AS BUILT

40.1 - 34.1 - 22.13

Sheet Number	Total Sheets
1	70

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED

WEST BROWN DEER ROAD

(NORTH 68TH STREET — NORTH 43RD STREET)

S.T.H. 100

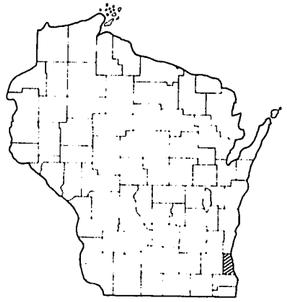
MILWAUKEE COUNTY

PROJECT IDENTIFICATION NUMBER	PROJECT DESIGNATION
2150 2 70	T 034-1(13)

Scales { Plan 1 in. = 20 FT.
Profile Hor. 1 in. = 20 ft. Vert. 1 in. = 2 ft.
Cross Sections Hor. 1 in. = 10 FT. Vert. 1 in. = 5 FT.

Index of Sheets

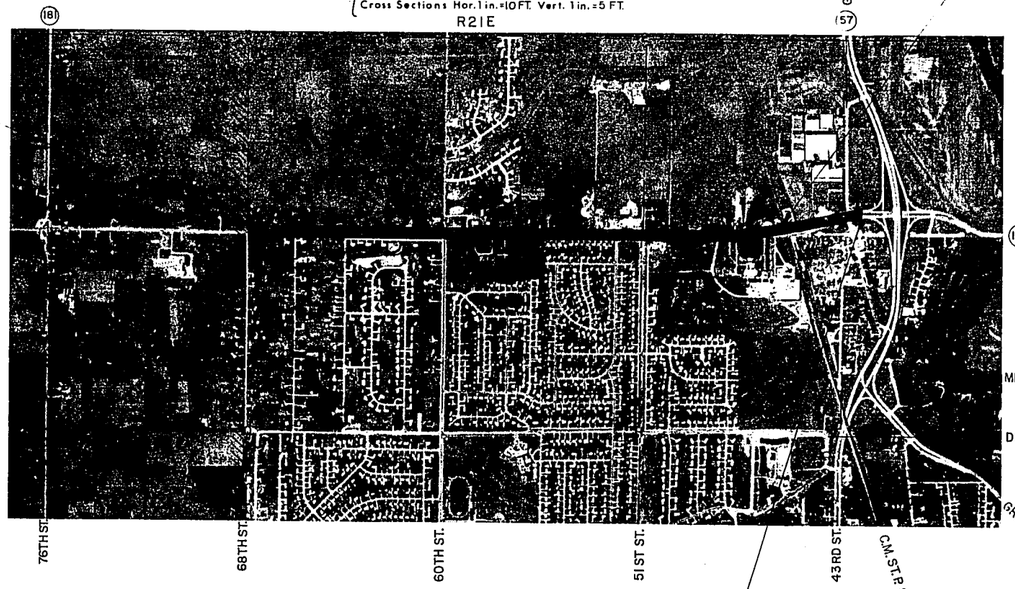
Sheet No.	1	Title
Sheet No.	2-2.19	Typical Cross Sections
Sheet No.	3	Estimate of Quantities
Sheet No.	3A-3C	Miscellaneous Quantities
Sheet No.	4-4.7	Right of Way Plat
Sheet No.	5-20	Plan and Profile
Sheet No.	21-21.7	Standard Details
Sheet No.	22-31	Drainage Structures
Sheet No.	32-70	Cross Sections



Design Designation

A. D. T., CURRENT, TWO WAY	= 10, 120
A. D. T., 1990, TWO WAY	= 25,800
D. H. V., 1990, TWO WAY	= 3,405
D.	= 55-45
T.	= 10%
V. ZONED 1967	= 50 MPH - 40 MPH
V. DESIGN 1990	= 45 MPH
K.	= 12%

BEGIN PROJECT 2150-2-70
STA 213 + 49.19
AT THE NORTH 1/4
CORNER OF SECTION 10,
T 8 N, R 21 E
N 435,680 (± 200')*
E 2,534,960 (± 200')*



EXCEPTION TO NET LENGTH OF CENTERLINE
AT C.M. ST. P. & P. R.R. TRACKS.
STA. 285+52.06 TO 285+64.76

END PROJECT 2150-2-70
STA 296 + 65
294 FT. EAST AND 280 FT. NORTH
OF THE NE CORNER
OF SECTION 11, T8N, R21E
N 436,140 (± 200') *
E 2,543,220 (± 200') *

Layout
Scale 0 1000 2000

Total Net Length of Centerline = 1.57 Mi.

* WISCONSIN PLANE COORDINATES, SOUTH ZONE,
SCALED FROM U.S.G.S. TOPOGRAPHIC MAP
"THIENSVILLE, WIS. 1958", 7'-30" QUADRANGLE.

Drainage system plan by State of Wisconsin

Plan included

Conventional Signs

State Line		Culverts in Place	
County Line		Culverts Required	
Township or Range Line		Proposed Storm Sewer	36"
Section Line		Power Pole	
New Right of Way Line		Telephone or Telegraph Pole	
Present Right of Way Line		Existing Catch Basin	
Wire Fence: Woven		Proposed Catch Basin	
Wire Fence: Barbed		Existing Manhole	
Lot Line		Proposed Manholes	
Corporate or City Limits		Trees	
Property Line	P.L.	Utility	W (SIZE) G E T
Traveled Way or P.E.		Existing Sewer	SAN. (SIZE) ST. (SIZE)
Railroads			
Base or Survey Line			
Expansion Joint			
Transverse Joint			
Longitudinal Joint			

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
6702:

Surveyor B. KINNEL Note Book 67045, 67073.
District Computer F.G.H. M.O. Checker R.L.O.
District Checker D.E.B. Correct

Correct:

Date 4/69 — District Engineer

Recommended for Approval:

Date 4/69 — Chief Design Engineer

Approved:

Date 4/29/69 — State Highway Engineer

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS
REGION 4 WISCONSIN DIVISION

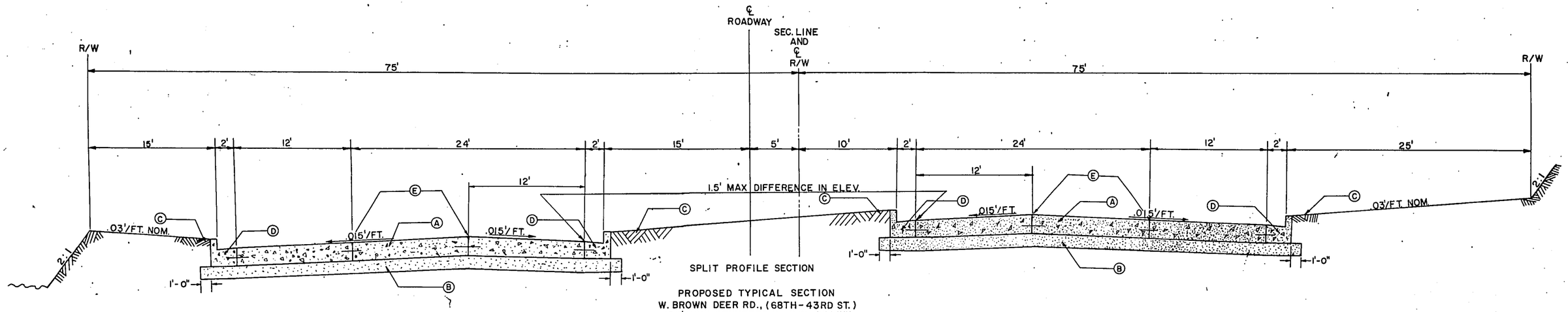
Approved:

Date _____ — Division Engineer

T034-1(13)

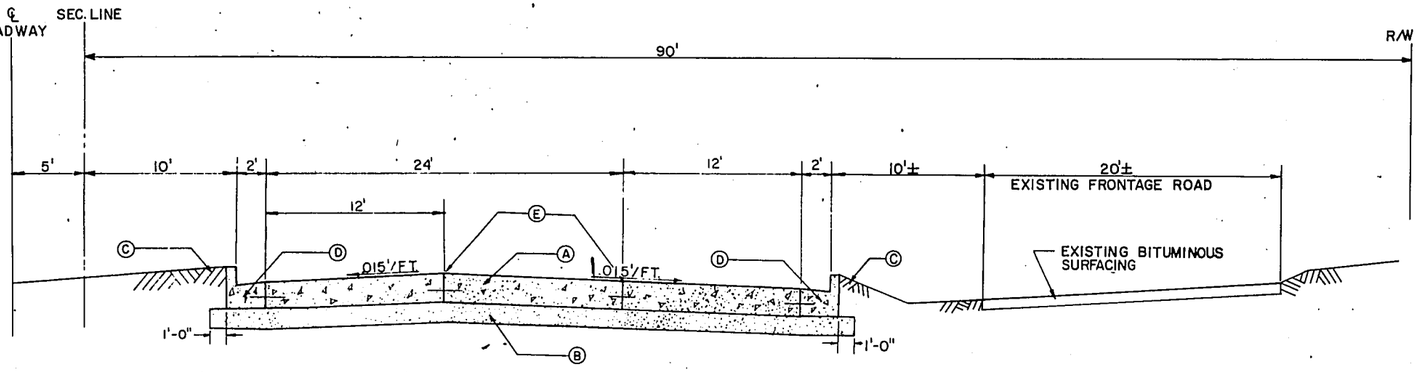
T034-1(13)
2150-2-70

2-70



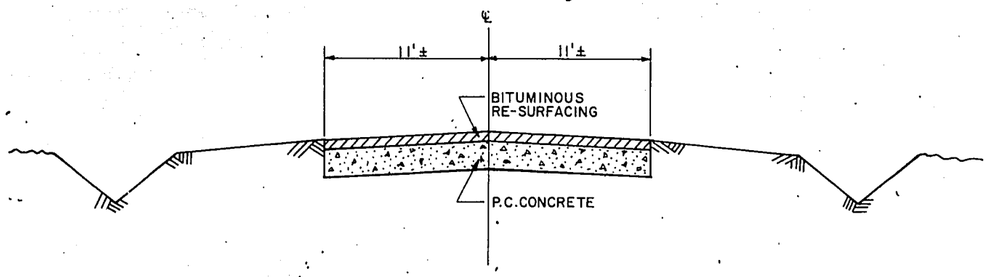
SPLIT PROFILE SECTION

PROPOSED TYPICAL SECTION
W. BROWN DEER RD., (68TH-43RD ST.)
150' R.O.W. CENTERED ON SECTION LINE
VILLAGE OF BROWN DEER



PROPOSED TYPICAL SECTION
AT FRONTAGE ROAD

LEGEND
- (A)- 9" Reinforced concrete pavement
- (B)- 6" min. crushed aggregate base course (see General Note #6)
- (C)- 3" Topsoil, fertilizing and seed, Mulch all seeding
- (D)- Type A-1 Concrete curb and gutter (7" Nor. Curb Face, Median / 6" Nor. Curb Face, Outer)
- (E)- Longitudinal joint



TYPICAL SECTION
EXISTING PAVEMENT
W. BROWN DEER ROAD
(68TH-43RD ST.)

GENERAL NOTES

1. All disturbed areas of the Highway Right of Way not surfaced, are to be covered with topsoil and seeded as directed by the Engineer.
2. SALVAGED topsoil shall be placed to an approximate depth of 3" at time of placing.
3. When the quantity of the items of subase, base or surface course is measured for payment by the ton or cubic yard, the depth or thickness of the course shown on the plan is approximate, and the actual thickness will depend on the distribution of material as directed by the Engineer.
4. Curb and gutter as shown are typical throughout the major portion of the section. Typical sections show the general roadway features throughout the project.
5. All holes or openings below subgrade resulting from removals or abandonments, shall be backfilled with granular backfill.
6. Use 9" base course between stations 213+49.19 ^ and 217+00, 229+00 and 235+00, 239+00 and 244+00, 262+00 and 272+00.

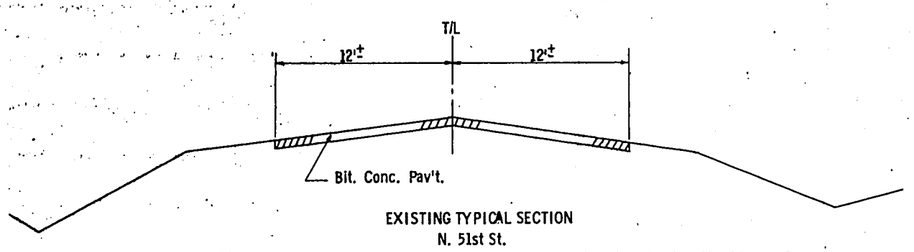
STANDARD DETAIL DRAWINGS

2-1.1.12	Concrete Pavement Reinforcement
2-2.1.11	Railroad Approach Details Concrete Pavement
4-4.4.8	Longitudinal Joints - Concrete Pavement
4-4.5.11	Transverse Joints - Concrete Pavement
7-2.5.1	Steel Plate Beam Guard class B
8-5.1.6	Metal Conduit & Fiber Conduit
7-4.1.5	Construction Barricade
6-2.6.7	APRON ENDWALLS FOR CULVERT PIPE

TYPICAL SECTIONS
FOR
W. BROWN DEER ROAD
(68TH-43RD ST.)

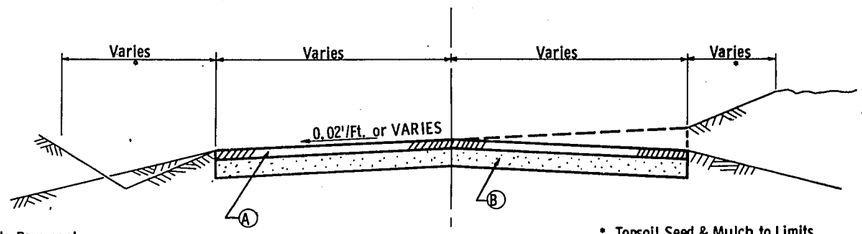
MILWAUKEE COUNTY

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150-2-70	2.1	70
PROJECT DESIGNATION		
T034-1(13)		



EXISTING TYPICAL SECTION
N. 51st St.

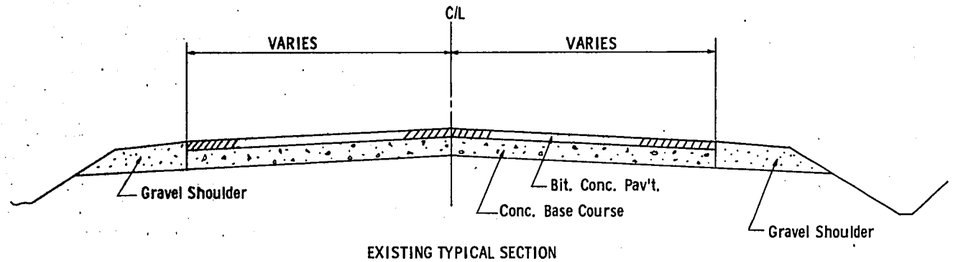
Note: Existing 51st St., N. of Brown Deer, is a 20'± wide Gravel Driveway.



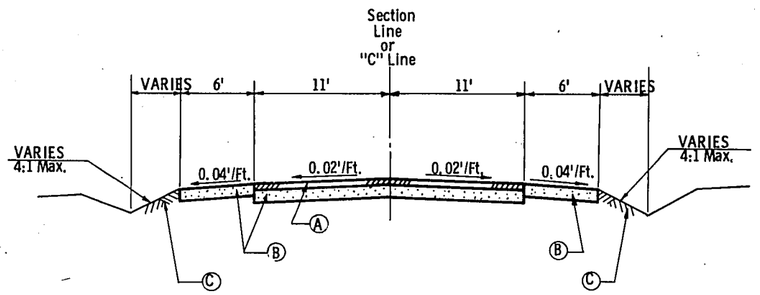
Ⓐ 3" Bituminous Concrete Pavement
Ⓑ 6" Crushed Aggregate Base Course
Ⓒ 3" Topsoil, Seed, Fertilizer and Mulch

* Topsoil Seed & Mulch to Limits Disturbed by Construction

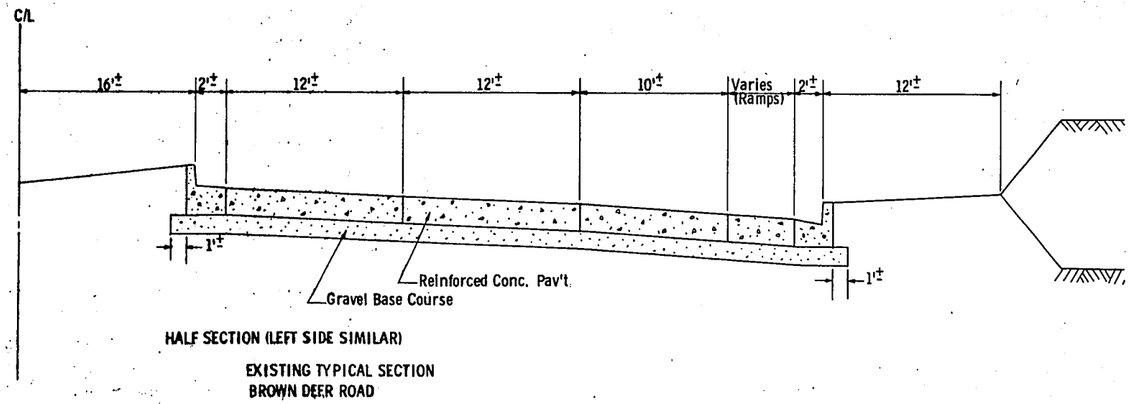
PROPOSED TYPICAL SECTION
FOR CONNECTION STREETS 68th, 66th, 64th, 60th, 56th, 52nd, 51st, Deerwood Drive



EXISTING TYPICAL SECTION
N. DEERWOOD DR.



PROPOSED TYPICAL SECTION
W. RIVER LANE EXTENDED



HALF SECTION (LEFT SIDE SIMILAR)

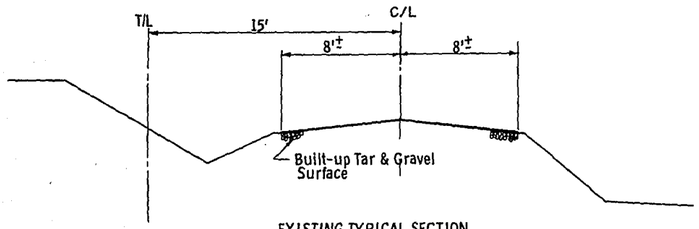
EXISTING TYPICAL SECTION
BROWN DEER ROAD

(At match with new construction, 296+65)

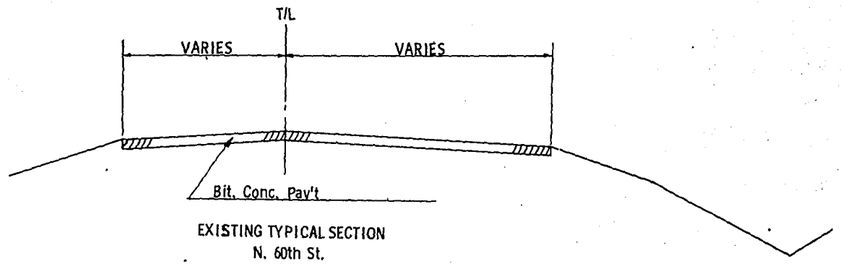
TYPICAL SECTIONS
FOR
WEST BROWN DEER ROAD
(68th - 43rd ST.)

MILWAUKEE COUNTY

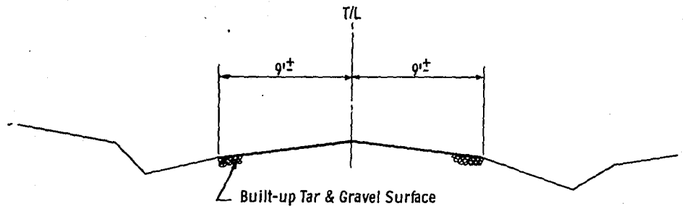
PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 70	2.2	70
PROJECT DESIGNATION: T 034-1(13)		



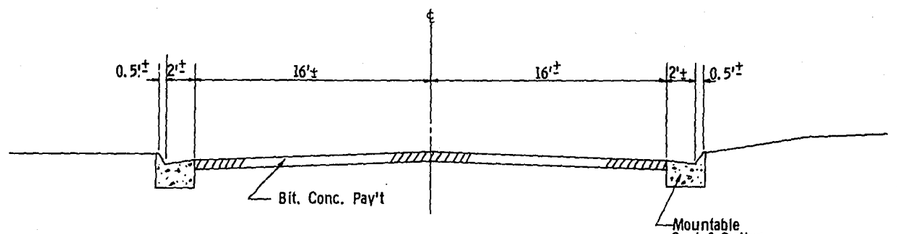
EXISTING TYPICAL SECTION
N. 68th St.



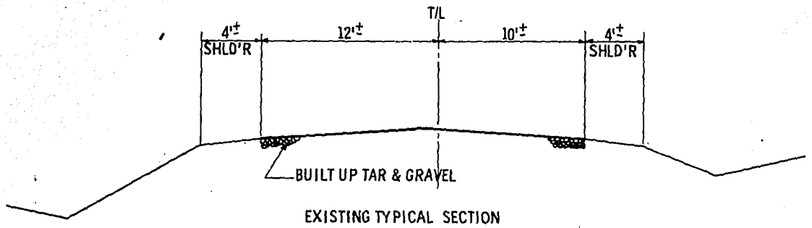
EXISTING TYPICAL SECTION
N. 60th St.



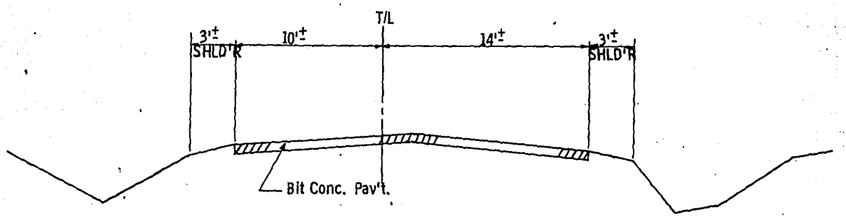
EXISTING TYPICAL SECTION
N. 66th St.



EXISTING TYPICAL SECTION
N. 56th St.



EXISTING TYPICAL SECTION
N. 64th St.

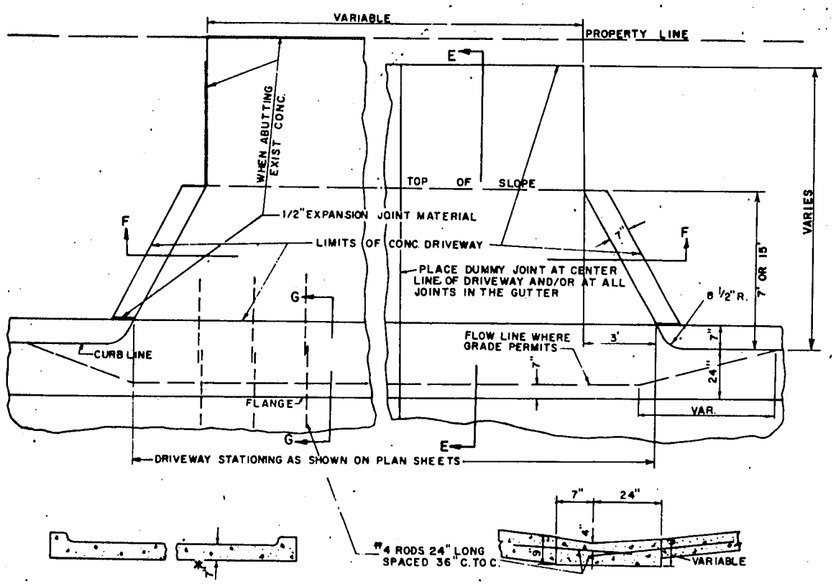


EXISTING TYPICAL SECTION
N. 52nd St.

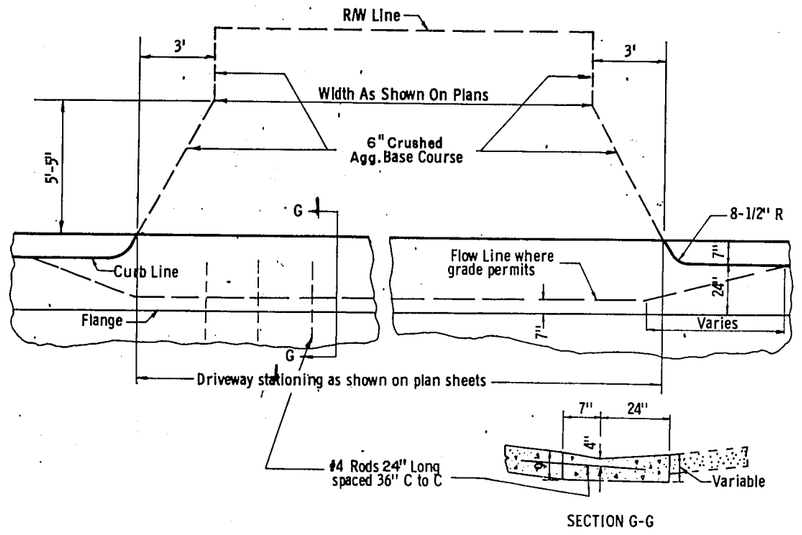
TYPICAL SECTIONS
FOR
WEST BROWN DEER ROAD
(68th - 43rd ST.)

MILWAUKEE COUNTY

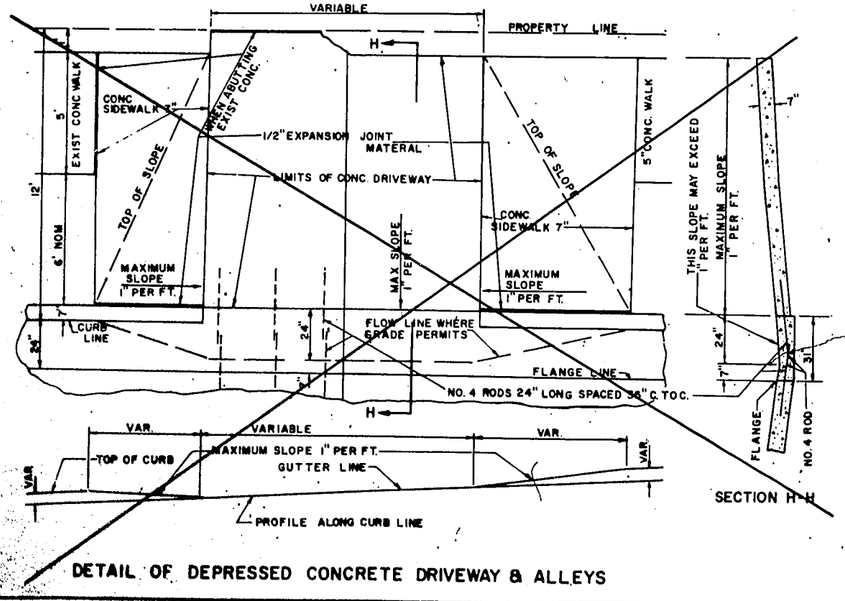
PROJECT I D	SHEET NUMBER	TOTAL SHEETS
2150 2 70	2.3	70
PROJECT DESIGNATION: T034-1 (13)		



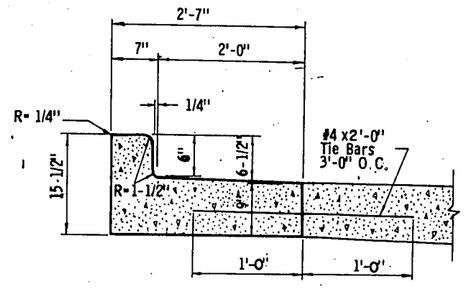
DETAIL OF CONCRETE DRIVEWAYS



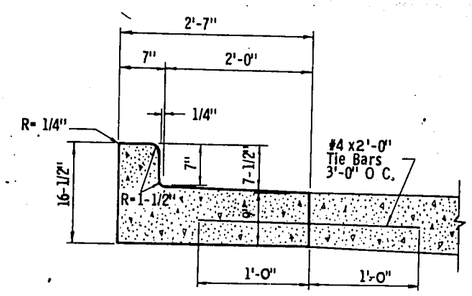
DETAIL OF CRUSHED AGGREGATE DRIVEWAYS



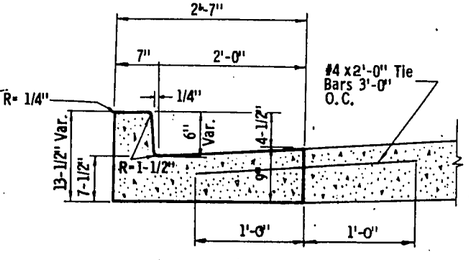
DETAIL OF DEPRESSED CONCRETE DRIVEWAY & ALLEYS



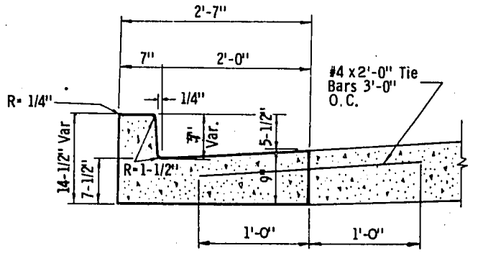
TYPE A-2 (6" Face, Outer C.&G.)



TYPE A-2 (7" Face, Median C.&G.)



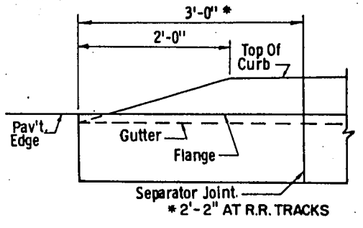
TYPE A-1 (6" Face, Outer C.&G.)



TYPE A-1 (7" Face, Median C.&G.

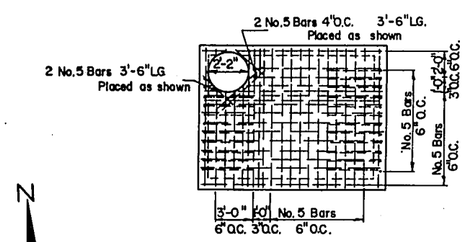
All curb & gutter is to be type A-1 (low side), unless otherwise noted on plans.

DETAIL OF CONCRETE CURB & GUTTER 31 INCH

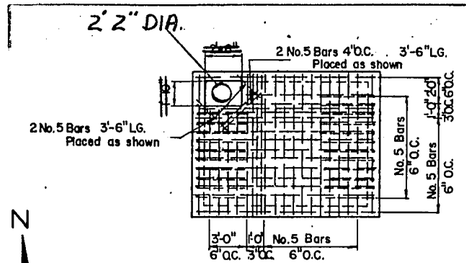


END SECTION CURB & GUTTER
(Where Shown On Plans)

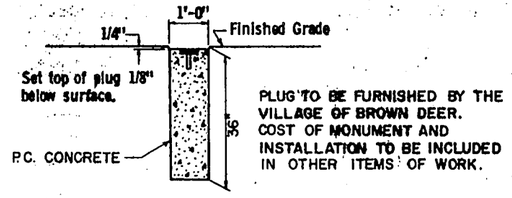
PROJECT I D	SHEET NUMBER	TOTAL SHEETS
2150 2 70	2.4	70
PROJECT DESIGNATION T034-1(13)		



DETAIL OF TOP SLAB



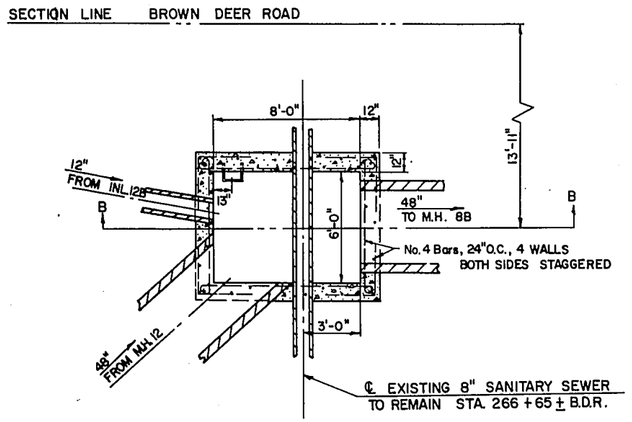
DETAIL OF TOP SLAB



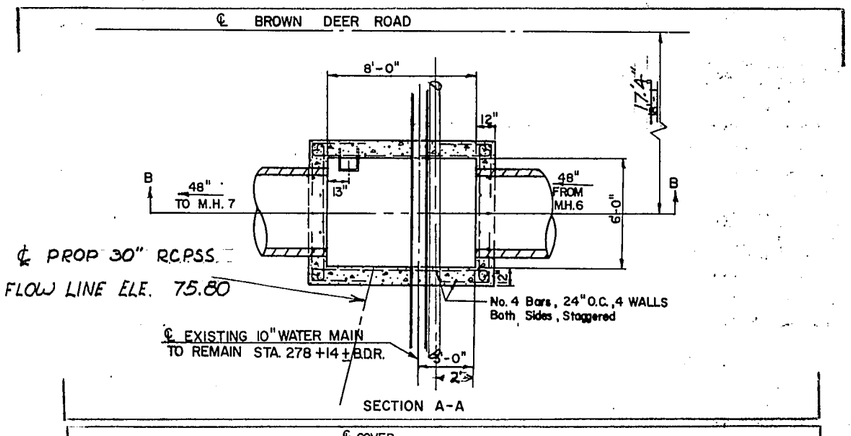
PLUG TO BE FURNISHED BY THE VILLAGE OF BROWN DEER. COST OF MONUMENT AND INSTALLATION TO BE INCLUDED IN OTHER ITEMS OF WORK.

LANDMARK MONUMENT DETAIL

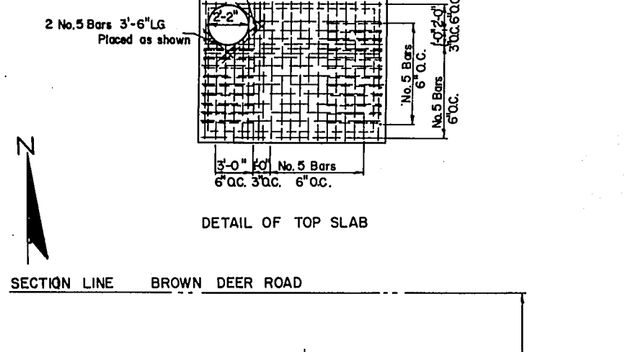
STA. 213+49.19 (68TH ST.)
239+96.06 (60TH ST.)
266+69.25 (51ST ST.)



SECTION A-A

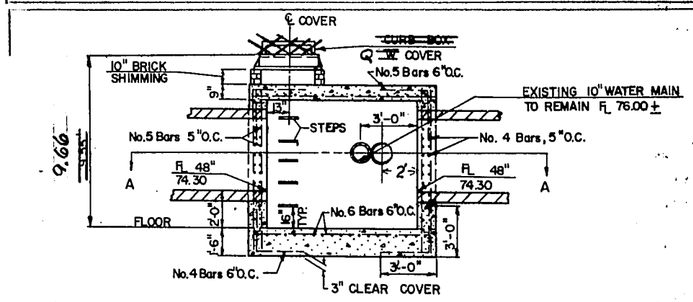


SECTION A-A



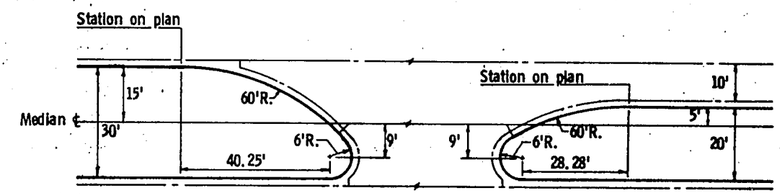
SECTION B-B

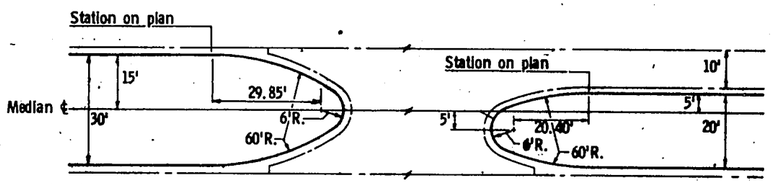
M.H. II STA. 266 + 65 ± B.D.R. 12' RT. ±



SECTION B-B

M.H. 6G STA. 278 + ~~14~~ 9.09 ± B.D.R. 15' RT. ±





30' FOOT WIDTH (FACE-FACE) MEDIAN CURB DETAILS

GENERAL NOTES:

1.) The minimum cover from face of bar steel reinforcement to face of concrete shall be 1 1/2" unless otherwise shown on plan.

2.) All concrete shall be grade AA.

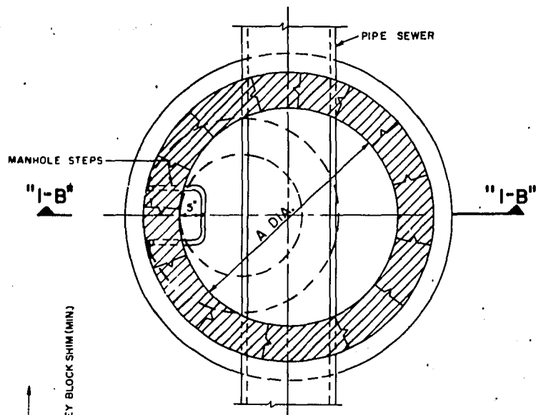
3.) When openings in the sidewalls interfere with the reinforcement, the steel shall be bent around if possible, if not, it shall be cut off.

SPECIAL MANHOLES TYPE II

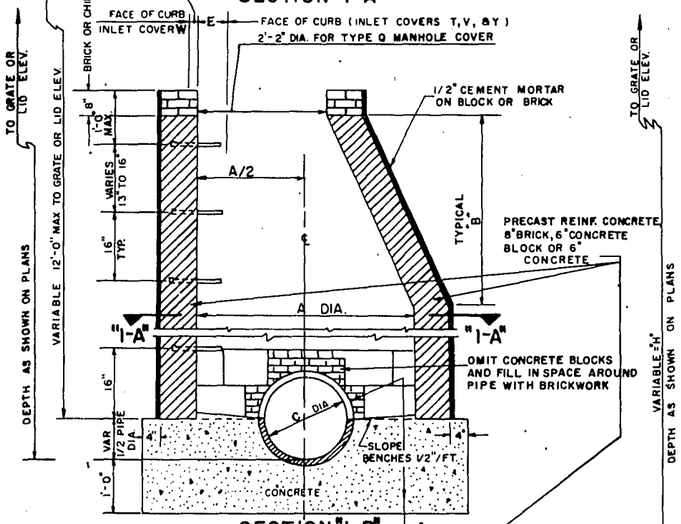
CONSTRUCTION & DRAINAGE DETAILS
for
WEST BROWN DEER ROAD
68th - 43rd. ST.

S.T.H. 100 MILWAUKEE COUNTY

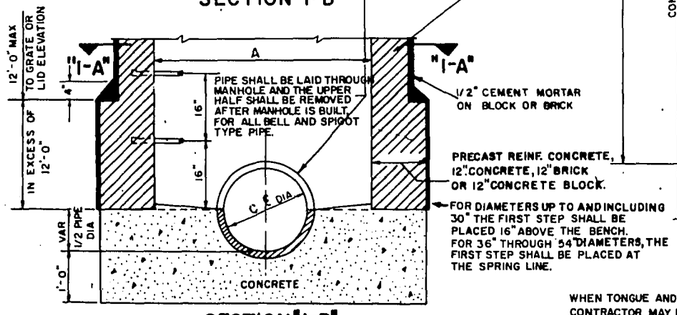
PROJECT	SHEET NUMBER	TOTAL SHEETS
T034-1 (13)	2.5	70



SECTION "I-A"



SECTION "I-B"



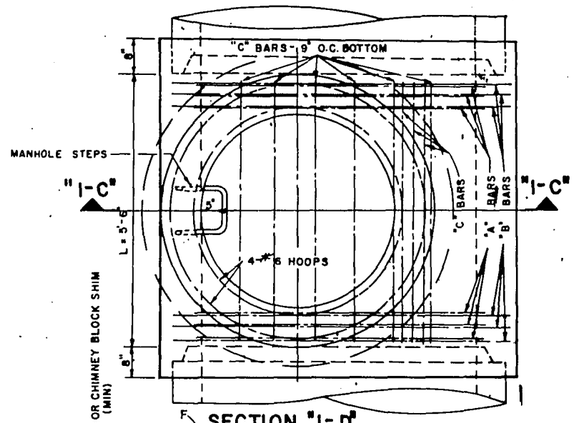
SECTION "I-B"

MANHOLE-TYPES 11,12,13

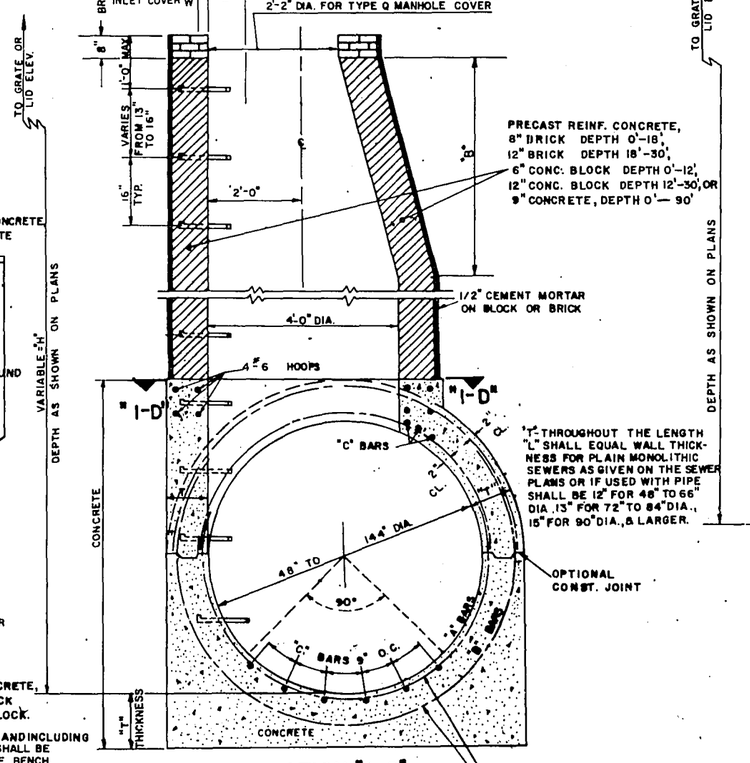
INLET COVER OFFSETS FACE OF CURB TO INSIDE EDGE OF M.H.			
TYPE	DESCRIPTION	E	F
Y	CURB BOX (CITY OF MILW)	3 1/2"	
T	CURB BOX (WEST ALLIS)	5"	
V	MOUNTABLE CURB BOX	9"	
W	CURB BOX (X' WAY)		1"

TYPE	A	B	C
11	3'-6"	2'-8"	12" - 36" *
12	4'-0"	3'-8"	12" - 42"**
13	5'-0"	5'-8"	42"- 48"
14	6'-0"	7'-8"	54"-60"

* 12"-21" FOR PRECAST M.H.
** 12"-24" FOR PRECAST M.H.



SECTION "I-D"



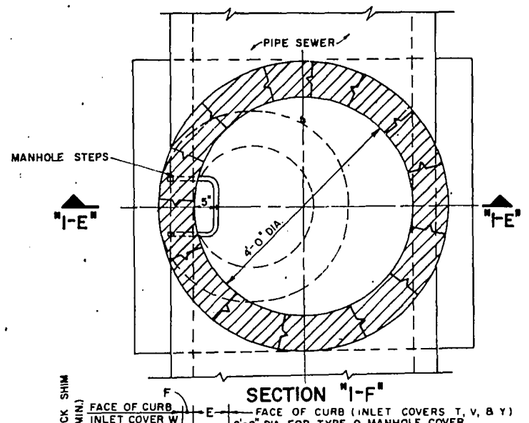
SECTION "I-C"

MANHOLE-TYPE 15

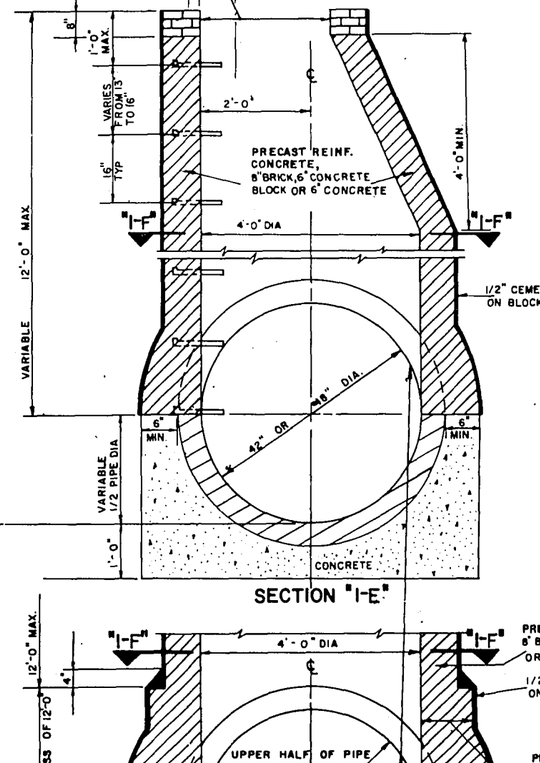
WHEN TONGUE AND GROOVE PIPE IS USED, (NOT IN CONTRACT) CONTRACTOR MAY FORM AND POUR MONOLITHIC CONCRETE INVERT, PROVIDED THAT DISTANCE FROM CENTER OF M.H. TO PIPE END DOES NOT EXCEED VALUES GIVEN IN TABLE BELOW.

6'-0" DIA. M.H.	5'-6" DIA. M.H.	4'-0" DIA. M.H.	5'-0" DIA. M.H.	DIA. SEWER
-	18"	21"	-	21"
-	17"	20"	-	24"
-	16"	19"	-	27"
-	15"	18"	-	30"
-	12"	15"	-	36"
-	-	12"	21"	42"
-	-	-	18"	48"
24"	-	-	-	54"
19"	-	-	-	60"

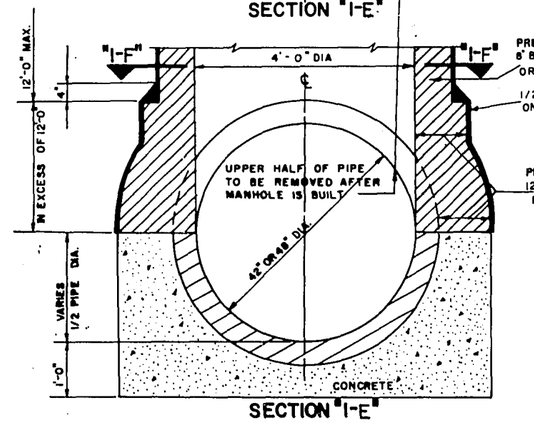
ALL "A", "B", AND "C" REINFORCING BARS ARE OF THE SAME DIAMETER, WHICH VARIES WITH "H".
FOR "H" 5'-0 TO 20'-0 USE #5 BAR.
FOR "H" 20'-0 TO 30'-0 USE #6 BAR.
FOR "H" 30'-0 TO 40'-0 USE #7 BAR.
THE "A" BARS MAY BE PLACED IN TWO SEGMENTS LAPPING 12" AT SPRING LINES, OR IN ONE HOOP WITH ONE 12" LAP AT SPRING LINE.
THE "B" BARS MAY LAP 24 DIAMETERS AT SPRING LINES, OR BE PLACED IN ONE HOOP WITH ONE 12" LAP AT TOP OR BOTTOM.
ALL "C" BARS SHALL HAVE STANDARD HOOKED ENDS FACE OF STEEL TO CONCRETE FACE SHALL BE A MINIMUM OF 2".



SECTION "I-F"

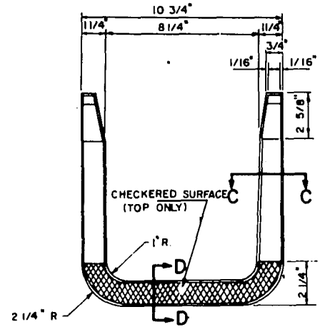


SECTION "I-E"

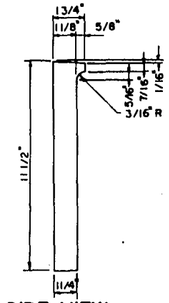


SECTION "I-E"

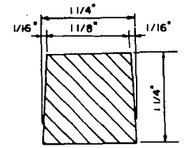
MANHOLE-TYPE 16
(NOT IN CONTRACT)



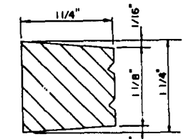
PLAN



SIDE VIEW



SECTION C-C



SECTION D-D

MANHOLE STEP
WEIGHT 10.7 LBS ±

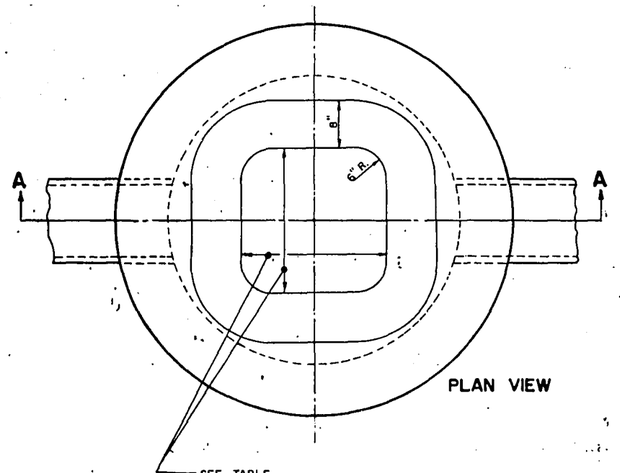
NOTES

1. LIMIT OF PAY ITEM FOR STORM SEWERS & SUBDRAINS OUTSIDE FACE OF MANHOLE.
2. NO MANHOLE STEPS TO BE USED IN A MANHOLE 5'-0" OR LESS IN DEPTH
3. CONCRETE BLOCKS MAY BE NON-INTERLOCKING IN SIZES APPROPRIATE FOR THE WORK
4. PRECAST REINFORCED CONCRETE SECTIONS SHALL CONFORM TO AASHO DESIGNATION M-199.
5. PRECAST BASES WILL NOT BE PERMITTED.
6. PRECAST RISERS MAY BE PLACED SO THE TONGUE ENDS POINT UP OR DOWN.
7. ECCENTRIC TOP SECTIONS SHALL BE USED ON ALL MANHOLES.

DRAINAGE DETAILS

DI-A

PROJECT	SHEET NUMBER	TOTAL SHEETS
T034-1(13)	2.6	70



PLAN VIEW

SECTION A-A

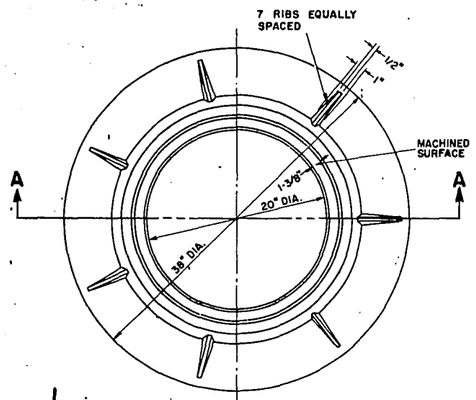
NOTE: CONCRETE BLOCKS MAY BE NON-INTERLOCKING IN SIZES APPROPRIATE FOR THE WORK.

INLETS, TYPES 31 & 32

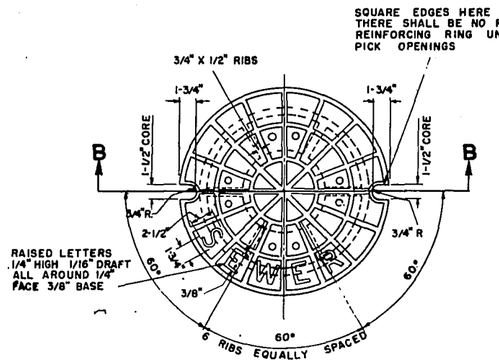
FOR TYPE 31, A = 3'-6"
FOR TYPE 32, A = 4'-0"

INLET COVER OPENINGS AND OFFSETS			
TYPE	DESCRIPTION	OPENING	℄ OPENING TO FACE OF CURB *
T	CURB BOX	2'-6" x	10"
V	MOUNTABLE CURB BOX	2'-6" x 2'-6"	6"
W	CURB BOX	1'-10" x 2'-6"	12"
X	FIELD INLET	1'-10" x 2'-6"	—
Y	CURB BOX	2'-6" x 2'-1"	11"
Z	FIELD INLET	2'-1" x 2'-1"	—

* NOTE: ℄ OPENING EQUALS ℄ STRUCTURE

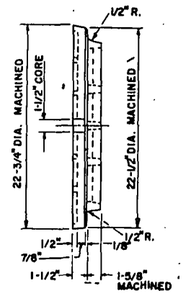


PLAN

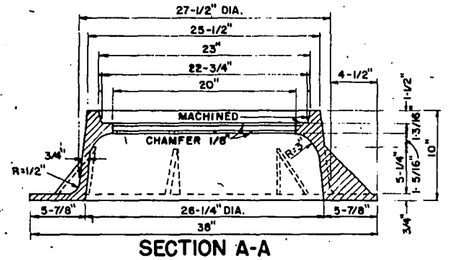


PLAN

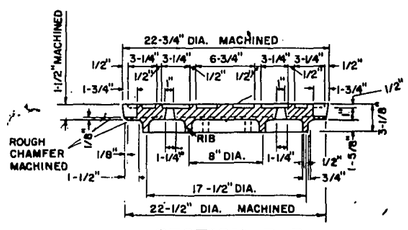
NOTE: ONE VENT HOLE FOR SANITARY AND COMBINED SEWER



EDGE VIEW



SECTION A-A
FRAME



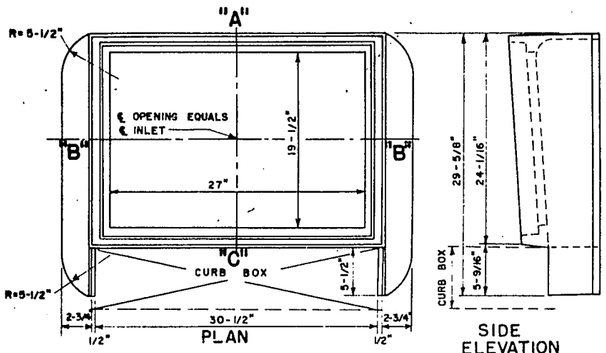
SECTION B-B
LID

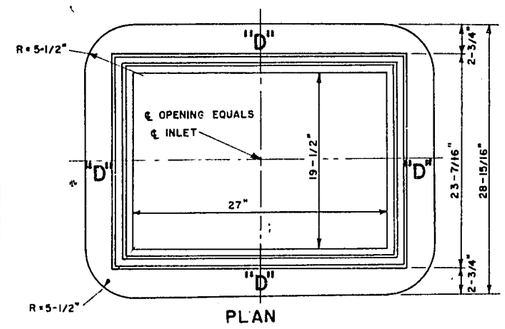
MANHOLE COVER, TYPE Q

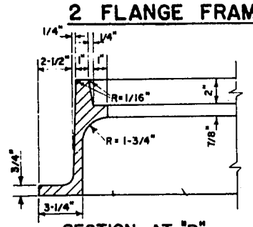
APPROX. WEIGHT 528 LBS.

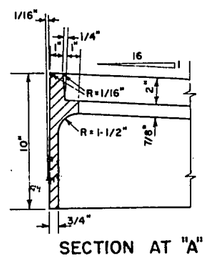
DRAINAGE DETAILS

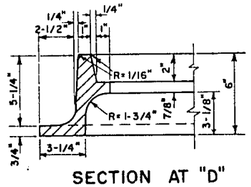
PROJECT	SHEET NUMBER	TOTAL SHEETS
TO34-1(13)	2.7	70

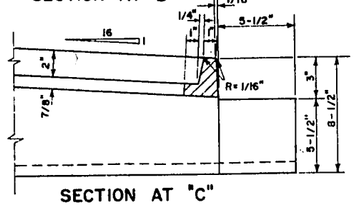




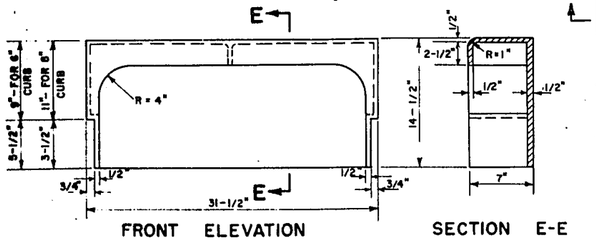


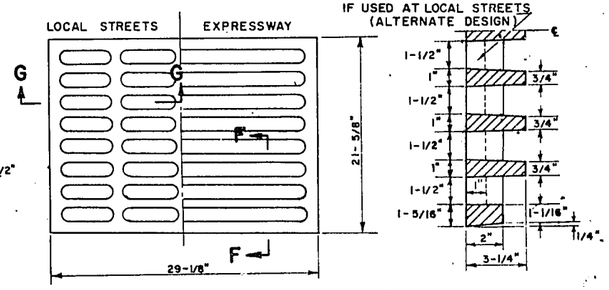


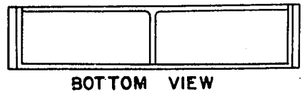




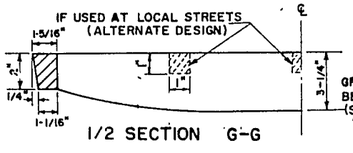
TYPICAL FRAME DETAILS







CURB BOX

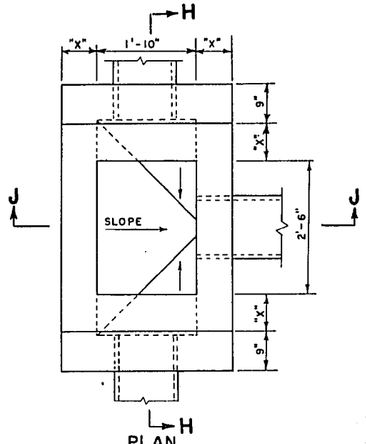


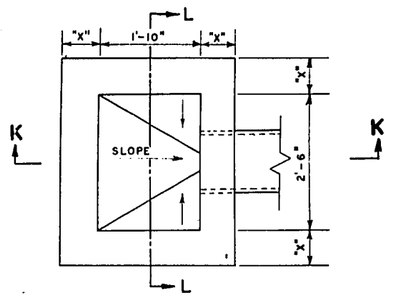
GRATE

GRATE WITH CROSS BARS TO BE USED ON LOCAL STREETS (SEE ALTERNATE DESIGN)

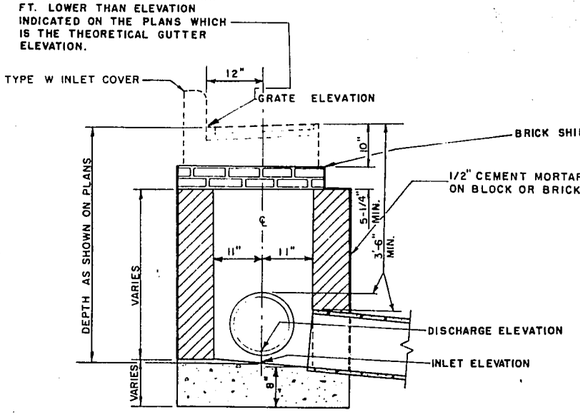
INLET COVERS, TYPES W & X

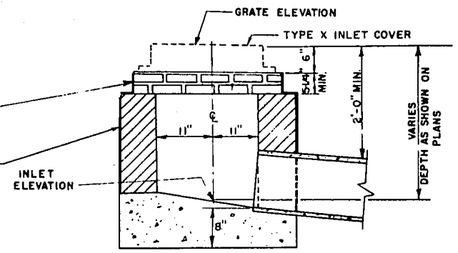
TYPE W - 2 FLANGE FRAME, GRATE, AND CURB BOX - APPROX. WEIGHT 612 LBS.
TYPE X - 4 FLANGE FRAME AND GRATE - APPROX. WEIGHT 450 LBS.





