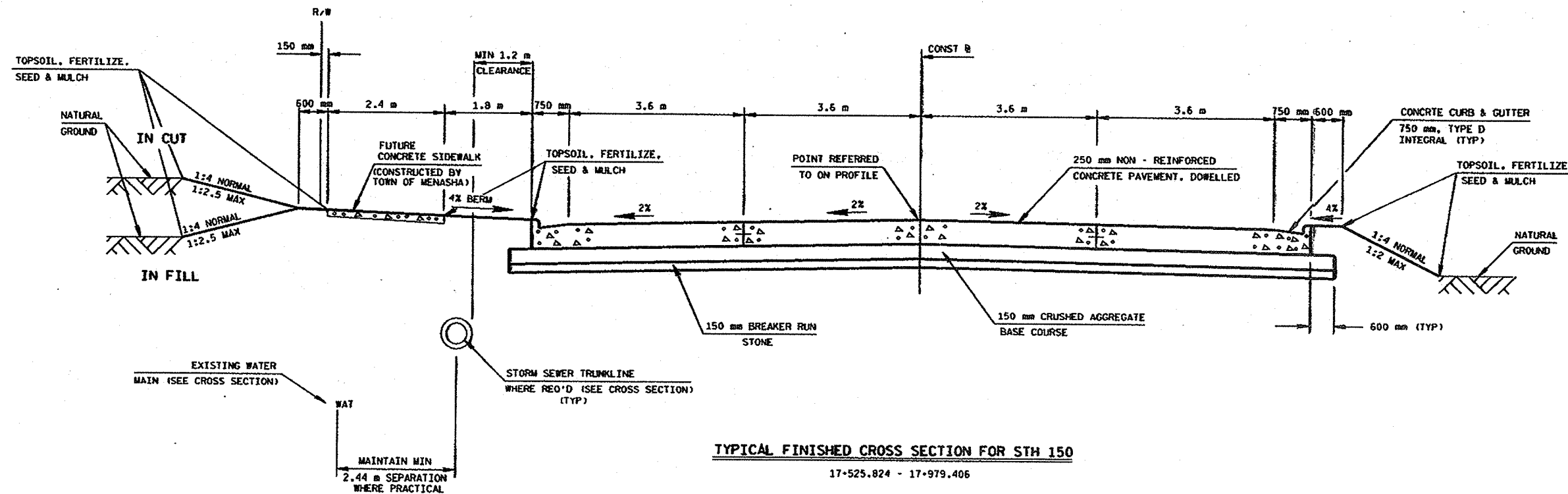
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TYPICAL FINISHED CROSS SECTION FOR STH 150

15+100 - 16+972.959

NOTE: SEE CONSTRUCTION DETAILS FOR TWO-LANE TO FOUR-LANE RECONSTRUCTION TRANSITION DETAILS, 15+100 TO 15+200



TYPICAL FINISHED CROSS SECTION FOR STH 150

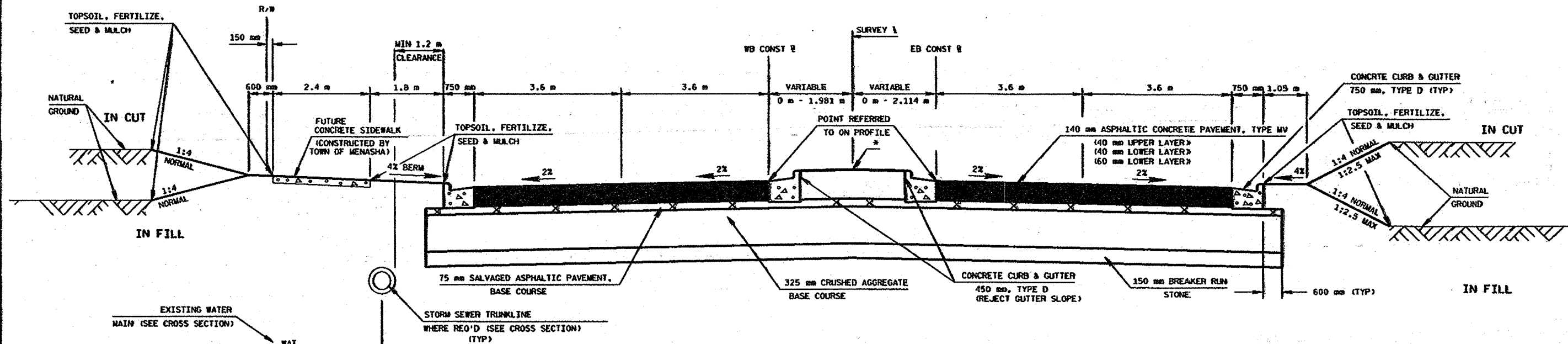
17+525.824 - 17+979.406

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PLOT NAME: 201G4

REV. DATE: 12-16-98

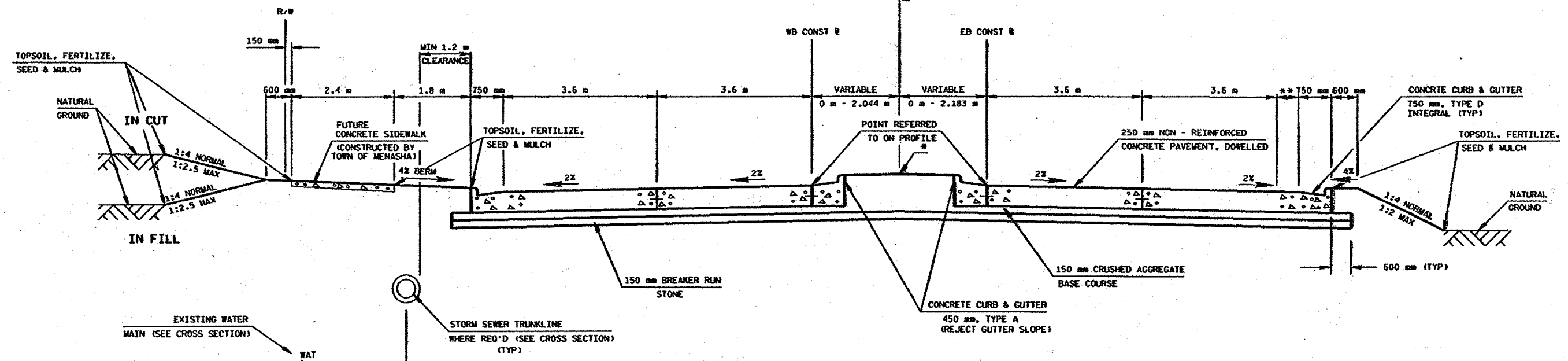
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TYPICAL FINISHED CROSS SECTION FOR STH 150

16+972.959 - 17+071.0 LT
16+972.959 - 17+063.8 RT

* ASPHALTIC OR CONCRETE CORRUGATED MEDIAN
(SEE PLANS FOR LOCATIONS)



TYPICAL FINISHED CROSS SECTION FOR STH 150

17+417.1 - 17+525.824

* SOD ON CONCRETE CORRUGATED MEDIAN
(SEE PLANS FOR LOCATIONS)

** NOTE: TAPER FROM 1.21 m WIDTH AT STA 17+417.1
TO 0 m WIDTH AT STA 17+432

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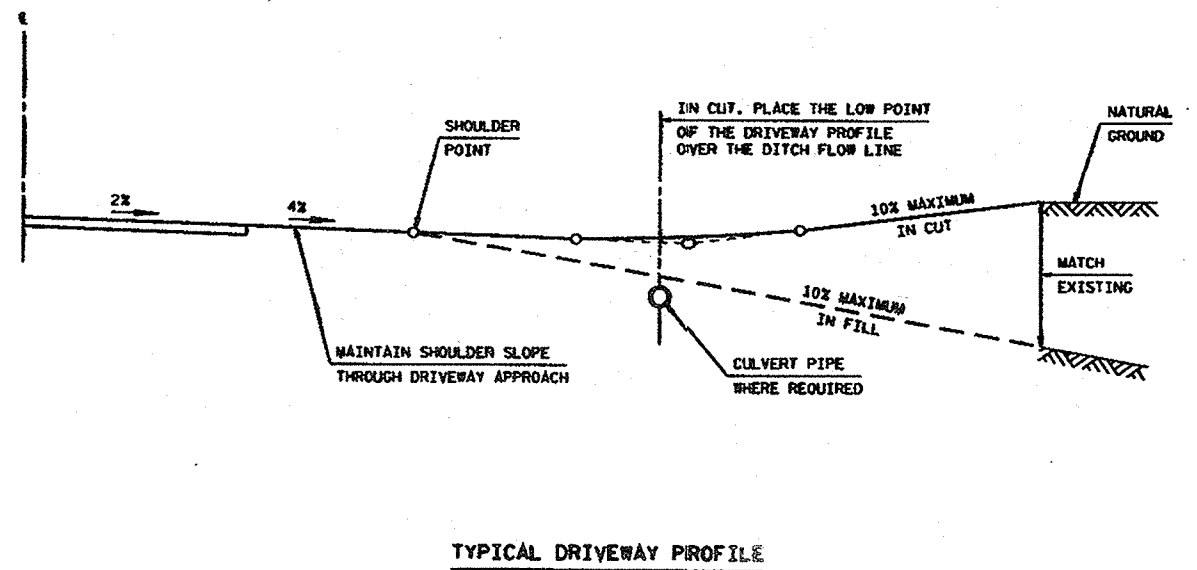
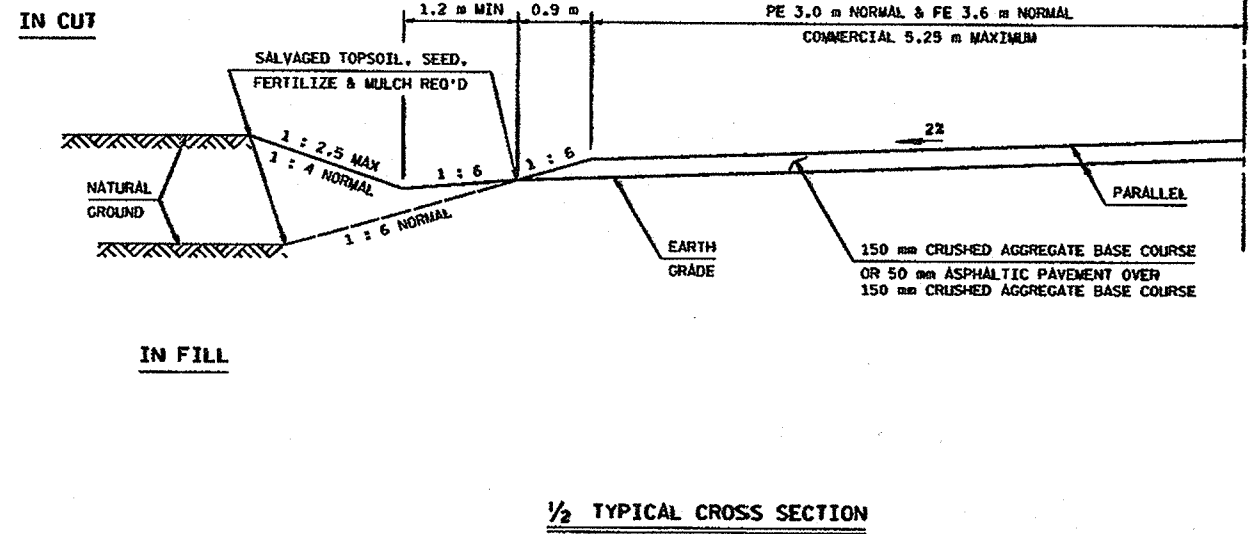
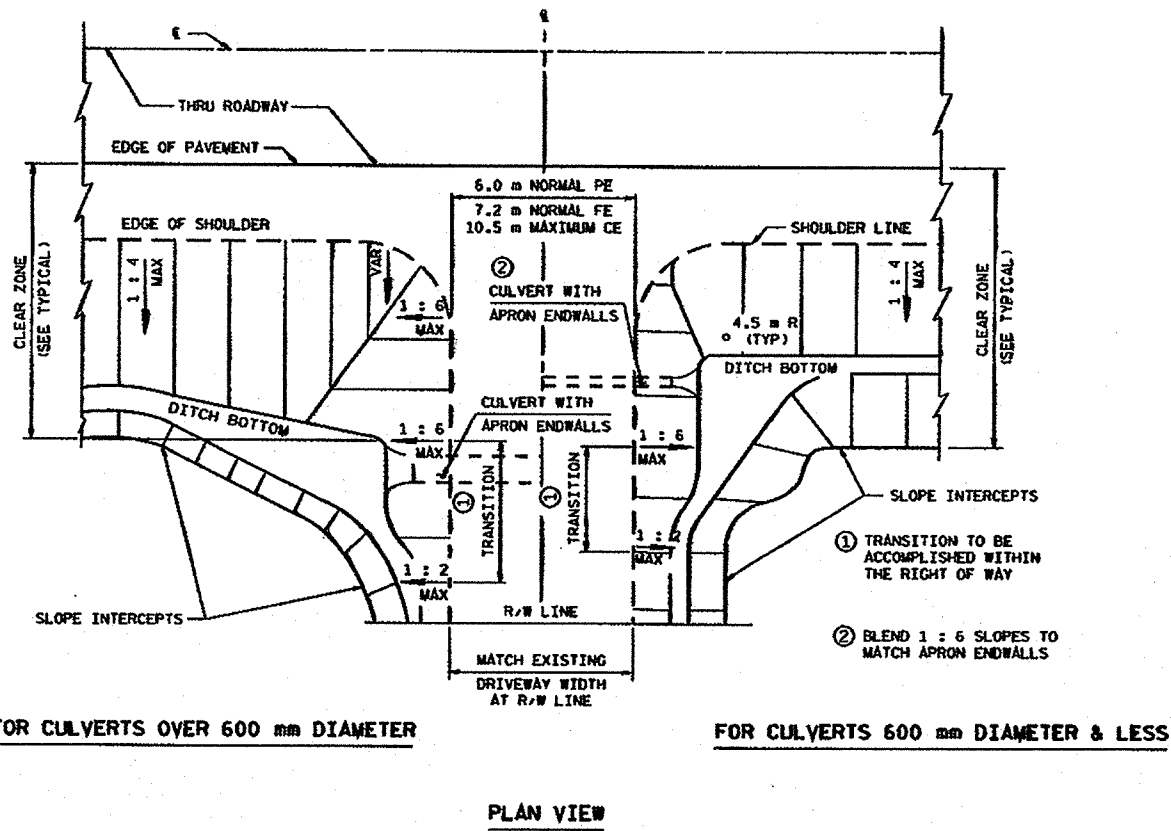
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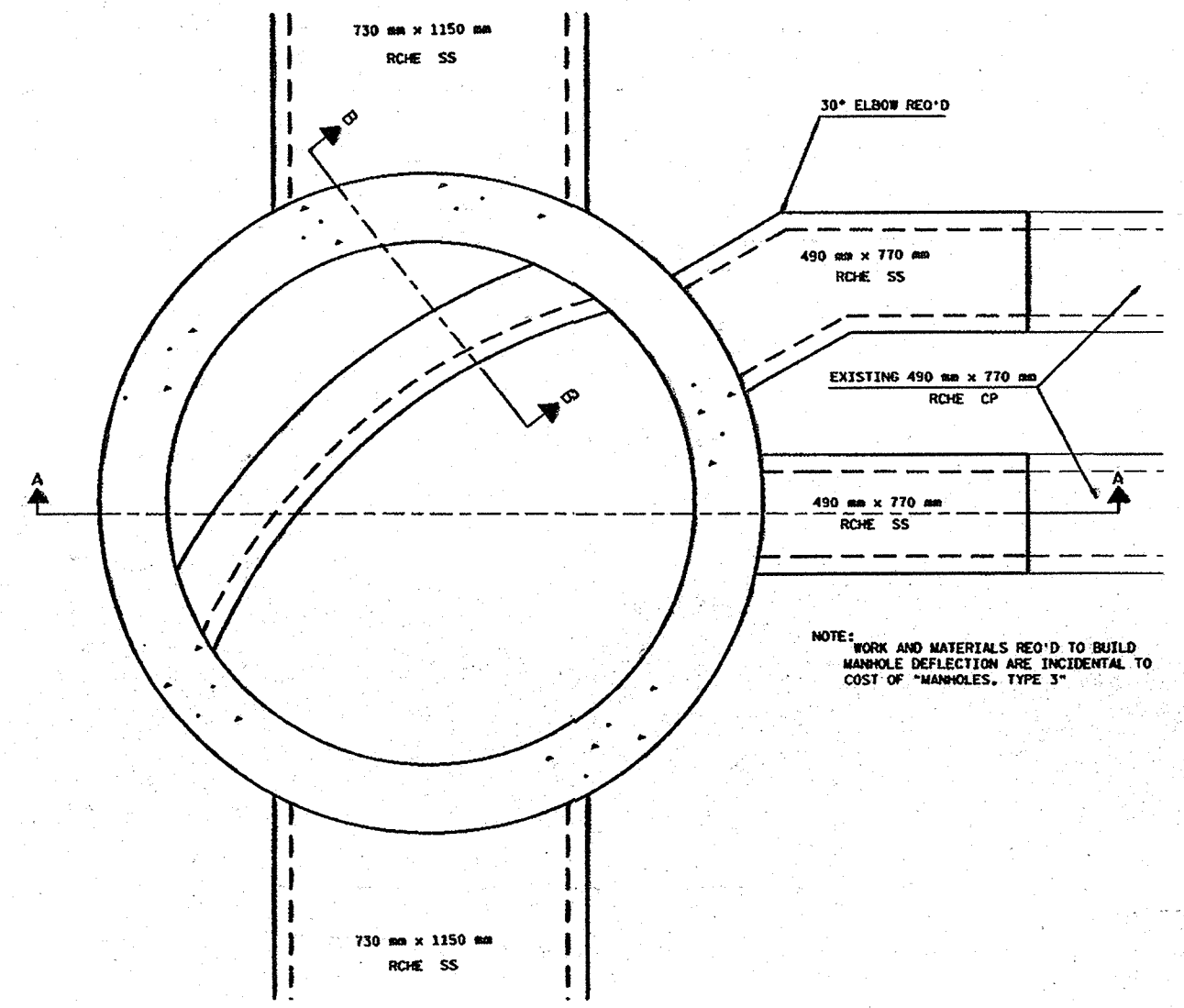
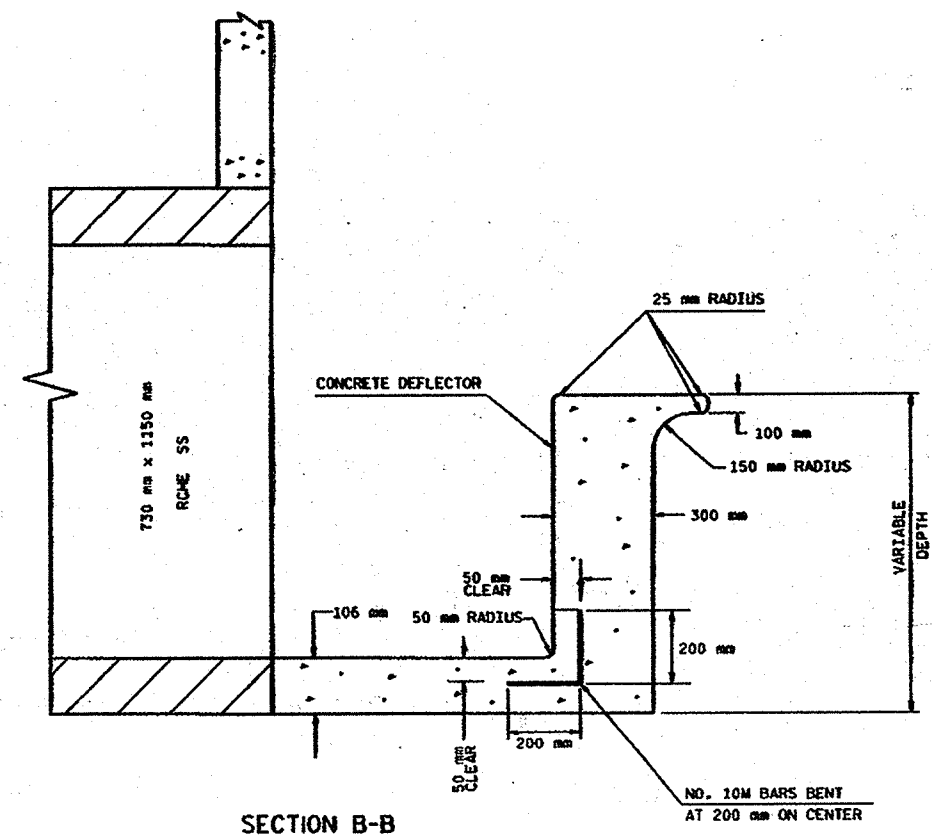
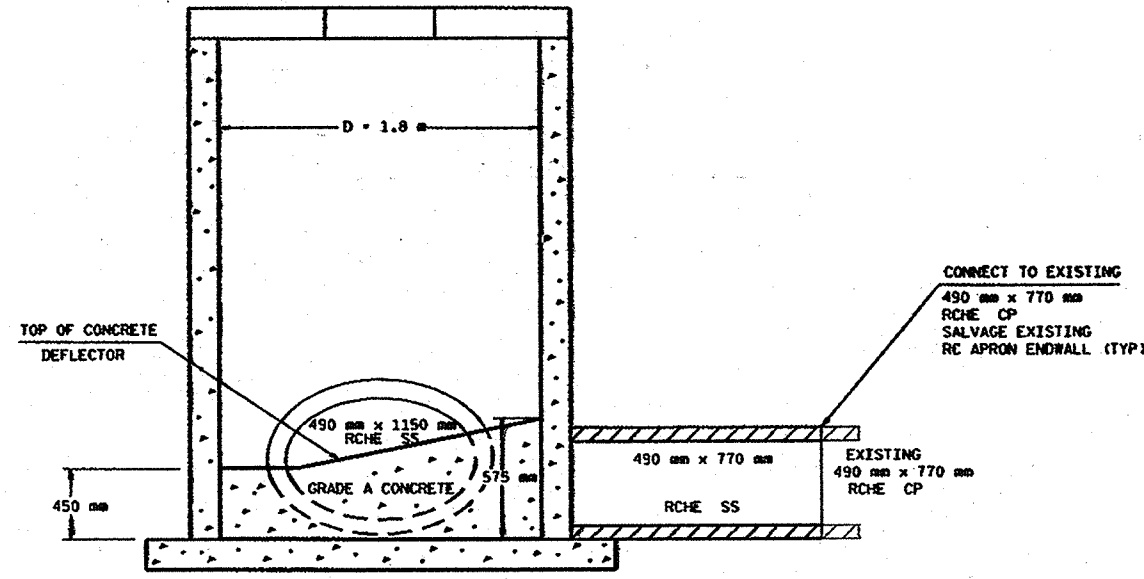
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ORIGINATOR: DIST. 3
LEVELS ON *



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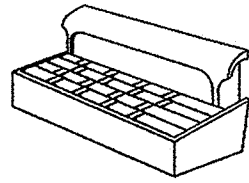
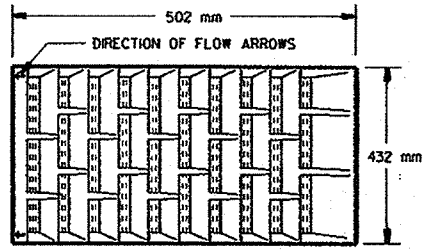


NOTE: WORK AND MATERIALS REQ'D TO BUILD MANHOLE DEFLECTION ARE INCIDENTAL TO COST OF "MANHOLES, TYPE 3"

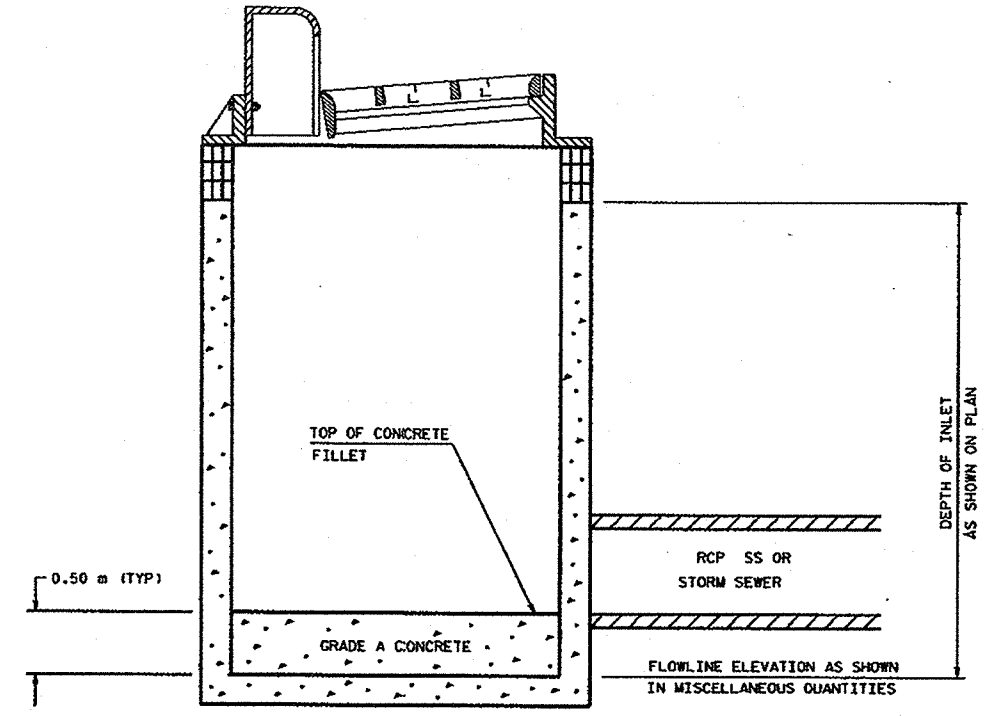
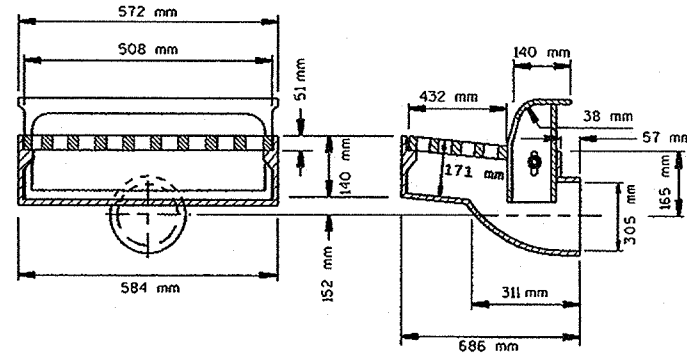
SPECIAL MANHOLE

DEFLECTION DETAIL AT MANHOLE 89

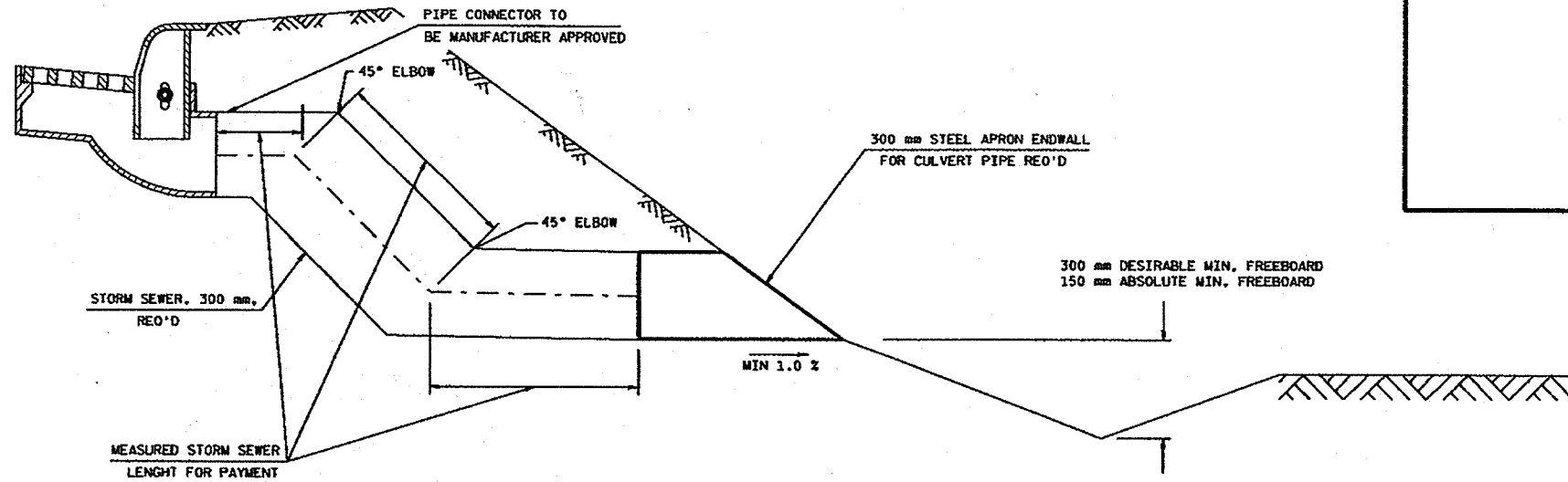
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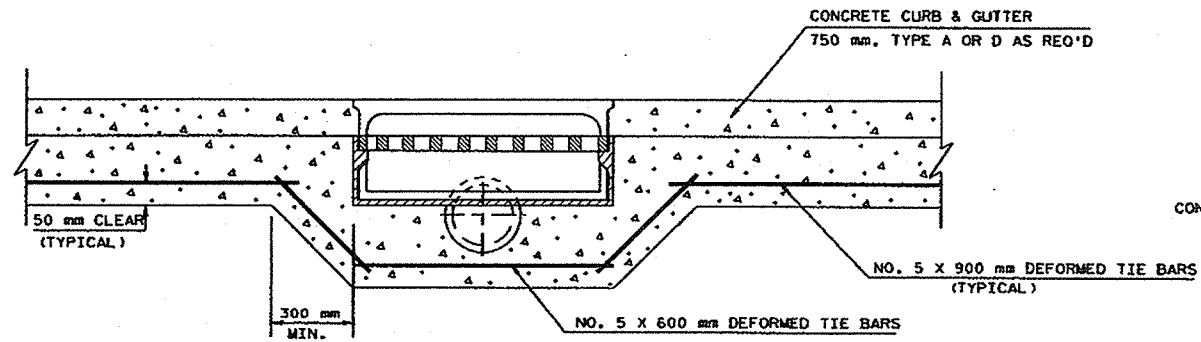
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 (APPROX. WT. 132 Kg)



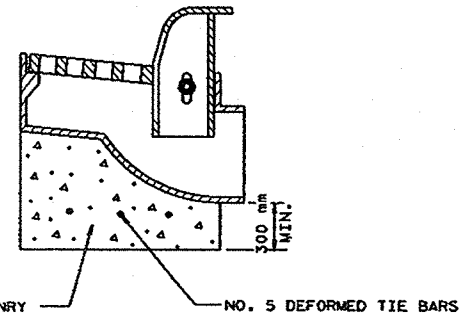
MODIFIED INLET



PIPE CONNECTION TO SPECIAL INLET

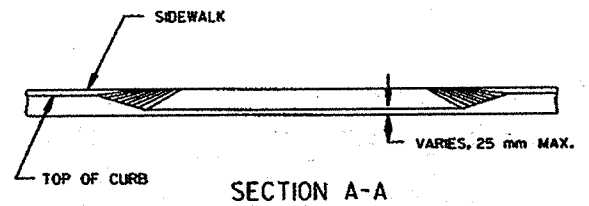


FOUNDATION FOR SPECIAL INLET



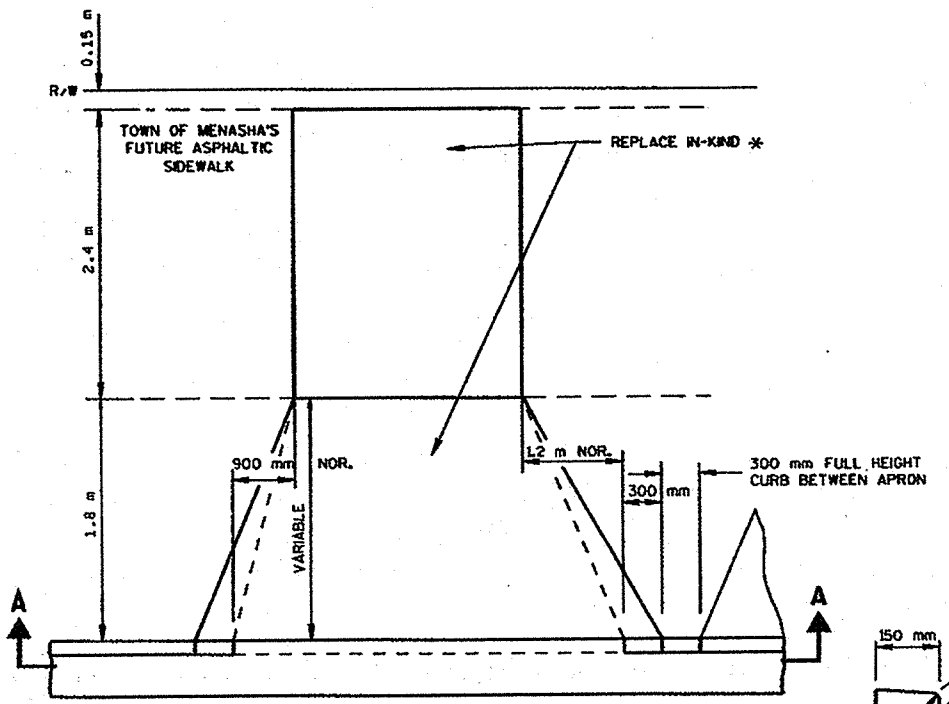
NOTE: THE CONCRETE MASONRY AND DEFORMED TIE BARS ARE TO BE INCLUDED IN THE COST OF SPECIAL INLET

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 ORIGINATOR: DIST 3
 REV. DATE: 10-26-98
 PLOT SCALE: 1:201450011.000000
 PLOT DATE: 28-OCT-1998 06:57
 PLOT NAME: 200d710

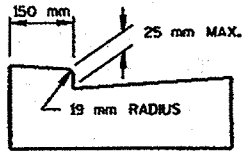


* 150 mm CRUSHED AGGREGATE BASE COURSE AT CRUSHED AGGREGATE P.E.
 50 mm ASPHALTIC CONCRETE PAVEMENT, TYPE MV OVER 150 mm CRUSHED AGGREGATE BASE COURSE AT ASPHALTIC P.E.
 80 mm ASPHALTIC CONCRETE PAVEMENT, TYPE MV OVER 200 mm CRUSHED AGGREGATE BASE COURSE AT ASPHALTIC C.E. AND PARKING LOTS.

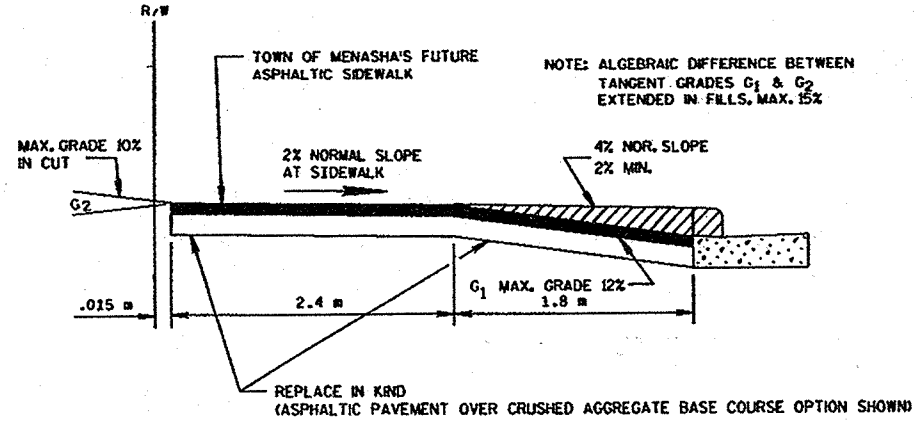
DRIVEWAY WIDTHS AT R/W
 MAX. P.E. = 7.2 m
 NORMAL P.E. = 4.8 m
 MAX. C.E. = 10.5 m



PLAN



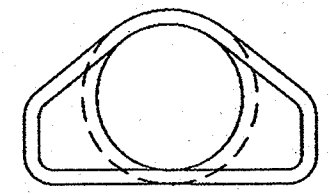
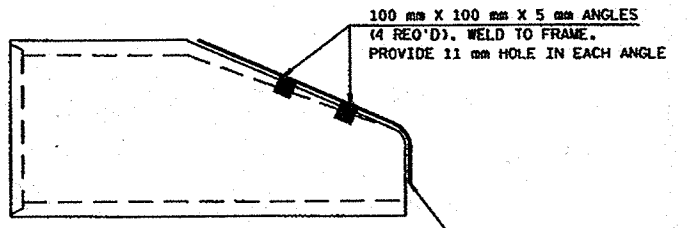
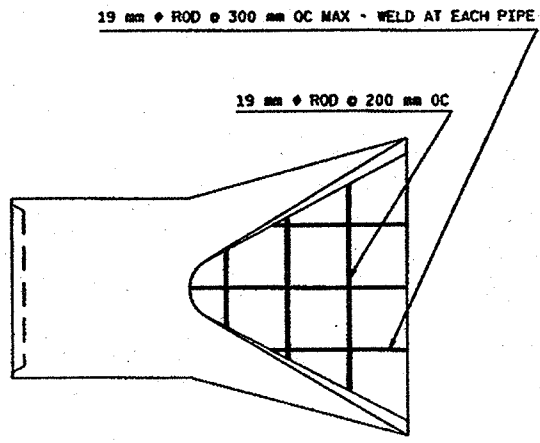
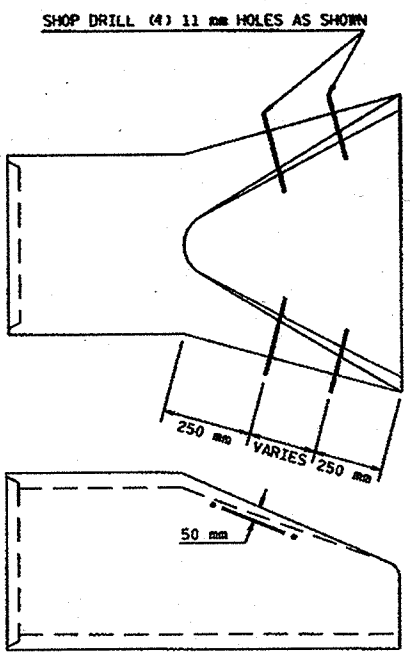
OPTIONAL METHOD FOR CONCRETE GUTTER



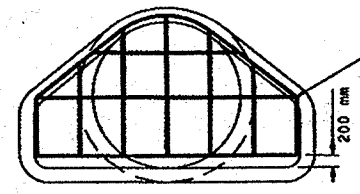
PROFILE

URBAN DRIVEWAY DETAIL

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G_1 & G_2 EXTENDED IN FILLS, MAX. 3%
 NOTE: TOWN OF MENASHA'S ASPHALTIC SIDEWALK MAY BE PLACED BY THE TOWN CONCURRENTLY DURING THE PROJECT



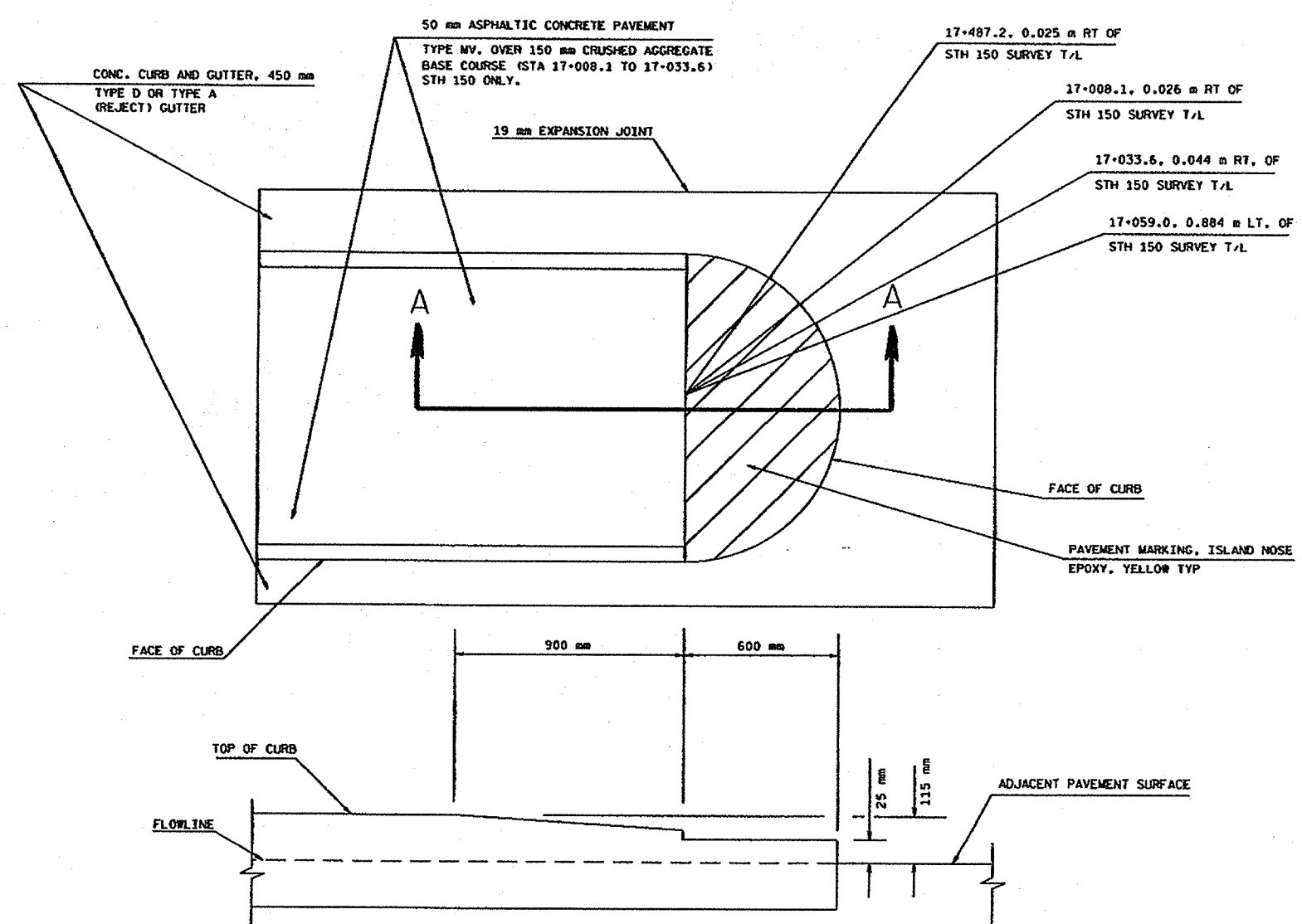
NO SCALE



THE CONTRACTOR SHALL BOLT THE GRATE TO THE CONCRETE END WALL WITH FOUR 10 mm X 150 mm MACHINE BOLTS WITH NUTS ON THE INSIDE WALL.

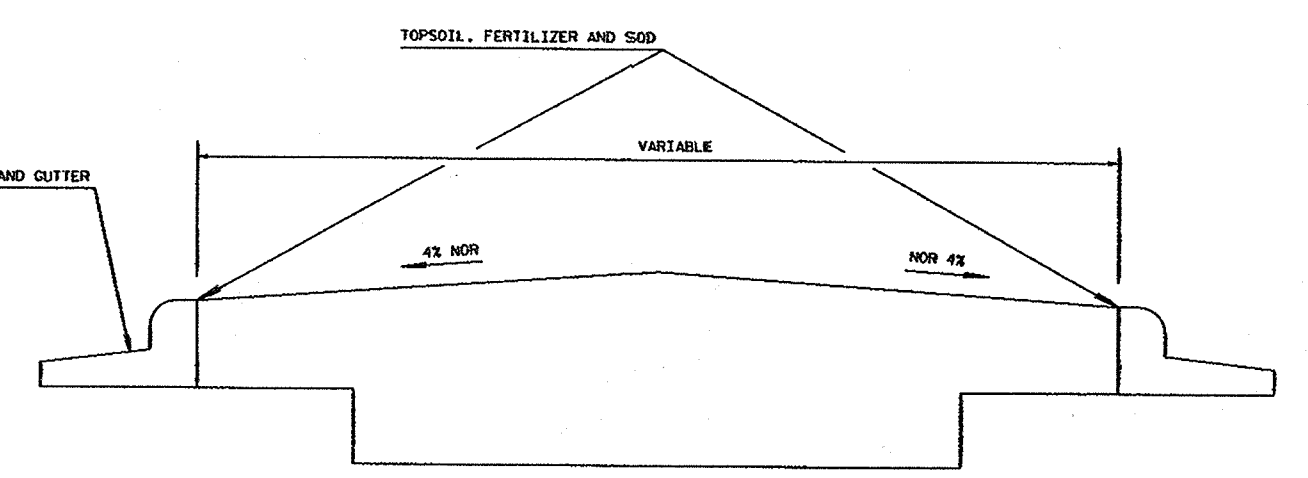
DETAIL FOR PIPE ENDWALL GRATE

FILE NAME: F:\d3_644803\200.dwg
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 ORIGINATOR: DIST 3
 PLOT NAME: 200d71d
 REV. DATE: 12-18-98
 PLOT SCALE: 2.01480011:000000
 PLOT DATE: 18-DEC-1998 11:30



SECTION A-A
CONCRETE MEDIAN ISLAND NOSE DETAIL

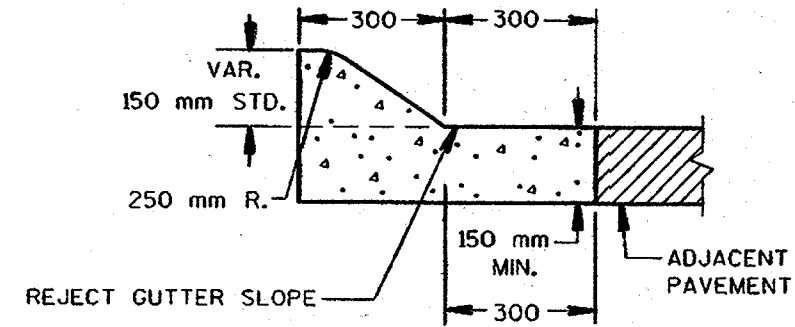
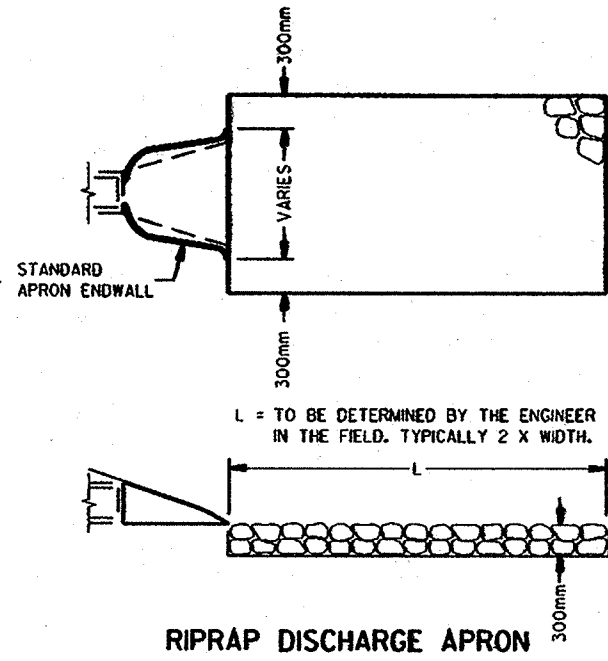
NOTE: REFER TO GENERAL NOTES OF SDD 11 B 2-1, "CONCRETE MEDIAN NOSE", FOR TIE BARS OR PAVEMENT TIES PLACEMENT WHERE REQUIRED.



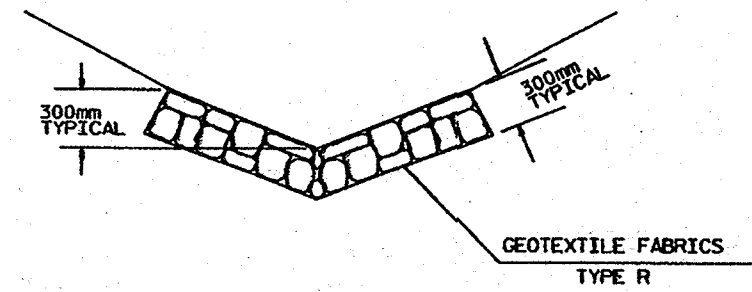
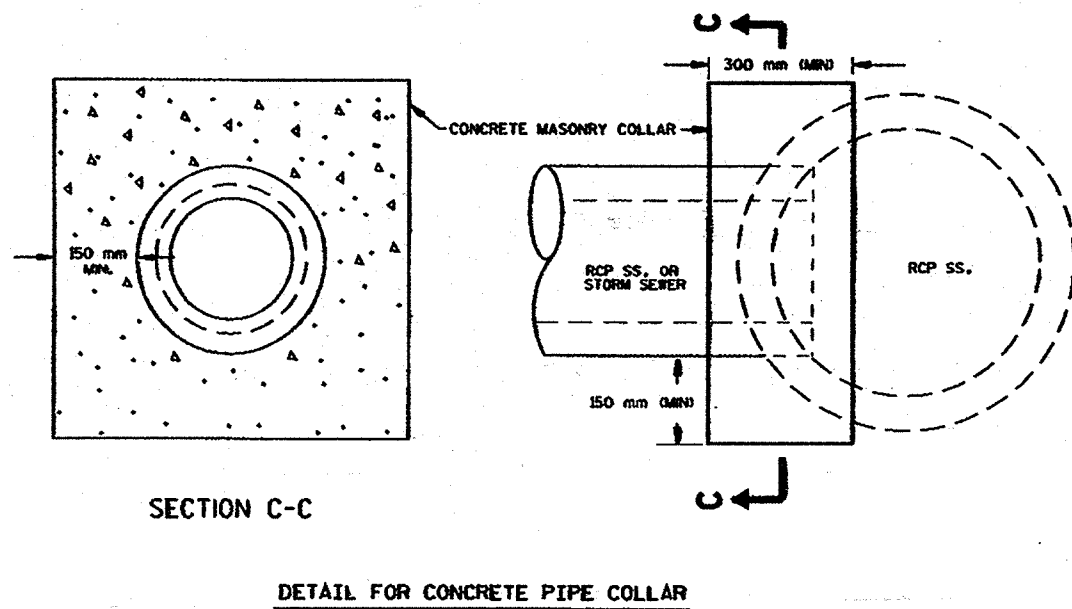
RAISED SOD MEDIAN DETAIL

STATION	LOCATION
17+058 TO 17+071	STH 150
17+417.1 TO 17+487.2	STH 150

FILE NAME: F:\d3-644803\200.dgn
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 ORIGINATOR: ODC 12-2-98
 20070d REV. DATE: 12-18-98
 PLOT SCALE: 1
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 PLOT DATE: 18-DEC-1998 08:22

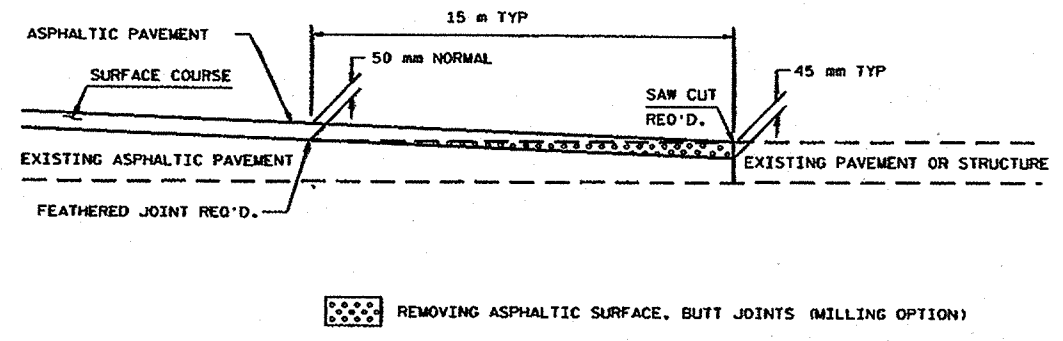


MOUNTABLE CONCRETE CURB & GUTTER, 600 mm

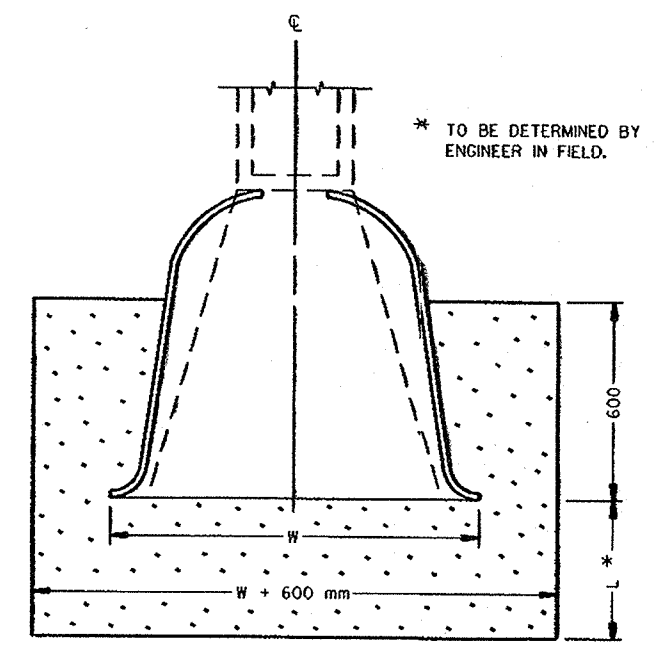


DETAIL FOR RIPRAP IN DITCHES

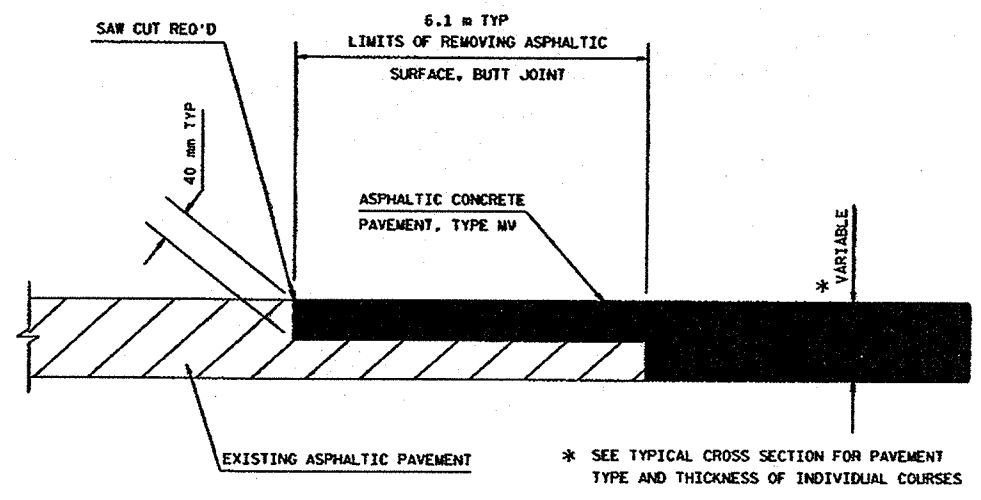
FILE NAME: f1s03-644603-200.dgn
 ORIGINATOR: DIST 3
 PLOT NAME: 200d71
 REV. DATE: 10-23-98
 PLOT SCALE: 2:0148001:000000
 PLOT DATE: 18-DEC-1998 07:56
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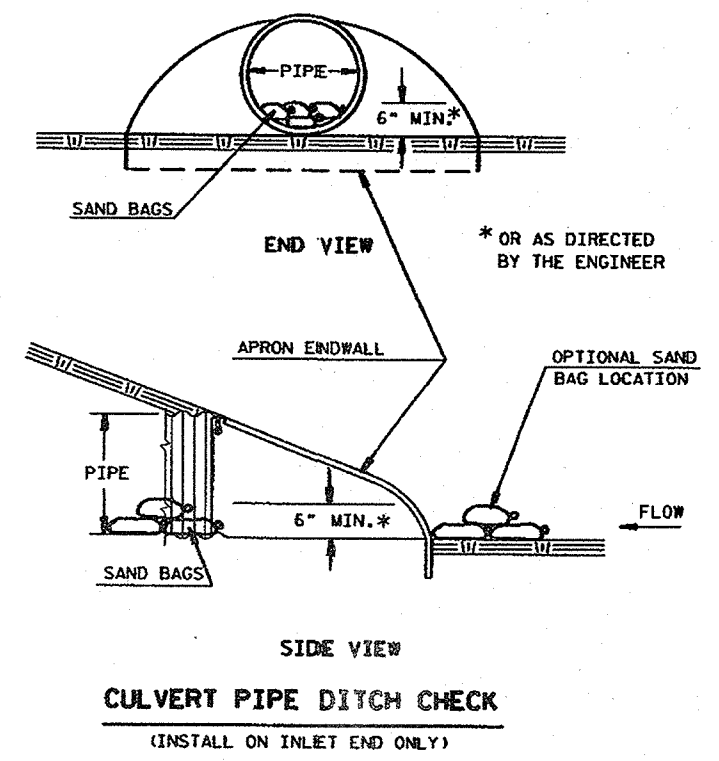
BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS AT STH 150 AND USH 45 INTERSECTION



SOD AT PIPE END



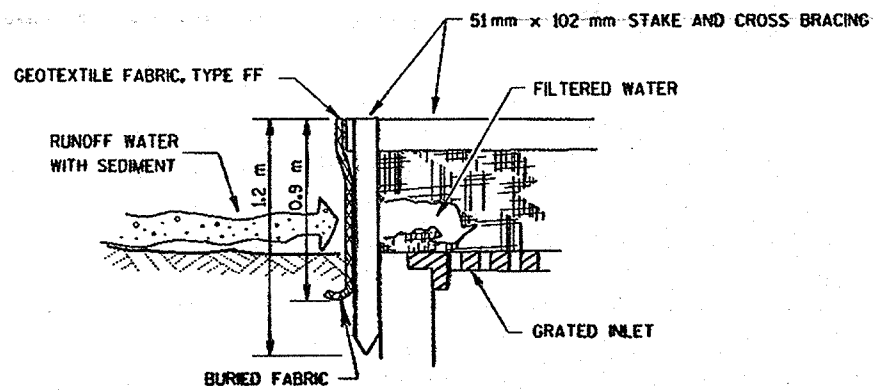
ASPHALTIC CONCRETE PAVEMENT, BUTT JOINT
SIDE ROADS (EXCLUDING USH 45) AND K-C ENTRANCES



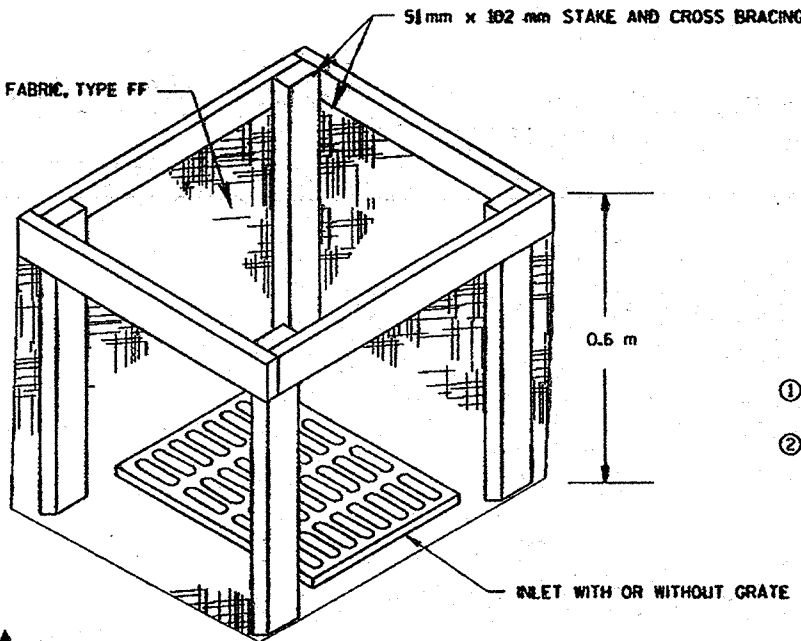
CULVERT PIPE DITCH CHECK
(INSTALL ON INLET END ONLY)

FILE NAME: f:\d3-644803\200.dgn
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 PLOT NAME: 200c71d
 ORIGINATOR: DIST 3
 REV. DATE: 12-18-98
 PLOT SCALE: 2.0146001:1.000000
 PLOT DATE: 18-DEC-1998 08:22

NOTE: ATTACH GEOTEXTILE FABRIC, TYPE FF TO THE TOP OF STAKES AND CROSS BRACINGS.



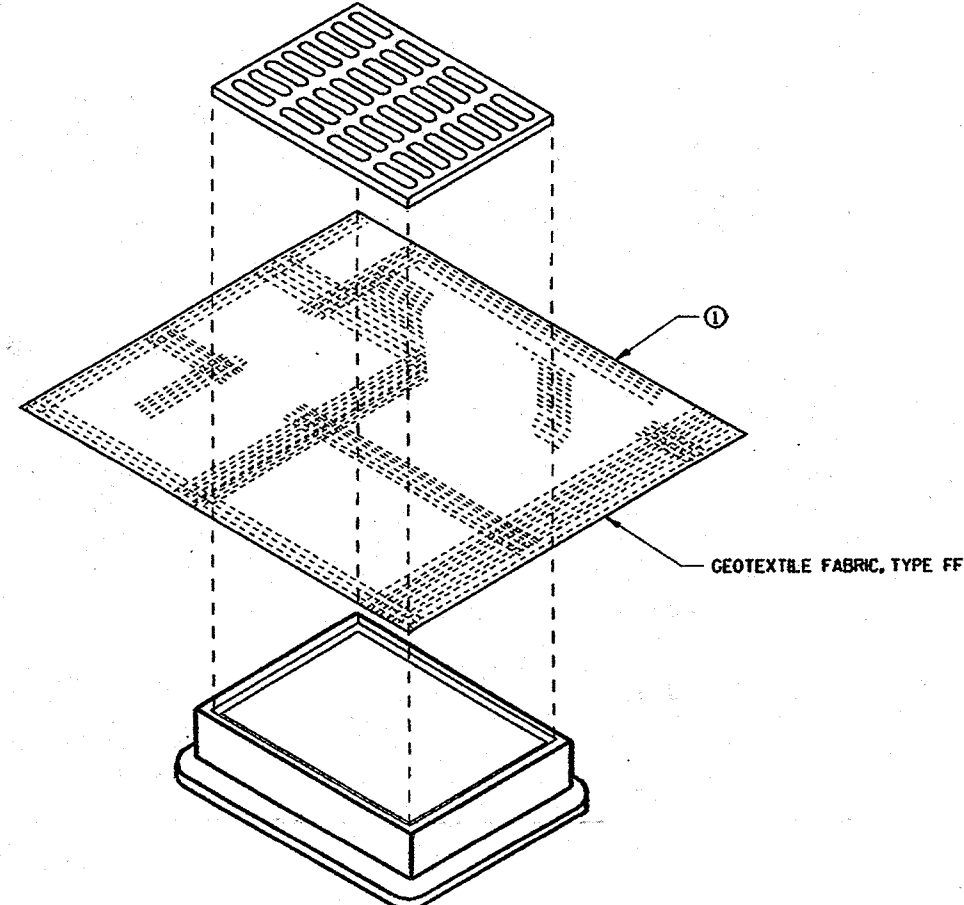
GEOTEXTILE FABRIC, TYPE FF



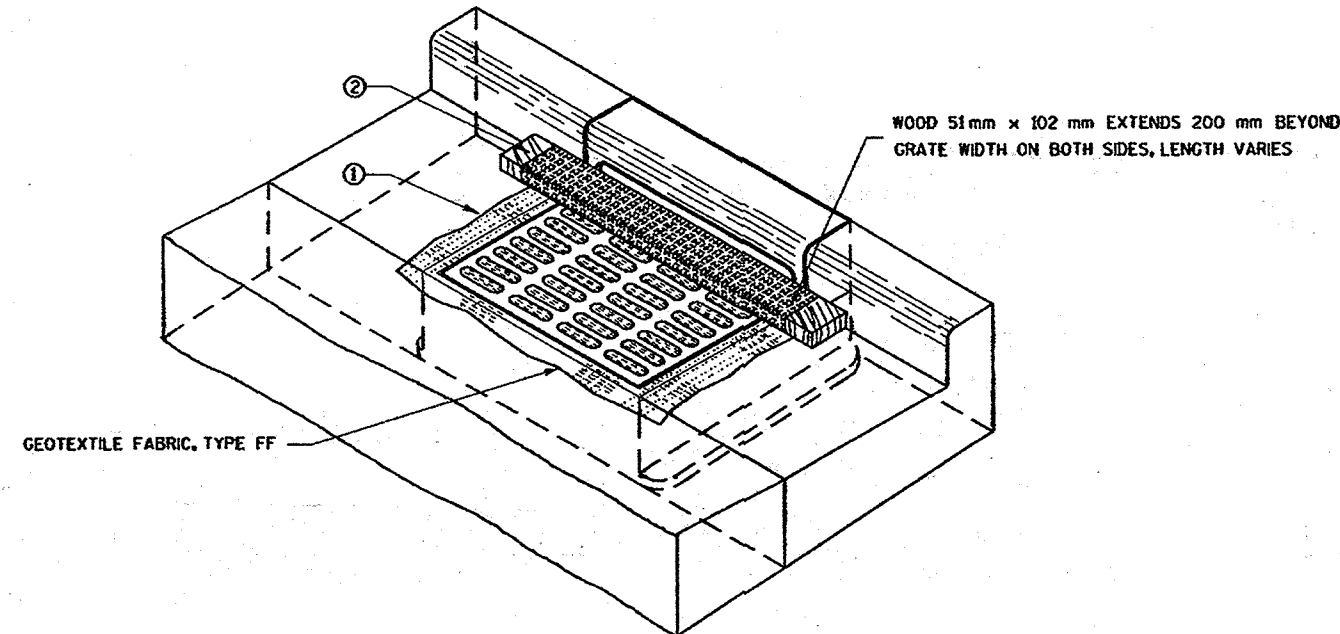
INLET PROTECTION, TYPE A

GENERAL NOTES:

- FABRIC SHALL BE REPLACED AT THE ENGINEERS DISCRETION. MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED FOR THE INLET PROTECTION TYPE SPECIFIED. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.
- ① FABRIC SIZE SHALL BE 200 mm (MIN) GREATER ON ALL SIDES OF THE INLET COVER TO PROVIDE A HAND HOLD WHEN MAINTENANCE OR REMOVAL IS REQUIRED.
 - ② FOR INLET PROTECTION, TYPE C, WITH A CURB BOX, AN ADDITIONAL 0.46 m OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX.



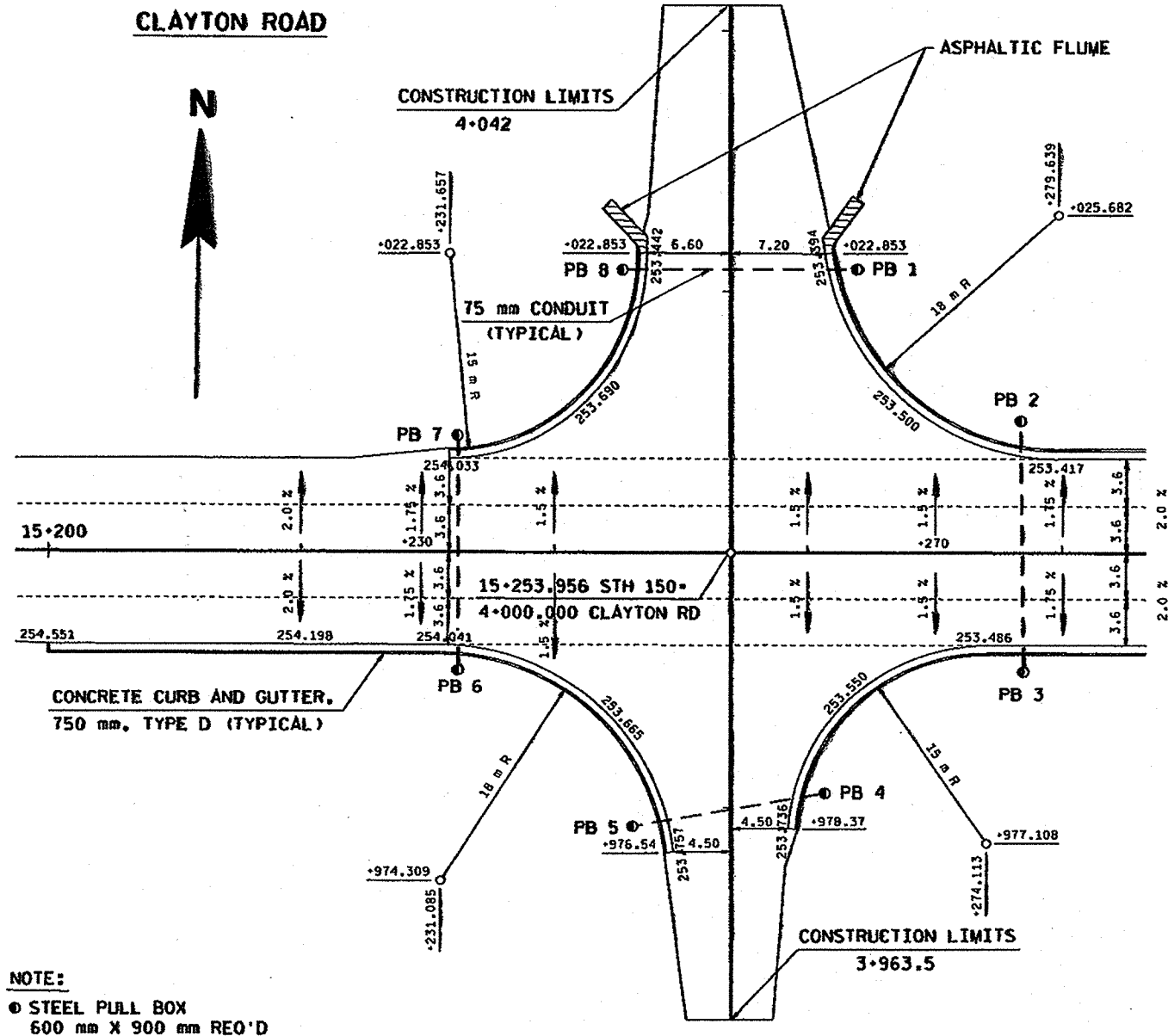
INLET PROTECTION, TYPE B (WITHOUT CURB BOX)
(CAN BE INSTALLED ON ANY INLET TYPE)



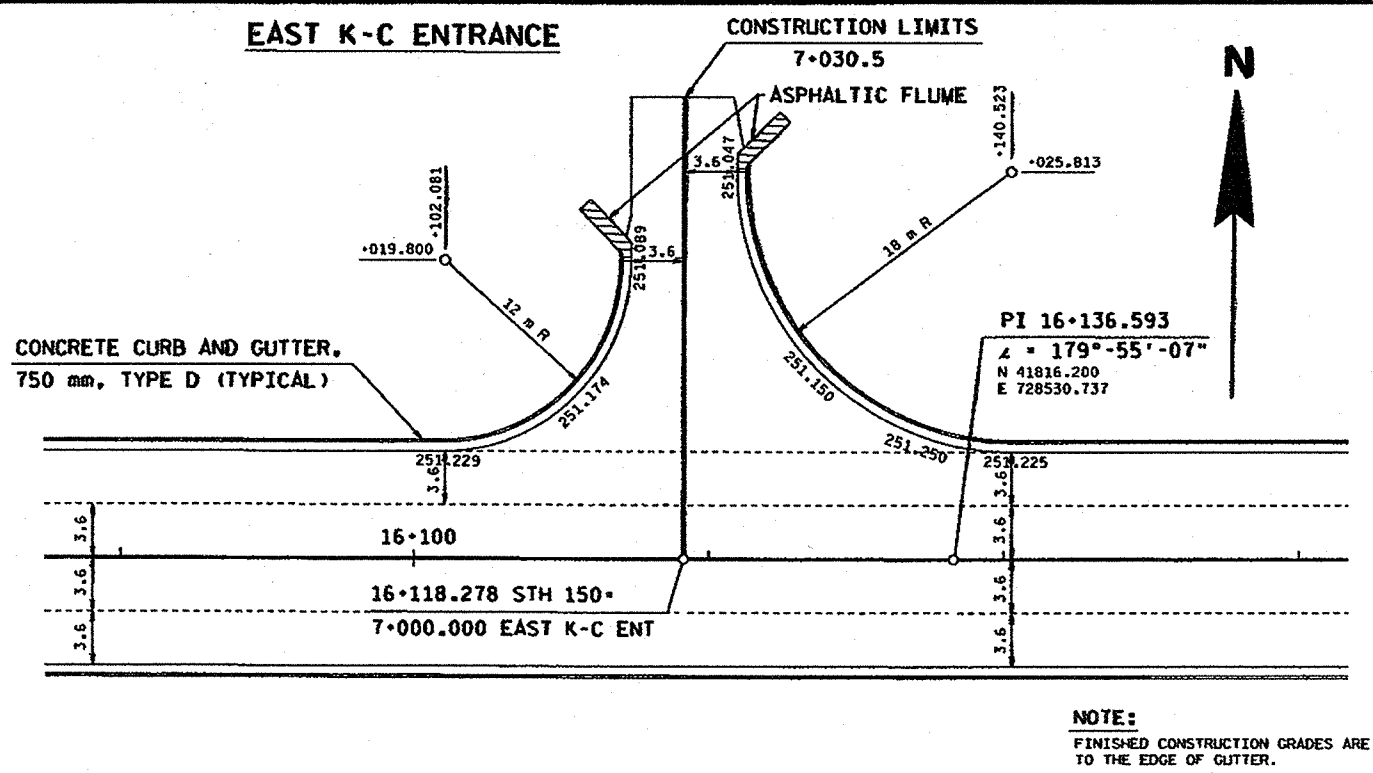
INLET PROTECTION, TYPE C (WITH CURB BOX)

ORIGINATOR: DISTRICT 3 11-2-98 REV. DATE: 12-7-98 PLOT SCALE: 0.9050001:000000 PLOT DATE: 07-DEC-1998 14:04
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CLAYTON ROAD



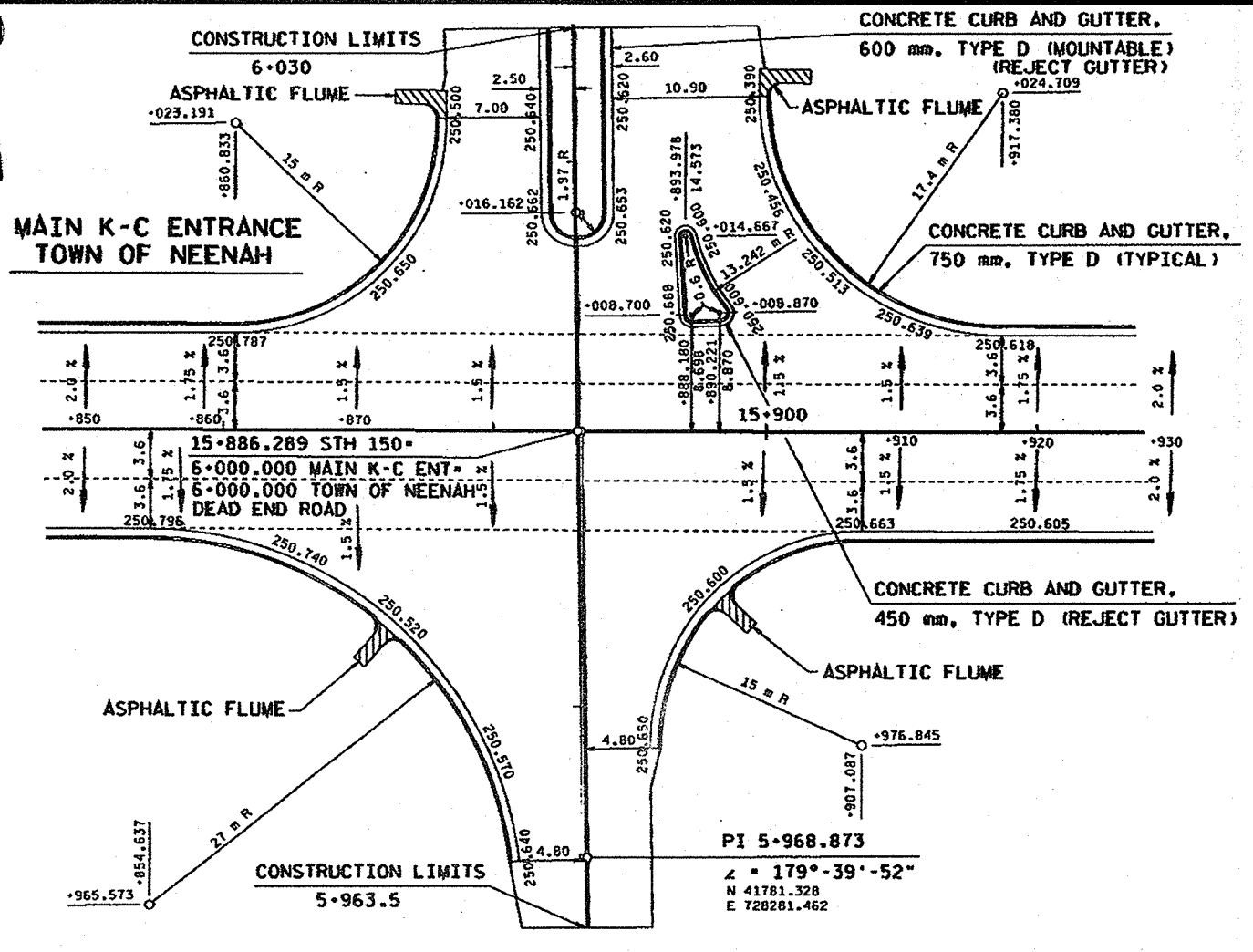
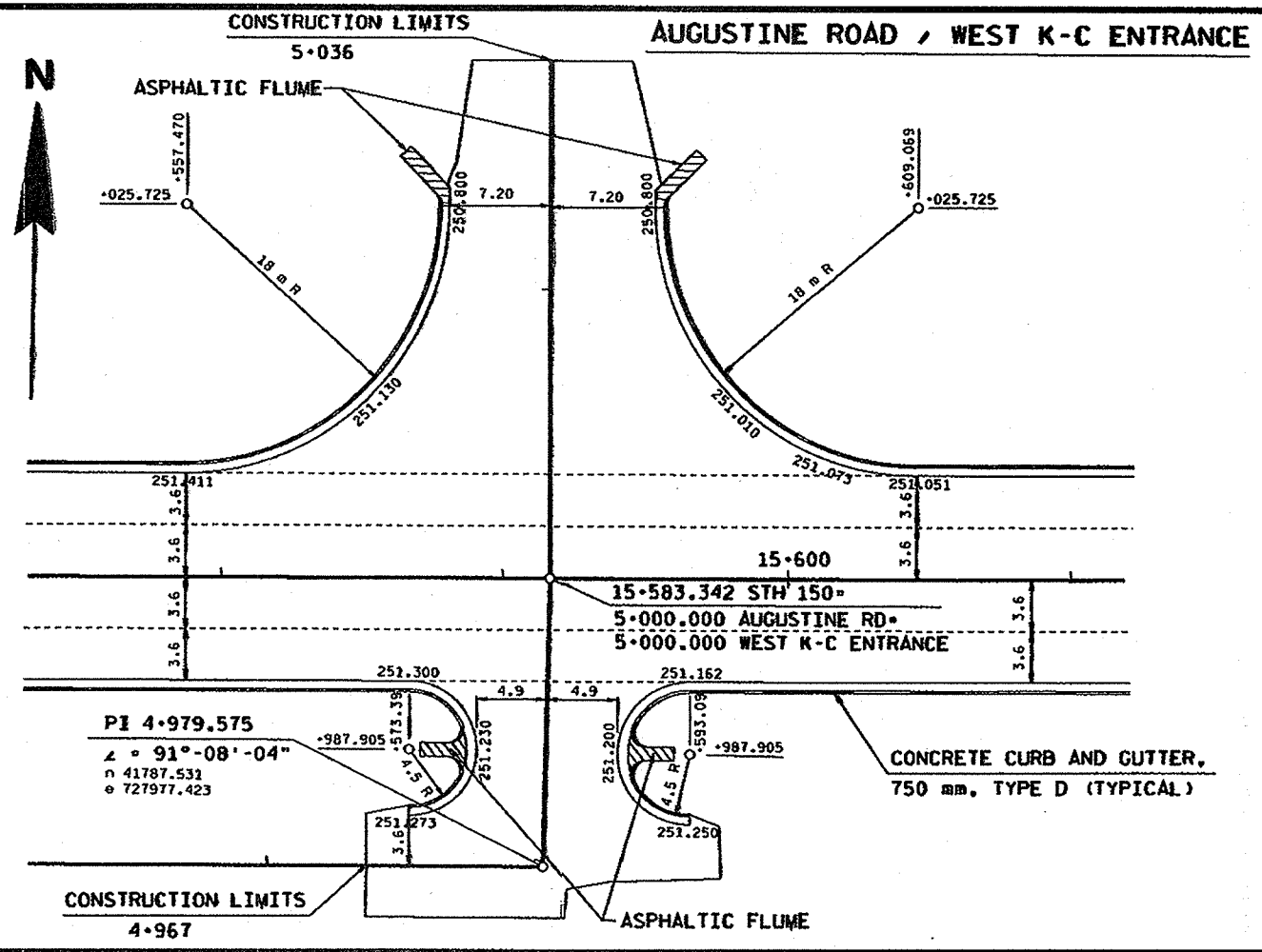
EAST K-C ENTRANCE



CONSTRUCTION DETAILS

SCALE: 1:250 HWY: STH 150

AUGUSTINE ROAD / WEST K-C ENTRANCE



COUNTY: WINNEBAGO

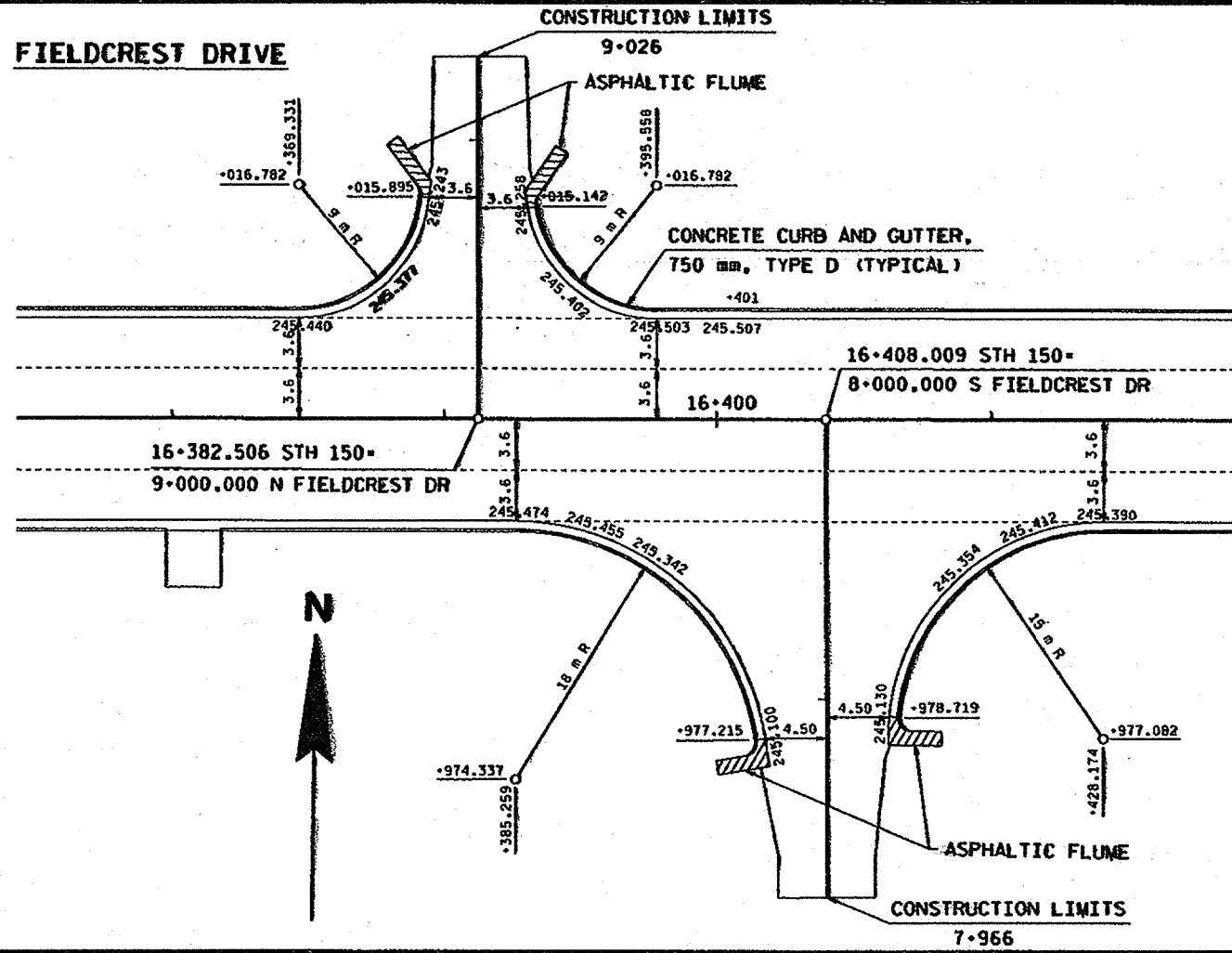
STATE PROJECT NO: 6448-03-71

SHEET NO: 2.14

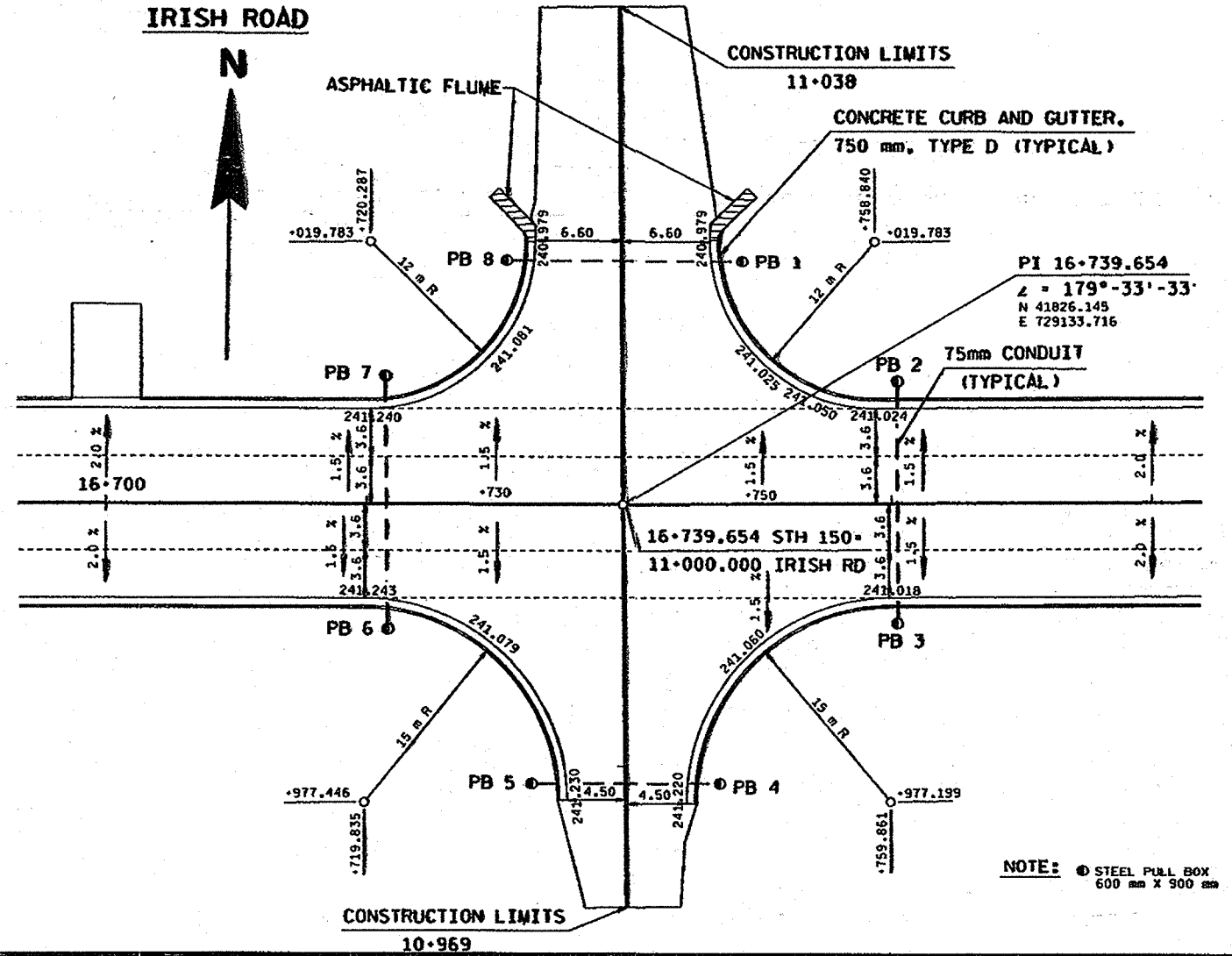
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FILE NAME: F:\d3\644803\203.dgn
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 REV. DATE: 12-16-98
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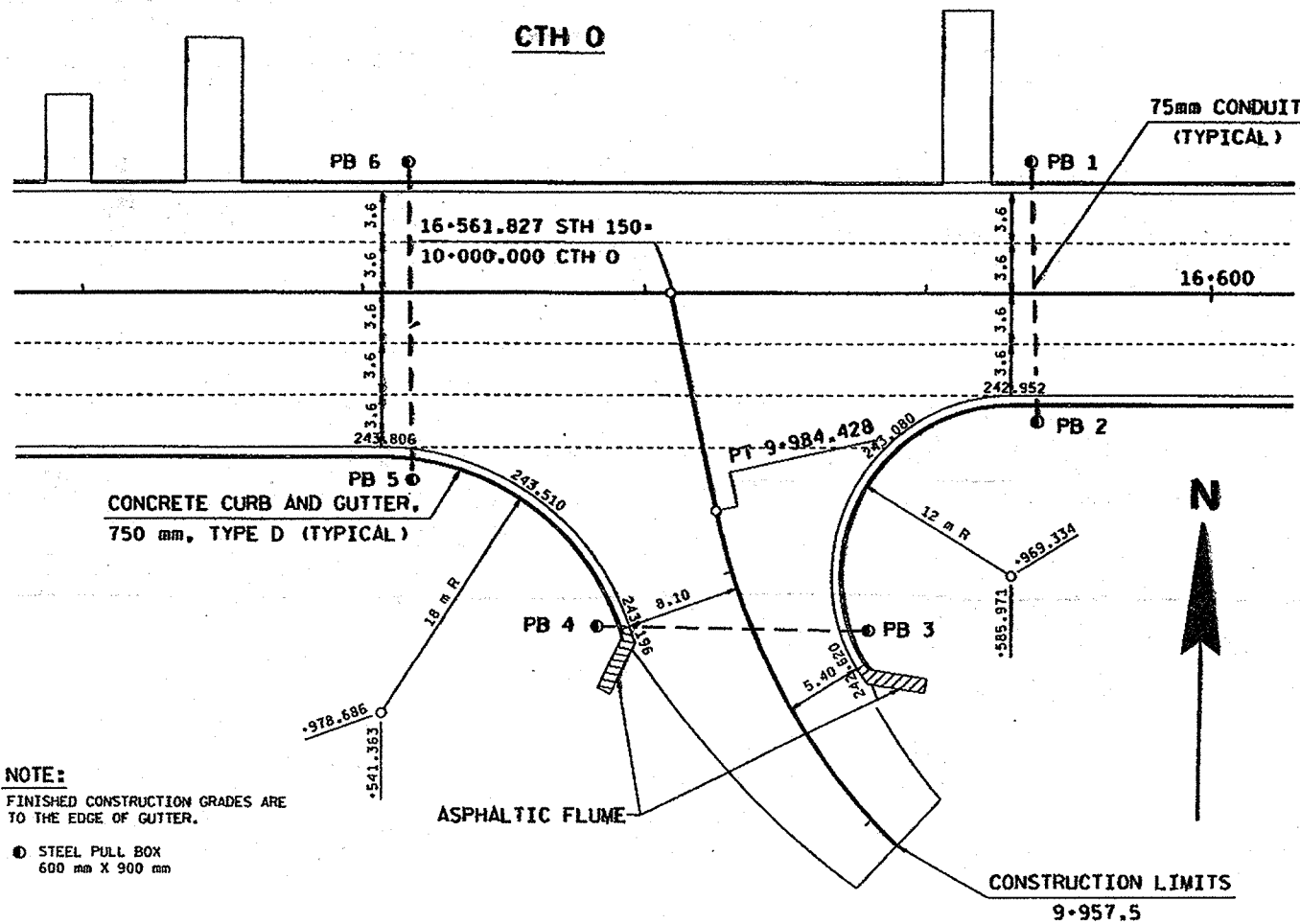
FIELDCREST DRIVE



IRISH ROAD

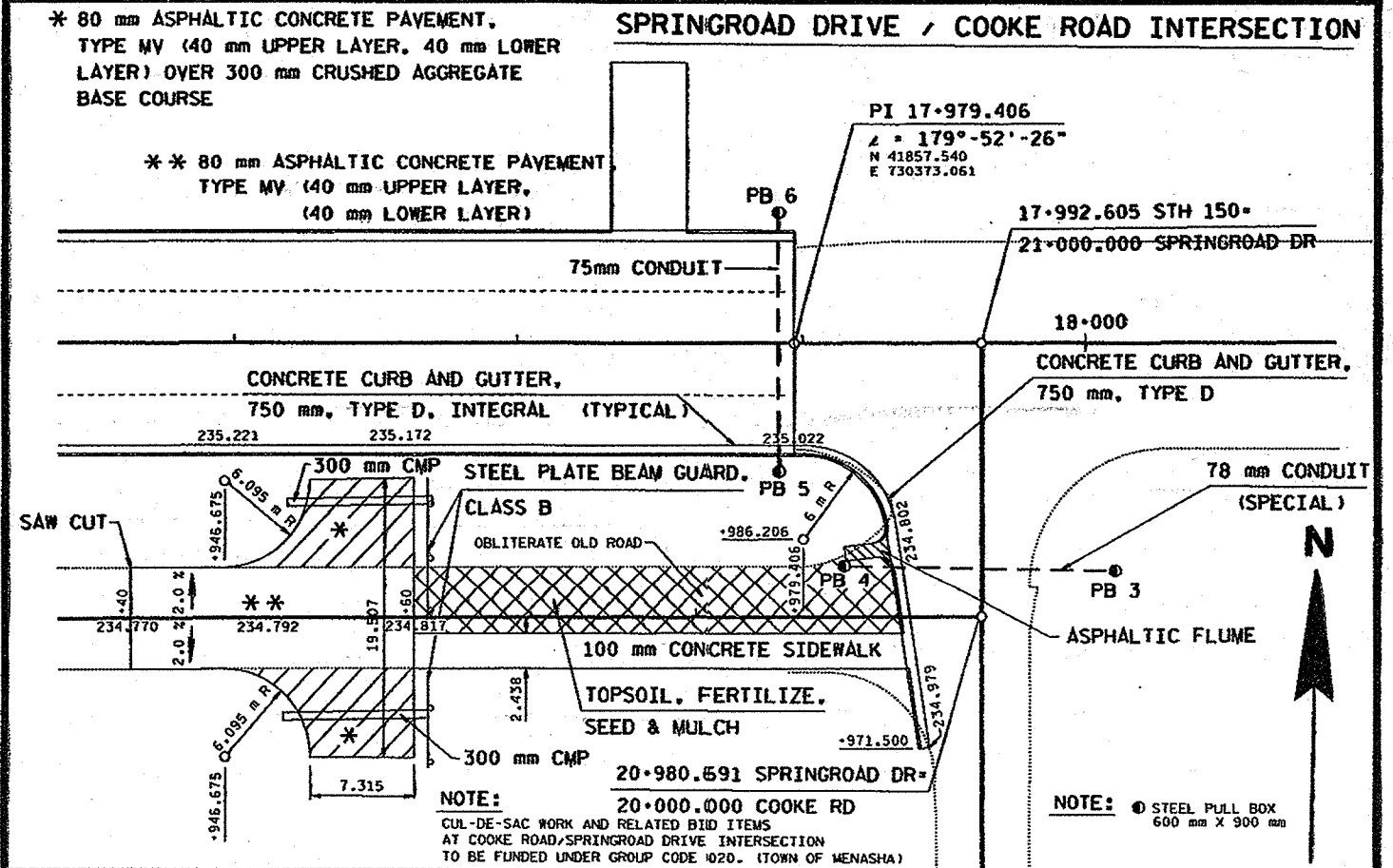


CTH 0



NOTE:
 FINISHED CONSTRUCTION GRADES ARE TO THE EDGE OF GUTTER.
 ● STEEL PULL BOX 600 mm X 900 mm

SPRINGROAD DRIVE / COOKE ROAD INTERSECTION



CONSTRUCTION DETAILS

SCALE: 1:250 HWY: STH 150

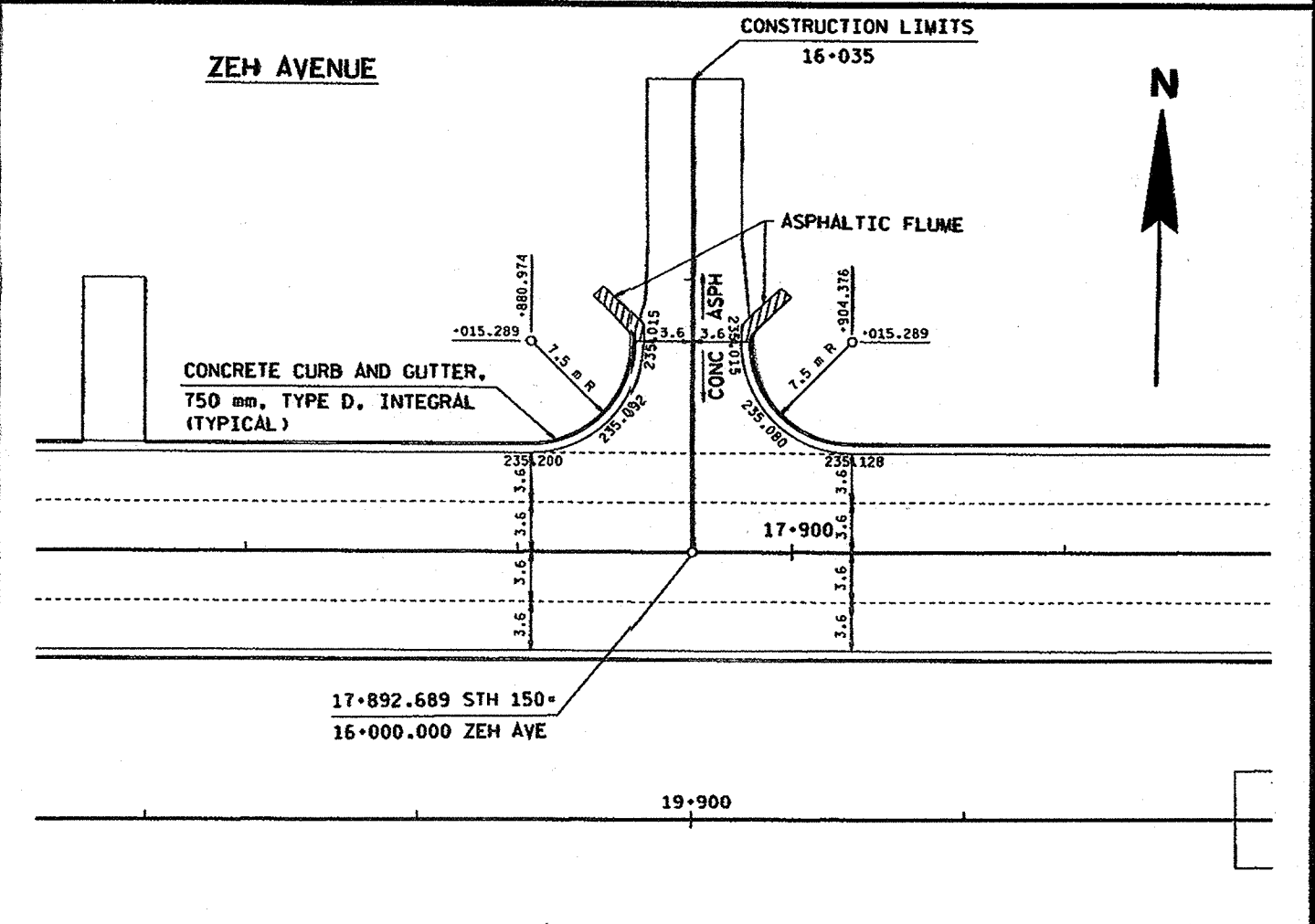
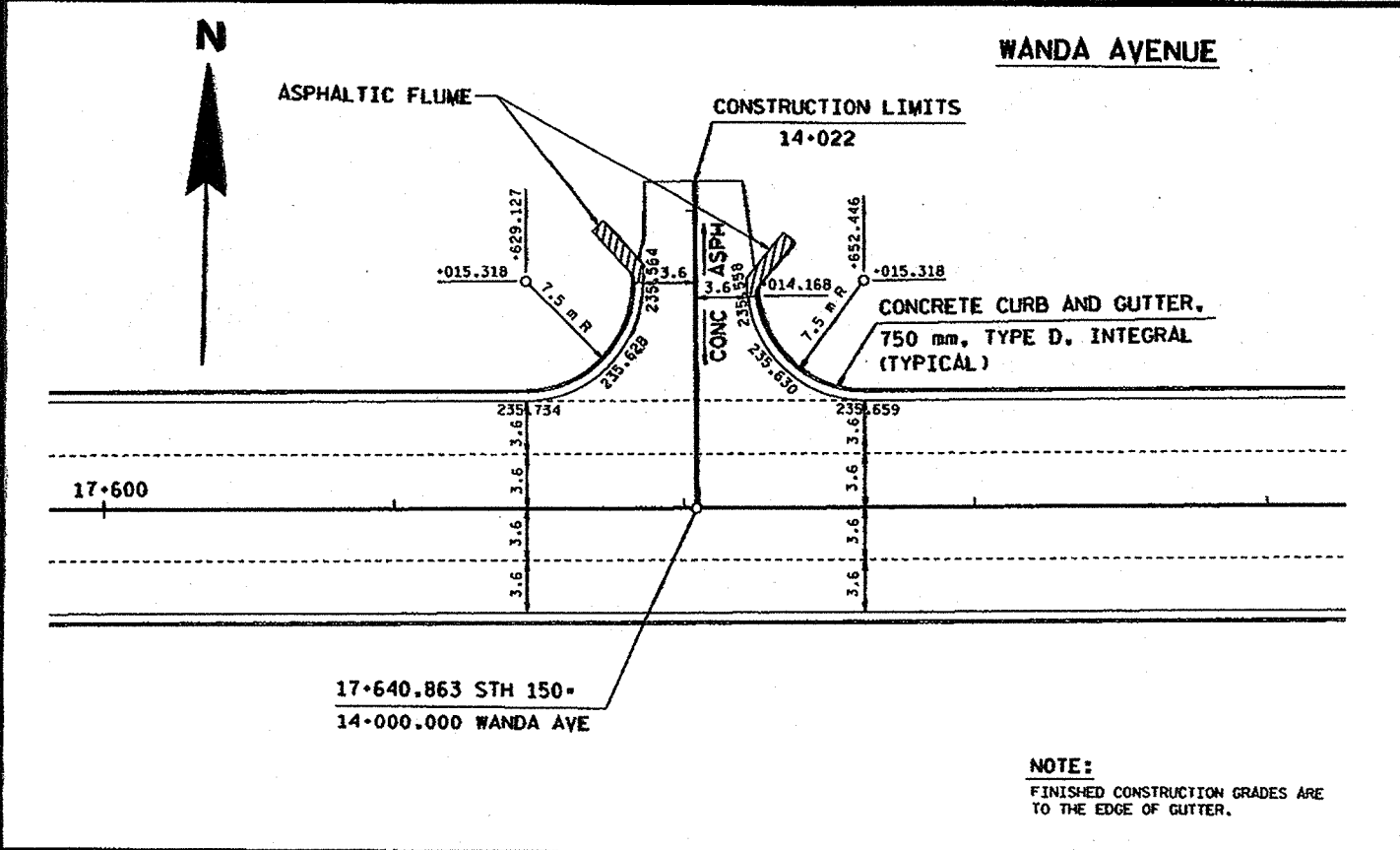
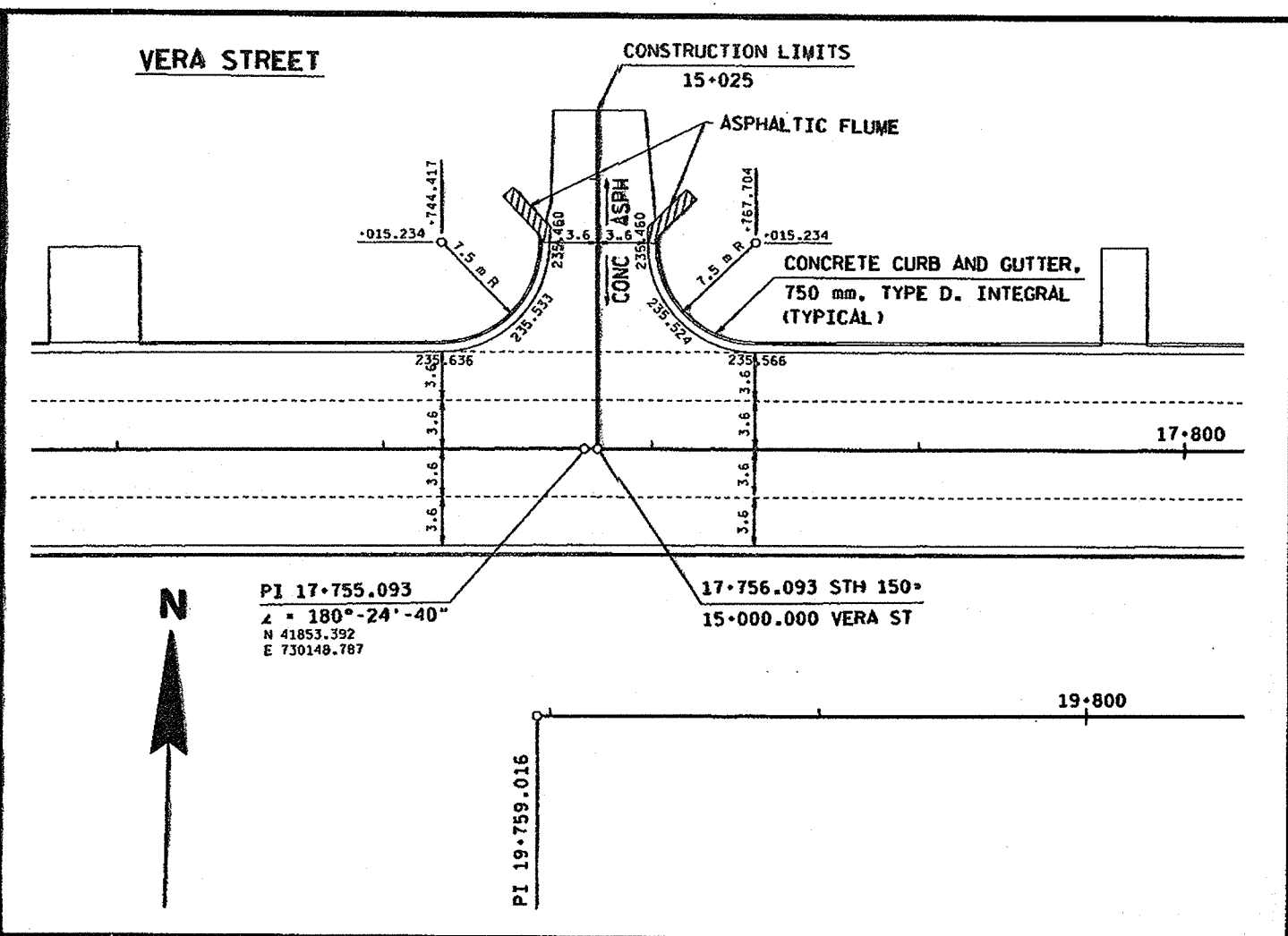
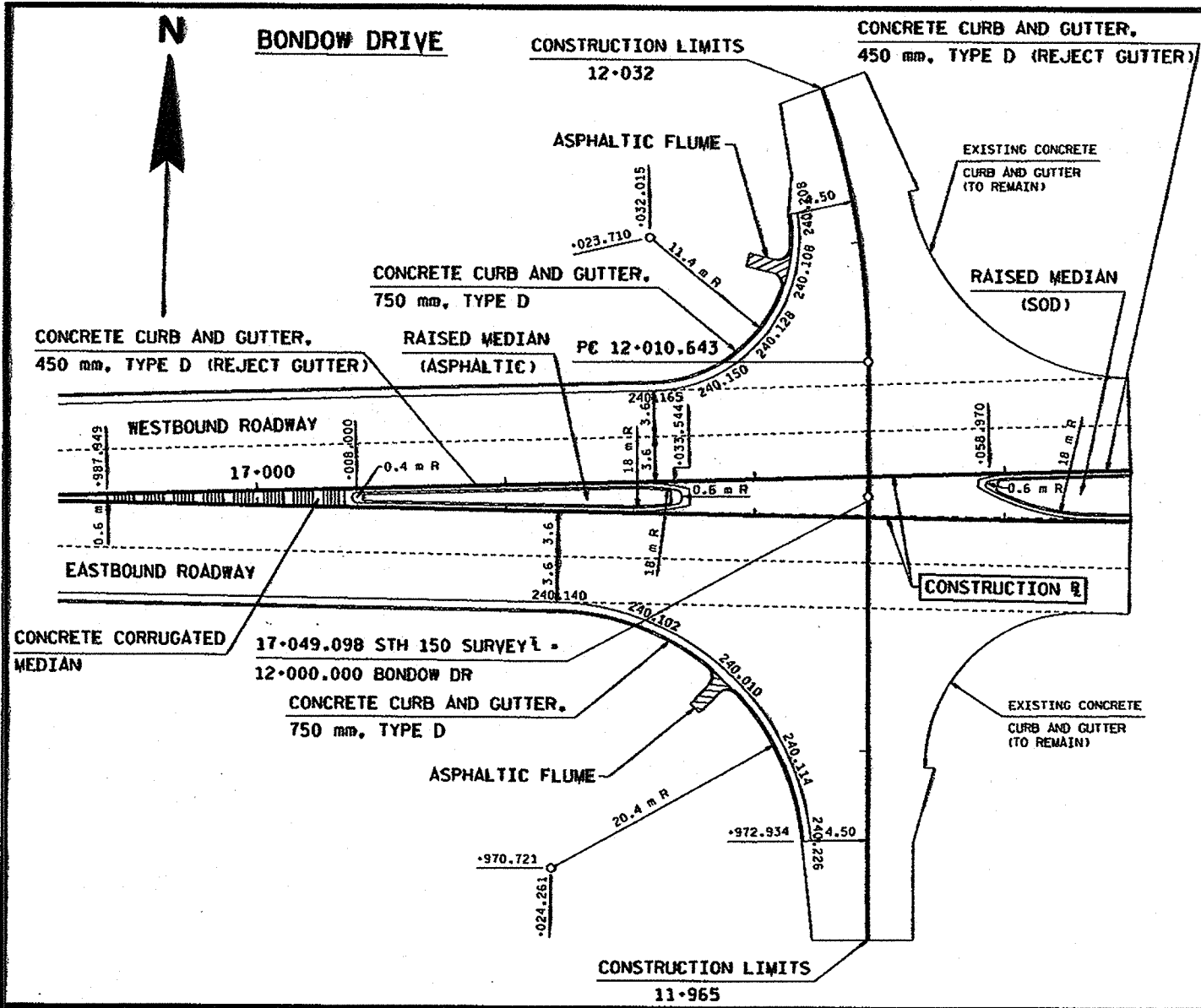
COUNTY: WINNEBAGO

STATE PROJECT NO: 6448-03-71

SHEET NO: 2.15

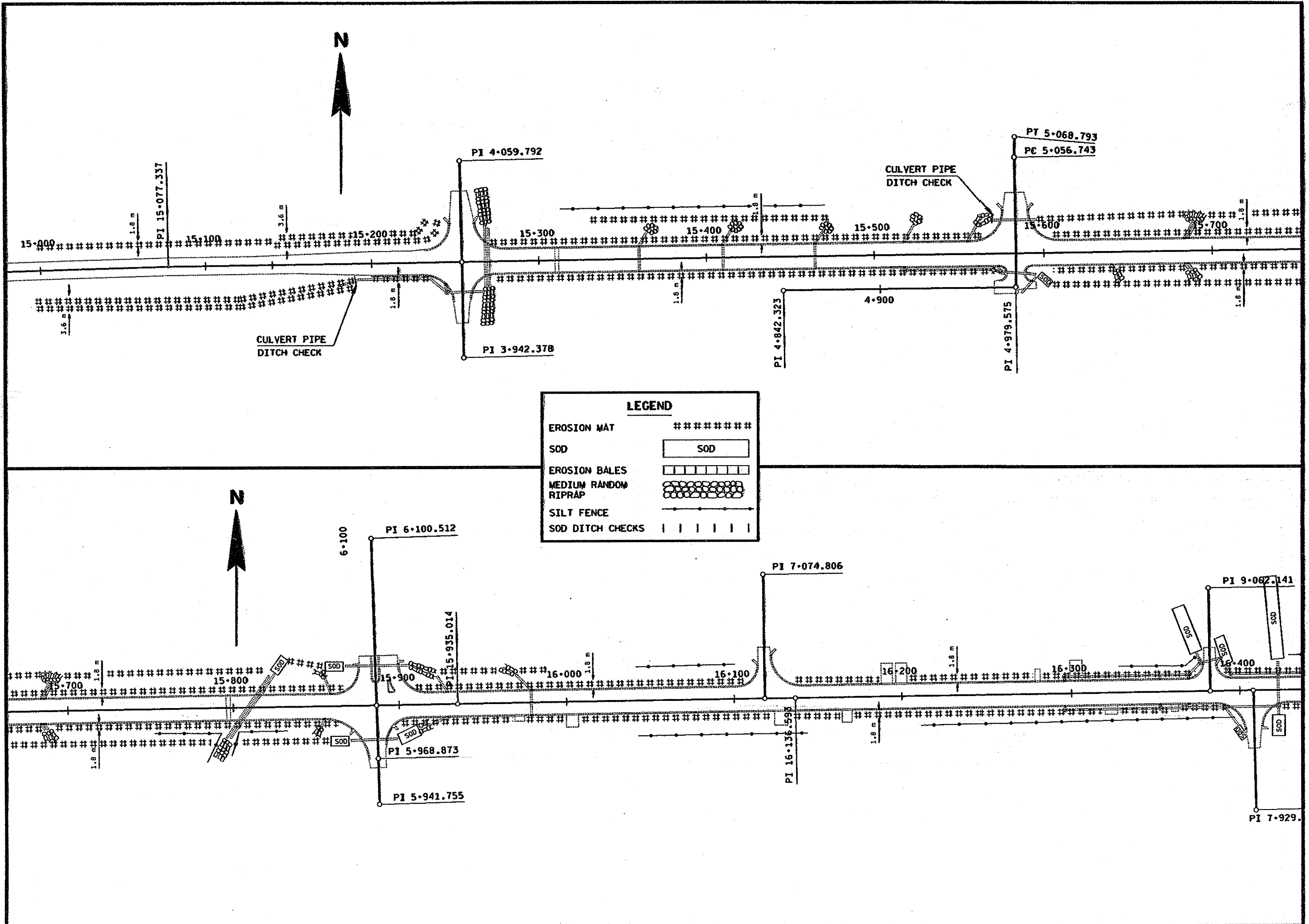
M 16

FILE NAME: F:\03-644803\203.dwg
 ORIGINATOR: DISTRICT 3 11-2-98
 REV. DATE: 12-18-98
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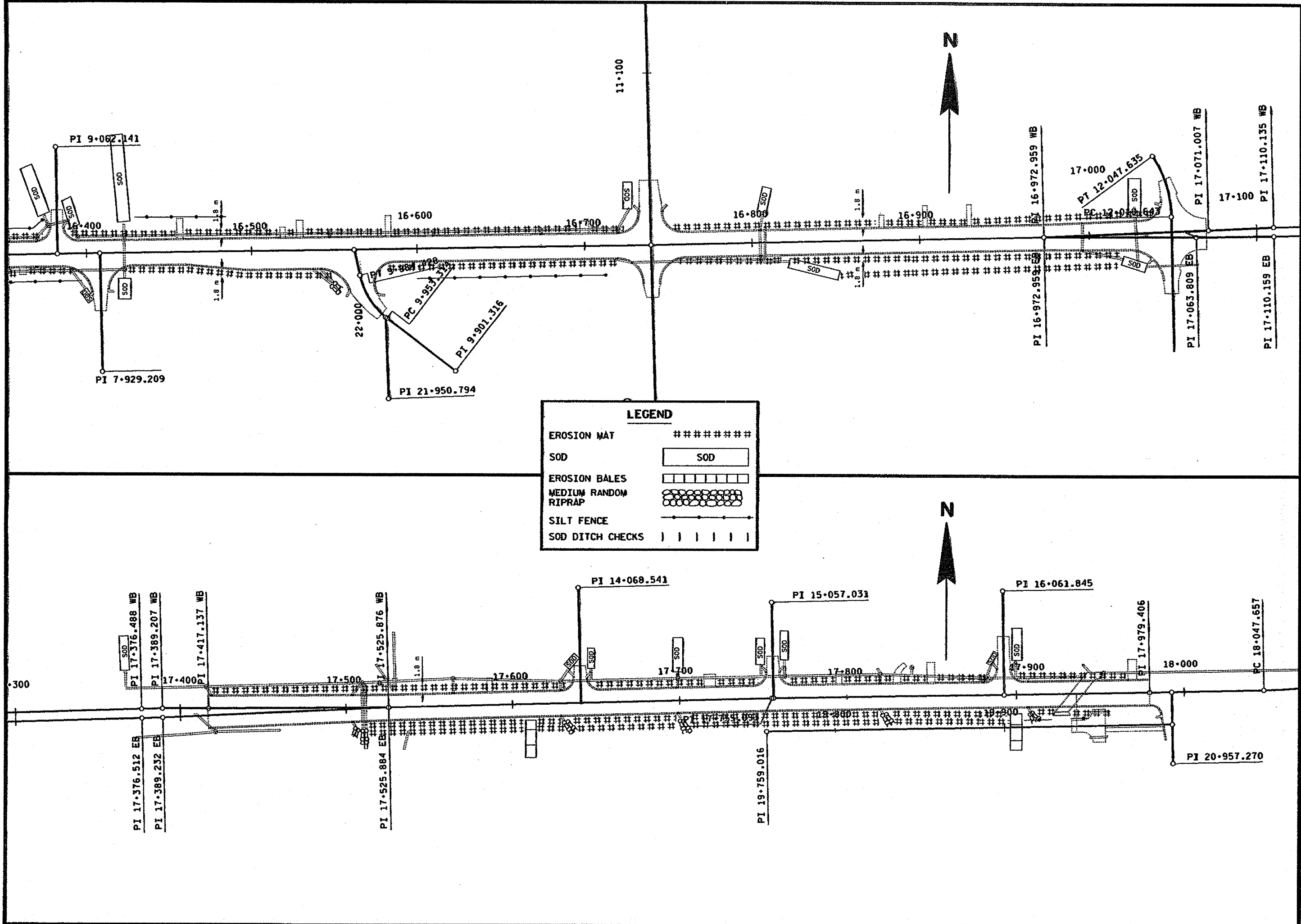
NOTE:
 FINISHED CONSTRUCTION GRADES ARE TO THE EDGE OF GUTTER.

FILE NAME: F:\43-644803\2086.dwg
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 PLOT NAME: 2086



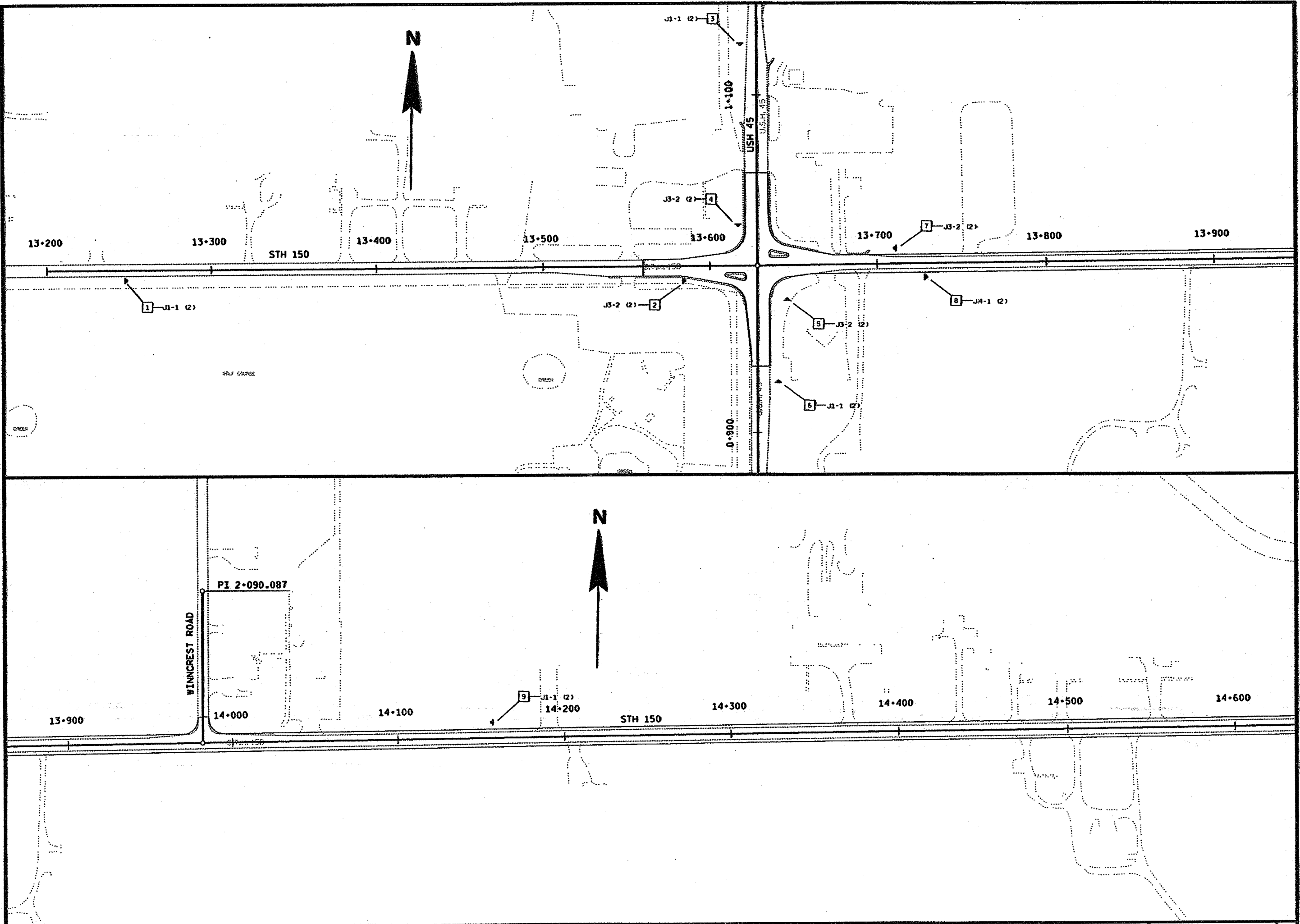
LEGEND	
EROSION MAT	#####
SOD	SOD
EROSION BALES	[Symbol]
MEDIUM RANDOM RIPRAP	[Symbol]
SILT FENCE	[Symbol]
SOD DITCH CHECKS	[Symbol]

FILE NAME: F:\d3-644803\208.dwg
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 PLOT SCALE: 2:0145001:1000000
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 PLOT NAME: 208B
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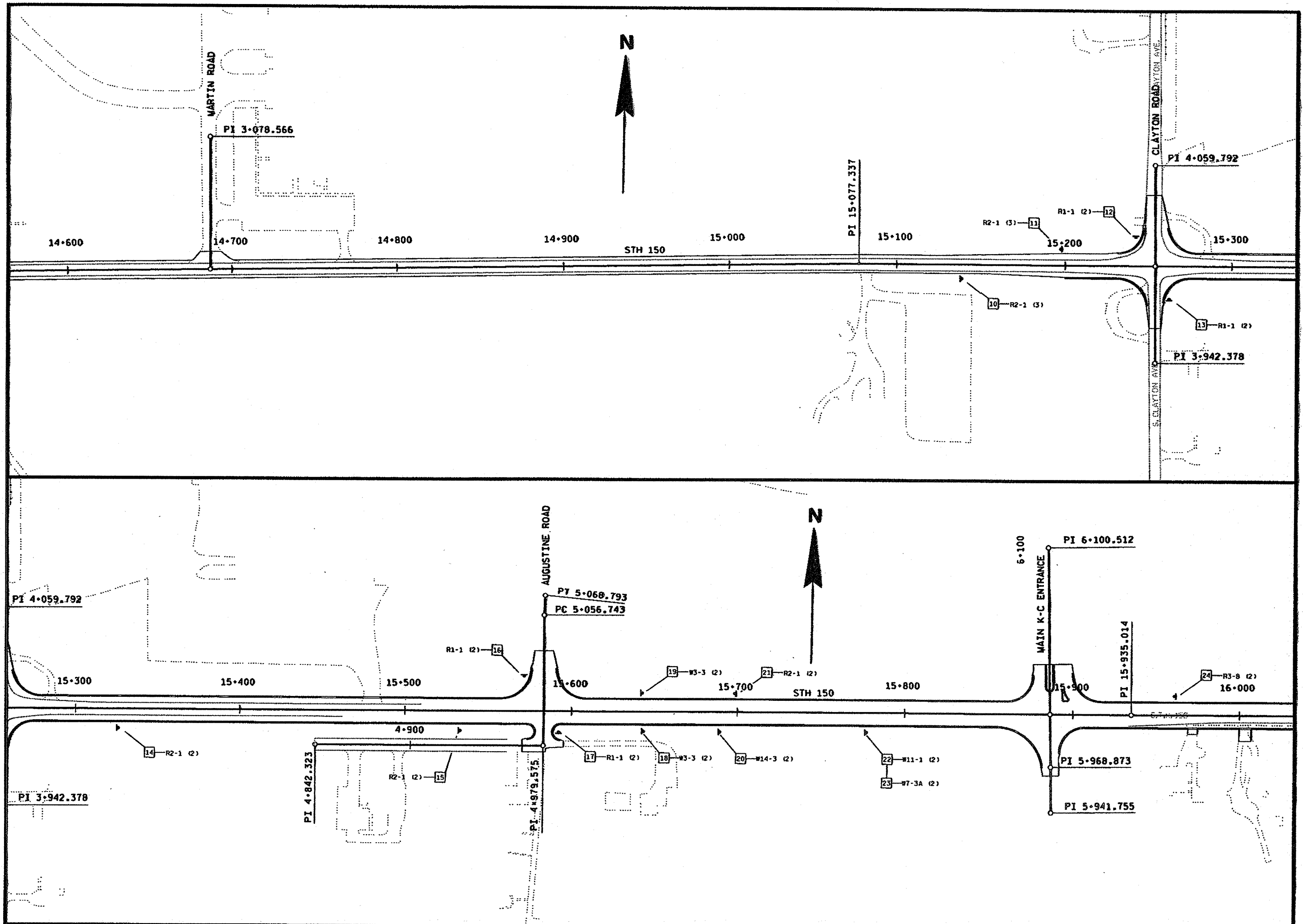


LEGEND	
EROSION MAT	#####
SOD	
EROSION BALES	
MEDIUM RANDOM RIPRAP	
SILT FENCE	
SOD DITCH CHECKS	

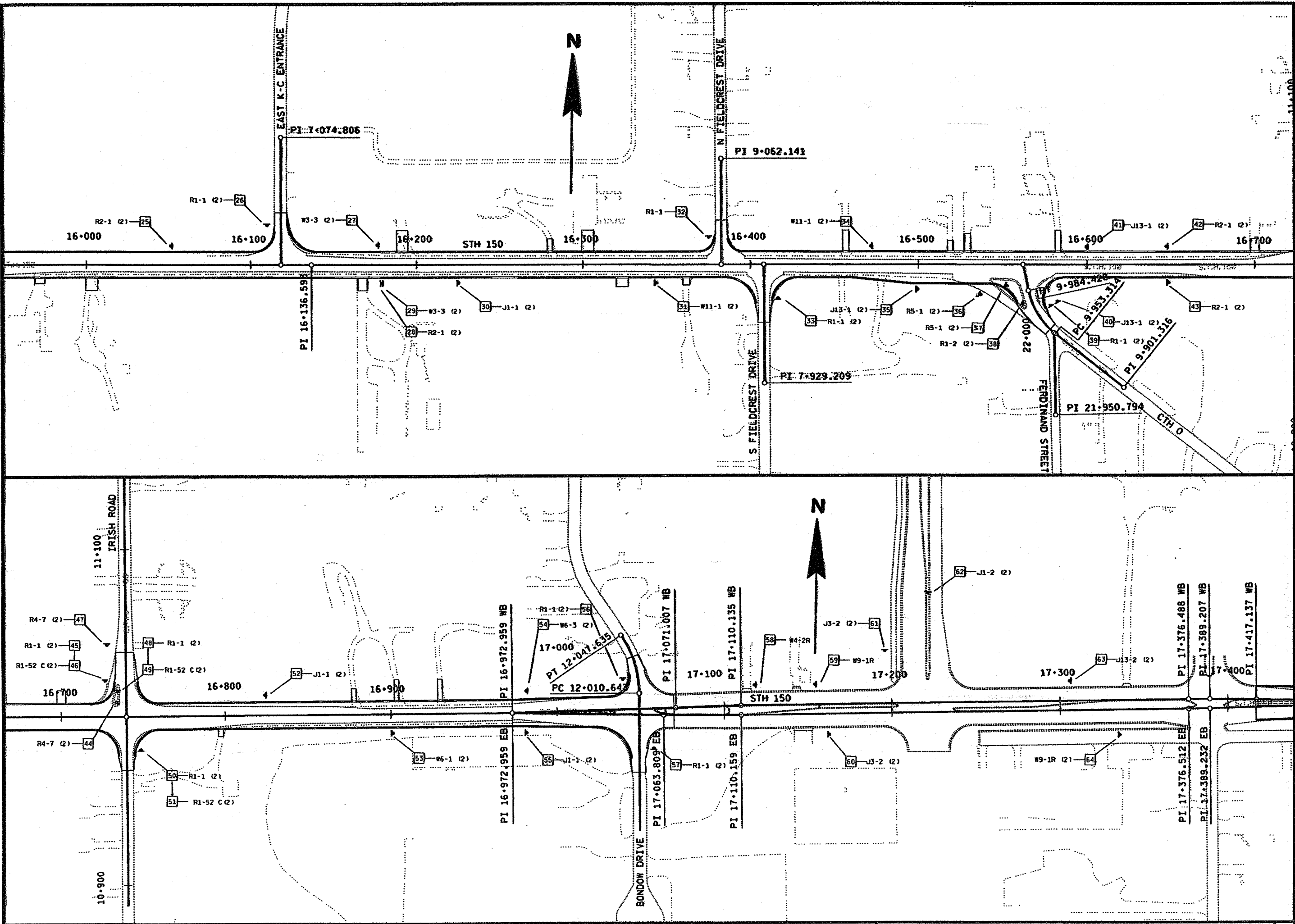
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REV. DATE: 11-30-98
PLOT SCALE: 2.0200001000000
PLOT DATE: 01-DEC-1998 08:31



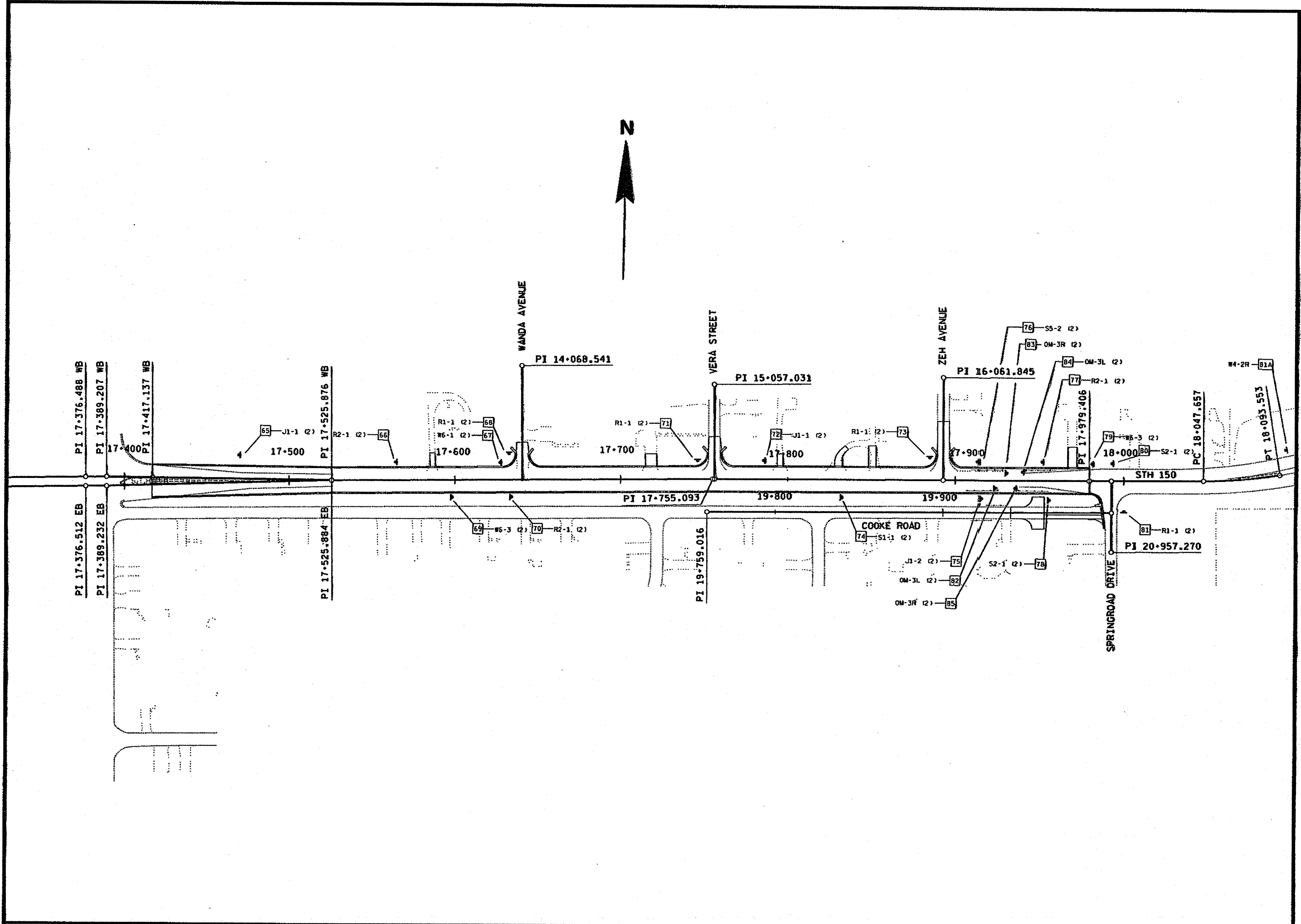
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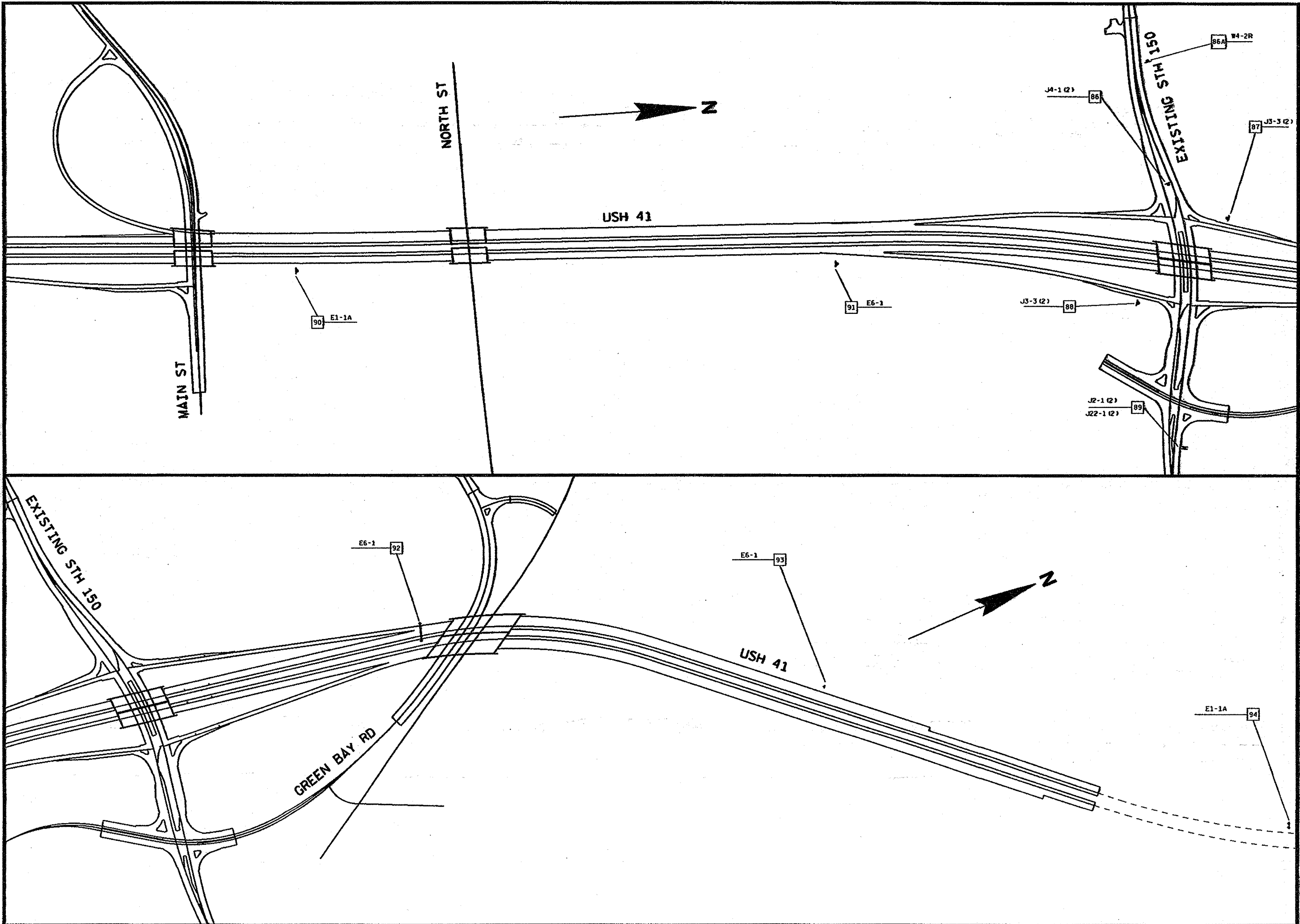
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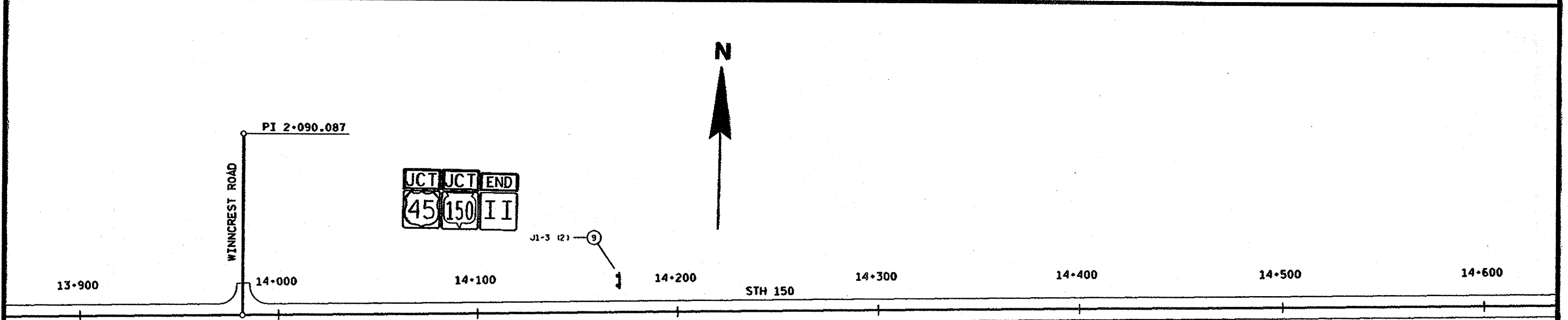
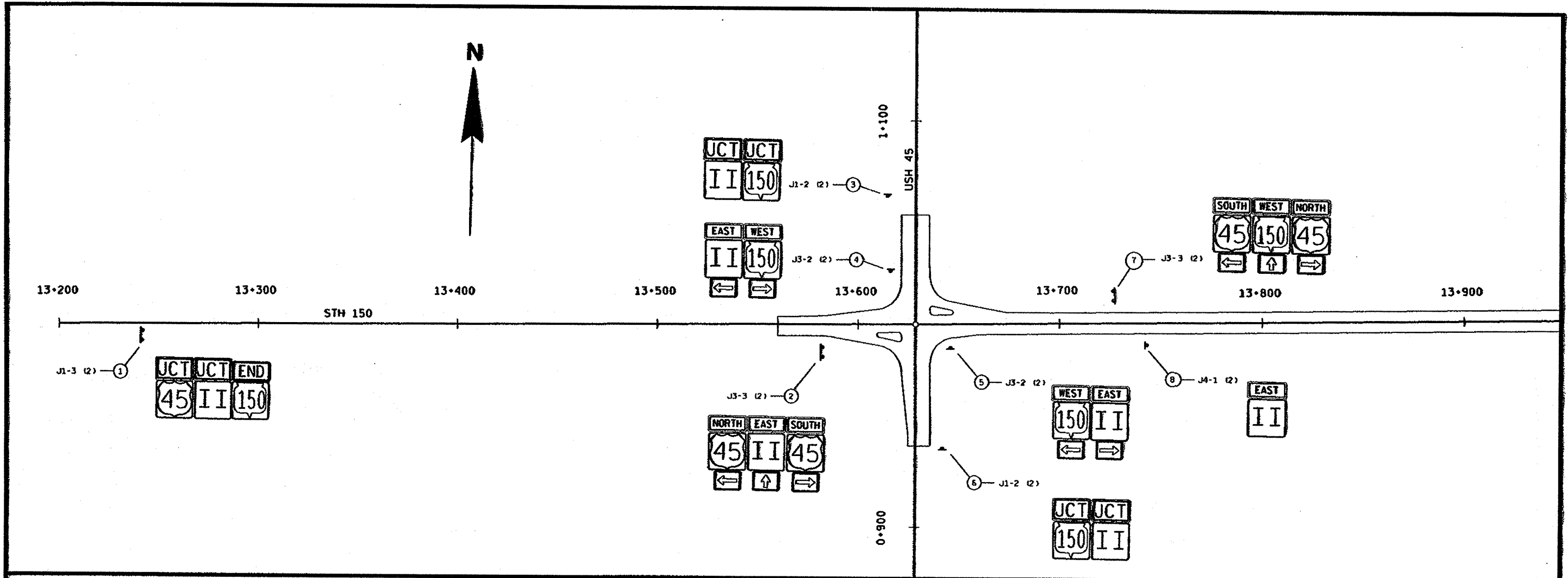
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 PLOT SCALE: 2.02000011.000000
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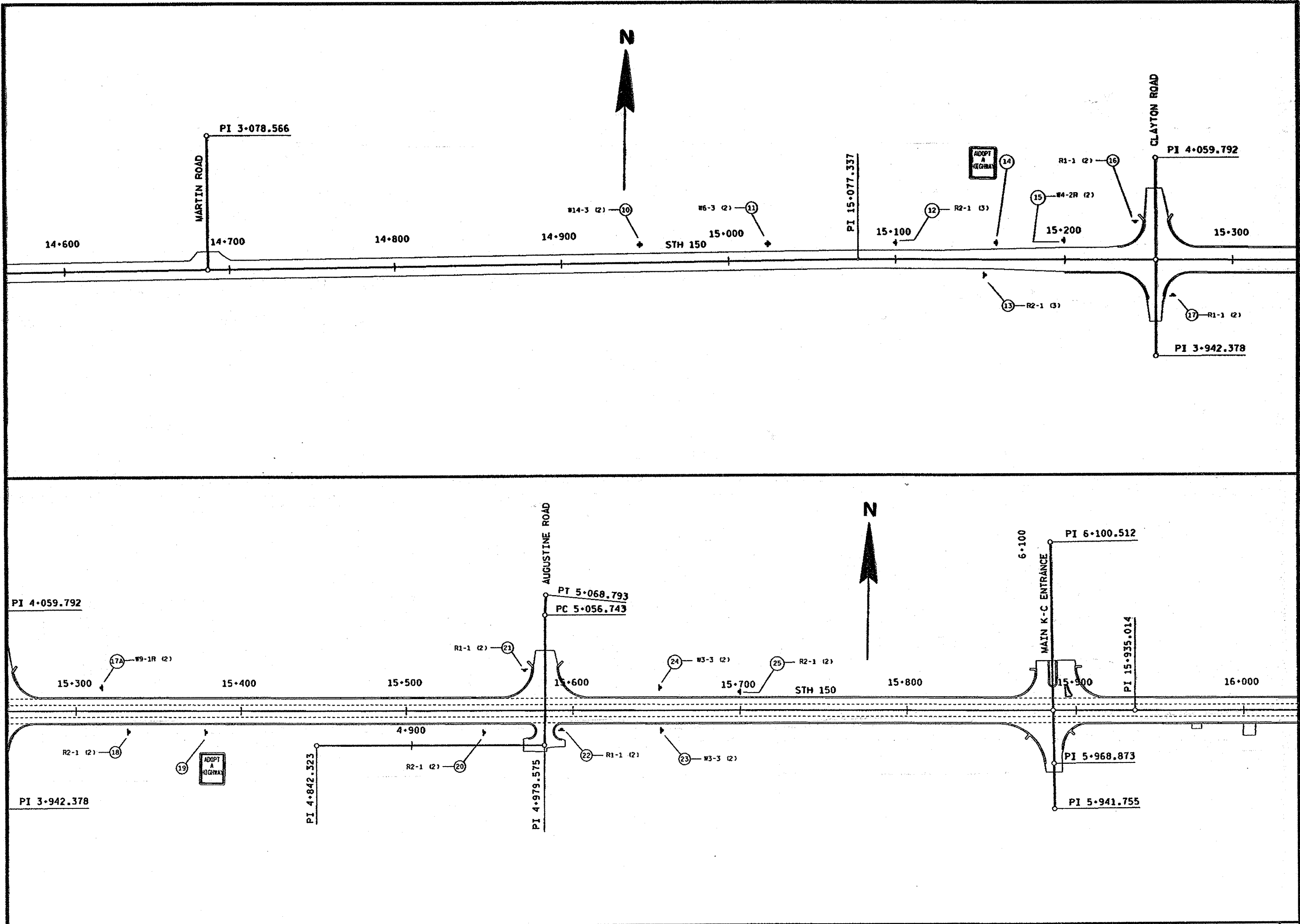
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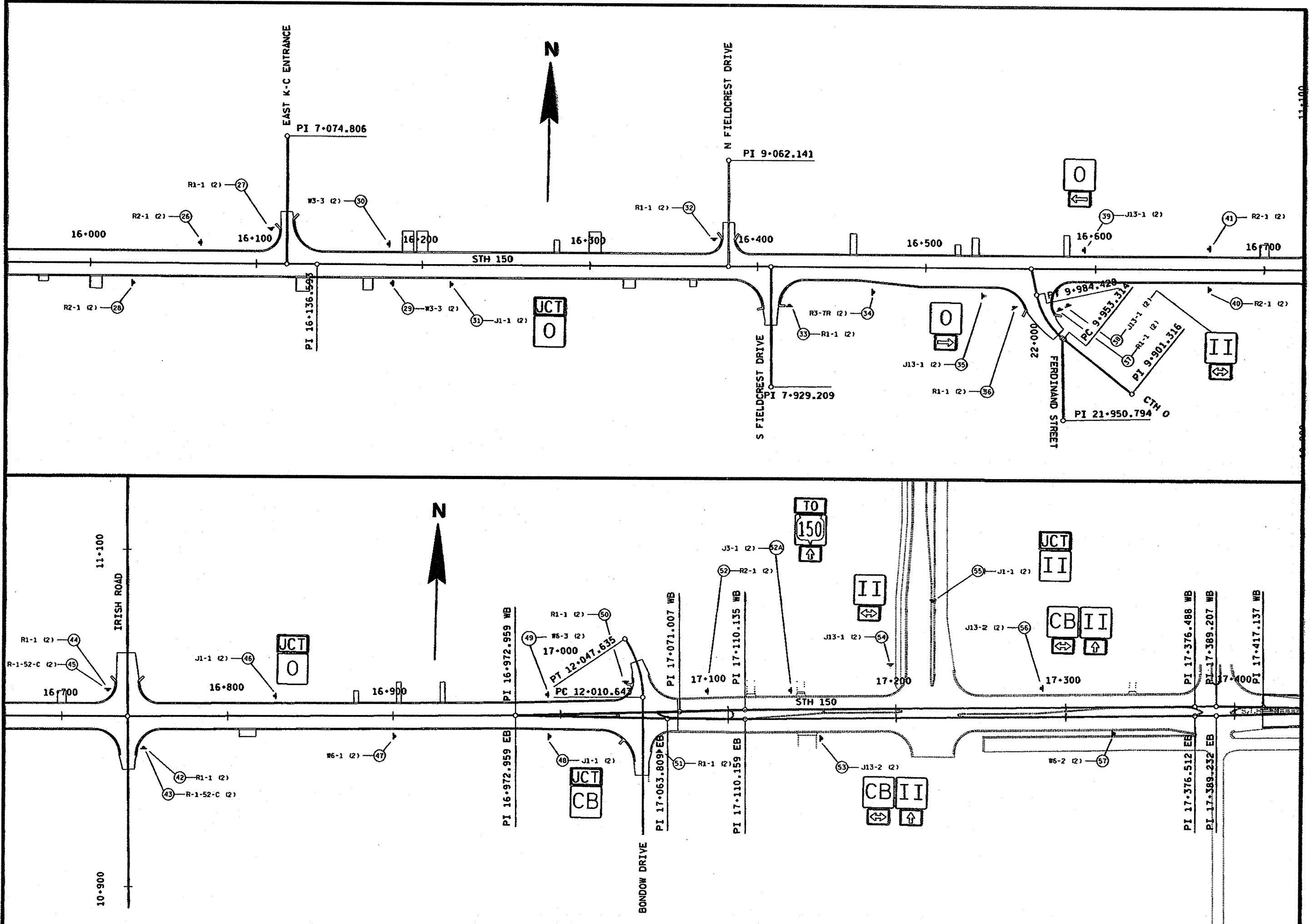
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 REV. DATE: 12-15-98
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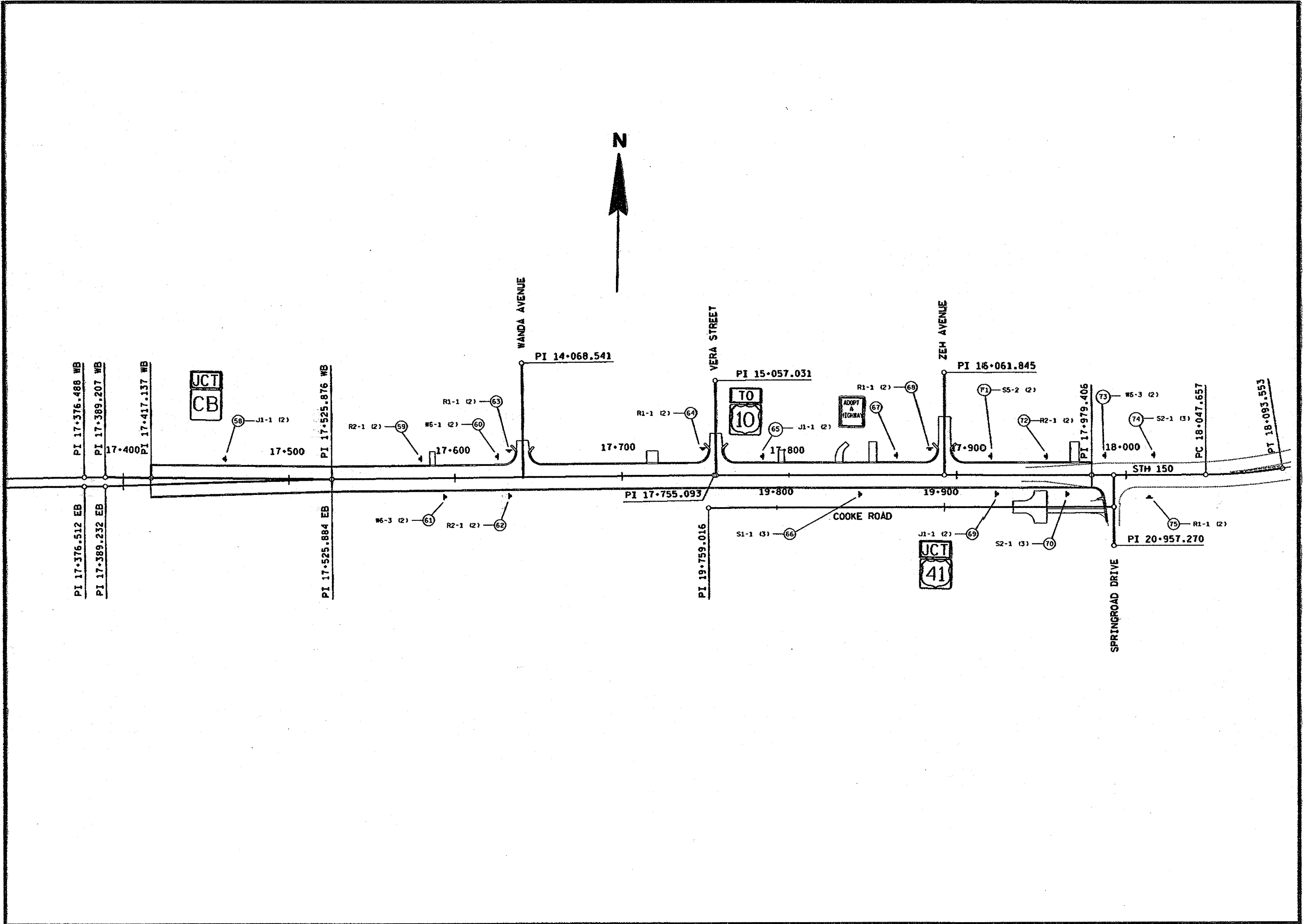
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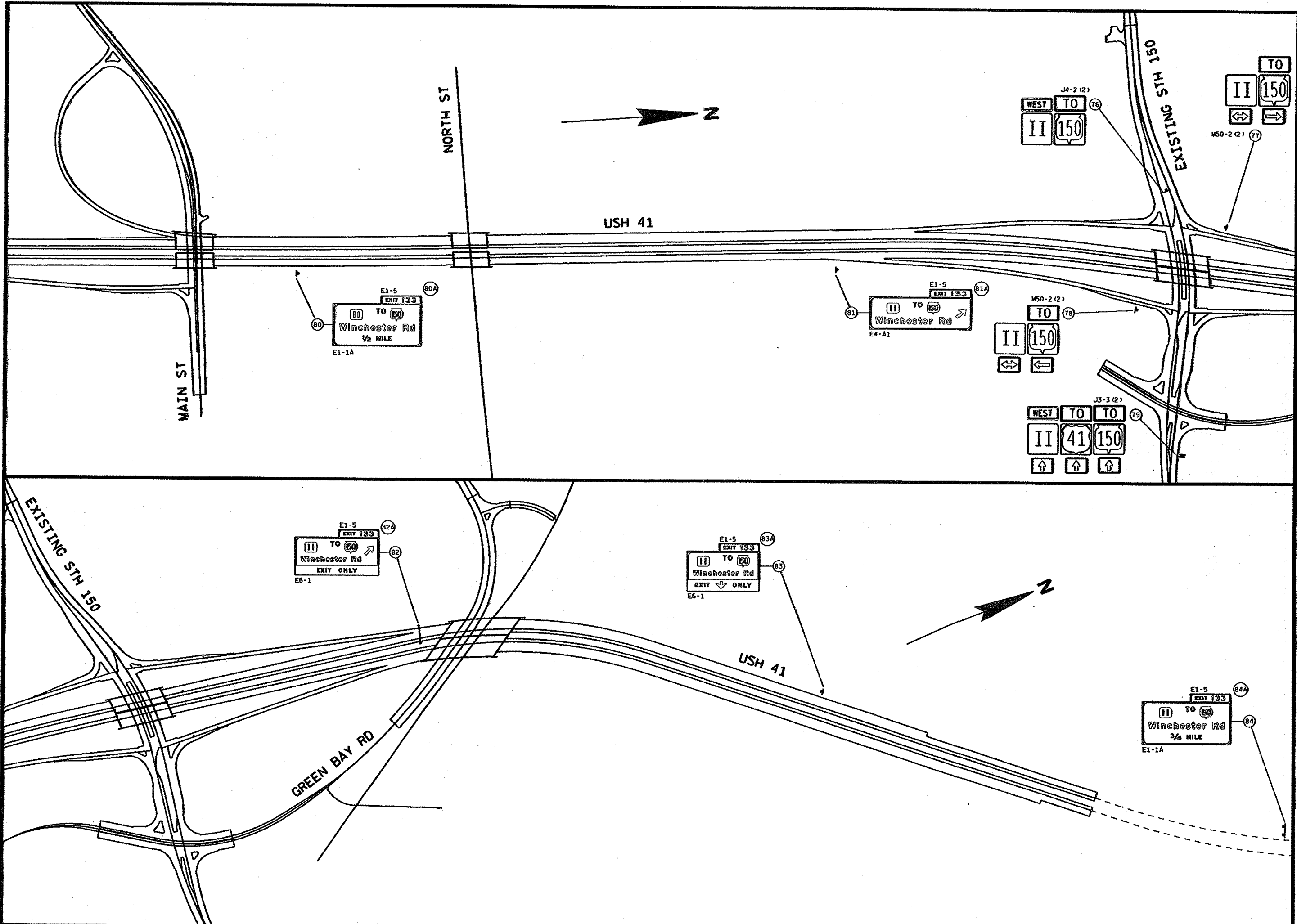
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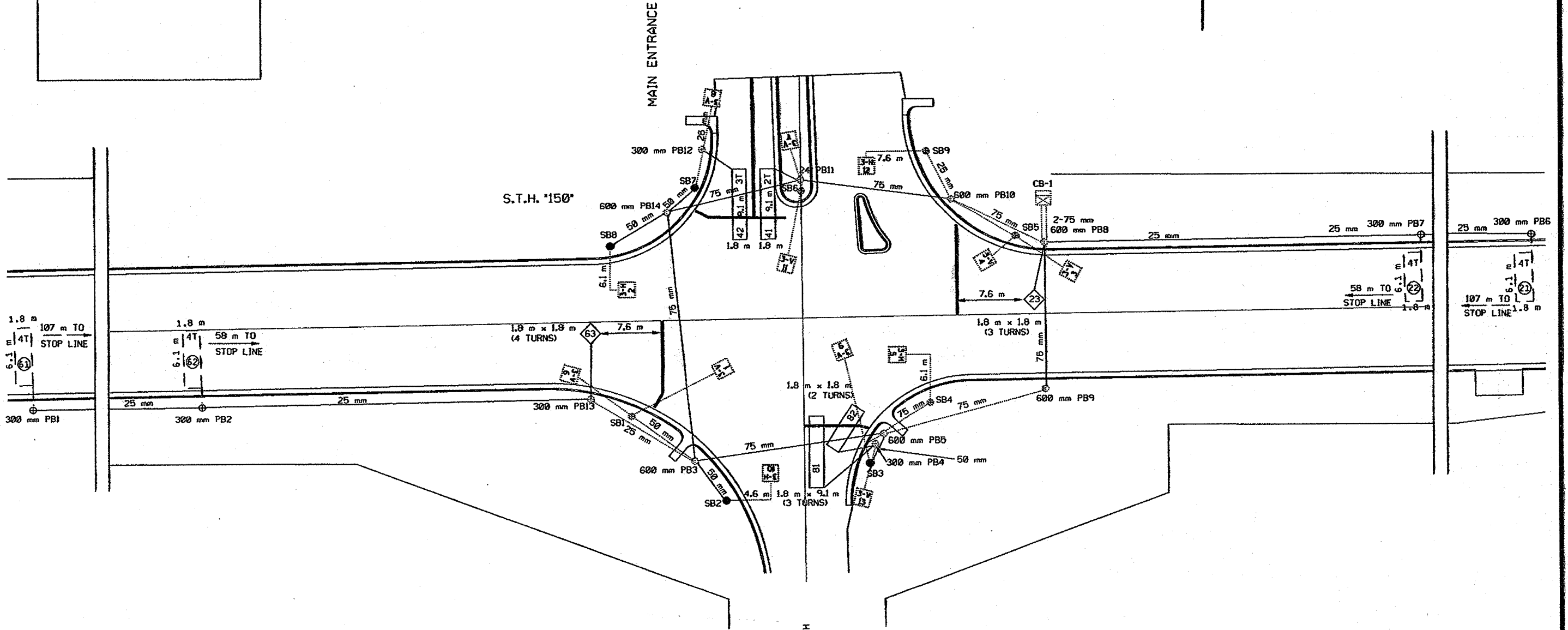


PLOT SCALE: 51.52
 PLOT NAME: SIG87S150
 REV. DATE: 29
 20
 ORIGINATOR: DIST. 3, KRUEGER, 12-16-98
 LEVELS ON *
 FILE NAME: D3 TRAFFI:TFSIG87S.DGN

LEGEND

- SIGNAL HEAD, PEDESTAL MOUNT, TYPE 1 BASE
- SIGNAL HEAD, MAST ARM MOUNT, TYPE 2 BASE, LUMINAIRE
- ⊕ PULL BOX 300 mm x 600 mm
- ⊙ PULL BOX 600 mm x 900 mm
- CONDUIT
- ☒ CONTROLLER CABINET
- ▭ LOOP DETECTOR IN CONDUIT

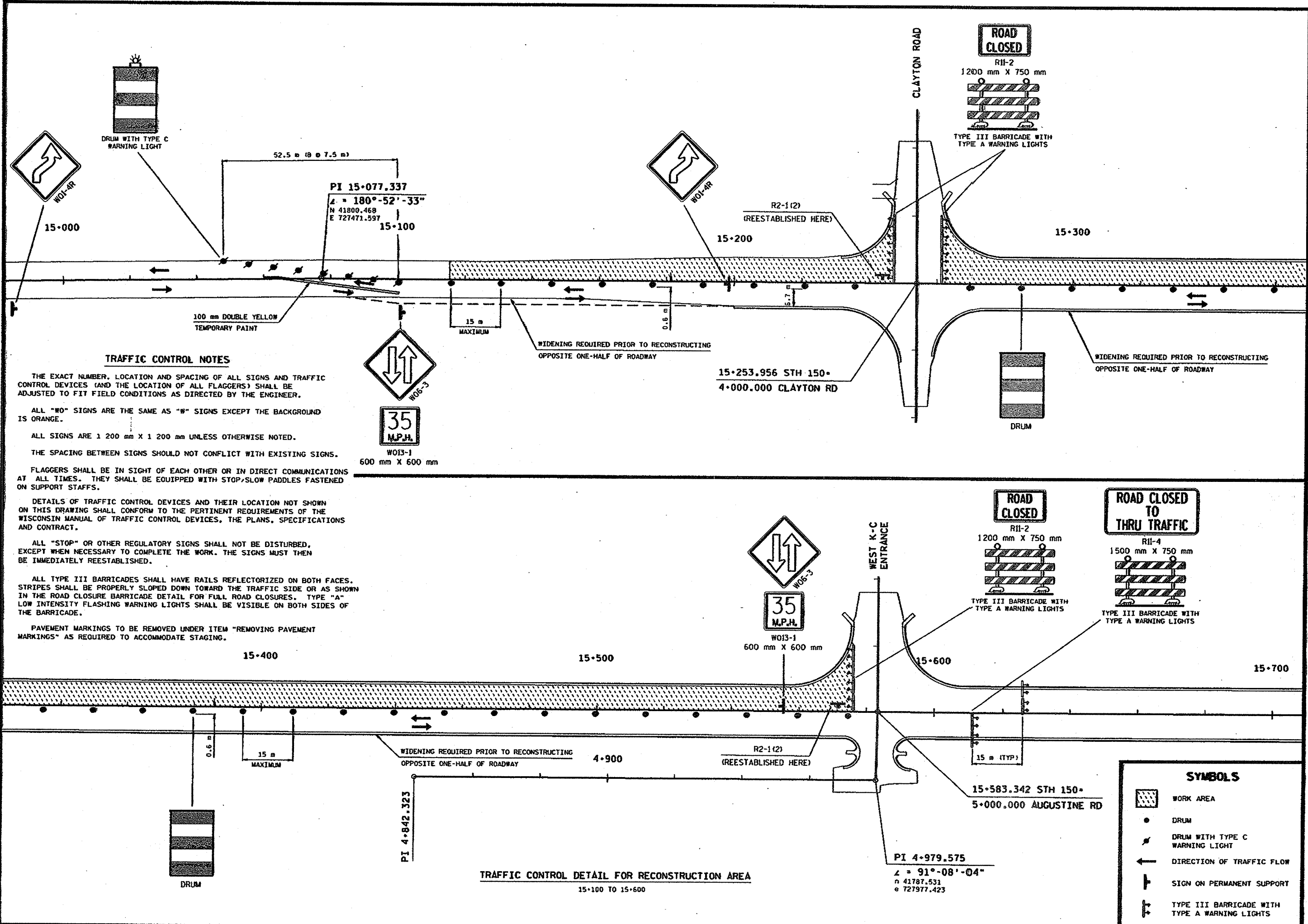
- CONSTRUCTION NOTES:**
1. • DISTANCE IS FROM FRONT, CENTER OF LOOP
 2. THE EXACT LOCATIONS FOR PULL BOXES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. THE W.D.O.T. WILL LOCATE CONCRETE BASES AND LOOP DETECTORS.
 3. PAVEMENT MARKINGS SHOWN ARE FOR SIGNAL LAYOUT PURPOSES ONLY.