GRATE ELEVATION TO BE 0.05 FT. LOWER THAN ELEVATION INDICATED ON THE PLANS WHICH IS THE THEORETICAL GUTTER ELEVATION.

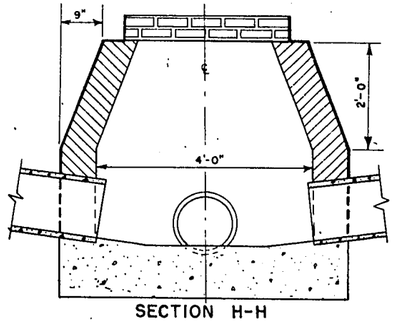




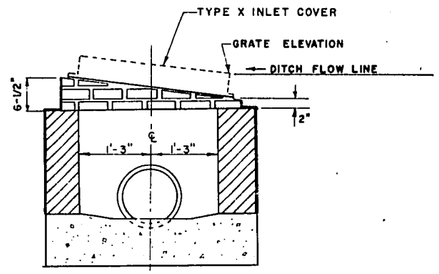
TYPE 35

NOTE:
STRUCTURE WALL THICKNESS "x" TO BE 8" BRICK OR 6" CONCRETE BLOCK OR 6" GRADE AA CONCRETE.
STRUCTURE FOOTINGS TO BE GRADE AA CONCRETE

CONCRETE BLOCKS MAY BE NON-INTERLOCKING IN SIZES APPROPRIATE FOR THE WORK.



TYPE 34

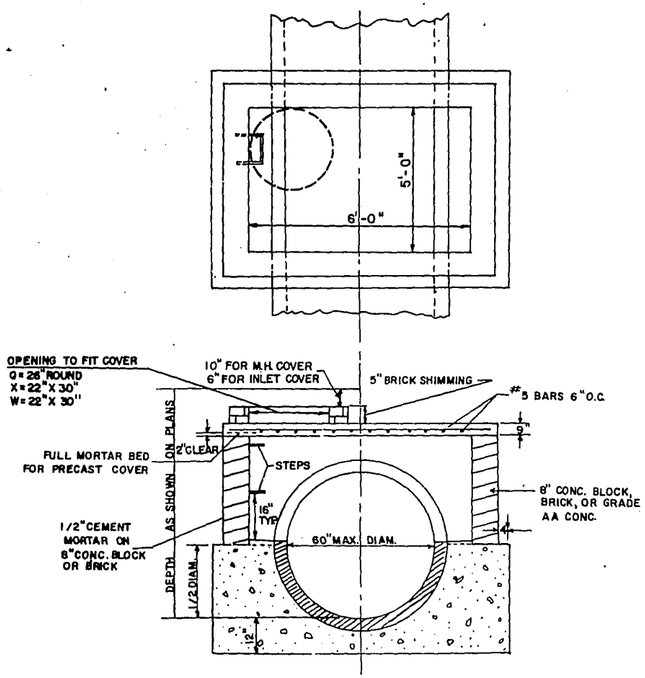


INLETS

DRAINAGE DETAILS

K-D

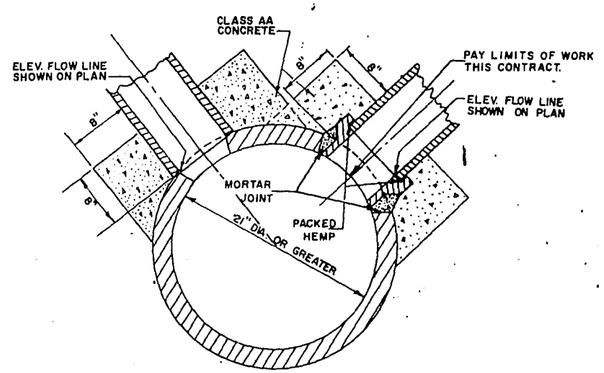
PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 70	2.8	70
PROJECT DESIGNATION: T 034-1(13)		



SPECIAL MANHOLE TYPE I

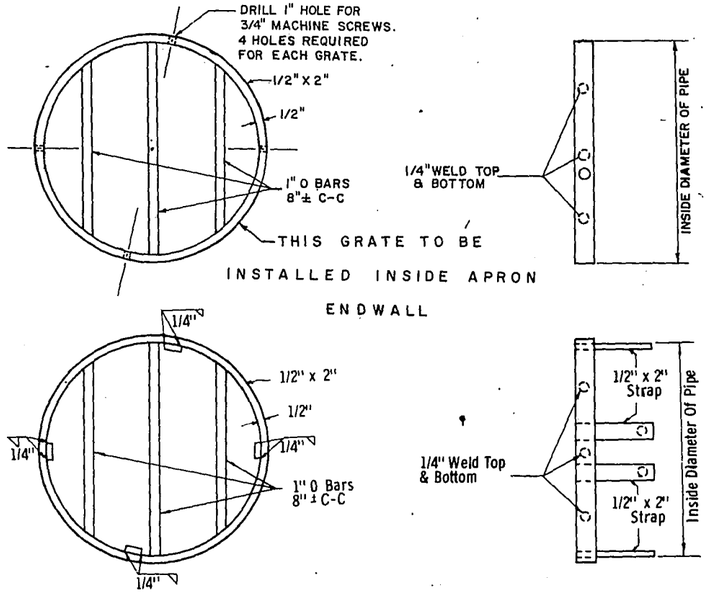
GENERAL NOTES:

1. THE MINIMUM COVER FROM FACE OF BAR STEEL REINF TO FACE OF CONCRETE SHALL BE 2" UNLESS OTHERWISE SHOWN ON PLAN.
2. ALL CONCRETE SHALL BE GRADE A-A.



DETAIL OF CONNECTION TO STORM SEWER

NOTE: CONTRACT UNIT PRICE FOR PIPE SHALL INCLUDE COST OF CONNECTION TO EXISTING STORM SEWER OR M.H.



PIPE END GRATE DETAILS

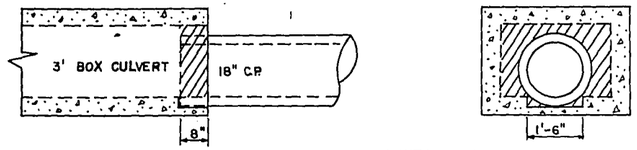
Fasten grate to metal pipe with 3/4" bolts and nuts. Fasten grate to concrete pipe by means of 3/4" rawl calk-ins, cat. no. 92501 (or equivalent) and machine screws.

24" to 36" dia. pipe end grates require 4 straps, over 36" dia. require 6 straps. Straps shall be sufficient length so as to anchor bolts in body of pipe

Grate bars to be horizontal when installed at pipe outlet and vertical when installed at pipe inlet.

Note: Pipe end grate to be included in the cost of the pipe.

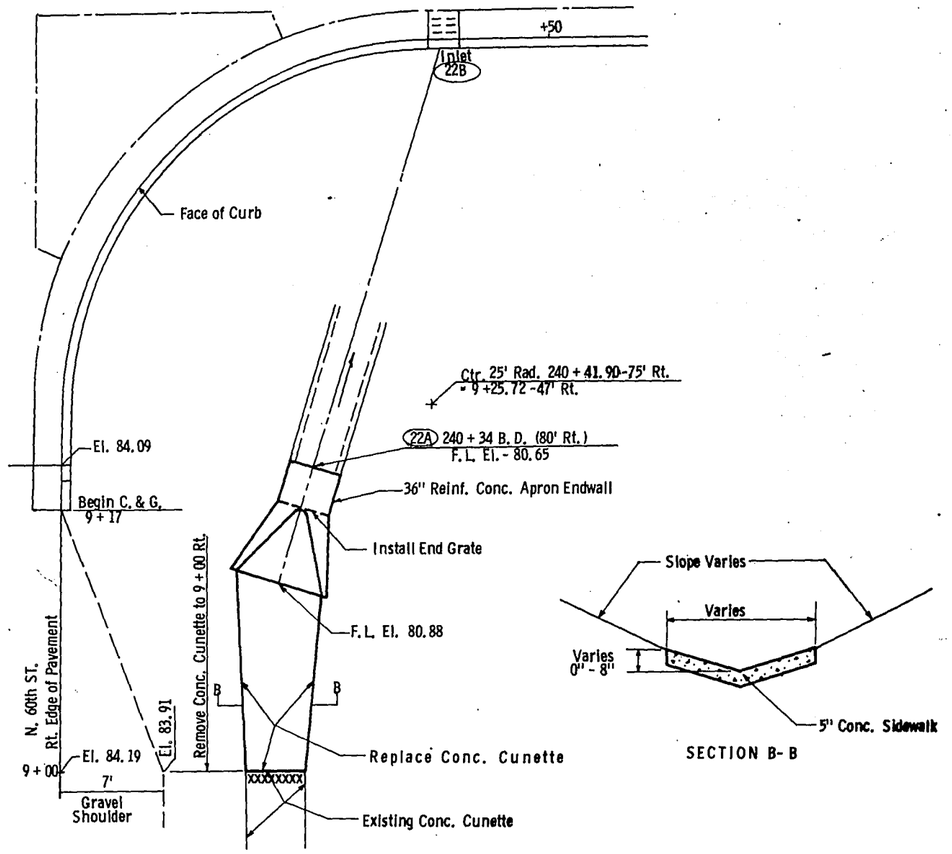
FILL VOIDED AREA WITH 8" BRICK OR 6" BLOCK & BACK PLASTER OUTSIDE SURFACE.



REMOVE EXIST. CONC TO LIMITS SHOWN, AND LAY PIPE END IN MORTAR TO EXTEND FLOWLINE STRAIGHT THROUGH CONNECTION.

CONNECTION DETAIL (3F)
285+43 B.D.R., 85'RT.

NOTE: PRICE OF CONNECTION TO BE INCLUDED IN UNIT PRICE PER LIN. FT. OF STORM SEWER



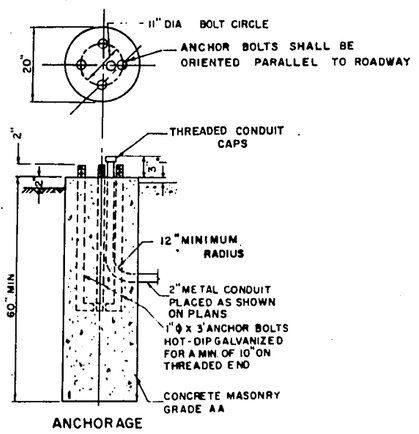
SECTION B-B

APRON END WALL AND CUNETTE REPLACEMENT DETAIL (22A)
240 + 34 B. D. (80' Rt.)

DRAINAGE DETAILS
for
WEST BROWN DEER ROAD
68th - 43rd ST.

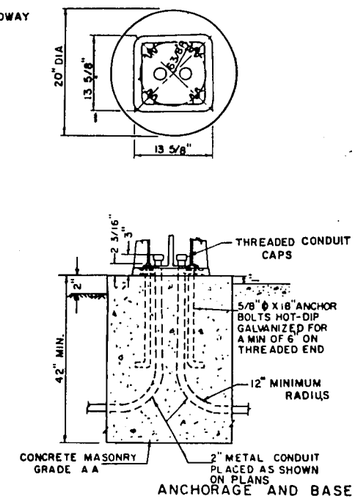
MILWAUKEE COUNTY

PROJECT	SHEET NUMBER	TOTAL SHEETS
I.D. 2150-2-70		
T034-1(13)	29	70



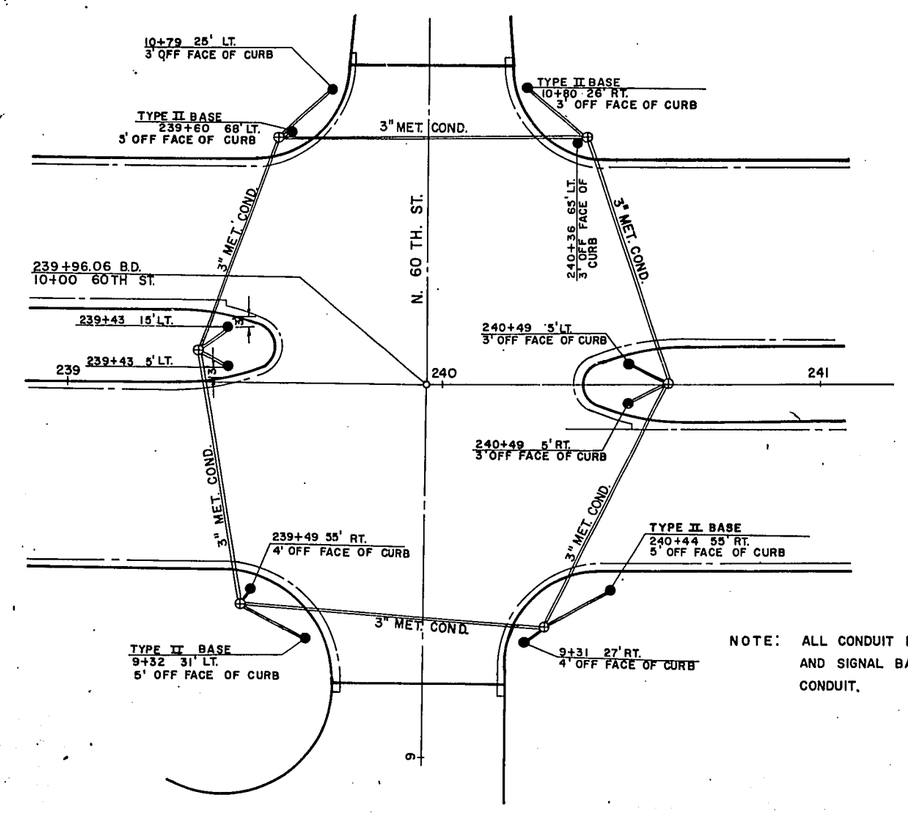
ANCHORAGE

TRAFFIC SIGNAL BASE
TYPE II

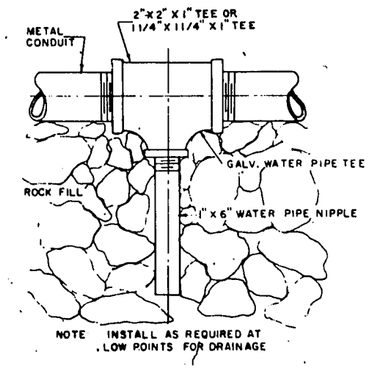


ANCHORAGE AND BASE

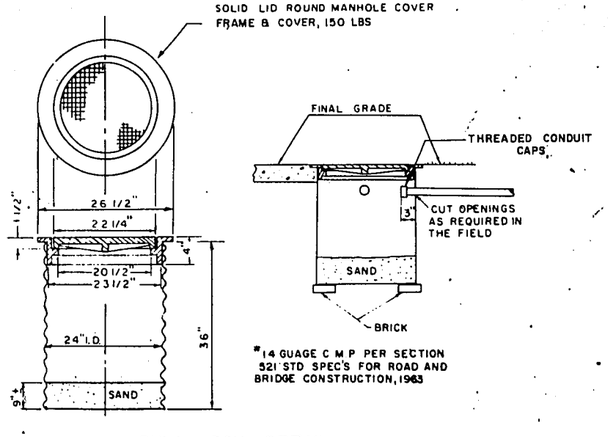
TRAFFIC SIGNAL BASE
TYPE I



NOTE: ALL CONDUIT INSTALLED BETWEEN PULLBOXES AND SIGNAL BASES SHALL BE 2" METAL CONDUIT.



DRAIN SUMP



PULL BOX DETAIL

LEGEND

═══ METAL CONDUIT AND FIBER CONDUIT
⊕ PULLBOX
● TRAFFIC SIGNAL BASE

GENERAL NOTES

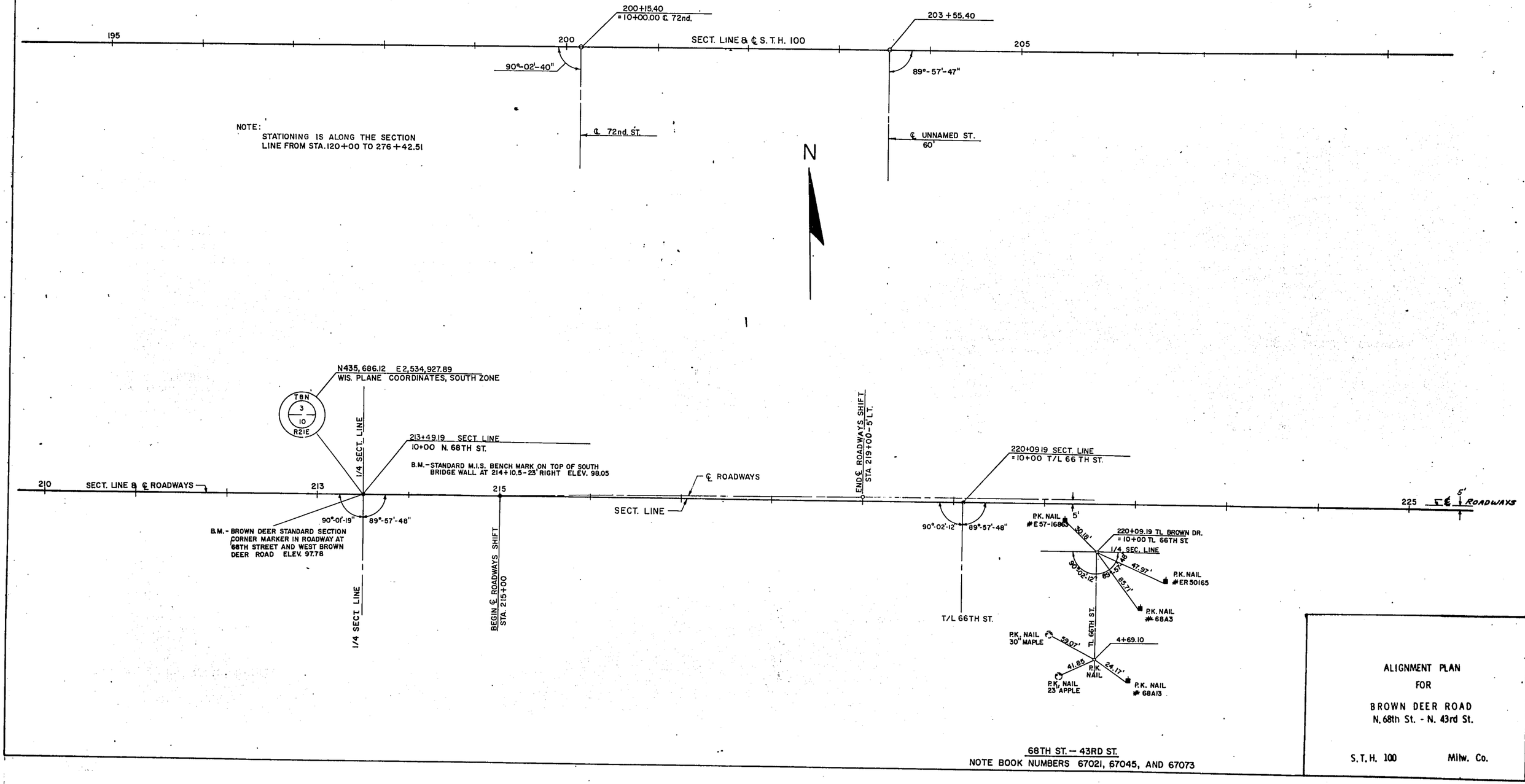
1. ALL CONDUIT SHALL BE PITCHED TO DRAIN TO PULLBOX.
2. ALL CONDUIT ENDS SHALL BE REAMED, THREADED AND CAPPED
3. ALL TRAFFIC SIGNAL BASES SHALL BE TYPE I UNLESS OTHERWISE INDICATED
4. CONDUIT INSTALLED AS A CONTINUOUS SYSTEM BETWEEN PULLBOXES SHALL HAVE A MINIMUM DEPTH OF 12" AND SHALL AT ALL TIMES BE BELOW THE PAVEMENT.
5. ANCHOR BOLTS IN SIGNAL BASE SHALL BE ORIENTED NORMAL TO THE ℄ OF THE ROADWAY.

TRAFFIC SIGNAL DETAILS
FOR
BROWN DEER RD. (S.T.H. 100)
(68 TH.– 43 RD.)

MILW. CO.

PROJECT	SHEET NUMBER	TOTAL SHEETS
T034-1(13)	2.10	70

I.D. 2150 2 70



68TH ST. — 43RD ST.
NOTE BOOK NUMBERS 67021, 67045, AND 67073

ALIGNMENT PLAN
FOR
BROWN DEER ROAD
N. 68th St. - N. 43rd St.

S.T.H. 100 Milw. Co.

PROJECT	SHEET NUMBER	TOTAL SHEETS
T034-1(13)	2.11	70

I.D. 2150 2 70

2.11/70

TIES TO WEST CORNER OF SECTION 2
N. 60 TH ST.

N435,711.42 E2,537,574.40
WIS. PLANE COORDINATES, SOUTH ZONE

R.R. SPIKE N. SIDE 8" ELM — 27.80 — 39.39 — 37.00 — P.K. NAIL IN ROAD

T8N
3 | 2
10 | 11
R21E

R.R. SPIKE E. SIDE PP# 3888

R.R. SPIKE N.E. SIDE OF 24" MAPLE (REMOVED FOR CONST. OF FAIRY CHASM RD.)
239+96.06 SECT. LINE

5' ℄ ROADWAYS

226

226+72.64 SECT. LINE
= 10+00 64TH ST.

B.M. - SOUTHEAST BOLT ON HYDRANT AT 227+08 82' RIGHT ELEV. = 91.97

230

SECTION LINE

235

89°-49'-10" — 89°-15'-10" — 5'

90°-02'-03" — 20°-53'-29"

5' ℄ ROADWAYS

P.K. NAIL E 57-16862 — 57.88 — 29.52 — P.K. NAIL 28" MAPLE

90°-01'-50" — 38.10

226 T/L +72.64 BROWN DEER RD. = 10+00 ℄ 64th ST. — 89°-58'-10" — P.K. NAIL E 54-14051 68 A5

T/L 64TH ST.

HUB

R-11676 6804

3+14 ± 0.10 — P.K. NAIL IN ROAD

HUB

B.M.- BROWN DEER STANDARD SECTION CORNER MARKER IN ROADWAY AT 60th STREET AND WEST BROWN DEER ROAD ELEV. = 85.00

SECT. LINE

N

℄ BROWN DEER ROAD

251+59.34 SECT. LINE
= 10+00.00 ℄ 56th STREET

253+67.86 SECT. LINE

5' ℄ ROADWAYS

245

SECT. LINE

250

90°-49'-12" — 89°-10'-48"

255

90°-00'-00" — 90°-00'-00"

℄ N. 56TH ST.

ALIGNMENT PLAN
FOR
BROWN DEER ROAD
N. 68th St. - N. 43rd St.

S.T.H. 100 — Milw. Co.

PROJECT	SHEET NUMBER	TOTAL SHEETS
T034-11(13)	2.12	70

I.D. 2150 2 70

NOTE: TIES TO CENTER OF SECTION 2 FROM VILLAGE ENGINEER.

N435,780.15 E2,540,246.46
WISC. PLANE COORDINATES, SOUTH ZONE

T8N 2 11 R21E

51.39 46.84 55.44 43.53
TACK IN HUBS TYPICAL

NOTE: THIS TRANSIT LINE IS 400' EAST & PARALLEL TO THE WEST LINE OF THE SOUTH EAST 1/4 OF SECTION 2 OF T8N, R21E.

30+00

11+00

℄ N. 51ST. ST.

℄ ROADWAYS 5'

256 260 265 270

SECT. LINE

262 T/L+94.26 SECT. LINE
= 10+00 T/L 52ND ST.

266 T/L+69.25 SECT. LINE

90°-53'-41" 89°-09'-17" 89°-06'-26" 90°-50'-36"

89°-06'-05" 90°-53'-55"

90°-50'-43" 89°-09'-17"

10+00 REF. LINE 'S' =
270+69.25 T/L BROWN DEER RD.

℄ ROADWAYS 5'

262+94.26 T/L BROWN DEER
= 10+00 T/L 52ND ST.

PK. NAIL
55-9736
39A 68

34.24 63.48

S.W. BOLT HYDRANT

90°-53'-55"

64.37

PK. NAIL
#57-0100

TACK IN 5" PINE

39.52 20.37

TACK IN HUB
4+75.1±0.10'

35.18

#69L17

T/L N. 52ND. ST.

1/4 SECT. LINE

B.M.- BROWN DEER STANDARD CORNER MARKER IN ROADWAY AT 51ST STREET AND WEST BROWN DEER RD.
ELEV. = 84.14

N

NOTE:

Stationing is along the Section Line from Sta. 120+00 to 276+42.51

At Sta. 276+42.51, stationing shifts from the Section Line to 5ft. left, which is the ℄ roadways.

Stationing is along the ℄ roadways (= 'B' Line) after Sta. 276+42.51

P.C. 276B+42.51
= 276+42.51 SECT. LINE-5' LT.

5'
"B" LINE
"A" LINE
SECT. LINE

CURVE #11 DATA

P.I. = 281B+29.77
R = 4116.28
D = 1°-23'-31"
Δ = 13°-30'-07.44
T = 487.26
L = 970.02

285B+58.41 =
51+11.64 C/L R.R.

51+11.29 ℄ RR.

℄ C.M. ST. P. & P. RR.

'B' LINE
'A' LINE
TAN. LINE
93°-59'-29"
86°-00'-31"

RT. 286A+12.92 =
RT. 286B+12.53 =
286A+12.53 (AHD.)

540' ± ALONG TAN. LINE

285

TO TAN. LINE 111.29'

72°-30'-24" 107°-29'-36"

P.C. 276B+42.51
= 276+42.51, 5' LT. SECTION LINE

'B' LINE = ℄ ROADWAYS

CURVE #11

℄ 5' ROADWAYS

275 280

SECTION LINE

CURVE #10

℄ R/W = 'A' LINE

P.C. 276A+00.27

P.I. 281B+29.77
= 281A+29.77-5' LT.

P.I. 281A+08.95
= 281+08.95 SECT. LINE

285+84.43 SECT. LINE
= 50+00 ℄ C.M. ST. P. & P. RR.

CURVE #10 DATA

P.I. 281A+08.95
R = 4297.183
D = 1°-20'-00"
Δ = 13°-30'-07.43"
T = 508.684
L = 1012.655

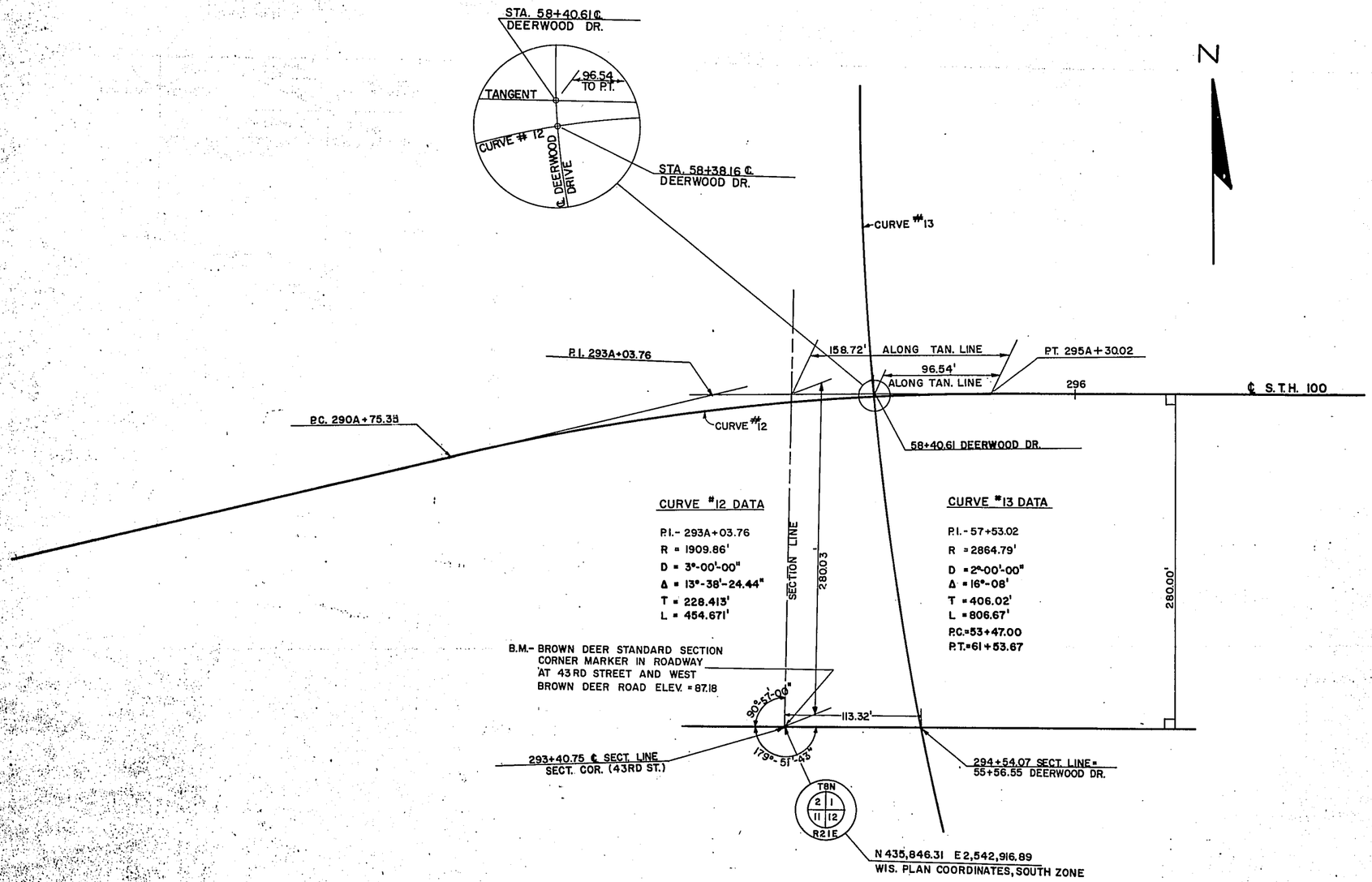
⊙ B.M. – CITY OF MILWAUKEE STANDARD BENCH MARK AT STATION 279+38, 85' RIGHT OF SECTION LINE FLUSH WITH LAWN OF BADGER METER CO.
ELEV. = 86.66

ALIGNMENT PLAN
FOR
BROWN DEER ROAD
N. 68th St. - N. 43rd St.

S.T.H. 100 Milw. Co.

PROJECT	SHEET NUMBER	TOTAL SHEETS
T034-(03)	2.13	70

I.D. 2150 2 70



ALIGNMENT PLAN

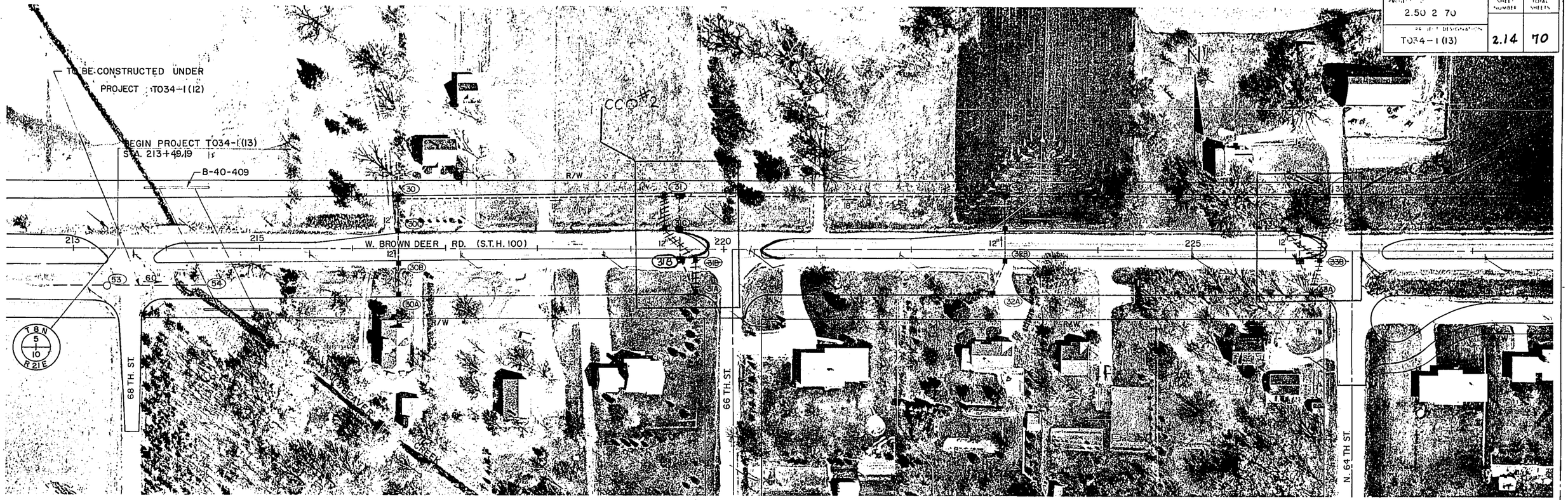
FOR

BROWN DEER ROAD

N. 68th St. - N. 43rd St.

S.T.H. 100

PROJECT	SHEET NUMBER	TOTAL SHEETS
2.50 2 70		
PROJECT DESIGNATION T034-1(13)	2.14	70



DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	30A	216+50 - 53.12' Rt.	34	W	97.45	4.05	
	30B	216+50 - 13.12' Rt.	34	W	97.63	4.43	
	30C	216+50 - 15.88' LT.	34	W	99.05	6.05	
	30	216+50 - 56.88' Lt.	11	W	98.95	6.15	
	31A	219+69.2 - 50.00' Rt.	35	W	95.37	3.72	
	31B	219+69 - 10.00' Rt. +46	34	W	95.55	4.20	
	31C	219+37 - 20' Lt. +46	34	W	97.30	6.05	5.97
	31	219+37 - 60' Lt. +46	11	W	97.12	7.02	6.84
	32A	222+87 - 50' Rt.	35	W	92.87	3.67	
	32B	223+00 - 10' Rt.	34	W	92.95	4.05	
	32C	223+00 - 20' Lt.	34	W	94.45	5.85	
	32	223+00 - 60' Lt.	11	W	94.27	7.02	
	33A	226+28 - 50' Rt.	34	W	89.44	4.14	
	33B	226+38 - 10' Rt. +09	34	W	89.49	4.69	508
	33C	225+97 - 20' Lt. +09	34	W	91.18	6.08	
	33E	226+43 - 65' Lt.	---	---	90.77	66.7	BULKHEAD FOR FUTURE USE
	33	226+43 - 60' Lt.	12	W	90.20	8.72	

STORM SEWER

Code	Location From	Location To	Size (In)	Length (Ft)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g	Type of Pipe	Remarks
	30A	30B	12	36	0.50	93.40	93.20		
	30B	30C	12	28	0.67	93.20	93.00		
	30C	30	12	36	0.50	93.00	92.80		
	30	31	12	283	1.30	92.80	90.60		
	31A	31B	12	36	0.56	91.65	91.35		
	31B	31C	12	42	0.48	91.35	91.25		
	31C	31	12	36	0.37	91.25	91.10		
	31	32	18	359	0.72	90.10	87.50		
	32A	32B	12	37	0.67	89.20	88.90		
	32B	32C	12	28	1.00	88.90	88.60		
	32C	32	12	36	0.75	88.60	88.30		
	32	33	21	339	1.25	87.25	82.73		
	33A	33B	12	36	1.05	85.30	84.80		
	33B	33C	12	68.29	1.40	84.80	83.84	84.30	
	33C	33E	12	48	0.40	85.10	84.66		
	33E	33	30	5	1.00	82.03	81.98		
	33	34	36	253	0.75	81.48	79.60		
	33C	33	12	52		84.30	83.84		

DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks

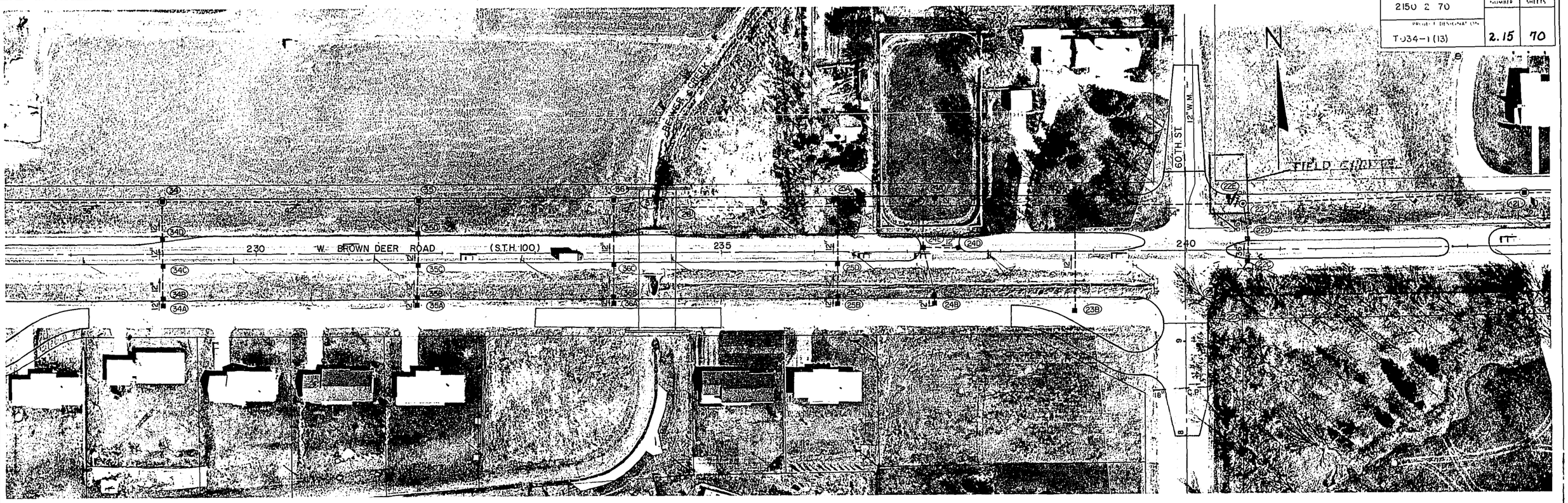
STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks

CONSTRUCTION NOTES

1) Unless otherwise specified all pipe will be Class III.
2) Grate elevations are given at flow line of inlet grate or center of manhole cover.
3) Locations of structures in curb & gutter sections refers to flow line of inlet grate.
4) Location of structures not in curb & gutter sections refers to ℄ of grate or cover.
5) E.G. indicates end grate required.
6) Pipe lengths given are approx. out to out of structures.
7) Cost of Bulkheads to be included in Cost of Pipe.
8) All quantities are in section 1 unless noted.

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 70		
PROJECT DESIGNATION	2.15	70
T-334-1 (13)		



DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	22F	241+38± - 50' RT.	34	W	85.25	4.21	*See Note Below
	22A	240+34 - 80' Rt.	-----	-----	-----	-----	
	22B	240+42.9 - 50' Rt.	31	W	84.50	~~5.62~~ 4.87	*
	22C	240+65 - 10' Rt.	31	W	84.80	6.18	
	22D	240+65 - 10' Lt.	31	W	84.93	6.43	
	22E	240+45.17 - 60' Lt.	34	W	84.71	4.26	
	23B	238+80 - 65' Rt.	35	X	83.00	3.25	
	23C	238+80 - 50' Lt.					Connection at 54" Pipe
	24A	237+30 - 60' Lt.	34	W	83.23	4.58	
	24B	237+30 - 56' Rt.	35	X	82.60	~~2.95~~ 2.12	*
	24C	237+30 - 50' Rt.	35	W	83.23	3.68	
	24D	237+56 - 5' Lt.	34	W	83.27	3.92	
	24E	237+15 - 5' Lt.	34	W	83.10	4.05	
	24	237+30 - 50' Lt.					Connection at 54" pipe
	24F	237+15 - 50' Lt.					Connection at 54" pipe
	25A	236+25 - 60' Lt.	34	W	82.90	4.40	

STORM SEWER

Sec.	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
	8+48(60ST) 36 LT.	8+51(60ST) 36 RT	18	72		82.1	81.6	C.P.	
	22F	22C	12	80	0.50	81.04	80.62		
	22A	22B	36	31	2.92	80.65	79.68		End Wall Reqd (see Detail) End Grate Req'd.
	22B	22C	36	41	0.58	~~78.88~~	~~78.62~~ 79.46		*
	22C	22D	36	19	0.60	78.62	78.50	79.65	*
	22D	22	36	36	0.62	78.50	78.25		
	22E	~~22~~	12	~~16~~	1.00	80.45	80.25		
	To 54" Pipe 5				Connect				
	23B	23C	12	112	0.87	79.75	78.75		Connect to 54" Pipe
	24A	24	12	5	1.00	78.65	78.55		Connect to 54" Pipe
	24B	24C	12	5	1.70	~~79.65~~	79.55	20.49	*
	24C	24E	12	54	0.75	79.55	79.05		
	24D	24E	12	36	1.00	79.35	79.05		
	24E	24F	12	40	1.33	79.05	78.55		Connect to 54" Pipe
	25A	25	12	5	1.00	78.50	78.40		Connect to 54" Pipe

DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	25B	236+25 - 56' Rt.	35	X	82.60	3.14	
	25C	236+25 - 50' Rt.	35	W	82.90	3.50	
	25D	236+25 - 10' Rt.	35	W	83.08	3.98	
	25E	236+25 - 20' Lt.	34	W	83.08	4.28	
	25	236+25 - 50' Lt.					Connection at 54" Pipe
	22	240+60 - 50' Lt.	Spec.M.H. Type I	Q	85.12	8.37	
	26	234+44.5 - 50' Lt.					Connection at Box Culvert
	34A	229+00 - 56' Rt.	35	X	85.50	2.90	
	34B	229+00 - 50' Rt.	35	W	85.82	3.32	
	34C	229+00 - 10' Rt.	35	W	86.00	3.80	
	34D	229+00 - 12.5' Lt.	34	W	86.02	4.02	
	34	229+00 - 60' Lt.	Spec.M.H. Type I	W	85.95	6.85	
	35A	231+75 - 56' Rt.	35	X	83.50	2.60	
	35B	231+75 - 50' Rt.	35	W	84.60	3.80	
	35C	231+75 - 10' Rt.	34	W	84.78	4.28	
	35D	231+75 - 20' Lt.	34	W	84.78	4.58	
	35	231+75 - 60' Lt.	Spec.M.H. Type I	W	84.60	6.70	
	36A	233+85 - 56' Rt.	35	X	82.80	2.94	
	36B	233+85 - 50' Rt.	35	W	83.76	3.96	
	36C	233+85 - 10' Rt.	34	W	83.94	4.44	
	36D	233+85 20' Lt.	34	W	83.94	4.64	
	36	233+85 60' Lt.	Spec.M.H. Type I	W	83.76	6.66	
	37	234+11.5 60' Lt.					Connection at Box Culvert

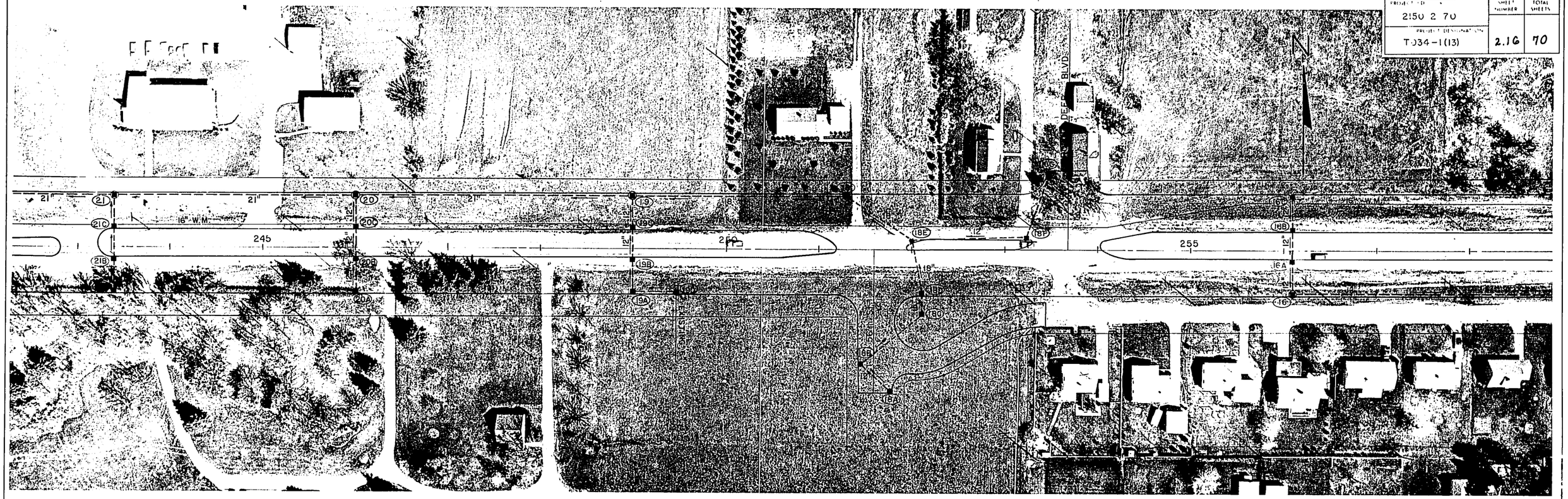
STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
25B	25C	12	5	1.00	79.46	79.40			
25C	25D	12	36	0.75	79.40	79.10			
25D	25E	12	29	1.00	79.10	78.80			
25E	25	12	26	1.30	78.80	78.40			Connect to 54" Pipe
22	26	54	613	0.14	76.75	75.90			Outfall into box Culvert
34A	34B	12	5	1.70	82.60	82.50			
34B	34C	12	36	0.75	82.50	82.20			
34C	34D	12	21	0.90	82.20	82.00			
34D	34	12	39	0.93	82.00	81.60			
34	35	42	270	0.44	79.10	77.90			
35A	35B	12	5	1.70	80.90	80.80			
35B	35C	12	36	0.75	80.80	80.50			
35C	35D	12	29	1.00	80.50	80.20			
35D	35	12	36	0.75	80.20	79.90			
35	36	42	205	0.38	77.90	77.10			
36A	36B	12	5	1.00	79.86	79.80			
36B	36C	12	36	0.75	79.80	79.50			
36C	36D	12	28	0.67	79.50	79.30			
36D	36	12	36	0.50	79.30	79.10			
36	37	42	24	0.37	77.10	77.00	Outfall		into box Culvert

* Build inlet (22F) over the existing 8" conc. pipe so that the pipe will outfall into the inlet.

* FIELD CHANGE

PROJECT NO.	SHEET NUMBER	TOTAL SHEETS
2150 2 70	2.16	70
PROJECT DESIGNATION T-034-1(13)		



DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	16C	256+10 - 60' Lt.	35	W	93.87	3.07	
	16B	256+10 - 20' Lt.	34	W	94.05	4.25	
	16A	256+10 - 10' Rt.	34	W	95.02	5.42	
	16	256+10 - 50' Rt.	11	W	94.84	5.44	
	18A	8+41(56 st.) - 17' Rt.	34	X	100.02	5.23	
	18B	8+75(56 st.) - 18' Lt.	34	W	99.42	5.27	
	18C	252+10 - 70' Rt.	35	X	97.70	3.65	
	18D	252+10 - 50' Rt.	34	W	98.18	4.18	
	18E	252+00- 6.5' LT.	35	W	97.59	3.79	
	18	251+30 - 60' LT.	11	W	96.87	4.87	
	19A	249+00- 50' RT.	35	W	96.93	3.81	
	19B	249+00- 10' RT.	34	W	97.11	4.39	
	19C	249+00- 20' LT.	35	W	96.07	3.71	
	19	249+00- 60' LT.	11	W	95.89	5.14	
	20A	246+00- 50' RT.	34	W	95.27	4.37	
	20B	246+00- 10' RT.	34	W	95.45	4.75	
	20C	246+00- 20' LT.	34	W	94.81	4.31	
	20	246+00- 60' LT.	11	W	94.63	5.38	
	21A	243+40- 50' RT.	35	W	89.42	2.42	
	21B	243+40- 10' RT.	35	W	89.60	2.80	
	21C	243+40- 20' LT.	35	W	90.72	4.02	

STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
	16C	16B	12	36	2.63	90.80	89.80		
	16B	16A	12	29	0.70	89.80	89.60		
	16A	16	12	36	0.70	89.60	89.40		
	16	15	12	302	1.48	89.40	84.90		
	18A	18B	12	45	0.83	~~94.79~~	~~94.40~~ 95.12		94.73
	18B	18C	15	83	0.12	~~94.15~~	~~94.05~~ 94.48		94.38
	18C	18D	15	17	0.26	94.05	94.00		
	18D	18E	18	53	0.36	94.00	93.80		
	18E	18	18	75	0.39	93.80	93.50		
	18	19	18	226	0.43	92.00	91.00		
	19A	19B	12	36	1.00	93.12	92.72		
	19B	19C	12	29	1.20	92.72	92.36		
	19C	19	12	36	1.88	92.36	91.61		
	19	20	21	296	0.50	90.75	89.25		
	20A	20B	12	36	0.50	90.90	90.70		
	20B	20C	12	29	0.67	90.70	90.50		
	20C	20	12	36	0.67	90.50	90.30		
	20	21	21	255	1.92	89.25	84.25		
	21A	21B	12	36	0.50	87.00	86.80		
	21B	21C	12	29	0.33	86.80	86.70		
	21C	21	12	36	0.50	86.70	86.50		

DRAINAGE STRUCTURES

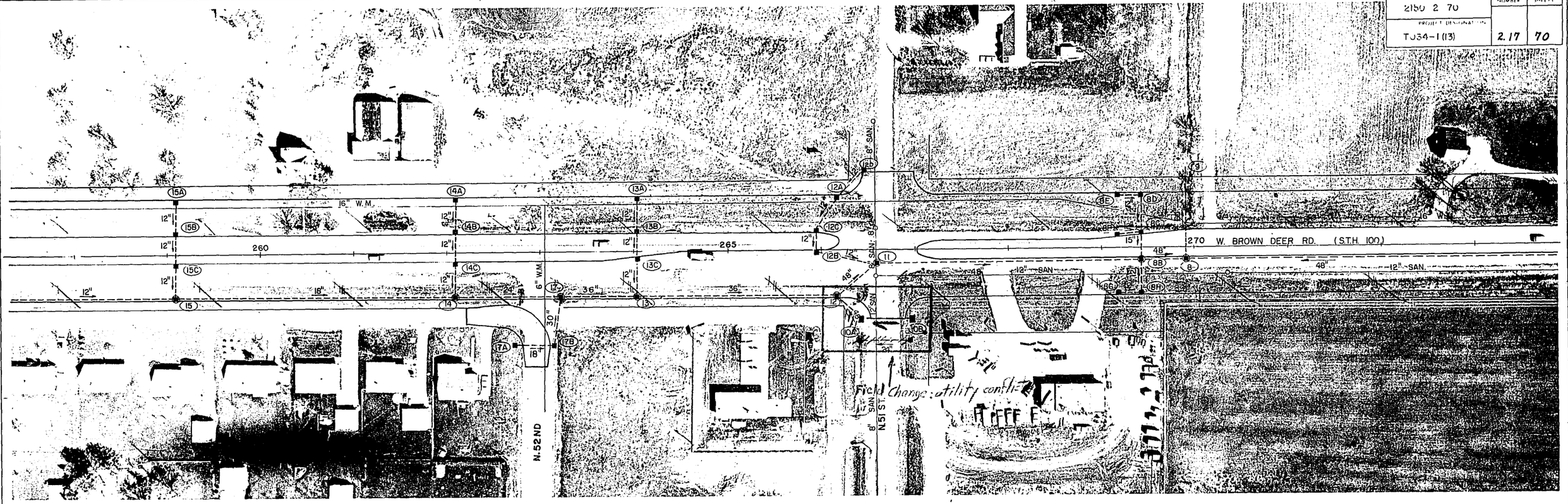
Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	21	243+40 - 60' Lt.	11	W	90.54	6.29	
	19D	249+47±5 0'Rt.	35	W	97.13	3.73	*See Note Below
	18F	253 + 29 - 10'Lt.	35	W	97.69	3.76	
	18G	253 + 47 - 84'Lt.	35	W	96.55	2.42	

STORM SEWER

Sec.	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
	21	22	21	275	1.50	84.25	80.00		
	19D	19A	12	43	0.60	93.40	93.12		
	18F	18E	12	126	0.10	93.93	93.80		
	18G	18F	12	72	0.26	94.13	93.93		

* Build inlet (19D) over the existing 6" iron pipe so that the pipe will outfall into the inlet.

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 70		
PROJECT DESIGNATION		
TJ34-1(13)	2.17	70



DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	15A	259+15 - 60' Lt.	35	W	89.26	2.71	
	15B	259+15 - 20' Lt.	35	W	89.44	3.69	
	15C	259+15 - 10' Rt.	34	W	90.42	4.87	
	15	259+15 - 50' Rt.	11	W	90.24	5.84	
	14A	262+15 - 60' Lt.	35	W	84.73	3.73	
	14B	262+15 - 20' Lt.	34	W	84.91	4.11	
	14C	262+15 - 10' Rt.	34	W	85.95	5.30	
	14	262+15 - 50' Rt.	11	W	85.77	6.02	
	17A	9+00(52 st.) - 19' Lt	35	X	84.00	3.00	
	17B	9+00(52 st.) - 23' Rt	31	X	84.00	5.83	
	17	263+20 - 50' Rt.	11	W	84.85	7.33	
	13A	264+10 - 60' Lt.	35	W	82.90	3.90	
	13B	264+10 - 20' Lt.	34	W	83.08	4.28	
	13C	264+10 - 5' Rt	34	W	84.49	5.79	
	13	264+10 - 50' Rt.	11	W	84.40	7.18	
	12	266+24 - 50' Rt. ~~Spec MH Type II~~	~~11~~	W	83.33	6.93	✳
	10B	9+10(51 st.) - 26' Rt.	34	X	82.00	4.30	
	10A	9+10(51 st.) - 28' Lt.	Spec.MH-Type I	X	81.70	6.80	
	12D	10+87(51ST.) - 22' Lt.	35	W	81.50	2.90	
	~~12C~~	~~266+01 - 20' Lt.~~	35	W	81.84	3.44	

STORM SEWER

Code	Location From	Location To	Size (In)	Length (Ft)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g	Type of Pipe	Remarks
	15A	15B	12	37	0.12	86.55	86.50		
	15B	15C	12	28	0.67	85.75	85.55		
	15C	15	12	36	0.50	85.55	85.35		
	15	14	18	296	1.38	84.40	80.25		
	14A	14B	12	38	0.50	81.00	80.80		
	14B	14C	12	28	0.50	80.80	80.65		
	14C	14	12	36	0.50	80.65	~~80.45~~		
	14	17	24	100	0.48	~~79.75~~	~~79.25~~	80.15	79.65 ✳
	17A	17B	18	37	0.25	81.00	80.90		
	17B	17	30	47	0.74	~~78.17~~	~~77.80~~	78.67	78.30 ✳
	17	13	36	85	0.36	77.52	77.22		
	13A	13B	12	36	0.50	79.00	78.80		
	13B	13C	12	23	0.40	78.80	78.70		
	13C	13	12	41	0.44	78.70	78.50		
	13	12	36	210	0.37	77.22	76.40		
	12	11	48	49	1.00	74.75	74.20		
	10B	10A	24	50	1.67	77.70	76.90		
	10A	12	48	40	0.25	74.90	74.75		
	12D	12A	12	36	0.50	78.60	78.40		
	12A	12C	12	43	0.22	78.40	78.30		

DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	12C	266+01 - 20' Lt.	34	W	82.12	4.02	
	12B	266+01 ℄	34	W	83.36	5.46	
	11	266+65± - ~~12 Rt.~~ ± 10.92	Spec.MH-Type II	Q	83.42	11.22	See detail for location - 2' sump required.
	8E	269+25 - 60' Lt.	34	W	80.32	4.17	
	8F	269+25 - 12.5' Lt.	34	W	80.35	4.10	
	8G	269+25 - 50' Rt.	34	W	81.82	4.07	
	8H	269+50 - 50' Rt.	34	W	81.69	4.19	
	8D	269+50 - 60' Lt.	34	W	80.19	4.29	
	8C	269+50 - 15' Lt.	34	W	80.23	4.98	
	8B	269+50 - 10' Rt.	Spec.M.H.-Type I	W	81.87	~~10.12~~	10.92 ✳
	8	269+98 - 10' Rt.	Spec.M.H.-Type I	W	82.12	11.92	
	9	269+98 - 85' Lt.	-	-	-	-	OUTFALL INTO DITCH APRON-ENDWALL REQ'D.