SIGNAL HEAD CONFIGURATIONS	
3-4	3-14
1,2,4, 5,7,8 9,11,12 13	2,5 10,12
NOTE: ALL LENSES ARE 300 mm	

TRAFFIC CONTROL SIGNAL	
STH 150 AT KIMBERLY CLARK ACCESS ROAD WINNEBAGO COUNTY	
SIGNAL NO. 285	
WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVAL RECOMMENDED	
Date _____	DISTRICT TRAFFIC ENGINEER
APPROVED	
Date _____	STATE TRAFFIC ENGINEER
DESIGNED BY:	PAGE OF

FILE NAME: F:\03-644803\206.dwg
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 ORIGINAL DIST: 3 (2066cd)
 REV. DATE: 2-8-99
 PLOT DATE: 08-FEB-1999 08:10
 PLOT SCALE: 1:100000:1:000000



TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND TRAFFIC CONTROL DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL "W0" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ARE 1 200 mm X 1 200 mm UNLESS OTHERWISE NOTED.

THE SPACING BETWEEN SIGNS SHOULD NOT CONFLICT WITH EXISTING SIGNS.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATIONS AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS.

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.

ALL "STOP" OR OTHER REGULATORY SIGNS SHALL NOT BE DISTURBED, EXCEPT WHEN NECESSARY TO COMPLETE THE WORK. THE SIGNS MUST THEN BE IMMEDIATELY REESTABLISHED.

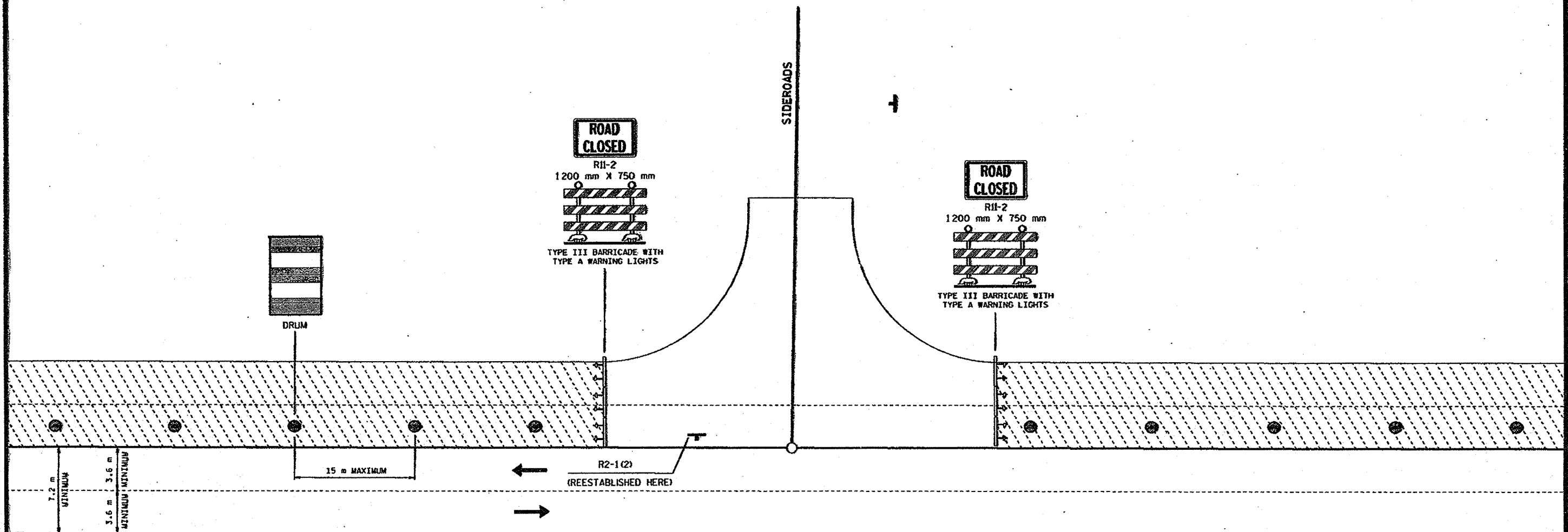
ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL FOR FULL ROAD CLOSURES. TYPE "A" LOW INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

PAVEMENT MARKINGS TO BE REMOVED UNDER ITEM "REMOVING PAVEMENT MARKINGS" AS REQUIRED TO ACCOMMODATE STAGING.

SYMBOLS

	WORK AREA
	DRUM
	DRUM WITH TYPE C WARNING LIGHT
	DIRECTION OF TRAFFIC FLOW
	SIGN ON PERMANENT SUPPORT
	TYPE III BARRICADE WITH TYPE A WARNING LIGHTS

FILE NAME: F:\03-644803\206.dgn
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 REV. DATE: 2-8-99
 PLOT SCALE: 1:1000000
 PLOT DATE: 08-FEB-1999 08:10
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TRAFFIC CONTROL DETAIL FOR WORK AREA PROTECTION
 DURING NON - CONSTRUCTION WORK HOURS

TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND TRAFFIC CONTROL DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ARE 1 200 mm X 1 200 mm UNLESS OTHERWISE NOTED.

THE SPACING BETWEEN SIGNS SHOULD NOT CONFLICT WITH EXISTING SIGNS.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATIONS AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS.

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.

ALL "STOP" OR OTHER REGULATORY SIGNS 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.

PAVEMENT MARKINGS TO BE REMOVED UNDER ITEM "REMOVING PAVEMENT MARKINGS" AS REQUIRED TO ACCOMMODATE STAGING.

SYMBOLS	
	WORK AREA
	DRUM
	DIRECTION OF TRAFFIC FLOW
	TYPE III BARRICADE WITH TYPE A WARNING LIGHTS

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 REV. DATE: 10-23-98
 PLOT SCALE: 1:1000
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 S:\168303\1\000000

Station on STH 150 SURVEY T/L	Station on STH 150 Westbound Const. R/L	Offset Distance
16+972.959	16+972.959	0.000
16+980.000	16+980.001	0.145 LT
16+990.000	16+990.004	0.351 LT
17+000.000	17+000.006	0.557 LT
17+010.000	17+010.008	0.763 LT
17+020.000	17+020.010	0.969 LT
17+030.000	17+030.012	1.175 LT
17+040.000	17+040.014	1.381 LT
17+050.000	17+050.016	1.587 LT
17+060.000	17+060.018	1.793 LT
17+064.649	17+064.668	1.889 LT
17+070.000	17+070.009	1.967 LT
17+080.000	17+080.010	2.157 LT
17+090.000	17+090.012	2.352 LT
17+100.000	17+100.014	2.546 LT
17+110.000	17+110.016	2.741 LT
17+120.000	17+120.016	2.743 LT
17+130.000	17+130.016	2.743 LT
17+370.000	17+370.016	2.743 LT
17+376.472	17+376.488	2.743 LT
17+380.000	17+380.024	2.743 LT
17+390.000	17+390.024	2.722 LT
17+400.000	17+400.027	2.472 LT
17+410.000	17+410.030	2.222 LT
17+420.000	17+420.033	1.990 LT
17+430.000	17+430.035	1.802 LT
17+440.000	17+440.037	1.614 LT
17+450.000	17+450.038	1.426 LT
17+460.000	17+460.040	1.238 LT
17+470.000	17+470.042	1.050 LT
17+480.000	17+480.044	0.862 LT
17+490.000	17+490.045	0.674 LT
17+500.000	17+500.047	0.486 LT
17+510.000	17+510.049	0.298 LT
17+520.000	17+520.051	0.110 LT
17+525.824	17+525.876	0.000

Station on STH 150 SURVEY T/L	Station on STH 150 Eastbound Const. R/L	Offset Distance
16+972.959	16+972.959	0.000
16+980.000	16+980.002	0.155 RT
16+990.000	16+990.004	0.376 RT
17+000.000	17+000.007	0.596 RT
17+010.000	17+010.009	0.817 RT
17+020.000	17+020.012	1.037 RT
17+030.000	17+030.014	1.258 RT
17+040.000	17+040.017	1.478 RT
17+050.000	17+050.019	1.699 RT
17+060.000	17+060.021	1.919 RT
17+064.649	17+064.671	2.011 RT
17+070.000	17+070.035	2.098 RT
17+080.000	17+080.037	2.259 RT
17+090.000	17+090.038	2.420 RT
17+100.000	17+100.039	2.580 RT
17+110.000	17+110.040	2.741 RT
17+120.000	17+120.040	2.743 RT
17+130.000	17+130.040	2.743 RT
17+370.000	17+370.040	2.743 RT
17+376.472	17+376.512	2.743 RT
17+380.000	17+380.033	2.743 RT
17+390.000	17+390.033	2.727 RT
17+400.000	17+400.035	2.526 RT
17+410.000	17+410.037	2.326 RT
17+420.000	17+420.039	2.125 RT
17+430.000	17+430.041	1.924 RT
17+440.000	17+440.043	1.723 RT
17+450.000	17+450.045	1.522 RT
17+460.000	17+460.047	1.322 RT
17+470.000	17+470.049	1.121 RT
17+480.000	17+480.051	0.920 RT
17+490.000	17+490.053	0.719 RT
17+500.000	17+500.055	0.518 RT
17+510.000	17+510.057	0.318 RT
17+520.000	17+520.059	0.117 RT
17+525.824	17+525.884	0.000

DATE 10FEB99

ESTIMATE OF QUANTITIES

SHEET: 3.1

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6448-03-71 QUANTITY
0010	20101	CLEARING	40M	4.00	4.00
0020	20102	CLEARING	25MM	238.00	238.00
0030	20104	GRUBBING	40M	4.00	4.00
0040	20105	GRUBBING	25MM	238.00	238.00
0050	20301	REMOVING OLD CULVERT, STATION 15+311	LS	1.00	1.00
0060	20302	REMOVING OLD CULVERT, STATION 15+797	LS	1.00	1.00
0070	20304	REMOVING OLD CULVERT, STATION 17+932.50	LS	1.00	1.00
0080	20330	REMOVING OLD CULVERTS STA. 16+807	EACH	1.00	1.00
0090	20401	REMOVING PAVEMENT	M2	8,200.00	8,200.00
0100	20402	REMOVING ASPHALTIC SURFACE	M2	855.00	855.00
0110	20403	REMOVING CURB	M	28.00	28.00
0120	20405	REMOVING CURB AND GUTTER	M	388.00	388.00
0130	20411	REMOVING GUARDRAIL	M	98.00	98.00
0140	20416	REMOVING INLETS	EACH	5.00	5.00
0150	20419	REMOVING ASPHALTIC SURFACE, BUTT JOINTS	M2	344.00	344.00
0160	20422	REMOVING CONCRETE BASES	EACH	5.00	5.00
0170	20470	REMOVING BUILDINGS, PARCEL NO. 4	LS	1.00	1.00
0180	20483	ABANDONING WELLS	EACH	2.00	2.00
0190	20501	COMMON EXCAVATION	M3	31,802.00	31,802.00
0200	20502	ROCK EXCAVATION	M3	227.00	227.00
0210	20620	EXCAVATION FOR STRUCTURES, CULVERTS C-70-39	LS	1.00	1.00
0220	21001	STRUCTURE BACKFILL	M3	260.00	260.00
0230	21101	PREPARATION OF FOUNDATION FOR ASPHALTIC PAVING	LS	1.00	1.00
0240	21111	PREPARATION OF FOUNDATION FOR CONCRETE PAVEMENT	LS	1.00	1.00
0250	21131	PREPARATION OF FOUNDATION FOR ASPHALTIC SHOULDERS	M	2,880.00	2,880.00
0260	21301	FINISHING ROADWAY	LS	1.00	1.00
0270	21401	OBLITERATING OLD ROAD	M	35.00	35.00
0280	30404	CRUSHED AGGREGATE BASE COURSE	MG	42,010.00	42,010.00
0290	30424	SALVAGED ASPHALTIC PAVEMENT, BASE COURSE	MG	6,210.00	6,210.00
0300	30426	BREAKER RUN STONE	MG	14,900.00	14,900.00
0310	40203	ASPHALTIC MATERIAL FOR TACK COAT	MG	14.88	14.87
0320	40301	QMP, ASPHALTIC MIXTURE	MG	15,435.00	15,435.00

DATE 10FEB99

ESTIMATE OF QUANTITIES

SHEET: 3.2

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6448-03-71 QUANTITY
0330	40501	ASPHALTIC MATERIAL FOR PLANT MIXES	MG	860.00	860.00
0340	40712	ASPHALTIC CONCRETE PAVEMENT, TYPE HV	MG	465.00	465.00
0350	40713	ASPHALTIC CONCRETE PAVEMENT, TYPE MV	MG	14,970.00	14,970.00
0360	41020	SALVAGED ASPHALTIC PAVEMENT, MILLING	MG	13,300.00	13,300.00
0370	41510	CONCRETE PAVEMENT, 250 MM	M2	8,430.00	8,430.00
0380	41605	CONCRETE DRIVEWAY, 150 MM	M2	65.00	65.00
0390	41654	DOWEL BARS	EACH	32.00	32.00
0400	41665	CONCRETE PAVEMENT GAPS	EACH	4.00	4.00
0410	50401	CONCRETE MASONRY, CULVERTS	M3	110.00	110.00
0420	50505	HIGH STRENGTH BAR STEEL REINFORCEMENT, CULVERTS	KG	9,200.00	9,200.00
0430	51605	RUBBERIZED MEMBRANE WATERPROOFING	M2	140.00	140.00
0440	52059	APRON ENDWALLS FOR CULVERT PIPE, 300 MM	EACH	18.00	18.00
0450	52060	APRON ENDWALLS FOR CULVERT PIPE, 375 MM	EACH	4.00	4.00
0460	52061	APRON ENDWALLS FOR CULVERT PIPE, 450 MM	EACH	6.00	6.00
0470	52103	CORRUGATED STEEL CULVERT PIPE, 300 MM	M	24.00	24.00
0480	52105	CORRUGATED STEEL CULVERT PIPE, 450 MM	M	25.20	25.20
0490	52136	CORRUGATED STEEL PIPE ARCH, 510 X 380 MM	M	91.00	91.00
0500	52140	CORRUGATED STEEL PIPE ARCH, 1030 X 740 MM	M	2.00	2.00
0510	52147	STEEL APRON ENDWALLS FOR CULVERT PIPE, 300 MM	EACH	4.00	4.00
0520	52162	STEEL APRON ENDWALLS FOR PIPE ARCH, 510 X 380 MM	EACH	6.00	6.00
0530	52202	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 375 MM	M	6.00	6.00
0540	52261	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 375 MM	EACH	2.00	2.00
0550	52262	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 450 MM	EACH	8.00	8.00
0560	52264	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 600 MM	EACH	4.00	4.00
0570	52266	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 750 MM	EACH	2.00	2.00
0580	52361	REINFORCED CONCRETE APRON ENDWALLS FOR HORIZONTAL ELLIP. CULVERT PIPE, 490 X 770 MM	EACH	5.00	5.00
0590	52363	REINFORCED CONCRETE APRON ENDWALLS FOR HORIZONTAL ELLIP. CULVERT PIPE, 610 X 960 MM	EACH	4.00	4.00

DATE 10FEB99

ESTIMATE OF QUANTITIES

SHEET: 3.3

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6448-03-71 QUANTITY
0600	52365	REINFORCED CONCRETE APRON ENDWALLS FOR HORIZONTAL ELLIP. CULVERT PIPE, 730 X 1150 MM	EACH	4.00	4.00
0610	52471	SALVAGED APRON ENDWALLS FOR CULVERT PIPE, 375 MM	EACH	1.00	1.00
0620	60119	CONCRETE CURB AND GUTTER, 450 MM, TYPE A	M	148.00	148.00
0630	60120	CONCRETE CURB AND GUTTER, 450 MM, TYPE D	M	96.00	96.00
0640	60133	CONCRETE CURB AND GUTTER, 750 MM, TYPE D	M	3,745.00	3,745.00
0650	60204	CONCRETE SIDEWALK, 100 MM	M2	83.00	83.00
0660	60601	RIPRAP	M3	206.00	206.00
0670	60721	ROCK EXCAVATION FOR STORM SEWER	M3	84.00	84.00
0680	60825	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 300 MM	M	39.50	39.50
0690	60826	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 375 MM	M	77.00	77.00
0700	60827	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 450 MM	M	301.00	301.00
0710	60829	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 600 MM	M	80.00	80.00
0720	60831	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 750 MM	M	39.00	39.00
0730	60833	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 900 MM	M	255.50	255.50
0740	60834	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 1050 MM	M	118.00	118.00
0750	60850	REINFORCED CONCRETE PIPE, CLASS IV, STORM SEWER, 300 MM	M	85.50	85.50
0760	61002	REINFORCED CONCRETE HORIZONTAL ELLIP. PIPE, CLASS HE-III, STORM SEWER, 490 X 770 MM	M	180.00	180.00
0770	61006	REINFORCED CONCRETE HORIZONTAL ELLIP. PIPE, CLASS HE-III, STORM SEWER, 730 X 1150 MM	M	120.00	120.00
0780	61110	MANHOLES, TYPE 1	EACH	17.00	17.00
0790	61112	MANHOLES, TYPE 3	EACH	12.00	12.00
0800	61122	INLETS, TYPE 3	EACH	21.00	21.00
0810	61123	INLETS, TYPE 8	EACH	3.00	3.00
0820	61128	RECONSTRUCTING MANHOLES	EACH	5.00	5.00
0830	61151	MANHOLE COVERS, TYPE J	EACH	11.00	11.00
0840	61153	MANHOLE COVERS, TYPE L	EACH	17.00	17.00
0850	61161	INLET COVERS, TYPE A	EACH	18.00	18.00

DATE 10FEB99

ESTIMATE OF QUANTITIES

SHEET: 3.4

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6448-03-71 QUANTITY
0860	61163	INLET COVERS, TYPE C	EACH	2.00	2.00
0870	61167	INLET COVERS, TYPE H	EACH	36.00	36.00
0880	61170	INLET COVERS, TYPE HS	EACH	3.00	3.00
0890	61182	ADJUSTING MANHOLE COVERS	EACH	8.00	8.00
0900	61210	PIPE UNDERDRAIN, UNPERFORATED, 100 MM	M	6.00	6.00
0910	61211	PIPE UNDERDRAIN, UNPERFORATED, 150 MM	M	37.00	37.00
0920	61251	DRAIN TILE EXPLORATION	M	90.00	90.00
0930	61409	STEEL PLATE BEAM GUARD, CLASS B	M	16.00	16.00
0940	61801	MAINTENANCE AND REPAIR OF HAUL ROADS	LS	1.00	1.00
0950	61910	MOBILIZATION	LS	1.00	1.00
0960	62001	CONCRETE CORRUGATED MEDIAN	M2	56.00	56.00
0970	62003	CONCRETE MEDIAN SLOPED NOSE	M2	5.20	5.20
0980	62101	LANDMARK REFERENCE MONUMENTS	EACH	24.00	24.00
0990	62203	ASPHALTIC FLUMES	M2	204.80	204.80
1000	62301	CALCIUM CHLORIDE SURFACE TREATMENT	MG	23.40	23.40
1010	62401	WATER	KL	1,765.00	1,765.00
1020	62501	TOPSOIL	M2	39,319.00	39,319.00
1030	62703	MULCHING	MG	132.00	132.00
1040	62811	EROSION BALES, DELIVERED	EACH	28.00	28.00
1050	62812	EROSION BALES, INSTALLED	EACH	28.00	28.00
1060	62815	SILT FENCE, DELIVERED	M	765.00	765.00
1070	62816	SILT FENCE, INSTALLED	M	765.00	765.00
1080	62817	SILT FENCE MAINTENANCE	M	765.00	765.00
1090	62819	MOBILIZATIONS, EROSION CONTROL	EACH	1.00	1.00
1100	62821	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	1.00	1.00
1110	62824	EROSION MAT, DELIVERED, CLASS I, TYPE B	M2	5,440.00	5,440.00
1120	62825	EROSION MAT, INSTALLED, CLASS I, TYPE B	M2	5,440.00	5,440.00
1130	62826	EROSION MAT, DELIVERED, CLASS I, TYPE URBAN	M2	7,376.00	7,376.00
1140	62827	EROSION MAT, INSTALLED, CLASS I, TYPE URBAN	M2	7,376.00	7,376.00
1150	62905	FERTILIZER, TYPE B	KG	1,413.00	1,413.00
1160	63003	SEEDING, TEMPORARY	KG	279.00	279.00
1170	63011	SEEDING, MIXTURE NO. 40	KG	804.00	804.00
1180	63101	SODDING	M2	517.40	517.40

DATE 10FEB99

ESTIMATE OF QUANTITIES

SHEET: 3.5

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6448-03-71 QUANTITY
1190	63103	WATERING SODDED AREAS	KL	5,000.00	5,000.00
1200	63411	WOOD POSTS, 100 X 150 MM X 4.3 M	EACH	79.00	79.00
1210	63412	WOOD POSTS, 100 X 150 MM X 4.9 M	EACH	4.00	4.00
1220	63701	SIGNS, TYPE I	M2	105.81	105.81
1230	63702	SIGNS, TYPE II, REFLECTIVE	M2	57.56	57.56
1240	63822	MOVING SIGNS, TYPE II	EACH	3.00	3.00
1250	63826	REMOVING SIGNS, TYPE I	EACH	5.00	5.00
1260	63827	REMOVING SIGNS, TYPE II	EACH	91.00	91.00
1270	63830	REMOVING SMALL SIGN SUPPORTS	EACH	79.00	79.00
1280	64220	FIELD OFFICE, TYPE C	LS	1.00	1.00
1290	64301	TRAFFIC CONTROL	LS	1.00	1.00
1300	64313	TRAFFIC CONTROL, DRUMS	DAYS	24,640.00	24,640.00
1310	64318	TRAFFIC CONTROL, BARRICADES, TYPE III	DAYS	9,380.00	9,380.00
1320	64321	TRAFFIC CONTROL, WARNING LIGHTS, TYPE A	DAYS	12,460.00	12,460.00
1330	64323	TRAFFIC CONTROL, WARNING LIGHTS, TYPE C	DAYS	1,120.00	1,120.00
1340	64326	TRAFFIC CONTROL, SIGNS	DAYS	10,080.00	10,080.00
1350	64505	GEOTEXTILE FABRIC, TYPE R	M2	654.00	654.00
1360	64602	PAVEMENT MARKING, 100 MM, EPOXY	M	13,943.00	13,943.00
1370	64618	PAVEMENT MARKING, CHANNELIZING, 200 MM, EPOXY	M	294.00	294.00
1380	64642	REMOVING PAVEMENT MARKINGS	M	244.00	244.00
1390	64714	PAVEMENT MARKING, STOP LINE, 600 MM, EPOXY	M	67.60	67.60
1400	64722	PAVEMENT MARKING, CROSSWALK, 300 MM, EPOXY	M	275.00	275.00
1410	64734	PAVEMENT MARKING, ARROWS, TYPE 2, EPOXY	EACH	4.00	4.00
1420	64758	PAVEMENT MARKING, WORDS, EPOXY	EACH	2.00	2.00
1430	64770	PAVEMENT MARKING, DIAGONAL, 300 MM, EPOXY	M	94.00	94.00
1440	64778	PAVEMENT MARKING, CURB, EPOXY	M	57.00	57.00
1450	64782	PAVEMENT MARKING, CURB RAMP, EPOXY	M	75.00	75.00
1460	64790	PAVEMENT MARKING, ISLAND NOSE, EPOXY	EACH	4.00	4.00
1470	64901	TEMPORARY PAVEMENT MARKING, 100 MM	M	244.00	244.00
1480	65216	NONMETALLIC CONDUIT, SCHEDULE 40, 25 MM	M	194.00	194.00
1490	65219	NONMETALLIC CONDUIT, SCHEDULE 40, 50 MM	M	24.00	24.00
1500	65221	NONMETALLIC CONDUIT, SCHEDULE 40, 75 MM	M	324.00	324.00
1510	65237	CONDUIT, SPECIAL, 78 MM	M	13.00	13.00

DATE 10FEB99

ESTIMATE OF QUANTITIES

SHEET: 3.0

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6448-03-71 QUANTITY
2060	90998	ON-THE-JOB TRAINING, ASP-1T	HRS.	200.00	200.00
2070	90999	ON-THE-JOB TRAINING, ASP-1	HRS	1,000.00	1,000.00

PLOT SCALE: 1:1

PLOT NAME: 3000 59.

51.

REV. DATE: 12-15-98

22.

ORIGINATOR: O'CONNOR LEVELS ON - I.

CLEARING AND GRUBBING

Table with columns: STATION TO STATION, LOCATION, CLEARING (25 mm, 40 m), GRUBBING (25 mm, 40 m). Includes GROUP CODE 010 and 020 items.

EARTHWORK SUMMARY

Table with columns: STATION TO STATION, LOCATION, COMMON EXCAVATION m3, ROCK EXCAVATION STORM SEWER m3, ROCK EXCAVATION FOR STORM SEWER m3, FILL m3, WASTE m3. Includes GROUP CODE 010 and 020 items.

NOTE: FILL EXPANSION FACTOR = 1.33

REMOVING ASPHALTIC ITEMS

Table with columns: STATION TO STATION, LOCATION, REMOVING ASPHALTIC SURFACE m2, REMOVING ASPHALTIC SURFACE, BUTT JOINTS m2. Includes GROUP CODE 010 and 020 items.

REMOVING CURB AND GUTTER ITEMS

Table with columns: STATION TO STATION, LOCATION, REMOVING CURB m, REMOVING CURB & GUTTER m. Includes GROUP CODE 010 items.

SAWING PAVEMENT SUMMARY

Table with columns: STATION, LOCATION, SAWING EXISTING PAVEMENT m. Includes GROUP CODE 010 and 020 items.

REMOVING GUARDRAIL

Table with columns: STATION TO STATION, LOCATION, REMOVING GUARDRAIL m. Includes GROUP CODE 010 items.

REMOVING INLETS

Table with columns: STATION, LOCATION, EACH. Includes GROUP CODE 010 items.

REMOVING OLD CULVERTS

Table with columns: STATION, LOCATION, L.S., EACH, REMARKS. Includes GROUP CODE 010 items.

REMOVING PAVEMENT

Table with columns: STATION TO STATION, LOCATION, m2. Includes GROUP CODE 010 items.

ABANDONING WELLS

Table with columns: STATION, LOCATION, ABANDONING WELLS EACH. Includes GROUP CODE 010 items.

GROUP CODE 030

Table with columns: STATION, LOCATION, EACH. Includes GROUP CODE 030 items.

CONCRETE COLLARS

Table with columns: STATION, STRUCTURE NO., LOCATION, EACH. Includes GROUP CODE 010 items.

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

SCALE: 1:1

HWY: STH 150

COUNTY: WINNEBAGO

STATE PROJECT NO: 6448-03-71

SHEET NO: 3A M

ORIGINATOR: O'CONNOR
 LEVELS ON: 1
 REV. DATE: 12-18-98
 PLOT NAME: 300B
 59.
 51.
 22.
 PLOT SCALE: 1:1

ENDWALL PIPE GRATE SUMMARY

STATION	LOCATION	STRUCTURE NO.	PIPE ENDWALL GRATE, 450 mm DIAMETER EACH	PIPE ENDWALL GRATE, 600 mm DIAMETER EACH	PIPE ENDWALL GRATE, 750 mm DIAMETER EACH	PIPE ENDWALL GRATE 490 X 770 mm EACH	REMARKS
GROUP CODE 010							
16+377	STH 150, 20 m LT.	61	1				
16+389.5	STH 150, 20 m LT.	62				1	
16+393	STH 150, 16.5 m LT.	53B			1		
16+399	STH 150, 20.5 m RT.	50					
16+423	STH 150, 14.5 m RT.	51		1			
16+423	STH 150, 17.4 m LT.	53A	1				
16+726.5	STH 150, 21.5 m LT.	75				1	
16+808.5	STH 150, 17.3 m LT.	82				1	
16+816	STH 150, 12.5 m RT.	79				1	
17+510	STH 150, 12 m RT.	99				1	
17+511	STH 150, 12 m RT.	101				1	FIELD CONNECT GRATE TO SALVAGED ENDWALL
17+565	STH 150, 19 m LT.	103A	1				FIELD CONNECT GRATE TO SALVAGED ENDWALL
17+634	STH 150, 20 m LT.	68		1			
17+647	STH 150, 20 m LT.	109	1				
17+749	STH 150, 20 m LT.	116	1				
17+764	STH 150, 23 m LT.	118	1				
17+817	STH 150, 18 m LT.	122			1		
17+886	STH 150, 18 m LT.	129	1				
17+900	STH 150, 21 m LT.	130	1				
TOTALS			8	3	2	6	

SALVAGED APRON ENDWALLS SUMMARY

STATION	LOCATION	APRON ENDWALL FOR 375 mm REINFORCED CONCRETE (R.C.) PIPE EACH	APRON ENDWALL FOR 490 X 770 mm R.C. PIPE EACH	REMARKS
GROUP CODE 010				
17+028	STH 150 SURVE, 10.7 m LT.	1		1
17+510	STH 150 SURVE, 9.6 m RT.		1	2
17+511	STH 150 SURVE, 9.6 m RT.		1	3
TOTAL		1	2	

REMARKS LEGEND: 1 RECONNECT TO EXTENDED R.C.C.P. AT INLET END, STA 17+028 LT.
 2 RECONNECT TO EXTENDED R.C.C.P. AT DISCHARGE END, STA 17+510 RT.
 3 RECONNECT TO EXTENDED R.C.C.P. AT DISCHARGE END, STA 17+511 RT.

* QUANTITY SHOWN ELSEWHERE.

DRAIN TILE EXPLORATION, UNPERFORATED PIPE UNDERDRAIN, *STORM SEWER SUMMARY

STATION TO STATION	LOCATION	DRAIN TILE EXPLORATION m	PIPE UNDERDRAIN		STORM SEWER SUMMARY		REMARKS
			UNPERFORATED 100 mm	150 mm	300 mm	450 mm	
GROUP CODE 010							
15+220	STH 150 RT.		4				1
3+964	CLAYTON RD. RT.		2				2
3+965	CLAYTON AVE. RT.	30					
15+220	STH 150 RT.	30					
15+310	STH 150 RT.	30					
15+273 - 15+310	STH 150, 12.5 m RT.			37			3
17+524	STH 150 LT.					2	1
17+531	STH 150 LT.						2
TOTALS		90	6	37	2	2	

*PARTIAL LIST OF STORM SEWER SEE MISCELLANEOUS QUANTITIES *STORM SEWER SUMMARY* FOR REMAINDER OF STORM SEWER QUANTITIES

REMARKS LEGEND:

- SEWER EXIST. PVC SUMP LATERAL. RECONNECT & DISCHARGE TO NEW R.C.P. S.S. TRUNKLINE CONCRETE COLLAR REQ'D INCLUDES RODENT SHIELD (INCIDENTAL TO COST OF PIPE UNDERDRAIN)
- SEWER EXISTING PVC SUMP LATERAL, RECONNECT AND DISCHARGE TO DITCH INCLUDES RODENT SHIELD (INCIDENTAL TO COST OF PIPE UNDERDRAIN)
- CONNECT TO EXIST. PVC SUMP LATERAL. 90° ELBOW REQ'D DISCHARGE TO NEW R.C.H.E. C.P. AT STA 15+270 INCLUDES RODENT SHIELD (INCIDENTAL TO COST OF PIPE UNDERDRAIN)
- REMOVE EXISTING STEEL APRON ENDWALL

RIPRAP SUMMARY

STATION TO STATION	LOCATION	RIPRAP m3	GEOTEXTILE FABRIC TYPE R m2
GROUP CODE 010			
15+365	STH 150, LT.	3.3	11.0
15+415	STH 150, LT.	3.3	11.0
15+470	STH 150, LT.	3.3	11.0
15+523	STH 150, LT.	3.0	10.0
15+561	STH 150, LT.	3.0	10.0
15+642	STH 150, LT.	3.0	10.0
15+688	STH 150, LT.	7.5	25.0
15+688	STH 150, RT.	7.5	25.0
15+852	STH 150, RT.	3.0	10.0
15+854	STH 150, LT.	3.0	10.0
15+906 - 15+924	STH 150, LT.	10.8	36.0
15+915 - 15+920	STH 150, RT.	3.0	10.0
15+970	STH 150, LT.	3.0	10.0
16+548	STH 150, RT.	3.6	12.0
17+506	STH 150, RT.	2.4	8.0
17+511	STH 150, RT.	4.5	15.0
17+630	STH 150, RT.	2.4	8.0
17+701	STH 150, RT.	2.4	8.0
17+822	STH 150, RT.	2.4	8.0
17+909	STH 150, RT.	2.4	8.0
3+958 - 3+985	CLAYTON AVE. RT.	46.8	156.0
4+010 - 4+042	CLAYTON AVE. LT.	57.4	192.0
SUBTOTALS		181.0	604.0
GROUP CODE 030			
17+925	STH 150 RT., C-70-39	25.0	50.0
TOTALS		206.0	654.0

LANDSCAPING SUMMARY

STATION TO STATION	LOCATION	TOPSOIL m ²	PREPARATION OF LAWN TYPE TURF m ²	SEED, NO. 40 kg	TEMP. SEED kg	FERT., TYPE B kg	WATERING * SOD & SEED AREAS kL	MULCHING Mg
GROUP CODE 010								
15+100 - 17+040	STH 150	29 330	29,330	600	206	1 062	3,000	105.0
17+420 - 17+980	STH 150	7 885	7 885	160	56	277	1,980	26.9
3+963 - 4+042	CLAYTON ROAD	944	944	19	7	33		
7+966 - 7+990	SO. FIELDCREST	122	122	3	1	5		
9+010 - 9+026	NO. FIELDCREST	228	288	5	2	8		
9+957 - 9+990	CTH 0	197	197	4	2	7		
10+969 - 10+990	SO. IRISH ROAD	143	143	3	1	5		
11+010 - 11+038	NO. IRISH ROAD	295	295	6	2	10		
SUBTOTALS		39 144	39 144	800	277	1 407	4,980	131.9
GROUP CODE 020								
19+948 - 19+995		175	175	4	2	6	20	0.1
TOTALS		39 319	39 319	804	279	1 413	5,000	132.0

* NOTE: WATERING SEEDED AREAS IS INCLUDED IN WATERING SEEDED AREAS QUANTITIES

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

SCALE: 1:1

HWY: STH 150

COUNTY: WINNEBAGO

STATE PROJECT NO: 6448-03-71

SHEET NO: . 33 M 35

EROSION CONTROL SUMMARY

STATION TO STATION	LOCATION	EROSION BALES DELIVERED EACH	EROSION BALES INSTALLED EACH	SILT FENCE MAINT. m	EROSION MAT, DELIVERED, CLASS 1 TYPE URBAN m2	EROSION MAT, INSTALLED, CLASS 1 TYPE URBAN m2	EROSION MAT, DELIVERED, CLASS 1 TYPE B m2	EROSION MAT, INSTALLED, CLASS 1 TYPE B m2	SILT FENCE, DELIVERED m	SILT FENCE, INSTALLED m	CULVERT PIPE DITCH CHECKS EACH	SODDING m2
GROUP CODE 010												
4+010 - 4+042	CLAYTON ROAD, LT.							264				
9+015 - 9+023	NO. FIELDCREST, RT.											21.6
11+022 - 11+032	NO. IRISH RD., LT.											27.0
15+000 - 17+040	STH 150, LT. & RT.				5 588	5 588						
15+100 - 15+160	STH 150, LT.						11	11				
15+100 - 15+195	STH 150, RT.						347	347				
15+160 - 15+240	STH 150, LT.						293	293				
15+190	STH 150, RT.										1	
15+320 - 15+470	LT.			150					150	150		
15+330 - 15+472	STH 150, LT.						520	520				
15+570	STH 150, LT.										1	
15+595	STH 150, RT.											10.0
15+597	STH 150, LT.											10.0
15+597 - 15+822	STH 150, LT.						824	824				
15+600 - 15+797	STH 150, RT.						721	721				
15+642	STH 150, RT.											8.0
15+796	STH 150, RT.										1	
15+798	STH 150, RT.										1	
15+800 - 15+864	STH 150, RT.						351	351				
15+822	STH 150, LT.											60.0
15+830 - 15+862	STH 150, LT.						117	117				
15+866 - 15+871	STH 150, RT.											10.0
15+868	STH 150, LT.											10.0
15+870	STH 150, RT.										1	
15+898 - 15+915	STH 150, RT.											34.0
15+920 - 16+000	STH 150, LT.						288	288				
16+040 - 16+100	LT.			60					60	60		
16+040 - 16+140	RT.			100					100	100		
16+210 - 16+400	RT.			190					190	190		
16+330 - 16+390	LT.			60					60	60		
16+375	STH 150, LT.											10.0
16+399	STH 150, RT.											10.0
16+423	STH 150, LT.											10.0
16+423	STH 150, RT.											10.0
16+430 - 16+480	LT.			50					50	50		
16+600 - 16+710	RT.			110					110	110		
16+809	STH 150, LT.											10.0
16+815	STH 150, RT.										1	
16+816	STH 150, RT.											10.0
16+820 - 17+024	STH 150, RT.						187	187				
17+020 - 17+034	STH 150, RT.											37.8
17+028	STH 150, LT.											10.0
17+059 - 17+071	STH 150 MEDIAN											24.0
17+367	STH 150, LT.											10.0
17+417 - 17+487	STH 150 MEDIAN											105.0
17+420 - 17+980	STH 150, LT. & RT.				1 788	1 788						
17+510 - 17+925	STH 150, RT.						1 494	1 494				
17+520	STH 150, RT.	7	7									
17+620	STH 150, RT.	5	5									
17+634	STH 150, LT.											10.0
17+648	STH 150, LT.											10.0
17+699	STH 150, LT.											10.0
17+720	STH 150, RT.	6	6									
17+750	STH 150, LT.											10.0
17+764	STH 150, LT.											10.0
17+817	STH 150, LT.											10.0
17+820	STH 150, RT.	5	5									
17+886	STH 150, LT.											10.0
17+900	STH 150, LT.											10.0
17+900	STH 150, RT.	5	5									
17+900 - 17+925	RT.			25					25	25		
17+918	STH 150, RT.										1	
17+930 - 17+950	RT.			20					20	20		
17+932 - 17+945	STH 150, RT.						23	23				
* INSTALL BEHIND CURB AT 1.8 m WIDTH												
** INSTALL IN DITCHES												
TOTALS		28	28	765	7 376	7 376	5 440	5 440	765	765	7	517.4

GROUP CODE 010		INLET PROTECTION	
STATION	LOCATION	TYPE A	TYPE C
15+100 - 17+979	STH 150	5	57

PLOT SCALE: 1:1
 PLOT NAME: 300G
 59.
 51.
 REV. DATE: 12-18-98
 22.
 ORIGINATOR: O'CONNOR
 LEVELS ON: 1.

FILE NAME: 03 644803:300.dgn

APRON ENDWALL SUMMARY

STATION	STRUCTURE NO.	LOCATION	STEEL APRON ENDWALLS FOR CULVERT PIPES*				STEEL APRON ENDWALLS FOR PIPE ARCH 510 X 380 mm EACH	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE				REINFORCED CONCRETE APRON ENDWALLS FOR ELLIPTICAL CULVERT PIPE,			REMARKS
			300 mm EACH	375 mm EACH	450 mm EACH	600 mm EACH		375 mm EACH	450 mm EACH	600 mm EACH	750 mm EACH	490 X 770 mm EACH	610 X 960 mm EACH	730 X 1150 mm EACH	
GROUP CODE 010															
15+180	1	STH 150, 13 m RT			1										
3+982	2	CLAYTON RD. 12.2 m RT.								1					
4+026.5		CLAYTON RD. LT.			2										F.E. PIPE
15+267.5		STH 150, 21.7 m LT.												1	
15+267.5		STH 150, 15 m RT.												1	
15+270		STH 150, 19.5 m LT.												1	
15+270		STH 150, 14 m RT.												1	
15+365	7	STH 150, 16.5 m LT.													
15+415.5	10	STH 150, 16 m LT.		1											
15+470.5	13	STH 150, 15.2 m LT.		1											
15+523.5	14A	STH 150, 17.5 m LT.	1												
15+561	21	STH 150, 17.5 m LT.	1												
5+019.5		W K-C ENTRANCE					2								
15+595	19	STH 150, 13 m RT.											1		
4+981		AUGUSTINE RD. RT.			2										P.E. PIPE
15+642	23	STH 150, 11 m RT.	1												
15+685.7	29	STH 150, 11 m RT.	1												
15+687.7	31	STH 150, 11 m RT.	1												
15+688.5	25	STH 150, 16.5 m LT.	1												
15+690.5	27	STH 150, 16.5 m LT.	1												
15+796		STH 150, 14.5 m RT.													
15+798.5		STH 150, 14.5 m RT.												1	
15+822.5		STH 150, 19 m LT.												1	
15+826		STH 150, 19 m LT.												1	
15+852.5	33	STH 150, 11.5 m RT.	1												
15+854	35	STH 150, 18.5 m LT.	1												
5+980		DEAD END RD.					2								
6+020.5		MAIN K-C ENTRANCE					2								
15+920	37	STH 150, 10.5 m RT.	1												
15+923.5	39	STH 150, 16.5 m LT.	1												
15+970	42	STH 150, 17.5 m LT.		1											
16+377	61	STH 150, 20 m LT.													
16+389.5	62	STH 150, 20 m LT.								1					
16+391	53B	STH 150, 16.5 m LT.										1			
16+399	50	STH 150, 20.5 m RT.									1				
16+423	51	STH 150, 14.5 m RT.									1				
16+423	53A	STH 150, 17.4 m LT.								1					
16+548.5	64	STH 150, 20 m RT.	1												
16+549.5	66	STH 150, 18.5 m RT.	1												
16+726.5	75	STH 150, 21.5 m LT.											1		
16+808.5	82	STH 150, 17.3 m LT.											1		
16+816	79	STH 150, 12.5 m RT.											1		
17+020	85	STH 150, SURV 1 15.4 RT.						1							
17+460	95	STH 150, SURV 1 12 m RT.			1										
17+506	97	STH 150 SURV 1 10.5 m RT.	1												
17+565	103A	STH 150 19.5 m LT.								1					
17+630	105	STH 150, 10 m RT.	1												
17+634	108	STH 150, 20 m LT.									1				
17+647.5	109	STH 150, 20 m LT.								1					
17+701	115	STH 150, 10 m RT.	1												
17+749.5	116	STH 150, 19.5 m LT.								1					
17+764	118	STH 150, 23 m LT.								1					
17+817	122	STH 150, 18.5 m LT.										1			
17+822	124	STH 150, 10.5 m RT.	1												
17+885.5	129	STH 150, 18 m LT.										1			
17+900	130	STH 150, 20.5 m LT.										1			
17+909	135	STH 150, 11 m RT.	1												
		SUBTOTALS	18	4	6	0	6	1	8	4	2	5	4	4	
GROUP CODE 020															
17+367		STH 150 LT.						1							
19+956		COOKE ROAD LT.	2												
19+956		COOKE ROAD RT.	2												
		SUBTOTALS	4					1							
		TOTALS	22	4	6	0	6	2	8	4	2	5	4	4	

NOTES: JOINT TIES (4 TYPICAL) REQ'D FOR EACH CONCRETE PIPE ENDWALL AT DIAMETERS 450 mm AND LARGER
 * WHERE THE ITEM "STORM SEWER" IS SPECIFIED, INSTALL STEEL APRON ENDWALLS FOR ALL NON-CONCRETE STORM SEWER.

PLOT SCALE: 1:1
 PLOT NAME: 3009 59.
 REV. DATE: 12-16-98 51.
 ORIGINATOR: O'CONNOR LEVELS ON 1.
 22.

PLOT SCALE: 1:1
 PLOT NAME: 300F
 5/1
 REV. DATE: 12-18-98
 22
 ORIGINATOR: O'CONNOR
 LEVELS ON: 1

ASPHALTIC SUMMARY

STATION TO STATION	LOCATION	SALVAGED ASPHALTIC PAVEMENT MILL. m2	ASPHALTIC CONCRETE PAVEMENT		TACK COAT Mg	ASPHALTIC MATERIAL FOR PLANT MIXES @5.6% Mg	QUALITY MANAGEMENT PROGRAM, ASPHALTIC PAVEMENT Mg
			TYPE HV Mg	TYPE MV Mg			
GROUP CODE 010							
13+560 - 15+100	STH 150	1 180					
15+100 - 15+900	STH 150	2 470					
15+900 - 17+979	STH 150	8 220					
13+560 - 13+700	STH 150		280		0.219	15	280
0+940 - 1+054	USH 45	150	185		0.157	10	185
13+700 - 15+100	STH 150			3 365	3.417	188	3 365
15+100 - 17+071	STH 150			9 685	9.644	542	9 685
4+007 - 4+042	CLAYTON RD.	90		160	0.127	9	160
3+964 - 3+993	CLAYTON RD.	60		110	0.085	6	110
4+967 - 4+993	AUGUSTINE RD.	50		55	0.079	3	55
5+007 - 5+036	W KC ENTRANCE	110		150	0.118	8	150
5+964 - 5+993	DEAD END RD.	130		150	0.098	8	150
6+007 - 6+030	MAIN KC ENTRANCE	90		150	0.135	8	150
7+007 - 7+031	E KC ENTRANCE	80		80	0.054	4	80
9+007 - 9+026	N FIELDCREST DR.	50		40	0.043	2	40
7+966 - 7+993	S FIELDCREST DR.	70		100	0.070	6	100
9+957 - 9+991	CTH 0	160		145	0.115	8	145
10+969 - 10+993	IRISH RD.	50		90	0.065	5	90
11+007 - 11+038	IRISH RD.	90		130	0.116	7	130
11+965 - 11+993	BONDOW DR.	90		110	0.079	6	110
12+008 - 12+032	BONDOW DR.	50		95	0.076	5	95
14+007 - 14+022	WANDA AVE.	30		35	0.037	2	35
15+007 - 15+025	VERA ST.	30		40	0.045	2	40
16+007 - 16+035	ZEH AVE.	50		55	0.066	3	55
13+680 - 17+719	DRIVEWAYS			180		10	180
SUBTOTALS		13 300	465	14 925	14.845	857	15 390
GROUP CODE 020							
19+940 - 19+960	COOKE ROAD			45	0.025	3	45
SUBTOTALS		13 300	465	14 970	14.870	860	15 435

16 DRIVEWAYS AT AN AVG. OF 11.25 Mg

CONCRETE PAVEMENT, DRIVEWAY, CORRUGATED MEDIAN AND DOWEL BARS

STATION TO STATION	LOCATION	CONCRETE PAVEMENT 250 mm	CONCRETE DRIVEWAY 150 mm	DOWELS BARS EACH	CONCRETE CORRUGATED MEDIAN m2
GROUP CODE 010					
17+525 - 17+979	STH 150	6 538			
17+417 - 17+526	STH 150	1 570			
17+417 - 17+432	STH 150	9			
17+979	STH 150			32	
15+972	STH 150 RT.		17		
17+718	STH 150 LT.		48		
16+973 - 17+010	STH 150 MEDIAN				28
17+782 - 17+516	STH 150 MEDIAN				28
WANDA, VERA AND ZEH AVE INTERSECTIONS		313			
TOTALS		8 430	65	32	56

CRUSHED AGGREGATE BASE COURSE, WATER, CALCIUM CHLORIDE AND BREAKER RUN STONE SUMMARY

STATION TO STATION	LOCATION	CRUSHED AGGREGATE BASE COURSE		WATER KL	CALCIUM CHLORIDE SURFACE TREATMENT Mg	BREAKER RUN STONE Mg
		ROADWAY Mg	SHOULDER Mg			
GROUP CODE 010						
13+560 - 13+700	STH 150		130	5.5	.8	
0+940 - 1+054	USH 45		185	7.8		
13+700 - 15+100	STH 150		2 270	95.3	6.1	
15+100 - 17+071	STH 150	27 525		1 156.0	12.7	9 260
17+417 - 17+979	STH 150	3 635		152.7	3.8	2 640
3+964 - 3+993	CLAYTON RD.	278	27	12.8		
4+007 - 4+042	CLAYTON RD.	413	27	18.5		
4+967 - 4+993	AUGUSTINE RD.	142	13	6.5		
5+007 - 5+036	W KC ENTRANCE	383	27	17.2		
5+964 - 5+993	DEAD END RD.	348	27	15.8		
6+007 - 6+030	MAIN KC ENTRANCE	535	20	23.3		
7+007 - 7+031	E KC ENTRANCE	245	20	11.1		
9+007 - 9+026	N FIELDCREST DR.	127	13	5.9		
7+966 - 7+993	S FIELDCREST DR.	270	20	12.2		
9+957 - 9+991	CTH 0	378	27	17.0		
10+969 - 10+993	IRISH RD.	245	20	11.1		
11+007 - 11+038	IRISH RD.	418	27	18.7		
11+965 - 11+993	BONDOW DR.	303	27	13.9		
12+008 - 12+032	BONDOW DR.	245	20	11.1		
14+007 - 14+022	WANDA AVE.	97	13	4.6		
15+007 - 15+025	VERA ST.	117	13	5.5		
16+007 - 16+035	ZEH AVE.	186	19	8.6		
DRIVEWAYS & FIELD ENT. UNDISTRIBUTED		3 090		130.3		3 000
SUBTOTALS		38 980	2 945	1 761.4	23.4	14 900
GROUP CODE 020						
19+953 - 19+960		85		3.6		
TOTALS		39 065	2 945	1 765.0	23.4	14 900

CONCRETE CURB AND GUTTER SUMMARY

STATION TO STATION	LOCATION	CONCRETE CURB & GUTTER 450 mm		CONCRETE CURB & GUTTER 750 mm TYPE D	INTEGRAL CONCRETE C&G 750 mm TYPE D	MOUNTABLE CONCRETE C&G 600mm
		TYPE A m	TYPE D m			
GROUP CODE 010						
15+200 - 17+033	STH 150			3 143		
	INTER. CLAYTON RD.			97		
	INTER. W KC ENT.			50		
	INTER. AUGUSTINE RD.			28		
	INTER. MAIN KC ENT.			47		
	INTER. DEAD END RD.			64		
	INTER. E KC ENT.			47		
	INTER. N FIELDCREST DR.			27		
	INTER. S FIELDCREST DR.			45		
	INTER. CTH 0			43		
	INTER. IRISH RD.			74		
	INTER. BONDOW DR.			49		
	INTER. SPRINGROAD DR.			15		
15+895	STH 150 LT. ISLAND			18		
17+010 - 17+034	STH 150 MEDIAN			48		
17+032	STH 150 MEDIAN RADIUS			4		
17+058 - 17+071	STH 150 MEDIAN			26		
17+417 - 17+489	STH 150 MEDIAN	144				
17+487	STH 150 MEDIAN RADIUS	4				
17+417 - 17+979	STH 150 RT.				562	
17+417 - 17+629	STH 150 LT.				212	
17+653 - 17+744	STH 150 LT.				91	
17+768 - 17+881	STH 150 LT.				113	
17+904 - 17+979	STH 150 LT.				75	
6+014 - 6+030	MAIN KC ENT. MEDIAN					35
SUBTOTALS		148	96	3 729	1 053	35
GROUP CODE 020						
19+983 - 19+983				16		
TOTALS		148	96	3 745	1 053	35

CROSS DRAIN AND SIDEROAD PIPE SUMMARY

STATION	LOCATION	DIAMETER mm	LENGTH m	TYPE m	CLASS	THICKNESS STEEL mm	INLET ELEVATION	DISCHARGE ELEVATION	JOINT TIES EACH	* APRON ENDWALL EACH	*SALVAGED APRON ENDWALL	REMARKS
GROUP CODE 010												
15+267.5	STH 150	610 X 960	33	R.C.H.E. C.P.	IV		252.20	251.95	4	2		
15+270	STH 150	610 X 960	30	R.C.H.E. C.P.	IV		252.20	251.97	4	2		
15+807	STH 150	730 X 1150	39	R.C.H.E. C.P.	IV		249.17	249.13	4	2		3
15+810.5	STH 150	730 X 1150	39	R.C.H.E. C.P.	IV		249.17	249.13	4	2		3
17+028	STH 150 LT.	375	6	R.C.C.P.	III		238.95	238.93			1	4
3+956	CLAYTON RD. RT.	1030 X 740	2	C.S.P.A.		2.77	252.33	252.31		1		1
5+019.5	W K-C ENTRANCE	510 X 380	26	C.S.P.A.		1.63	250.00	249.85		2		2
5+980	DEAD END ROAD	510 X 380	26	C.S.P.A.		1.63	249.75	249.65		2		2
6+020.5	MAIN K-C ENTRANCE	510 X 380	39	C.S.P.A.		1.63	249.36	249.24		2		2
GROUP CODE 020												
19+956	COOKE ROAD LT.	300	12	C.S.C.P.		1.63	234.42	234.36		2		
19+956	COOKE ROAD RT.	300	12	C.S.C.P.		1.63	234.52	234.50		2		

* INCLUDED IN QUANTITIES ELSEWHERE/FOR INFORMATION ONLY

REMARKS LEGEND:

- 1 EXTEND EXISTING C.S.P.A. AT INLET END
- 2 1:6 FILL SLOPES AT PIPE ENDS
- 3 SKEW 40° L.H.F. INLET FLOWLINE OF NEW CROSSDRAIN PIPE TO BE PLACED AT OR BELOW EXISTING STH 150 CROSSDRAIN FLOWLINE ELEVATION. CONFIRM ELEVATIONS WITH PROPERTY OWNER PRIOR TO PIPE INSTALLATION.
- 4 EXTEND EXISTING R.C.C.P. AT INLET END

ENTRANCE PIPE SUMMARY

STATION	LOCATION	PE	FE	DIAMETER mm	LENGTH m	TYPE	THICKNESS STEEL mm	STEEL * APRON ENDWALLS EACH	TOP WIDTH m	REMARKS
GROUP CODE 010										
4+026.5	CLAYTON RD. LT.		X	450	12.0	C.S.C.P.	1.63	2	7.2	1:4 INSLOPES
4+981	AUGUSTINE RD. RT.	X		450	13.2	C.S.C.P.	1.63	2	4.8	1:4 INSLOPES SKEW PIPE TO FIT FIELD COND.
					25.2					

* INCLUDED IN QUANTITIES ELSEWHERE. FOR INFORMATION ONLY

* QUANTITY SHOWN ELSEWHERE.

STAKING SUMMARY

STATION TO STATION	LOCATION	PRELIMINARY CONSTRUCTION STAKING, m	SUBGRADE, SPECIAL, m	CRUSHED AGGREGATE BASE COURSE, SPECIAL m	CONCRETE PAVEMENT, SPECIAL m	STORM SEWER SYSTEM, EACH	CURB, GUTTER, AND CURB AND GUTTER, SPECIAL m	PIPE CULVERTS, SPECIAL m	ASPHALTIC PAVEMENT, FINE GRADING, m
GROUP CODE 010									
13+560 - 17+980	STH 150 & SIDEROADS	4 517	4 517						
13+560 - 17+071	STH 150 & SIDEROADS			3 954					
17+417 - 17+980	STH 150				563				
15+180 - 17+940	STH 150					129			
15+200 - 17+980	STH 150						5 008		
15+895	STH 150 LT. ISLAND						18		
6+014 - 6+030	MAIN KC ENTRANCE MEDIAN						35		
15+267.5 - 17+028	STH 150							5	
3+953	CLAYTON RD. RT.							1	
5+019.5	W KC ENTRANCE							1	
5+980	DEAD END ROAD							1	
6+020.5	MAIN KC ENTRANCE							1	
15+100 - 16+973	STH 150								1 873
16+971 - 17+071	STH 150								98
SUBTOTALS		4 517	4 517	3 954	563	129	5 061	9	1 971
GROUP CODE 020									
19+940 - 19+960	COOKE ROAD		20	20			16	2	
17+367 - 18+211.5						5			
TOTALS		4 517	4 537	3 974	563	134	5 077	11	1 971

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

SCALE: 1:1

HWY: STH 150

COUNTY: WINNEBAGO

STATE PROJECT NO: 6448-03-71

SHEET NO: 38 M

PLOT SCALE: 1:1

PLOT NAME: 3009

5/

REV. DATE: 12-18-98

22

ORIGINATOR: O'CONNOR
LEVELS ON - I

PLOT SCALE: 1:1
 PLOT NAME: 3001 59
 51
 REV. DATE: 2-4-99
 22
 ORIGINATOR: O'CONNOR
 LEVELS ON

STORM SEWER SUMMARY

FROM	TO	DIAMETER	LENGTH	TYPE	CLASS	INLET ELEVATION	DISCHARGE ELEVATION	REMARKS
GROUP CODE 010		mm	m					
1	2	450	66	STORM SEWER		253.78	252.46	1
3	2	300	6	STORM SEWER		252.68	252.62	
2	4	600	19	R.C.P. S.S.	III	252.30	252.21	2
5	6	300	15.5	R.C.P. S.S.	IV	251.62	251.46	
6	7	375	10	STORM SEWER		251.38	251.30	3
8	9	300	15.5	R.C.P. S.S.	IV	251.37	251.21	
9	10	375	10	STORM SEWER		251.13	251.04	4
11	12	300	15.5	R.C.P. S.S.	IV	251.01	250.85	
12	13	375	9	STORM SEWER		250.77	250.70	5
13A	14A	300	10	STORM SEWER		251.32	250.70	6
14	15	300	8	R.C.P. S.S.	IV	250.67	250.57	
15	16	450	2	STORM SEWER		250.57	250.55	
16	18	450	57	STORM SEWER		250.55	250.15	7
17	18	300	3	STORM SEWER		250.23	250.19	
18	19	490 X 770	19	R.C.H.E. S.S.	IV	250.10	250.04	8
20	21	300	10	STORM SEWER		251.05	250.50	9
22	23	300	3.5	STORM SEWER		250.47	250.10	10
24	25	300	9	STORM SEWER		250.22	249.85	11
26	27	300	9	STORM SEWER		250.22	249.85	12
28	29	300	3	STORM SEWER		250.22	250.07	13
30	31	300	3	STORM SEWER		250.22	250.07	14
32	33	300	4	STORM SEWER		250.43	250.08	15
34	35	300	11	STORM SEWER		250.42	249.62	16
36	37	300	9	STORM SEWER		250.20	250.05	17
38	39	300	9.5	STORM SEWER		250.20	249.72	18
40	41	300	15.5	R.C.P. S.S.	IV	249.75	249.60	
41	42	375	12	R.C.P. S.S.	III	249.60	249.55	19
43	44	450	2	R.C.P. S.S.	III	245.36	245.34	
44	46	450	57	R.C.P. S.S.	III	245.34	244.66	
45	46	300	2	R.C.P. S.S.	III	244.70	244.66	
46	48	600	17	R.C.P. S.S.	III	244.50	244.45	20
47	48	300	2	R.C.P. S.S.	III	244.64	244.60	21
48	49	600	21	R.C.P. S.S.	III	244.45	244.38	
49	52	610 X 960	31.5	R.C.H.E. S.S.	IV	244.38	244.30	
50	49	600	13	R.C.P. S.S.	III	244.55	244.38	22
51	52	600	2	R.C.P. S.S.	III	244.31	244.30	23
52	53	610 X 960	19.5	R.C.H.E. S.S.	IV	244.30	244.26	
53	53A	450	4.5	R.C.P. S.S.	III	244.59	244.53	24
53	53C	750	28	R.C.P. S.S.	III	244.26	244.20	
53C	53B	750	7	R.C.P. S.S.	III	244.20	244.18	25
54	55	450	2	R.C.P. S.S.	III	245.35	245.33	
55	57	450	57	R.C.P. S.S.	III	245.33	244.54	26
56	57	300	2	R.C.P. S.S.	III	244.66	244.62	27
57	59	450	17	R.C.P. S.S.	III	244.54	244.36	
58	59	300	2	R.C.P. S.S.	III	244.56	244.52	
59	60	490 X 770	10.5	R.C.H.E. S.S.	III	244.32	244.26	
61	60	450	4.5	R.C.P. S.S.	III	244.45	244.31	28
60	62	490 X 770	12	R.C.H.E. S.S.	IV	244.26	244.20	
63	64	300	20	STORM SEWER		243.66	242.90	30
65	66	300	12	STORM SEWER		243.46	242.90	31
67	68	300	2	STORM SEWER		242.91	242.87	
68	70	600	63	STORM SEWER		242.65	241.38	
69	70	300	2	R.C.P. S.S.	III	241.64	241.60	
70	72	490 X 770	64	R.C.H.E. S.S.	III	241.38	240.72	
71	72	300	2	R.C.P. S.S.	III	240.84	240.80	
72	74	490 X 770	45.5	R.C.H.E. S.S.	III	240.72	240.50	
73	74	300	2	R.C.P. S.S.	III	240.60	240.56	
74	75	490 X 770	13	R.C.H.E. S.S.	III	240.50	240.45	32
76	77	300	11	R.C.P. S.S.	III	240.39	240.28	
77	78	450	76	R.C.P. S.S.	III	240.12	239.78	
79	78	490 X 770	20	R.C.H.E. S.S.	III	239.85	239.74	33
78	80	490 X 770	2	R.C.H.E. S.S.	III	239.74	239.73	
80	81	490 X 770	15.5	R.C.H.E. S.S.	IV	239.73	239.66	
81	82	490 X 770	9.5	R.C.H.E. S.S.	III	239.66	239.60	34
83	84	300	15.5	R.C.P. S.S.	IV	239.30	239.18	
84	85	375	23	STORM SEWER		239.10	238.85	35
86	87	375	6	R.C.P. S.S.	III	235.86	235.77	36
87	89	730 X 1150	94	R.C.H.E. S.S.	III	235.62	235.18	
88	89	375	9	R.C.P. S.S.	III	235.44	235.31	
89	90	490 X 770	6	R.C.H.E. S.S.	III	235.18	235.13	37
89	91	490 X 770	6.5	R.C.H.E. S.S.	III	235.18	235.13	38
89	103	730 X 1150	26	R.C.H.E. S.S.	III	235.18	234.94	
92	94	375	14	R.C.P. S.S.	III	235.66	235.40	39
93	94	375	1.5	R.C.P. S.S.	III	235.42	235.40	40
94	95	450	39	R.C.P. S.S.	III	235.32	235.20	41

STORM SEWER SUMMARY

FROM	TO	DIAMETER	LENGTH	TYPE	CLASS	INLET ELEVATION	DISCHARGE ELEVATION	REMARKS
GROUP CODE 020		mm	m					
96	97	300	2.5	STORM SEWER		235.94	235.60	42
98	99	490 X 770	1.5	R.C.H.E. S.S.	III	235.00	234.99	43
100	101	490 X 770	1.5	R.C.H.E. S.S.	III	235.01	235.00	44
102	103	375	9	R.C.P. S.S.	III	235.20	235.07	
103A	103	450	2	R.C.P. S.S.	III	235.50	235.27	45
103	107	900	64	R.C.P. S.S.	III	234.77	234.48	
104	105	300	2.5	STORM SEWER		235.37	235.15	46
106	107	375	5.5	R.C.P. S.S.	III	234.94	234.83	
108	107	600	8	R.C.P. S.S.	III	235.10	234.81	47
107	110	900	18	R.C.P. S.S.	III	234.48	234.39	48
109	110	450	6	R.C.P. S.S.	III	235.00	234.61	49
110	112	900	52	R.C.P. S.S.	III	234.39	234.13	
111	112	300	5.5	R.C.P. S.S.	III	234.71	234.60	
113	112	450	3	R.C.P. S.S.	III	234.38	234.32	
112	117	900	50.5	R.C.P. S.S.	III	234.13	233.85	50
114	115	300	2.5	STORM SEWER		235.15	234.85	51
116	117	450	5.5	R.C.P. S.S.	III	234.70	234.10	52
117	119	900	14.5	R.C.P. S.S.	III	233.85	233.77	
118	119	450	8.5	R.C.P. S.S.	III	234.65	234.27	54
119	121	900	56.5	R.C.P. S.S.	III	233.77	233.46	
120	121	300	5	R.C.P. S.S.	III	234.23	234.12	
122	121	750	4	R.C.P. S.S.	III	234.15	233.62	55
121	126	1050	18.5	R.C.P. S.S.	III	233.29	233.23	
123	124	300	3	STORM SEWER		235.03	234.70	56
125	126	375	4	R.C.P. S.S.	III	233.78	233.70	57
126	128	1050	43.5	R.C.P. S.S.	III	233.23	233.09	
127	128	300	2.5	R.C.P. S.S.	III	233.96	233.91	
129	128	450	8	R.C.P. S.S.	III	234.60	233.60	58
128	131	1050	18	R.C.P. S.S.	III	233.09	233.03	59
130	131	450	9	R.C.P. S.S.	III	234.30	233.50	60
131	133	1050	5	R.C.P. S.S.	III	233.03	233.01	61
132	133	300	1.5	R.C.P. S.S.	III	233.87	233.84	
133	138	1050	33	R.C.P. S.S.	III	233.01	232.90	62
134	135	300	3	STORM SEWER		234.76	234.30	63
139	140	375	8.5	R.C.P.S.S.	III	233.10	232.90	64

GROUP CODE 020

53	68	300	124	STORM SEWER		244.56	242.87	
86A	86B	375	7.5	R.C.P.S.S.	III	236.05	236.00	
141	142	900	118	STORM SEWER		232.75	232.30	
142	143	900	100	STORM SEWER		232.30	231.92	
143	144	900	43	STORM SEWER		231.92	231.77	

SUMMARY OF STORM SEWER QUANTITIES

GROUP CODE	R.C.P. S.S., CLASS III						R.C.P. S.S. CLASS IV	R.C.H.E. S.S. CLASS HE-III		R.C.H.E. S.S. CLASS HE-IV		STORM SEWER						
	(mm)	300	375	450	600	750	900	1050	300	490 X 770	730 X 1150	490 X 770	610 X 960	300	375	450	600	900
GROUP CODE 010	(mm)	39.5	69.5	301	80	39	255.5	118	85.5	180	120	46.5	51	137.5	52	125	63	
GROUP CODE 020	(m)		7.5											124			261	
TOTALS	(m)	39.5	77	301	80	39	255.5	118	85.5	180	120	46.5	51	261.5	52	125	63	261

SEE NEXT SHEET FOR REMARKS LEGEND

REMARKS LEGEND

- 1 STRUCTURE 1 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE @ STA 15+180, 13 m RT.) 4 45° ELBOW REQ'D AT STA 15+235, 15° ELBOW REQ'D AS 15+191
- 2 STRUCTURE 4 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE @ STA 3+982 CLAYTON RD., 12.2 m RT.) 4 JOINT TIES REQ'D
- 3 SKEW 30° L.H.F. STRUCTURE 7 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE @ STA 15+365, 16.5 m LT.)
- 4 SKEW 30° L.H.F. STRUCTURE 10 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE @ STA 15+415.5, 16 m LT.)
- 5 SKEW 30° L.H.F. STRUCTURE 13 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE @ STA 15+470.5, 15.2 m LT.)
- 6 SKEW 30° L.H.F. STRUCTURE 14A IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 15+523.5, 17.5 m LT.)
- 7 ±10° ELBOW OR BEND REQ'D AT STH 15+568 RT. TO CONNECT TO MANHOLE 18
- 8 STRUCTURE 19 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE @ STA 15+595, 13 m RT.), 4 JOINT TIES REQ'D
- 9 SKEW 30° L.H.F., SEE CONSTRUCTION DETAIL. STRUCTURE 21 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 15+561, 17 m LT.)
- 10 SKEW 30° R.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 23 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 15+642, 11 m RT.)
- 11 SKEW 30° L.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 25 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 15+688.5, 16.5 m LT.)
- 12 SKEW 30° L.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 27 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 15+690.5, 16.5 m LT.)
- 13 SKEW 30° R.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 29 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 15+685.7, 11 m RT.)
- 14 SKEW 30° R.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 31 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 15+687.7, 11 m RT.)
- 15 SKEW 30° L.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 33 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 15+852.5, 11.5 m RT.)
- 16 SKEW 30° R.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 35 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 15+854, 18.5 m RT.)
- 17 SKEW 70° L.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 37 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 15+920.5, 10.5 m RT.)
- 18 SKEW 30° R.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 39 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE @ STA 15+923.5, 16.5 m LT.)
- 19 SKEW 40° R.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 42 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 15+970, 17.5 m LT.)
- 20 JUNCTION 48 IS CONCRETE COLLAR. SEE CONSTRUCTION DETAIL
- 21 JUNCTION 48 IS CONCRETE COLLAR. SEE CONSTRUCTION DETAIL
- 22 STRUCTURE 50 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE AT STA 16+399, 20.5 m RT.) FOUR JOINT TIES REQ'D
- 23 STRUCTURE 51 IS R.C. APRON ENDWALL. TWO JOINT TIES REQ'D
- 24 STRUCTURE 53A IS R.C. APRON ENDWALL. THIS STORM SEWER STUD FUNCTIONS AS RELIEF PIPE
- 25 STRUCTURE 53B IS R.C. APRON ENDWALL. (ENDWALL FLOWLINE AT STA 16+390 STH 150, 17.5 m LT.) FOUR JOINT TIES REQ'D.
- 26 JUNCTION 57 IS CONCRETE COLLAR. SEE CONSTRUCTION DETAIL
- 27 JUNCTION 57 IS CONCRETE COLLAR. SEE CONSTRUCTION DETAIL
- 28 STRUCTURE 61 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE AT STA 16+374.5, 22.5 m LT.). FOUR JOINT TIES REQ'D
- 29 STRUCTURE 62 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE AT STA 16+389.5, 20 m LT.). FOUR JOINT TIES REQ'D
- 30 SKEW 60° R.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 64 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 15+548.5, 20 m RT.)
- 31 SKEW 45° R.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 66 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 16+549.5, 18.5 m RT.)
- 32 STRUCTURE 75 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE @ STA 16+726.5, 21 m LT.) FOUR JOINT TIES REQ'D
- 33 STRUCTURE 79 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE @ STA 16+825, 12.5 m RT.). FOUR JOINT TIES REQ'D
- 34 STRUCTURE 82 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE @ STA 16+808.5, 17.0 m LT.) FOUR JOINT TIES REQ'D
- 35 STRUCTURE 85 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE @ STA 17+020, 15.4 m RT. OF STH 150 SURV 1)
- 36 REMOVE EXISTING R.C. APRON ENDWALL AT STRUCTURE 87 (INCIDENTAL TO COST OF STORM SEWER)
- 37 STRUCTURE 90 IS EXISTING R.C. APRON ENDWALL. REMOVE ENDWALL (INCIDENTAL TO COST OF STORM SEWER)
- 38 30° ELBOW REQ'D. STRUCTURE 91 IS EXISTING R.C. APRON ENDWALL. REMOVE ENDWALL (INCIDENTAL TO COST OF STORM SEWER)
- 39 STRUCTURE 92 IS EXISTING R.C. APRON ENDWALL. REMOVE ENDWALL (INCIDENTAL TO COST OF STORM SEWER)
- 40 STRUCTURE 93 IS EXISTING R.C. APRON ENDWALL. REMOVE ENDWALL (INCIDENTAL TO COST OF STORM SEWER)
- 41 STRUCTURE 95 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE @ STA 17+460, 12.4 m RT. OF STH 150 SURV. 1)
- 42 SKEW 30° R.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 97 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 17+506, 10.5 m RT. OF STH 150 SURVEY 1)
- 43 STRUCTURE 99 IS EXISTING R.C. APRON ENDWALL. SALVAGE EXISTING ENDWALL AND RECONNECT. PIPE GRATE REQ'D
- 44 STRUCTURE 101 IS EXISTING R.C. APRON ENDWALL. SALVAGE EXISTING ENDWALL AND RECONNECT. PIPE GRATE REQ'D
- 45 STRUCTURE 103A IS R.C. APRON ENDWALL. PIPE GRATE REQ'D
- 46 SKEW 30° R.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 105 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 17+630 STH 150, 10 m RT.)
- 47 STRUCTURE 108 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE AT STA 17+634 STH 150, 20 m LT. PIPE GRATE REQ'D.)
- 48 JUNCTION 110 IS CONCRETE COLLAR
- 49 STRUCTURE 109 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE AT STA 17+647.5 STH 150, 20 m LT. PIPE GRATE REQ'D.)
- 50 JUNCTION 117 IS CONCRETE COLLAR
- 51 SKEW 30° R.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 115 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 17+701 STH 150, 10 m RT.)
- 52 STRUCTURE 116 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE AT 17+749.5 STH 150, 19.5 m LT.), PIPE GRATE REQ'D
- 54 STRUCTURE 118 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE AT 17+764 STH 150, 23 m LT.) PIPE GRATE REQ'D
- 55 STRUCTURE 122 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE AT STA 17+817 STH 150, 18.5 m RT. PIPE GRATE REQ'D)
- 56 SKEW 30° R.H.F. SEE CONSTRUCTION DETAIL STRUCTURE 124 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 17+822 STH 150, 10.5 m RT.)
- 57 JUNCTION 126 IS CONCRETE COLLAR
- 58 STRUCTURE 129 IS R.C. APRON ENDWALL (ENDWALL AT STA 17+885.5 STH 150, 18 m LT.) PIPE GRATE REQ'D
- 59 JUNCTION 131 IS CONCRETE COLLAR
- 60 STRUCTURE 130 IS R.C. APRON ENDWALL (ENDWALL FLOWLINE AT STA 17+900 STH 150, 20.5 m LT)
- 61 JUNCTION 133 IS CONCRETE COLLAR
- 62 JUNCTION 138 IS BOX CULVERT C-70-39. SEE STRUCTURE DETAILS
- 63 SKEW 30° R.H.F. SEE CONSTRUCTION DETAIL. STRUCTURE 135 IS STEEL APRON ENDWALL (ENDWALL FLOWLINE AT STA 17+909 STH 150, 11 m RT.)
- 64 JUNCTION 140 IS BOX CULVERT C-70-39. SEE STRUCTURE DETAILS
- 65 TAP INTO EXISTING MANHOLE (STRUCTURE 86B)

PLOT SCALE: 1:1

PLOT NAME: 300J

58.

REV. DATE:

59.

ORIGINATOR: O'CONNOR
LEVELS ON - 1.

PLOT SCALE: 1:1
 PLOT NAME: 300K 59
 REV. DATE: 2-8-99
 51
 22
 ORIGINATOR: O'CONNOR
 LEVELS ON * 1

STATION TO STATION	LOCATION	PAVEMENT MARKING, EPOXY			CROSSWALK 300 mm m	CHANNELIZING EPOXY, 200 mm m	STOP LINE, WHITE 600 mm m	ARROWS EPOXY, TYPE 2 EACH	WORDS EPOXY, EACH	DIAGONAL 300 mm m	CURB m	CURB RAMPS m	CONCRETE CORRUGATED MEDIAN m2	TEMPORARY 100 mm	REMOVING PAVEMENT MARKINGS 100 mm	REMARKS
		100 mm, YELLOW CENTERLINE m	100 mm, WHITE EDGE LINE SOLID m	LANE LINE DASHED m												
GROUP CODE 010																
0+940 - 0+986	USH 45	92	80			42										
1+015 - 1+054	USH 45	78				39										
13+560 - 13+783	STH 150	446														
13+783 - 15+232	STH 150	1 412														
13+560 - 15+200	STH 150 RT.		1 640													
13+560 - 15+232	STH 150 LT.		1 672													
15+273 - 17+034	STH 150	3 522														
15+273 - 17+034	STH 150			2 889												
17+417 - 17+979	STH 150	1 124														
17+417 - 17+979	STH 150			922												
9+957 - 9+990	CTH 0	66														
0+920 - 0+981	USH 45					61										
1+020 - 1+081	USH 45					61										
16+495 - 16+540	STH 150 RT.					45										
10+616	STH 150 RT.					9					29					
13+640	STH 150 LT.					9					28					
	W KC ENTRANCE					16	15.0									
6+030 - 6+080	MAIN KC ENTRANCE LT					12	7.0	2	1						*	
16+475	STH 150 RT.							1								
16+535	STH 150 RT.							1								
16+505	STH 150 RT.								1						*	
16+973 - 17+010	STH 150											30				
17+489 - 17+526	STH 150											30				
15+040 - 15+100	STH 150												244	244		
	SUBTOTALS	6 740	3 392	3 811	0	294	22.0	4	2	0	57	60	244	244		
GROUP CODE 020																
11+010	IRISH ROAD RT.														5	
12+011	N BONDOW DR.				42		8.0								10	
	CTH CB				74		15.0								10	
	DEERWOOD				60		7.0								10	
14+011	WANDA AVE.				18		4.0								10	
15+011	VERA ST.				18		4.0								10	
16+011	ZEH AVE.				18		4.0								10	
18+004	STH 150				29					60					**	
20+979	SPRINGROAD DR.				16		3.6			34					**	
	SUBTOTALS				275		45.6			94		75				
	TOTALS	6 740	3 392	3 811	275	294	67.6	4	2	94	57	75	60	244	244	

* WORD IS " ONLY". RIGHT TURN ARROWS
 ** 45° DIAGONAL HATCHING @ 600 mm SPACING

GROUP CODE 010			TRAFFIC CONTROL SUMMARY													
PAVEMENT MARKING ISLAND NOSE, EPOXY			STATION TO STATION	LOCATION	APPROX. SERVICE PERIOD DAYS	DRUMS		BARRICADES TYPE III		WARNING LIGHTS TYPE A		WARNING LIGHTS TYPE C		SIGNS		REMARKS
STATION	LOCATION	EACH				NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	
17+008	STH 150, SURV I	1	15+100 - 15+600	STH 150	140	41	5,740	17	2,380	21	2,940	8	1,120	16	2,240	INCLUDES SIDEROADS
17+034	STH 150, SURV I	1	15+600 - 17+071	STH 150	140	98	13,720	19	2,660	27	3,780			27	3,780	INCLUDES SIDEROADS
17+059	STH 150, SURV I LT	1	17+417 - 17+979	STH 150	140	37	5,180	31	4,340	41	5,740			29	4,060	INCLUDES SIDEROADS
17+487	STH 150, SURV I	1														
		4		TOTAL			24,640		9,380		12,460		1,120		10,080	

FILE NAME: J3 644803:300.dgn

SECTION CORNER AND LANDMARK REFERENCE MONUMENTS

STATION	LOCATION	DESCRIPTION	SECTION CORNER EACH	LANDMARK REFERENCE MONUMENTS EACH	REMARKS
<u>GROUP CODE 010</u>					
13+628.170	0.518 m LT.	SW CORNER SEC 13 T20N R16E	1	4	SECTION CORNER AT RESURFACING SECT., ADJ EXIST CORNER TO REQ ELEV
14+439.462	0.0003 m RT.	S $\frac{1}{4}$ CORNER SEC 13 T20N R16E	1	4	SECTION CORNER AT RESURFACING SECT., ADJ EXIST CORNER TO REQ ELEV
15+254.399	1.941 m LT.	P.K. NAIL SW CORNER SEC 18 T20N R17E	1	4	SECTION CORNER AT RECONSTRUCTION SECTION
15+935.012	0.001 m RT.	S $\frac{1}{4}$ CORNER SEC 18 T20N R17E	1	4	SECTION CORNER AT RECONSTRUCTION SECTION
16+739.551	0.200 m LT.	P.K. NAIL SE CORNER SEC 18 T20N R17E	1	4	SECTION CORNER AT RECONSTRUCTION SECTION
17+537.966	0.302 m RT.	S $\frac{1}{4}$ CORNER SEC 17 T20N R17E	1	4	SECTION CORNER AT RECONSTRUCTION SECTION
TOTAL			6	24	

STEEL PLATE BEAM GUARD, CLASS B

STATION TO STATION	LOCATION	LENGTH m
<u>GROUP CODE 020</u>		
19+962	COOKE ROAD	16

PREPARATION OF FOUNDATION FOR ASPH. SHOULDERS

STATION TO STATION	LOCATION	LENGTH m
<u>GROUP CODE 010</u>		
13+660 - 15+100	STH 150	2 880

SALVAGED ASPHALTIC PAVEMENT BASE COURSE

STATION TO STATION	LOCATION	SALVAGED ASPHALTIC PAVEMENT BASE COURSE Mg
<u>GROUP CODE 010</u>		
15+100 - 17+071	STH 150	6 210
TOTAL		6 210

ASPHALTIC FLUMES

STATION	LOCATION	ASPHALTIC FLUMES m ²
<u>GROUP CODE 010</u>		
4+023	CLAYTON ROAD, LT.	7.0
4+023	CLAYTON ROAD, RT.	12.5
5+026	WEST K-C ENTRANCE, LT.	7.8
5+026	WEST K-C ENTRANCE, RT.	7.8
4+988	AUGUSTINE ROAD, LT.	7.8
4+988	AUGUSTINE ROAD, RT.	7.8
6+023	MAIN K-C ENTRANCE, LT.	7.8
6+024	MAIN K-C ENTRANCE, RT.	7.8
5+986	TOWN OF NEENAH, LT	7.8
5+988	TOWN OF NEENAH, RT	7.8
7+020	EAST K-C ENTRANCE, LT.	7.8
7+026	EAST K-C ENTRANCE, RT.	7.8
9+016	NO. FIELDCREST DR., RT.	8.2
9+017	NO. FIELDCREST DR., LT.	7.8
8+976	SO. FIELDCREST DR., LT.	6.0
8+978	SO. FIELDCREST DR., RT.	5.4
9+968	CTH 0, RT.	5.4
9+978	CTH 0, LT.	6.5
10+020	IRISH ROAD, LT.	8.2
10+020	IRISH ROAD, RT.	5.8
11+985	BONDOW DR., LT.	6.0
12+020	BONDOW DR., RT.	6.0
14+014	WANDA AVE., RT.	6.0
14+015	WANDA AVE., LT.	6.0
15+016	VERA ST., LT.	6.0
15+016	VERA ST., RT.	6.0
16+016	ZEH AVE., LT.	6.0
16+016	ZEH AVE., RT.	6.0
20+986	SPRINGROAD DR., LT.	6.0
TOTAL		204.8

CONCRETE PAVEMENT GAPS

LOCATION	EACH
<u>GROUP CODE 010</u>	
WANDA AVE OR VERA AVE.	2
ZEH AVE.	2
TOTAL	4

ADJUSTING MANHOLE COVERS

STATION TO STATION	LOCATION	EACH
<u>GROUP CODE 020</u>		
16+200	STH 150, 12.0 m LT.	1
16+289	STH 150, 12.0 m LT.	1
16+384	STH 150, 13.5 m LT.	1
16+504	STH 150, 11.0 m LT.	1
16+625	STH 150, 10.5 m LT.	1
17+049	STH 150 SURV T/L, 12.5 m LT.	1
17+641	STH 150, 8.5 m LT.	1
17+756	STH 150, 8.5 m LT.	1
TOTAL		8

PLOT SCALE: 1:1
 PLOT NAME: 300N 59
 51
 REV. DATE: 1-26-99
 22
 ORIGINATOR: O'CONNOR
 LEVELS ON

GROUP CODE 010

REMOVING CONCRETE BASES

LOCATION	TYPE 1 EACH	TYPE 2 EACH	REMARKS
<u>KIMBERLY CLARK MAIN ENTRANCE</u>			
NORTHWEST CORNER	1	1	
SOUTHWEST CORNER		1	
SOUTHEAST CORNER	1		
STA 17+880 STH 150 RT		1	AT LOCATION WHERE POLE, MAST ARM AND ATTACHMENTS TO BE RELOCATED
	<u>2</u>	<u>3</u>	

GROUP CODE 010

CONCRETE BASES

LOCATION	TYPE 1 EACH	TYPE 2 EACH	REMARKS
<u>KIMBERLY CLARK MAIN ENTRANCE</u>			
NORTHWEST CORNER	1	1	
SOUTHWEST CORNER		1	
SOUTHEAST CORNER	1		
STA 17+880 STH 150 RT		1	AT LOCATION WHERE POLE, MAST ARM AND ATTACHMENTS TO BE RELOCATED
TOTALS	<u>2</u>	<u>3</u>	

GROUP CODE 010

LOOP DETECTORS

LOCATION	LOOP NO.	NO. OF TURNS	CONDUIT m	WIRE m	LEAD IN CABLE m
<u>KIMBERLY CLARK MAIN ENTRANCE</u>					
	21	4	18	66	106
	22	4	18	66	50
	23	3	14	28	12
	41	2	26	48	36
	42	3	26	70	68
	61	4	20	68	182
	62	4	20	68	132
	63	4	14	36	82
	81	3	30	74	46
	82	2	20	36	46
TOTALS			<u>206</u>	<u>560</u>	<u>760</u>

GROUP CODE 010

CONCRETE MEDIAN SLOPED NOSE

STATION	LOCATION	AREA m ²
<u>KIMBERLY CLARK MAIN ENTRANCE</u>		
17+008	STH 150, SURV 1	1.0
17+034	STH 150, SURV 1	1.6
17+059	STH 150, SURV 1 LT	1.6
17+487	STH 150, SURV 1	1.0
TOTAL		<u>5.2</u>

GROUP CODE 010

ELECTRICAL WIRE, TRAFFIC SIGNALS, NO. 10

LOCATION	FROM	TO	GROUNDING CONDUCTOR (WHITE)	EQUIPMENT GROUNDING CONDUCTOR (GREEN)
<u>KIMBERLY CLARK MAIN ENTRANCE</u>				
	CB	PB8		6
	PB8	PB9		18
	CB	SB3	48	48
	SB3	PB5		4
	SB3	SB4	10	10
	SB3	SB2	34	34
	SB2	PB3		6
	SB2	SB1	16	16
	SB2	SB8	44	44
	SB8	PB14		8
	SB8	SB7	12	12
	SB7	SB6	24	24
	SB6	PB11		2
	SB6	SB9	26	26
	SB9	PB10		6
	SB9	SB5	16	16
	SB9	CB	24	24
TOTALS			<u>254</u>	<u>304</u>

GROUP CODE 010

REMOVING AND REINSTALLING SIGNALS

LOCATION	EACH	REMARKS
<u>KIMBERLY CLARK MAIN ENTRANCE</u>		
NORTHWEST CORNER	2	SEE CONSTRUCTION DETAIL
SOUTHWEST CORNER	1	SEE CONSTRUCTION DETAIL
SOUTHEAST CORNER	1	SEE CONSTRUCTION DETAIL
TOTALS	<u>4</u>	

GROUP CODE 010

TRAFFIC SIGNAL CABLE

LOCATION	FROM	TO	7 CONDUCTOR NO. 14 m	HEAD NO.
<u>KIMBERLY CLARK MAIN ENTRANCE</u>				
<u>STH 150</u>				
	CB	SB5	28	3,4
	SB5	SB8	50	2
	CB	SB4	50	5
	SB4	SB1	40	1,6
<u>KIMBERLY CLARK MAIN ENTRANCE</u>				
	CB	SB3	48	9,13
	SB4	SB2	34	10
	CB	SB9	26	12
	SB9	SB6	26	7,11
	SB6	SB7	22	8
TOTAL			<u>324</u>	

NOTE: CABLE CONDUCTING TO BE ROUTED WITH THE FOLLOWING COLORS

EASTBOUND AND NORTHBOUND TRAFFIC

RED = RED
 YELLOW = ORANGE
 GREEN = GREEN

SOUTHBOUND AND WESTBOUND TRAFFIC

RED = RED WITH BLACK TRACER
 YELLOW = ORANGE WITH BLACK TRACER
 GREEN = GREEN WITH BLACK TRACER

GROUP CODE 010

PULL BOX SUMMARY

STATION	LOCATION	PULL BOX NUMBER	PULL BOXES, STEEL	
			300 X 600	600 X 900
4+020	CLAYTON RD., RT.	1		1
15+280	STH 150 LT.	2		1
15+280	STH 150 RT.	3		1
3+960	RT.	4		1
3+960	LT.	5		1
15+232	STH 150 RT.	6		1
15+232	STH 150 LT.	7		1
4+020	LT.	8		1
16+587	CTH 0 LT.	1		1
16+587	RT.	2		1
9+972	RT.	3		1
9+978	LT.	4		1
16+543	RT.	5		1
16+543	LT.	6		1
11+018	IRISH RD., RT.	1		1
16+761	LT.	2		1
16+761	RT.	3		1
10+979	RT.	4		1
10+979	LT.	5		1
16+722	RT.	6		1
16+722	LT.	7		1
11+018	LT.	8		1
18+006	LT.			
18+006	SPRING RD.			
18+006	RT.			
20+984	RT.	3		1
20+984	LT.	4		1
17+978	RT.	5		1
17+978	LT.	6		1
<u>KIMBERLY CLARK MAIN ENTRANCE</u>		1	1	
		2	1	
		6	1	
		7	1	
TOTAL			4	26

GROUP CODE 010

NON-METALLIC CONDUIT

LOCATION	FROM	TO	NON-METALLIC CONDUIT, SCHEDULE 40			CONDUIT, SPECIAL
			25 mm m	50 mm m	75 mm m	
CLAYTON ROAD	PB2	PB3			18	
	PB4	PB5			14	
	PB6	PB7			18	
	PB8	PB1			18	
CTH 0	PB1	PB2			18	
	PB3	PB4			18	
	PB5	PB6			22	
IRISH ROAD	PB2	PB3			18	
	PB4	PB5			18	
	PB6	PB7			18	
	PB8	PB1			18	
SPRINGROAD DRIVE	PB3	PB4				13
	PB5	PB6			18	
KIMBERLY CLARK MAIN ENT.	PB8	PB9			18	
	PB8	PB7	46			
	PB7	PB6	50			
	PB10	PB11			18	
	PB11	PB14			18	
	PB14	SB7		6		
	PB14	SB8		8		
	PB14	PB3			30	
	PB3	SB2		6		
	PB13	PB2	48			
PB2	PB1	50				
PB3	PB5			24		
PB5	SB3		4			
TOTAL			194	24	324	13

GROUP CODE 020

CONCRETE SIDEWALK, 100 mm

STATION TO STATION	LOCATION	m ²
19+960 - 19+994	COOKE ROAD	83

GROUP CODE 020

RECONSTRUCTING MANHOLES

STATION	LOCATION	EACH	REMARKS
16+090	STH 150, 11.5 m LT	1	
16+748	STH 150, 11.5 m LT	1	
17+516	STH 150 SURV 1, 11.5 m LT	1	
17+835	STH 150, 9.5 m LT	1	
17+894	STH 150, 12.0 m	1	
		5	

GROUP CODE 020

OBLITERATING OLD ROAD

STATION TO STATION	LOCATION	m
19+960 - 19+995	COOKE ROAD	35

ORIGINATOR: O'CONNOR
 LEVELS ON * I,
 REV. DATE: 12-18-88
 22,
 5/1,
 PLOT NAME: sign1
 59,
 PLOT SCALE: 1:1

SIGN REMOVALS

REMOVING SIGN SUMMARY

NO.	CODE	REMOVING SIGNS TYPE I	REMOVING SIGNS TYPE II	REMOVING SMALL SIGN SUPPORTS	REMARKS
GROUP CODE 010					
1	J1-1		1	1	DO NOT REMOVE SIGN UNTIL PRIOR TO ERECTING NEW REPLACEMENT SIGN
2	J3-2		1	1	DO NOT REMOVE SIGN UNTIL PRIOR TO ERECTING NEW REPLACEMENT SIGN
3	J1-1		1	1	DO NOT REMOVE SIGN UNTIL PRIOR TO ERECTING NEW REPLACEMENT SIGN
4	J3-2		1	1	DO NOT REMOVE SIGN UNTIL PRIOR TO ERECTING NEW REPLACEMENT SIGN
5	J3-2		1	1	DO NOT REMOVE SIGN UNTIL PRIOR TO ERECTING NEW REPLACEMENT SIGN
6	J1-1		1	1	DO NOT REMOVE SIGN UNTIL PRIOR TO ERECTING NEW REPLACEMENT SIGN
7	J3-2		1	1	DO NOT REMOVE SIGN UNTIL PRIOR TO ERECTING NEW REPLACEMENT SIGN
8	J4-1		1		EXISTING D2-2 & POSTS TO REMAIN/DO NOT REMOVE SIGN UNTIL PRIOR TO ERECTING NEW REPLACEMENT SIGN
9	J1-1		1	1	DO NOT REMOVE SIGN UNTIL PRIOR TO ERECTING NEW REPLACEMENT SIGN
10	R2-1		1	1	
11	R2-1		1	1	
12	R1-1		1	1	
13	R1-1		1	1	
14	R2-1		1	1	
15	R2-1		1	1	
16	R1-1		1	1	
17	R1-1		1	1	
18	W3-3		1	1	
19	W3-3		1	1	
20	W14-3		1	1	
21	R2-1		1	1	
22	W11-1		1	1	
23	W7-3A		1		ERECTED UNDER #22
24	R3-8R		1	1	
25	R2-1		1	1	
26	R1-1		1	1	
27	W3-3		1	1	
28	R2-1		1	1	
29	W3-3		1		ERECTED ON BACK OF #28
30	J1-1		1	1	
31	W11-1		1	1	
32	R1-1		1	1	
33	R1-1		1	1	
34	W11-1		1	1	
35	J13-1		1	1	
36	R5-1		1	1	
37	R5-1		1	1	
38	R1-2		1	1	
39	R1-1		1	1	
40	J13-1		1	1	
41	J13-1		1	1	
42	R2-1		1	1	
43	R2-1		1	1	
44	R4-7		1	1	
45	R1-1		1	1	
46	R1-52C		1		ERECTED ON BACK OF #45
47	R4-7		1	1	
48	R1-1		1	1	
49	R1-52C		1		ERECTED ON BACK OF #48
50	R1-1		1	1	
51	R1-52C		1		ERECTED ON BACK OF #50
52	J1-1		1	1	
53	W6-1		1	1	
54	W6-3		1	1	
55	J1-1		1	1	
56	R1-1		1	1	
57	R1-1		1	1	
58	W4-2R		1	1	
59	W9-1R		1	1	
60	J3-2		1	1	
61	J3-2		1	1	
62	J1-2		1		*
63	J13-2		1	1	
64	W9-1R		1	1	
65	J1-1		1	1	
66	R2-1		1	1	
67	W6-1		1	1	
68	R1-1		1	1	
69	W6-3		1	1	
70	R2-1		1	1	
71	R1-1		1	1	
72	J1-1		1	1	
73	R1-1		1	1	
74	S1-1		1	1	

CONTINUED

REMOVING SIGN SUMMARY

NO.	CODE	REMOVING SIGNS TYPE I	REMOVING SIGNS TYPE II	REMOVING SMALL SIGN SUPPORTS	REMARKS
75	J1-2		1	1	
76	SS-2		1	1	
77	R2-1		1	1	
78	S2-1		1	1	
79	W6-3		1	1	
80	S2-1		1	1	
81	R1-1		1	1	
81A	W4-2R		1	1	
82	OM-3L		1	1	
83	OM-3R		1	1	
84	OM-3L		1	1	
85	OM-3R		1	1	
86A	W4-2R		1	1	
86	J4-1		1		DO NOT REMOVE POST
87	J3-1		1		DO NOT REMOVE POST
88	J3-1		1		DO NOT REMOVE POST
89	J3-2		1	1	
90	-	1			*
91	-	1			*
92	-	1			*
93	-	1			*
94	-	1			*
TOTALS		5	91	79	

* USE EXISTING POSTS / SUPPORTS. DO NOT REMOVE SIGN UNTIL PRIOR TO ERECTING NEW REPLACEMENT SIGN. APPROXIMATE LOCATION.

PERMANENT SIGNS

NO.	CODE	TYPE	SIGN SUMMARY			SIGN TYPE I REFLECTIVE #2	SIGN TYPE II REFLEC. #2	MOVING SIGN TYPE II EACH	WOOD POSTS 100 X 150 mm		REMARKS
			CODE SIZE	HEIGHT m	WIDTH m				4.3 m EACH	4.9 m EACH	
GROUP CODE 010											
1	J1-3	2	2			1.71		2			
2	J3-3	2	2			2.53		2			
3	J1-2	2	2			1.13		1			
4	J3-2	2	2			1.68		1			
5	J3-2	2	2			1.68		1			
6	J1-2	2	2			1.13		1			
7	J3-3	2	2			2.53		2			
8	J4-1	2	2			0.56				PLACE ABOVE EXISTING D2-2 SIGN/USE EXISTING POSTS.	
9	J1-3	2	2			1.71		2			
10	W14-3	2	2	0.91	1.22	0.52				APPROXIMATE LOCATION	
11	W6-3	2	2	0.76	0.76	0.58				APPROXIMATE LOCATION	
12	R2-1	2	2	0.76	0.61	0.46				APPROXIMATE LOCATION/45 MPH	
13	R2-1	2	2	1.22	0.91	1.11				45 MPH	
14							1	2		SALVAGE AND RE-ERECT "ADOPT A HIGHWAY" SIGN	
15	W4-2R	2	2	0.76	0.76	0.58				APPROXIMATE LOCATION	
16	R1-1	2	2	0.76	0.76	0.48					
17	R1-1	2	2	0.76	0.76	0.48					
17A	W3-1R	2	2	0.76	0.76	0.58				APPROXIMATE LOCATION	
18	R2-1	2	2	0.61	0.61	0.46				45 MPH	
19							1	2		SALVAGE AND RE-ERECT "ADOPT A HIGHWAY" SIGN	
20	R2-1	2	2	0.61	0.61	0.46				45 MPH	
21	R1-1	2	2	0.76	0.76	0.48					
22	R1-1	2	2	0.76	0.76	0.48					
23	W3-3	2	2	0.76	0.76	0.58					
24	W2-3	2	2	0.76	0.76	0.58					
25	R2-1	2	2	0.61	0.61	0.46				45 MPH	
26	R2-1	2	2	0.61	0.61	0.46				45 MPH	
27	R1-1	2	2	0.76	0.76	0.48					
28	R2-1	2	2	0.61	0.61	0.46				35 MPH	
29	W3-3	2	2	0.76	0.76	0.58					
30	W3-3	2	2	0.76	0.76	0.58					
31	J1-1	2	2			0.57					
32	R1-1	2	2	0.76	0.76	0.48					
33	R1-1	2	2	0.76	0.76	0.48					
34	R3-7R	2	2	0.76	0.76	0.58					
35	J13-1	2	2			0.66					
36	R1-1	2	2	0.76	0.76	0.48					
37	R1-1	2	2	0.76	0.76	0.48					
38	J13-1	2	2			0.66					
39	J13-1	2	2			0.66					
40	R2-1	2	2	0.76	0.61	0.46				35 MPH	
41	R2-1	2	2	0.76	0.61	0.46				35 MPH	
42	R1-1	2	2	0.76	0.76	0.48					
43	R1-52C	2	2	0.46	1.02	0.47				ERECT UNDER SIGN #42	
44	R1-1	2	2	0.76	0.76	0.48		1		ERECT UNDER SIGN #44	
45	R1-52C	2	2	0.46	1.02	0.47					
46	J1-1	2	2			0.57					
47	W6-1	2	2	0.76	0.76	0.58					
48	J1-1	2	2			0.57					
49	W6-3	2	2	0.76	0.76	0.58					
50	R1-1	2	2	0.76	0.76	0.48					
51	R1-1	2	2	0.76	0.76	0.48					
52	R2-1	2	2	0.76	0.61	0.46				35 MPH	
52A	J3-1	2	2			0.64					
53	J13-2	2	2			1.31					
54	J13-1	2	2			0.66					
55	J1-1	2	2			0.57					
56	J13-2	2	2			1.31					
57	W6-2	2	2	0.76	0.76	0.58					
58	J1-1	2	2			0.57					
59	R2-1	2	2	0.76	0.61	0.46				35 MPH	
60	W6-1	2	2	0.76	0.76	0.58					
61	W6-3	2	2	0.76	0.76	0.58			1		
62	R2-1	2	2	0.76	0.61	0.46			1	35 MPH	
63	R1-1	2	2	0.76	0.76	0.48					
64	R1-1	2	2	0.76	0.76	0.48					
65	J1-1	2	2			0.57					
66	S1-1	2	3	0.91	0.91	0.63			1		
67							1	2		SALVAGE AND RE-ERECT "ADOPT A HIGHWAY" SIGN	
68	R1-1	2	2	0.76	0.76	0.48					
69	J1-1	2	2			0.57			1		
70	S2-1	2	3	0.91	0.91	0.63					
71	S5-2	2	2	0.76	0.61	0.46					
72	R2-1	2	2	0.76	0.61	0.46				35 MPH	
73	W6-3	2	2	0.76	0.76	0.58					
74	S2-1	2	3	0.91	0.91	0.63					
75	R1-1	2	2	0.76	0.76	0.48					
76	J4-2	2	2	0.91	0.61	0.56				INSTALL ON EXISTING POST	
77	M50-2	2	2			1.50				INSTALL ON EXISTING POST	
78	M50-2	2	2			1.50				INSTALL ON EXISTING POST	
79	J3-3	2	2	1.45	1.83	2.53		2			
80		1		3.20	6.70	21.44				ATTACH TO EXISTING POSTS/MAST ARM SEE CONSTRUCTION DETAILS	
80A		1		0.61	3.04	1.85				ATTACH TO EXISTING POSTS/MAST ARM SEE CONSTRUCTION DETAILS	
81		1		2.43	7.62	18.52				ATTACH TO EXISTING POSTS/MAST ARM SEE CONSTRUCTION DETAILS	
81A		1		0.61	3.04	1.85				ATTACH TO EXISTING POSTS/MAST ARM SEE CONSTRUCTION DETAILS	
82		1		2.89	6.40	18.50				ATTACH TO EXISTING POSTS/MAST ARM SEE CONSTRUCTION DETAILS	
82A		1		0.61	3.04	1.85				ATTACH TO EXISTING POSTS/MAST ARM SEE CONSTRUCTION DETAILS	
83		1		3.04	5.48	16.66				ATTACH TO EXISTING POSTS/MAST ARM SEE CONSTRUCTION DETAILS	
83A		1		0.61	3.04	1.85				ATTACH TO EXISTING POSTS/MAST ARM SEE CONSTRUCTION DETAILS	
84		1		3.20	6.70	21.44				ATTACH TO EXISTING POSTS/MAST ARM SEE CONSTRUCTION DETAILS	
84A		1		0.61	3.04	1.85				ATTACH TO EXISTING POSTS/MAST ARM SEE CONSTRUCTION DETAILS	
TOTALS						105.81	57.56	3	79	4	

PLOT SCALE: 1:1
 PLOT NAME: sign2
 59,
 51,
 REV. DATE:
 22
 ORIGINATOR: O'CONNOR
 LEVELS ON - 1

R/W PROJECT NUMBER 6448-03-21	SHEET NUMBER 4.1	TOTAL SHEETS
FEDERAL PROJECT NUMBER		
PLAT OF RIGHT OF WAY REQUIRED FOR STH 110 - SPRINGROAD DRIVE		
STH 150	WINNEBAGO CO	
CF = 0.999945		

CONVENTIONAL SIGNS AND ABBREVIATIONS

AC.	ACRES	m	METER
AC. REM.	ACRES REMAINING	P.	PAGE
A.P.	ACCESS POINT	PED	PEDESTAL
B.	BARN	O	R/W MONUMENT
BLDG.	BUILDING	P.L.	PROPERTY LINE
CO.	COMPANY	P.L.E.	PERMANENT LIMITED EASEMENT
CORP.	CORPORATION	---P.L---	PROPERTY LINE
C.S.M.	CERTIFIED SURVEY MAP	---Q.L---	QUARTER LINE
C.T.H.	COUNTY TRUNK HIGHWAY	R.	RANGE
D.	DEED	RD.	ROAD
ET. AL.	AND OTHERS	R/W	RIGHT OF WAY
---	EXISTING R/W LINE	S.	SHED
G.	GARAGE	---	SECTION LINE
GN	GRID NORTH	S.F.	SQUARE FEET
H.	HOUSE	---	SIXTEENTH LINE
ha	HECTARE	m ²	SQUARE METER
INC.	INCORPORATED	S.T.H.	STATE TRUNK HIGHWAY
I.P.	IRON PIN	T.	TOWN
L.C.	LAND CONTRACT	TEMP.	TEMPORARY
km	KILOMETER	T.L.E.	TEMPORARY LIMITED EASEMENT
L.C.B.	LONG CHORD BEARING	VOL.	VOLUME
		WIS.	WISCONSIN

PLOT SCALE:

PLOT NAME: 100

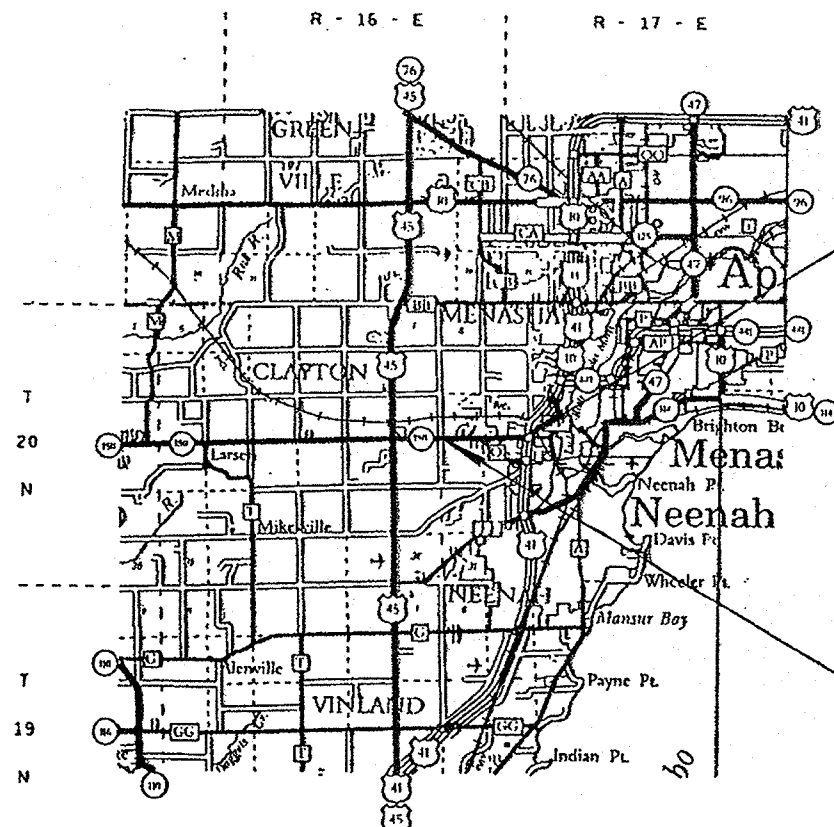
REV. DATE: 3-5-98

3-2-98

ORIGINATOR: BALDWIN

COMPENSABLE NON-COMPENSABLE

POWER POLE	▲	⊙
TELEPHONE POLE	⚡	⊙
SIGN	⚡	⊙
TELEPHONE PEDESTAL	■	⊙
NO ACCESS (BY ACQUISITION)		
NO ACCESS (BY STATUTORY AUTHORITY)	●●●●●	●●●●●
NO ACCESS (BY PREVIOUS PROJECT OR COVENANT)	◆◆◆◆◆	◆◆◆◆◆



END RELOCATION ORDER

PROJECT 6448-03-21
STATION 18+040.000
N 41 858.794
E 730 433.642
297.244 m (975.21') S 88°-53'-18" W
OF THE NORTHEAST CORNER OF SECTION 20,
TOWNSHIP 20 NORTH, RANGE 17 EAST.

BEGIN RELOCATION ORDER

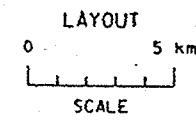
PROJECT 6448-03-21
STATION 15+000.000
N 41 798.142
E 727 394.296
254.409 m (834.67') S 88°-26'-55" W
OF THE SOUTHEAST CORNER OF SECTION 13,
TOWNSHIP 20 NORTH, RANGE 16 EAST.

NOTES

COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WISCONSIN COORDINATE SYSTEM CENTRAL ZONE (NAD 27). ALL PLAT COORDINATES ARE PROVIDED IN METRIC GROUND DATA AND CAN BE CONVERTED TO METRIC GRID BY MULTIPLYING BY THE GRID FACTOR PROVIDED ON THE DETAIL SHEETS. ALL PLAT DISTANCES ARE GROUND LENGTHS AND ARE PROVIDED IN METRIC (METERS) AND ENGLISH (FEET). TO CONVERT GROUND LENGTHS TO GRID LENGTHS MULTIPLY THE DISTANCES BY THE GRID FACTOR PROVIDED ON THE DETAIL SHEETS.

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.