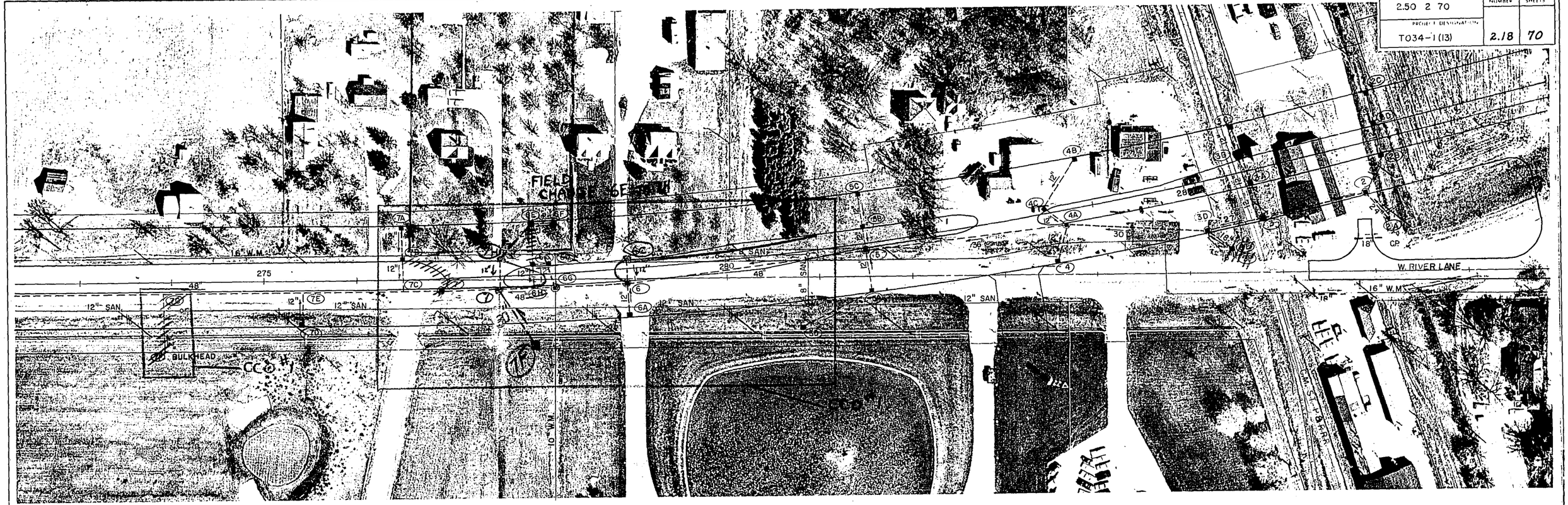
STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
	12C	12B	12	19	1.00	78.10	77.90		
	12B	11	12	60	0.60	77.90	77.50		
	11	8B	48	278	0.86	74.20	71.75		
	8E	8D	12	23	1.00	76.15	75.90		
	8F	8C	12	23	1.00	76.25	76.00		
	8G	8H	12	23	1.00	77.75	77.50		
	8H	8B	12	38	0.71	77.50	77.10		
	8D	8C	12	43	0.80	75.90	75.50		
	8C	8B	15	24	1.00	75.25	75.00		
	8B	8	48	40	0.86	~~71.75~~	~~71.55~~		
						70.95	71.20 ✳		
	8	9	60	95	0.42	70.20	69.80		

12D 266+22 60'LT -------- PLAN ERROR

✳ FIELD CHANGES

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2.50 2 70		
PROJECT DESIGNATION		
T034-1(13)	2.18	70



DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grade Elev.	Depth	Remarks
	2A	287+16 86' Rt	--	--	--	--	APRON END WALL REQ'D.
	2C	287+25 55' Lt.	35	W	84.95	3.95	
	2D	287+25 15' Lt.	34	W	85.13	4.33	
	2B	287+25 15' Rt.	34	W	85.50	4.85	
	2	287+00 55' Rt.	11	W	85.20	6.00	
	3C	285+75 55' Lt.	35	W	83.92	3.37	
	3B	285+78 15' Lt.	34	W	84.39	4.04	
	3A	285+80 15' Rt.	34	W	84.78	4.53	
	3	285+84 55' Rt.	11	W	85.12	6.32	
	~~3E~~	~~285+44 79' Rt~~	~~34~~	~~X~~	~~85.00~~	~~3.00~~	PLACE 4' SIDE PARALLEL TO GDR.
	~~3F~~	~~285+45 65' Rt~~					~~CONNECTION TO BOX CULVERT (SEE DETAIL)~~
	3D	285+25 55' Rt	11	W	84.82	6.52	
	4	283+60 55' Rt	34	W	84.53	4.85	
	4B	284+00 55' Lt	35	W	82.65	3.40	
	4C	283+43 1' Lt	34	W	83.38	4.63	
	4A	283+67 15' Rt	11	W	83.71	6.71	
	5C	281+50 55' Lt.	35	W	81.40	3.60	
	5B	281+50 15' Lt.	34	W	82.25	4.75	
	5D	280+82 85' RT.	34	X	85.00	4.00	
	5A	281+50 55' Rt.	34	W	83.48	3.98	
	5	281+50 5' Rt.	SPEC. M.H. TYPE I	W	82.39	7.09	

STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
	2A	2	24	30	1.60	79.93	79.45		
	2C	2D	12	36	0.50	81.00	80.80		
	2D	2B	12	28	0.50	80.80	80.65		
	2B	2	12	44	0.32	80.65	80.50		
	2	3	27	112	0.36	79.20	78.80		
	3C	3B	12	38	0.40	80.55	80.35		
	3B	3A	12	28	0.50	80.35	80.25		
	3A	3	12	37	0.50	80.25	80.10		
	3	3D	27	54	0.38	78.80	78.55		CLASS IV
	~~3E~~	~~3D~~	~~18~~	~~28~~	~~3.90~~	~~82.00~~	~~81.00~~		ELIMINATED IN FIELD
	~~3F~~	~~3E~~	~~18~~	~~5~~		~~CULVERT~~	~~82.00~~		~~CONNECTION TO BOX CULVERT (SEE DETAIL)~~
	3D	4A	30	160	0.50	78.30	77.50		ELIMINATED IN FIELD
	4	4A	12	35	0.75	79.68	79.38		
	4B	4C	12	75	0.63	79.25	78.75		
	4C	4A	12	27	0.72	78.75	78.55		
	4A	5	36	212	0.32	77.00	76.30		
	5C	5B	12	36	0.75	77.80	77.50		
	5B	5	12	18	1.00	77.50	77.20		
	5D	5A	12	70	2.00	81.00	79.50		
	5A	5	12	44	2.00	79.50	78.50		
	5	6	48	245	0.28	75.30	74.60		

DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grade Elev.	Depth	Remarks
	6A	279+00 55' Rt.	34	W	82.23	4.33	
	6	279+00 15' Rt.	SPEC. M.H. TYPE I	W	81.38	6.78	
	6F	278+25 55' Lt	35	W	79.78	2.58	
	~~6D~~	~~278+05 5' Lt.~~	~~34~~	~~W~~	~~80.73~~	~~4.68~~	
	6E	278+00 55' Lt	35	W	79.65	2.45	
	6C	~~277+93~~ 5' Lt 279+00	~~34~~ 35	W	~~80.80~~ 81.03	~~4.86~~ 5.85	CONNECTION TO 48" PIPE
	6H	277+93 15' Rt					
	7H	277+58 15' LT.	35	W	80.58	2.75	
	7A	276+50 55' Lt	35	W	80.60	3.30	
	7B	276+50 15' Lt	34	W	81.30	5.26	
	6G	278+14 ± 15' Rt. ±	SPEC. M.H. TYPE I	W	81.85	9.56	72" SUMP SEE DETAIL SHEET FOR CONNECTION TO 48" PIPE
	7C	276+50 15' Rt.					LOCATION
	7D	275+50 50' Rt.	34	W	83.12	6.67	
	7E	275+50 10' Rt.					CONN. TO 48" PI
	~~7F~~	~~274+00 75' RT.~~ 279+00 39' RT.					BULKHEAD PIPE CONNECTION TO 48" PIPE
	~~7G~~	~~274+00 10' RT.~~					
	7	~~276+91~~ 15' RT.	SPEC. M.H. TYPE I	W	82.51	8.61	
		277+42			82.53	8.10	

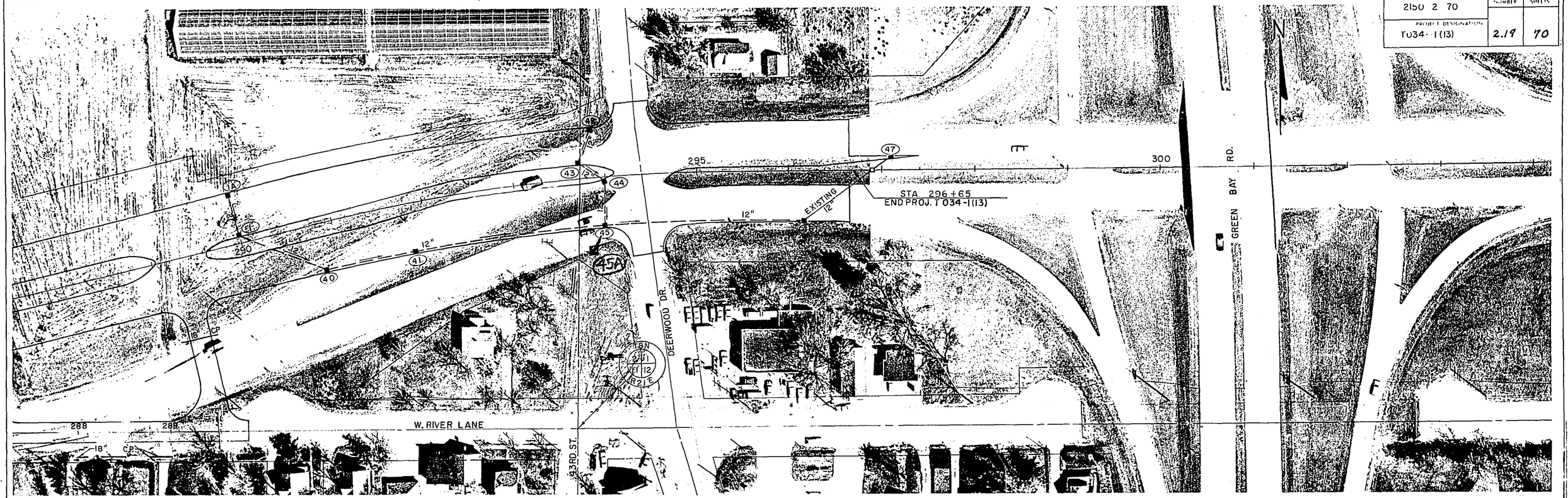
* STATE NON-PARTICIPATING.

STORM SEWER

Sec.	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
	6A	6	12	36	0.75	77.90	77.60		
	6	6G	48	~~78~~ 80	0.35	74.60	74.30		
	6F	6E	12	20	0.00	77.20	77.20		
	~~6D~~	~~6C~~	~~12~~	~~8~~	~~1.00~~	~~76.05~~	~~75.95~~		
	~~6E~~	~~6C~~	~~12~~	~~44~~	~~0.00~~	~~77.20~~	~~77.20~~		SEE 6E TO 7H
	6C	6H 6	12	19	1.00	~~76.95~~ 76.18	75.73 76.93		
	7H	7	12	28	2.7	77.0	77.13		
	7A	7B	12	35	0.25	77.30	77.20		
	7B	7C	12	29	2.67	76.04	75.24		
	6G	7	48	~~117~~ 140	0.33	74.30	~~73.90~~ 74.1		
	7D	7E	12	33	4.00	76.45	74.85		
		7	30	64	1.37	76.10	75.80		
2	7F	~~7G~~	12	~~81~~ *	~~2.00~~	75.48	~~74.26~~		
				72.5		74.13			
	7	8	48	~~68.9~~	0.39	~~73.90~~	71.20		
	286+48 SEC LINE 24 Rt.	286+76 SEC LINE 24 Rt.	18	28		83.2	82.9	C.P.	
	286+87 SEC LINE 36' LT.	287+15 SEC LINE 36' LT.	18	28		81.6	81.1	C.P.	
	6E	7H	12	54	0	77.20	77.20		

(FIELD CHANGE)

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 70		
PROJECT DESIGNATION		
TU34-1(13)	2.19	70



DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	1A	290+00 55'Lt.	34	W	86.94	4.54	
	1	290+00 5'LT.	34	W	86.12	4.02	
	40	290+83 55'Rt.	34	W	85.96	4.63	
	41	291+85 55'Rt.	34	W	85.90	4.87	
	42	293+87 55'Lt.	34	W	87.86	5.36	
	43	293+72.5 15'Lt.	34	W	86.60	4.85	
	44	293+97 0.5'Rt.	34	W	86.32	5.07	
	45	293+95 55'Rt.	34	W	84.77	4.44	
	46	296+16 55'Rt.	34	W	80.99	3.66	
	47	297+10.54 13.11'Lt.	35	W	79.11	3.80	
	45A	293+81 31' Rt	35	X	84.32	3.75	

STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
1A	1		12	46	0.65	82.40	82.10		
1	40		12	100	0.77	82.10	81.33		
40	41		12	99	0.30	81.33	81.03		
41	45		12	206	0.30	81.03	80.33		
42	43		12	40	1.75	82.50	81.75		
43	44		12	25	1.40	81.75	81.25		
44	45		12	51	1.67	81.25	80.33		
45	46		12	217	1.35	80.33	77.33		
									Use Existing Pipe
									Use Existing Pipe
45A	45		12	25	1.00	80.58	80.33		Added In Field
	289+00 SEC LINE 27' RT.	288+80 SEC LINE 27' RT.	18	20		81.9	81.7	C.P.	for drainage.
	288+52 SEC LINE 27' RT.	288+24 SEC LINE 27' RT.	18	28		81.3	81.0	C.P.	
	288+13 SEC LINE 27' RT.	287+93 SEC LINE 27' RT.	18	20		80.8	80.6	C.P.	
	1+05 'C' LINE 30 RT.	1+05 'C' LINE 30 LT.	18	60		82.0	81.7	C.P.	

DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks

STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks

CONSTRUCTION NOTES

1) Unless otherwise specified all pipe will be Class III.
2) Grate elevations are given at flow line of inlet grate or center of manhole cover.
3) Locations of structures in curb & gutter sections refers to flow line of inlet grate.
4) Location of structures not in curb & gutter sections refers to ℄ of grate or cover.
5) E.G. indicates end grate required.
6) Pipe lengths given are approx. out to out of structures.

ESTIMATE OF QUANTITIES

THIS PROJECT IS TO BE EXECUTED UNDER THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE WISCONSIN DIVISION OF HIGHWAYS - EDITION OF 1969, AND SPECIAL PROVISIONS AS ATTACHED TO PROPOSALS

Contract No. 1
Grading, Base, Surfacing, and Structures
B-40-409, B-40-410

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 - 2 - 70	3	10
PROJECT DESIGNATION: T 034 - 1 (13)		

SEC NO	STATION TO STATION	NET LENGTH OF CENTER LINE	CLEARING	GRUBBING	REMOVING OLD CULVERT Sta. 214 + 10	Sta. 234 + 25	Sta. 249 + 46	Sta. 264 + 40	Sta. 269 + 30	Sta. 278 + 35	REMOVING PAVEMENT	REMOVING CURB & GUTTER	REMOVING CONCRETE SIDEWALK	REMOVING FENCE (DELETED)	REMOVING MANHOLES	REMOVING INLETS	ABANDONING INLETS	UNCLASSIFIED EXCAVATION	GRANULAR BACKFILL	FINISHING ROADWAY	OBLITERATING OLD ROAD	CRUSHED AGGREGATE BASE COURSE	BITUMINOUS CONCRETE PAVEMENT	BITUMINOUS MATERIAL FOR SURFACE COURSE	CONCRETE PAVEMENT 9"-INCH	CONCRETE PAVEMENT 11"-INCH	CONCRETE DRIVEWAY	CONCRETE PAVEMENT REINF.	
	ITEM NO.		20102	20105	20301	20302	20303	20304	20305	20306	20401	20405	20406	20412	20414	20416	20443	20503	20901	21301	21401	30404	40701	40702	40909	40911	40931	40950	
	UNIT	LIN. FT	In. Dia.	In. Dia.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	S.Y.	L.F.	S.Y.	L.F.	Each	Each	Each	C.Y.	C.Y.	L.S.	Sta.	Ton	Ton	Ton	S.Y.	S.Y.	S.Y.	S.Y.	
1	W. Brown Deer Road																												
	Sta. 213 + 49.19 to 296 + 65	8303.11	3700	3800	1	1	1	1	1	1	24,300	380	130	~~1,300~~	2	3	1	~~74,800~~ 74,958	560	1		36,500	1100	60	74,700	200		74,900	
														#1 C.C.O.				#1 C.C.O.									763 ~~740~~ #1 C.C.O.		
T	Totals	8303.11	3700	3800	1	1	1	1	1	1	24,300	380	130	~~1,300~~	2	3	1	~~74,800~~ 74,950	560	1		36,500	1100	60	74,700	200	~~740~~ 763	74,900	

SEC NO	STRUCTURE	BRIDGES (STRUCTURES OVER 20FT. SPAN) EXCAVATION FOR STRUCTURES	GRANULAR BACKFILL	CONCRETE MASONRY, BRIDGES	BAR STEEL REINF., BRIDGES	TUBULAR RAILING TYPE H	MANHOLES SPECIAL TYPE II	METAL CONDUIT, 2-INCH	TRAFFIC SIGNAL BASE TYPE I	TRAFFIC SIGNAL BASE TYPE II	REMOVING BUILDINGS PARCEL 6	REMOVING BUILDINGS PARCEL 7	REMOVING BUILDINGS PARCEL 117	REMOVING BUILDINGS PARCEL 12	REMOVING SEPTIC TANKS
		20601	20901	50201	50501	51317	90006	61302	90004	90005	20430	20431	20432	20433	20417
		C.Y.	C.Y.	C.Y.	L.B.	L.F.	EACH	L.F.	EACH	EACH	L.S.	L.S.	L.S.	L.S.	EACH
1	B-40-409	1,450	325	507.9	61,097	141	2	167	8	4	1	1	1	1	1
1	B-40-410	1,875	375	509.3	85,340	119									
T		3,325	700	1017.2	146,437	260	2	167	8	4	1	1	1	1	1

SEC NO	CULVERT PIPE 18 Inch CLA III	REINFORCED CONC. APRON ENDWALLS FOR CULVERT PIPE 24 Inch	36 Inch	60 Inch	CONCRETE CURB & GUTTER 31 INCH	CONCRETE SIDEWALK 5 INCH	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER 12 Inch	15 Inch	18 Inch	21 Inch	24 Inch	27 Inch	30 Inch	36 Inch	42 Inch	48 Inch	54 Inch	60 Inch	REINFORCED CONC. PIPE CLASS IV STORM SEWER 27 INCH	MANHOLES TYPE 11	MANHOLES TYPE 12	MANHOLES TYPE	MANHOLES TYPE	MANHOLES SPEC. TYPE I	MANHOLE COVERS TYPE Q	INLET COVERS TYPE W	INLET COVERS TYPE X	INLETS TYPE 31	INLETS TYPE 34	INLETS TYPE 35	METAL CONDUIT 3 INCH	FIBER CONDUIT 3 INCH	PULL BOXES	STEEL PLATE BEAM GUARD CLASS B	CALCIUM CHLORIDE SURFACE TREATMENT	SALVAGED TOPSOIL	MULCHING	FERTILIZER	SEEDING	FIELD OFFICE,	CONCRETE HEADER
	52003	52263	52267	52271	60124	60205	60825	60826	60827	60828	60829	60830	60831	60833	60834	60835	60836	60837	60855	61114	61116			90001	61155	61174	61175	61184	61187	61188	61303	61323	90002	61409	62301	62505	62702	62901	63001	90003	40933
	L.F.	Each	Each	Each	L.F.	S.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	L.F.	L.F.	Each	L.F.	Ton	S.Y.	S.Y.	Cwt.	S.Y.	L.S.	S.Y.
							4675 C.C.O. #1 & #2																																		
1	256	1	1	1	32,220	70	~~4638~~	124	1079	1165	180	112	212	887	499	1536	613	95	54	17	1			10	3 ~~2~~	127 ~~128~~	14	4	57 ~~69~~	43 ~~41~~	2727 ~~2,461~~	738 ~~522~~	6	60	20	71,000	71,000	64	71,000	1	35
						C.C.O. #1																			C.C.O. #1					C.C.O. #2										
2						~~370~~ 383	~~81~~	C.C.O. #1					69	C.C.O. #1																												
						453	4675	C.C.O. #1 & #2					281																												
T	256	1	1	1	32,220	~~440~~	~~4699~~	124	1079	1165	180	112	~~212~~	887	499	1536	613	95	54	17	1			10	3 ~~2~~	127 ~~128~~	14	4	57 ~~69~~	43 ~~41~~	2727 ~~2,461~~	738 ~~522~~	6	60	20	71,000	71,000	64	71,000	1	35

DETAIL SUMMARY SHEET OF MISCELLANEOUS QUANTITIES

PROJECT NO	SHEET NUMBER	TOTAL SHEETS
2150 2 70		
PROJECT DESIGNATION		
T034-1(13)	3 A	70

CLEARING & GRUBBING

Sec.	Station to Station	Clear In. Dia.	Grub. In. Dia.
1	Brown Deer Rd.		
	213+49.19 to 220+00 - Lt. Side	120	124
	213+49.19 to 220+00 - Rt. Side	176	176
	220+00 to 227+00 - Lt. Side	421	421
	220+00 to 227+00 - Rt. Side	376	386
	227+00 to 240+00	339	368
	240+00 to 251+50	826	836
	251+50 to 266+50	332	332
	266+50 to 277+50	442	442
	277+50 to 285+50	668	715
	285+50 to 296+65	0	0

REMOVING PAVEMENT

Sec.	Location	Sq. Yd.
1	213 + 49.19 B.D. to 286 + 40	17,820
	286 + 40 B.D. to 296 + 65 B.D.	6,480

REMOVING CURB & GUTTER

Sec.	Location	L.F.
1	10 + 60 to 11 + 50 - 51st St. (Lt. & Rt.)	180
	8 + 40 to 9 + 40 - 56th St. (Lt. & Rt.)	200

REMOVING CONCRETE SIDEWALK

Sec.	Location	Sq. Yd.
1	225+90 B.D. - Rt.	14
	240+35 B.D. - Rt.	27
	277+50 B.D. - Lt.	55
	278+38 B.D. - Lt.	1
	290+10 B.D. - Rt.	33

REMOVING FENCE

Sec.	Location	Lin. Ft.
1	269+69 B.D. to 282+50 S/L-Rt.	1300

REMOVING MANHOLES

Sec.	Location	Each
1	8+75 56th St. - 8' Lt.	1
	9+55 56th St. - 9' Lt.	1

REMOVING INLETS

Sec.	Location	Each
1	8+75 56th St. - 18'Lt.	1
	8+75 56th St. - 18' Rt.	1
	296+16 B.D. - 54' Rt.	1

ABANDONING INLETS

Sec.	Location	Each
1	297+15 B.D. - 18' Lt.	1

GRANULAR BACKFILL

Sec.	Location	Cu. Yd.
1	214+09 B.D.	116
	264+40 B.D.	11
	269+30 B.D.	13
	Miscellaneous	100
	Parcel 6 (Tanks)	320

REMOVING SEPTIC TANK

Sec.	Location	Each
1	Parcel 12	1

CRUSHED AGGREGATE BASE COURSE

Sec.	Location	Ton
1	Brown Deer Rd.	
	213+49.19 to 217+00 - Lt. Mainline (9 in.)	842
	213+49.19 to 216+60 - Median Opening & Lt. Turn Lane (9 in.)	224
	217+00 to 229+00 - Lt. Mainline (6 in.)	1920
	219+36 to 223+00 - Median Opening & Lt. Turn Lane (6 in.)	154
	225+99 to 229+00 - Median Opening & Lt. Turn Lane (6 in.)	160
	229 +00 to 229+75 - Lt. Turn Lane (9 in.)	16
	229+00 to 235+00 - Lt. Mainline (9 in.)	1440
	235+00 to 239+00 - Lt. Mainline (6 in.)	640
	237+00 to 239+00 - Median Opening & Lt. Turn Lane (6 in.)	105
	239+00 to 244+00 - Lt. Mainline (9 in.)	1200
	239+00 to 243+35 - Median Openings & Lt. Turn Lanes (9 in.)	370
	239+49 to 240+44 - Lt. Apron (9 in.)	73
	244+00 to 262+00 - Lt. Mainline (6 in.)	2880
	250+60 to 254+60 - Median Opening & Lt. Apron & Lt. Turn Lanes (6 in.)	303
	262+00 to 272+00 - Lt. Mainline (9 in.)	2400
	263+60 to 270+00 - Median Opening & Lt. Turn Lanes (9 in.)	393
	266+24 to 267+18 - Lt. Apron (9 in.)	77
	272+00 to 282+00 - Lt. Mainline (6 in.)	1600
	276+52 to 280+30 - Median Opening & Lt. Turn Lane (6 in.)	163
	280+40 to 285+77 - Median opening & Lt. Turn Lanes(6 in.)	232
	282+00 to 292+00 - Lt. Mainline (6 in.)	1580
	288+64 to 292+30 - Median Opening & Lt. Turn Lane (6 in.)	164
	292+00 to 296+65 - Lt. Mainline (6 in.)	743
	291+30 to 297+40 - Median Opening & Lt. Turn Lanes (6 in.)	249
	293+88 to 294+71 - Lt. Apron (6in.)	49
	213+49.19 to 217+00 - Rt. Mainline (9 in.)	842
	213+49 to 214+01 - Rt. Apron (9 in.)	48
	217+00 to 229+00 - Rt. Mainline (6 in.)	1920
	219+70 to 220+48 - Rt. Apron (6 in.)	35
	226+30 to 227+16 - Rt. Apron (6 in.)	43
	229+00 to 235+00 - Rt. Mainline (9 in.)	1440
	235+00 to 239+00 - Rt. Mainline (6in.)	640
	239+00 to 244+00 - Rt. Mainline (9 in.)	1200
	239+42 to 240 +42 - Rt. Apron (9 in.)	91
	244+00 to 262+00 - Rt. Mainline (6in.)	2934
	251+16 to 252+09 - Rt. Apron (6 in.)	50
	262+00 to 272+00 - Rt. Mainline (9 in.)	2400
	266+25 to 267+11 - Rt. Apron (9 in.)	67
	272+00 to 282+00 - Rt. Mainline (6 in.)	1600
	282+00 to 292+00 - Rt. Mainline (6 in.)	1580
	288 + 89 to 289 + 71 - Rt. Apron (6 in)	39
	292 + 00 to 296 + 65 - Rt. Mainline (6 in)	743
	293 + 96 to 294 + 86 - Rt. Apron (6 in)	52
	8 + 00 to 9 + 20 - 68th St. (6 in.)	93
	8 + 50 to 9 + 25 - 66th St. (6 in.)	64
	64th St. and Frontage Rd. (6 in.)	234
	233 + 00 to 235 + 00 - Frontage Rd. (6 in.)	148
	8 + 00 to 9 + 20 - 60th St. and Frontage Road (6 in.)	361
	10 + 85 to 12 + 00 - 60th St. (6 in.)	145
	56th St. and Frontage Road (6 in.)	280
	52nd St. and Frontage Road (6 in.)	100
	8 + 50 to 9 + 26 - 51st St. (6 in.)	83
	10 + 84 to 11 + 25 - 51st St. (6 in.)	112
	W. River Lane and "C" Line (6 in.)	627
	57 + 40 to 57 + 53 Deerwood Dr. (6 in.)	16
	59 + 22 to 59 + 40 Deerwood Dr. (6 in.)	22
	Driveways - 213 + 49 to 220 + 09	65
	Driveways - 220 + 09 to 226 + 73	48
	Driveways - 226 + 73 to 239 + 96	19
	Driveways - 239 + 96 to 251 + 59	68
	Driveways - 251 + 59 to 266 + 69	101
	Driveways - 266 + 69 to 278 + 00	62
	Driveways - 278 + 00 to 285 + 58	139
	Driveways - 285 + 58 to 296 + 65	12

BITUMINOUS CONCRETE PAVEMENT

Sec.	Location	Ton
1	68th St.	48
	66th St.	33
	64th St. and Frontage Road	119
	233 + 00 to 235 + 00 - Frontage Rd.	77
	8 + 00 to 9 + 20 - 60th St. & Frontage Rd.	189
	10 + 85 to 12 + 00 - 60th St.	76
	56th St. and Frontage Rd.	140
	52nd St. and Frontage Rd.	53
	8 + 50 to 9 + 24 - 51st St.	43
	10 + 84 to 11 + 50 - 51st St.	50
	W. River Lane and "C" Line	252
	Deerwood Dr. Lt.	12
	Deerwood Dr. Rt.	8

CONCRETE PAVEMENT, 9 - INCH *

Sec	Location	Sq. Yd.
1	Brown Deer Road	
	213 + 49.19 to R.R. Tracks - Lt. Mainline	28,800
	R.R. Tracks to 296 + 65 - Lt. Mainline	4,413
	213 + 49, 19 to 216 + 60 - Median Opening and Left Turn Lane	407
	219 + 36 to 223 + 00 - Median Opening and Left Turn Lane	510
	225 + 99 to 229 + 75 - Median Opening and Left Turn Lane	509
	237 + 00 to 243 + 35 - Median Openings and Left Turn Lane	1,146
	239 + 49 to 240 + 44 - Lt. Apron	160
	250+60 to 254+60 - Median Opening and Left Turn Lanes and Lt. Apron	974
	263 + 60 to 270 + 00 - Median Opening and Left Turn Lanes	832
	266 + 24 to 267 + 18 - Lt. Apron	167
	276+52 to 280+30 - Median Opening and Left Turn Lane	514
	280 + 40 to 285 + 77 - Median Opening and Left Turn Lanes	672
	288 + 64 to 292 + 30 - Median Opening and Left Turn Lane	545
	291 + 30 to 297 + 40 - Median Opening and Left Turn Lanes	777
	293 + 88 to 294 + 71 - Lt. Apron	140
	213 + 49. 19 to R.R. Tracks - Rt. Mainline	28,823
	R.R. Tracks to 296 + 65 - Rt. Mainline	4,390
	213 + 49. 19 to 214 + 01 - Rt. Apron	100
	219 + 70 to 220 + 48 - Rt. Apron	112
	226 + 30 to 227 + 16 - Rt. Apron	134
	239 + 42 to 240 + 42 - Rt. Apron	198
	251 + 16 to 252 + 09 - Rt. Apron	156
	266 + 25 to 267 + 11 - Rt. Apron	136
	288 + 89 to 289 + 71 - Rt. Apron	128
	293 + 96 to 294 + 86 - Rt. Apron	157

* INCLUDES 11-INCH PAVEMENT

CONCRETE CURB & GUTTER, 31- INCH

Sec.	Location	Lin. Ft.
1	Brown Deer Road	
	213 + 49. 19 to 239 + 96 - Lt. Outside	2,642
	213 + 64 to 220 + 00 - Median	1,208
	213 + 27 to 220 + 00 - Rt. Outside	680
	220 + 00 to 226 + 73 - Median	1,229
	220 + 00 to 226 + 73 - Rt. Outside	664
	226 + 73 to 237 + 25 - Median	2,044
	237 + 25 to 239 + 96 - Median	419
	226 + 73 to 239 + 96 - Rt. Outside	1,318
	239 + 96 to 266 + 69 - Lt. Outside	2,720
	239 + 96 to 243 + 00 - Median	509
	243 + 00 to 251 + 59 - Median	1,660
	251 + 59 to 253+ 68 - Median	360
	253+ 68 to 266+ 69 - MEDIAN	2,470
	239 + 96 to 251 + 59 - Rt. Outside	1,251
	251 + 59 to 266 + 69 - Rt. Outside	1,524
	266 + 69 to R.R. Tracks - Lt. Outside	1,933
	266 + 69 to 277+00 - Median	2175 1,975
	277+60 to 282 + 75 - Median	826 1,036
	283+40 to R.R. Tracks - Median	440
	266 + 69 to R.R. Tracks - Rt. Outside	1,888
	R.R. Tracks to 294 + 34 - Lt. Outside	872
	294 + 34 to 296 + 65 - Lt. Outside	239
	R.R. Tracks to 289 + 30 - Median	687
	289 + 30 to 294 + 34 - Median	880
	294 + 34 to 297 + 40 - Median	474
	R.R. Tracks to 289 + 30 - Rt. Outside	365
	289 + 30 to 294 + 34 - Rt. Outside	511
	294 + 34 to 296 + 65 - Rt. Outside	222
	298+50± TO 300+00± MEDIAN	106

CONCRETE SIDEWALK, 5-INCH

Sec.	Location	Sq. Ft.
1	9 + 00 to 9 + 13 (37' Rt.) 60th St.	70
2	277+28 RT.	88 75
2	283+07 RT.	295

METAL CONDUIT, 3- INCH

Sec.	Location	L.F.
1	9 + 35 (68th) - 19' Lt. to 9 + 35 (68th)-19' Rt.	38
	214 + 05 - 56.5' Lt. to 214 + 05 - 1.5' Lt.	55
	214 + 05 - 13.5' Rt. to 214 + 05 - 56.5' Rt.	43
	237 + 12 - 1' Lt. to 237 + 63 - 1' Lt.	51
	239 + 47 - 59' Rt. to 239 + 35 - 9' Lt.	67
	239 + 35 - 9' Lt. to 239 + 56 - 66' Lt.	60
	239 + 56 - 66' Lt. to 240 + 38 - 66' Lt.	80
	239 + 47 - 59' Rt. to 240 + 28 - 65' Rt.	80
	240 + 28 - 65' Rt. to 240 + 60 S/L	72
	240 + 60 - S/L to 240 + 38 - 66' Lt.	68
	266 + 15 - 51.5' Rt. to 266 + 15 - 3.5' Lt.	55
	251+20-51.5'RT. to 251+20-1.5'RT.	50
	251+20-8.5'LT. to 251+20-61.5'LT. RT.	53
	9+22(56ST.)-19.5'LT. to 9+22(56ST.)-21.5'LT.	41
	252+05-51.5 RT. to 252+05-1.5' LT	53
	252+05-6.5'LT. to 252+05-61.5' LT.	55
	266 + 15 - 16.5' Lt. to 266 + 15 - 61.5' Lt.	45
	9 + 35 (51st) - 21.5' Lt. to 9 + 35 (51st)-21.5'Rt.	43
	10 + 80(51st) - 24.5' Lt. to 10 + 80(51st)-24.5'Rt.	49
	267.+ 25 - 51.5' Rt. to 267 + 25 - 7.5' Rt.	44
	267 + 25 - 7.5' Lt. to 267 + 25 - 61.5' Lt.	54
	276+87 -13.5' Rt. to 276+87 - 56.5' Rt.	43
	276+87 - 1.5' Lt. to 276+87 - 56.5' Lt.	53 55
	277+72 - 13.5' Rt. to 277+72 - 56.5' Rt.	43
	277+72 - 0.5' Lt. to 277+72 - 56.5' Lt.	56
	282+60 - 1.5' Rt. to 282+60 - 56.5' Rt.	55
	282+60 -12.5' Lt. to 282+60 - 56.5' Lt.	44
	282+88 - 59' Rt. to 283+26 - 59' Rt.	56
	283+55 - 12.5' Rt. to 283+55 - 56.5' Rt.	44
	283+55 - 2.5' Lt. to 283+55 - 56.5' Lt.	54
	288+85 - 9.5' Rt. to 288+85 - 56.5' Rt.	47
	288+85 - 9.5' Lt. to 288+85 - 56.5' Lt.	47
	289+09 - 65' Rt. to 289+52 - 65' Rt.	43
	289+85 - 12.5' Rt. to 289+85 - 56.5' Rt.	44
	289+85 - 2.5' Lt. to 289+85 - 56.5' Lt.	54
	293+90 - 0.5' Rt. to 293+90 - 56.5' Rt.	56
	293+90 - 11' Lt. to 293+90 - 57' Lt.	46
	57 + 58 (D. Dr.)-19.5' Rt. to 57 + 58(D. Dr.) -19.5' Lt.	39
	59 + 17(D. Dr.)-19.5' Rt. to 59 + 17(D. Dr.) -19.5' Lt.	39
	294 + 85 - 12.5' Rt. to 294 + 85 - 56.5' Rt.	44
	294 + 80 - 0.5' Lt. to 294 + 80 - 56.5' Lt.	56
	288+55 S/L-12'LT. TO 12'RT.	24
	253+30-51.5'RT. to 253+30-6.5' LT.	58
	253+30-8.5'LT. to 253+30-62.5' LT.	54
	254+15-61.5'LT. to 254+15-13.5' LT	48
	254+15-1.5'RT. to 254+15-51.5'RT.	50
	253+42-80'LT. to 253+92-80'LT.	50
	277+09-59' RT. to 277+47-59' RT.	58 56
	278+26 278+64	
	(CONT'D ON SHEET 3B)	

FIBER CONDUIT, 3 - INCH

Sec.	Location	L.F.
1	216 + 05 - 58' Lt. to 216 + 05 - 9' Lt. -2@49'	98
	237 + 05 - 7' Rt. to 237 + 05 - 52' Rt. -2@45'	90
	238 + 75 - 2' Lt. to 238 + 75 - 12' Rt.	14
	241 + 10 - 8' Lt. to 241 + 10 - 22' Lt.	14
	242 + 70 - 61.5' Lt. to 242 + 70 - 8.5' Lt. -2@53'	106
	264 + 15 - 2.5' Rt. to 264 + 15 - 51.5'-Rt. -2@49'	98
	269 + 20 - 10.5' Lt. to 269 + 20 - 61.5' Lt. - 2@51'	102
	224+52, 2'LT. TO 224+52, 52'RT. 2@54	108
	228+90, 62'LT. TO 228+90, 8'LT. 2@54	108

DETAIL SUMMARY SHEET OF MISCELLANEOUS QUANTITIES

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 70		
PROJECT DESIGNATION		
T034-1 (13)	38	70

PULLBOXES

Sec.	Location	Each
1	239 + 47 - 59' Rt.	1
	239 + 35 - 9' Lt.	1
	239 + 56 - 66' Lt.	1
	240 + 38 - 66' Lt.	1
	240 + 60 - ℄	1
	240 + 28 - 65' Rt.	1

STEEL PLATE BEAM GUARD, CLASS B

Sec.	Location	L.F.
1	286 + 36 (Sec. Line) - 15' Rt. -286 + 36 (Sec. Line) - 15' Lt.	30
	9+32 T/L 52nd. St. - 2' Rt.	30

SALVAGED TOPSOIL

Sec.	Location	S.Y.
1	Brown Deer Road	
	213 + 49. 19 to 239 + 96 - Lt.	7,613
	213 + 64 to 220 + 09 - Median	1, 681
	213 + 64 to 220 + 09 - Rt.	2,505
	220 + 09 to 226 + 73 - Median	1, 727
	220 + 09 to 226 + 73 - Rt.	2, 033
	226 + 73 to 237 + 25 - Median	3, 100
	237 + 25 to 239 + 96 - Median	427
	226 + 73 to 239 + 96 - Rt.	2, 271
	239 + 96 to 266 + 69 - Lt.	5,251
	239 + 96 to 243 + 00 - Median	523
	243 + 00 to 251 + 59 - Median	2, 663
	251 + 59 to 266 + 69 - Median	4, 258
	239 + 96 to 251 + 59 - Rt.	4,442
	251 + 59 to 266 + 69 - Rt.	3, 034
	266 + 69 to R. R. Tracks - Lt.	4,438
	266 + 69 to276 + 50 - Median	2, 756
	276 + 50 to 282 + 75 - Median	1, 574
	282 + 75 to R. R. Tracks - Median	622
	266 + 69 to R. R. Tracks - Rt.	6,343
	R. R. Tracks to 294 + 34 - Lt.	3,747
	294 + 34 to 296 + 65 - Lt.	683
	R. R. Tracks to 289 + 30 - Median	1, 092
	289 + 30 to 294 + 34 - Median	946
	294 + 34 to 297 + 40 - Median	536
	R. R. Tracks to 289 + 30 - Rt.	1, 761
	289 + 30 to 294 + 34 - Rt.	2,566
	294 + 34 to 296 + 65 - Rt.	459
	W. River Lane and "C" Line	1,949

CONCRETE DRIVEWAY

Sec.	Location	Sq. Yd.
2	278+35 ~~277+28~~ - Rt.	166 ~~143~~
	280 + 39 - Lt.	53
	283+07- Lt.	53
	283+07- Rt.	438
	284 + 76 - Lt.	53

METAL CONDUIT, 2-INCH

Sec.	Location					L.F.
1	239 + 35	B.D.	- 9' Lt.	TO	239 + 43 B.D. - 15' Lt.	12
	239 + 35	B.D.	- 9' Lt.	TO	239 + 43 B.D. - 5' Lt.	11
	239 + 56	B.D.	- 66' Lt.	TO	239 + 60 B.D. - 68' Lt.	6
	239 + 56	B.D.	- 66' Lt.	TO	10 + 79 (60°) - 25' Lt.	22
	239 + 47	B.D.	- 59' Rt.	TO	239 + 49 B.D. - 55' Rt.	7
	239 + 47	B.D.	- 59' Rt.	TO	9+32 (60°) - 31' Lt.	22
	240 + 38	B.D.	- 66' Lt.	TO	10+80 (60°) - 26' Rt.	23
	240 + 38	B.D.	66' Lt.	TO	240+35 B.D. - 65' Lt.	5
	240 + 60	B.D.	- Ctr.	TO	240+49 B.D. - 5' Lt.	14
	240 + 60	B.D.	- Ctr.	TO	240+49 B.D. - 5' Rt.	14
	240 + 28	B.D.	- 65' Rt.	TO	240+44 B.D. - 55' Rt.	22
	240 + 28	B.D.	- 65' Rt.	TO	9+31 (60°) - 27' Rt.	9

TRAFFIC SIGNAL BASES, TYPE I

Sec.		Each
1	239 + 43 B.D. - 15' Lt.	1
	239 + 43 B.D. - 5' Lt.	1
	239 + 49 B.D. - 55' Rt.	1
	10 + 79 (60°) - 25' Lt.	1
	9 + 31 (60°) - 27' Rt.	1
	240+ 35 B.D. - 65' Lt.	1
	240+49 B.D. - 5' Lt.	1
	240+49 B.D. - 5' Rt	1

TRAFFIC SIGNAL BASES, TYPE II

Sec.		Each
1	239 + 60 B.D. - 68' Lt.	1
	9 + 32 (60°) - 31' Lt.	1
	10 + 80 (60°) - 26' Rt.	1
	240+44 B.D. - 55' Rt.	1

CONCRETE HEADER

Sec.		S.Y.
1	Both sides R.R. Tracks Sta. 285B + 58.41	35

METAL CONDUIT, 3-INCH
(CONT'D. FROM SHEET 3-A)

SEC.	LOCATION	L.F.
1	226+24-16'LT. TO 226+37-62'LT.	48
	226+24-5'LT. TO 226+37-55'RT.	60
	226+46-60'RT. TO 226+98-60' RT.	52
	227+06-62'LT. TO 227+17-8'LT.	56
	227+06-55'RT. TO 227+17-6'RT.	50

DETAIL SUMMARY SHEET OF MISCELLANEOUS QUANTITIES

PROJECT ID	SHEET NUMBER	TOTAL SHEETS
2150 2 70		
PROJECT DESIGNATION		
T034-1 (13)	3C	70

W. BROWN DEER RD. (S. T. H. 100) Yardage Tabulation

STA	FILL VOLUME	CUT VOLUME
213+50		
	Ⓐ 1179	
	Ⓑ 1415	
214+00		
	1553	
	1866	
214+50		
	1439	1
	1726	1
215+00		
	991	2
	1190	2
215+50		
	515	38
	618	38
216+50		
	196	185
	236	185
216+50		
	102	365
	123	365
217+00		
	67	441
	81	441
217+50		
	8	536
	10	536
218+00		
		649
		649
218+50		
		677
		677
219+00		
		713
		713
219+50		
		856
		856
220+00		
		927
		927
220+50		
		907
		907
221+00		
		831
		831
221+50		
	7	725
	9	725
222+00		
	10	721
	12	721
222+50		
	2	779
	3	779
223+00		
	2	706
	2	706
223+50		
	8	556
	9	556
224+00		
	27	430
	33	430
224+50		
	26	390
	31	390
225+00		
	6	516
	7	516
225+50		
	15	479
	18	479
226+00		
	23	418
	28	418
226+50		
	16	390
	19	390
227+00		
	42	416
	51	416
227+50		
	58	273
	70	273
228+00		
	61	170
	73	170
228+50		
	67	136
	80	136
229+00		
	104	108
	125	108
229+50		
	175	66
	210	66
230+00		
	262	38
	314	38
230+50		
	314	33
	376	33
231+00		

STA	FILL VOLUME	CUT VOLUME
231+00		
	286	35
	343	35
231+50		
	270	31
	324	31
232+00		
	288	24
	345	24
232+50		
	331	25
	397	25
233+00		
	381	24
	457	24
233+50		
	397	32
	476	32
234+00		
	291	56
	349	56
234+50		
	173	69
	208	69
235+00		
	162	59
	195	59
235+50		
	242	56
	291	56
236+00		
	306	63
	368	63
236+50		
	354	57
	425	57
237+00		
	394	73
	473	73
237+50		
	347	82
	416	82
238+00		
	299	85
	358	85
238+50		
	332	109
	398	109
239+00		
	429	94
	514	94
239+50		
	226	272
	271	272
240+00		
	82	322
	98	322
240+50		
	131	205
	170	205
241+00		
	113	217
	136	217
241+50		
	58	256
	70	256
242+00		
	6	450
	7	450
242+50		
	2	750
	2	750
243+00		
		983
		983
243+50		
		1087
		1087
244+00		
		1178
		1178
244+50		
		1307
		1307
245+00		
		1464
		1464
245+50		
		1562
		1562
246+00		
		1519
		1519
246+50		
		1436
		1436
247+00		
		1360
		1360
247+50		
		1249
		1249
248+00		
		974
		974
248+50		
	14	618
	17	618
249+00		
	76	380
	91	380
249+50		
	95	329
	115	329
250+00		

STA	FILL VOLUME	CUT VOLUME
250+00		
	34	479
	41	479
250+50		
		618
		618
251+00		
	2	700
	3	700
251+50		
	23	713
	28	713
252+00		
	21	771
	25	771
252+50		
		674
		674
253+00		
	2	627
	2	627
253+50		
	3	558
	4	558
254+00		
	4	427
	5	427
254+50		
	2	358
	3	358
255+00		
		384
		384
255+50		
		389
		389
256+00		
		396
		396
256+50		
		452
		452
257+00		
		509
		509
257+50		
		527
		527
258+00		
		522
		522
258+50		
		527
		527
259+00		
		481
		481
259+50		
		407
		407
260+00		
		449
		449
260+50		
	6	449
	7	449
261+00		
	8	368
	10	368
261+50		
	2	370
	3	370
262+00		
		378
		378
262+50		
		397
		397
263+00		
	23	355
	27	355
263+50		
	53	258
	63	258
264+00		
	86	242
	103	242
264+50		
	91	235
	109	235
265+00		
	62	225
	74	225
265+50		
	43	211
	52	211
266+00		
	18	401
	21	401
266+50		
	7	488
	8	488
267+00		
	9	407
	11	407
267+50		
	8	456
	9	456
268+00		
	12	426
	15	426
268+50		
	8	469
	10	469
269+00		

STA	FILL VOLUME	CUT VOLUME
269+00		
	10	481 489
	12	481
269+50		
	52	353 366
	62	353
270+00		
	86	305 316
	103	305
270+50		
	87	283 295
	105	283
271+00		
	87	236 245
	105	236
271+50		
	86	237 244
	103	237
272+00		
	96	240 254
	115	240
272+50		
	108	215 230
	129	215
273+00		
	111	224 244
	133	224
273+50		
	69	260 281
	83	260
274+00		
	30	280 298
	36	280
274+50		
	51	277 291
	62	277
275+00		
	67	291 303
	81	291
275+50		
	36	403 420
	43	403
276+00		
	3	643 671
	3	643
276+50		
		768 752
		768
277+00		
		782 687
		782
277+50		
		737 659
		737
278+00		
		734 742
		714
278+50		
		815 839
		815
279+00		
		827 828
		827
279+50		
		748 762
		748
280+00		
		670 692
		670
280+50		
	3	540 554
	3	540
281+00		
	7	485 499
	8	485
281+50		
	6	467
	7	467
282+00		
	2	509
	2	509
282+50		
		662
		662
283+00		
	9	765
	10	765
283+50		
	29	738
	35	738
284+00		
	44	796
	53	796
284+50		
	52	867
	62	867
285+00		
	119	499
	143	499
285+50		
	435	98
	522	98
286+00		
	695	18
	833	18
286+50		
	846	
	1016	
287+00		
	1291	
	1550	
287+50		
	1403	
	1686	
288+00		

STA	FILL VOLUME	CUT VOLUME
288+00		
	1294	
	1552	
288+50		
	1106	
	1327	
289+00		
	570	11
	684	11
289+50		
	351	41
	421	41
290+00		
	383	77
	460	77
290+50		
	328	98
	394	98
291+00		
	329	90
	395	90
291+50		
	364	131
	437	131
292+00		
	339	254
	407	254
292+50		
	276	376
	332	376
293+00		
	218	444
	261	444
293+50		
	176	500
	211	500
294+00		
	101	546
	122	546
294+50		
	73	508
	88	508
295+00		
	83	402
	99	402
295+50		
	38	273
	46	273
296+00		
	21	210
	25	210
296+50		
	3	43
	4	43
296+65		
	3	26
	4	26
297+40		

68th STREET Yardage Tabulation

STA	FILL VOLUME	CUT VOLUME
8+00		
	Ⓑ 11	15
8+50		
	50	3
9+00		
	84	1
9+25		

66th STREET Yardage Tabulation

STA	FILL VOLUME	CUT VOLUME
8+50		
		50
9+00		
		46
9+25		

64th STREET Yardage Tabulation

STA	FILL VOLUME	CUT VOLUME
8+51		
		75
9+00		
		60
9+25		
		58
9+40		

60th STREET Yardage Tabulation

STA	FILL VOLUME	CUT VOLUME
8+00		
		76
8+50		
		116
9+00		
	20	60
9+20		
10+86		
	21	3
11+00		
	48	21
11+50		
	13	29
12+00		

56th STREET Yardage Tabulation

STA	FILL VOLUME	CUT VOLUME
8+40		
		2
8+50		
		46
9+00		
		7
9+20		

51st STREET Yardage Tabulation

STA	FILL VOLUME	CUT VOLUME
8+50		
		66
9+00		
		53
9+24		
10+86		
		37
11+00		
		69
11+50		

60-INCH PIPE OUTFALL Yardage Tabulation

STA	FILL VOLUME	CUT VOLUME
10+93		
		642
12+00		
		424
13+00		
		361
14+00		
		291
15+00		

INTERSECTION "C" Yardage Tabulation

STA	FILL VOLUME	CUT VOLUME
0+72		
	98	41
1+22		

W. RIVER LANE Yardage Tabulation

STA	FILL VOLUME	CUT VOLUME
286+38		
	1	12
286+70		
	36	42
287+00		
	41	27
287+50		
	22	38
288+00		
	14	84
288+50		
	11	107
289+00		
	46	81
289+50		
	28	42
289+88		

EARTHWORK SUMMARY

C.C.O. #1

UNCLASSIFIED EXCAVATION	74,958 ~~74,800~~ C.Y.
FILL (INCLUDING 1.2 SHRINKAGE FACTOR)	31,600 C.Y.
(WASTE) EXCESS	~~43,200~~ 43,358 C.Y.

Ⓐ ACTUAL FILL VOLUME (TYPICAL)
Ⓑ FILL VOLUME INCREASED BY 1.2 SHRINKAGE FACTOR (TYPICAL)

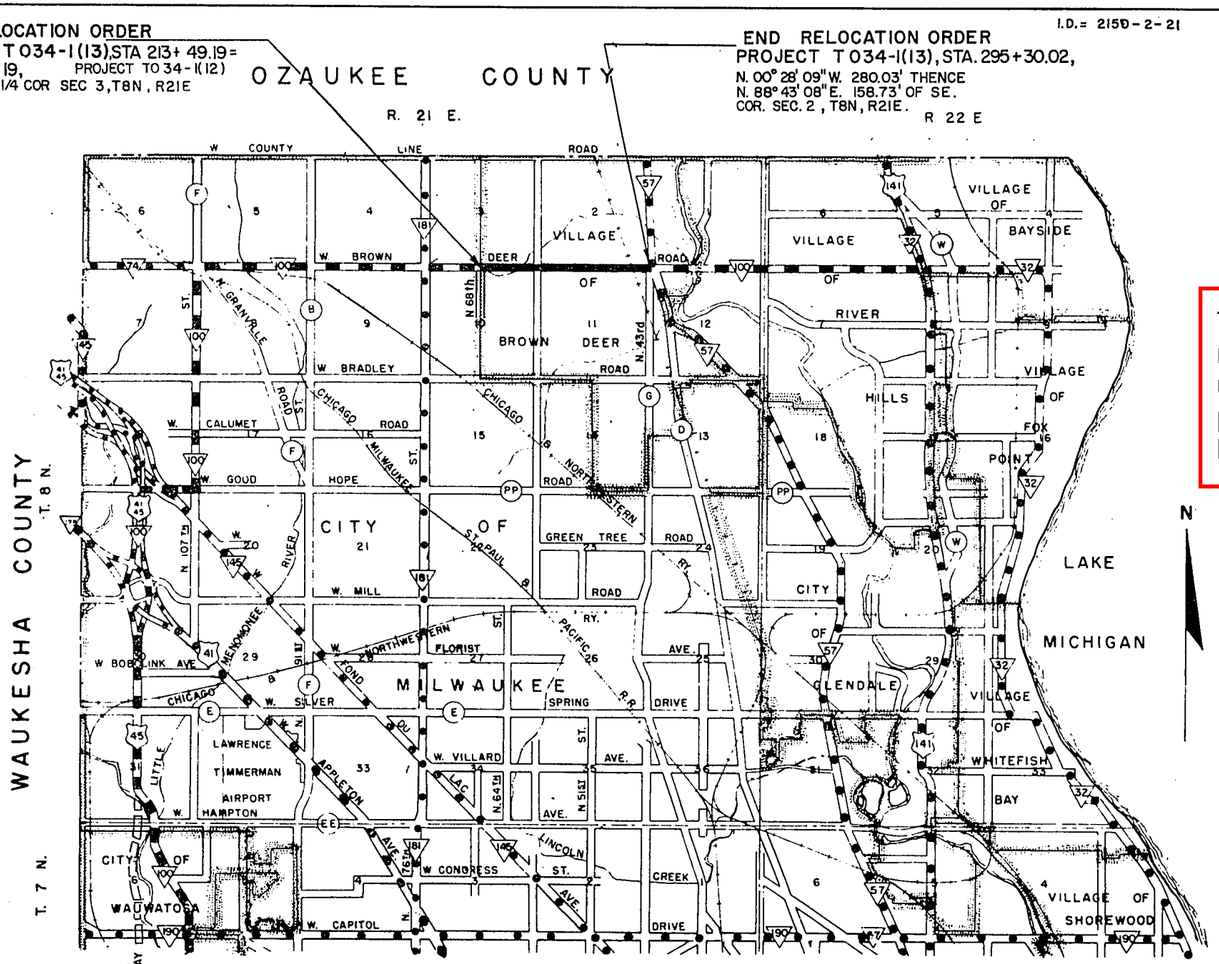
STANDARD ABBREVIATIONS

ABANDON	ABND.	MAILING ADDRESS
ABSTRACT	ABS.	MANHOLE
ACCESS POINT	A. P.	MANUFACTURING
ACRES	AC.	MAXIMUM
ADDITION	ADD.	MEASURED
AGRICULTURAL	AGRI.	MILE
AHEAD	AH.	MILK ROOM
AND OTHERS	ET. AL.	MINIMUM
AND WIFE	ET. UX.	MONUMENT
APARTMENT	APT.	MOTEL
ASSUMED	(A)	MUNICIPAL
AUXILIARY REFERENCE LINE	A. R.	NORTHEAST
AVENUE	AVE.	NORTHWEST
BACK	BK.	NUMBER
BARN	B.	OUTLOT
BASE LINE	B	PARALLEL
BEARING LONG CHORD	B. L. C.	PAVEMENT
BITUMINOUS	BIT.	PERMANENT
BLOCK	BLK.	POINT OF CURVATURE
BOULEVARD	BLVD.	POINT OF INTERSECTION
BRICK	BRK.	POINT OF TANGENCY
BUILDINGS	BLDGS.	POINT OF COMPOUND CURVE
CATCH BASIN	C. B.	POINT OF REVERSE CURVE
CEMETERY	CEM.	POINT ON CURVE
CENTERLINE	℄	PRIVATE DRIVE
CENTRAL ANGLE	Δ	PROJECT
CHANNEL	CH.	PROPERTY LINE
CHANNEL CHANGE	CH. CH.	QUIT CLAIM DEED
CHICKEN HOUSE	C. H.	RADIUS
COMMERCIAL	COMM.	RAILROAD
COMPANY	COM.	RAILWAY
COMPUTED	(C)	REFERENCE LINE
CONCRETE	CONC.	RELOCATED
CONSTRUCTION	CONST.	REQUIRED
CORN CRIB	C. C.	RESIDENTIAL
CORNER	COR.	RESTAURANT
CORPORATION	CORP.	RIGHT
CORRUGATED	CORR.	RIGHT OF WAY
COUNTY	CO.	ROAD
COUNTY TRUNK HIGHWAY	C. T. H.	ROADWAY
CREEK	CR.	SANITARY
CULVERT	CULV.	SCALED
DEED	(D)	SCHOOL
DEGREE OF CURVE	D	SECTION
DISPOSAL	DISP.	SERVICE STATION
DISTRICT	DIST.	SEPTIC TANK
DRIVE	DR.	SIDEWALK
DRIVEWAY	DWY.	SHED
ESTATE	EST.	SOUTHEAST
EXISTING	EX.	SOUTHWEST
EXTERNAL DISTANCE	E	SPECIAL CROSSING
FACTORY	FACT.	SPECIAL DRIVE
FEDERAL AID PROJECT	F. A. P.	SQUARE
FIELD ENTRANCE	F. E.	STANDARD
FIRE HYDRANT	F. H.	STATE TRUNK HIGHWAY
FOOT (FEET)	FT.	STATION
FOUNDATION	FDN.	STORY
FRAME	FR.	STREET
GARAGE	G.	SUBDIVISION
GOVERNMENT	GOV'T.	SURVEY
GREEN HOUSE	G. H.	TANGENT
HIGHWAY	HWY.	TANGENT LENGTH OF CURVE
HOTEL	HO.	TAPER
HOUSE	H.	TAVERN
HOUSE TRAILER	H. T.	TEMPORARY
INCHES	IN.	TRANSIT LINE
INCORPORATED	INC.	TRANSMISSION TOWER
INCLUSIVE	INCL.	UNITED STATES COAST & GEODETIC SURVEY
INTERSECTION ANGLE	I.	UNITED STATES GEOLOGICAL SURVEY
INTERSTATE HIGHWAY	I. H.	UNITED STATE HIGHWAY
IRON PIN	I. P.	VENDEE
ISLAND	IS.	VENDOR
LEFT	LT.	VITRIFIED
LENGTH OF CURVE	L	WAREHOUSE
LESSEE	LSE.	WATER TOWER
LESSOR	LSR.	WELL
LIMITED HIGHWAY EASEMENT	L. H. E.	WINDMILL
MACHINERY SHED	M. S.	WOOD
MAGNETIC	MAG.	
#0000	S1/4 COR SEC 3, T8N, R21E	
	M. H.	
	MFG.	
	MAX.	
	(M)	
	MI.	
	M. R.	
	MIN.	
	MON.	
	MO.	
	MCPL.	
	NE	
	NW	
	NO.	
	O. L.	
	PLL.	
	PAV'T.	
	PERM.	
	P. C.	
	P. I.	
	P. T.	
	P. C. C.	
	P. R. C.	
	P. O. C.	
	P. D.	
	PROJ.	
	P. L.	
	Q. C. D.	
	R	
	RR.	
	RY.	
	℞	
	REL.	
	REQ'D.	
	RES.	
	REST.	
	RT.	
	R/W	
	RD.	
	RDWY.	
	SAN.	
	(S)	
	SCH.	
	SEC.	
	S. S.	
	SEP.	
	SWK.	
	S.	
	SE	
	SW	
	S. C.	
	S. D.	
	SQ.	
	STD.	
	S. T. H.	
	STA.	
	STY.	
	ST.	
	SUBD.	
	(S)	
	TAN.	
	T	
	TAP.	
	TAV.	
	TEMP.	
	℄	
	T. T.	
	U. S. C. & G. S.	
	U. S. G. S.	
	U. S. Highway	
	VDE.	
	VDR.	
	VIT.	
	WH.	
	W. T.	
	W.	
	WM.	
	WD.	