TOTAL NET LENGTH OF CENTERLINE • 3.040 km

REVISION DATE	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
	APPROVED FOR DISTRICT OFFICE:
	DATE: 2/3/98 <i>Michael J. Flynn</i>

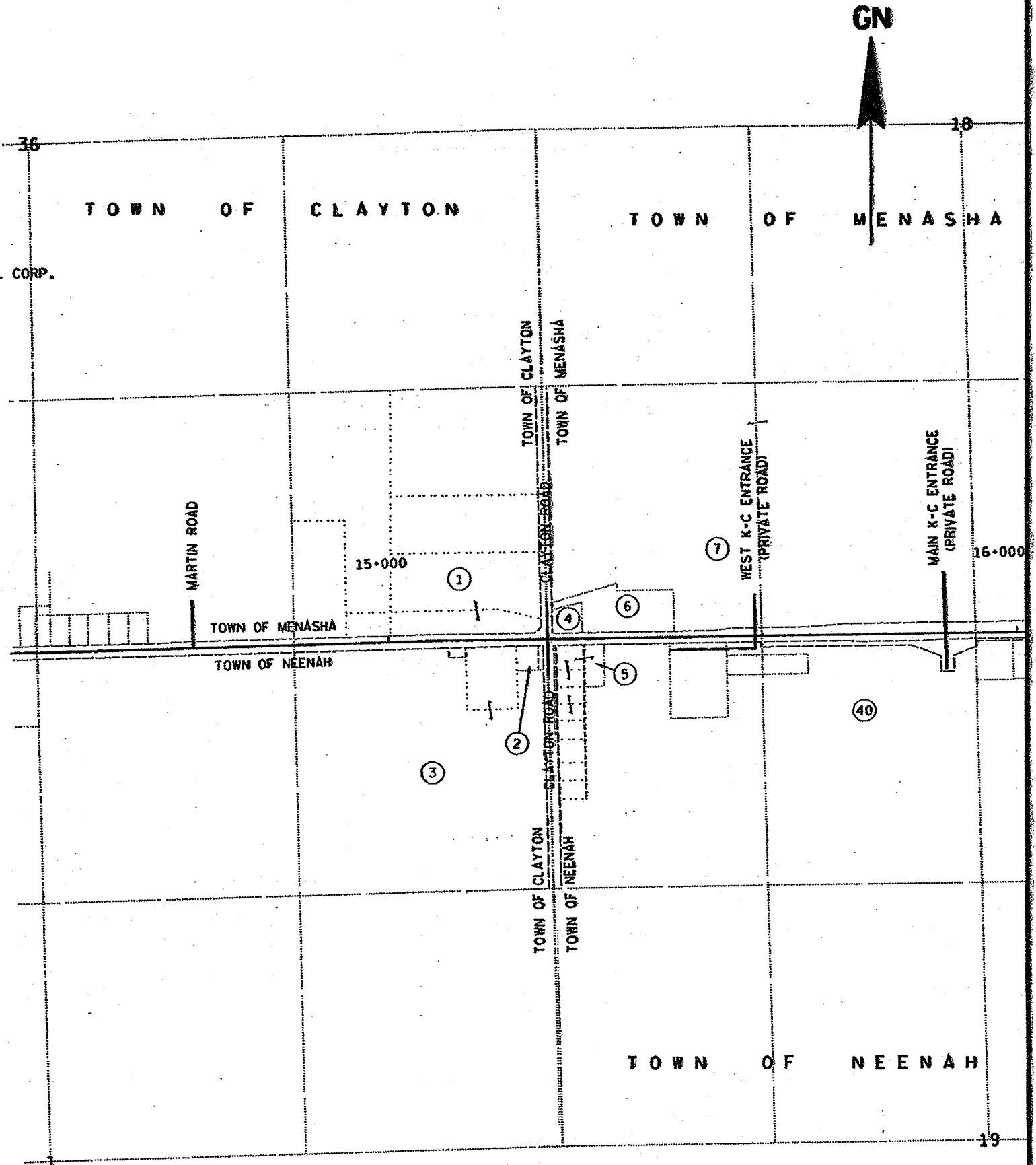
PLOT SCALE: 4000

PLOT NAME: 4T02

REV. DATE: 9-10-98

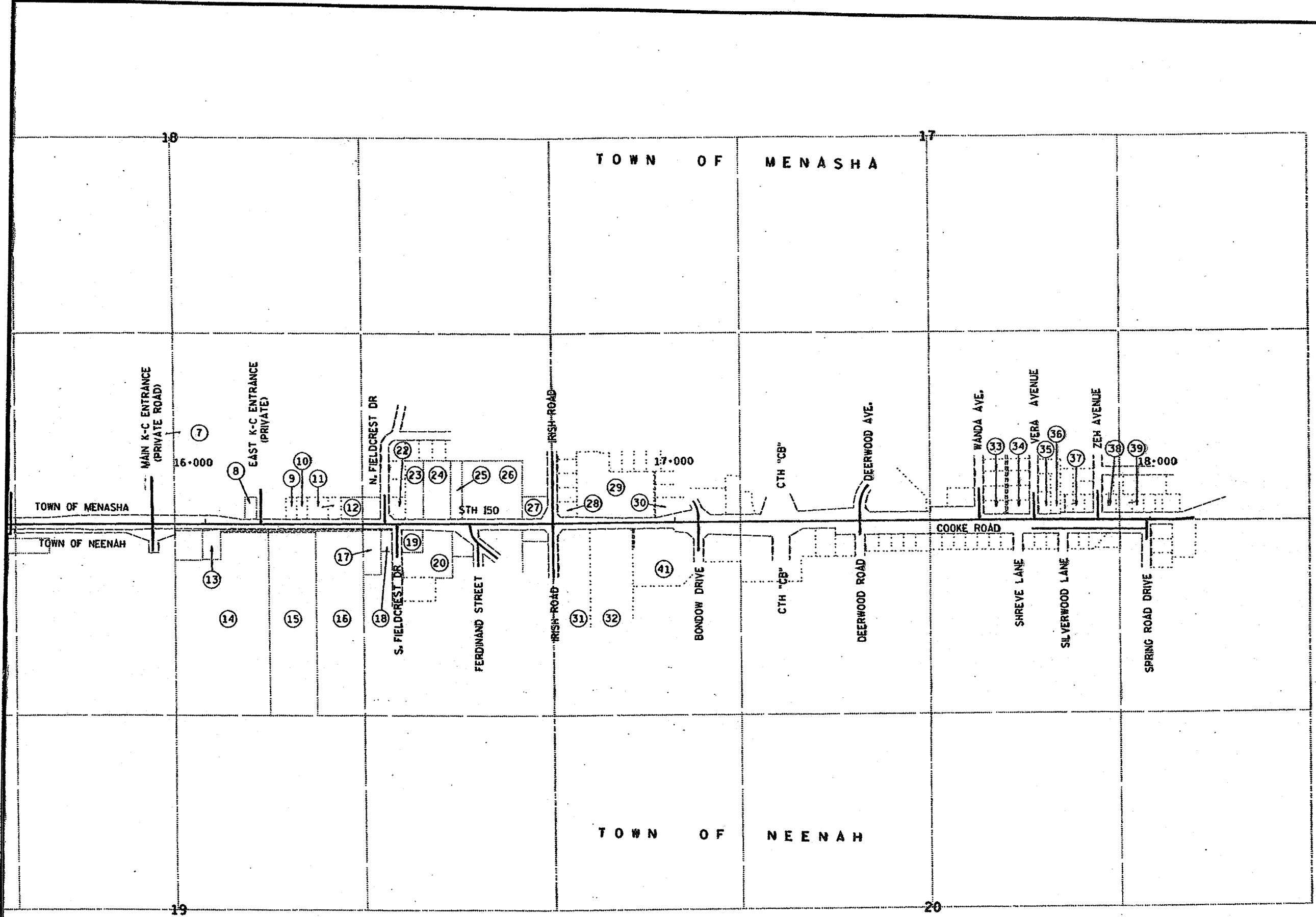
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PARCEL NUMBER	SHEET NUMBER	OWNER
1	4.3 & 4.4	CARL G. & NANCY L. MEIERS-KNOX
2	4.4	DENNIS F. & JANE L. VANDEHEY-WADDINGTON
3	4.3	JAMES H. & BONNIE J. SALM
4	4.4	BETTY KEMPF
5	4.4	PATRICK J. & BARBARA D. WILZ
6	4.4	LYNN A. WERNER, ETAL
7	4.4-4.6	KIMBERLY-CLARK CORPORATION
8	4.6	SANITARY DISTRICT NO. 4, TOWN OF MENASHA, A MUNICIPAL CORP.
9	4.6	ROBERT W. & DARCY J. CALLAWAY
10	4.6	ERVIN F. KOCH
11	4.7	TIMOTHY W. WOELER & BRENDA L. HOWARD
12	4.7	THE KURKA FAMILY TRUST
13	4.6	BRUCE S. WILLIAMS
14	4.6	KEVIN E. SELL
15	4.6 & 4.7	MICHAEL & SHARON M. KOEUNE L.C.
16	4.7	OTTO C. & THERESA A. ZOESCH
17	4.7	DANNY R. T. & DEBORAH J. KUSE
18	4.7	JOSEPH M. JOHNSON
19	4.7	WILLIS E. WOCKENFUS
20	4.7	WAYNE F. & JOAN C. STABNAW
21	4.7	JACOB C. & MILDRED VERTZ
22	4.7	JAMES GREGORY & LOIS H. CHOCK
23	4.7	THOMAS JEFFREY & JACQUELINE A. MARTIN
24	4.7	GEORGE E. & GERMAINE C. RUHL
25	4.7	DONALD G. JUNGEBERG & SHARON K. PHILLIP
26	4.8	GERHARD J. GEIGER
27	4.8	JAY F. & KATHLEEN A. ALAN
28	4.8	BERNARD R. & JANET M. HILDEBRAND
29	4.8 & 4.9	GEORGE W. & MARGARET M. STROHMEYER
30	4.9	JEFFREY A. & NATALIE A. STROHMEYER
31	4.8	VEL CORP. A WIS. CORP. L.C.
32	4.8 & 4.9	VEL CORP. A WIS. CORP.
33	4.11	PEGGY ANN PERZENTKA
34	4.11	CHERYL L. NALEWAY
35	4.11	LELAND W. & JOYCE M. SUTHEIMER
36	4.11	GILBERT H. & DOROTHY I. COREY
37	4.11	HENRY J. & DELORES J. HEDTKE
38	4.12	TERRENCE K. VAN HOOF
39	4.12	PATRICK J. & SUSAN E. GOLDEN
40	4.5	LAWRENCE W. & PATRICIA WIRTH
41	4.9	JOHN FRANK & SUSANNA ECCLES
70	4.4 & 4.6-4.9	WISCONSIN ELECTRIC POWER CO. (40)
71	4.4-4.7 & 4.9	AMERITECH (41)
72	4.5-4.9 & 4.11	TOWN OF MENASHA, SANITARY DISTRICT NO. 4 (42)
73	4.3 & 4.4	WISCONSIN PUBLIC SERVICE CORP. (43)
74	4.4, 4.6 & 4.7	TIME WARNER CABLE (44)



REVISION DATE	DATE	NOT TO SCALE	HWY: STH 150	FEDERAL PROJECT NO:	
	8-3-98		COUNTY: WINNEBAGO	STATE R/W PROJECT NO: 6448-03-21	SHEET NO: 4.2

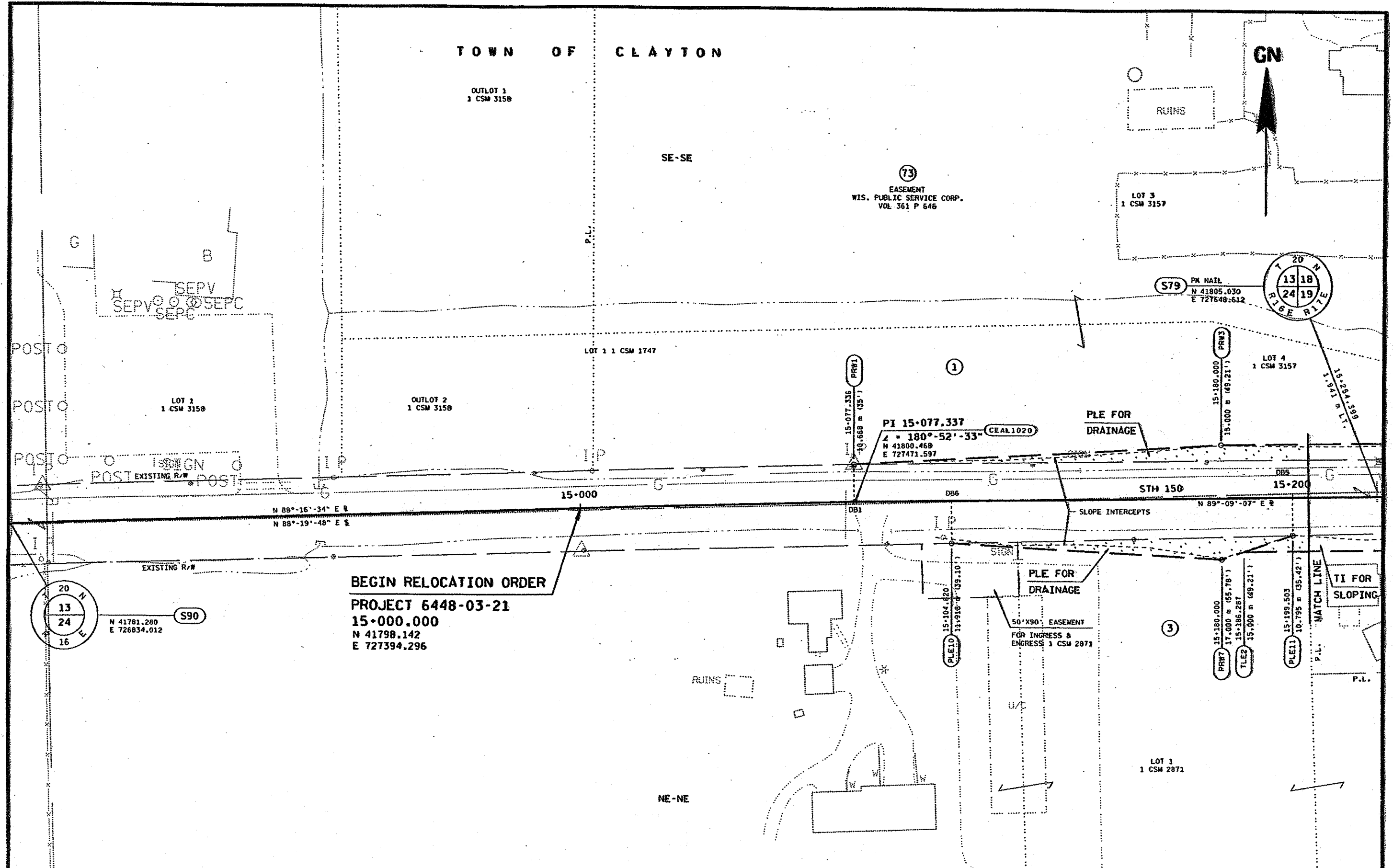
ORIGINATOR: 10-28-97
 LEVELS ON: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63
 REV. DATE: 9-10-98
 PLOT NAME: 4T03
 PLOT SCALE: 4000



REVISION DATE	DATE	NOT TO SCALE	HWY: STH 150	FEDERAL PROJECT NO:	
	8-3-98		COUNTY: WINNEBAGO	STATE R/W PROJECT NO: 6448-03-21	SHEET NO: 4.3

FILE NAME: 03 644803:4T03

REV. DATE: 9-10-98
 PLOT NAME: D3404
 PLOT SCALE: 500
 ORIGINAL OR: 10-28-97
 LEVELS ON: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63
 FILE NAME: D3 644803:03404



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL AREA	R/W AREA REQUIRED			TOTAL AREA REMAINING	TI AREA	PLE AREA
					NEW	EXISTING	TOTAL			
1	4.3 & 4.4	CARL G. & NANCY L. MEYERS-KNOX	PLE & TI	9,705 sq (23.98 AC)	-	-	-	14.47 m ² (155.76 SF)	0.047 ha (0.12 AC)	
3	4.3	JAMES H. & BONNIE J. SALM	PLE & TI	310,430 sq (272.87 AC)	-	-	-	0.005 ha (0.01 AC)	0.028 ha (0.07 AC)	
73	4.3 & 4.4	WIS. PUBLIC SERVICE CORP. (43)	RELEASE OF RIGHTS	-	-	-	-	-	-	

EXISTING R/W ACQUIRED UNDER PROJECTS 6448-1-21 & 4619-2-21

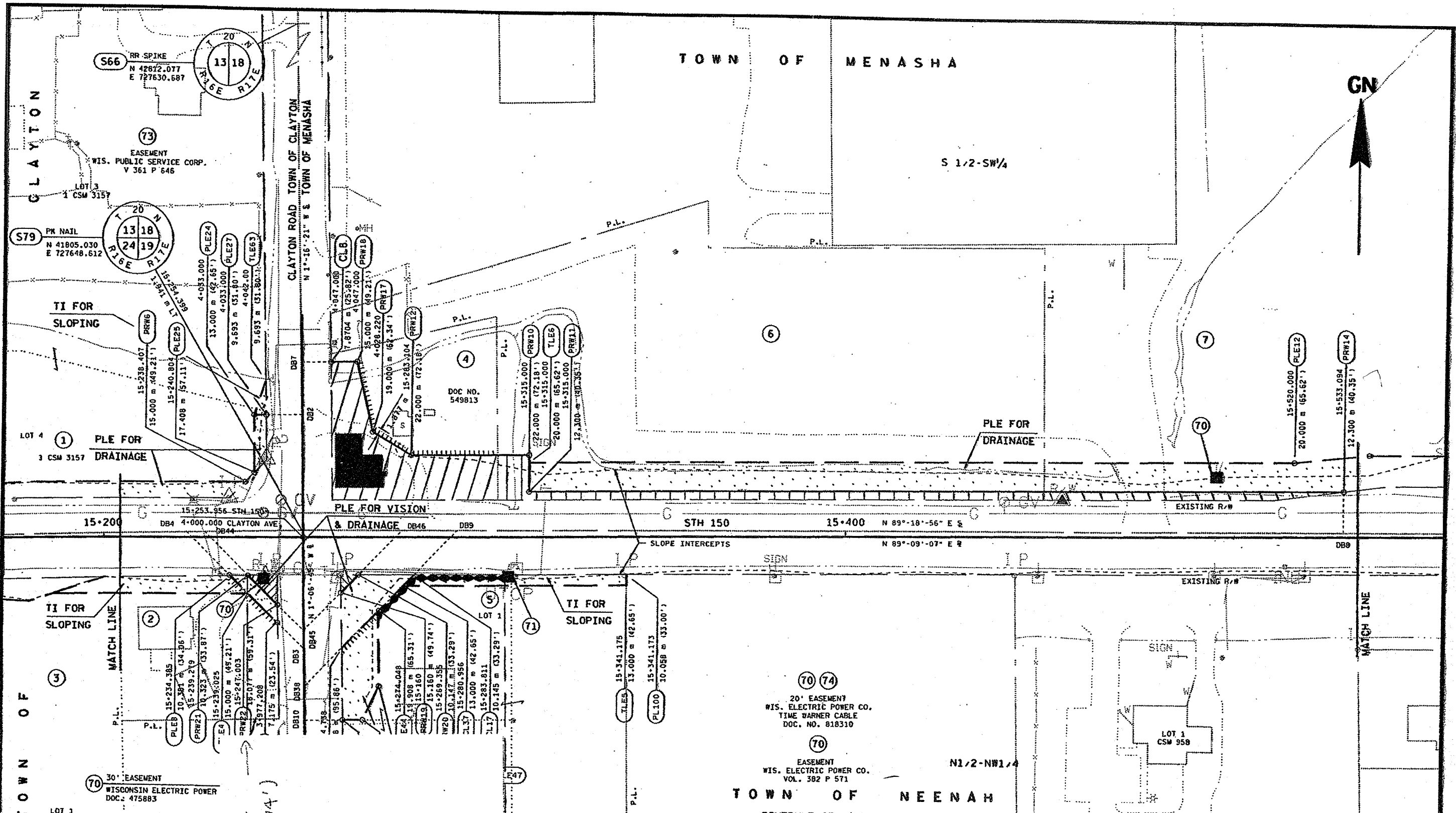
REVISION DATE	DATE	SCALE, METERS	HWY: STH 150	FEDERAL PROJECT NO:
	8-3-98	0 25 50	COUNTY: WINNEBAGO	STATE R/W PROJECT NO: 6448-03-21
	GRID FACTOR			SHEET NO: 4.4
	0.999945			M

REV. DATE: 11-2-98

ORIGINATOR: 10-28-97

LEVELS ON: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63

FILE NAME: D3 644803:034045



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL AREA	R/W AREA REQUIRED			TOTAL AREA REMAINING	TI AREA	PLE AREA
					NEW	EXISTING	TOTAL			
1	4.3 & 4.4	CARL G. & NANCY L. MEYERS-KNOX								
2	4.4	DENNIS F. & JANE L. VANDHEY-WADDINGTON	FEE, PLE, TI & ACCESS RTS.	2508.969m ² 27007.20SF	30.138 m ² 324.41SF		30.138 m ² 324.41SF	2478.831m ² 26682.79SF	144.252m ² 1552.77SF	50.257m ² 540.38SF
4	4.4	BETTY KEMPE	FEE & ACCESS RTS.	0.259 ha (0.64 AC)	0.081 ha (0.20 AC)	0.077 ha (0.19 AC)	0.158 ha (0.39 AC)	0.101 ha (0.25 AC)		
5	4.4	PATRICK J. & BARBARA D. WILZ	FEE, PLE, TI & ACCESS RTS.	5260.741m ² 56628.00SF	12.000m ² 129.17SF		12.000m ² 129.17SF	5248.741m ² 56498.83SF	80.795m ² 869.70SF	377.886m ² 4067.66SF
6	4.4	LYNN A. WERNER, ETAL	FEE & PLE	2.902 ha (7.17 AC)	0.042 ha (0.10 AC)	0.154 ha (0.38 AC)	0.196 ha (0.48 AC)	2.706 ha (6.69 AC)		0.108 ha (0.27 AC)
7	4.4 & 4.6	KIMBERLY-CLARK CORPORATION	FEE, PLE & TI	60.664 ha (149.90 AC)	0.150 ha (0.37 AC)		0.150 ha (0.37 AC)	60.514 ha (149.53 AC)	0.137 ha (0.34 AC)	0.514 ha (1.27 AC)
70	4.4 & 4.6-4.9	WISCONSIN ELECTRIC POWER CO. (40)	RELEASE OF RIGHTS							
71	4.4-4.7 & 4.9	AMERITECH (41)	RELEASE OF RIGHTS							
73	4.3 & 4.4	WIS. PUBLIC SERVICE CORP. (43)	RELEASE OF RIGHTS							
74	4.4, 4.6 & 4.7	TIME WARNER CABLE (44)	RELEASE OF RIGHTS							

SEE SHEET NO. 4.3

PRW19 15+261.612
15.160m (49.74')

EXISTING R/W ACQUIRED UNDER PROJECTS 6448-1-21 & 4619-2-21

REVISION DATE: _____ DATE: 8-3-98 SCALE, METERS: 0 25 50

GRID FACTOR: 0.999945

HWY: STH 150 COUNTY: WINNEBAGO FEDERAL PROJECT NO: STATE R/W PROJECT NO: 6448-03-21 SHEET NO: 4.5

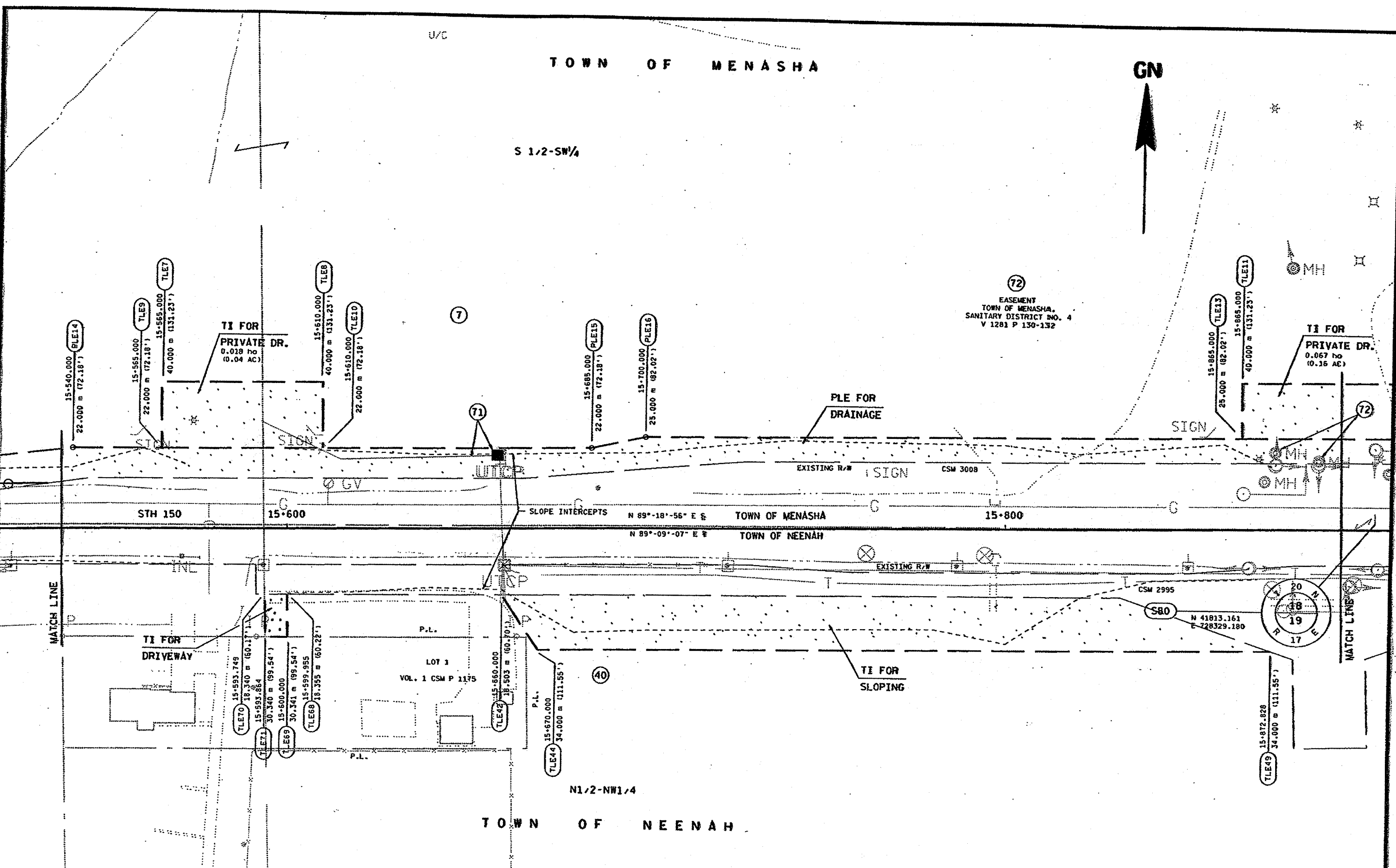
PLOT SCALE: 1000

PLOT NAME: P3405

REV. DATE: 10-27-98

ORIGINATOR: 10-28-97

LEVELS ON: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63



EXISTING R/W ACQUIRED UNDER PROJECTS 6448-1-21 & 4619-2-21 AND BY DEDICATION TO PUBLIC RECORDED IN CSM 2995 & 3008.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL AREA	R/W AREA REQUIRED			TOTAL AREA REMAINING	TI AREA
					NEW	EXISTING	TOTAL		
7	4.4-4.6	KIMBERLY-CLARK CORPORATION			SEE SHEET NO. 4.4				
40	4.5	LAWRENCE W. & PATRICIA WIRTH	TI					0.292 HO (0.72 AC)	
71	4.4-4.7 & 4.9	AMERITECH (41)	RELEASE OF RIGHTS						
72	4.5-4.9 & 4.11	TOWN OF MENASHA SANITARY DIST. NO. 4 (42)	RELEASE OF RIGHTS						

REVISION DATE	DATE	SCALE, METERS	HWY: STH 150	FEDERAL PROJECT NO:
	8-3-98	0 25 50	COUNTY: WINNEBAGO	STATE R/W PROJECT NO: 6448-03-21
	GRID FACTOR			SHEET NO: 4.6
	0.999945			M

FILE NAME: P3405

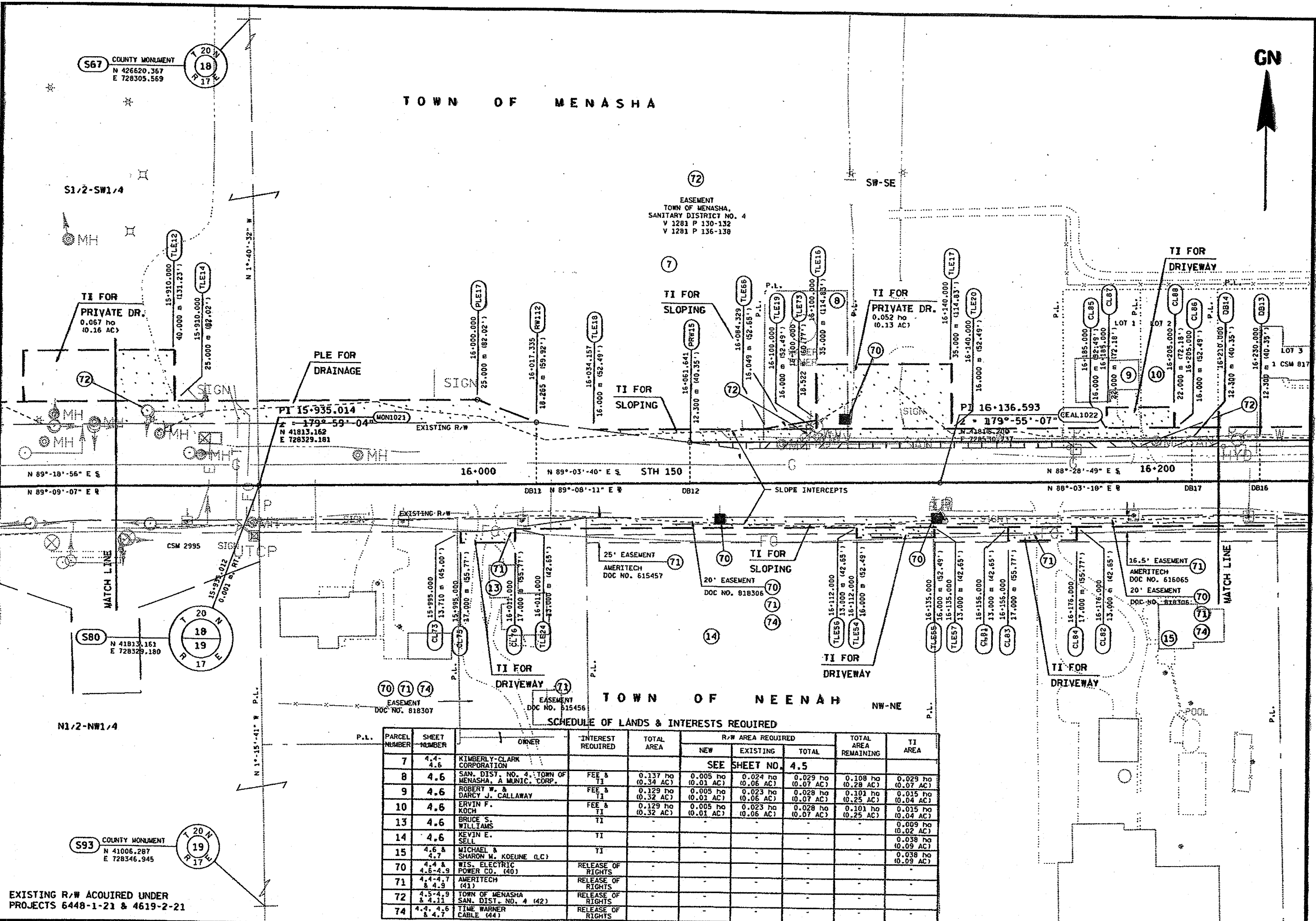
TOWN OF MENASHA

GN

PLOT SCALE: 1000

PLOT NAME: D34055
REV. DATE: 9-10-98
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63

ORIGINATOR: 10-28-97



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL AREA	R/W AREA REQUIRED			TOTAL AREA REMAINING	TI AREA
					NEW	EXISTING	TOTAL		
7	4.4-4.6	KIMBERLY-CLARK CORPORATION			SEE SHEET NO. 4, 5				
8	4.6	SAN. DIST. NO. 4, TOWN OF MENASHA, A MUNIC. CORP.	FEE & TI	0.137 ha (0.34 AC)	0.005 ha (0.01 AC)	0.024 ha (0.06 AC)	0.029 ha (0.07 AC)	0.108 ha (0.28 AC)	0.029 ha (0.07 AC)
9	4.6	ROBERT W. & DAREY J. CALLAWAY	FEE & TI	0.129 ha (0.32 AC)	0.005 ha (0.01 AC)	0.023 ha (0.06 AC)	0.028 ha (0.07 AC)	0.101 ha (0.25 AC)	0.015 ha (0.04 AC)
10	4.6	ERVIN F. KOCH	FEE & TI	0.129 ha (0.32 AC)	0.005 ha (0.01 AC)	0.023 ha (0.06 AC)	0.028 ha (0.07 AC)	0.101 ha (0.25 AC)	0.015 ha (0.04 AC)
13	4.6	BRUCE S. WILLIAMS	TI	-	-	-	-	-	0.009 ha (0.02 AC)
14	4.6	KEVIN E. SELL	TI	-	-	-	-	-	0.038 ha (0.09 AC)
15	4.6 & 4.7	MICHAEL & SHARON M. KOEUNE (LC)	TI	-	-	-	-	-	0.038 ha (0.09 AC)
70	4.4 & 4.6-4.9	WIS. ELECTRIC POWER CO. (40)	RELEASE OF RIGHTS	-	-	-	-	-	-
71	4.4-4.7 & 4.9	AMERITECH (41)	RELEASE OF RIGHTS	-	-	-	-	-	-
72	4.5-4.9 & 4.11	TOWN OF MENASHA SAN. DIST. NO. 4 (42)	RELEASE OF RIGHTS	-	-	-	-	-	-
74	4.4, 4.6 & 4.7	TIME WARNER CABLE (44)	RELEASE OF RIGHTS	-	-	-	-	-	-

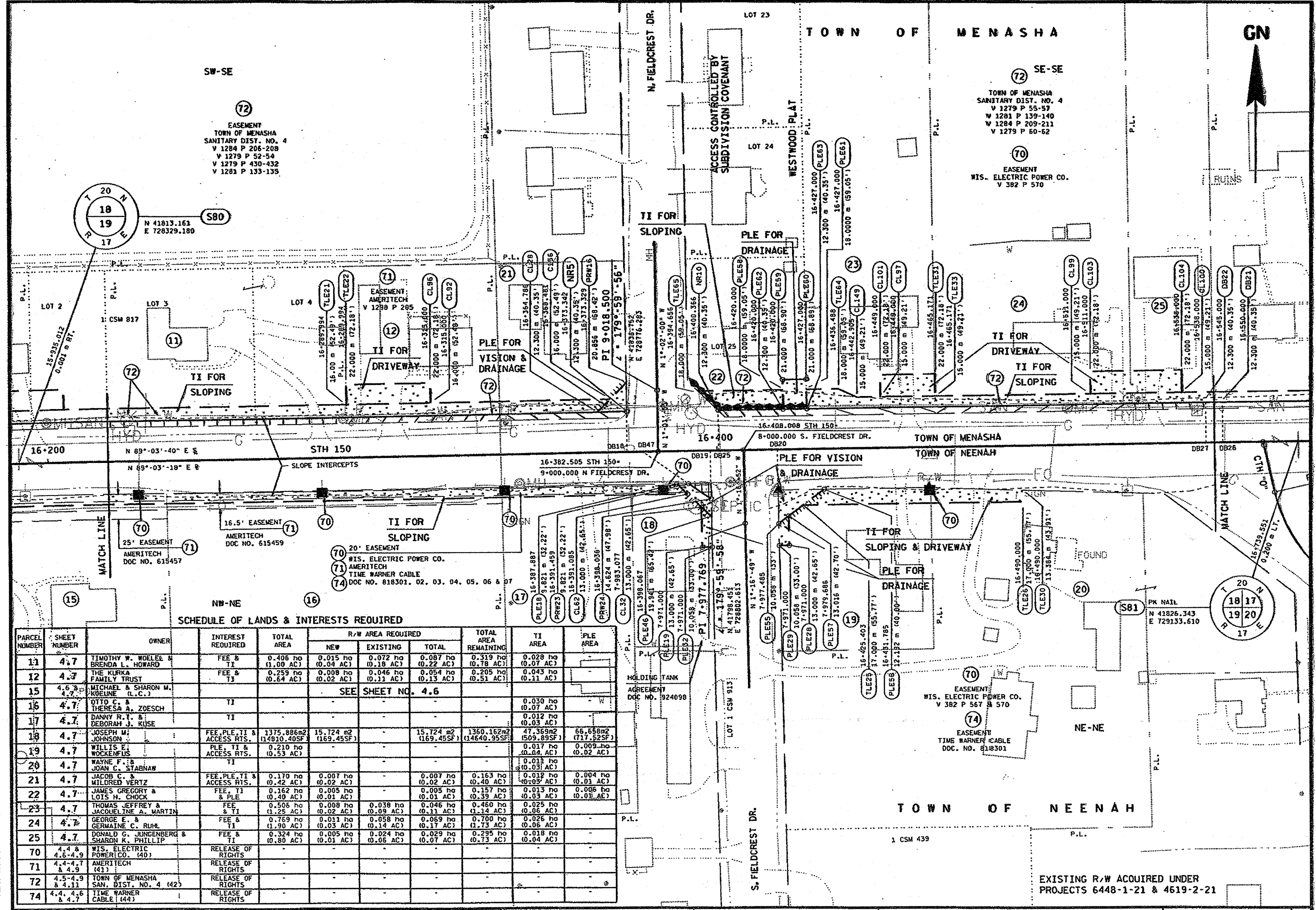
EXISTING R/W ACQUIRED UNDER PROJECTS 6448-1-21 & 4619-2-21

REVISION DATE	DATE	SCALE, METERS	HWY: STH 150	FEDERAL PROJECT NO:
	8-3-98	0 25 50	COUNTY: WINNEBAGO	STATE R/W PROJECT NO: 6448-03-21
	GRID FACTOR			SHEET NO: 4.7
	0.999945			M

PLOT SCALE: 1000

REV. DATE: 11-2-98

ORIGINATOR: 10-28-97



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL AREA	R/W AREA REQUIRED			TOTAL AREA REMAINING	TI AREA	PLE AREA
					NEW	EXISTING	TOTAL			
11	4.7	TIMOTHY W. WOELK & BRENDA L. HOWARD	FEE & TI	0.408 ha (1.00 AC)	0.015 ha (0.04 AC)	0.072 ha (0.18 AC)	0.087 ha (0.22 AC)	0.319 ha (0.78 AC)	0.028 ha (0.07 AC)	
12	4.7	THE KURKA FAMILY TRUST	FEE & TI	0.259 ha (0.64 AC)	0.02 ha (0.05 AC)	0.046 ha (0.11 AC)	0.066 ha (0.16 AC)	0.205 ha (0.51 AC)	0.043 ha (0.11 AC)	
15	4.6 & 4.7	MICHAEL & SHARON M. KOEHLER (L.C.)	SEE SHEET NO. 4.6							
16	4.7	OTTO C. & THERESA A. ZOESCH	TI					0.030 ha (0.07 AC)		
17	4.7	DANNY R. & DEBORAH J. KUSE	TI					0.012 ha (0.03 AC)		
18	4.7	JOSEPH M. JOHNSON	FEE, PLE, TI & ACCESS RTS.	1375.886m ² (14810.40SF)	15.724 m ² (169.45SF)	15.724 m ² (169.45SF)	1360.162m ² (14640.95SF)	47.369m ² (509.89SF)	66.658m ² (717.52SF)	
19	4.7	WILLIS E. WOCKENFUS	PLE, TI & ACCESS RTS.	0.210 ha (0.53 AC)				0.017 ha (0.04 AC)	0.009 ha (0.02 AC)	
20	4.7	WAYNE F. & JOAN C. STABNAW	TI					0.013 ha (0.03 AC)		
21	4.7	JACOB C. & MILDRED VERTZ	FEE, PLE, TI & ACCESS RTS.	0.170 ha (0.42 AC)	0.007 ha (0.02 AC)	0.007 ha (0.02 AC)	0.163 ha (0.40 AC)	0.039 ha (0.09 AC)	0.004 ha (0.01 AC)	
22	4.7	JAMES GREGORY & LOIS H. CHOCK	FEE, TI & PLE	0.162 ha (0.40 AC)	0.005 ha (0.01 AC)	0.005 ha (0.01 AC)	0.157 ha (0.39 AC)	0.013 ha (0.03 AC)	0.006 ha (0.01 AC)	
23	4.7	THOMAS JEFFREY & JACQUELINE A. MARTIN	FEE & TI	0.506 ha (1.25 AC)	0.008 ha (0.02 AC)	0.038 ha (0.09 AC)	0.460 ha (1.14 AC)	0.025 ha (0.06 AC)		
24	4.7	GEORGE E. & GERMAINE C. RUHL	FEE & TI	0.769 ha (1.90 AC)	0.011 ha (0.03 AC)	0.058 ha (0.14 AC)	0.700 ha (1.73 AC)	0.026 ha (0.06 AC)		
25	4.7	DONALD G. JUNGEBERG & SHARON K. PHILLIP	FEE & TI	0.324 ha (0.80 AC)	0.005 ha (0.01 AC)	0.024 ha (0.06 AC)	0.295 ha (0.73 AC)	0.018 ha (0.04 AC)		
70	4.4 & 4.6-4.9	WIS. ELECTRIC POWER CO. (40)	RELEASE OF RIGHTS							
71	4.4-4.7 & 4.9	AMERITECH (41)	RELEASE OF RIGHTS							
72	4.5-4.9 & 4.11	TOWN OF MENASHA SAN. DIST. NO. 4 (42)	RELEASE OF RIGHTS							
74	4.4, 4.6 & 4.7	TIME WARNER CABLE (44)	RELEASE OF RIGHTS							

REVISION DATE	DATE	SCALE, METERS	HWY: STH 150	FEDERAL PROJECT NO:
	8-3-98	0 25 50	COUNTY: WINNEBAGO	STATE R/W PROJECT NO: 6448-03-21
	GRID FACTOR 0.999945			SHEET NO: 4.8 M

FILE NAME: 93 644803103406

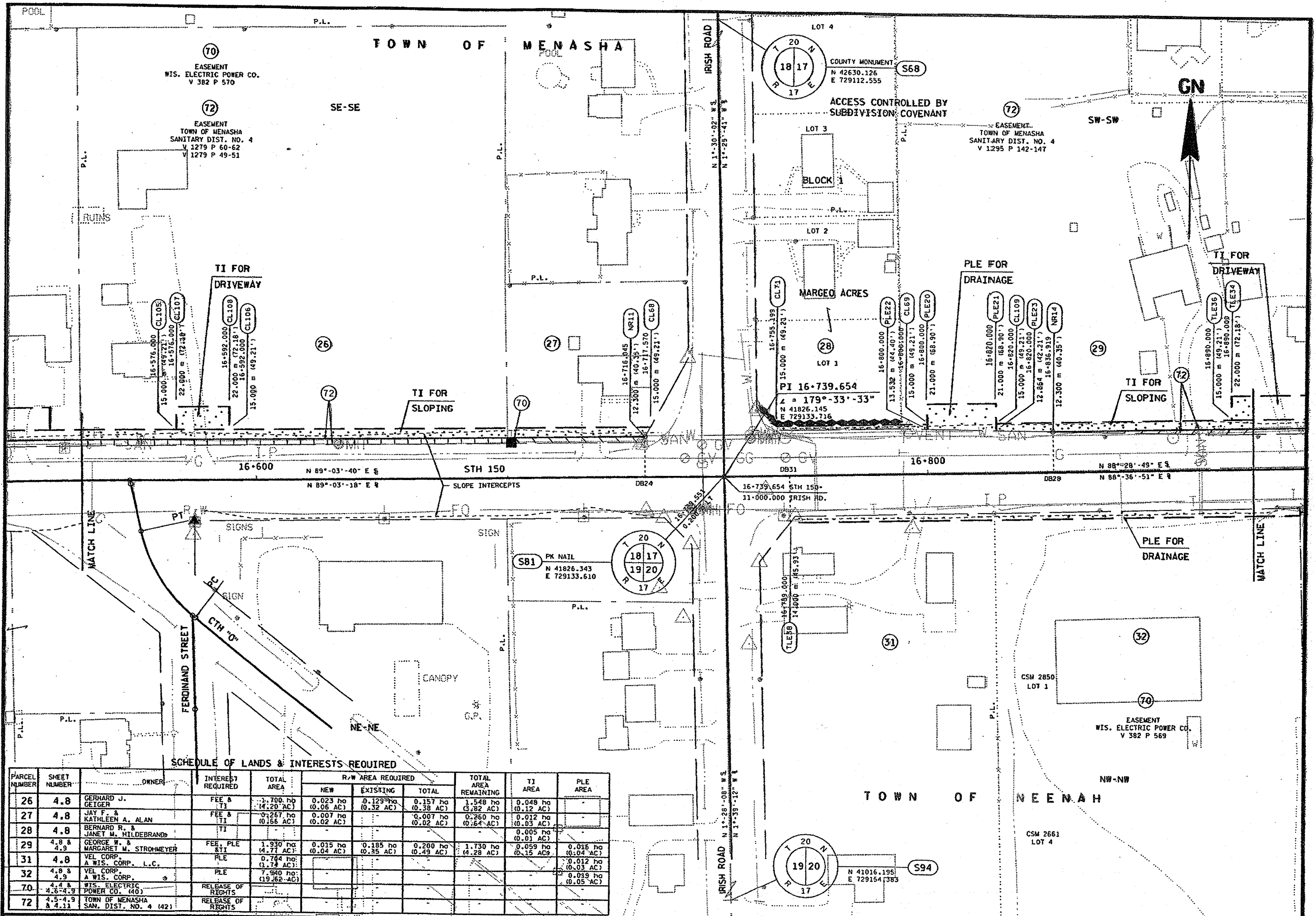
PLOT SCALE: 1000

PLOT NAME: D34065

REV. DATE: 9-1-98

ORIGINATOR: 10-28-97

FILE NAME: D3 644803:D34065



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL AREA	R/W AREA REQUIRED			TOTAL AREA REMAINING	TI AREA	PLE AREA
					NEW	EXISTING	TOTAL			
26	4.8	GERHARD J. GEIGER	FEE & TI	1,700 sq ft (0.04 AC)	0.023 ha (0.06 AC)	0.129 ha (0.32 AC)	0.157 ha (0.38 AC)	1,548 sq ft (0.12 AC)	0.048 ha (0.12 AC)	-
27	4.8	JAY F. & KATHLEEN A. ALAN	FEE & TI	1,267 sq ft (0.15 AC)	0.007 ha (0.02 AC)	-	0.007 ha (0.02 AC)	0.260 ha (0.64 AC)	0.012 ha (0.03 AC)	-
28	4.8	BERNARD R. & JANET M. HILDEBRAND	TI	-	-	-	-	-	0.005 ha (0.01 AC)	-
29	4.8 & 4.9	GEORGE W. & MARGARET M. STROHMEYER	FEE, PLE & TI	1,930 sq ft (0.22 AC)	0.015 ha (0.04 AC)	0.185 ha (0.46 AC)	0.200 ha (0.49 AC)	1,730 sq ft (0.15 AC)	0.035 ha (0.09 AC)	0.015 ha (0.04 AC)
31	4.8	VEL CORP. A WIS. CORP. L.C.	PLE	0,764 sq ft (0.17 AC)	-	-	-	-	0.012 ha (0.03 AC)	-
32	4.8 & 4.9	VEL CORP. A WIS. CORP.	PLE	7,940 sq ft (0.23 AC)	-	-	-	-	0.039 ha (0.09 AC)	-
70	4.4 & 4.5	WIS. ELECTRIC POWER CO. (40)	RELEASE OF RIGHTS	-	-	-	-	-	-	-
72	4.5-4.9 & 4.11	TOWN OF MENASHA SAN. DIST. NO. 4 (42)	RELEASE OF RIGHTS	-	-	-	-	-	-	-

REVISION DATE	DATE	SCALE, METERS	HWY: STH 150	FEDERAL PROJECT NO:
	8-3-98	0 25 50	COUNTY: WINNEBAGO	STATE R/W PROJECT NO: 6448-03-21
GRID FACTOR	0.999945			SHEET NO: 49

PLOT SCALE: 1000

PLOT NAME: 03407

REV. DATE: 9-10-98

ORIGINATOR: 10-28-97

LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63

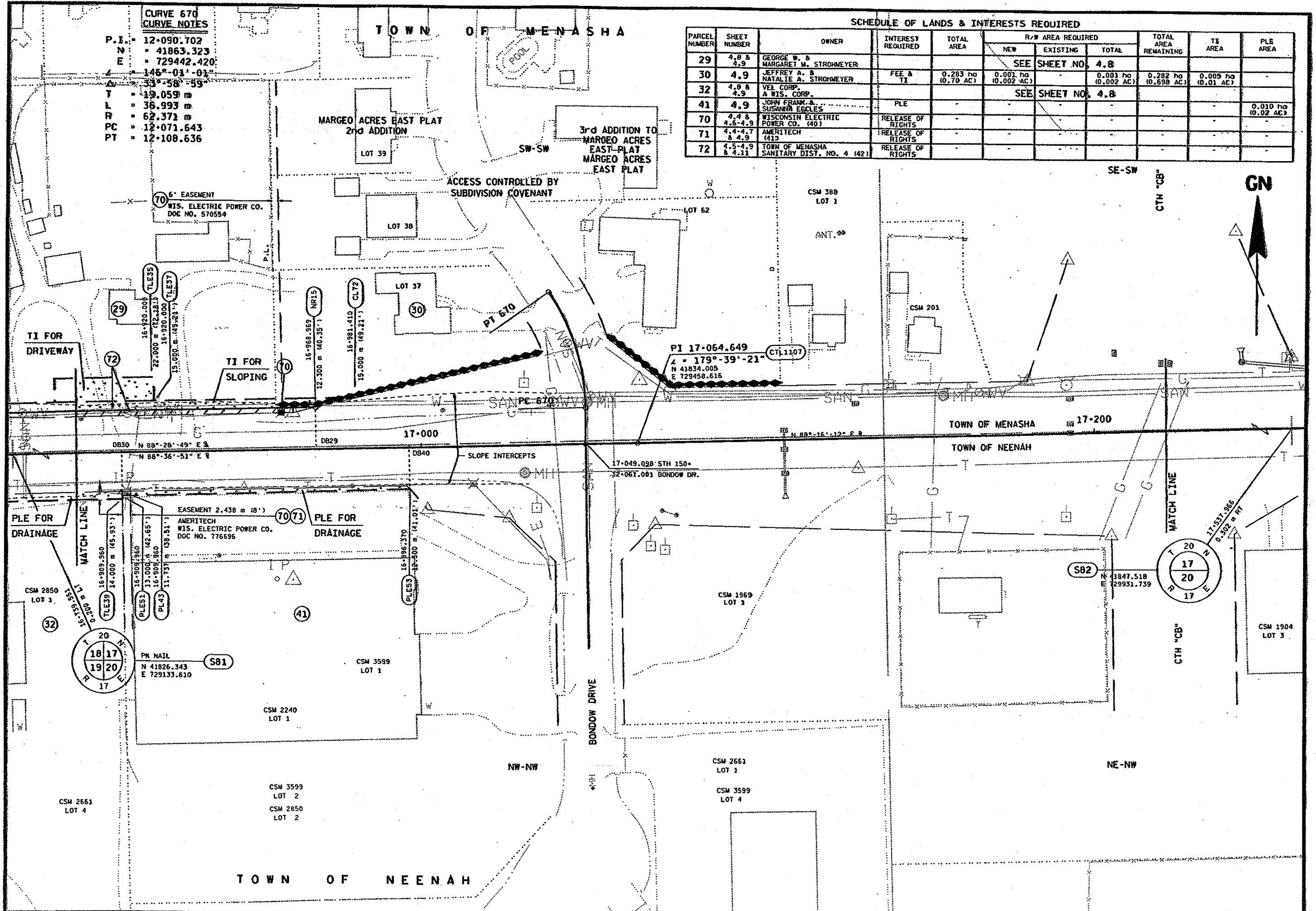
CURVE 670
CURVE NOTES

P.I. = 12+090.702
N = 41863.323
E = 729442.420
L = 146°-01'-01"
T = 33°-58'-59"
A = 18.059 m
L = 36.993 m
R = 62.371 m
PC = 12+071.643
PT = 12+108.636

TOWN OF MENASHA

SCHEDULE OF LANDS & INTERESTS REQUIRED

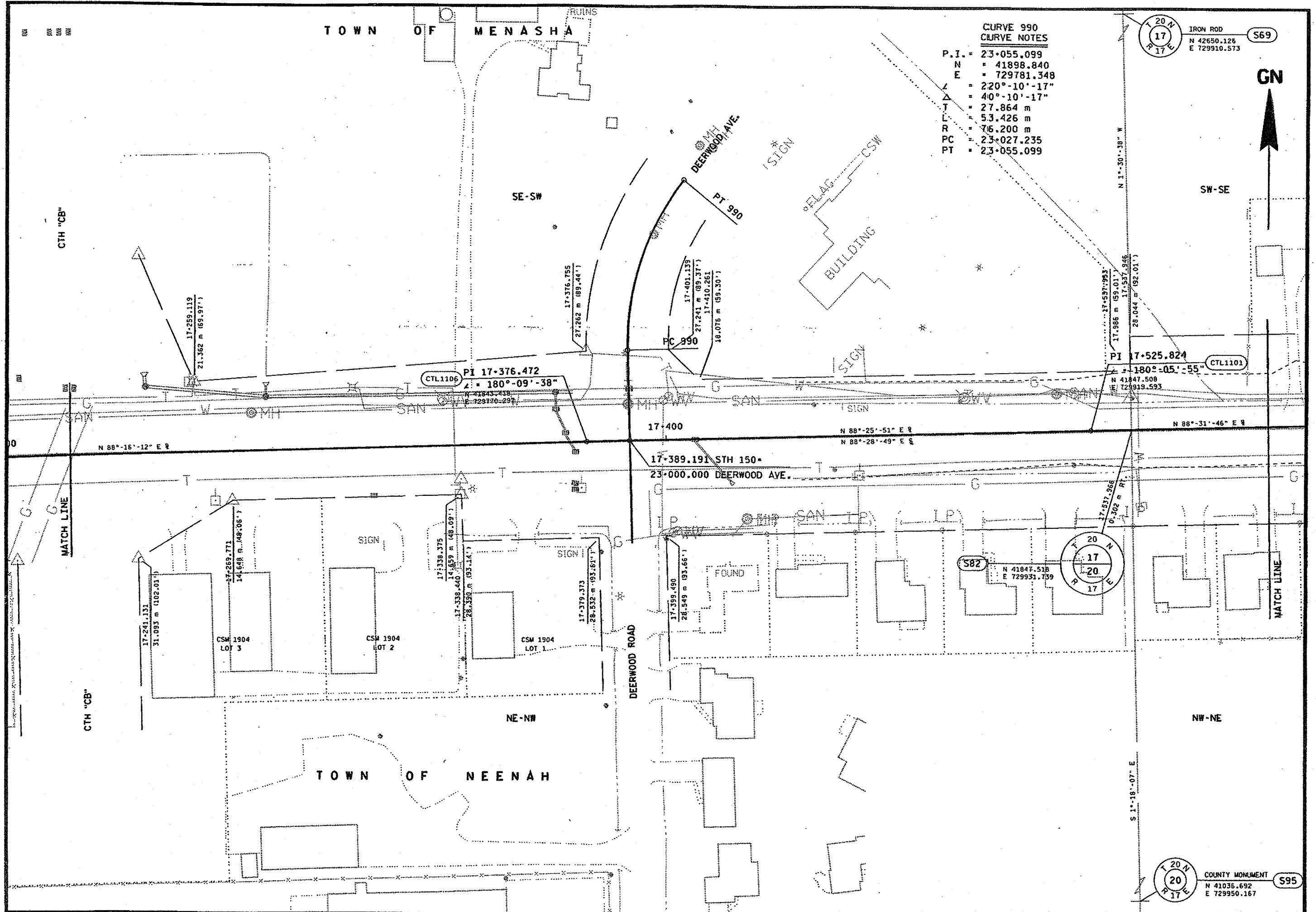
PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL AREA	R/W AREA REQUIRED			TOTAL AREA REMAINING	TI AREA	PLE AREA
					NEW	EXISTING	TOTAL			
29	4.8 & 4.9	GEORGE W. & MARGARET M. STROHMEYER			SEE SHEET NO. 4.8					
30	4.9	JEFFREY A. & NATALIE A. STROHMEYER	FEE & TI	0.283 ha (0.70 AC)	0.001 ha (0.002 AC)	0.001 ha (0.002 AC)	0.282 ha (0.698 AC)	0.005 ha (0.01 AC)		
32	4.8 & 4.9	VEL CORP. A WIS. CORP.			SEE SHEET NO. 4.8					
41	4.9	JOHN FRANK & SUSANNA ECCLES	PLE						0.010 ha (0.02 AC)	
70	4.4 & 4.5-4.9	WISCONSIN ELECTRIC POWER CO. (40)	RELEASE OF RIGHTS							
71	4.4-4.7 & 4.9	AMERITECH (41)	RELEASE OF RIGHTS							
72	4.5-4.9 & 4.11	TOWN OF MENASHA SANITARY DIST. NO. 4 (42)	RELEASE OF RIGHTS							



REVISION DATE	DATE	SCALE, METERS	HWY: STH 150	FEDERAL PROJECT NO:
	8-3-98	0 25 50	COUNTY: WINNEBAGO	STATE R/W PROJECT NO: 6448-03-21
	GRID FACTOR 0.999945			SHEET NO: 4.10 M

FILE NAME: 03 644803:03407

ORIGINATOR: IO-28-97
 REV. DATE: 9-1-98
 PLOT NAME: D34075
 PLOT SCALE: 1000
 LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63



REVISION DATE	DATE	SCALE, METERS	HWY: STH 150	FEDERAL PROJECT NO:
	8-3-98	0 25 50	COUNTY: WINNEBAGO	STATE R/W PROJECT NO: 6448-03-21
	GRID FACTOR 0.999945			SHEET NO: 4.11

FILE NAME: D3 644803:D34075

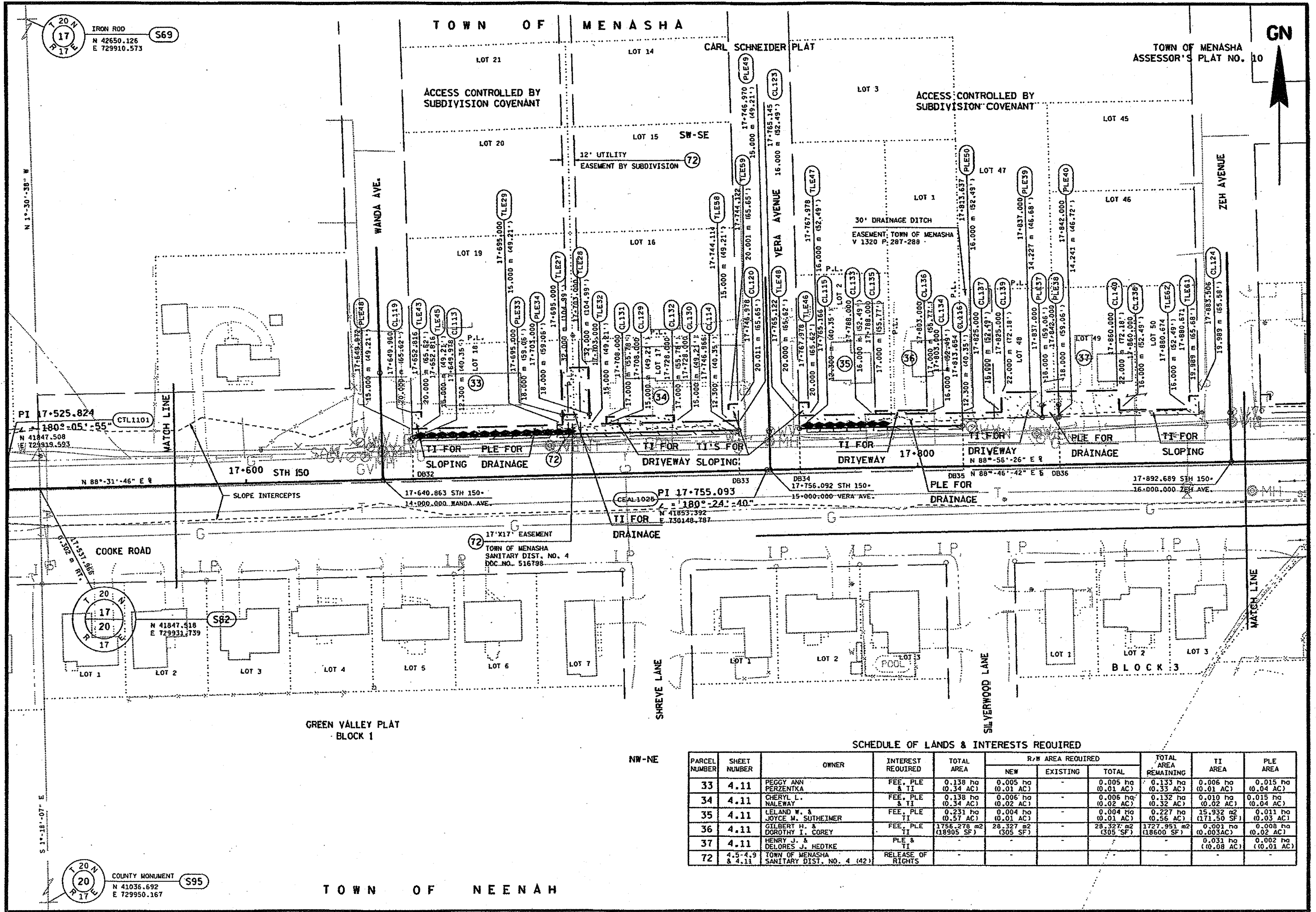
PLOT SCALE: 1000

PLOT NAME: d3408

REV. DATE: 9-10-98

ORIGINATOR: 10-28-97

LEVELS ON: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL AREA	R/W AREA REQUIRED			TOTAL AREA REMAINING	TI AREA	PLE AREA
					NEW	EXISTING	TOTAL			
33	4.11	PEGGY ANN PERZENTKA	FEE, PLE & TI	0.138 ha (0.34 AC)	0.005 ha (0.01 AC)	-	0.005 ha (0.01 AC)	0.133 ha (0.33 AC)	0.006 ha (0.01 AC)	0.015 ha (0.04 AC)
34	4.11	CERYL L. NALEWAY	FEE, PLE & TI	0.138 ha (0.34 AC)	0.006 ha (0.02 AC)	-	0.006 ha (0.02 AC)	0.132 ha (0.32 AC)	0.010 ha (0.02 AC)	0.015 ha (0.04 AC)
35	4.11	LELAND W. & JOYCE M. SUTHEIMER	FEE, PLE & TI	0.231 ha (0.57 AC)	0.004 ha (0.01 AC)	-	0.004 ha (0.01 AC)	0.227 ha (0.56 AC)	15.932 m ² (0.17150 SF)	0.011 ha (0.03 AC)
36	4.11	GILBERT H. & DOROTHY I. COREY	FEE, PLE & TI	1756.278 m ² (18905 SF)	28.327 m ² (305 SF)	-	28.327 m ² (305 SF)	1727.951 m ² (18600 SF)	0.001 ha (0.003AC)	0.008 ha (0.02 AC)
37	4.11	HENRY J. & DELORES J. HEDTKE	PLE & TI	-	-	-	-	-	0.031 ha (0.08 AC)	0.002 ha (0.01 AC)
72	4.5-4.9 & 4.11	TOWN OF MENASHA SANITARY DIST. NO. 4 (42)	RELEASE OF RIGHTS	-	-	-	-	-	-	-

REVISION DATE	DATE: 8-3-98	SCALE, METERS: 0, 25, 50	HWY: STH 150	FEDERAL PROJECT NO:	
GRID FACTOR: 0.999945			COUNTY: WINNEBAGO	STATE R/W PROJECT NO: 6448-03-21	SHEET NO: 4.12

FILE NAME: d3 644803:d3408

TOWN OF MENASHA

CURVE NOTES

P.I. = 18+070.651
 N = 41859.428
 E = 730464.287
 Δ = 171°-05'-33"
 Δ = 8°-54'-27"
 T = 22.995 m
 L = 45.897 m
 R = 295.226 m

GN



BURNETTE ST.

TOWN OF MENASHA
 ASSESSOR'S PLAT NO. 10

SW-SE

SE-SE

LOT 19

LOT 18

LOT 17

TI FOR
 DRIVEWAY

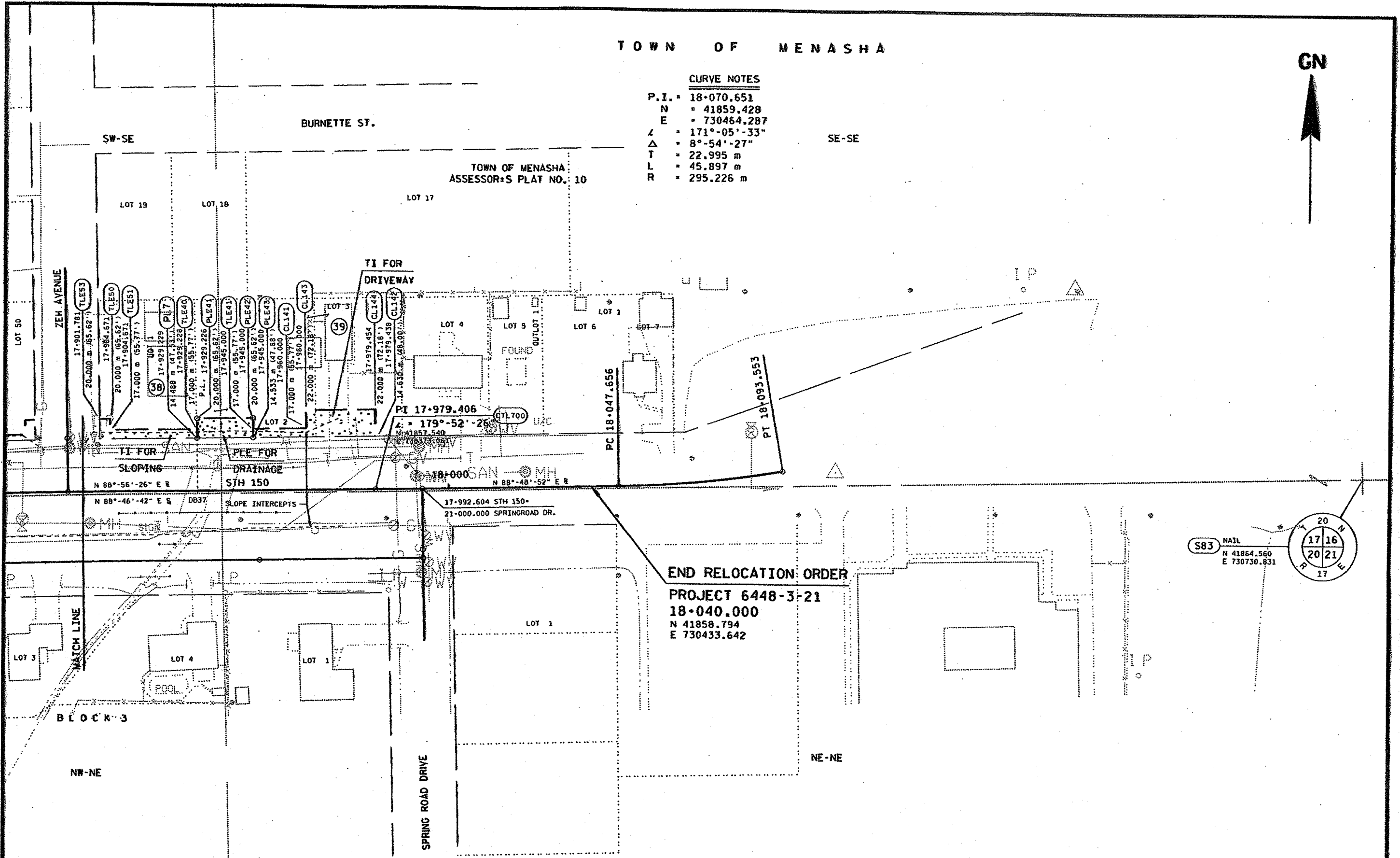
PLOT SCALE: 1000

PLOT NAME: 034085

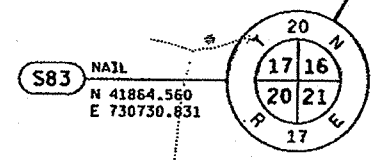
REV. DATE: 9-1-98

ORIGINATOR: 10-28-97

LEVELS ON: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63



END RELOCATION ORDER
 PROJECT 6448-3-21
 18+040.000
 N 41858.794
 E 730433.642



TOWN OF NEENAH

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL AREA	R/W AREA REQUIRED			TOTAL AREA REMAINING	TI AREA	PLE AREA
					NEW	EXISTING	TOTAL			
38	4.12	TERRENCE K. VAN HOOF	TI	-	-	-	-	0.008 ha (0.02 AC)	-	
39	4.12	PATRICK J. & SUSAN E. GOLDEN	PLE & TI	0.218 ha (0.54 AC)	-	-	-	0.018 ha (0.04 AC)	0.009 ha (0.02 AC)	

REVISION DATE	DATE	SCALE, METERS
	8-3-98	0 25 50
	GRID FACTOR	0.999945

HWY: STH 150	FEDERAL PROJECT NO:
COUNTY: WINNEBAGO	STATE R/W PROJECT NO: 6448-03-21
	SHEET NO: 4.12

PLOT SCALE: 1:1000

PLOT NAME: 4db1

REV. DATE: 10-22-98

ORIGINATOR: 7-30-98

LEVELS ON: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63

FILE NAME: d3 644803:4db

Parcel 1 PLE (DBC1)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S79	176.919m (580.441')	S 88°19'48" W	N 41805.030 E 727648.612
DB1	11.264m (36.956')	N 1°40'12" W	N 41799.874 E 727471.769
PRW1	102.754m (337.120')	N 86°44'06" E	N 41811.133 E 727471.440
PRW3	58.407m (191.623')	N 89°09'07" E	N 41816.985 E 727574.028
PRW6	3.398m (11.148')	N 44°01'11" E	N 41817.850 E 727632.428
PLE25	15.532m (50.957')	N 0°50'53" W	N 41820.293 E 727634.790
PLE24	3.307m (10.851')	N 88°49'57" E	N 41835.823 E 727634.560
PLE27	10.058m (32.999')	N 88°49'57" E	N 41835.891 E 727637.866
DB2	31.074m (101.947')	S 1°16'21" E	N 41836.096 E 727647.922
S79			N 41805.030 E 727648.612

Parcel 2 FEE (DBC27)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S79	27.634m (90.662')	S 1°21'47" E	N 41805.030 E 727648.612
DB45	10.769m (35.331')	N 45°50'53" W	N 41777.404 E 727649.270
PRW22	10.965m (35.976')	N 45°50'53" W	N 41784.905 E 727641.543
PRW21	16.797m (55.107')	N 45°50'53" W	N 41792.543 E 727633.675
DB44	27.000m (88.582')	N 88°19'48" E	N 41804.243 E 727621.624
S79			N 41805.030 E 727648.612

Parcel 2 PLE FOR VISION & DRAINAGE (DBC2)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S79	32.537m (106.747')	S 1°21'47" E	N 41805.030 E 727648.612
DB3	10.743m (35.247')	N 45°58'51" W	N 41772.502 E 727649.386
PLE9	17.909m (58.755')	N 45°58'51" W	N 41779.968 E 727641.661
PLE8	4.895m (16.058')	N 88°28'21" E	N 41792.413 E 727628.782
PRW21	10.965m (35.976')	S 45°50'53" E	N 41792.543 E 727633.675
PRW22	4.938m (16.202')	S 1°21'59" E	N 41784.905 E 727641.543
PLE9			N 41779.968 E 727641.661

Parcel 3 PLE (DBC3)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S79	55.073m (180.684')	S 88°19'48" W	N 41805.030 E 727648.612
DB5	11.947m (39.197')	S 1°40'12" E	N 41803.425 E 727593.563
PLE11	20.467m (67.149')	S 71°30'07" W	N 41791.483 E 727593.911
PRW7	75.351m (247.214')	N 86°58'49" W	N 41784.989 E 727574.502
PLE10	11.712m (38.425')	N 1°40'12" W	N 41788.959 E 727499.255
DB6	94.689m (310.660')	N 88°19'48" E	N 41800.665 E 727498.914
DB5			N 41803.425 E 727593.563

Parcels 4, 6 & 7 (west) Fee (DBC4)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S79	45.061m (147.837')	N 1°16'21" W	N 41805.030 E 727648.612
DB7	7.544m (24.751')	N 88°53'15" E	N 41850.079 E 727647.612
CL8	7.130m (23.391')	N 88°53'15" E	N 41850.226 E 727655.154
PRW18	19.201m (62.997')	S 13°08'11" E	N 41850.364 E 727662.283
PRW17	12.060m (39.565')	S 59°18'49" E	N 41831.665 E 727666.646
PRW12	31.896m (104.645')	N 89°09'07" E	N 41825.511 E 727677.017
PRW10	9.700m (31.824')	S 0°50'53" E	N 41825.983 E 727708.910
PRW11	218.094m (715.529')	S 0°50'53" E	N 41816.284 E 727709.053
PRW14	11.153m (36.593')	N 89°09'08" E	N 41819.512 E 727927.123
DB8	278.664m (914.250')	S 0°41'04" E	N 41808.359 E 727927.256
S79		S 89°18'56" W	N 41805.030 E 727648.612

Parcel 5 Fee (DBC13)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S79	26.323m (86.361')	N 89°18'56" E	N 41805.030 E 727648.612
DB46	16.539m (54.262')	S 42°34'04" W	N 41805.344 E 727674.933
PRW20	6.901m (22.642')	S 42°34'04" W	N 41793.164 E 727663.745
PRW19	14.498m (47.565')	S 42°34'04" W	N 41788.081 E 727659.077
DB45	27.634m (90.662')	N 1°21'47" W	N 41777.404 E 727649.270
S79			N 41805.030 E 727648.612

Parcel 5 PLE For Drainage (DBC5)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
PLE44	20.000m (65.615')	S 1°06'46" E	N 41783.474 E 727668.583
PLE47	9.842m (32.289')	S 24°57'46" W	N 41763.478 E 727668.971
PLE45	4.942m (16.214')	S 89°08'51" W	N 41754.556 E 727664.818
PL97	19.550m (64.141')	N 1°21'44" W	N 41754.482 E 727659.876
CL12	13.167m (43.198')	N 44°09'07" E	N 41774.027 E 727659.411
PLE44			N 41783.474 E 727668.583

REVISION DATE	DATE	NOT TO SCALE	HWY: STH 150	FEDERAL PROJECT NO:	
	8-3-98		COUNTY: WINNEBAGO	STATE R/W PROJECT NO: 6448-03-21	SHEET NO: 4.14

M 63

PLOT SCALE: 1000

PLOT NAME: 4002

REV. DATE: 10-22-98

ORIGINATOR: 7-30-98

LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63

Parcel 5 PLE For Vision (DBC5V1)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S79			N 41805.030 E 727648.612
DB9	41.380m (135.762')	N 89°18'56" E	N 41805.524 E 727689.990
CL17	16.926m (55.533')	S 44°09'07" W	N 41793.380 E 727678.199
PLE44	26.973m (88.493')	S 44°09'07" W	N 41783.474 E 727668.583
CL12	13.167m (43.198')	S 44°09'07" W	N 41774.027 E 727659.411
PRW19	14.058m (46.123')	N 1°21'44" W	N 41788.081 E 727659.077
PRW20	6.901m (22.642')	N 42°34'04" E	N 41793.164 E 727663.745
CL17	14.456m (47.427')	N 89°08'40" E	N 41793.380 E 727678.199

Parcel 6 & 7 PLE (DBC6)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S80			N 41813.161 E 728329.180
DB8	401.952m (1318.737')	S 89°18'56" W	N 41808.359 E 727927.256
PRW14	11.153m (36.593')	N 0°41'04" W	N 41819.512 E 727927.123
PRW11	218.094m (715.529')	S 89°09'08" W	N 41816.284 E 727709.053
TLE6	7.700m (25.263')	N 0°50'53" W	N 41823.983 E 727708.939
PLE12	205.000m (672.571')	N 89°09'07" E	N 41827.017 E 727913.917
PLE14	20.100m (65.944')	N 83°26'29" E	N 41829.313 E 727933.885
PLE15	145.000m (475.721')	N 89°09'07" E	N 41831.459 E 728078.869
PLE16	15.297m (50.187')	N 77°50'31" E	N 41834.681 E 728093.823
PLE17	299.993m (984.228')	N 89°08'55" E	N 41839.139 E 728393.783
RW112	18.597m (61.014')	S 69°37'49" E	N 41832.665 E 728411.217
DB11	18.158m (59.572')	S 0°56'20" E	N 41814.510 E 728411.515
S80	82.346m (270.164')	S 89°03'40" W	N 41813.161 E 728329.180

Parcels 7,8,9, & 10 Fee (DBC7)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S80			N 41813.161 E 728329.180
DB12	126.645m (415.500')	N 89°03'40" E	N 41815.236 E 728455.807
PRW15	12.135m (39.812')	N 0°56'20" W	N 41827.369 E 728455.609
DB13	168.342m (552.301')	N 89°05'29" E	N 41830.039 E 728623.929
DB16	12.046m (39.521')	S 0°56'20" E	N 41817.994 E 728624.126
S80	294.986m (967.801')	S 89°03'40" W	N 41813.161 E 728329.180

Parcels 11,12, & 21 Fee (DBC8)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S80			N 41813.161 E 728329.180
DB17	274.986m (902.184')	N 89°03'40" E	N 41817.667 E 728604.129
DB14	12.044m (39.514')	N 0°56'20" W	N 41829.709 E 728603.932
NRS	163.342m (535.899')	N 89°03'18" E	N 41832.403 E 728767.252
DB18	12.061m (39.571')	S 1°01'59" E	N 41820.343 E 728767.469
DB17	163.362m (535.964')	S 89°03'40" W	N 41817.667 E 728604.129

Parcel 18 FEE (DBC26)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S81			N 41826.343 E 729133.610
DB19	341.602m (1120.738')	S 89°03'40" W	N 41820.746 E 728792.054
RW126	10.058m (32.999')	S 1°16'50" IE	N 41810.690 E 728792.279
PRW24	4.802m (15.754')	S 1°16'50" IE	N 41805.890 E 728792.386
PRW23	8.144m (26.720')	N 54°48'33" W	N 41810.583 E 728785.730
RW126	6.549m (21.487')	N 89°03'40" E	N 41810.690 E 728792.279

Parcel 18 PLE For Drainage (DBC10)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
PLE46			N 41800.573 E 728792.505
PLE32	9.117m (29.912')	S 1°16'50" E	N 41791.459 E 728792.709
PLE19	2.942m (9.652')	S 88°43'09" W	N 41791.393 E 728789.767
CL32	12.076m (39.621')	N 1°16'50" W	N 41803.466 E 728789.498
PLE46	4.173m (13.690')	S 46°06'46" E	N 41800.573 E 728792.505

Parcel 18 PLE for Vision (DBC10V1)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
PRW24			N 41805.890 E 728792.386
PLE46	5.318m (17.446')	S 1°16'50" E	N 41800.573 E 728792.505
PLE31	14.355m (47.095')	N 46°06'46" W	N 41810.525 E 728782.159
PRW23	3.571m (11.717')	N 89°03'40" E	N 41810.583 E 728785.730
PRW24	8.144m (26.720')	S 54°48'33" E	N 41805.890 E 728792.386

REVISION DATE

DATE

8-3-98

NOT TO SCALE

HWY: STH 150

FEDERAL PROJECT NO:

COUNTY: WINNEBAGO

STATE R/W PROJECT NO: 6448-03-21

SHEET NO: 4.15

M

PLOT SCALE: 1000

PLOT NAME: 4db3

REV. DATE: 10-22-98

ORIGINATOR: 7-30-98

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63

Parcel 19 PLE For Drainage (DBC11)

	DISTANCE	BEARING	GROUND COORDINATES
S81	321.485m (1054.740')	S 89°03'40" W	N 41826.343 E 729133.610
DB20	22.690m (74.443')	S 1°16'50" E	N 41821.076 E 728812.168
PLE55	6.485m (21.275')	S 1°16'50" E	N 41798.391 E 728812.675
PLE29	2.942m (9.653')	N 88°43'09" E	N 41791.908 E 728812.820
PLE28	8.686m (28.497')	N 1°10'41" W	N 41791.974 E 728815.761
PLE57	3.687m (12.096')	S 52°03'51" W	N 41800.658 E 728815.582
PLE55			N 41798.391 E 728812.675

Parcel 19 PLE For Vision (DBC11V1)

	DISTANCE	BEARING	GROUND COORDINATES
S81	321.485m (1054.740')	S 89°03'40" W	N 41826.343 E 729133.610
DB20	12.427m (40.770')	S 1°16'50" E	N 41821.076 E 728812.168
RW129	13.685m (44.898')	N 89°03'19" E	N 41808.652 E 728812.445
PLE56	17.058m (55.964')	S 52°03'51" W	N 41808.878 E 728826.128
PLE55	10.264m (33.674')	N 1°16'50" W	N 41798.391 E 728812.675
RW129			N 41808.652 E 728812.445

Parcel 21 PLE (DBC9)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S80	438.348m (1438.148')	N 89°03'40" E	N 41813.161 E 728329.180
DB18	12.061m (39.571')	N 1°01'59" W	N 41820.343 E 728767.469
NRS	8.556m (28.071')	S 89°03'18" W	N 41832.403 E 728767.252
CL28	12.091m (39.667')	N 44°00'43" E	N 41832.261 E 728758.697
PRW16	8.556m (28.070')	S 1°01'59" E	N 41840.957 E 728767.098
NRS			N 41832.403 E 728767.252

Parcels 22, 23, 24, & 25 FEE (DBC12)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S81	189.552m (621.888')	S 89°03'40" W	N 41826.343 E 729133.610
DB26	12.080m (39.632')	N 0°56'20" W	N 41823.237 E 728944.083
DB21	149.634m (490.924')	S 89°03'18" W	N 41835.316 E 728943.885
NR10	12.064m (39.580')	S 0°56'20" E	N 41832.848 E 728794.272
DB25	149.634m (490.924')	N 89°03'40" E	N 41820.786 E 728794.470
DB26			N 41823.237 E 728944.083

Parcels 22 PLE (DBC25)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
NR10	19.634m (64.415')	N 89°03'18" E	N 41832.848 E 728794.272
PLE62	5.700m (18.701')	N 0°56'42" W	N 41833.172 E 728813.903
PLE58	3.000m (9.843')	N 0°56'42" W	N 41838.871 E 728813.809
PLE59	7.000m (22.966')	N 89°03'18" E	N 41841.871 E 728813.760
PLE60	3.000m (9.843')	S 0°56'42" E	N 41841.986 E 728820.759
PLE61	5.700m (18.701')	S 0°56'42" E	N 41838.987 E 728820.808
PLE63	7.000m (22.966')	S 89°03'18" W	N 41833.287 E 728820.902
PLE62			N 41833.172 E 728813.903

Parcels 26 & 27 FEE (DBC14)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S81	23.507m (77.123')	S 89°03'40.2" W	N 41826.343 E 729133.610
DB24	171.045m (561.169')	S 89°03'40.2" W	N 41825.958 E 729110.106
DB27	12.079m (39.631')	N 0°56'19.8" W	N 41823.156 E 728939.084
DB22	171.045m (561.169')	N 89°03'18.4" E	N 41835.233 E 728938.886
NR11	12.098m (39.690')	S 0°56'19.8" E	N 41838.054 E 729109.907
DB24			N 41825.958 E 729110.106

Parcels 29 & 30 FEE (DBC16)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S81	97.395m (319.537')	N 88°28'49" E	N 41826.343 E 729133.610
DB28	11.872m (38.949')	N 1°31'11" W	N 41828.926 E 729230.970
NR14	132.050m (433.234')	N 88°36'51" E	N 41840.794 E 729230.656
NR15	11.563m (37.937')	S 1°31'11" E	N 41843.987 E 729362.667
DB29	132.050m (433.233')	S 88°28'49" W	N 41832.428 E 729362.974
DB28			N 41828.926 E 729230.970

Parcel 29 PLE (DBC15)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S81	97.395m (319.537')	N 88°28'49" E	N 41826.343 E 729133.610
DB28	11.872m (38.949')	N 1°31'11" W	N 41828.926 E 729230.970
NR14	16.928m (55.539')	N 89°28'31" W	N 41840.794 E 729230.656
PLE23	20.011m (65.653')	N 89°28'31" W	N 41840.949 E 729213.728
PLE22	7.468m (24.503')	N 1°23'09" W	N 41841.132 E 729193.718
PLE20	20.000m (65.617')	N 88°36'51" E	N 41848.598 E 729193.537
PLE21	8.136m (26.692')	S 1°23'09" E	N 41849.082 E 729213.531
PLE23			N 41840.949 E 729213.728

REVISION DATE	DATE	NOT TO SCALE	HWY: STH 150	FEDERAL PROJECT NO:	
	8-3-98		COUNTY: WINNEBAGO	STATE R/W PROJECT NO: 6448-03-21	SHEET NO: 4.16

PLOT SCALE: 1000

PLOT NAME: 4db4

REV. DATE: 9-10-98

ORIGINATOR: 7-30-98

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63

Parcels 31 & 32 PLE (DBC17)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S81			N 41826.343 E 729133.610
DB31	19.415m (63.697')	N 88°28'49" E	N 41826.858 E 729153.018
DB30	150.992m (495.380')	N 88°28'49" E	N 41830.863 E 729303.957
PL43	12.336m (40.472')	S 1°23'31" E	N 41818.530 E 729304.256
TLE39	2.263m (7.425')	S 1°23'31" E	N 41816.268 E 729304.311
TLE38	150.960m (495.274')	S 88°36'51" W	N 41812.617 E 729153.396
DB31	14.246m (46.739')	N 1°31'11" W	N 41826.858 E 729153.018

Parcels 33 & 34 FEE (DBC18)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S82	111.957m (367.312')	N 88°46'42" E	N 41847.518 E 729931.739
DB32	13.088m (42.941')	N 1°13'18" W	N 41849.905 E 730043.670
CL113	96.988m (318.202')	N 88°31'46" E	N 41862.990 E 730043.391
CL114	13.510m (44.323')	S 1°13'18" E	N 41865.479 E 730140.347
DB33	96.987m (318.199')	S 88°46'42" W	N 41851.973 E 730140.639
DB32			N 41849.905 E 730043.670

Parcels 33 & 34 PLE (DBC23)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S82	111.957m (367.312')	N 88°46'42" E	N 41847.518 E 729931.739
DB32	13.088m (42.941')	N 1°13'18" W	N 41849.905 E 730043.670
CL113	2.700m (8.858')	N 1°36'10" W	N 41862.990 E 730043.391
PLE40	45.028m (147.729')	N 88°31'46" E	N 41865.689 E 730043.315
TLE29	3.000m (9.843')	N 1°28'14" W	N 41866.845 E 730088.329
PLE33	8.000m (26.247')	N 88°31'46" E	N 41869.844 E 730088.252
PLE34	3.000m (9.843')	S 1°28'14" E	N 41870.049 E 730096.249
TLE32	43.970m (144.259')	N 88°31'46" E	N 41867.050 E 730096.326
PLE49	2.700m (8.858')	S 1°23'12" E	N 41869.179 E 730140.282
CL114	96.988m (318.202')	S 88°31'46" W	N 41865.479 E 730140.347
CL113			N 41862.990 E 730043.391

Parcels 35 & 36 FEE (DBC20)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S82	227.232m (745.511')	N 88°46'41.7" E	N 41847.518 E 729931.739
DB34			N 41852.363 E 730158.919
CL115	13.516m (44.345')	N 1°13'18.3" W	N 41865.876 E 730158.631
CL116	48.488m (159.081')	N 88°56'25.5" E	N 41866.773 E 730207.111
DB35	13.379m (43.895')	S 1°13'18.3" E	N 41853.397 E 730207.396
DB34	48.488m (159.081')	S 88°46'41.7" W	N 41852.363 E 730158.919

Parcels 35 & 36 PLE (DBC24)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S82	227.232m (745.511')	N 88°46'42" E	N 41847.518 E 729931.739
DB34			N 41852.363 E 730158.919
CL115	13.516m (44.345')	N 1°13'18" W	N 41865.876 E 730158.631
CL123	3.700m (12.140')	N 1°23'12" W	N 41869.575 E 730158.541
PLE50	48.492m (159.094')	N 88°56'26" E	N 41870.472 E 730207.025
CL116	3.700m (12.140')	S 1°19'30" E	N 41866.773 E 730207.111
CL115	48.488m (159.081')	S 88°56'26" W	N 41865.876 E 730158.631

Parcel 37 PLE (DBC21)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S82	304.028m (997.465')	N 88°46'42" E	N 41847.518 E 729931.739
DB36	15.240m (50.000')	N 1°03'35" W	N 41854.000 E 730235.697
PLE40	5.000m (16.404')	S 88°46'42" W	N 41869.238 E 730235.416
PLE39	3.773m (12.379')	N 1°03'35" W	N 41869.131 E 730230.417
PLE37	5.000m (16.404')	N 88°56'26" E	N 41872.904 E 730230.347
PLE38	3.759m (12.332')	S 1°03'35" E	N 41872.996 E 730235.346
PLE40			N 41869.238 E 730235.416

Parcel 39 PLE (DBC22)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S83	408.011m (1338.615')	S 88°46'42" W	N 41864.560 E 730730.831
DB37	15.240m (50.000')	N 1°05'03" W	N 41855.860 E 730322.913
PL7	5.512m (18.084')	N 1°05'03" W	N 41871.098 E 730322.625
PLE41	19.774m (64.751')	N 88°56'26" E	N 41876.609 E 730322.520
PLE42	5.467m (17.937')	S 1°03'35" E	N 41876.900 E 730338.291
PLE43	15.771m (51.743')	S 88°46'42" W	N 41871.434 E 730338.393
PL7			N 41871.098 E 730322.625

Parcel 41 PLE For Drainage (DB1)

	DISTANCE Meters (Ft.)	BEARING	GROUND COORDINATES
S81	170.407m (559.077')	N 88°28'49.0" E	N 41826.343 E 729133.610
DB30			N 41830.863 E 729303.957
PL43	12.336m (40.472')	S 1°23'31.0" E	N 41818.530 E 729304.2563
PLE51	1.263m (4.144')	S 1°23'31.0" E	N 41817.268 E 729304.287
PLE53	86.411m (283.500')	N 88°16'57.5" E	N 41819.857 E 729390.659
DB40	13.301m (43.638')	N 1°31'11.0" W	N 41833.153 E 729390.307
DB30	86.380m (283.399')	S 88°28'49.0" W	N 41830.863 E 729303.957

REVISION DATE

DATE

8-3-98

NOT TO SCALE

HWY: STH 150

COUNTY: WINNEBAGO

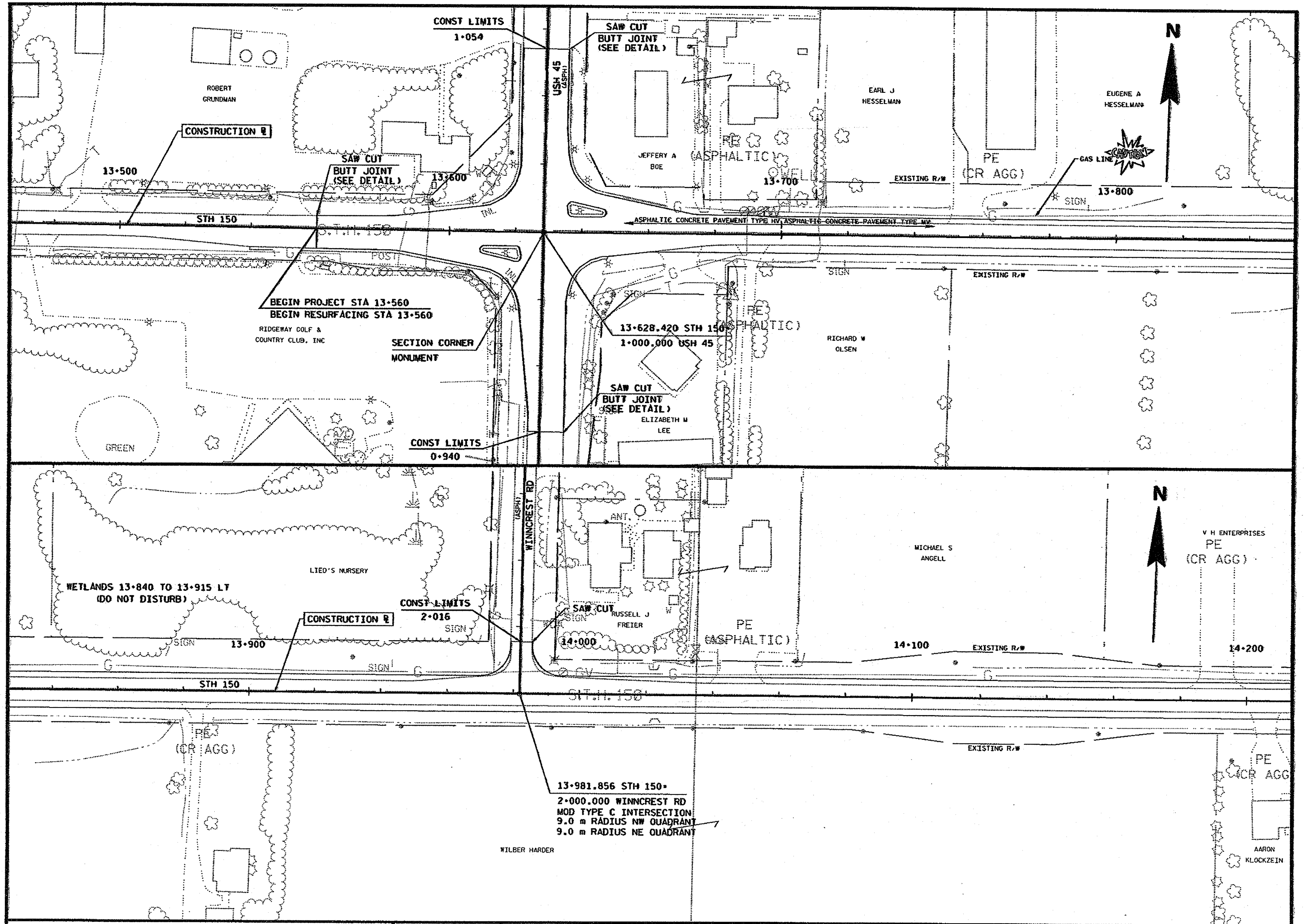
FEDERAL PROJECT NO:

STATE R/W PROJECT NO: 5448-03-21

SHEET NO: 4

FILE NAME: d3 644803:4db

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 REV. DATE: 12-18-98 PLOT NAME: 501 PLOT SCALE: 1:5



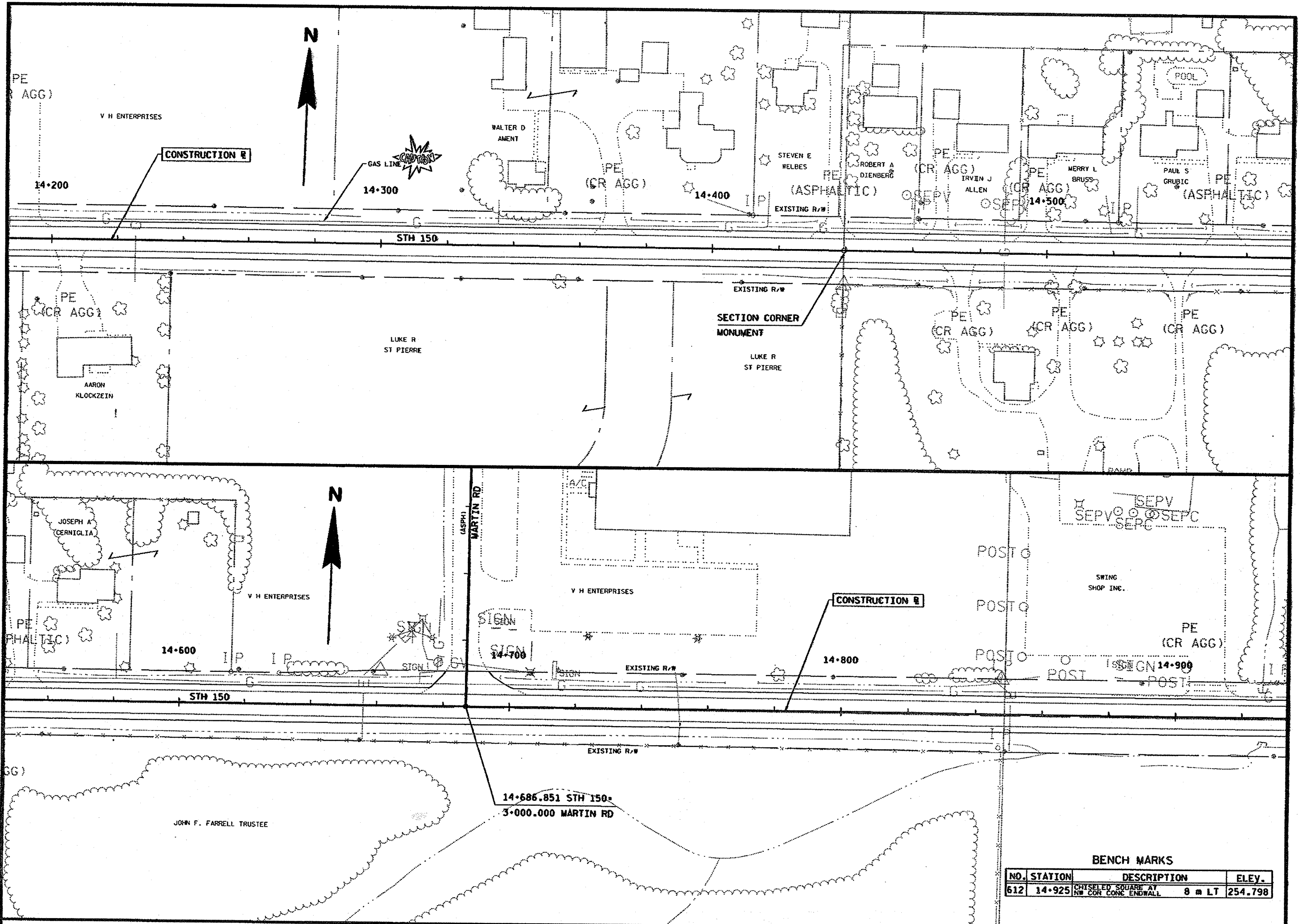
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PLOT NAME: 502

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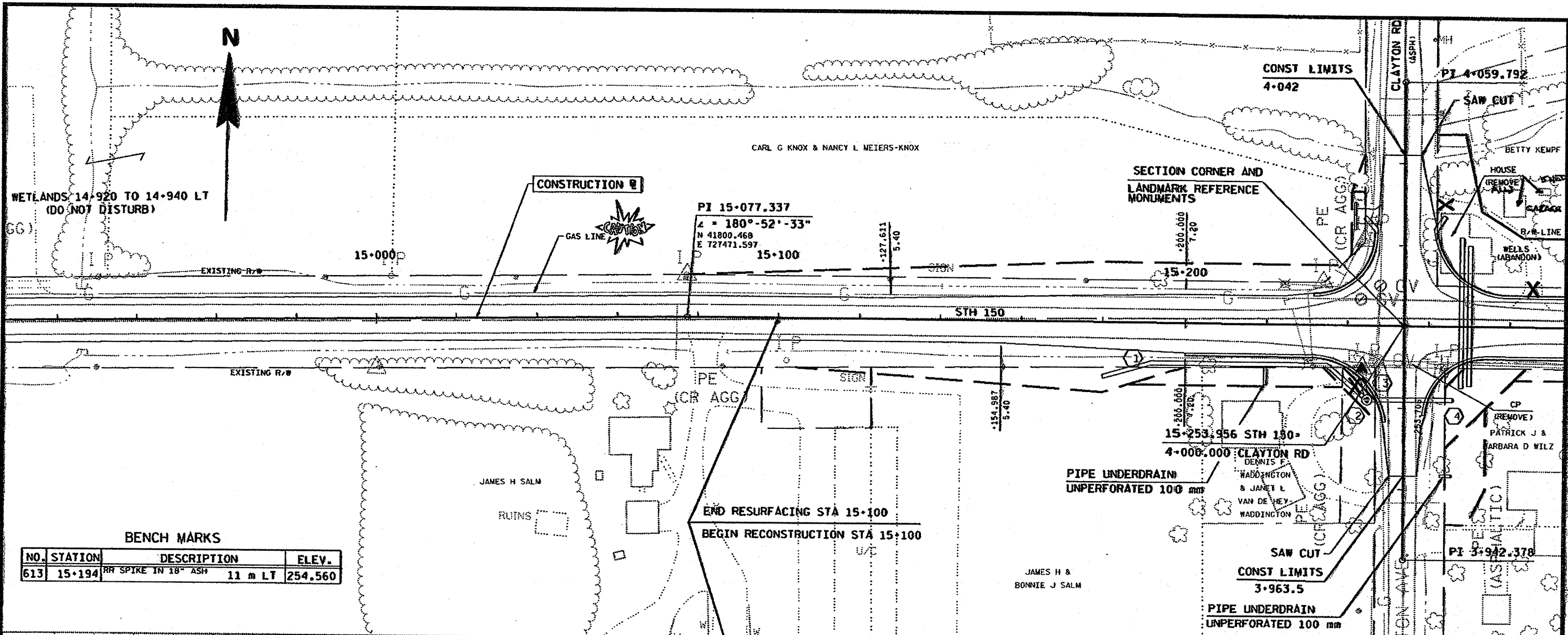
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BENCH MARKS

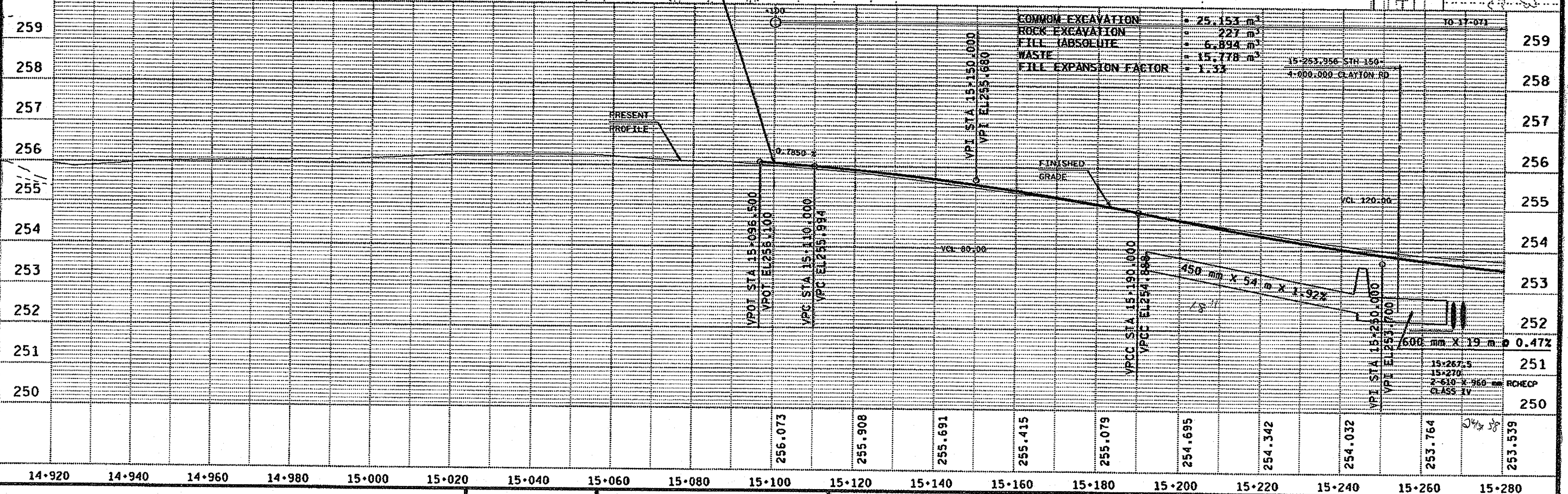
NO.	STATION	DESCRIPTION	ELEV.
612	14-925	CHISELED SQUARE AT NW COR CONC ENDWALL 8 m LT	254.798

REV. DATE: 12-18-98 PLOT SCALE: 1:00724811.000000 PLOT DATE: 18-DEC-1998 11:06
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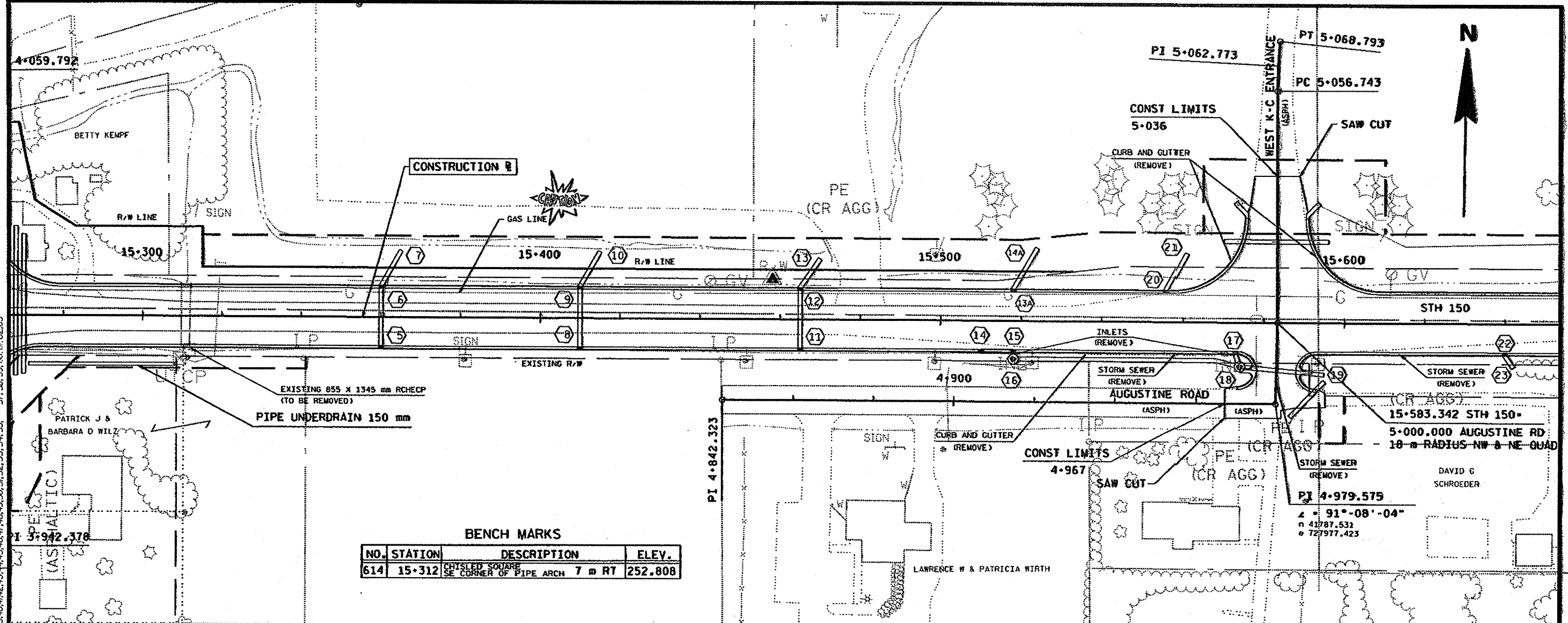


BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
613	15+194	RR SPIKE IN 18" ASH 11 m LT	254.560

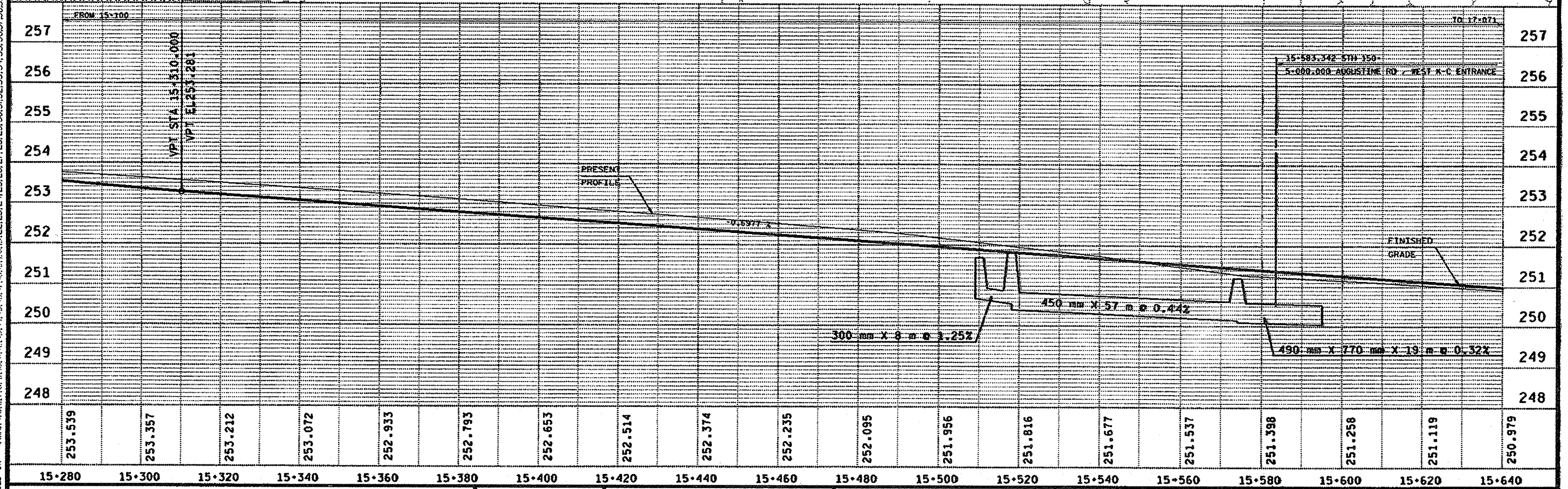


FILE NAME: 11ed3-648033-3504-000
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 PLOT SCALE: 1:500
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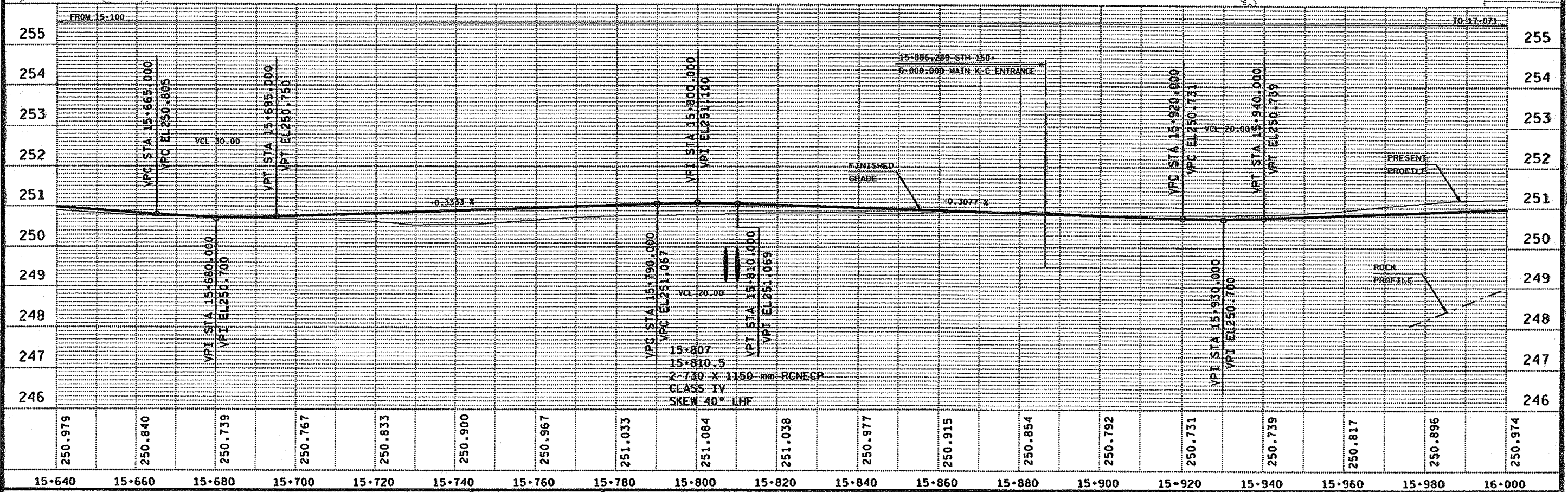
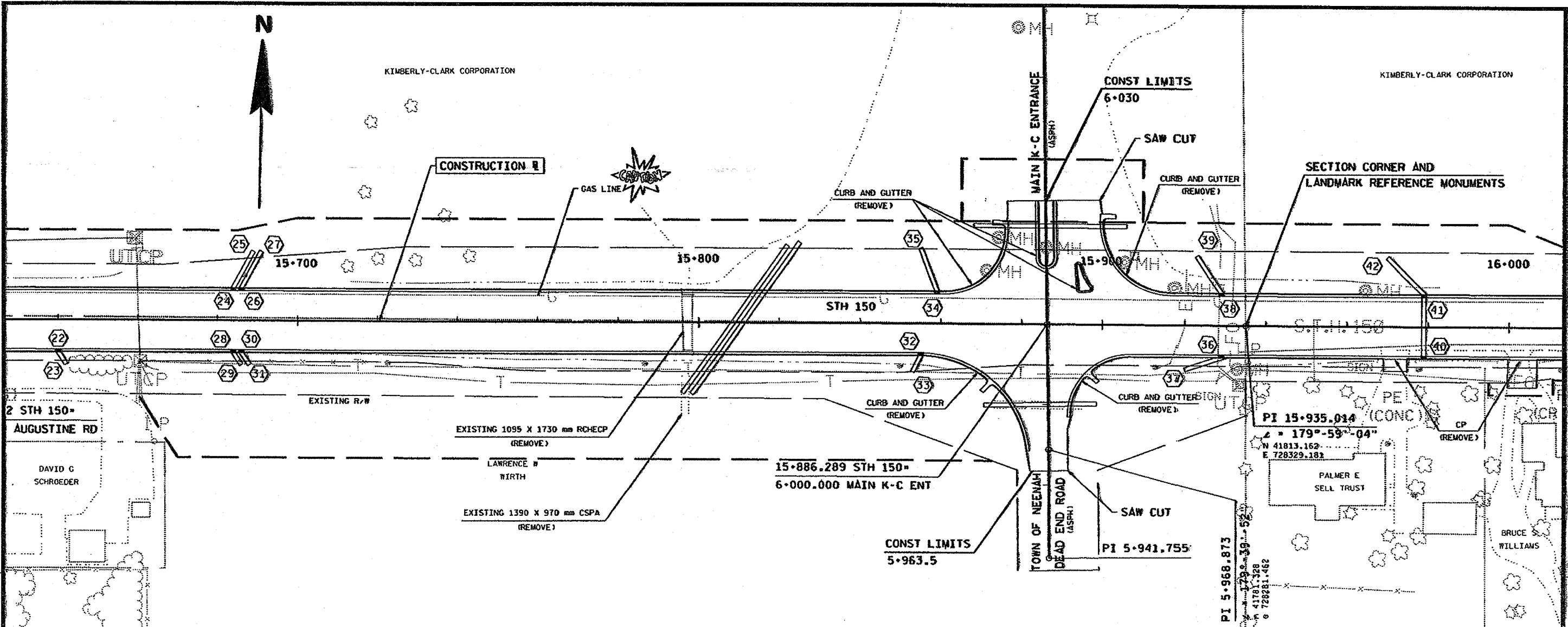


BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
614	15+312	CHRYSLER SQUARE SE CORNER OF PIPE ARCH 7 m RT	252.808



FILE NAME: F:\03_644803\03505.dwg
 ORIGINATOR:
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16-DEC-1998 15:30

PLOT DATE:

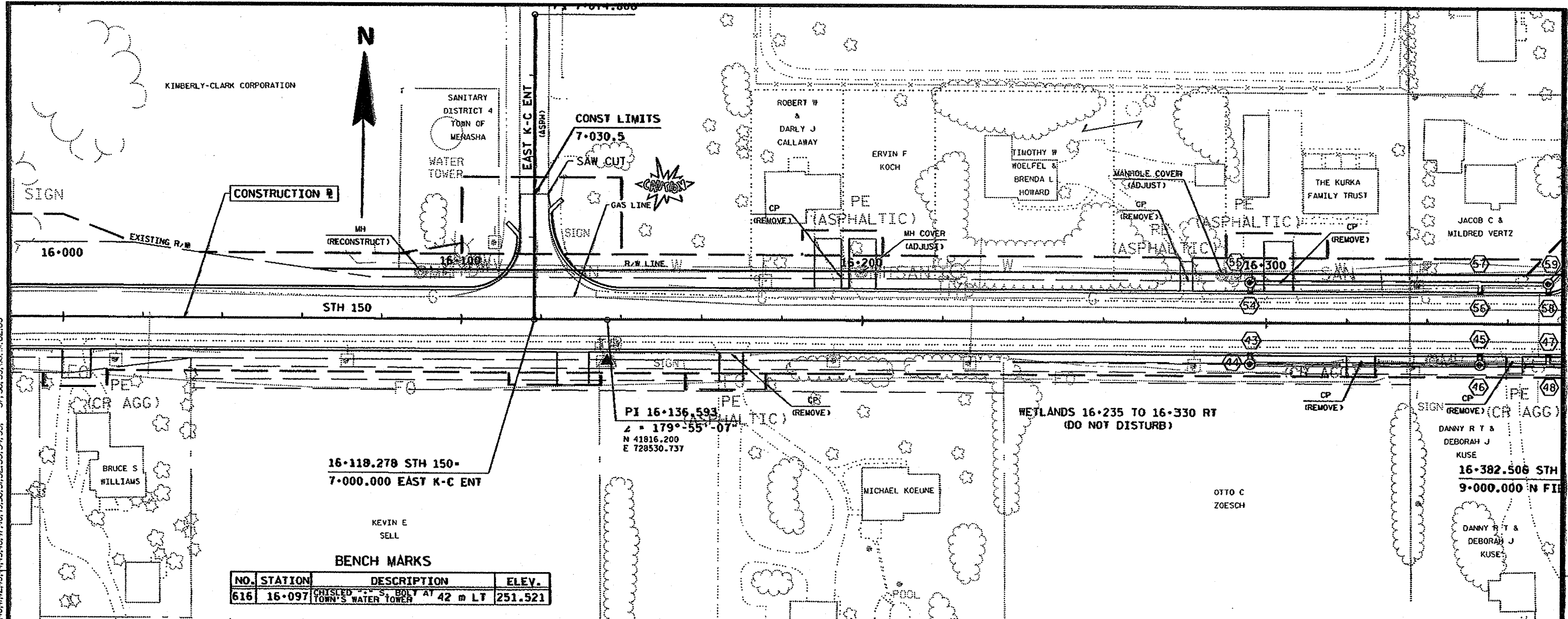
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PLOT SCALE:

REV. DATE: 12-16-98

ORIGINATOR:

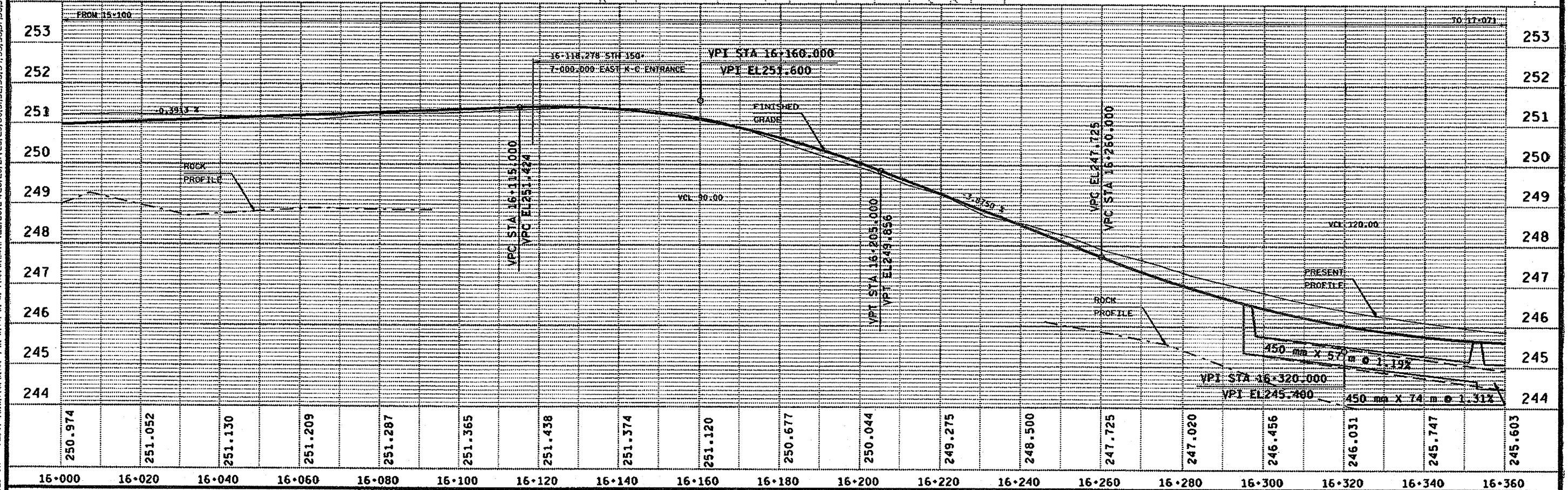
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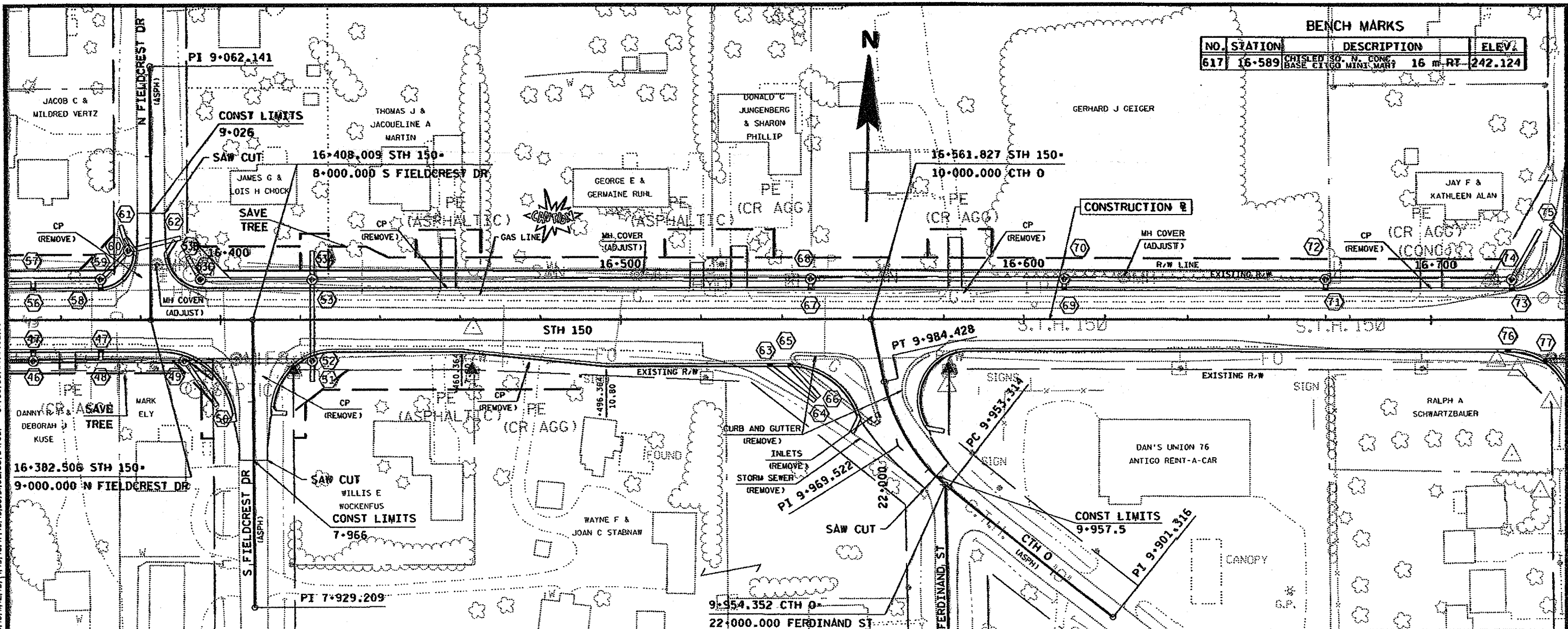


16+118.278 STH 150-
7+000.000 EAST K-C ENT

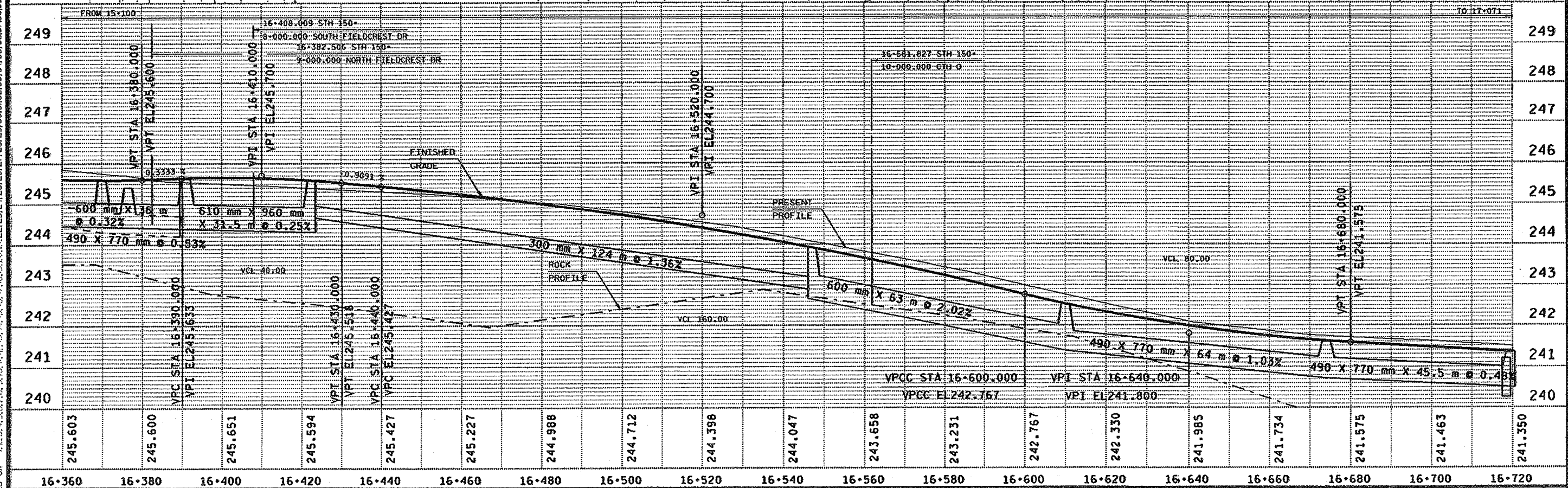
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
616	16+097	CHISEL "S" BOLT AT 42 m LT TOWN'S WATER TOWER	251.521

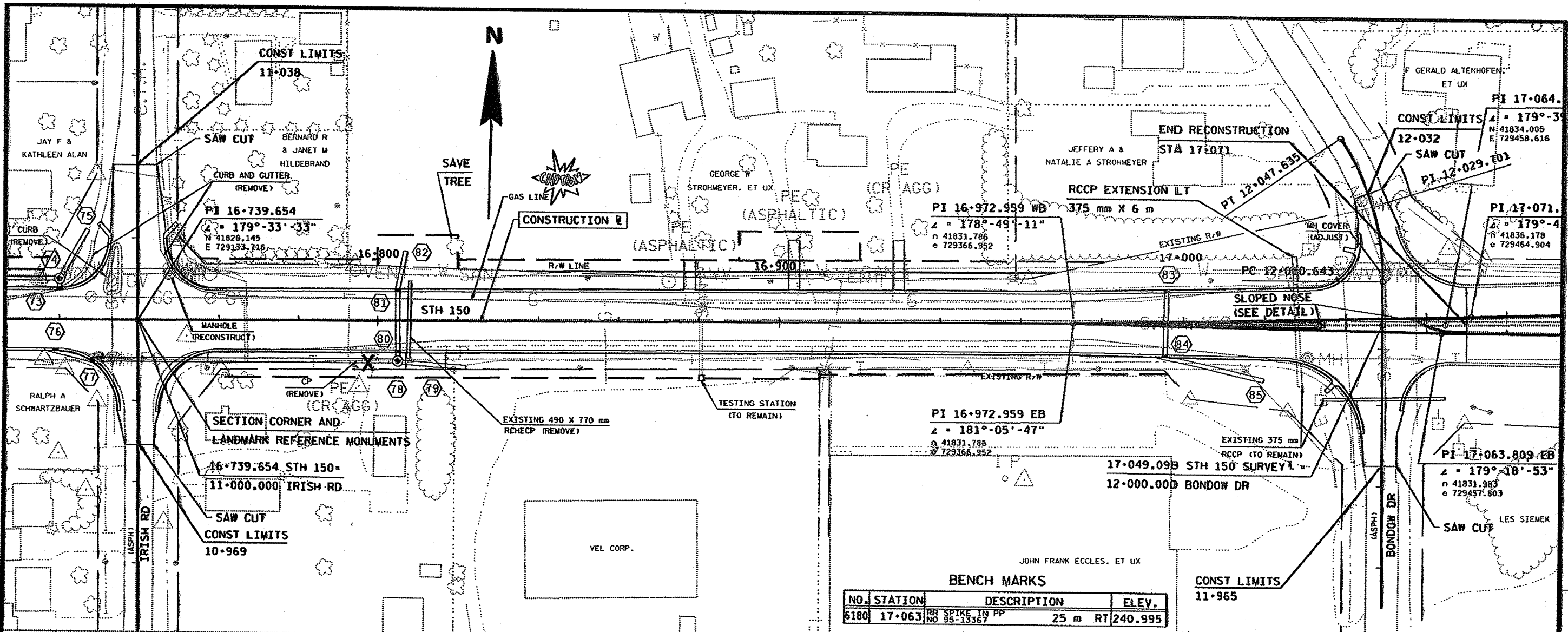




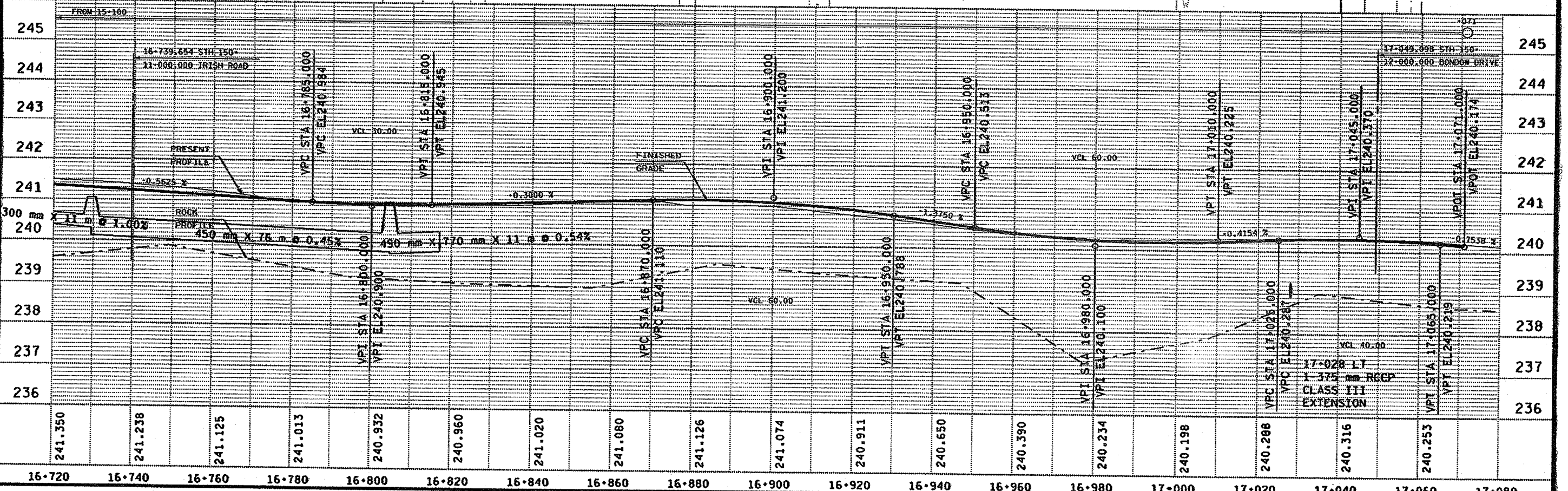
NO.	STATION	DESCRIPTION	ELEV.
617	16+589	CHISELED SQ. N. CONC. BASE CITEGO MINI-MART	16 m-RT 242.124



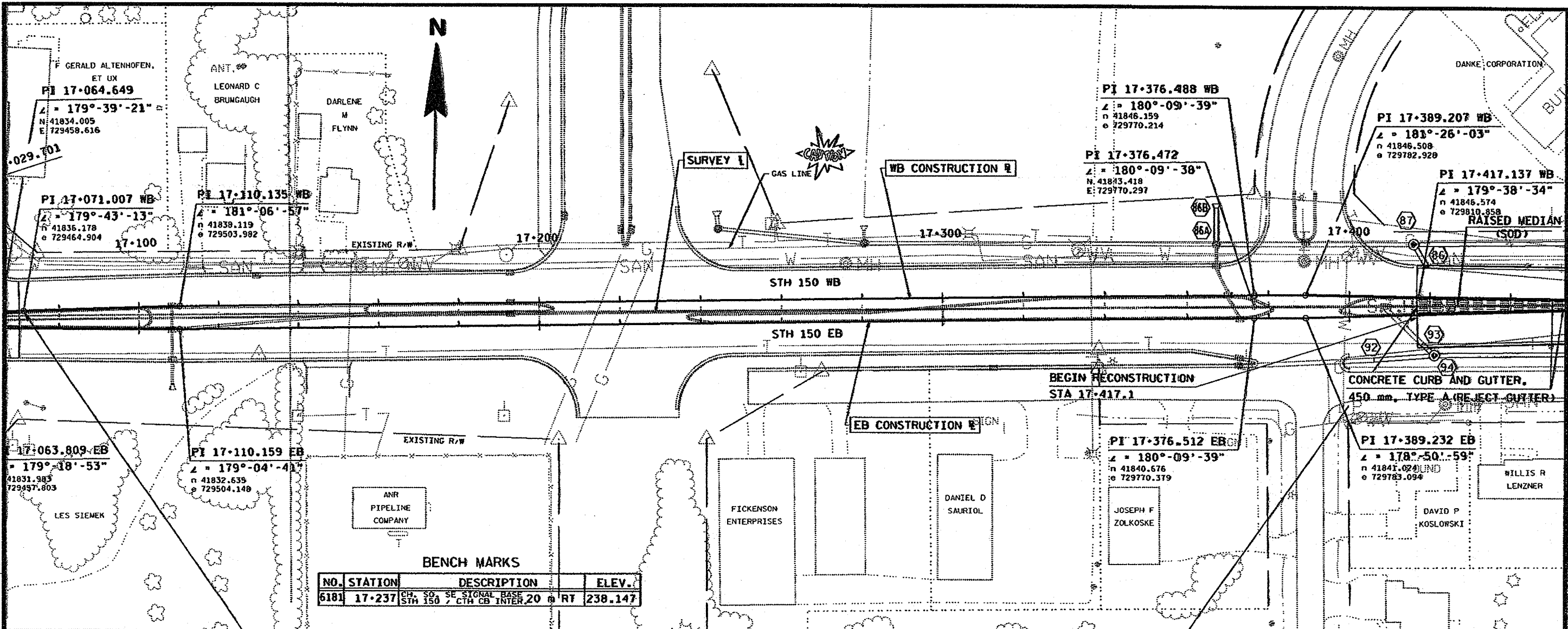
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 PLOT DATE: 100724911.000000
 REV. DATE: 12-18-98
 PLOT SCALE: 1:500
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NO.	STATION	DESCRIPTION	ELEV.
6180	17+063	RR SPIKE IN PP NO 95-15367	25 m RT 240.995

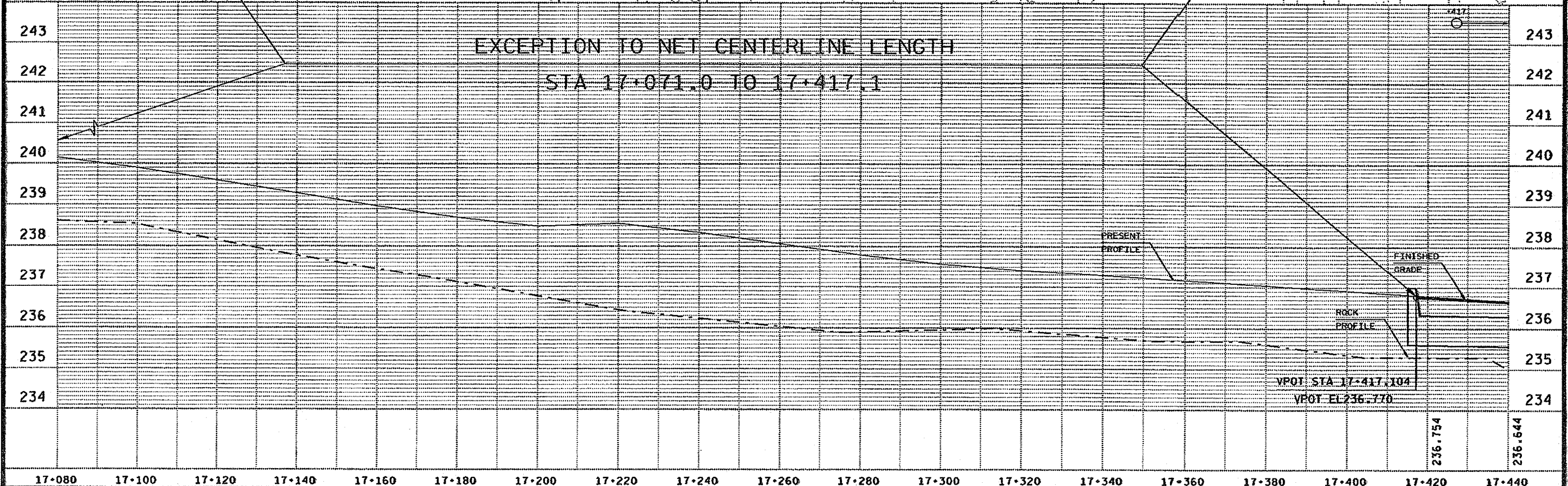


FILE NAME: 1:1003-644803-03509-09
 ORIGINATOR: REV. DATE: 12-18-98 PLOT SCALE: 1:0072491.000000 PLOT DATE: 18-DEC-1998 13:58



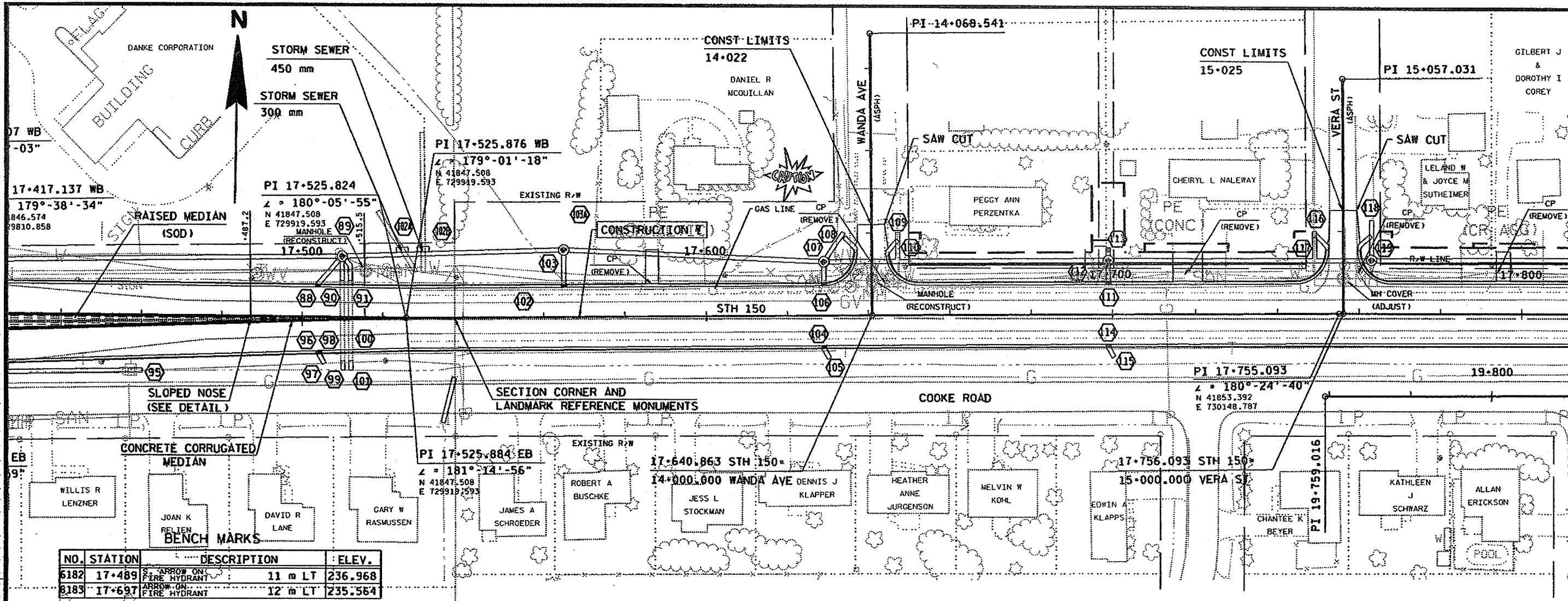
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
6181	17+237	CH. SQ. SE SIGNAL BASE STH 150 / CTH CB INTER. 20 @ RT	238.147

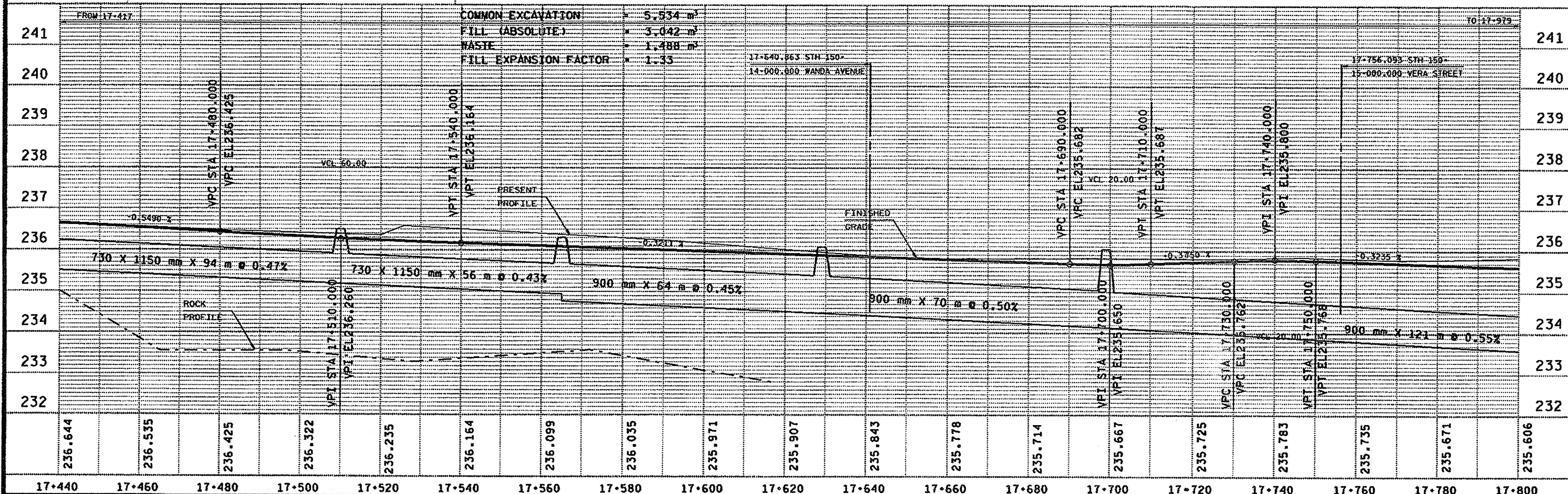


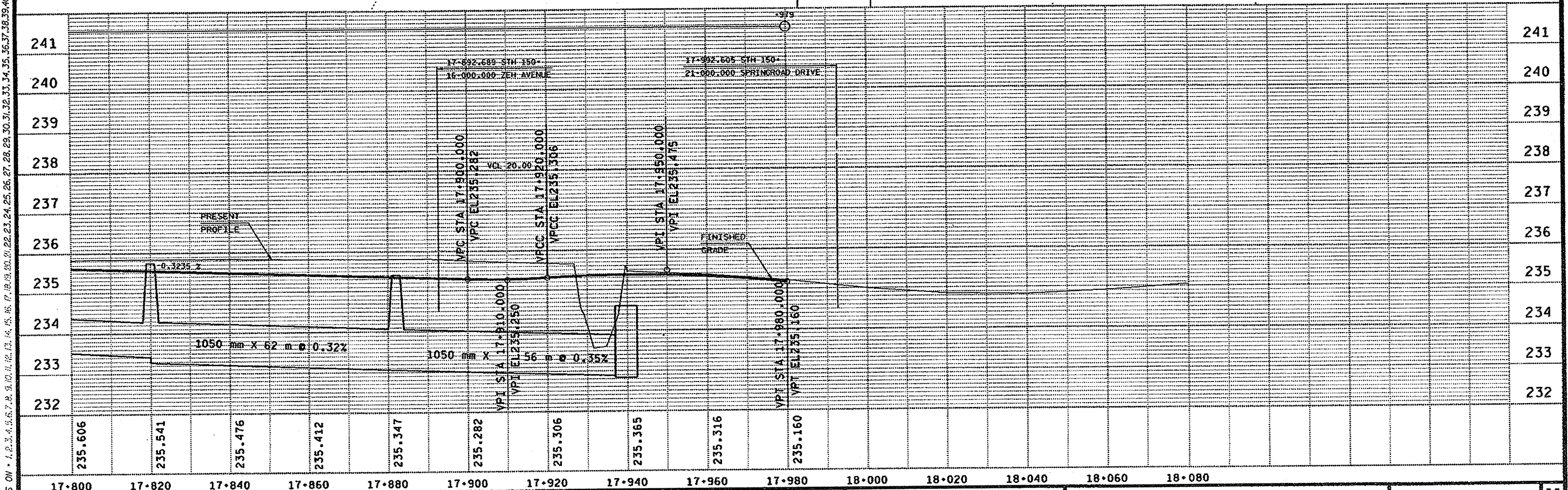
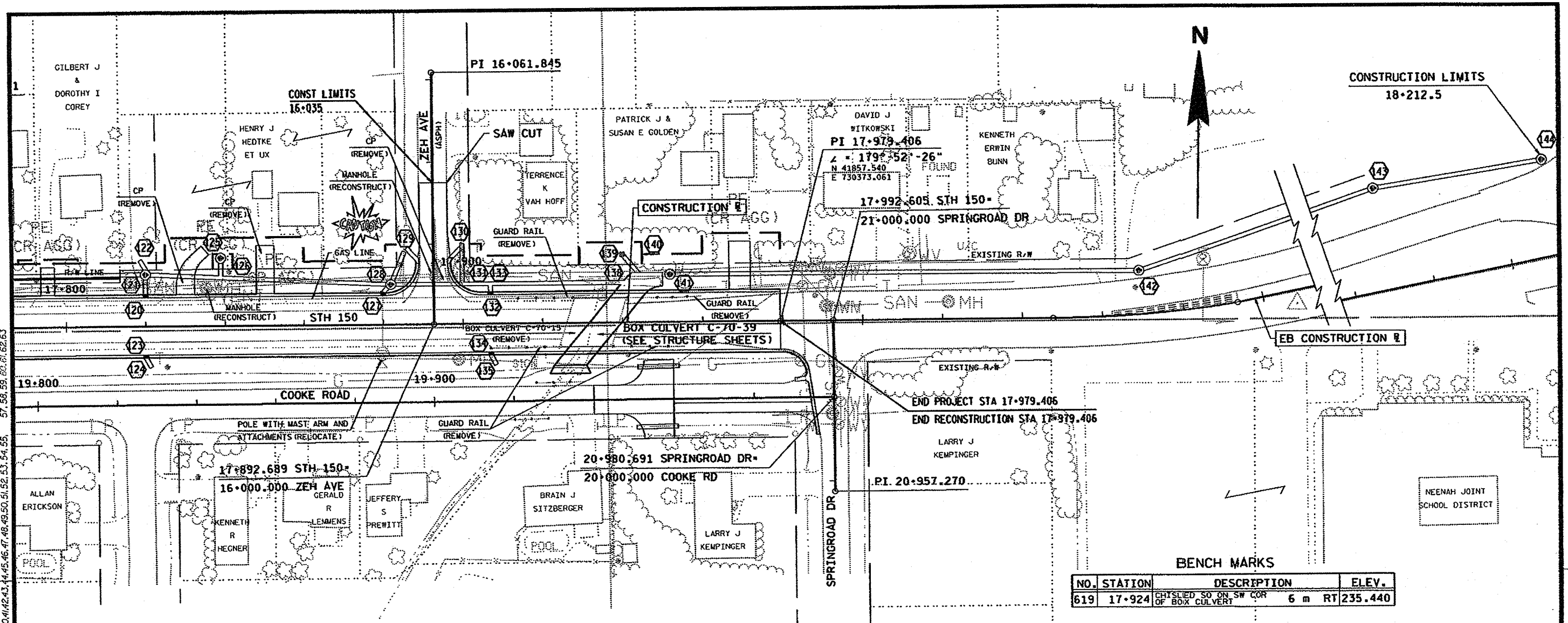
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18-DEC-1998 10:135 PLOT DATE: 57.59.59.602.62.63 LEVELS ON: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



NO.	STATION	DESCRIPTION	ELEV.
8182	17+489	ARROW ON FIRE HYDRANT	11 m LT 236.968
8183	17+697	ARROW ON FIRE HYDRANT	12 m LT 235.564

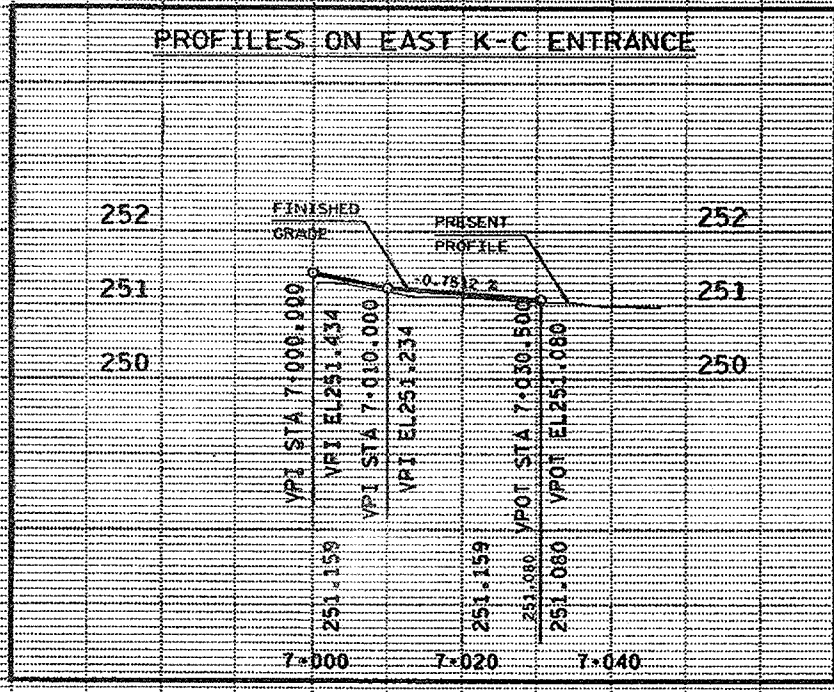
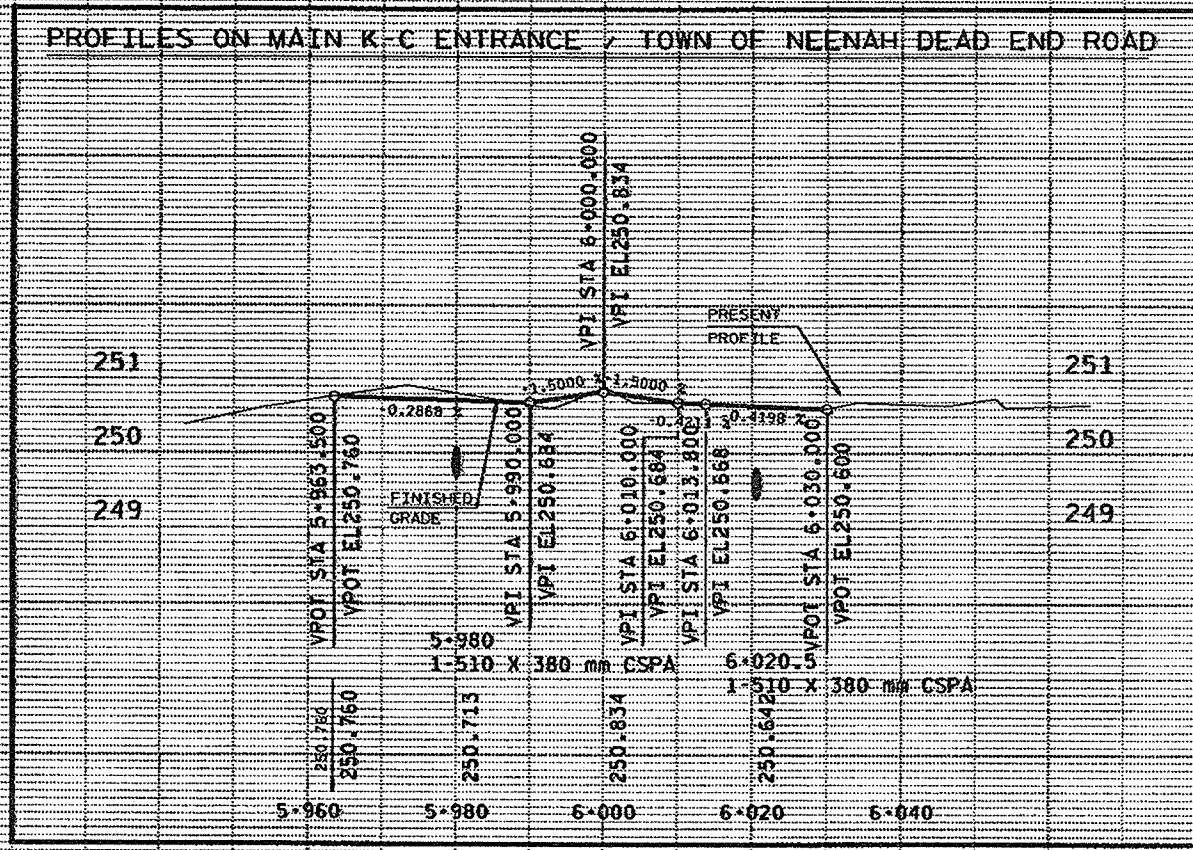
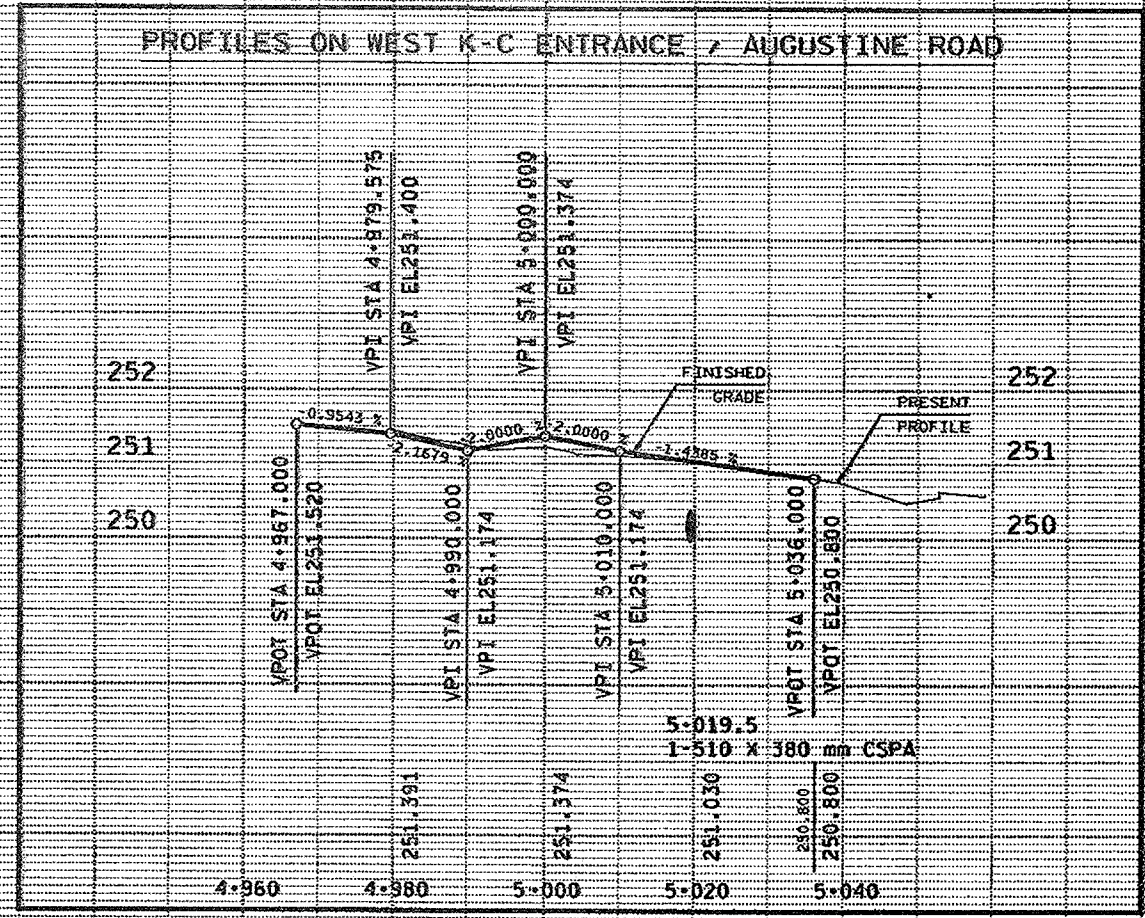
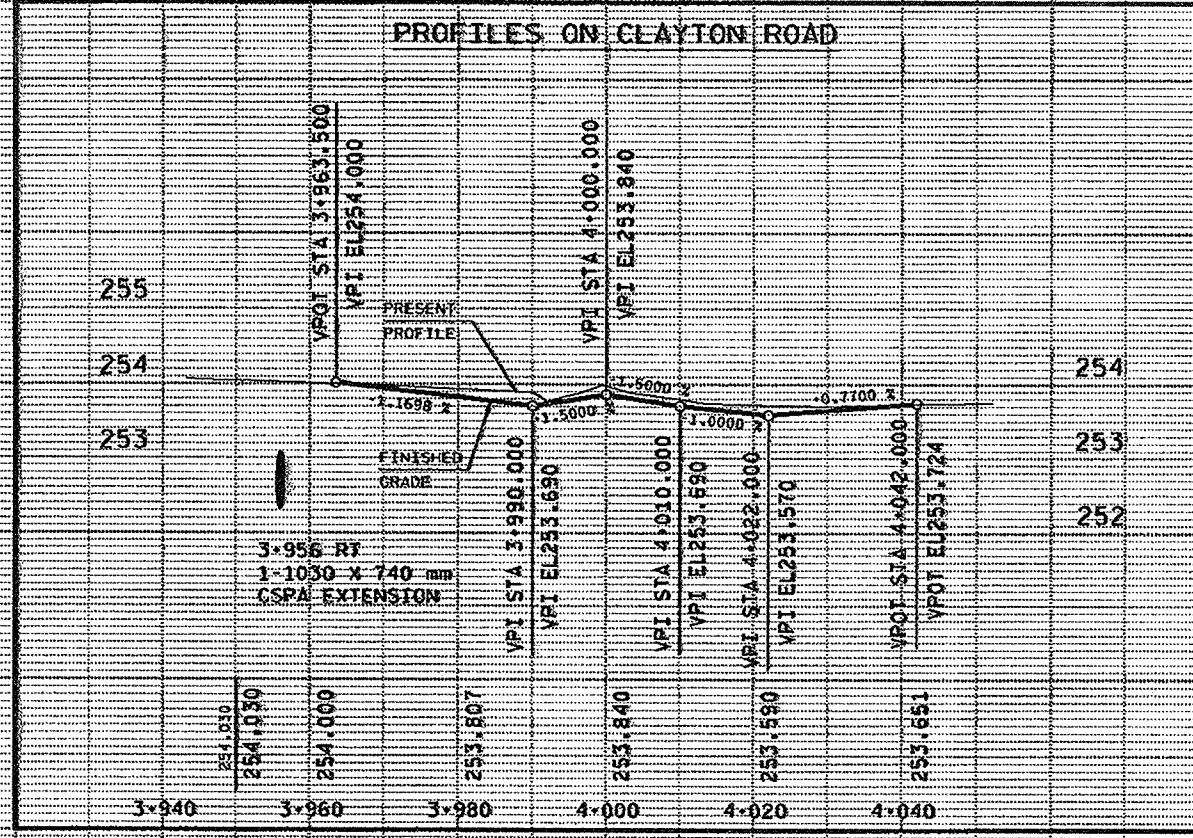


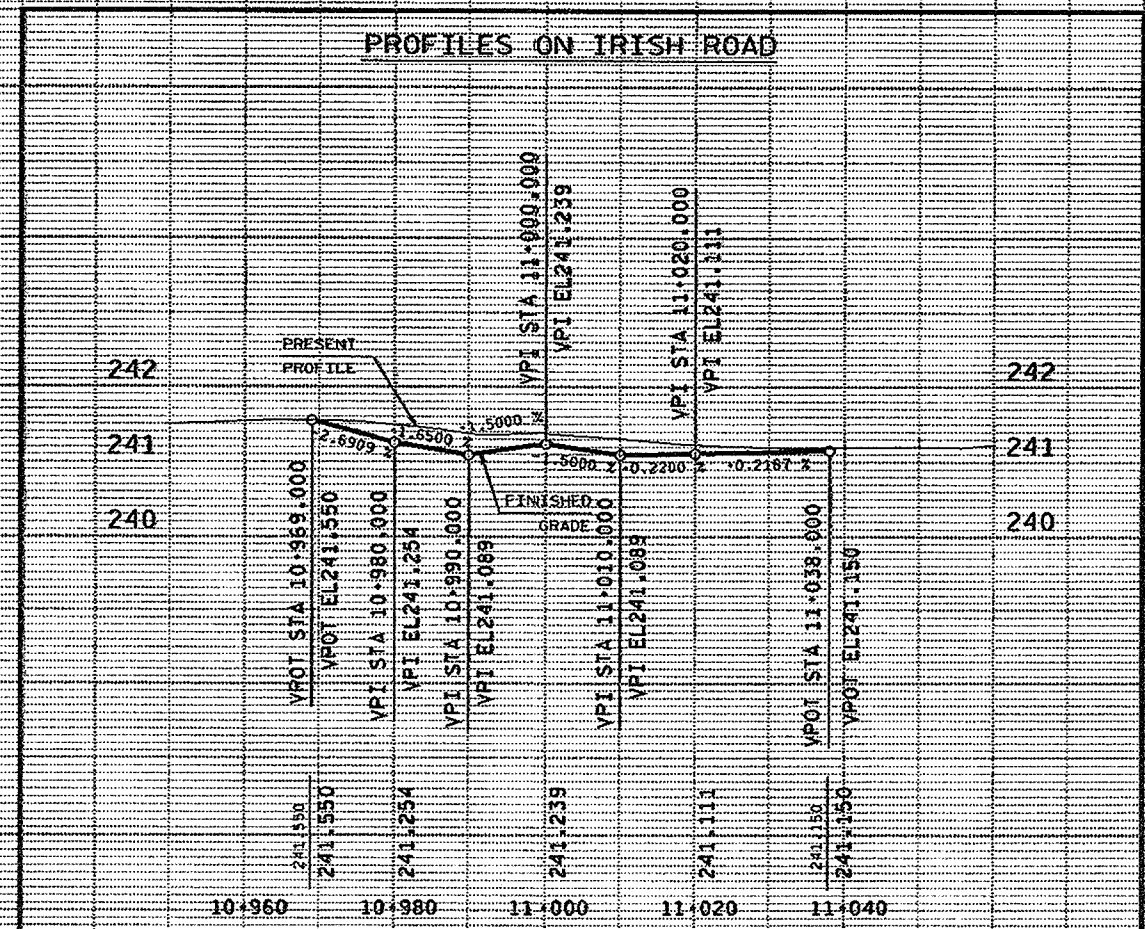
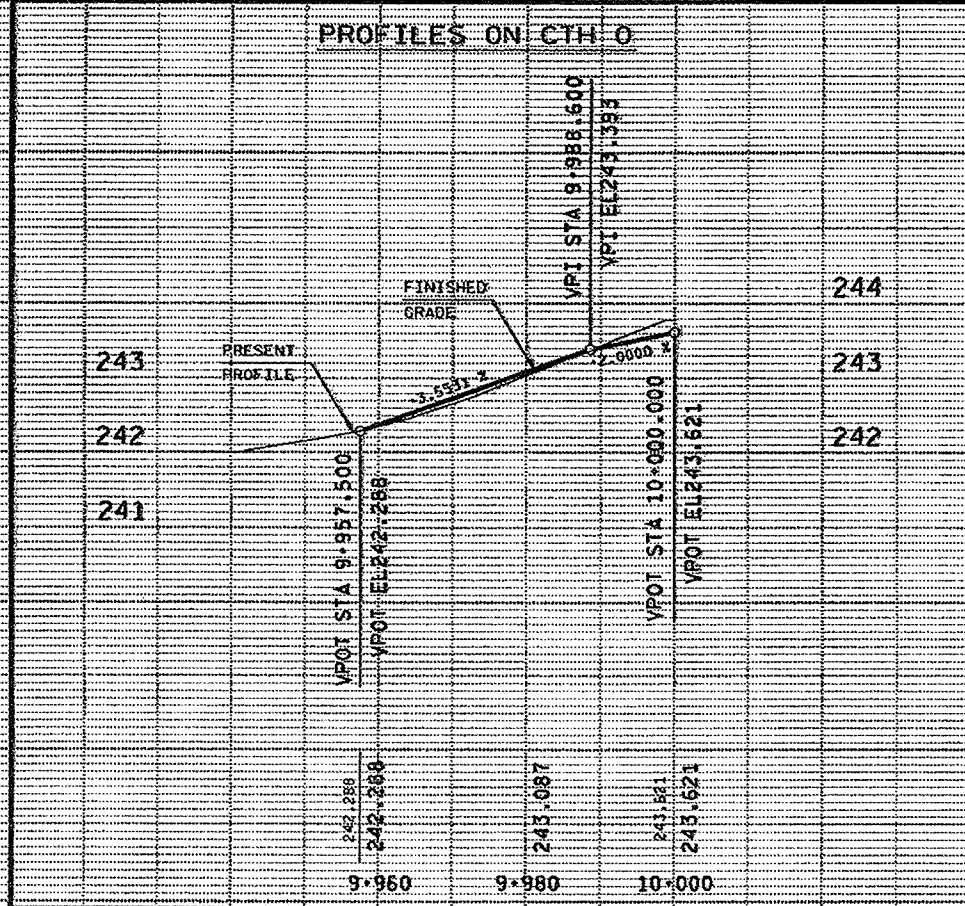
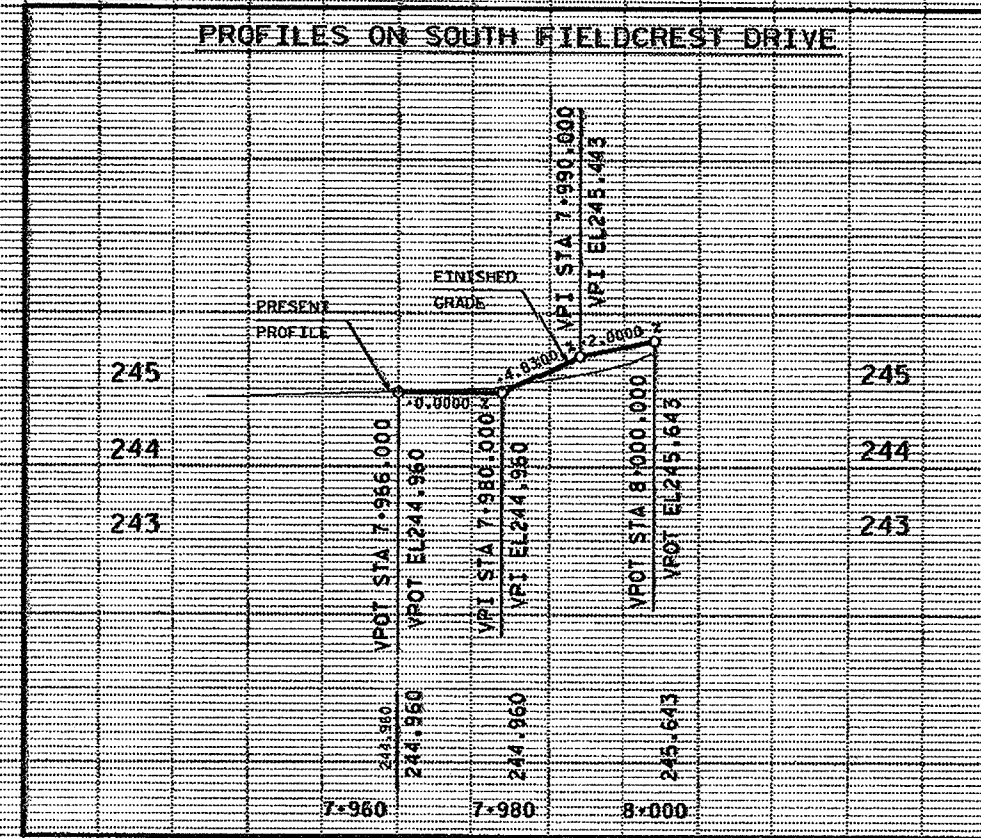
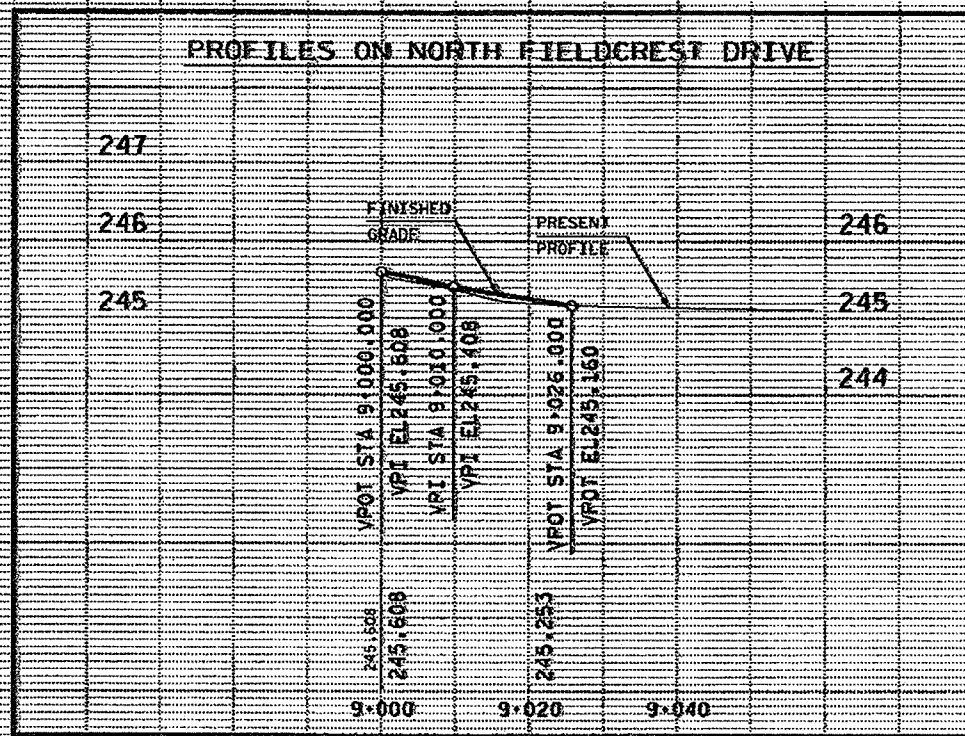


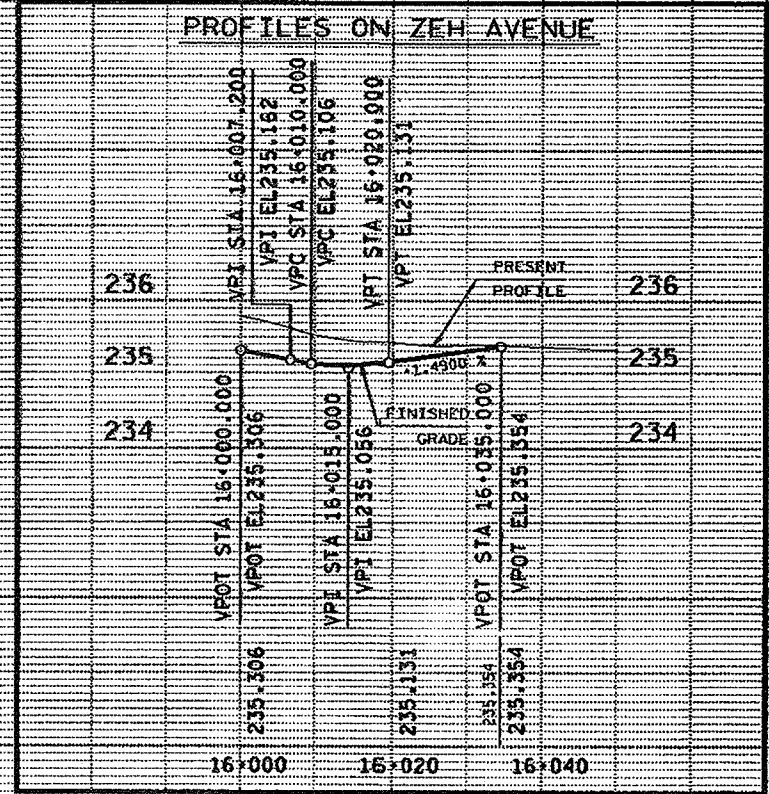
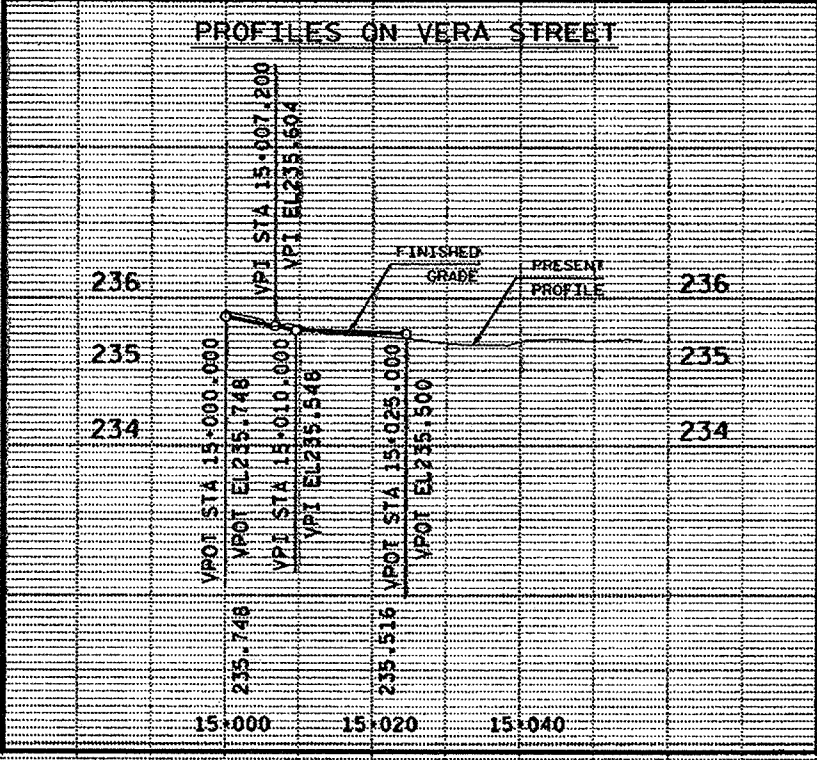
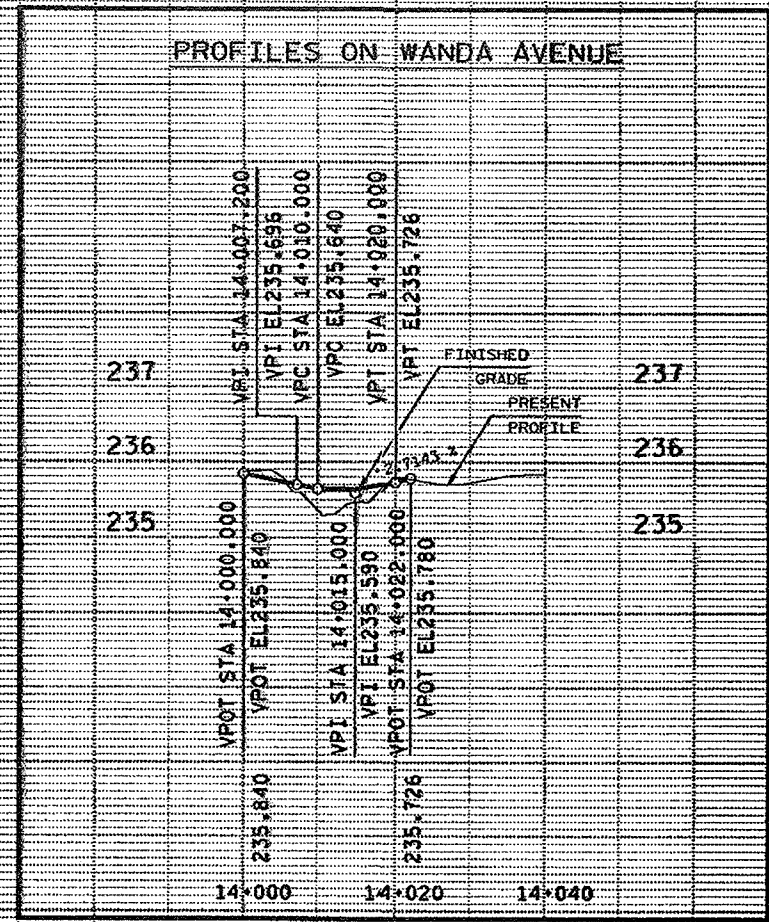
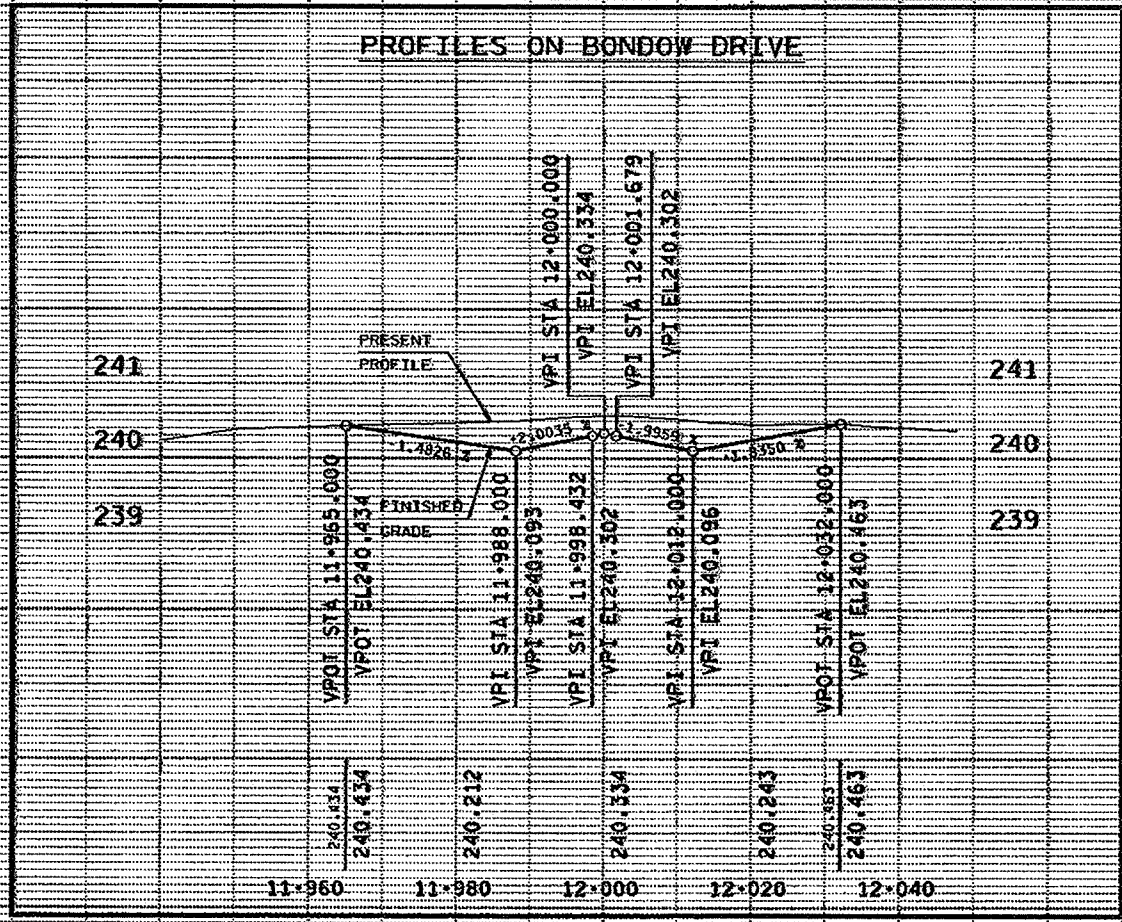
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
619	17+924	CHYSLER SO. SW COR OF BOX CULVERT	6 m RT 235.440

FILE NAME: F:\03_644803\03512.000 ORIGINATOR: DIST 3 12-2-98 REV. DATE: 1.007248:1.000000 PLOT DATE: 16-DEC-1998 10:52
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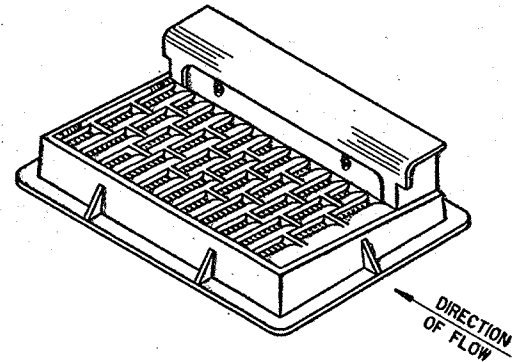
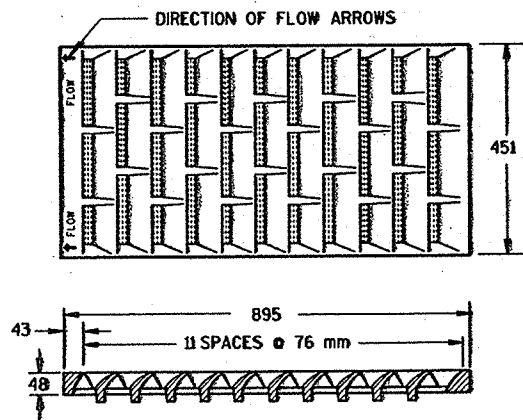




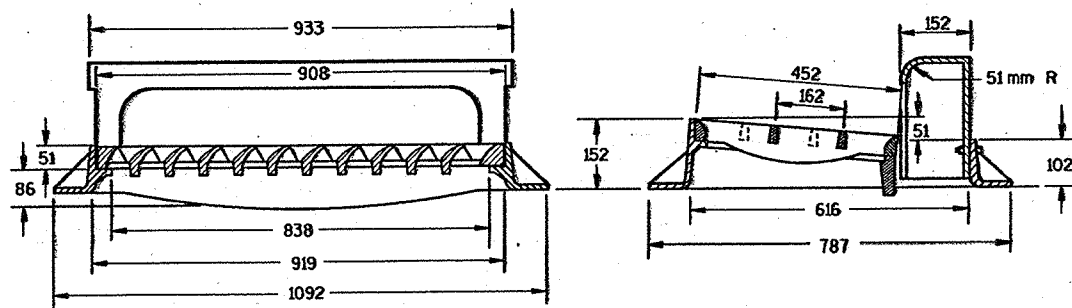


S.D.D. 8 A 5-14g
LEVELS ON • 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

NOTE:
GRATE IS REVERSIBLE.

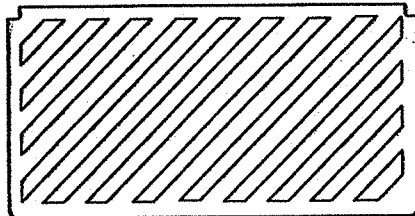


NOTE: CURB BOX HEIGHT ADJUSTABLE 150 mm TO 230 mm



TYPE "H"
(APPROXIMATE WEIGHT 191 kg)
FRAME..... 79 kg
GRATE..... 63 kg
CURB BOX..... 49 kg

300 mm DIAGONAL BARS WITH 41 mm OPENINGS



**SPECIAL GRATE FOR
TYPE "H" COVER**

(MEASURES 895 mm X 451 mm X 51 mm)
(APPROXIMATE WEIGHT 78 kg)

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

NOTE:
GRATE IS REVERSIBLE.

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.

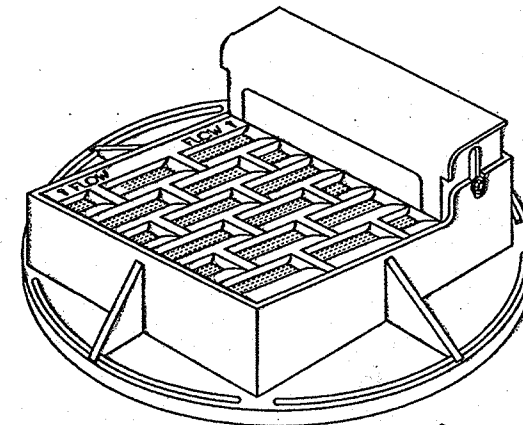
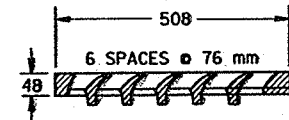
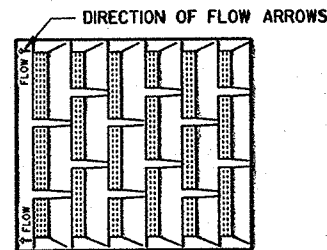
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

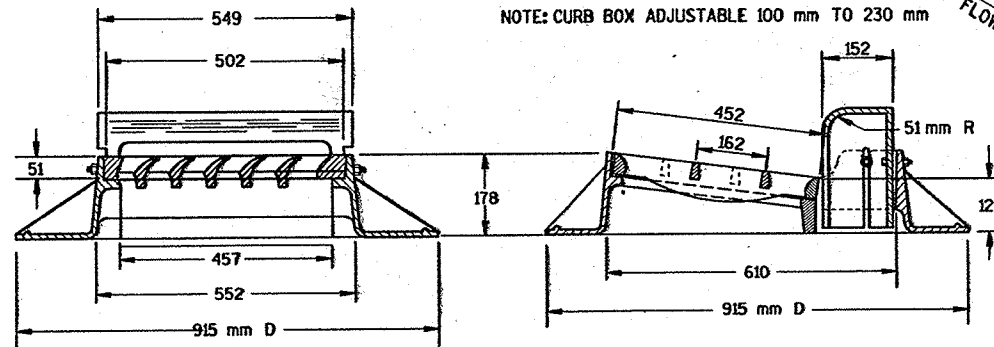
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

NOTE

ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE SHOWN.



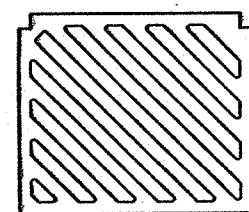
NOTE: CURB BOX ADJUSTABLE 100 mm TO 230 mm



TYPE "A"

(APPROXIMATE WEIGHT 325 LBS.)
FRAME..... 157 LBS.
GRATE..... 84 LBS.
CURB BOX..... 84 LBS.

30 mm DIAGONAL BARS
WITH 30 mm OPENINGS



**SPECIAL GRATE FOR
TYPE "A" COVER**

(MEASURES 502 mm X 432 mm X 51 mm)

GRATE..... 38 kg

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

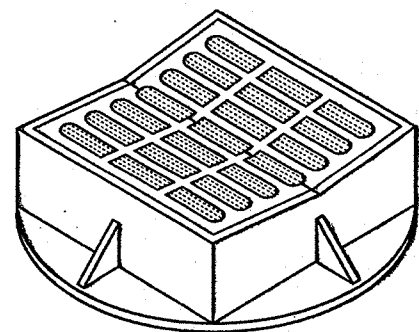
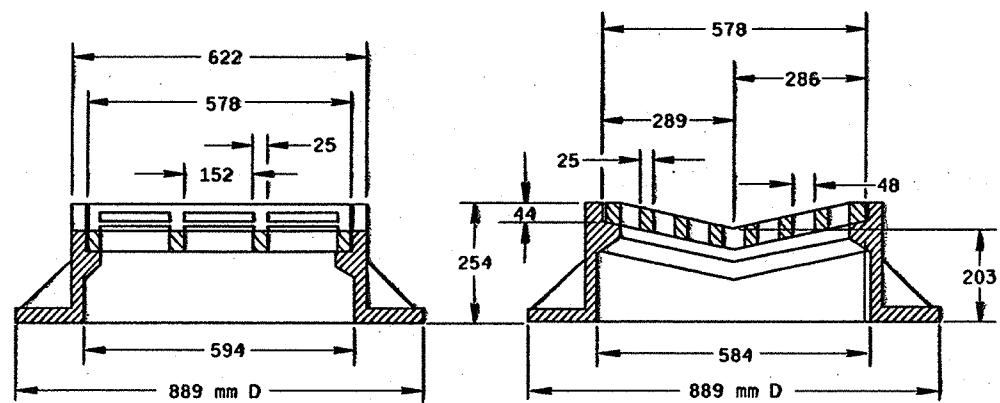
NOTE:
GRATE IS REVERSIBLE.

INLET COVERS

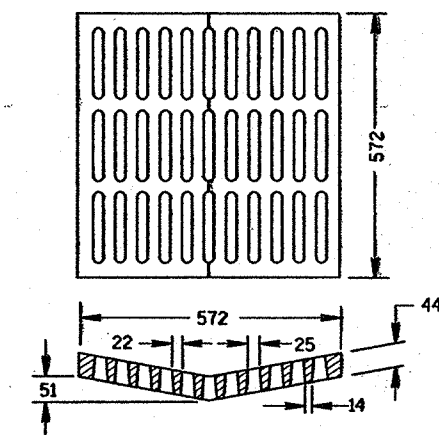
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/97
DATE
[Signature]
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

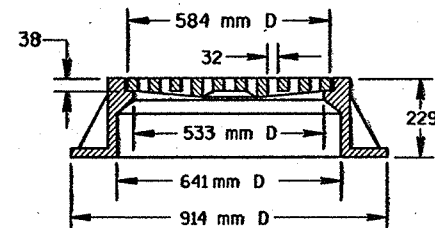
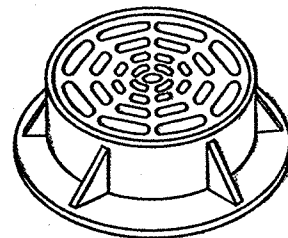
S.D.D. 8 A 5-14b
 LEVELS ON - 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



TYPE "B"
 (APPROXIMATE WEIGHT 179 kg)
 FRAME..... 129 kg
 GRATE..... 50 kg



**ALTERNATIVE GRATE FOR
 FOR TYPE "B" COVER**
 (APPROXIMATE GRATE WEIGHT 57 kg)
 GRATE..... 57 kg
 USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
 NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"
 (APPROXIMATE WEIGHT 154 kg)
 FRAME..... 107 kg
 GRATE..... 48 kg

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.

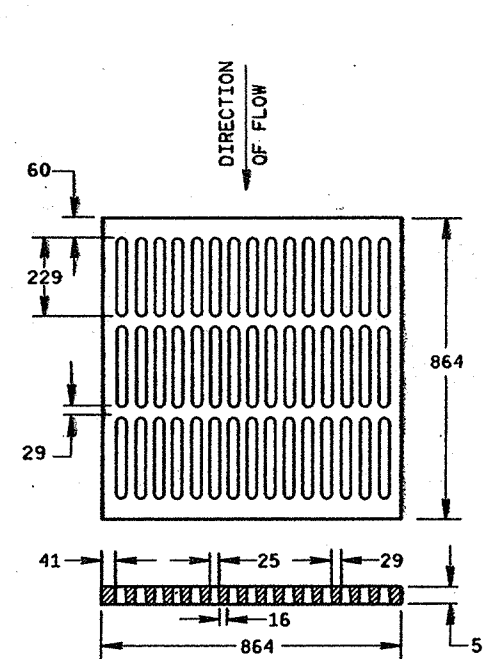
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

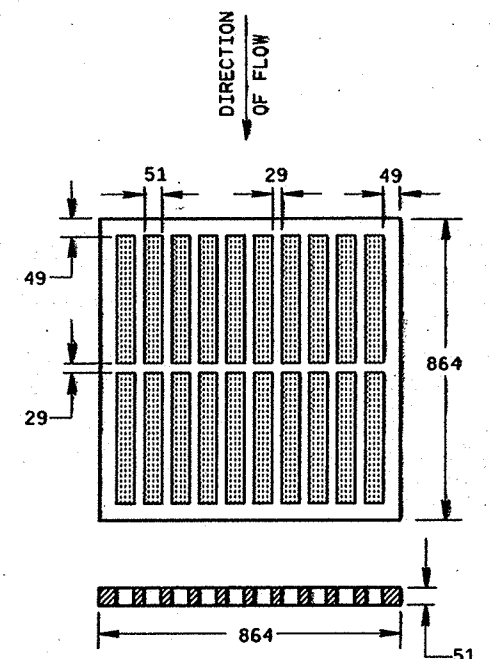
NOTES

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



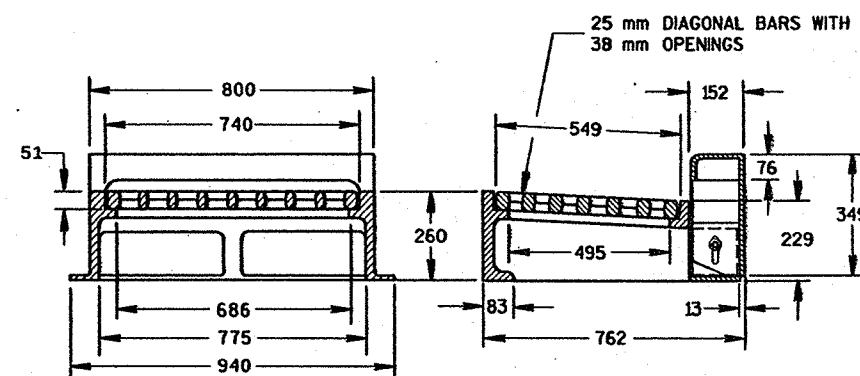
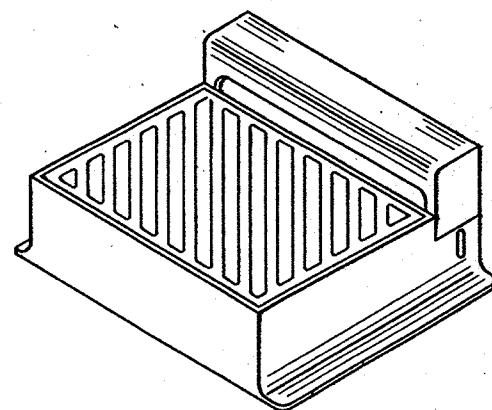
ALTERNATIVE TYPE "MS"
 (APPROXIMATE GRATE WEIGHT 166 kg)
 GRATE..... 166 kg

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
 NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



TYPE "MS"
 (APPROXIMATE GRATE WEIGHT 122 kg)
 GRATE..... 122 kg

USE ON FREEWAYS AND EXPRESSWAYS
 NOTED AS TYPE MS ON DRAINAGE TABLE



NOTE: CURB BOX HEIGHT ADJUSTABLE 152 mm TO 229 mm

TYPE "WM"
 (APPROXIMATE WEIGHT 304 kg)

FRAME..... 163 kg
 GRATE..... 73 kg
 CURB BOX..... 68 kg

DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.

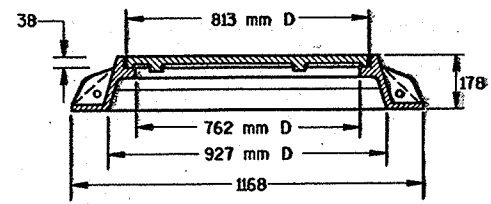
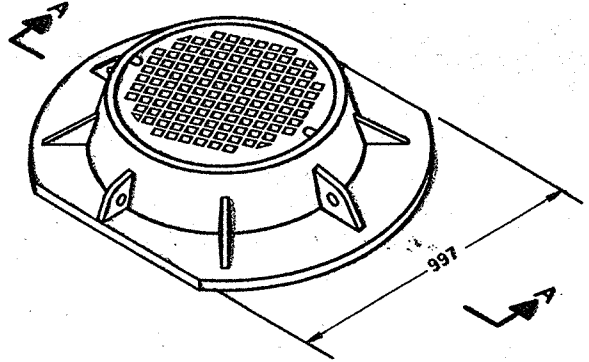
DIRECTION OF FLOW

INLET COVERS

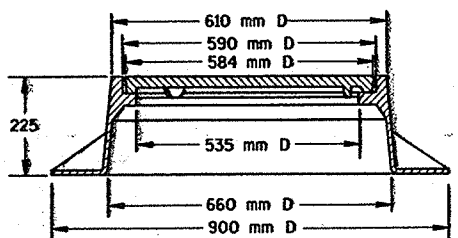
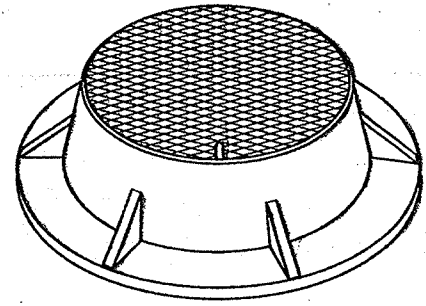
STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED 10/1/97
 DATE
 CHIEF ROADWAY DEVELOPMENT ENGINEER
 FHWA

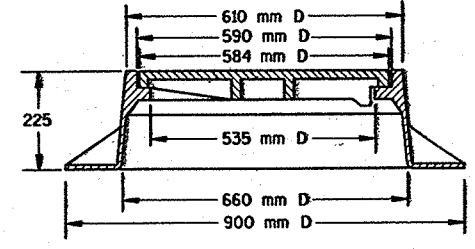
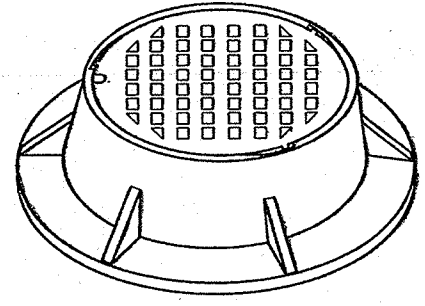
S.D.D. 8 A 5-14d
LEVELS ON - 2.3, 4, 5.6, 7.8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



**SECTION A-A
TYPE "K"**
(APPROXIMATE WEIGHT 188 kg)
FRAME.....95 kg
LID.....93 kg



TYPE "J"
(APPROXIMATE WEIGHT 113 kg)
FRAME.....61 kg
LID.....52 kg



TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(APPROXIMATE WEIGHT 111 kg)
FRAME.....66 kg
LID.....45 kg
(NOTED AS TYPE J-S ON DRAINAGE TABLE)

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.

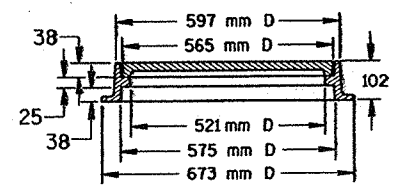
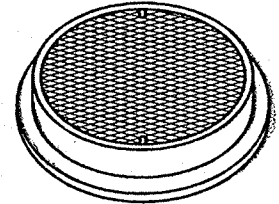
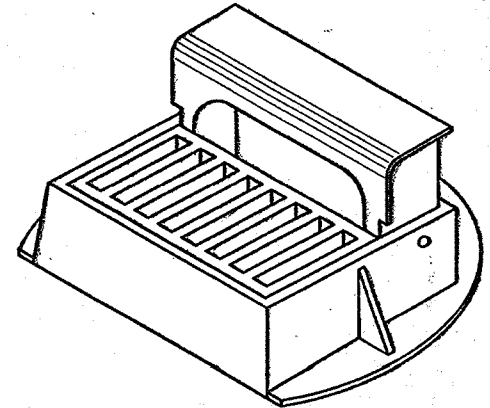
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

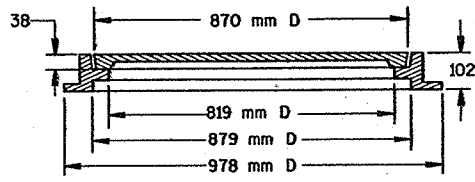
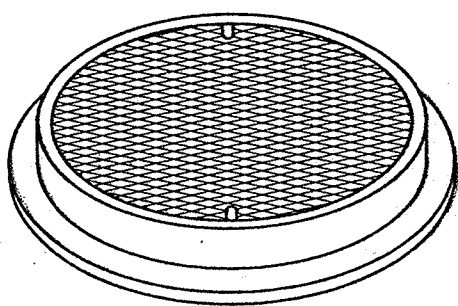
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

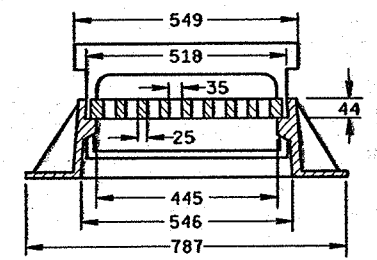
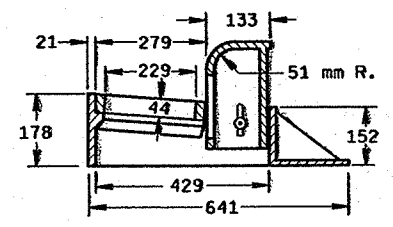


TYPE "L"
(APPROXIMATE WEIGHT 66 kg)
FRAME.....34 kg
LID.....32 kg



TYPE "M"
(APPROXIMATE WEIGHT 175 kg)
FRAME.....57 kg
LID.....118 kg

CURB BOX ADJUSTABLE 102 mm TO 254 mm

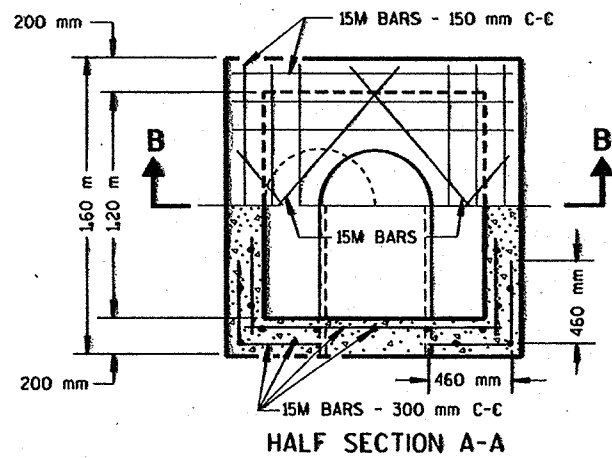


INLET COVER TYPE "Z"

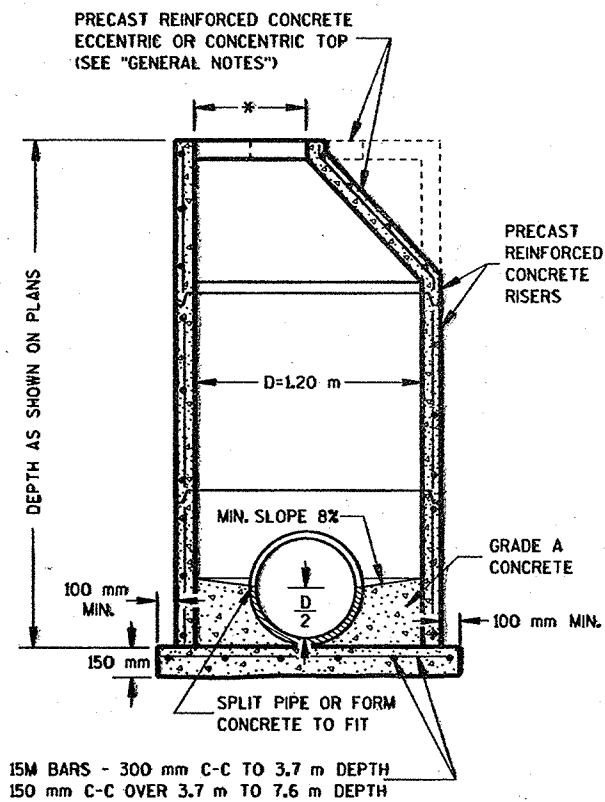
(APPROXIMATE WEIGHT 140 kg)
FRAME.....77 kg
GRATE.....23 kg
CURB BOX.....40 kg

INLET AND MANHOLE COVERS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/1/97 DATE	 CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA M	

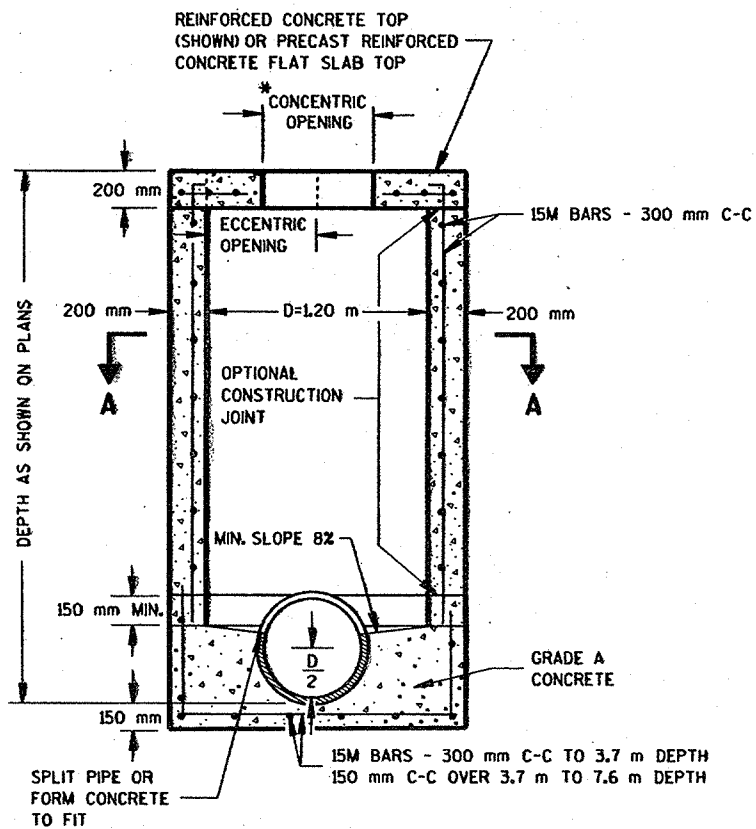
S.D.D. 8 B 6-3
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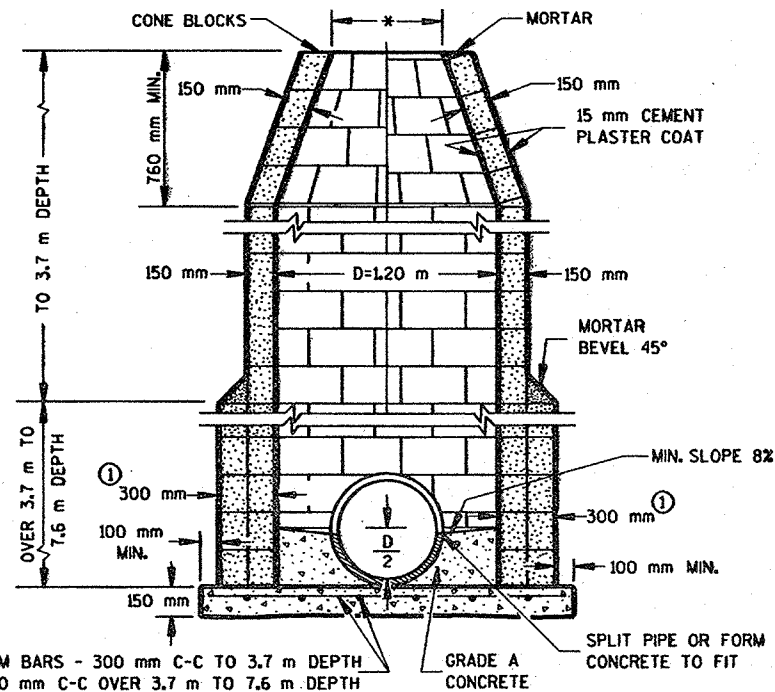
HALF SECTION A-A



PRECAST REINFORCED CONCRETE



SECTION B-B
REINFORCED CONCRETE



CONCRETE BLOCK

MANHOLES 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.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-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 150 mm IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 1.5 m OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 1.5 m IN DEPTH: 400 mm C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 100 mm FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 250 mm; MINIMUM WALL EMBEDMENT OF 75 mm; AND BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 136 kg FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 25 mm.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 19 mm. 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 ARE ACCEPTABLE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199M.

* USE 600 mm DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS, OR 900 mm DIAMETER WITH TYPE "K" AND "M" COVERS.

① 2 COURSES 150 mm BLOCK.

MANHOLES TYPE 1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

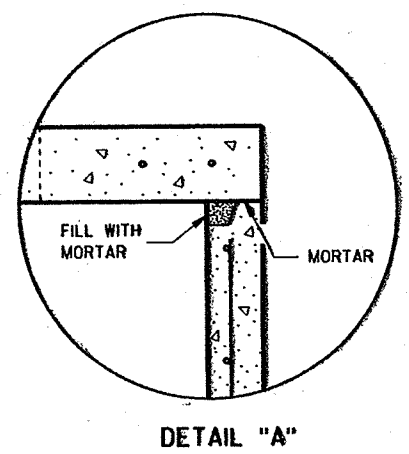
APPROVED
02/07/85
DATE
[Signature]
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

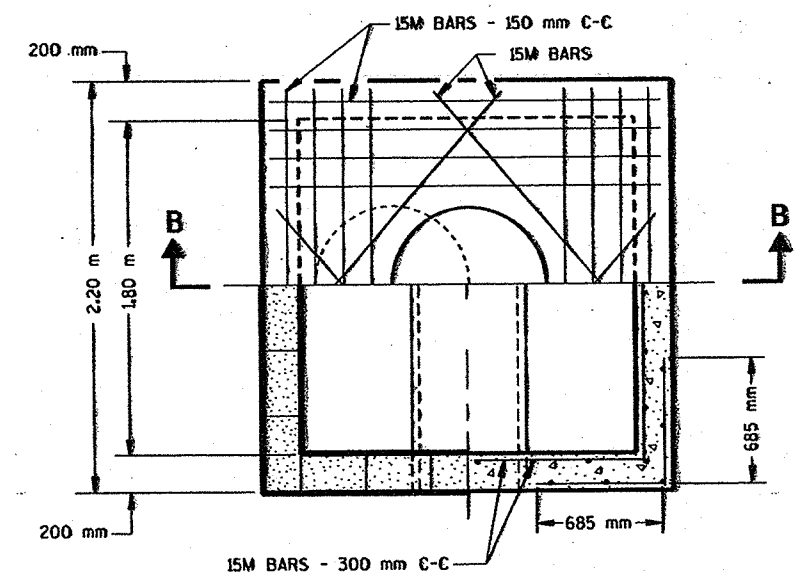
M

REV. DATE: PLOT SCALE:

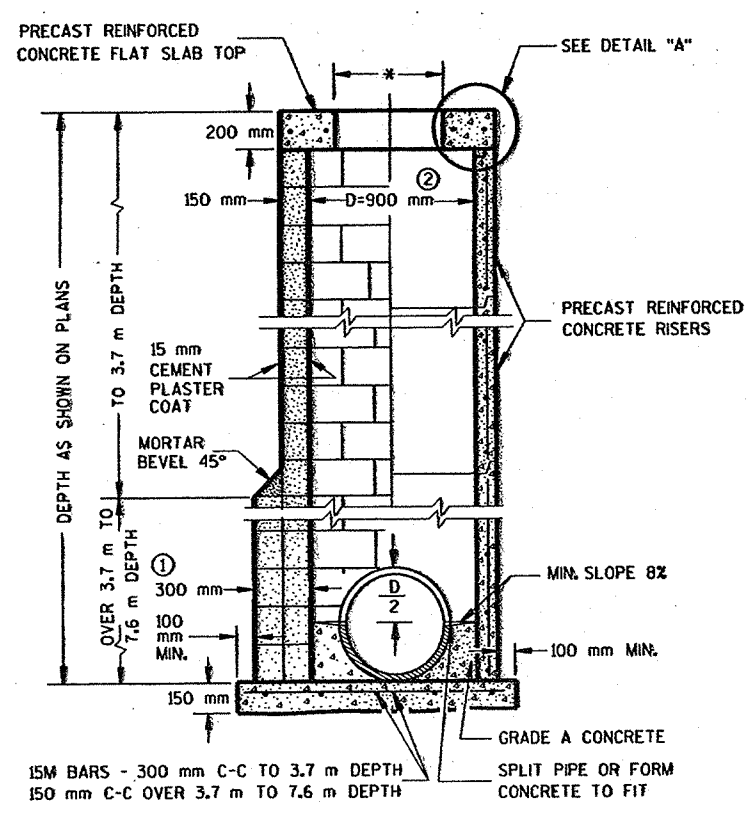
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DETAIL "A"

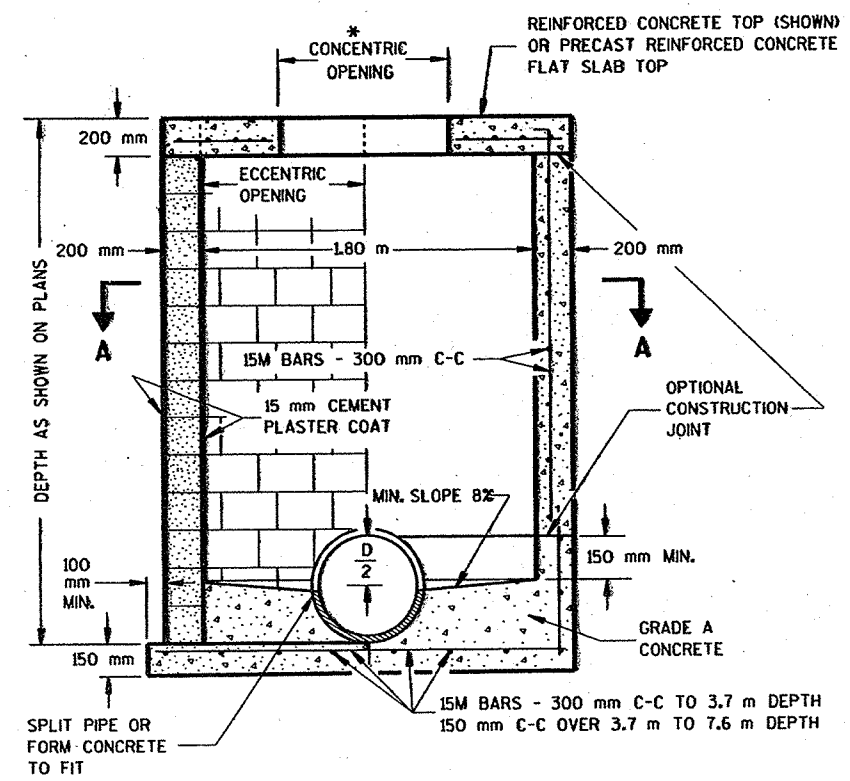


HALF SECTION A-A



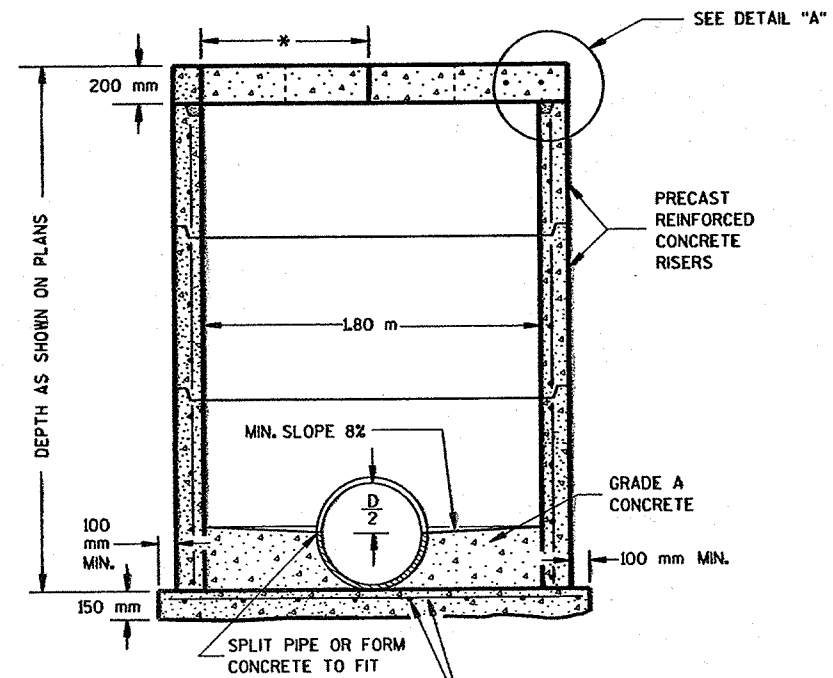
CONCRETE BLOCK
 PRECAST REINFORCED CONCRETE

MANHOLES TYPE 2



CONCRETE BLOCK
 REINFORCED CONCRETE

MANHOLES TYPE 3



15M BARS - 300 mm C-C TO 3.7 m DEPTH
 150 mm C-C OVER 3.7 m TO 7.6 m DEPTH

PRECAST 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 3-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 150 mm IN DEPTH, WHICH MEETS THE REQUIREMENTS OF 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 1.5 m IN DEPTH: 400 mm C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 100 mm FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 150 mm; MINIMUM WALL EMBEDMENT OF 75 mm; AND BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 136 kg FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 25 mm.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 19 mm. 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 ARE ACCEPTABLE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199M.

* USE 600 mm DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS, OR 900 mm DIAMETER WITH TYPE "K" AND "M" COVERS.

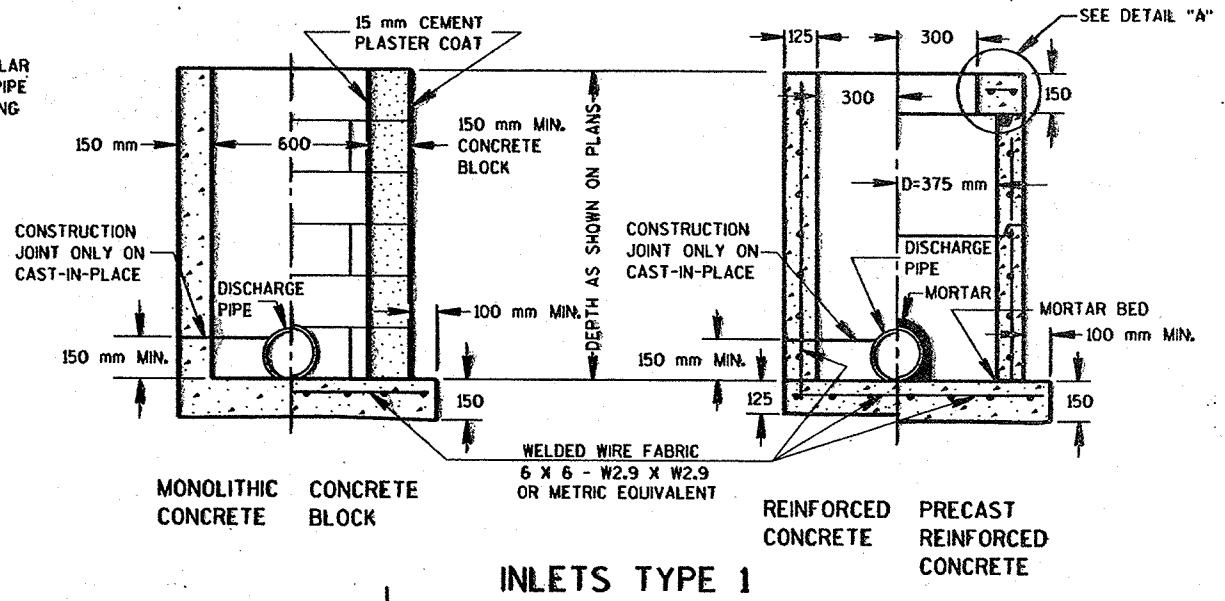
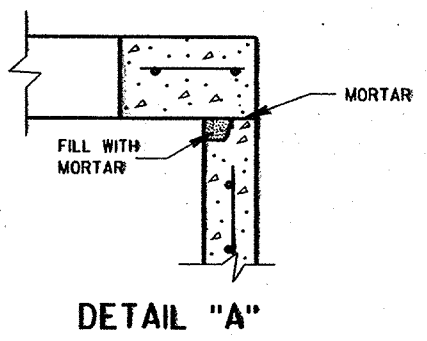
① 2 COURSES 150 mm BLOCK.

② WHEN CONNECTING PIPES ARE 600 mm OR LARGER THE PRECAST MANHOLES MAY BE INCREASED TO 107 mm DIAMETER.

MANHOLES TYPE 2 & 3	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 01/27/95 DATE	 CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

S.D.D. 8 C 1-5
 LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

*SELECTION OF SQUARE OR CIRCULAR DESIGN WILL BE BASED ON THE PIPE SIZES AND THE INLET COVER BEING UTILIZED



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 PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION 199 M.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-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 150 mm IN DEPTH, WHICH MEETS THE REQUIREMENTS OF 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.

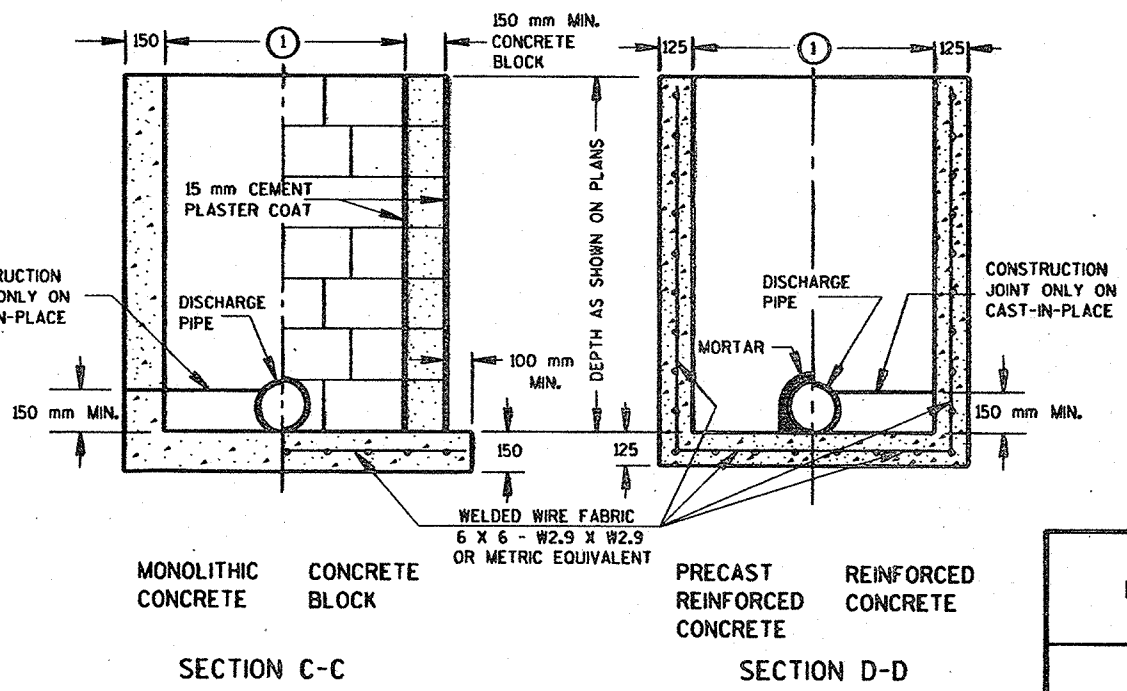
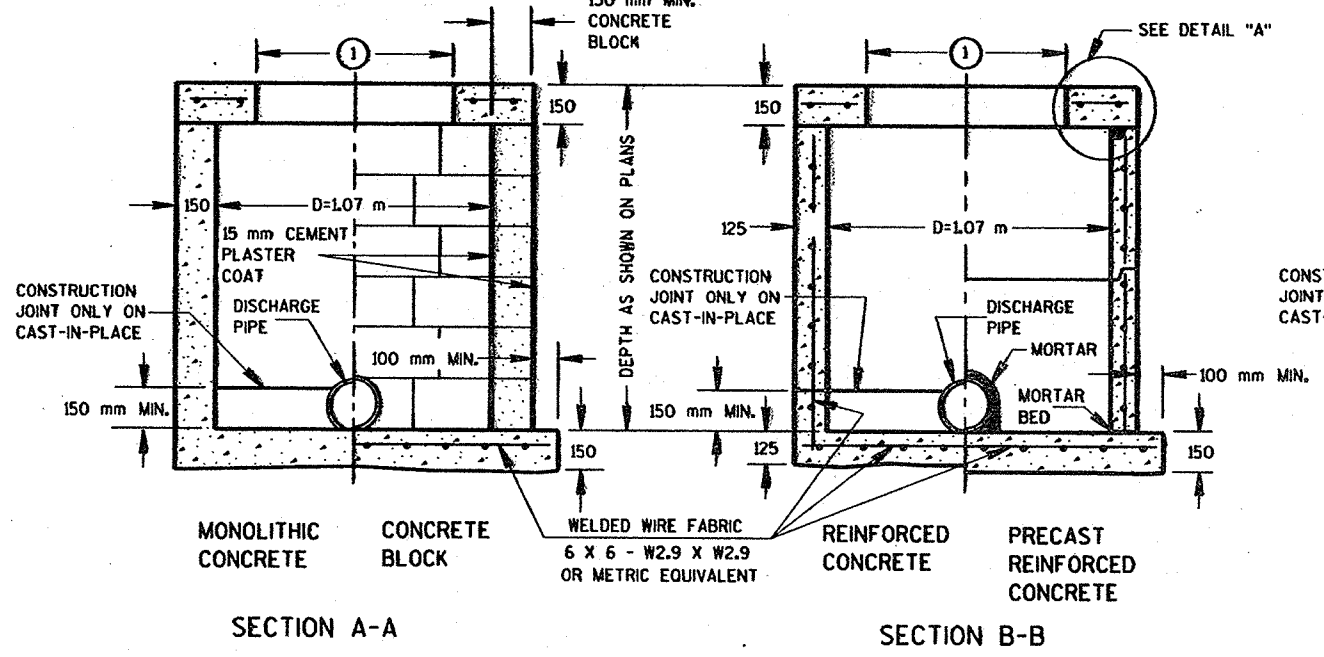
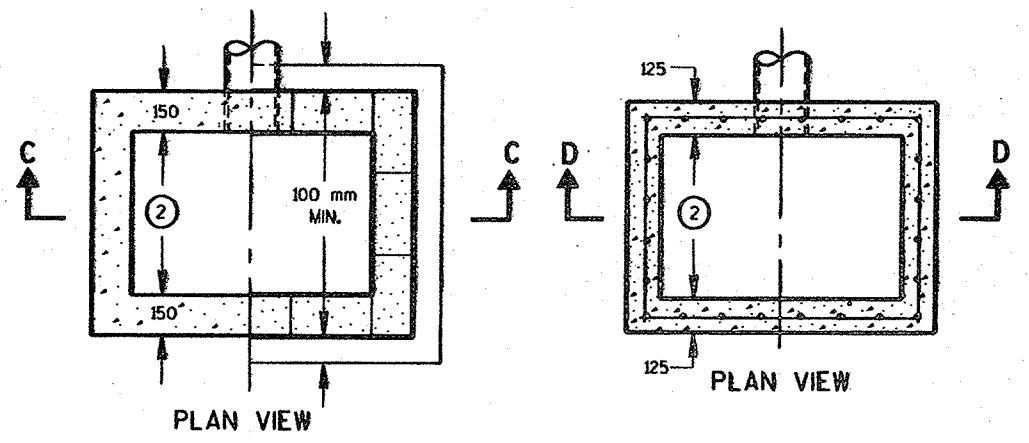
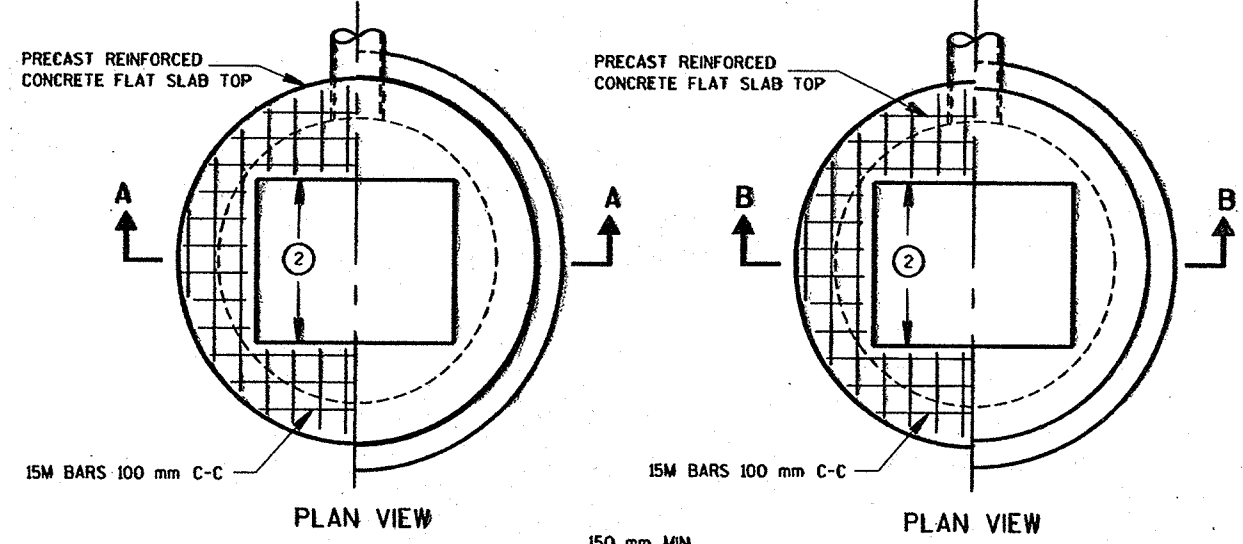
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH TONGUE DOWN.

- ① USE 760 mm OPENING FOR TYPE 2 INLETS, 915 mm. OPENING FOR TYPE 3 INLETS, AND 890 mm TYPE 4 INLETS.
- ② USE 610 mm OPENING FOR TYPE 1, 2 & 3 INLETS, 775 mm OPENING FOR TYPE 4 INLETS.

NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



INLETS TYPE 2, 3 & 4

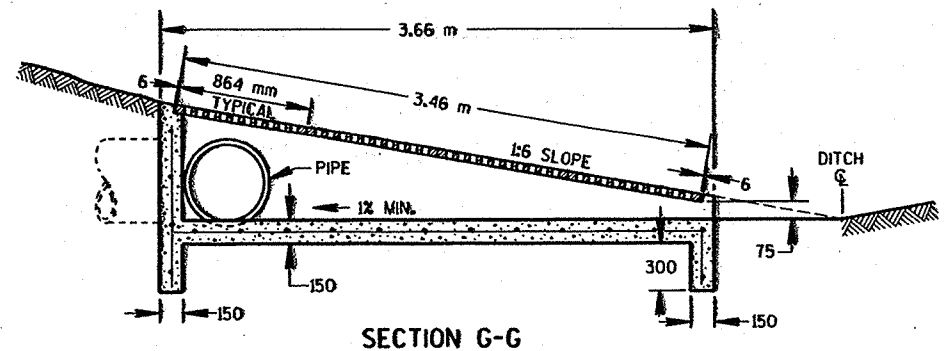
INLETS TYPE 1, 2, 3 & 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

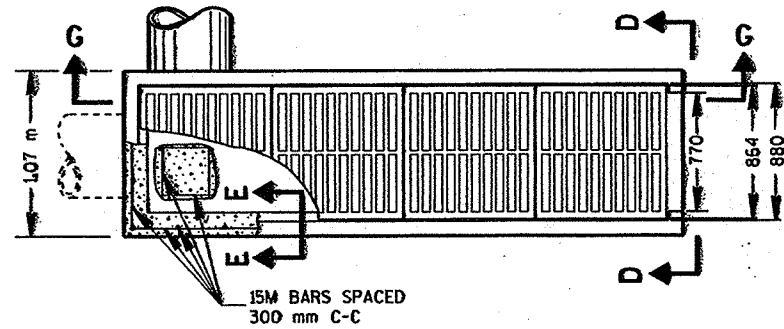
APPROVED
01/31/95
DATE
Roy L. Roman
CHIEF ROADWAY DEVELOPMENT ENGINEER

PLOT NAME: REV. DATE:

S.D.D. 8 C 5-2 LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

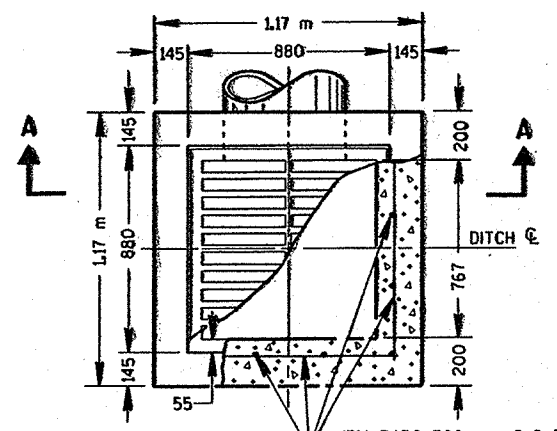


SECTION G-G

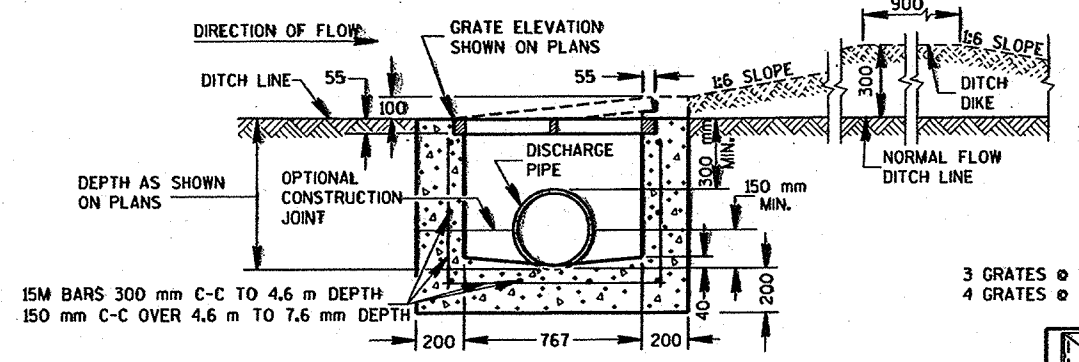


PLAN VIEW

REINFORCED CONCRETE INLET TYPE 11

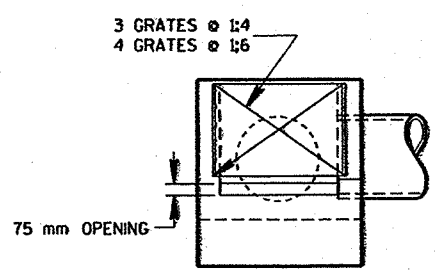


PLAN VIEW

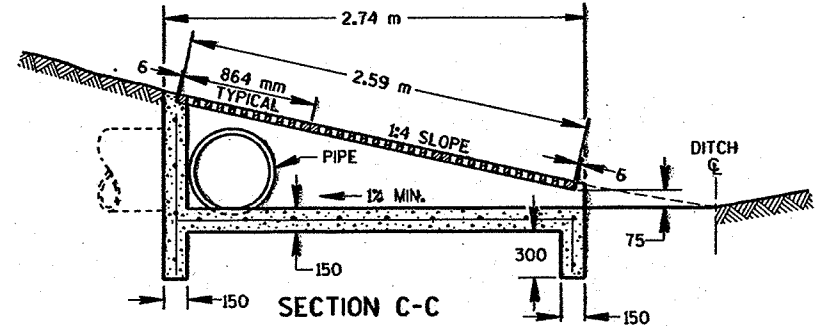


SECTION A-A

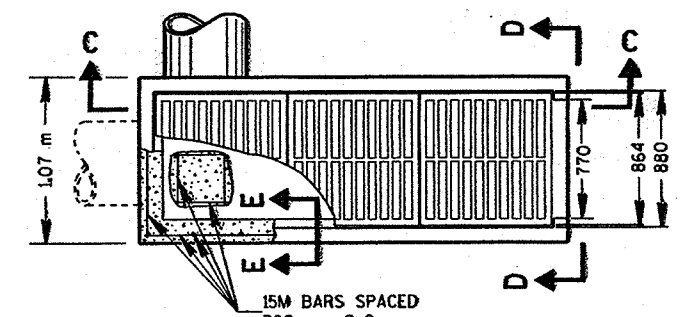
REINFORCED CONCRETE INLET TYPE 8



SECTION D-D

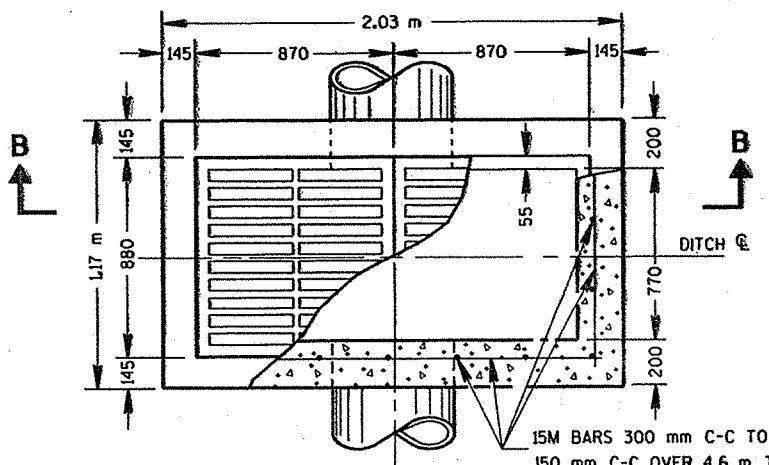


SECTION C-C

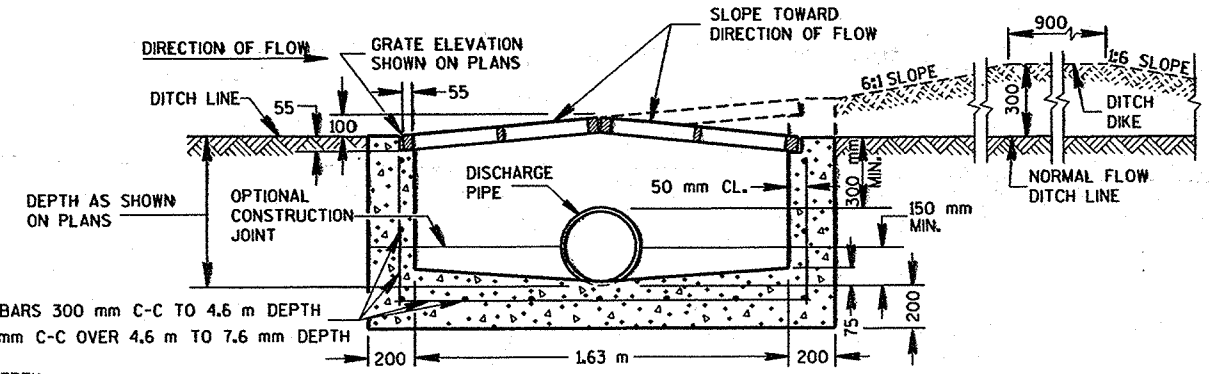


PLAN VIEW

REINFORCED CONCRETE INLET TYPE 10

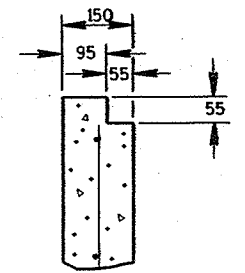


PLAN VIEW



SECTION B-B

REINFORCED CONCRETE INLET TYPE 9



SECTION E-E

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 INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

PRECAST REINFORCED CONCRETE INLET UNITS, IF USED, SHALL CONFORM TO THE REQUIREMENTS OF THE CATCH BASINS, MANHOLES AND INLETS SECTION OF THE STANDARD SPECIFICATIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A CORRECTED LIST OF SIZES IS FURNISHED BY THE ENGINEER.

ALL INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 8-MS", ETC. THIS DESIGNATION IS INTERPRETED TO MEAN THAT THE NUMBER, OR FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER OR IRON CASTING TO BE USED THEREWITH TO COMPRISE THE COMPLETE UNIT.

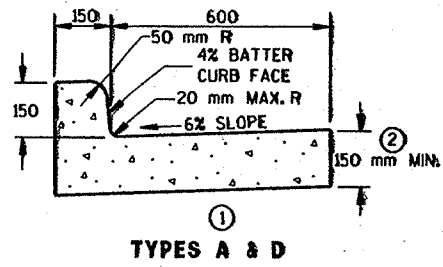
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

NOTE

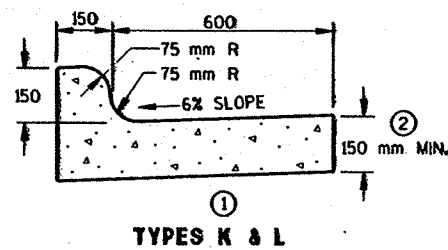
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

INLETS TYPE 8, 9, 10 & 11	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 01/30/95 DATE	 CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	M

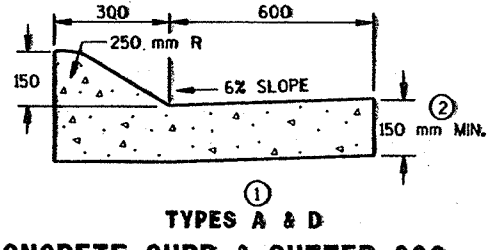
LEVELS ON • 2.3, 4, 5.6, 7.8, 9.10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63
 S.D.D. 8 D 1-12



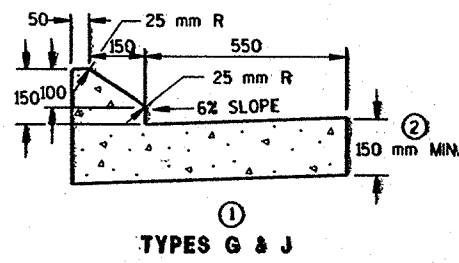
TYPES A & D



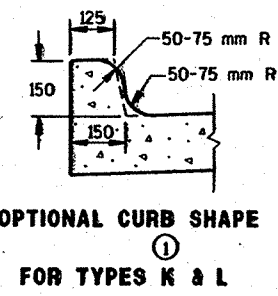
TYPES K & L



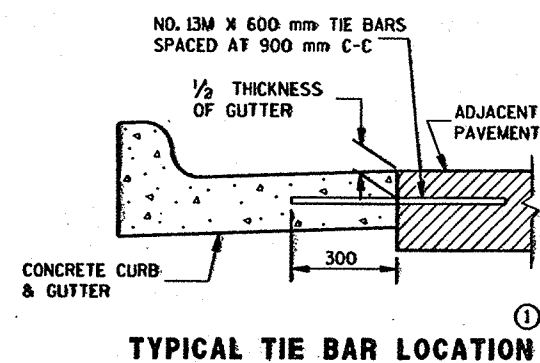
TYPES A & D
CONCRETE CURB & GUTTER 900 mm



TYPES G & J

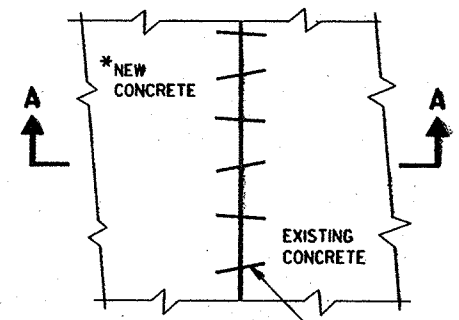


OPTIONAL CURB SHAPE
FOR TYPES K & L



TYPICAL TIE BAR LOCATION

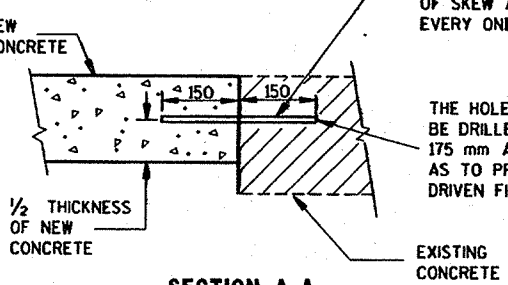
CONCRETE CURB & GUTTER 750 mm



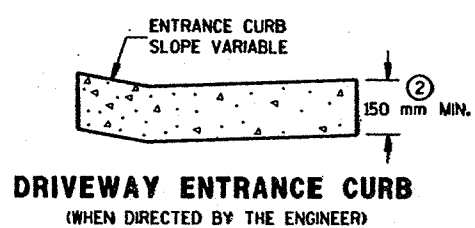
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

NO. 19M X 300 mm DEF. BARS SPACED 900 mm C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.

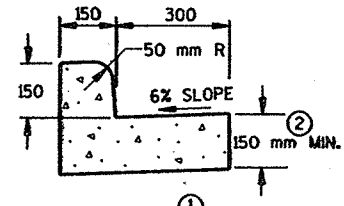
THE HOLE FOR THE BAR SHALL BE DRILLED TO A DEPTH OF 175 mm AND TO SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT



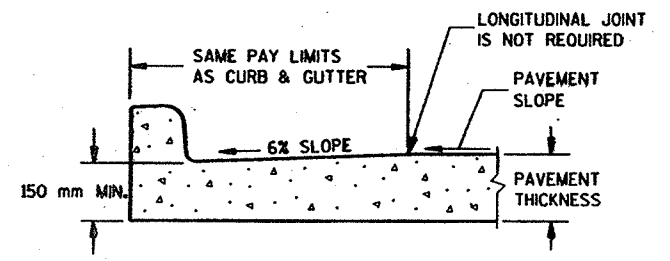
SECTION A-A
PAVEMENT TIES



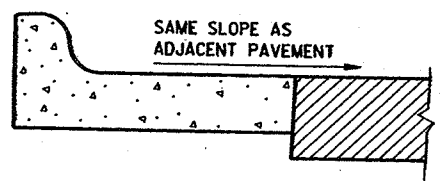
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



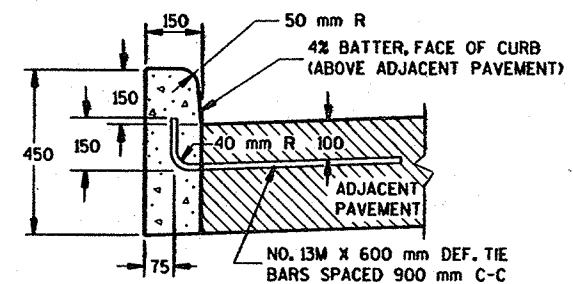
TYPES A & D
CONCRETE CURB & GUTTER 450 mm



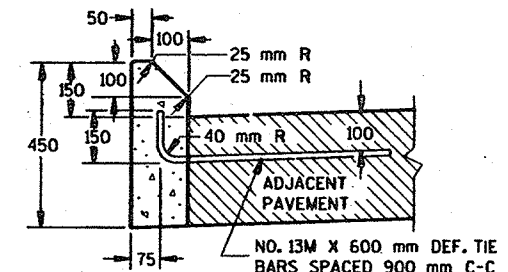
PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



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.
 PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 600 mm 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 150 mm MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

NOTE

DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

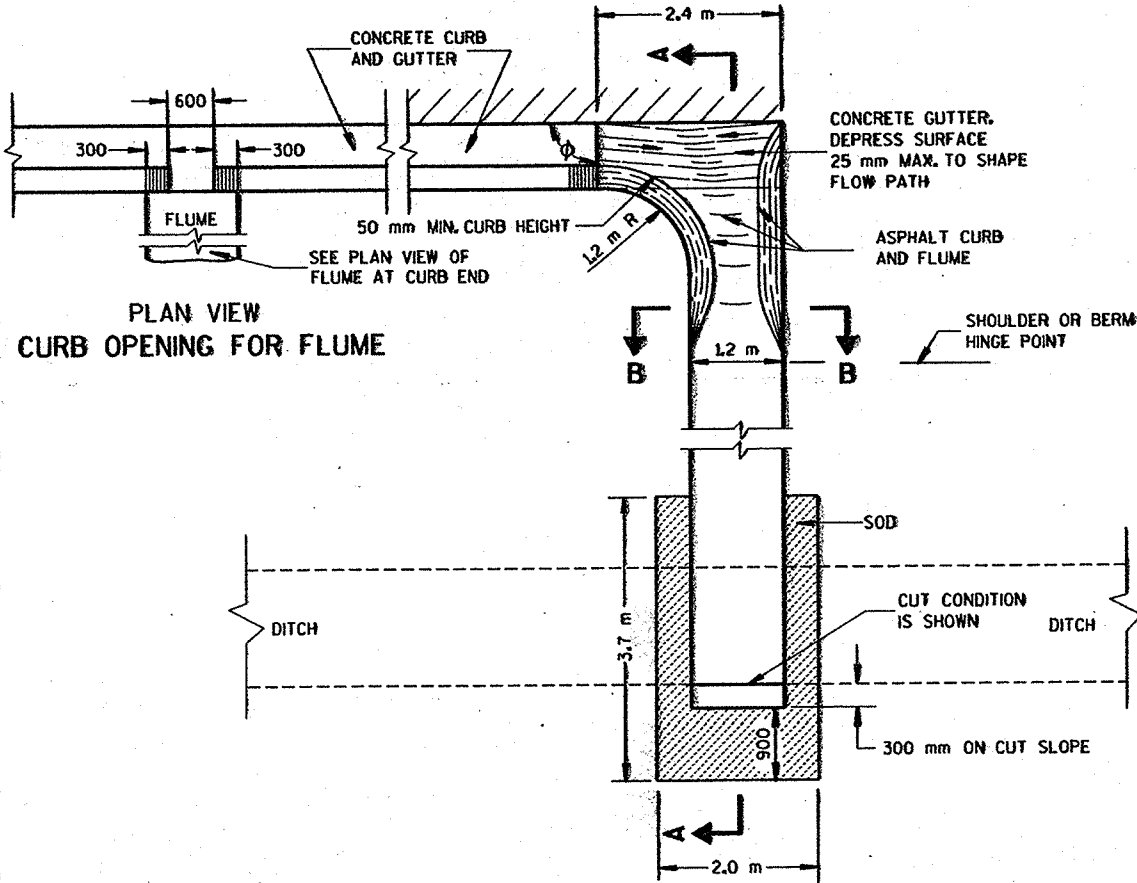
CONCRETE CURB, CONCRETE CURB & GUTTER AND PAVEMENT TIES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/22/96 DATE	 CHIEF ROADWAY DEVELOPMENT ENGINEER
<small>FRWA</small>	

S.D.D. 8 D 4-3
 LEVELS ON 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63

ASPHALTIC FLUME

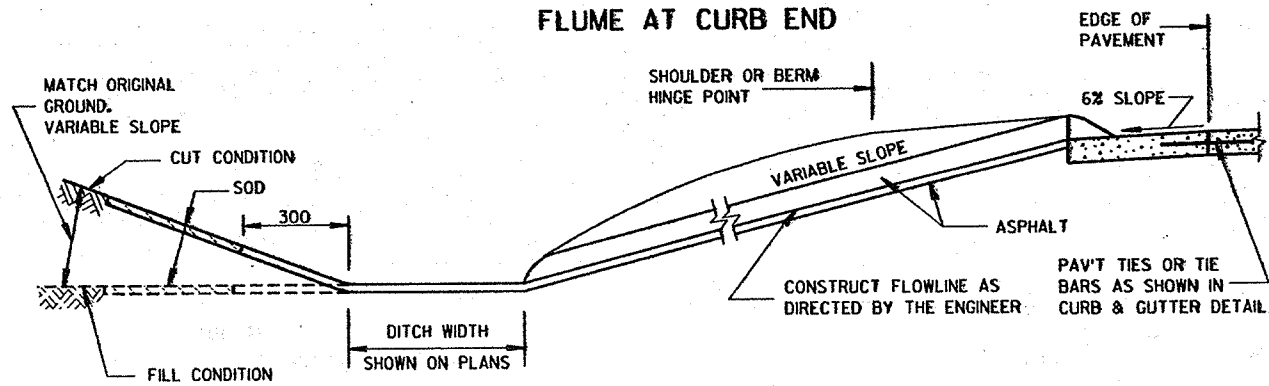
NOTE: TAPER CURB ENDS TO GUTTER IN 300 mm

INCREASE ϕ FROM RIGHT ANGLE TO BEST FIT FIELD CONDITIONS

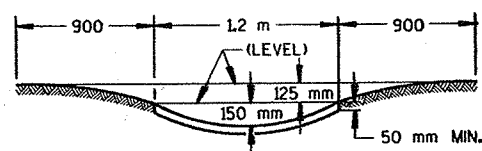


PLAN VIEW CURB OPENING FOR FLUME

PLAN VIEW FLUME AT CURB END



SECTION A-A



SECTION B-B

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.

① JOINTS SHALL BE 5 mm WIDE BY 40 mm DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 1.2 m.

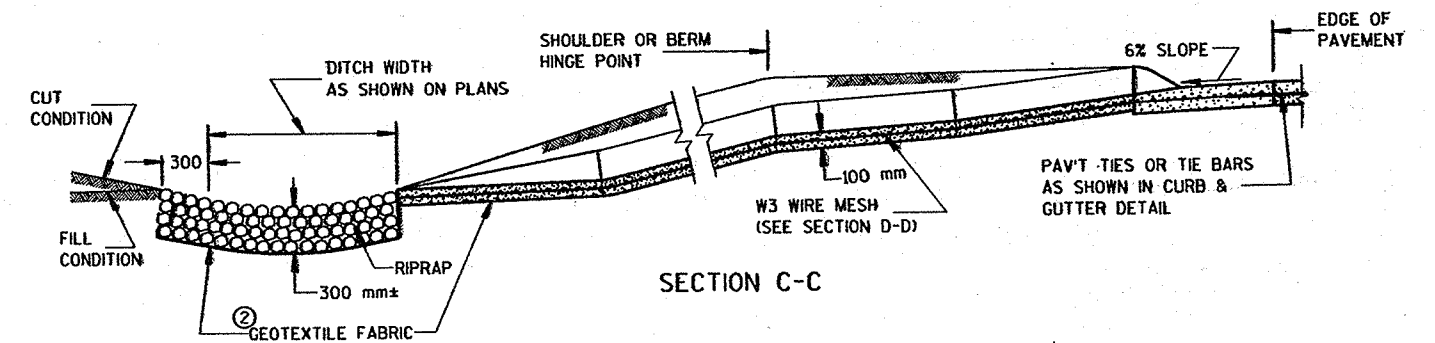
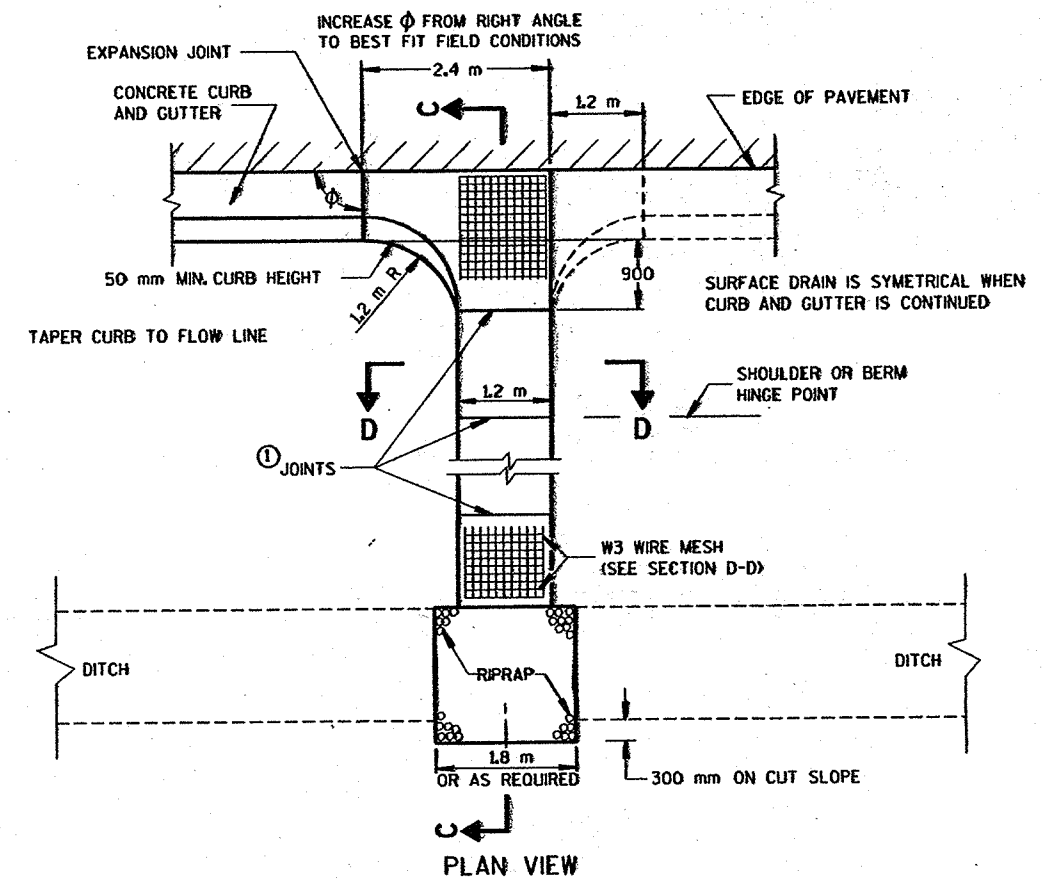
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

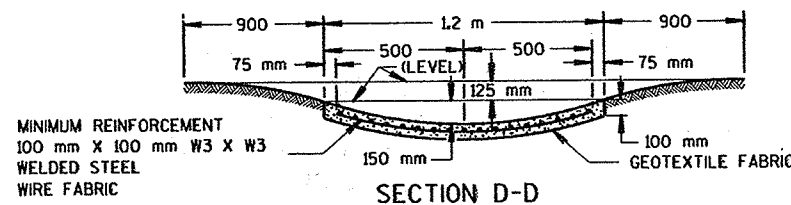
NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

③ CONCRETE SURFACE DRAIN



SECTION C-C



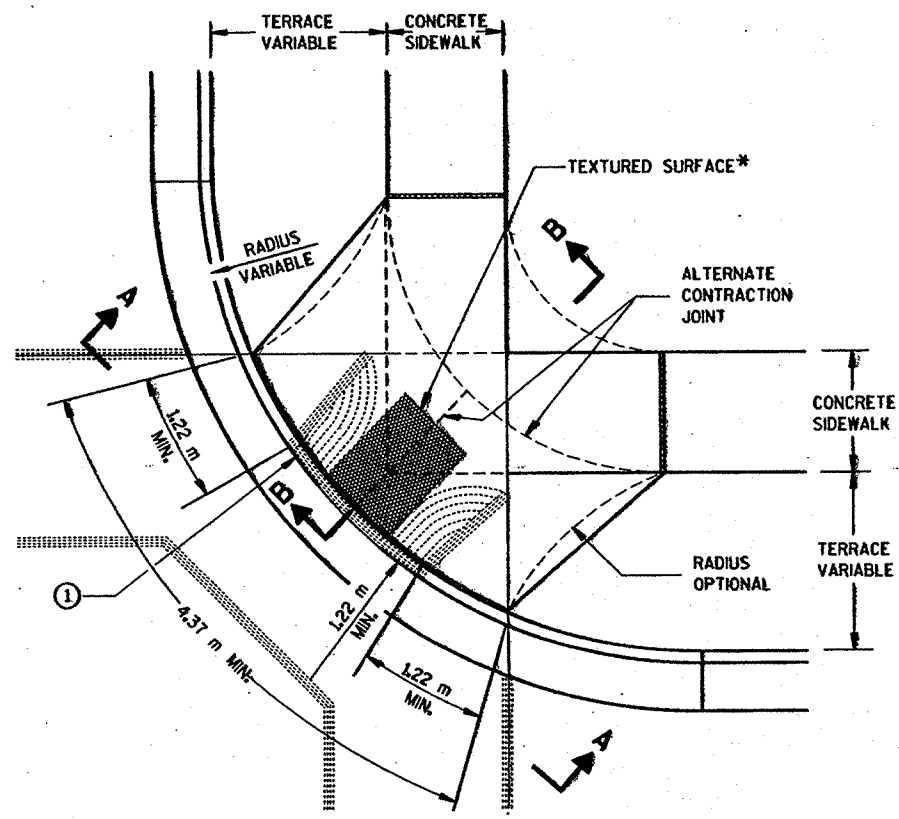
CONCRETE SURFACE DRAIN & ASPHALTIC FLUME

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

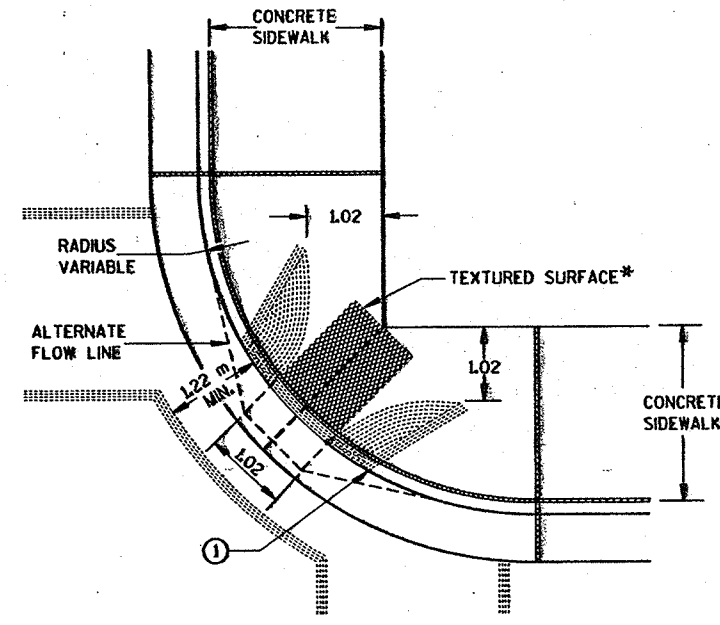
APPROVED
02/00/95
DATE
Roy J. Thompson
CHIEF ROADWAY DEVELOPMENT ENGINEER

FWA

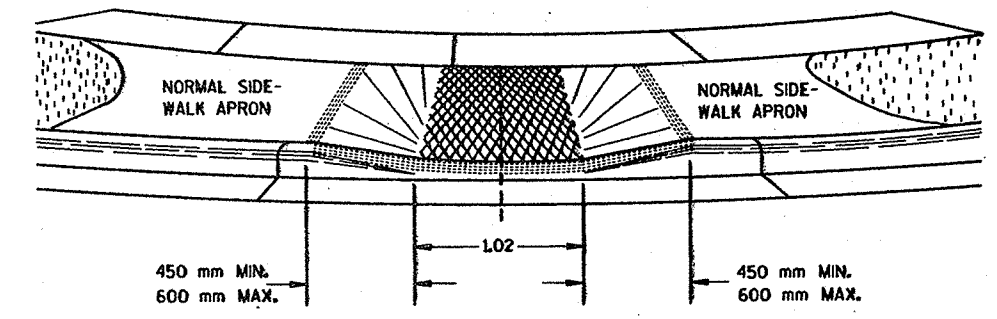
S.D.D. 8 D 5-8
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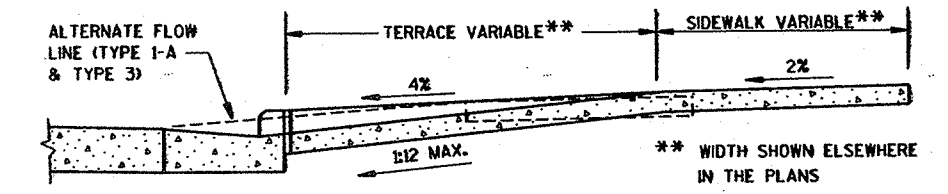
PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)

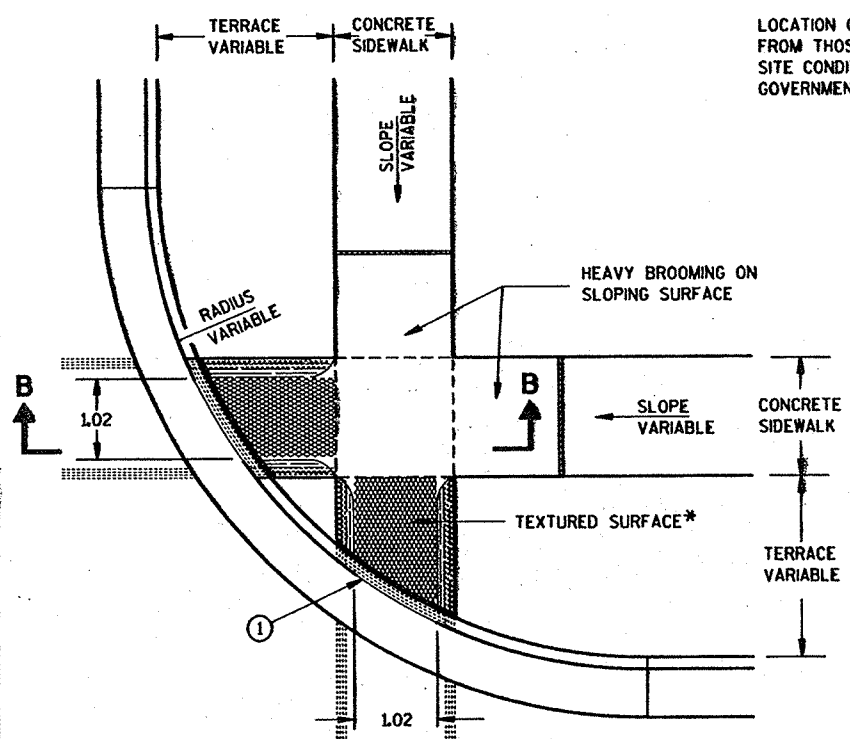


VIEW A-A

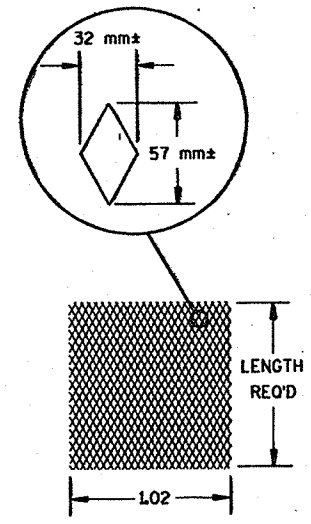


SECTION B-B

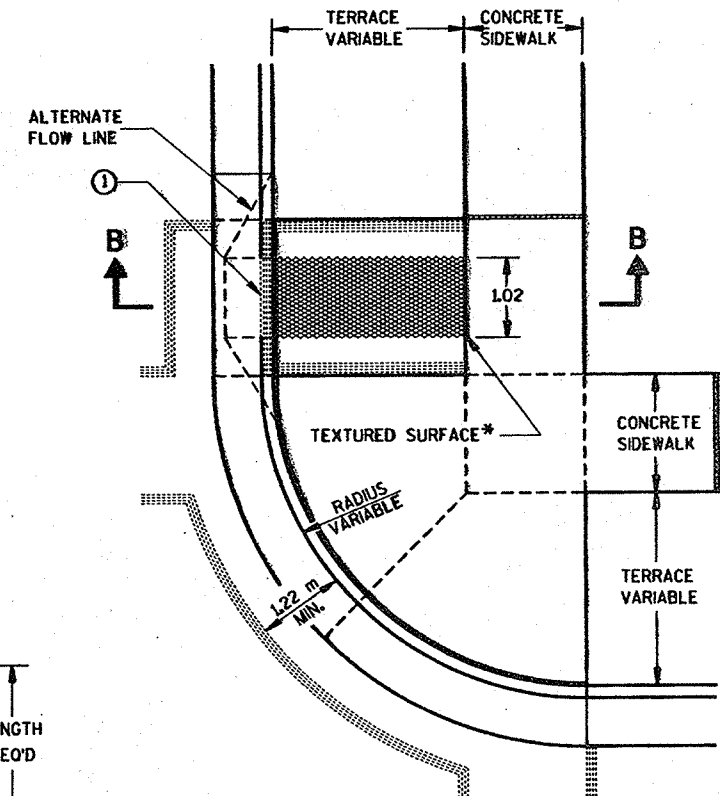
13 mm ——— EXPANSION JOINT-SIDEWALK
 - - - - - CONTRACTION JOINT
 LOCATION OF JOINTS MAY BE VARIED FROM THOSE SHOWN TO BETTER FIT SITE CONDITIONS AND/OR LOCAL GOVERNMENT PREFERENCE.



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



DETAIL OF DIAMOND PATTERN*

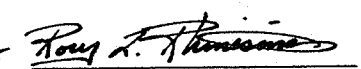


PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

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 1:12 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.
- CURB RAMPS SHALL BE MEASURED AND PAID FOR AS CONCRETE SIDEWALK AND CONCRETE CURB AND GUTTER.
- SURFACE TEXTURING SHALL CONSIST OF LINEAR IMPRESSIONS APPROXIMATELY 6 mm TO 9 mm IN DEPTH AND WIDTH, ORIENTED TO PROVIDE A UNIFORM PATTERN OF DIAMOND SHAPES MEASURING APPROXIMATELY 32 mm IN WIDTH BY 57 mm IN LENGTH, WITH THE LENGTH BEING PARALLEL TO THE DIRECTION OF PEDESTRIAN MOVEMENT. THIS SURFACE TEXTURE MAY BE ACHIEVED BY IMPRESSING AND REMOVING A PIECE OF EXPANDED METAL REGULAR INDUSTRIAL MESH INTO THE SURFACE OF THE RAMP WHILE THE CONCRETE IS IN A PLASTIC STATE.
- ① THE RAMP SHALL BE BORDERED ON BOTH SIDES AND ON THE CURB LINE WITH A 100 mm WIDE YELLOW PAINT STRIPE OR WITH BRICK OF A CONTRASTING COLOR. NORMALLY THE PAINT STRIPE ALTERNATE WILL BE USED. THE MUNICIPALITY OR THE DEPARTMENT WILL APPLY THIS STRIPPING UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.
- IF A MUNICIPALITY REQUIRES THE BRICK ALTERNATE, SPECIAL DETAILS AND PROVISIONS ARE SHOWN ELSEWHERE IN THE PLANS.
- NOTE: ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN.

CURB RAMPS

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION
 APPROVED
 01/27/95
 DATE

 CHEF ROADWAY DEVELOPMENT ENGINEER
 FHWA

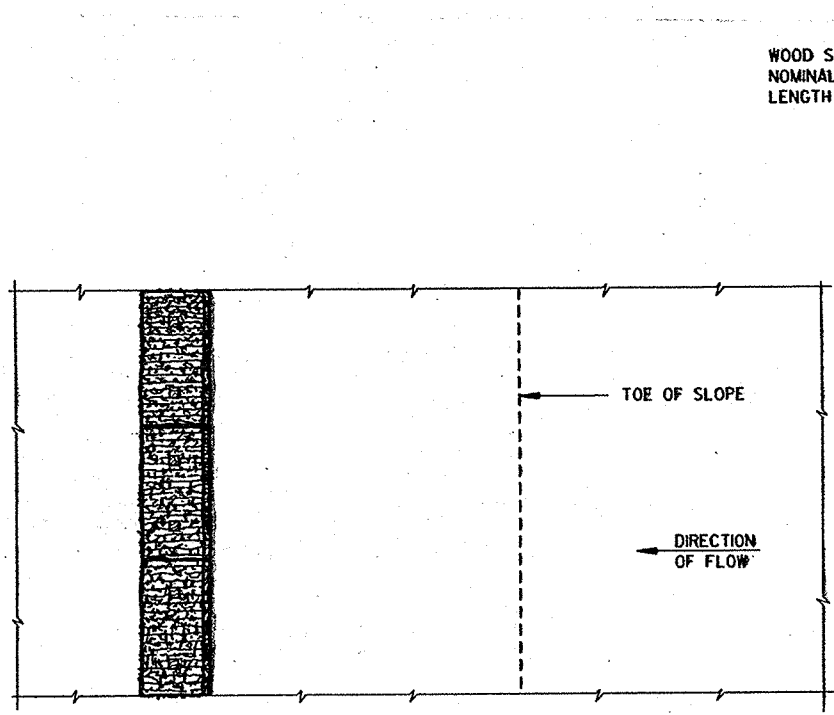
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PLOT NAME:

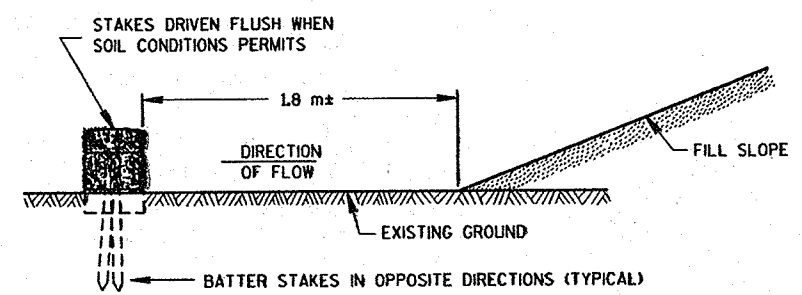
REV. DATE:

ORIGINATOR:

S.D.D. 8 E 8-2
LEVELS ON - 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63

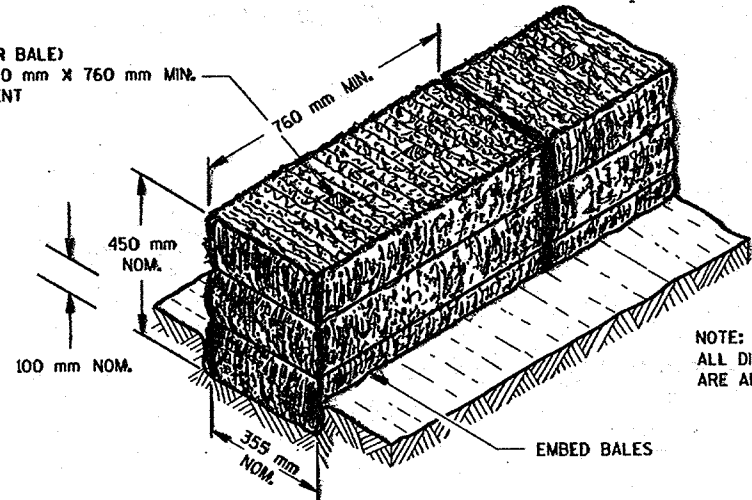


PLAN VIEW



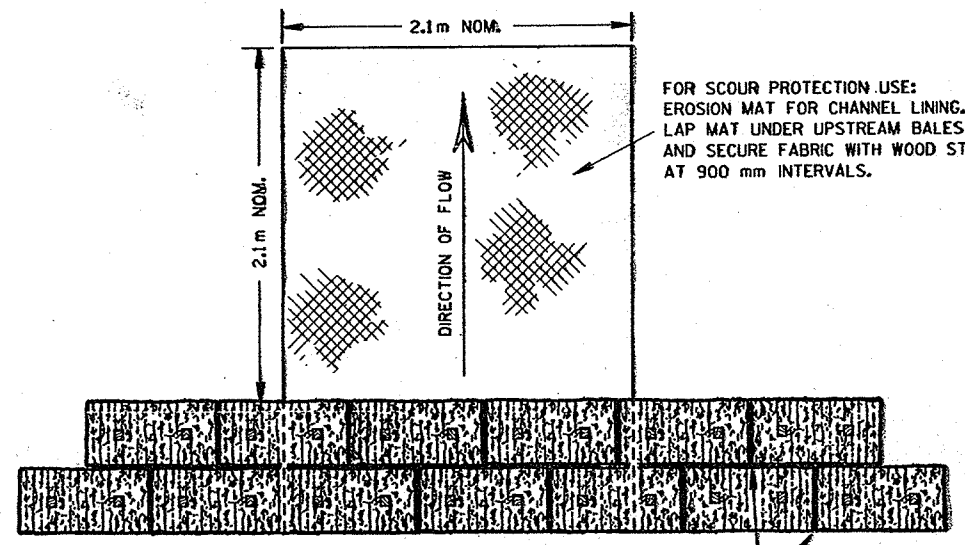
FRONT ELEVATION
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE
EROSION BALES FOR SHEET FLOW

WOOD STAKES (2 PER BALE)
NOMINAL 50 mm X 50 mm X 760 mm MIN.
LENGTH OR EQUIVALENT

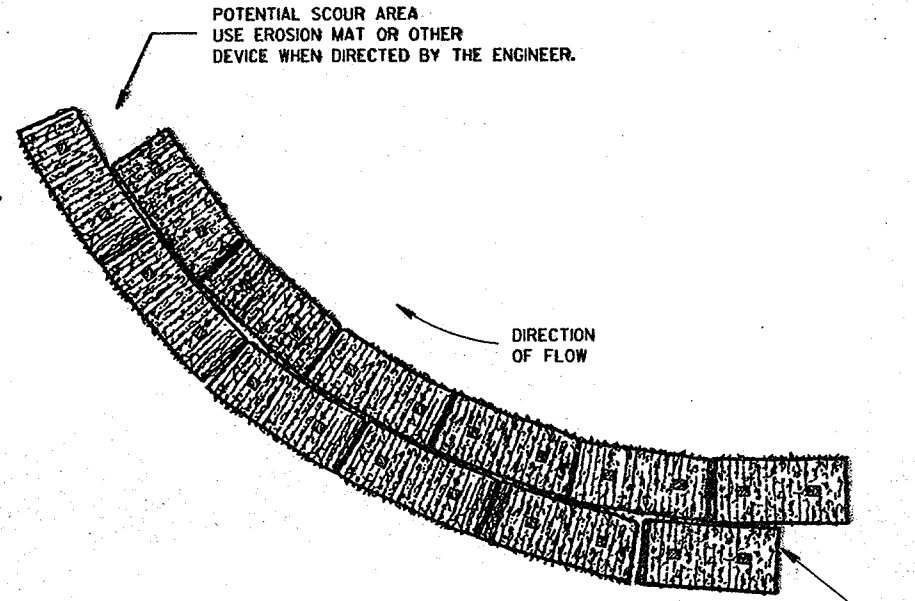


GENERAL NOTES

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.

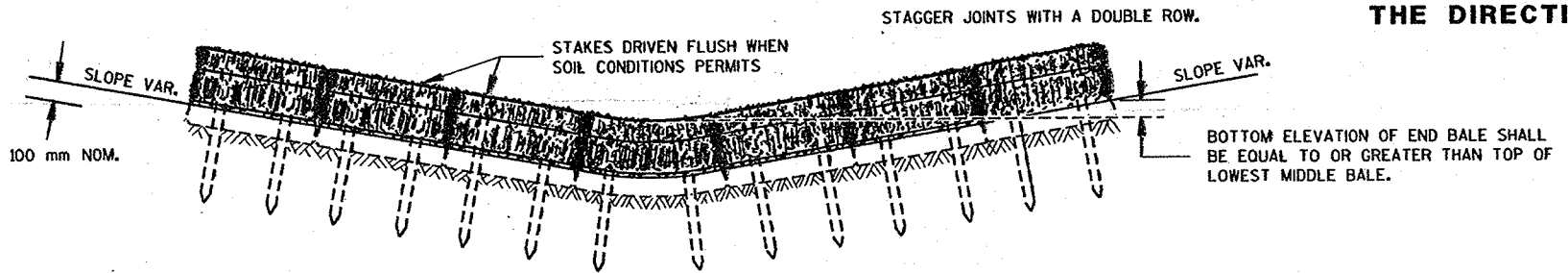


PLAN VIEW



PLAN VIEW

EROSION BALES WHEN ALTERING THE DIRECTION OF FLOW



FRONT ELEVATION

EROSION BALES FOR CHANNEL FLOW

TYPICAL INSTALLATIONS
OF EROSION BALES
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE 01/27/95
Roy L. [Signature]
CHIEF ROADWAY DEVELOPMENT ENGINEER

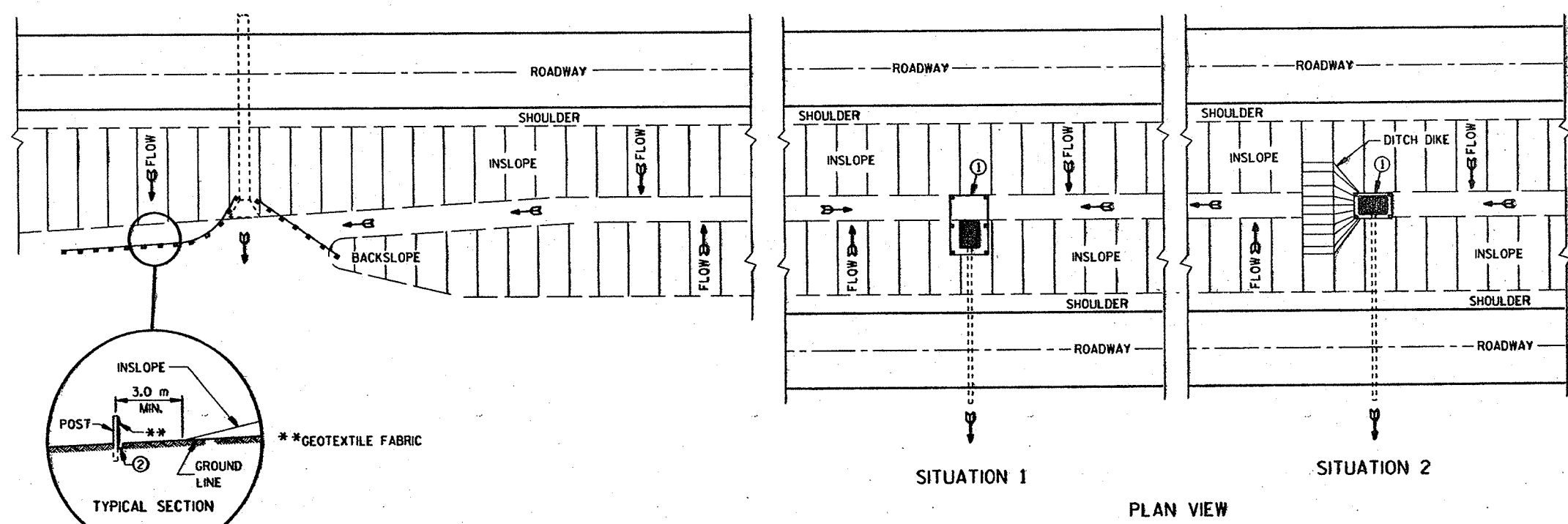
PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR:

S.D.D. 8 E 9-5
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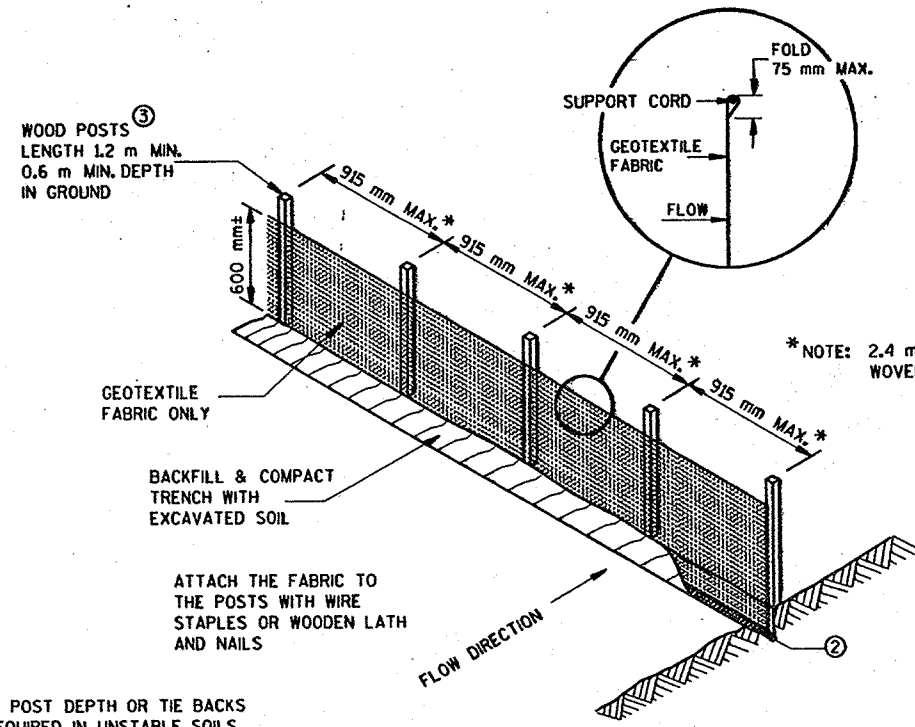
PLAN VIEW
TYPICAL APPLICATIONS OF SILT FENCE

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

GENERAL NOTES

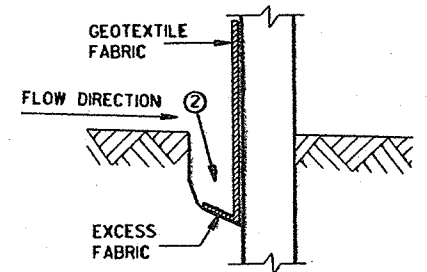
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE WITH 50 mm X 100 mm WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.
- ② TRENCH SHALL BE A MINIMUM OF 100 mm WIDE & 150 mm 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 30 mm X 30 mm OF OAK OR HICKORY.

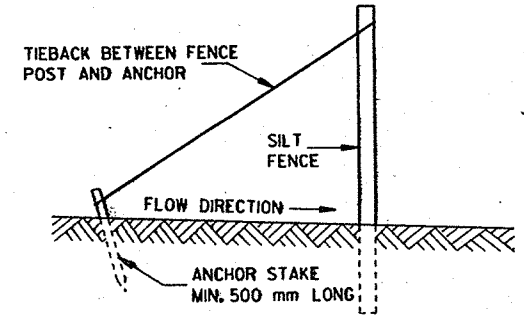


NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

SILT FENCE
(NON-REINFORCED)



TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 05/11/96 DATE	<i>Roy L. Thomsen</i> CHIEF ROADWAY DEVELOPMENT ENGINEER
FWA	M

PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR:

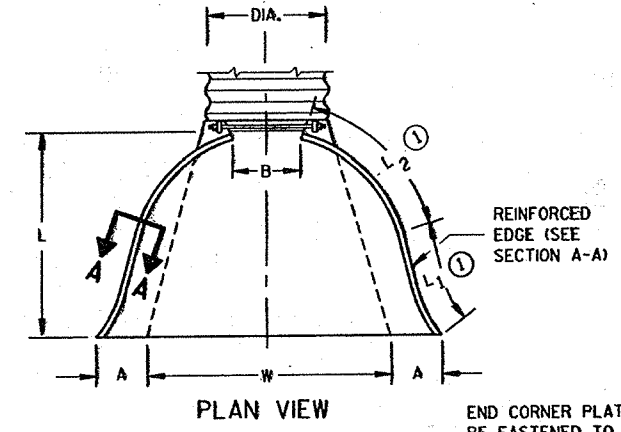
S.D.D. 8 F 1-11
LEVELS ON - 2.3, 4, 5.6, 7.8, 9.10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

METAL APRON ENDWALLS											
PIPE DIA. (mm)	MIN. THICK. (mm)		DIMENSIONS (MILLIMETERS)						APPROX. SLOPE	BODY	
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1/2")	L1 (1)	L2 (1)			W (±2")
300	1.6	1.5	150	150	150	535	305	445	610	1:2.5	1 Pc.
375	1.6	1.5	180	205	150	660	355	552	760	1:2.5	1 Pc.
450	1.6	1.5	205	255	150	790	380	718	915	1:2.5	1 Pc.
525	1.6	1.5	230	305	150	915	455	752	1065	1:2.5	1 Pc.
600	1.6	1.5	255	330	150	1040	455	949	1220	1:2.5	1 Pc.
750	2.0	1.9	305	405	205	1300	455	1327	1525	1:2.5	1 Pc.
900	2.0	1.9	355	480	230	1525	610	1905	1830	1:2.5	2 Pc.
1050	2.8	2.7	405	560	280	1755	610	1921	2135	1:2.5	2 Pc.
1200	2.8	2.7	455	685	305	1980	610	2057	2285	1:2.5	3 Pc.
1350	2.8	2.7	455	760	305	2140	760	2172	2590	1:2.25	3 Pc.
1500	2.8x	2.7x	455	840	305	2210	—	—	2895	1:2	3 Pc.
1650	2.8x	2.7x	455	915	305	2210	—	—	3050	1:2	3 Pc.
1800	2.8x	2.7x	455	990	305	2210	—	—	3200	1:2	3 Pc.
1950	2.8x	2.7x	455	1070	305	2210	—	—	3355	1:1.5	3 Pc.
2100	2.8x	2.7x	455	1145	305	2210	—	—	3505	1:1.5	3 Pc.
2250	2.8x	2.7x	455	940	305	2210	—	—	3660	1:1.5	3 Pc.
2400	2.8x	2.7x	455	890	305	2210	—	—	3960	1:1.5	3 Pc.

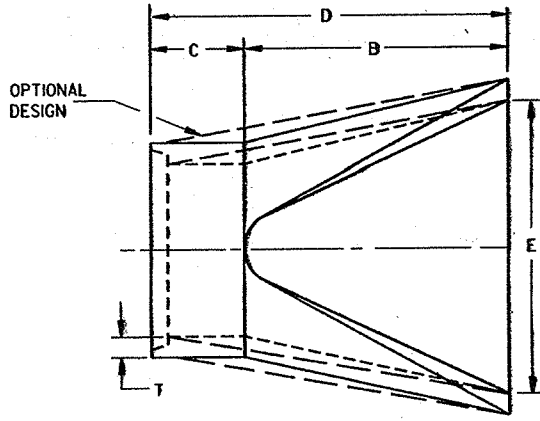
* EXCEPT CENTER PANEL SEE GENERAL NOTES

REINFORCED CONCRETE APRON ENDWALLS										
PIPE DIA. (mm)	DIMENSIONS (MILLIMETERS)						APPROX. SLOPE			
	T	A	B	C	D	E		G		
305	51	102	610	1241	1851	610	51	1:3		
380	57	152	686	1168	1854	762	57	1:3		
450	64	229	686	1168	1854	914	64	1:3		
525	70	229	915	953	1867	1067	70	1:3		
600	76	241	1105	762	1867	1219	76	1:3		
675	83	267	1257	610	1867	1372	83	1:3		
750	89	305	1372	502	1867	1524	89	1:3		
900	102	381	1600	883	2483	1829	102	1:3		
1050	114	533	1600	889	2489	1981	114	1:3		
1200	127	610	1829	660	2489	2134	127	1:3		
1350	140	686	1651	635	2496	2286	140	1:2.4		
1500	152	752	1524	991	2515	2448	152	1:2		
1650	165	810	1829	533	2515	2591	165	1:2		
1800	178	810	1981	533	2515	2743	178	1:2		
1950	190	810	1981	533	2515	2896	190	1:2		
2100	203	915	2299	533	2832	3048	203	1:1.5		
2250	216	1041	2222	610	2832	3353	216	1:1.5		

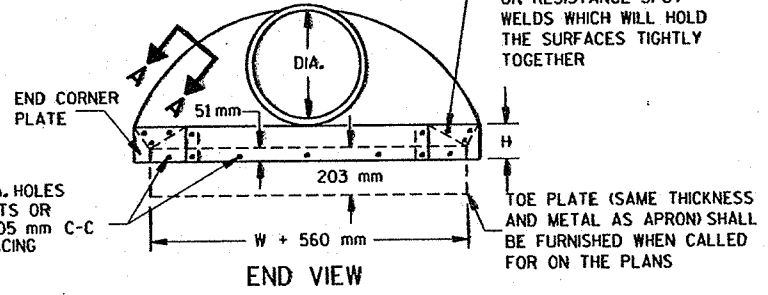
* MINIMUM
** MAXIMUM



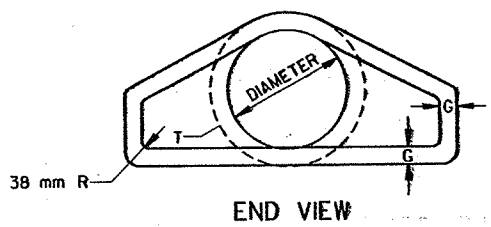
PLAN VIEW



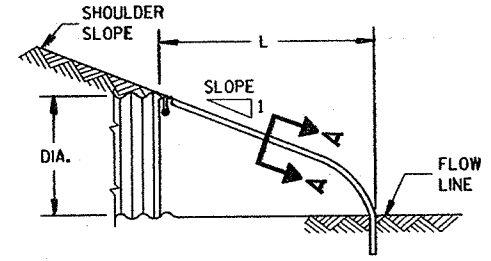
PLAN



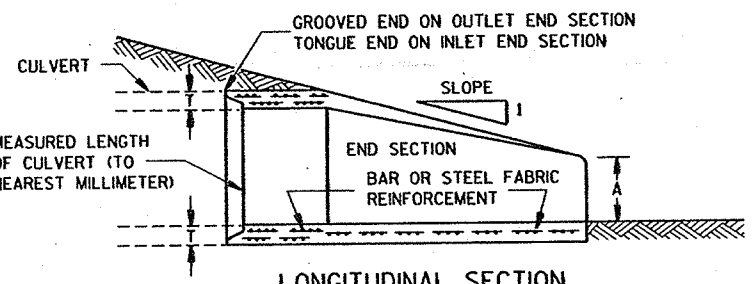
END VIEW



END VIEW

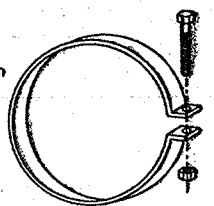


SIDE ELEVATION METAL ENDWALLS

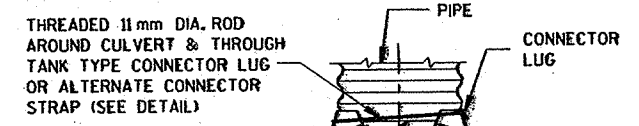


LONGITUDINAL SECTION CONCRETE ENDWALLS

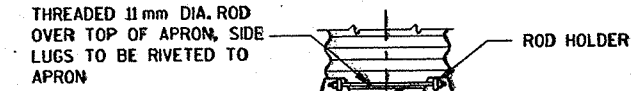
25 mm WIDE, 2.7 mm THICK GALVANIZED STRAP WITH STANDARD 152 mm X 13mm BAND BOLT AND NUT



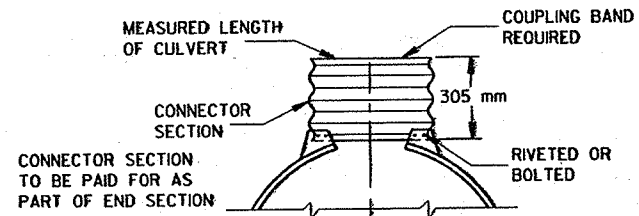
ALTERNATE FOR TYPE 1 CONNECTION END SECTION CONNECTOR STRAP



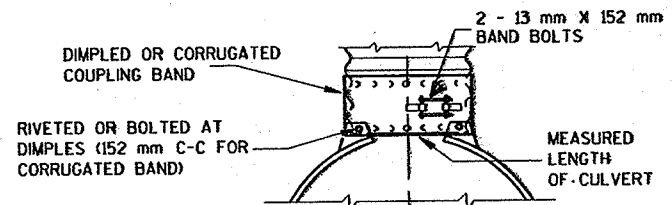
TYPE 1 FOR 300 mm THRU 600 mm CORR. PIPE



TYPE 2 FOR 750 mm THRU 2400 mm CORR. PIPE



TYPE 3 FOR 1050 mm THRU 2400 mm CORR. PIPE



TYPE 5 ALTERNATE FOR: ALL SIZES CORRUGATED CIRCULAR PIPE

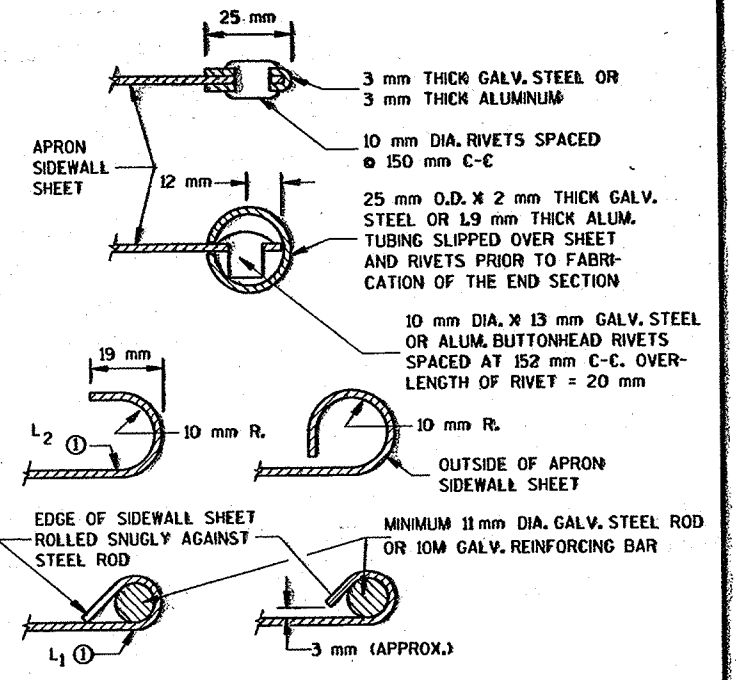
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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 1500 mm DIAMETER PIPE AND LARGER SHALL HAVE 2.8 mm SIDES AND 3.5 mm CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 1500 mm DIAMETER PIPE AND LARGER SHALL HAVE 3.4 mm SIDES AND 3.4 mm 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 1500 mm THROUGH 2400 mm 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 152 mm BETWEEN APRON ENDWALLS.

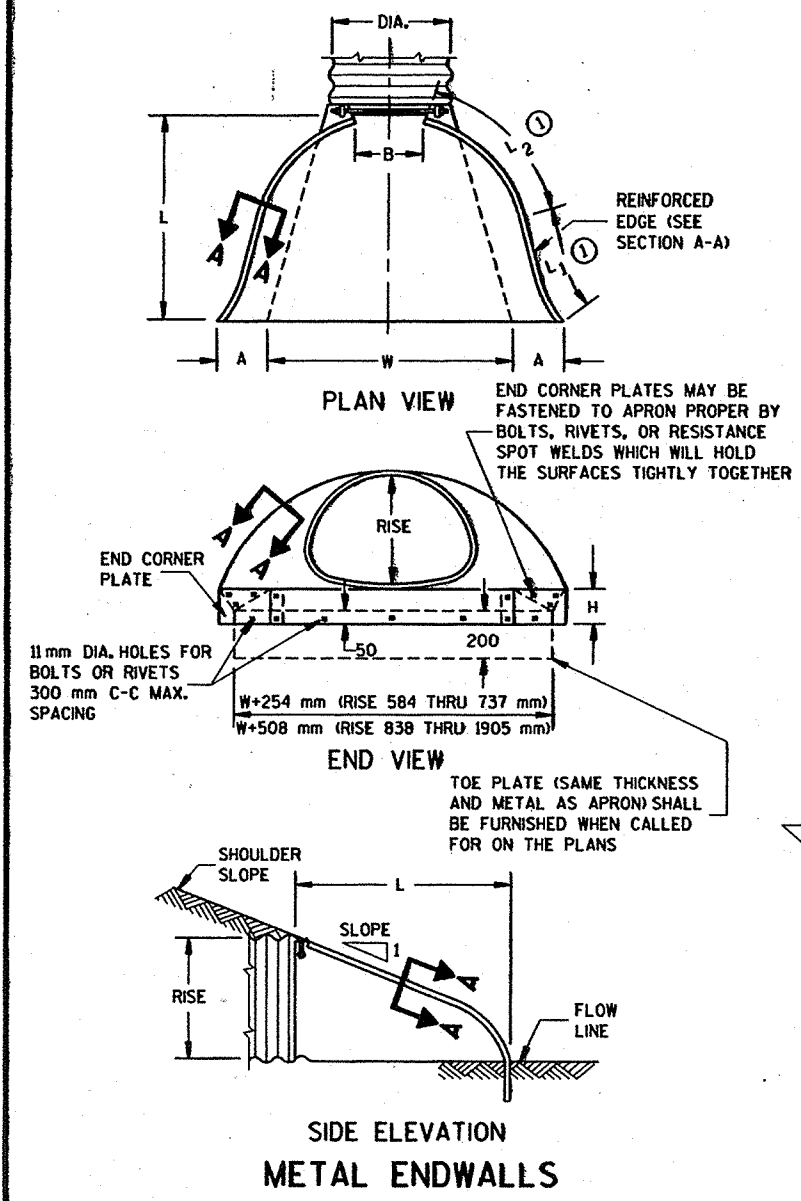
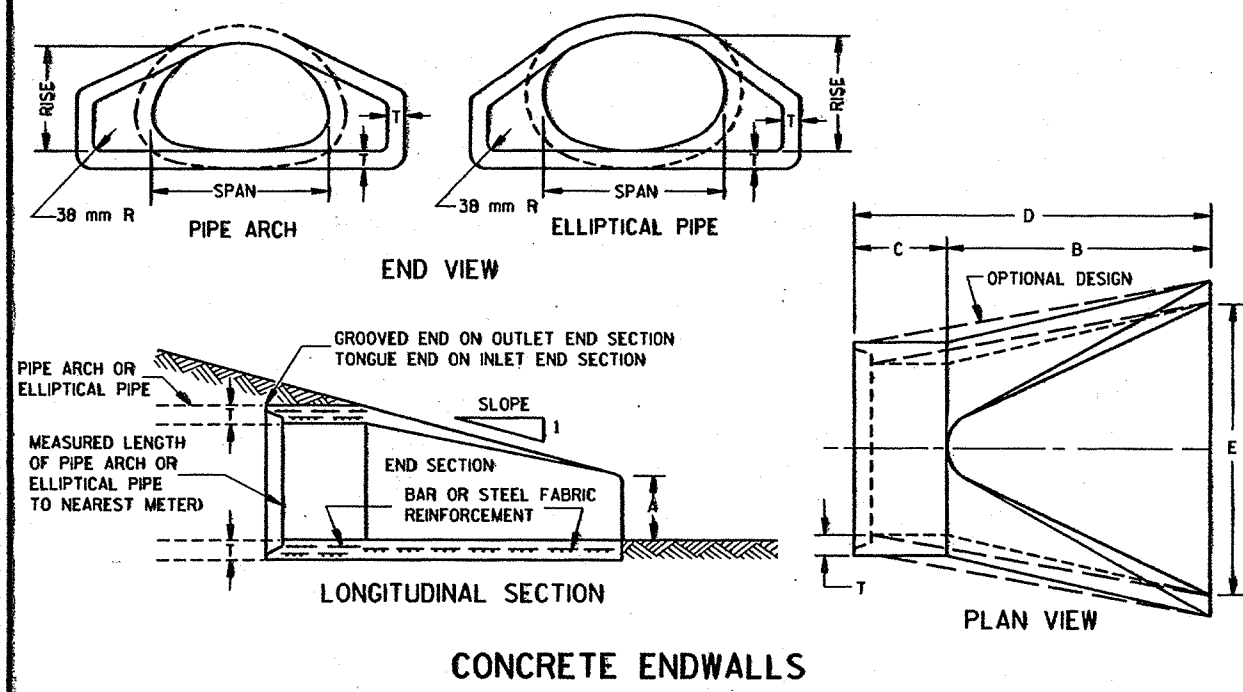
① FOR PIPE SIZES UP TO 1500 mm DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED DATE 01/27/85 DATE 01/27/85 CHIEF ROADWAY DEVELOPMENT ENGINEER

S.D.D. 8 F 2-1
 LEVELS ON - 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63



68 X 13 CORRUGATIONS (mm)													
EQUIV. DIA. (mm)	(mm)		MIN. THICK. (mm)		DIMENSIONS (mm)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±25)	B (MAX.)	H (±25)	L (±37)	L1 (1)	L2 (1)	W (±50)		
400	450	340	1.63	1.52	175	225	150	475	350	406	750	1:2.5	1 Pc.
450	510	380	1.63	1.52	175	250	150	575	350	492	900	1:2.5	1 Pc.
500	560	420	1.63	1.52	200	300	150	700	450	552	1050	1:2.5	1 Pc.
600	680	500	1.63	1.52	225	350	150	800	450	701	1200	1:2.5	1 Pc.
800	910	660	2.27	1.91	250	400	150	975	450	956	1500	1:2.5	1 Pc.
900	1030	740	2.27	1.91	300	450	200	1150	600	1153	1875	1:2.5	1 Pc.
1000	1150	820	2.77	2.67	325	525	225	1325	600	1391	2125	1:2.5	2 Pc.
1200	1390	970	2.77	2.67	450	650	300	1575	600	1727	2250	1:2.5	3 Pc.
1400	1630	1120	2.77	2.67	450	750	300	1750	600	1848	2550	1:2.25	3 Pc.
1600	1880	1260	2.77*	2.67*	450	825	300	1925	780	2089	2850	1:2.25	3 Pc.
1650	1925	1300	2.77*	2.67*	450	900	300	1925	—	—	3150	1:2	3 Pc.
1800	2130	1400	2.77*	2.67*	450	975	300	1925	—	—	3450	1:2	3 Pc.

75 X 25 CORRUGATIONS (mm)													
EQUIV. DIA. (mm)	(mm)		MIN. THICK. (mm)		DIMENSIONS (mm)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±25)	B (MAX.)	H (±25)	L (±37)	L1 (1)	L2 (1)	W (±50)		
1200	1325	1025	2.7	2.6	450	26	300	1575	600	1848	2250	1:2.5	2 Pc.
1350	1500	1150	2.7	2.6	450	30	300	1750	750	2096	2550	1:2	2 Pc.
1500	1650	1275	2.7*	2.6*	450	33	300	1925	—	—	2850	1:1.5	3 Pc.
1650	1825	1375	2.7*	2.6*	450	36	300	1925	—	—	3150	1:1.5	3 Pc.
1800	2025	1475	2.7*	2.6*	450	39	300	1925	—	—	3450	1:2	3 Pc.
1950	2175	1575	2.7*	2.6*	550	38	300	1925	—	—	3700	1:1.5	3 Pc.
2100	2375	1675	2.7*	2.6*	550	34	300	1925	—	—	4050	1:1.5	3 Pc.
2250	2575	1775	2.7*	2.6*	550	38	300	1925	—	—	4350	1:1.5	3 Pc.
2400	2800	1875	2.7*	2.6*	600	40	300	1925	—	—	4350	1:1.5	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED. * EXCEPT CENTER PANEL SEE GENERAL NOTES

REINFORCED CONCRETE PIPE ARCH												
EQUIV. DIA. (mm)	DIMENSIONS (mm)										APPROX. SLOPE	
	**RISE	**SPAN	T	A	B	C	D	E				
600	460	725	76	216	975	825	1800	1200	1:3			
750	570	920	89	242	1250	1150	2400	1500	1:3			
900	675	1100	102	283	1500	900	2400	1800	1:3			
1050	795	1300	114	402	1500	900	2400	1950	1:3			
1200	915	1485	127	533	1500	900	2400	2100	1:3			
1350	1015	1650	138	648	1500	900	2400	2250	1:3			
1500	1145	1855	152	787	1500	900	2400	2400	1:3			
1800	1370	2235	178	787	1500	975	2475	3000	1:2			
2100	1575	2590	203	724	2075	475	2550	3600	1:2			

REINFORCED CONCRETE ELLIPTICAL PIPE												
EQUIV. DIA. (mm)	DIMENSIONS (mm)										APPROX. SLOPE	
	**RISE	**SPAN	T	A	B	C	D	E				
600	490	770	81	216	975	825	1800	1200	1:3			
750	610	960	94	241	1350	450	1800	1500	1:3			
900	730	1150	106	286	1500	600	2100	1800	1:2.5			
1050	855	1345	125	400	1500	900	2400	1950	1:2.5			
1200	975	1535	137	533	1500	900	2400	2100	1:2.5			
1350	1095	1730	150	648	1500	900	2400	2250	1:2.5			
1500	1220	1920	163	762	1500	900	2400	2400	1:2.5			

**NOMINAL SIZE

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.

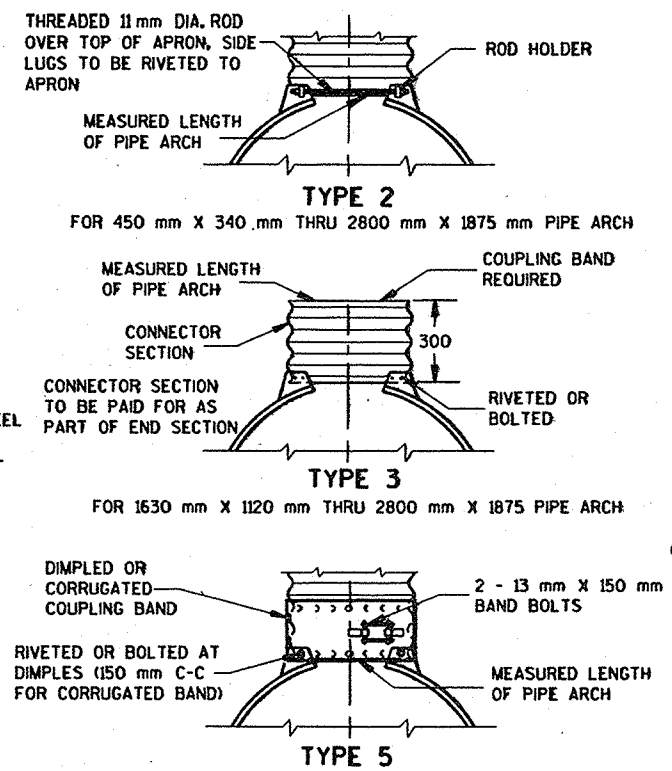
CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VICE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 1650 X 1275 mm PIPE ARCH AND LARGER SHALL HAVE 2.8 mm SIDES AND 3.4 mm CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 1650 X 1275 mm PIPE ARCH AND LARGER SHALL HAVE 2.7 mm SIDES AND 3.4 mm CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH 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 1925 mm X 1300 mm THROUGH 2800 mm X 1875 mm 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 150 mm BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 1825 mm X 1375 mm A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.