BEGIN RELOCATION ORDER
PROJECT T 034-1(13), STA 213+49.19 =
STA 213+49.19, PROJECT TO 34-1(12)

END RELOCATION ORDER
PROJECT T 034-1(13), STA. 295+30.02,
N. 00° 28' 09" W. 280.03' THENCE
N. 88° 43' 08" E. 158.73' OF SE.
COR. SEC. 2, T8N, R21E.

I.D.= 2150-2-21



N

LOCATION SKETCH

0 1 2 3 MILES

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE	CLASS AND AGREEMENT FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.13		4 WIS.	4	-
CONST. PROJECT T 034-1(13)					4	70

2150-2-70

NOTE BOOKS
67021
67045
67073
67087

The most current Right of Way information should be viewed in DOTView using the Real Estate project ID. The plat information contained in this as-built plan may not be the final record.

CONVENTIONAL SIGNS

- STATE LINE
- COUNTY LINE
- TOWNSHIP AND RANGE LINES
- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- NEW CENTERLINE
- NEW R/W LINE
- OLD R/W LINE
- PROPERTY LINE — P.L. +00.0
- CORPORATE LIMITS — (NAME)
- SLOPE INTERCEPTS — slope intercept
- LOT, TIE AND OTHER MINOR DASHED LINES
- UNDERGROUND FACILITY (POWER, TELEPHONE, TELEGRAPH, GAS, ETC.) — (Name or Type)
- NO ACCESS
- LIMITED HIGHWAY EASEMENT

- CEMETERY — Cem.
- FOUNDATION — Fdn.
- GAS PUMP ISLAND — Gas Pump
- BUILDING — type
- IRON PIN — I.P.
- POWER POLE
- TELEPHONE POLE
- RAIL LINE
- TRANSMISSION TOWER AND LINE
- UNDERGROUND CABLE MARKER
- WELL
- STONE MONUMENT
- SEPTIC TANK
- WINDMILL

- HIGHWAY HIGHWAY SEPARATION
- HIGHWAY OVERPASS
- RAIL LINE OVERPASS
- ALL OTHER BRIDGES
- STREAM OR RIVER — (name)
- LAKE — (name)
- CATTLE PASS
- ℄ RELOCATED STREAM OR RIVER
- TRAVELED WAY (Shown only in area of Frontage Roads, Interchanges or Dual Lanes)

REVISION DATE	
SEPT. 18, 1968	
DEC. 16, 1968	
JAN. 8, 1969	

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T 034 - 1(13)
BROWN DEER RD.
North 68th St. to North 43rd St.
S.T.H. 100 MILWAUKEE COUNTY
SCALE
LENGTH 1.549 MILES FEET
DATED APR 9 1969

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTERESTS REQUIRED	ACRES	AREA BEFORE ACRES	AREA AFTER ACRES
1	1.6&4.7	Holton & Hunkel G.H. Co.	Fee and L.H.E. & Right of Entry	1.31	Extensive	Extensive
2						
3	4.6	Wisconsin Electric Power Co.	Highway Easement & Right of Entry	0.45	Extensive	Extensive
4						
5	4.6	C.M.ST.P.&P. Rd.	Highway Easement	0.38	Extensive	Extensive
6	4.6	Humble Oil & Refining Co.	Fee & L.H.E.	0.40	0.40	—
7	4.6	[illegible] James Tobin, Jr.	Fee & L.H.E.	1.02	9.63	8.61
8	4.6	Jack Genelman Etal	Fee & L.H.E.	0.18	3.71	3.53
9	4.6	John Lockman	Fee & L.H.E.	0.05	1.34	1.29
10	4.6	Philip J. Hohlweck	Fee & L.H.E.	0.18	5.25	5.07
11	4.6	Earl Gengler	Fee & L.H.E.	0.13	4.00	3.87
12	4.5, 4.6	Est. of A.M. Gengler	Fee & L.H.E.	0.51	42.50	41.99
13	4.5	American Oil Co.	Fee & L.H.E.	0.27	0.95	0.68
14	4.4, 4.5	Village of Brown Deer	Fee & Right of Entry	0.49	48.91	48.42
15						
16	4.4	Caroline Zacharias, Etal	Fee & L.H.E.	0.03	7.96	7.93
17	4.4	Edwin Zacharias	Fee & L.H.E.	0.05	0.79	0.74
18	4.4	Caroline Zacharias	Fee & L.H.E.	0.05	0.79	0.74
19	4.4	Daniel C. Stern	L.H.E.	—	—	—
20	4.4	Daniel C. Stern	Dedication	—	—	—
21	4.3&4.4	Brown Deer Com. Meth. Church	Fee & L.H.E.	0.61	6.29	5.68
22	4.3	John E. Hacker	Fee & L.H.E.	0.28	1.39	1.11
23						
24	4.3	Harold G. Richter	Fee & L.H.E.	0.07	0.42	0.35
25	4.3&4.4	Francis J. Schroedel	Fee & L.H.E.	2.17	136.11	133.94
26						
27	4.2	William H. Lathrop	Fee & L.H.E.	0.05	0.76	0.71
28	4.2	Eugene H. Berger	Fee & L.H.E.	0.05	0.76	0.71
29	4.2	Lloyd G. Footh	Fee & L.H.E.	0.05	0.76	0.71
30	4.2	Edward J. Butler	Fee & L.H.E.	0.05	0.76	0.71
31	4.2	Arnold Petri	Fee & L.H.E.	0.05	0.76	0.71
32	4.2	Frank Jaeger	Fee & L.H.E.	0.14	0.85	0.71
33	4.2	Otto Harass	Fee & L.H.E.	0.04	0.63	0.59
34	4.2	Siegfried Wiedmann	Fee & L.H.E.	0.06	0.90	0.84
35	4.2	John J. Ullenberg	Fee	0.07	0.56	0.49
36						
37						
38						
39						
40	4.3	Arthur Larson	L.H.E.	—	—	—
41						
42						
43	4.3	Adelman Stores Inc.	Fee & L.H.E.	0.09	0.94	0.85
44	4.3&4.4	W.E. O'Rourke	Dedication	—	—	—

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTERESTS REQUIRED	ACRES	AREA BEFORE ACRES	AREA AFTER ACRES
60	4.5&4.6	Charles W. Wright Foundation of Badger Meter Inc.	Fee & L.H.E.	1.33	36.32	34.99
61	4.6 (2)	Badger Meter Inc.	Fee	0.21	17.42	17.21
109	4.2 (2)	Siegfried Wiedmann	Dedication	—	—	—
110	4.2	William H. Lathrop	Dedication	—	—	—
111	4.2	Eugene W. Berger	Dedication	—	—	—
112	4.2	Lloyd G. Footh	Dedication	—	—	—
113	4.2	Edward J. Butler	Dedication	—	—	—
114	4.2	Arnold Petri	Dedication	—	—	—
115	4.2	Otto Harrass	Dedication	—	—	—
116	4.3 & 4.4	O'Rourke Co., Inc.	L.H.E.	—	—	—
117	4.6	C.M.ST.P.&P. Rd.	Fee	0.19	0.19	0.0
118	4.6 (2)	Wisconsin Electric Power Co.	Modification of Easement	-	-	-
119	4.4 (2)	W.E. O'Rourke	Fee & L.H.E.	0.15	0.96	0.81
120	4.4 (2)	Wisconsin Electric Power Co.	Modification of Easement	-	-	-
121	4.5&4.6(2)	Wisconsin Electric Power Co.	Termination of Prescriptive Rights	-	-	-
122	4.5 (2)	Robert A. Bechtel	L.H.E.	-	-	-
123	4.5 (2)	Claude Bechtel	L.H.E.	-	-	-
124	4.4 (3)	Wisconsin Electric Power Co.	Termination of Prescriptive Rights	—	—	—
125	4.2 (2)	Wisconsin Electric Power Co.	Modification of Easement	—	—	—
126	4.4 (3)	Caroline Zacharias	Dedication	—	—	—
127	4.4 (3)	Edwin Zacharias	Dedication	—	—	—
128	4.2 (3)	William H. Lathrop	Right of Entry	—	—	—

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE	CLASS AND AGREEMENT FEDERAL	B.P.R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.13		4 WIS.	4.1	
CONST. PROJECT T-034-1(13)					4.1	70

2150-2-70

REVISION DATE
SEPT. 18, 1968
DEC. 16, 1968
JAN. 8, 1969

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T034-1 (13)

W. BROWN DEER ROAD

N. 68th ST. TO N. 43rd ST.

S.T.H. 100 MILWAUKEE COUNTY

SCALE

LENGTH 1.549 MILES) FEET DATED APRIL 24, 1968

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE	CLASS AND AGREEMENT FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.13		4 WIS	4.2	
CONST. PROJECT	T034-1(13)				4.2	70

2150-2-70

PART OF E. 20.56 AC. OF W. 38.68 AC. OF W. 1/2-SE 1/4

℄ OF W.E.P. CO. EASEMENT

W. 18.32 AC. OF SE. 1/4

W. L. I. E. 20.56 AC. OF W. 38.68 AC. OF W. 1/2, SE. 1/4

160 RODS

40

40'

+49.19

P.L.

25

FRANCIS J. SCHROEDEL

BEGIN RELOCATION ORDER PROJ. T034-1(13), STA. 213+49.19 = STA. 213+49.19 ON PROJ. T034-1(12)

30'

190'

75'

15'

264'

EXCEPT FOR BLDG.

#6640

165'

160 RODS

48 RODS

LH. SLOPE (TEMP.) 0.03 AC.

EXCEPT FOR BLDG.

64.10

SEE ALSO SHEET 4.3

MARCH LINE

215

215

18.32 RODS

165'

150'

150'

180'

220

27.16 RODS

180'

150'

75'

50'

25'

225

W. BROWN DEER RD. (S.T.H. 100)

208.50'

N 435,686.12
E 2,534,927.27
W.S.P.C.S. (67)

RES. FOR HWY.

WILLIAM H. LATHROP

#6701

EUGENE W. BERG (EXCEPT PT. USED FOR HWY.)

LH. SLOPE (TEMP.) 0.03 AC.

#6625

#6609

EDWARD J. [illegible]

LLOYD G. FOOTH

E. 150' OF W. 480' OF N. 279.85' OF N.E. 1/4

RIGHT OF ENTRY

180' & PLL. W/N. LI.

150' & PLL. W/N. LI.

279.85' & PLL. W/W. LI.

30' RES. FOR HWY.

℄ 18" DRAIN TILE IN COUNTY FARM DRAIN NO. 18 (NOTICE NO. 1463)

N. 66TH ST.

N. 68 TH ST.

W.E.P. CO. EASEMENT

#6525

6501

LH. SLOPE (TEMP.) 0.03 AC.

ARNOLD PETRI

6439

OTTO HARRASS

#6409

333.55'(D)

208.55' & PLL. W/N. LI.

#6391

JEROME F. LISI

RALPH J. ULLENBERG

N. 64TH ST.

279.85'

NW 1/4

E. 1/4

SE 1/4

CURVE 500 R = 17.00' T = 4.87' L = 9.49' Δ = 31°58'59" CH = 9.36' BRG = N.73°59'12"E

CURVE 300 R = 57.00' T = 16.77' L = 32.62' Δ = 32°47'19" CH = 32.18' BRG = N.73°34'31"E

CURVE 650 R = 92.00' T = 27.09' L = 52.70' Δ = 32°49'09" CH = 51.90' BRG = N.73°35'26"E

CURVE DATA (PAR. 35)

NO VEHICULAR INGRESS OR EGRESS BY PLAT

FRONTAGE RD.

W. 50.00' ON W.

S. 66TH ST.

CURVE 500

CURVE 300

CURVE 650

SITE 33.6

MEADOW LANE

REVISION DATE
SEPT. 18, 1968
DEC. 6, 1968
JAN. 6, 1969

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T034-1(13)

W. BROWN DEER RD.

N. 68TH ST. TO N. 43RD ST.

ST. H. 100 MILWAUKEE COUNTY

SCALE 0 50 100 FEET

LENGTH 1,549 MILES

DATED APR. 24, 1968

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT: STATE	FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.13		4 WIS.	4.3	
CONST. PROJECT	T034-1(13)				4.3	70

FRANCIS J. SCHROEDEL

(25) SEE ALSO SHEET 4.2

L.H.E. SLOPE (TEMP.) SEE SHEET 4

6.20" DRAIN TILE IN COUNTY FARM DRAIN NO. 18 BEAVER CREEK (NOTICE NO. 1463)

E.L.I. S.48 RODS OF W.60 RODS OF E. 1/2 - SE 1/4

492'

33'

33'

+96.06'

PL 166

64' PLL W/S L.

PL W/E L.I.

L.H.E. SLOPE (TEMP) 0.03 AC.

6' X 237'

17.29'

6020

L.H.E. SLOPE (TEMP) 0.13 AC.

JOHN E. HACKER

6042

300' @ PLL W/E L.I.

L.H.E. (DRAIN) 0.02 AC. (PERM.)

(24)

HAROLD G. RICHTER

(22)

1 ACRE

20'

15'

7'

125'

73.96 RODS

N 89°51' W. 64'

N 89°51' W. 332'

117.29'

2087'

330'

240'

SEE ALSO SHT. 4.4

S. 7 AC. OF S. 30 AC. OF W. 1/2 OF W. 1/2 OF SW. 1/4 SEC. 2

BROWN DEER COMMUNITY METHODIST CHURCH

T8N R21E 3 2 10 11

N 340,711.42 E 2,537,574.40 W.S.P.C. 9135.2

2/50-2-70 T. 8

(21)

230

W. BROWN DEER, RD. (S.T.H. 100)

235

120'

NO PUBLIC VEHICULAR INGRESS OR EGRESS BY PLAT FRONTAGE STREET

#6391

#6345

#6249

#6253

#6105

ROBERT A. BORCHERT

RICHARD M. THEISON

ARTHUR LARSON

(20)

L.H.E. DRAIN 0.02 AC. (PERM.)

L.H.E. DRAIN 0.03 AC. (TEMP.)

L.H.E. SLOPE 0.05 AC. (TEMP.)

(43)

ADELMAN STORES, INC.

CURVE 5

CURVE 400

N. 89°27' 58" E. 140.34'

N. 89°23' 09" W. 63.00'

330' @ PLL W/N L.I.

CURVE 4

R = 92.00'

T = 24.65'

L = 48.17'

Δ = 30°00'00"

TCH = 47.62'

BRG. = N. 75°12'52" W.

CURVE 3

R = 62.00'

T = 16.63'

L = 32.50'

Δ = 30°01'

CH = 32.13'

BRG. = N. 75°12'52" W.

CURVE 2

CURVE 1

N. 63RD ST.

N. 62ND ST

N. 60TH ST.

328'

36 UNIT APT. BLDG.

(44) SEE ALSO SHT. 4.4

(116) SEE ALSO SHT. 4.4

O'ROURKE CO.

REVISION DATE
SEPT. 18, 1968
DEC. 16, 1968
JAN. 8, 1969

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T034-1(13)

W. BROWN DEER RD.

N. 68TH ST. TO N. 43RD ST.

ST. H. 100 MILWAUKEE COUNTY

SCALE 0 50 100 FEET

LENGTH 1.549 MILES

DATED APR. 24, 1968

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE	CLASS AND AGREEMENT FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.13		4 WIS	4.4	
CONST. PROJECT		7-034-1(13)			4.4	70

2.150-2-70

S. 7 AC. OF S. 30 AC. OF W. 1/2 OF W. 1/2 OF S.W. 1/4 SEC. 2

GREEN BRIAR ESTATES

PARCEL 2 PARCEL 1

DANIEL C. STERN

DANIEL C. STERN

OERT. SURV. MAP #663 REC. AS DOC. 4307864 IN REEL 351, AS IMAGE 1634

RESTRICTED VEHICULAR INGRESS & EGRESS BY COVENANT & AGREEMENT.

PRIVATE DRIVEWAY

L.H.E. (SLOPE) 0.12 AC. TEMP.

CAROLINE ZACHARIAS & EDWIN ZACHARIAS

PART OF S. 10 AC. E. 1/2 E. 1/2 W. 1/2 S.W. 1/4 SEC. 2

152.09' & PLL W/S LI. REC. AS DOC. 3920180

152.09' & PLL W/S LI. REC. AS DOC. 3045368

L.H.E. (SLOPE) 0.04 AC. TEMP.

L.H.E. (SLOPE) 0.02 AC. TEMP.

EDWIN ZACHARIAS

CAROLINE ZACHARIAS

#5530

#5506

#5432

BROWN DEER BLVD.

EAST 40' OF BROWN DEER BLVD. VACATED BY VILLAGE OF BROWN DEER BY RESOLUTION 6830, DATED NOV. 18, 1968.

VILLAGE OF BROWN DEER

L.H.E. (SLOPE) 0.01 AC. TEMP.

BROWN DEER INDUSTRIAL PARK

VILLAGE OF BROWN DEER

VILLAGE WILL REMOVE BLDG. BY 3-1-69

SEE ALSO SHT 4.5 & 4.6

NO VEHICULAR INGRESS OR EGRESS BY PLAT

MATCH LINE

SEE ALSO SHEET 4.3

BROWN DEER COMMUNITY METHODIST CHURCH

#5700

L.H.E. (SLOPE) 0.22 AC. (TEMP.)

W.E.P.CO.

RESERVED FOR HIGHWAY PURPOSES

120' DEDICATED FOR HIGHWAY PURPOSES

214.17'

RESERVE FOR STREET

184.62' TO S.14 COR.

TO S.W. COR. 1/4 SEC. N.88°31'36"E. 1416.80 (D)

334.15'

152.09'

152.09'

255

330.03'

332.66'

339.99'

400'

287.00'

S.03°49'15"W.

N.0°48'E.

100'

30' RES.

P.L.

C/L

W.E. O'ROURKE CO. INC.

136 UNIT APT. BLDG. (UNDER CONSTRUCTION)

L.H.E. (SLOPE) 0.06 AC. TEMP.

RESTRICTED VEHICULAR INGRESS & EGRESS BY CLAUSE IN PLAT.

SEE ALSO SHEET 4.3

N.88°31'36"E.

S.88°31'36"W. 142.14'

N 00°34'40"W. 30.49'

CURVE 200

N.88°31'36"E. 7.00'

CURVE 100

W.E. O'ROURKE

140.03'

CURVE 100
R = 17.00'
T = 7.91'
L = 14.80'
Δ = 49°52'51"
CH = 14.34'
BRG N.63°35'11"E.

CURVE 200
R = 62.00'
T = 16.61'
L = 32.46'
Δ = 30°00'00"
CH = 32.09'
BRG N.73°31'36"E.

CURVE 300
R = 92.00'
T = 19.65'
L = 38.72'
Δ = 24°06'49"
CH = 38.43'
BRG N.70°35'01"E.

20' PEDESTRIAN WALK

BETTY JANE PRESTIN & BETTY LANKE

GLE SON JR.

DAVID L. PAULSON

MICHAEL G ROSANDICH

CARL W. RYBECK

ROBERT L. PAGE, JR.

JOHN F. BAZAN

#5435 #5425 #5413 #5403 #5333 #5325 #5315

WEST WAHNER AVE.

WALL OF ROSE DALE CEMETERY

364.93'

N. 56TH ST.

REVISION DATE
SEPT. 18, 1968
DEC. 16, 1968
JAN. 8, 1969

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T034-1(13)

W. BROWN DEER RD

N 68TH ST. TO N. 43RD ST.

ST.H. 100 MILWAUKEE COUNTY

SCALE 0 50 100 FEET

LENGTH 1.549 MILES

DATED APR. 24, 1968

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE	CLASS AND AGREEMENT FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.13		4 WIS	4.5	
CONST. PROJECT	T034-1(13)				4.5	70

2150-2-70

BROWN DEER INDUSTRIAL PARK

VILLAGE OF BROWN DEER

N 435,780.15
E 2,540,246.46
WISPCS (S.Z.)

SEE ALSO SHT. 4.4

NO VEHICULAR INGRESS OR EGRESS BY PLAT

1-PUBLIC STREET CONNECTION AUTHORIZED BY S.H.C. 12-19-68

HOUSE REMOVED

RIGHT OF ENTRY SLOPE (TEMP.) 0.41 AC.

RIGHT OF ENTRY SLOPE (TEMP.)

P.L.

328.75' & PLL. W/ S.LI.

LHE. SLOPE (TEMP.) 0.03 AC.

LHE. DRAIN. (TERM.) 0.09 AC.

LHE. SLOPE (TEMP.) SEE ALSO SHT. 4.6

℄ ULTIMATE DRAINAGE CHANNEL

SEE ALSO SHT. 4.6

E. LI. OF W. 20 AC. W 1/2 · SE 1/4 · SEC. 11

EST. OF A.M. GENGLER

LHE. SLOPE (TEMP.) 0.034 AC.

LHE. DRAIN. (PERM.) 0.106 AC.

LHE. DRAIN. (PERM.) 0.085 AC.

S. 180' OF W. 328.75' OF SE1/4 SEC. 2, EXCEPT W. 45'

COVENANT REC. AS DOC. #3944311 IN VOL. 4233 PAGE 592

PERM. DRAIN EASE. FOR OPEN DITCH

LHE. SLOPE (TEMP.) 0.10 AC.

THE AMERICAN OIL CO.

RESTRICTION OF ACCESS BY COVENANT

SHED

500' TO S LI SEC. 2

2446.78' TO N LI OF 1/4 SEC.

E. LINE OF 1/4 SEC. 132.00

N. 51 ST.

MATCH LINE

W. BROWN DEER RD. (STH. 100)

PUBLIC SERVICE STREET

ROSEDALE SUBDIVISION NO. 1

ROBERT L. PAGE JR. 7 · JOHN F. BAZAN 6 · DALE E. EGGERT 5 · CARLA R. HENDLER 4 · DAVID SCHMIDT 3 · DONALD SPIEKERMAN 2 · BERTIL WINSTROM 1

VACATED BY RESOLUTION MAY 25, 1967 OFF STREET PARKING

SUNRAY DX OIL CO.

N 110' OF E 110' OF BLOCK 1

ROSE C. FORMAN

VACATED PUBLIC SERVICE STREET BY RESOLUTION

N. 52ND ST.

W. WAHNER AVE.

FRONTAGE ROAD

RESOLUTION JAN. 23, 1958

N. 80.01' FT. LOT 10 LEASED TO WIS. ICE & COAL CO.

WEP CO. SEE ALSO SHT. 4.6

CHARLES W. WRIGHT FOUNDATION OF BADGER METER, INC.

SEE ALSO SHT. 4.6

DIDERRICH 1 ESTATES

REVISION DATE
SEPT. 18, 1968
DEC. 16, 1969
JAN. 8, 1969

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T034-1(13)

W. BROWN DEER RD.

N 68TH ST. TO N. 43RD. ST.

S.T.H. 100 MILWAUKEE COUNTY

SCALE 0 50 100 FEET

LENGTH 1.549 MILES

DATED APR. 24, 1968

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE	FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.13		4 WIS	4.6	
CONST. PROJECT	T034-1(13)				4.6	70

11 2/50-2-70

CURVE DATA

	CURVE "A"	CURVE "B"	CURVE "C"	CURVE "D"
Δ =	7°39'47"	3°28'00"	1°32'00"	0°50'20"
D =	1°21'25"	1°22'00"	1°22'30"	1°22'00"
T =	282.77'	126.86'	55.76'	30.69'
L =	564.70'	253.65'	111.52'	61.38'
R =	4222.20'	4192.20'	4167.20'	4192.20'
L.C. =	564.28'	253.61'	111.52'	61.38'
BRG. =	N.84°44'57.5"E	N.79°11'04"E	N.76°41'04"E	N.75°29'54"E

CURVE DATA R
P.I. = 281+08.95
Δ = 13°30'07"
D = 1°20'00"
T = 508.68
L = 1012.65
R = 4297.50'
L.C. = 1010.31'
BRG. = N.81°49'47.5"E.
P.C. = 276+00.27
P.T. = 286+12.92'

482.88' TO E.LI.-W.1/2-SE.1/4

170.88' TO E. LI.-W.1/2-SE.1/4 SEC.

1142.1'± TO N.S.1/8 LI.

SEE ALSO SHT. 4.5

EST. OF A. M. GENGLER

EARL GENGLER

PHILIP J. HOHLWECK

JOHN LOCKMAN

REC AS DOC. # 3043976 IN VOL # 2911 PAGE # 528

JACK GENDELMAN
JACK ROSEFELT
CORP.

WISCONSIN POWER CO. ELECTRIC

C.M.ST.P. & P. RR.

S.17°31'E 563.52'

RIGHT OF ENTRY FOR SLOPING

EQUATION:
STA 286+12.92 BK =
STA 286+12.53 AH

SEE ALSO SHEET 4.7

EASEMENT TO W.E.P. CO. & W.T. CO.

TRACK
2 RODS
2 RODS

SUB-STATION

CURVE "C"
CURVE "D"
CURVE "B"

REF. LINE
N.75°04'44"E.

HUMBLE OIL & REFINING CO.
DRIVEWAY EASEMENT

W.E.P. CO.

SEE ALSO SHT. 4.5

C.H.E. (SLOPE) 0.32 AC. (TEMP.)

CHARLES W. WRIGHT FOUNDATION OF BADGER METER, INC.

BADGER METER MANUFACTURING CO.

TO S. LINE OF N 1/2 OF 1/4 SEC.

S.00°50'30"W. & PLL W/W LI

N.00°50'30"W. & PLL W/W LI

S.T.H. 100

MATCH LINE

REVISION DATE
SEPT. 18, 1968
DEC. 16, 1968
JAN. 8, 1969

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T034-1(13)

W. BROWN DEER RD.

N. 68TH ST. TO N. 43RD ST.

S.T.H. 100 MILWAUKEE COUNTY

SCALE 0 50 100 FEET

LENGTH 1.549 MILES

DATED APR. 24, 1968

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT: STATE	CLASS AND AGREEMENT: FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.13		4 WIS.	4.7	
CONST. PROJECT	T034-1(13)				4.7	70

899.56' TO E. LI. R.O.W., C.M.ST.P.&P.RD. & PLL. TO S. LI. SEC.

SEE ALSO SHT. 4.6

RIGHT OF ENTRY FOR SLOPING

4410

HOLTON & HUNKEL CO.

CHE SLOPE (TEMP.) 0.25 AC.

850' N. OF S.E. COR. SEC. 2

CURVE E

CURVE DATA

CURVE E

CEDARBURG RD. (FORMERLY)

ACCESS RIGHTS ACQUIRED UNDER PROJ. F02-216

END PAVEMENT 296 + 65

STA. 300+86.77 (PROJ. T034-1(13)) = STA 40+20 (PROJ. F02-2(21)) EQUATION

RR. RD. ROW LINE (OPERATING)

MATCH LINE

W. RIVER LANE

N. 88°34'51"E (C)

N. 88°43'08"E (C)

SLOPE INTERCEPT

RIGHT OF WAY

N 435,846.31 E 2,542,916.89

W.S.P.C.S. (S.Z.)

E. HEDL & R. PFEFFER

DEERWOOD DR. (NEW)

GREEN BAY RD. (ST.H. 57)

REVISION DATE
SEPT. 8, 1968
DEC. 16, 1968
JAN. 8, 1969

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T034-1(13)

W. BROWN DEER RD.

N. 68TH ST. TO N. 43RD ST.

ST.H 100 MILWAUKEE COUNTY

SCALE 0 50 100 FEET

LENGTH 1.549 MILES

DATED APR. 24, 1968

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150-2-70	5	70
PROJECT DESIGNATION: T 034-1(13)		

END PROJECT T 034-1(12) ID 2150-1-71

STA. 213+49.19 BEGIN PROJECT T 034-1(13) ID 2150-2-70

REPLACE 1/4 SEC. COR. MARKER (PROJ. T034-1(13)) SEE LANDMARK MONUMENT DETAIL

T 8 N R 21 E 3 10

BEGIN SHIFT OF C/L TO 5' LT. of SEC. LINE STA. 215+00

CITY OF MILWAUKEE

VILLAGE OF BROWN DEER

R/W

VARIABLE FACE CURB & GUTTER

98.39G

98.96T.C. 98.95T.C. 98.99T.C. 99.07T.C.

98.33G 98.32G 98.44G 98.57G

98.57 98.61 98.69 98.82 99.07 99.32 99.57 99.82 99.91 99.95 99.91 99.82 99.57 99.32 99.07

99.60 FLG. 99.64G 100.14T.C. 99.55 FLG. 99.59G 100.09T.C.

98.94 98.93 98.97 99.05 99.18 99.43 99.68 99.93 100.18 100.27 100.31 100.27 100.18 99.93 99.68 99.43

98.76 98.75 98.79 98.87 99.00 99.25 99.50 99.75 99.87 100.00 100.09 100.13 100.09 100.00 99.75 99.50 99.25 99.12

98.51G 98.50G 98.62G 98.75G

99.22T.C. 99.21T.C. 99.25T.C. 99.33T.C.

98.57G

98.81G

99.56T.C. 99.47T.C. 99.43T.C. 99.43T.C. 99.48T.C. 99.58T.C. 99.71T.C. 99.80T.C. 99.84T.C. 99.80T.C. 99.78 99.94 99.98 99.94 99.88 99.78 99.67 99.55 99.42 99.30 99.18G 99.76T.C. 99.05G 99.71T.C. 98.93G 99.58TC

99.00G 98.88G 98.75G 98.75G 98.88G 99.00G 99.13G 99.25G 99.38G 99.34G 99.85G 99.98G 99.89G 99.80G 99.68G

99.10 99.01 98.97 98.97 99.02 99.12 99.25 99.34 99.38 99.34 99.25 99.12 99.00 98.75 98.50 98.25 98.00 97.75

99.28 99.19 99.15 99.15 99.20 99.30 99.43 99.52 99.56 99.52 99.45F 99.49G 99.43 99.30 99.18 98.93 98.68 98.43 98.18 97.93

98.92 98.83 98.79 98.79 98.84 98.94 99.07 99.16 99.20 99.16 99.07 98.94 98.82 98.57 98.32 98.07 97.82 97.57

98.82G 98.70G 98.57G 98.57G 98.70G 98.82G 98.95G 99.08G 99.20G 99.08G

99.30T.C. 99.21T.C. 99.17T.C. 99.17T.C. 99.22T.C. 99.32T.C. 99.45T.C. 99.54T.C. 99.54T.C. 99.38T.C. 99.54T.C.

98.63G

VARIABLE FACE CURB & GUTTER

+27 END C&G-RT. PROJ. T034-1(12)

NOTE: USE 9" BASE COURSE FROM STA. 210+00 TO 217+00

213+49.19

STH 100 W. BROWN DEER RD.

211 212 213 214 215 216 217

1/4 SEC. COR. 213+49.19 T/L 68th

C&G TRANSV. 6'R+33.25

6'R+94.72

89°-57'-48"

90°-01'-19"

CTR. 25' RAD. 213+27.22-80'RT. = 9+20.01 T/L 68-22' LT.

CTR. 25' RAD. 214+01.24-80' RT. = 9+19.97 T/L 68-52' RT.

T/L 68th St. = 1/4 SEC. LINE

STRUCTURE B-40-409, SEE SHEETS X-40108 REQ'D. TRIPLE 7'X10' CONC. BOX THRU X-40112

C/L ROADWAYS SECTION LINE

VARIABLE FACE CURB & GUTTER

VAR. FACE C. & G.

VARIES

3" BIT. CONC. ON 6" CRUSHED AGGREGATE BASE COURSE

MATCH EXIST. 8+00

8+75

98.66 98.88 98.67 98.83 99.03 98.84 99.13 99.32 99.14

℄ 68th St.

T/L 68th St. = 1/4 SEC. LINE

14' CR. AGG.

12" 24" 60" 75' 15' 20' 8' 30 30A 30B 30C

2-3" FIBER COND. +05

3" MET. COND. +05

SAN. 10"

SAN. 8"

LT. OUTER FLANGE

LT. OUTER GUTTER

LT. MED. FLANGE

LT. MED. GUTTER

INL + 25 98.32

INL + 00 98.33

+50 98.62

INL + 25 98.36

INL + 00 98.51

+50 98.80

PT. (LT.) + 82 98.91

RIGHT

LEFT

P.I. (RT.) + 00 99.50

+ 0.501 % LT.

P.T. (RT.) + 25 99.12

P.C. (RT.) + 50 99.25

P.C. (LT.) +00 100.00

P.I. (LT.) +50 100.25

P.T. (LT.) +00 100.00

P.T. (RT.) + 50 99.25

RT. MED. FLANGE

RT. MED. GUTTER

RT. OUTER FLANGE

RT. OUTER GUTTER

INL + 75 98.75

INL + 50 98.75

INL + 75 98.57

INL + 50 98.57

BEG RAD.

20' Along FLANGE

END RAD.

20' Along FLANGE

Lt. TURN FLANGE

LT. TURN GUTTER

INL + 50

PROFILE FINISHED GRADE ALONG LT. MED. FLANGE

- 0.500 % LT.

- 0.500 % RT.

PROFILE FINISHED GRADE ALONG RT. MED. FLANGE

PROFILE PRESENT GRADE ALONG SECTION LINE

ELEVATION PRESENT GRADE ALONG SECTION LINE

99.0 99.4 98.8 98.5 98.0 97.8 97.6 97.8 98.1 98.8 98.1 98.5 98.7

211 +50 212 +50 213 +50 214 +50 215 +50 216 +50 217

PLATE 5 - PLAN - PROFILE

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 70		
PROJECT DESIGNATION: T034-1 (13)	6	70

END C/L ROADWAYS
SHIFT - 219+00

R/W
16' CR. AGG.
12"
15'
31
18"
32
R/W
15'
98.82 98.57 98.32 97.93 97.53 97.14 96.75 96.36 95.96 95.57 95.18 94.78 94.39
+22 +44
12"
12'
99.18 98.93 98.68 98.29 97.89 97.50 97.11 96.72 96.32 95.93 95.54 95.14 94.75
12'
99.00 98.88 98.75 98.62 98.50 98.30 98.11 97.71 31C 97.32 97.12 96.93 96.73 96.54 96.34 96.14 95.75 95.36 94.96 94.57
98.80G 98.68G 98.55G 98.43G 98.30G 98.18G
99.46T.C. 99.34T.C. 99.21T.C. 99.08T.C. 98.96T.C. 98.76T.C. 39" M.I.S.
VARIABLE FACE CURB & GUTTER
C/L roadways
15'
+36
12"
60' R
220+09.19 SEC. LINE
=10+00L. 66 ST.
96.52
96.18
95.98
96.09
96.19
95.99
95.60
95.21
94.88
10'
12'
20'
60' R
+75
+00
12"
5'
217
218 SECTION LINE
220
221
222
223
W. BROWN DEER ROAD
10'
6'R+76.25
6'R+46.72
32B
97.50 97.25 97.00 96.61 96.21 95.82 31B 95.62 95.43 95.23 95.04 94.64 94.25 93.86 93.46 93.07
12'
97.68 97.43 97.18 96.79 96.39 96.00 95.61 95.22 94.82 94.43 94.04 93.64 93.25
12"
12"
12'
97.32 97.07 96.82 96.43 96.03 95.64 95.44 95.25 95.05 94.86 94.46 94.07 93.68 93.28 92.89
+22 +59 +81 +71 +45 +90 +14
31A
32A
94.95
94.75
20'
20'
+00
16' CR. AGG.
16' CR. AGG.
25'
18' CR. AGG.
DRIVE
R/W
R/W
25'R. +70.24-75'RT.
=9+25.02, 66th St. -39'LT.
94.56
94.80
94.56
12'
12'
34'
25'R. +48.24-75'RT.
=9+24.98, 66th St. -39'RT
Change by owner to match garage.
BEGIN C&G
GRAVEL
CONC WALK
94.22
94.47
94.23
93.87
94.18
93.98
3" Bit. Conc. on 6" CRUSHED AGG. Base Course
Match Exist. 8+50
℄ 66 TH ST.
*6501

LT. MEDIAN FLANGE
LT MEDIAN GUTTER
P.I. +00 (Lt.) 98.50
PROFILE PRESENT GRADE ALONG EXISTING C/L
PROFILE FINISHED GRADE ALONG LT. MEDIAN FLANGE
-0.500% LT.
-0.500% RT.
P.I. +00(RT.) 97.00
-0.7857% LT.
-0.7857% RT.
PROFILE FINISHED GRADE ALONG RT. MEDIAN FLANGE
ELEVATION PRESENT GRADE ALONG EXISTING ℄
99
98
97
95
94
93
98.7 98.9 99.4 99.5 99.5 99.0 99.2 98.9 98.9 98.1 97.7 97.2 96.6
217 +50 218 +50 219 +50 220 +50 221 +50 222 +50 223

PLATE 1 — PLAN — PROFILE D. P. C. & E. L.
MADE AND PRINTED IN U.S.A.
CHARLES SOUBIRAN COMPANY, INC.

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 70	6	70
PROJECT DESIGNATION: T034-1 (13)		

END C/L ROADWAYS
SHIFT - 219+00

R/W
16' CR. AGG
12"
15'
31
18"
32
R/W
15'
98.82
+22
+44
98.57
98.32
97.93
97.53
97.14
96.75
96.36
95.96
95.57
95.18
94.78
94.39
12"
12"
99.18
98.93
98.68
98.29
97.89
12"
97.50
97.11
96.72
96.32
95.93
95.54
95.14
94.75
12'
99.00
98.88
98.75
98.62
98.50
98.30
98.11
97.71
31C
97.32
97.12
96.93
96.73
96.54
96.34
96.14
95.75
95.36
94.96
94.57
12'
98.80G
98.68G
98.55G
98.43G
98.30G
98.18G
99.46T.C.
99.34 T.C.
99.21 T.C.
99.08T.C.
98.96 T.C.
98.76 T.C.
89° M.S.
15'
+36
12"
60' R
220+09.19 SEC LINE
=10+00C. 66 ST.
96.52
96.18
95.98
96.09
96.19
95.99
95.60
95.21
+00
10'
12"
32C
20'
VARIABLE FACE CURB & GUTTER
C/L roadways
5'
60' R
+75
221
222
223
W. BROWN DEER ROAD
217
218
SECTION LINE
10'
6' R +76.25
32.94
32.53
6' R +46.72
32B
10'
97.50
97.25
97.00
96.61
96.21
95.82
31B
95.62
95.43
95.23
95.04
94.64
94.25
93.86
93.46
93.07
12'
97.68
97.43
97.18
96.79
96.39
96.00
12"
95.61
95.22
94.82
94.43
94.04
93.64
12"
93.25
12'
97.32
97.07
96.82
+22
96.43
+59
+81
96.03
95.64
95.44
95.25
95.05
94.86
94.46
94.07
93.68
93.28
+80
92.89
+14
12'
+00
16' CR. AGG.
16' CR. AGG.
25'
31A
94.55
20'
20'
94.75
32A
16' CR. AGG.
DRIVE
GRAVEL
R/W
25'R +70.24-75'RT.
=9+25.02, 66th St.-39'LT.
94.56
94.60
94.56
12'
12'
25'R +48.24-75'RT.
=9+24.98, 66th St.-39'RT
R/W
24'
94.22
94.47
94.23
BEGIN C&G
CONC WALK
650'
3" Bit. Conc. on 6" CRUSHED AGG. Base Course
93.87
94.18
93.98
Match Exist. 8+50
℄ 66 TH ST.

99
98
LT. MEDIAN FLANGE
LT. MEDIAN GUTTER
P.I. +00 (Lt.)
98.50
PROFILE PRESENT GRADE ALONG EXISTING C/L
PROFILE FINISHED GRADE ALONG LT. MEDIAN FLANGE
-0.500 % LT.
-0.500 % RT.
P.I. +00(RT.)
97.00
-0.7857 % LT.
-0.7857 % RT.
PROFILE FINISHED GRADE ALONG RT. MEDIAN FLANGE
95
94
93
ELEVATION PRESENT GRADE ALONG EXISTING ℄
98.7
217
98.9
+50
99.4
218
99.5
+50
99.5
219
99.0
+50
99.2
220
98.9
+50
98.9
221
98.1
+50
97.7
222
97.2
+50
96.6
223

PLATE 1 - PLAN - PROFILE

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 70	7	70
PROJECT DESIGNATION: T034-1 (13)		

#6410
CONC PORCH
CONC WINDOW WELL
R/W
18' CR. AGG.
36"
21"
SECTION LINE W. BROWN DECK ROAD
NO DRIVEWAY ON BROWN DEER RD.
6' R+38.75
60' R.
6'R. + 09.72
226+72.64 S/L Br. Dr. Rd. = 10+00.00 C/L 64th St.
226+29.68-75'RT. S/L B.D. 9+25.02-43'LT. C/L 64th St.
227 + 15.68-75'RT. S/L B.D. 9+24.98-43'RT. C/L 64th St.
227+62.18-75.38RT. S/L B.D.
P.T. 228+22.68 58'RT. S/L BR. DR. RD.
3" BIT. CONC. ON 6" CRUSHED AGGREGATE BASE COURSE
END C&G
END P.C. CONC. PAVT.
227+28.95-96.19RT. S/L B.D. 9+03.78-56.26RT. C/L 64th St.
227+74.92 B.D. -95.72'RT.
227+41.68 B.D. -116.53'Rt. = 8+83.43 ℄ 64th-68.98'Rt.
℄ 64TH. ST.
MATCH
8+50.98 39'Rt. ℄ 64th St.
VARIES
MATCH
CONC CURB & GUTTER
WOOD FENCE

P.C. + 50 (LT.) 93.39
P.I. + 00 (LT.) 93.00
-0.786 % LT.
-0.786 % RT.
P.T. + 50 (LT.) 92.12
PROFILE FINISHED GRADE ALONG LT. MEDIAN FLANGE
P.I. - 00 (RT.) 91.50
PROFILE FINISHED GRADE ALONG RT. MEDIAN FLANGE
-1.375 % RT.
PROFILE PRESENT GRADE ALONG EXISTING C/L
-1.75 % LT.
P.C. + 25 (LT.) 87.31
RT OUTER FLANGE
Gutter
P.C. + 50 (RT.) 86.69
(LT. + RT.) P.I. + 00 86.00
ELEVATION PRESENT GRADE ALONG EXISTING ℄

PROJECT I D	SHEET NUMBER	TOTAL SHEETS
2150 2 70	7	70
PROJECT DESIGNATION: T034-1 (13)		

37.53

#6410 CONC. PORCH CONC. WINDOW WELL

R/W 15' 75' 12" 12" 12" 12" 20' 10' 12" 12" 12" 12" 75' 25'

32 32C 328 33 33C 33B 33A 34 340 34C 34B 34A

21" 12" 12" 60° R 6' R+38.75 12" 12" 36" 12" 12" 12" 12" 12" 12" 12" 12"

94.39 94.00 93.61 93.21 92.99 92.70 92.35 91.94 91.07
94.75 94.36 93.97 93.57 93.35 93.06 92.71 92.30 91.43
94.57 94.18 93.79 93.39 93.17 92.88 92.53 92.12 91.25
93.07 92.68 92.29 91.89 91.50 90.81 90.12
93.25 92.86 92.47 92.07 91.68 90.99 90.30
92.89 92.50 92.11 91.71 91.32 90.63 89.94

223 224 225 226

+90 +14 +88 +19 +98.5

18' CR. AGG. 14' CR. AGG. R/W

90.20 +69 89.76 89.32 88.44 87.57 87.13 86.72 86.37 86.07
90.56 90.12 89.68 88.80 87.93 87.49 87.08 86.73 86.43
90.38 89.94 89.50 89.06 88.62 87.75 87.31 86.90 86.55 86.25
89.91 89.52 89.12 88.89 88.47 87.60 87.16 86.75 86.40 86.14
89.44 89.09 88.75 88.06 87.38 86.69 86.37 86.12
89.62 88.93 88.24 87.56 86.87 86.55 86.30
89.26 88.91 88.57 87.88 87.20 86.51 86.19 85.94

10' +73 +75 +38

158.27 33.59 37.08 36 36

60° R. 6' R. + 09.72

SECTION LINE 228
W. BROWN DEER ROAD

226+72.64 S/L Br. Dr. Rd.
=10+00.00 C/L 64th St.

226+29.68-75'RT. S/L B.D.
9+25.02-43'LT. C/L 64th St.

227+15.68-75'RT. S/L B.D.
9+24.98-43'RT. C/L 64th St.

P.T. 228+22.68
58'RT. S/L BR DR. RD.

227+62.18-
75.38RT. S/L B.D.

227+28.95-96.19RT. S/L B.D.
9+03.78-56.26RT. C/L 64th St.

227+74.92 B.D. -95.72'RT.

227+41.68 B.D. -116.53'Rt. =
8+83.43 ℄ 64th-68.98'Rt.

8+50.98
39'Rt. ℄ 64th St.

END P.C. CONC. PAVT.
END C&G
3" BIT. CONC. ON 6" CRUSHED AGGREGATE BASE COURSE
VARIES
MATCH
℄ 64TH. ST.
MATCH

18' 18' 14' 14' 14' 14' 4' 3' 24' 39.22' 25' 25' 20' 20' 25' R 25' R 25' R

NOTE: Use 9" Base Course From Sta. 229+00 to 235+00

STRUCTURE B-40-410 SEE SHEETS X-39882 thru X-39886 TRIPLE 7'X 10' CONC. BOX REQ'D

PROJECT I D	SHEET NUMBER	TOTAL SHEETS
2150 2 70	8	70
PROJECT DESIGNATION: T 034-1(13)		

R/W

15' 12' 12' 22' 10' 12' 12' 12' 40'

34 35 36 37

86.07 85.83 85.65 85.52 85.42 42" 85.22 85.02 84.82 84.62 84.42 42" 84.22 84.02 36 42" 83.82 83.62 54" 83.42

86.43 86.19 86.01 85.88 85.78 85.58 85.38 85.18 84.98 84.78 84.58 84.38 84.18 83.98 83.78

86.25 86.01 85.83 85.70 85.60 85.40 85.20 85.00 35D 84.80 84.60 84.40 84.20 36D 84.00 83.80 83.60

86.14 85.93 85.79 34D +75

229 230 231 SECTION LINE 232 233 234 W. BROWN DEER RD. (STH 100) 235

34C 35C 36C

86.12 85.93 85.80 85.60 TELE. M.H. 85.40 85.20 85.00 84.80 84.60 84.40 84.20 84.00 83.80 83.60

86.30 86.11 85.98 85.78 85.58 85.38 85.18 84.98 84.78 84.58 84.38 84.18 83.98 83.78

85.94 85.75 85.62 85.42 85.22 85.02 84.82 35B 84.62 84.42 84.22 84.02 36B 83.82 83.62 83.42

34B 6' DITCH 35A 36A 6'

34A 84.7 84.4 84.2 84.0 83.7 83.6 83.8 83.2 83.0 83.1 83.3 83.1

8" SAN. SEWER

MATCH 20' 83.83 83.75 84.B 84.05 20' 83.55 83.85 MATCH

R/W BIT CONC. GRAVEL DR

3" BIT. CONC. PAVT. OVER 6" CRUSHED AGGREGATE BASE COURSE

87 86 85

LT. MEDIAN FLANGE

PROFILE FINISHED GRADE ALONG LT & RT MEDIAN FLANGE

RT. MEDIAN FLANGE

P.T. (R.T.)+50 85.80

PI +00 (Lt.) & (Rt.) 86.00

P.T. (LT.)+75 85.70

0.400% LT. & RT.

PROFILE PRESENT GRADE ALONG EXISTING C/L

ELEVATION PRESENT GRADE ALONG EXISTING ℄

87.2 229 86.5 +50 86.0 230 85.6 +50 84.8 231 84.8 +50 84.5 232 84.3 +50 84.1 233 84.3 +50 84.5 234 84.6 +50 84.7 235

85 84 83

PROJECT ID	SHEET NUMBER	TOTAL SHEETS
2150 2 70	9	70
PROJECT DESIGNATION T 034-1(13)		

REPLACE SEC. COR. MARKER, SEE LANDMARK DETAIL

CENTERLINE OF EXISTING DRIVE

N

CTR. 25'R 239+48.79-85' Lt. 10+85.15-47'Lt.

END C. & G.

CTR 25' R 240+44.17-85'Lt. = 10+85.62-47'Rt.

3" MET. COND.

239+96.06 B. D. 10+00-60th St.

SECTION LINE

BROWN DEER RD. (S. T. H. 100)

3" MET. COND.

2-3" FIBER COND.

10' C & G. TRANS.

REMOVE CUNETTE

CTR. 30'R. 239+42.11-80'Rt. =9+20.03-54'Lt.

P. T. 238+72.77 74.61'Rt.

P. C. 239+27.11-105.98'Rt. = 8+94.06-69.02'Lt.

P. T. 238+60.77 95.40'Rt

BEGIN C. & G.

CTR 25'R 240+41.90-75'Rt. = 9+25.72-47'Rt.

Replace Conc. Cunette 9+00 to F. L. 36" Conc. Pipe Apron Endwall (See Detail)

Existing "V" Shaped Conc. Cunette

3" BIT. PAVT. ON 6" GRAVEL OR CRUSHED STONE BASE COURSE

EXISTING FRONTAGE ROAD

3" Bit. Pavt. on 6" Crushed Aggregate Base Course

CURVE DATA

Δ = 30°	Δ = 30°
R = 100'	R = 124'
T = 26.79'	T = 33.23
L = 52.36'	L = 64.92

MATCH EXIST. 12+00

℄ 60TH ST

MATCH EXIST. 8+00

P. C. 239+15.10-126.76'Rt. =8+73.28-81.03'Lt.

P. T. 8+66.03-54'Lt.

INV. EL. 82.1

Proposed 18" CP 8+48 ℄ 60th - 35'L.

CTR 25' R 8+41.03 - 47'LT.

Disch. El. 81.6

8+51 ℄ 60th 36'Rt.

CRUSHED AGG. SHOULDER

4" GAS

PROFILE PRESENT GRADE ALONG EXISTING ℄

-0.400% RT. & LT.

+0.412% RT. & LT.

P. C. +75 83.30

P. T. +75 83.30

P. I. +25 83.10

PROFILE FINISHED GRADE ALONG RT. & LT. MEDIAN FLANGE

P. C. +75 Lt. 84.54

Lt. Outer Fl.

Gutter

Int. +45.17

Lt. Median Fl.

Int. +65

Lt.

Rt.

P. C. +50 Rt. 84.84

Rt. Median Fl.

Rt. Outer Fl.

Int. +42.9

ELEVATION PRESENT GRADE ALONG SECTION LINE

235	+50	236	+50	237	+50	238	+50	239	+50	240	+50	241
84.7	84.2	84.4	84.6	84.2	84.2	84.4	84.3	83.7	84.0	85.1	85.4	86.3

PLAN — PROFILE

NOTE: Use 9" Base Course From Sta. 239+00 to 244+00

PROJECT	SHEET NUMBER	TOTAL SHEETS
2150 2 70	10	70
T 034-1(13)		

SHIFTED TO MATCH Bit. Conc

R/W 15' 12' 12' 10' 10' 12' 12' 75' 25'

30' CR. AGG. — 24' CR. AGG. — 12' CR. AGG. Pipe

85.46	85.82	86.22	86.67	87.17	87.71	88.30	88.94	89.60	90.92	91.55	92.13	92.65	93.12	93.53	93.88	94.18	94.42	94.61	94.75	94.96	95.17			
85.82	86.18	86.58	87.03	87.53	88.07	88.66	89.30	89.96	91.28	91.91	92.49	93.01	93.48	93.89	94.24	94.54	94.78	94.97	95.11	95.32	95.53			
85.64	86.00	86.40	86.85	87.35	87.89	88.48	89.12	89.78	90.44	91.10	91.73	92.31	92.83	93.30	93.71	94.06	94.36	94.60	94.79	94.93	95.14	95.35		
85.49	85.85	86.25	86.70	87.20	87.74	88.33	88.86	89.70	89.22															
85.16	85.40	85.70	86.06	86.47	86.93	87.45	88.03	88.66	89.32	89.98	91.30	92.52	93.25	93.83	94.35	94.81	95.22	95.57	95.87	96.11	96.30	96.42		
85.34	85.58	85.88	86.24	86.65	87.11	87.63	88.21	88.84	90.16	91.48	92.80	93.43	94.01	94.53	94.99	95.40	95.75	96.05	96.29	96.48	96.60			
84.98	85.22	85.52	85.88	86.29	86.75	87.27	87.85	88.48	89.80	91.12	92.44	93.07	93.65	94.17	94.63	95.04	95.39	95.69	95.93	96.12	96.24			

+82 +70 +18 +93 +23 +63 +81 +10 +58 +94

3" FIBER COND. — 3" FIBER COND.

21 21A 21B 21C 20 20A 20B 20C

+35(5' Lt.) 15' R. — +70 10' R.

241 SECTION LINE 242 243 244 W. BROWN DEER RD. (S. T. H. 100) 245 246 247

Save 12" Maple 241+67 - 76'Rt.
Save 13" Maple 241+55 - 87'Rt.
Save 18" Maple 241+95 - 88'Rt.
Save 16" Maple 242+23 - 75'Rt.
Save 9" Maple 242+43-83'Rt.
Save 21" Maple 242+96 - 81'Rt.
Save 9" Maple 243+67 - 83'Rt.
Save 13" Cottonwood 243+54 - 85'Rt.
SAVE 12" Linden 244+98 - 85'Rt.

PROFILE PRESENT GRADE ALONG EXISTING ℄

P. I. +75 (Rt.) 95.92 — P. T. +00 (Rt.) 96.42 — P. T. +00 (Lt.) 94.93 — P. I. +75 (Lt.) 94.40

+0.422%

P. C. +50 (Lt.) 91.10 — P. T. +75 (Lt.) 89.12 — +2.64% — +2.64%

PROFILE FINISHED GRADE ALONG LT. MED. FLANGE

P. C. +50 (Rt.) 92.62

PROFILE FINISHED GRADE ALONG RT. MED. FLANGE

P. T. +00 (Rt.) 88.66

P. I. +25 (Lt.) 85.16 — P. I. +75 (Rt.) 85.36

ELEV. PRESENT GRADE ALONG EXISTING ℄

86.3	86.0	88.0	89.9	91.7	94.0	95.4	97.1	98.2	99.5	100.1	100.4	100.3
241	+ 50	242	+ 50	243	+ 50	244	+ 50	245	+ 50	246	+ 50	247

97 96 95 86 85 84

PLATE I—PLAN—PROFILE

DRAWING NO. 42 H1

NO. STRUCTURE ROUTE'S CHRD.

PROJECT	SHEET NUMBER	TOTAL SHEETS
2150 2 70	11	70
T 034-1(13)		

R/W 15' 12' 12' 12' 20' 10' 12' 12' 12' 25' R/W — 75' 75' 50'

TEL. CABLE

12' CR. AGG.

95.17 95.38 95.59 95.80 96.01 96.22 96.43 96.64 96.86 97.07 97.28 97.38 97.46 97.50 97.48
95.53 95.74 95.95 96.16 96.37 96.58 96.79 97.00 97.22 97.43 97.64 97.74 97.82 97.86 97.84
95.35 95.56 95.77 95.98 96.19 96.40 96.61 96.82 97.04 97.14 97.25 97.35 97.46 97.56 97.64 97.68 97.66
96.42 96.63 96.83 97.03 97.23 97.44 97.64 97.84 97.94 98.04 98.14 98.24 98.34 98.44 98.54 98.62 98.65 98.63
96.60 96.81 97.01 97.21 97.41 97.62 97.82 98.02 98.22 98.42 98.62 98.80 98.83 98.81
96.24 96.45 96.65 96.85 97.05 97.26 97.46 97.66 97.86 97.96 98.06 98.16 98.26 98.36 98.44 98.47 98.45

21" 18" 16" W 4"C 4"C 18" 18" 15" 15" 18"

+81 +99 +32 +50 +86 +60 +20 +20 +20 +18 +18 +18

2150 2 70

T034-1 (13)

12 70

CTR 25'R 10+84.34 B.D.BLVD - 47' LT.
=253+22.07 B.D.R. - 85' LT.

CTR 25'R 10+85.68 B.D. BLVD. 47'RT.
=254+16.08 B.D.R. - 85' LT.

#5432

10+85.68 END R.C.PAV'T.

R/W

CR AGG

3" MET. COND.

W. BROWN DEER BLVD. (S.T.H. 100)

SECTION LINE

CTR 25'R 253+30.50 B.D.R. 75' LT.

CTR 6'R 254+09.34 B.D.R.-7.98 LT.

P.T. 253+40.67 (58' RT.)

MATCH 1+93.37

R=124'

R=100'

100.10

100.34

100.58

24'

40'

8" SAN.

6" W.M.

2" GAS

6" SAN.

GRAVEL DR.

PROFILE PRESENT GRADE ALONG EXISTING ℄

P.I. + 50 (Rt) 99.05

P.I. + 50 (Lt) 98.09

P.T. + 75 (Rt) 97.17

P.T. +75 (Lt) 96.20

PROFILE FINISHED GRADE ALONG RT. MEDIAN FLANGE

PROFILE FINISHED GRADE ALONG LT. MEDIAN FLANGE

-1.5056% RT.

-1.5095% LT.

ELEVATION PRESENT GRADE ALONG EXISTING ℄

100.2 | 99.5 | 99.0 | 98.4 | 98.2 | 97.2 | 96.5 | 96.1 | 95.4 | 94.8 | 94.3 | 93.4 | 93.1

253 | +50 | 254 | +50 | 255 | +50 | 256 | +50 | 257 | +50 | 258 | +50 | 259

PLATE 1 - PLAN - PROFILE

MADE AND PRINTED IN U.S.A.
CHARLES BRUNING COMPANY INC.