ALTERNATE FOR: ALL SIZES CORRUGATED PIPE ARCHES
 NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
 STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED 01/27/85
 DATE
 RAYMOND J. RICHMOND
 CHIEF ROADWAY DEVELOPMENT ENGINEER

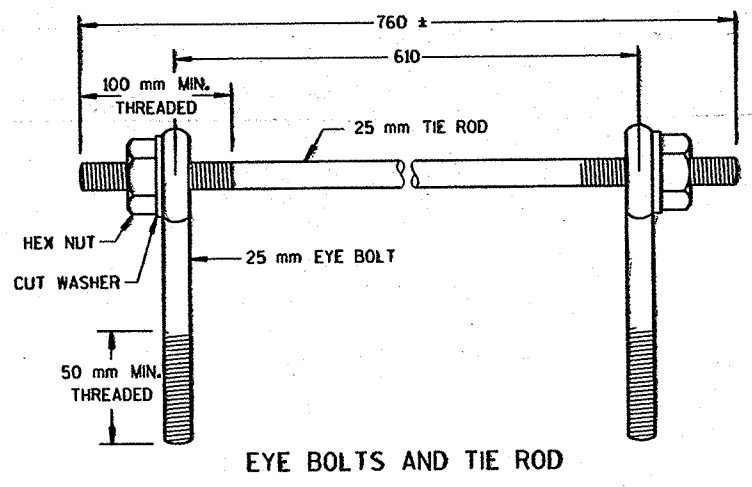
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PLOT NAME:

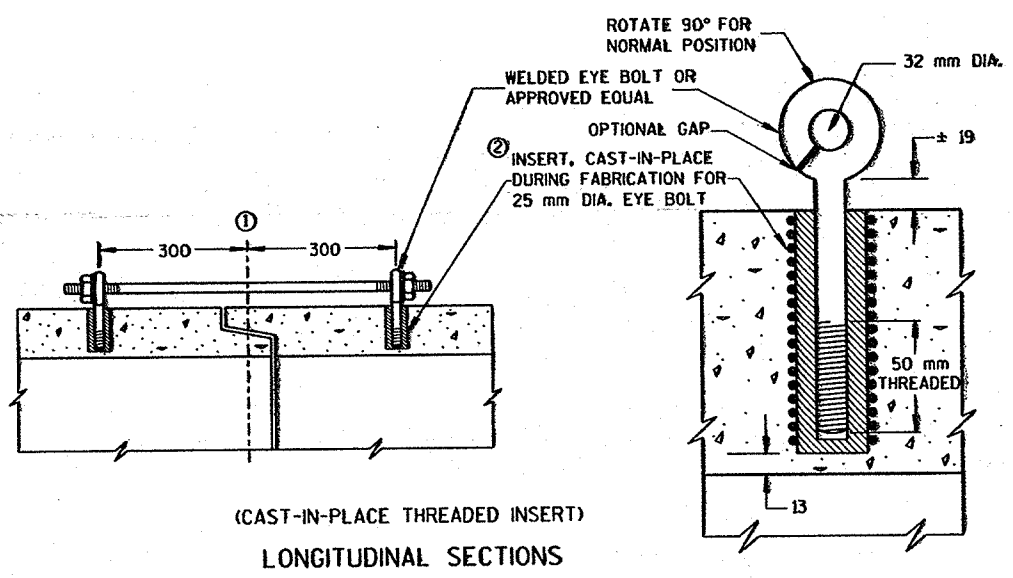
REV. DATE:

ORIGINATOR:

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EYE BOLTS AND TIE ROD

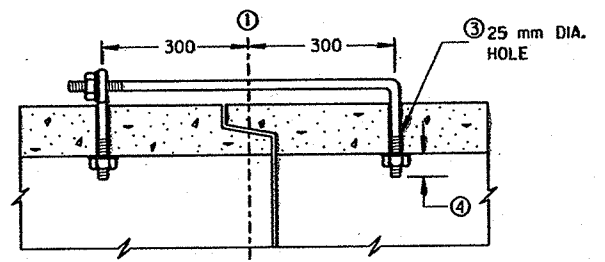


LONGITUDINAL SECTIONS
(CAST-IN-PLACE THREADED INSERT)

GENERAL NOTES

- CONCRETE CULVERT PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED ON THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR LOCATIONS DESIGNATED FOR CATTLE PASSES. UNLESS OTHERWISE STATED IN THE CONTRACT THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE CULVERT PIPE AS INDICATED ON THE PLANS AND BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO CULVERT PIPE, REINFORCED CONCRETE CULVERT PIPE, OR REINFORCED CONCRETE PIPE CATTLE PASS.
- DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- CENTERLINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
 - THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.
 - HOLES SHALL BE CAST-IN-PLACE OR DRILLED.
 - BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 50 mm.
 - ROD DIAMETER + 25 mm.
 - LENGTH ADEQUATE TO EXTEND TO WITHIN 13 mm OF THE INNER SURFACE OF THE PIPE.

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)



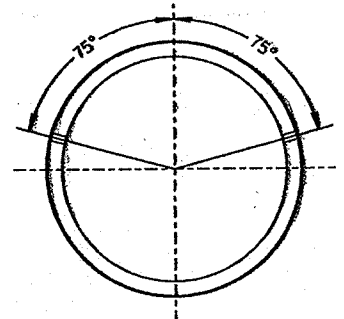
(TONGUE & GROOVE PIPE)

EYE BOLT DIMENSION TABLE

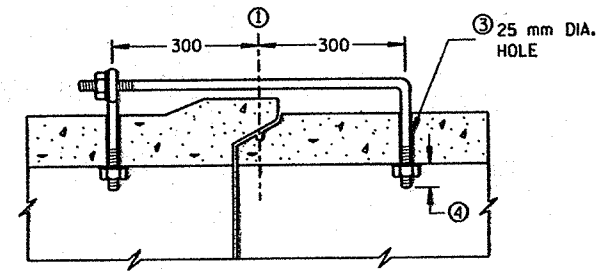
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
400-600	115	160
750	130	180
900	140	180
1000	150	
1200	165	
1500	190	
1650	200	

ADJUSTABLE TIE ROD TABLE

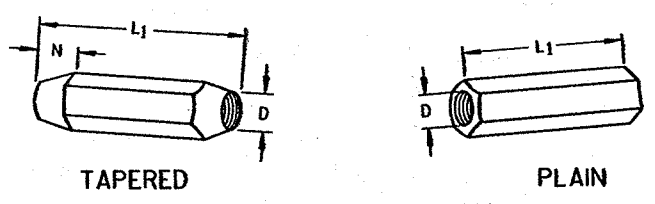
PIPE DIAMETER	TIE ROD DIAMETER	D	L ₁	N
300-1500	16	16	125	13
1650-2100	19	19	125	13
2250-2700	25	25	180	36



TRANSVERSE SECTION
PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS



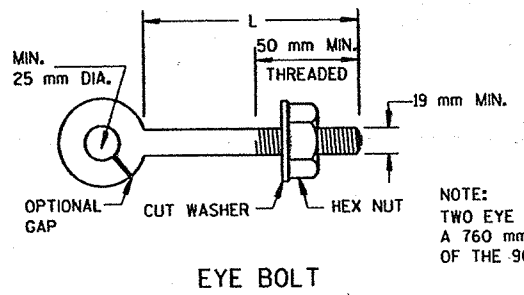
(MODIFIED BELL PIPE)
LONGITUDINAL SECTION



SLEEVE NUTS
RIGHT AND LEFT THREADS

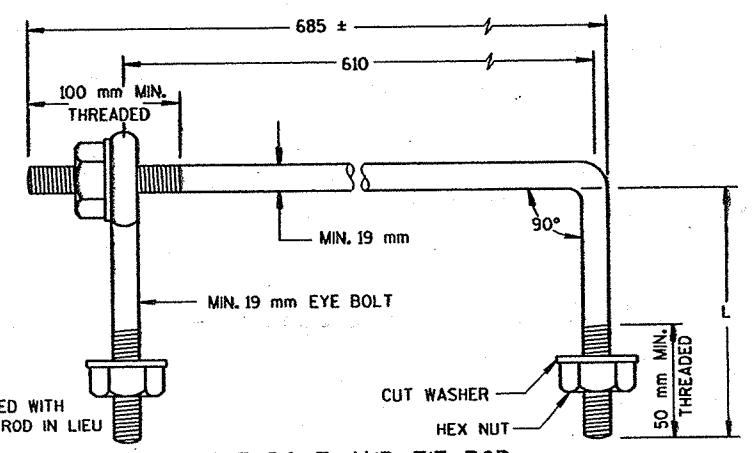
NOTE

ALL DIMENSIONS IN THIS DRAWING ARE IN MILLIMETERS.



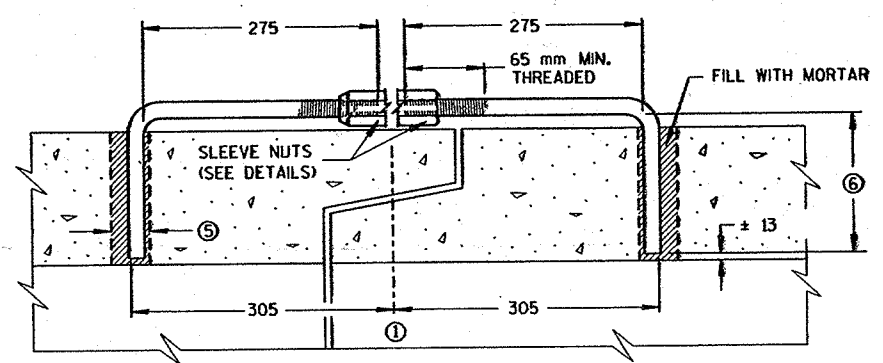
EYE BOLT

NOTE:
TWO EYE BOLTS MAY BE USED WITH A 760 mm LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

(JOINT TIES FOR 450 mm TO 1650 mm DIA. CONCRETE PIPE)
EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

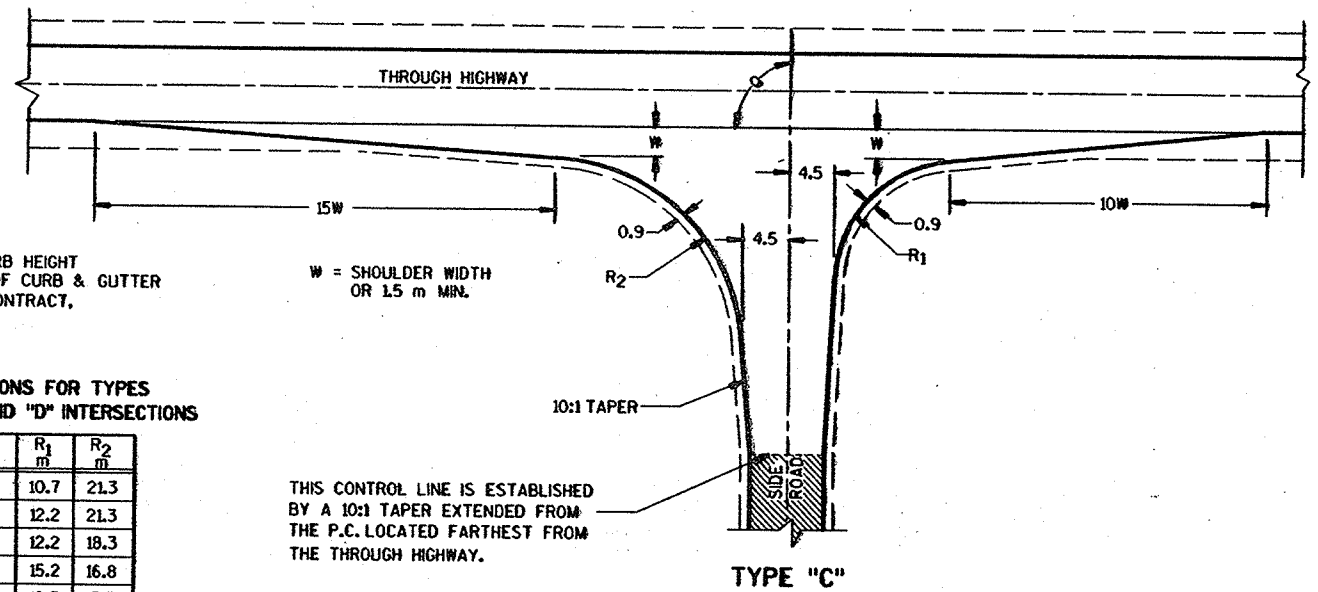
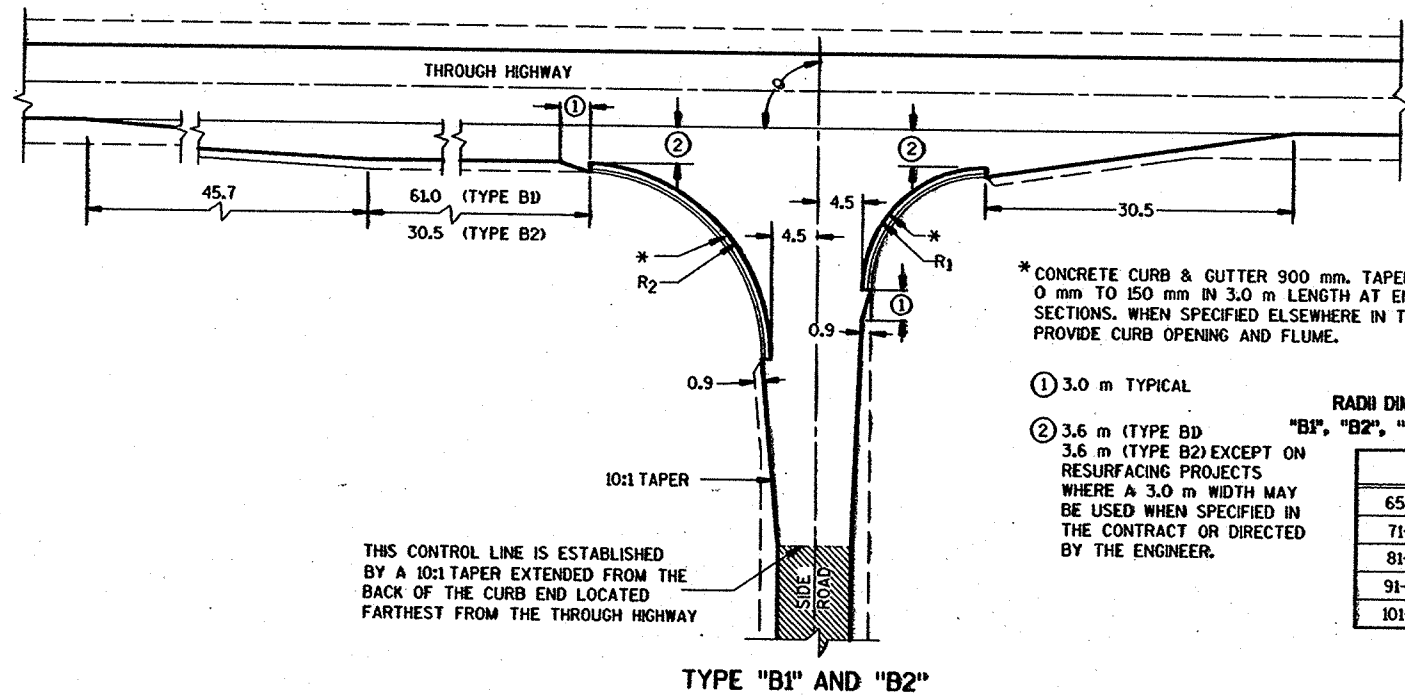


LONGITUDINAL SECTION
(JOINT TIES FOR 300 mm TO 2700 mm DIA. CONCRETE PIPE)
ADJUSTABLE TIE ROD (ALTERNATE NO. 3)

JOINT TIES FOR CONCRETE PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
01/27/95
DATE
Rory L. Thompson
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



* CONCRETE CURB & GUTTER 900 mm. TAPER CURB HEIGHT 0 mm TO 150 mm IN 3.0 m LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 3.0 m TYPICAL

② 3.6 m (TYPE B1) 3.6 m (TYPE B2) EXCEPT ON RESURFACING PROJECTS WHERE A 3.0 m WIDTH MAY BE USED WHEN SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

RADI DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R ₁ m	R ₂ m
65-70	10.7	21.3
71-80	12.2	21.3
81-90	12.2	18.3
91-100	15.2	16.8
101-110	18.3	13.7

THIS CONTROL LINE IS ESTABLISHED BY A 10:1 TAPER EXTENDED FROM THE BACK OF THE CURB END LOCATED FARTHEST FROM THE THROUGH HIGHWAY

THIS CONTROL LINE IS ESTABLISHED BY A 10:1 TAPER EXTENDED FROM THE P.C. LOCATED FARTHEST FROM THE THROUGH HIGHWAY.

TYPE "B1" AND "B2"

TYPE "C"

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.

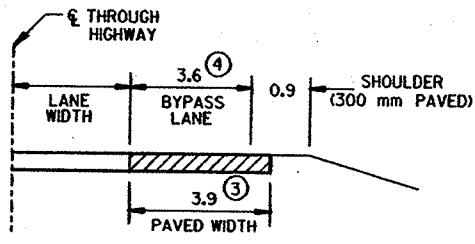
SIDE ROAD SURFACING NOTE

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.

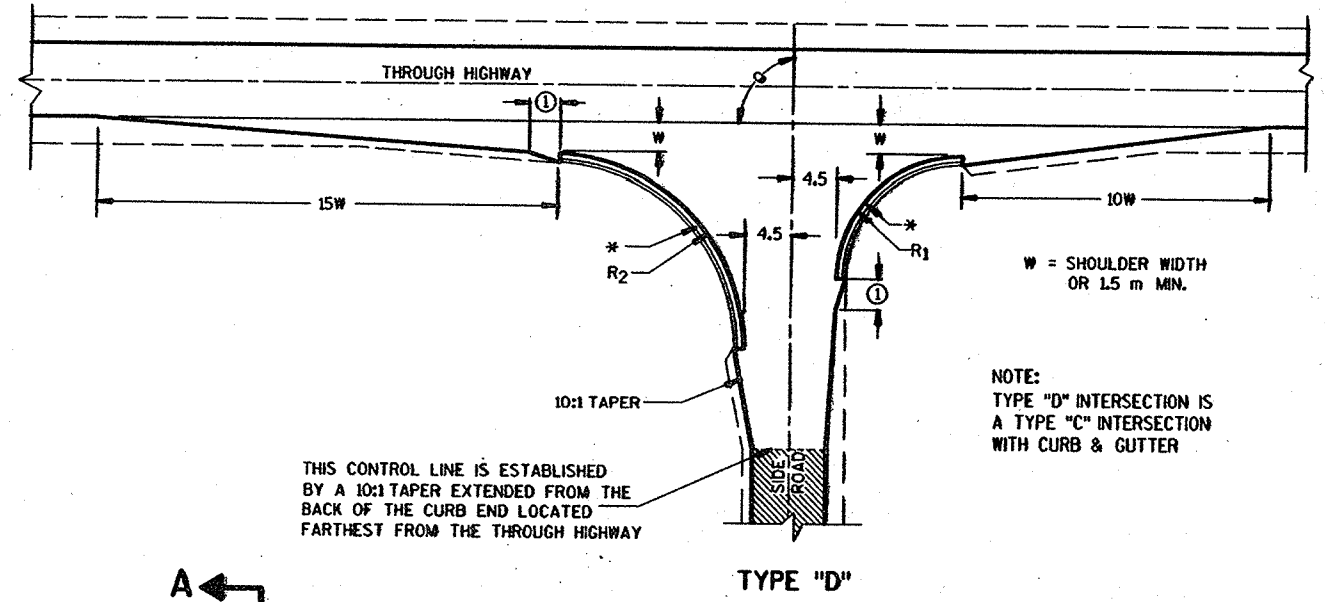
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

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

EXISTING SURFACE



SECTION A-A (SHOWING BYPASS LANE AND SHOULDER)

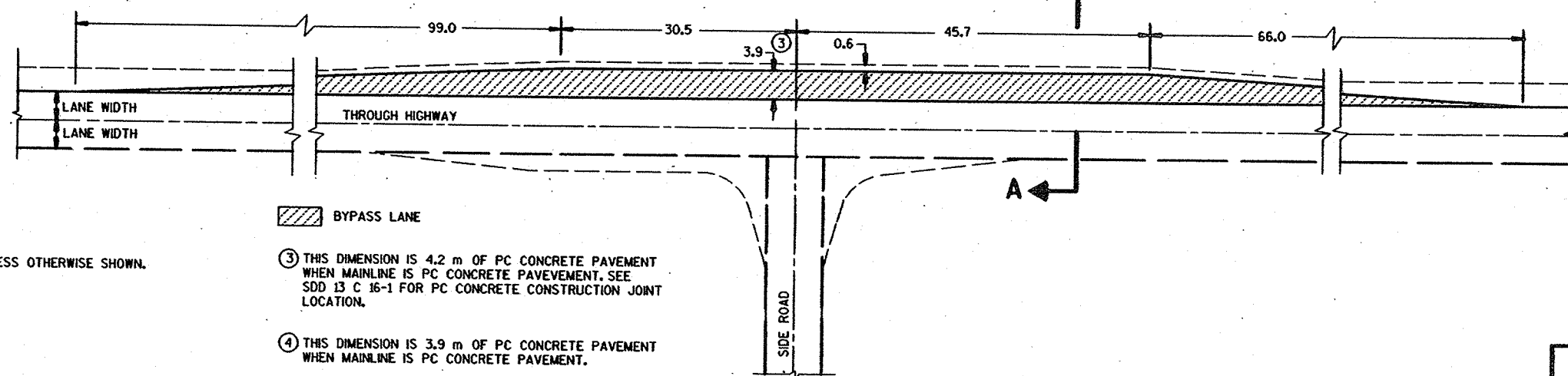


W = SHOULDER WIDTH OR 1.5 m MIN.

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

THIS CONTROL LINE IS ESTABLISHED BY A 10:1 TAPER EXTENDED FROM THE BACK OF THE CURB END LOCATED FARTHEST FROM THE THROUGH HIGHWAY

TYPE "D"



BYPASS LANE

NOTE:

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN.

③ THIS DIMENSION IS 4.2 m OF PC CONCRETE PAVEMENT WHEN MAINLINE IS PC CONCRETE PAVEMENT. SEE SDD 13 C 16-1 FOR PC CONCRETE CONSTRUCTION JOINT LOCATION.

④ THIS DIMENSION IS 3.9 m OF PC CONCRETE PAVEMENT WHEN MAINLINE IS PC CONCRETE PAVEMENT.

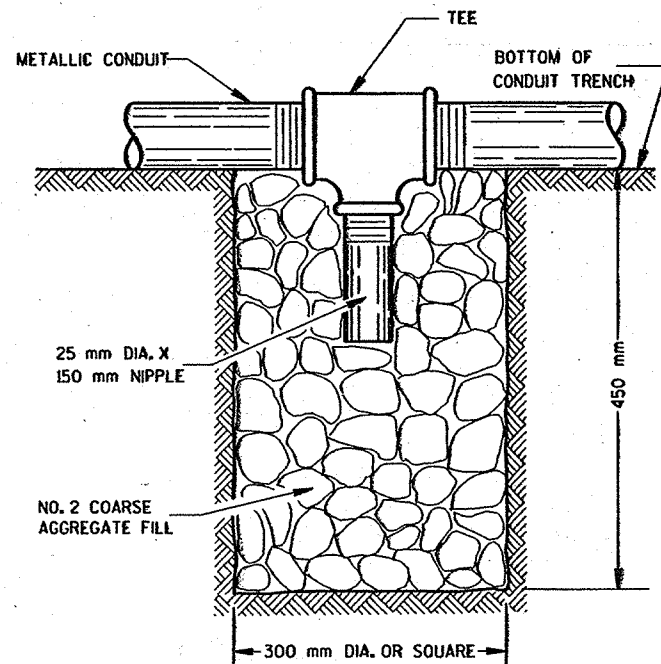
TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

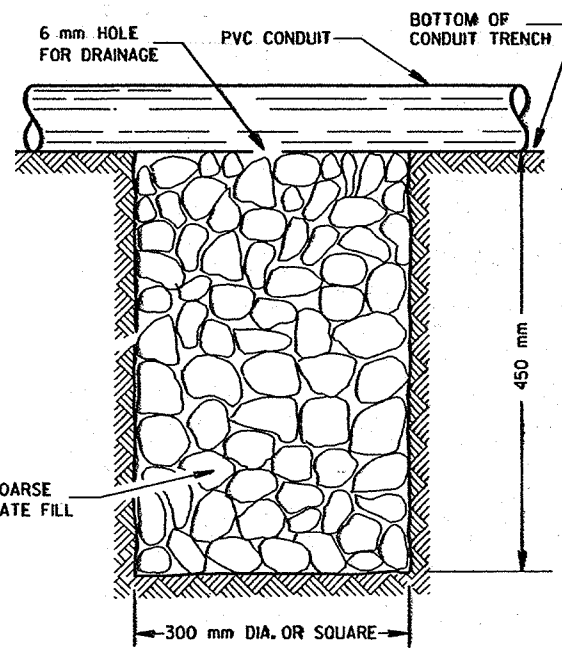
REV. DATE: PLOT NAME:

LEVELS ON - 2.3, 4, 5.6, 7.8, 9.10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

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

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 600 mm MINIMUM AND 900 mm MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 450 mm MIN. AND 900 mm MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSON TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

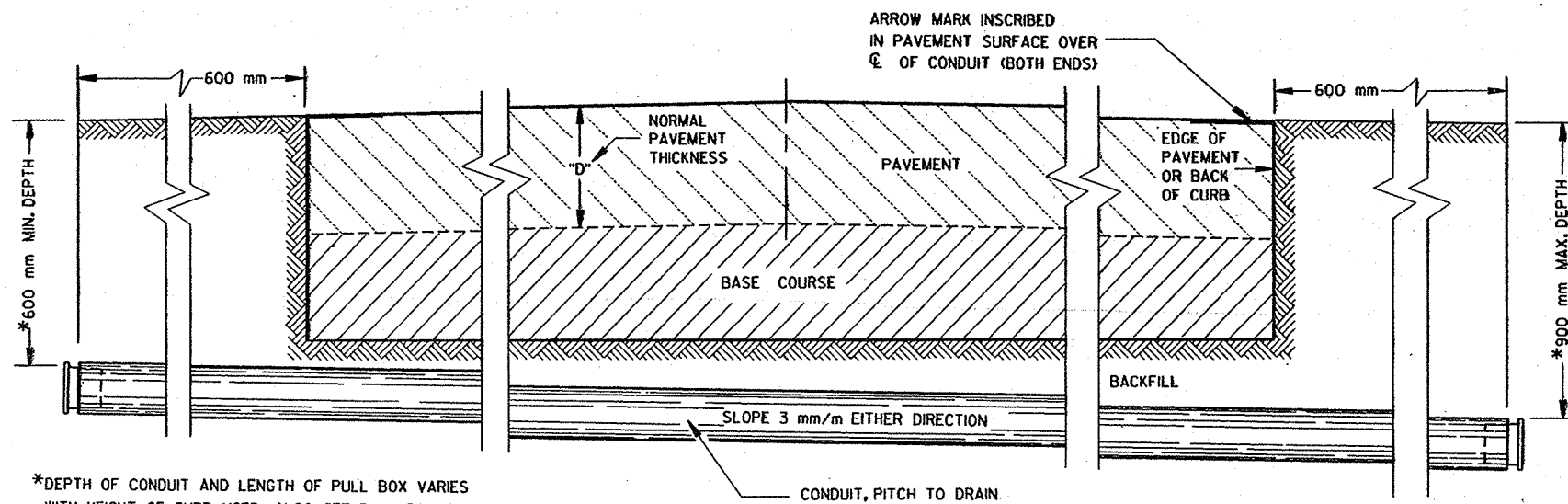
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE PIPE FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX OR JUNCTION BOX TO JUNCTION BOX OR BASE TO BASE, ETC.).

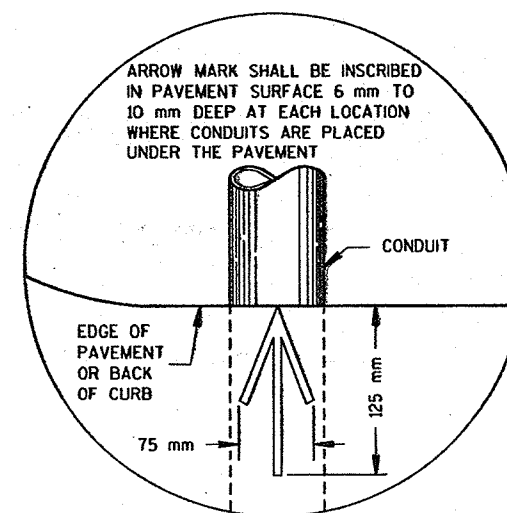
POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1L.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS



**PLAN VIEW
ARROW MARK**

CONDUIT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/21/96 DATE	<i>Bala</i> STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA	M

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN MILLIMETERS	TYPE OF PIPE	CORRUGATED STEEL									POLYETHYLENE SDR 32.5
		A	B	C	D	E	F	G	H	I	
PIPE DIAMETER (INSIDE)	A	300	300	300	450	450	450	600	600	600	300
PIPE LENGTH **	B	600	750	900	600	750	900	900	1050	1200	600
WALL THICKNESS	C	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	10
COVER	D	260	260	260	413	413	413	565	565	565	260
FRAME	E	368	368	368	521	521	521	676	676	676	368
FRAME	F	217	217	217	368	368	368	521	521	521	217
FRAME	G	293	293	293	445	445	445	597	597	597	293
WEIGHT IN kg											
FRAME AND COVER		27	27	27	50	50	50	70	70	70	27

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 1200 mm (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

GENERAL NOTES

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

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

POLYETHYLENE PULL BOXES SHALL NOT BE INSTALLED IN CONCRETE OR ASPHALTIC PAVEMENT. PULL BOXES LOCATED IN THE ROADWAY SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 6 mm.

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE. THE MECHANICAL CONNECTION (INSIDE AND OUTSIDE) TO THE PULL BOX, SHALL BE TOTALLY AND PERMANENTLY SEALED WITH A SILICONE OR RUBBERIZED CAULKING COMPOUND AS APPROVED BY THE ENGINEER.

GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

DRAIN DUCT SHALL BE MEASURED AND PAID FOR SEPARATELY.

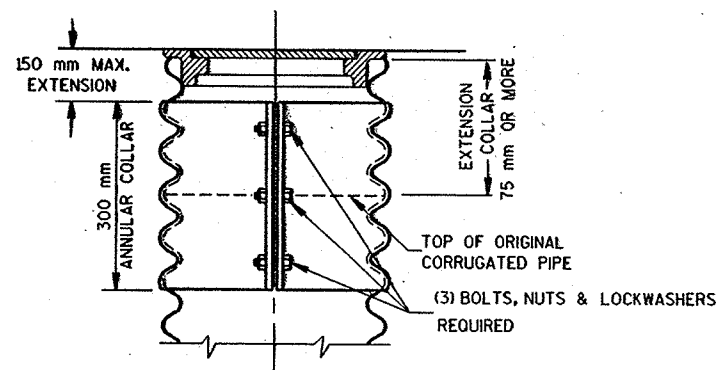
RODENT WIRE SCREEN SHALL BE 3 mm STAINLESS STEEL MESH AND BE INSTALLED WITH A STAINLESS STEEL HOSE CLAMP OF SUFFICIENT SIZE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

IF PULL BOX EQUIPMENT GROUNDING IS REQUIRED USING AN EQUIPMENT GROUNDING ELECTRODE IN EACH PULL BOX, THE EQUIPMENT GROUNDING ELECTRODE SHALL BE 15 mm X 2400 mm, COPPERCLAD, AND BE EXOTHERMICALLY WELDED TO A #4 AWG, COPPER, STRANDED WIRE (BARE OR GREEN INSULATED). THE #4 AWG WIRE SHALL BE 1200 mm IN LENGTH, NEATLY COILED, TAPED AND AVAILABLE FOR USE WHEN REQUIRED.



CORRUGATED PIPE EXTENDER

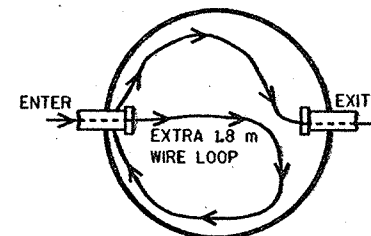
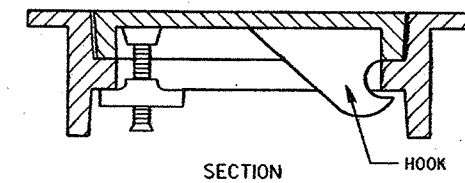
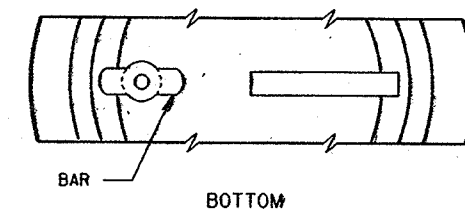
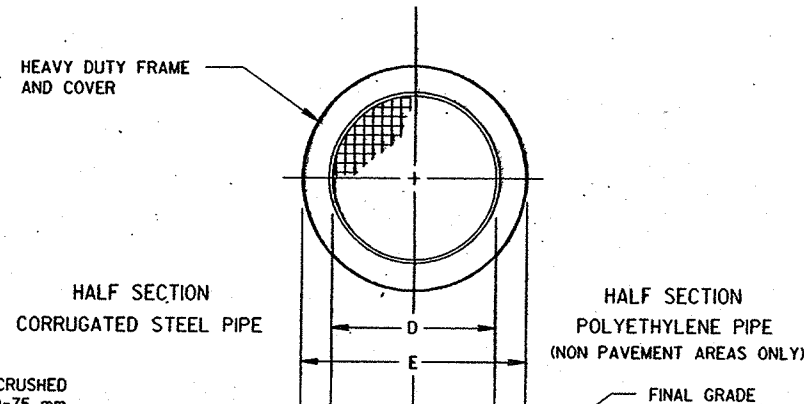


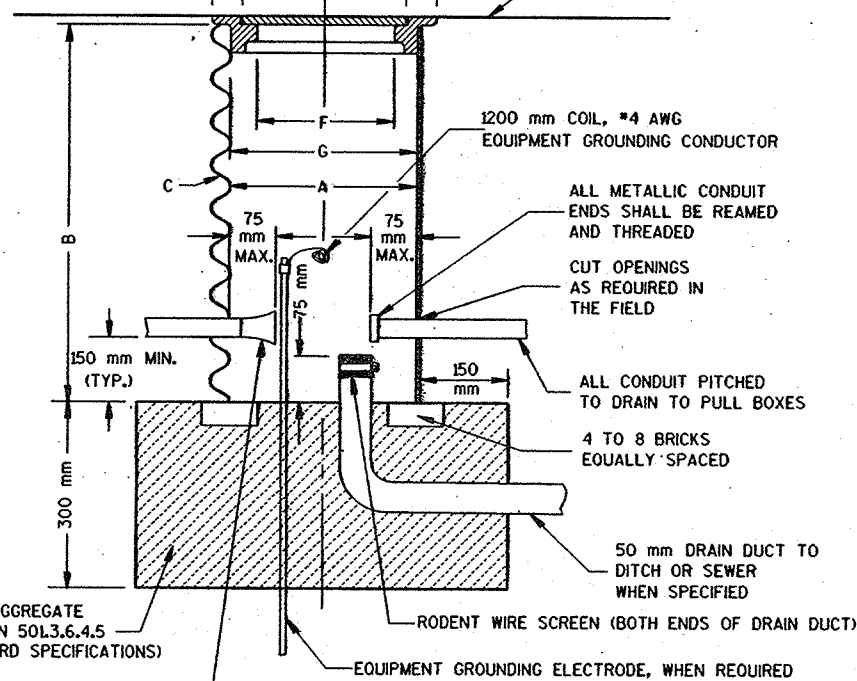
ILLUSTRATION OF WIRE/CABLE PLACEMENT IN PULLBOX



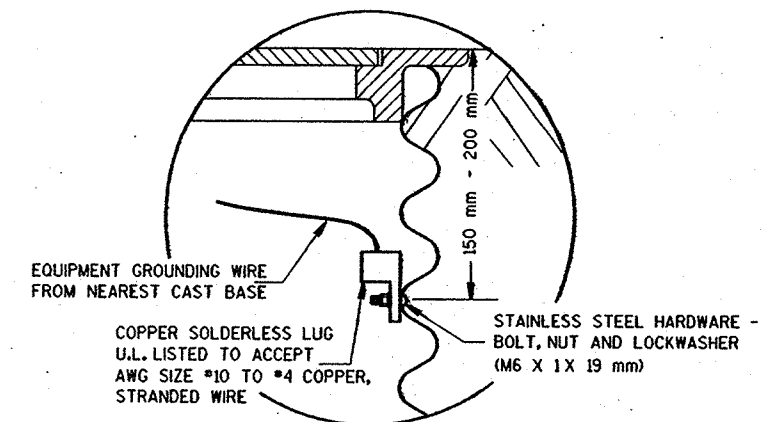
ALTERNATE COVER (LOCKING) TIGHTENING BAR TYPE



WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 50-75 mm BELOW GRADE AND COVER IT WITH 50-75 mm OF CRUSHED AGGREGATE



PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/21/97
DATE

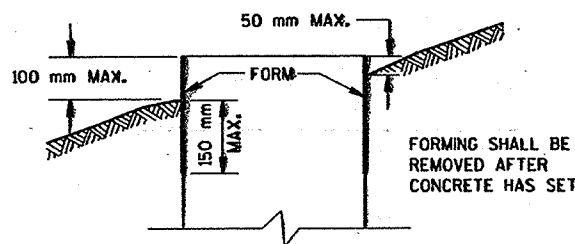
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STATE ELECTRICAL ENGINEER FOR
HIGHWAYS

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LEVELS ON - 2.3, 4, 5.6, 7.8, 9.10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63
S.D.D. 9 B 4-3

FORM DEPTH SHALL BE NO MORE THAN 150 mm BELOW GRADE ON THE LOWER SIDE OF BASE

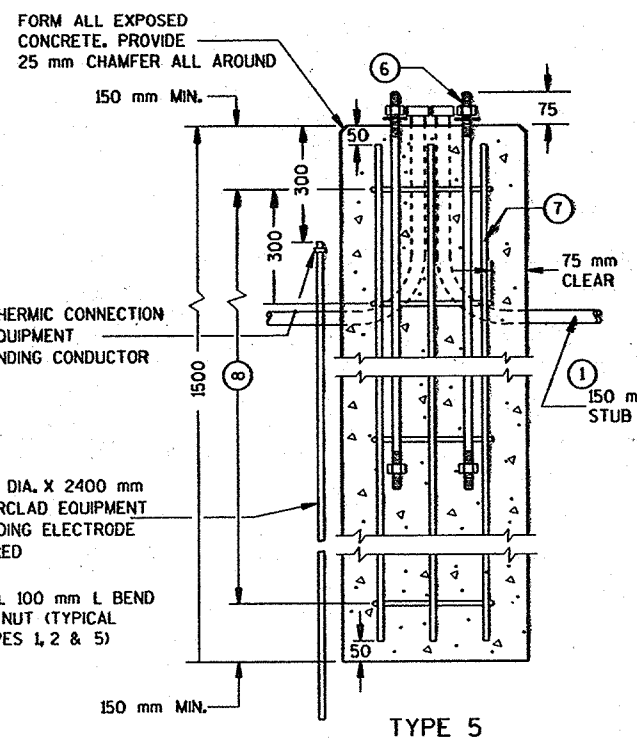
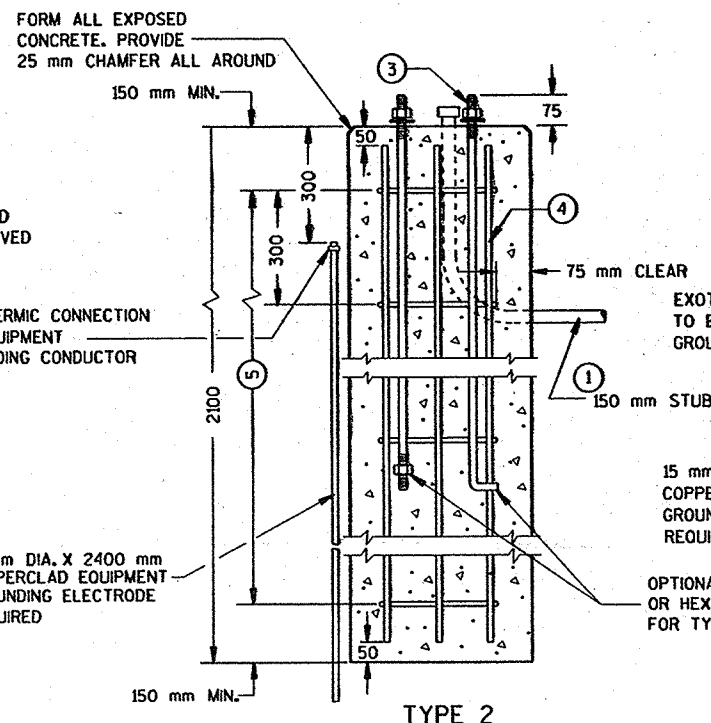
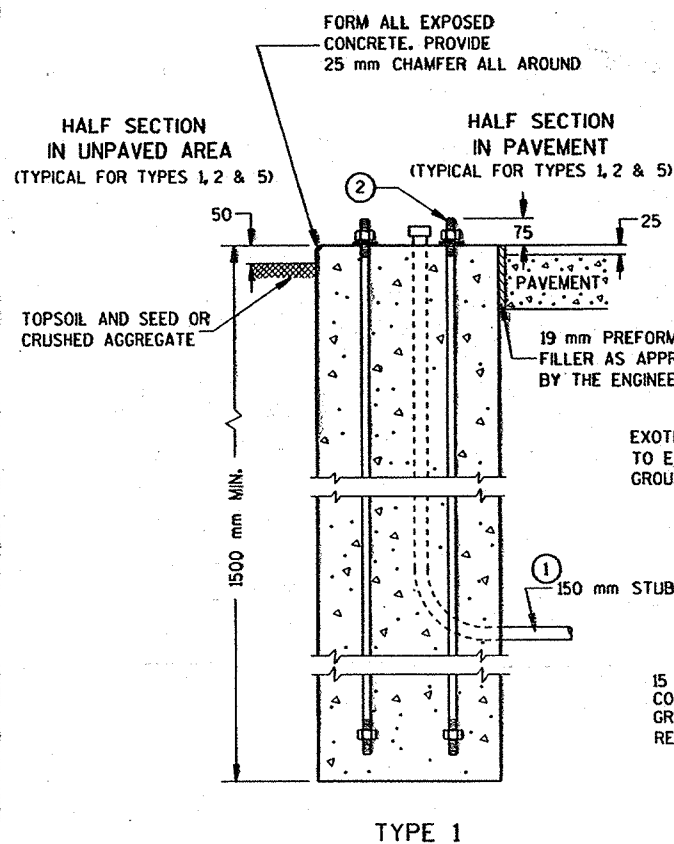
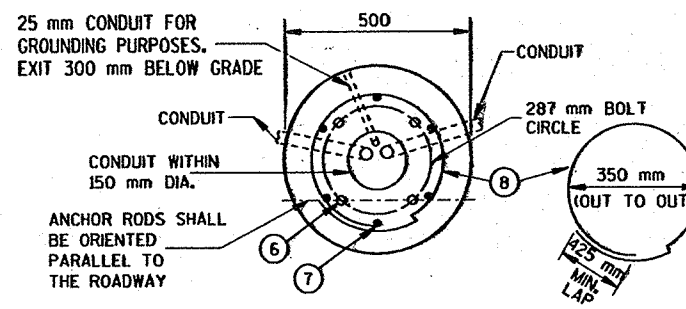
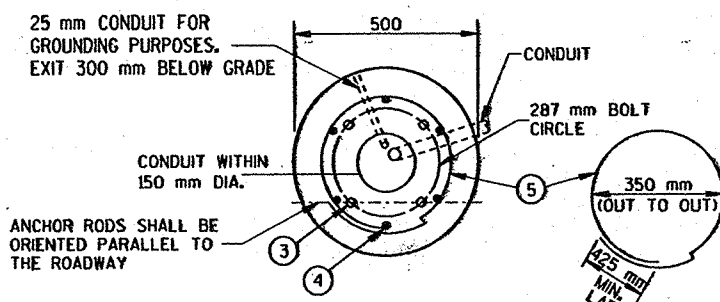
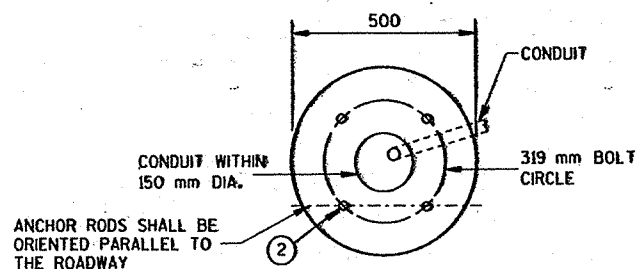


FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5
APPROX. CUBIC METERS OF CONCRETE	.306	.44	.306
kg OF HOOP BAR STEEL	NONE	10.4	7.26
kg OF VERTICAL BAR STEEL	NONE	27.2	8.16

NOTE:

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



CONCRETE BASES

GENERAL NOTES

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

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 150 mm EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 25 mm. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 300 mm OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2 AND TYPE 5 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 25 mm CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 1200 mm COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 300 mm IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 64L2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-449, OR ASTM A-687 (GRADE 105).

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 100 mm "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATION (LATEST EDITION).

METRIC ANCHOR ROD SIZES SHOWN ARE SOFT CONVERTED ENGLISH SIZES.

- ① THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 600 mm. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 450 mm. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 900 mm EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.
- ② (4) 25.4 mm DIA. X 1050 mm ANCHOR RODS.
- ③ (4) 25.4 mm DIA. X 1500 mm ANCHOR RODS.
- ④ (6) NO 19 X 2000 mm BAR STEEL REINFORCEMENT.
- ⑤ (7) NO 13 X 1525 mm BAR STEEL REINFORCEMENT @ 300 mm C-C.
- ⑥ (4) 25.4 mm DIA. X 1050 mm ANCHOR RODS.
- ⑦ (6) NO 13 X 1400 mm BAR STEEL REINFORCEMENT
- ⑧ (5) NO 13 X 1525 mm BAR STEEL REINFORCEMENT @ 300 mm C-C.

CONCRETE BASES, TYPES 1, 2 & 5

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED DATE *[Signature]* STATE ELECTRICAL ENGINEER FOR HIGHWAYS

GENERAL NOTES

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

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD-OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

THE GROUND RESISTANCE READING OF THE LOOP SHALL READ "INFINITY" TO GROUND ON AN OHMMETER USING A MULTIPLIER SCALE OF 1 MEGOHM AND AN INPUT RESISTANCE OF 11 MEGOHMS MINIMUM BEFORE SPLICING THE LOOP TO THE LEAD-IN CABLE.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER 300 mm BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

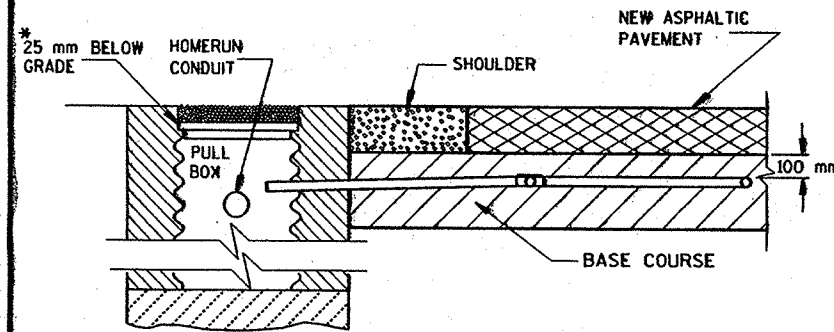
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP DUCT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT AND CONDULET SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE ASPHALTIC PAVEMENT IS PLACED.

WHEN MULTIPLE LAYERS OF ASPHALTIC PAVEMENT ARE TO BE PLACED, LOOPS MAY BE INSTALLED BY SAWING A 50 mm WIDE SLOT IN THE FIRST LAYER, DIG OUT THE ASPHALTIC MATERIAL AND BASE COURSE, PLACE THE LOOP, FILL THE SLOT WITH BASE COURSE MATERIAL AND NEW ASPHALTIC MATERIAL AND TAMP THE ASPHALTIC MATERIAL IN PLACE.

SHOULD TRAFFIC BE ALLOWED TO USE THE AREA OF ROADWAY WITH THE NEWLY INSTALLED LOOP BEFORE THE PLACEMENT OF THE NEXT LAYER OF ASPHALTIC PAVEMENT, THE SLOT/PAVEMENT OPENING SHALL BE SEALED WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

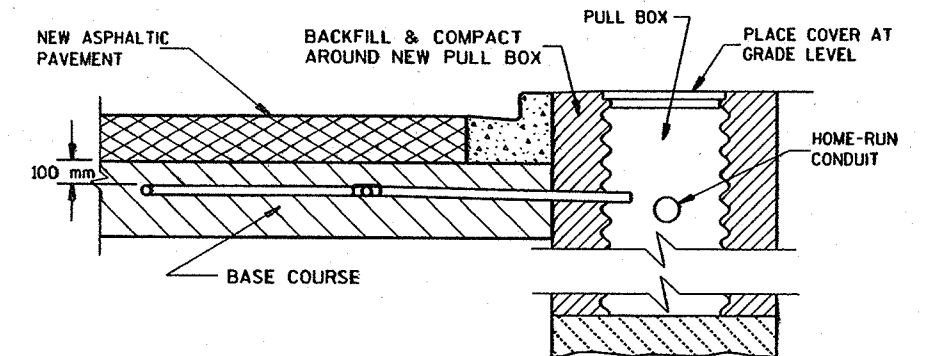
DRIVE A 38 mm MAX. PK NAIL INTO THE NEW ASPHALTIC PAVEMENT AND DIRECTLY ABOVE THE CONDULET AFTER THE FINAL LAYER OF NEW ASPHALTIC PAVEMENT IS COMPLETELY INSTALLED, IF REQUIRED BY THE DISTRICT TRAFFIC SECTION.



**SECTION A-A
NO CURB & GUTTER**

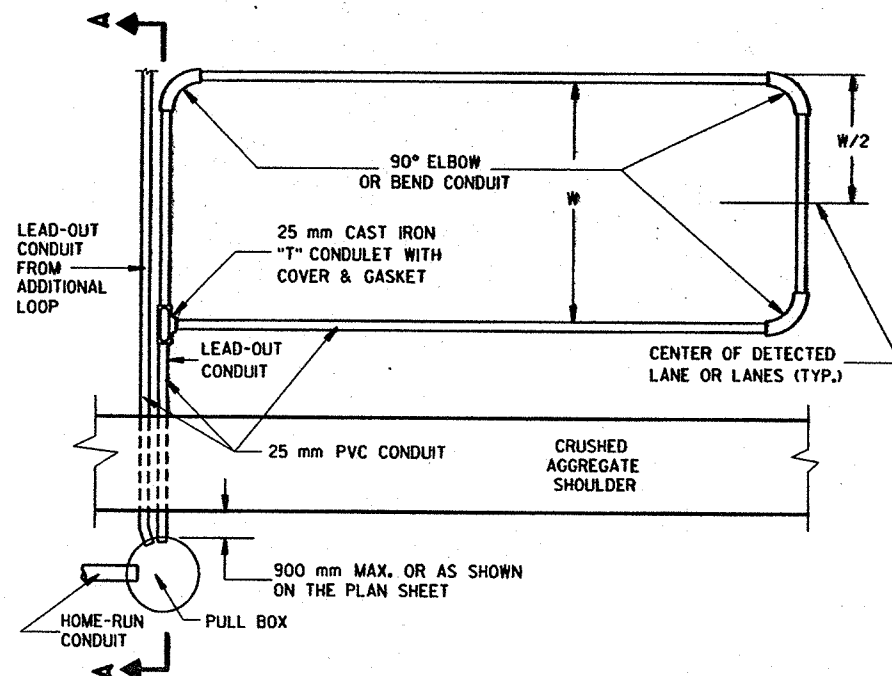
DETECTOR LOOP INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 75 mm BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

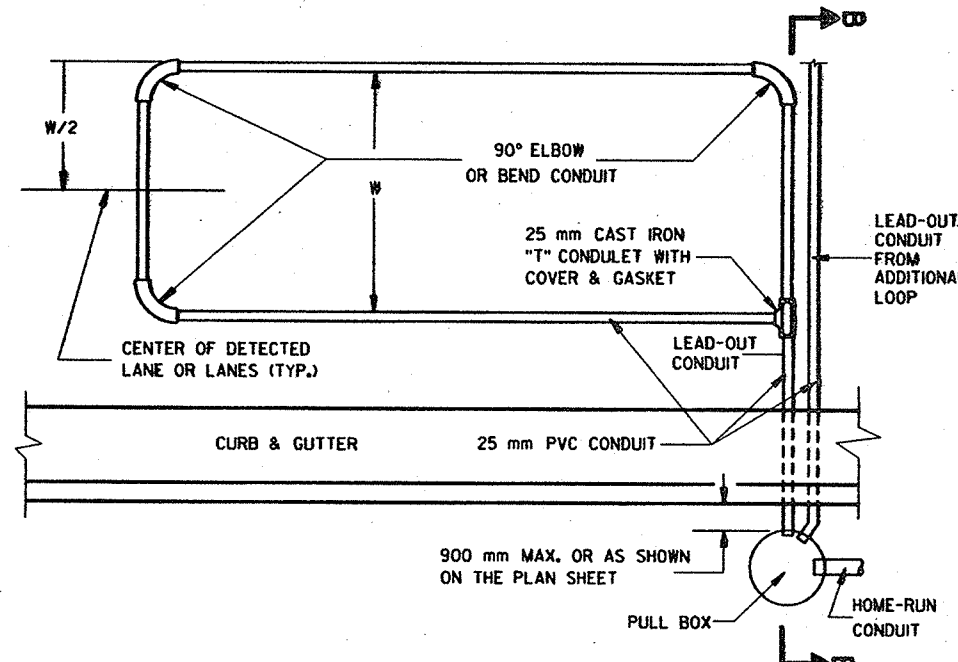


**SECTION B-B
CURB & GUTTER**

LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR



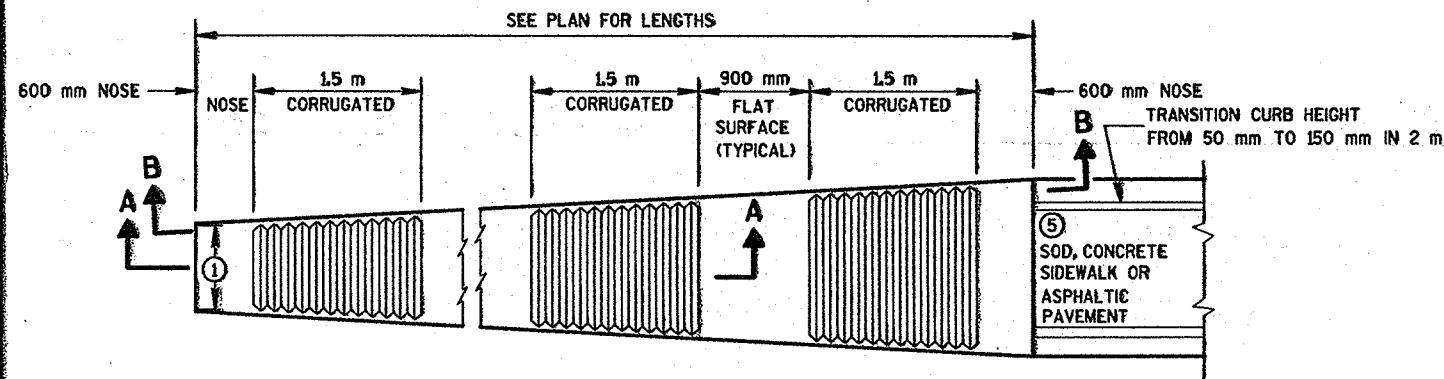
TYPICAL PLAN OF LOOP DETECTOR

LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)

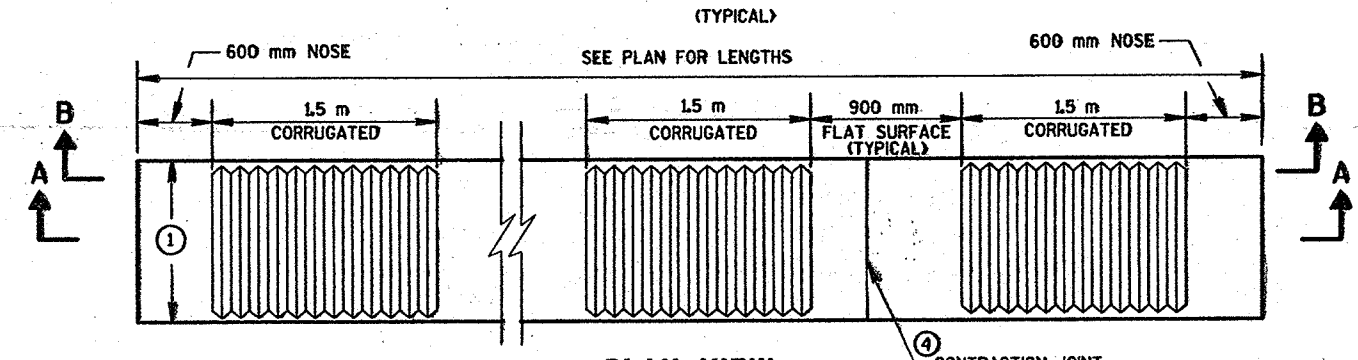
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/96 DATE *Bala Strud* STATE ELECTRICAL ENGINEER FOR HIGHWAYS

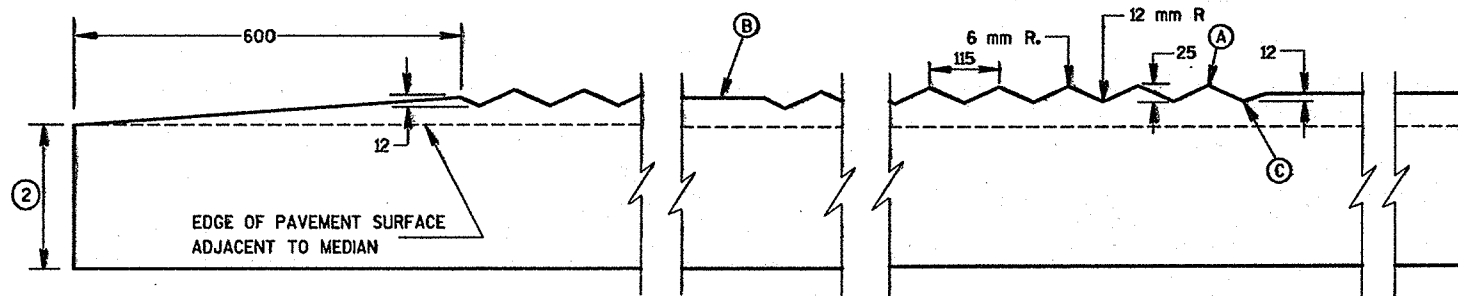
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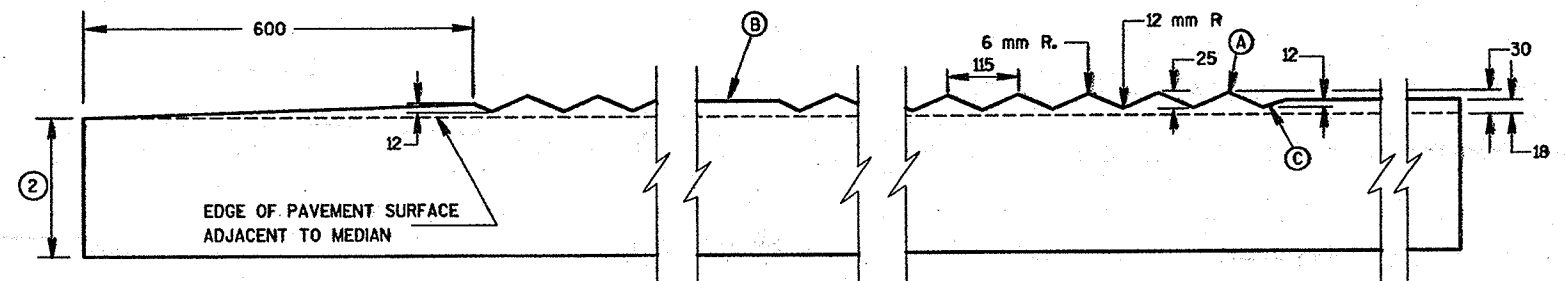
PLAN VIEW
VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



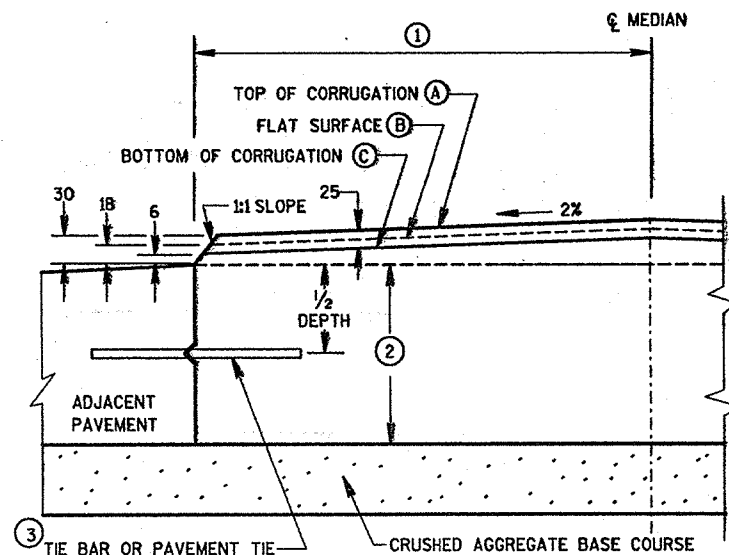
PLAN VIEW
UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A
LONGITUDINAL SECTION



SECTION B-B
LONGITUDINAL SECTION



HALF CROSS SECTION
CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT

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.

WHEN REQUIRED IN THE CONTRACT, FLAT SURFACES BETWEEN THE CORRUGATIONS SHALL BE MARKED WITH YELLOW PAVEMENT MARKING.

- ① SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.
- ② THE DEPTH OF THE CONCRETE MEDIAN SHALL EQUAL THE DEPTH OF THE ADJACENT PAVEMENT STRUCTURE. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:
 - (1) NEW OR EXISTING CONCRETE PAVEMENT.
 - (2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE.
 - (3) ASPHALTIC PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.
- ③ TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 13 X 600 mm SPACED AT 600 mm C-C.
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR CONCRETE BASE COURSE, PAVEMENT TIES SHALL BE NO. 19 X 300 mm SPACED AT 900 mm C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1 THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.
- ④ CONCRETE PAVEMENT TRANSVERSE CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH CRUSHED AGGREGATE BASE, TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 6 m INTERVALS.
- ⑤ SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

NOTE:

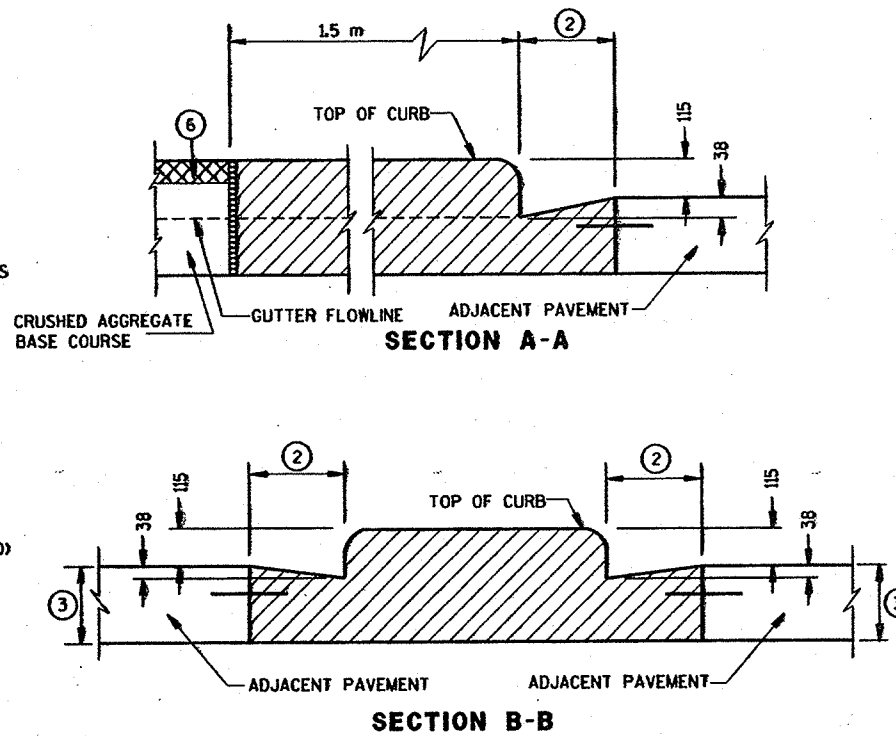
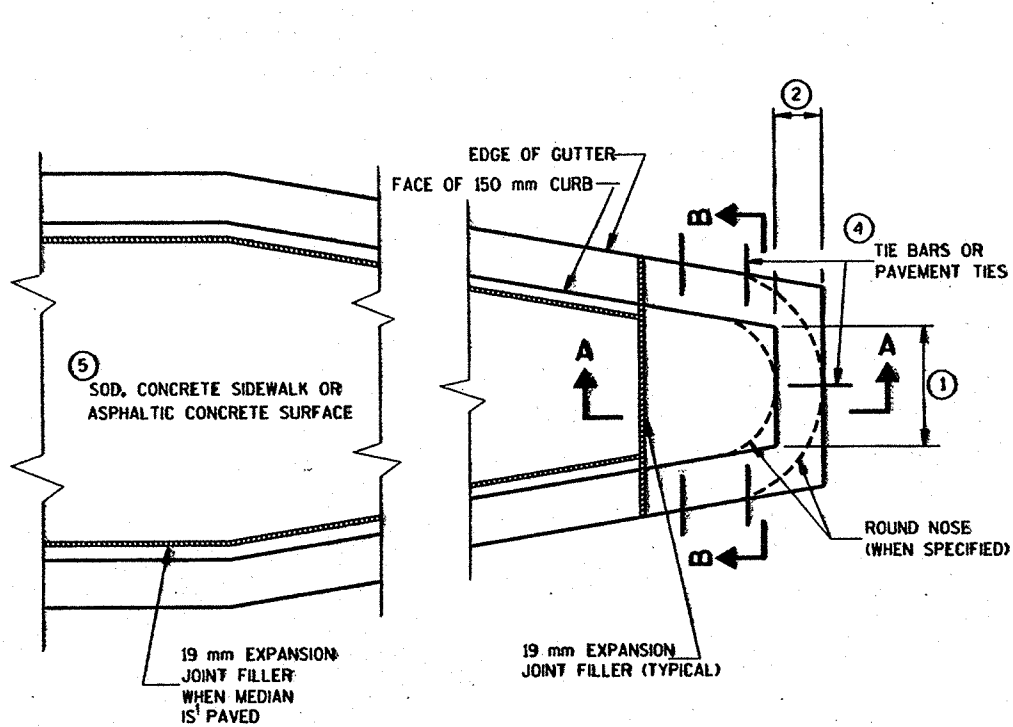
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

CONCRETE CORRUGATED MEDIAN

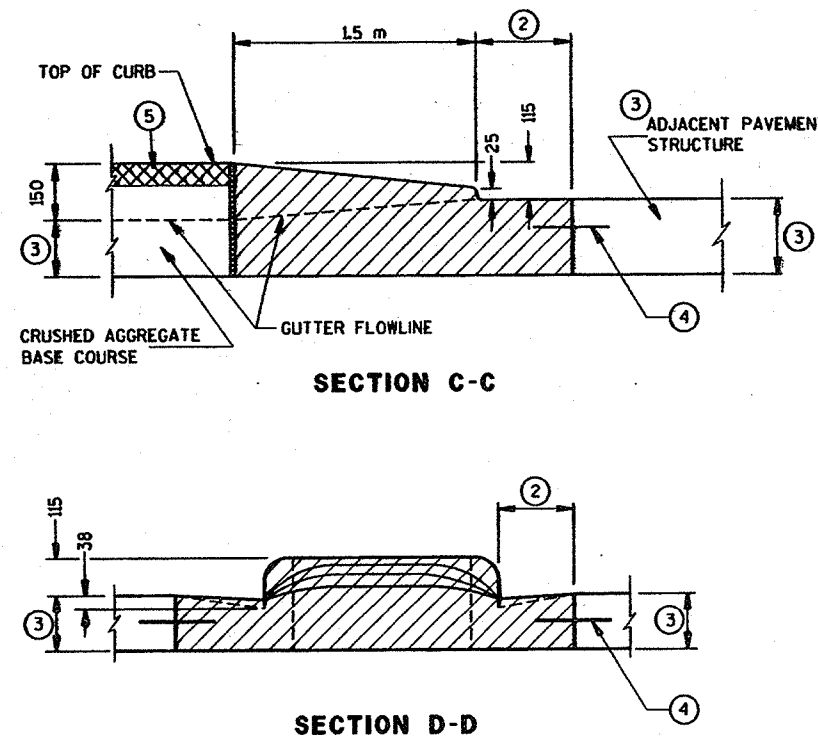
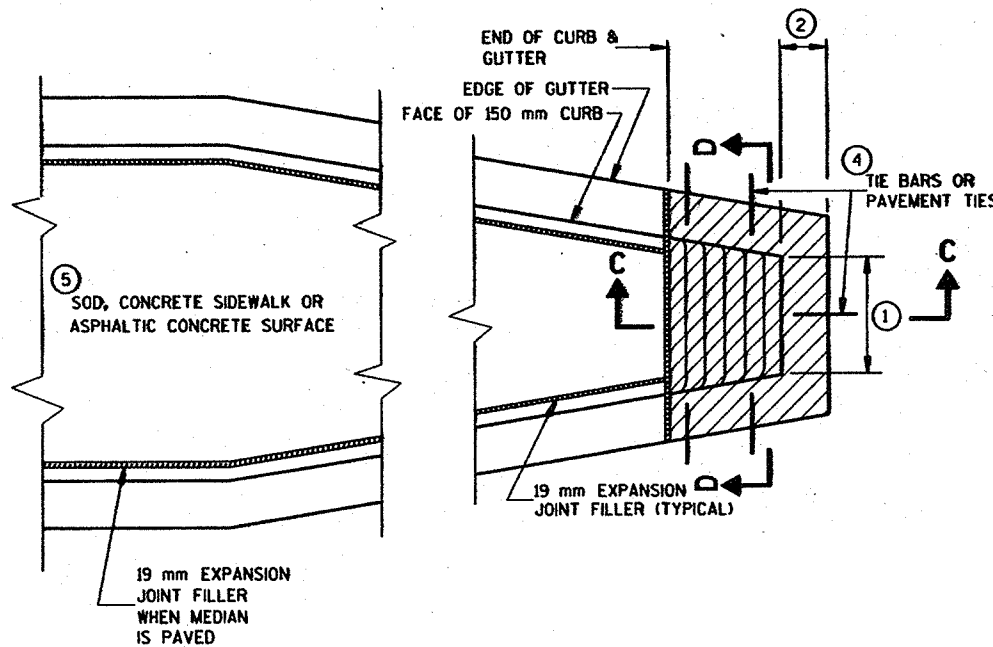
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/08/98
DATE
[Signature]
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

LEVELS ON - 2.3, 4, 5.6, 7.8, 9.0, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63
 S.D.D. 11B 2-1



CONCRETE MEDIAN BLUNT NOSE DETAIL



CONCRETE MEDIAN SLOPED NOSE DETAIL

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.

- ① SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).
- ② WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.
- ③ DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:
 - (1) NEW OR EXISTING CONCRETE PAVEMENT.
 - (2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.
 - (3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.
- ④ TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 13 X 600 mm SPACED AT 600 mm C-C.
 PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 19 X 300 mm SPACED AT 900 mm C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.
- ⑤ SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

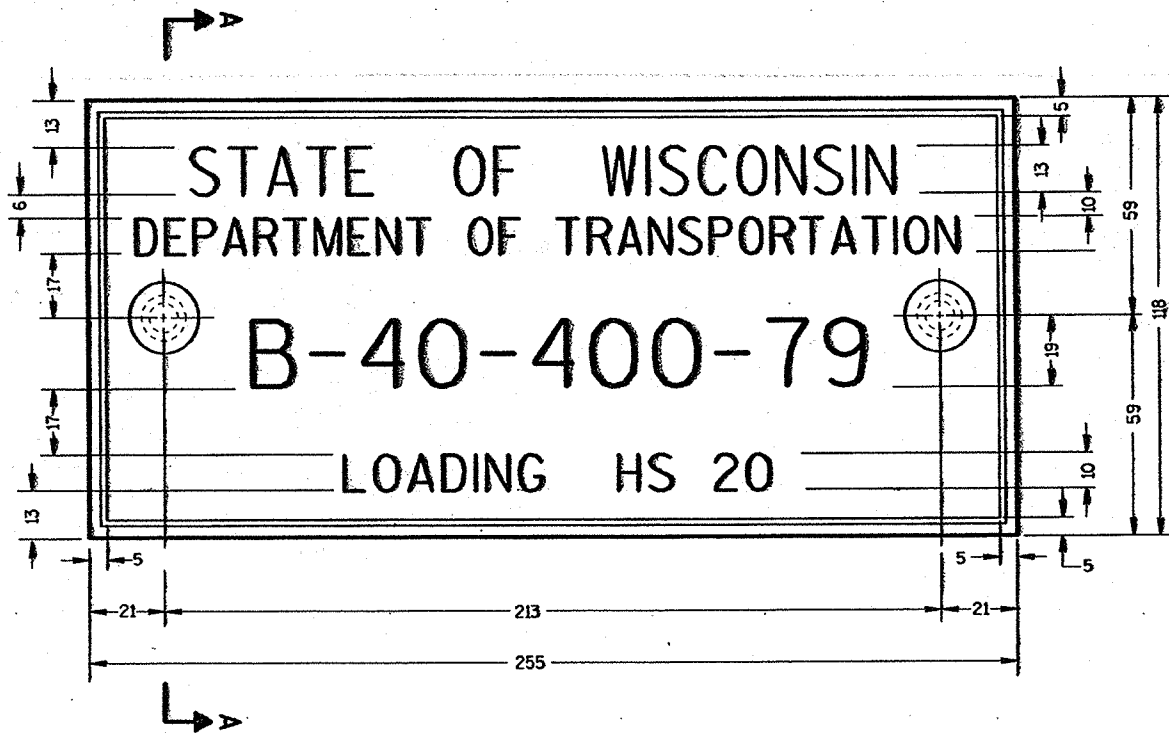
NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

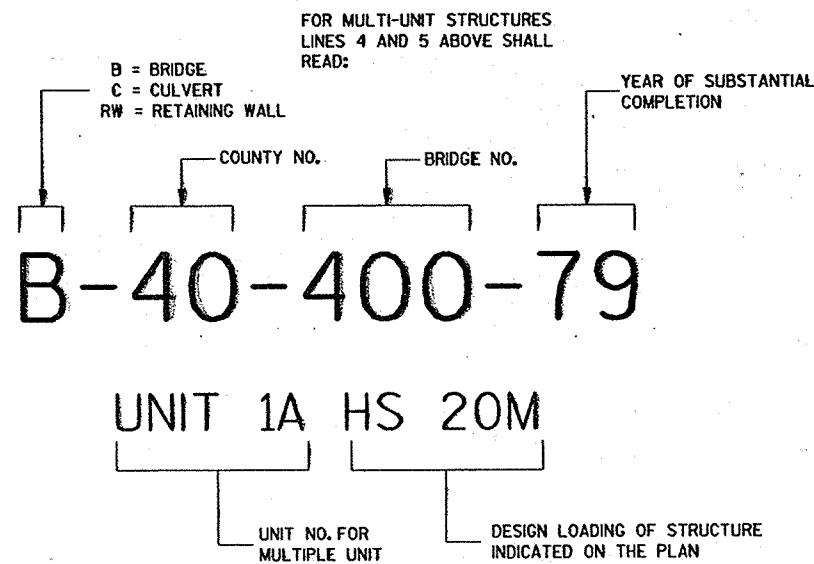
CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/30/96
DATE
Roy L. Thompson
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



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



NUMBERING AND LOADING DESIGNATION
MULTI-UNIT STRUCTURES

GENERAL NOTES

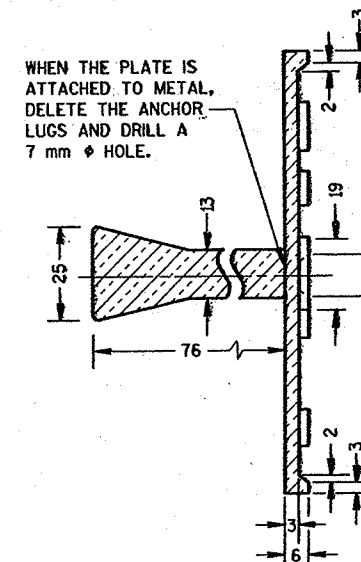
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 506.2.4 OF THE STANDARD SPECIFICATIONS.

THE BRIDGE NUMBER AND DESIGN LOADING SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND DESIGN LOADING.

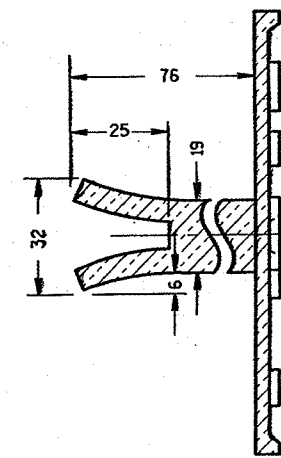
① EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

NOTE

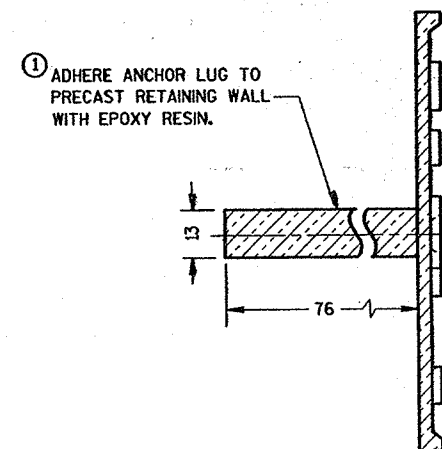
ALL DIMENSIONS SHOWN ARE IN MILLIMETERS



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 01/21/98 DATE	<i>Roy J. Thies</i> CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA M	

S.D.D. 12 A 3-5
 LEVELS ON - 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63

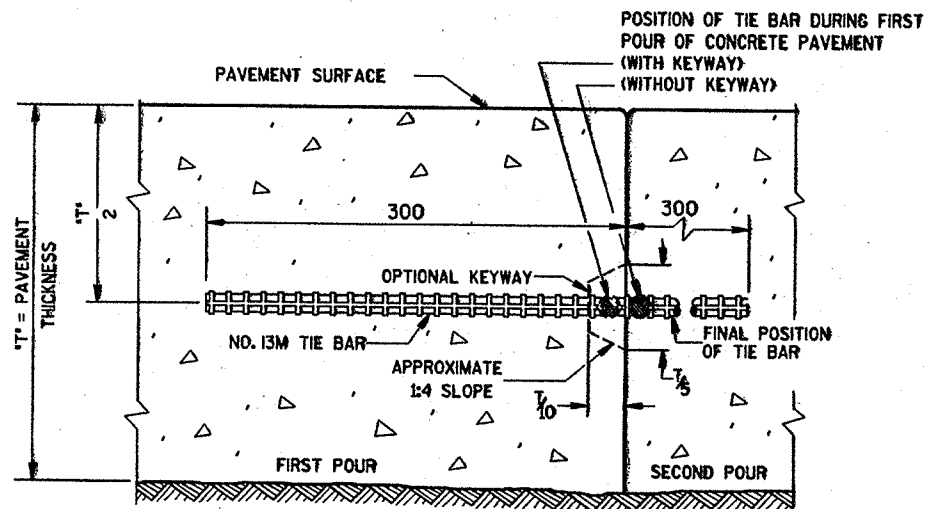
PLOT SCALE:

PLOT NAME:

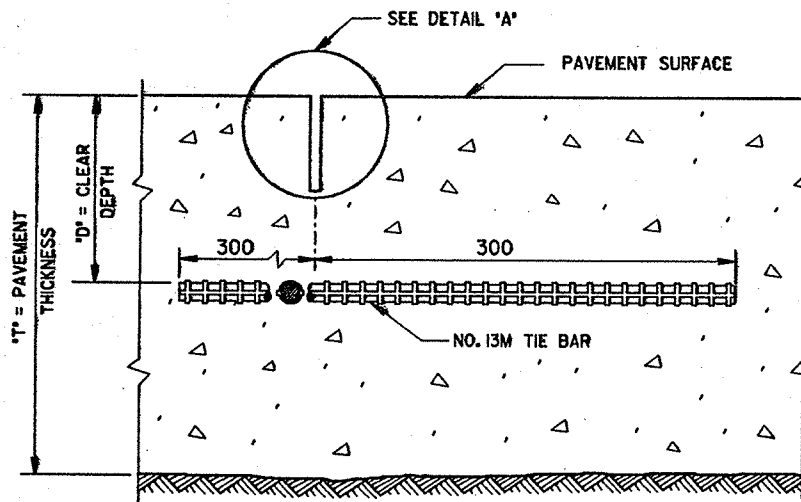
REV. DATE:

ORIGINATOR:

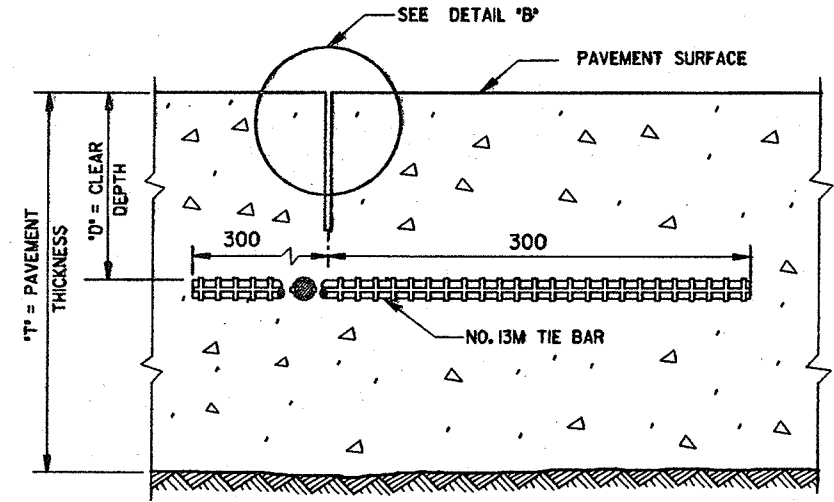
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CONSTRUCTION JOINT



SAWED JOINT



RIBBON JOINT

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.

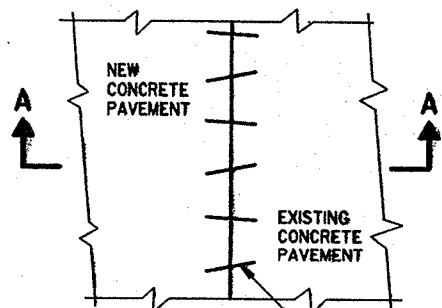
DETAILS "A" AND "B" ARE EQUAL ALTERNATES UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.

LONGITUDINAL JOINTS SHALL NOT BE SEALED OR FILLED.

TIE BAR SPACINGS ARE VALID ONLY FOR PAVEMENT WIDTHS IN THE TABLE. FOR WIDER PAVEMENTS, TIED CONCRETE SHOULDERS OR RAMPS, THE TIE BAR SPACING SHALL BE AS SHOWN ON THE PLANS.

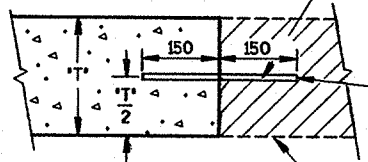
NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



PLAN VIEW

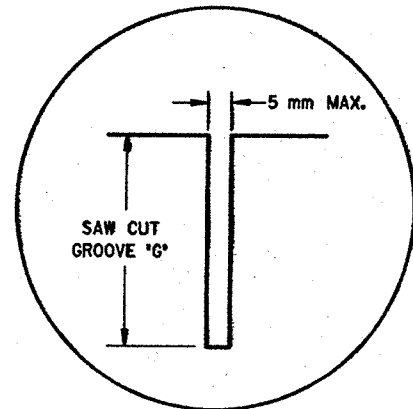
NO. 19M TIE BARS SPACED 900 mm C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.



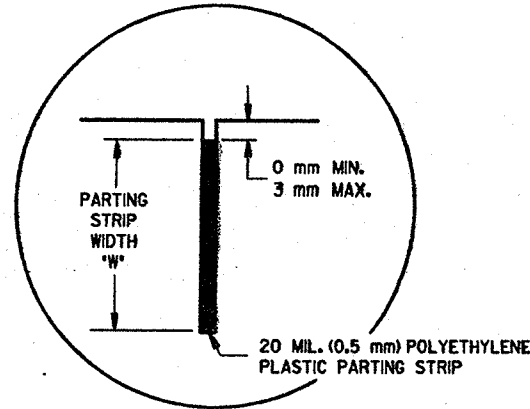
SECTION A-A PAVEMENT TIES

THE HOLE FOR THE BAR SHALL BE DRILLED TO A DEPTH OF 175 mm AND TO SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

EXIST. CONC. PAVEMENT

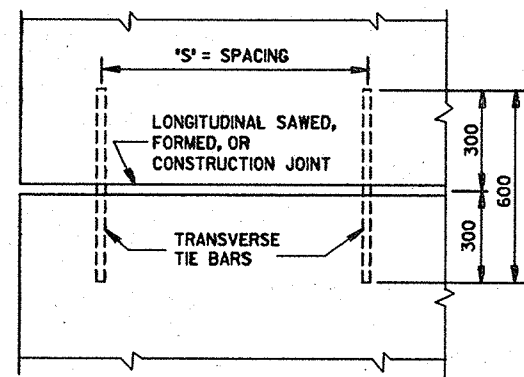


DETAIL "A"



DETAIL "B"

PAVEMENT THICKNESS "T" (mm)	CLEAR DEPTH "D" (mm)	SAW CUT GROOVE "G" (mm)	MAXIMUM TIE BAR SPACING "S" (mm)		PARTING STRIP WIDTH "W" (mm)
			PAVEMENT WIDTH (m) 7.2 OR 7.8	9.0	
150,165	75 ± 13	50	1 000	900	50
175,190	85 ± 25	55	850	800	55
200,215	95 ± 25	65	750	700	65
225,240	110 ± 25	75	650	600	75
250,265	120 ± 25	85	600	550	85
275,290	135 ± 25	95	550	500	95
300	145 ± 25	100	500	450	100



PLAN VIEW SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND PAVEMENT TIES

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED
 9-24-98
 DATE

[Signature]
 CHIEF PAVEMENTS & RESEARCH ENGINEER

FHWA

M

PLOT SCALE:

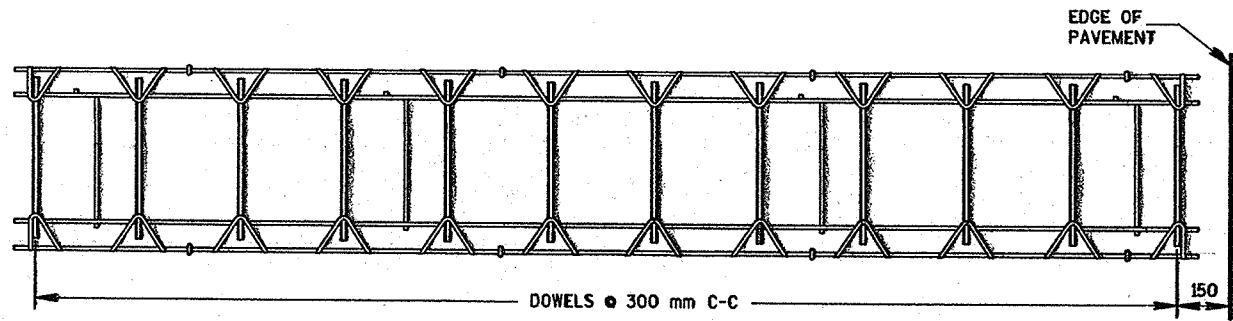
PLOT NAME:

REV. DATE:

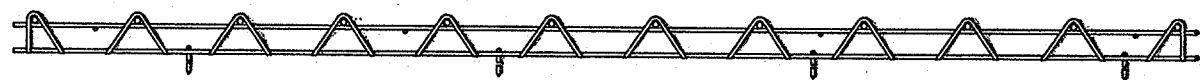
ORIGINATOR:

S.D.D. 13 C 13-3

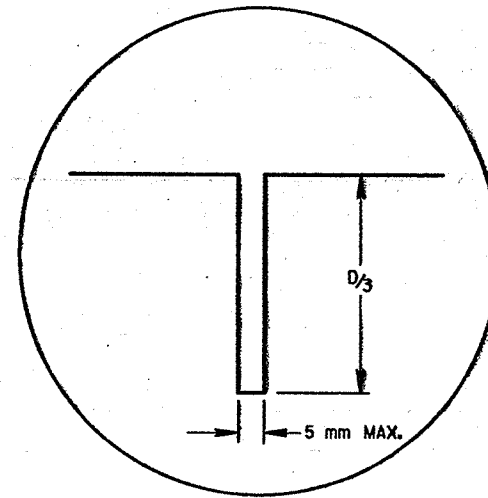
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



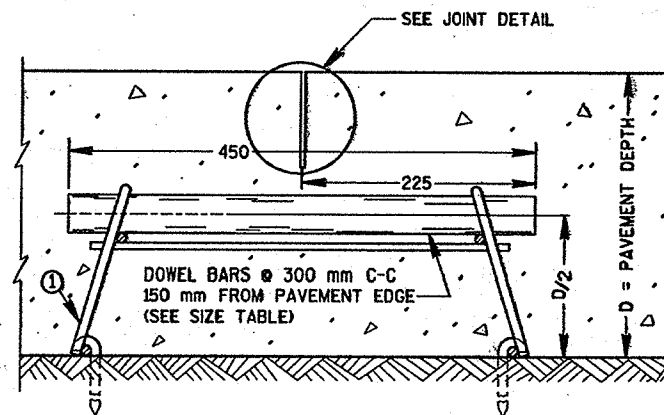
PLAN VIEW



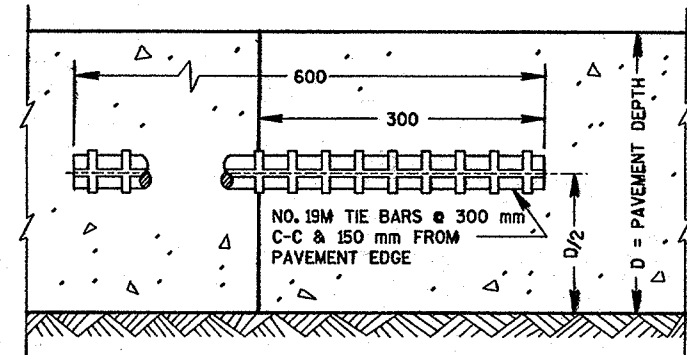
SIDE VIEW
CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

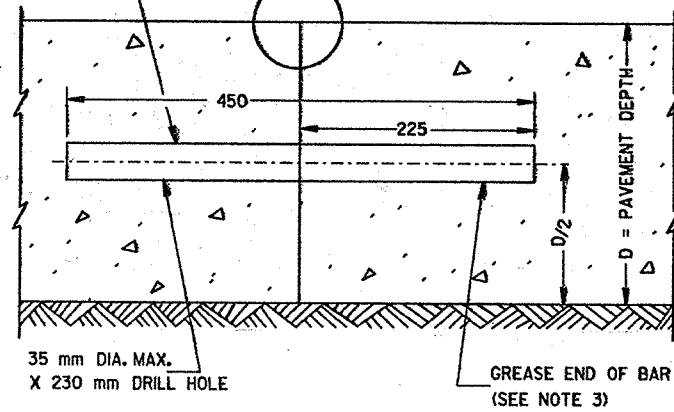
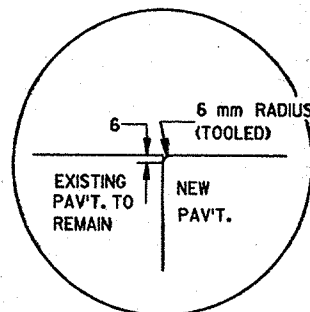


DOWELED CONTRACTION JOINT

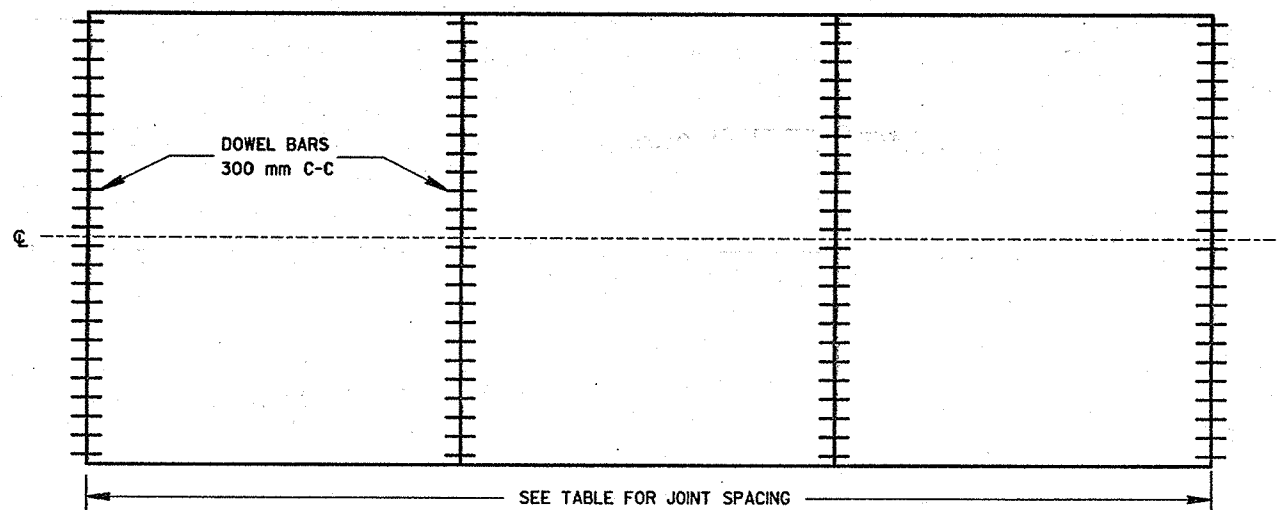


CONSTRUCTION JOINT

32 mm DIA. X 450 mm DOWEL BARS ANCHORED INTO EXISTING PAV'T. (SEE NOTE 2)



TRANSVERSE CONTRACTION JOINTS ABUTTING EXISTING PAVEMENT
DOWEL BAR DETAIL ④



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

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

CONTRACTION JOINTS

UNLESS OTHERWISE SPECIFIED, CONTRACTION JOINTS SHALL BE NORMAL TO THE CENTERLINE. THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

CONTRACTION JOINTS SHALL NOT BE SEALED OR FILLED.

DOWEL BARS SHALL BE INSTALLED PARALLEL TO THE PAVEMENT CENTERLINE AND SURFACE.

CONSTRUCTION JOINTS

CONSTRUCTION JOINTS SHALL BE A MINIMUM OF 1.2 m FROM THE NEAREST CONTRACTION JOINT AND ALIGNED EITHER PARALLEL TO CONTRACTION JOINTS OR AT 90° TO THE CENTERLINE.

TIE BARS MAY BE INSERTED THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN POURED.

- ① ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY MAY BE USED WHEN APPROVED BY THE ENGINEER. MECHANICAL DOWEL BAR IMPLANTERS MAY BE USED INSTEAD OF DOWEL ASSEMBLIES.
- ② DOWEL BARS SHALL BE ANCHORED INTO DRILL HOLES WITH AN APPROVED EPOXY GROUT.
- ③ THE FREE END OF DOWEL BARS SHALL RECEIVE A THIN UNIFORM COATING OF BOND BREAKING GREASE.
- ④ DOWEL BARS INSTALLED BY DRILLING SHALL BE SPACED 380 mm ON CENTER. THE GROUPING OF DOWEL BARS SHALL BE CENTERED INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:

BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.

THE CLEAR DISTANCE FROM THE EDGE OF PAVEMENT OR LONGITUDINAL JOINT TO THE NEAR EDGE OF DOWEL BAR NEAREST THAT EDGE OR JOINT SHALL BE A MINIMUM OF 150 mm AND A MAXIMUM OF 355 mm.

NOTE

ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE SHOWN.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
150,165 mm	32 mm	3.6 m
175,190 mm	32 mm	4.3 m
200,215 mm	32 mm	4.5 m
225,240 mm	32 mm	4.5 m
250 mm & ABOVE	38 mm	5.5 m

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

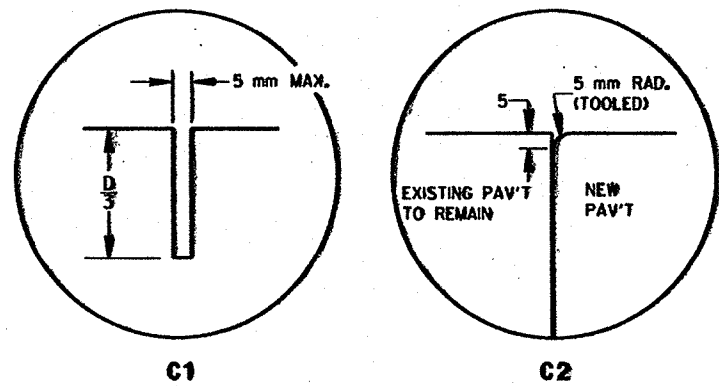
APPROVED 9-24-98 DATE

CHIEF PAVEMENTS & RESEARCH ENGINEER

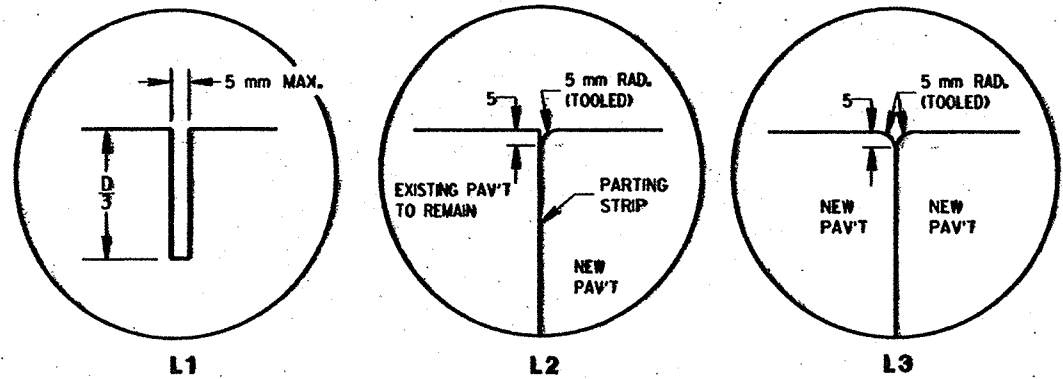
FRWA

M

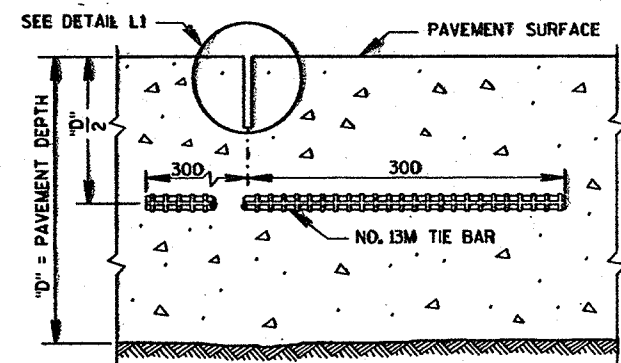
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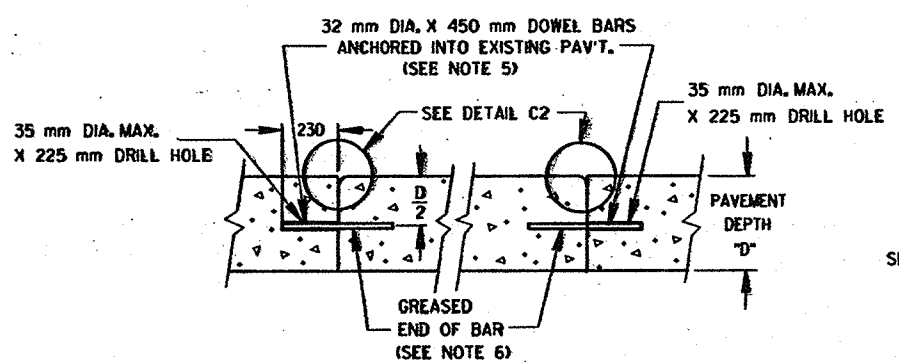
C1 **C2**
TRANSVERSE JOINTS



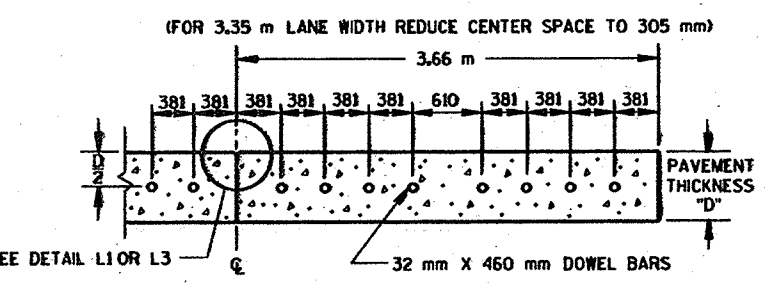
L1 **L2** **L3**
LONGITUDINAL JOINTS



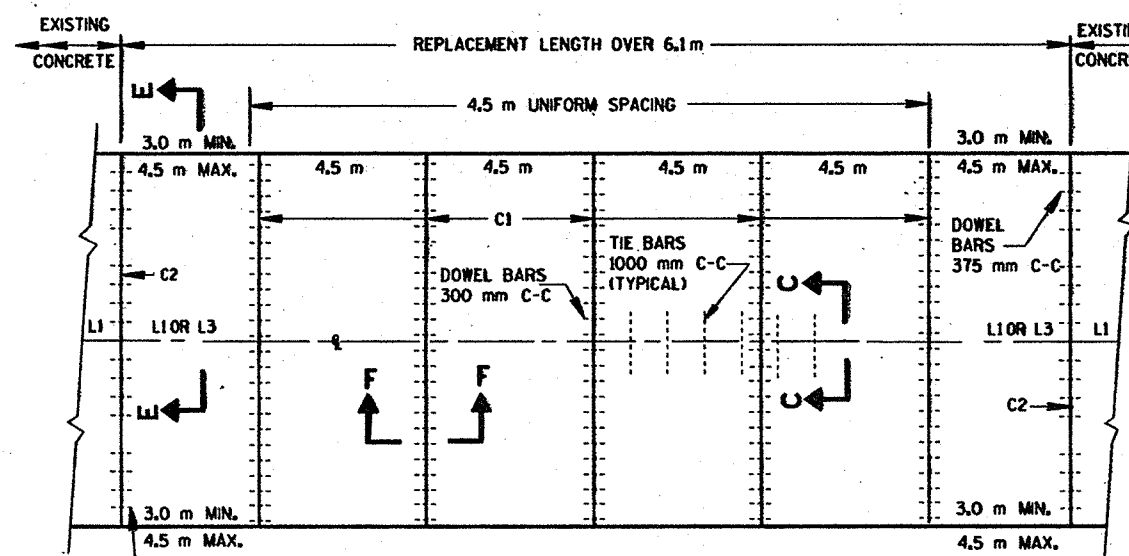
**SECTION C-C
SAWED JOINT**



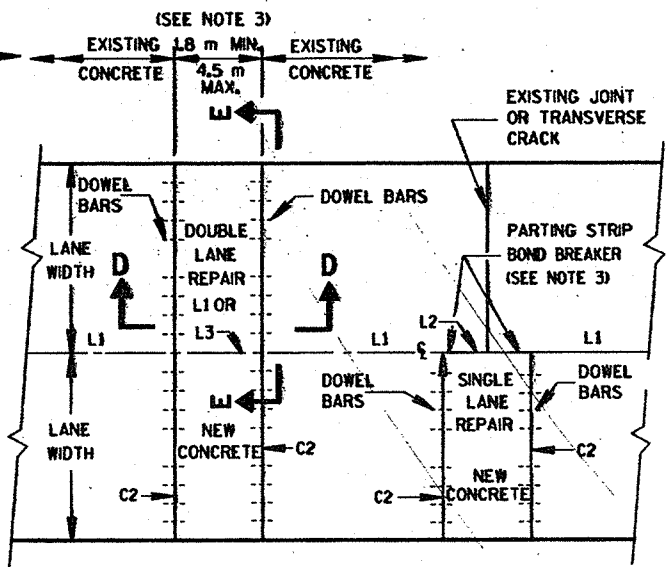
SECTION D-D



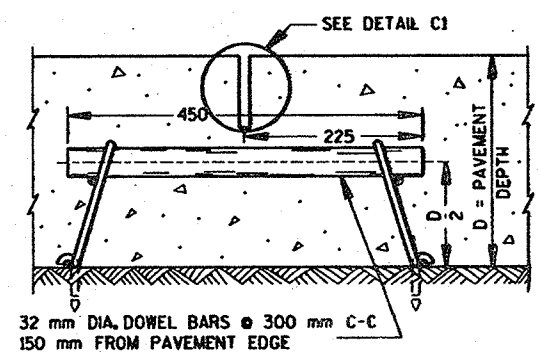
**SECTION E-E
DOWEL BAR SPACING ABUTTING
EXISTING PAVEMENT**



**PLAN VIEW
CONCRETE PAVEMENT REPLACEMENT**



**PLAN VIEW
CONCRETE PAVEMENT REPAIR**



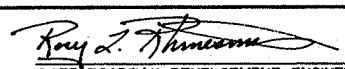
**SECTION F-F
CONTRACTION JOINT**

GENERAL NOTES

1. DOWEL BARS SHALL BE INSTALLED PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.
2. PARTING STRIPS SHALL BE MADE OF POLYETHELENE PLASTIC SHEETING HAVING A MINIMUM THICKNESS OF 20 MILS (0.5 mm), A WIDTH EQUAL TO THE PAVEMENT DEPTH AND THE SAME LENGTH AS THE REPAIR.
3. CONCRETE REPAIR SIZES AND LOCATIONS ARE SHOWN ELSEWHERE IN THE CONTRACT.
4. THE PREPARATION OF FOUNDATION FOR FULL DEPTH CONCRETE PAVEMENT REPAIR SHALL BE IN ACCORDANCE WITH SUBSECTION 211.4.4 OF THE STANDARD SPECIFICATIONS.
5. DOWEL BARS SHALL BE ANCHORED INTO DRILL HOLES WITH AN APPROVED EPOXY GROUT.
6. THE FREE END OF DOWEL BARS SHALL RECEIVE A THIN UNIFORM COATING OF BOND BREAKER.
7. JOINTS SHALL NOT BE SEALED OR FILLED.

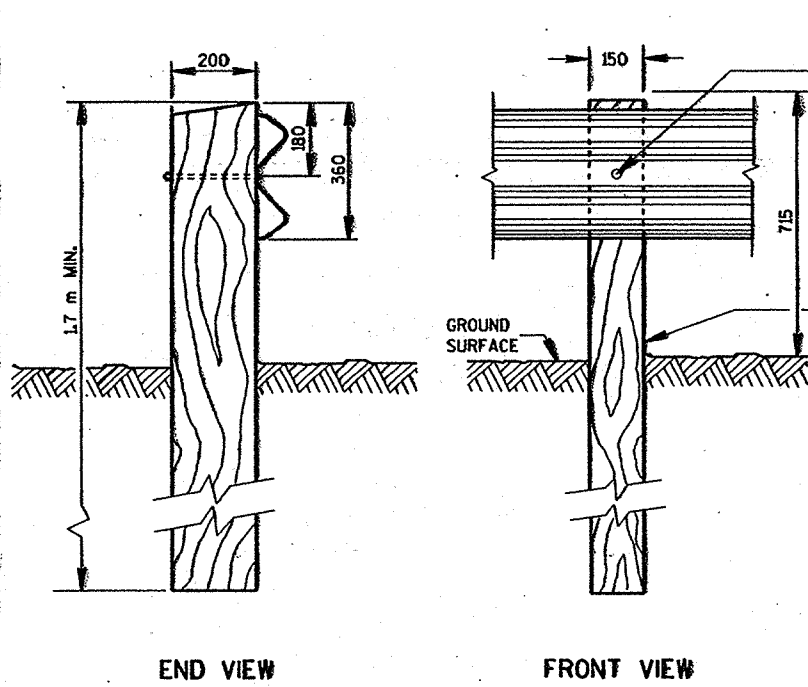
NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

CONCRETE PAVEMENT REPAIR	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 07/02/97 DATE	 CHIEF ROADWAY DEVELOPMENT ENGINEER
FWSA	

PLOT SCALE: REV. DATE: PLOT NAME:

S.D.D. 14 B 3-2 LEVELS ON 2.3, 4.5, 6.7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63

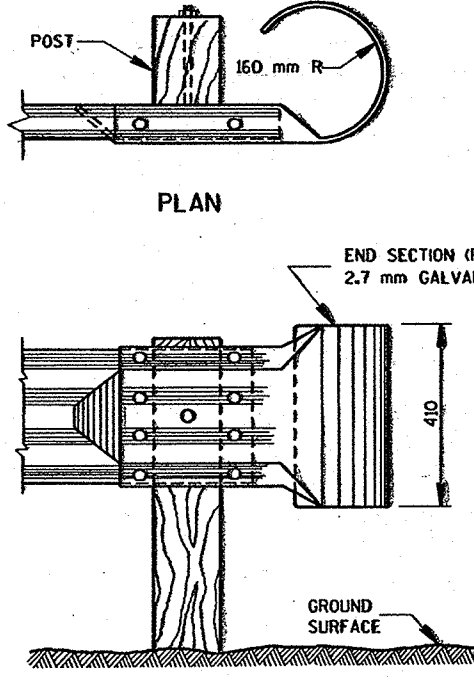


END VIEW

FRONT VIEW

BUTTONHEAD MOUNTING BOLT
15.875 mm X 255 mm
SECURED WITH WASHER
& NUT. THREAD END
TO BE BURRED FOLLOWING
MOUNTING.

SAWED TREATED TIMBER POSTS
150 mm X 200 mm X 1.8 m SHALL BE
FURNISHED AND PLACED IN
ACCORDANCE WITH THE STANDARD
SPECIFICATIONS.



PLAN

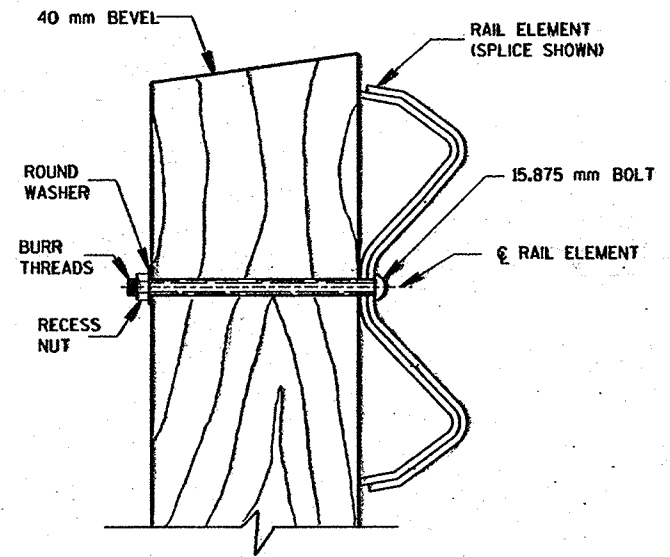
FRONT ELEVATION
END SECTION (ROUNDED) DETAILS

GENERAL NOTES

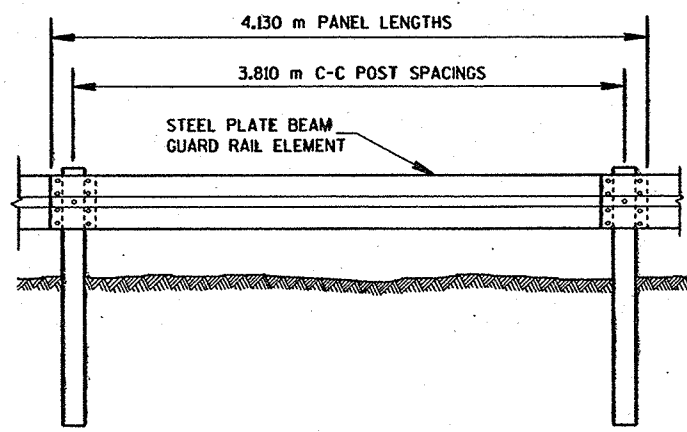
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

NOTE

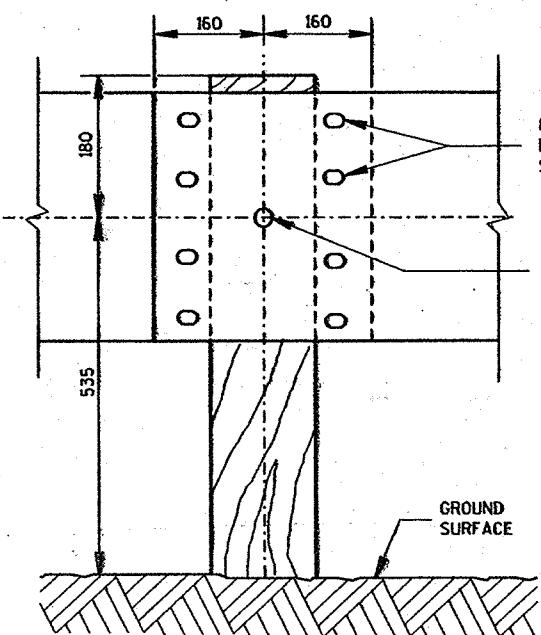
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



BUTTON HEAD BOLT DETAIL



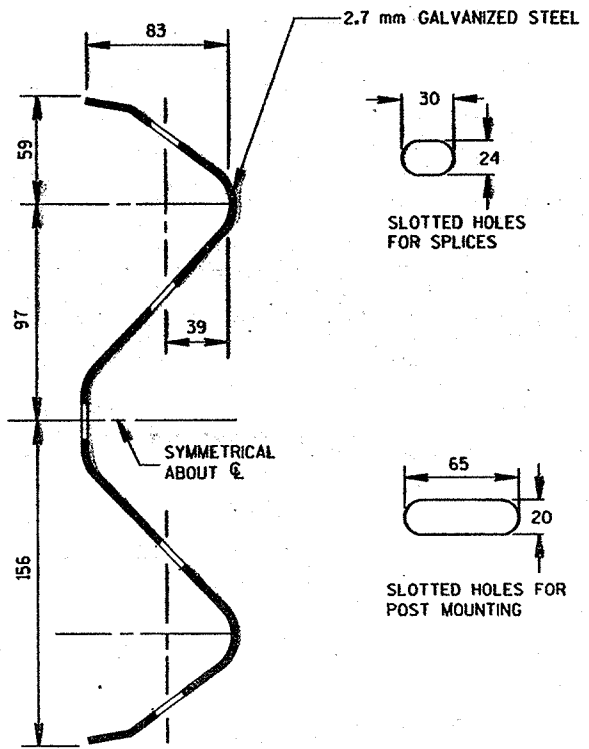
FRONT VIEW
POST DETAIL



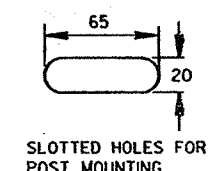
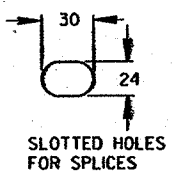
RAIL ELEMENT SPLICING
AND POST MOUNTING DETAIL

Ø - 15.875 mm X 35 mm
BUTTON HEAD BOLTS WITH OVAL
SHOULDERS & RECESS NUTS.

BUTTON HEAD BOLT
15.875 mm Ø X 255 mm
SECURED WITH ROUND WASHER
AND RECESS NUT.
(SEE BUTTON HEAD BOLT DETAIL).

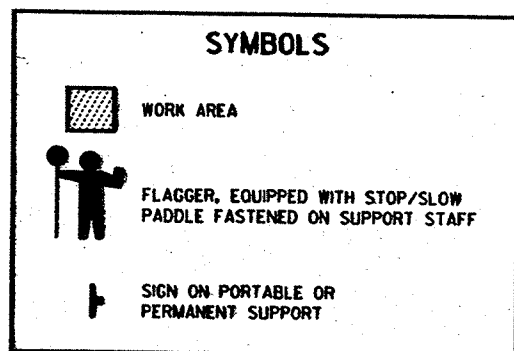


SECTION THRU RAIL ELEMENT

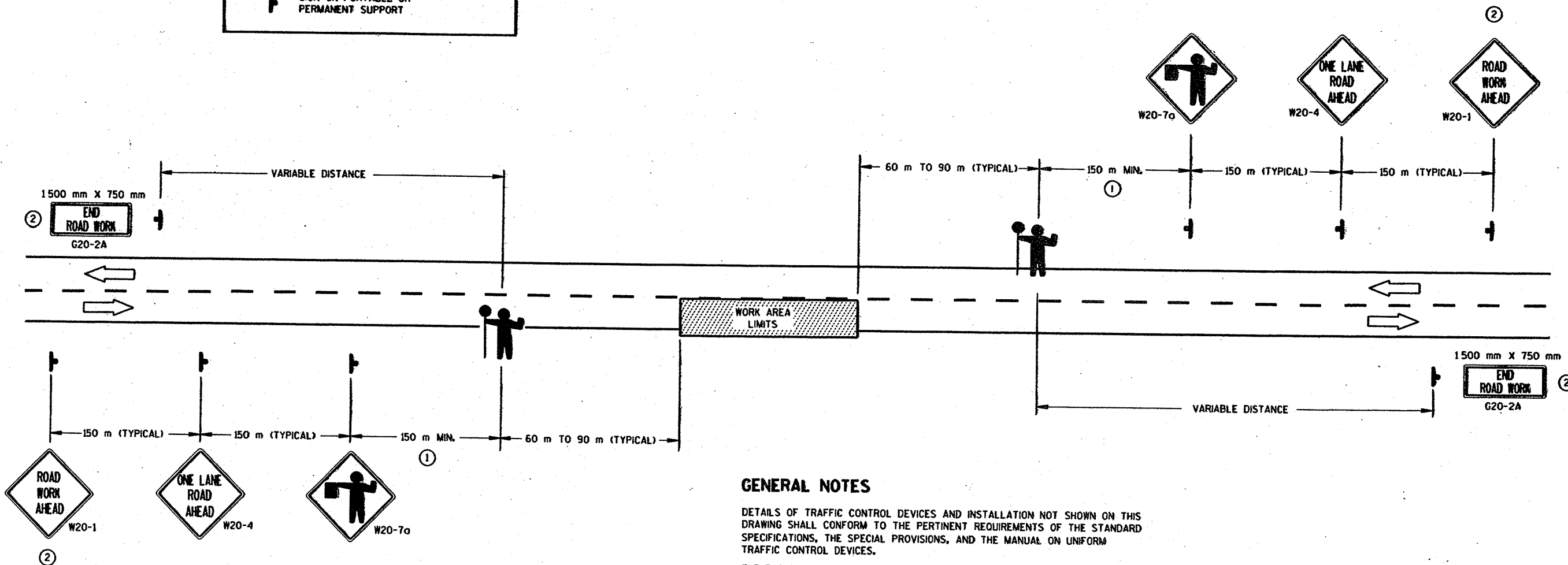


STEEL PLATE BEAM GUARD CLASS B	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 02/09/85 DATE	 CHIEF ROADWAY DEVELOPMENT ENGINEER

TWO-LANE ROADWAY



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 150 m TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

ALL SIGNS ARE 1200 mm X 1200 mm UNLESS OTHERWISE NOTED.

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 10 km INTERVALS IN THE MOVING WORK OPERATION OR AS DIRECTED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-7-95
DATE

Charles J. Spang
DIRECTOR, OFFICE OF TRAFFIC

FWA

PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR:

S.D.D. 15 C 12-2

LEVELS ON - 2,3,4,5,6,7,8, 9,10,11,12,13,14,15, 16, 17, 18, 19, 20,21,22, 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, 59,60,61, 62,63

FILE NAME:

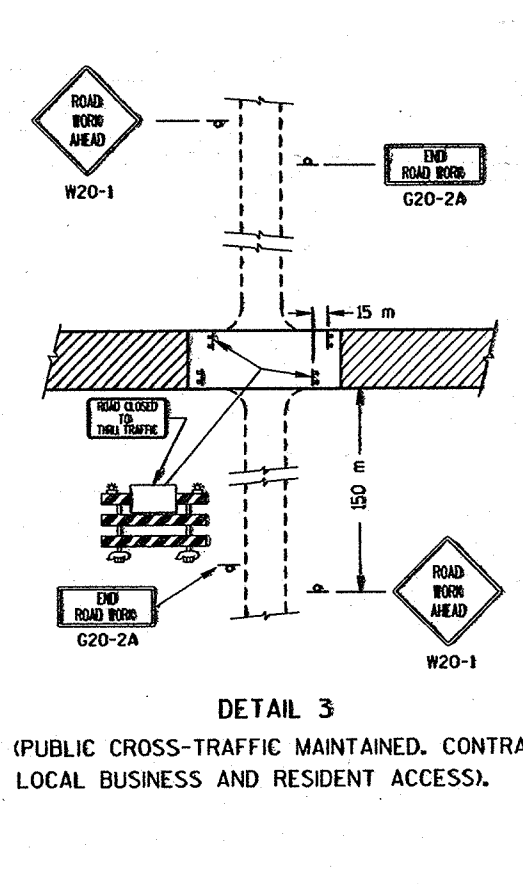
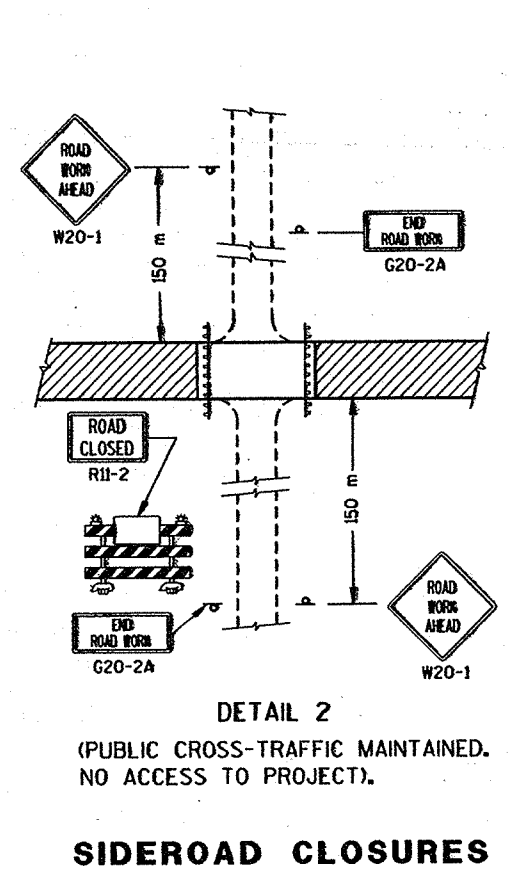
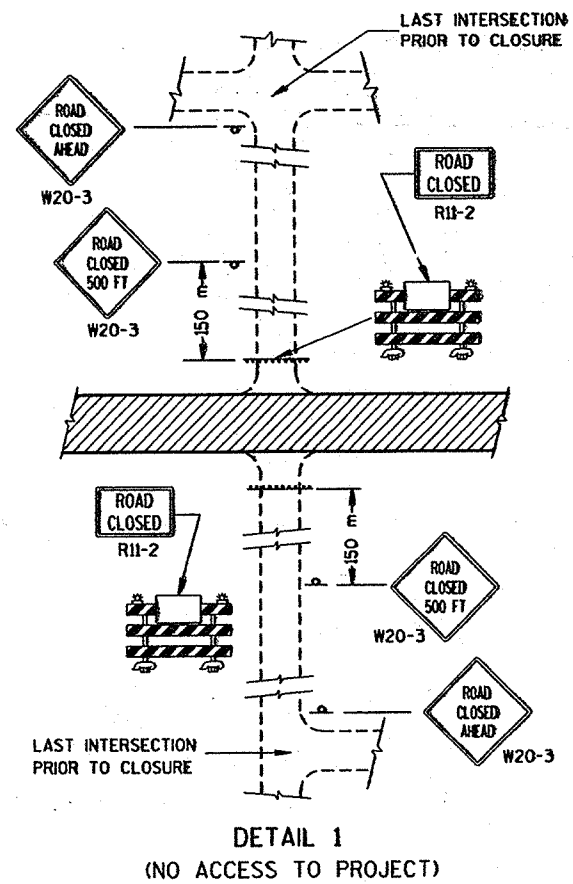
PLOT SCALE:

PLOT NAME:

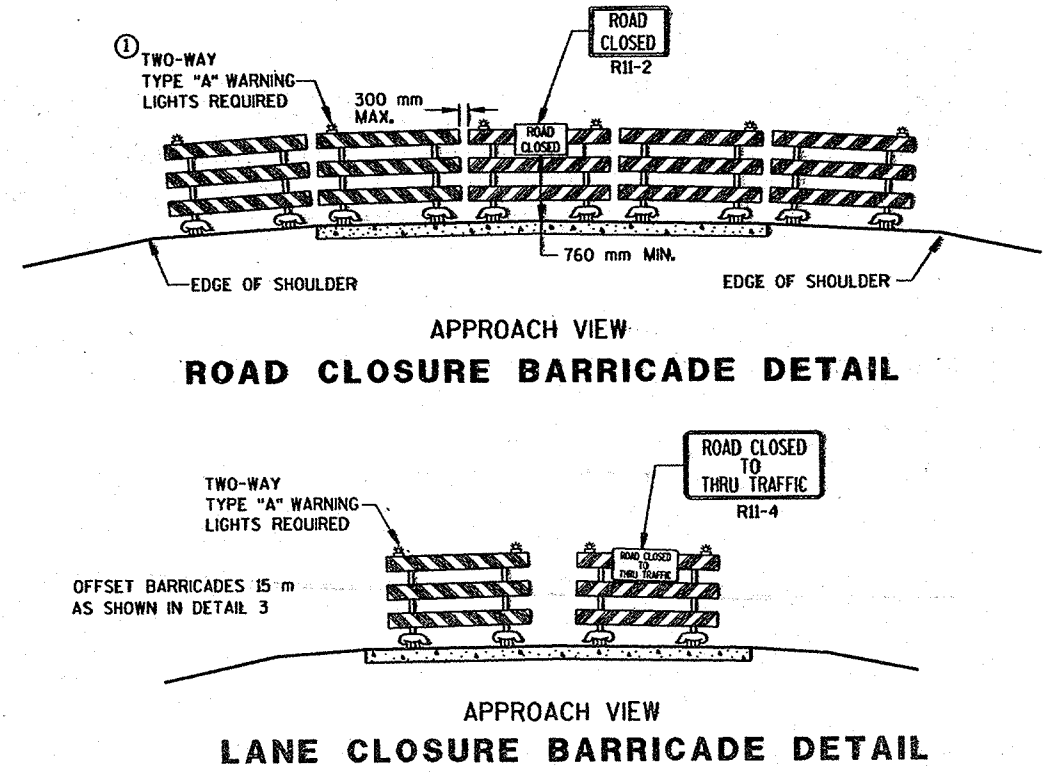
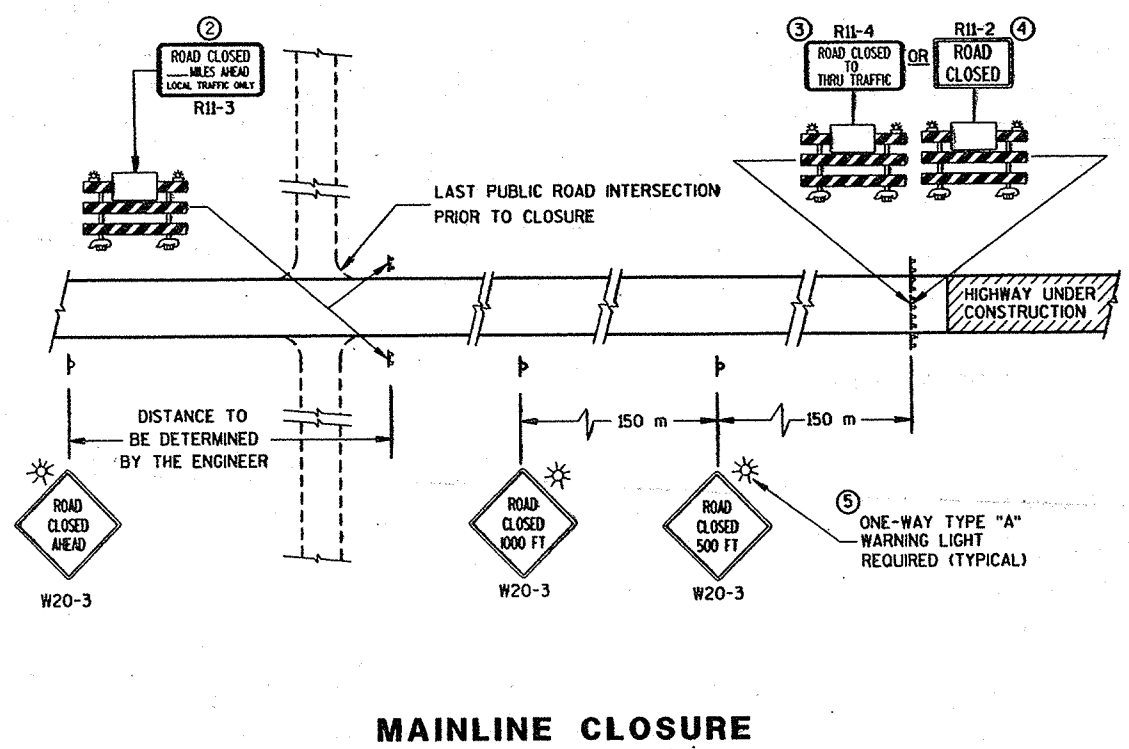
REV. DATE: 8-10-95

ORIGINATOR:

S.D.D. 15 C 2-3
LEVELS ON - 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63



SIDEROAD CLOSURES



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 R11-3 AND R11-4 SIGNS.
- ALL SIGNS SHALL BE 1200 mm X 1200 mm UNLESS OTHERWISE NOTED BELOW:
 R11-2, "ROAD CLOSED" SIGNS SHALL BE 1200 mm X 750 mm.
 R11-3, AND R11-4 SIGNS SHALL BE 1500 mm X 750 mm.
 G20-2A SIGNS SHALL BE 1200 mm X 600 mm.
- 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.
 - THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
 - FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL.
 - FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL.
 - 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.

- ⊠ 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 SIGNS FOR ROAD CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8-10-95 DATE	<i>Christa J. Spang</i> for DIRECTOR, OFFICE OF TRAFFIC
PHWA	M

PLOT SCALE:

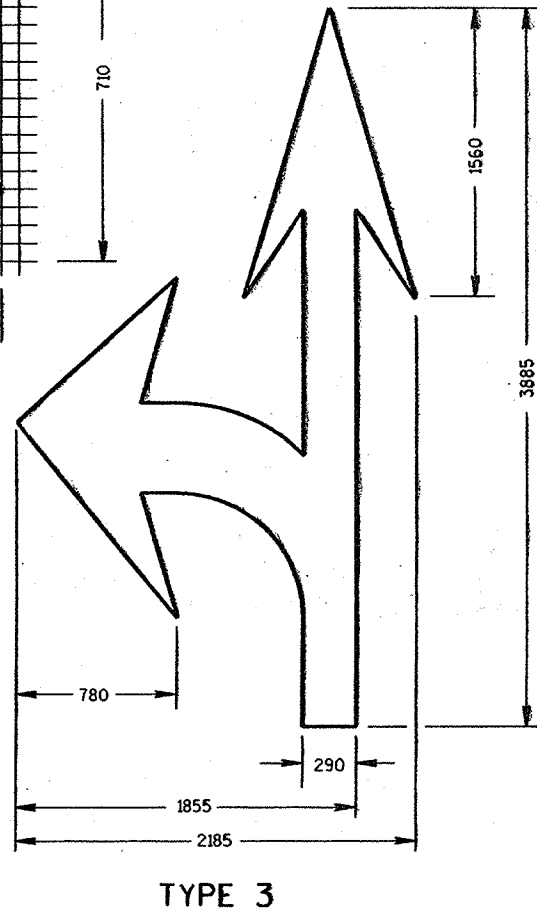
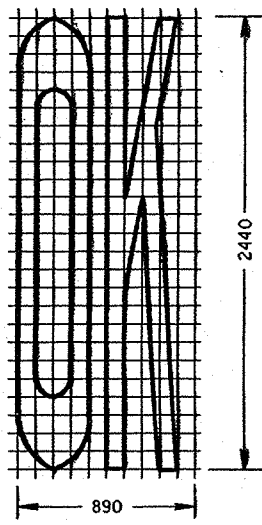
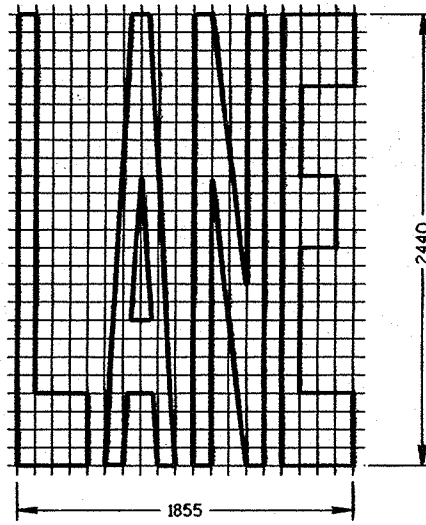
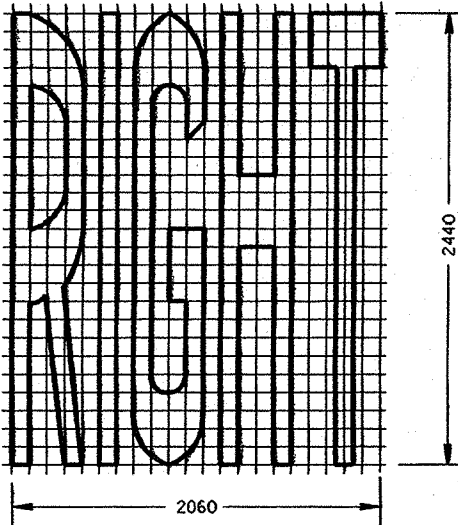
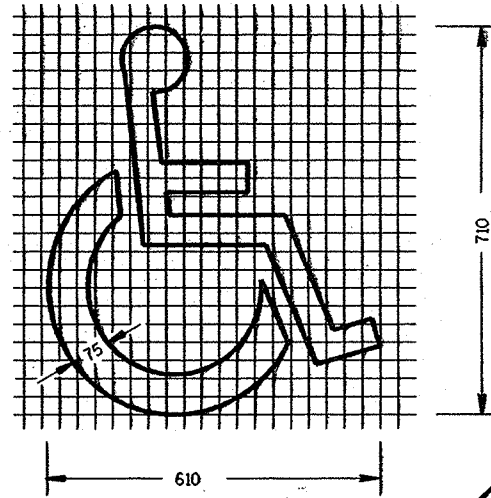
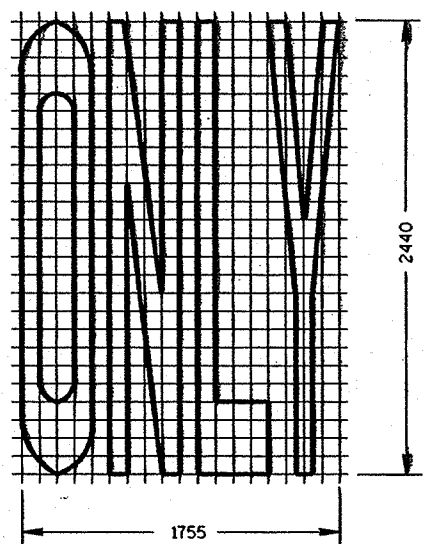
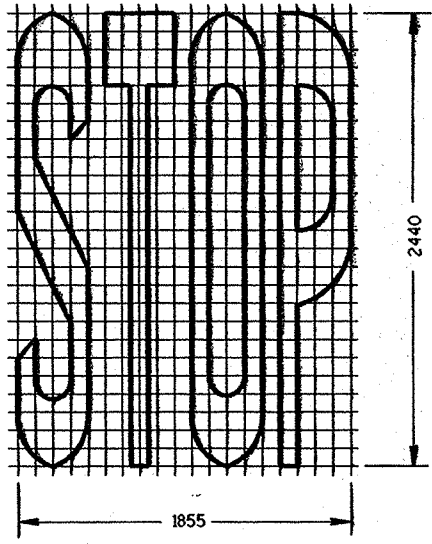
PLOT NAME:

REV. DATE:

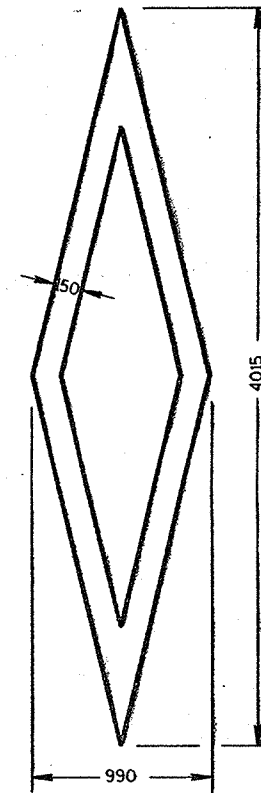
ORIGINATOR:

S.D.D. 15 C 7-60

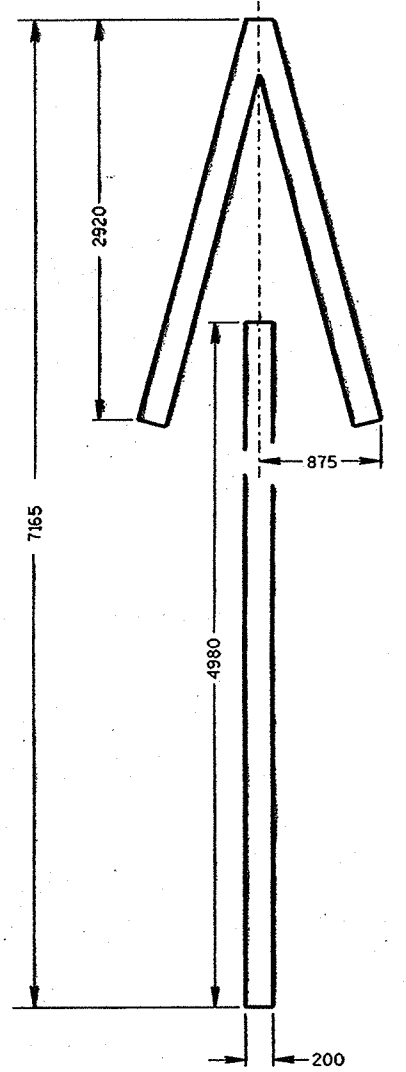
LEVELS ON - 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



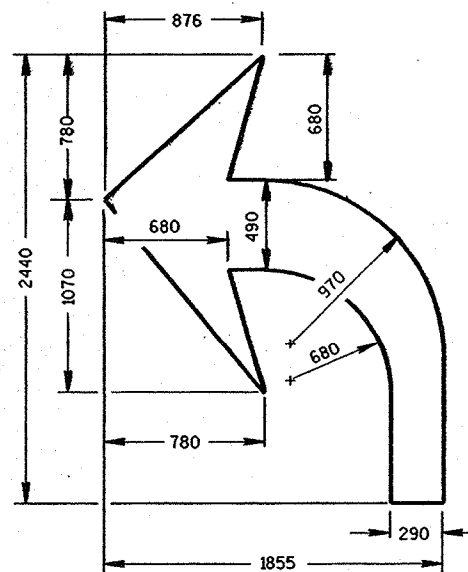
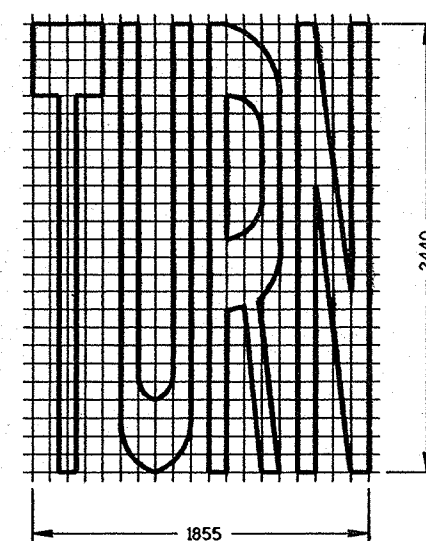
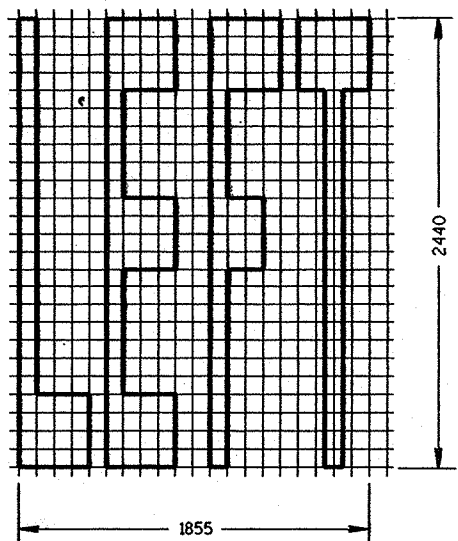
TYPE 3



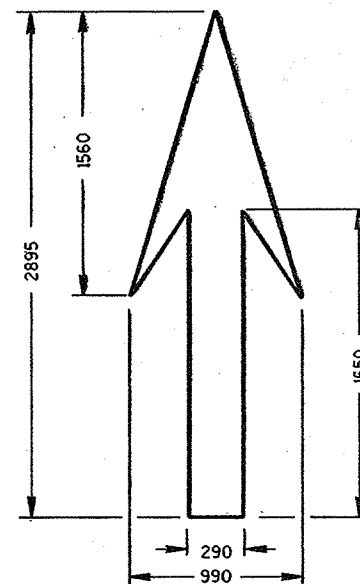
PREFERENTIAL LANE SYMBOL



TYPE 4



TYPE 2



TYPE 1

GENERAL NOTES

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

ALL LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED.

A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.

NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-15-97
DATE

Christie J. Spang
for DIRECTOR, OFFICE OF TRAFFIC

FWA



FILE NAME:

PLOT SCALE: 6-28-95

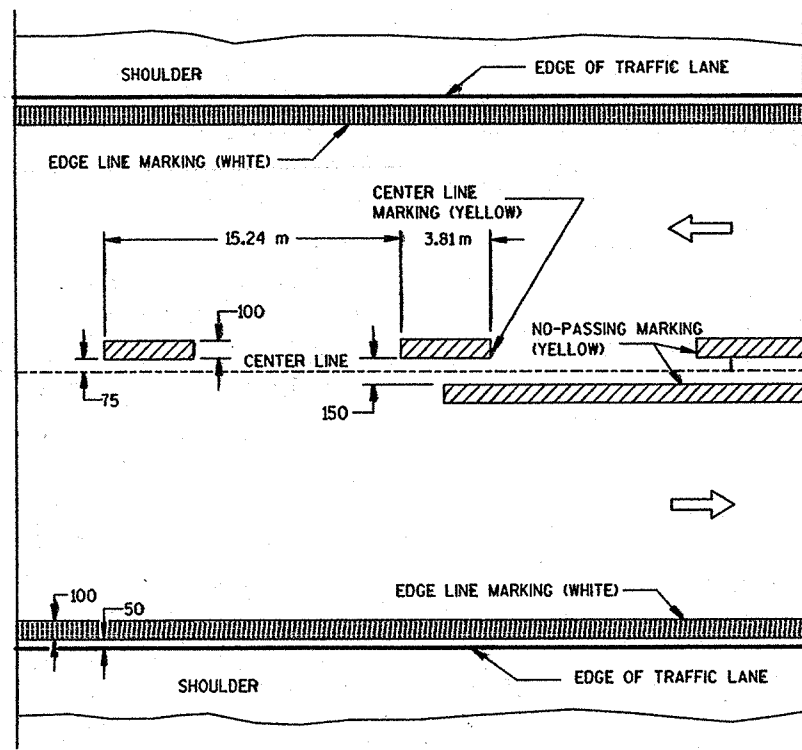
PLOT NAME:

REV. DATE:

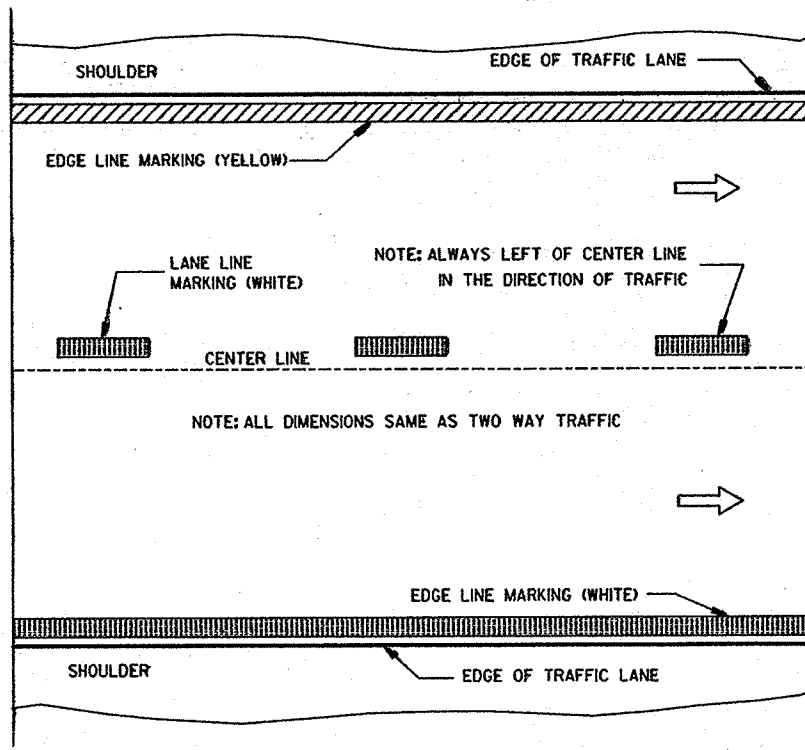
ORIGINATOR:

S.D.D. 15 C 8-8d

LEVELS ON - 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63

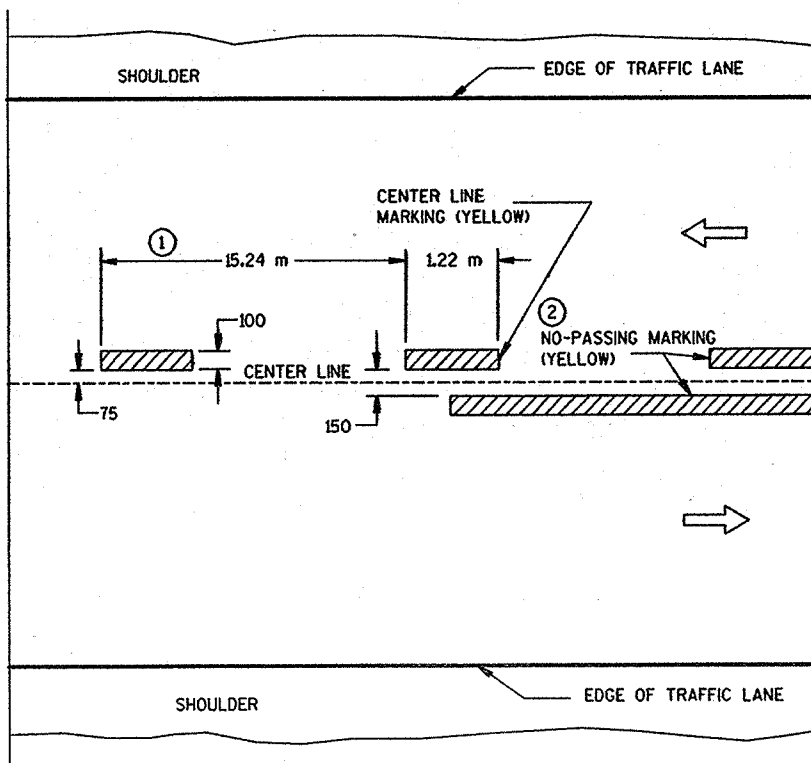


TWO WAY TRAFFIC

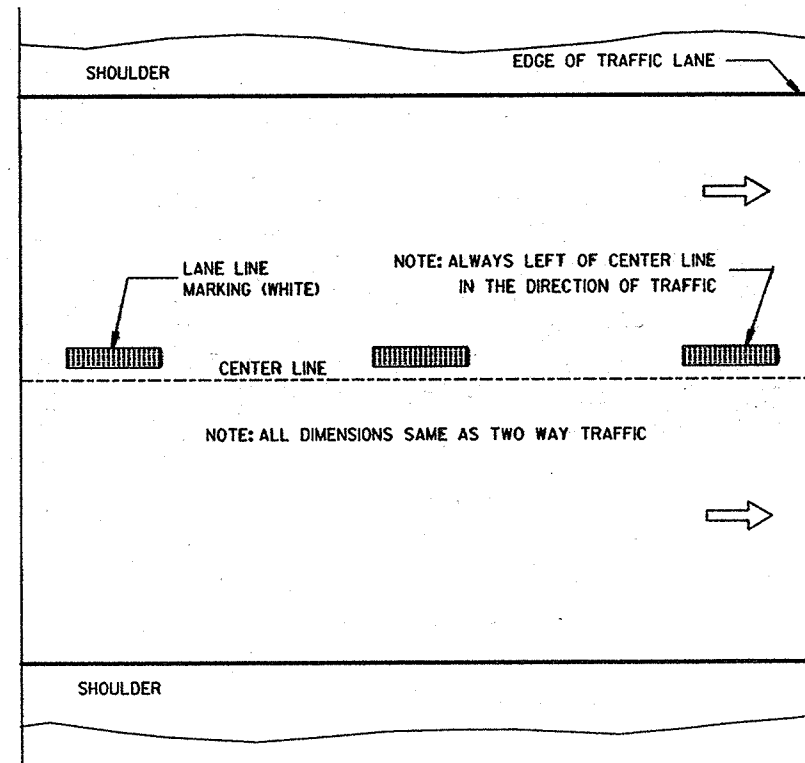


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

GENERAL NOTES

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

- ① HALF CYCLE LENGTHS (7.62 m±) WITH 600 mm 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.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-10-98
DATE

Chester J. Spring
CHIEF SIGNS AND MARKING ENGINEER

FWHA

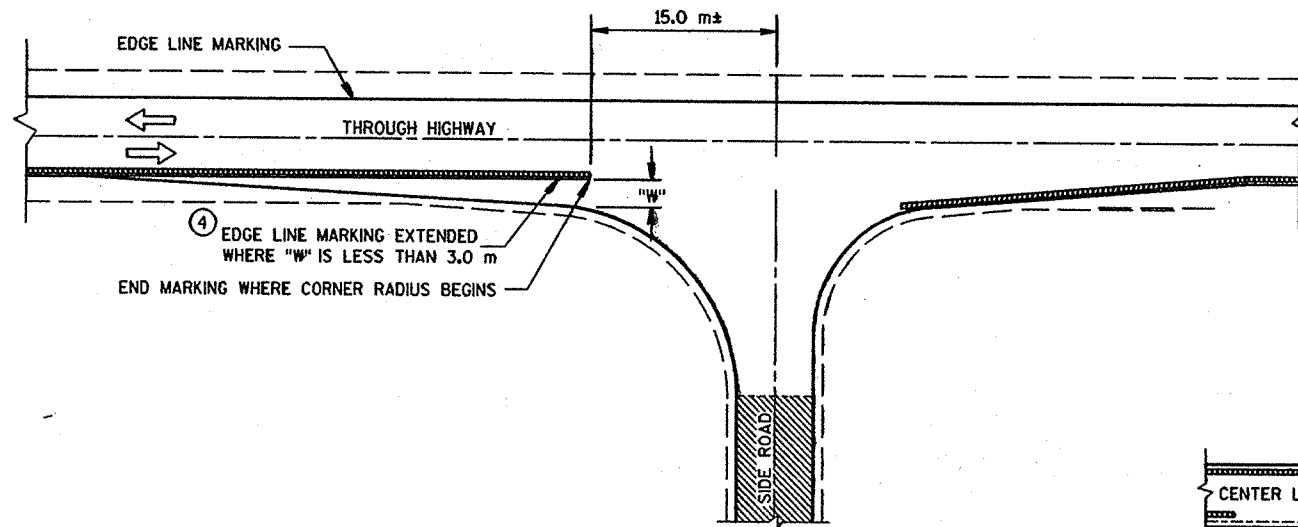
M

S.D.D. 15 C 8-89
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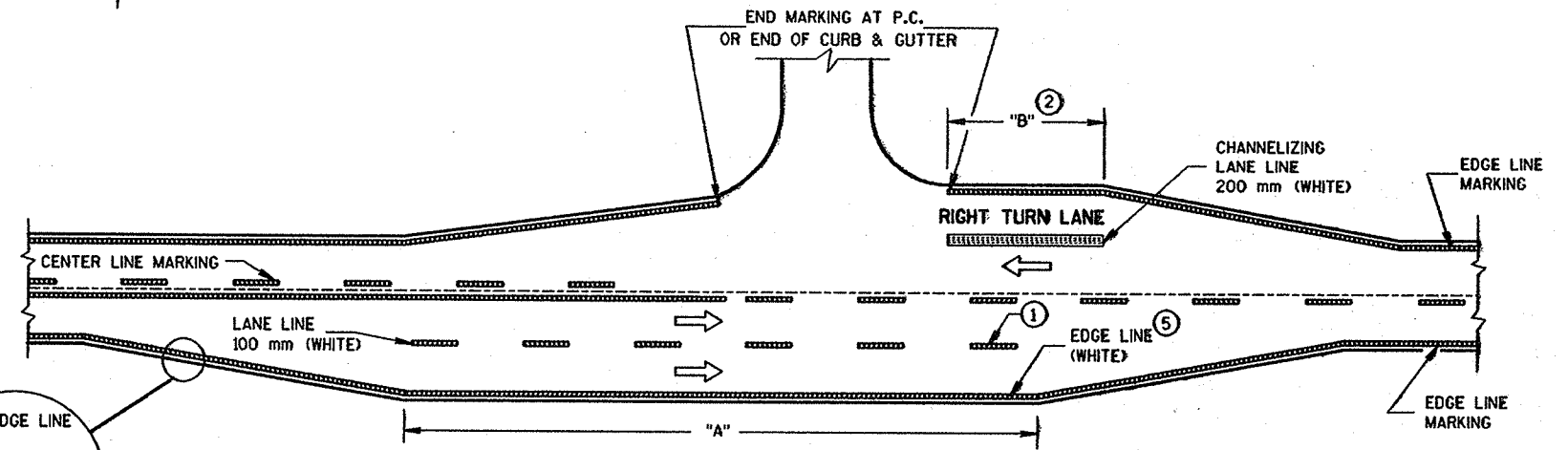
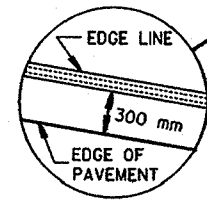
NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

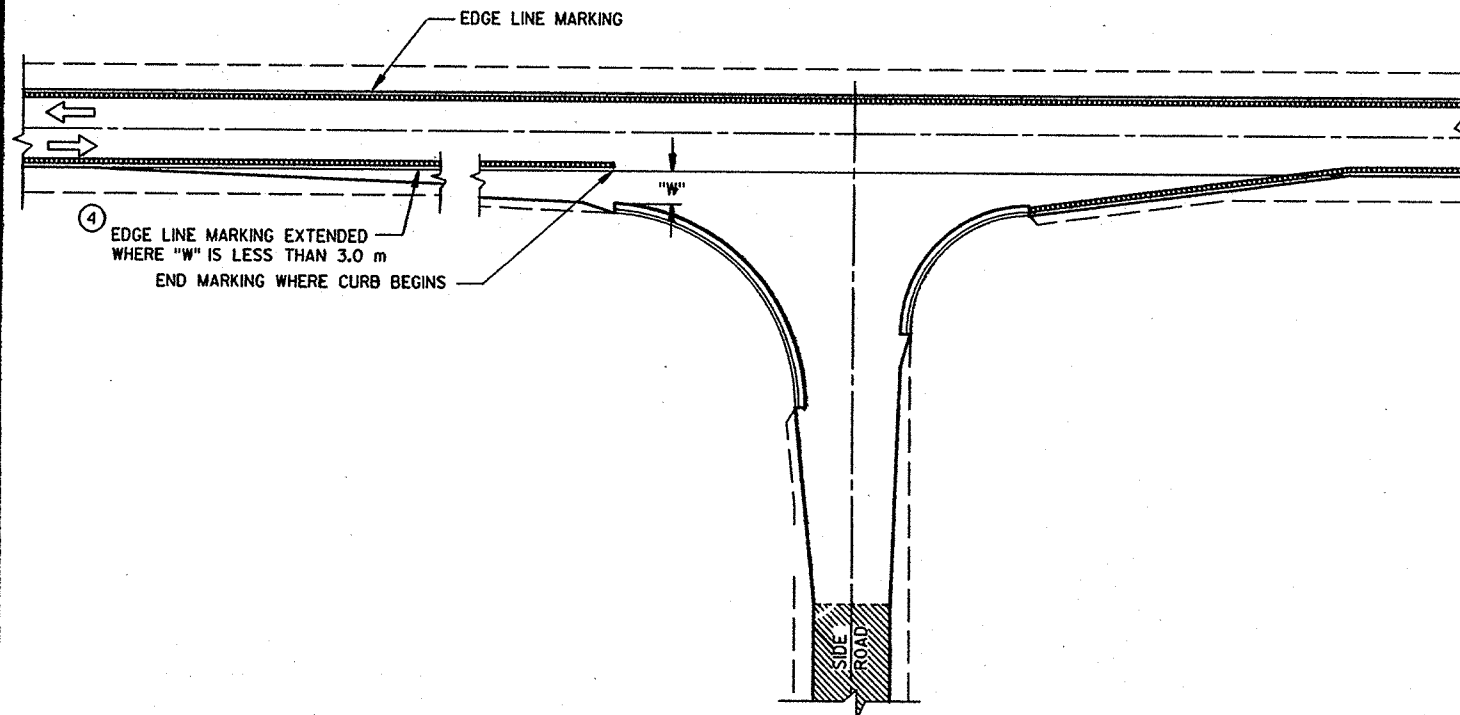
- ① WHEN DISTANCE "A" IS LESS THAN 76 m, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 30 m, OMIT CHANNELIZING LANE LINE.
- ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
- ④ LOCATE THE EDGE LINE ALONG THE TAPER WHERE "W" IS 3.0 m OR MORE.
- ⑤ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 300 mm FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.



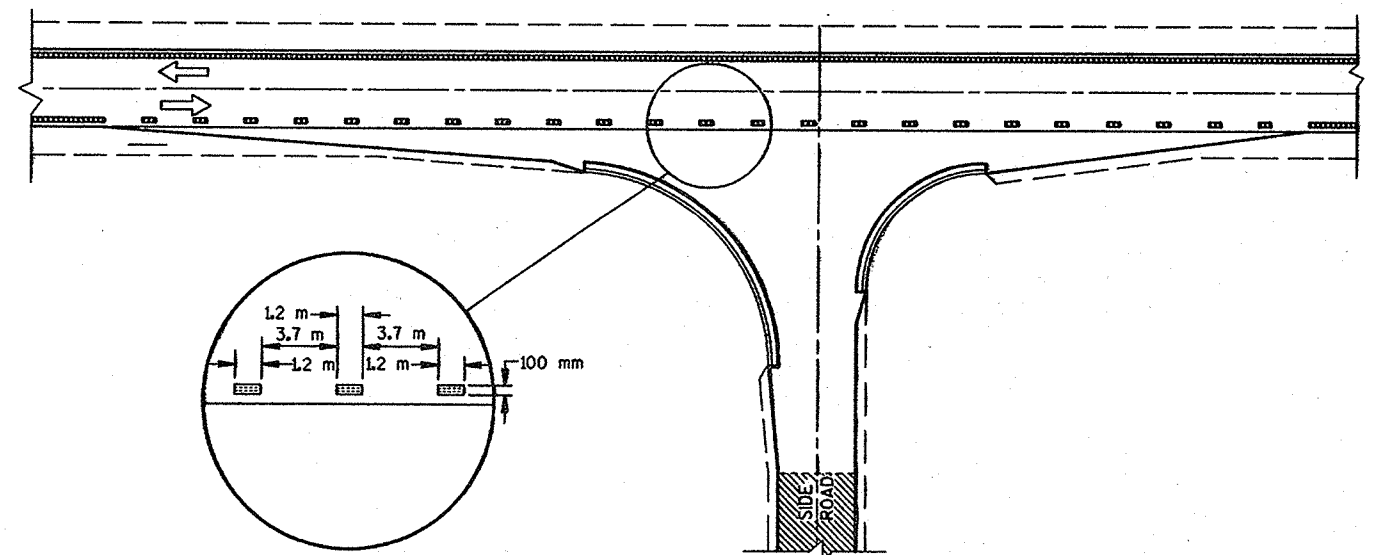
MINOR INTERSECTION WITHOUT CURBS



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)

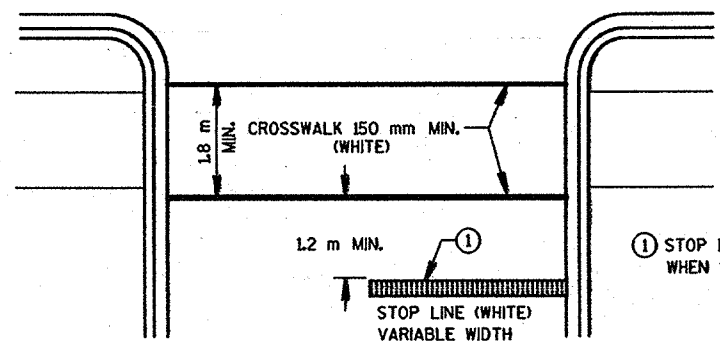


MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

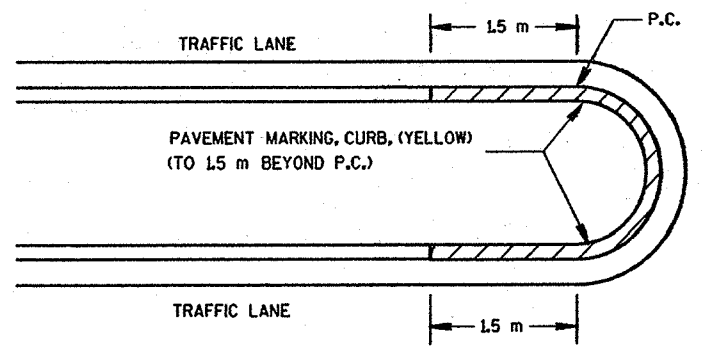
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 15 C 8-8e
LEVELS ON - 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63

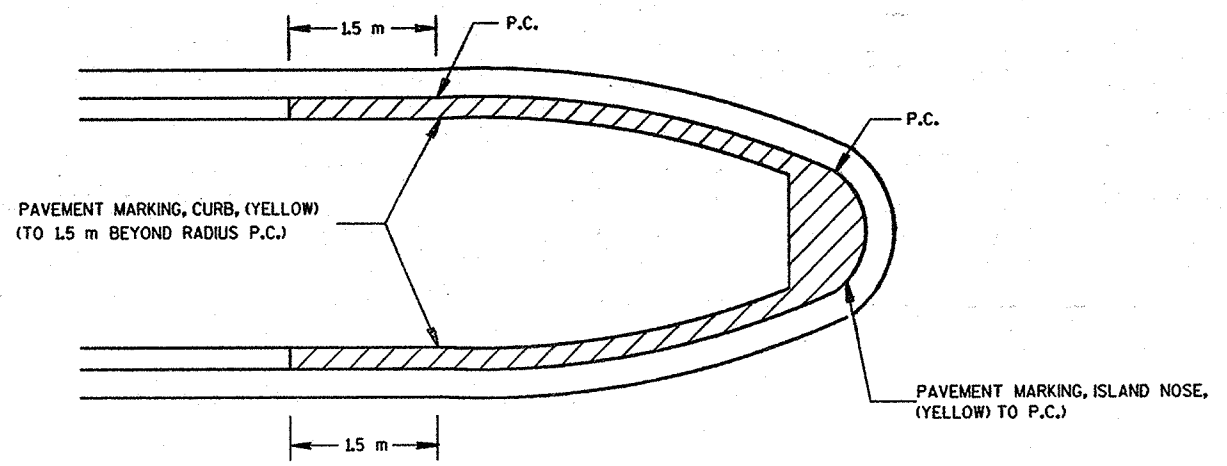


STOP LINE AND CROSSWALK

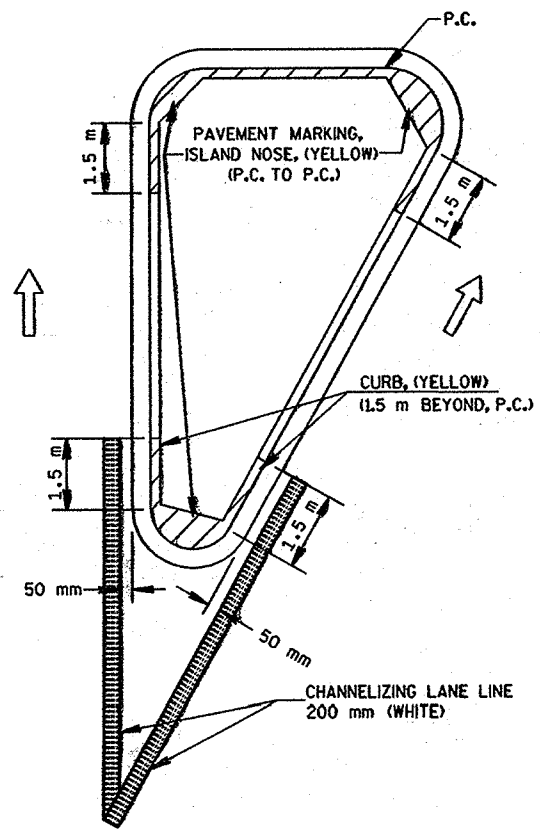
① STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT



MEDIAN CURB

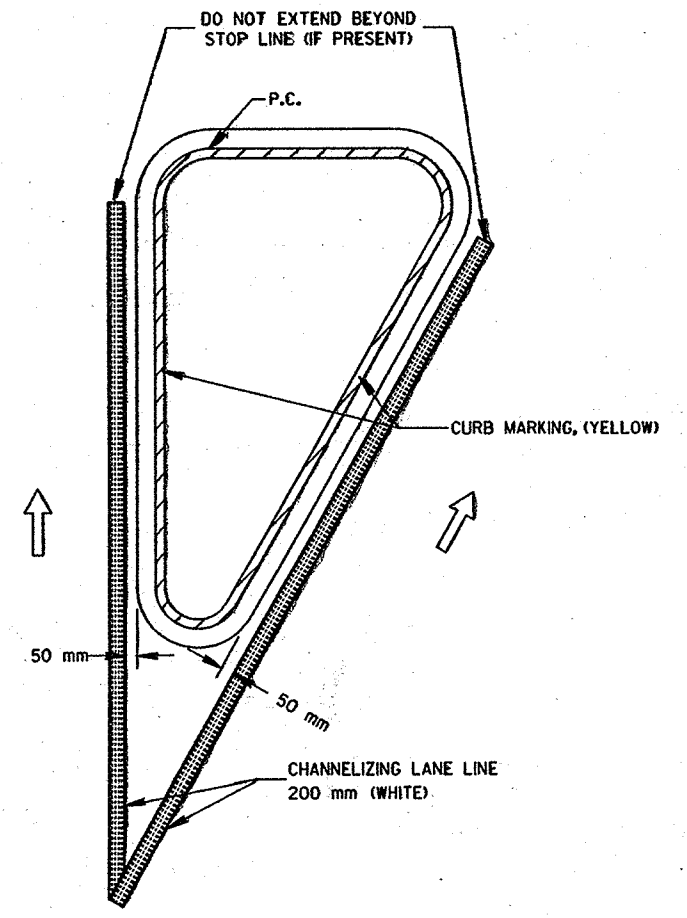


BULLET NOSE ISLAND



LARGE ISLAND

(GREATER THAN 15.0 m PERIMETER OR ANY SIDE
GREATER THAN 8.0 m BETWEEN CURVES)



SMALL ISLAND

(LESS THAN 15.0 m PERIMETER OR ANY SIDE
LESS THAN 8.0 m BETWEEN CURVES)

NOTE:
ARROW SYMBOL (→)
SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS, STOP LINE &
CROSS WALK)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-10-98
DATE

Christie J. Spring
CHIEF SIGNS AND MARKING ENGINEER

FWA

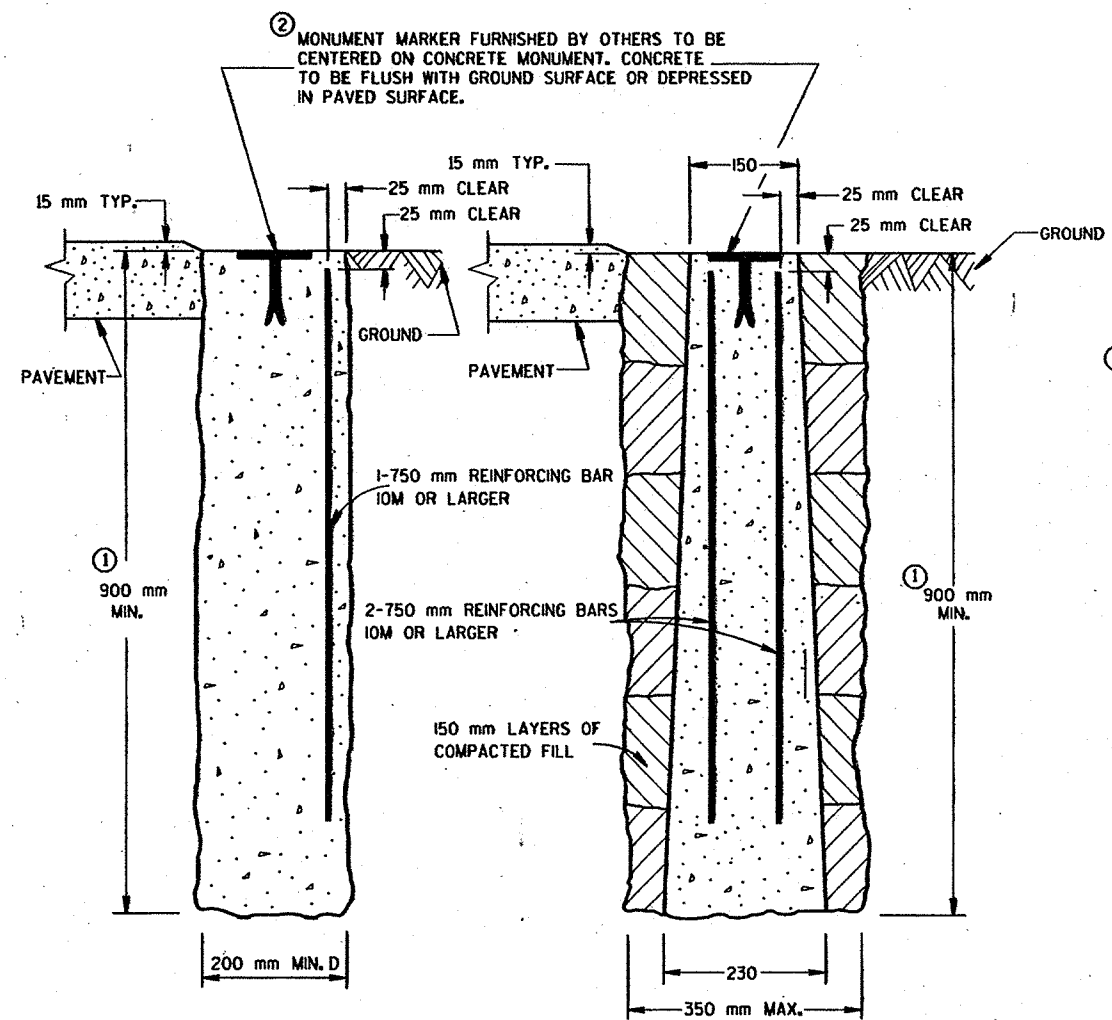
M

PLOT NAMES

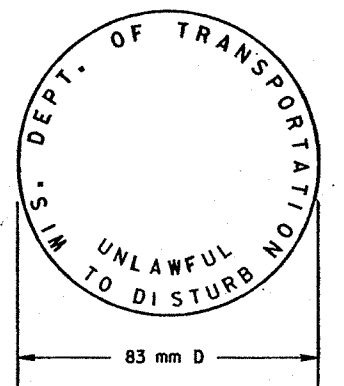
REV. DATES

ORIGINATOR

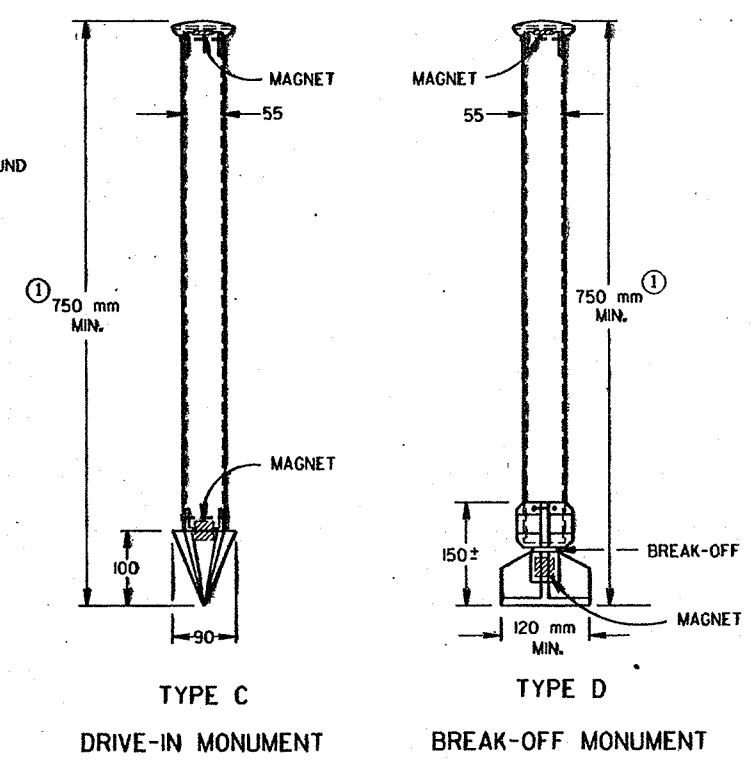
S.D.D. 16 A 1-5
LEVELS ON - 2,3,4,5,6,7,8, 9,10,11,12,13,14,15, 16,17,18,19, 20,21,22, 23,24,25, 26,27, 28,29,30,31,32,33, 34,35,36,37,38,39, 40,41,42,43,44,45,46,47,48, 49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



CAST-IN-PLACE
PRECAST
CONCRETE MONUMENTS
TYPE A



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



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

NOTE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE

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.

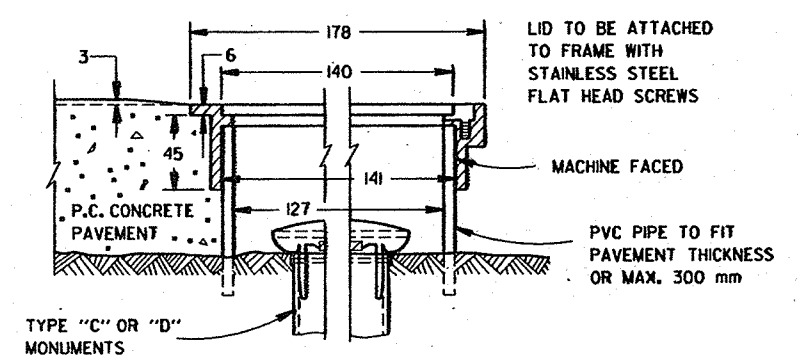
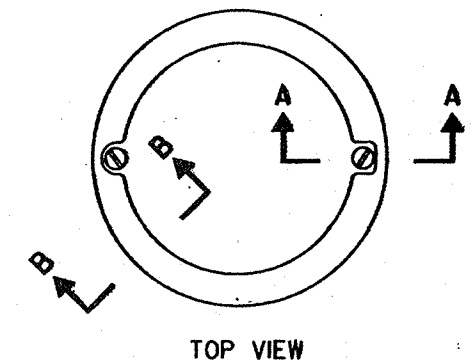
MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

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

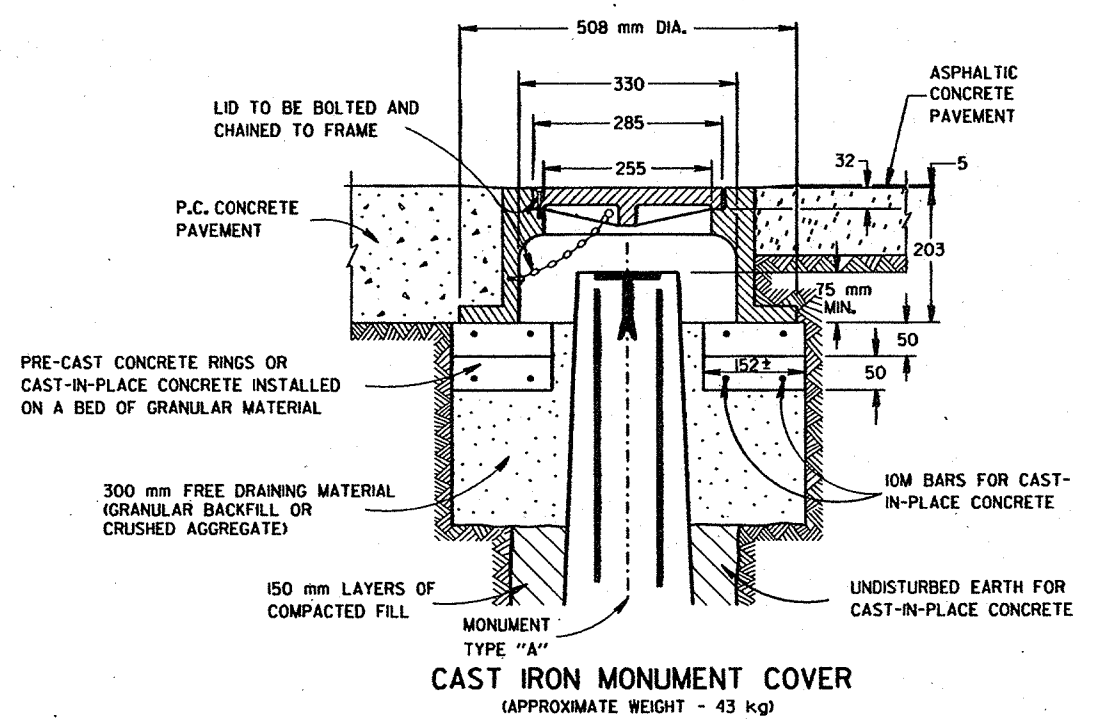
THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

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 1.2 m 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.



SECTION B-B SECTION A-A
ALUMINUM MONUMENT COVER
(APPROXIMATE WEIGHT 0.9 kg)
(FOR CONCRETE PAVEMENT ONLY)



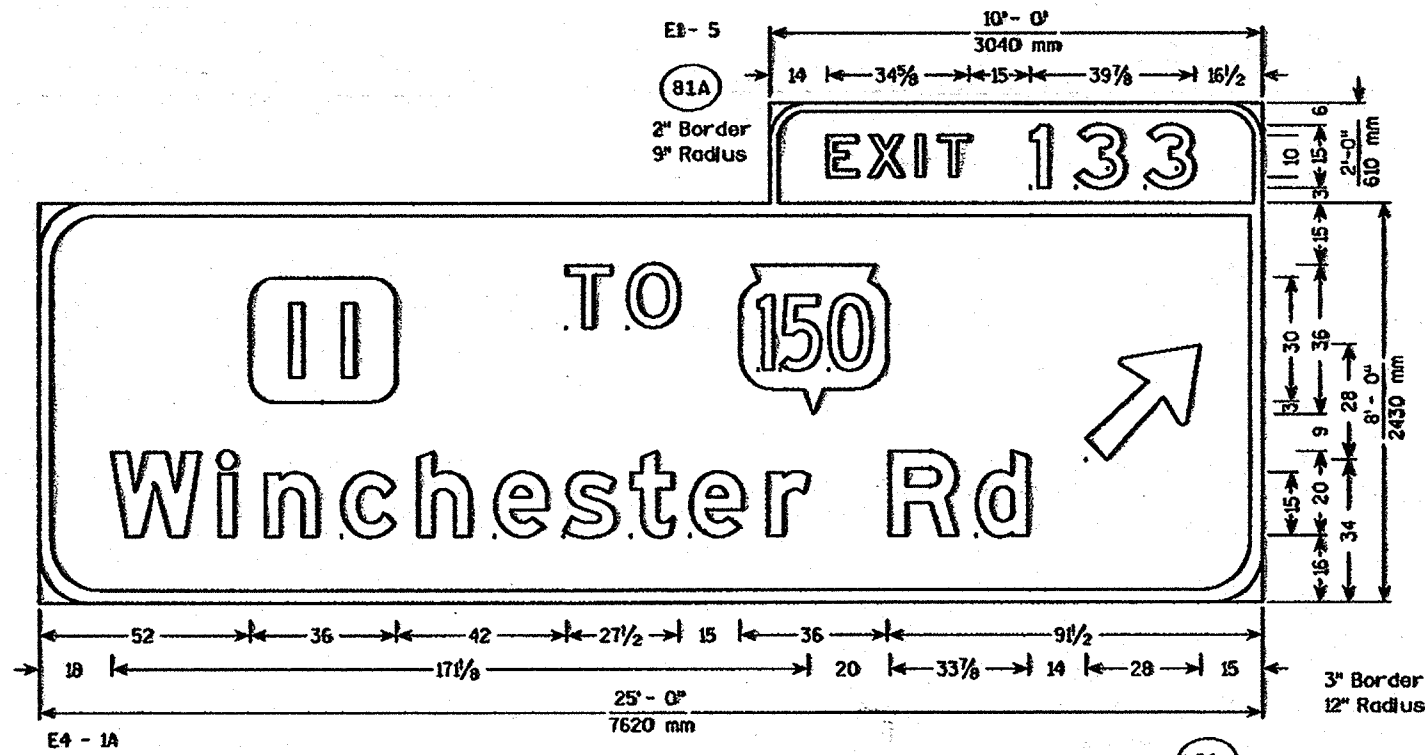
CAST IRON MONUMENT COVER
(APPROXIMATE WEIGHT - 43 kg)

LANDMARK REFERENCE
MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

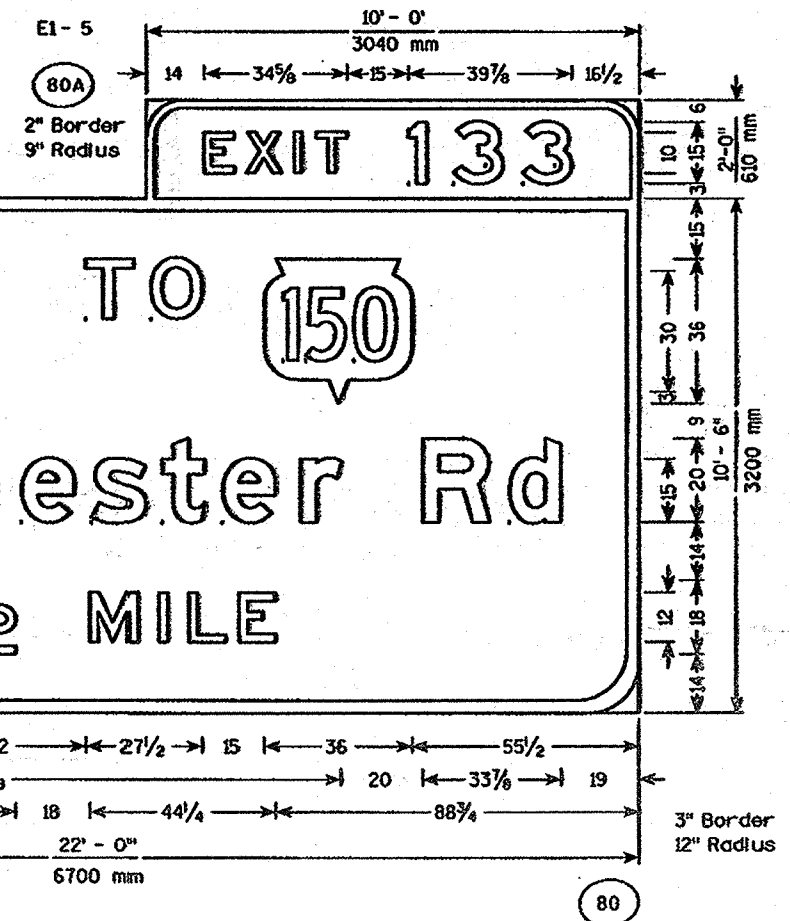
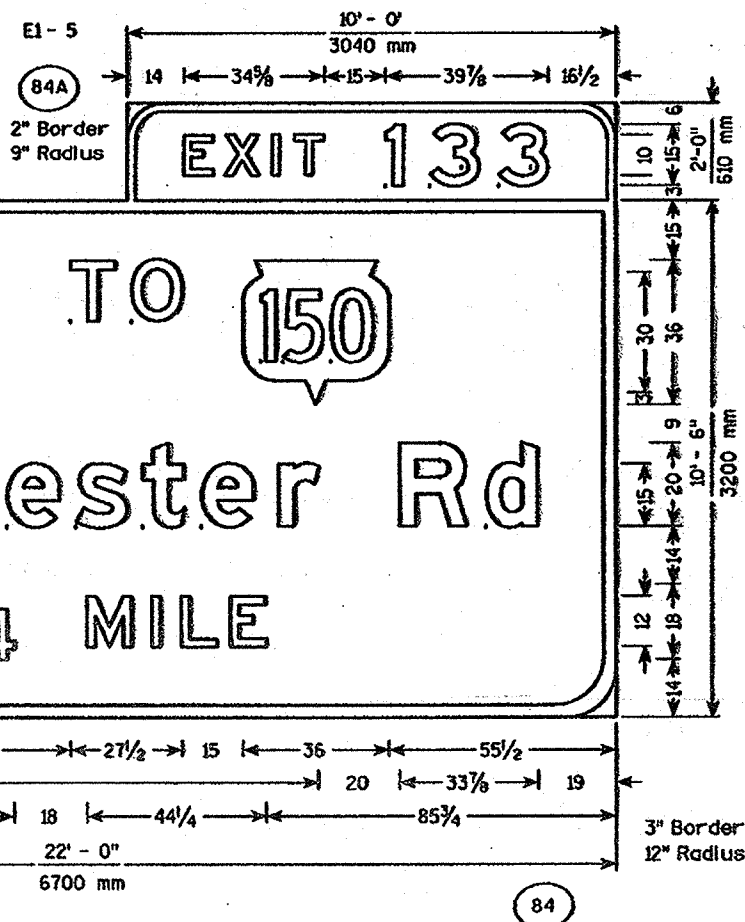
APPROVED
02/07/95
DATE
Roy J. Thompson
CHIEF ROADWAY DEVELOPMENT ENGINEER

FWMA



NOTES

1. All Signs are Type I- Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green
Message - White
3. Message Series - All CAP Letters are Series E. All Upper/Lower case Letters are Series E Modified.



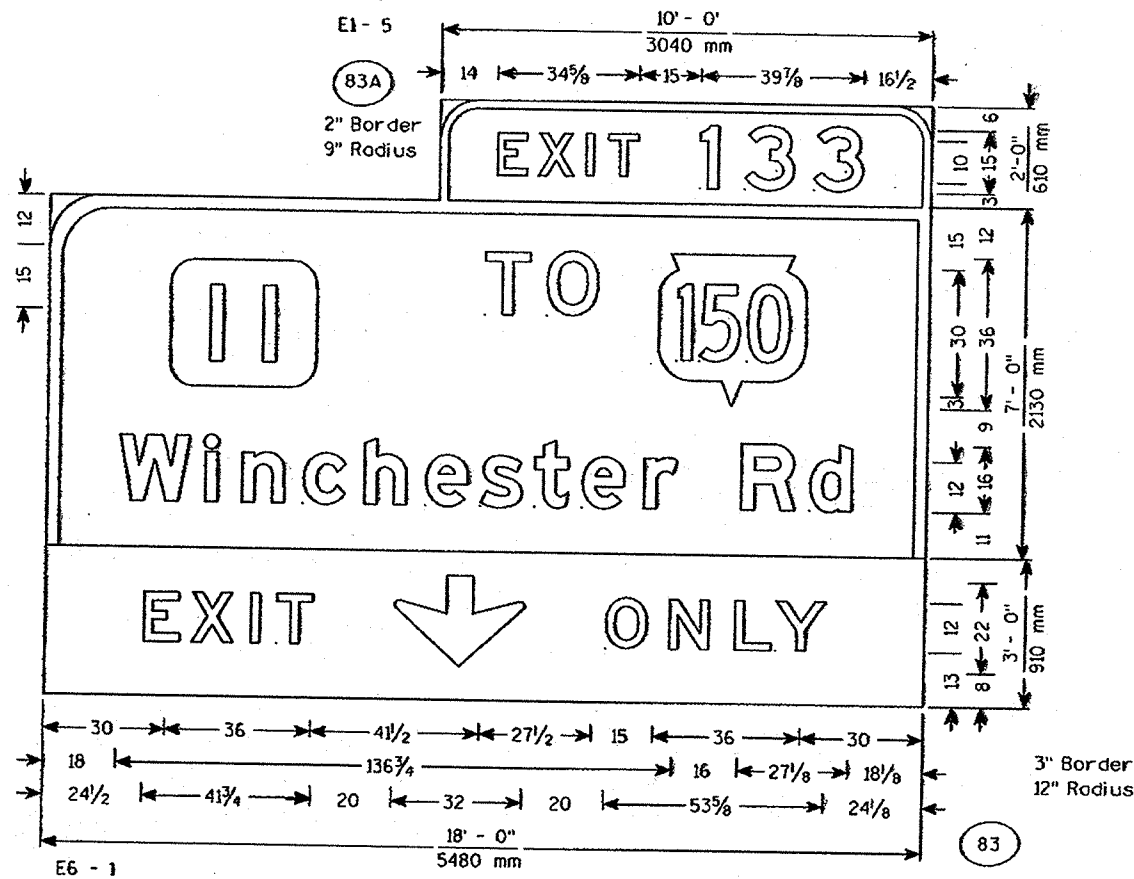
HWY:

COUNTY:

STATE PROJECT NO: 6448-03-71

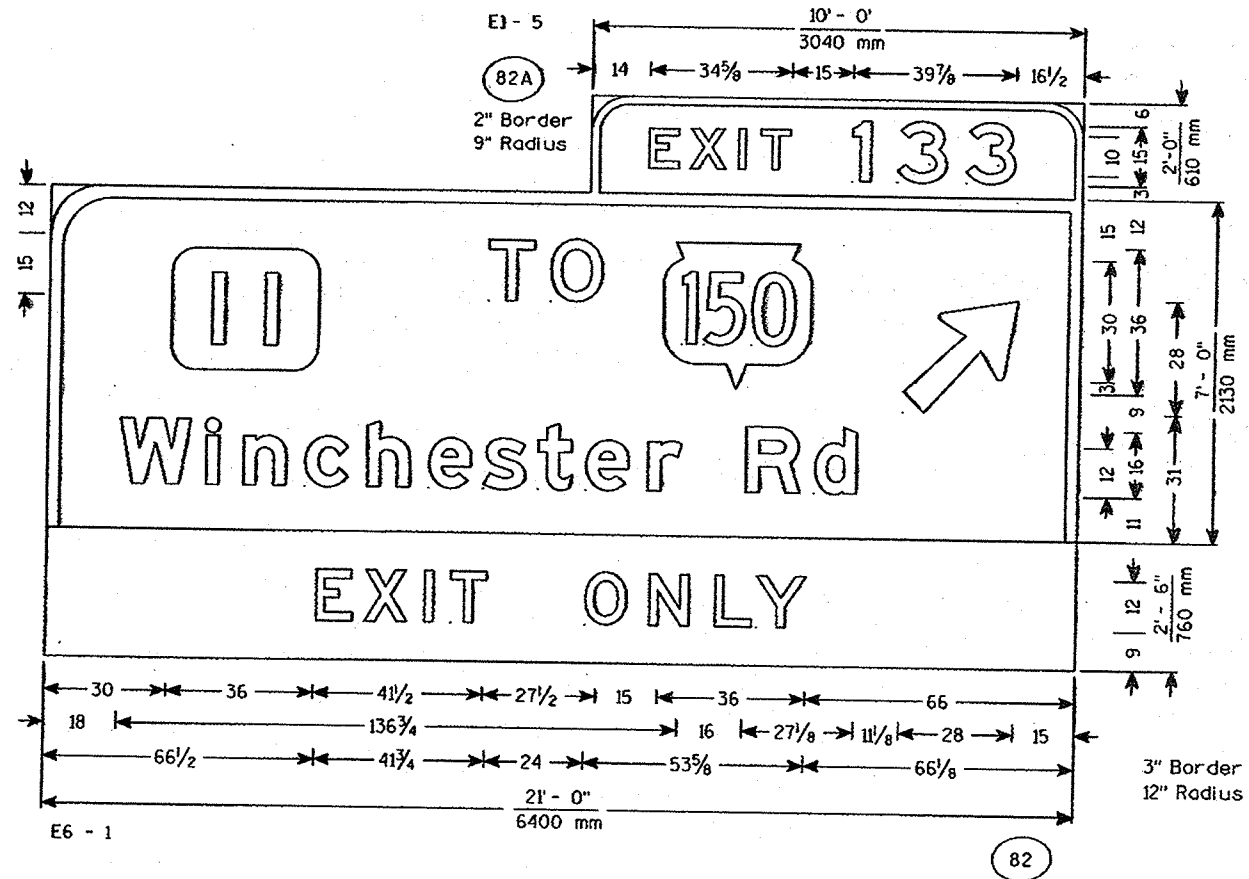
SHEET NO: 7.1

M

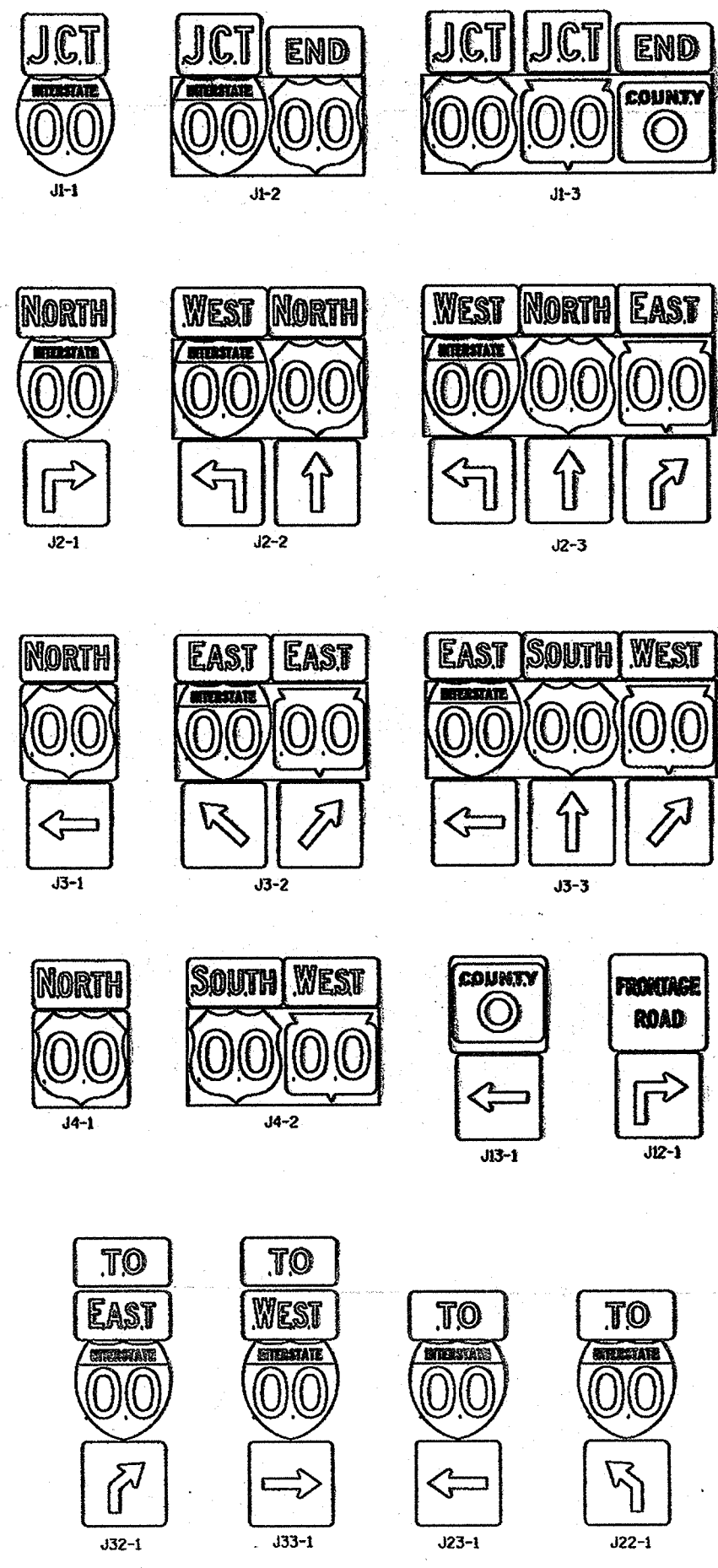


NOTES

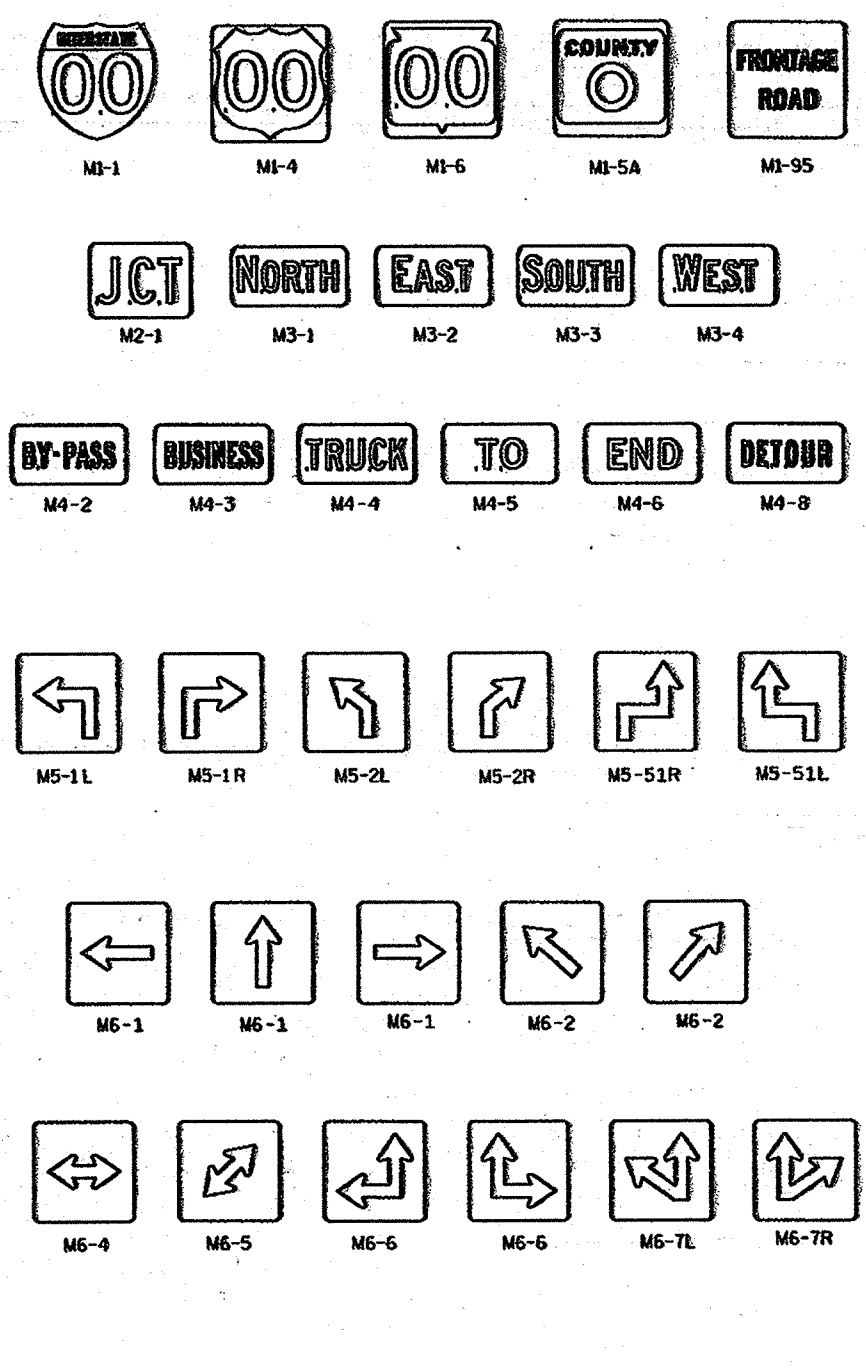
1. All Signs are Type I - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green (except see note 4)
Message - White (except see note 4)
3. Message Series - All CAP Letters are Series E. All Upper/Lower case Letters are Series E Modified.
4. Exit Only panels are Black non-reflective on a Type H Yellow reflective background.



TYPICAL ASSEMBLIES

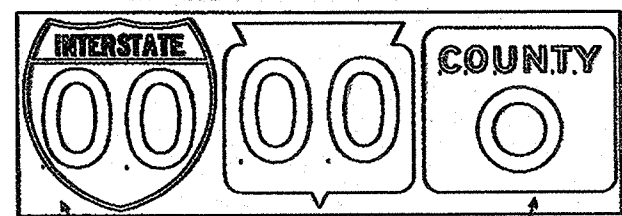


INDIVIDUAL COMPONENTS OF ASSEMBLIES



GENERAL NOTES

1. All components within any individual assembly shall be the same "size". The following table illustrates that situation:
- | SIZE | M1'S | M2 | M3'S & M4'S | M5'S & M6'S |
|-------|-----------|-----------|-------------|-------------|
| 2 | 600 X 600 | 525 X 375 | 600 X 300 | 525 X 525 |
| 3,4-5 | 900 X 900 | 750 X 525 | 750 X 375 | 750 X 750 |
2. For any assembly containing two or more route markers, the route markers SHALL be placed on a single high density overlay PLYWOOD panel. All other materials within the assembly can be either plywood or aluminum.
 3. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 marker shall be blue.
 4. All dimensions in millimeters unless otherwise noted.



PLOT SCALE: 12 : 1

PLOT NAME: 58-58-02

REV. DATE: 10/21/96

ORIGINATOR: Sandy Anderson

FILE NAME: A2IM.007
LEVELS 01 - 1, 2, 5, 6, 10

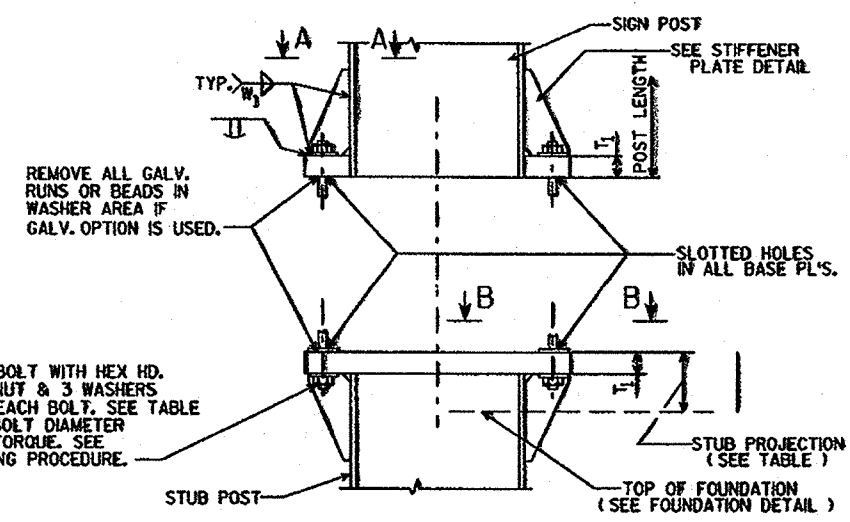
ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

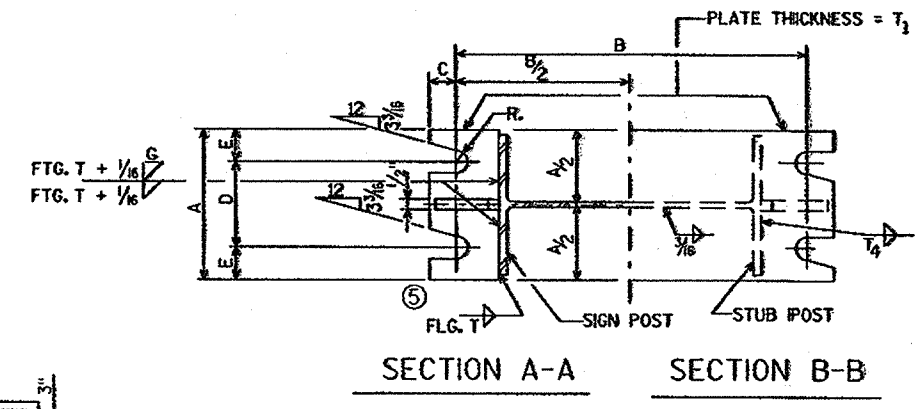
APPROVED *Chester J. Spang*
for State Traffic Engineer

DATE 10/28/96 PLATE NO. A2-1M.5

WISDOT/CADD'S METRIC SHEET **M**



SIGN POST AND STUB POST ELEVATION



SECTION A-A SECTION B-B

DESIGN DATA
 WIND PRESSURE = 75 M.P.H.
 WIND COMPONENTS - NORMAL = 1.0 TRANSVERSE = 0.0
 ICE LOAD = 3 P.S.F.

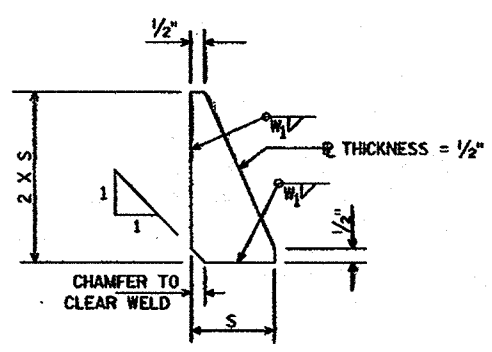
GROUP LOADS	PERCENT OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD & WIND	140
3. DEAD, ICE & 1/2 WIND ^a	140 ^a 25 P.S.F. MIN.

 ALLOWABLE SOIL PRESSURE = 1/2 T / SQ. FT.
 WIND LOAD WAS APPLIED TO THE AREA OF THE SIGN AND TO THE SUPPORTING MEMBERS.
 ICE LOAD WAS APPLIED TO ONE FACE OF THE SIGN AND AROUND THE SURFACE OF THE SUPPORTING MEMBERS.

GENERAL NOTES
 DRAWINGS SHALL NOT BE SCALED.
 DESIGN CONFORMS WITH A.A.S.H.T.O. SPECIFICATIONS 1985.
 ALL POSTS, POST STUBS & ATTACHMENTS SHALL BE A.S.T.M. A709 GRADE 50, EXCEPT WHERE CONTRACT REQUIRES A.S.T.M. A709 GRADE 50 W.
 IF A709 GRADE 50 MATERIAL IS USED, THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST, FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.
 H.S. BOLTS, WASHERS & NUTS SHALL BE A325 GALVANIZED WHEN POSTS, POST STUBS AND ATTACHMENTS ARE A709 GRADE 50 AND GALVANIZED.
 H.S. BOLTS, WASHERS & NUTS SHALL BE A325 TYPE 3 NOT GALVANIZED WHEN CONTRACT REQUIRES A709 GRADE 50 W POSTS, POSTS STUBS AND ATTACHMENTS.

BOLTING PROCEDURE - BASE CONNECTION

1. ASSEMBLE SIGN POST TO STUB POST WITH BOLTS AND ONE OF THE FLAT WASHERS ON EACH BOLT BETW. PLATES.
 2. SHIM AS REQD. TO PLUMB POST.
 3. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS, THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. (SEE TABLE)
 4. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.
- NOTE:
TIGHTEN THE HIGH STRENGTH BOLTS TO THE TORQUE SHOWN. DO NOT OVERTIGHTEN.



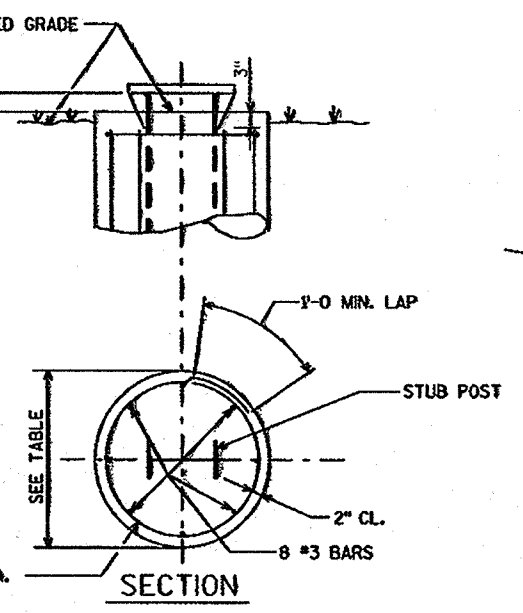
STIFFENER PLATE DETAIL
(SEE TABLE FOR DIMENSIONS)

FURNISH 2 @ .012" ± THICK AND 2 @ .032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO A.S.T.M. - B36.

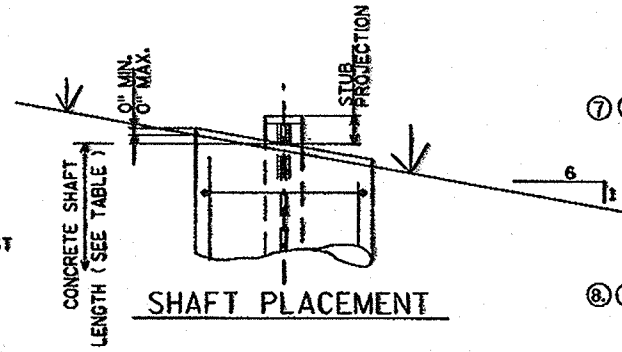
SHIM DETAIL

QUANTITIES FOR 1 FOOTING		
	CONC. MASONRY C.Y.	REINF. STEEL LBS.
A	0.6	34
B	0.8	49
C	0.9	50
D	0.9	56
E	1.0	62

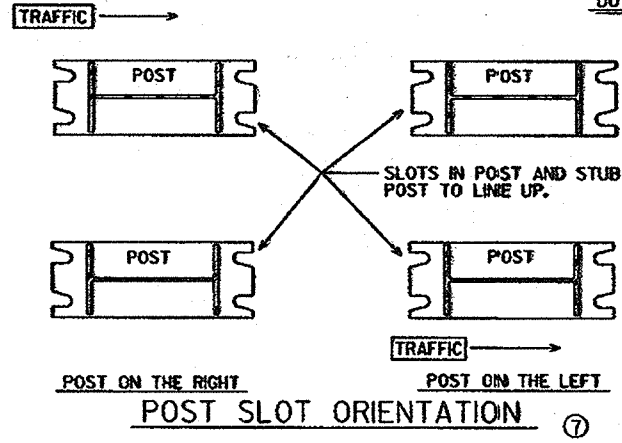
REINF.	TYPE	#3		#4	
		QTY	SIZE	QTY	SIZE
⑦	A	8 @	4'-5"	5 @	6'-3"
	B	8 @	6'-5"	7 @	6'-3"
	C	8 @	6'-11"	7 @	6'-3"
	D	8 @	7'-5"	8 @	6'-3"
⑦	E	8 @	7'-11"	9 @	6'-3"



FOUNDATION DETAIL



SHAFT PLACEMENT



POST SLOT ORIENTATION

TYPE	DIMENSION POST SIZE	BOLT SIZE & TORQUE	BASE CONNECTION DATA TABLE										FOUNDATION DATA				K		
			A	B	C	D	E	T ₁	T ₄	W ₁	R	S	STUB LENGTH	STUB PROJECTION	SHAFT DIAMETER	SHAFT LENGTH			
④	A	W10"x12.0 #/FT.	3/4" @ 75'-FT.	5/4"	1'-0 3/8"	7/8"	3 1/2"	7/8"	1"	1 1/4"	1/4"	5/8"	5/8"	2 1/8"	3'-6"	3"	2'-0"	5'-0"	76.0*
④	B	W12"x16.0 #/FT.	7/8" @ 85'-FT.	5 1/2"	1'-4 1/4"	1"	3 1/2"	1"	1 1/4"	1/4"	5/8"	5/8"	3"	5'-6"	3"	2'-0"	7'-0"	146.5*	
	C	W12"x19.0 #/FT.	7/8" @ 85'-FT.	5 1/2"	1'-4 1/4"	1"	3 1/2"	1"	1 1/2"	3/8"	5/8"	5/8"	3"	6'-0"	3"	2'-0"	7'-6"	182.1*	
	D	W12"x22.0 #/FT.	7/8" @ 85'-FT.	5 1/2"	1'-4 1/4"	1"	3 1/2"	1"	1 1/2"	3/8"	5/8"	5/8"	3"	6'-6"	3"	2'-0"	8'-0"	210.5*	
③	E	W12"x26.0 #/FT.	1" @ 90'-FT.	7"	1'-4 1/4"	1 1/4"	4"	1 1/2"	1 1/2"	3/8"	5/8"	1 1/2"	3"	7'-0"	3"	2'-0"	8'-6"	293.0*	

STRUCTURAL CARBON STEEL PAY WTS. (1 POST) = K + (POST LENGTH X POST WT.)
 * K " INCLUDES STUB, BASE PLATES, STIFFS., BOLTS, AND WASHERS.

PLOT SCALE:
 PLOT NAME:
 REV. DATE: 8/20/97
 ORIGINATOR: Sandy Anderson
 FILE NAME: tr-stdplate 031.dgn
 LEVELS ON: 1, 2, 3, 5, 6, 10

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Chris J. Spang*
 State Traffic Engineer
 DATE 8/26/97 PLATE NO. A3-112

⑧	10-30-96	NOT GALVANIZED/GALVANIZED
⑦	10-30-92	QUANT., A588 EXCEPT., ADD SLOT VIEW
⑥	8-24-87	BASE CONN. WELD
⑤	10-13-81	BASE CONN. WELD & FUSE & WASHERS
④	10-19-79	POST A & B, A572 GR. 50, & K
③	11-28-78	"K" ③ 4-23-79 TYPE "E"
②	5-4-78	T ₁ , T ₂ & W ₁

NO. DATE REVISION

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

TYPE A, B, C, D, & E

CONST. SPEC.	1989	DRAWN BY	LOY	PLANS CTD.
FTG. & SIGN SUPPORT DETAILS GROUND MOUNT BREAK-AWAY SIGNS				SHEET
WISDOT/CADDS METRIC SHEET				M

PLOT SCALE: 30 : 1

PLOT NAME:

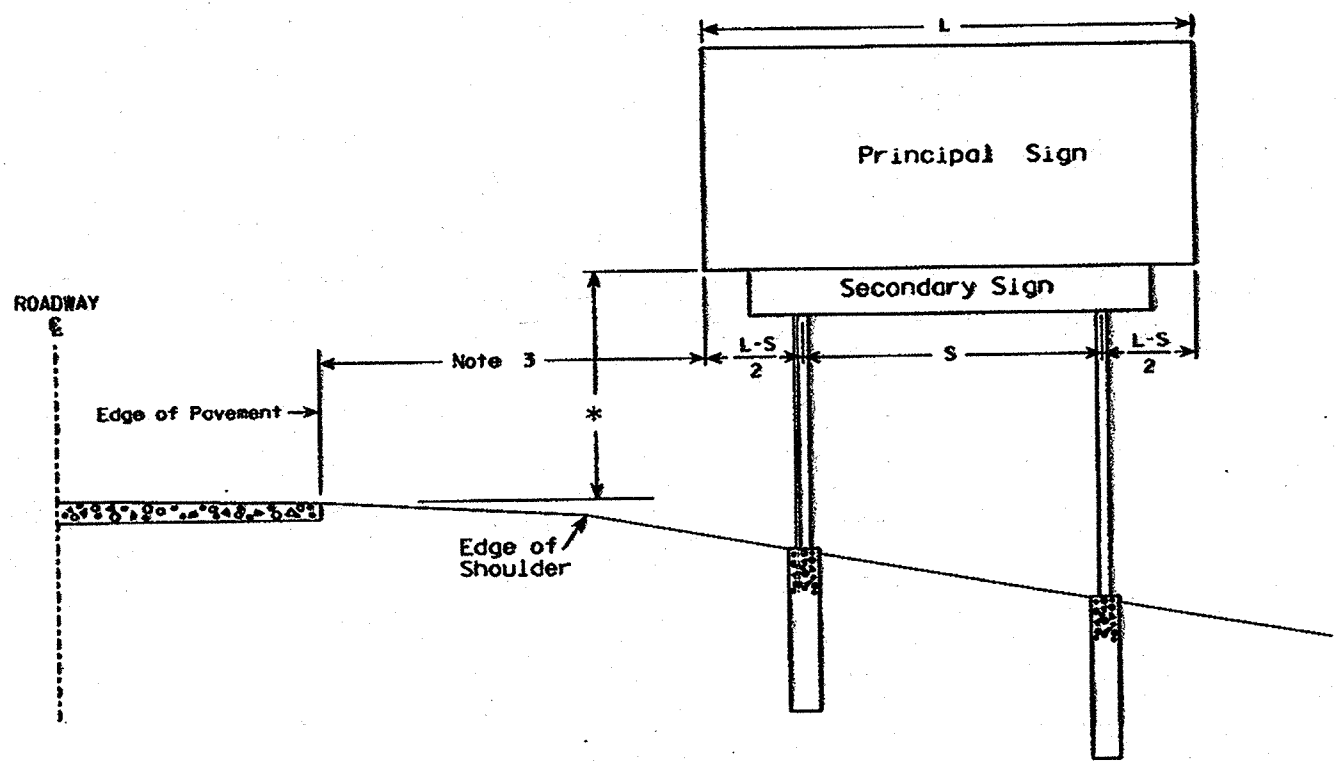
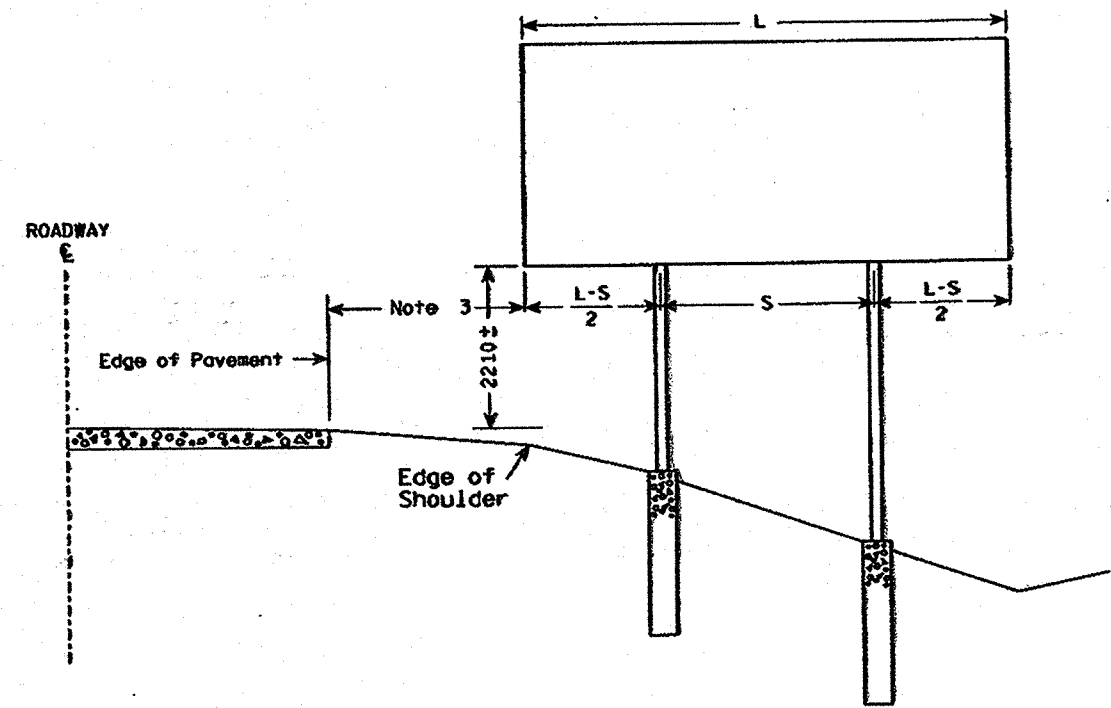
REV. DATE: 10/23/96

ORIGINATOR: Sandy Anderson

63

56.59

FILE NAME: A4IM.DGN
LEVELS ON: 1,2,3, 10



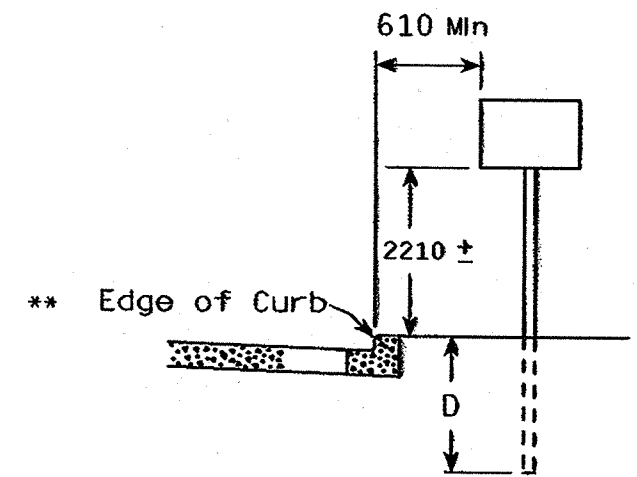
GENERAL NOTES

1. For a 2 post installation, S equals $3L/5$, but shall not be less than 2745.
2. For a 3 post installation, S equals $5L/7$, but shall not be less than 5490, and the space between any two posts shall not be less than 2745.
3. The sign offset distance shall be as listed in the plan.
4. The (\pm) tolerance shown on this sheet is 75.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.
6. Refer to the Traffic Guidelines Manual for further guidance on minimum vertical clearance requirements.
7. All dimensions in millimeters unless otherwise noted.

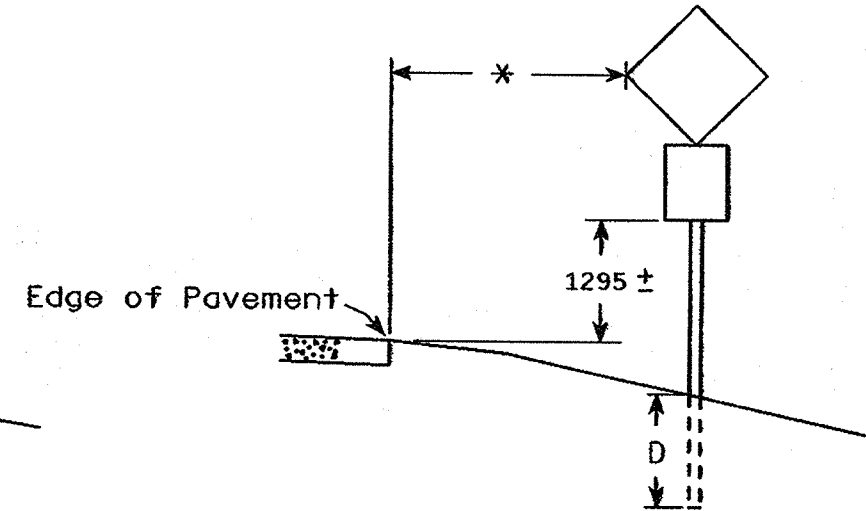
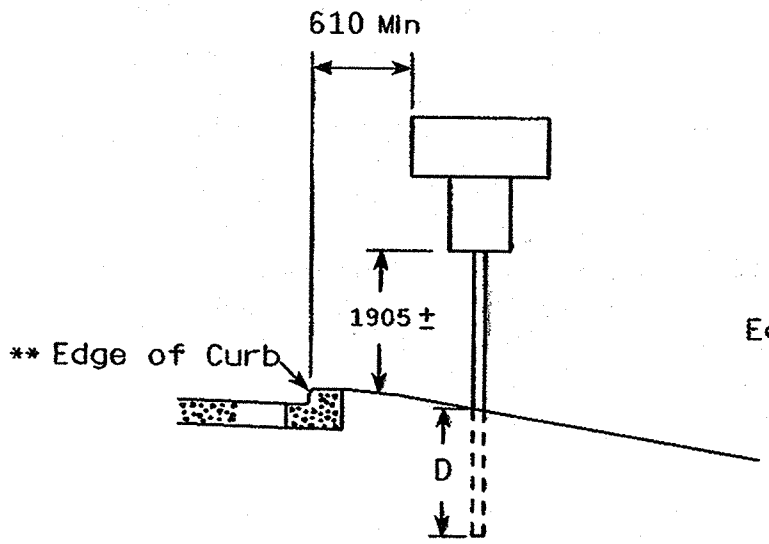
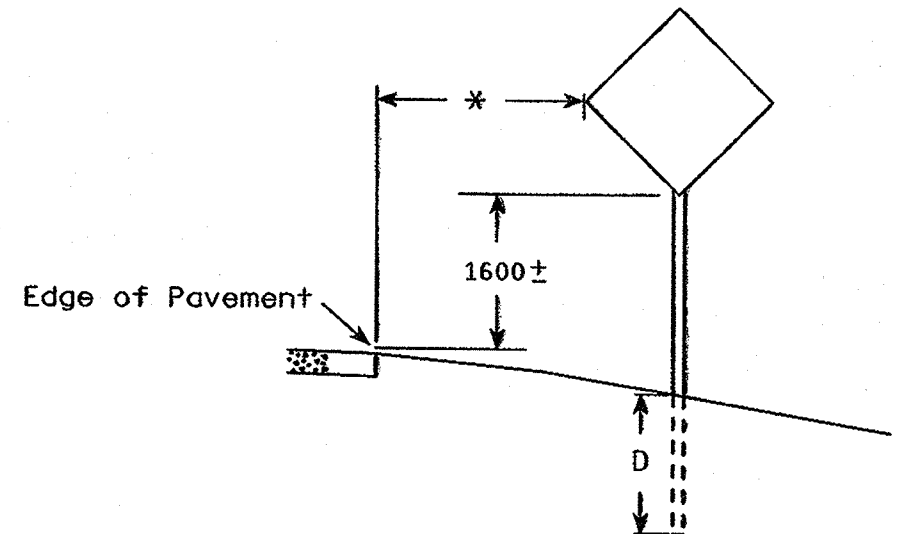
* Clearance is 2515 (\pm) when the secondary sign is 915 or less in height. For secondary signs larger than 915, the clearance to the bottom of the secondary sign shall be 1600 (\pm).

TYPICAL INSTALLATION OF TYPE I SIGNS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	
<i>Charles J. Spang</i> State Traffic Engineer	
DATE 10-28-96	PLATE NO. A4-IM.7
WISDOT/CADDS METRIC SHEET	
M	

URBAN AREA



RURAL AREA (See Note 2)



GENERAL NOTES

1. Sign assemblies wider than 1200 or larger than 1.86 m² shall be mounted on multiple posts. See plate A4-4 for typical installations.
2. For expressway and freeways installations, the minimum mounting height is 2210 ± or 1905 ± depending upon the existence of a sub-sign.
3. For Route Marker assemblies or J panels, the minimum mounting height is 2210 ± or 1600 ± depending upon urban/rural area.
4. The (±) tolerance for the mounting height is 75.
5. All dimensions in millimeters unless otherwise noted.

POST EMBEDMENT DEPTH

Area of Sign Installation (m ²)	D (Min)
1.86 or Less	1200
Greater than 1.86	1500

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically where there is sidewalk adjacent to the roadway or parking is permitted.

* 1830 from edge of a paved shoulder or 3660 from the edge of pavement (edgeline location), whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Christa J. Spang*
for State Traffic Engineer

DATE 05/12/98 PLATE NO. A4-3M.11

WISDOT/CADD'S METRIC SHEET **M**

PLOT SCALE:

REV. DATE: 05/12/98

ORIGINATOR: Don Kluever

FILE NAME: A43M.dgn
LEVELS ON - 2, 5.6, 10

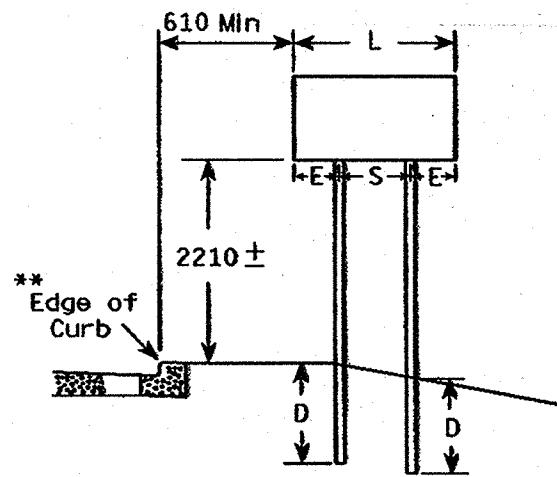
GENERAL NOTES

1. For 3 post installations, post spacing is $S/2$ and S must be greater than 2130.
2. For 4 post installations, post spacing is $S/3$ and S must be greater than 3200.
3. For expressway and freeways installations, the minimum mounting height is $2110 \pm$ or $1905 \pm$ depending upon the existence of a sub-sign.
4. The (\pm) tolerance for the mounting height is 75.
5. All dimensions in millimeters unless otherwise noted.

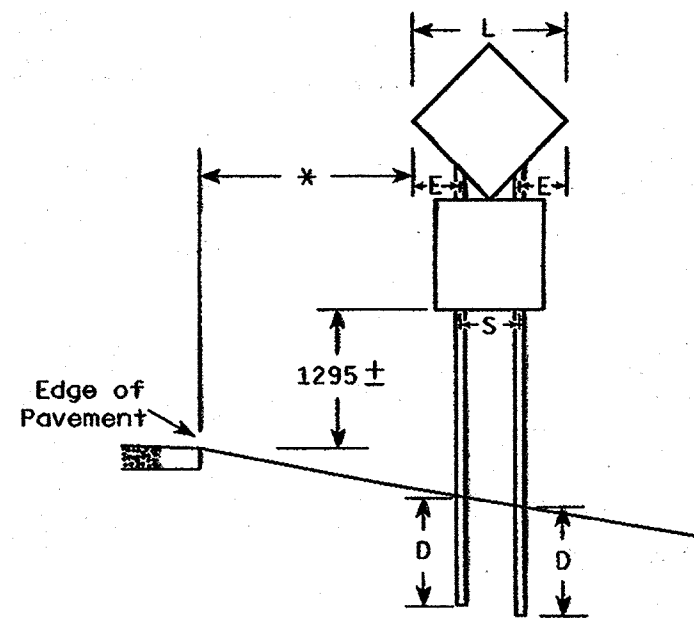
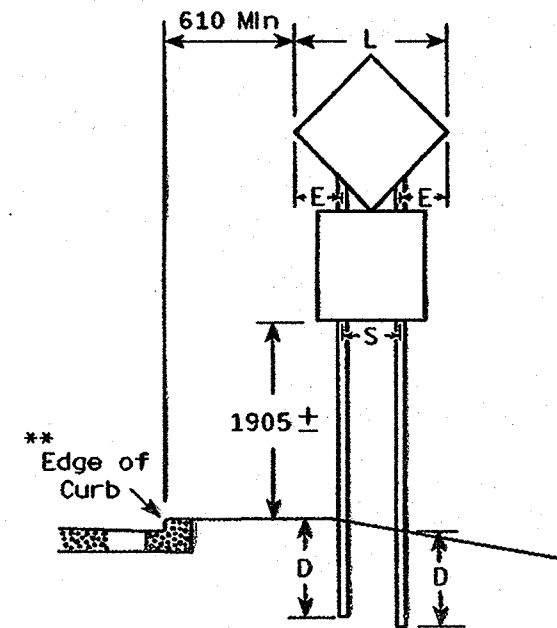
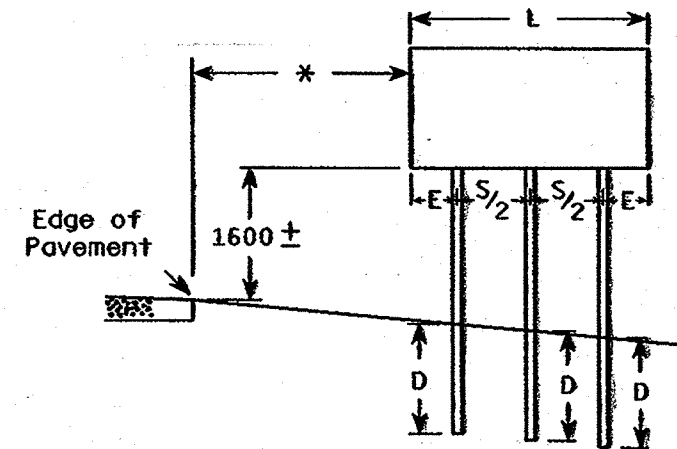
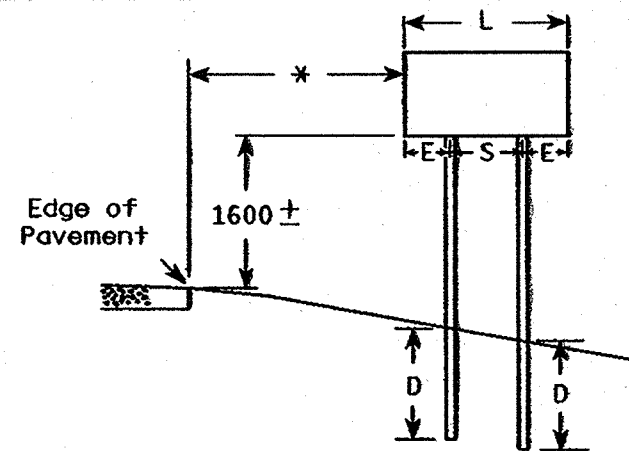
* 1830 from edge of a paved shoulder or 3660 from the edge of pavement (edgeline location), whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically where there is sidewalk adjacent to the roadway or parking is permitted.

URBAN AREA



RURAL AREA (See Note 3)



DIAMOND SHAPED SIGNS

L	S	E
Less than 1500	500	$L/2 - 250$
1500 -- 1800	800	$L/2 - 400$
Greater than 1800	$3 L/5$	$L/5$

SIGN SHAPE OTHER THAN DIAMOND
(Two Post Installations)

L	S	E
Less than 1500	$L-600$	300
1500 or more	$3 L/5$	$L/5$

POST EMBEDMENT DEPTH

Area of Sign Installation (m ²)	D (Min)
1.86 or Less	1200
Greater than 1.86	1500

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION
APPROVED
Christie J. Spang
for State Traffic Engineer
DATE 11/15/96 PLATE NO. A4-4M.5

PLOT SCALE: 10 : 1

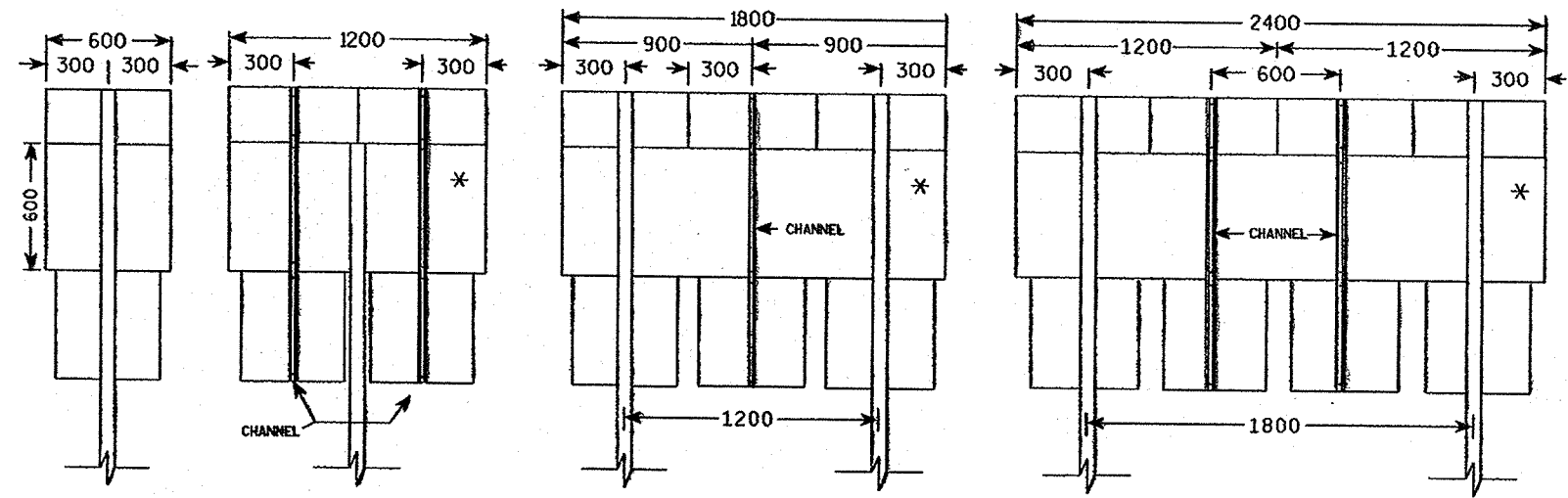
PLOT NAME:

52.59.00 63

REV. DATE: 10/23/96

ORIGINATOR: Sandy Anderson

FILE NAME: A4SM.dgn
 LEVELS ON: 1, 2, 3, 5, 6, 10



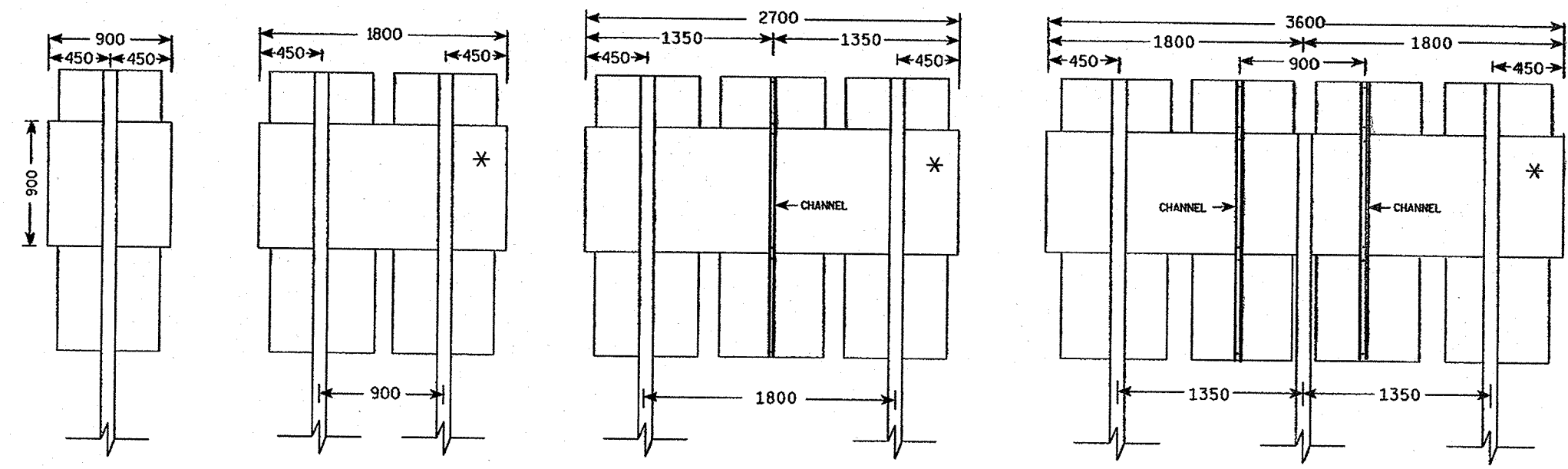
600 mm MARKER DETAIL

CHANNEL HARDWARE:

Aluminum Sign components: M6 x 20 bolt and 6 flat washers
 Plywood Sign Components: M6 x 35 bolt and 6 flat washers

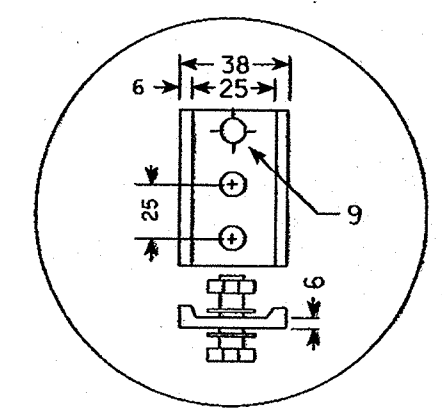
NOTES:

1. Post spacing shall be according to this detail but post embedment depth shall be in accordance with A4-4.
2. Channel material shall be as specified in Section 633 of Std. Specs. and weight shall be approx. 2.08 kg/m
3. Base material for a multiple marker head panel (*) shall be one piece high density overlay plywood. All other materials within the assembly can be either plywood or aluminum.
4. All dimensions in millimeters unless otherwise noted.



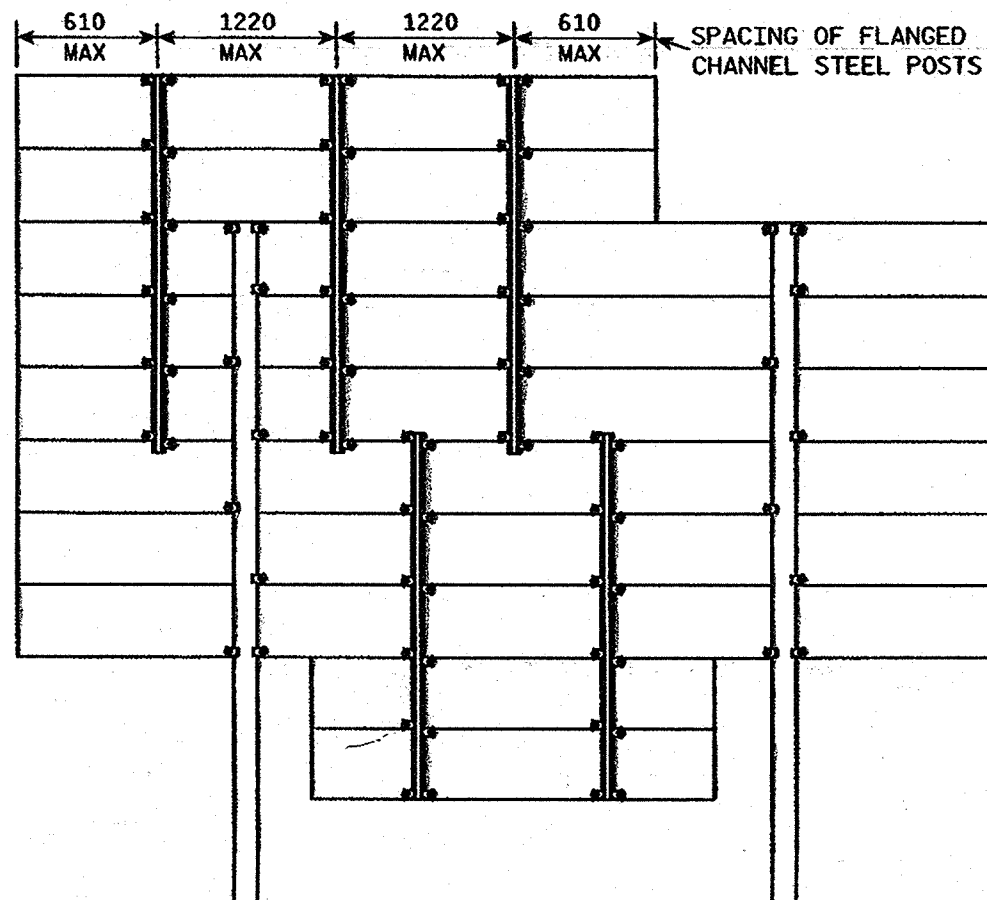
900 mm MARKER DETAIL

CHANNEL DETAIL

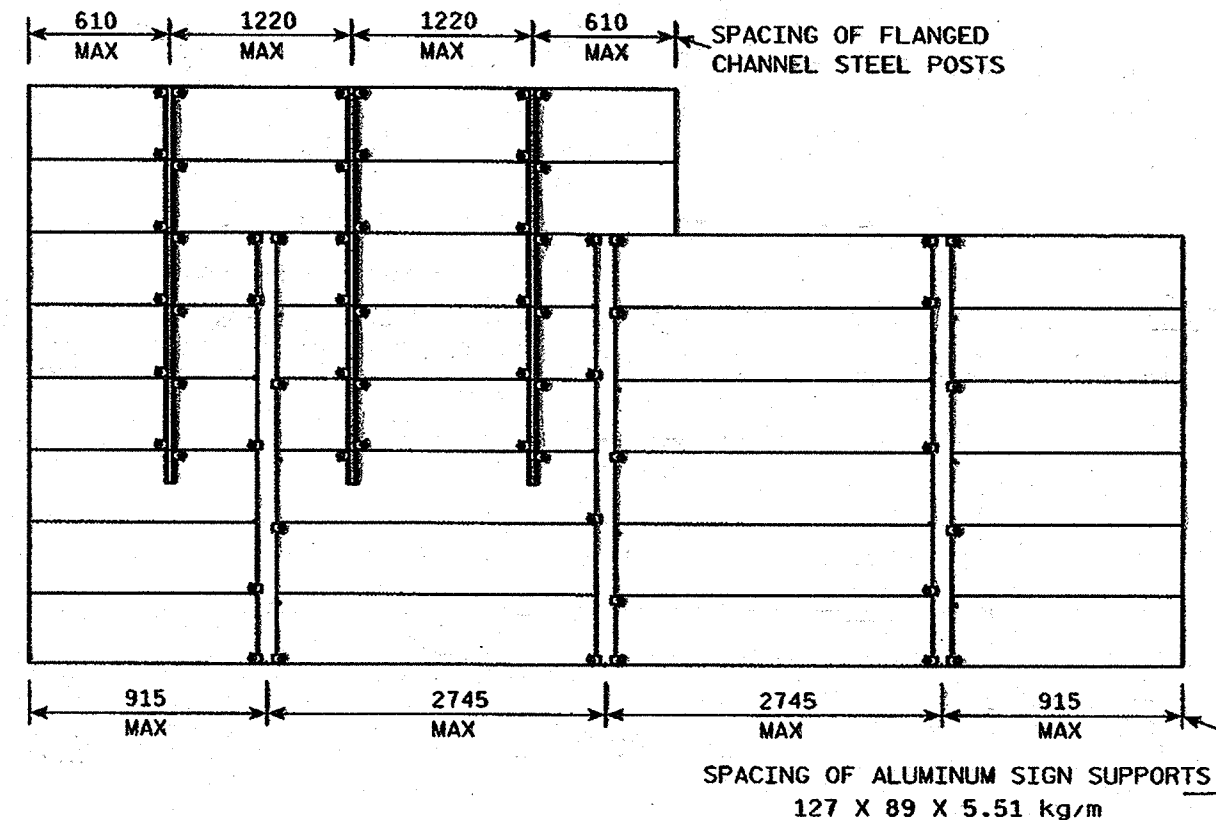


TYPICAL PANEL INSTALLATION FOR ASSEMBLIES	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Chris J. Spang</i> State Traffic Engineer
DATE 10/28/96	PLATE NO. A4-5M.4
WISDOT/CADD'S METRIC SHEET	M

GROUND MOUNTED SIGN



SIGN BRIDGE MOUNTED SIGN



GENERAL NOTES

1. Flanged channel steel posts shall conform to section 633 of STANDARD SPECIFICATIONS and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:
 PANEL LENGTH 2440 OR LESS = 2 CHANNELS
 PANEL LENGTH 2745 - 3660 = 3 CHANNELS
 PANEL LENGTH 3965 OR MORE = 4 CHANNELS
 If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide two (2) post clips at top and bottom of each Guide sign and alternate interior clips. Post Clip other signs, EXIT NUMBER or NEXT EXIT as shown.
6. All dimensions in millimeters unless otherwise noted.

ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Christa J Spang*
for State Traffic Engineer

DATE 4/15/98 PLATE NO. A4-6M.8

WISDOT/CADDS METRIC SHEET **M**

PLOT SCALE: 15 : 1

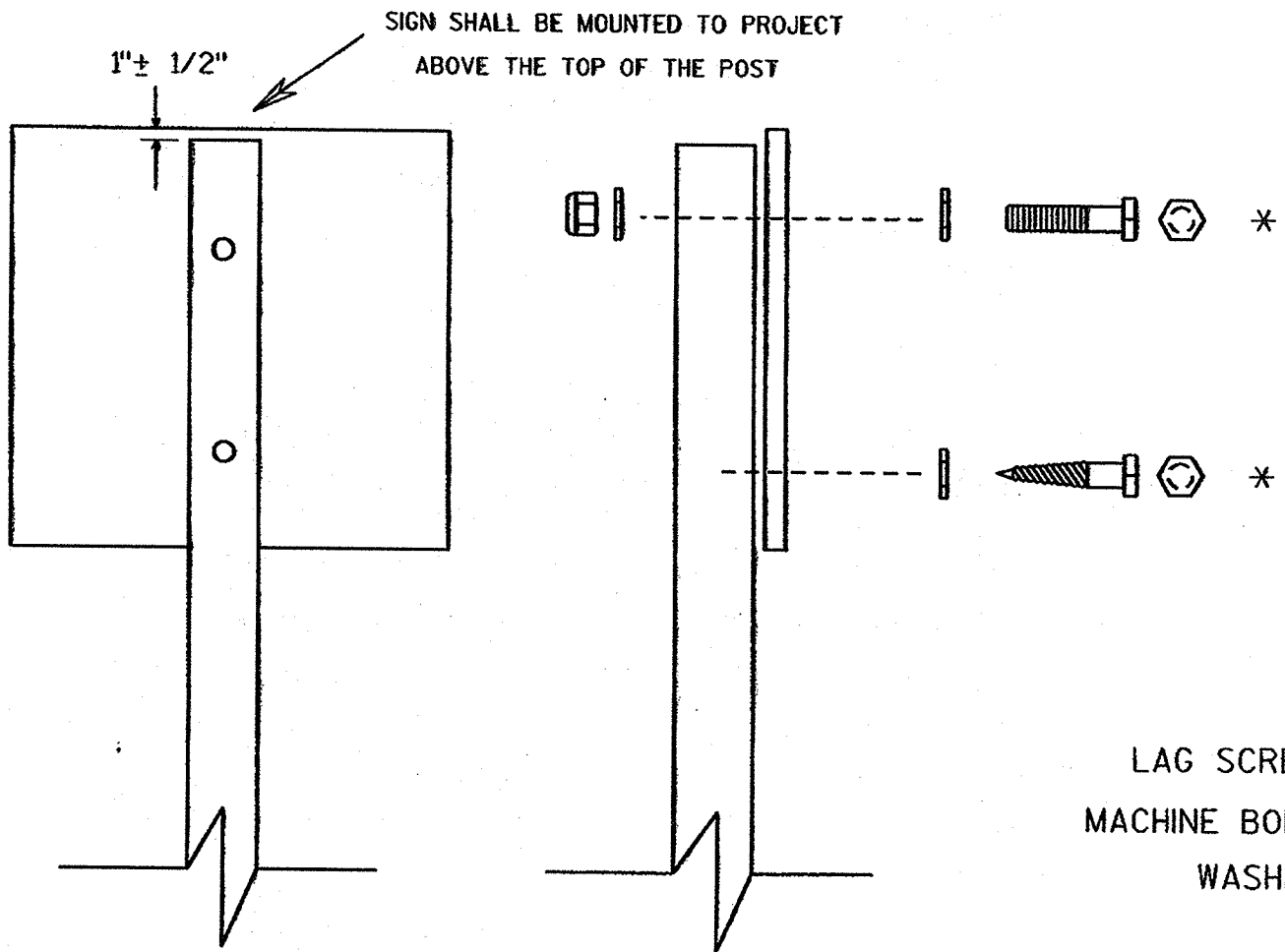
59.59.02 63

REV. DATE: 04/15/98

FILE NAME: A46M.dgn
LEVELS ON: 2, 3, 5, 10, 12, 13

ORIGINATOR: Don Kluever

PLOT NAME: 58.52
 PLOT SCALE: 2:1
 FILE NAME: A48
 ORIGINATOR: Don Kuever
 LEVELS: 01, 02, 03, 04



SIGN SHALL BE MOUNTED TO PROJECT
 ABOVE THE TOP OF THE POST

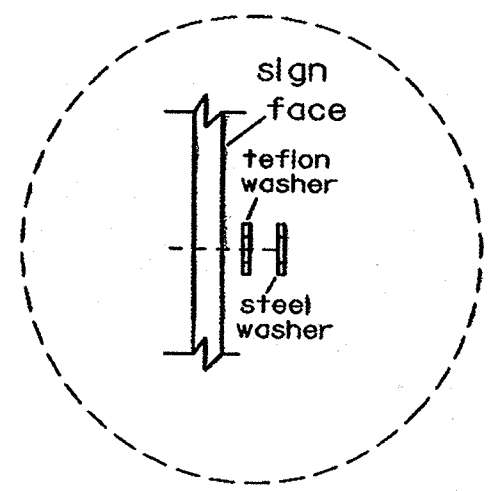
1" ± 1/2"

Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
- Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
- Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- LAG SCREWS - 3/8" X 3"
- MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- WASHERS - 1" O.D. X 3/8" I.D. X 1/16" STEEL for signs 24x24 and smaller.
 1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL for signs 24x30 to 36x48.
 1-1/2" O.D. X 7/16" I.D. X 1/16" STEEL for signs 48x48 and larger.
 1-1/4" O.D. X 3/8" I.D. X .080 TEFLON for all Type H signs.



Washer Placement when
 Sign Has Type H Face

* Two different fastening systems are shown for illustration purposes only. On any individual sign, either one or the other system shall be used unless otherwise indicated in the special provisions.

**ATTACHMENT OF SIGNS
 TO WOOD POSTS**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Christa J. Spay*
 State Traffic Engineer

DATE 4/3/96 PLATE NO. A4-8.3

PLOT SCALE: 2 : 1

PLOT NAME:

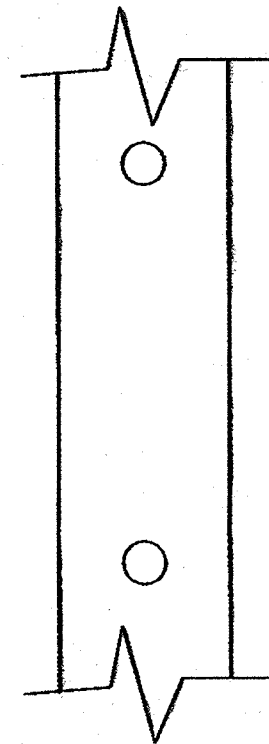
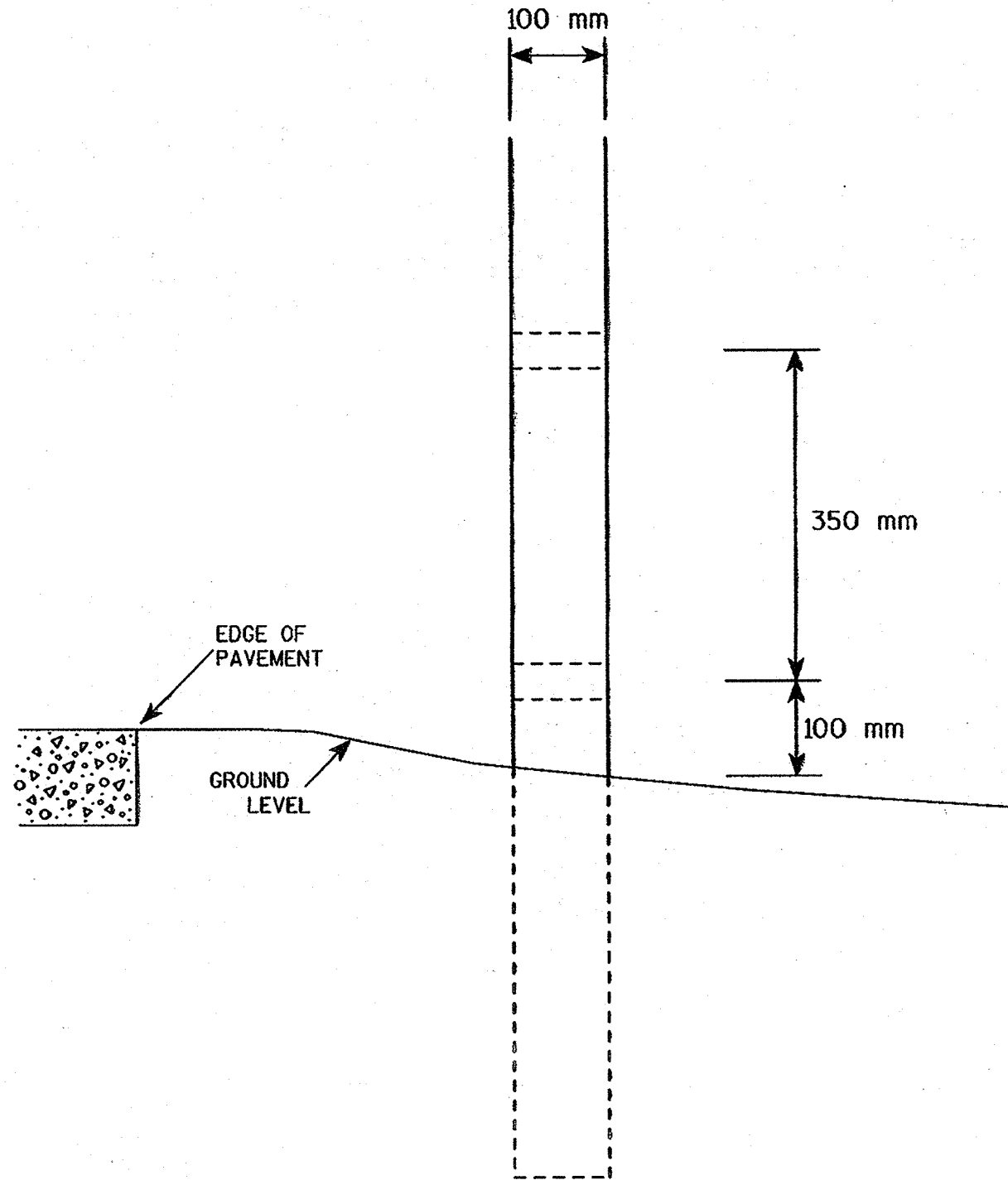
63

58.55

REV. DATE: 10/23/96

ORIGINATOR: Sandy Anderson

FILE NAME: A411M.dwg
LEVELS ON: 1, 2, 5, 10



SIDE VIEW

GENERAL NOTES

1. All 100 X 150 mm Wood Posts shall be modified by having two 38 mm diameter holes drilled perpendicular to the roadway centerline.

100 x 150 mm WOOD
POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

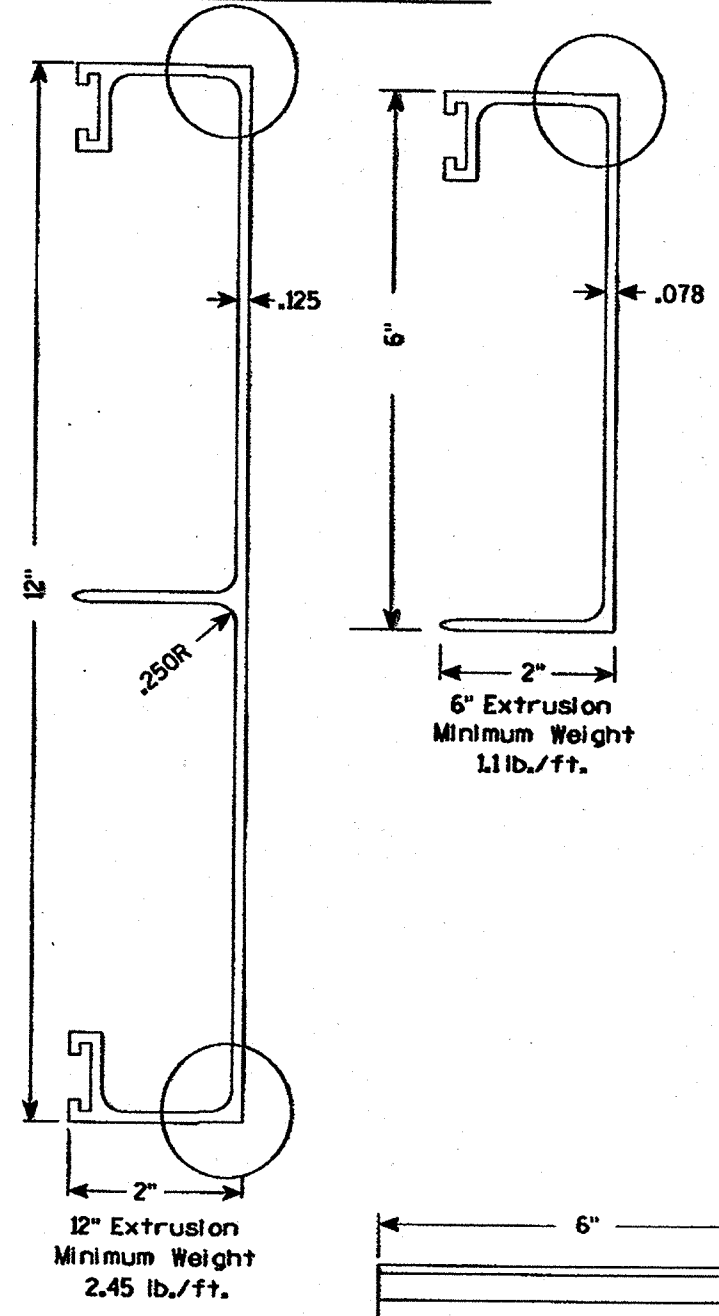
APPROVED
Chester J. Spang
for State Traffic Engineer

DATE 10/28/96 PLATE NO. A4-11M.1

WISDOT/CADD5 METRIC SHEET **M**

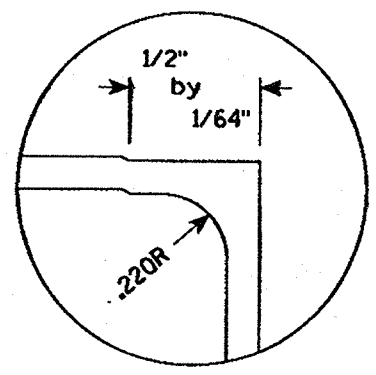
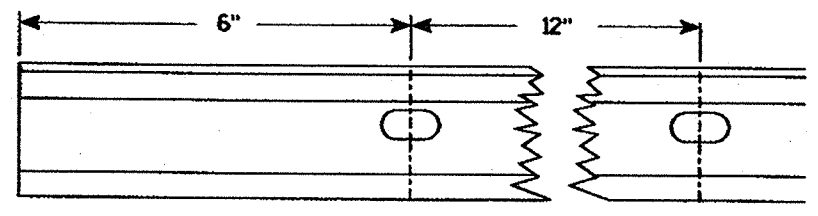
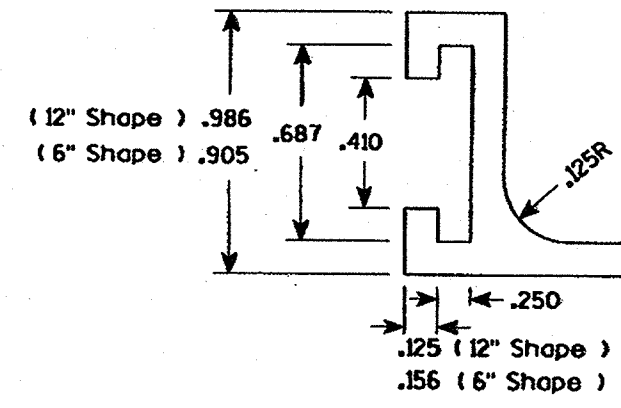
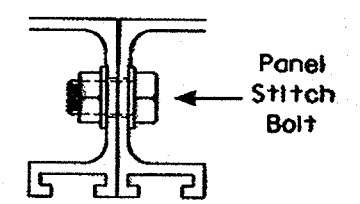
50.50
 12
 5
 LEVELS ON 1.12 5

Extruded Shape



STITCH BOLT, WASHER & NUT

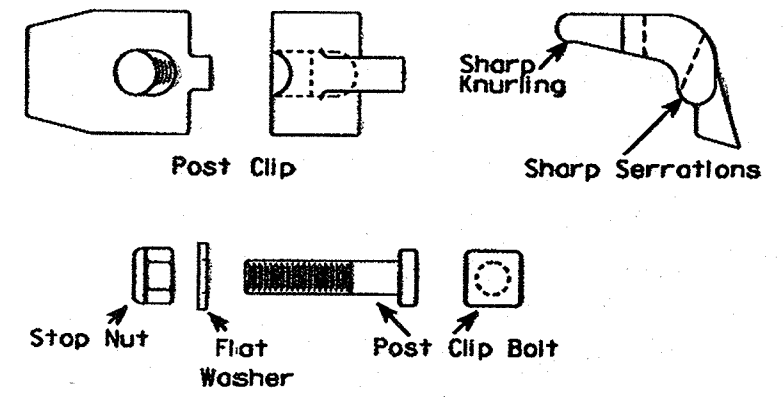
The hardware includes:
 3/8" - 16 X 3/4" Economy Bolt 2024-T4 alloy
 3/8" - Stainless steel stop nut
 3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



Hardware

POST CLIP, POST CLIP BOLT, WASHER & NUT

Post Clip shall be Alum. Alloy 356-T6
 Post Clip Bolt shall be Alum. Alloy 2024-T4
 Flat washer shall be 3/8" X .091, Alclad 2024-T4 alloy.
 Stop nut shall be stainless steel.



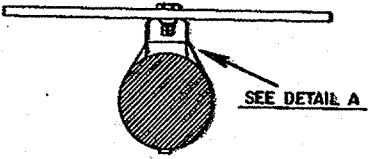
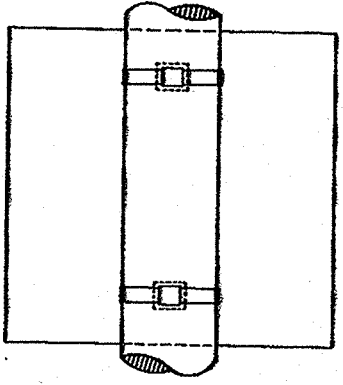
NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	
<i>Charles J. Spang</i> State Traffic Engineer	
DATE 9-12-96	PLATE NO. A5-2.8

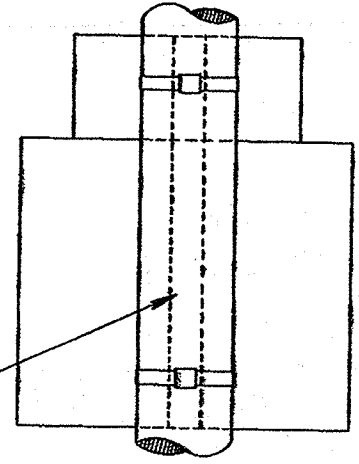
PROJECT I.D. 6A18-03-71	SHEET NUMBER 7.13	TOTAL SHEETS
PROJECT DESCRIPTION		

SINGLE SIGN

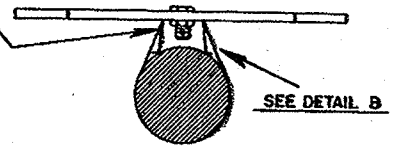


SEE DETAIL A

"J" ASSEMBLY

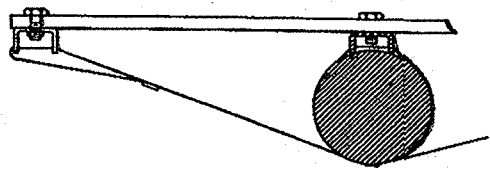


CHANNEL
SEE TYPICAL
PANEL INSTALLATION
SHEET

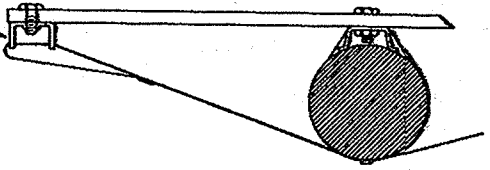


SEE DETAIL B

BRACKET BANDING



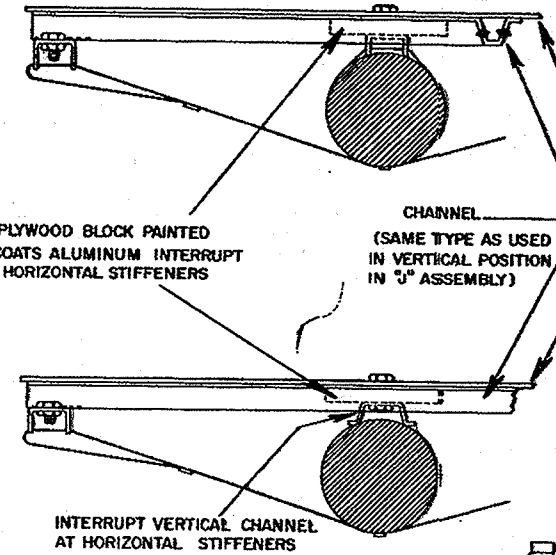
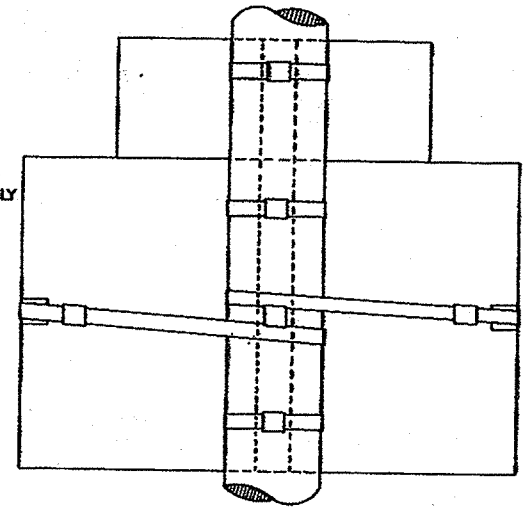
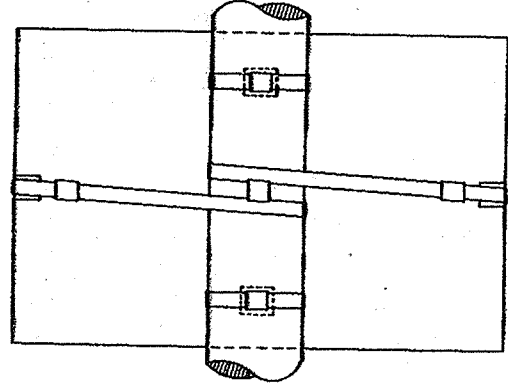
SEE DETAIL C



BRACKET BANDING

USE ONE BRACE BAND ON EACH
SIGN 4 FEET OR MORE IN WIDTH.

BRACE BANDING SHALL BE TIGHTENED
FIRMLY BUT NOT SO TIGHT AS TO APPRECIABLY
CURVE FACE OF SIGN.



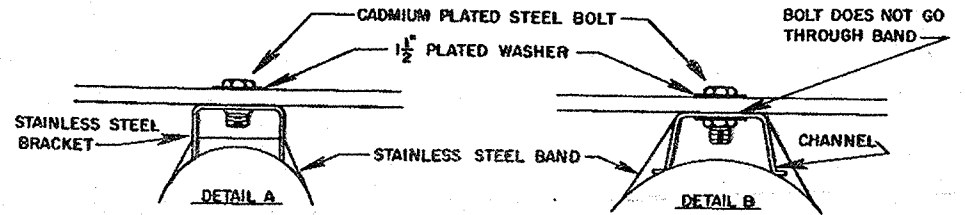
$\frac{3}{4}$ " PLYWOOD BLOCK PAINTED
2 COATS ALUMINUM INTERRUPT
AT HORIZONTAL STIFFENERS

CHANNEL
(SAME TYPE AS USED
IN VERTICAL POSITION
IN "J" ASSEMBLY)

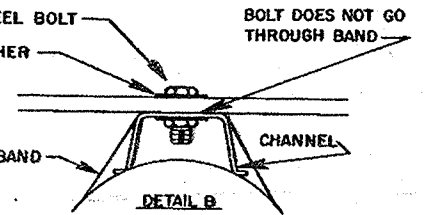
METAL SIGN

INTERRUPT VERTICAL CHANNEL
AT HORIZONTAL STIFFENERS

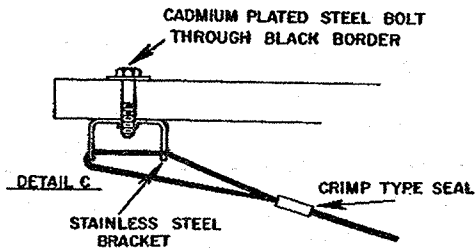
EACH SIDE OF BRACE BANDING
MAKES ONE COMPLETE LOOP
AROUND POLE-SEAL ON BACK
OF POLE



DETAIL A



DETAIL B



DETAIL C

BRACE BANDING

NUMBER OF BRACKET BANDS

WHEN THE AREA OF THE SIGN OR SIGN
ASSEMBLY IS LESS THAN 10 SQUARE FEET
TWO BRACKET BANDS SHALL BE USED.
WHEN THE AREA IS 10 SQUARE FEET OR
MORE, THREE BRACKET BANDS SHALL BE
USED.

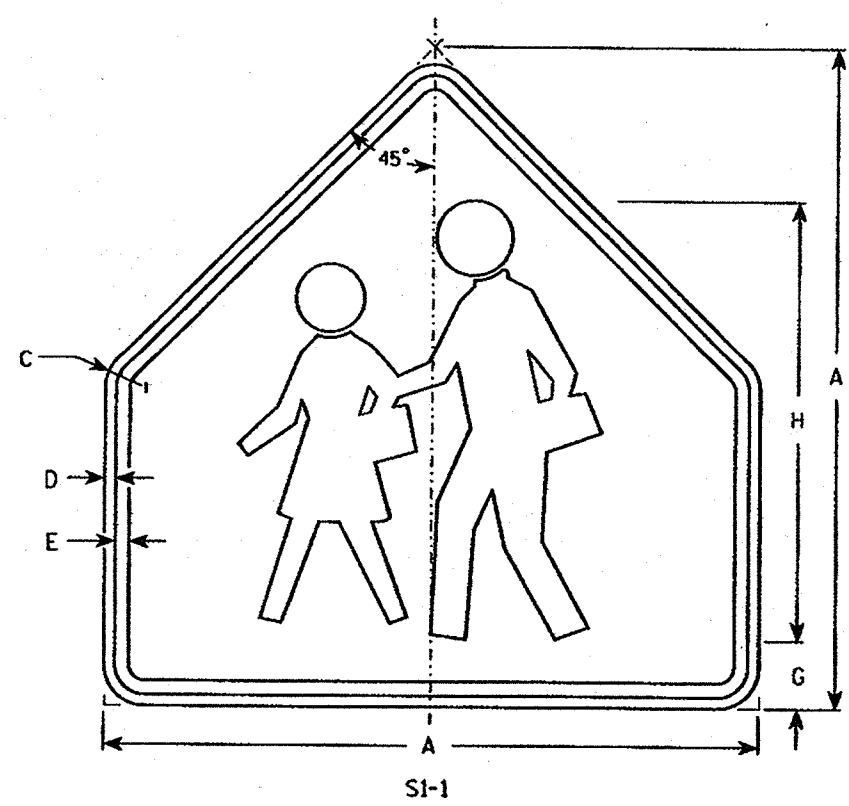
MATERIAL

BANDING AND ASSEMBLY BRACKET SHALL
STAINLESS STEEL ALL BANDING SHALL BE
 $\frac{3}{4}$ "-INCH IN WIDTH

Date Redrawn - 2/18/71	
Date Revised -	
SIGN BANDING DETAILS	
WISCONSIN DIVISION OF HIGHWAYS	
APPROVED _____	CHIEF TRAFFIC ENGINEER
DATE _____	PLATE NO. A5-9.1

NOTES

1. Sign is Type II- Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Metric equivalent for this sign is:

SIZE	
2	750 mm X 750 mm
3	900 mm X 900 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
2	30		1 3/8	1/2	5/8		3	20																			4.69	.44
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75	.63
4																												
5																												

STANDARD SIGN
SI-1

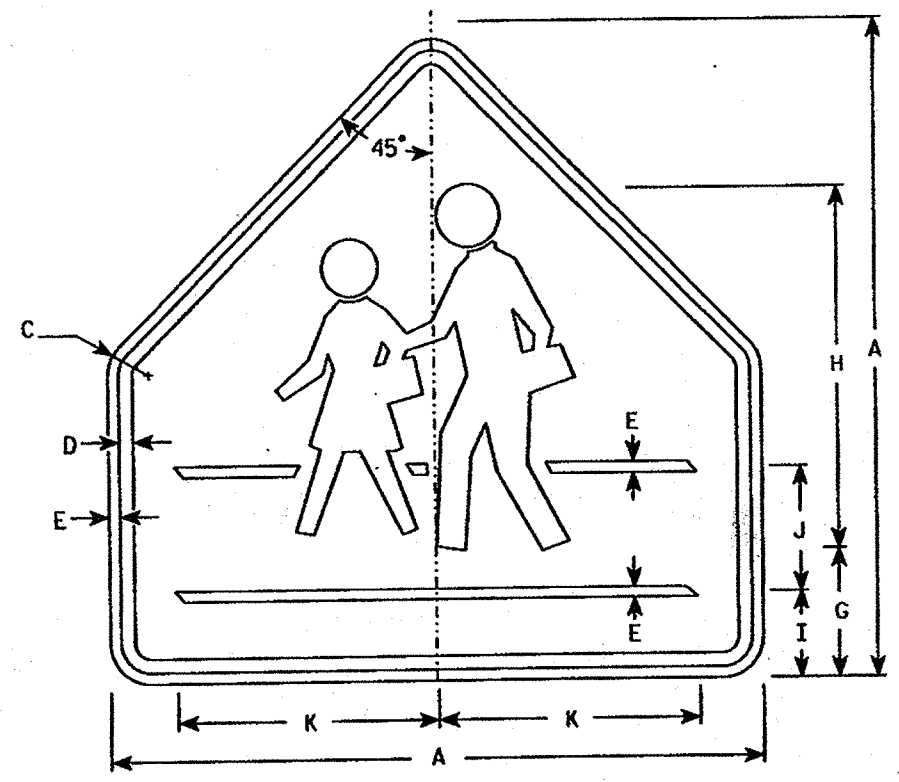
WISCONSIN DEPT OF TRANSPORTATION

APPROVED _____
Director, Office of Traffic

DATE 12-19-95 PLATE NO. SI-14

58.69

LEVELS ON - 2.3. 5. 4.



S2-1

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
2	750 mm X 750 mm
3	900 mm X 900 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq.
2	30		1 3/8	1/2	5/8		6	16 1/2	4	5 3/4	12																4.69	.44
3	36		1 5/8	5/8	3/4		7 1/4	19 3/4	4 3/4	6 7/8	14 3/8																6.75	.63
4																												
5																												

STANDARD SIGN
S2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Christie J. Spang*
for State Traffic Engineer

DATE 12-21-95 PLATE NO. S2-L3

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 Background - White & Black
 Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing as per Plate A10-1.

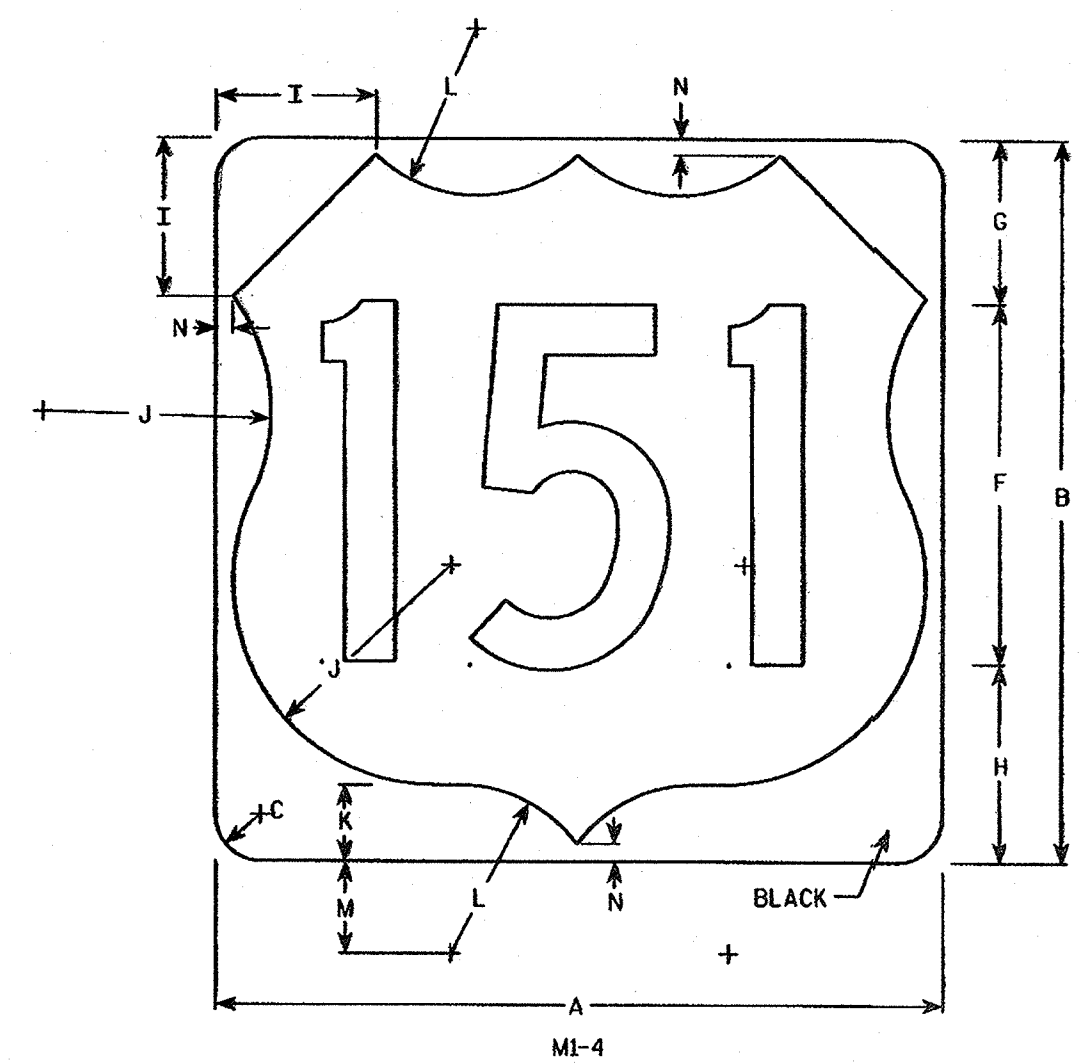
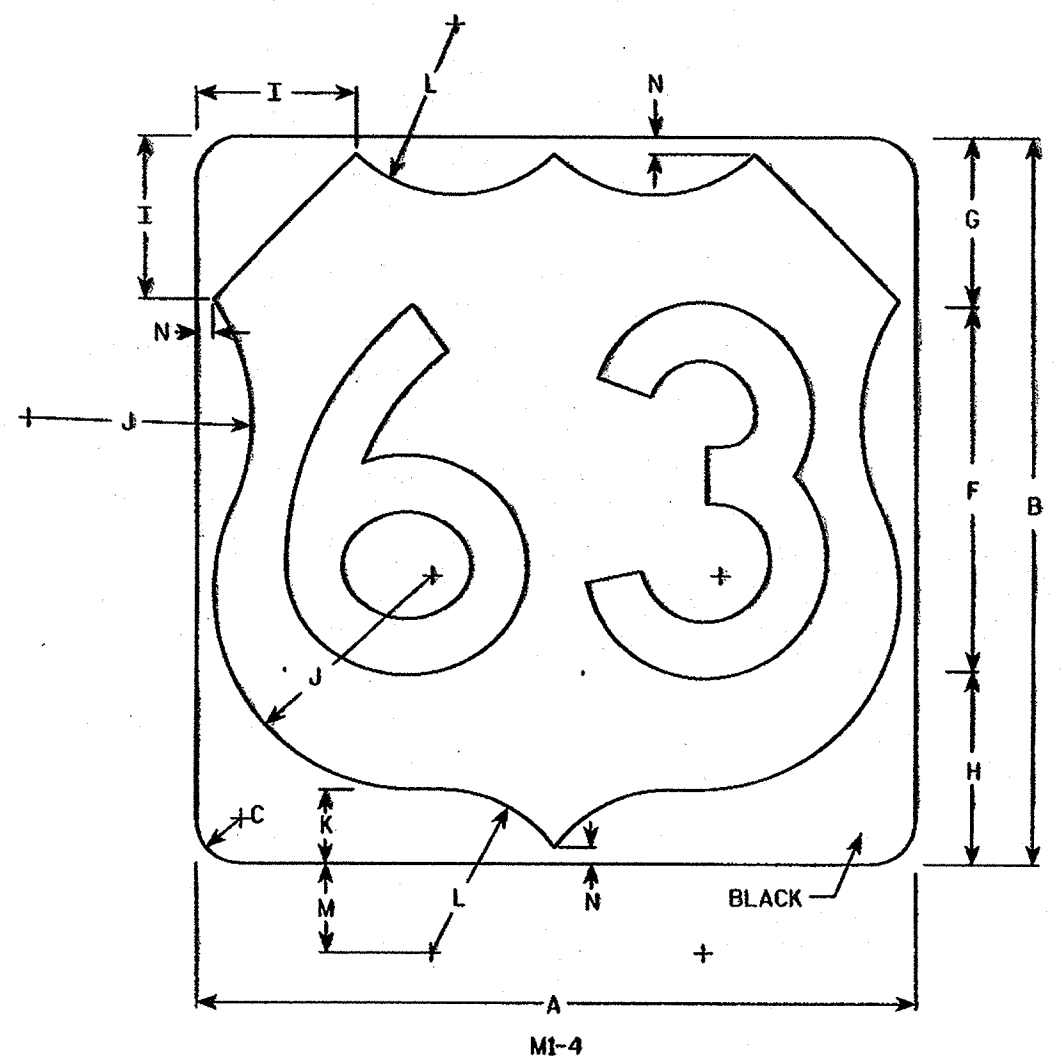
PLOT SCALE:
 PLOT NAME:

59.59.03 63

REV. DATE: 1/30/98

ORIGINATOR: Sandy Anderson

FILE NAME: tr-etoplate m14.dgn
 LEVEL ON: 2 56



Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. mm
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

USH MARKER
 M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

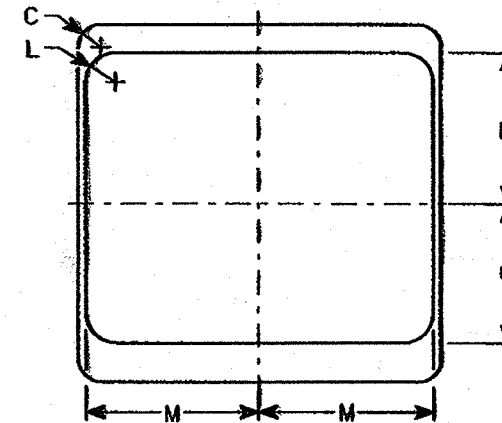
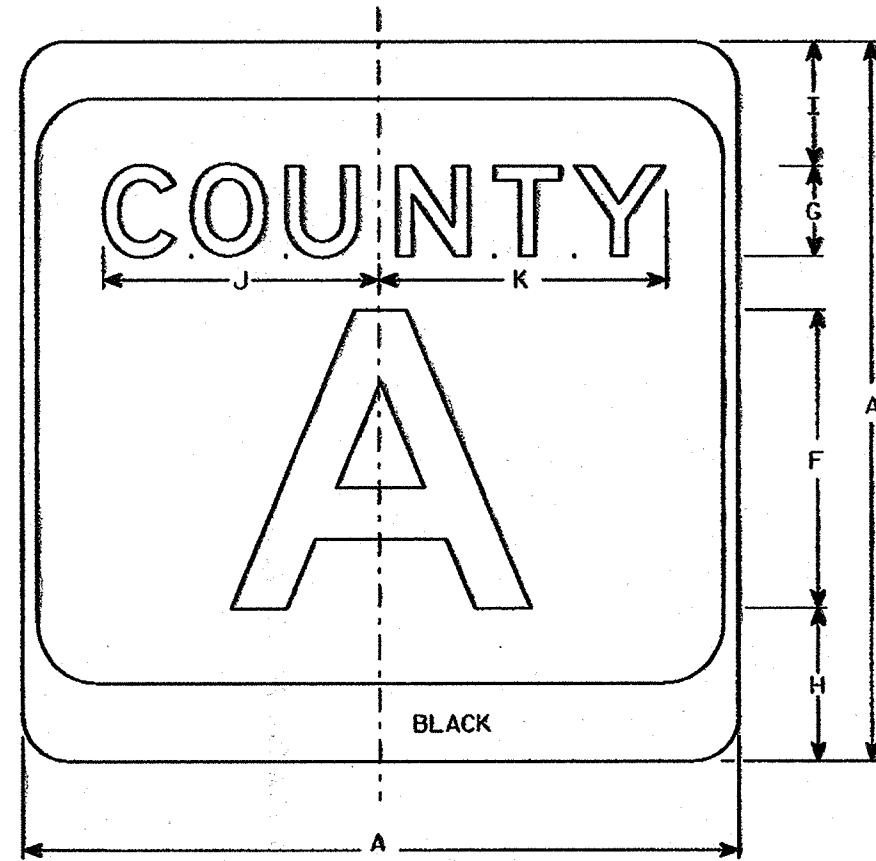
APPROVED
Christa J. Spang
 State Traffic Engineer

DATE 2/02/98 PLATE NO. MI-4.7

WISDOT/CADD METRIC SHEET **M**

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
Message Series D for 2 letters unless message is too big then Series C.
Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically adjust spacing to achieve proper balance.