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 70	13	70
PROJECT DESIGNATION T034-1(13)		

GRAVEL PARKING LOT

GRAVEL DR

R/W

15A 14A 13A

89.61 88.85 88.10 87.34 16"W 86.59 85.83 85.08 84.70 84.35 84.03 83.76 83.53 83.34 83.20 83.07 16"W 82.82 82.57

89.97 89.21 88.46 87.70 86.95 86.19 85.44 85.06 84.71 84.39 84.12 83.89 83.70 83.56 83.43 83.18 82.93

89.79 89.03 88.28 87.52 86.77 86.01 85.26 84.88 84.53 84.21 83.94 83.71 83.52 83.38 83.25 13B 83.00 82.75

15B 14B

259 260 SECTION LINE 261 262 BROWN DEER RD. (S.T.H. 100) 263 264 265

262+94.26S/L B.D. = 10+00.00 T/L 52nd St.

89°-06'-05" 90°-53'-55"

15C 14C 13C

90.77 T 90.02 89.26 88.51 T 87.76 87.01 86.63 86.27 85.96 85.69 85.46 85.27 85.12 85.00 84.89 84.75 84.36 84.50 84.10 84.25

90.95 90.20 89.44 88.69 87.94 87.19 8681 86.45 86.14 85.87 85.64 85.45 85.30 85.18 84.93 84.68 84.43

90.59 89.84 89.08 88.33 87.58 86.83 86.45 86.09 85.78 85.51 85.28 85.09 84.94 84.82 84.57 84.32 84.07

15 14 17 13

4"G T 18" 24" 36" 36" 4"G

+60 +15 +69 +05

2-3" FIBER COND.

CTR POST CLASS B STEEL PLATE BEAM GUARD 9+32 T/L 52ND.-2 RT. BEAM TO BE 2' OFF PAVT. AT CTR. & EQUALLY OFF PAVT. AT ENDS

EXISTING FRONTAGE ROAD

8" SAN. SEWER

6" W.M.

2" GAS

12" SAN. SEWER

3" BIT. CONC. ON 6" CR. AGG. BASE COURSE

30' CR. AGG.

R/W

GRAVEL DR. 6" SAN CONC. SLAB CONC. BLOCKS VARIOUS SIZES CONC. SLAB GRAVEL DR

ETT. CONC.

CTR. 25'R 262+55.59-106' RT. = 8+93.41 T/L 52ND.-37' LT.

CTR. 50'R 262+58.58-107' RT. = 8+92.45 T/L 52ND-34' LT.

+25 MATCH 86.45 25' 25' 25' 25' 86.75 R=25 86.28 R=50 86.48 86.54 25' 25' 86.18 6"W 30' 17A 17B 18' 28' 8" SAN 86.50 +75 MATCH

NOTE: Use 9" Base Course From STA. 262+00 to 272+00

PROFILE PRESENT GRADE ALONG EXISTING ℄

PROFILE FINISHED GRADE ALONG LT. MEDIAN FLANGE

-1.5056% RT.

-1.5095% LT.

P.C. +75 RT. 86.63

P.I. +50 RT. 85.50

P.C. +25 LT. 84.88

P.I. +00 LT. 83.75

P.T. +75 LT. 83.38

P.T. +25 RT. 85.12

PROFILE FINISHED GRADE ALONG RT. MEDIAN FLANGE

-0.500% RT.

-0.500% LT.

ELEVATION PRESENT GRADE ALONG EXISTING ℄

91 90 89 84 83 82

93.1 259 91.7 +50 91.2 260 90.4 +50 89.6 261 88.6 +50 88.4 262 87.4 +50 86.8 263 85.8 +50 85.8 264 85.1 +50 84.9 265

PLATE 1- PLAN - PROFILE

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 7Q	14	70
PROJECT DESIGNATION T034-1(13)		

266+23.57-85'Lt. = 10+84.28-47'Lt.

267+17.51-85'Lt. = 10+85.70-47'Rt.

END PC. CONC. PAV'T. - 10+85.7

266+69.25 B.D.R. = 10+00 ℄ 51st. St.

266+25.08-75'Rt. = 9+24.32-43'Lt.

267+11.15-75'Rt. = 9+25.62-43'Rt.

BEGIN C. & G.

SECTION LINE

BROWN DEER RD. (S.T.H. 100)

GRAVEL & TAR

GRASS

CONC SLAB

BIT CONC

GRAVEL

30' CR. AGG.

3" MET. COND.

2-3" FIBER COND.

12" SAN.

8" SAN.

16" W

36"

48"

60"

REPLACE 1/4 SEC. COR. MARKER. SEE LANDMARK MONUMENT DETAIL

3" BIT. CONC. ON 6" CR. AGG. BASE COURSE

6" CR. AGG. BASE COURSE ONLY

MATCH EXIST. 11+50

+50 MATCH

℄ 51ST. ST.

NOTE: USE 9" BASE COURSE FROM STA. 262+00 TO 272+00

PROFILE FINISHED GRADE ALONG RT. MEDIAN FLANGE

PROFILE FINISHED GRADE ALONG LT. MEIDAN FLANGE

PROFILE PRESENT GRADE ALONG EXISTING ℄

ELEVATION PRESENT GRADE ALONG SECTION LINE

-0.500% RT.

+0.500% RT.

-0.500% LT.

+0.500% LT.

P.C. +00 RT. 82.25

P.T. +00 RT. 82.25

P.I. +50 RT. 82.00

P.C. +00 LT. 80.75

P.I. +50 LT. 80.50

P.T. +00 LT. 80.75

Lt. Outer Fl.

Lt. Med. Fl.

Rt. Med. Fl.

Rt. Outer Fl.

Gutter

Inl. +25 80.32

Inl. +50 80.19

Inl. +22 81.84

Inl. +01 82.12

Inl. +01 83.36

Inl. +25 83.33

Inl. +25 80.35

Inl. +50 80.23

Inl. +25 82.00

Inl. +50 81.97

Inl. +50 81.69

Inl. +98 81.95

PLATE 1 - PLAN - PROFILE S. P. R. & B. C.

MADE AND PRINTED IN U.S.A.

CHARLES BRUNING COMPANY, INC

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 70	15	70
PROJECT DESIGNATION: T034-1 (13)		

#4630

R/W

15' 12' 12' 12' 20' 10' 12' 12' 12' 12' 25'

75' 75'

81.07	81.32	81.57	81.82	82.07	82.32	82.41	82.44	82.40	82.30	82.04	81.77	81.60	81.35	81.04	80.72	80.48	80.30					
81.43	81.68	81.93	82.18	82.43	82.68	82.77	82.80	82.76	82.66	82.40	82.13	81.97	81.76	81.50	81.24	81.03	80.87					
81.25	81.50	81.75	82.00	82.25	82.50	82.59	82.62	82.58	82.48	82.22	81.95	81.82	81.68	81.55	81.42	81.29	81.15					
					82.38G 82.96TC	82.50G 83.05TC	82.62G 83.08TC	82.49G 83.04TC	82.36G 82.94TC													
82.75	83.00	83.25	83.50	83.75	84.00	84.09	84.12	84.08	83.98	83.70	83.56	83.42	83.29	83.15	83.01	82.88	82.74	82.60				
82.93	83.18	83.43	83.68	83.93	84.18	84.27	84.30	84.26	84.16	83.88	83.74	83.61	83.50	83.38	83.26	83.15	83.02	82.88				
82.57	82.82	83.07	83.32	83.57	83.82	83.91	83.94	83.90	83.80	83.52	83.41	83.37	83.40	83.48	83.57	83.60	83.56	83.45				
					83.70G 84.20TC	83.82G 84.29TC	83.94G 84.32TC	83.81G 84.28TC	83.68G 84.18TC	83.40G 83.90TC	83.26G 83.79TC	83.12G 83.75 TC	83.25G 83.78TC	83.37G 83.86TC	83.49G 83.95TC	83.60G	83.47G 83.94TC	83.33G 83.83TC				

82.70TC 82.20G | 82.79TC 82.32G | 82.82TC 82.44G | 82.78TC 82.31G | 82.68TC 82.18G

84.46TC 83.88G | 84.55TC 84.00G | 84.58TC 84.12G | 84.54TC 83.99G | 84.44TC 83.86G

7A 7B 7C 7D 7E 7F 7G

16" W 16" W

12" SAN 12" SAN

48" 48"

12" 12"

12" MET. COND. +87' 12" MET. COND. +87'

PC. 276B+42.51=
276+42 51(5' LT. Sec. Line)

+51.75

271 SECTION LINE 272 W. BROWN DEER RD. (S. T. H. 100) 273 274 275 276

R/W VARIES 12' 12' 17' 17' 12' 12' 12' 12' 75' VARIES R/W

R/W NOTE: USE 9" BASE COURSE FROM STA 262+00 TO 272+00

7F BULKHEAD

Lt. Outer Fl.
Gutter
Lt. Med. Fl.
Gutter

PROFILE FINISHED GRADE ALONG Rt. MEDIAN FLANGE
+0.500 % RT.
+0.500 % LT.
PROFILE FINISHED GRADE ALONG Lt. MEDIAN FLANGE

P.C. +50 (Rt.) 84.00
P.I. +00 (Rt.) 84.25
P.T. +50 (Rt.) 83.98
P.I. +00 (Lt.) 82.75
P.C. +50 (Lt.) 82.50
P.T. +50 (Lt.) 82.48

PROFILE PRESENT GRADE ALONG EXISTING ℄
-0.550 % RT.
-0.533% LT

Rt. Med. Fl.
Gutter
Rt. Outer Fl.
Gutter
INL. +50

ELEVATION PRESENT GRADE ALONG EXISTING ℄

82.9 271 | 82.9 +50 | 83.2 272 | 83.5 +50 | 83.1 273 | 83.2 +50 | 83.7 274 | 83.9 +50 | 83.6 275 | 83.5 +50 | 83.9 276 | 84.0 +50 | 84.1 277

PLAN & PROFILE

PROJECT ID	SHEET NUMBER	TOTAL SHEETS
2150 2 70	15	70
PROJECT DESIGNATION: T034-1 (13)		

#4850

R/W 15' 75' 12' 12' 12' 20' 10' 12' 12' 12' 25' R/W

VARIES 12' 12' 12' 17' 17' 12' 12' 12' VARIES

3" WET COND. +87

271 SECTION LINE 272 W. BROWN DEER RD. (S.T.H. 100) 273 274 275 276 277

81.07	81.32	81.57	81.82	82.07	82.32	82.41	82.44	82.40	82.30	82.04	81.77	81.60	81.35	81.04	80.72	80.48	80.30					
81.43	81.68	81.93	82.18	82.43	82.68	82.77	82.80	82.76	82.66	82.40	82.13	81.97	81.76	81.50	81.24	81.03	80.87					
81.25	81.50	81.75	82.00	82.25	82.50	82.59	82.62	82.58	82.48	82.22	81.95	81.82	81.68	81.55	81.42	81.29	81.15					
					82.38G 82.96TC	82.50G 83.05TC	82.62G 83.08TC	82.49G 83.04TC	82.36G 82.94TC													
82.75	83.00	83.25	83.50	83.75	84.00	84.09	84.12	84.08	83.98	83.70	83.56	83.42	83.29	83.15	83.01	82.88	82.74	82.60				
82.93	83.18	83.43	83.68	83.93	84.18	84.27	84.30	84.26	84.16	83.88	83.74	83.61	83.50	83.38	83.26	83.15	83.02	82.88				
82.57	82.82	83.07	83.32	83.57	83.82	83.91	83.94	83.90	83.80	83.52	83.41	83.37	83.40	83.48	83.57	83.60	83.56	83.45				
					83.70G 84.20TC	83.82G 84.29TC	83.94G 84.32TC	83.81G 84.28TC	83.68G 84.18TC	83.40G 83.90TC	83.26G 83.79TC	83.12G 83.75 TC	83.25G 83.78TC	83.37G 83.86TC	83.49G 83.95TC	83.60G	83.47G 83.94TC	83.33G 83.83TC					

7A 7B 7C 7 7E 7F 7G 7D

PC 276+42.51= 276+42.51 (5° LT. Sec. Line)

+51.75

81.39

81.87

.015 .015 .004 .004 .043

NOTE: USE 9" BASE COURSE FROM STA 262+00 TO 272+00

BULKHEAD

275+00 NC

275+87.5 ℄ (flat)

NC NC

48" 48"

2" 2" 2" 2"

Lt. Outer Fl

Gutter

Lt. Med. Fl.

Gutter

82

82

PROFILE FINISHED GRADE ALONG Rt. MEDIAN FLANGE

+0.500 % RT.

+0.500 % LT.

PROFILE FINISHED GRADE ALONG Lt. MEDIAN FLANGE

P.C. +50 (Rt) 84.00

P.I. +00 (Rt.) 84.25

P.T. +50 (Rt) 83.98

P.I. +00 (Lt.) 82.75

P.C. +50 (Lt.) 82.50

P.T. +50 (Lt.) 82.48

PROFILE PRESENT GRADE ALONG EXISTING ℄

-0.550 % RT.

-0.533% LT.

83

82

81

Rt. Med. Fl.

Gutter

Rt. Outer Fl.

Gutter

INL. +50

83

83

ELEVATION PRESENT GRADE ALONG EXISTING ℄

82.9	82.9	83.2	83.5	83.1	83.2	83.7	83.9	83.6	83.5	83.9	84.0	84.1										
271	+50	272	+50	273	+50	274	+50	275	+50	276	+50	277										

* NOTE: COST OF FURNISHING AND PLACING REINFORCEMENT TO BE CONSIDERED INCIDENTAL TO COST OF CONCRETE DRIVEWAY.

9" REINF. P.C. CONC., MEASURED & PAID FOR AS CONCRETE DRIVEWAY. *

9" REINF. P.C. CONC., MEASURED & PAID FOR AS CONCRETE DRIVEWAY *

CR. AGG. BASE CSE.

SEE SECTION A-A SKETCH NEXT SHEET.

5" CONC. SDWK, DOWELED TO DRIVEWAY WITH #4 REBARS 8" LONG @ 3' SPACINGS. *

9" REINF. P.C. CONC., MEASURED & PAID FOR AS CONCRETE DRIVEWAY *

6" CHAIN LINK FENCE

BIT. CONC.

281 ℄ ROADWAYS = "B" LINE

SECTION LINE

FORM DEPRESSION APPROX. 9" DEEP TO INSURE DRAINAGE INTO INLET (5D)

CONC. FLUME

SECTION A-A NOT TO SCALE

BADGER METER POND

10' OVERFLOW

Lt. Outer Fl.

GUTTER

INL. +00

INL. +25

Rt. MED. Fl. Line

Rt. Outer Fl.

PROFILE PRESENT GRADE ALONG EXISTING ℄

PROFILE FINISHED GRADE ALONG Rt. MEDIAN FLANGE

PROFILE FINISHED GRADE ALONG Lt. MEDIAN FLANGE

+0.550% (RT.)

-0.533% (LT.)

+0.500%

P.C. +50 (RT.) 81.78

P.T. +50 (RT.) 81.75

P.I. +00 (RT.) 81.50

P.C. +50 (LT.) 80.89

P.I. +00 (LT.) 80.62

P.T. +50 (LT.) 80.87

ELEVATION PRESENT GRADE ALONG EXISTING ℄

84.1	84.4	84.2	84.9	84.8	84.6	83.7	83.4	83.1	83.2	83.5	84.7	86.0
277	+50	278	+50	279	+50	280	+50	281	+50	282	+50	283

PLATE I - PLAN - PROFILE

NO. BY AUTH. ENGINEER ADDITIONS OKED

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 70	17	70
PROJECT DESIGNATION: T034-1 (13)		

N

* Right Of Entry Has Been Obtained For Driveway Work Beyond R/W

Gravel Driveway To Be Sloped at a 10% Grade From End of Berm To Match Existing Ground. (See Cross Sections)

* Note: Cost Of Furnishing and Placing Reinforcement To Be Considered Incidental To Cost Of Concrete Driveway.

9" Reinf. P.C. Conc., Measured & Paid For As Concrete Driveway.

entrance to Holton and Hunkel Co.

substation

gravel drive

N. P. R. R.

C/L C. M. ST. P. & P. R. R.

C/L ROADWAYS-"B" LINE

C/L R/W

RELOCATED BROWN DEER 288 ROAD

P.T. 286B + 12.53

2858+58.41= 51+11.64 C/LRR

289A+30.00= P.C.+98.38

C. & G. END SECTION TYP at R. R. TRACKS

CTR 30'RAD Gravel Drive 286+62 s/l-4'Lt.

285+84.43 SECT. LINE +50+80.00 C/L R. R

3" Bit. Conc. on 6" CR. Agg. Base Course

6' CR. AGG.

APRON END WALL

CTR 30'RAD 287+39 s/l-41'Lt.

288+89 25' RAD. 80'RT.

Exist. 3' x 2' Box

SECTION LINE

Remove Existing Pavement

EXISTING DITCH TO REMAIN

MATCH EXIST. GROUND

5" CONC. SDWK., DOWELED TO DRIVEWAY WITH #4 RE-BARS 8" LONG @ 3' SPACINGS

#4 RE-BARS

0.015'/FT.

* 9" REINFORCED P.C. CONC., MEASURED AND PAID FOR AS CONCRETE DRIVEWAY.

SECTION A-A (NOT TO SCALE)

Rt. Outer Flange

Lt. Outer Flange

Gutter

Inlet

Profile finished grade along Rt. median flange

Profile finished grade along Lt. median flange

Profile present grade along proposed ℄

Elevation present grade along proposed ℄

0.50%(Rt.)

0.50%(Lt.)

PLAN & PROFILE

STRUCTURE NOTATIONS CHKD.

PROJECT ID	SHEET NUMBER	TOTAL SHEETS
2150 2 70	17	70
PROJECT DESIGNATION: T034-1 (13)		

N

R/W

30' CR. AGG.

9" Reinf. P.C. Conc., Measured & Paid For As Concrete Driveway.

* Note: Cost Of Furnishing and Placing Reinforcement To Be Considered Incidental To Cost Of Concrete Driveway.

130' LT. OF C/L R/W

30' CR. AGG.

C/L C.M.ST.P.&P.R.R.

substation

gravel drive

* Right Of Entry Has Been Obtained For Driveway Work Beyond R/W

Gravel Driveway To Be Sloped at a 10% Grade From End of Berm To Match Existing Ground (See Cross Sections)

entrance to Holton and Hunkel Co.

14' CR. AGG.

C/L ROADWAYS - "B" LINE

C/L R/W

3" MET. COND.

RELOCATED BROWN DEER 288 ROAD

P.T. 286B + 12.53

C. & G. END SECTION TYP at R.R. TRACKS

CTR 30' RAD Gravel Drive 286+62 s/l-4'Lt.

285+84.43 SECT. LINE +50+00.00 C/L R.R.

3" Bit. Conc. on 6" CR. Agg. Base Course

6' CR. AGG.

24'

R=30'

APRON END WALL

CTR 30' RAD 287+39 s/l-41'Lt.

Exist. 3' x 2' Box

288+89.25' RAD. 80' RT.

Remove Existing Pavement

EXISTING DITCH TO REMAIN

MATCH EXIST. GROUND

5" CONC. SDWK., DOWELED TO DRIVEWAY WITH #4 RE-BARS 8" LONG @ 3' SPACINGS

#4 RE-BARS

0.015'/FT.

* 9" REINFORCED P.C.CONC., MEASURED AND PAID FOR AS CONCRETE DRIVEWAY.

SECTION A-A (NOT TO SCALE)

Rt. Outer Flange

Gutter

Inlet

Lt. Outer Flange

Profile finished grade along Rt. median flange

0.50%(Rt.)

0.50%(Lt.)

Profile finished grade along Lt. median flange

Profile present grade along proposed ℄

Elevation present grade along proposed ℄

STATE - PLAN & PROFILE OF A ROAD MADE AND FILED IN THE ... OFFICE

STRUCTURE NO. 241.08 RD

18/60

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 70	18	70
PROJECT DESIGNATION T034-1 (13)		

Gravel Driveway to be sloped at a 5% grade from end of berm to match existing ground. (See Cross Sections)

SUPER ELEVATION TRANSITION | FULL SUPER ELEV. 0.042 1/1

293A+88.31 80'Lt ℄ B D R
59+19.41 43'Lt. ℄ Deerwood Dr.

℄ BROWN DEER RD. (S.T.H. 100)

10:1 TAPER

P.C. 290+75.35

3" BIT. CONC OVER 6" CRUSHED AGGREGATE BASE COURSE

294A+70.92, 80'Lt ℄ B.D.R.
59+16.16 43 Rt. ℄ DEERWOOD RD.

294A+33.72, ℄ B.D.R.
58+38.16, ℄ DEERWOOD DR.

20'C&G TRANSITION

289A +30.00
1 1/2"=98.38

25'R 288+89 -80'Rt.

1+03-30'LT. INVERT 81.7

1+03-30'RT. INVERT 82.0

Begin C&G

25'Rad. 289+71 -80'Rt.

REMOVE EXISTING PAV'T

293A+95.52, 80'Rt. ℄ B D R
57+61.60, 43'Lt. ℄ Deerwood Dr.

*MEASURED ALONG FLANGE

294A+85.73, 80' RT.℄ BDR.
57+53.01, 43' RT. ℄ DEERWOOD DR.

3" Bit. conc. over 6" Crushed Aggregate Base Course

Lt. MEDIAN FLG

Gutter

Inl. +00

PROFILE FINISHED GRADE ALONG RT MEDIAN FLANGE

PROFILE PRESENT GRADE ALONG EXISTING ℄

P.C. +13 (Rt.) 87.56

P.I. +63 (Rt.) 87.81

P.T. +13 (Rt.) 87.56

P.I. +00 (Lt.) 87.62

P.C. +50 (Lt.) 87.87

P.T. +50 (Lt.) 87.37

P.C. +50 (Lt.+Rt.) 86.87

P.I. +00 (Lt.+Rt.) 86.12

+0.500% (Rt.)

+0.500% (Lt.)

-0.500% (Lt.+Rt.)

PROFILE FINISHED GRADE ALONG LT. MEDIAN FLANGE

PROFILE FINISHED GRADE ALONG LT. & RT. MEDIAN FLANGE

Rt. Outer Fl.

Inl. +83

Lt. Outer Fl.

Inl. +87

Rt. Outer Fl.

INL. +95

Gutter

ELEVATION PRESENT GRADE ALONG EXISTING ℄

PLATE 1 - PLAN - PROFILE

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 70		
PROJECT DESIGNATION # T034-1 (13)	18	70

Gravel Driveway to be sloped at a 5% grade from end of beam to match existing ground. (See Cross Sections)

14' CR AGG

TAPE B * GRAVEL DR

SUPER ELEVATION TRANSITION | FULL SUPER ELEV 0.042 1/1

293A+88.31, 80'Lt ℄ B D R
59+19.41, 43'Lt. ℄ Deerwood Dr.

289A +30.00= 1 "C" +98.38

289 290 291 292 293 294 295

℄ BROWN DEER RD. (S.T.H. 100)

P.C. 290+75.35

10:1 TAPER

3" MET COND +85 | 3" MET COND +86 | 3" MET COND +90 | 3" MET COND +96 | 3" MET COND +80 | 3" MET COND +85

20'C&G TRANSITION

25'R, 288+89, -80'Rt.

3" MET. COND. 65'Rt.

Begin C&G

1+03-30'LT. INVERT 81.7

1+03-30'RT. INVERT 82.0

25'Rad. 289+71 -80'Rt.

290+00

291+50 Super .042

SUPER ELEV TRANSITION | FULL SUPER ELEV 0.042 1/1

293A+95.52, 80'Rt. ℄ B D R.
57+61.60, 43'Lt. ℄ Deerwood Dr.

*MEASURED ALONG FLANGE

3" Bit. conc. over 6" Crushed Aggregate Base Course

294A+70.92, 80'Lt. ℄ B.D.R. 59+16.16, 43'Rt. ℄ DEERWOOD RD.

294A+33.72, ℄ B.D.R. 58+38.16, ℄ DEERWOOD DR.

294A+85.73, 80'Rt. ℄ B.D.R. 57+53.01, 43'Rt. ℄ DEERWOOD DR.

FULL SUPER 0.042 1/1 | SUPER Transition

3" Bit. conc. over 6" Crushed Aggregate Base Course

Lt. Outer Fl. | Inl. +87 | Gutter

Lt. MEDIAN FLG. | Inl. +00 | Gutter

Rt. Outer Fl. | Inl. +83 | Gutter

Rt. Outer Fl. | INL. +95 | Gutter

PROFILE PRESENT GRADE ALONG EXISTING ℄

PROFILE FINISHED GRADE ALONG RT MEDIAN FLANGE

PROFILE FINISHED GRADE ALONG LT. MEDIAN FLANGE

PROFILE FINISHED GRADE ALONG LT. & RT. MEDIAN FLANGE

ELEVATION PRESENT GRADE ALONG EXISTING ℄

P.C. +13 (Rt.) 87.56 | P.I. +63 (Rt.) 87.81 | P.T. +13 (Rt.) 87.56

P.I. +00 (Lt.) 87.62

P.C. +50 (Lt.) 87.37 | P.T. +50 (Lt.) 87.37

P.C. +50 (Lt.+Rt.) 86.87

(Lt.+Rt.) P.I. +00 86.12

+0.500% (Rt.)

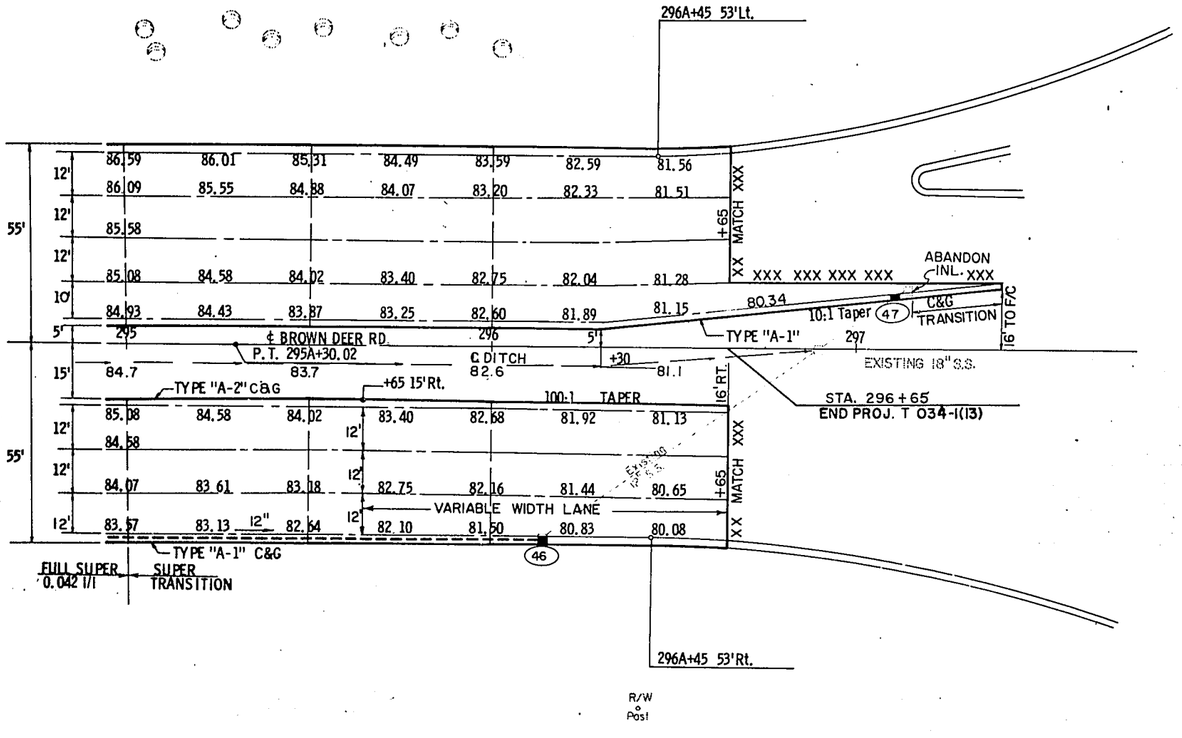
+0.500% (Lt.)

-0.500% (Lt.+Rt.)

83.4 | 85.2 | 86.1 | 86.8 | 86.6 | 86.9 | 86.4 | 89.0 | 89.3 | 88.7 | 88.1 | 87.3 | 86.7

289 | +50 | 290 | +50 | 291 | +50 | 292 | +50 | 293 | +50 | 294 | +50 | 295

2150-2-70
T034-1(13)
19-70



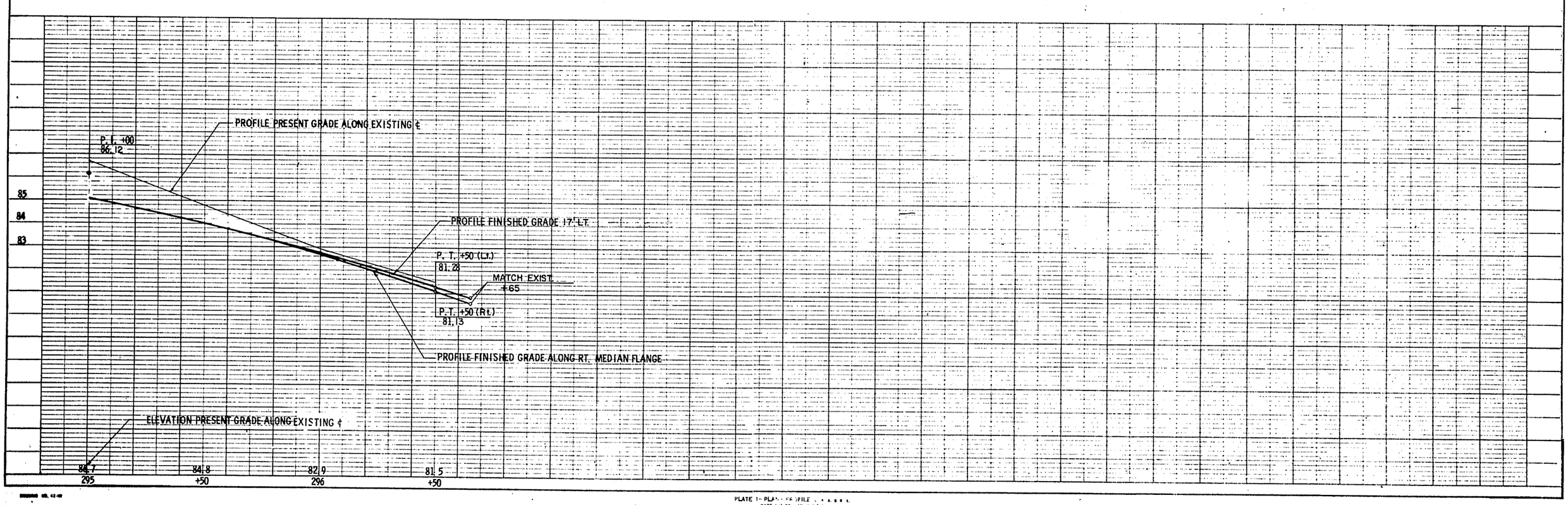


PLATE 1 - PLAN & PROFILE

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 2 70	20	70
PROJECT DESIGNATION: T034-1 (13)		

286 285 85.82 85.48 85.57 85.48 85.45 85.54 85.49 85.36 85.18 85.09 85.07 85.10

CTR. 30' RAD. 286+62 S/L-41' LT.

CROWN LINE AT 287+00

CTR. 30' RAD. 287+39 S/L-41' LT.

16' 83.87 84.03 83.85 84.14 84.31 84.12

18" CP

EXISTING 3'X2' BOX

ELECTRIC CONDUIT

24'

25'

CTR. 51' RAD. 288+93.89 S/L-51' LT.

EXISTING PAVEMENT

3" MET. COND. 288+55

R=40'

84.75 84.97 85.10 84.88 84.43 84.65 84.18 84.40 84.14 84.96

1+03-30' RT. INVERT 82.0

18" CP

1+03-30' LT. INVERT 81.7

14' 14' 6' 6' 85.55 85.38 85.16 85.16

"C" LINE

PT. 0 "C" +64.70

CTR. 25' R 289+87 S/L-36' LT.

REMOVE TOP 3" OF BIT CONC. AND BASE COURSE. REPLACE WITH TOPSOIL. SEED, FERTILIZE, AND MULCH. *

REMOVE BIT. CONC. AND REPLACE WITH CR. AGG. BASE COURSE *

84.94	84.79	84.65	84.50	84.32	84.13	83.95	83.82	83.78	6'	83.85	83.96	25'	84.18	84.40	76°29'52"	84.73	
85.16	85.01	84.87	84.72	84.54	84.35	84.17	84.04	84.00	11'	84.07	84.23		84.46	84.72		85.00	+88
84.94	84.79	84.65	84.50	84.32	84.13	83.95	83.82	83.78	6'	83.85	84.01		84.24	84.50		84.78	
				287				288				289					

285 286 290 291

SECTION LINE (S/L)

W. RIVER LANE SECTION LINE

12" SAN.

SAN

4" GAS.

BEGIN CONST. +38

18" CP 18" CP 18" CP 18" CP 18" CP

3" BIT. CONC. ON 6" CR. AGG. BASE COURSE

R/W

PI. 289+88.59± "C" LINE 0+00.00

SAVE 20" MAPLE

MATCH EXIST.

33'

* 4429 OFFICE

TRANS. TOWER

GRAVEL DRIVE (NOT USED)

GRAVEL DRIVE TO FIREHOUSE

4417

GRAVEL DRIVE

4401

GRAVEL DRIVE

4335-37

GRAVEL DRIVE

*COST OF REMOVAL OF BIT. CONC. TO BE INCLUDED UNDER OTHER PAY ITEMS.

+38 MATCH

PROFILE FINISHED GRADE ALONG SECTION LINE

PROFILE PRESENT GRADE ALONG SECTION LINE

+88 MATCH

PROFILE FINISHED GRADE ALONG "C" LINE

85 84 83

85.5 85.2 84.6 84.4 84.8 83.8 83.8 84.7 85.3

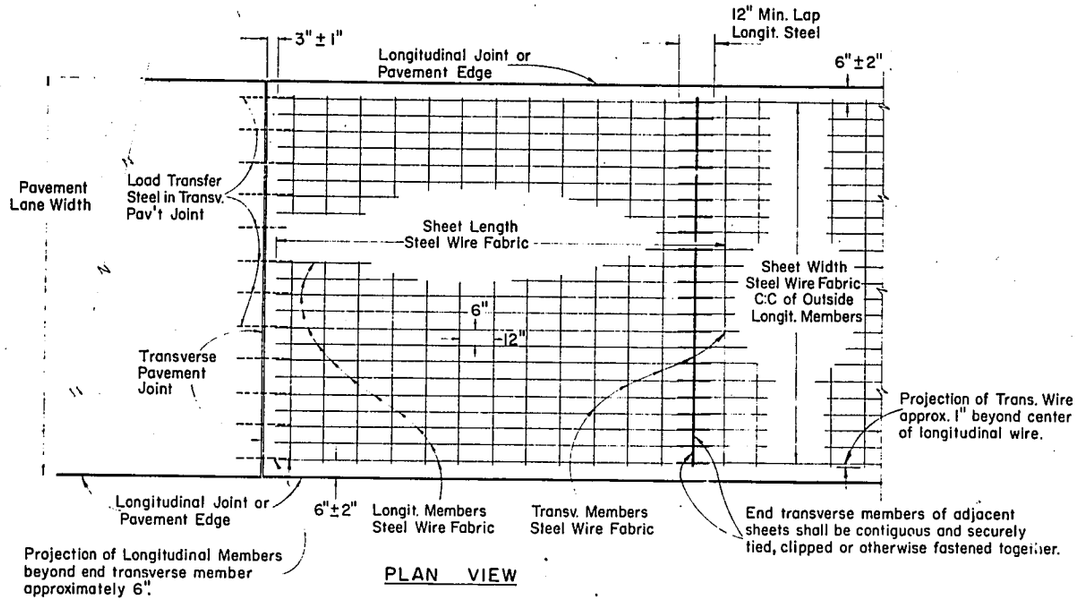
286 +50 287 +50 288 +50 289 +50 290

PLATE 1—PLAN—PROFILE

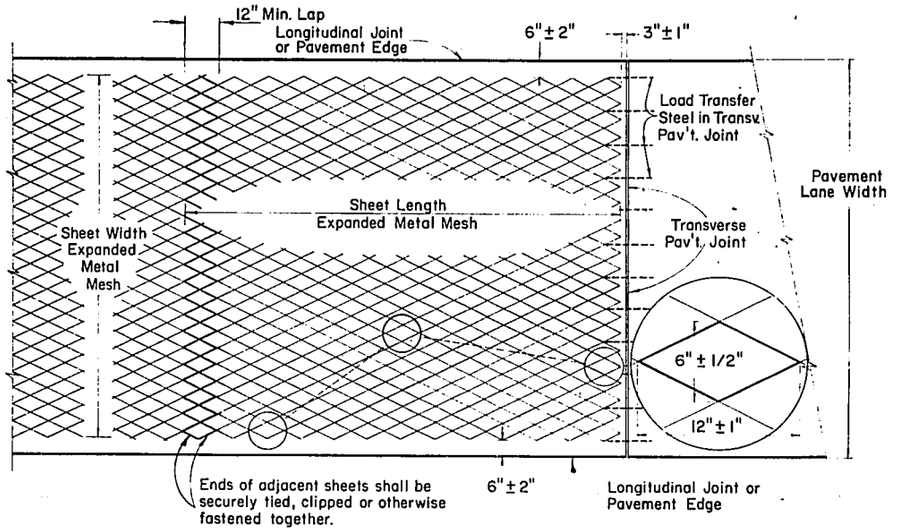
MADE AND PRINTED IN U.S.A.

CHARLES BRUNEN COMPANY, INC.

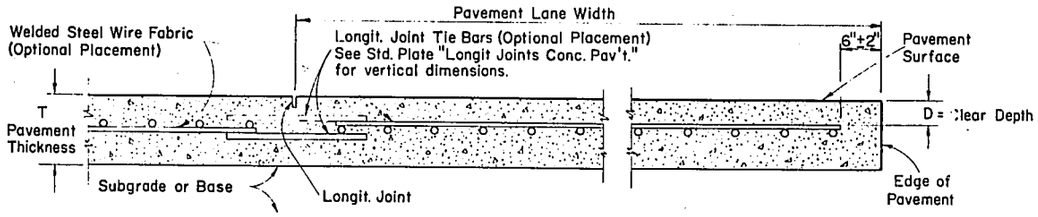
21-76



PLAN VIEW

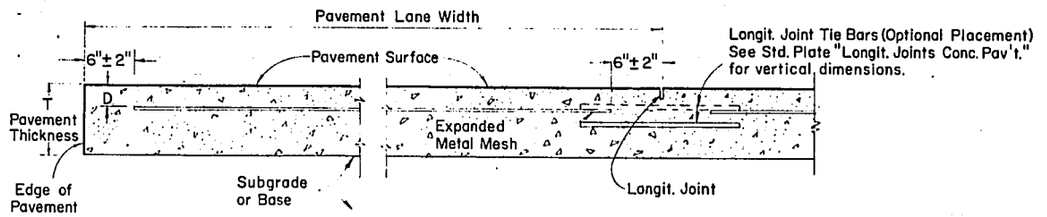


PLAN VIEW



CROSS SECTION

WELDED STEEL WIRE FABRIC



CROSS SECTION

EXPANDED METAL MESH

Pavement Thickness	"D"
8"	2"-4"
9"	2"-4 1/2"
10"	2"-5"

GENERAL NOTES-

Details of Construction and Materials not shown hereon shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

WELDED STEEL WIRE FABRIC

Manufacturer's No. 612-04
Approx. Weight per 100 Sq. Ft. = 69.0 lbs.
Longitudinal Steel - Gage No. 0 = 0.3065" D. at 6" C:C
Transverse Steel - Gage No. 4 = 0.2253" D. at 12" C:C

Welded Steel Wire Fabric shall conform to the requirements of the Standard Specifications for Welded Steel Wire Fabric for Concrete Reinforcement A.A.S.H.O. Designation M55.
Side lap of adjacent sheets approximate 6"

EXPANDED METAL MESH

Weight per 100 Sq. Ft. = 76.0 lbs. min.
Expanded Metal Mesh shall be manufactured from open hearth steel, having a phosphorus content of not more than 0.05 percent, and a yield point of not less than 55,000 p.s.i. The steel shall be sufficiently ductile to permit any strand to be bent through an angle of 180 degrees over one diam. without fracture.
The diamond shaped mesh shall be fabricated by a cold drawn process which will cut and draw the steel forming uniform dimensioned strands conforming to shape and weight as shown elsewhere hereon.
Side lap of adjacent sheets approximate 6"

SHIPPING REQUIREMENTS

Welded Steel Wire Fabric or Expanded Metal Mesh Concrete Pavement Reinforcement shall be shipped to the job site in flat sheets.

CONCRETE PAVEMENT REINFORCEMENT

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

2/2/66
DATE

E. V. Zyskowski
CHIEF DESIGN ENGINEER

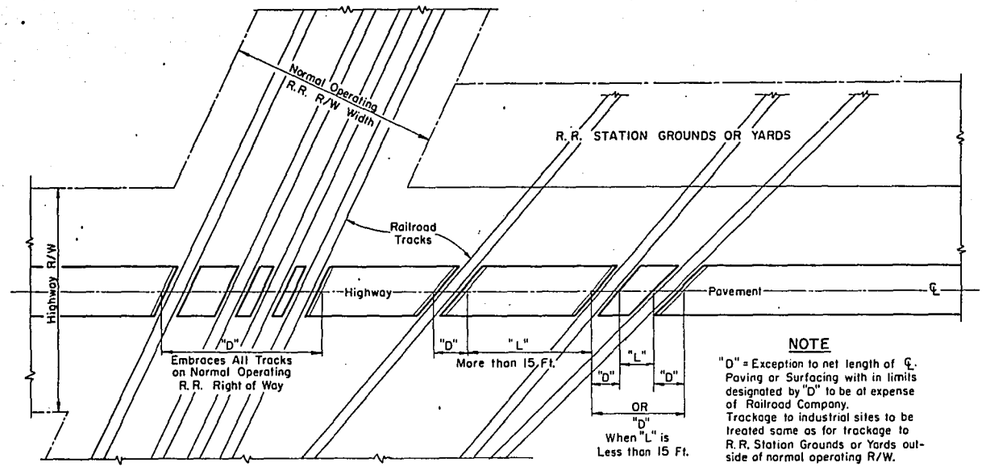
APPROVED:

2/2/66
DATE

A. K. Zimmerman
STATE HIGHWAY ENGINEER

PLATE NO 2 1 1 2

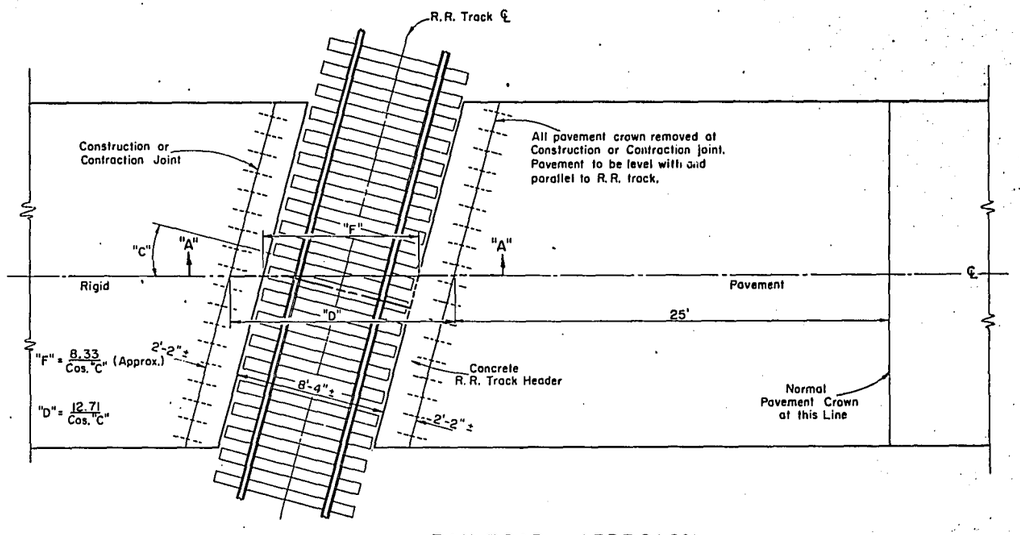
21.1-70



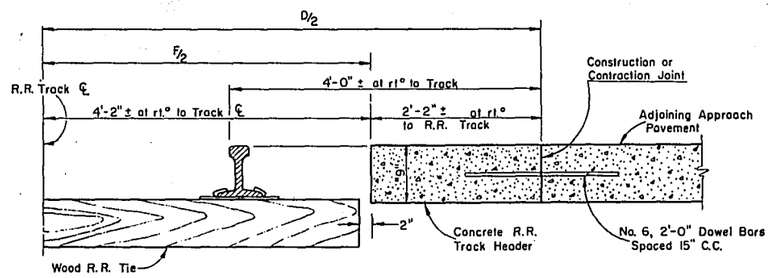
NOTE

"D" = Exception to net length of ℄ Paving or Surfacing with in limits designated by "D" to be at expense of Railroad Company. Trackage to industrial sites to be treated same as for trackage to R.R. Station Grounds or Yards outside of normal operating R/W.

TYPICAL TYPES OF RAILROAD GRADE CROSSINGS SHOWING PAVEMENT HEADER LOCATIONS AND MEASUREMENT DETAILS



RAILROAD APPROACH CONSTRUCTION DETAILS



CROSS SECTION "A-A" SHOWING PAVEMENT HEADER DETAILS AT R.R. TRACKS

GENERAL NOTES

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

The above details appy for concrete surfacing. For bituminous surfacing, construction work shall be carried up to railroad tie ends.

Dimension "D" is an exception to Net Centerline Length for all Surfacing and Grading Projects.

RAILROAD APPROACH DETAILS CONCRETE PAVEMENT

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL

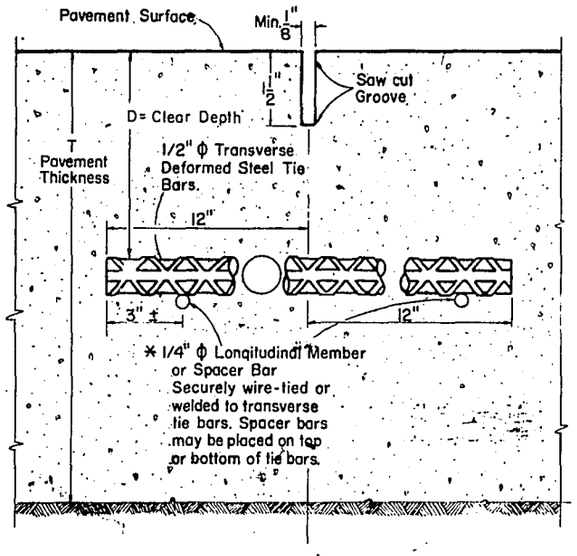
4-7-63 DATE — J. S. Piff ENGINEER OF DESIGN

APPROVED:

4/5/63 DATE — E. L. Ruettiger STATE HIGHWAY ENGINEER

PLATE NO. 2-2.1.11

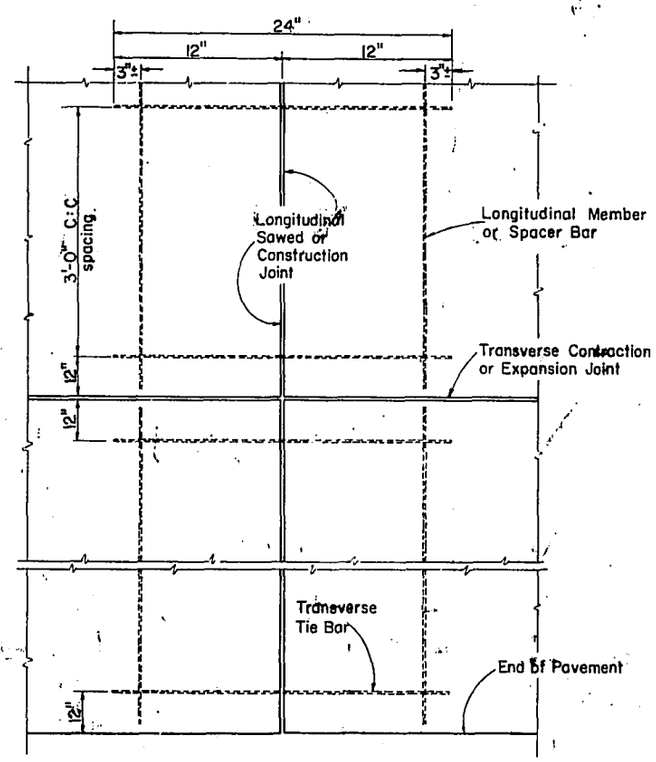
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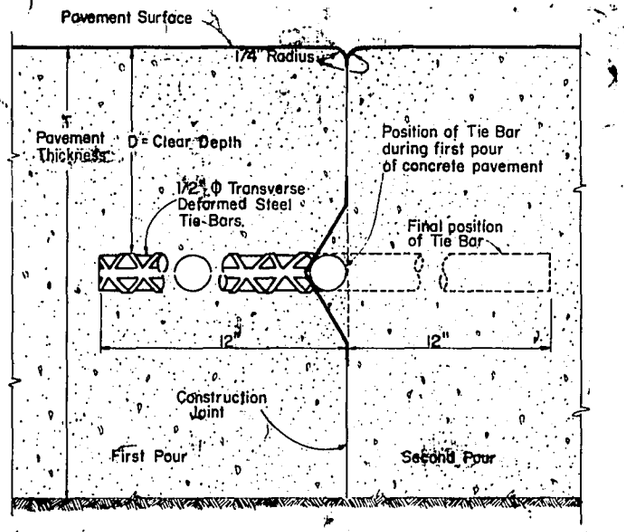
SAWED JOINT

ELEVATION, Showing Tie Bars and Positioning Details

Pavement Thickness	"D"
8"	2"-4 3/4"
9"	2"-5 1/2"
10"	2"-5 3/4"



PLAN VIEW, Showing Tie Bars and Location Details



CONSTRUCTION JOINT

ELEVATION, Showing Tie Bars and Positioning Details

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.

ALTERNATE DESIGNS -

Alternate designs of Bolt Type Joint installations may be used upon written approval of the engineer.

SEALING JOINTS -

Longitudinal Joints shall not be sealed.

*TIE BARS

Tie bars shall be installed as shown (assembled ladder type pattern), or the longitudinal member spacer bar may be omitted if the transverse tie bars can be accurately placed and firmly held during the placing and setting of concrete by devices or methods approved by the engineer, or if mechanical means of placing the tie bars in the plastic concrete are approved by the engineer.

Devices may be omitted on the longitudinal construction joint type when in the opinion of the engineer the tie bars will be retained in their proper designated position.

LONGITUDINAL JOINTS CONCRETE PAVEMENT

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

2/3/66
DATE

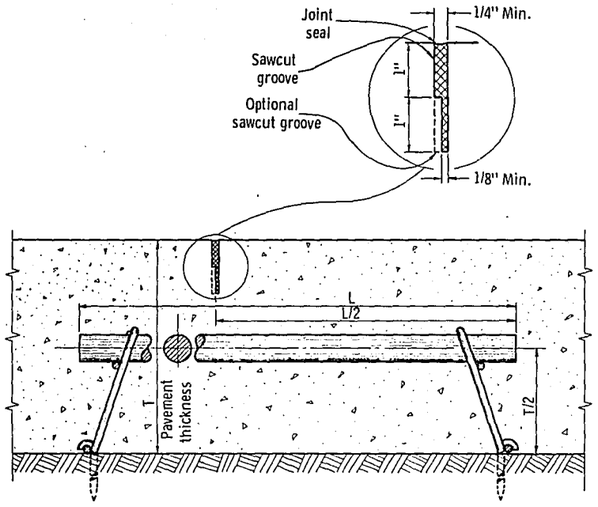
E. J. Ryckert
CHIEF DESIGN ENGINEER

APPROVED:

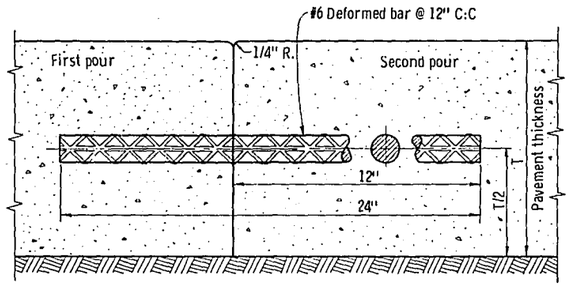
2/3/66
DATE

STATE HIGHWAY ENGINEER

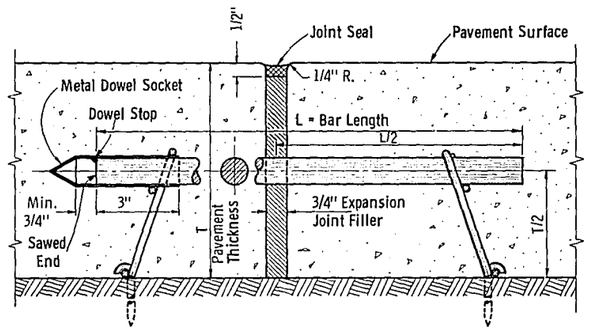
PLATE NO. 4.4



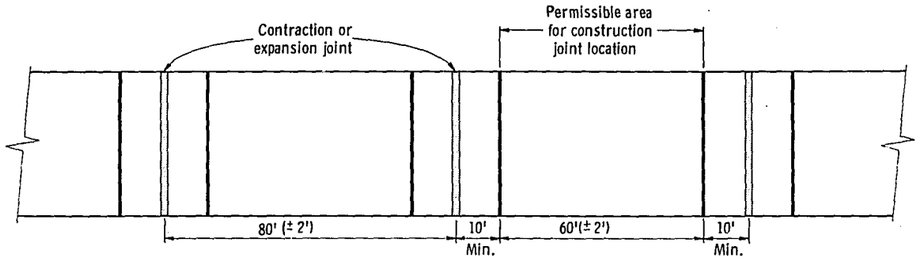
CONTRACTION JOINT



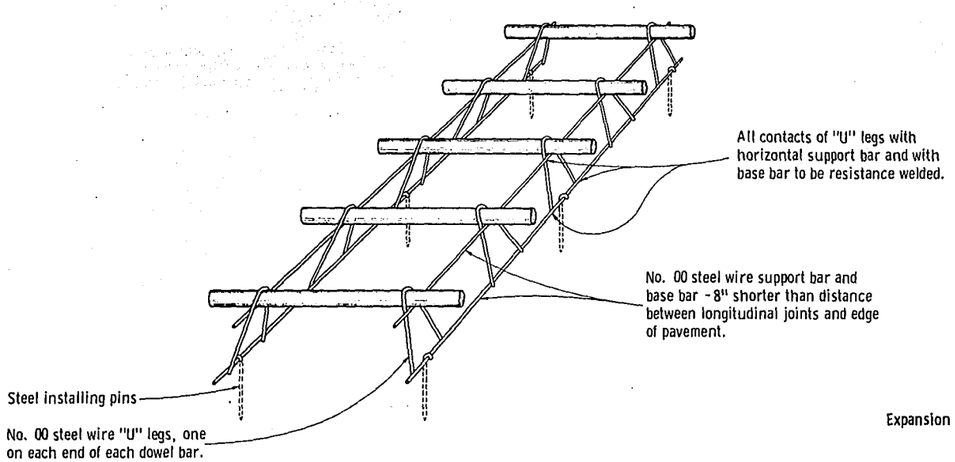
CONSTRUCTION JOINT



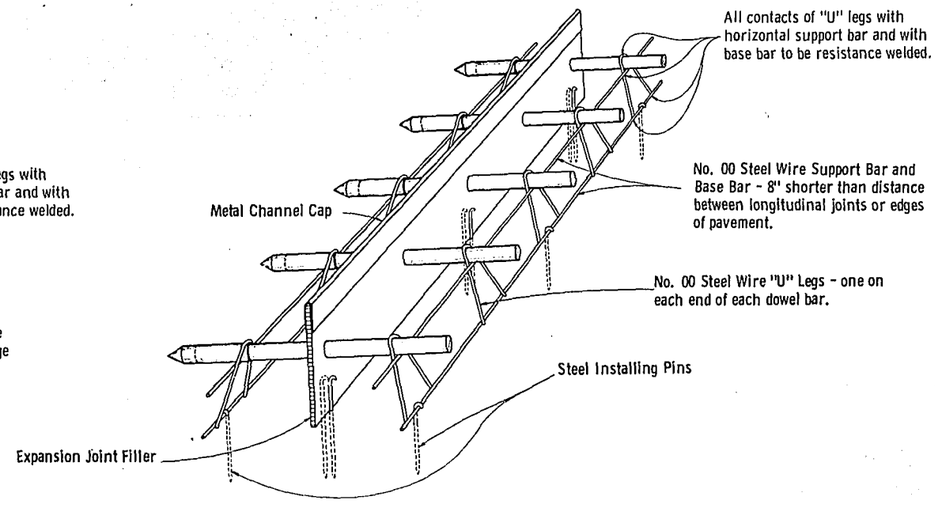
EXPANSION JOINT



SCHEMATIC SHOWING JOINT LOCATIONS



INSTALLING DEVICE FOR LOAD TRANSFER DOWELS FOR CONTRACTION JOINTS



INSTALLING DEVICE FOR LOAD TRANSFER DOWELS AND EXPANSION JOINT ASSEMBLY

GENERAL NOTES 21.3-70

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

Steel installing pins of sufficient number, length,and rigidity shall be placed so as to prevent movement of the joint assembly during construction operations.

Details shown hereon make provision for a minimum of structural adequacy and stability to satisfy Standard Specifications requirements.

ALTERNATE DESIGNS

Alternate designs for load transfer dowels for contraction and expansion joints and appurtenances other than shown hereon may be used upon written approval of the Engineer.

CONTRACTION JOINTS

Contraction joints shall be installed at 80' (±2') spacing from adjacent contraction or expansion joints, except that lesser spacings ranging to a minimum of 40' shall be used:

1. At locations or spacing indicated on the plans.
2. As extensions of transverse joints or cracks in abutting pavement lanes.
3. At locations designated by the Engineer where there are manholes or other fixtures in the pavement.

CONSTRUCTION JOINTS

Deformed bars shall be spaced at 12" C:C and 6" from each edge of pavement.

Deformed bars may be inserted after the concrete has been poured.

Construction joints shall be installed as necessary, except that a construction joint shall be not less than 10 feet from the nearest contraction or expansion joint.

EXPANSION JOINTS

Expansion joints are required only at structure approaches and/or where shown on the plans. The locations may be shifted to avoid stationary fixtures in the pavement.

Expansion joint filler shall be secured with sufficient number of steel pins to preclude any horizontal movement during the placing of concrete.

Metal dowel socket (CAP), 1 1/16" or 1 5/16" Dia., 24 gauge, closed on one end, shall be placed on the sawed end of each dowel bar as required for proper pavement expansion.

SEALING JOINTS

Joints shall be sealed as shown.

DOWEL BARS

Dowel bars shall be spaced at 12" C:C and 6" from each edge of pavement.

One end of each dowel bar shall be sawed and free of all burrs or protruding edges.

Dowel bars shall be painted with a rust inhibitive paint and coated for at least 2/3 their length with liquid asphalt MC 70 or MC 250, or other approved lubricant, to prevent bonding with concrete. The asphalt coating shall be applied to the sawed and capped end of the dowel bar and shall be sufficiently dry so that it will not be removed by the handling and placing of the dowel assembly.

Dowel bar dimensions:

For 7" P.C. Pavement - 1" Ø x 18"
For 8" P.C. Pavement - 1" Ø x 18"
For 9" P.C. Pavement - 1 1/4" Ø x 18"
For 10" P.C. Pavement - 1 1/4" Ø x 18"

TRANSVERSE JOINTS FOR CONCRETE PAVEMENT

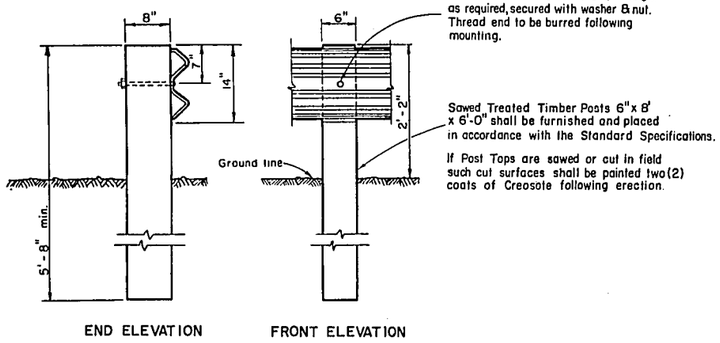
State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:
5/24/68 DATE — E. J. Bykstra CHIEF DESIGN ENGINEER

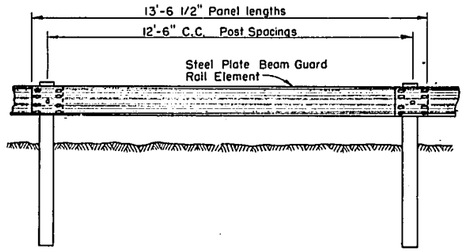
APPROVED:
5/27/68 DATE — W. J. Zimmerman STATE HIGHWAY ENGINEER

Plate No. 4-4.5.11

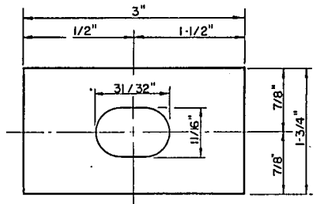
Plate No. 4-4.5.11



END ELEVATION FRONT ELEVATION



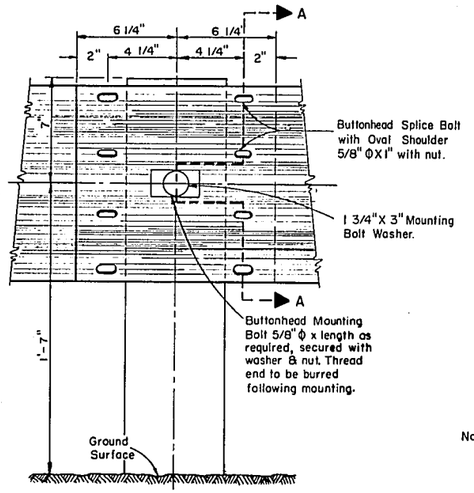
FRONT ELEVATION

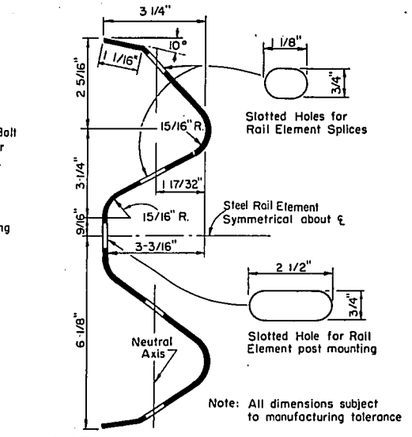


Note: Washer to be 8 Gage Galvanized.

MOUNTING BOLT WASHER DETAILS

POST DETAIL

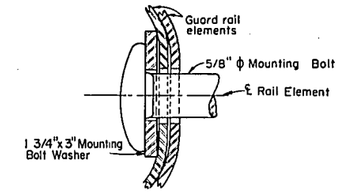




Note: Rail Element to be Min. 12 Gage Steel.

SECTION A-A

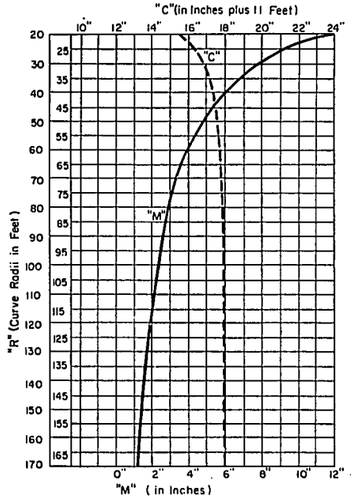
RAIL ELEMENT & POST MOUNTING DETAILS



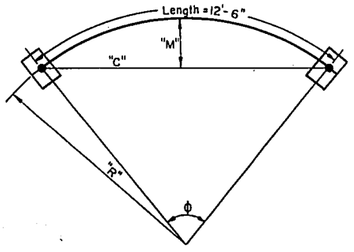
MOUNTING BOLT DETAIL

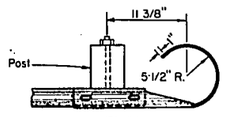
GENERAL NOTES

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

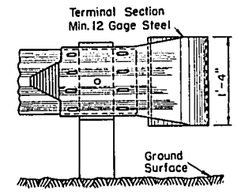


CURVE DATA FOR POST SPACING & BEAM CURVING





PLAN



FRONT ELEVATION

TERMINAL SECTION DETAILS

STEEL PLATE BEAM GUARD
CLASS B

State of Wisconsin
Department of Transportation
Division of Highways

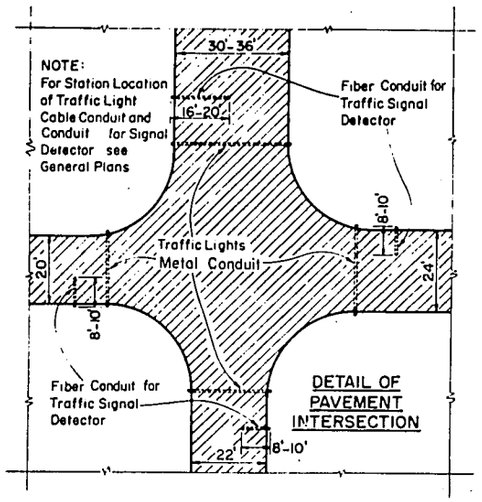
RECOMMENDED FOR APPROVAL:
1/25/68 DATE — E. J. Barfeit CHIEF DESIGN ENGINEER

APPROVED:
2/8/68 DATE — A. Summerfield STATE HIGHWAY ENGINEER

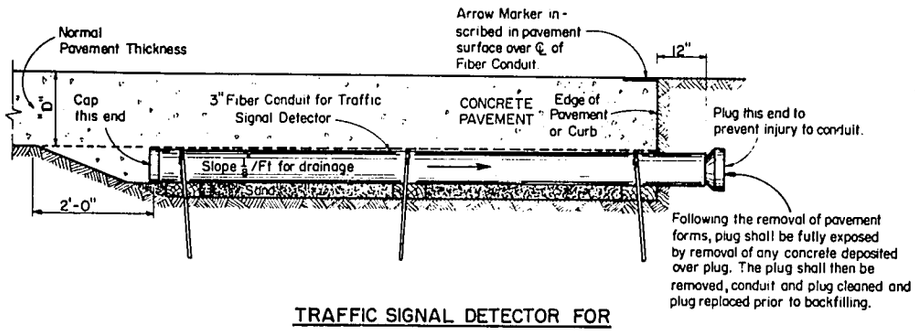
Plate No. 7-2.5.1

Plate No. 7-2.5.1

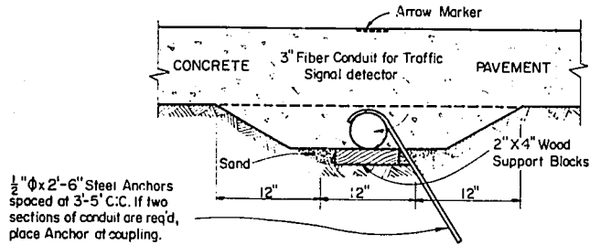
21.5-70



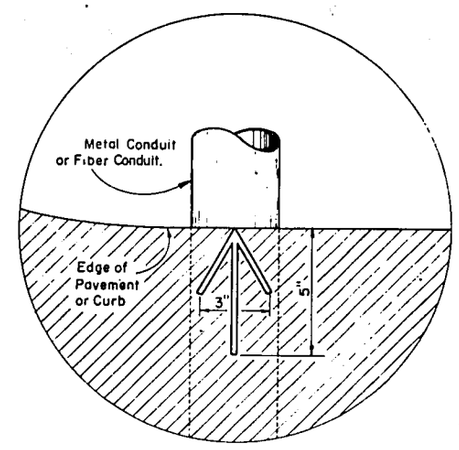
PLAN VIEW
SHOWING RELATIVE POSITION OF
TRAFFIC LIGHT CONDUITS AND
TRAFFIC SIGNAL DETECTOR CONDUITS
AT UNDIVIDED HIGHWAY INTERSECTIONS



TRAFFIC SIGNAL DETECTOR FOR
UNDIVIDED HIGHWAYS

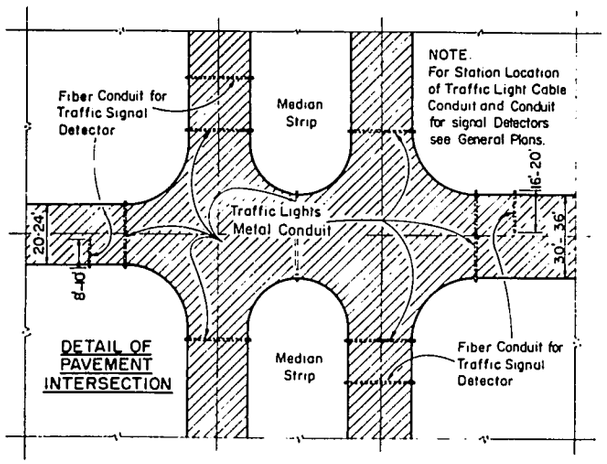


SIDE & END ELEVATIONS
SHOWING PLACEMENT DETAILS
FOR TRAFFIC SIGNAL DETECTOR CONDUIT

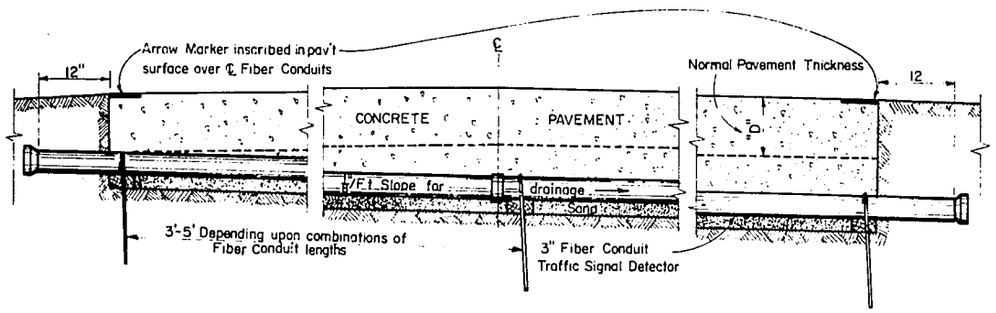


Arrow Marker to be inscribed in fresh concrete and/or bituminous surfacing ¼" to ⅜" deep at each location where pipe conduit or fiber cond. are placed under rigid surfacing.

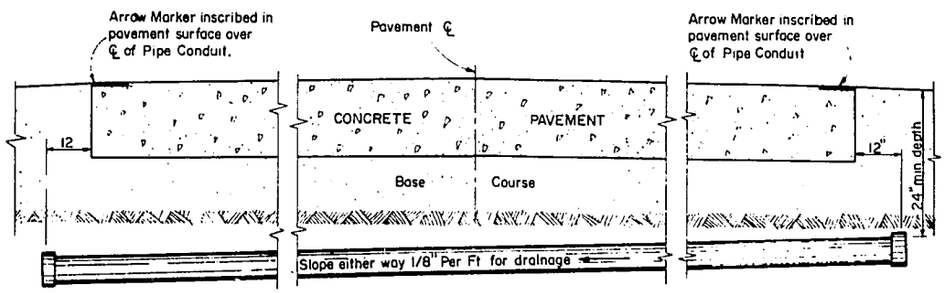
PLAN VIEW - ARROW MARKER



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



TRAFFIC SIGNAL DETECTOR FOR
DIVIDED HIGHWAYS



ELEVATION ON CENTERLINE
SHOWING PLACEMENT DETAILS
FOR TRAFFIC SIGNAL CONDUIT

GENERAL NOTES

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

MATERIALS

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

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

MEASUREMENT & PAYMENT

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

CONDUIT SIZE

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

METAL CONDUIT & FIBER CONDUIT

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL.

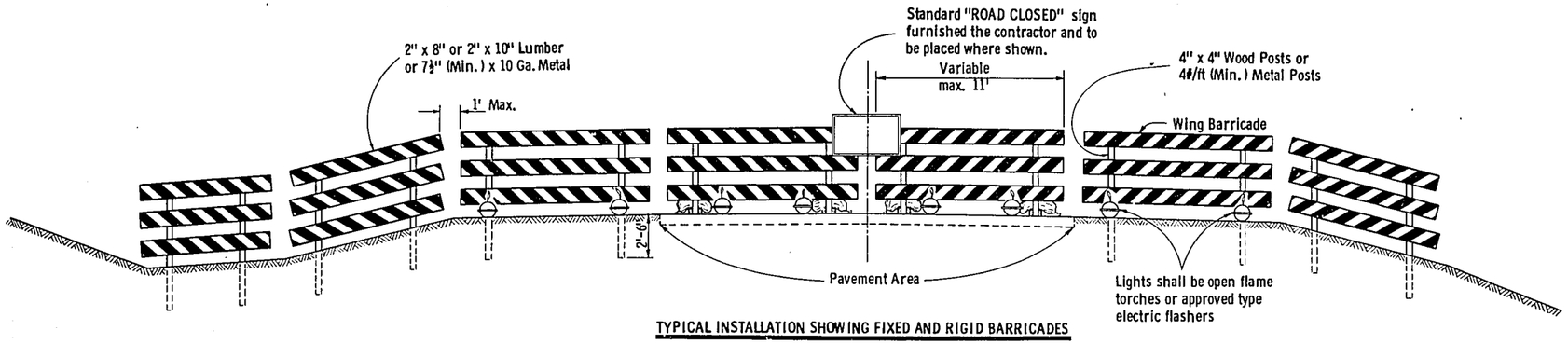
4-3-63 — DATE — J.S. Pelt — ENGINEER OF DESIGN

APPROVED.

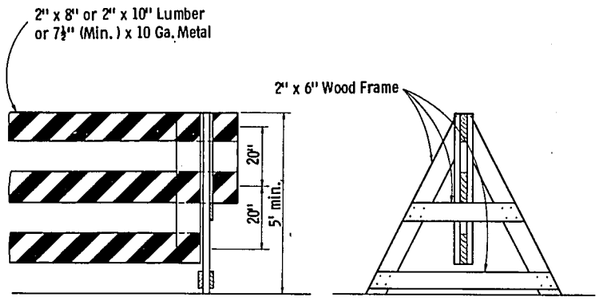
4/5/63 — DATE — E.L. Rettiger — STATE HIGHWAY ENGINEER

PLATE NO. 8-5.1.6

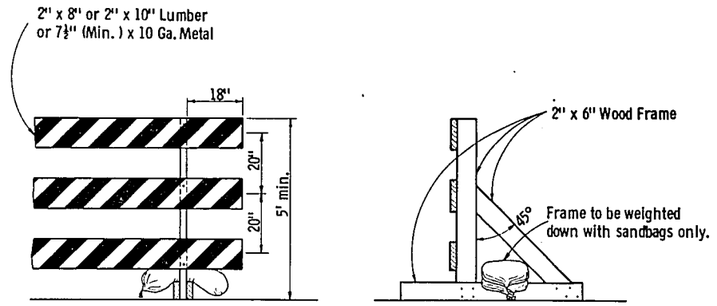
21.6-70



TYPICAL INSTALLATION SHOWING FIXED AND RIGID BARRICADES

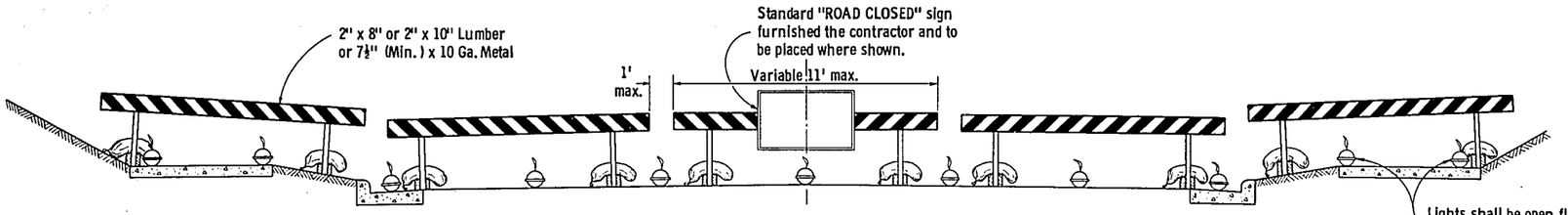


ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

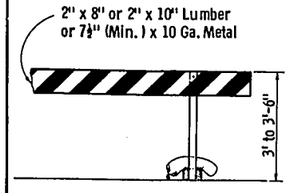


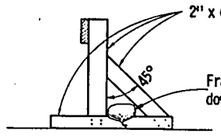
ALTERNATE TYPE INSTALLATION (RIGID)

CLASS I BARRICADES

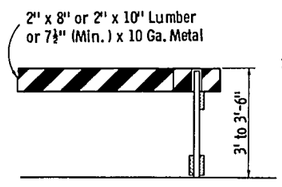


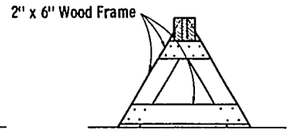
TYPICAL INSTALLATION SHOWING RIGID BARRICADES



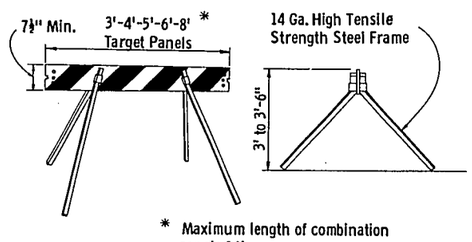


ALTERNATE TYPE INSTALLATION (RIGID)





ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)



* Maximum length of combination panels 16'

ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

CLASS II BARRICADES

GENERAL NOTES

The contractor shall construct, place and maintain barricades as shown on the drawing and as required by the Standard Specifications or applicable Special Provisions.

CLASS 1 BARRICADE:

Class 1 Barricades shall be of variable length as indicated, and long barricades shall be assembled from these units. The Class 1 Barricade is the type normally required for major operations, where the barricade will remain in place for extended periods. Class 1 Barricades shall be used at points where the road is closed to traffic. Gates or movable sections of a barricade shall be provided when necessary, for access of equipment or other authorized vehicles.
Wing Barricades are Class 1 Barricades erected on the shoulder on one or both sides of the pavement to give Traffic the perceptive effect of a narrowing or restricted roadway. The ends closest to traffic of all three members of a wing barricade shall be in a vertical line. If used in a series, they should start at the outer edge of the shoulder and be brought progressively closer to the pavement. Wing Barricades may be used as a mounting for the advance warning or guide signs or for flashers. When used on two-way roadways, the back of the wing barricade shall be painted reflectorized white.

CLASS 11 BARRICADE:

Class 11 Barricades may be used only where the hazard to traffic is relatively small, and for the more or less continuous delimiting of a restricted roadway, or for temporary daytime use.

MATERIAL & FABRICATION:

Lumber shall be of a grade structurally sound and sufficiently rigid to satisfactorily support and maintain the purpose and intent of a barricade facility.
Metal shall be sufficiently rigid to satisfactorily support and maintain the purpose and intent of a barricade facility.
The fabrication of the barricade shall be in accord with good pertinent woodworking and metalworking practices.
All lumber or timber dimensions stated are nominal.

PAINTING:

All barricades shall be painted in alternate 4" or 6" black and white stripes at a 45° angle. The width of stripe shall be consistent for each complete barricade installation.
Black stripes shall be painted with weather resistant and durable black paint. White stripes shall be primed, followed by two coats of white reflectorized paint or reflective wide angle sheeting.

DIRECTION OF DIAGONAL STRIPES:

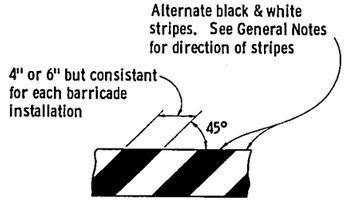
Where a barricade extends entirely across the roadway with no vehicle access provision, the stripes shall slope downward toward the highway centerline.
Where vehicle access is permitted, the stripes shall slope downward in the direction toward which vehicles must turn in detouring.
Where both right and left turns are provided for, the stripes shall slope downward in both directions from the center.
The stripes on wing barricades shall point downward toward the roadway.

LIGHTING:

Lighting devices for barricades shall conform to the requirements of the Standard Specifications.

MEASUREMENT & PAYMENT:

All barricades, unless otherwise provided for in the plans and/or special provisions shall be furnished, placed, and maintained as noted above, and no additional compensation will be allowed but shall be construed to be included in the price bid for other items.



TYPICAL DIAGONAL STRIPES

Applies to all Classes & Types of Barricades

CONSTRUCTION BARRICADE

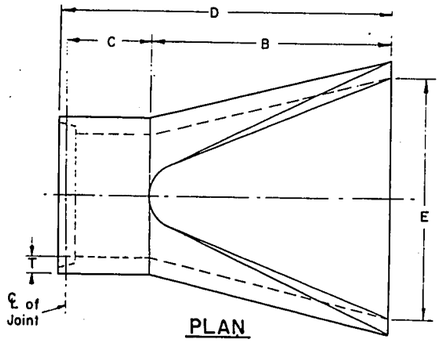
State Highway Commission of Wisconsin

RECOMMENDED FOR APPROVAL:
1/4/67 DATE — CHIEF DESIGN ENGINEER

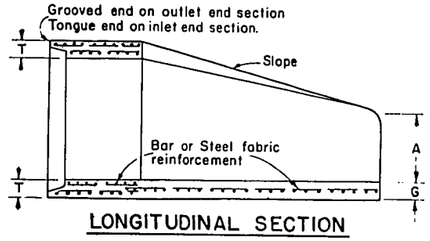
APPROVED:
1/3/67 DATE — STATE HIGHWAY ENGINEER

Plate No. 7-4.1.5

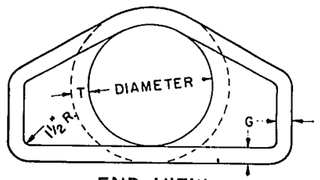
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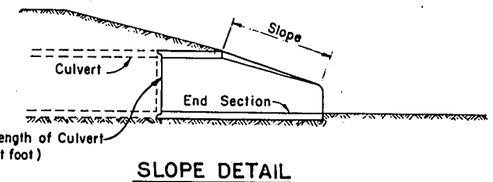
PLAN



LONGITUDINAL SECTION



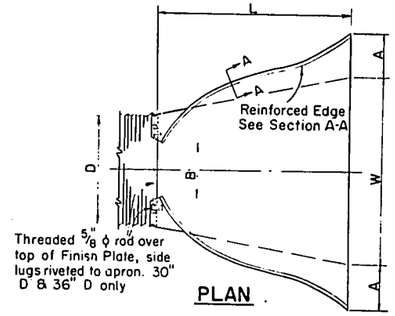
END VIEW



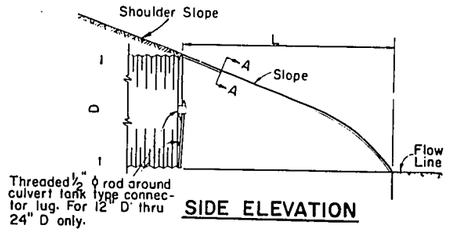
SLOPE DETAIL

DIA.	APPROX. WEIGHT/ SECTION	APPROX SLOPE	T	A	B	C	D	E	G
12"	530	3 to 1	2"	4"	24"	48 7/8"	72 7/8"	24"	2"
15"	740	3 to 1	2¼"	6"	27"	46"	73"	30"	2¼"
18"	990	3 to 1	2½"	9"	27"	46"	73"	36"	2½"
21"	1280	3 to 1	2¾"	9"	36"	37½"	73½"	42"	2¾"
24"	1520	3 to 1	3"	9½"	43½"	30"	73½"	48"	3"
27"	1930	3 to 1	3¼"	10½"	49½"	24"	73½"	54"	3¼"
30"	2190	3 to 1	3½"	12"	54"	19¾"	73¾"	60"	3½"
36"	4100	3 to 1	4"	15"	63"	34¾"	97¾"	72"	4"
42"	5380	3 to 1	4½"	21"	63"	35"	98"	78"	4½"
48"	6550	3 to 1	5"	24"	72"	26"	98"	84"	5"
54"	8040	2²⁄₃ to 1	5½"	27"	65"	33½" min. 35" max.	98" min. 100" max.	90"	5"
60"	8730	2 to 1	6"	30" min. 33" max.	60"	39"	99"	96"	5"
66"	10,630	2 to 1	6½"	24" min. 30" max.	72" min. 78" max.	21" min. 27" max.	99"	102"	5½"
72"	12,520	2 to 1	7"	24" min. 36" max.	78"	21"	99"	108"	6"
78"	14,430	2 to 1	7½"	24" min. 36" max.	78"	21"	99"	114"	6½"
84"	18,160	1½ to 1	8"	36"	90½"	21"	111½"	120"	6½"

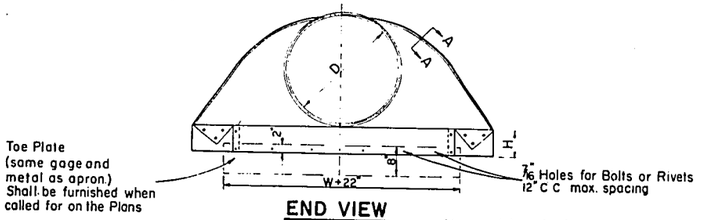
REINFORCED CONCRETE APRON ENDWALLS



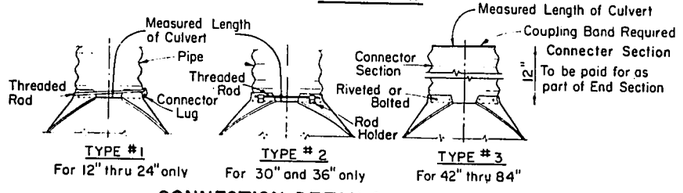
PLAN



SIDE ELEVATION



END VIEW

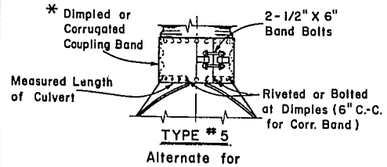


CONNECTION DETAILS

D Pipe Diam.	Gage Min.	Dimensions A ± 1"	B Max.	H ± 1"	L ± 1½"	W ± 2"	Approx. Slope
12"	16	6"	6"	6"	21"	24"	2½ to 1
15"	16	7"	8"	6"	26"	30"	"
18"	16	8"	10"	6"	31"	36"	"
21"	16	9"	12"	6"	36"	42"	"
24"	16	10"	13"	6"	41"	48"	"
30"	14	12"	16"	8"	51"	60"	"
36"	14	14"	19"	9"	60"	72"	"
42"	12	16"	22"	11"	69"	84"	"
48"	12	18"	27"	12"	78"	90"	2¼ to 1
54"	12	18"	30"	12"	84"	102"	2 to 1
60"	12	18"	33"	12"	87"	114"	1¾ to 1
66"	12	18"	36"	12"	87"	120"	1½ to 1
72"	12	18"	39"	12"	87"	126"	1⅓ to 1
78"	12	18"	42"	12"	87"	132"	1⅛ to 1
84"	12	18"	45"	12"	87"	138"	1 1/16 to 1

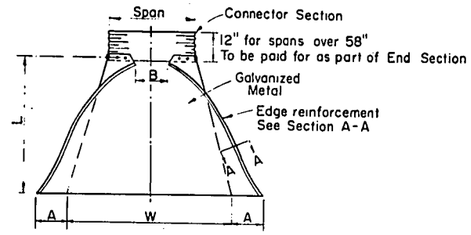
Note: All splices to be lap riveted or bolted.

METAL APRON ENDWALLS

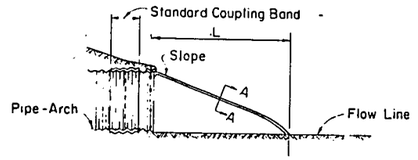


Alternate for
All sizes Corrugated Pipe and Pipe Arch

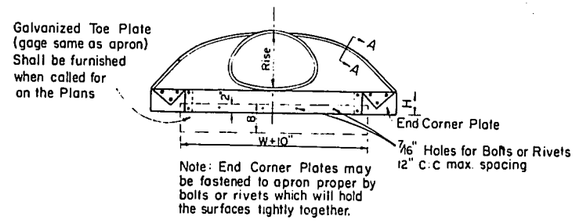
*NOTE: Dimpled Band fits over Outside of Endwall, and Corr. Band fits Inside Endwall. Dimpled Band may be used with Helically Corrugated Pipe.



PLAN
showing alternate type with connector section

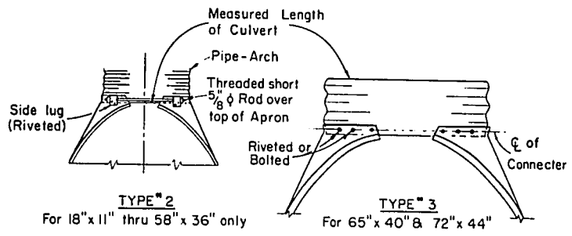


SIDE ELEVATION



Note: End Corner Plates may be fastened to apron proper by bolts or rivets which will hold the surfaces tightly together.

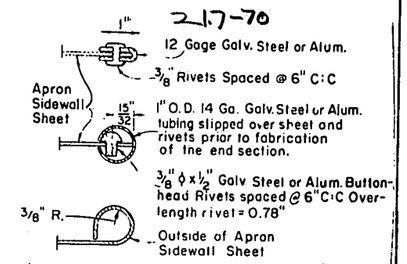
END VIEW



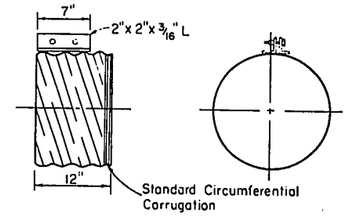
CONNECTION DETAILS

Pipe-Arch Dimensions Span	Rise	Gage Min.	Dimensions A ± 1"	B Max.	H ± 1"	L ± 1½"	W ± 2"	Approx. Slope
18"	11"	16	7"	9"	6"	19"	30"	2½ to 1
22"	13"	16	7"	10"	6"	23"	36"	"
25"	16"	16	8"	12"	6"	28"	42"	"
29"	18"	16	9"	14"	6"	32"	48"	"
36"	22"	14	10"	16"	6"	39"	60"	"
43"	27"	14	12"	18"	8"	46"	75"	"
50"	31"	12	13"	21"	9"	53"	85"	"
58"	36"	12	18"	26"	12"	63"	90"	"
65"	40"	12	18"	30"	12"	70"	102"	2¼ to 1
72"	44"	12	18"	33"	12"	77"	114"	"

Note: All splices to be lap riveted or bolted



SECTION A-A



END SECTION CONNECTION
For 12" thru 21" Diameter Helically Corrugated Metal Pipe

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.

NOTE

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

Reinforced concrete apron endwalls shall be used with concrete pipe culvert installations, steel apron endwalls shall be used with corrugated steel pipe culvert installations, and aluminum apron endwalls shall be used with corrugated aluminum pipe culvert installations, except that steel apron endwalls may be used on corrugated aluminum pipe culverts when a non-metalic insulation material is placed between the steel and aluminum. The non-metalic insulation material shall be so placed between the two metals so as to prohibit galvanic action from occurring.

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

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

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

APRON ENDWALLS FOR CULVERT PIPE & PIPE ARCH

State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:
DATE 12/9/68 — CHIEF DESIGN ENGINEER

APPROVED:
DATE 12/24/68 — STATE HIGHWAY ENGINEER

APRON ENDWALLS FOR CULVERT PIPE

APRON ENDWALLS FOR PIPE ARCH

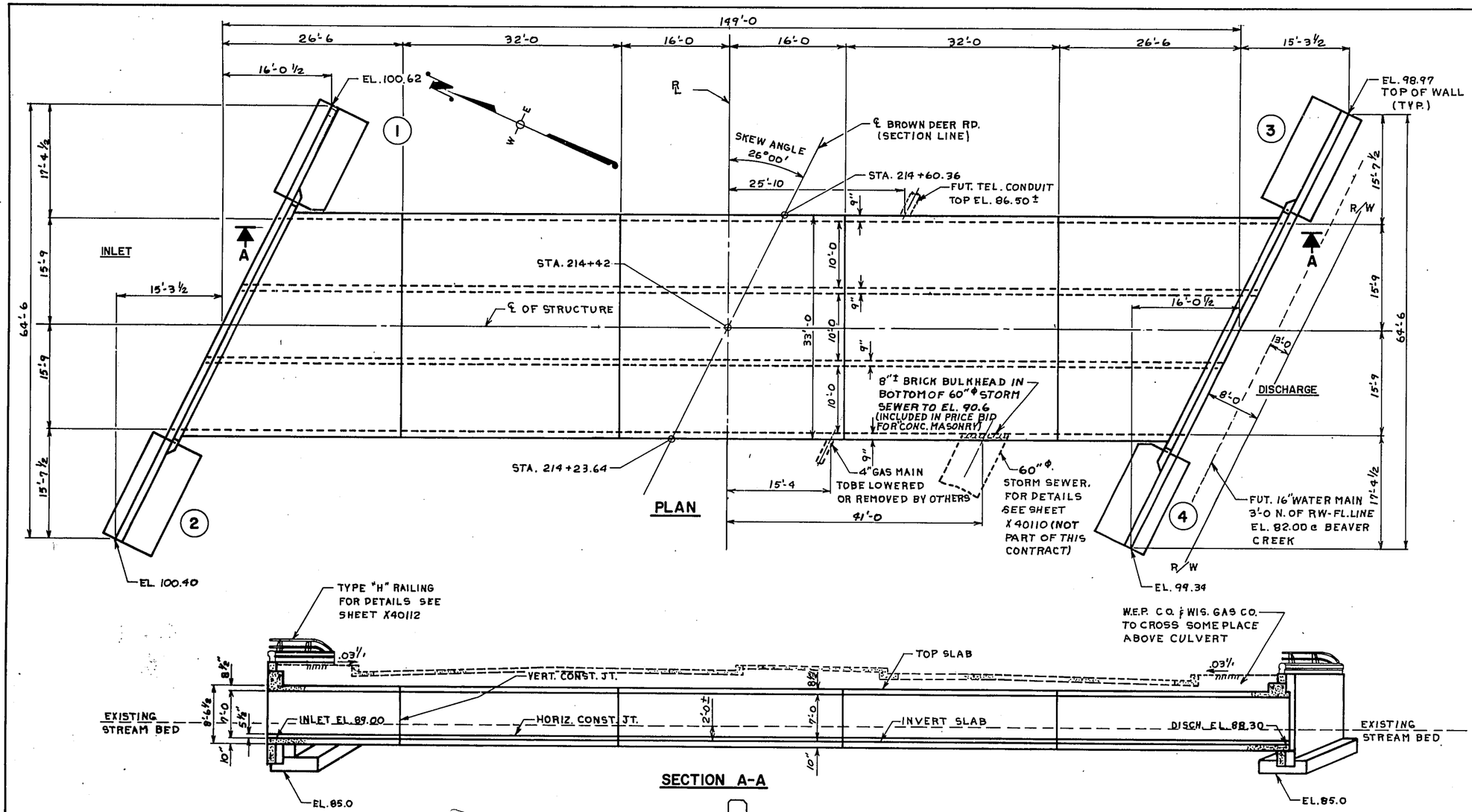
Plate No. 6-2.6.7

Plate No. 6-2.6.7

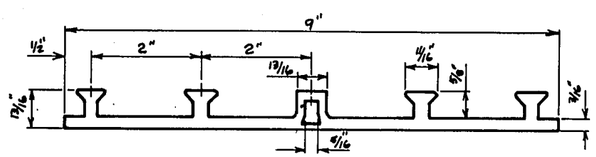
Form E-B-11-67

County & Highway	Route & Section	Class & Agreement State	Class & Agreement Federal	B.P.R. Division	Project	Sheet No.	Total Sheets
40.1	34.1	22.13		4	T034-1(13)	22	70

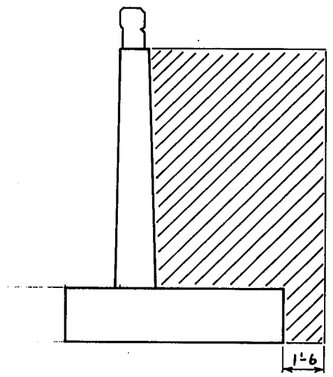
2150-2-70



SECTION A-A



POLYVINYL CHLORIDE WATERSTOP



LIMITS OF GRANULAR BACKFILL AT WINGWALLS

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

IMBED ALL BAR STEEL REINFORCEMENT 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

BEVEL EXPOSED EDGES OF CONCRETE 1" UNLESS SHOWN OR NOTED OTHERWISE.

THE EXISTING GROUNDLINE WAS USED AS THE UPPER LIMITS OF EXCAVATION FOR THE COMPUTATION OF EXCAVATION QUANTITIES.

AT THE SIDEWALLS ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH GRANULAR FILL TO TOP OF BOX. PAYMENT WILL BE MADE ONLY FOR MATERIAL ACTUALLY PLACED WITHIN THE LIMITS OF "EXCAVATION FOR STRUCTURES".

BEFORE ROOF IS PLACED, BACKFILL FLOOR OF STRUCTURE TO EXISTING STREAM BED EL. (FLOOR OF BOX ± 2'-0). COST OF BACKFILL TO BE CONSIDERED AS INCIDENTAL TO OTHER CONTRACT ITEMS.

DESIGN DATA

LIVE LOAD: HS20
EARTH LOAD: BOX DESIGNED FOR 5.0' OF FILL.
WING WALLS: MAXIMUM ALLOWABLE DESIGN PRESSURE FOR FOOTINGS IS 2 TONS PER SQ. FT.

ALLOWABLE DESIGN STRESSES

CONCRETE MASONRY, GRADE "AA"	f_c = 1,400 P.S.I.
BAR STEEL REINFORCEMENT	f_s = 20,000 P.S.I.

HYDRAULIC DATA

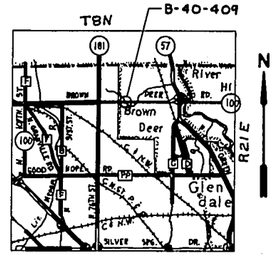
Q = 900 CUBIC FT./SEC.
V = 10 FT./SEC.

TOTAL ESTIMATED QUANTITIES

EXCAVATION FOR STRUCTURES	1,450.0 C.Y.
GRANULAR BACKFILL	325.0 C.Y.
CONCRETE MASONRY	307.9 C.Y.
BAR STEEL REINFORCEMENT	61,097 LB.
TUBULAR RAILING, TYPE "H"	141.0 L.F.
REMOVING OLD STRUCTURE, STA. 214+10	1 L.S.
NON-BID ITEMS	
POLYVINYL CHLORIDE WATERSTOP	44.0 L.F.
FILLER	¾" SIZE

LIST OF DRAWINGS

1. DETAILS — X40108
2. DETAILS — X40109
3. DETAILS — X40110
4. BILL OF BARS & DETAILS — X40111
5. DETAILS FOR TYPE "H" RAILING — X40112



LAYOUT

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-40-409

S.T.H. 100 OVER BEAVER CREEK

County MILWAUKEE		City, Village BROWN DEER	
Design Spec. A.A.S.H.O. 1965		Load HS20	Const. Spec. 1969
Designed By I.B.M.	Design Checked	Drawn By B.W.	Plans Checked W.J.E.

Approved W. A. Klein, Chief Bridge Engineer — 1-10-69, Date

DETAILS

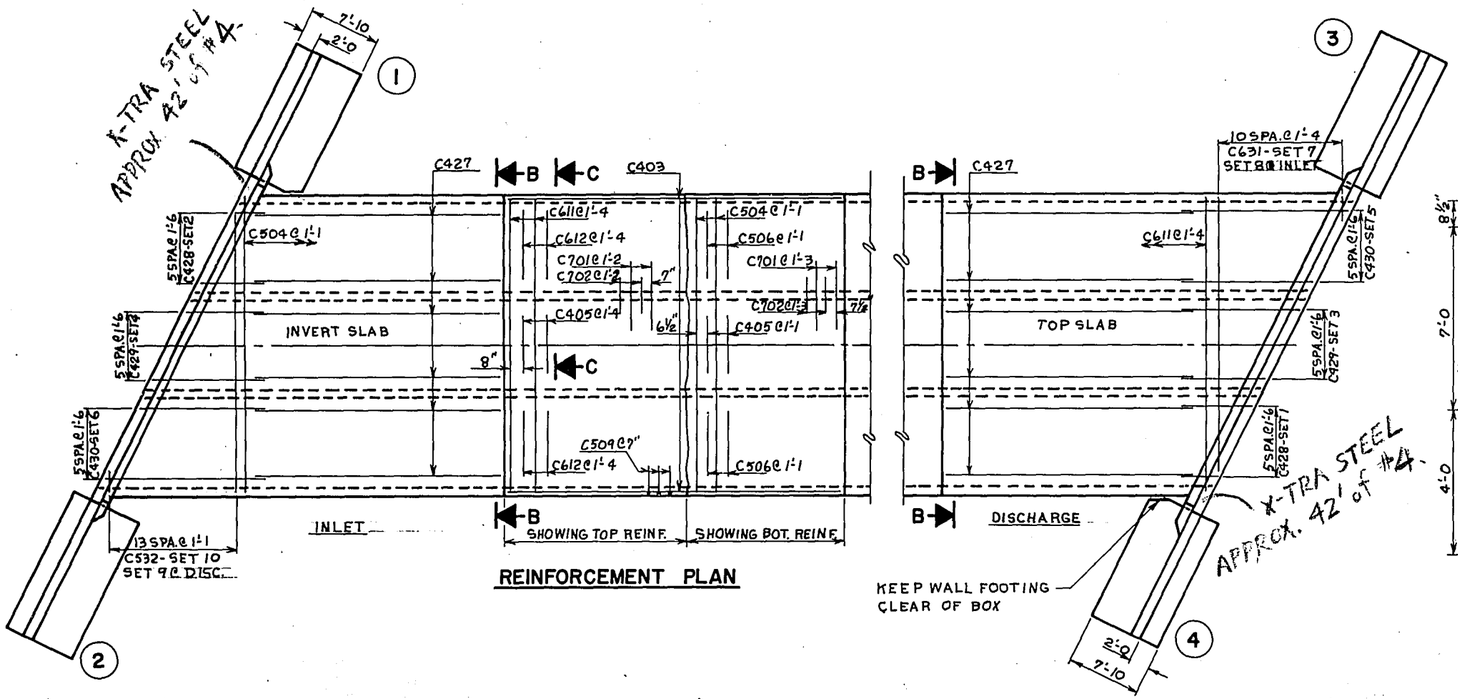
SHEET 1 OF 5

X40108

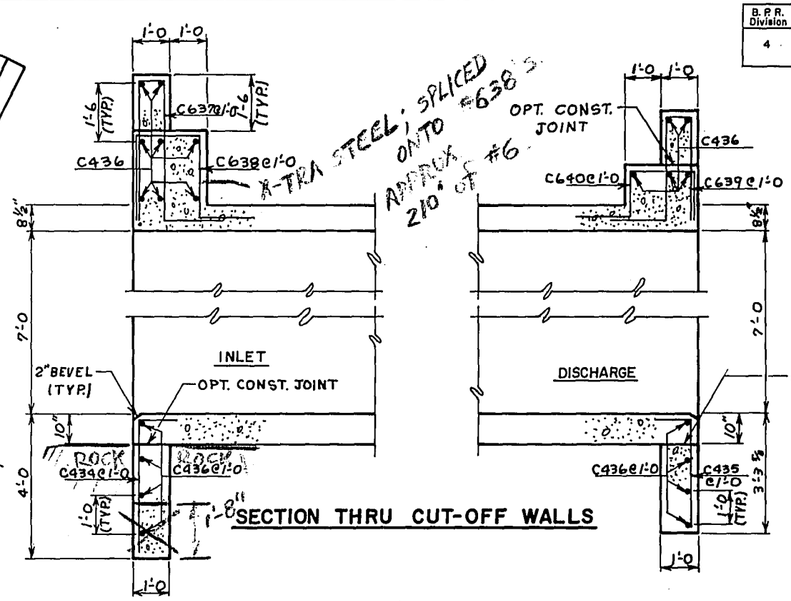
Form E-B-12-67

B.P.R. Division	Project	Sheet Number	Total Sheets
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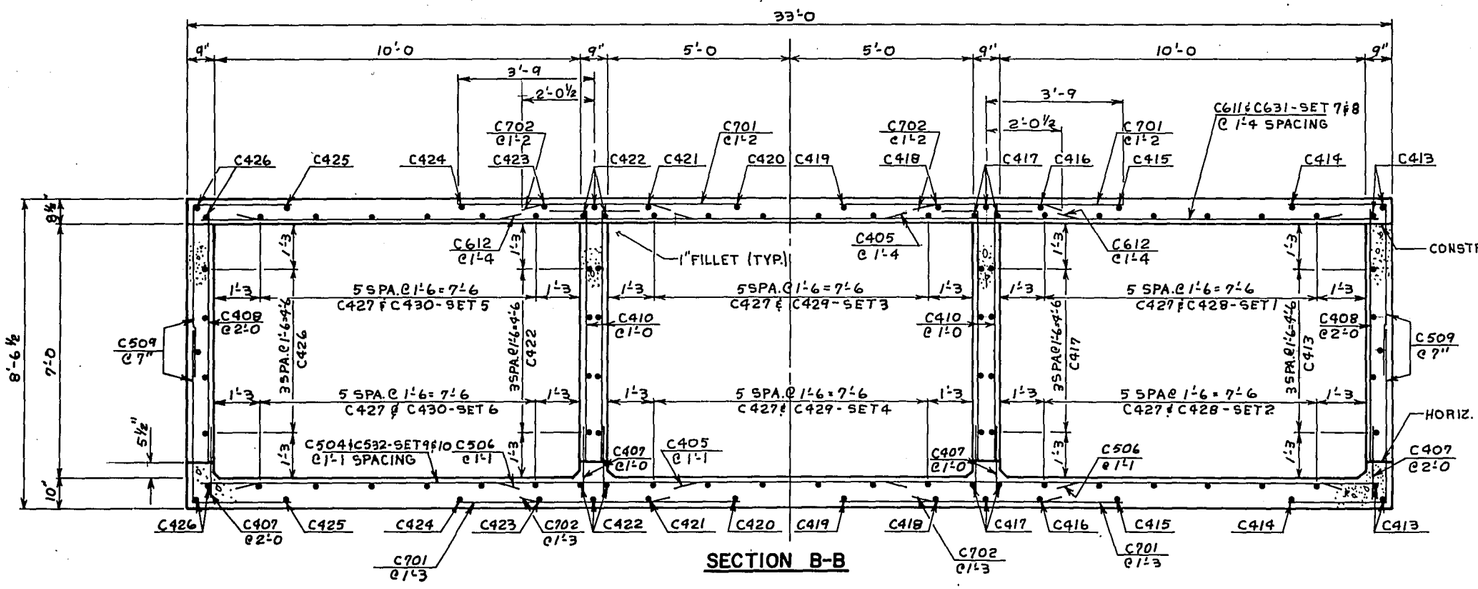
2150-2-70



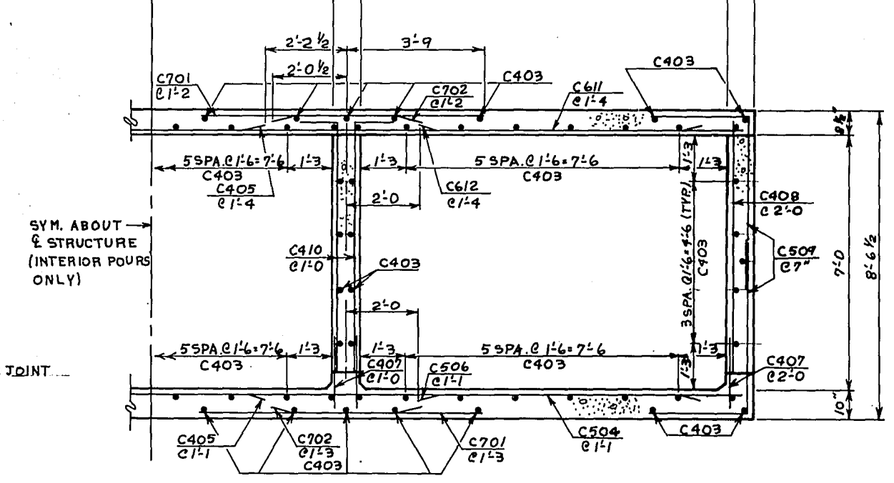
REINFORCEMENT PLAN



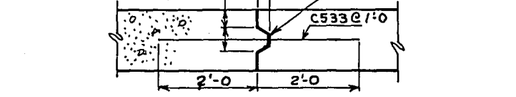
SECTION THRU CUT-OFF WALLS



SECTION B-B



SECTION C-C



VERT. CONST. JOINT

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-40-409

Const. Spec. 1969	Drawn By B. W.	Plans Checked W. J. E.

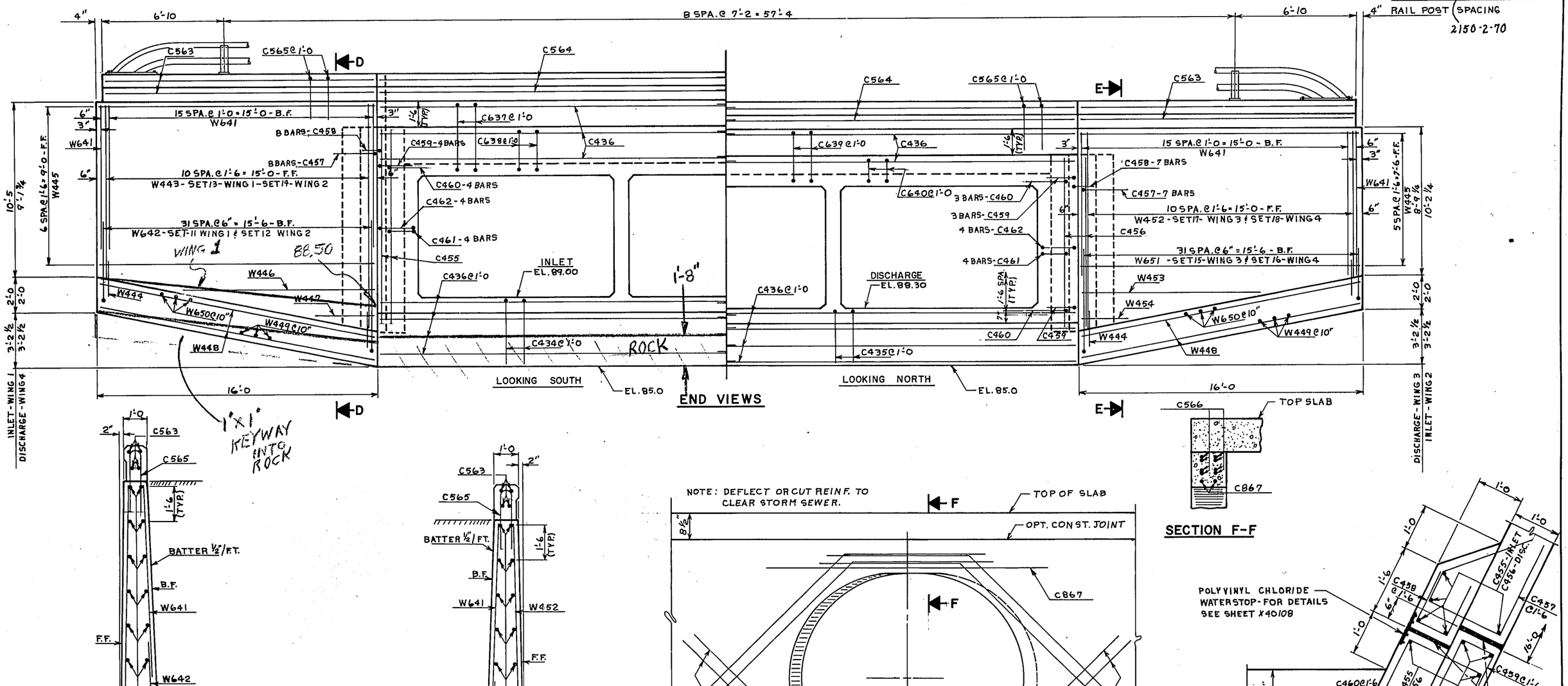
DETAILS

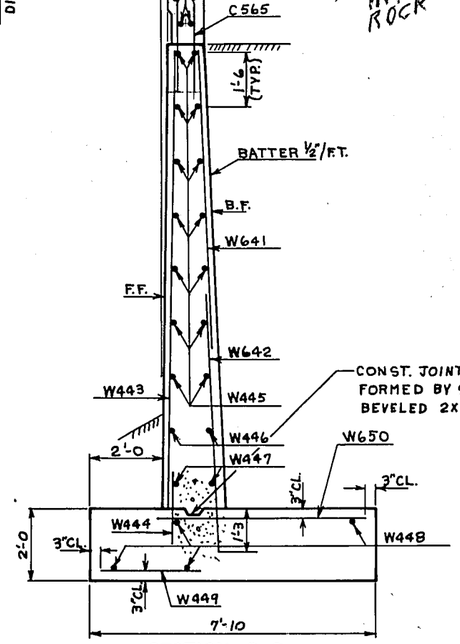
SHEET 2 OF 5

X40109

Form E-B-12-67

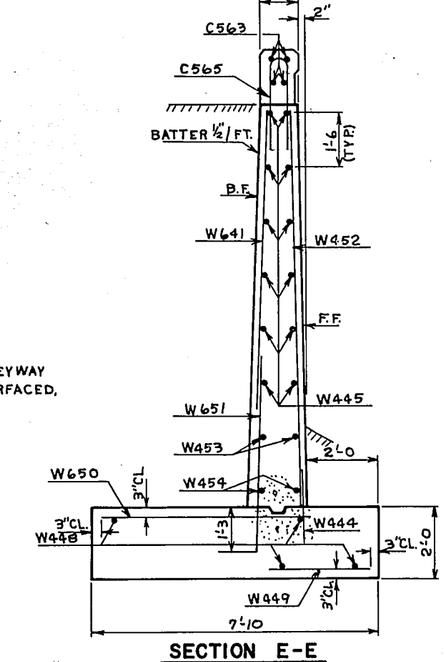
B.P.R. Division	Project	Sheet Number	Total Sheets
4	TO341(13)	24	70





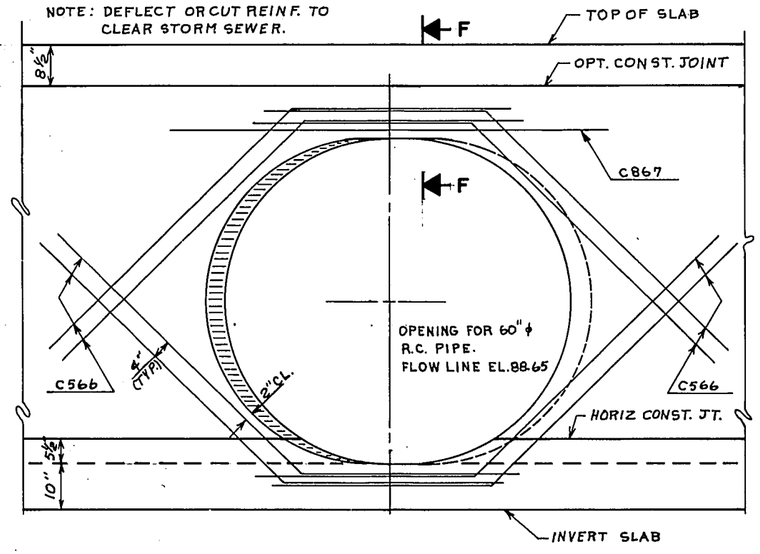
SECTION D-D

WING 1 SHOWN - WING 2 SIMILAR



SECTION E-E

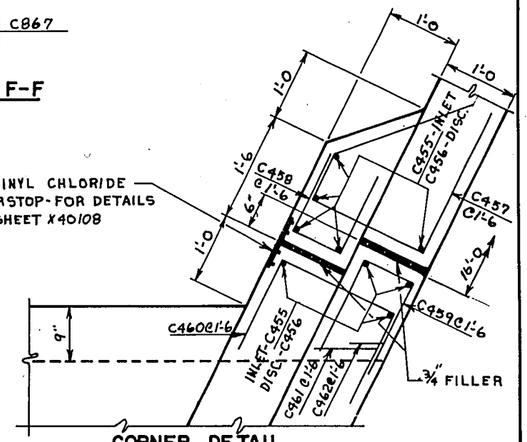
WING 3 SHOWN - WING 4 SIMILAR



VIEW AT STORM SEWER

(SHOWN AT RT. ANGLES TO CULVERT)

SECTION F-F



CORNER DETAIL

(TYP. ALL CORNERS)

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-40-409

Const. Spec. 1969	Drawn By B.W.	Plans Checked W.J.E.