M1-5A

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

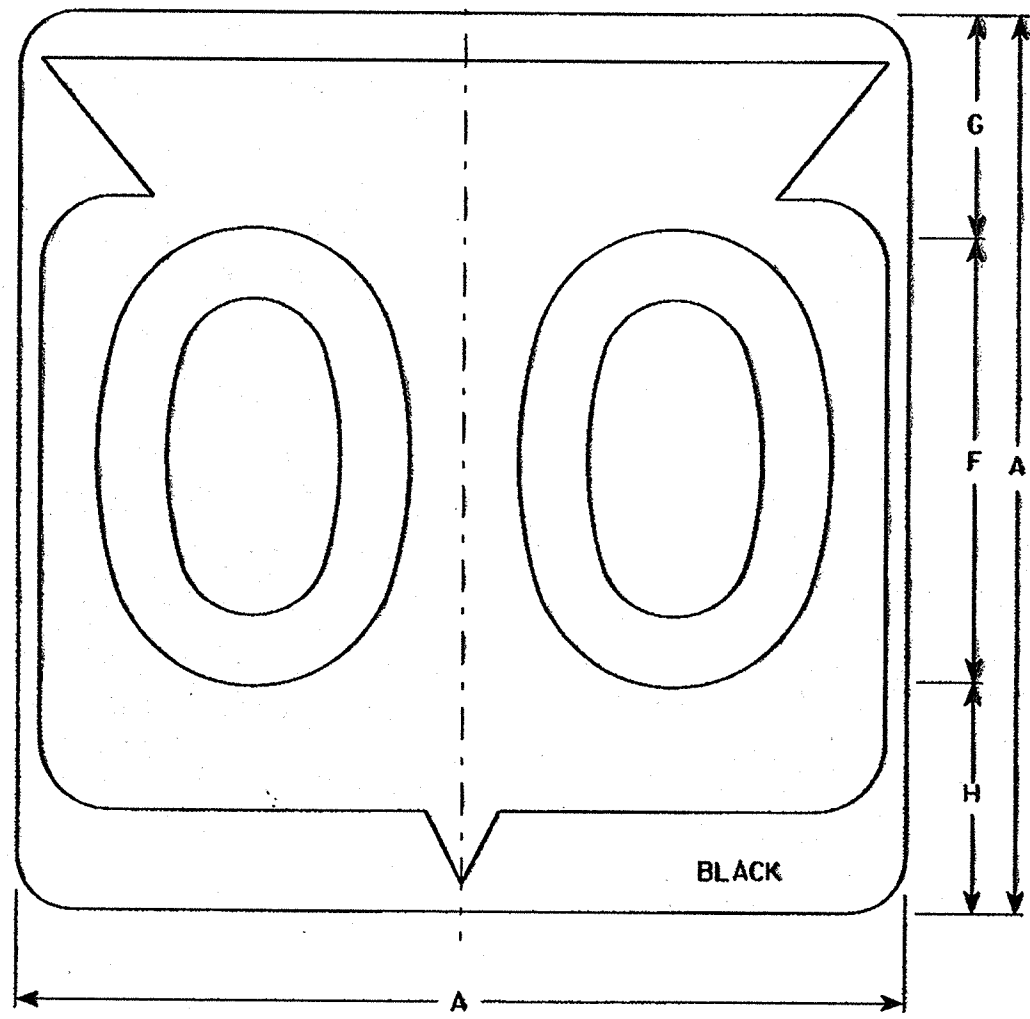
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1																												
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8												4.0	.36
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14												9.0	.81
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14												9.0	.81
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14												9.0	.81

CTH MARKER
M1-5A FOR ASSEMBLIES
WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Chester J. Spang*
State Traffic Engineer
DATE 10/15/98 PLATE NO. MI-5A.6

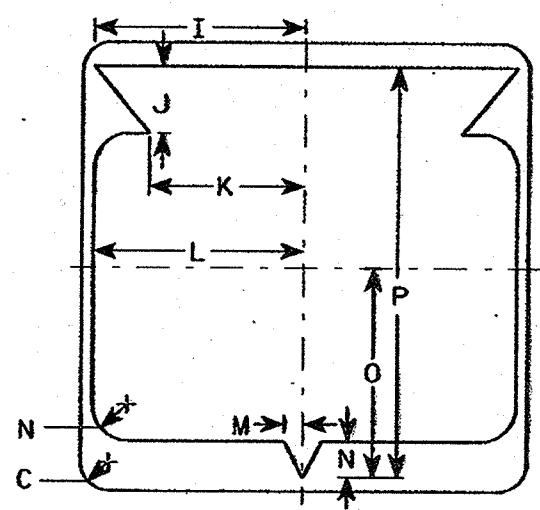
PLOT NAME: 06.50.02
 FILE NAME: tr-stddplate misa.dgn PLOT SCALE: 3 : 1
 ORIGINATOR: FOTH & VAN DYKE
 REVISED BY: Sindy Anderson
 LEVELS ON: 2, 3, 5, 6

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 Background - White
 Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.



M1-6



Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A ₁₀₀ sq. ft.	A ₆₀₀ sq.
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 3/8	11 1/2	1	1 3/8	11 1/4	21 3/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Chris J. Spay
 State Traffic Engineer

DATE 12/4/97 PLATE NO. M1-6.8

WISDOT/CADDs METRIC SHEET **M**

PLOT SCALE:

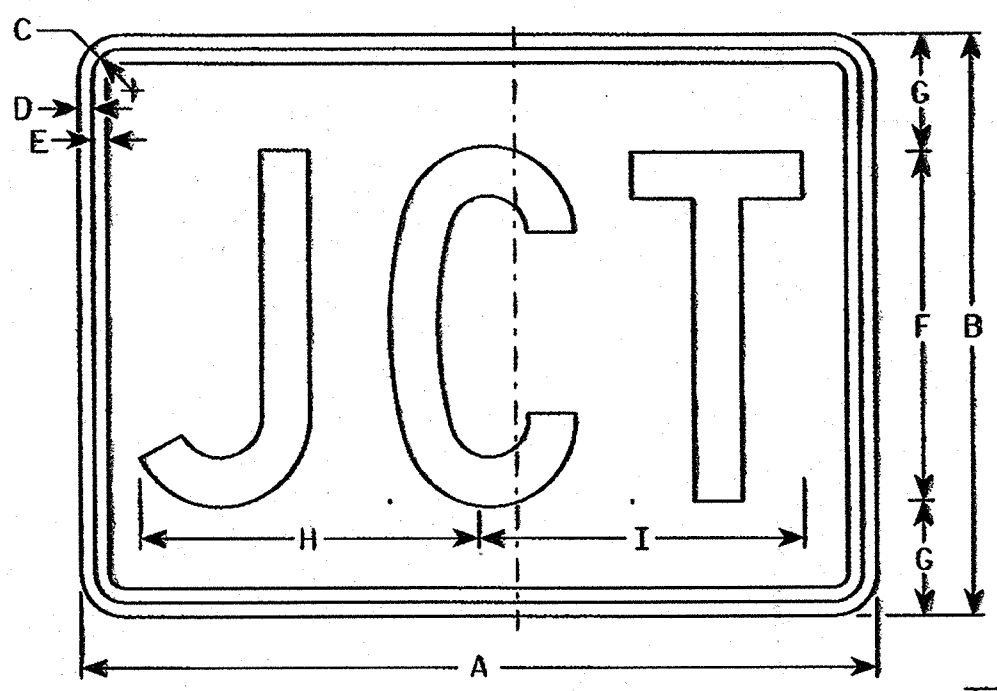
PLOT NAME:

58.59.60 63

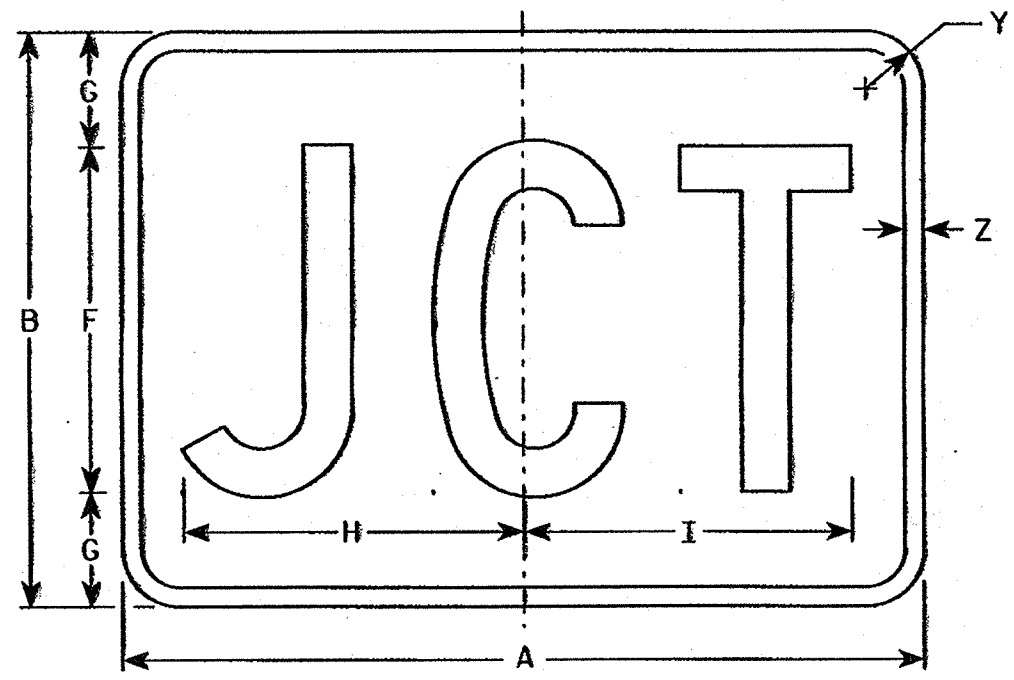
PE... DATE: 12/4/97

ORIGINATOR: Sarah Anderson

FILE NAME: rr-studiotr m16.dgn
 LEVELS: 0, 2, 3, 5, 6, 10



M2-1
 MK2-1
 MM2-1*



MB2-1
 MG2-1
 MN2-1
 MR2-1

*See Note 6

- NOTES**
1. Sign is Type II - See note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 2. Color:
 Background - See note 5
 Message - See note 5
 3. Message Series - C
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 5. M2-1 Background - Reflective white
 Message - Black
 MB2-1 Background - Reflective blue
 Message - Reflective white
 MG2-1 Background - Reflective green
 Message - Reflective white
 MK2-1 Background - Non-reflective green
 Message - Non-reflective white
 MM2-1 Background - Reflective white
 Message - Reflective green
 MN2-1 Background - Reflective brown
 Message - Reflective white
 MR2-1 Background - Non-reflective brown
 Message - Non-reflective yellow
 6. Border shall be omitted on MM2-1.

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1																												
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.2	.20
3	30	21	1 1/8	3/8	1/2	13	4	12 7/8	12 3/8																1 1/2	1/2	4.4	.39
4	30	21	1 1/8	3/8	1/2	13	4	12 7/8	12 3/8																1 1/2	1/2	4.4	.39
5	30	21	1 1/8	3/8	1/2	13	4	12 7/8	12 3/8																1 1/2	1/2	4.4	.39

STANDARD SIGN
 M2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Christa J. Spess
 for State Traffic Engineer

DATE 4/10/98 PLATE NO. M2-1.6

WISDOT/CADD METRIC SHEET **M**

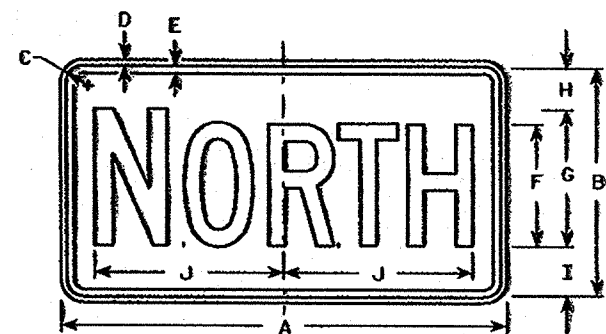
PLOT SCALE:

PLOT NAME:

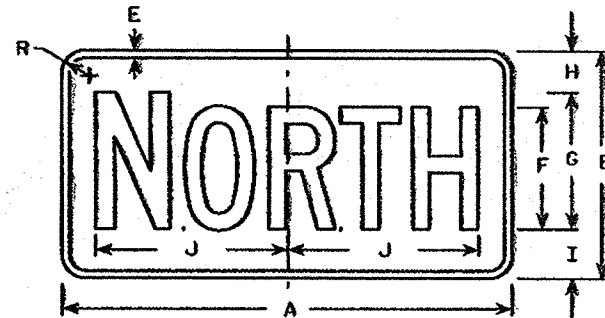
50,59,62, 62,63

REV. DATE: 4/10/98

ORIGINATOR: Sandy Anderson
 FILE NAME: tr_stdplate
 LEVELS ON: 2,3,5
 m21.dgn



M3-1
MK3-1
M03-1



MB3-1
MG3-1
MM3-1*
MN3-1



M3-2
MK3-2
M03-2



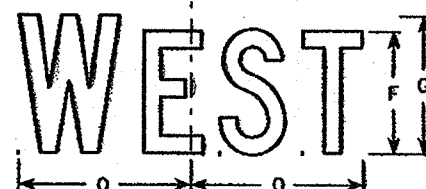
MB3-2
MG3-2
MM3-2*
MN3-2



M3-3
MK3-3
M03-3



MB3-3
MG3-3
MM3-3*
MN3-3



M3-4
MK3-4
M03-4



MB3-4
MG3-4
MM3-4*
MN3-4

NOTES

- All Signs Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 5
Message - See note 5
- Message Series - C
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M3-1 thru M3-4 Background - Reflective white
Message - Black
MB3-1 thru MB3-4 Background - Reflective blue
Message - Reflective white
MG3-1 thru MG3-4 Background - Reflective green
Message - Reflective white
MK3-1 thru MK3-4 Background - Non-Reflective green
Message - Non-Reflective white
MM3-1 thru MM3-4 Background - Reflective white
Message - Reflective green
MN3-1 thru MN3-4 Background - Reflective brown
Message - Reflective white
M03-1 thru M03-4 Background - Reflective Orange
Message - Black
- Border shall be omitted on MM series.
- Note the first letter of each direction is larger than the remainder of the message.

* See Note 6

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 300 mm
3	750 mm X 375 mm
4	750 mm X 375 mm
5	750 mm X 375 mm

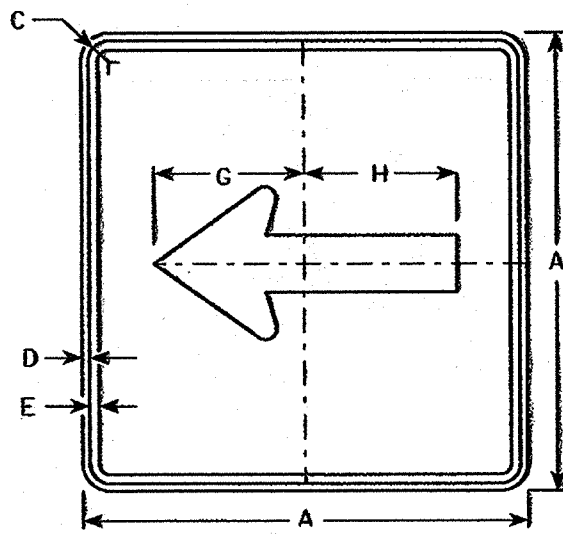
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq.
1																												
2	24	12	1 1/8	3/8	1/2	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00	0.18
3	30	15	1 1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2									3.13	0.28
4	30	15	1 1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2									3.13	0.28
5	30	15	1 1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2									3.13	0.28

STANDARD SIGNS
M3-1 thru M3-4
SERIES

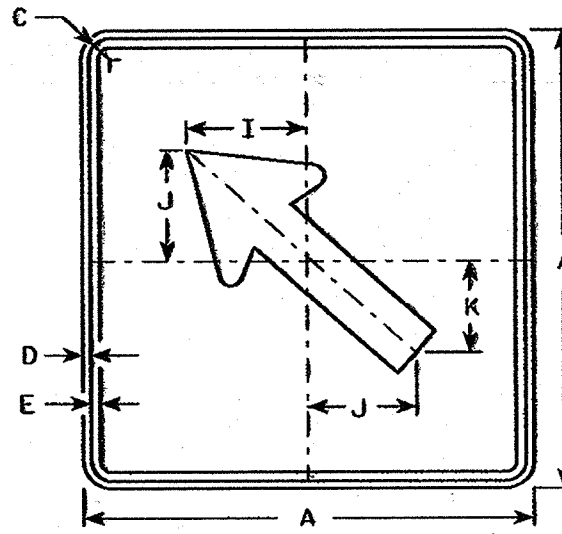
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Christa J. Spang*
State Traffic Engineer

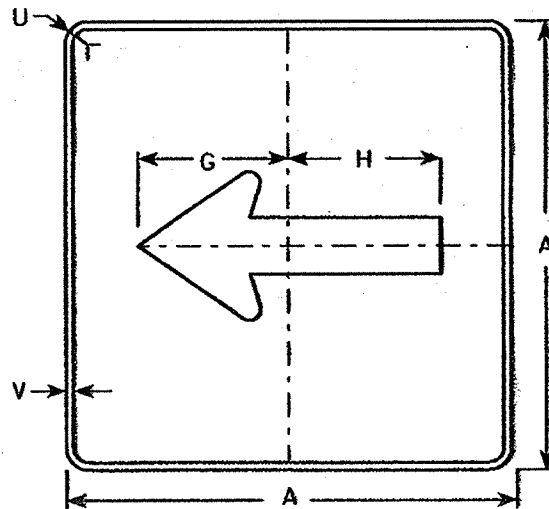
DATE 4/9/98 PLATE NO. M3-1.7



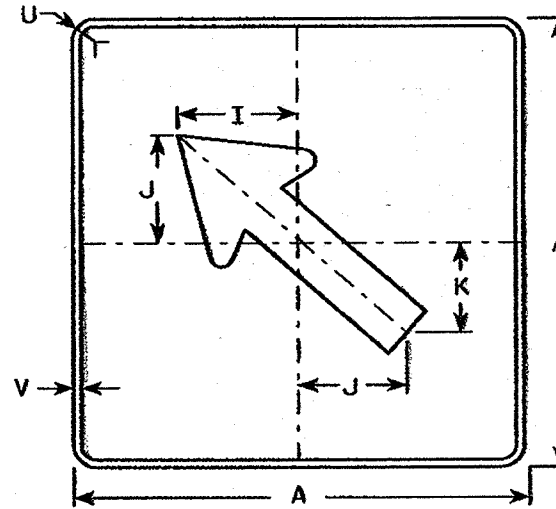
M6-1
MK6-1
MM6-1 (See Note 5)
M06-1



M6-2
MK6-2
MM6-2 (See Note 5)
M06-2



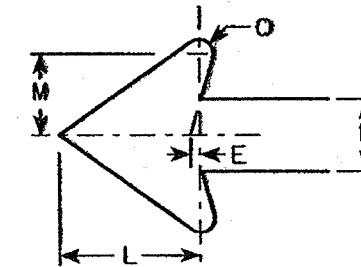
MB6-1
MG6-1
MN6-1
MR6-1



MB6-2
MG6-2
MN6-2
MR6-2

NOTES

- Signs are Type II - See note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-1 and M6-2 Background - Reflective white
Message - Black
MB6-1 and MB6-2 Background - Reflective blue
Message - Reflective white
MG6-1 and MG6-2 Background - Reflective green
Message - Reflective white
MK6-1 and MK6-2 Background - Non-Reflective green
Message - Non-Reflective white
MM6-1 and MM6-2 Background - Reflective white
Message - Reflective green
MN6-1 and MN6-2 Background - Reflective brown
Message - Reflective white
M06-1 and M06-2 Background - Reflective orange
Message - Black
MR6-1 and MR6-2 Background - Non-Reflective brown
Message - Non-Reflective yellow
- Border shall be omitted on MM series.



Metric equivalent for this sign is:

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1																												
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	.28
3	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	.28
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	.56
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	.56

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	.28
3	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	.28
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	.56
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	.56

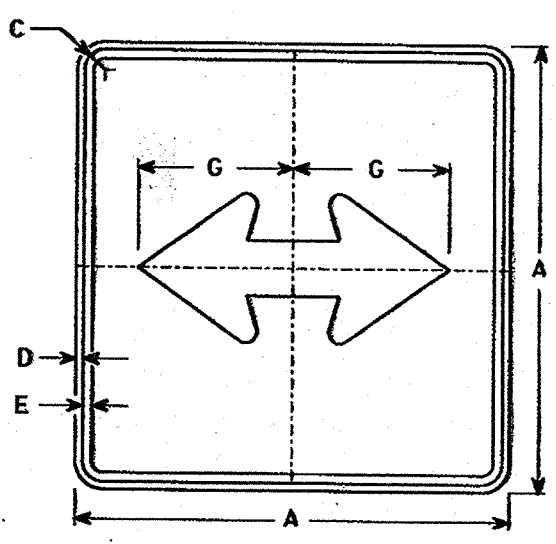
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

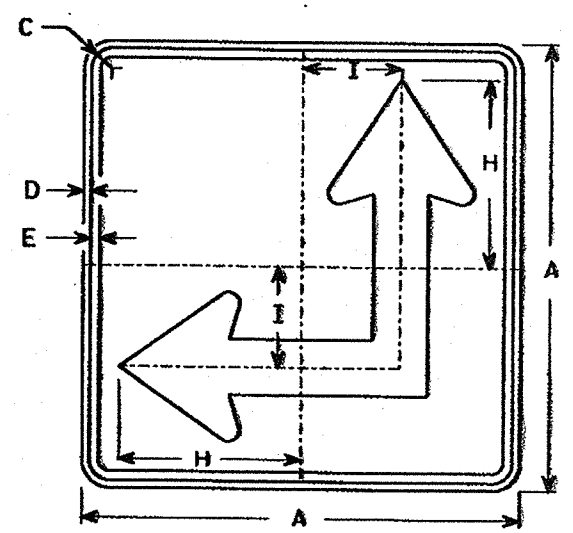
APPROVED

Cheta J. Spess
State Traffic Engineer

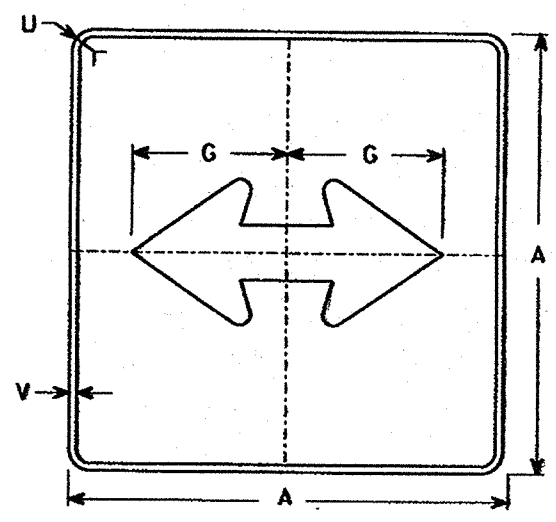
DATE 12/4/97 PLATE NO. M6-L8



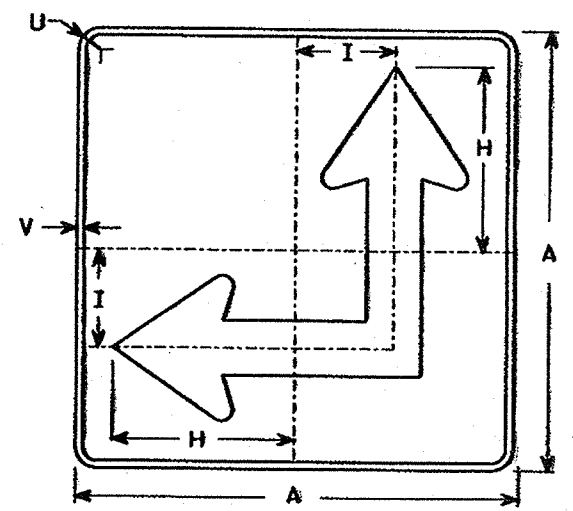
M6-4
MK6-4
MM6-4 (See Note 6)
MO6-4



M6-6L
MK6-6L
MM6-6L (See Note 6)
MO6-6L

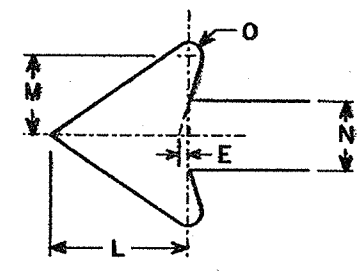


MB6-4
MG6-4
MN6-4
MR6-4



MB6-6L
MG6-6L
MN6-6L
MR6-6L

- NOTES**
- Signs are Type II - See note 4 - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition
 - Color:
Background - See note 4
Message - See note 4
 - Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 - M6-4 and M6-6 Background - Reflective white
Message - Black
MB6-4 and MB6-6 Background - Reflective blue
Message - Reflective white
MG6-4 and MG6-6 Background - Reflective green
Message - Reflective white
MK6-4 and MK6-6 Background - Non-Reflective green
Message - Non-Reflective white
MM6-4 and MM6-6 Background - Reflective white
Message - Reflective green
MN6-4 and MN6-6 Background - Reflective brown
Message - Reflective white
MO6-4 and MO6-6 Background - Reflective orange
Message - Black
MR6-4 and MR6-6 Background - Non-Reflective brown
Message - Non-Reflective yellow
 - M6-6R same as M6-6L except arrow points ahead and right.
 - Border shall be omitted on MM series.



Metric equivalent for this sign list

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	kg sq. ft.
1																												
2	525 mm	525 mm																										
3	525 mm	525 mm																										
4	750 mm	750 mm																										
5	750 mm	750 mm																										

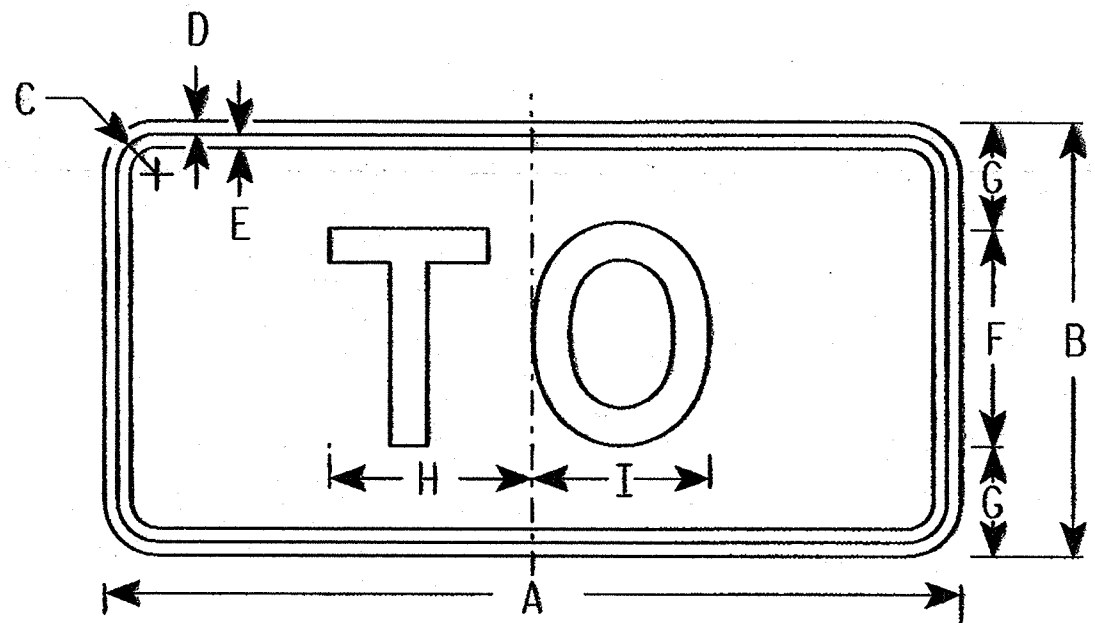
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	kg sq. ft.
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	.28
3	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	.28
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	.58
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	.58

STANDARD SIGNS
M6-4 & M6-6
SERIES

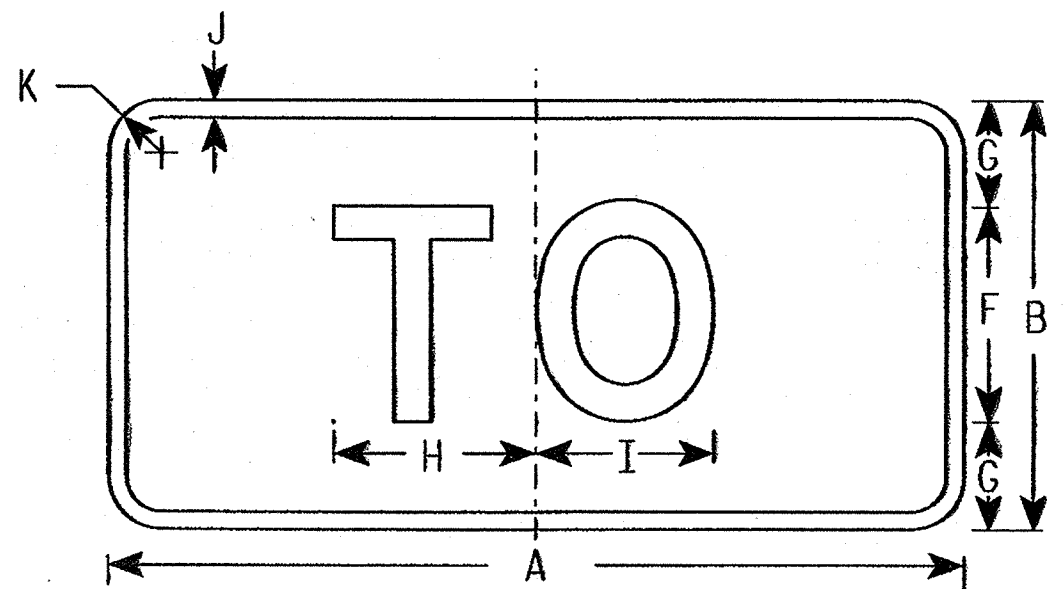
WISCONSIN DEPT OF TRANSPORTATION

APPROVED _____
State Traffic Engineer

DATE 4-3-96 PLATE NO. M6-4.3



M4-5
MK4-5
MM4-5 *See Note 6



MB4-5
MG4-5
MN4-5

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - Reflective white
Message - Black
MB4-5 Background - Reflective blue
Message - Reflective white
MG4-5 Background - Reflective green
Message - Reflective white
MK4-5 Background - Non-Reflective green
Message - Non-Reflective white
MM4-5 Background - Reflective white
Message - Reflective green
MN4-5 Background - Reflective brown
Message - Reflective white
6. Border shall be omitted on MM series.

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 300 mm
3	750 mm X 375 mm
4	750 mm X 375 mm
5	600 mm X 300 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1																												
2	24	12	1 1/8	3/8	3/8	6	3	5 5/8	5	1/2	1 1/2															2.0	0.18	
3	30	15	1 3/8	3/8	1/2	8	3 1/2	7 1/2	6 5/8	1/2	1 1/2															3.1	0.28	
4	30	15	1 3/8	3/8	1/2	8	3 1/2	7 1/2	6 5/8	1/2	1 1/2															3.1	0.28	
5	24	12	1 1/8	3/8	3/8	6	3	5 5/8	5	1/2	1 1/2															2.0	0.18	

PLOT SCALE:

PLOT NAME:

REV. DATE: 6/5/97

ORIGINATOR: Don Kluever

FILE NAME: tr_stdplate m45.dgn
LEVELS ON: 2, 3, 5, 6

STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Christa J. Spang
State Traffic Engineer

DATE 5/6/97 PLATE NO. M4-5.2

WISDOT/CADDS METRIC SHEET **M**

PLOT NAME

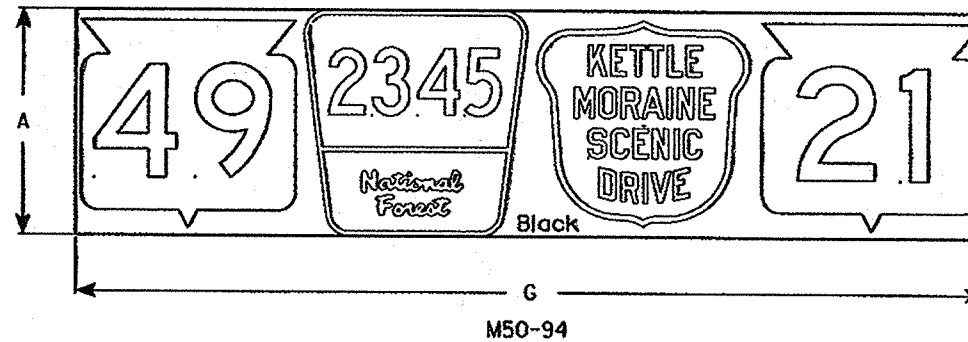
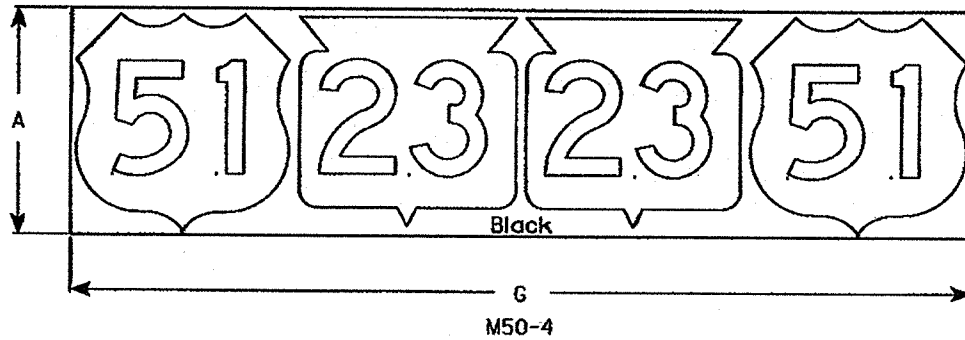
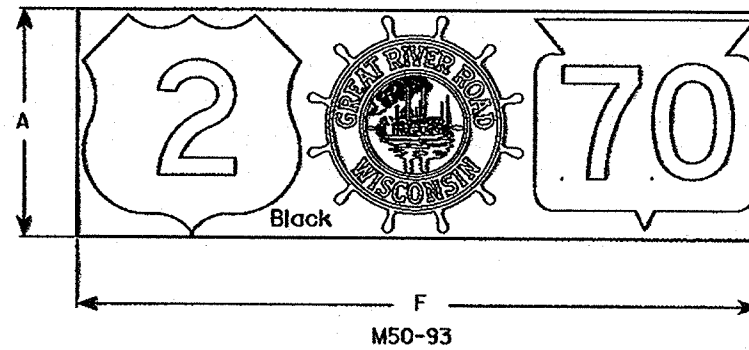
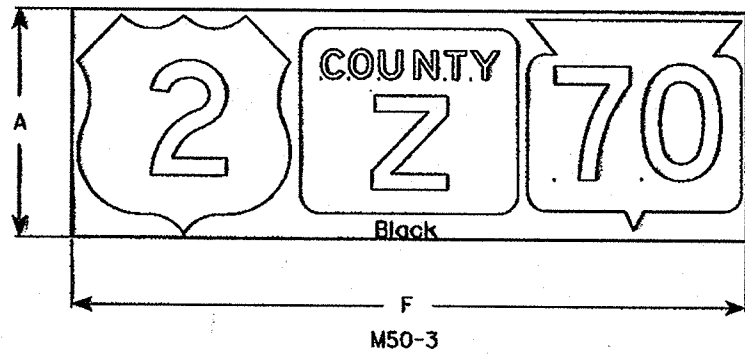
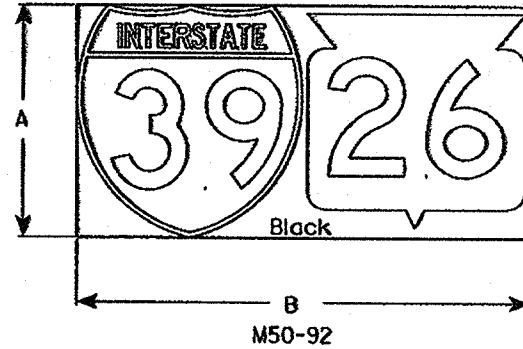
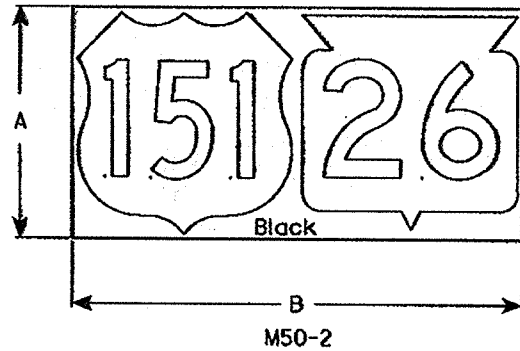
PLOT SCALE: 8.81

FILE NAME

ORIGINATOR: Dan Kuever

56.52, 61, 63

LEVELS ON - 2, 5.6, 10



NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Black non-reflective
Message - See Note 5
3. Message Series - See Note 5
4. Corners shall be square since base material is plywood.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.

Metric equivalent for this sign is: Metric equivalent for this sign is: Metric equivalent for this sign is:

SIZE	M50-2/92	SIZE	M50-3/93	SIZE	M50-4/94
1		1		1	
2	600 mm X 1200 mm	2	600 mm X 1800 mm	2	600 mm X 2400 mm
3	900 mm X 1800 mm	3	900 mm X 2400 mm	3	900 mm X 3600 mm
4		4		4	
5		5		5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	M50-2/92		M50-3/93		M50-4/94		
																							Area sq. ft.	Area sq. m.	Area sq. ft.	Area sq. m.	Area sq. ft.	Area sq. m.	
1																													
2	24	48				72	96																8.0	0.72	12.0	1.08	15.0	1.44	
3	36	72				96	144																18.0	1.62	24.0	2.16	36.0	3.24	
4																													
5																													

STANDARD SIGNS
M50 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Christa J. Spang*
for State Traffic Engineer

DATE 10/7/98 PLATE NO. M50.1

PLOT NAME:

PLOT SCALE:

FILE NAME:

ORIGINATOR:

63

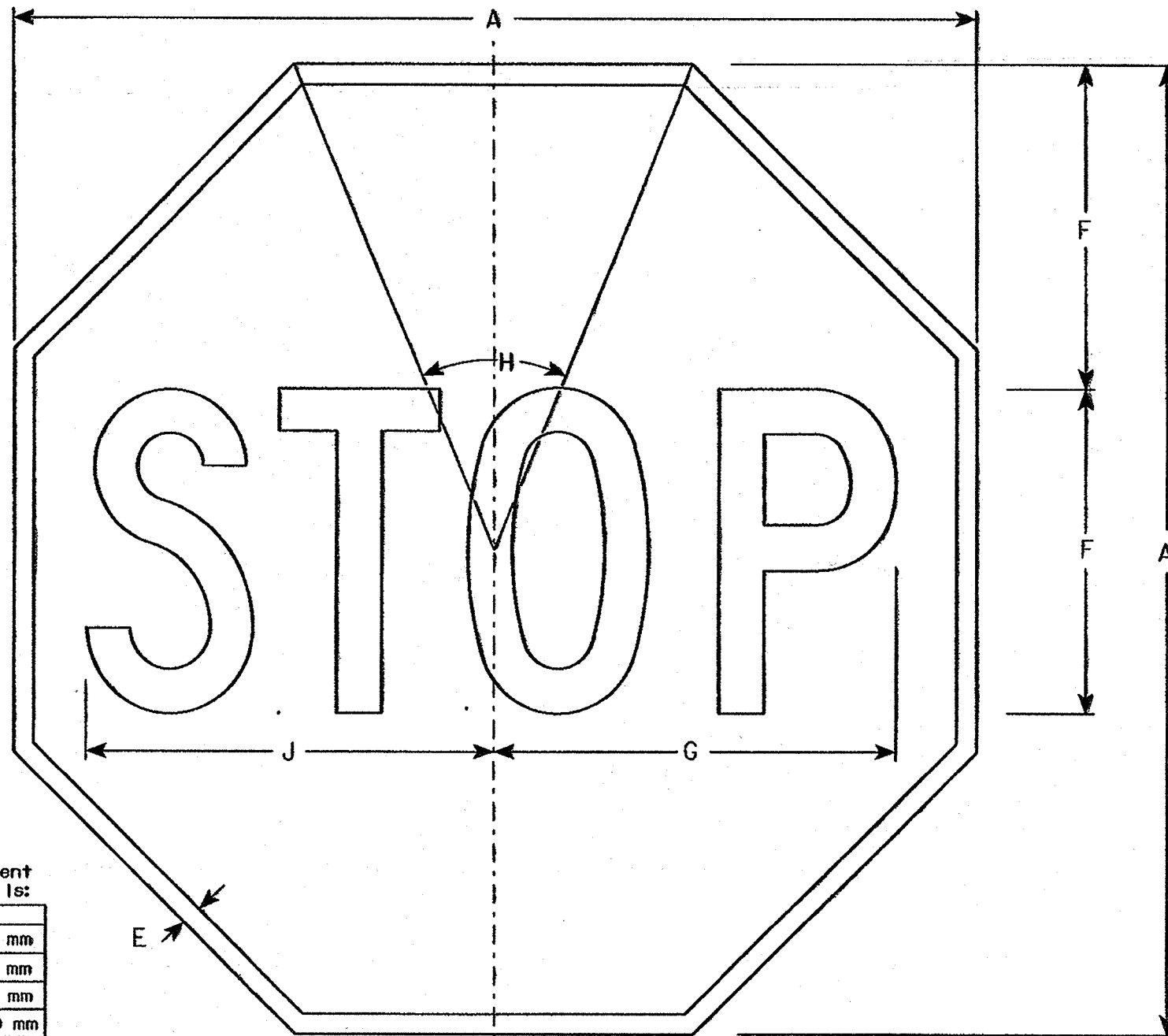
LEVELS ON - 8.1 8.6 A

STATE PROJECT NUMBER
LAAB-03-71

SHEET NO.
7.25

NOTES

1. Sign Is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 Background - Red
 Message - White
3. Message Series - C



R1-1

Metric equivalent for this sign is:

SIZE	
1	600 mm X 600 mm
2	750 mm X 750 mm
3	900 mm X 900 mm
4	1200 mm X 1200 mm
5	1200 mm X 1200 mm
6	450 mm X 450 mm
7	300 mm X 300 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1	24				3/8	8	10	45°		10 1/4																	3.31	0.31
2	30				5/8	10	12 1/2	45°		12 3/4																	5.18	0.48
3	36				3/4	12	15	45°		15 3/8																	7.46	0.69
4	48				1	16	20	45°		20 1/2																	13.25	1.23
5	48				1	16	20	45°		20 1/2																	13.25	1.23
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86	0.17
7	12				1/4	4	5	45°		5 1/8																	0.78	0.07

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

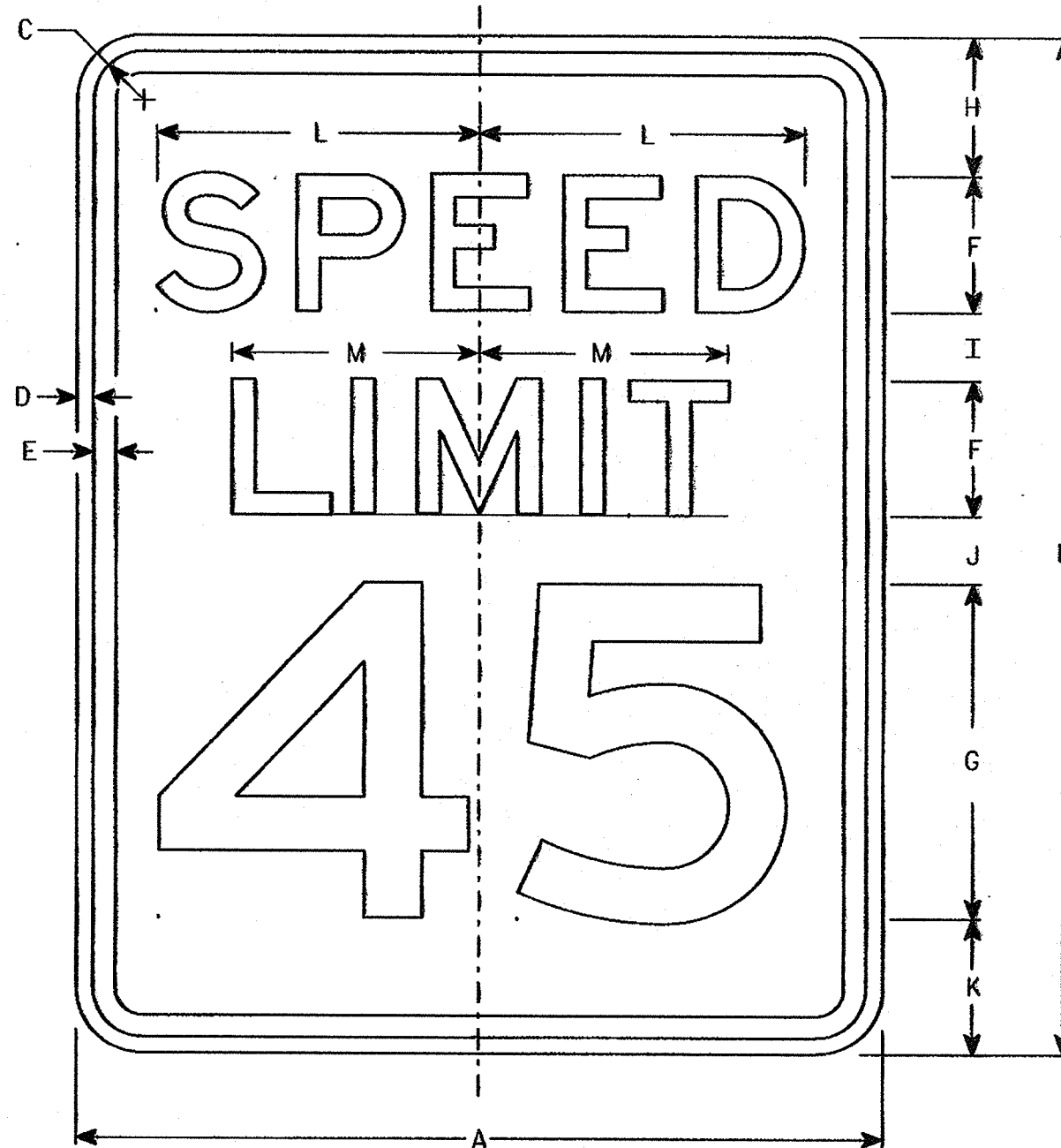
Chester J Spang
for State Traffic Engineer

DATE 10/15/98

PLATE NO. R1-1.11

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.



R2-1

Metric equivalent for this sign is:

SIZE	
1	450 mm X 600 mm
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	1200 mm X 1500 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0	.28
2	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0	.46
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0	1.11
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0	1.11
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0	1.86

PLOT SCALE:

PLOT NAME:

REV. DATE: 6/4/97

ORIGINATOR: Sandy Anderson

FILE NAME: TR-stdplate r21.dgn
LEVEL ON - 1,2 5,6

58.58 62.63

STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

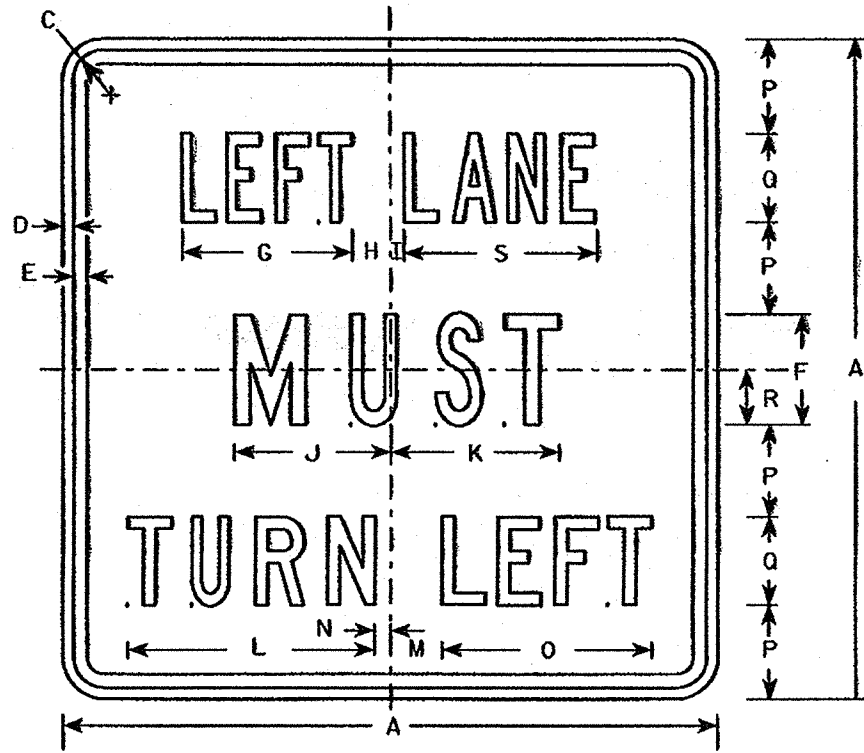
Christa J. Spang
State Traffic Engineer

DATE 5/4/97 PLATE NO. R2-1.10

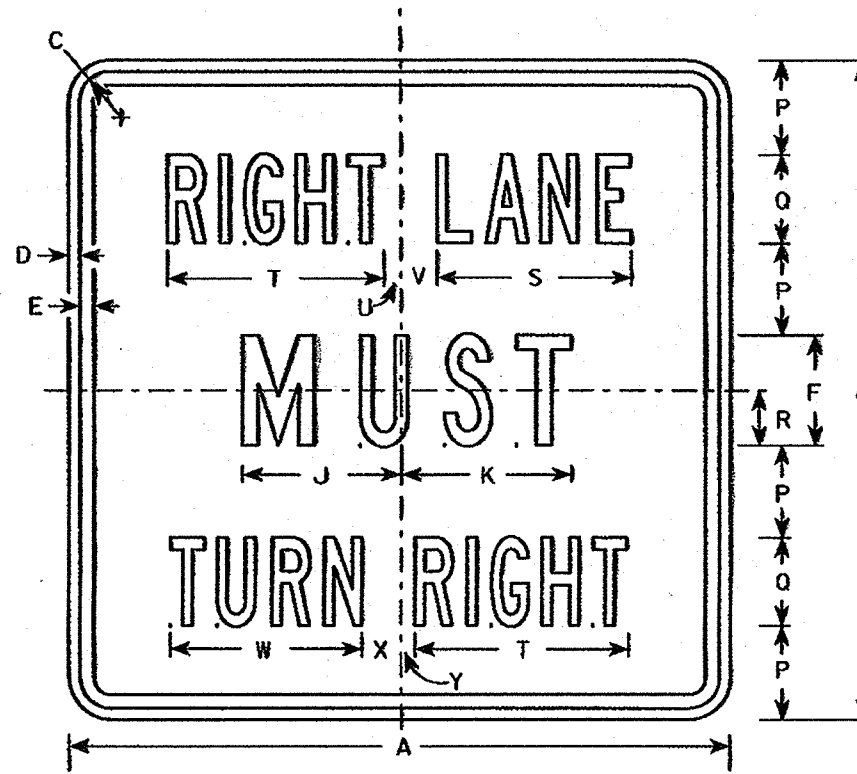
WISDOT/CADDs METRIC SHEET M

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 Background - White
 Message - Black
3. Message Series - Line 1 is Series B.
 Line 2 is Series C.
 Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R3-7L



R3-7R

Metric equivalent for this sign is:

SIZE	
1	750 mm X 750 mm
2	750 mm X 750 mm
3	900 mm X 900 mm
4	1200 mm X 1200 mm
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25	0.56
2	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25	0.56
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00	0.81
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00	1.44
5																												

STANDARD SIGN
 R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Chetan J. Spang*
 for State Traffic Engineer

DATE 1/21/97 PLATE NO. R3-7.2

WISDOT/CADDS METRIC SHEET **M**

PLOT SCALE: 4 : 1

PLOT NAME:

58.58.00 63

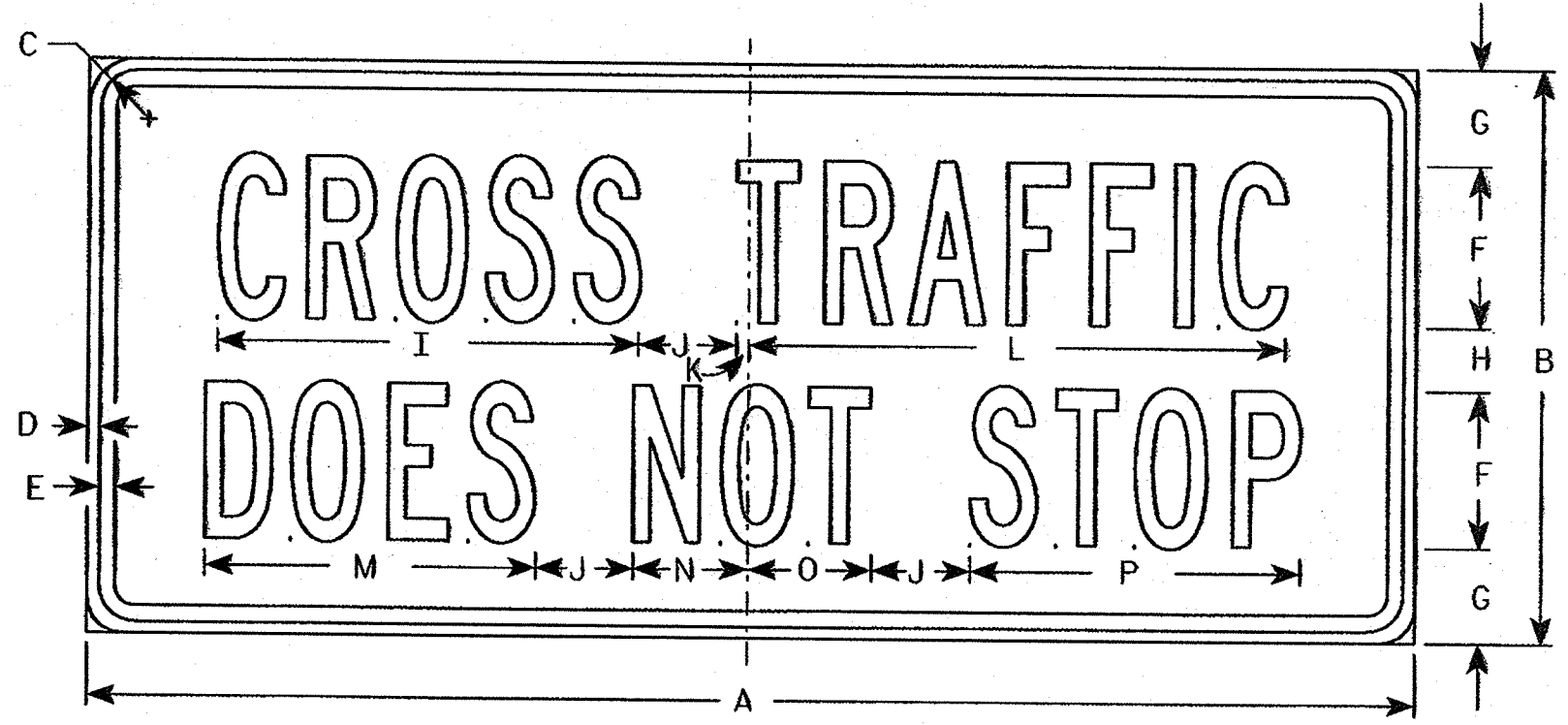
REV. DATE: 1/21/97

ORIGINATOR: Don Kluever

FILE NAME: TP_stdplate R37.dgn
 LEVELS ON: 1, 2, 3, 5, 6

NOTES

1. Sign Is Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R1-52C

Metric equivalent for this sign is:

SIZE	
1	600 mm X 300 mm
2	900 mm X 375 mm
3	1050 mm X 450 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq.
1	24	12	1 1/8	3/8	3/8	3	2 1/4	1 1/2	8	1 1/2	3/8	10	6 1/4	2 1/4	2 1/4	6 1/4											2.0	0.18
2	36	15	1 1/8	3/8	1/2	4	2 5/8	1 3/4	10 3/4	2 3/8	3/8	13 1/2	8 3/8	3	3 1/8	8 3/8											3.75	0.34
3	42	18	1 1/8	3/8	1/2	5	3	2	13 3/8	3 1/8	3/8	16 7/8	10 1/2	3 5/8	3 7/8	10 3/8											5.25	0.47
4																												
5																												

STANDARD SIGN
R1-52C

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Charles J. Spang
State Traffic Engineer

DATE 3/10/98 PLATE NO. R1-52C.2

WISDOT/CADDs METRIC SHEET M

PLOT SCALE:

PLOT NAME:

59.59.02 63

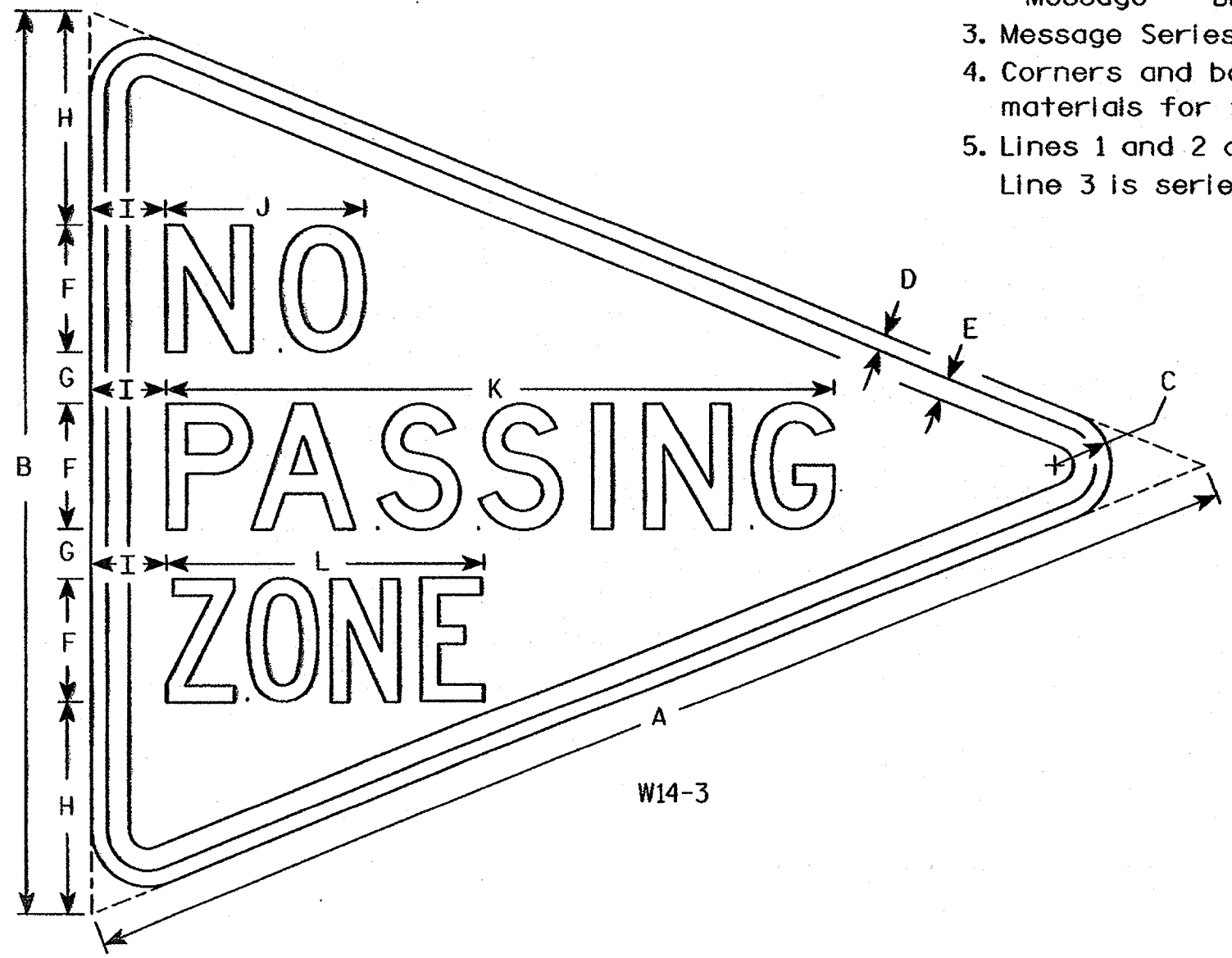
REV. DATE: 02/18/98

ORIGINATOR: Don Kluever

FILE NAME: tr-stopsign r152c.dgn
LEVEL ON: 23.56

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 Background - Yellow
 Message - Black
3. Message Series - See note 5
4. Corners and borders shall be rounded on all base materials for this sign.
5. Lines 1 and 2 are Series D.
 Line 3 is series C.



Metric equivalent for this sign is:

SIZE	
1	
2	1200 mm X 900 mm
3	1600 mm X 1200 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1																												
2	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0	.54
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	15 1/2															10.7	.96
4																												
5																												

STANDARD SIGN
 W14-3
 WISCONSIN DEPT OF TRANSPORTATION
 APPROVED
Christa J. Spang
 for State Traffic Engineer
 DATE 1/21/98 PLATE NO. W14-3.8
 WISDOT/CADDS METRIC SHEET **M**

PLOT SCALE:

PLOT NAME:

58.59.82 63

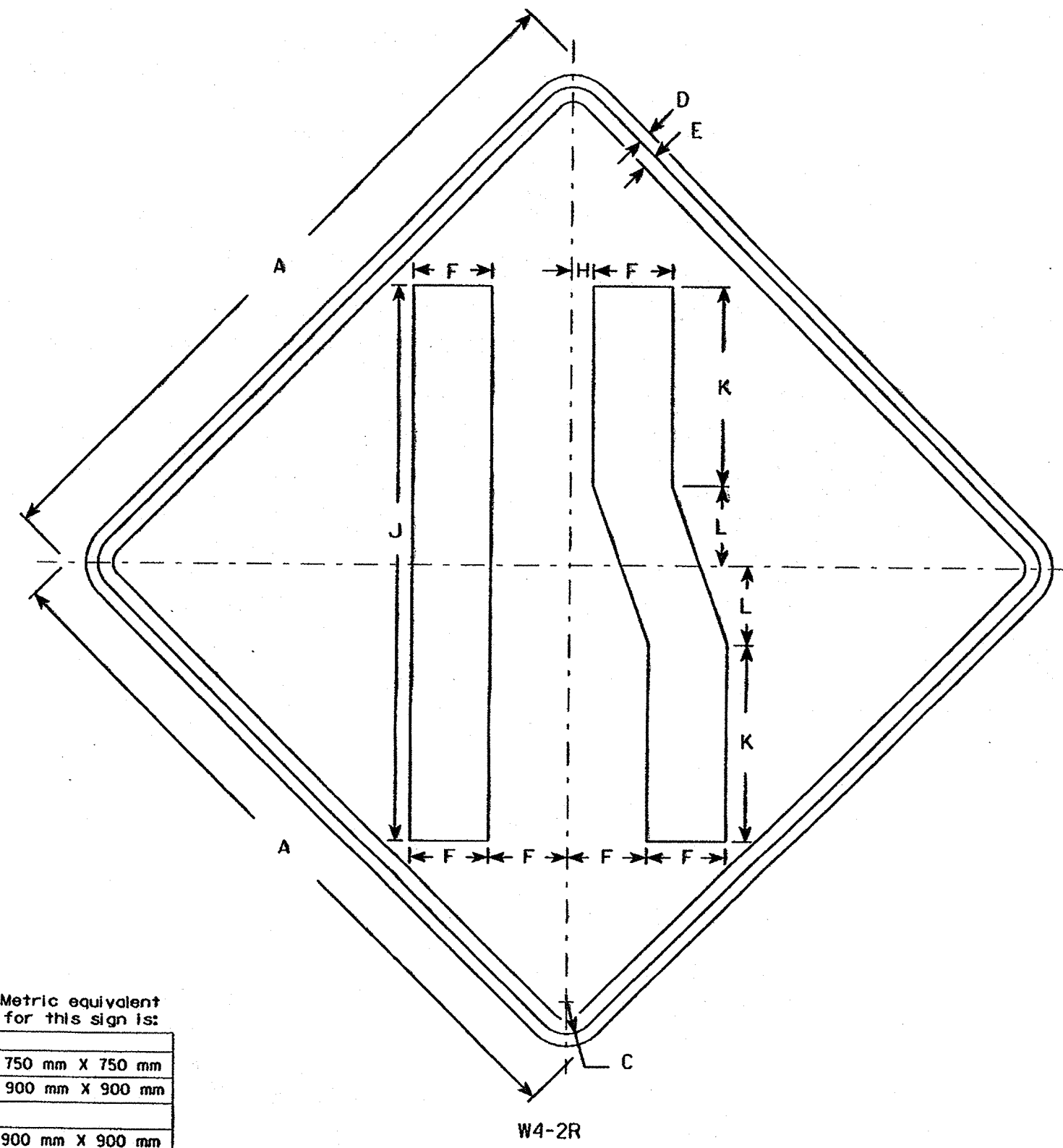
REV. DATE: 01/20/98

FILE NAME: TR-STDP1010 W143.DGN
 LEVELS ON - 2 58 10

ORIGINATOR: Don Kluever

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 Background - Yellow
 Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the arrow is reversed along the vertical centerline.



Metric equivalent for this sign is:

SIZE	
1	750 mm X 750 mm
2	900 mm X 900 mm
3	
4	900 mm X 900 mm
5	1200 mm X 1200 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1	30		1 3/8	1/2	5/8	3		7/8		23	8 1/4	3 1/4															6.25	0.56
2	36		1 5/8	5/8	3/4	4		1 1/8		28	10	4															9.0	0.81
3																												
4	36		1 5/8	5/8	3/4	4		1 1/8		28	10	4															9.0	0.81
5	48		2 1/4	3/4	1	5		1 1/2		37	13 1/4	5 1/4															16.0	1.44

STANDARD SIGN
W4-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Christa J. Spang
 for State Traffic Engineer

DATE 7/7/97 PLATE NO. W4-2.9

WISDOT/CADDS METRIC SHEET **M**

PLOT SCALE:

PLOT NAME:

58.59.60 53

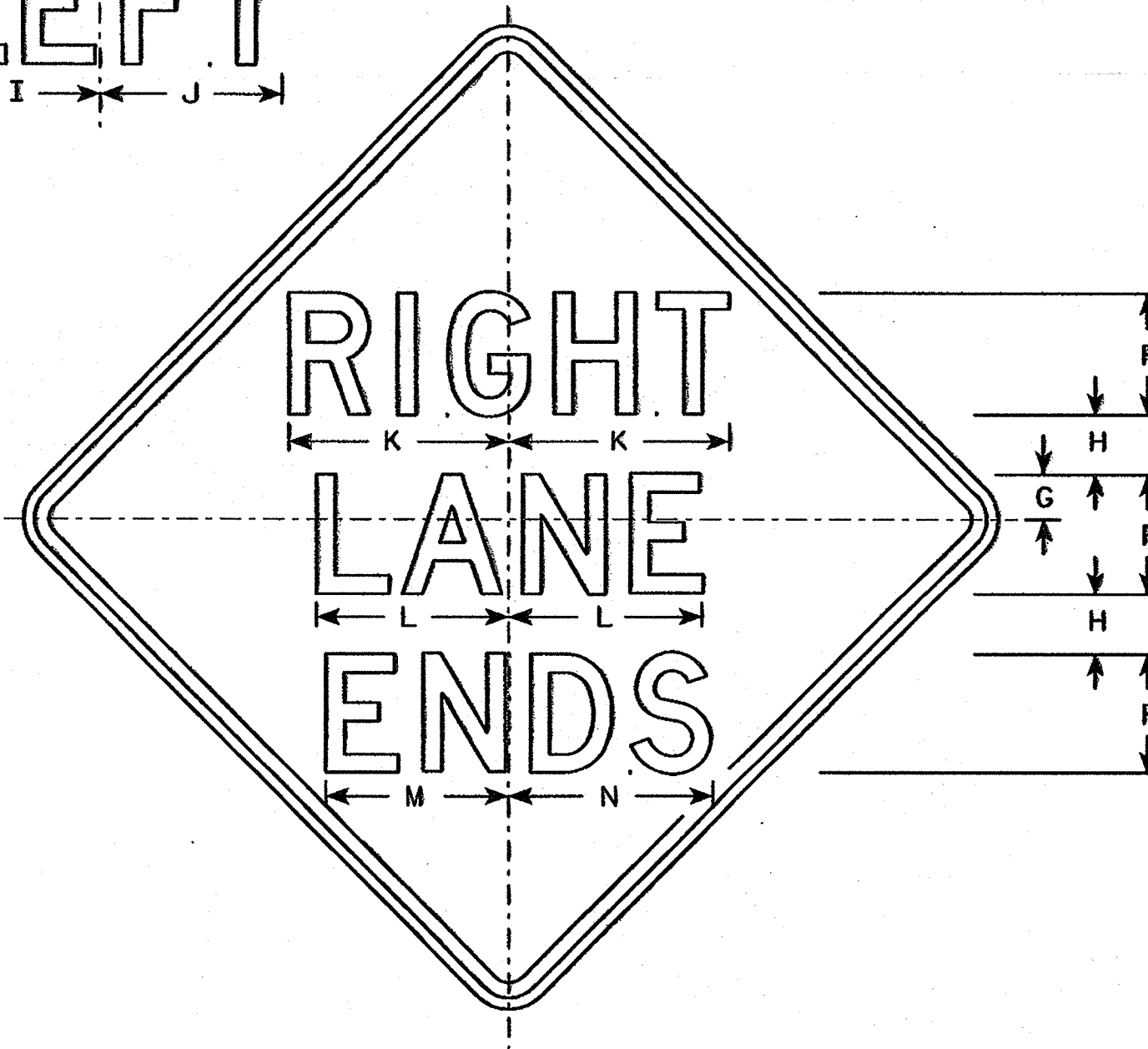
REV. DATE: 7-7-97

ORIGINATOR: CON. KILVEY
 FILE NAME: TR-STANDARD W42.000
 SIZE: 2.5, 5.6

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. W9-1L same as W9-1R except the word Left replaces Right.

LEFT
I J



W9-1R

Metric equivalent for this sign is:

SIZE	
1	
2	750 mm X 750 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	1200 mm X 1200 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1																												
2	30		1 3/8	1/2	5/8	5	1 1/2	2 1/2	7 1/8	7 5/8	9 1/4	8 1/8	7 5/8	8 5/8													6.25	0.56
3	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0	0.81
4	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0	0.81
5	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 3/8	12 1/4	13 5/8													16.0	1.44

PLOT SCALE:

PLOT NAME:

58.59.60. 63

REV. DATE: 9/25/97

FILE NAME: tr-stddiote w91-1R
LEVELS ON - 1, 2, 3, 5, 6, 10

ORIGINATOR: Don Kluver

STANDARD SIGN
W9-1

WISCONSIN DEPT OF TRANSPORTATION

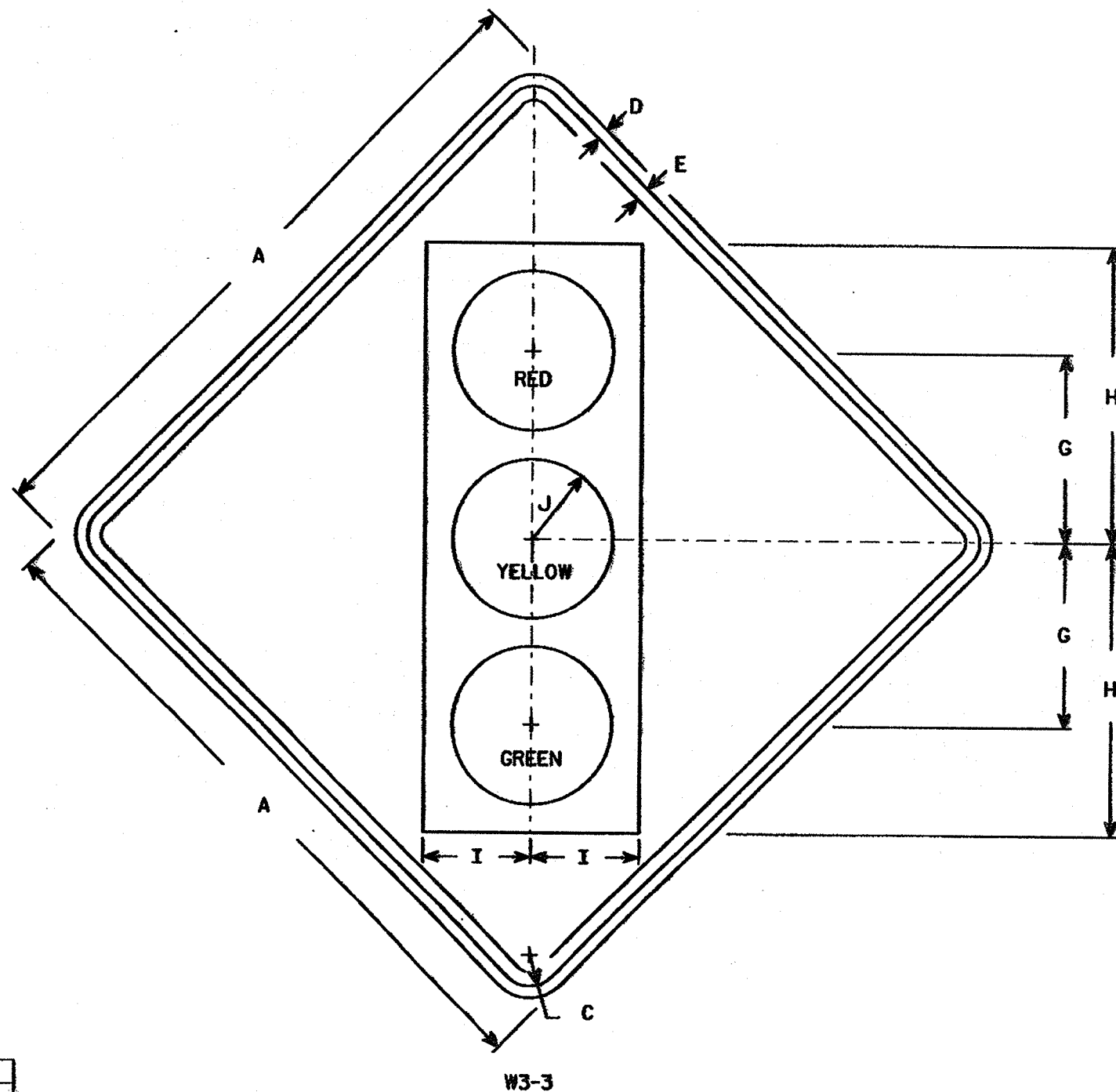
APPROVED
Christa J. Spang
State Traffic Engineer

DATE 9/26/97 PLATE NO. W9-15

WISDOT/CADD METRIC SHEET M

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 Background - Yellow
 Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
 Top circle - Reflectorized Red
 Center circle - Same as background
 Bottom circle - Reflectorized Green



Metric equivalent for this sign is:

SIZE	
1	750mm X 750mm
2	900mm X 900mm
3	
4	900mm X 900mm
5	1200mm X 1200mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25	0.56
2	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0	0.81
3																												
4	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0	0.81
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0	1.44

STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Christa J. Spang
 State Traffic Engineer

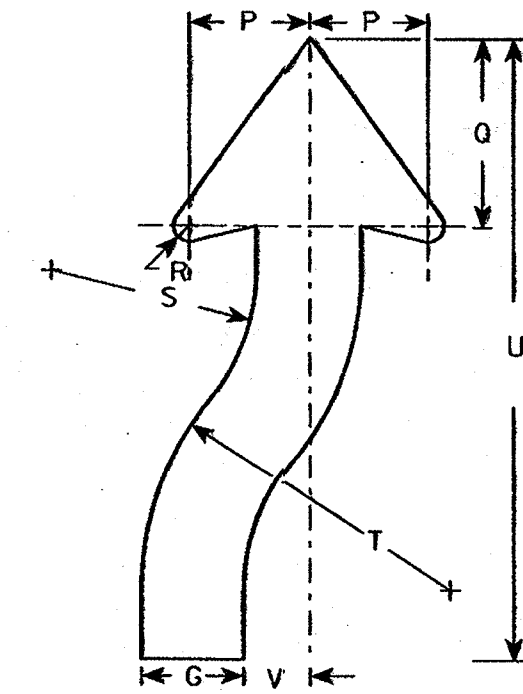
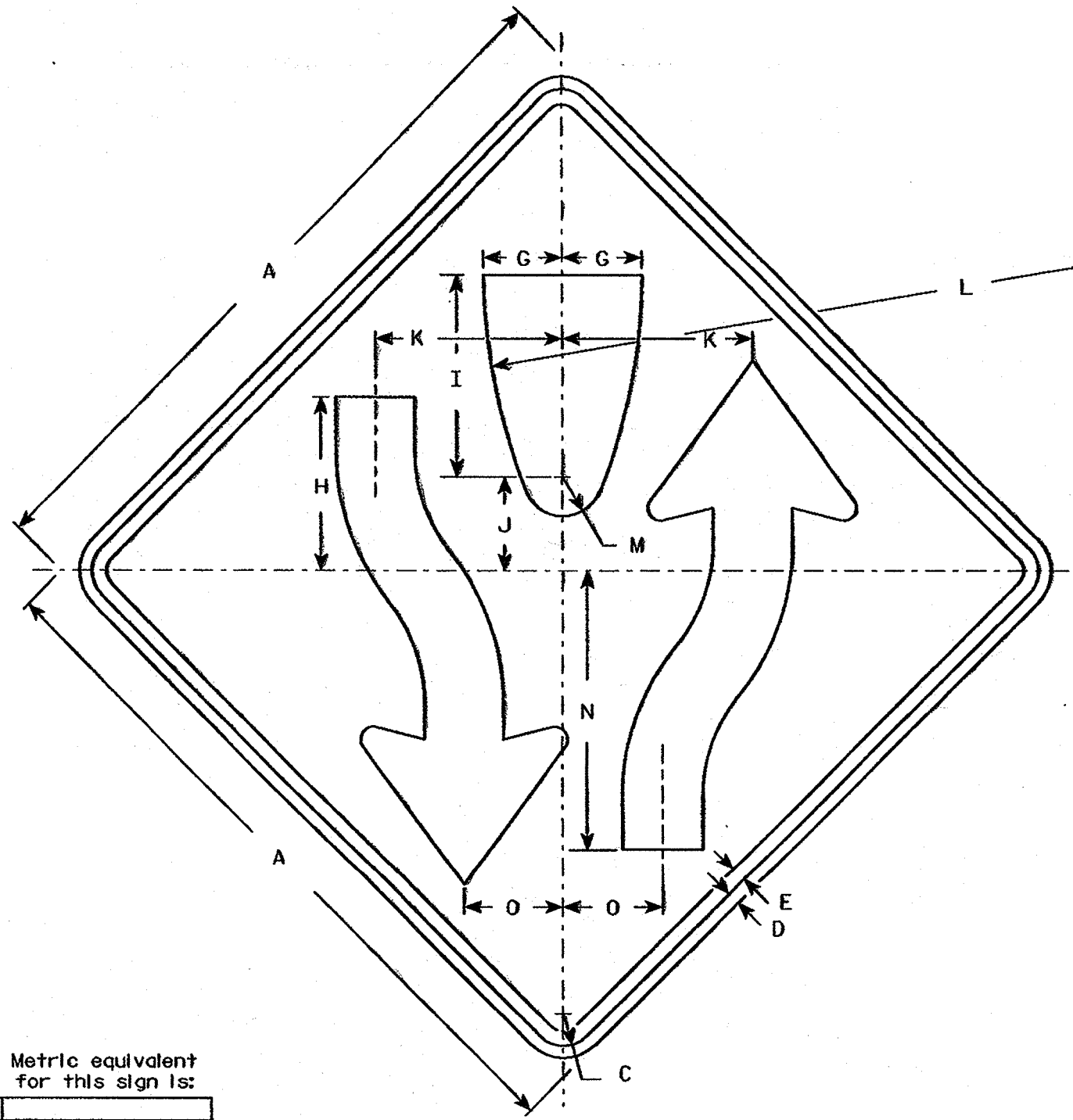
DATE 4/29/97 PLATE NO. W3-3.6

WISDOT/CADDS METRIC SHEET

ORIGINATOR: Sandy Anderson
 REV. DATE: 4/29/97
 PLOT NAME:
 PLOT SCALE:
 FILE NAME: tr-stpdiag
 LEVELS ON: 2, 3, 5, 6, 10, 63

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

Metric equivalent for this sign is:

SIZE	
1	750 mm X 750 mm
2	900 mm X 900 mm
3	
4	900 mm X 900 mm
5	1200 mm X 1200 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.	
1	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25	0.56	
2	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0	0.81	
3																													
4	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0	0.81	
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0	1.44	

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Christen J. Spang
for State Traffic Engineer

DATE 1/05/98 PLATE NO. W6-1.10

WISDOT/CADDS METRIC SHEET **M**

PLOT SCALE:

PLOT NAME:

56.59.03 63

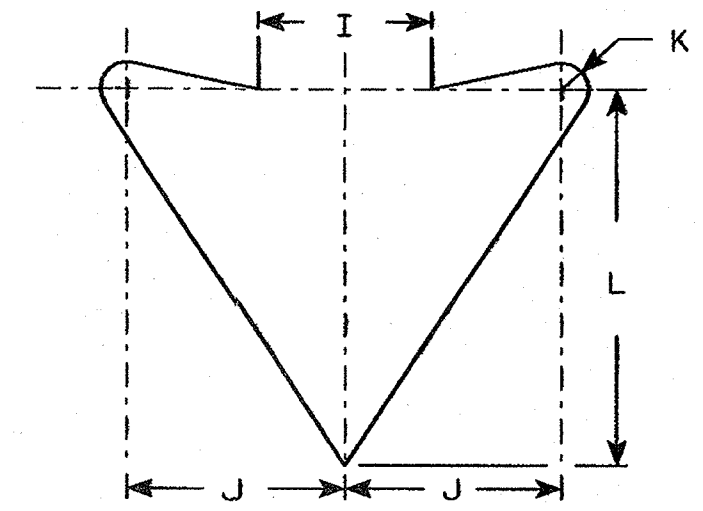
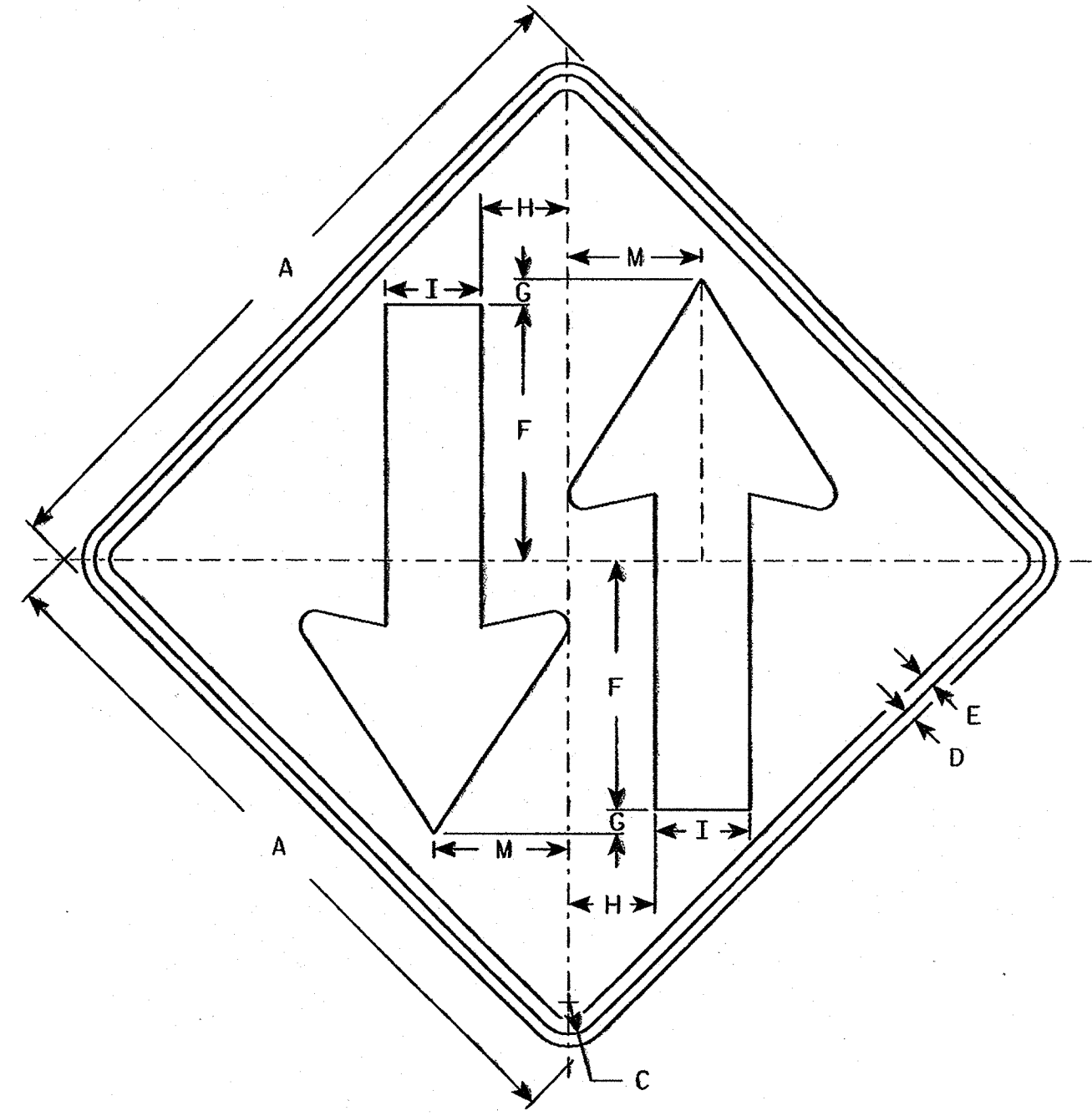
REV. DATE: 01/05/98

ORIGINATOR: Don Kluever

FILE NAME: tr_stdplate w61.dgn
LEVELS ON: 2, 3, 5

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

Metric equivalent for this sign is:

W6-3

SIZE	
1	600 mm X 600 mm
2	750 mm X 750 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	1200 mm X 1200 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1	24		1 1/8	3/8	1/2	8 1/8	1	2	3	4	1/2	7	3 1/2														4.0	0.36
2	30		1 3/8	1/2	5/8	10 1/2	1	3 5/8	4	5	5/8	8 3/4	5 5/8														6.25	0.56
3	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0	0.81
4	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0	0.81
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0	1.44

STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Charles J. Spang*
State Traffic Engineer

DATE 8/26/97 PLATE NO. W6-3.6

WISDOT/CADDS METRIC SHEET **M**

PLOT SCALE:

PLOT NAME:

REV. DATE: 8/14/97

ORIGINATOR: Don Kluever

FILE NAME: tr-stplote w63.dgn
LEVELS ON: 2, 3, 5, 6, 10

58.59.02 63

STATE PROJECT NUMBER	SHEET NO.
6448-03-71	8.1

DESIGN DATA

LIVELOAD: MS-18
 EARTHLOAD: DESIGNED FOR 0.3m OF FILL.
 STRENGTH DESIGN METHOD:
 CONCRETE MASONRY $f'_c = 24$ MPa
 HIGH STRENGTH BAR STEEL REINFORCEMENT $f_y = 420$ MPa

TRAFFIC VOLUME

S.T.H. 150
 A.D.T. = 16,000 (2020)
 R.D.S. = 60 km/h

HYDRAULIC DATA

100 YEAR FREQUENCY
 $Q_{100} = 39.6$ m³/s
 VEL. = 0.91 m/s
 HW. = EL. 235.57m
 DRAINAGE AREA = 2.3 km²
 OVERTOPPING RDWY. = 34.10m

TOTAL ESTIMATED QUANTITIES

BID ITEMS		NON-BID ITEMS	
REMOVING OLD CULVERT	1	FILLER	19mm SIZE
EXCAVATION FOR STRUCTURES, CULVERTS C-70-39	1		
CONCRETE MASONRY, CULVERTS	110		
HIGH STRENGTH BAR STEEL REINFORCEMENT, CULVERTS	9,200		
GEOTEXTILE FABRIC, TYPE R	50		
RIPRAP	25		
CONCRETE MASONRY ANCHORS, TYPE L, NO. 16 BARS	44		
STRUCTURE BACKFILL	260		
RUBBERIZED MEMBRANE WATERPROOFING	140		
INLET GRATE, C-70-39	1		

GENERAL NOTES

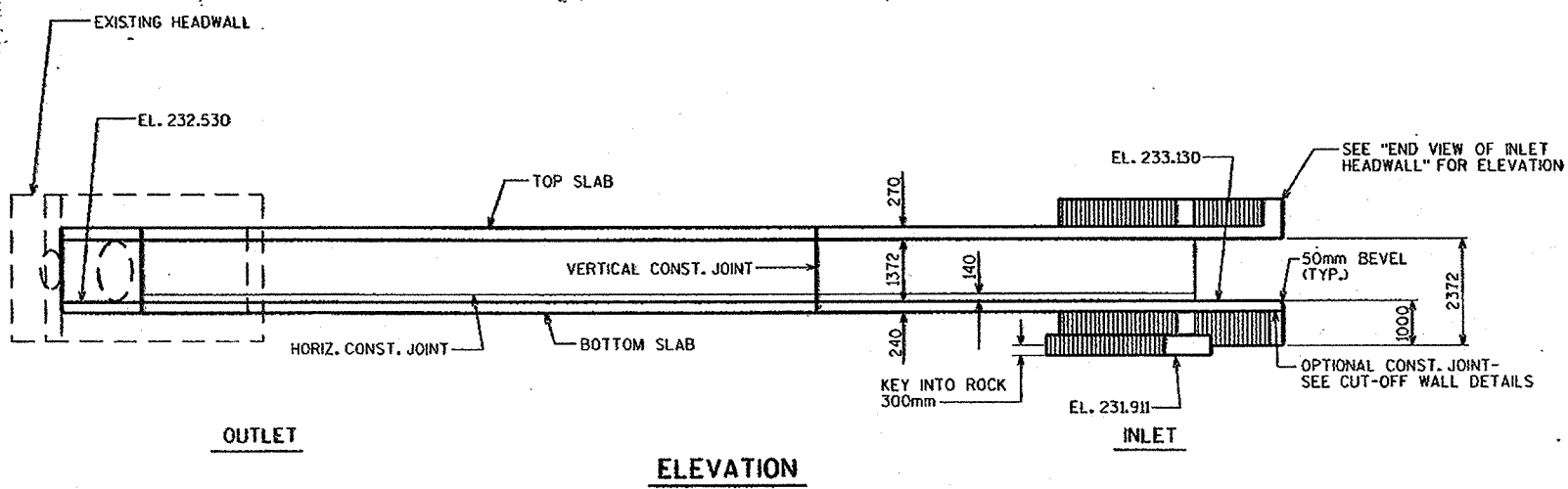
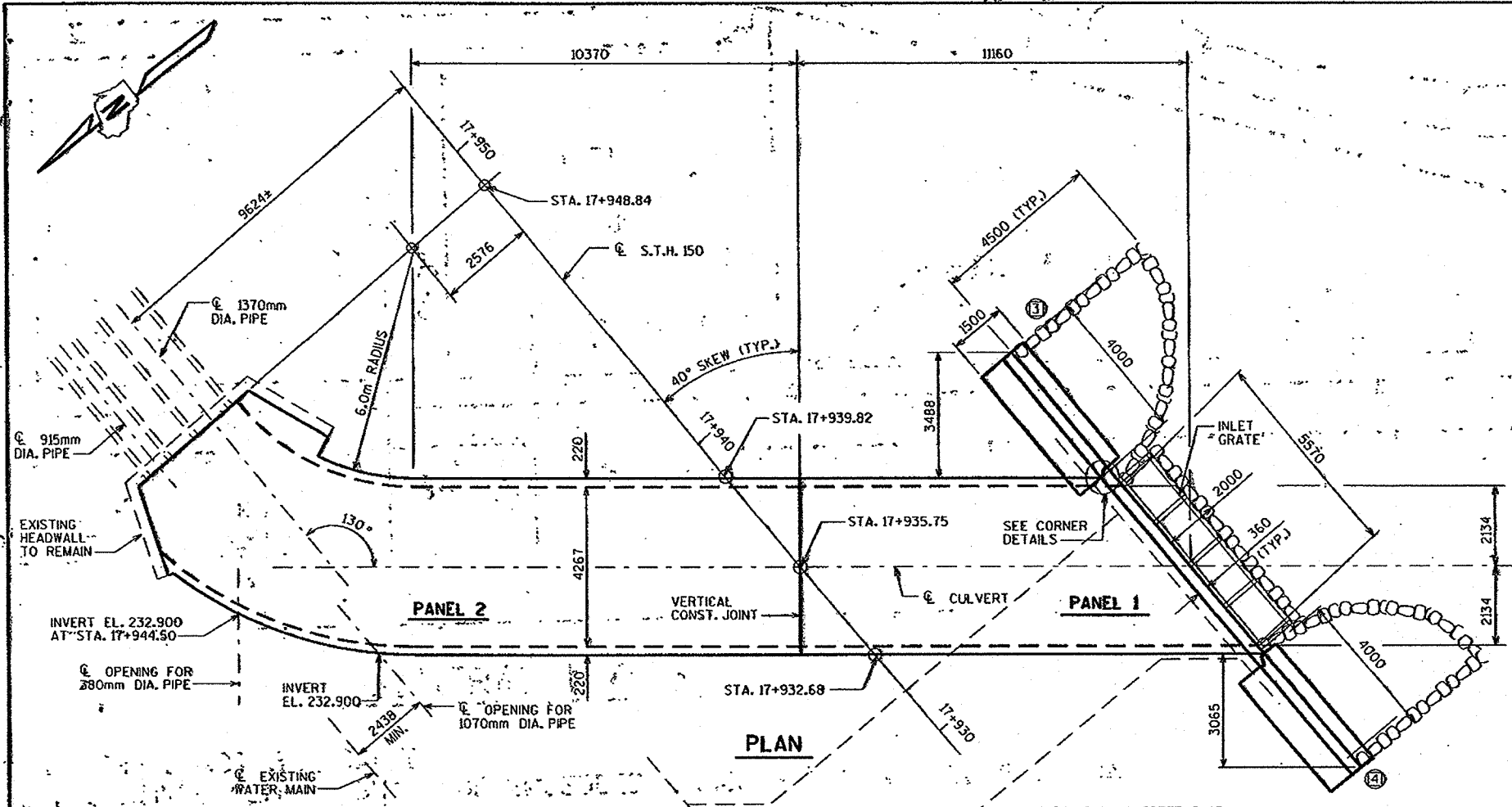
DRAWINGS SHALL NOT BE SCALED.
 BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 50mm CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
 THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES SHALL BE THE EXISTING GROUNDLINE.
 ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE ELEVATION AND SECTION EXISTING PRIOR TO EXCAVATION WITHIN THE LENGTH OF THE CULVERT.
 THE CONCRETE IN THE CUTOFF WALLS MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.
 THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT. MATERIALS AND FABRICATION SHALL BE IN ACCORDANCE WITH PRECAST REINFORCED CONCRETE BOX SECTIONS FOR CULVERTS, STORM DRAINS AND SEWERS AASHTO DESIGNATION M259, AND DIVISION 2 SECTION 27 OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, CURRENT EDITION, EXCEPT THAT THE CONCRETE MIXTURE SHALL CONTAIN NOT LESS THAN 256 KILOGRAMS OF PORTLAND CEMENT, BLENDED CEMENT OR PORTLAND CEMENT PLUS POZZOLANIC ADMIXTURE PER CUBIC METERS.
 ALL DIMENSIONS MILLIMETERS (mm) UNLESS OTHERWISE NOTED.
 ALL STATIONS AND ALL ELEVATIONS ARE METERS (m).
 ALL REINFORCING BARS ARE METRIC AND THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
 PLACE "RUBBERIZED MEMBRANE WATERPROOFING" ON TOP SLAB.
 EXISTING GRATE AT HEADWALL SHALL BE REMOVED.

BRIDGE OFFICE CONTACT = DAVID R. GENSON (608) 266-849

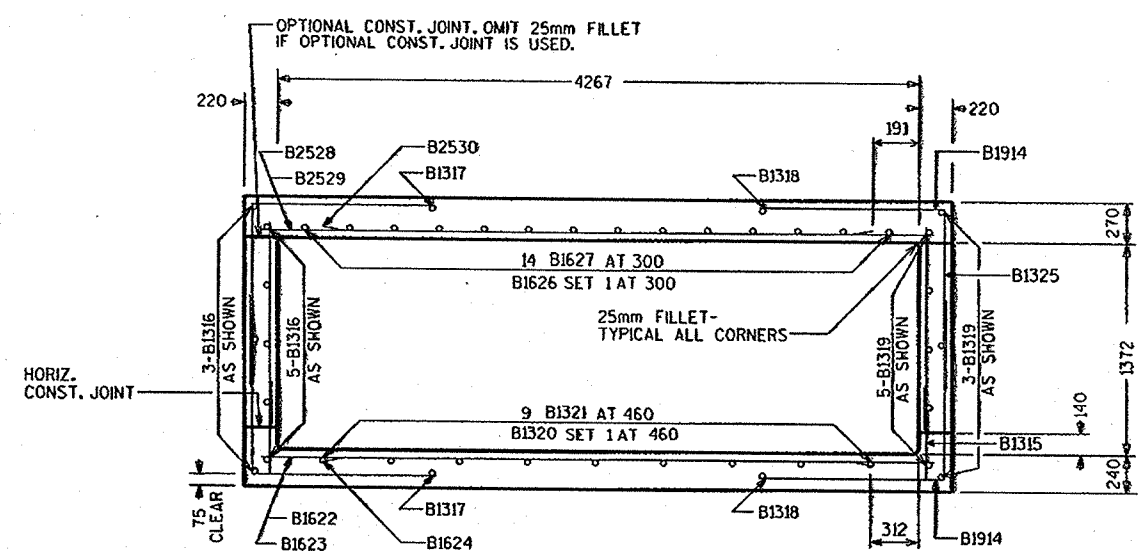
LIST OF DRAWINGS

- LAYOUT
- BOX DETAILS-PANEL 1
- BOX DETAILS-PANEL 2
- INLET WING DETAILS
- INLET GRATE DETAILS
- SUBSURFACE EXPLORATION

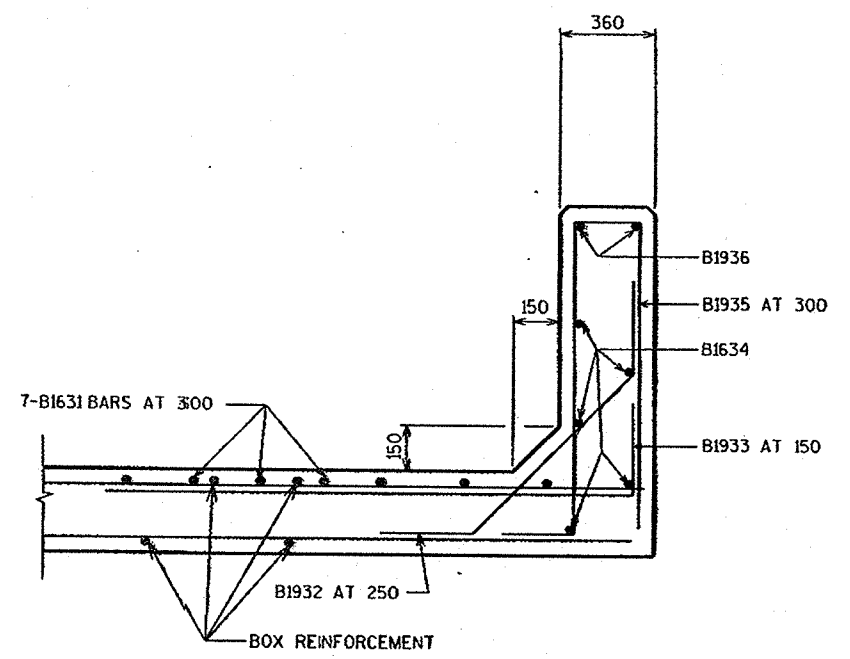
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-70-39			
S.T.H. 150 OVER DRAINAGE WAY			
COUNTY	WINNEBAGO	TOWN/VILLAGE	MENASHA
DESIGN SPEC.	AASHTO 1997	LOAD	MS-18
DESIGNED BY	COMP. CK'D. FWG	DRAWN BY	RIES
APPROVED	01-20-99		DATE
GENERAL PLAN			SHEET 1 OF 6
			DATE: NOV. '98



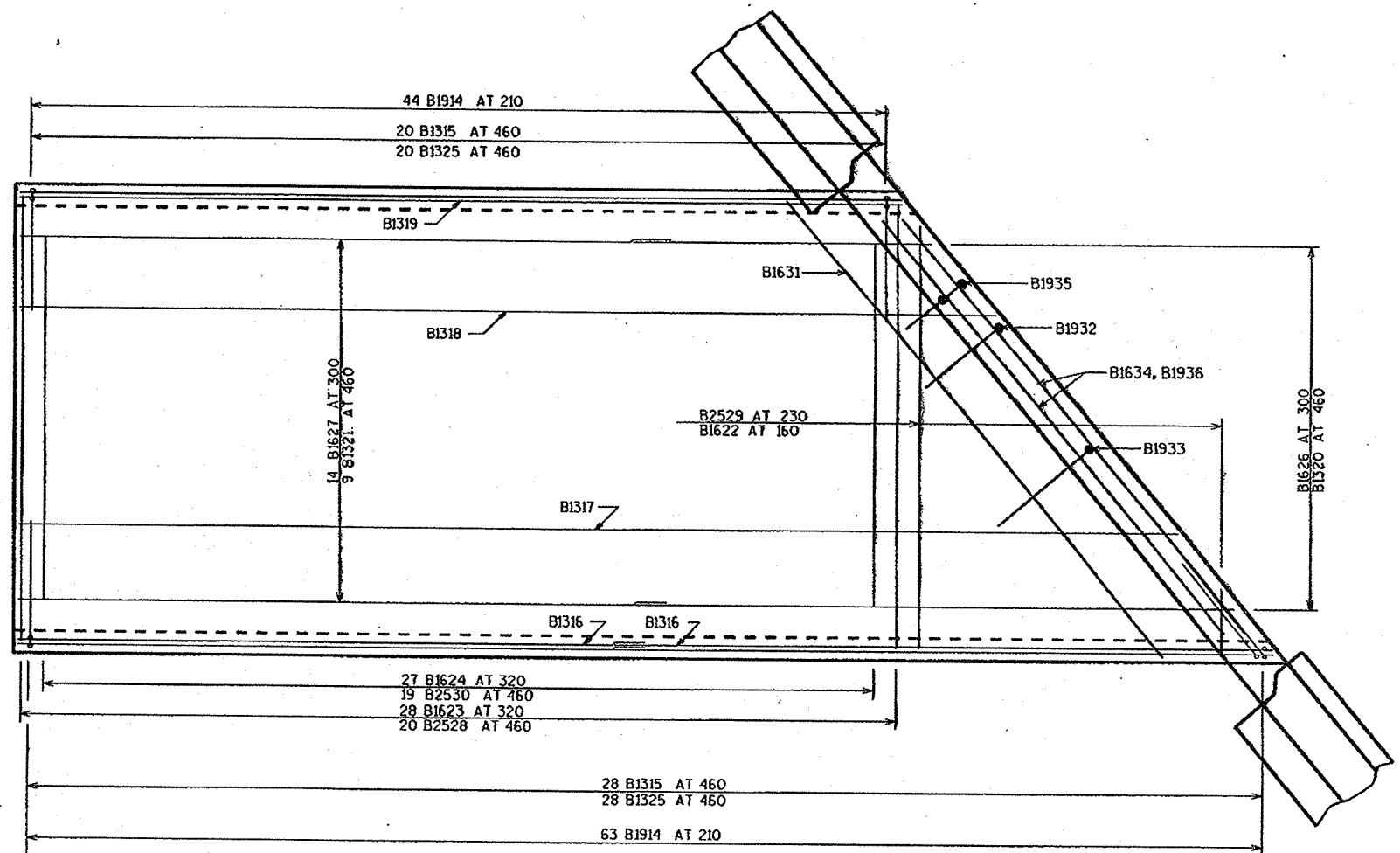
FILE: PREPLAN.DGN
SCALE: 75



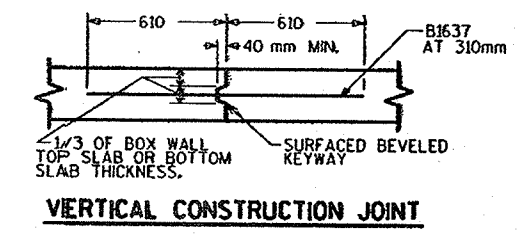
TYPICAL SECTION



HEADER/PARAPET ON BOX



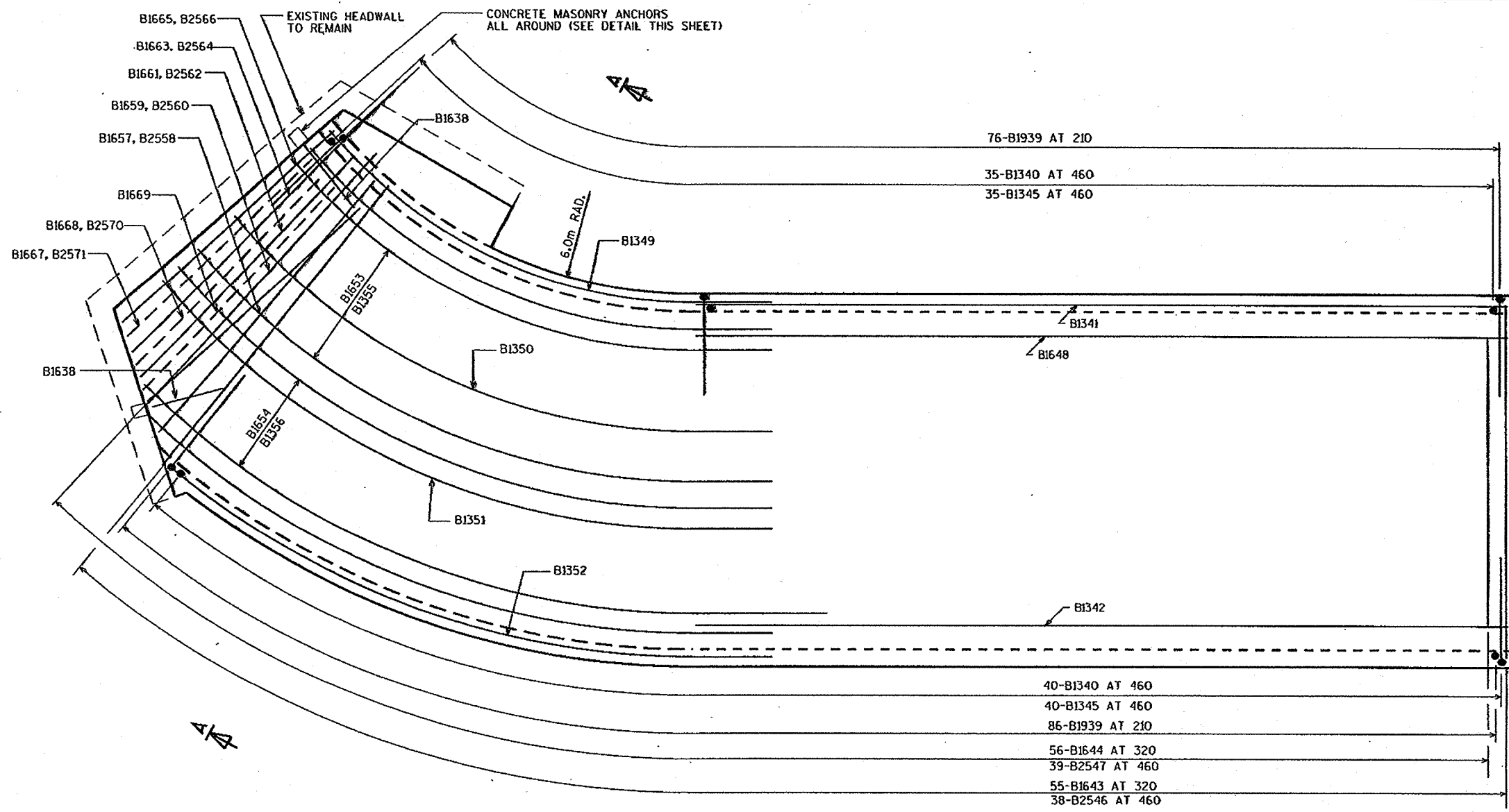
PLAN VIEW OF PANEL 1



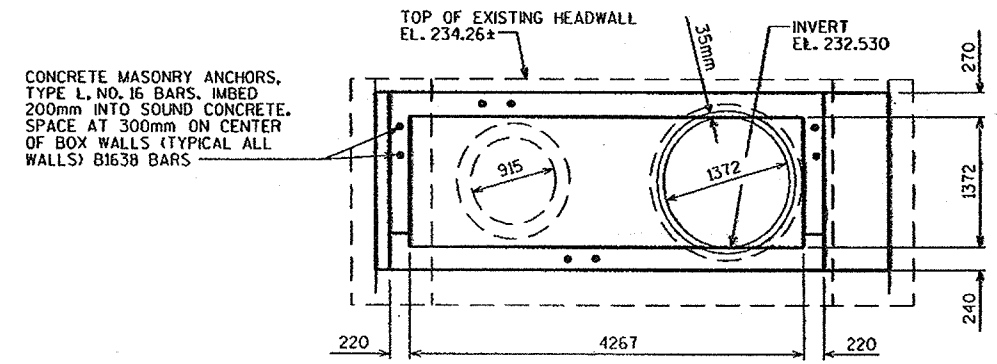
VERTICAL CONSTRUCTION JOINT

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-70-39			
CONST. SPEC.	1996	DRAWN BY RIES	PLANS CK'D. FWG
BOX DETAILS PANEL 1			SHEET 2

FILE= 7039PANI.DGN
SCALE = 4

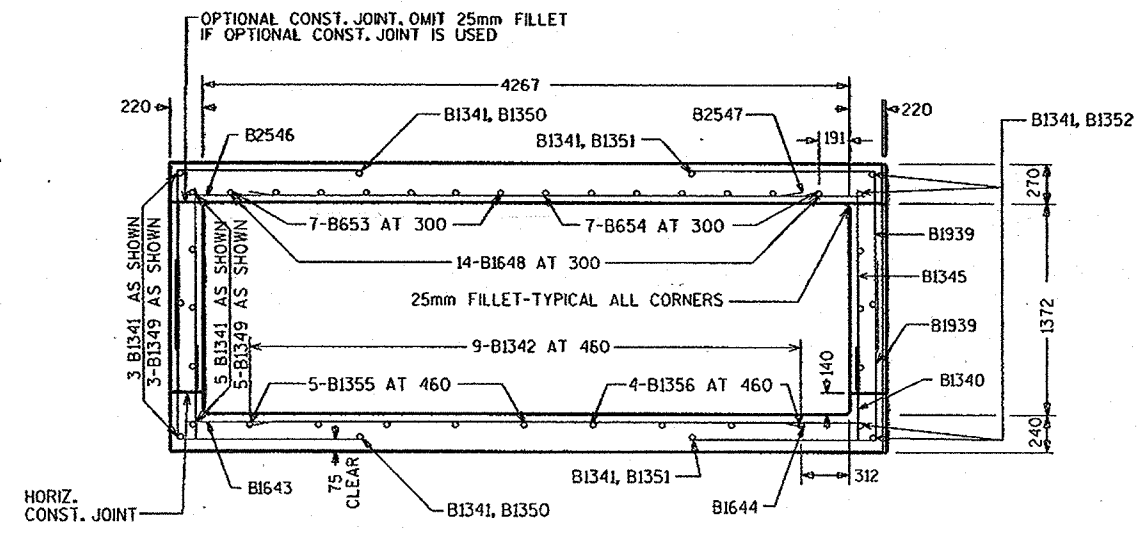


PLAN VIEW OF PANEL 2



VIEW A-A

CONTRACTOR SHALL REMOVE PROJECTING END OF 1372mm PIPE FLUSH WITH EXISTING HEADWALL AND CUT INTO THE INSIDE EDGE OF THE PIPE TO PROVIDE A 35mm x 35mm BEVEL AT THE FACE. INCIDENTAL TO BID ITEM "REMOVING OLD BRIDGE".



TYPICAL SECTION THRU BOX

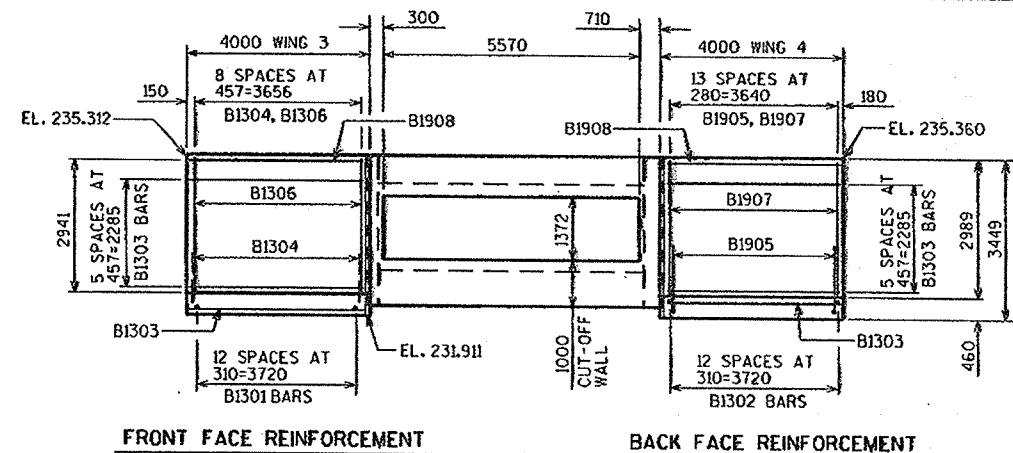
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-70-39			
CONST. SPEC.	1996	DRAWN BY RIES	PLANS CKD. FWG
BOX DETAILS			SHEET 3
PANEL 2			

FILE= 7039PAN2.DGN
SCALE = 4

BILL OF BARS

NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BEND	BAR SERIES	BUNDLE	LOCATION
B1301		26	640				WINGS 3&4-FOOTING
B1302		26	1070				WINGS 3&4-FOOTING
B1303		40	3950				WINGS 3&4-FOOTING&WALL-F.F.&B.F.
B1304		18	620				WINGS 3&4-FOOTING & WALL-F.F. VERT.
B1905		28	1320	X			WINGS 3&4-FOOTING & WALL-B.F. VERT.
B1306		18	2900				WINGS 3&4-WALL-F.F. VERT.
B1907		28	2900				WINGS 3&4-WALL-B.F. VERT.
B1908		4	3850				WINGS 3&4-TOP-F.F.&B.F. HORIZ.
B1909		8	700	X			WINGS 3&4 VERT.
B1310		21	1100	X			CUT-OFF WALL VERT.
B1311		4	6000				CUT-OFF WALL HORIZ.
B1312		32	1060	X			WINGS 3&4-CORNER
B1313		8	3000				WINGS 3&4-CORNER VERT.
B1914		214	2390	X			BOX-PANEL 1-CORNERS
B1315		48	610				BOX-PANEL 1-WALLS-DOWEL VERT.
B1316		16	6840				BOX-PANEL 1-WALLS LONGIT.
B1317		2	11980				BOX-PANEL 1-TOP&BOTTOM SLAB LONGIT.
B1318		2	10130				BOX-PANEL 1-TOP&BOTTOM SLAB LONGIT.
B1319		8	9180				BOX-PANEL 1-WALLS LONGIT.
B1320		9	4935	X			BOX-PANEL 1-BOTTOM SLAB LONGIT.
B1321		9	6660				BOX-PANEL 1-BOTTOM SLAB LONGIT.
B1622		21	2565	X			BOX-PANEL 1-BOTTOM SLAB TRANS.
B1623		28	4470				BOX-PANEL 1-BOTTOM SLAB TRANS.
B1624		27	3660				BOX-PANEL 1-BOTTOM SLAB TRANS.
B1325		48	1370				BOX-PANEL 1-WALL VERT.
B1626		14	4830	X			BOX-PANEL 1-TOP SLAB LONGIT.
B1627		14	6660				BOX-PANEL 1-TOP SLAB LONGIT.
B2528		20	4470				BOX-PANEL 1-TOP SLAB TRANS.
B2529		14	2460	X			BOX-PANEL 1-TOP SLAB TRANS.
B2530		19	3660				BOX-PANEL 1-TOP SLAB TRANS.
B1631		7	5800				BOX-PANEL 1-TOP SLAB AT HEADER
B1932		23	1350	X			BOX-PANEL 1-HEADER
B1933		38	2000	X			BOX-PANEL 1-HEADER
B1634		5	5800				BOX-PANEL 1-HEADER
B1935		19	2410	X			BOX-PANEL 1-HEADER
B1936		2	5800				BOX-PANEL 1-HEADER
B1637		40	1220				VERTICAL CONST. JOINT
B1638		44	810				CONCRETE MASONRY ANCHORS
B1939		324	2390	X			BOX-PANEL 2-CORNERS
B1340		75	610				BOX-PANEL 2-WALLS-DOWEL VERT.
B1341		20	10220				BOX-PANEL 2-TOP&BOTTOM SLAB&WALL
B1342		9	10220				BOX-PANEL 2-BOTTOM SLAB LONGIT.
B1643		55	4470				BOX-PANEL 2-BOTTOM SLAB TRANS.
B1644		56	3660				BOX-PANEL 2-BOTTOM SLAB TRANS.
B1345		75	1370				BOX-PANEL 2-WALLS VERT.
B2546		38	4470				BOX-PANEL 2-TOP SLAB TRANS.
B2547		39	3660				BOX-PANEL 2-TOP SLAB TRANS.
B1648		14	10220				BOX-PANEL 2-TOP SLAB LONGIT.
B1349		8	6075	X			BOX-PANEL 2-WALL LONGIT.
B1350		2	7030	X			BOX-PANEL 2-TOP&BOTTOM SLAB LONGIT.
B1351		2	8935	X			BOX-PANEL 2-TOP&BOTTOM SLAB LONGIT.
B1352		8	9900	X			BOX-PANEL 2-WALL LONGIT.
B1653		7	7890	X			BOX-PANEL 2-TOP SLAB LONGIT.
B1654		7	8900	X			BOX-PANEL 2-TOP SLAB LONGIT.
B1355		5	8020	X			BOX-PANEL 2-BOTTOM SLAB LONGIT.
B1356		4	8425	X			BOX-PANEL 2-BOTTOM SLAB LONGIT.
B1657		1	4225				BOX-PANEL 2-BOTTOM SLAB TRANS.
B2558		1	4460				BOX-PANEL 2-TOP SLAB TRANS.
B1659		1	4050				BOX-PANEL 2-BOTTOM SLAB TRANS.
B2560		1	4340				BOX-PANEL 2-TOP SLAB TRANS.
B1661		1	3840				BOX-PANEL 2-BOTTOM SLAB TRANS.
B2562		1	4100				BOX-PANEL 2-TOP SLAB TRANS.
B1663		1	3680				BOX-PANEL 2-BOTTOM SLAB TRANS.
B2564		1	3835				BOX-PANEL 2-TOP SLAB TRANS.
B1665		1	3550				BOX-PANEL 2-BOTTOM SLAB TRANS.
B2566		1	3550				BOX-PANEL 2-TOP SLAB TRANS.
B1667		1	3510				BOX-PANEL 2-BOTTOM SLAB TRANS.
B1668		1	3340				BOX-PANEL 2-BOTTOM SLAB TRANS.
B1669		1	3220				BOX-PANEL 2-BOTTOM SLAB TRANS.
B2570		1	3460				BOX-PANEL 2-TOP SLAB TRANS.
B2571		1	3220				BOX-PANEL 2-TOP SLAB TRANS.

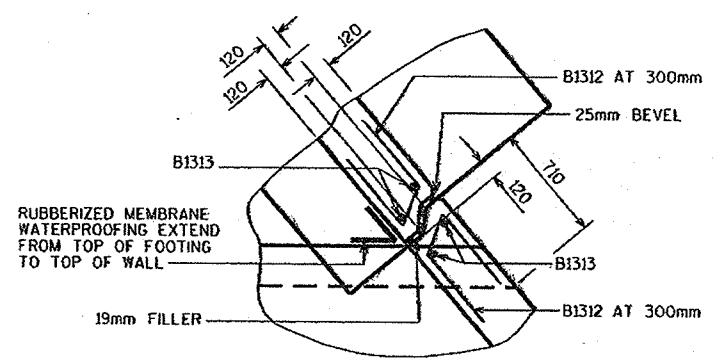


FRONT FACE REINFORCEMENT BACK FACE REINFORCEMENT
END VIEW OF INLET HEADWALL

BAR SERIES TABLE

MARK	NO. REQ'D.	LENGTH
B1320	1 SERIES OF 9	3400 TO 6470
B1622	1 SERIES OF 21	660 TO 4470
B1626	1 SERIES OF 14	3190 TO 6470
B2529	1 SERIES OF 14	680 TO 4240

BUNDLE AND TAG EACH SERIES SEPARATELY.
▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



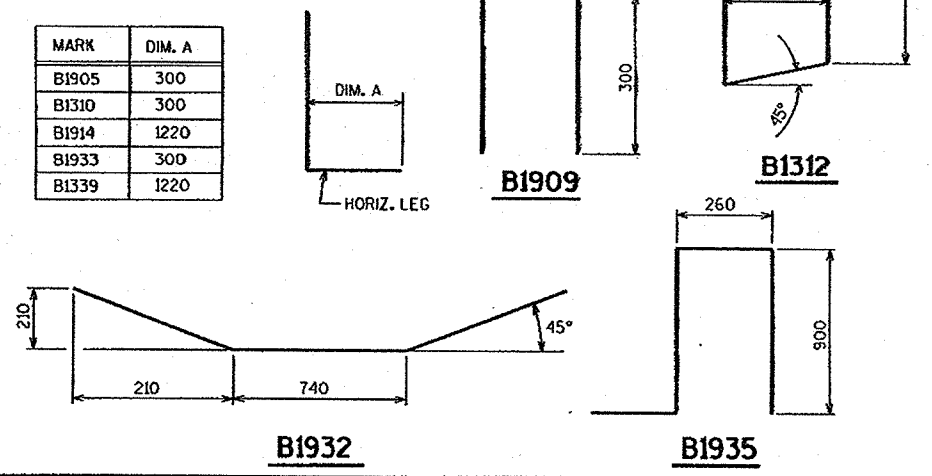
CORNER ③ DETAIL
CORNER ④ SIMILAR

BAR REINFORCEMENT RADIUS TABLE

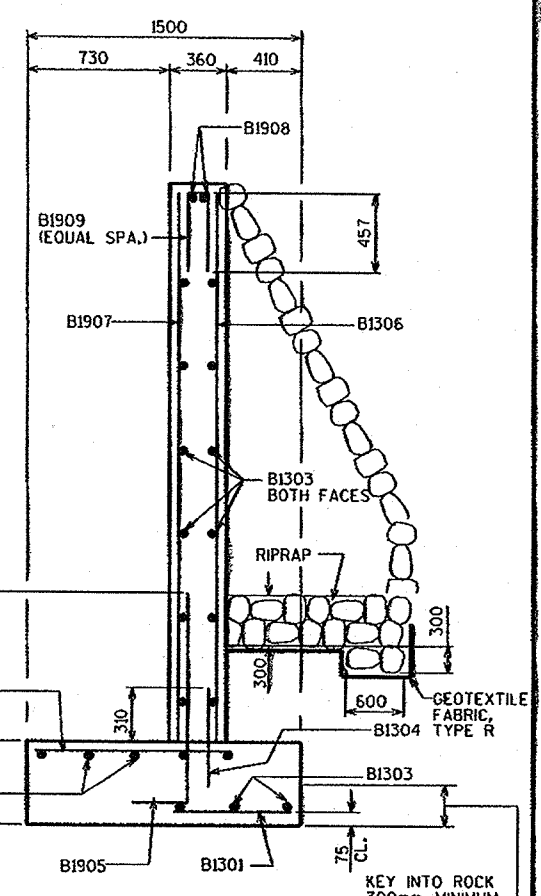
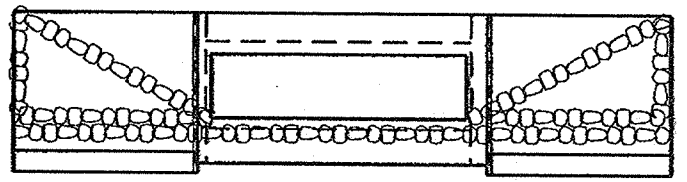
BAR MARK	RADIUS
B1349	6130
B1350	7270
B1351	9440
B1352	10600
* B1653	6400
* B1654	8500
* B1355	6510
* B1356	8810

* BAR RADIUS FOR THESE BARS IS FOR THE SMALLEST RADIUS IN THE SET. THE OTHER BARS IN THESE BAR SETS SHALL BE STRAIGHTENED TO FIT IN THE FIELD

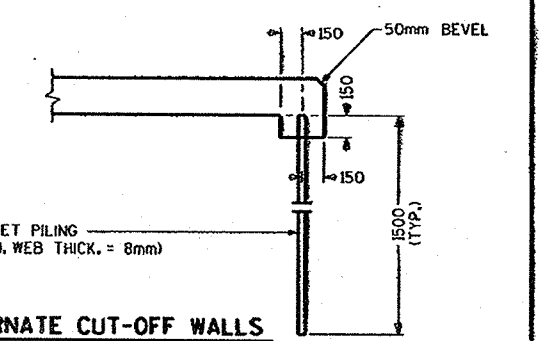
MARK	DIM. A
B1905	300
B1310	300
B1914	1220
B1933	300
B1339	1220



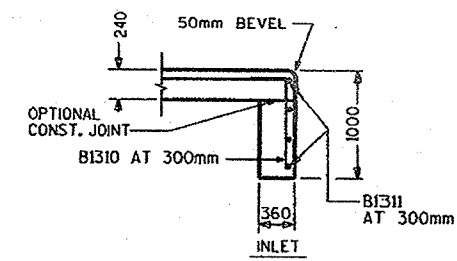
END VIEW OF INLET HEADWALL SHOWING RIPRAP



SECTION THRU WING



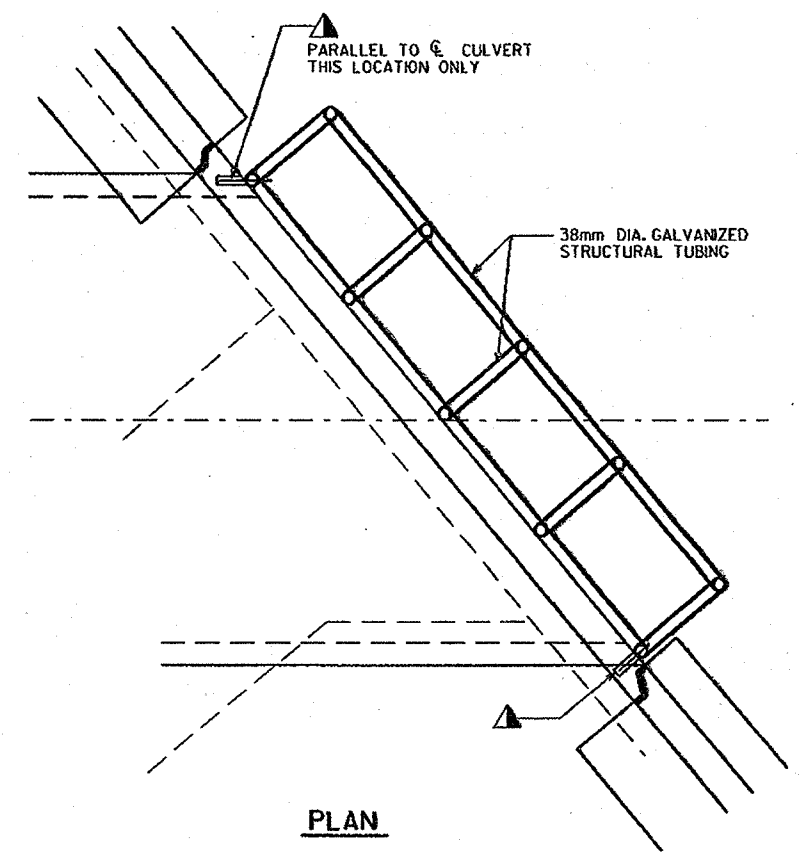
ALTERNATE CUT-OFF WALLS
THE ABOVE ALT. MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONC. CUT-OFF WALLS. PAYMENT WILL BE BASED ON THE CONC. CUT-OFF WALLS.



CUT-OFF WALLS SECTION THRU THE WALLS

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-70-39			
CONST. SPEC.	1996	DRAWN BY	RIES
		PLANS CND.	FWG
INLET WING DETAILS			SHEET 4

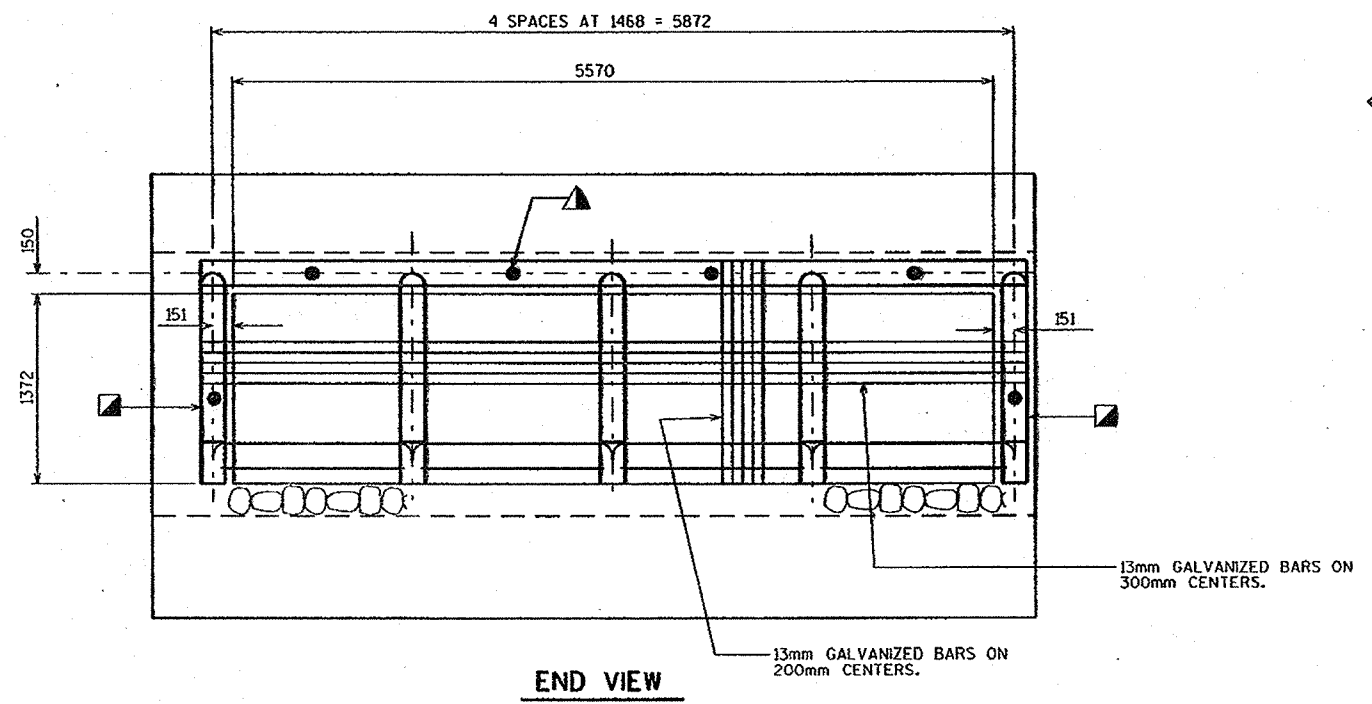
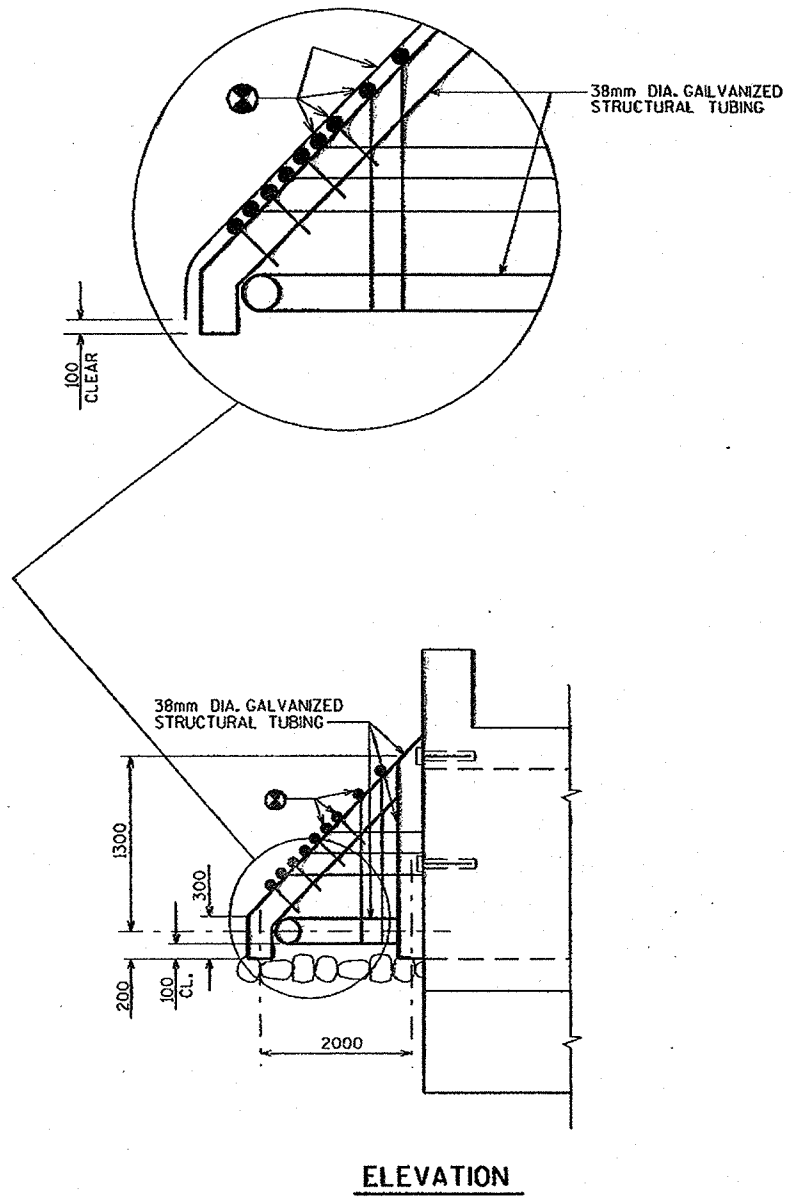
FILE=7039DET.DGN SCALE = 75



- ▲ CONCRETE MASONRY ANCHORS, TYPE S, M13. MINIMUM PULLOUT VALUE TO BE 20kN. INCIDENTAL TO BID ITEM "INLET GRATE, C-70-39"
- ① BEND ALL PROJECTING ENDS OF 13mm BARS 90° AT EDGE MARKED

GENERAL NOTES

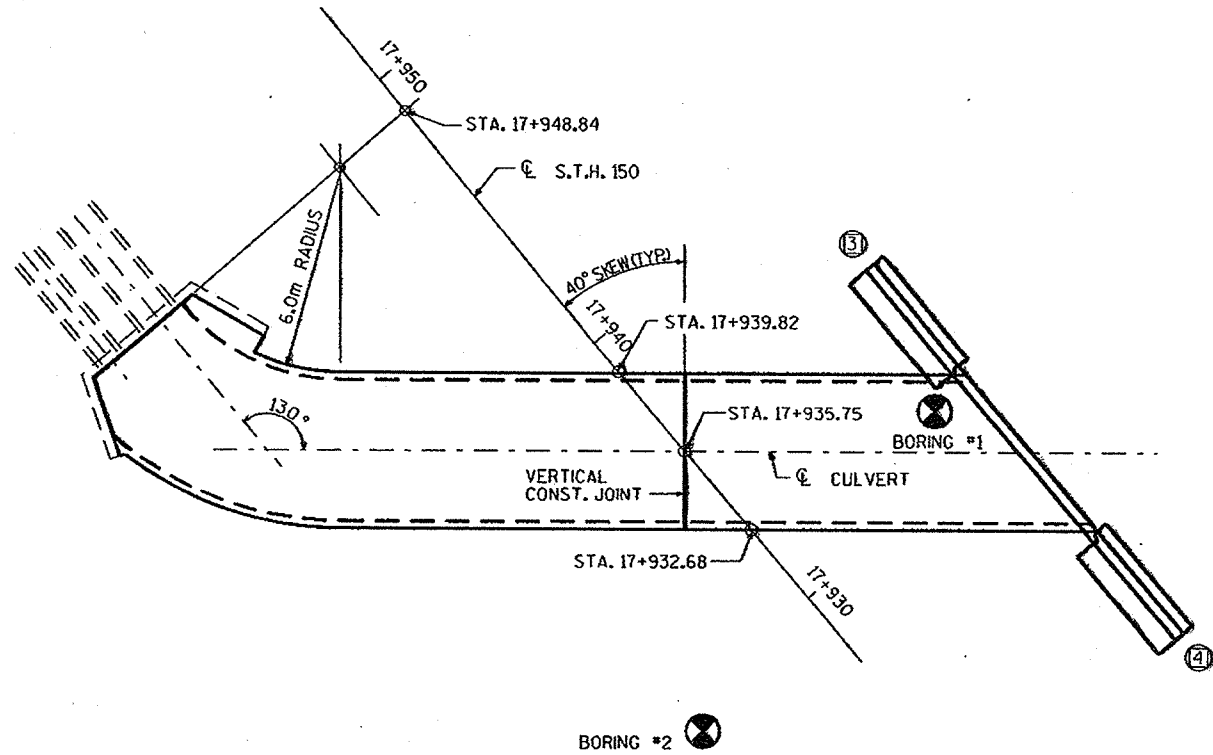
- WELD PIPE INTERSECTIONS WITH 1/4" FILLET WELD ALL AROUND
- WELD 13mm BARS AT EACH BAR AND PIPE INTERSECTION.
- DREL DRAIN HOLES IN PIPES BEFORE GALVANIZING.
- WELD 3mm CLOSURE PLATES IN OPEN ENDS OF PIPES AND GRIND SMOOTH



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-70-39			
CONST. SPEC.	1996	DRAWN BY RIES	PLANS CKD. FWG
INLET GRATE DETAILS			SHEET 5

FILE= 7039GRA.DGN
SCALE = 50

STH 150
 USH 45 TO SPRING ROAD DRIVE, WINNEBAGO COUNTY



STATE PROJECT NUMBER SHEET NO.

6448-03-71 8.6

ABBREVIATIONS
 F—Fine M—Medium C—Coarse
 Ws—Weathered So—Sound

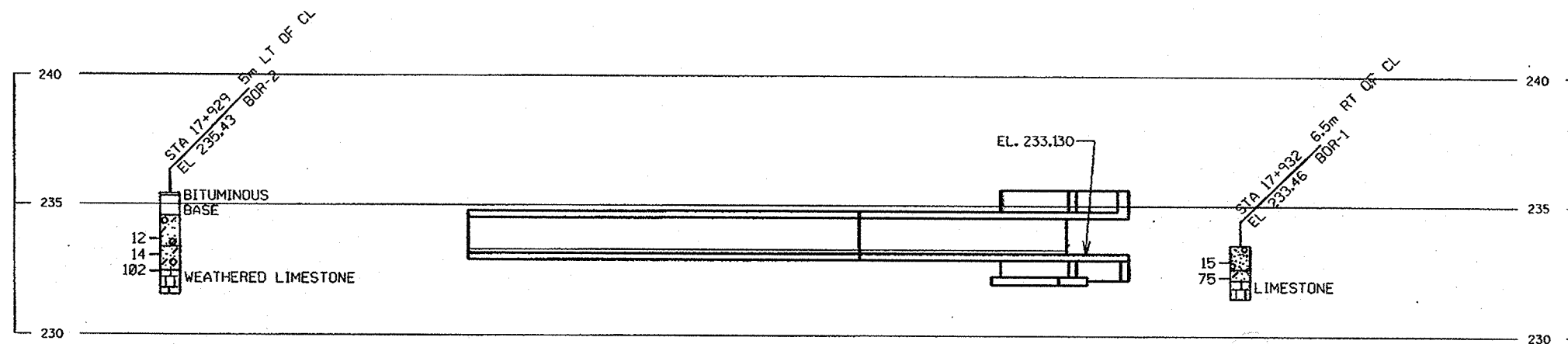
MATERIAL SYMBOLS
 Topsoil Silt Sandstone
 Sand Peat Limestone
 Gravel Clay Igneous Rock

LEGEND OF PROBING
 Probing No. Sta. Elevation
 95/152=95 Blows for 152mm Penetration
 Probing taken with a 159.1Kg Wt. Falling 457mm on a 51mm O.D. Point.
 7 Average Blows Per 305mm Refusal 95/152

LEGEND OF BORING
 Unconfined Strength kPa → 770
 Blows Per 300mm Using 63 Kg Wt. Falling 760mm
 Wash Sample
 Shelby Tube—S.T.
 Ground Water Elevation
 No Ground Water Observed Above This Elevation
 Boring No. Sta. Elev.
 Sandy Gravel
 F Boulders or Cobbles
 Sand
 Silty Clay
 So Limestone

Unless otherwise specified, the blows per 300mm at the locations indicated are based on driving a 51mm O.D. x 35mm I.D. split spoon sampler with a 63kg hammer having a free fall of 760mm. The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

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



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE C-70-39			
CONST. SPEC.	1996	DRAWN BY SMV/RIES	PLANS CK'D. FWG
SUBSURFACE EXPLORATION			SHEET 6

FILE=7039BOR.DGN SCALE=1"=15'

PLOT SCALE: 1:1

PLOT NAME: yordl
59

51

REV. DATE:

22

ORIGINATOR: O'CONNOR
LEVELS ON - I
FILE NAME: G3 6448031300.dgn

YARDAGE SUMMARY

STATION	COMMON EXCAVATION m3	FILL m3	ROCK EXCAVATION m3	MASSHAUL m3
STH 150				
15+083	96	0		96
15+100	240	0		336
15+120	263	0		599
15+140	295	0		894
15+160	359	0		1 253
15+180	346	4		1 595
15+200	282	10		1 867
15+220	280	19		2 128
15+240	137	9		2 256
15+253.956	39	2		2 293
15+260	239	35		2 497
15+280	66	12		2 551
15+284	258	63		2 746
15+300	306	113		2 939
15+320	309	108		3 140
15+340	321	97		3 364
15+360	324	101		3 587
15+380	323	84		3 826
15+400	318	68		4 076
15+420	310	67		4 319
15+440	300	69		4 550
15+460	296	64		4 782
15+480	279	81		4 980
15+500	234	111	23	5 126
15+520	129	120	118	5 253
15+540	207	116	28	5 372
15+560	128	54	28	5 474
15+580	21	0	0	5 495
15+585	141	16	11	5 631
15+600	277	78	17	5 847
15+620	253	106	2	5 996
15+640	264	90		6 170
15+660	284	126		6 328
15+680	289	160		6 457
15+700	300	176		6 581
15+720				

YARDAGE SUMMARY

STATION	COMMON EXCAVATION m3	FILL m3	ROCK EXCAVATION m3	MASSHAUL m3
STH 150				
15+720	322	181		6 722
15+740	292	169		6 845
15+760	208	219		6 834
15+780	186	382		6 638
15+800	199	430		6 407
15+820	208	283		6 332
15+840	256	142		6 446
15+860	181	39		6 588
15+880	22	0		6 610
15+884	242	13		6 839
15+900	389	38		7 190
15+920	349	41		7 498
15+940	401	27		7 872
15+960	232	5		8 099
15+970	231	5		8 325
15+980	419	8		8 736
16+000	41	0		8 777
16+002	313	4		9 086
16+020	269	27		9 328
16+040	227	61		9 494
16+060	199	90		9 603
16+080	179	124		9 658
16+100	93	84		9 667
16+120	125	18		9 774
16+140	241	12		10 003
16+160	77	1		10 079
16+166	159	3		10 235
16+180	140	10		10 365
16+195	44	5		10 404
16+200	190	22		10 572
16+220	222	20		10 774
16+240	265	16		11 023
16+260	315	16		11 322
16+280	34	2		11 354
16+282	313	15		11 652
16+300				

YARDAGE SUMMARY

STATION	COMMON EXCAVATION m3	FILL m3	ROCK EXCAVATION m3	MASSHAUL m3
STH 150				
16+300	92	3		11 741
16+305	272	11		12 002
16+320	331	45		12 288
16+340	305	63		12 530
16+360	259	65		12 724
16+380	16	8		12 732
16+382.506	79	107		12 704
16+400	29	93		12 640
16+408.009	47	138		12 549
16+420	75	89		12 535
16+430	80	67		12 548
16+440	148	55		12 641
16+455	33	9		12 665
16+458	22	7		12 680
16+460	220	50		12 850
16+478	27	3		12 874
16+480	294	24		13 144
16+500	321	14		13 451
16+520	133	7		13 577
16+528	203	10		13 770
16+540	231	5		13 996
16+560	242	2		14 236
16+580	73	1		14 308
16+584	273	4		14 577
16+600	300	16		14 861
16+620	273	32		15 102
16+640	260	40		15 322
16+660	257	45		15 534
16+680	269	31		15 772
16+700	277	36		16 013
16+720	164	30		16 147
16+740	161	35		16 273
16+760	250	76		16 447
16+780	240	76		16 611
16+800	135	44		16 702
16+810	129	54		16 777

PLOT SCALE: 1:1

PLOT NAME: yor-d2
59.

5/.

REV. DATE:

22.

ORIGINATOR: O'CONNOR
LEVELS ON - 1.