DETAILS

SHEET 3 OF 5

X40110

Form E-B-12-67

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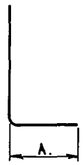
2150-2-70

BILL OF BARS

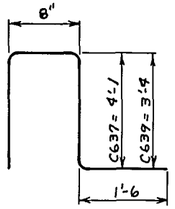
61,097 #

MARK	NO. REQ'D.	LENGTH	BENT	CUT DIAG.	LOCATION
C701	494	7'-9			INVERT & TOP SLAB - TRAN.
C702	490	4'-1			" & " " - "
C403	612	16'-4			LONG. STEEL - INT. POURS ONLY
C504	123	32'-5			INVERT - TRAN. - HORIZ.
C405	248	6'-9			" & TOP SLAB - TRAN. - HORIZ.
C506	274	7'-9			" - TRAN. - HORIZ.
C407	796	2'-0			WALLS - VERT.
C408	150	7'-0			OUTSIDE WALLS - VERT.
C509	1020	7'-5	X		" " - "
C410	596	8'-0	X		INSIDE WALLS - "
C611	100	32'-5			TOP SLAB - TRAN. - HORIZ.
C612	282	7'-9			" " - " - "
C413	18	18'-5			INVERT & TOP SLAB - LONG. - END POURS
C414	4	19'-5			" & " " - " - " "
C415	4	21'-8			" & " " - " - " "
C416	4	22'-9			" & " " - " - " "
C417	28	23'-6			" & " " - " - " "
C418	4	24'-4			" & " " - " - " "
C419	4	25'-4			" & " " - " - " "
C420	4	27'-0			" & " " - " - " "
C421	4	28'-0			" & " " - " - " "
C422	28	28'-9			" & " " - " - " "
C423	4	29'-6			" & " " - " - " "
C424	8	15'-10			" & " " - " - " "
C425	8	16'-11			" & " " - " - " "
C426	36	17'-6			" & " " - " - " "
C427	72	17'-3			" & " " - " - " "
C428	12	9'-8		X	" & " " - " - " "
C429	12	20'-2		X	" & " " - " - " "
C430	12	30'-8		X	" & " " - " - " "
C631	11	34'-0		X	TOP SLAB - TRAN. - HORIZ. - " "
C532	14	33'-2		X	INVERT - " - " - " "
C533	282	4'-0			VERT. CONST. JOINT
C434	40	4'-9	X		CUT-OFF WALL - INLET - VERT.
C435	40	3'-10	X		" " " - DISCH. - "
C436	42	20'-2			HEADER & CUT-OFF WALL - IN. & DIS. - HORIZ.
C637	90	9'-10	X		HEADER - INLET - VERT.
C638	40	7'-3	X		" - " - "
C639	40	8'-4	X		" - DISCH. - "
C640	40	6'-0	X		" - " - "
W641	68	8'-3			WINGS 1,2,3,4 - VERT. - B.F.
W642	32	14'-5	X	X	FOOTINGS - WINGS 1 & 2 - VERT. - B.F.
W443	11	23'-4		X	WINGS 1 & 2 - VERT. - F.F.
W444	44	2'-0			FOOTING - WINGS 1,2,3,4 - VERT. - F.F.
W445	52	15'-8			WINGS 1,2,3,4 - HORIZ. - F.F. & B.F.
W446	4	10'-9			" 1 & 2 - " - " & "
W447	4	3'-6			" 1 & 2 - " - " & "
W448	16	16'-0			FOOTINGS - WINGS 1,2,3,4 - HORIZ.
W449	80	2'-9			" - " 1,2,3,4 - "
W650	80	5'-9			" - " 1,2,3,4 - "
W651	32	11'-11	X	X	WINGS 3 & 4 - VERT. - B.F.
W452	11	20'-8		X	" 3 & 4 - " - F.F.
W453	4	12'-0			" 3 & 4 - HORIZ. - F.F. & B.F.
W454	4	4'-0			" 3 & 4 - " - " & B.F.
C455	18	11'-0			CORNER DETAIL - WINGS 1 & 2 - VERT.
C456	18	9'-9			" " - " 3 & 4 - "
C457	30	6'-9	X		" " - WINGS 1,2,3,4 - HORIZ.
C458	30	2'-10	X		" " - " 1,2,3,4 - "
C459	19	3'-9	X		" " - " 1,2,3,4 - "
C460	19	4'-2	X		" " - " 1,2,3,4 - "
C461	16	4'-1	X		" " - " 1,2,3,4 - "
C462	16	3'-3	X		" " - " 1,2,3,4 - "
C563	16	15'-4			RAILING PARAPET - HORIZ.
C564	16	20'-4			" " - "
C565	142	6'-5	X		" " - VERT.
C566	16	10'-2	X		STORM SEWER DETAIL - VERT.
C867	2	8'-0			" " " - HORIZ.

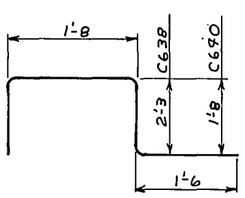
MARK	DIM. A.
C509	2'-8
C410	1'-0
C434	1'-0
C435	1'-0
W642	1'-0 1/2
W651	1'-0 1/2



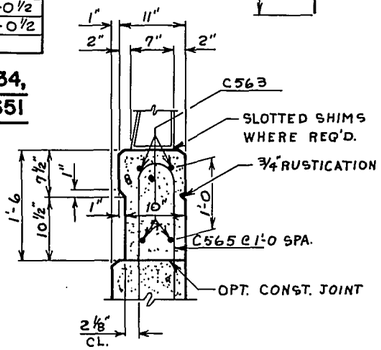
C509, C410, C434, C435, W642, W651



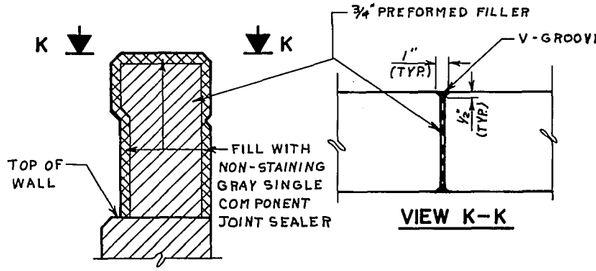
C637, C639



C638, C640



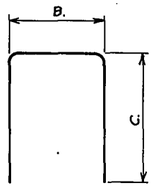
SECTION THRU RAIL PARAPET



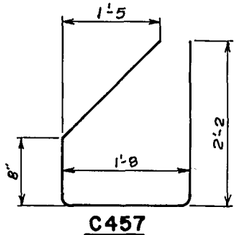
VIEW K-K

SECTION THRU RAIL PARAPET AT DEFLECTION JOINT

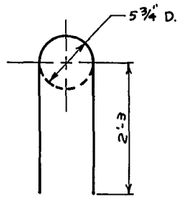
MARK	DIM. B.	DIM. C.
C458	8"	1'-2
C459	8"	1'-5
C460	1'-8	1'-4



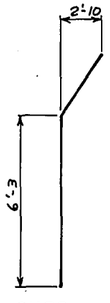
C458, C459, C460



C457



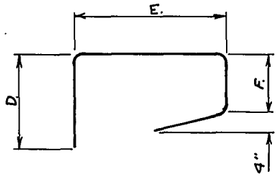
C565



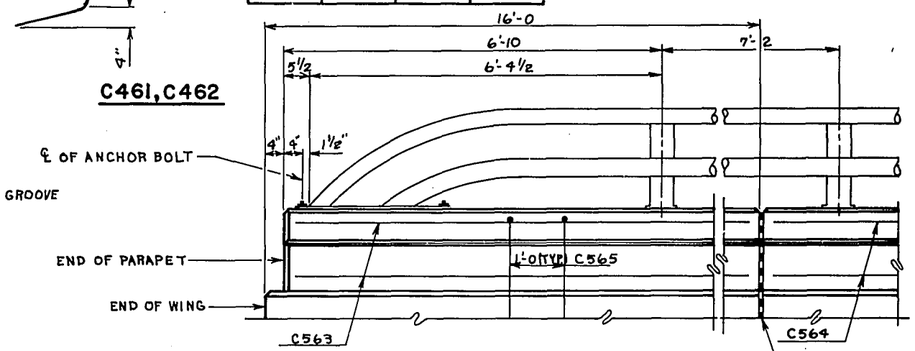
C566

NOTE: THE FIRST DIGIT OF A THREE DIGIT MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT MARK SIGNIFIES THE BAR SIZE.
ALL BAR BENDING DIMENSIONS ARE OUT TO OUT OF BAR.

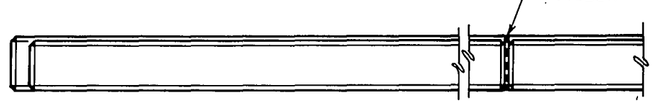
MARK	DIM. D.	DIM. E.	DIM. F.
C461	1'-4	1'-8	6"
C462	1'-5	8"	11"



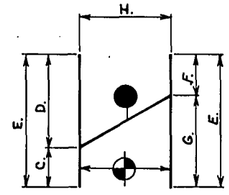
C461, C462



ELEVATION OF RAIL PARAPET



PLAN



CUTTING DIAGRAM

MARK		C.	D.	E.	F.	G.	H.	SETS REQ'D.
C428	SET 1	3'-0	—	9'-8	—	6'-8	6	2
	SET 2	—	6'-8		3'-0	—		2
C429	SET 3	8'-3	—	20'-2	—	11'-11	6	2
	SET 4	—	11'-11		8'-3	—		2
C430	SET 5	13'-6	—	30'-8	—	17'-2	6	2
	SET 6	—	17'-2		13'-6	—		2
C631	SET 7	3'-4	—	34'-0	—	30'-8	11	1
	SET 8	—	30'-8		3'-4	—		1
C532	SET 9	2'-2	—	33'-2	—	31'-0	14	1
	SET 10	—	31'-0		2'-2	—		1
W642	SET 11	5'-7	—	14'-5	—	8'-10	32	1
	SET 12	—	8'-10		5'-7	—		1
W443	SET 13	10'-3	—	23'-4	—	13'-4	11	1
	SET 14	—	13'-1		10'-0	—		1
W651	SET 15	4'-2	—	11'-11	—	7'-4	32	1
	SET 16	—	7'-9		4'-7	—		1
W452	SET 17	8'-7	—	20'-8	—	11'-9	11	1
	SET 18	—	12'-1		8'-11	—		1

● MARK AND CUT ALL BARS ALONG THIS LINE. MAKE ALL CUTS NORMAL TO BAR AXIS.

⊕ BUNDLE, MARK AND CUT BARS WITH BAR AND SET NUMBERS.
BENT BARS USED IN A CUTTING DIAGRAM SHALL BE BENT AFTER CUTTING.
"H" IS THE NUMBER OF BARS IN A CUTTING DIAGRAM, BEFORE CUTTING.

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-40-409

Const. Spec. 1969	Drawn By B.W.	Plans Checked W.J.E.

BILL OF BARS & DETAILS

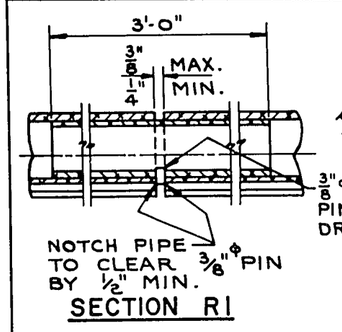
SHEET 4 OF 5

X40111

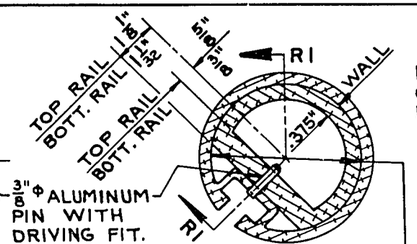
FORM E-B-12-62

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
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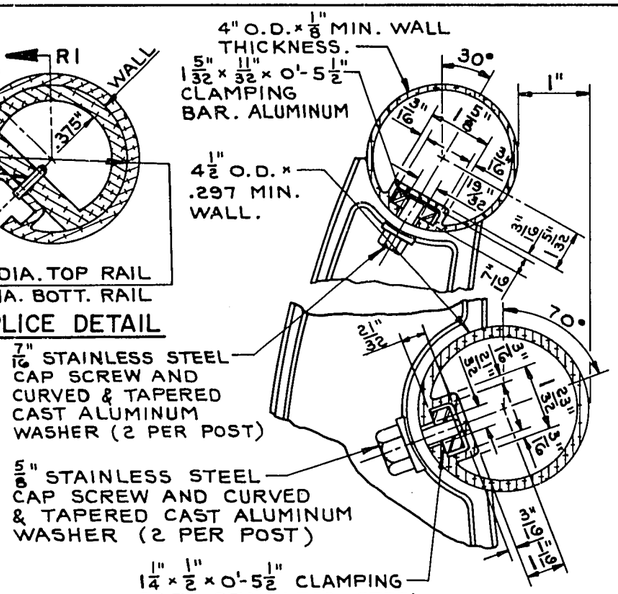
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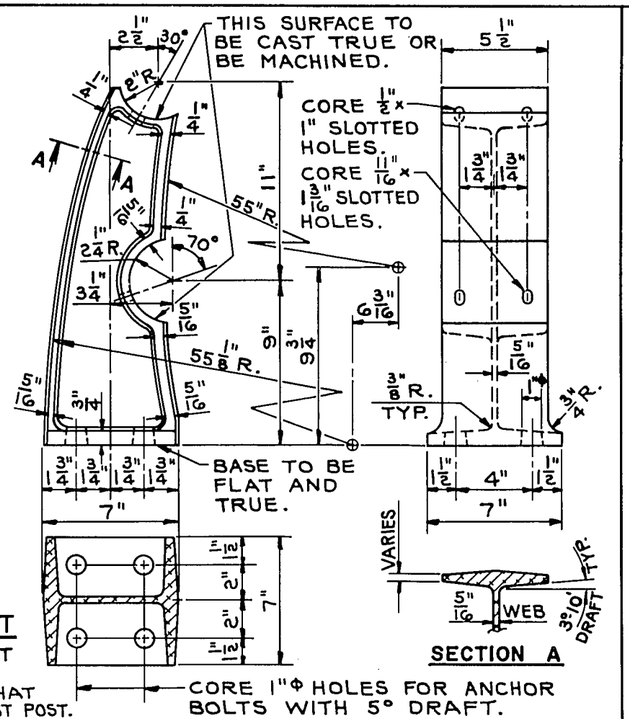
SECTION R1



RAIL SPLICE DETAIL

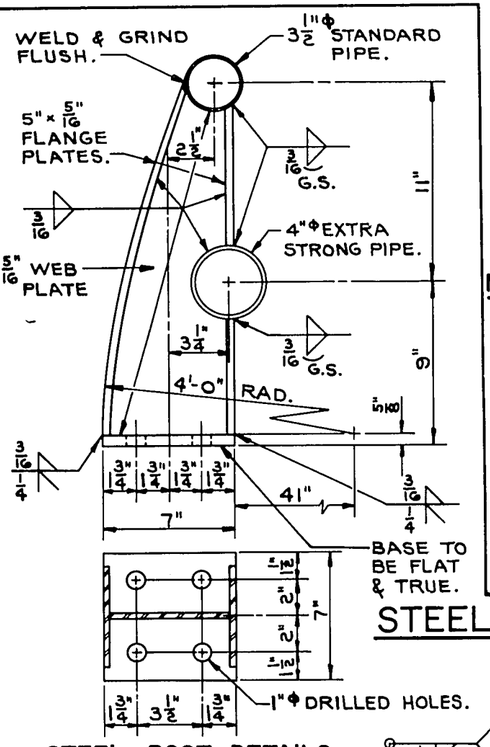


DETAIL OF RAIL ATTACHMENT TO POST

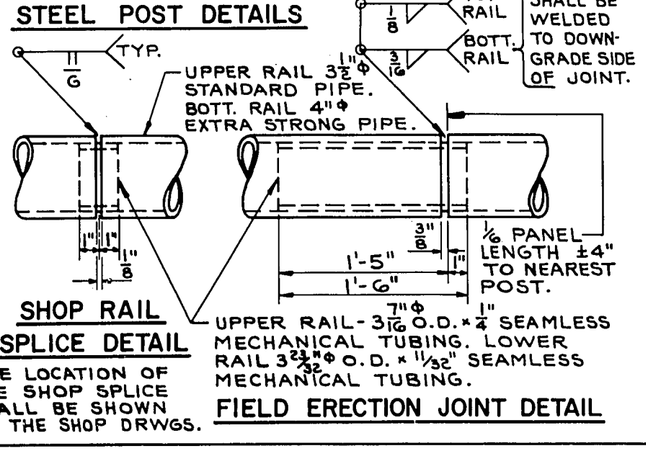


SECTION A

ALUMINUM POST CASTING



STEEL POST DETAILS



SHOP RAIL SPLICE DETAIL

THE LOCATION OF THE SHOP SPLICE SHALL BE SHOWN ON THE SHOP DRWGS.

UPPER RAIL- 3 1/16" Φ O.D. × 1/4" SEAMLESS MECHANICAL TUBING. LOWER RAIL 3 23/32" Φ O.D. × 11/32" SEAMLESS MECHANICAL TUBING.

FIELD ERECTION JOINT DETAIL

NOTES:

MAXIMUM REDUCTION IN DIAMETER OF BENT SECTION SHALL BE 3%.

RAILING SPLICES SHALL BE LOCATED SUCH THAT ℄ OF SPLICE IS 1/16 PANEL LENGTH ±4" OFF NEAREST POST.

ALUMINUM SHIMS SHALL BE USED UNDER POSTS AND END PLATES WHERE REQUIRED FOR ALIGNMENT.

RAILING SHALL BE FABRICATED IN TWO AND THREE PANEL LENGTHS.

ANCHOR BOLTS, NUTS, & WASHERS TO BE STAINLESS STEEL.

WALL THICKNESS OF TUBING SHOWN ABOVE SHALL BE MINIMUM NOMINAL AVERAGE WALL THICKNESS.

CAULK EXPOSED OPENINGS BETWEEN SHIMS WITH LEAD WOOL.

MAXIMUM REDUCTION IN SLOT WIDTH IN BENT TUBING SHALL BE 3/16".

ALUMINUM RAILING DETAILS

STEEL RAILING DETAILS

NOTES

RAILING SHALL BE FABRICATED IN TWO AND THREE PANEL LENGTHS.

STEEL SHIMS SHALL BE USED UNDER POSTS AND END PLATES WHERE REQUIRED FOR ALIGNMENT.

THE FOLLOWING MATERIALS SHALL BE USED:

UPPER RAIL SHALL BE 3 1/2" Φ STANDARD PIPE CONFORMING TO ASTM DESIGNATION A 53.

LOWER RAIL SHALL BE 4" Φ EXTRA STRONG PIPE CONFORMING TO ASTM DESIGNATION A53, GRADE B.

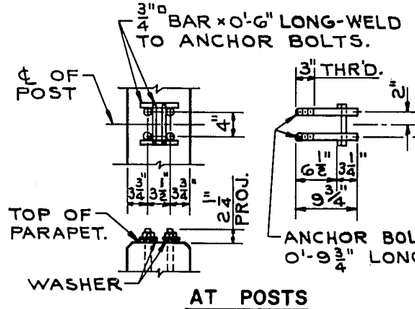
SLEEVES FOR UPPER RAIL SHALL BE 3 7/16" Φ O.D. × 1/4" SEAMLESS MECHANICAL TUBING. SLEEVES FOR LOWER RAIL SHALL BE 3 23/32" Φ O.D. × 11/32" SEAMLESS MECHANICAL TUBING. BOTH SLEEVES SHALL BE MADE OF STEEL WITH A MINIMUM ELONGATION OF 10% AND WITH A MINIMUM ULTIMATE TENSILE STRENGTH OF 60,000 P.S.I.

ANCHOR BOLTS TO BE MADE FROM MATERIAL CONFORMING TO ASTM DESIGNATION A307.

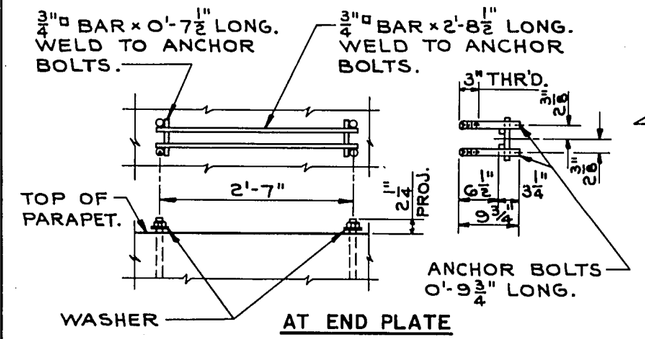
CAULK EXPOSED OPENINGS BETWEEN SHIMS WITH LEAD WOOL.

GALVANIZE ENTIRE RAILING AFTER FABRICATION INCLUDING NUTS, WASHERS, SHIMS AND TOP 3 1/2" OF ANCHOR BOLTS.

POSTS SHALL BE FABRICATED FROM MATERIAL CONFORMING TO ASTM DESIGNATION A 36.



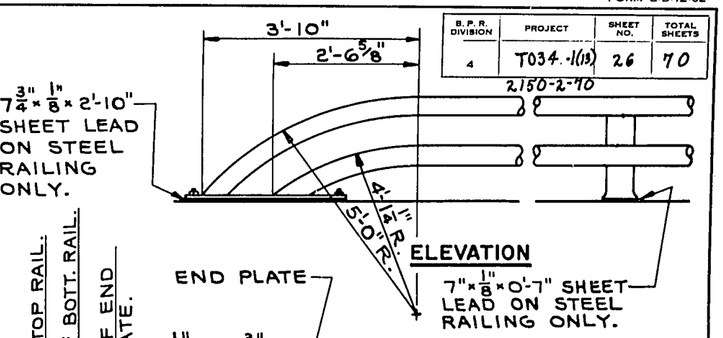
AT POSTS



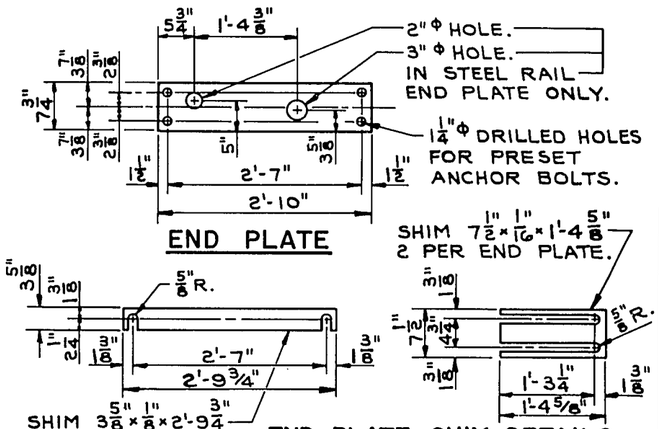
AT END PLATE

ANCHOR BOLT SETTING DETAILS

THE SHANK AND ROOT OF THREAD DIAMETER FOR ANCHOR BOLTS SHALL BE A MINIMUM OF 0.62 INCHES.



DETAIL OF RAIL BEND AT ABUTMENTS



No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-40-409

Const. Spec. 1969	Drawn By B.W.	Plans Checked W.J.E.

DETAILS FOR TYPE "H" TUBULAR ALUMINUM & STEEL RAILING

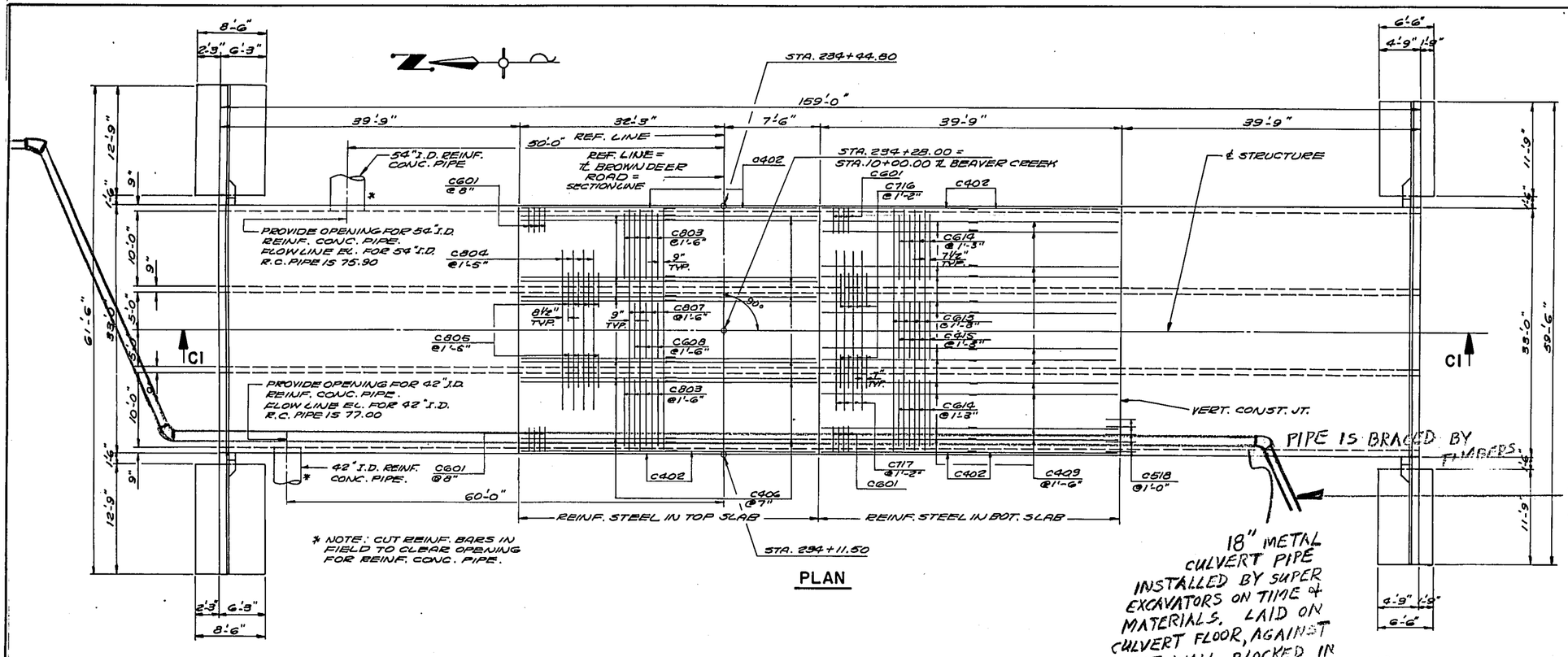
SHEET 5 OF 5

X40112

Form E-8-11-67

County & Highway	Route & Section	Class & Agreement: State	Federal	B. R. R. Division	Project	Sheet No.	Total Sheets
40.1	34.1	22.13		4	7034-1(13)	27	70

2150-2-70



PLAN

18" METAL CULVERT PIPE INSTALLED BY SUPER EXCAVATORS ON TIME & MATERIALS. LAID ON CULVERT FLOOR, AGAINST WEST WALL, BLOCKED IN PLACE FROM CULVERT ROOF, AND FROM OPPOSITE WALL.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

IMBED ALL BAR STEEL REINFORCEMENT 3" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE EXISTING GROUNDLINE WAS USED AS THE UPPER LIMITS OF EXCAVATION FOR THE COMPUTATION OF EXCAVATION QUANTITIES.

WITHIN THE LENGTH OF THE BOX ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH GRANULAR BACKFILL TO THE ELEVATION AND SECTION EXISTING PRIOR TO EXCAVATION. IF EXISTING GROUND LINE IS ABOVE TOP OF BOX, BACKFILL WILL STOP AT TOP OF BOX. PAYMENT WILL BE MADE ONLY FOR MATERIAL ACTUALLY PLACED WITHIN THE LIMITS SPECIFIED FOR EXCAVATION FOR STRUCTURES.

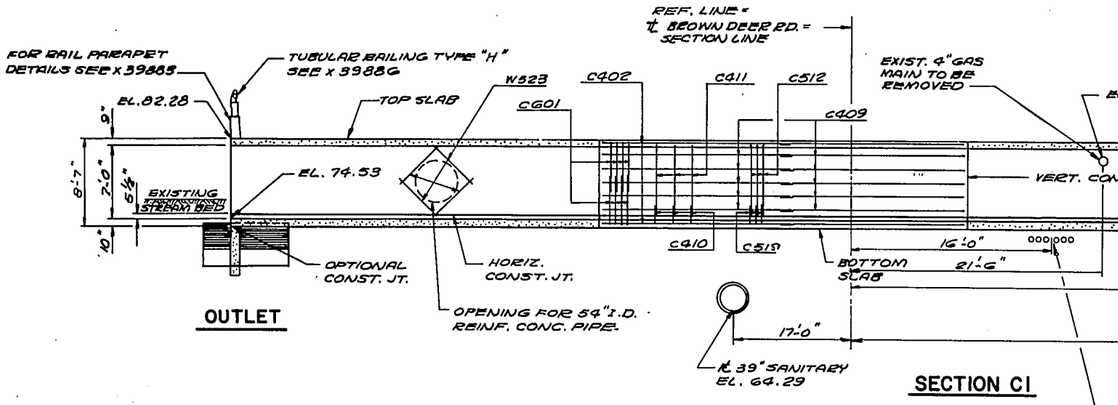
EXCAVATION FOR STRUCTURES AT THE WING WALL FOOTINGS SHALL EXTEND TO TOP OF ROCK AND BACKFILLED WITH COMPACTED GRANULAR BACKFILL TO THE BOTTOM FOOTING ELEVATIONS SHOWN ON THE PLANS.

FOR LIMITS OF GRANULAR BACKFILL AT THE WINGS SEE SHEET x 39885.

BEFORE ROOF IS PLACED, BACKFILL FLOOR OF STRUCTURE TO EXISTING STREAM BED ELEVATION. COST OF BACKFILL TO BE CONSIDERED INCIDENTAL TO OTHER CONTRACT ITEMS.

LIST OF DRAWINGS

1. DETAILS ____ x 39882
2. DETAILS ____ x 39883
3. DETAILS ____ x 39884
4. DETAILS ____ x 39885
5. DETAILS FOR TYPE "H" TUBULAR ALUMINUM & STEEL RAILING ____ x 39886



OUTLET

SECTION CI

INLET

DESIGN DATA

LIVELOAD: HS20

EARTHLOAD: BARREL DESIGNED FOR 2.0' OF FILL.

WINGWALLS: MAXIMUM ALLOWABLE DESIGN PRESSURE FOR FOOTINGS IS 1½ TONS PER SQ. FT.

ALLOWABLE DESIGN STRESSES:

CONCRETE MASONRY, GRADE "AA" f'_c = 1,900 P.S.I.

BAR STEEL REINFORCEMENT ____ f_s = 20,000 P.S.I.

HYDRAULIC DATA

Q = 900 CUBIC FT./SEC.

V = 11 FT./SEC.

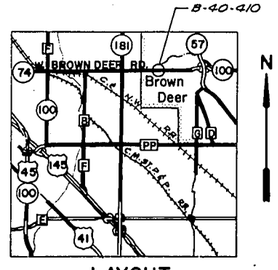
TOTAL ESTIMATED QUANTITIES

BID ITEMS

EXCAVATION FOR STRUCTURES	1875 C.Y.
GRANULAR BACKFILL	375 C.Y.
CONCRETE MASONRY	509.3 C.Y.
BAR STEEL REINFORCEMENT	85,340 LB.
TUBULAR RAILING, TYPE "H"	119 L.F.

NON-BID ITEMS

POLYVINYL CHLORIDE WATERSTOP	39 L.F.
FILLER	¾" SIZE



LAYOUT

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-40-410

BEAVER CREEK UNDER S.T.H. 100

County MILWAUKEE		City Village BROWN DEER	
Design Spec. A.A.S.H.O. 1965		Load HS 20	Const. Spec. 1969
Designed By I.B.M.	Design Checked ——	Drawn By FARR	Plans Checked DFS

Approved W.A.Kline, Chief Bridge Engineer — Date 1-10-69

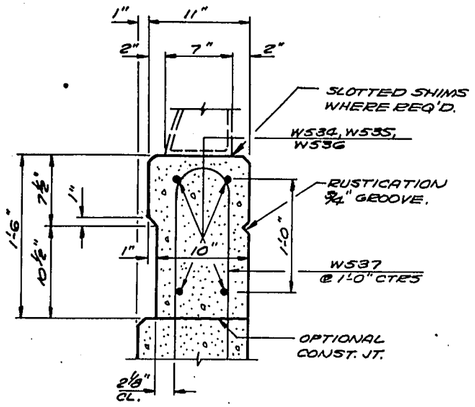
DETAILS

SHEET 1 OF 5

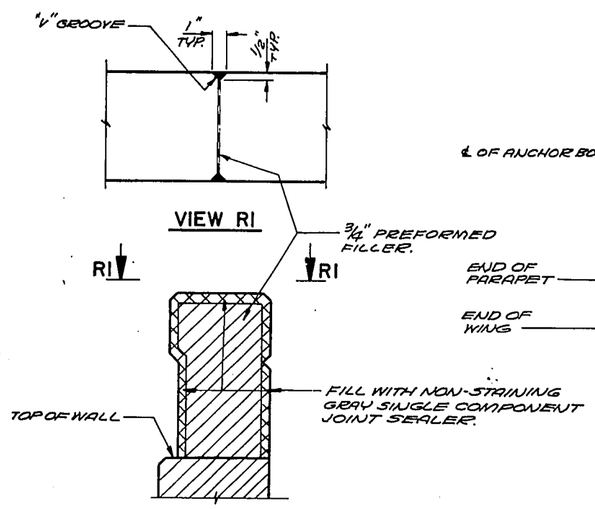
X 39882

Form E-B-12-67

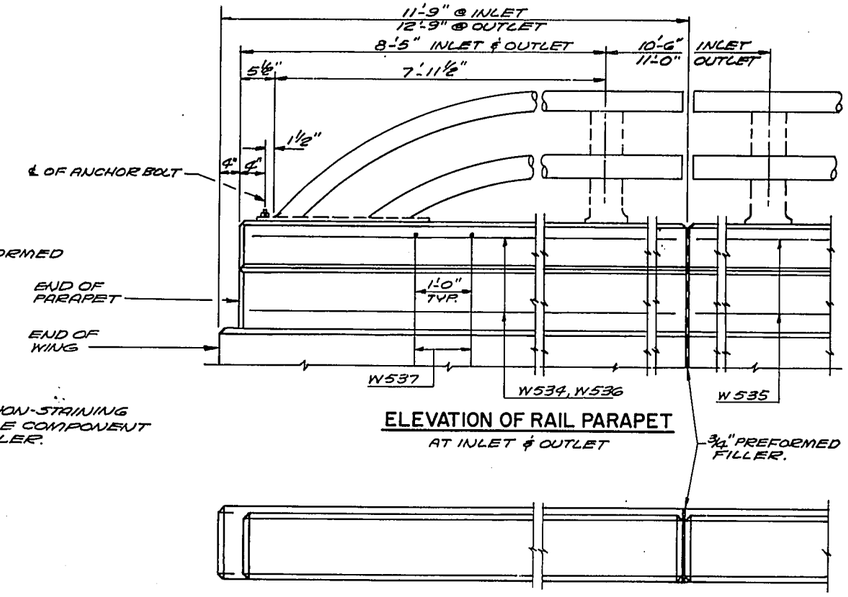
B.P.R. Division	Project	Sheet Number	Total Sheets
4	T034-1(13) 2150-2-70	28	70



SECTION THRU RAIL PARAPET



SECTION THRU RAIL PARAPET AT DEFLECTION JOINT



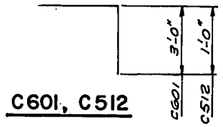
ELEVATION OF RAIL PARAPET AT INLET & OUTLET

PLAN

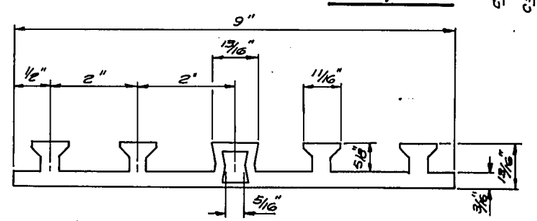
BILL OF BARS

ALL BENDING DIMENSIONS ARE OUT TO OUT OF BAR
THE FIRST DIGIT OF THE MARK SIGNIFIES THE BAR SIZE

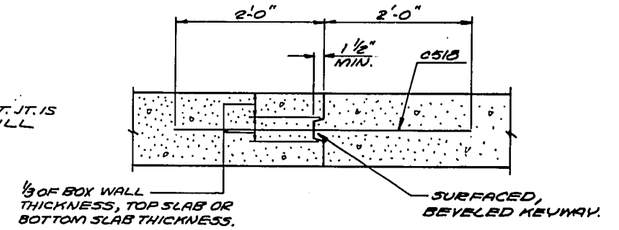
MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
C601	956	7-10	X	CORNERS
C402	288	20-3		TOP SLAB, SIDES & BOTTOM SLAB
C803	210	8-10		" "
C804	113	21-2		" " SYM. @ ℄ STRUCT.
C805	224	4-6		" " " @ ℄ INT. WALLS
C406	384	20-3		" "
C807	106	32-5		" "
C608	105	7-5		" " SYM. @ ℄ STRUCT.
C409	416	20-3		BOT. " , SIDES & INT. WALLS
C410	160	2-0		SIDEWALLS - DOWELS
C411	160	7-1		SIDE WALLS - VERT.
C512	848	8-1	X	INT. " "
C613	187	32-5		BOTTOM SLAB
C614	252	8-10		" "
C415	126	7-5		" " SYM. @ ℄ STRUCT.
C716	272	4-6		" " " @ ℄ INT. WALLS
C717	137	21-2		" " " @ ℄ STRUCT.
C518	282	4-0		VERTICAL CONST. JOINT
C519	848	2-6		INT. WALLS - DOWELS



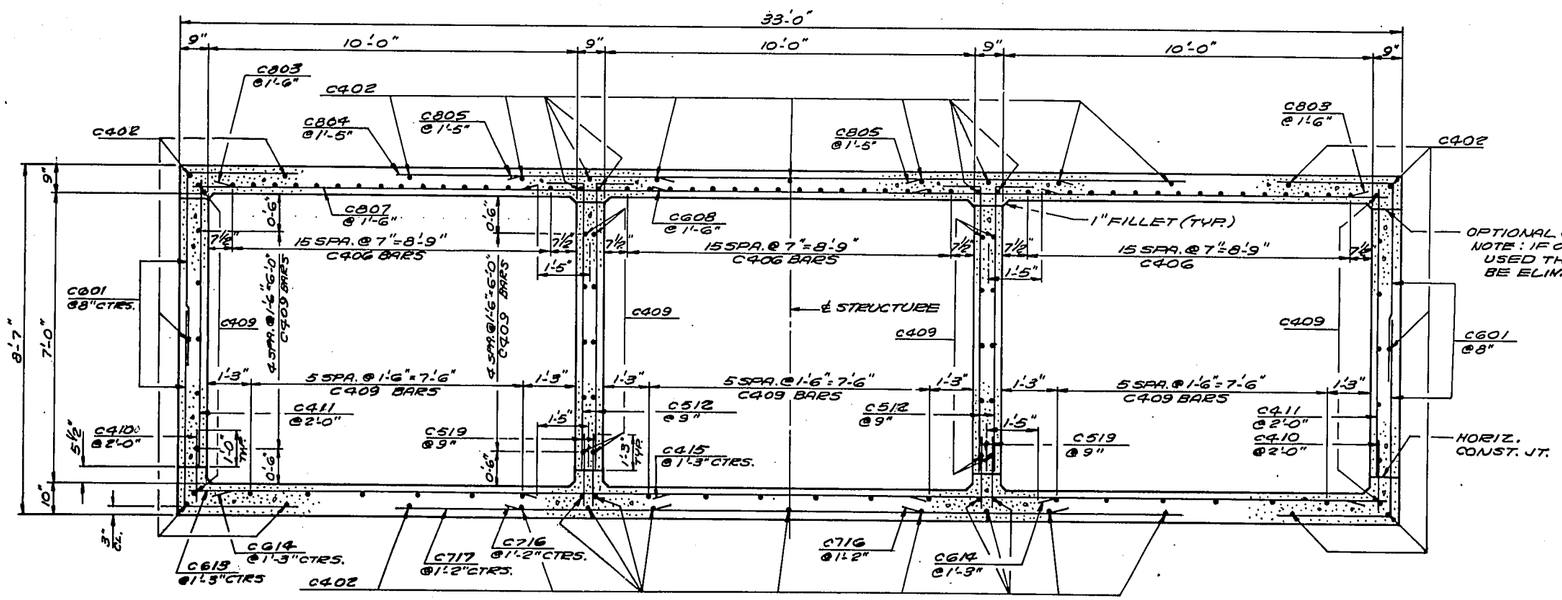
C601, C512



POLYVINYL CHLORIDE WATERSTOP DETAIL



VERTICAL CONSTRUCTION JOINT



SECTION THRU BOX

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B - 40 - 410

Const. Spec.	Drawn By	Plans Checked
1969	FARR	DFS

DETAILS

SHEET 2 OF 5

X 39883

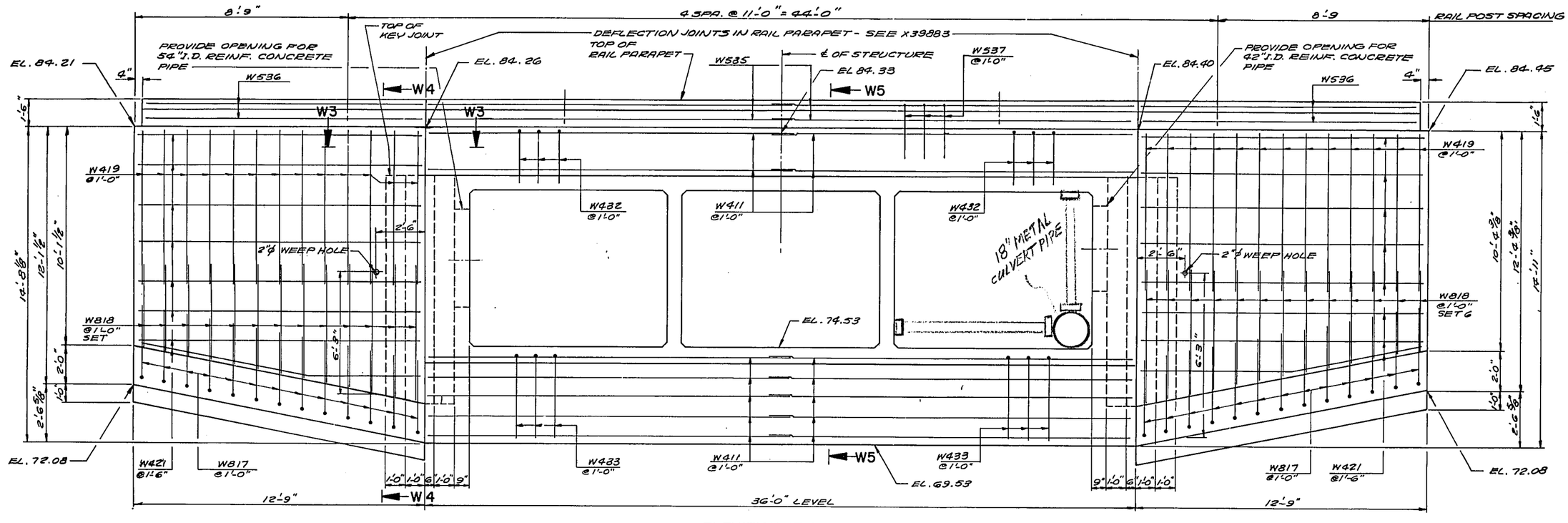
Form E-B-12-67

B.P.R. Division	Project	Sheet Number	Total Sheets
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2150-2-70

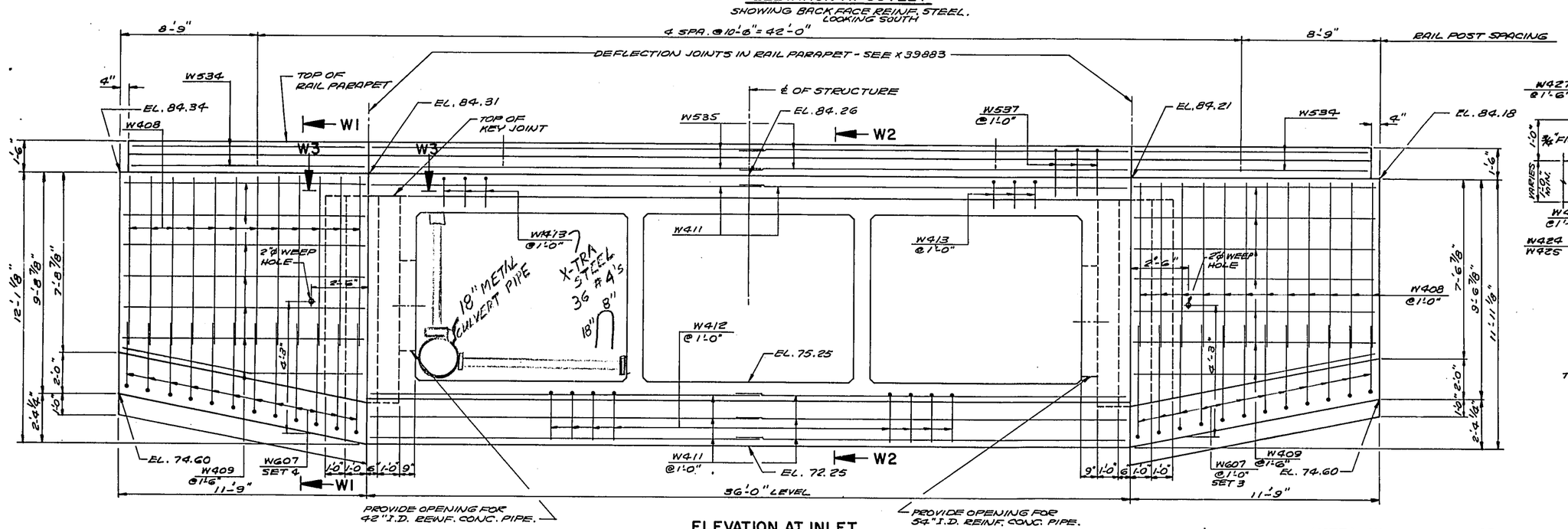
NOTE: ALL RAIL POST SPACINGS ARE TAKEN HORIZONTALLY ALONG ℄ OF RAILING AT BASE OF POSTS. ALL POSTS SHALL BE SET NORMAL TO GRADE.

NOTE: FLOW ELEV. FOR 42" I.D. R.C. PIPE IS 77.00
FLOW ELEV. FOR 54" I.D. R.C. PIPE IS 75.90
CUT BARS IN FRONT ℄ BACK FACE OF WALLS TO CLEAR HOLES BY 2" MIN.



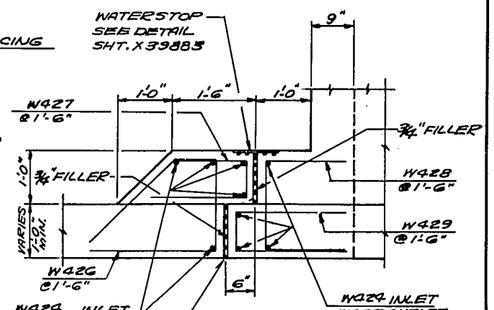
ELEVATION AT OUTLET

SHOWING BACK FACE REINF. STEEL. LOOKING SOUTH



ELEVATION AT INLET

SHOWING BACK FACE REINF. STEEL. LOOKING NORTH



VIEW W3

TYPICAL KEY JOINT DETAIL

NOTE: SEE SHEET X39885 FOR BILL OF BARS & BENDING DETAILS.

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-40-410

Const. Spec.	Drawn By	Plans Checked
1969	FARR	DFS

DETAILS

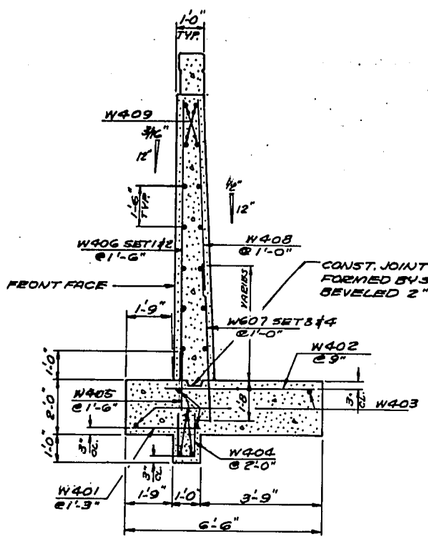
SHEET 3 OF 5

X 39884

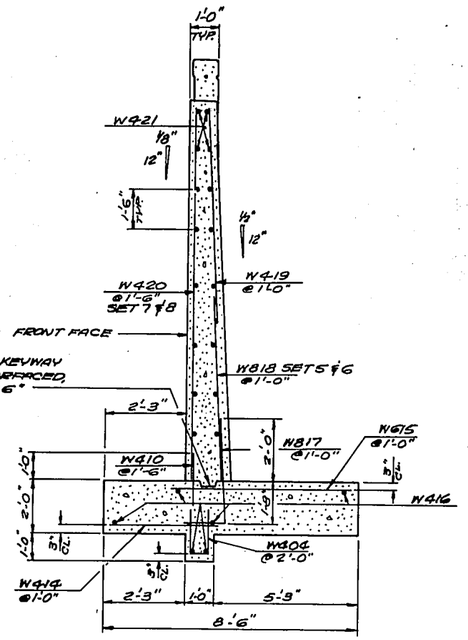
Form E-8-12-67

B. P. R. Division	Project	Sheet Number	Total Sheets
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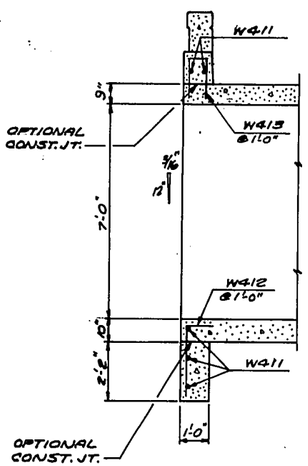
2150-2-70



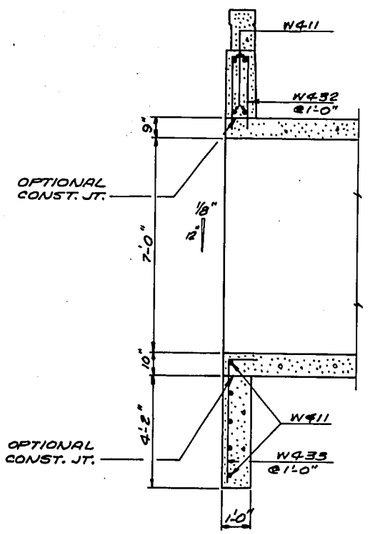
SECTION W1



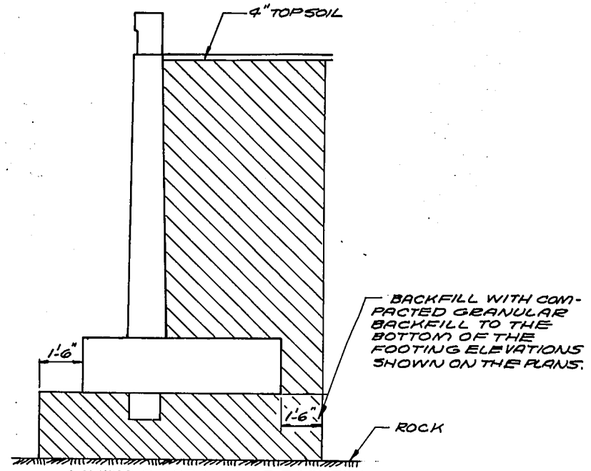
SECTION W4



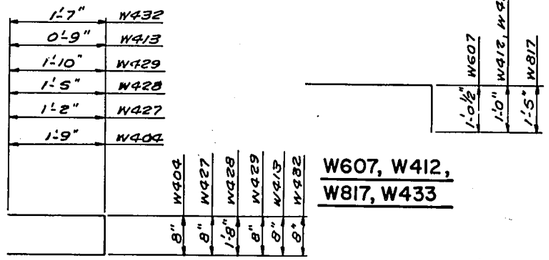
SECTION W2



SECTION W5

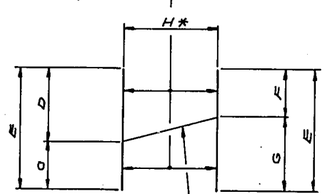


LIMITS OF GRANULAR BACKFILL AT WING WALLS

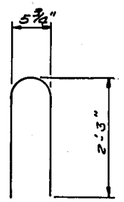


W607, W412, W817, W433

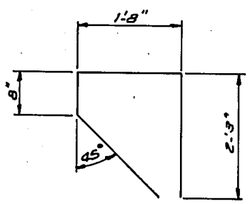
W404, W427, W428, W429, W413, W432



CUTTING DIAGRAM



W537



W426

BILL OF BARS

ALL BENDING DIMENSIONS ARE OUT TO OUT OF BAR
THE FIRST DIGIT OF THE MARK SIGNIFIES THE BAR SIZE

MARK	NO. REQ'D.	LENGTH	BENT	CUTTING DIAGRAM	LOCATION
W401	20	3-0			FOOTING - TOE - INLET WINGS
W402	32	4-9			" HEEL " "
W403	12	11-6			" # SHEAR KEY - INLET WINGS
W404	90	4-0	X		" " " " " # OUTLET WINGS
W405	16	2-0			" " WALLS - F.F. DOWELS - INLET "
W406	8	17-4		X	WALLS - F.F. VERT. INLET WINGS SET 1 #2
W607	12	10-5	X	X	" B.F. " " " DOWELS SET 3 #4
W408	24	7-1			" " " " "
W409	28	11-5			" F.F. # B.F. HORIZ. INLET WINGS
W410	18	2-0			FOOTING # WALLS - F.F. DOWELS - OUTLET WINGS
W411	28	18-4			CUT-OFF # TOP WALL F.F. # B.F. INL. # " "
W412	36	3-5	X		" " WALL F.F. VERT. INLET
W413	36	2-0	X		TOP WALL VERT. - INLET
W414	26	3-6			FOOTING - TOE - OUTLET WINGS
W615	26	6-3			" HEEL " "
W416	12	12-6			" # SHEAR KEY - OUTLET WINGS
W817	26	4-11	X		" " WALLS - B.F. DOWELS - OUTLET WINGS
W818	13	7-0		X	WALLS - B.F. VERT. - OUTLET WINGS SET 5 #6
W419	26	9-0			" " " " "
W420	9	22-7		X	" F.F. " " " SET 7 #8
W421	32	12-5			" " # B.F. HORIZ. " "
W522	8	5-3			BOX WALL @ 42" C.PIPE F.F. # B.F.
W523	8	6-3			" " @ 54" " " " " "
W424	18	8-5			KEY JOINT - VERT. INLET
W425	18	10-5			" " " OUTLET
W426	30	6-5	X		" " - INLET # "
W427	30	2-10	X		" " " " "
W428	30	4-4	X		" " " " "
W429	30	4-2	X		" " " " "
W432	36	3-7	X		TOP WALL - VERT. - OUTLET
W433	36	5-5	X		CUT OFF WALL F.F. VERT. OUTLET
W534	8	11-1			RAILING PARAPET
W535	16	18-6			" "
W536	8	12-1			" "
W537	120	4-9	X		" "

MARK	SET NO.	C	D	E	F	G	H *	SETS REQ'D.
W406	1		9'-9"	17'-4"	7'-7"		8	1 SET 1
	2	7'-7"				9'-9"		1 " 2
W607	3		6'-4"	10'-5"	4'-1"		12	1 " 3
	4	4'-1"				6'-4"		1 " 4
W818	5		4'-9"	7'-0"	2'-3"		13	1 " 5
	6	2'-3"				4'-9"		1 " 6
W420	7		12'-6"	22'-7"	10'-1"		9	1 " 7
	8	10'-1"				12'-6"		1 " 8

*"H" IS NUMBER OF BARS REQ'D. BEFORE CUTTING. BENT BARS, IF USED IN CUTTING DIAGRAM, SHALL BE BENT AFTER CUTTINGS.