YARDAGE SUMMARY

STATION	COMMON EXCAVATION m3	FILL m3	ROCK EXCAVATION m3	MASSHAUL m3
STH 150				
16+810	129	54		16 777
16+820	220	105		16 892
16+840	217	92		17 017
16+860	214	62		17 169
16+880	207	47		17 329
16+900	71	21		17 379
16+907	126	42		17 463
16+920	96	33		17 526
16+930	92	38		17 580
16+940	176	75		17 681
16+960	201	66		17 816
16+980	251	71		17 996
17+000	263	87		18 172
17+020	103	41		18 234
17+028	40	15		18 259
17+031	54	15		18 298
17+035	95	12		18 381
17+040	111	6		18 486
17+049.098	0	0		
17+060				
17+420	98	77		21
17+440	198	142		77
17+460	202	126		153
17+480	202	114		241
17+500	211	91		361
17+520	211	100		472
17+540	197	140		529
17+560	178	127		580
17+580	63	25		618
17+587	112	31		699
17+600	108	106		701
17+615	36	56		681
17+620	137	128		690
17+640	144	69		765
17+660	175	88		852
17+680				

YARDAGE SUMMARY

STATION	COMMON EXCAVATION m3	FILL m3	ROCK EXCAVATION m3	MASSHAUL m3
STH 150				
17+680	196	86		962
17+700	180	64		1 078
17+718	20	5		1 093
17+720	178	96		1 175
17+740	143	65		1 253
17+756.5	30	5		1 278
17+760	169	63		1 384
17+780	157	55		1 486
17+795.5	51	14		1 523
17+800	236	105		1 654
17+820	117	39		1 732
17+829	148	46		1 834
17+840	166	61		1 939
17+852	113	40		2 012
17+860	290	117		2 185
17+880	256	42		2 399
17+893	145	13		2 531
17+900	321	116		2 736
17+920	73	59		2 750
17+926	11	26		2 735
17+928	2	41		2 696
17+930	0	56		2 640
17+932	0	56		2 584
17+934	21	120		2 485
17+940	151	190		2 446
17+960	88	42		2 492
17+970				

PLOT SCALE: 1:1

PLOT NAME: yofp03

51

REV. DATE:

22

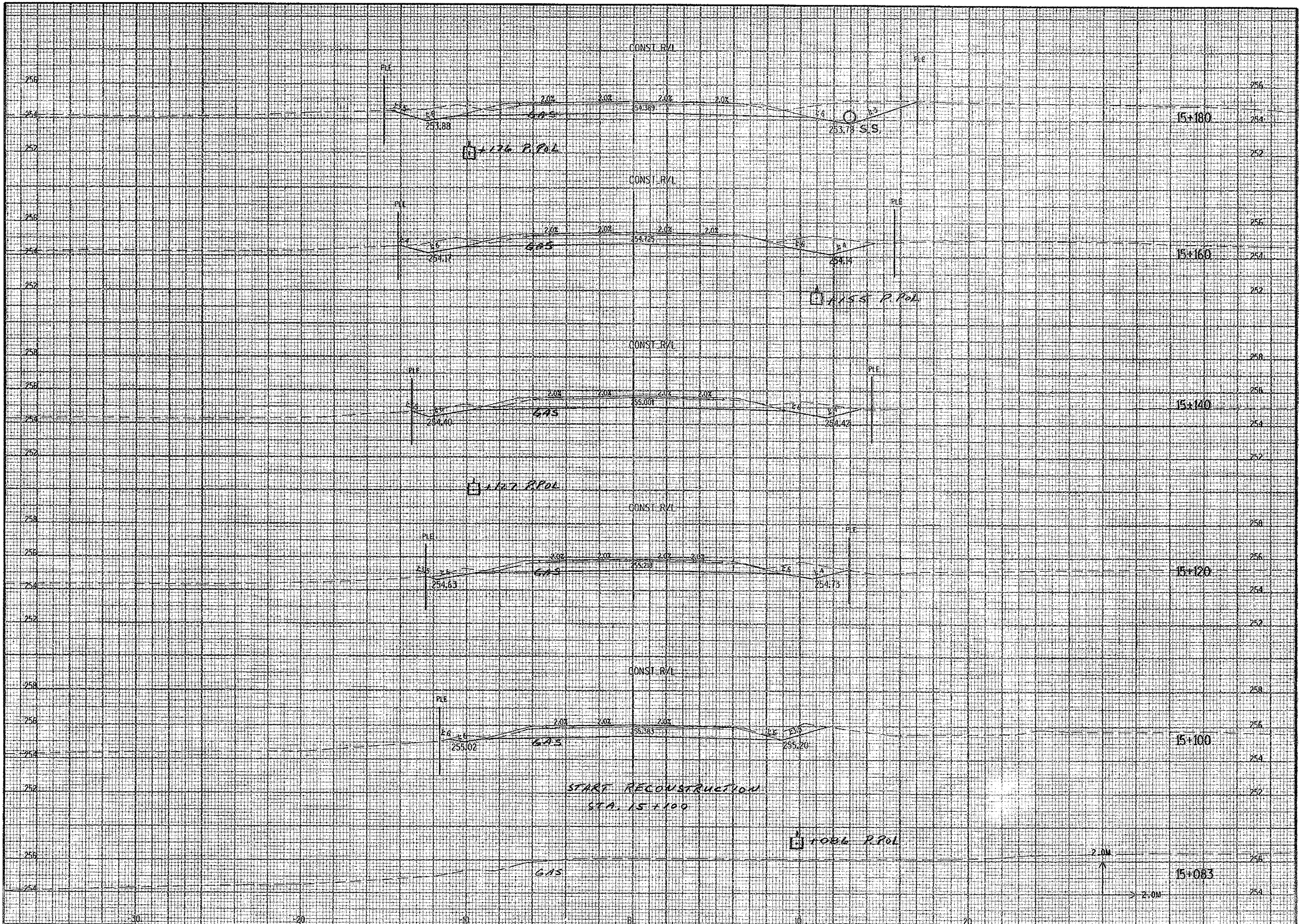
ORIGINATOR: O'CONNOR
LEVELS ON - 1

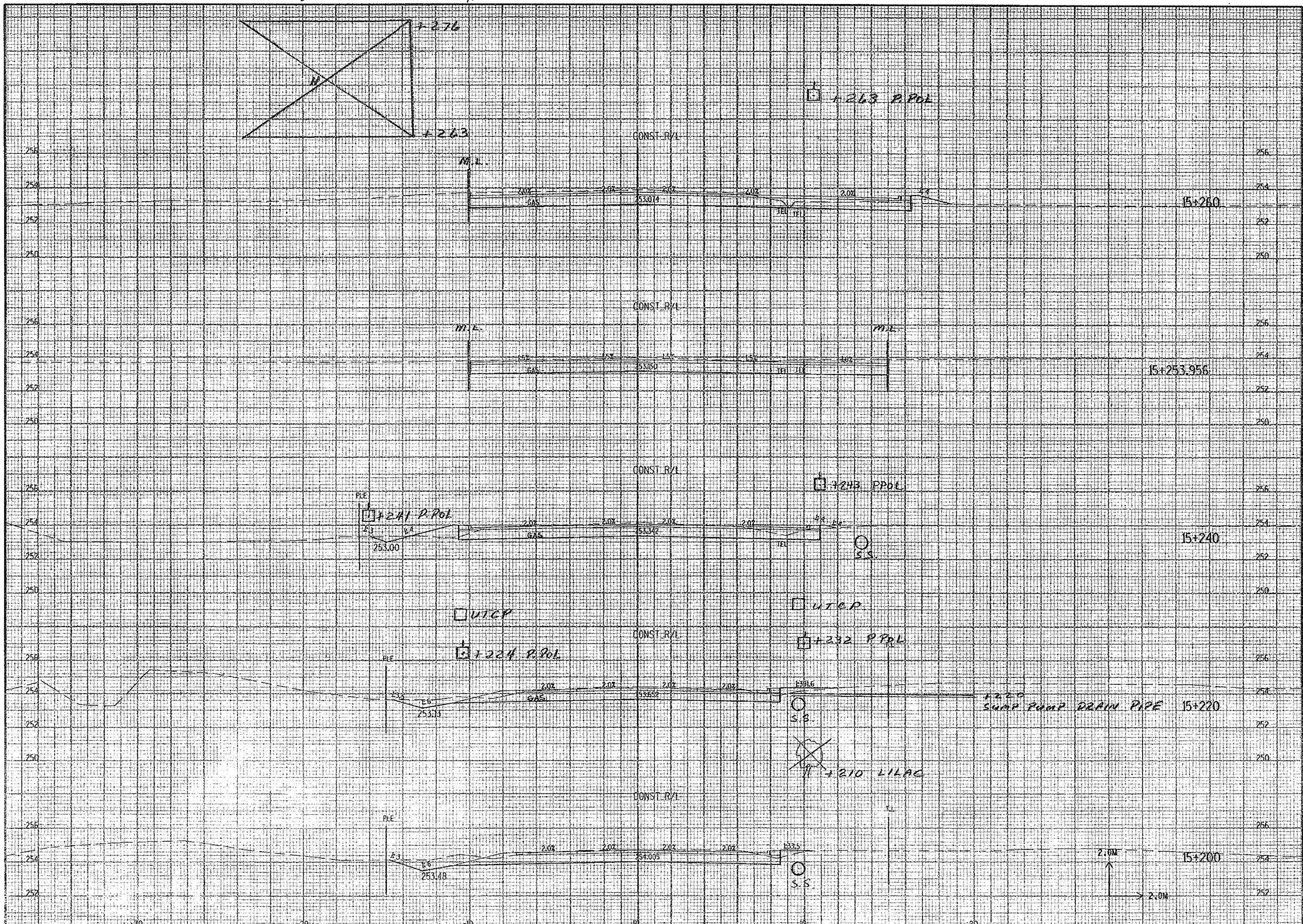
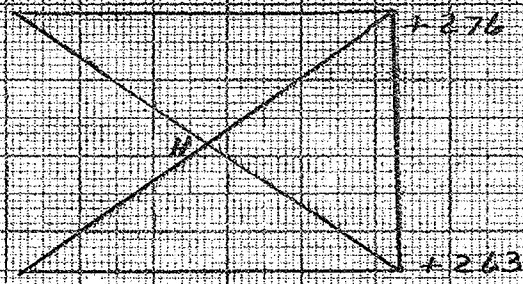
YARDAGE SUMMARY

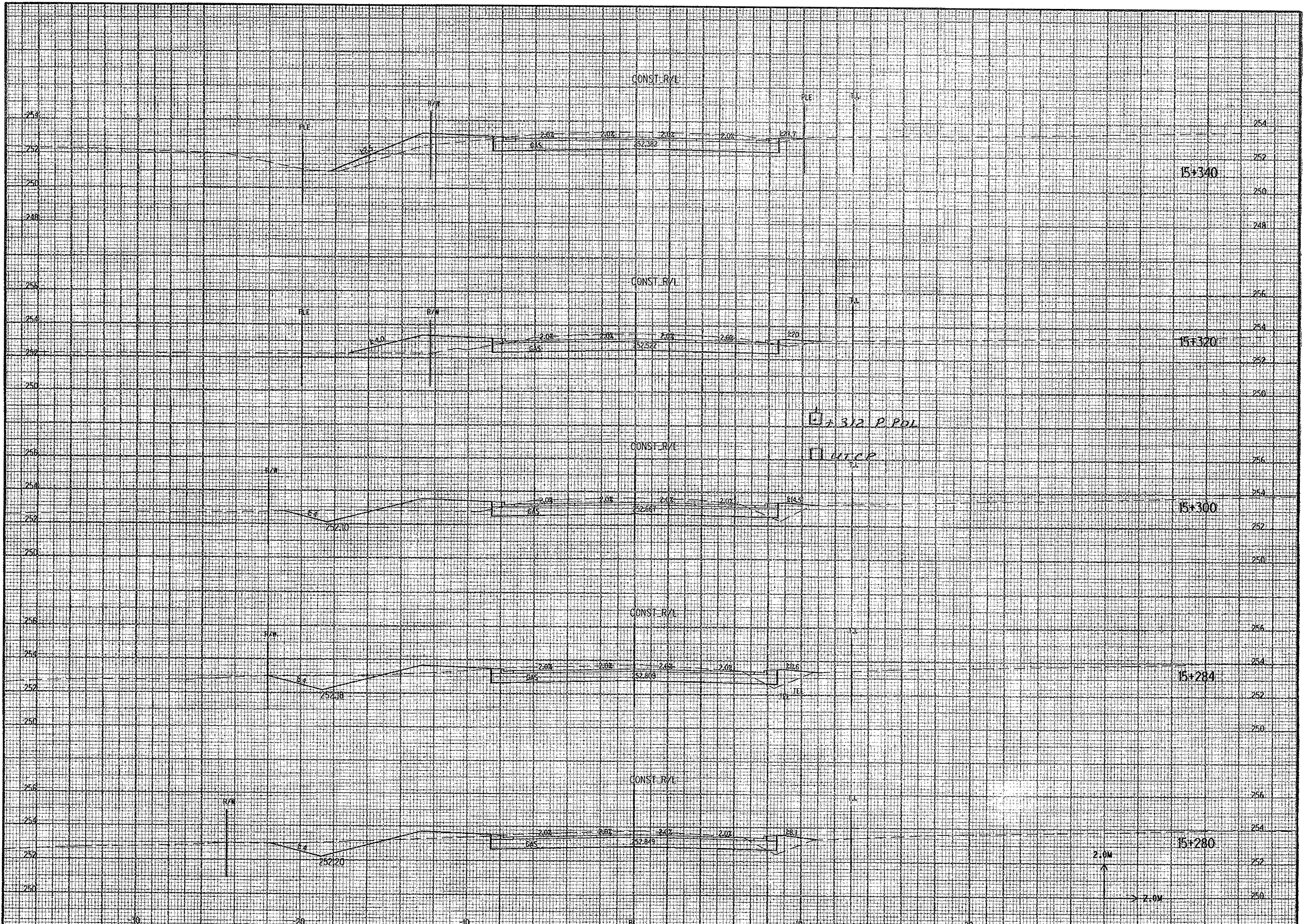
STATION	COMMON EXCAVATION m3	FILL m3	ROCK EXCAVATION m3	MASSHAUL m3
<u>CLAYTON ROAD</u>				
3+950	0	0		
3+955	15	1		14
3+960	22	2		34
3+963	128	11		151
3+976.5	25	3		173
3+978.3	25	4		194
3+980	80	10		264
3+985				
4+010	191	4		187
4+020	35	1		221
4+022	193	10		404
4+040	6	0		410
4+042				
<u>NO. FIELDCREST</u>				
9+010	19	7		12
9+015	2	2		12
9+015.8	15	5		22
9+020	15	0		37
9+026	4	0		41
9+040				
<u>SO. FIELDCREST</u>				
7+960	2	0		2
7+966	13	3		12
7+977.2	6	1		17
7+978	7	1		23
7+980	47	17		54
7+990				

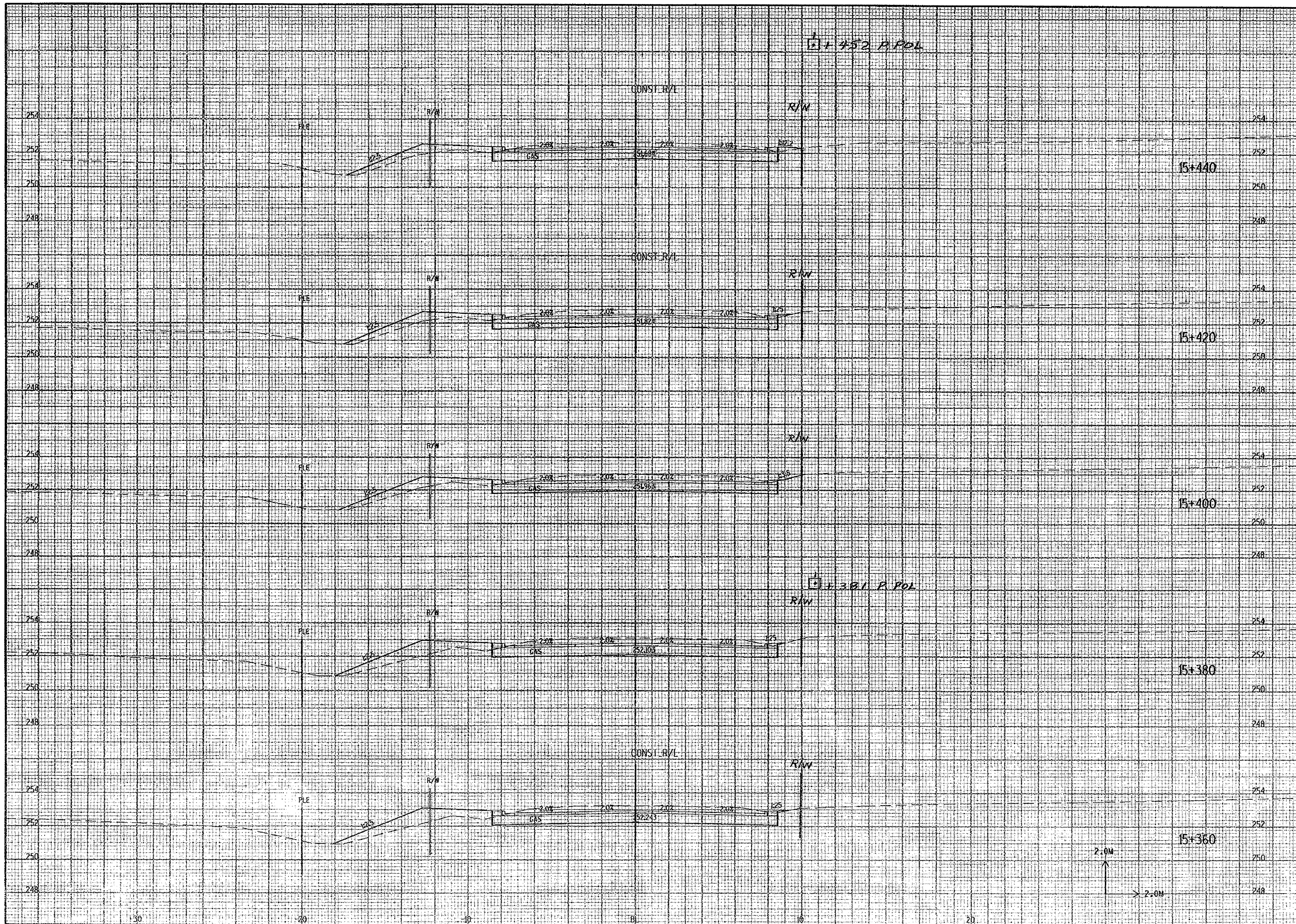
YARDAGE SUMMARY

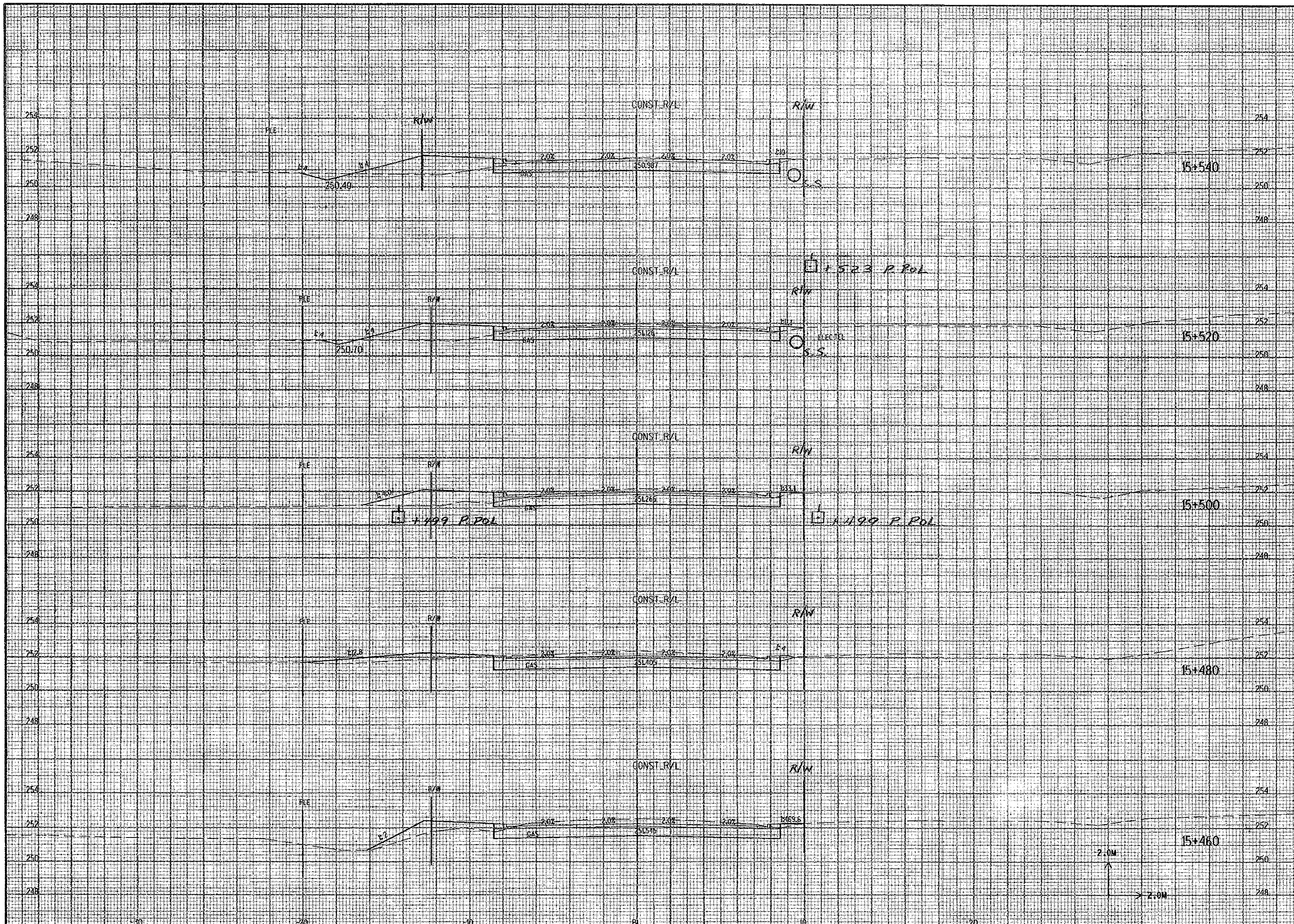
STATION	COMMON EXCAVATION m3	FILL m3	ROCK EXCAVATION m3	MASSHAUL m3
<u>CTH 0</u>				
9+940	7	0		7
9+957.5	3	0		10
9+960	12	2		20
9+970	39	4		55
9+980	20	2		73
9+985				
<u>IRISH RD.</u>				
10+960	3	0		3
10+969	26	1		28
10+980	5	0		33
10+980.8	110	6		137
10+990				
11+010	73	7		66
11+015	40	1		105
11+018.5	105	2		208
11+030	36	1		243
11+038	1	0		244
11+040				

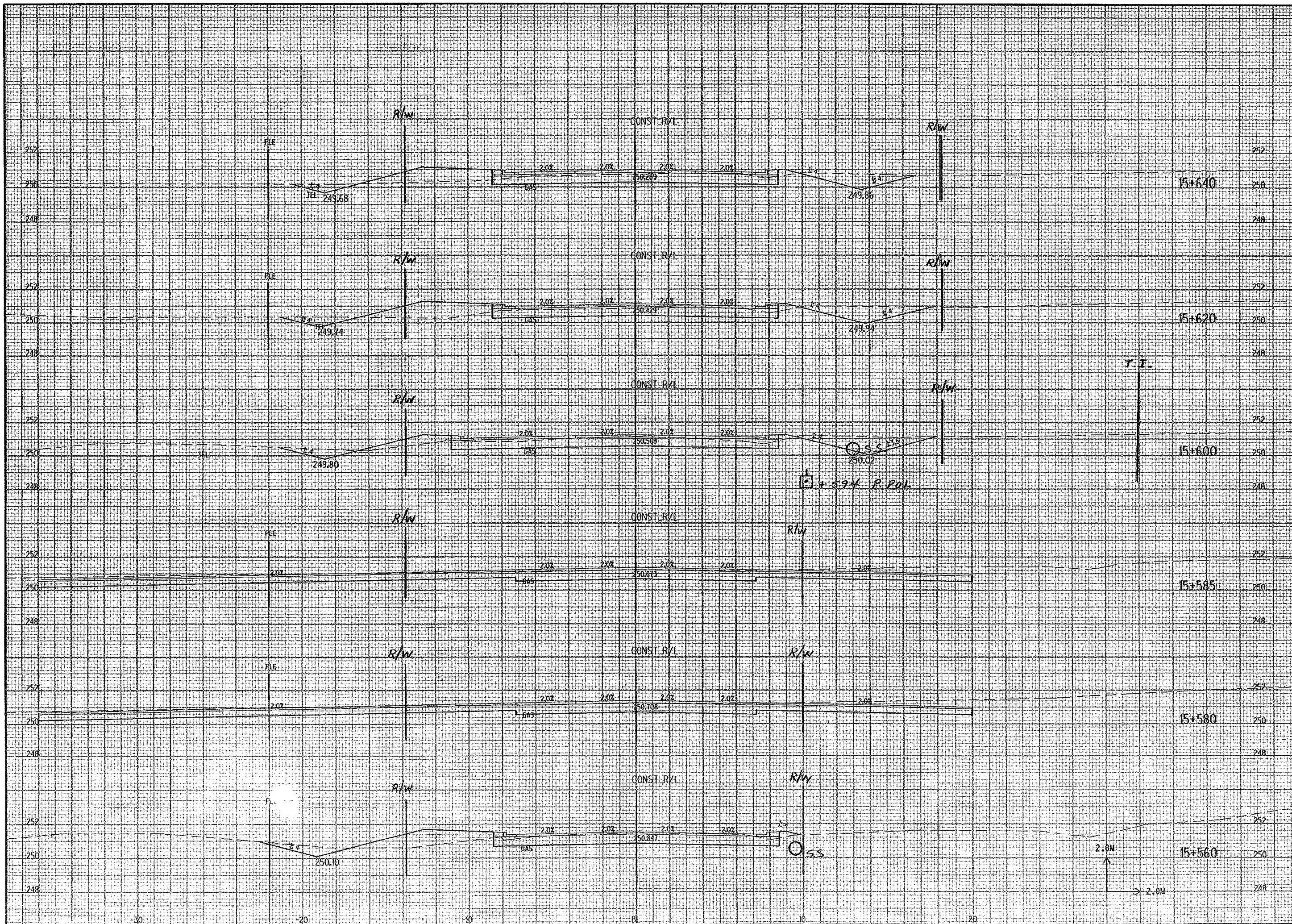


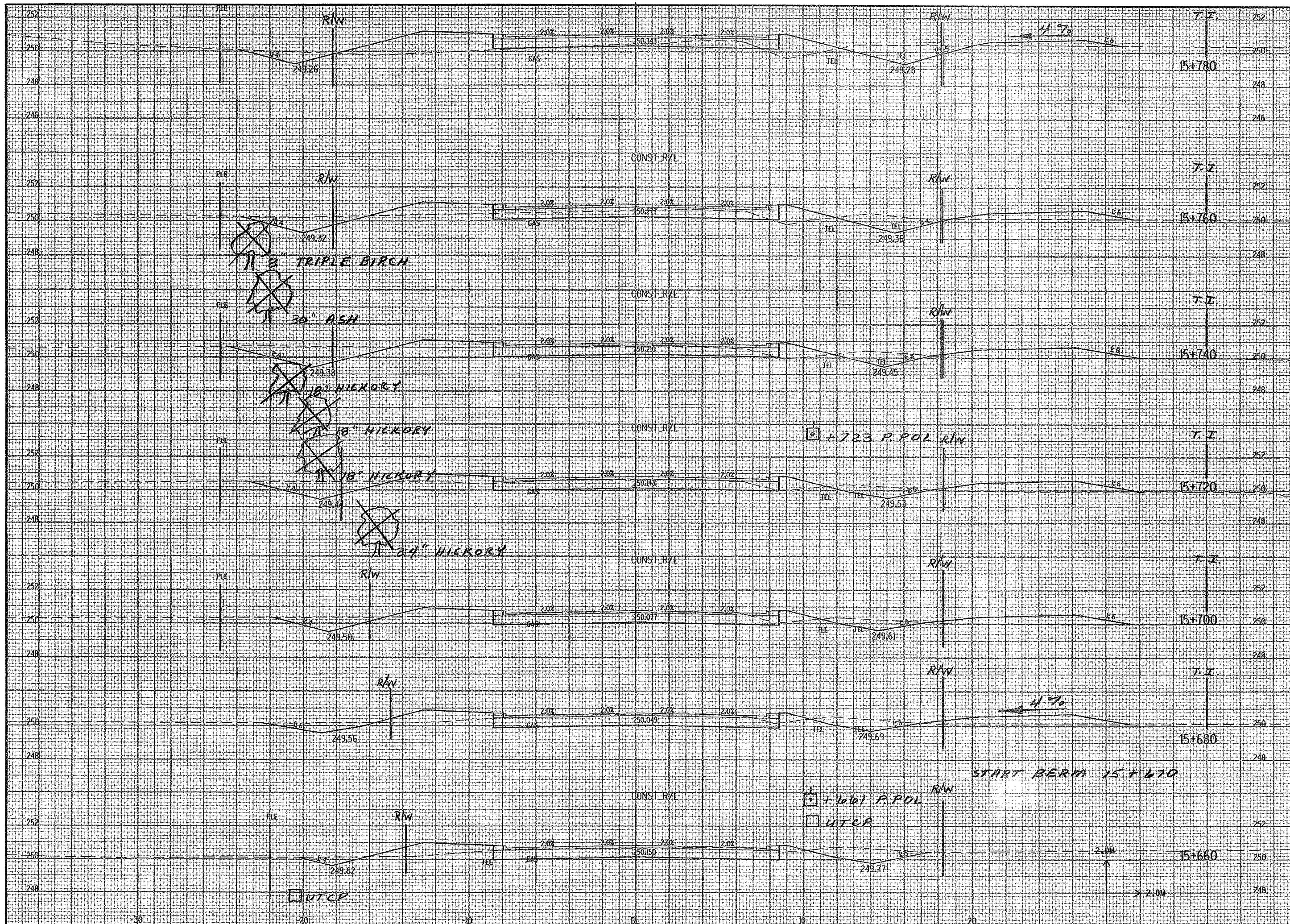


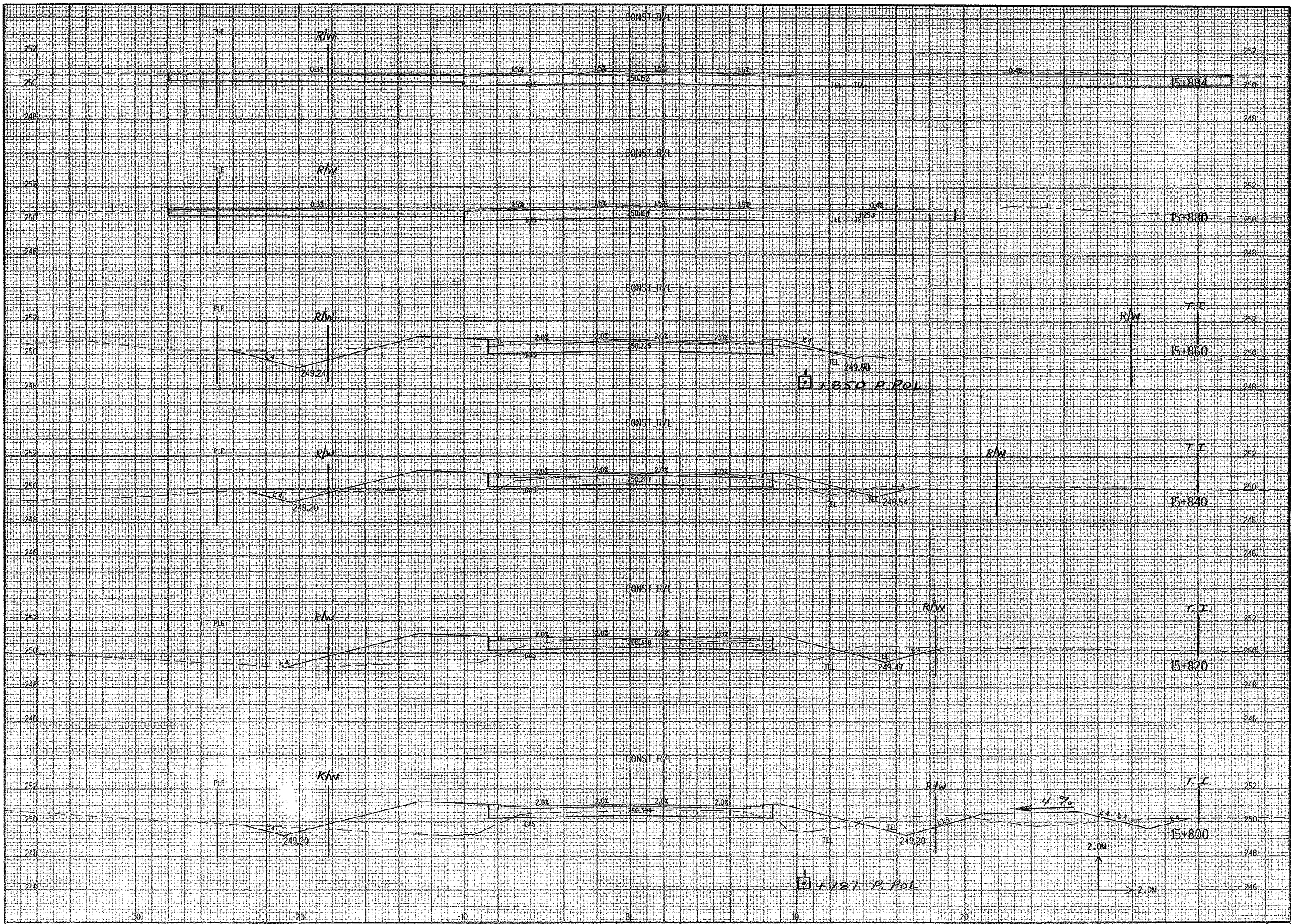


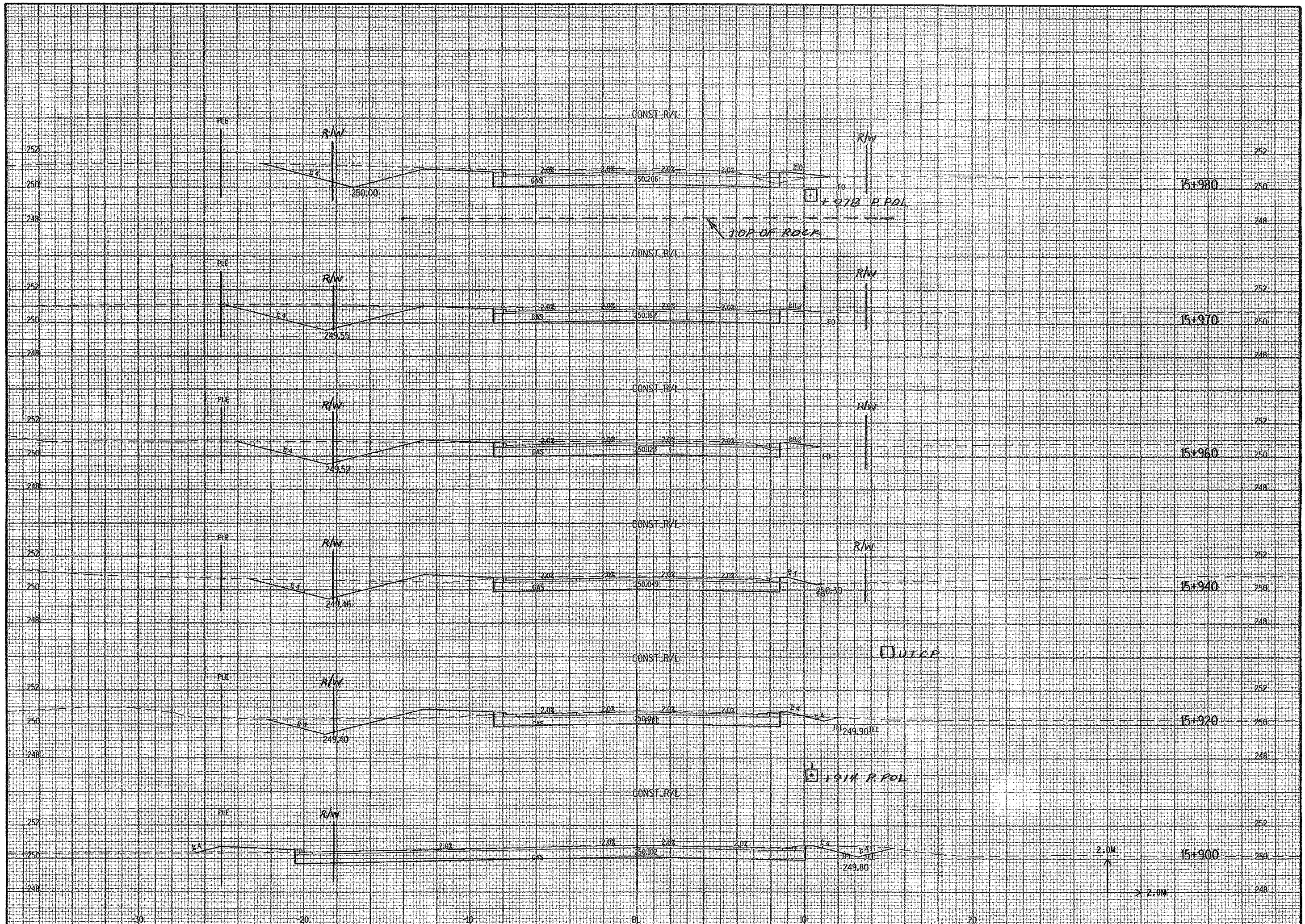


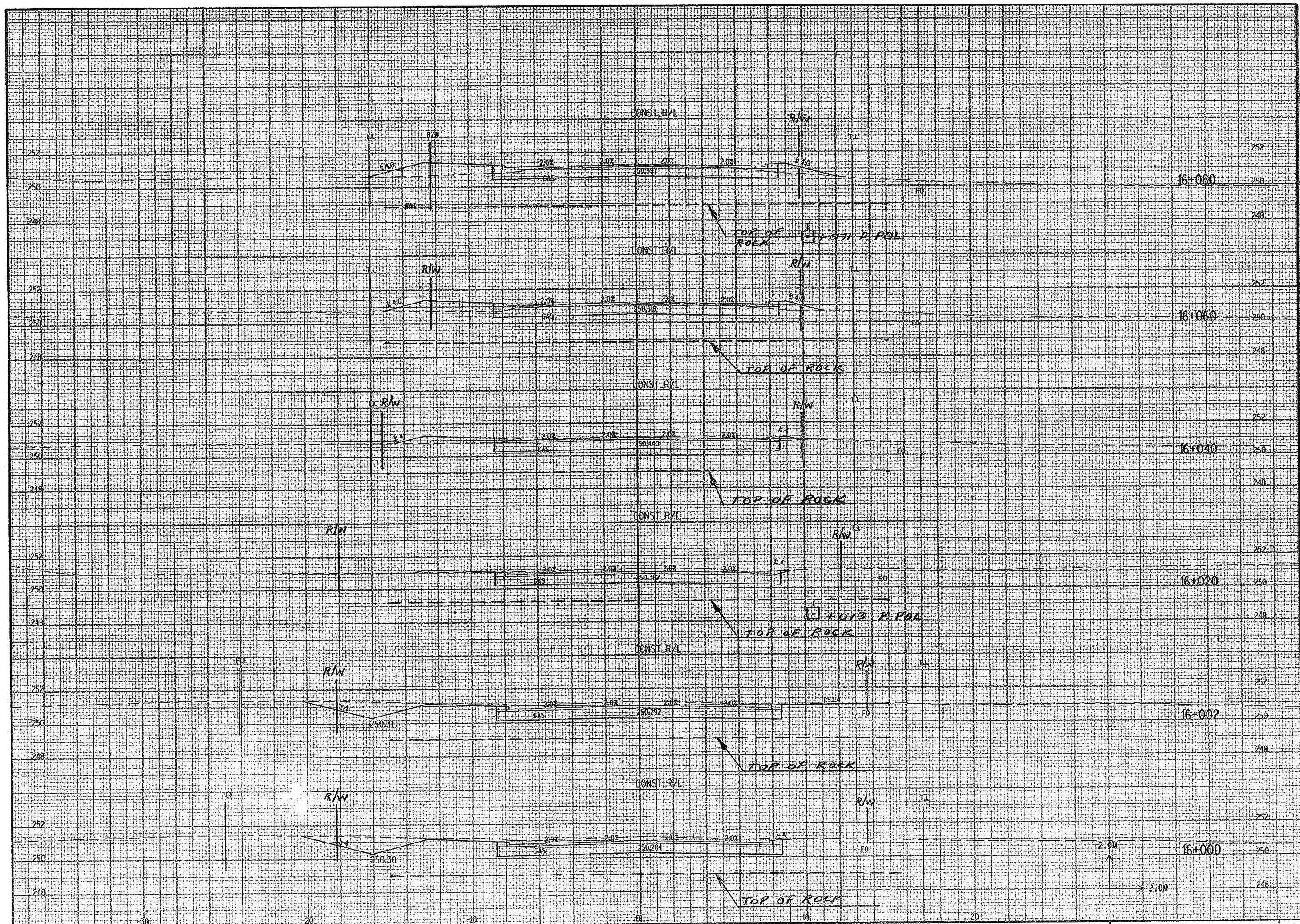


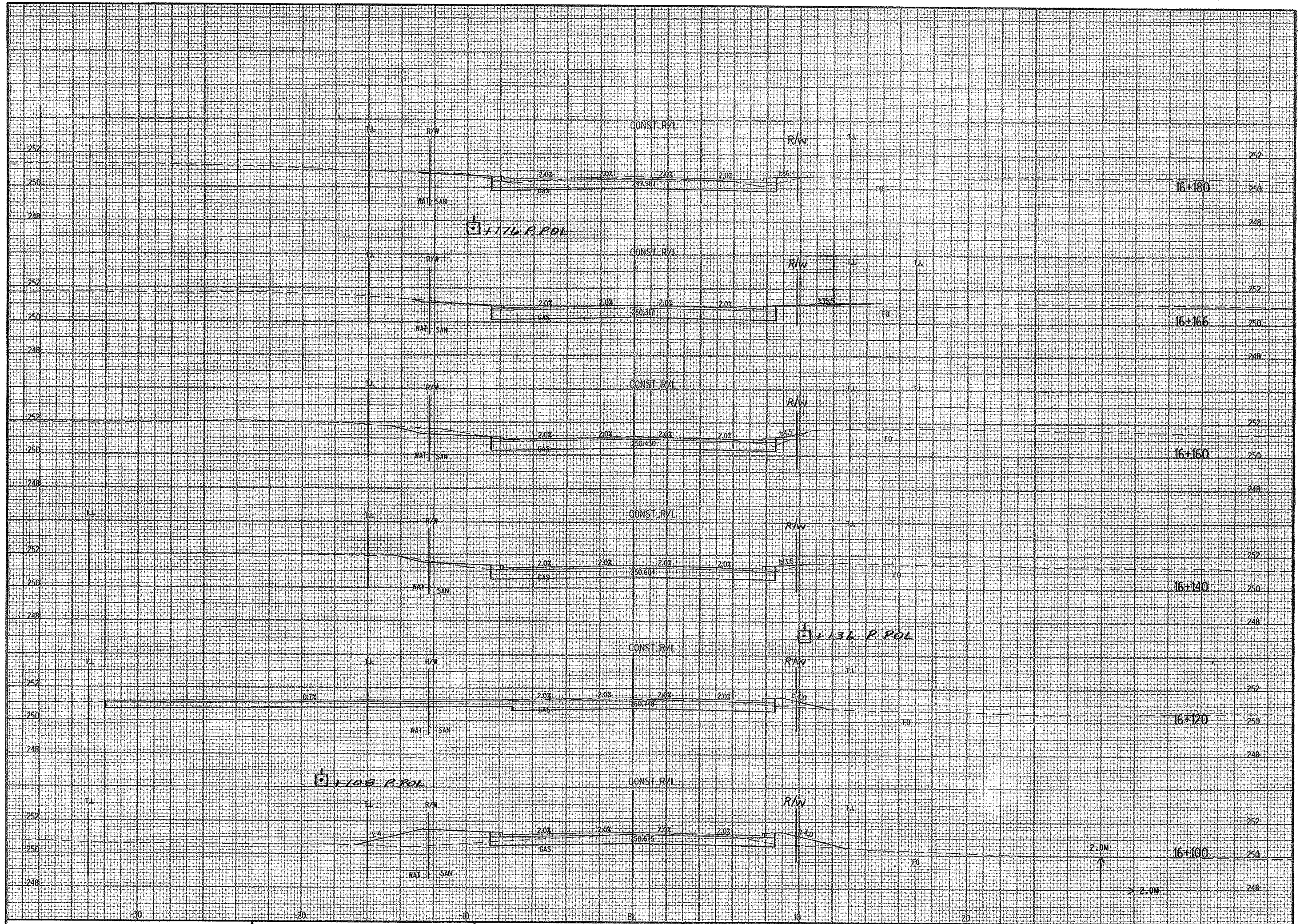




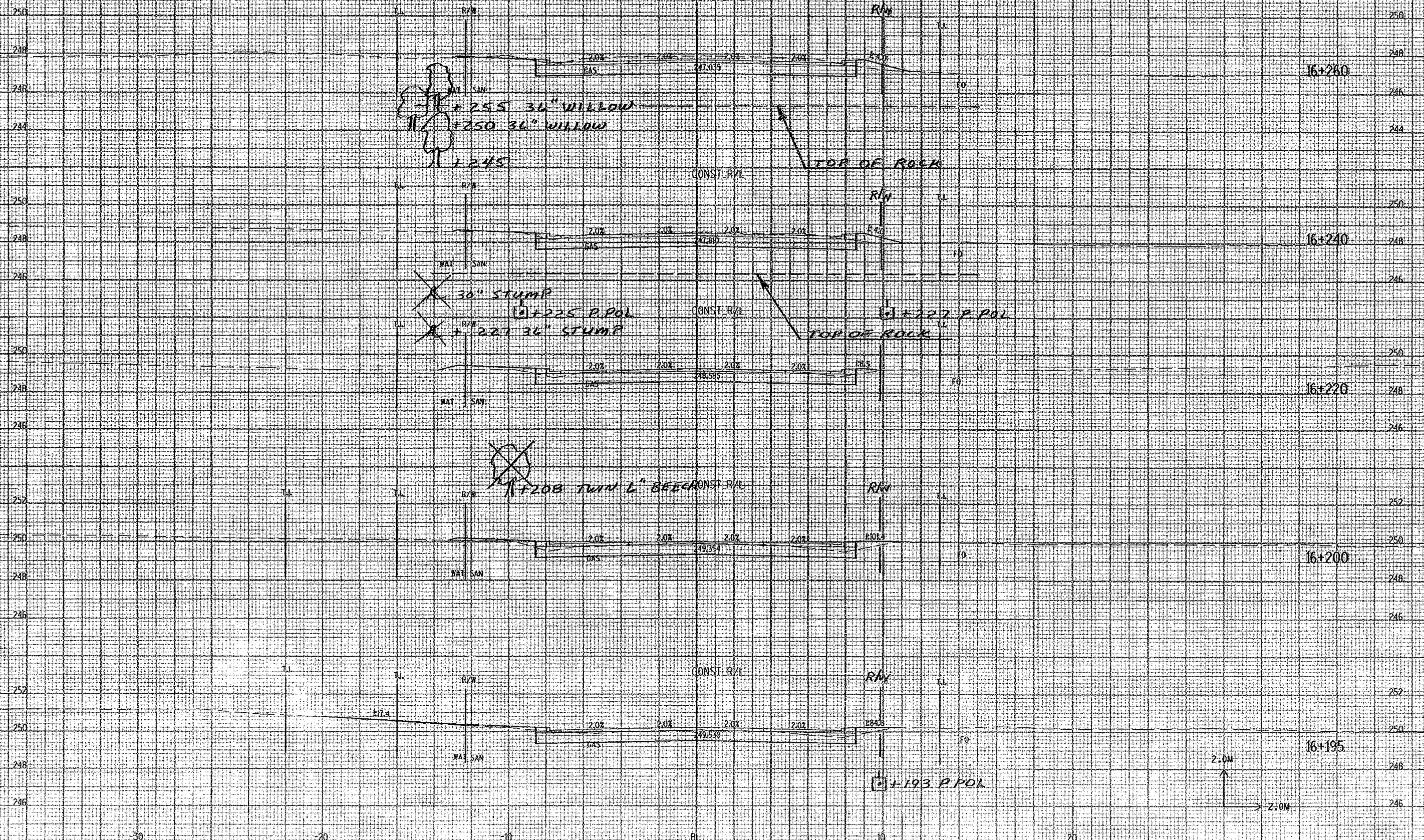


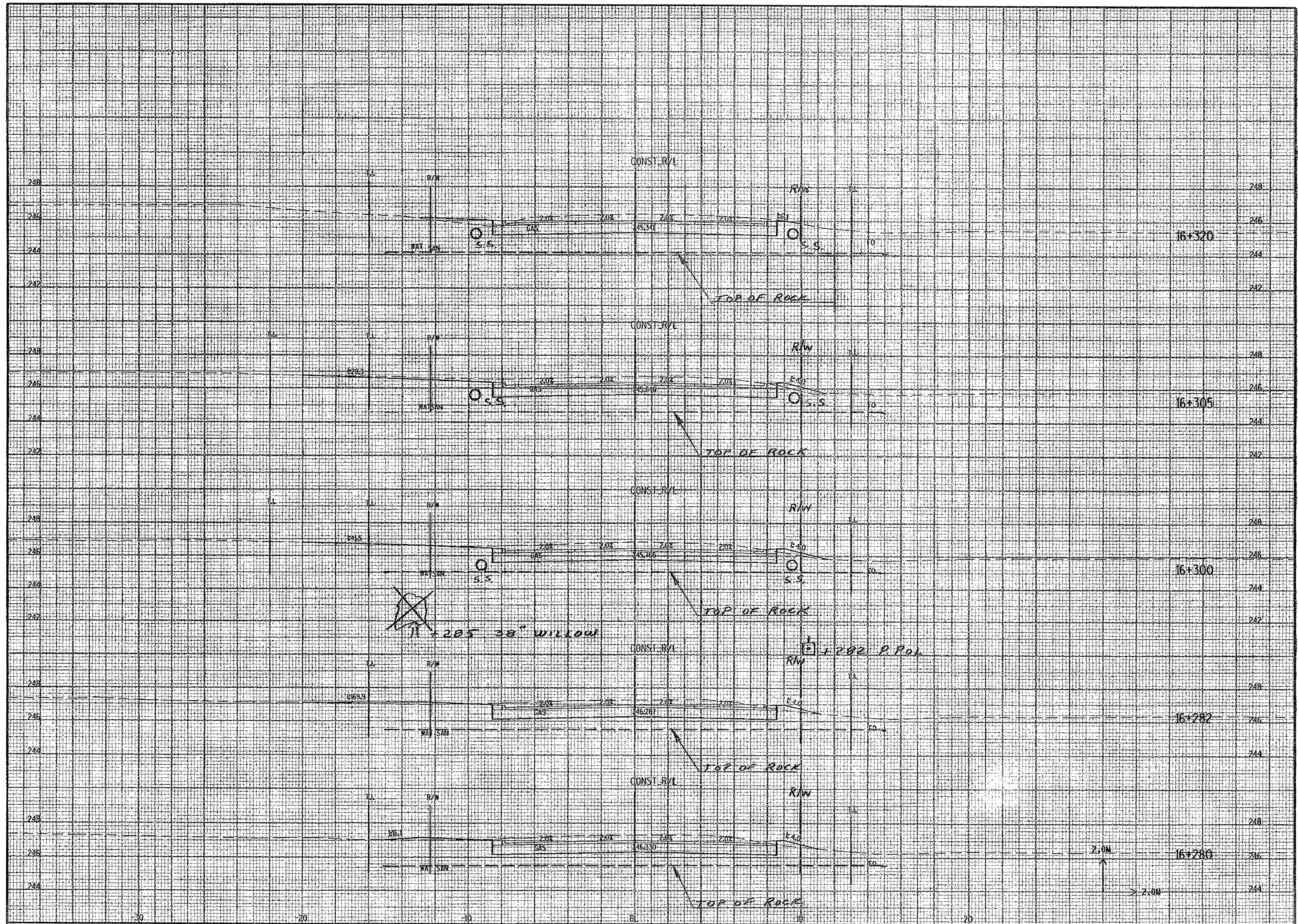


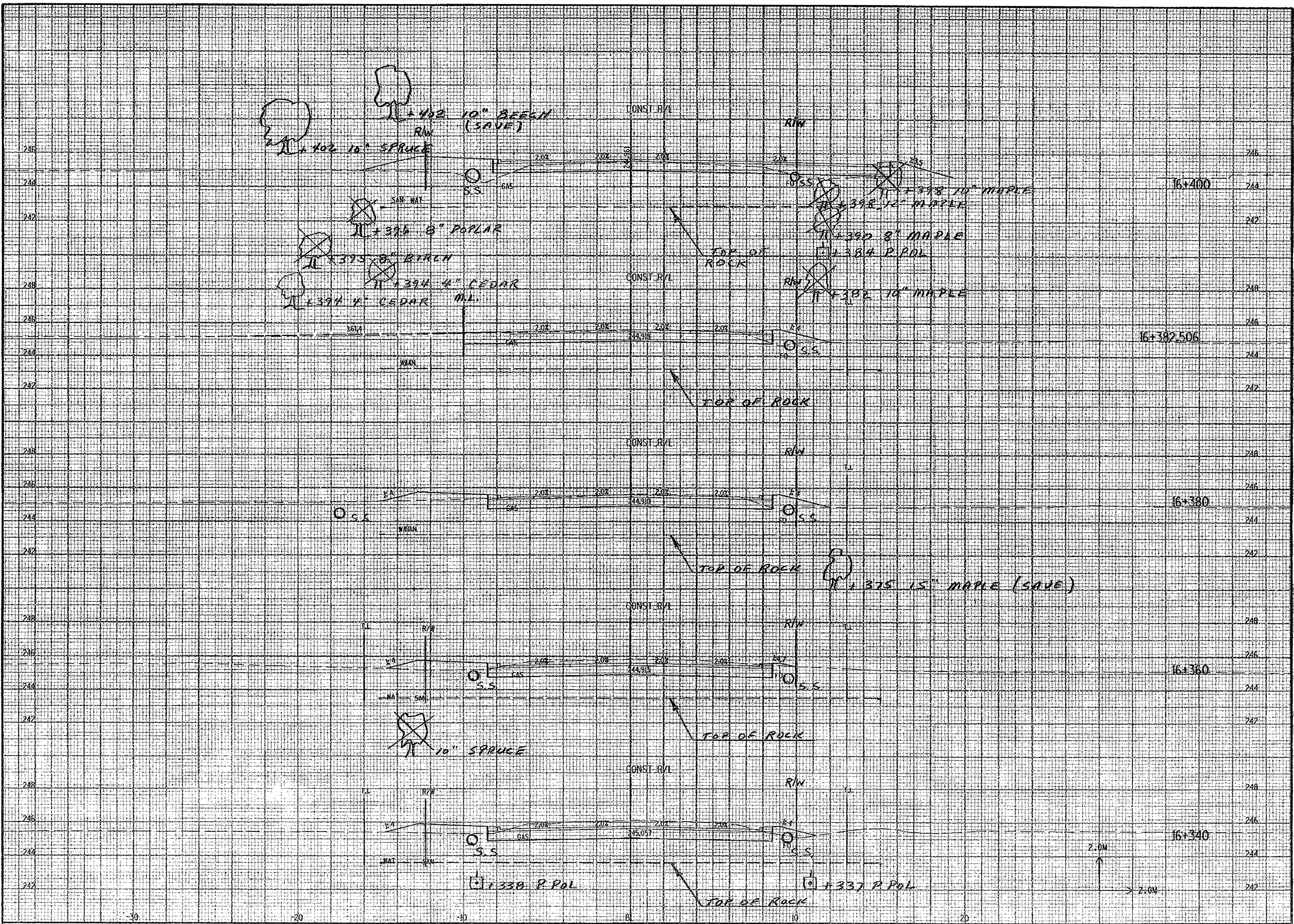


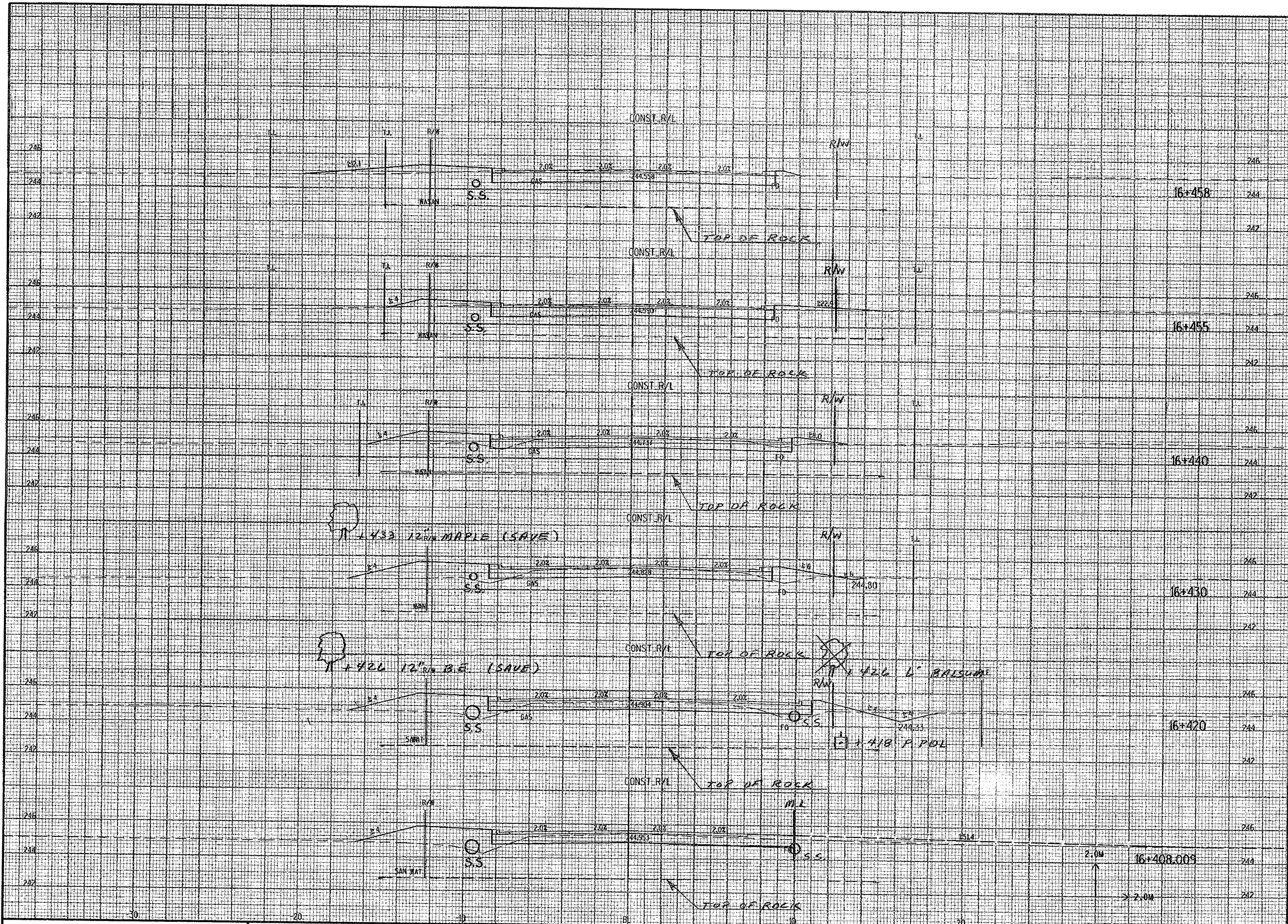


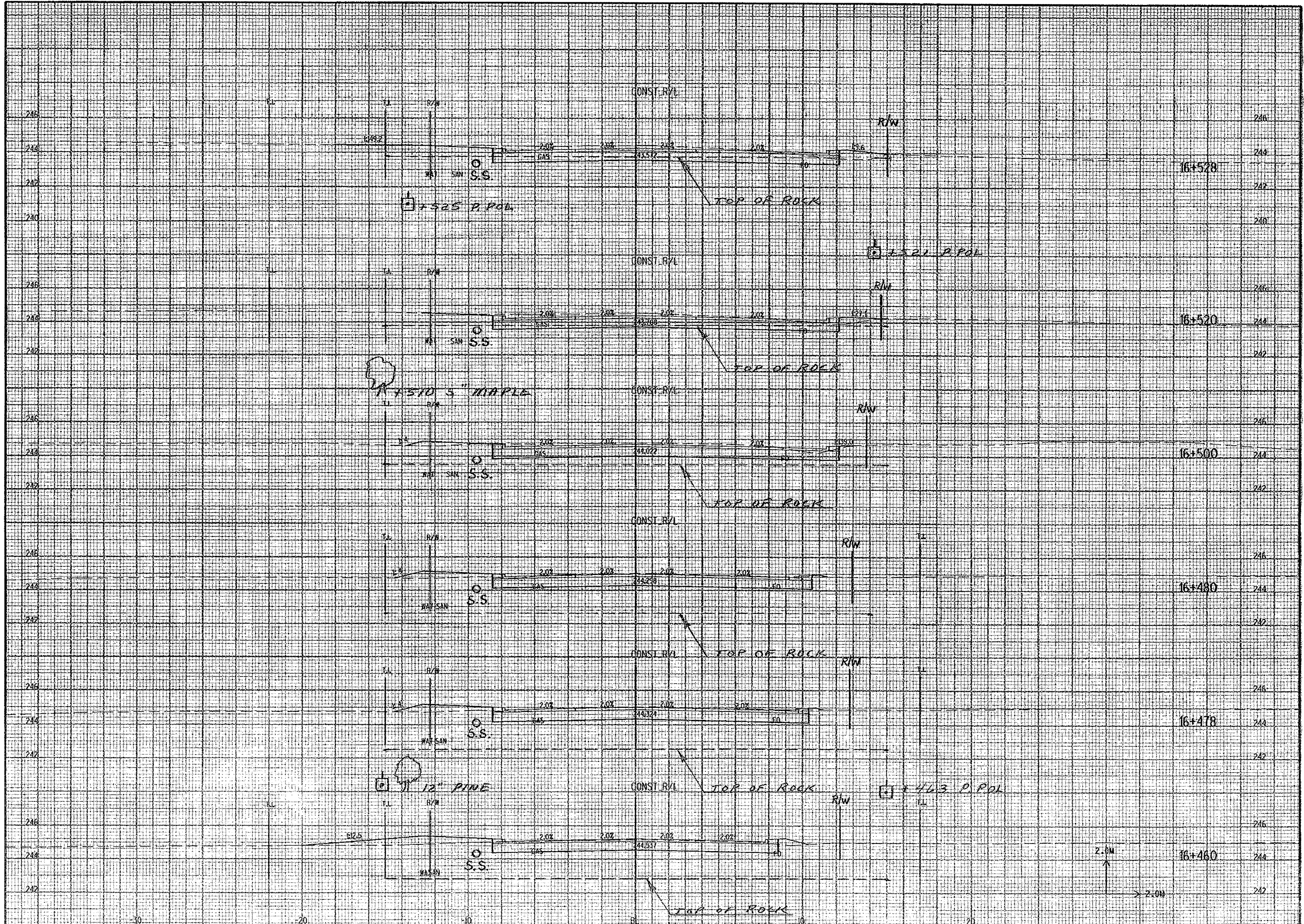
10
R+278 42" WILLOW

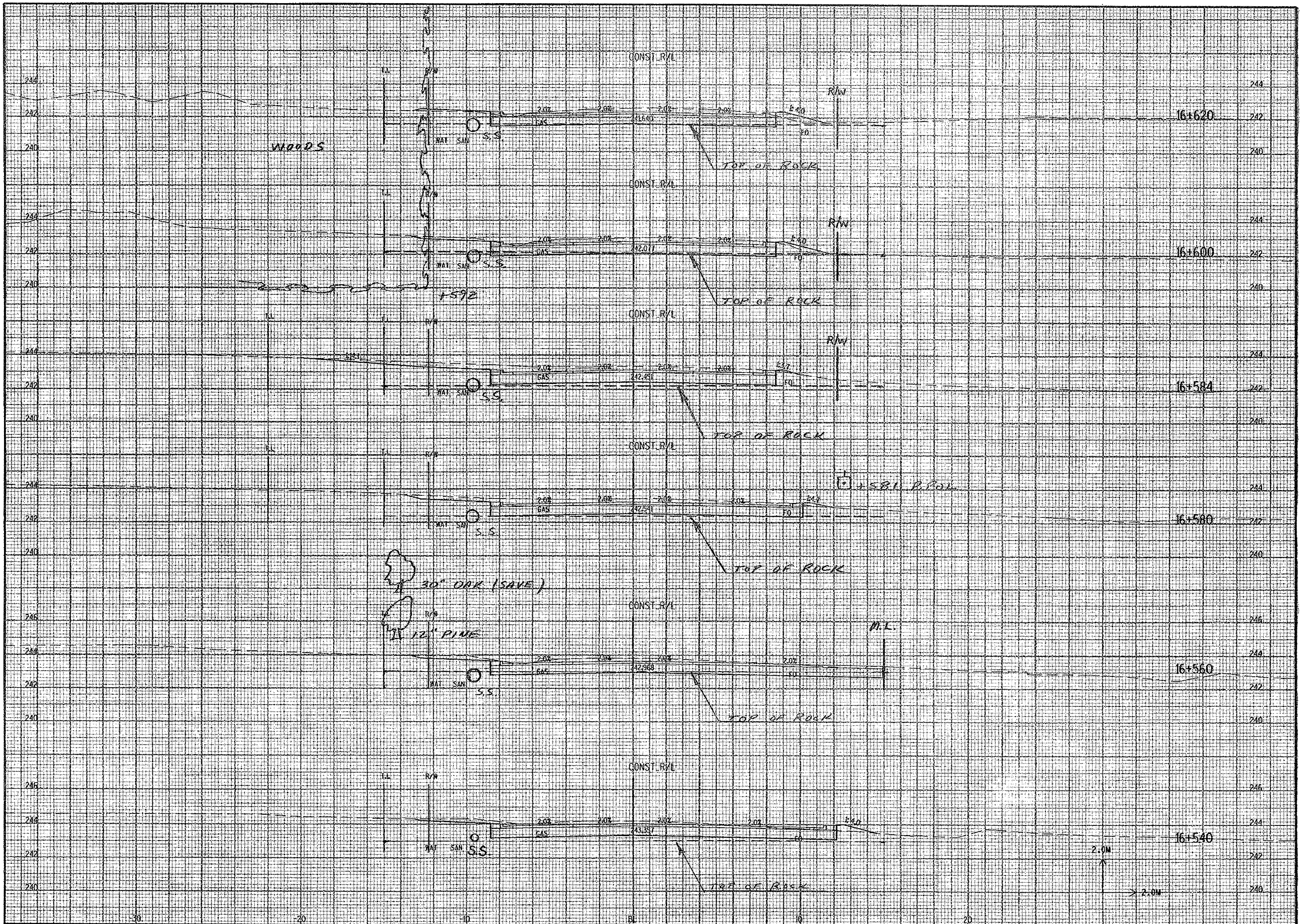


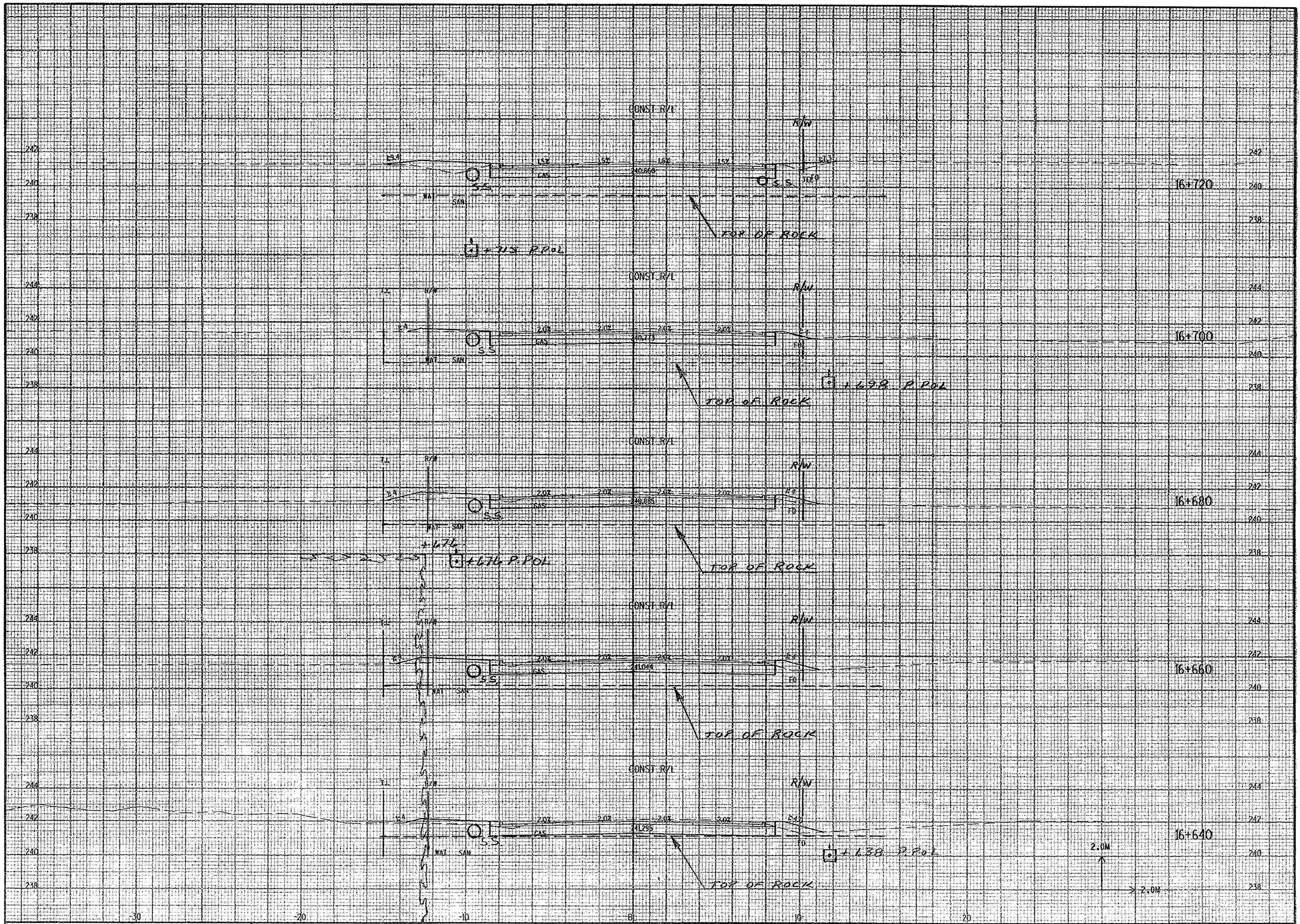


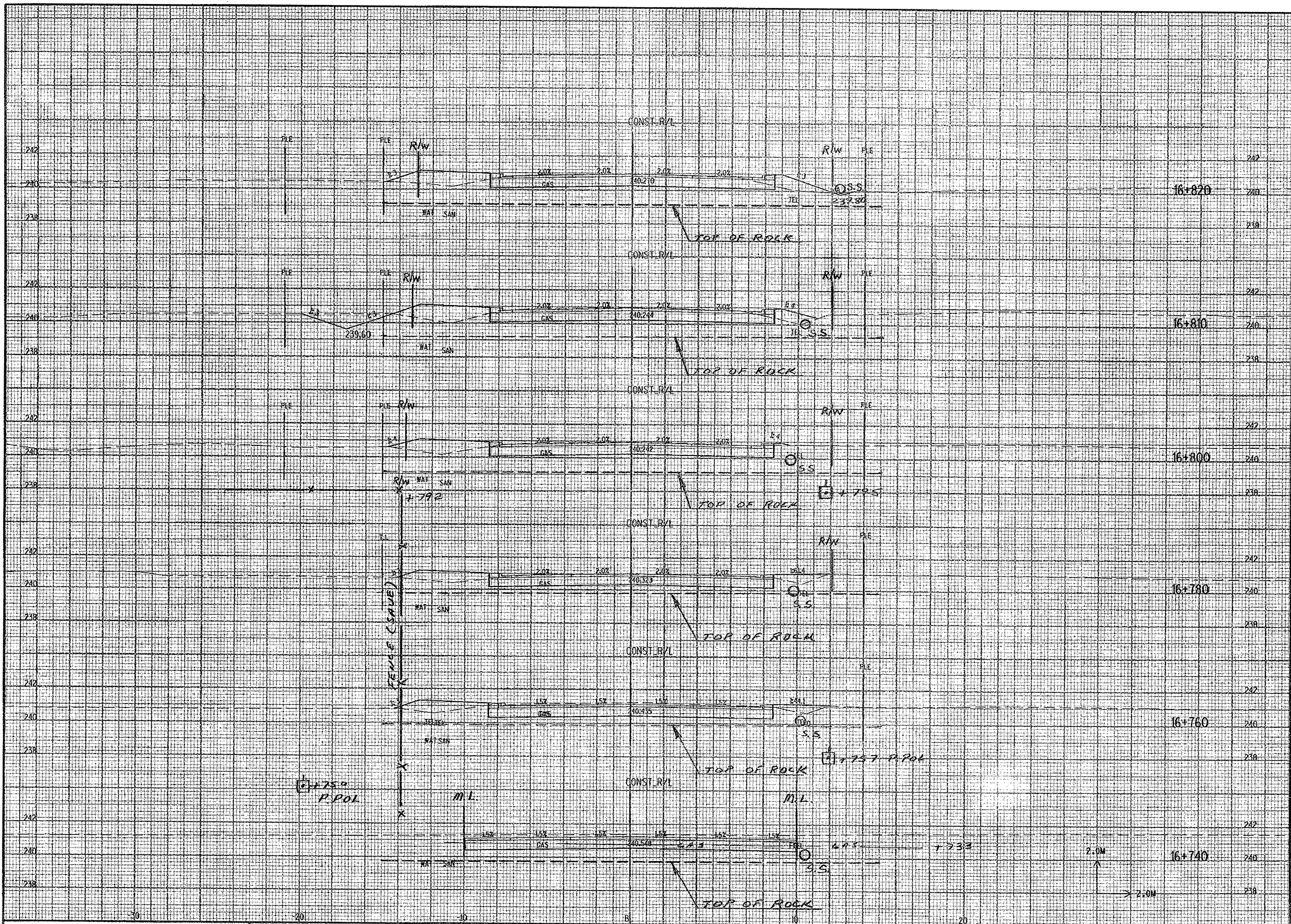


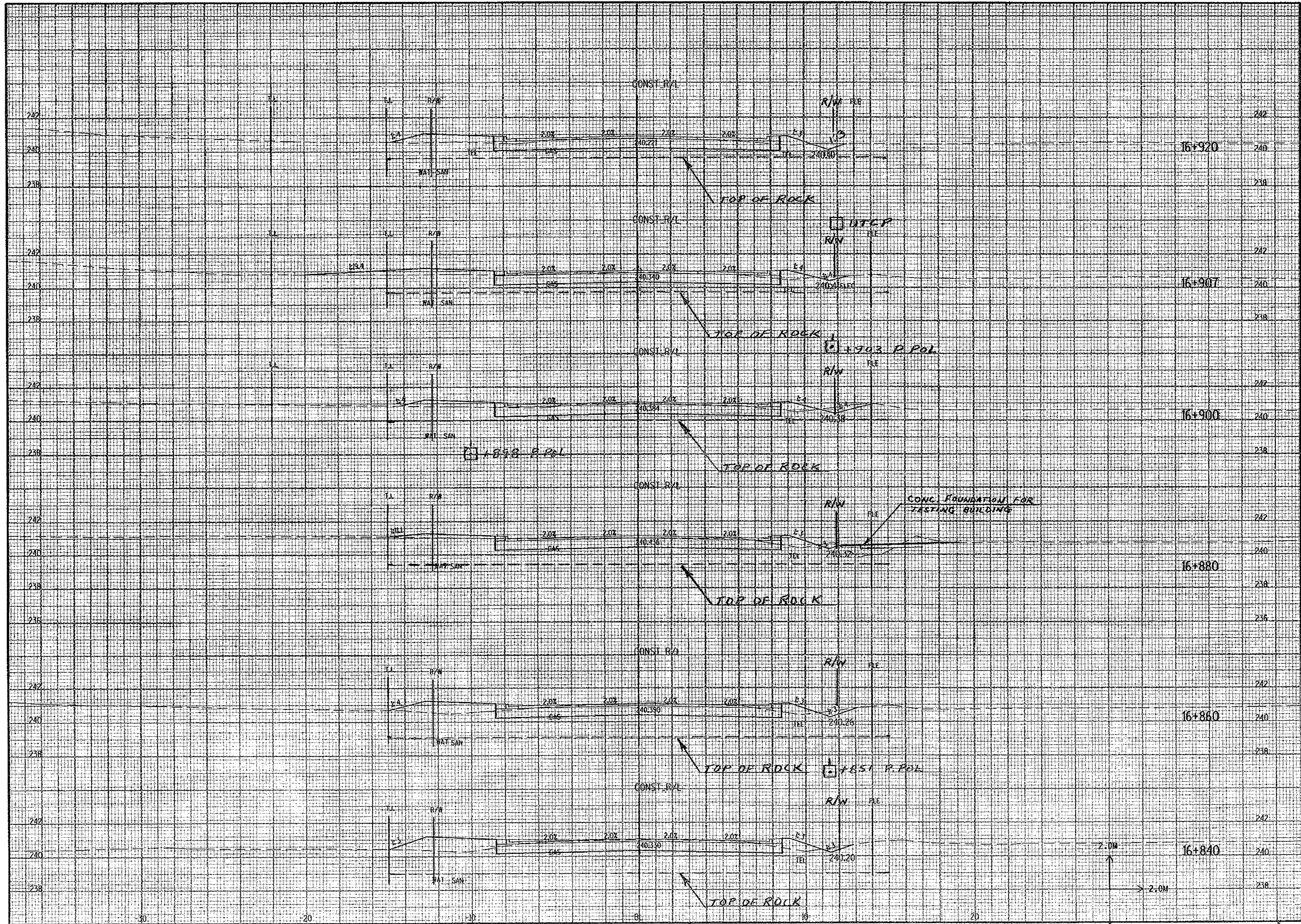


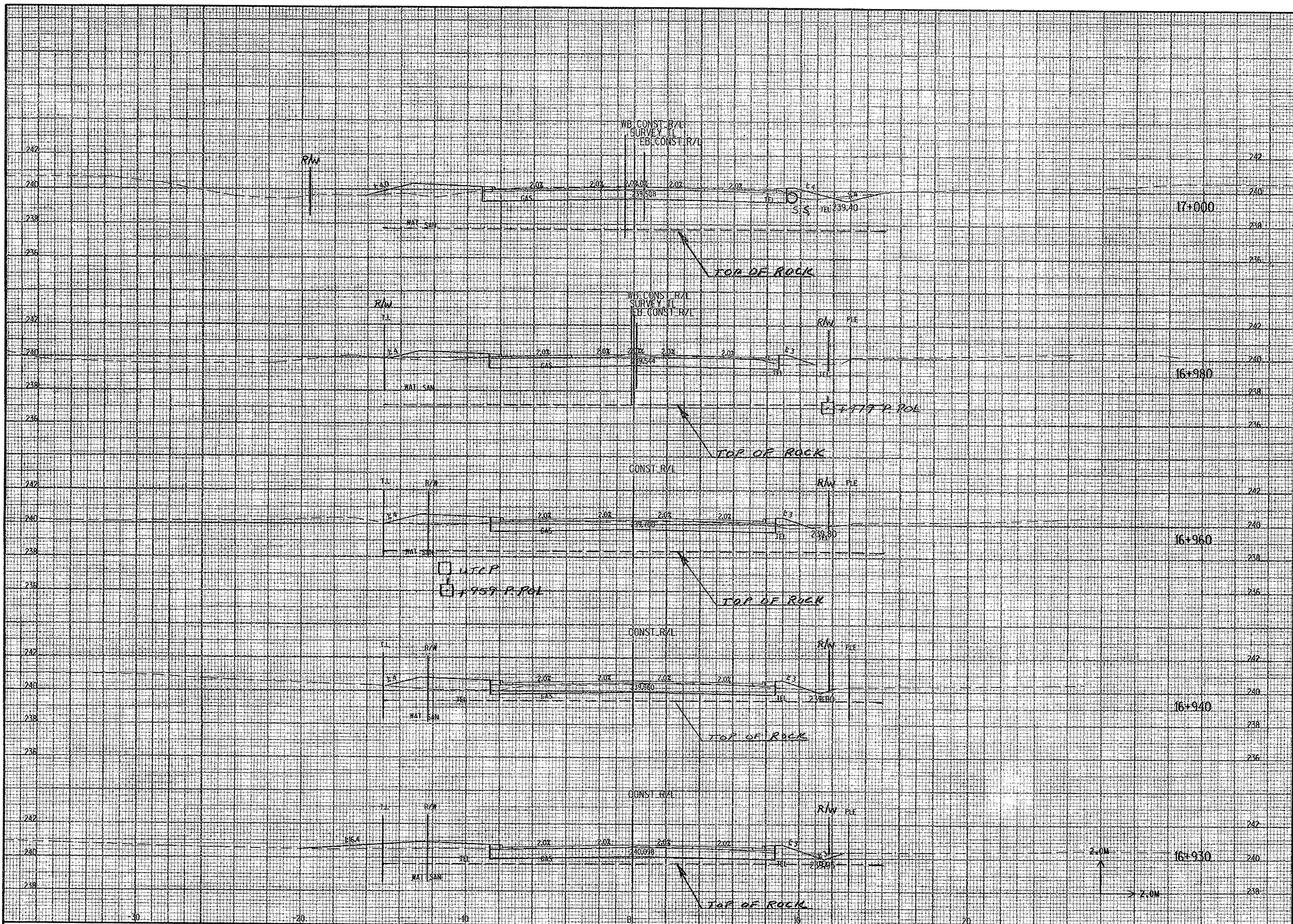


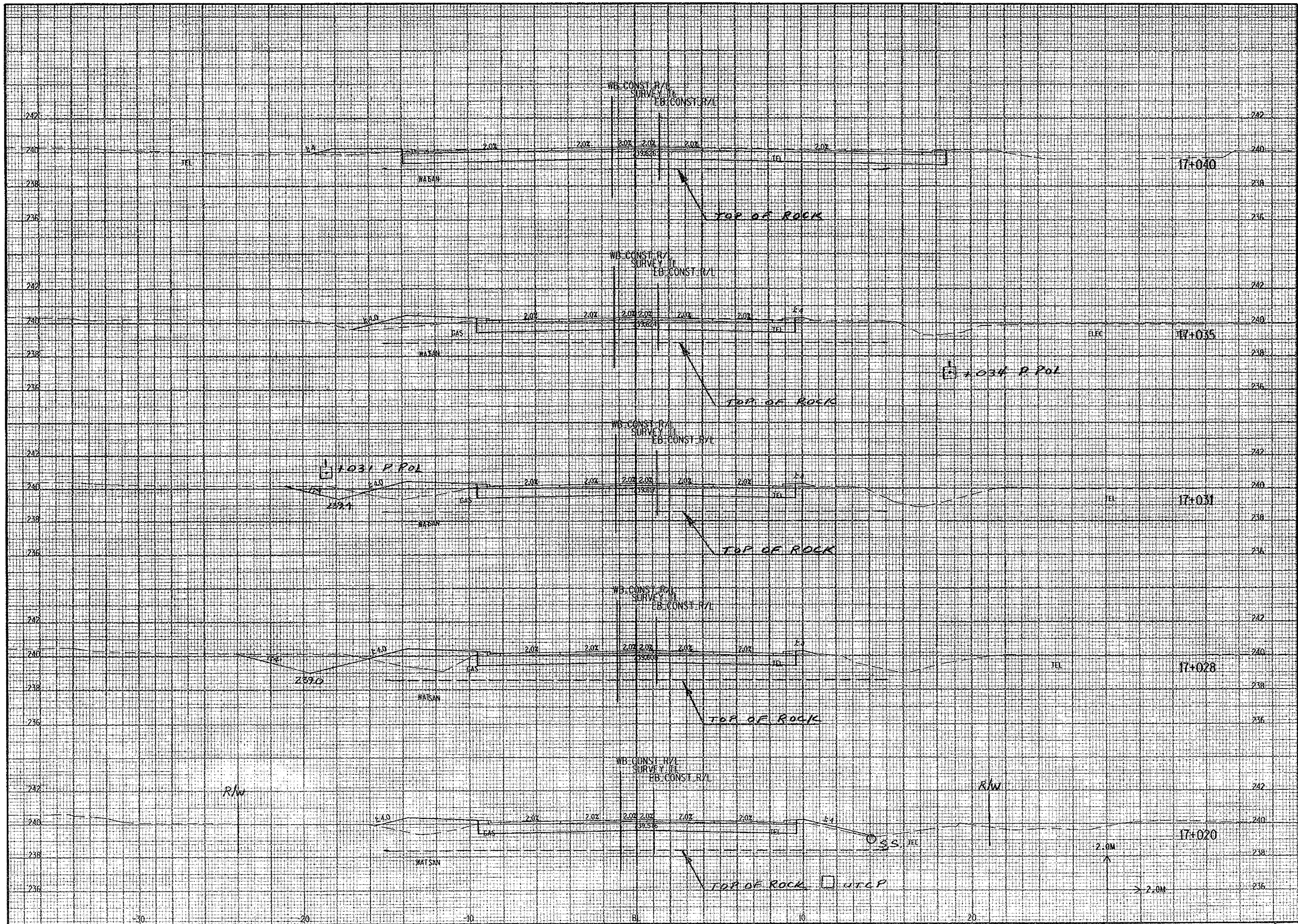


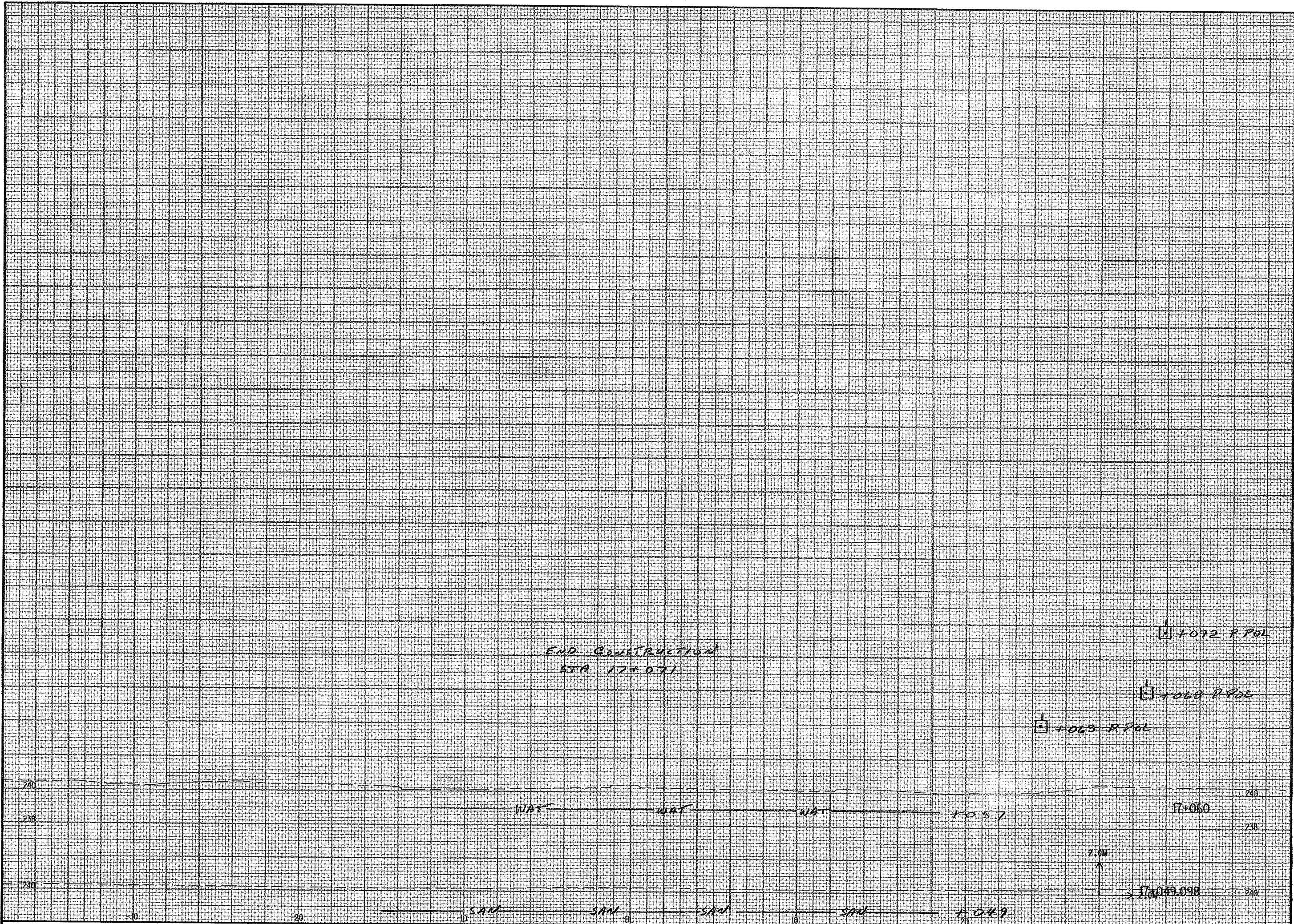


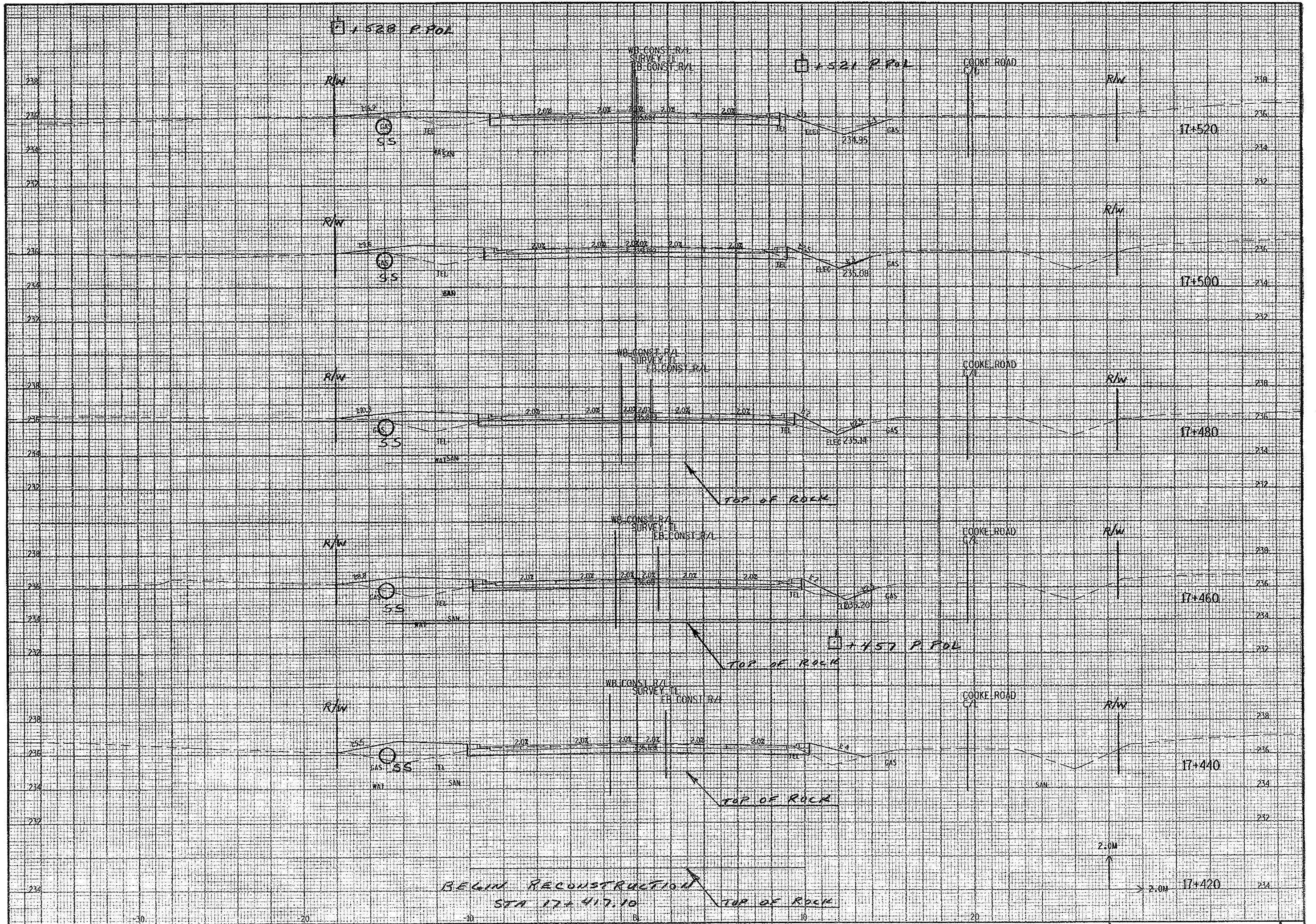


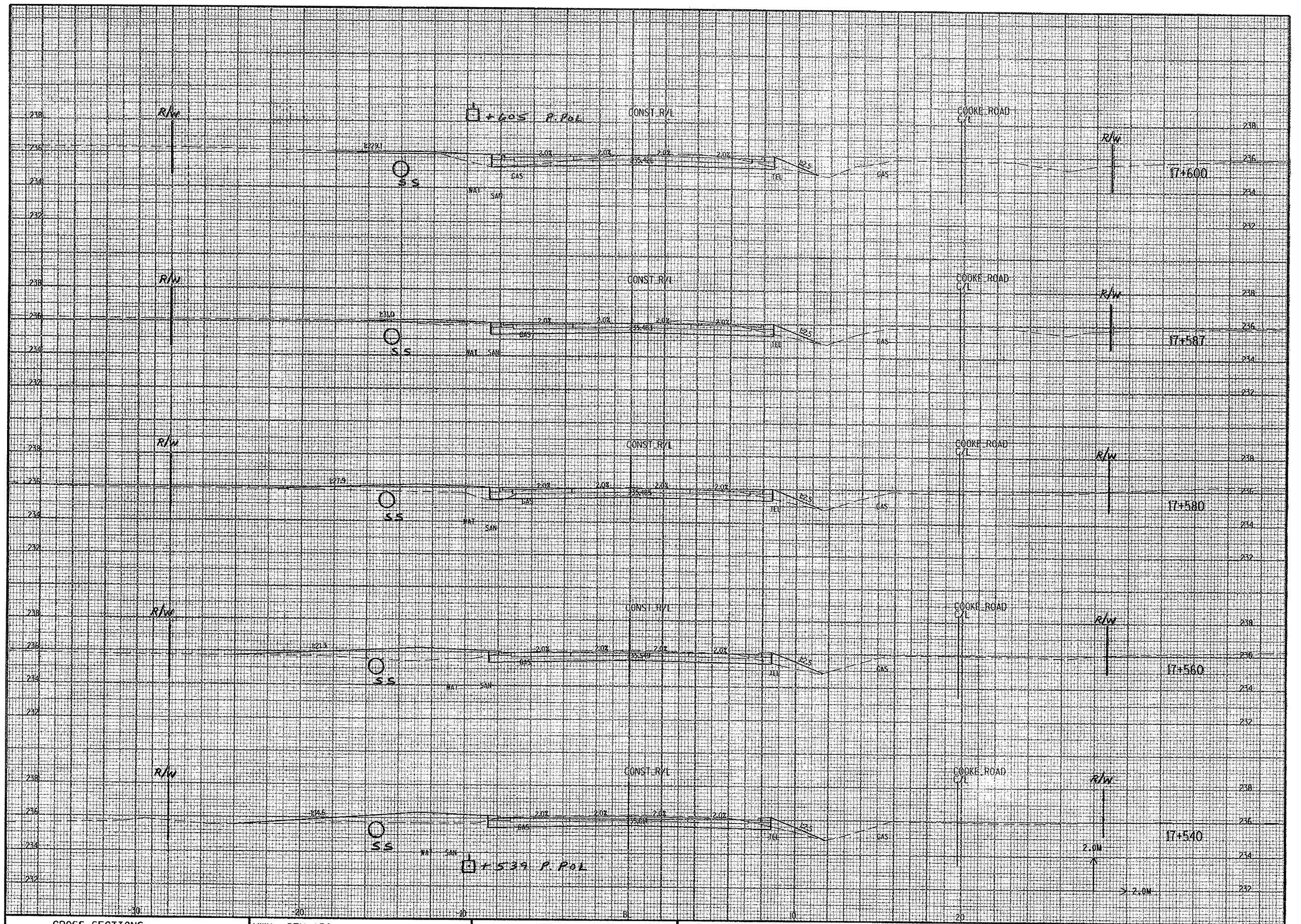


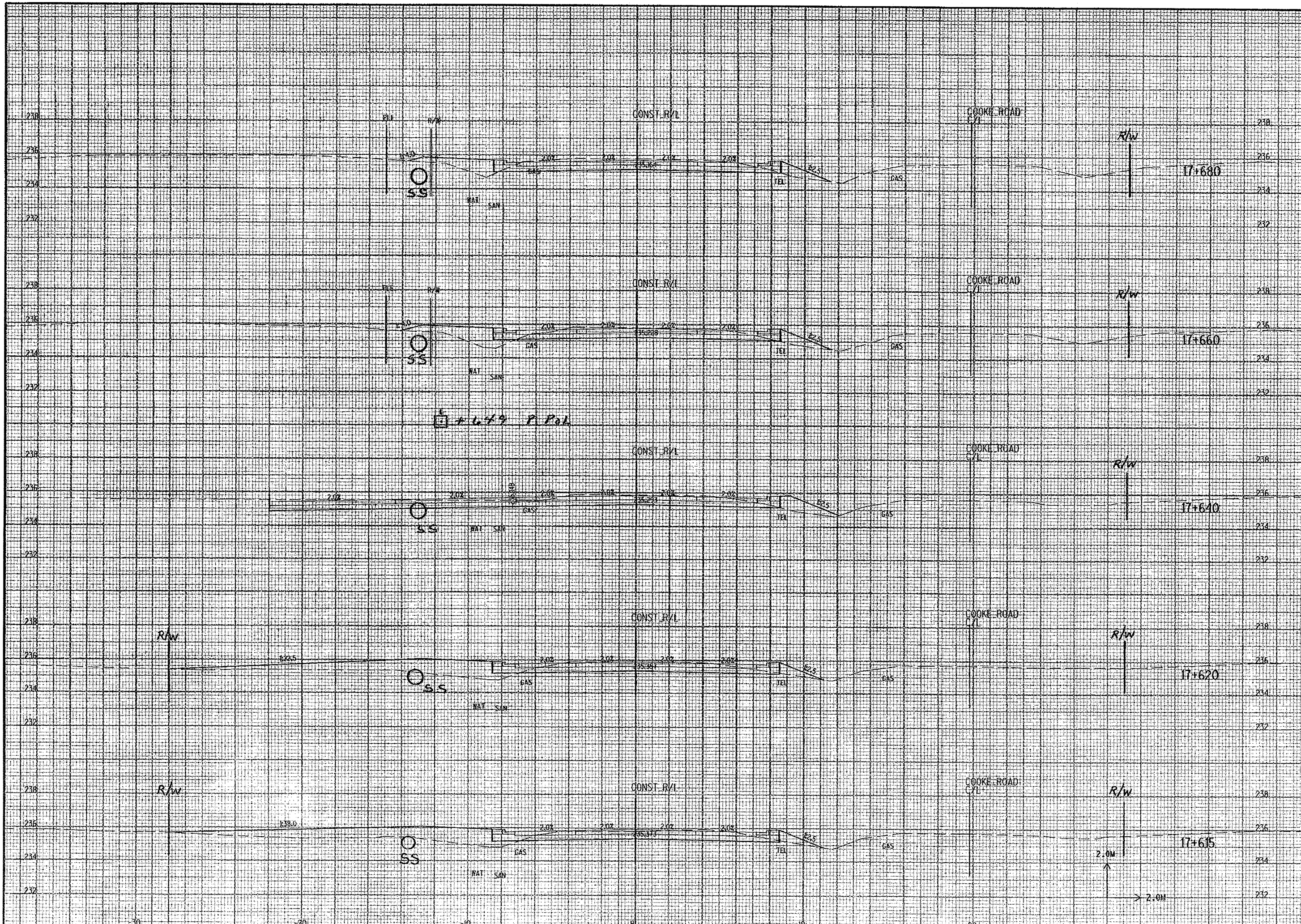




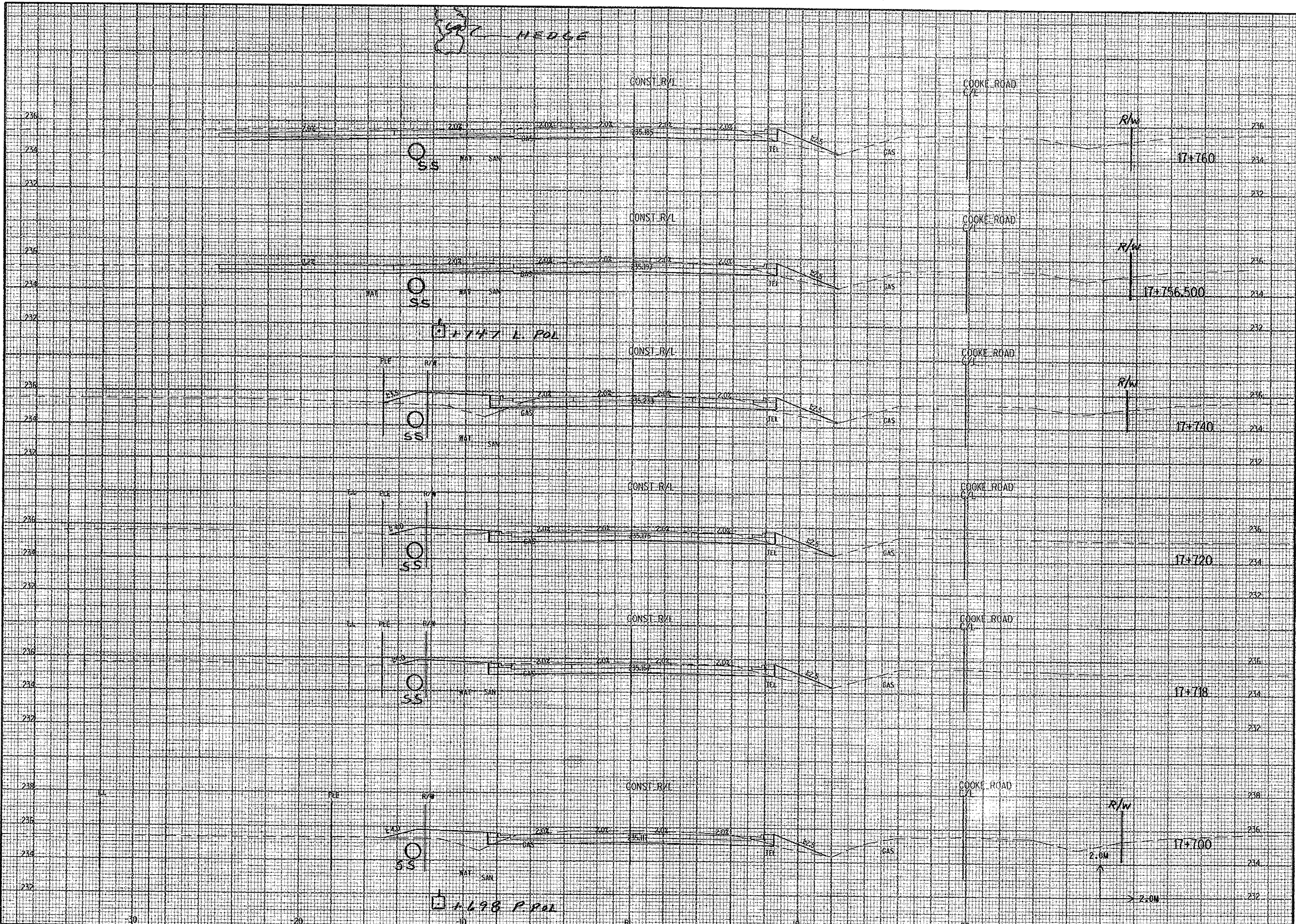








HEDGE



CROSS SECTIONS

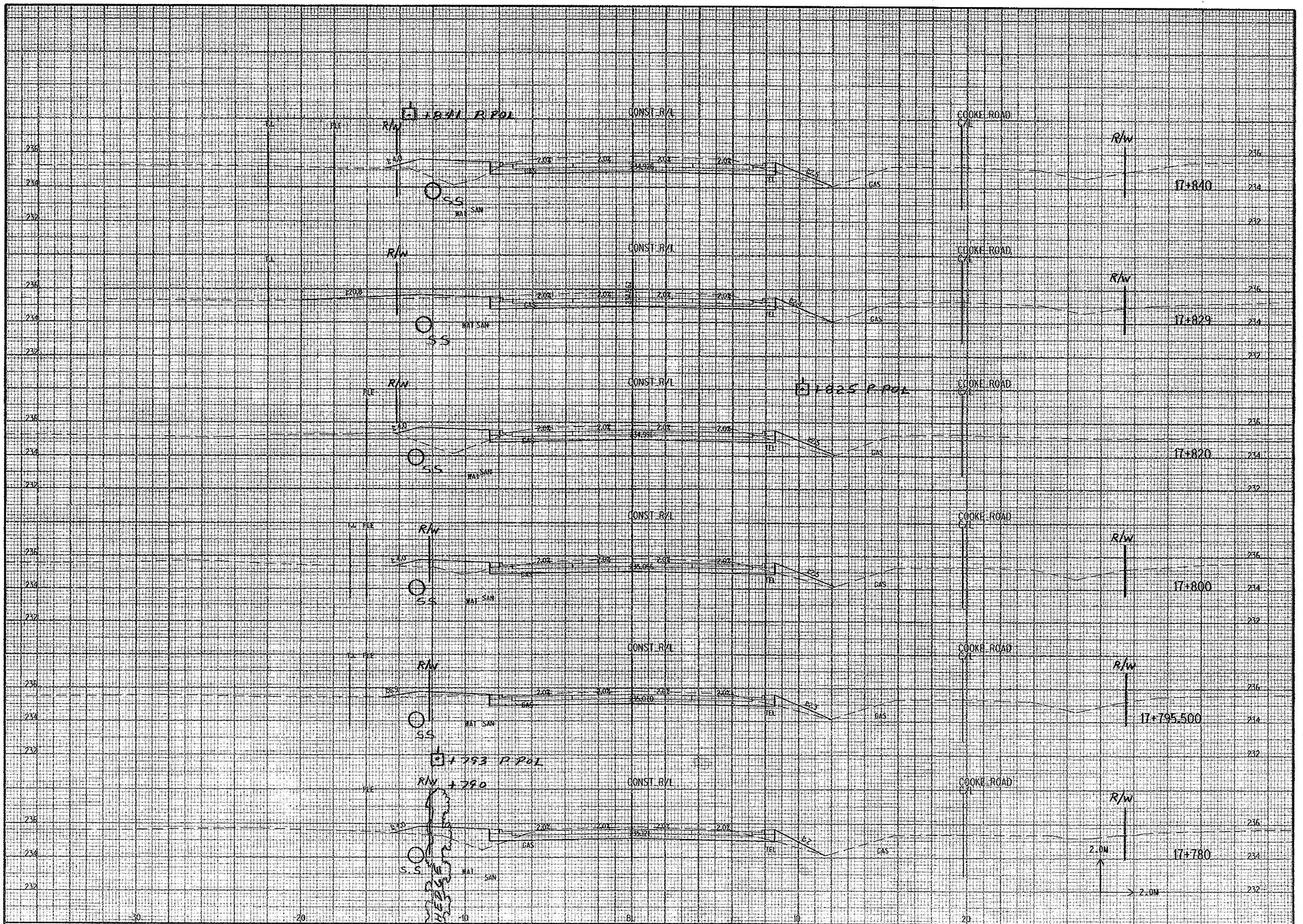
HWY: STH 150

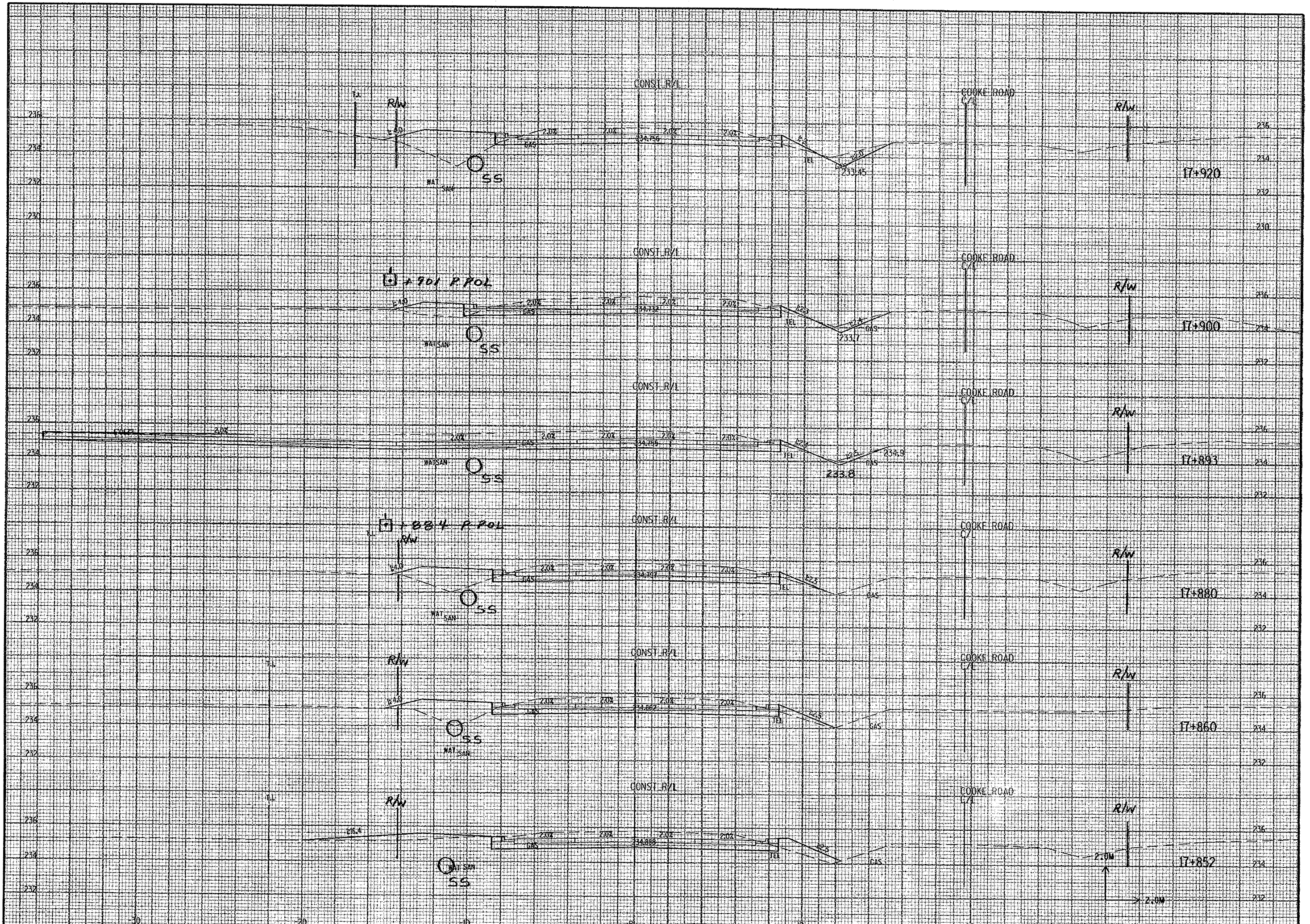
COUNTY: WINNEBAGO

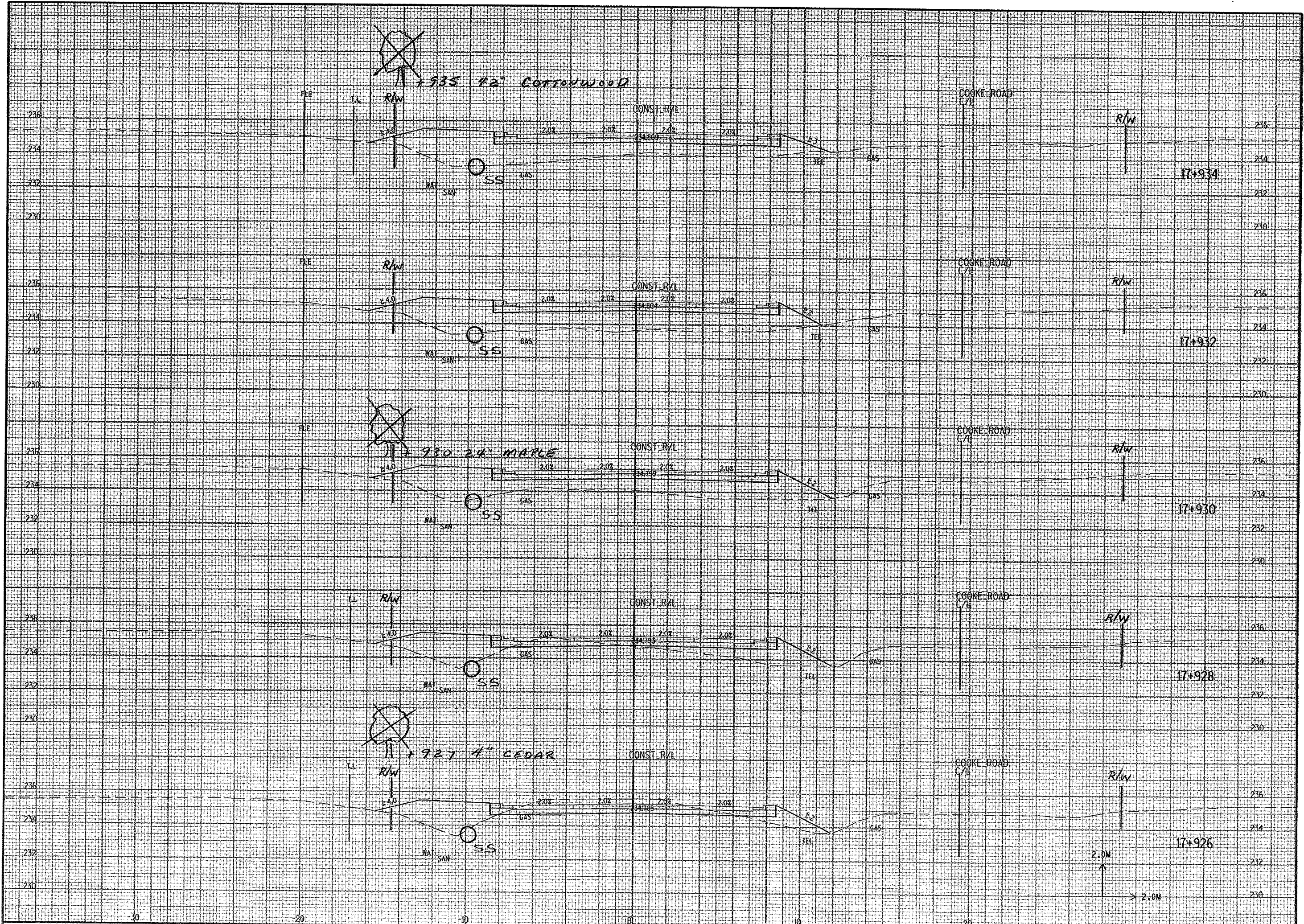
STATE PROJECT NO: 6448-03-71

SHEET NO: 9.30

M







CROSS SECTIONS

HWY: STH 150

COUNTY: WINNEBAGO

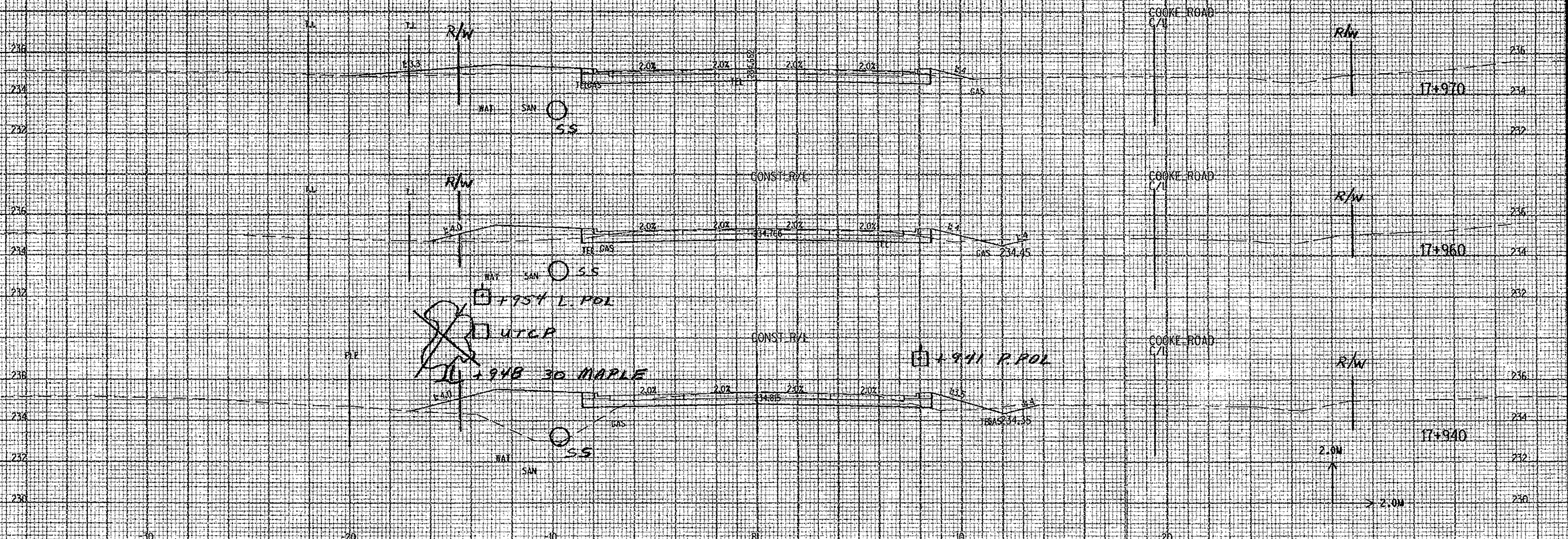
STATE PROJECT NO: 6448-03-71

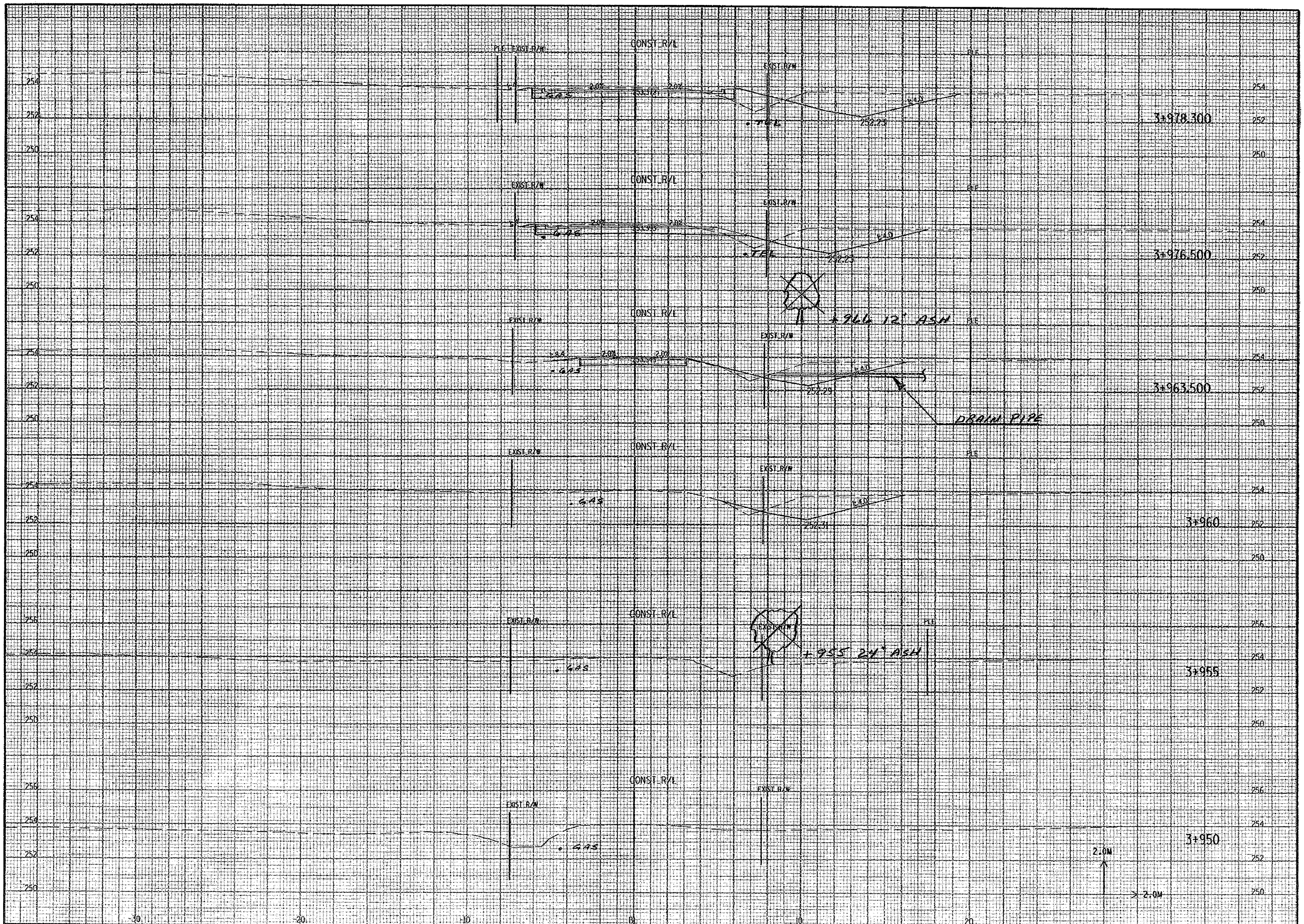
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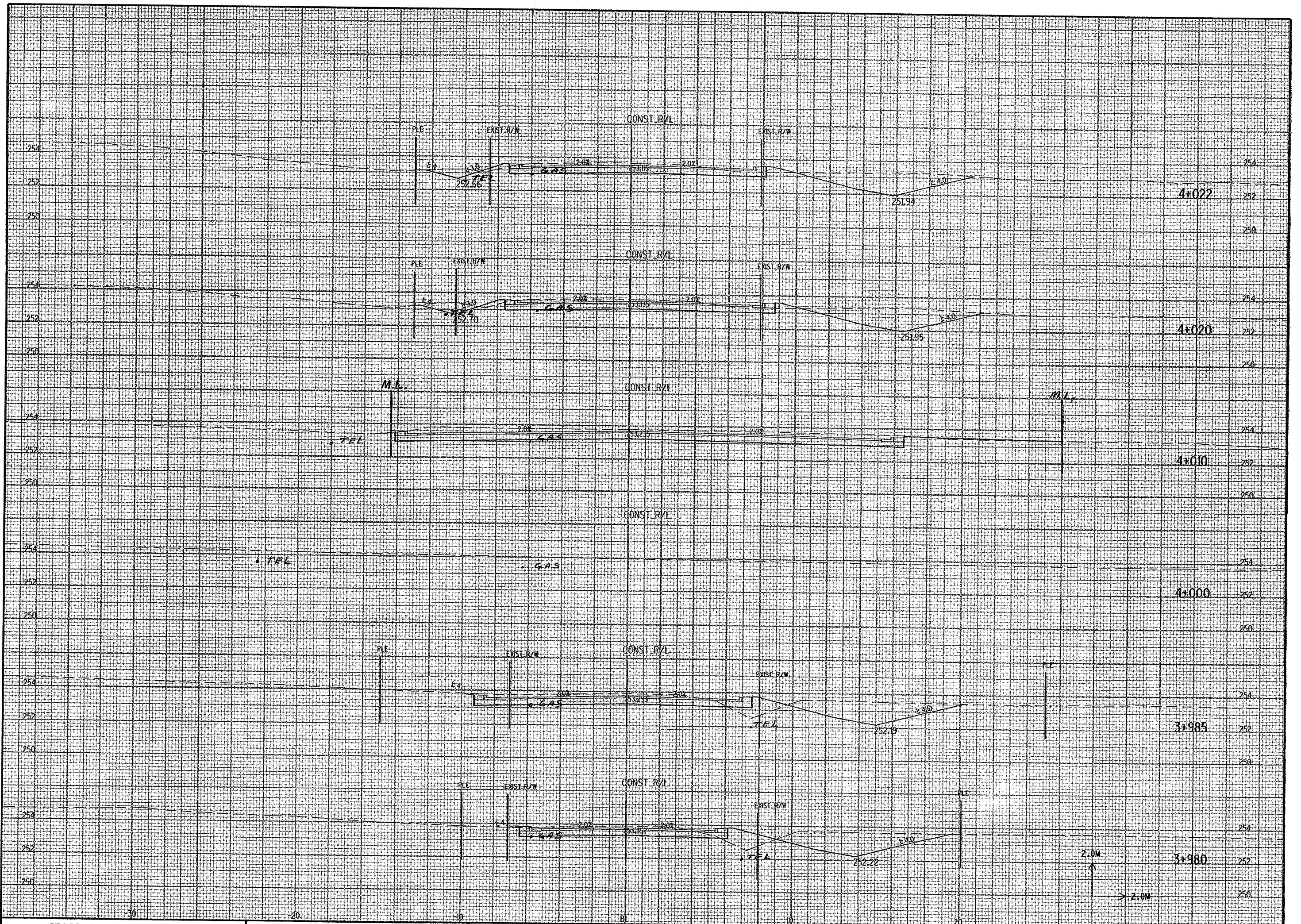
M 30

END RECONSTRUCTION & PROTECT
STA. 17+979.40 to

1988 P.POL







CROSS SECTIONS

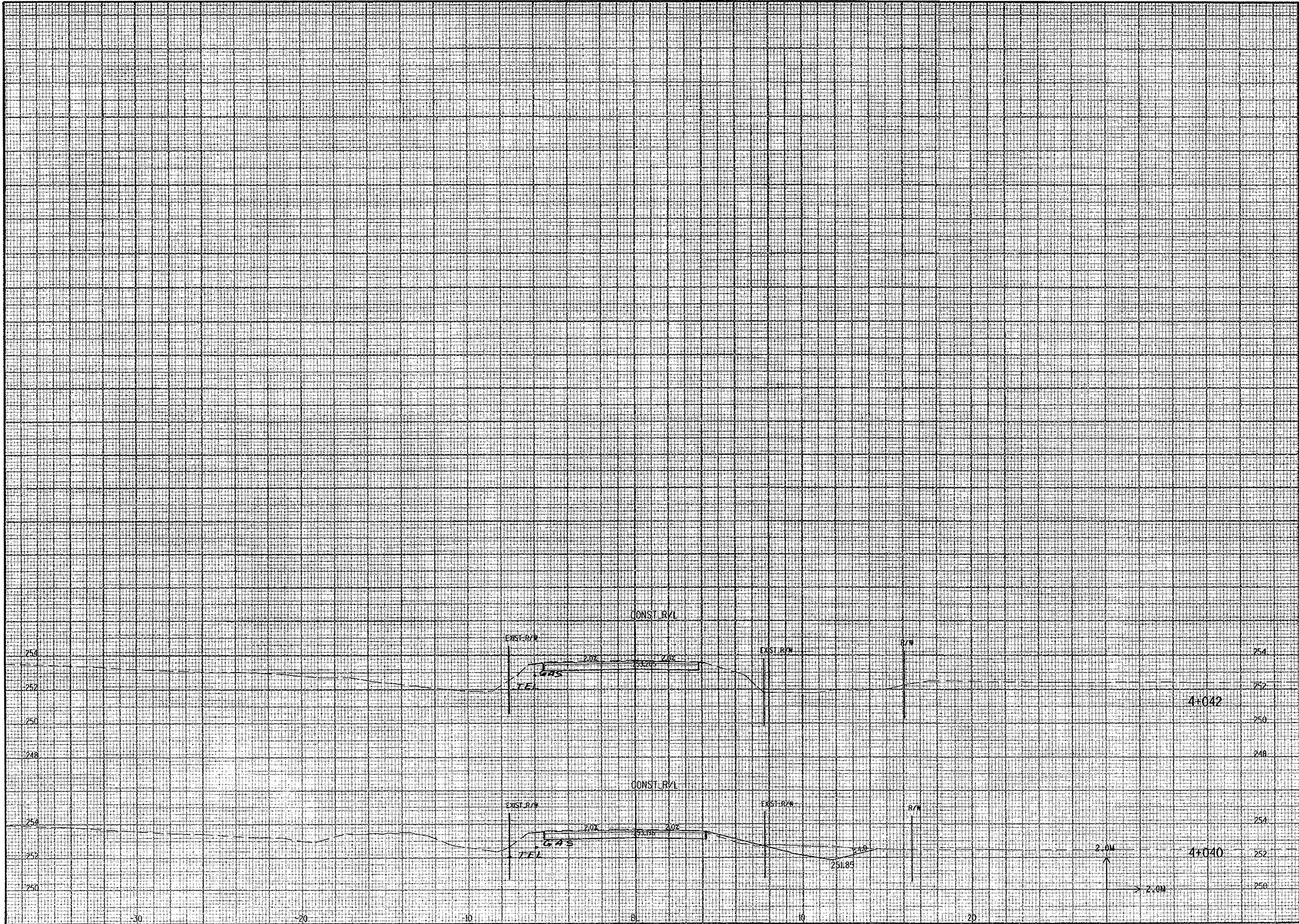
HWY: CLAYTON ROAD

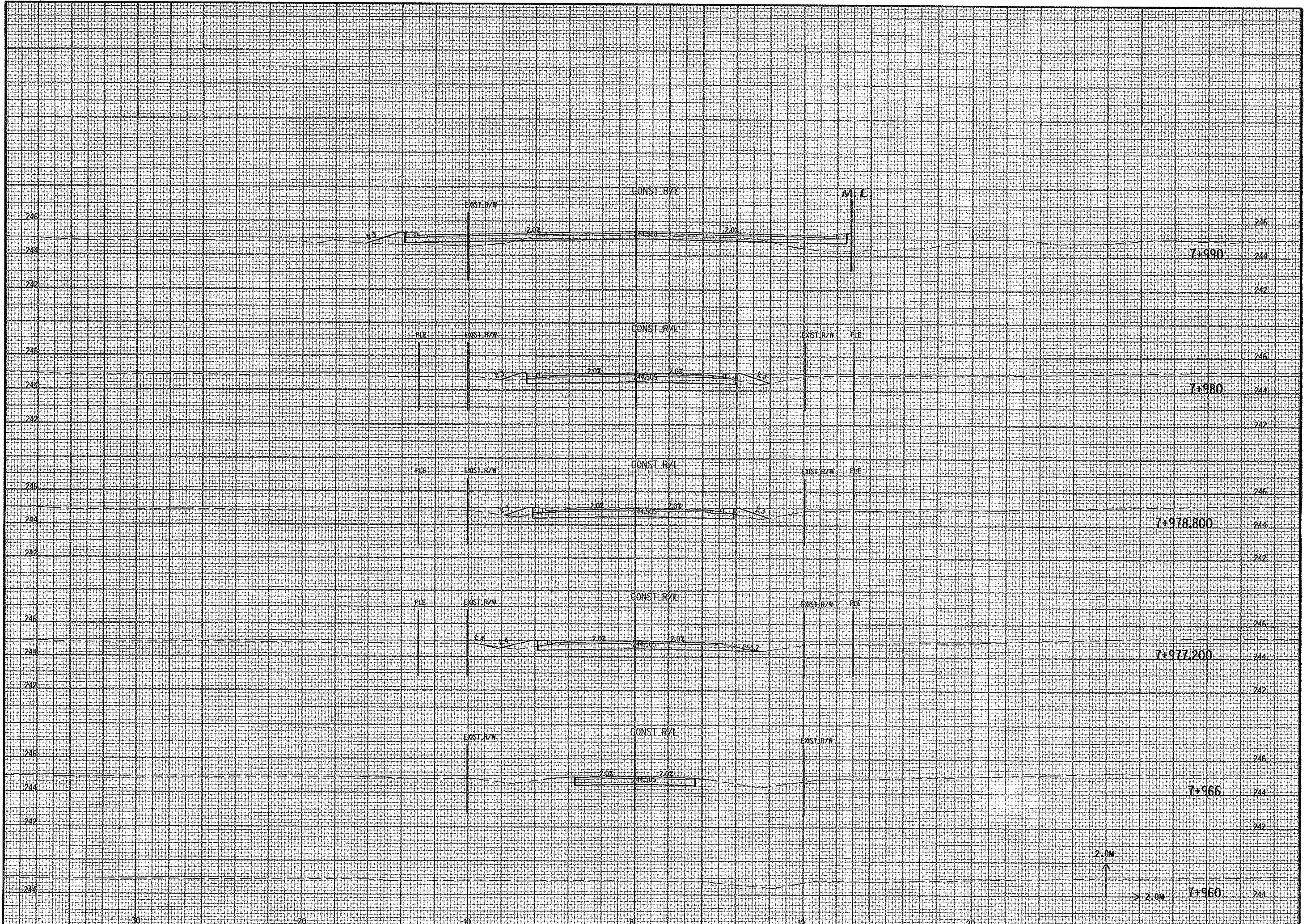
COUNTY: WINNEBAGO

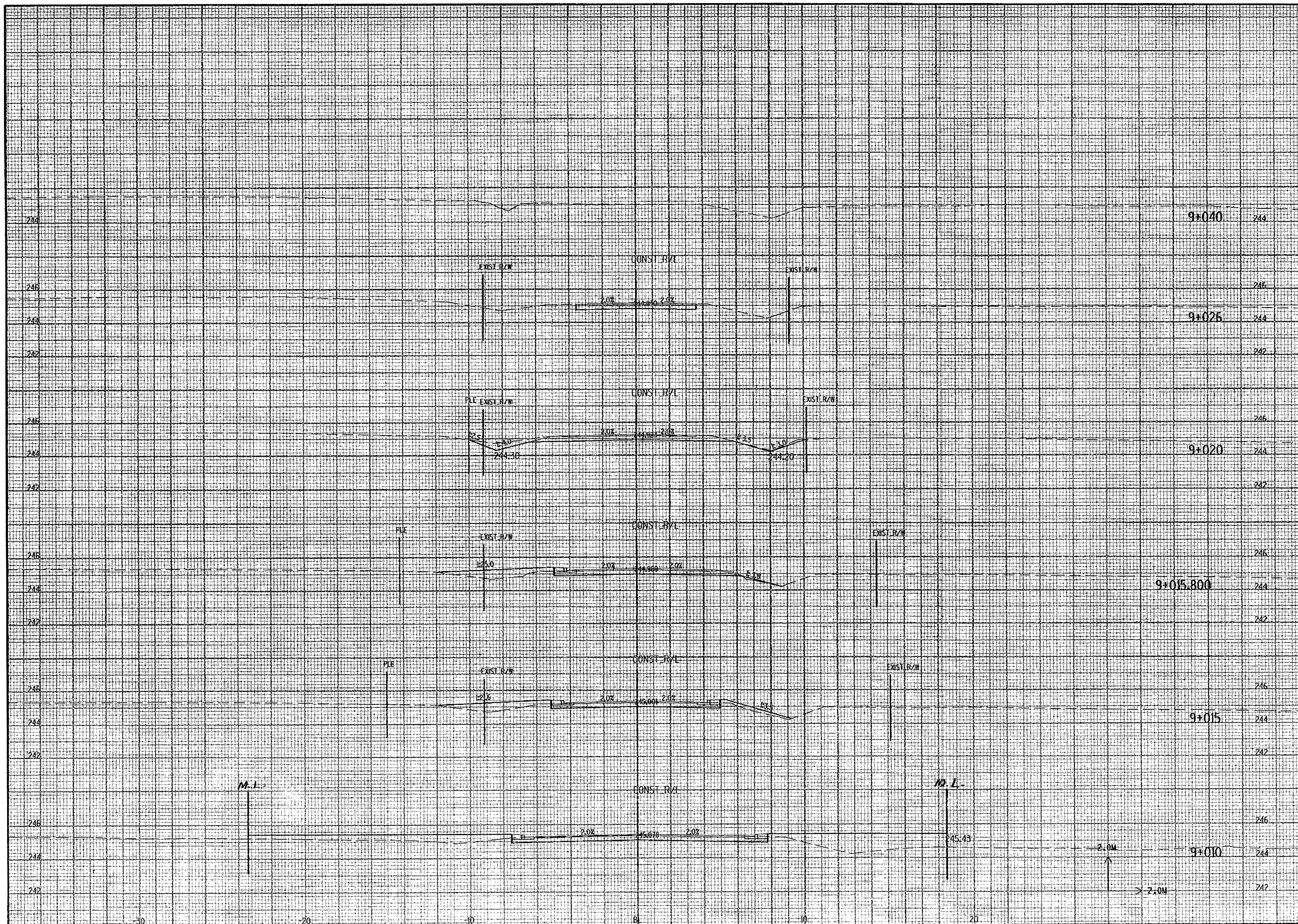
STATE PROJECT NO: 6448-03-71

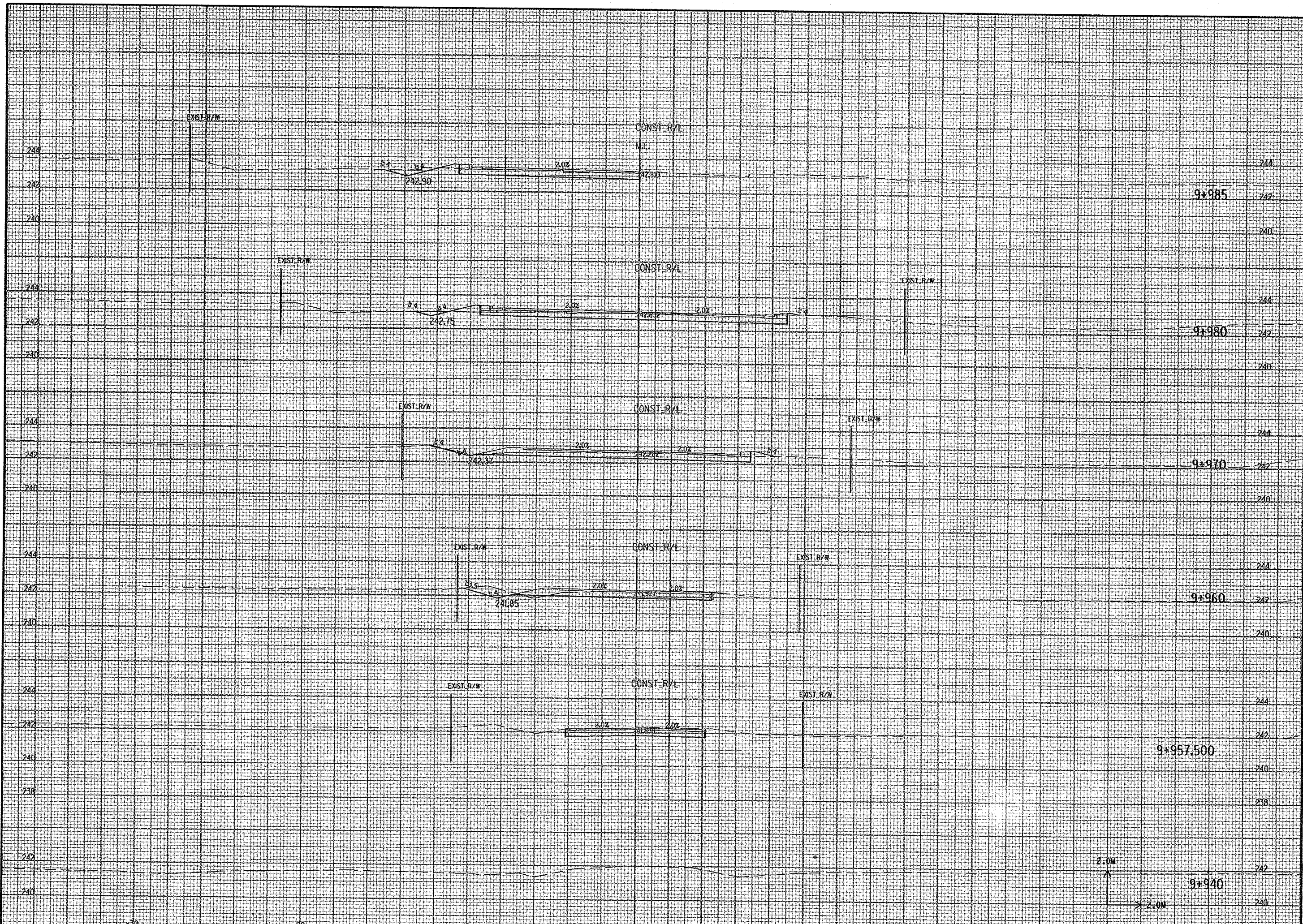
SHEET NO: 9.36

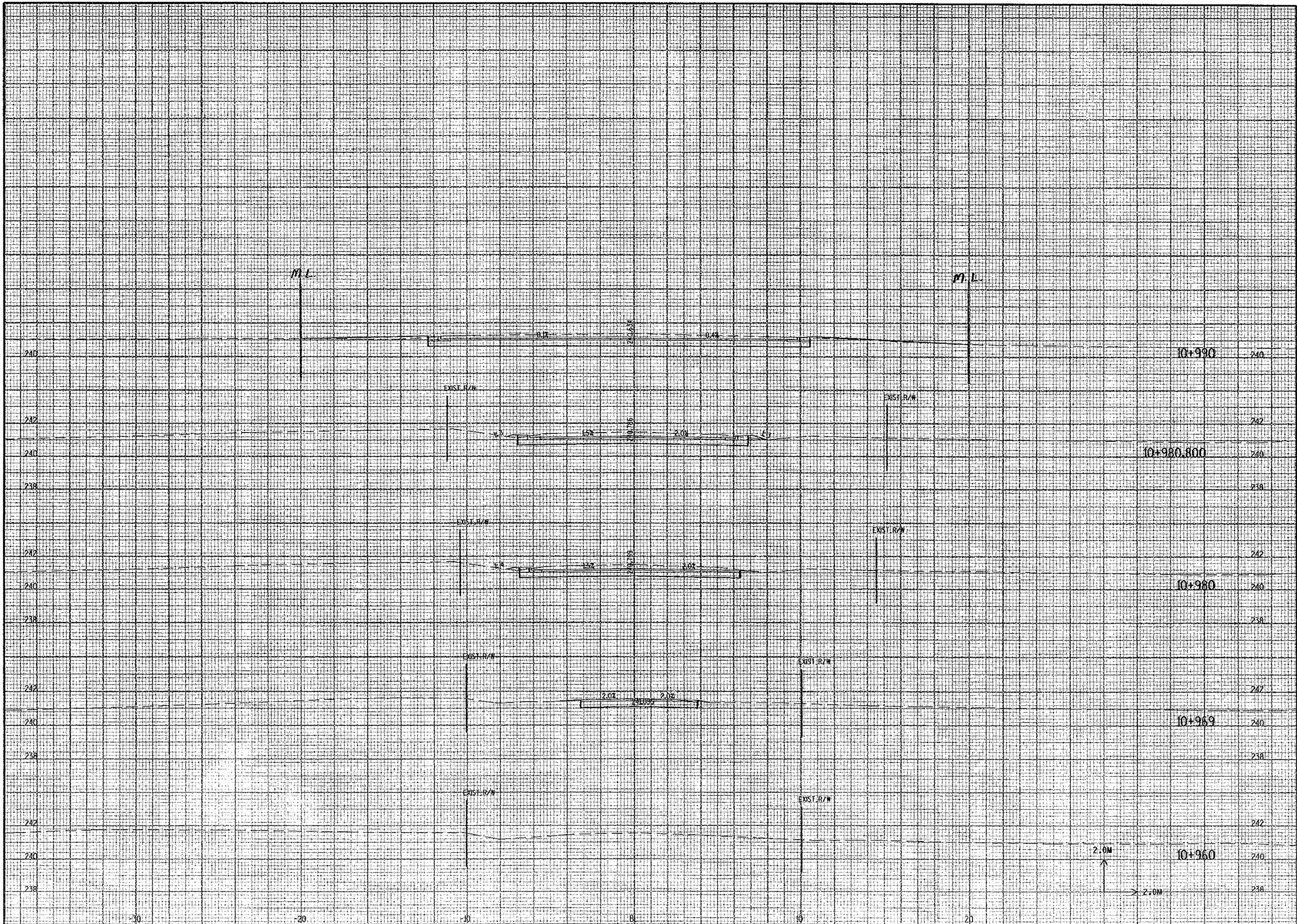
M

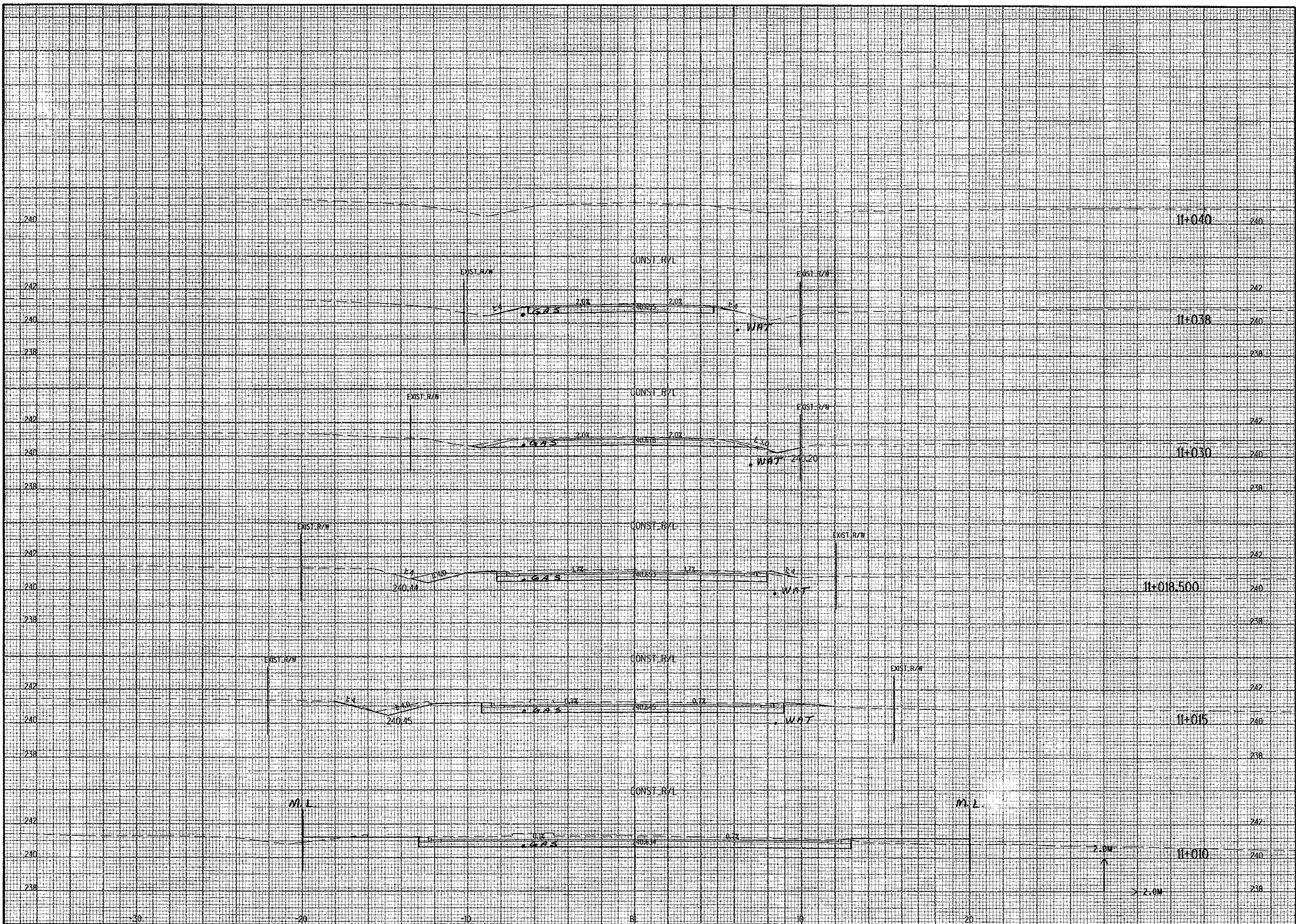












CROSS SECTIONS

HWY: N. JCT. IRISH ROAD

COUNTY: WINNEBAGO

STATE PROJECT NO: 6448-03-71

SHEET NO: 9.42

M