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-40-410

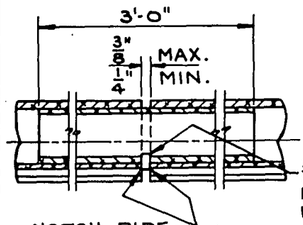
Const. Spec.	Drawn By	Plans Checked
1969	FARR	DFS

DETAILS

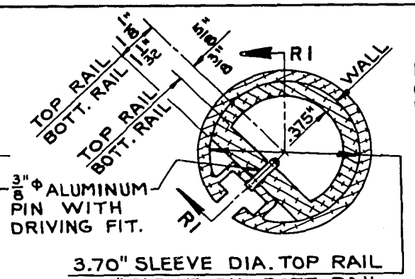
SHEET 4 OF 5

X 39885

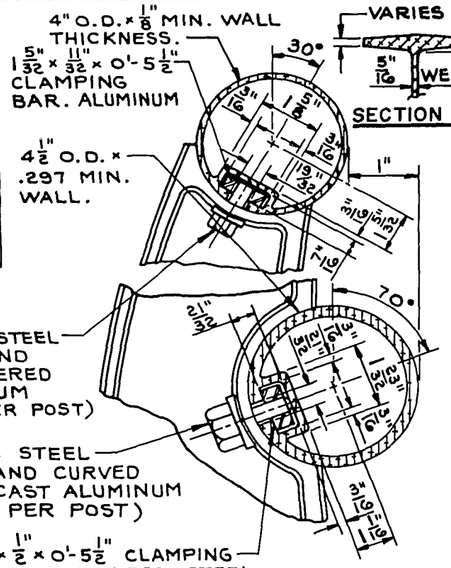
FORM E-B-12-62

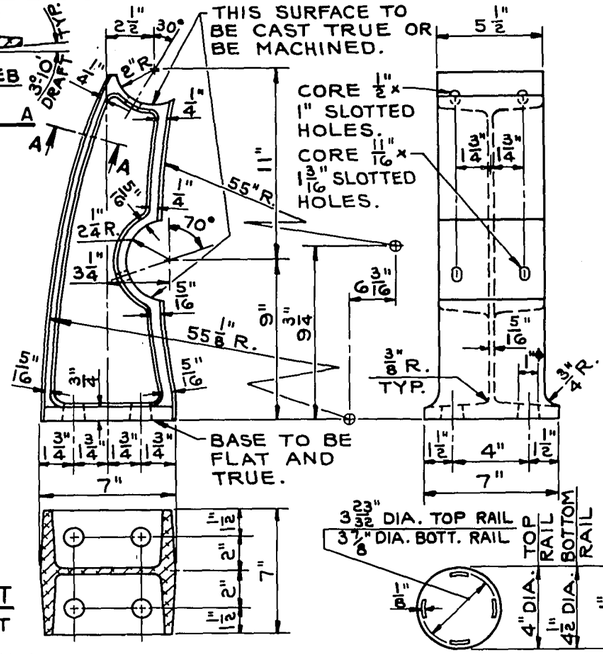


SECTION R1

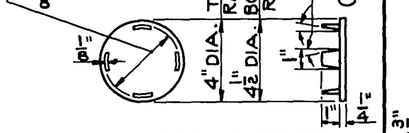


RAIL SPLICE DETAIL

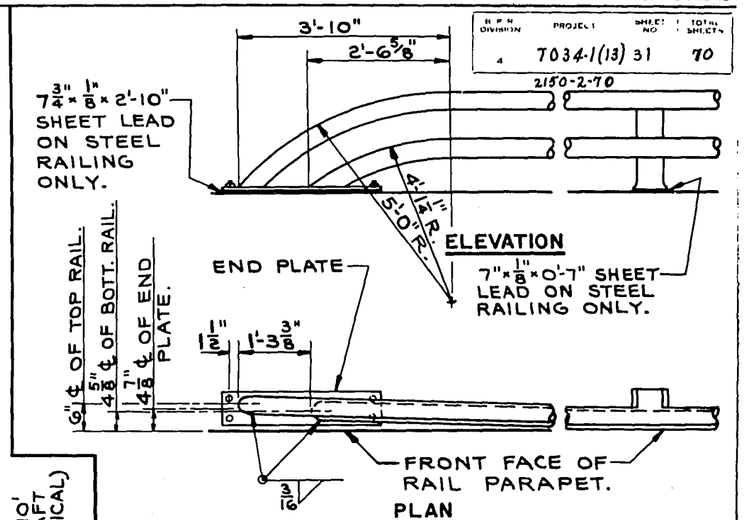




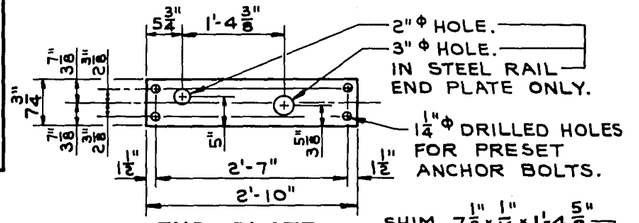
ALUMINUM POST CASTING

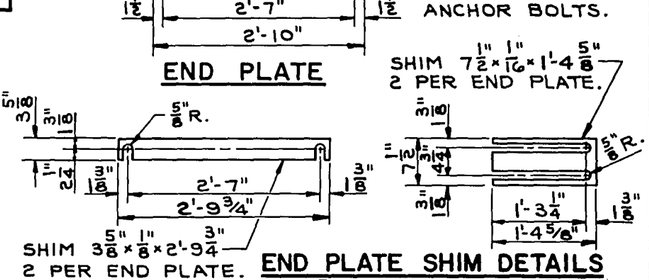


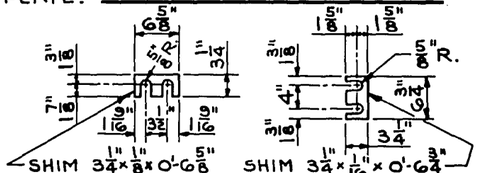
RAIL CLOSURE CAP DETAIL

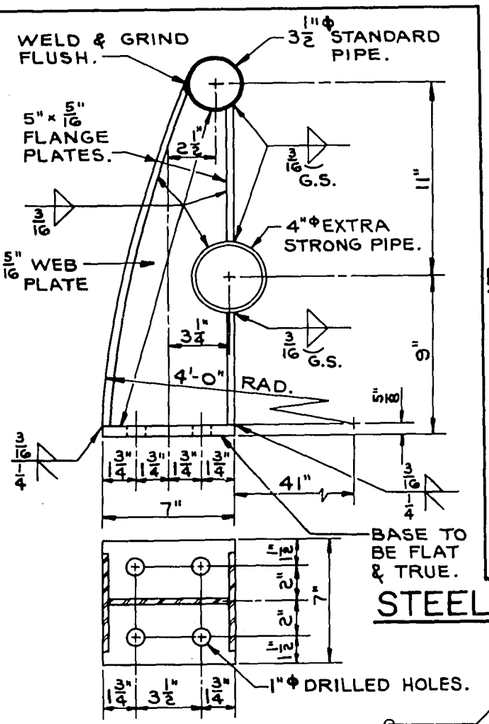


DETAIL OF RAIL BEND AT ABUTMENTS

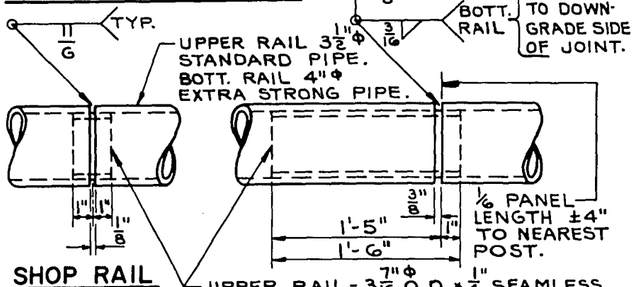








STEEL POST DETAILS



SHOP RAIL SPLICE DETAIL

THE LOCATION OF THE SHOP SPLICE SHALL BE SHOWN ON THE SHOP DRWGS.

UPPER RAIL- 3 7/16" O.D. × 1/4" SEAMLESS MECHANICAL TUBING. LOWER RAIL 3 23/32"Φ O.D. × 11/32" SEAMLESS MECHANICAL TUBING.

FIELD ERECTION JOINT DETAIL

NOTES: DETAIL OF RAIL ATTACHMENT TO POST

MAXIMUM REDUCTION IN DIAMETER OF BENT SECTION SHALL BE 3%.

RAILING SPLICES SHALL BE LOCATED SUCH THAT ℄ OF SPLICE IS 1/8 PANEL LENGTH ± 4" OFF NEAREST POST.

ALUMINUM SHIMS SHALL BE USED UNDER POSTS AND END PLATES WHERE REQUIRED FOR ALIGNMENT.

RAILING SHALL BE FABRICATED IN TWO AND THREE PANEL LENGTHS.

ANCHOR BOLTS, NUTS, & WASHERS TO BE STAINLESS STEEL.

WALL THICKNESS OF TUBING SHOWN ABOVE SHALL BE MINIMUM NOMINAL AVERAGE WALL THICKNESS.

CAULK EXPOSED OPENINGS BETWEEN SHIMS WITH LEAD WOOL.

MAXIMUM REDUCTION IN SLOT WIDTH IN BENT TUBING SHALL BE 3/16".

ALUMINUM RAILING DETAILS

STEEL RAILING DETAILS

NOTES

RAILING SHALL BE FABRICATED IN TWO AND THREE PANEL LENGTHS.

STEEL SHIMS SHALL BE USED UNDER POSTS AND END PLATES WHERE REQUIRED FOR ALIGNMENT.

THE FOLLOWING MATERIALS SHALL BE USED:

UPPER RAIL SHALL BE 3 1/2"Φ STANDARD PIPE CONFORMING TO A S T M DESIGNATION A 53.

LOWER RAIL SHALL BE 4"Φ EXTRA STRONG PIPE CONFORMING TO ASTM DESIGNATION A53, GRADE B.

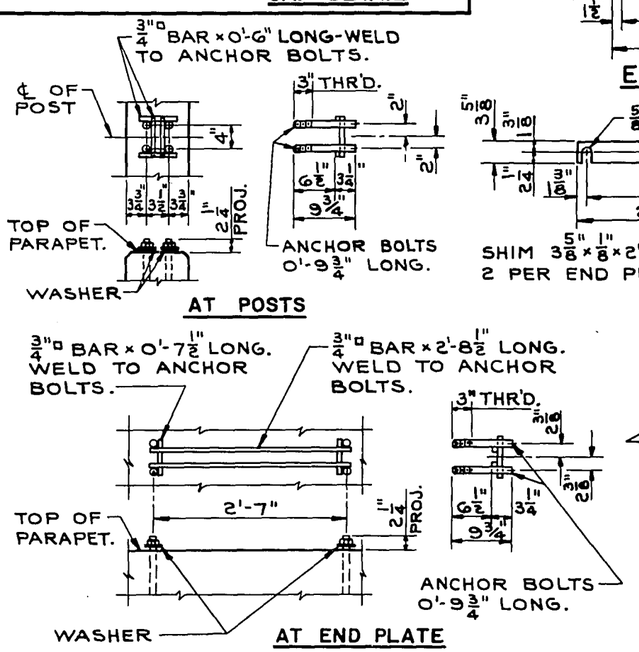
SLEEVES FOR UPPER RAIL SHALL BE 3 7/16"Φ O.D. × 1/4" SEAMLESS MECHANICAL TUBING. SLEEVES FOR LOWER RAIL SHALL BE 3 23/32"Φ O.D. × 11/32" SEAMLESS MECHANICAL TUBING. BOTH SLEEVES SHALL BE MADE OF STEEL WITH A MINIMUM ELONGATION OF 10% AND WITH A MINIMUM ULTIMATE TENSILE STRENGTH OF 60,000 P.S.I.

ANCHOR BOLTS TO BE MADE FROM MATERIAL CONFORMING TO ASTM DESIGNATION A307.

CAULK EXPOSED OPENINGS BETWEEN SHIMS WITH LEAD WOOL.

GALVANIZE ENTIRE RAILING AFTER FABRICATION INCLUDING NUTS, WASHERS, SHIMS AND TOP 3 1/2" OF ANCHOR BOLTS.

POSTS SHALL BE FABRICATED FROM MATERIAL CONFORMING TO ASTM DESIGNATION A 36.



ANCHOR BOLT SETTING DETAILS

THE SHANK AND ROOT OF THREAD DIAMETER FOR ANCHOR BOLTS SHALL BE A MINIMUM OF 0.62 INCHES.

R P N DIVISION	PROJECT	SHEET NO	TOTAL SHEETS
4	7034-1(13)	31	70

2150-2-70

No.	Date	Revision	By

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-40-410

Const Spec 1969	Drawn By FARR	Plans Checked

DETAILS FOR TYPE "H" TUBULAR ALUMINUM & STEEL RAILING

SHEET 5 OF 5

X 39886

2150-2-70
T034-1(13)

32/70
32-70

SECTION LINE

215+50
95

215+00
100

214+50
100

MATCH 9+25 68TH ST.

214+00
100

BACK ONLY
AHEAD FULL SECTION

213+50 BEGIN ABRUPTLY
100

AHEAD ONLY
BACK FULL SECTION

USE 9" BASE COURSE, STA. 210+00 TO 217+00

1" = 10 HOR
1" = 05 VER
9900 1

12

2120-2-70
7.03 4-1(13)
E5A6
53-46

SECTION LINE

218+50
100

218+00
100

217+50
95

217+00
95

BEGIN 6" BASE COURSE, STA. 217+00.

218+50
95

216+00
95

1 = 10 HOR
1 = 05 VER
9300 2

27

E

2150-2-70
T034-1-(13)

2/160
8-4-70

SECTION LINE

221+00
100

220+50
100

220+00
95

219+50
100

219+00
100

MATCH 9+25.6 TH. ST.

1" = 10 HOR
1" = 05 VER
9300 3

2150-2-70
T.O.34-1(13)

25/69
95.10

SECTION
LINE

224+00
95

223+50
95

223+00
95

222+50
95

222+00
100

221+50
100

1" = 10' HOR.
1" = 05' VER.
9300

2150-2-70
T 034-1(13)

24/60
36-70

SECTION LINE

MATCH STA 40+64 TH. ST.

227+00
90

BACK ONLY

AHEAD FULL SECTION

226+50
90

AHEAD ONLY

BACK FULL SECTION

226+00
95

225+50
95

225+00
95

224+50
95

1 = 10 HOR
1 = 05 VER
9300 S

(E)

2150-2-70
T034-((13))

2740
3770

SECTION LINE

230+50
85

230+00
85

229+50
85

229+00
90

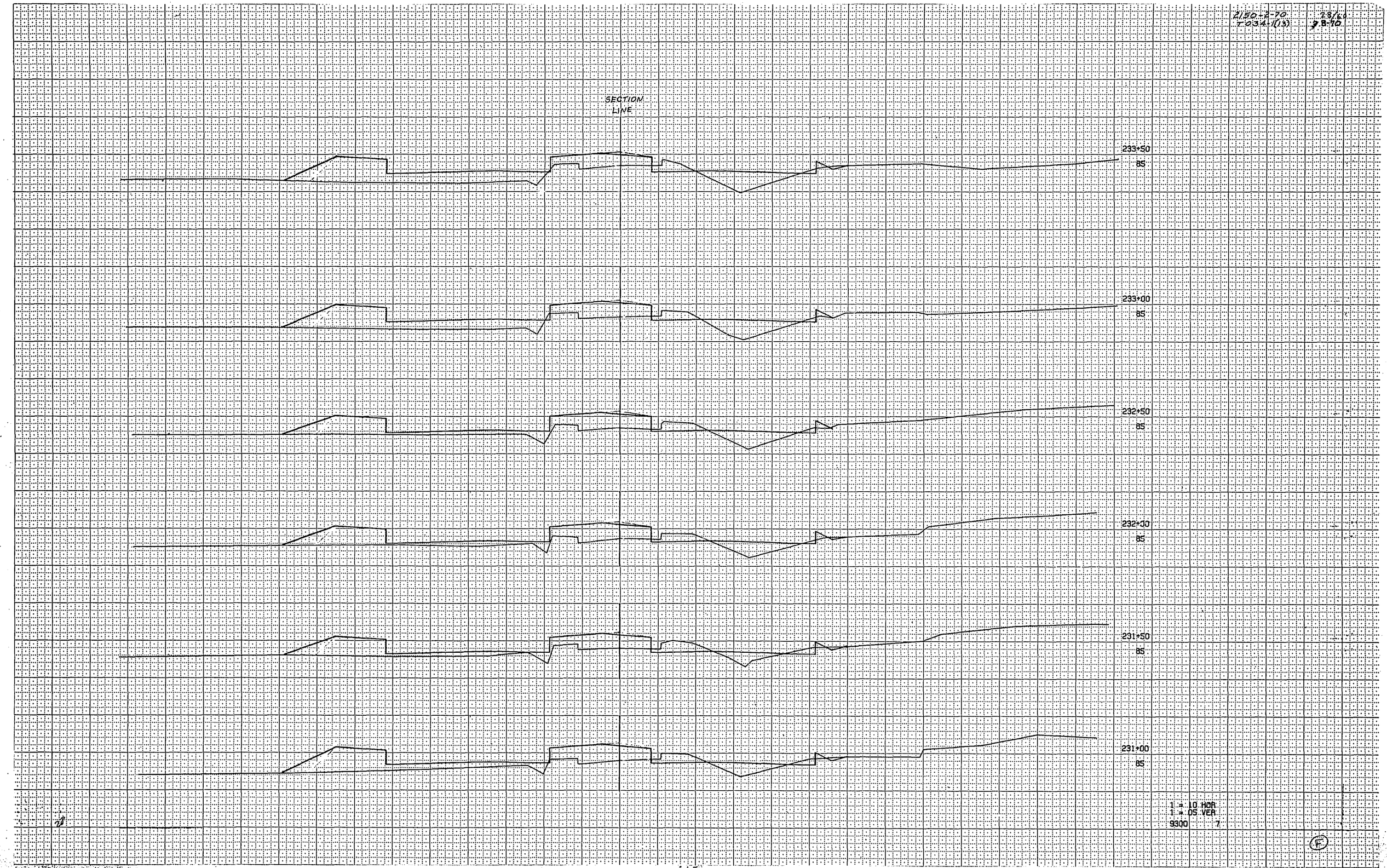
BEGIN 9" BASE COURSE, STA. 229+00

228+50
85

228+00
85

227+50
85

1 = 10 HOR.
1 = 05 VER.
9300 6


SECTION LINE
233+50
85
233+00
85
232+50
85
232+00
85
231+50
85
231+00
85
1 = 10 HOR
1 = 05 VER
9300
7

SECTION LINE

236+00
80

235+50
80

235+00
80

END 9" BASE COURSE
STA 235+00

234+50
85

234+00
85

1" = 10' HOR
1" = 05' VER
9300 6

2150-2-70
T034-1(13)

30/60
60-70

SECTION LINE

AHEAD ONLY

BACK FULL SECTION

239+50
80

239+00
80

BEGIN 9" BASE COURSE

238+50
80

238+00
80

237+50
80

237+00
80

236+50
80

1 = 10 HOR
1 = 05 VER
9300 9

F

2150-2-70
T-034-1(13)

31/40
51-70

SECTION LINE

243+00
90

SAVE 21" MAPLE
242+98 - 81' RT.

242+50
90

SAVE 9" MAPLE
242+93 - 83' RT.

SAVE 16" MAPLE
242+23 - 75' RT.

242+00
85

SAVE 18" MAPLE
241+95 + 88' RT.

SAVE 12" MAPLE
241+67 + 76' RT.

SAVE 13" MAPLE
241+55 + 87' RT.

241+50
85

241+00
85

240+50
85

240+00
85

1 = 10 HOR
1 = 05 VER
9300 10

F

2150-2-70
T.034-1(13)

32/60
42.70

SECTION LINE

245+50
100

245+00
95

FIELD CHANGE AT
O'ROURKE'S DRIVEWAY

SAVE 12" LINDEN
244+98-85'RT.

244+50
95

244+00
95

END 9" BASE COURSE STA. 244+00

SAVE 9" MAPLE
243+67-83'RT.

SAVE 13" COTTONWOOD
243+54-85'RT.

243+50
95

1" = 10 HOR
1" = 05 VER
9300 11

(F)

2150-2-70
T-034-1(13)

31/69
43-70

SECTION LINE

SAVE 7" MAPLE
248+22 - 92' RT

248+00
100

247+50
100

SAVE 8" APPLE
247+39 - 86' RT

247+00
100

248+50
100

248+00
100

1 = 10 HOR
1 = 05 VER
9300 12

F

2150-2-70
T.034-1(13)

34/60
44-70

SECTION
LINE

250+50
100

250+00
100

249+50
100

249+00
100

248+50
100

1 = 10 HOR
1 = .05 VER
9300 13

SECTION LINE

2150-2-70
7034-1(12)

35/60
45-70

SAVE FRAME DWELLING
STA. 253+90 Lt.

254+00
100

253+50
100

253+00
100

252+50
100

BACK ONLY

252+00
100

MATCH 5% ST

AHEAD FULL SECTION

251+50
100

251+00
100

1 = .10 HOR
1 = .05 VER
9300 14

5

6

2150-2-70
T-034-1(13)

SECTION LINE

257+00
95

256+50
95

256+00
100

255+50
100

255+00
100

254+50
95

1 = 10 HOR
1 = 05 VER
9300 15

2150-2-70
T-034-1(13)

37/2
41-70

SECTION LINE

260+00
90

259+50
95

259+00
95

258+50
95

258+00
95

257+50
95

1 = 10 HOR
1 = 05 VER
9300 16

2150-2-70
T034-1(13) 46-70

SECTION LINE

263+00
90

262+50
90

262+00
90

BEGIN 9" BASE COURSE, STA. 262+00

261+50
90

261+00
90

260+50
90

1 = 10 HOR.
1 = 05 VER.
9300 17

2150-2-70
T.034-(13)

39/66
49-70

SECTION LINE

266+50
85

266+00
85

265+50
85

265+00
85

264+50
85

264+00
85

263+50
85

1 = 10 HOR
1 = 05 VER
9300 18

41

E

2150-2-70
T034-1(13)
50-70
VG/40

SECTION LINE

269+00
85

268+50
85

268+00
85

267+50
85

267+00
85

1 = 10 HOR
1 = 05 VER
9300 19

F

2150-2.70
T.034.1(13) 61-10

4/66

SECTION LINE

271+50
60

271+00
65

270+50
65

270+00
65

269+50
65

MATCH 10:93
DITCH SECTION

60" STORM
OUTFALL

1" = 10' HOR
1" = 05' VER
9300 20

F

SECTION LINE

274+00
80

273+50
80

273+00
80

272+50
85

272+00
80

END 9" BASE COURSE, STA 272+00

1 = 10 HOR
1 = 05 VER
9300 21

F

SECTION LINE

* BASE LINE SHIFT STA 276+42.5

℄ LINE

276+50
85

SECTION LINE

276+00
85

275+50
85

275+00
80

274+50
80

1 = 10 HOR
1 = 05 VER
9900 22

2.150-2-70
T.034-1(13) 54-10

49/69

B. LINE =
℄
ROADWAYS

279+00
85

278+50
85

278+00
85

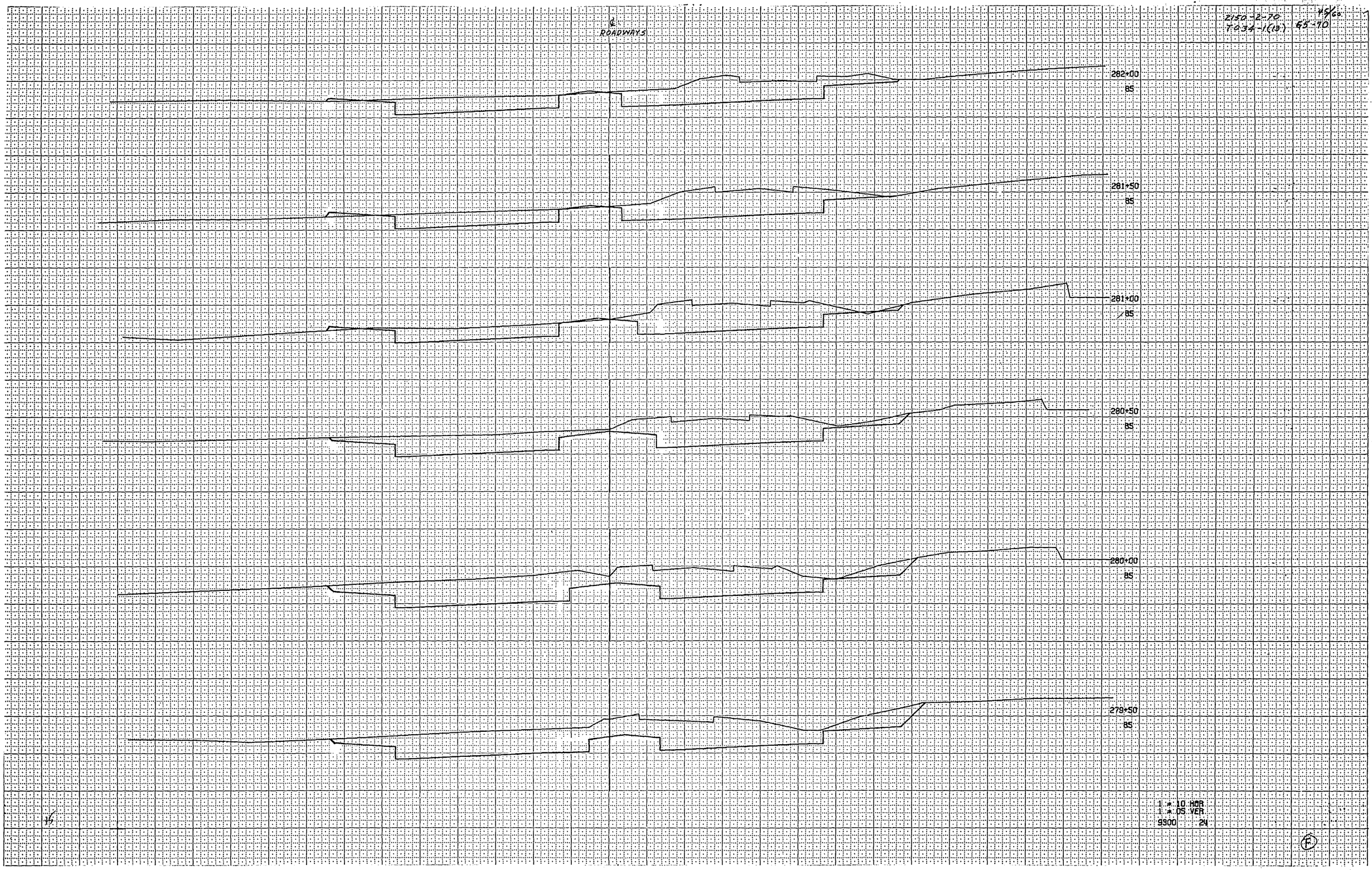
277+50
85

277+00
85

1" = 10' HOR
1" = 05' VER
9300 23

2150-2-70
T034-1(18)

45-70



℄
ROADWAYS

46/60
2150-2-70
T-034-1(13) 56-10

285+50
85
285+00
90
284+50
85
284+00
85
283+50
85
283+00
85
282+50
85

1 = 10 HOR
1 = 05 VER
9300 25

Ⓕ

℄
ROADWAYS

288+50
85

288+00
85

287+50
85

287+00
85

MATCH
CUT DE-SIC

286+50
85

286+00
85

1 = 10 HOR
1 = 05 VER
9900 26

4
ROADWAYS

292+00
85

291+50
85

291+00
85

290+50
85

290+00
85

289+50
85

BACK ONLY

AHEAD ONLY

289+00
85

1 = 10 HOR
1 = 05 VER
9300 27

F

℄
ROAD WAY 3

2150-2-20
T.03 A-1(13)

44/16
64-10

295+50
85

295+00
90

294+50
85

294+00
90

293+50
90

293+00
90

292+50
90

1 = 10 HOR
1 = 05 VER
9300 28

(F)

2150-2-70
T-034-1(13)

50/60

60-70

℄
ROADWAYS

AHEAD ONLY

297+40
80
BACK ONLY

296+65
80
BACK ONLY

296+50
80

296+00
80

1 = 10 HOR
1 = 05 VER
9300 29

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	T 034-1(13)	61	70

2150-2-70

1/4 SECTION LINE

℄ 68TH ST.

15'

MATCH 213+50 B.D.R.

MATCH 214+00 B.D.R.

R/W

R/W

R/W

15'

1/4 SECTION LINE ℄ 68TH ST.

STATION	DISTANCE	YARDAGE EXCAVATION UNCLASS.	YARDAGE FILL
9+25			
	25	1	84
9+00			
	50	3	50
8+50			
	50	15	11
8+00			
SHEET TOTAL		19	145

9+25 100 BACK ONLY

9+00 100

8+50 100

8+00 100 AHEAD ONLY.

SCALES: 1" = 10' HOR.
1" = 5' VER.

FUNCTIONAL CROSS SECTION - OPEN DOTTED
CHARLES BRUNING COMPANY, INC.

68TH ST. INTERSECTION

2150-2-7.0

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	T 034-(13)	62	70

NOTE BOOK | LOCATE AREAS CHECKED | NO.

LOCATE AREAS CHECKED | NOTE BOOK | NO. | 250 | 62

STATION	DISTANCE	YARDAGE EXCAVATION UNCLASS.	YARDAGE EXCAVATION FILL
9+25	25		46
9+00	50		50
8+50			

9+25 BACK ONLY
95

9+00
95

8+50 AHEAD ONLY
95

AHEAD (FOR REFERENCE ONLY)

R/W R/W

R/W R/W

R/W R/W

℄ 66TH ST.

℄ 66TH ST.

SCALES 1"=10' HOR
1"=5' VER.

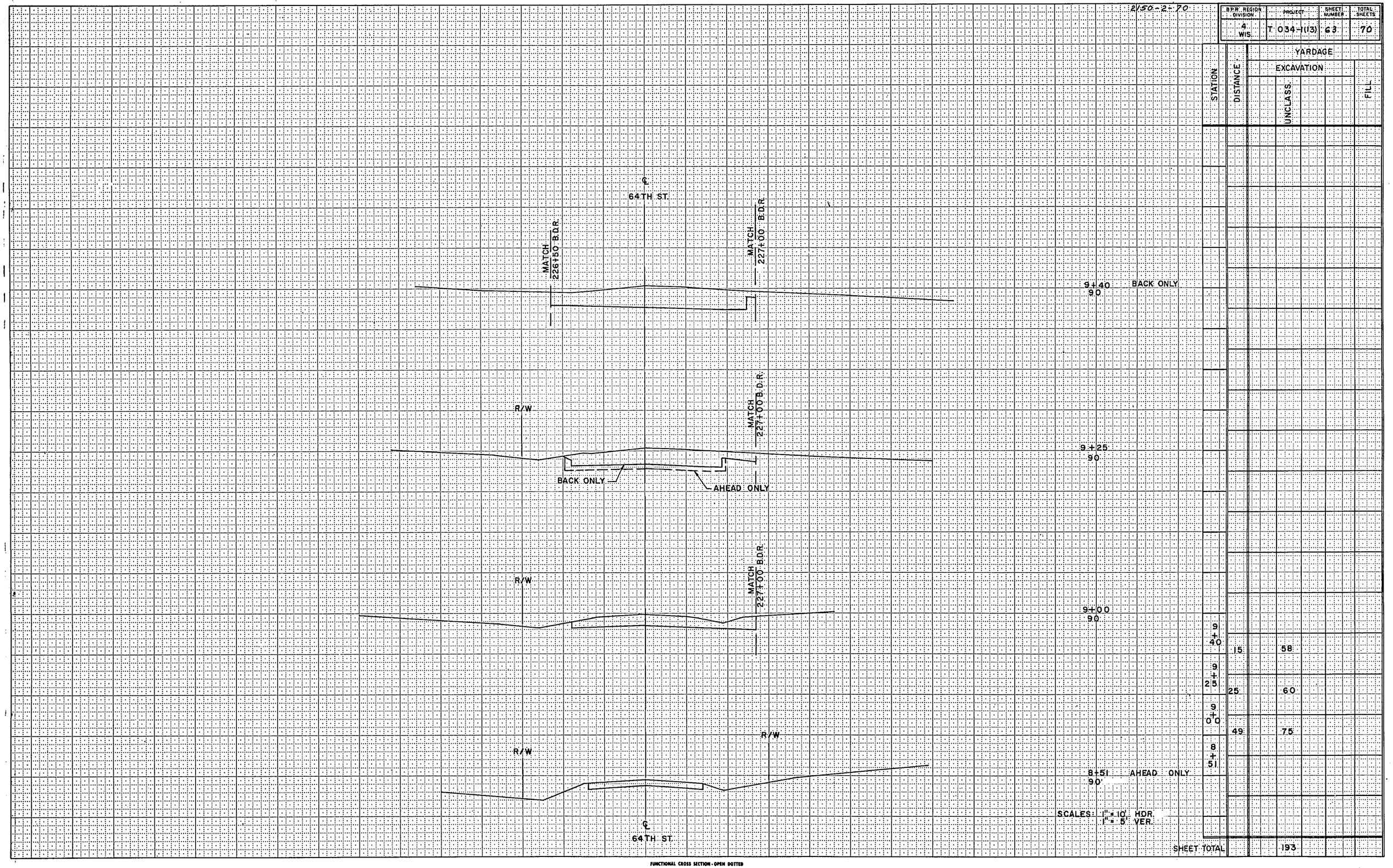
SHEET TOTAL 96

FUNCTIONAL CROSS SECTION - OPEN DOTTED
CHARLES BRUNING COMPANY, INC.

66TH ST. INTERSECTION

2/50-2-70

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	T 034-1(13)	63	70



STATION	DISTANCE	YARDAGE EXCAVATION UNCLASS.	YARDAGE FILL
9+40	15	58	
9+25	25	60	
9+00	49	75	
8+51			
SHEET TOTAL		193	

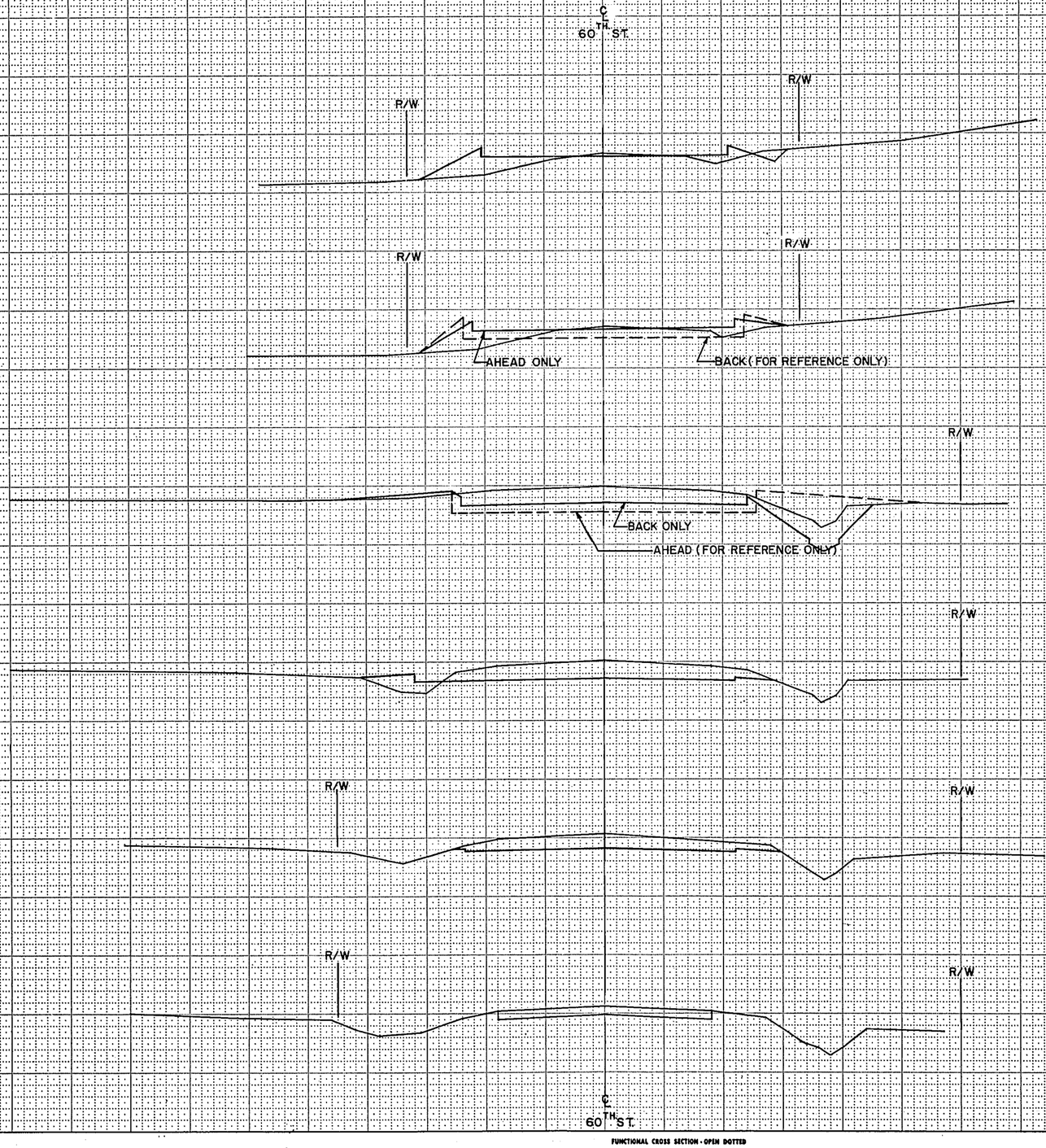
SCALES: 1" = 10' HOR.
1" = 5' VER.

FUNCTIONAL CROSS SECTION - OPEN DOTTED
CHARLES BRUNING COMPANY, INC.

64 TH ST. INTERSECTION

2150-2-70

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	T034-1(13)	64	70



STATION	DISTANCE	YARDAGE EXCAVATION UNCLASS.	YARDAGE FILL
11+00 85			
AHEAD ONLY 10+86 85			
BACK ONLY 9+20 85			
11+50	50	21	48
11+00			
9+00 85	14	3	21
10+86			
9+20	20	60	20
8+50 85			
9+00	50	116	
8+50	50	76	
8+00			
AHEAD ONLY 8+00 85			
SHEET TOTAL		276	89

SCALES: "= 10' HOR.
"= 5' VERT.

NO. 67045 MISS CHECKED

NO. MISS CHECKED

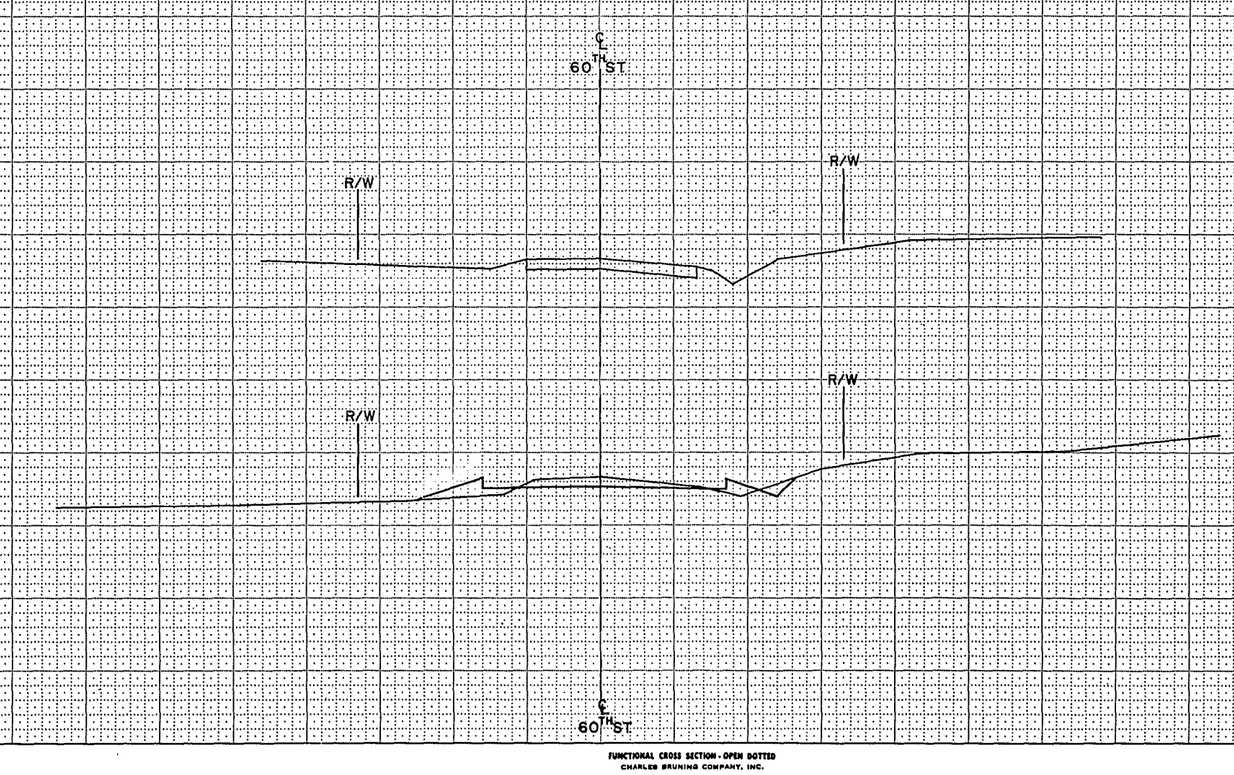
FUNCTIONAL CROSS SECTION - OPEN DOTTED
CHARLES BRUNING COMPANY, INC.

TH

2150-2-70

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	T 034-1(13)	65	70

STATION	DISTANCE	YARDAGE EXCAVATION UNCLASS.	YARDAGE EXCAVATION FILL
12+00	50	29	13
11+50			
SHEET TOTAL		29	13



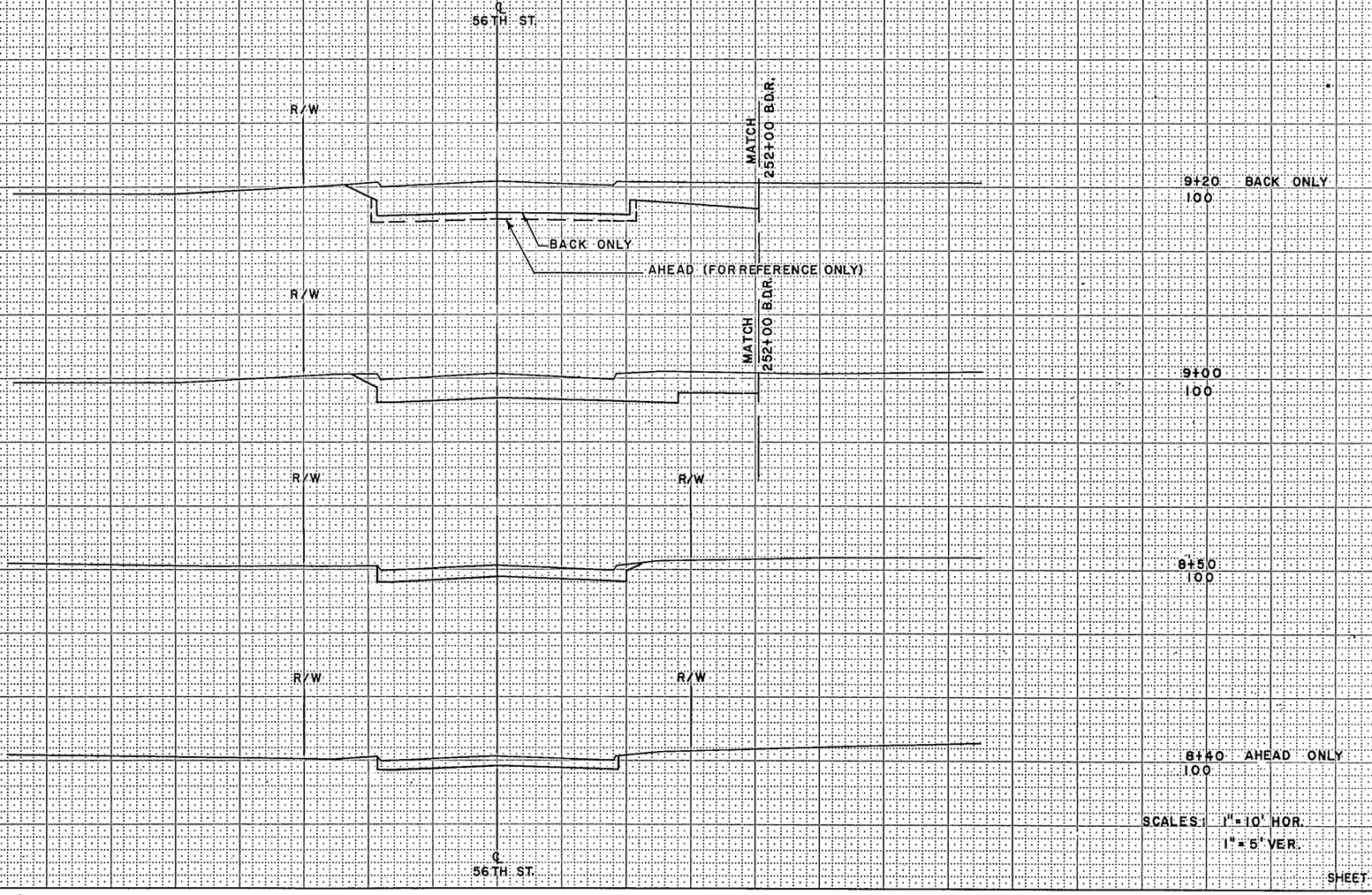
SCALES: 1"=10' HOR
1"=5 VER

FUNCTIONAL CROSS SECTION - OPEN DOTTED
CHARLES BRUNING COMPANY, INC.

60 ST. INTERSECTION 1/2

2150-2-70

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	T 034-1(13)	56	70



STATION	DISTANCE	YARDAGE EXCAVATION UNCLASS.	YARDAGE FILL
9+20			
	20		7
9+00			
	50		46
8+50			
	10		2
8+40			
SHEET TOTAL			55

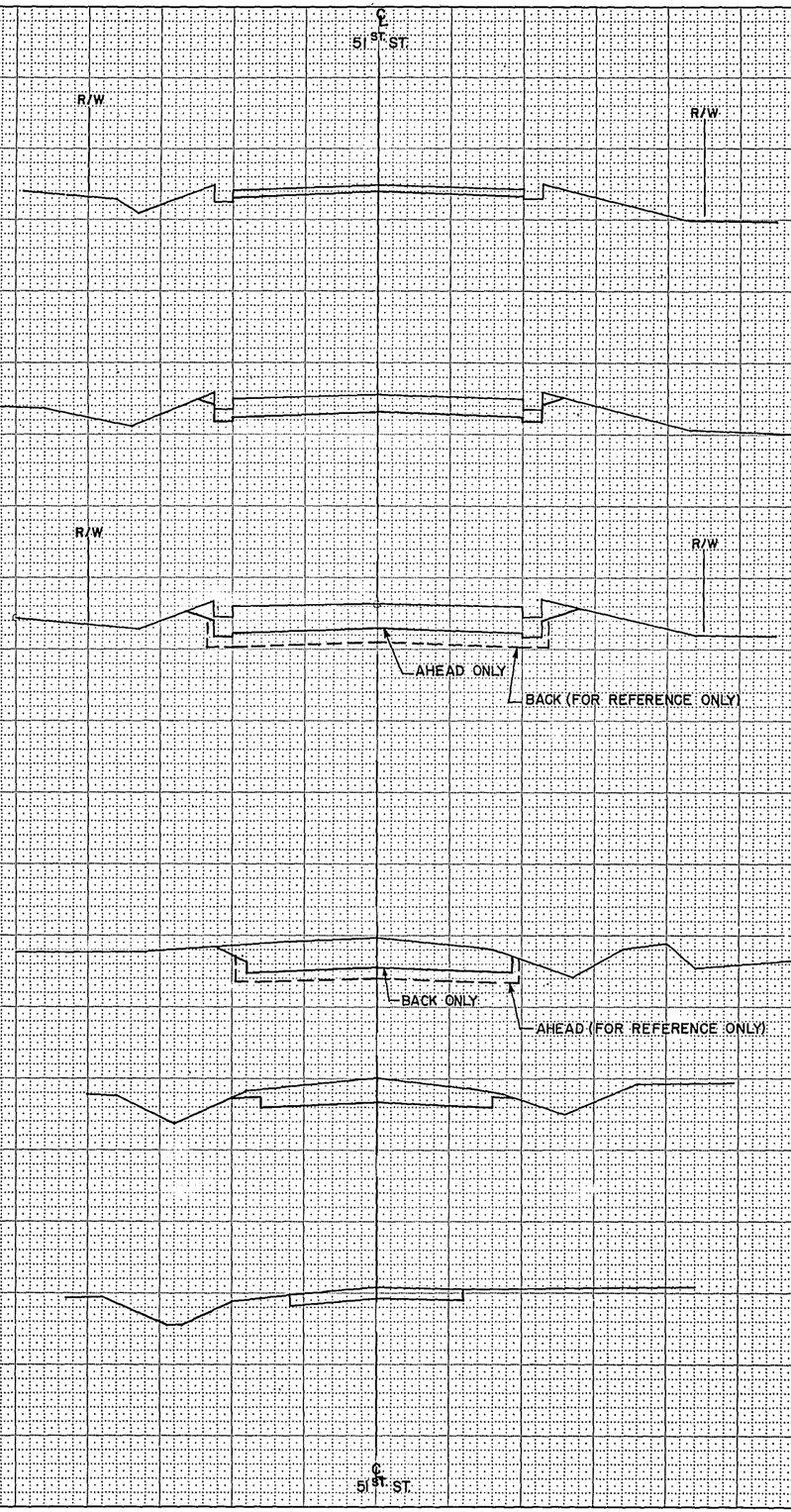
SCALES: 1" = 10' HOR.
1" = 5' VER.

FUNCTIONAL CROSS SECTION - OPEN DOTTED
CHARLES BRUNING COMPANY, INC.

56TH ST. INTERSECTION

2150-2-70

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	T 034-1(13)	67	70



STATION	DISTANCE	YARDAGE EXCAVATION UNCLASS	FILL
11+50	50	69	
11+00			
10+86	14	37	
9+24	24	53	
9+00	50	66	
8+50			
SHEET TOTAL		225	

SCALES: 1" = 10' HOR.
1" = 5' VERT.

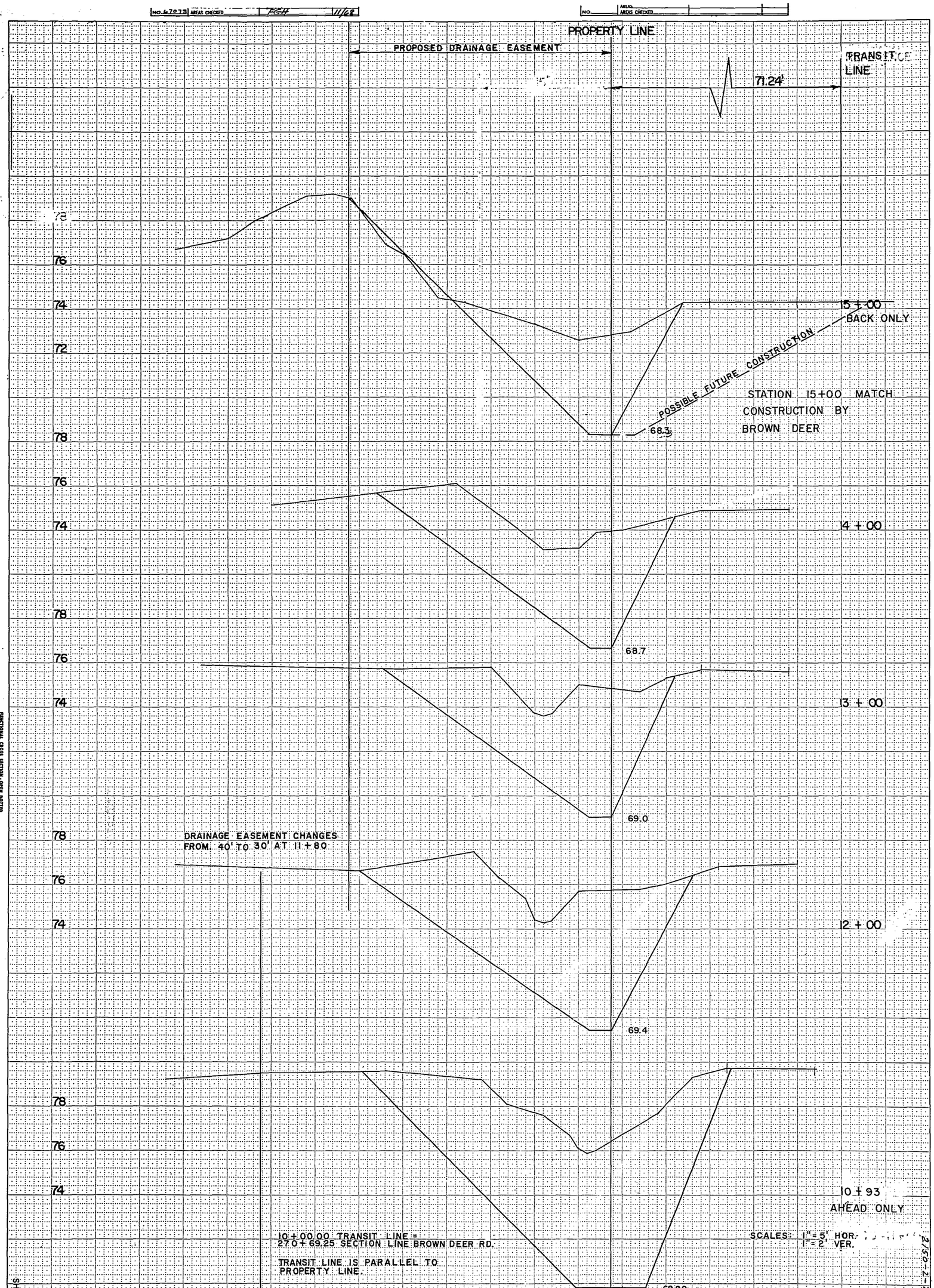
FUNCTIONAL CROSS SECTION - OPEN DOTTED
CHARLES BRUNING COMPANY, INC.

51 ST ST.

NOTE BOOK | TEMPLATE | AREAS CHECKED
NO. 4784 | 1152 | 1162

NO. 67073 AREAS CHECKED EGH 11/68

NO. AREAS CHECKED



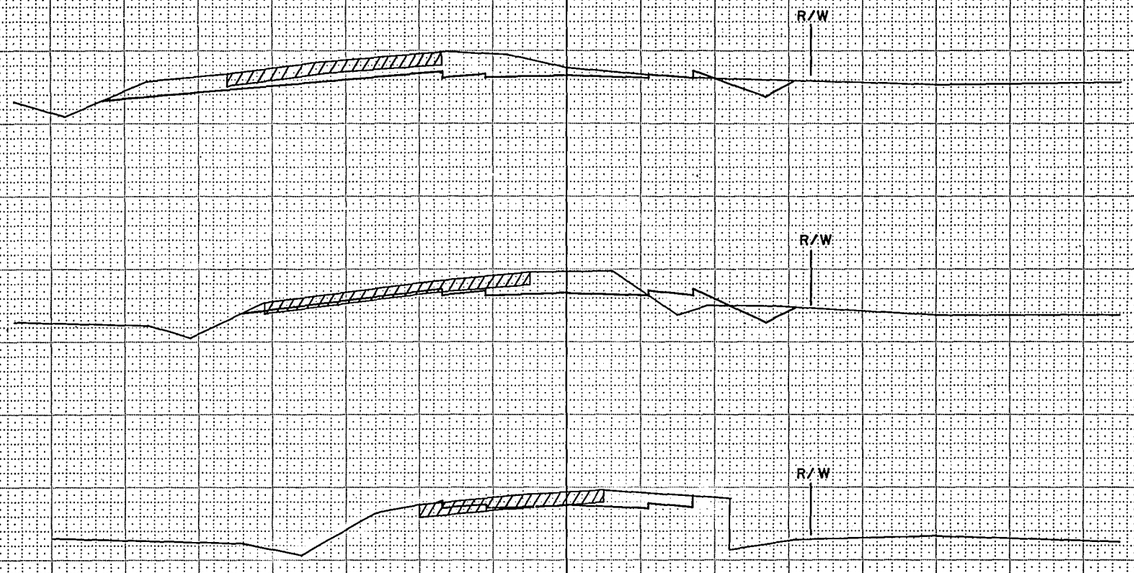
FUNCTIONAL CROSS SECTION-OPEN DITCH
CHARLES BRUNING COMPANY, INC.

| SHEET TOTAL | 10 + 93 | 12 + 00 | 13 + 00 | 14 + 00 | 15 + 00 | | |

SECTION LINE

2150-2-70

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	T 034-1((3)	69	70



STATION	DISTANCE	YARDAGE EXCAVATION UNCLASS.	FILL
289 + 00	50	107	11
288 + 50	50	84	14
288 + 00	50	38	22
287 + 50	50	27	41
287 + 00	50	42	36
286 + 50	12	12	1
286 + 38			
SHEET TOTAL		310	125

SCALES:
1"=10' HOR.
1"=5' VER.

SECTION LINE

FUNCTIONAL CROSS SECTION - OPEN DOTTED
CHARLES BRUNING COMPANY, INC.

NOTE BOOK
NO. 67013
AREA
AREA CHECKED

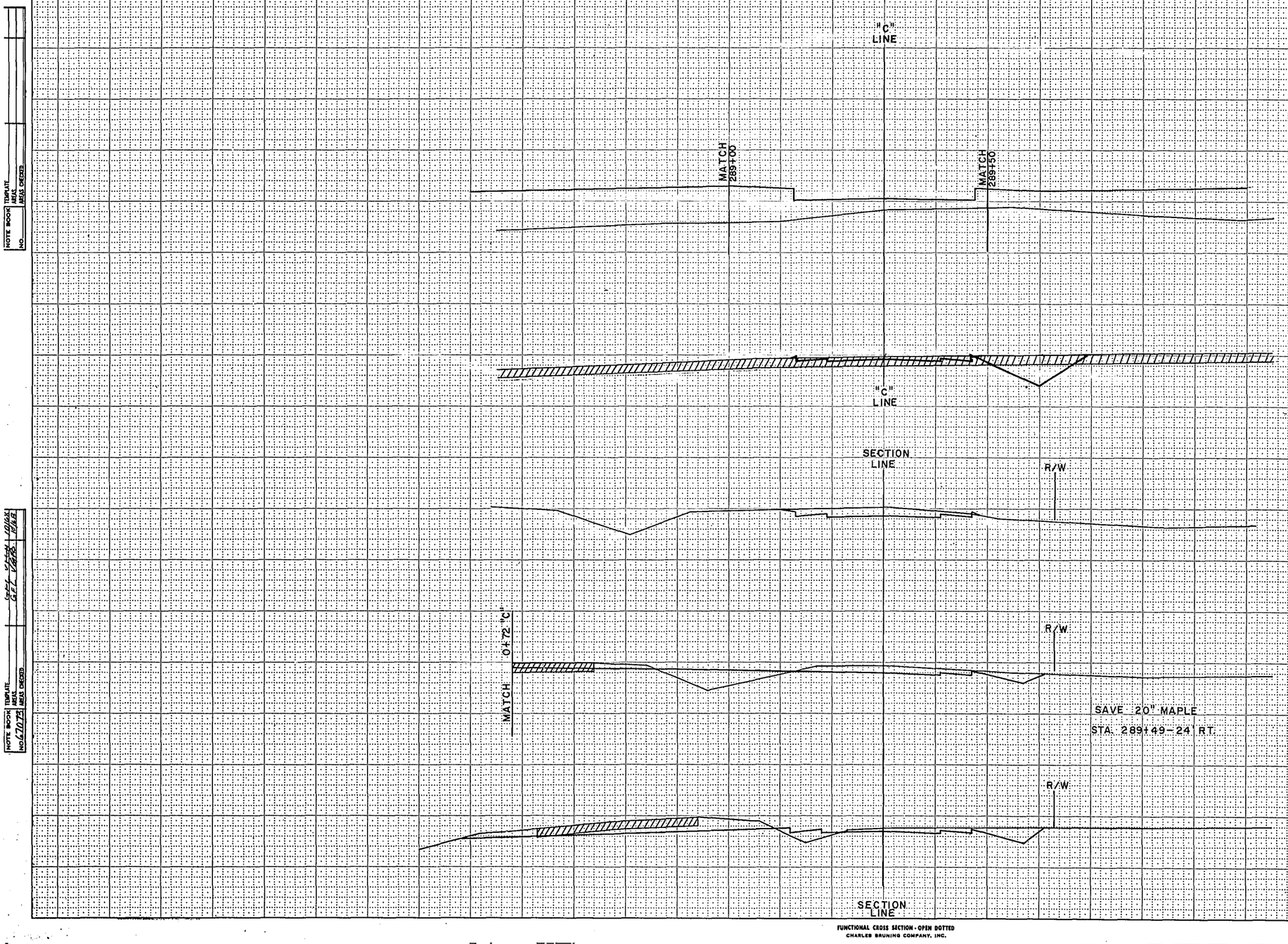
64 Lac

2150-2-70

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	T 034-(13)	70	70

NOTE BOOK | TEMPLATE | AREAS CHECKED | NO.

NOTE BOOK | DUPLATE | AREAS CHECKED | NO. 6-1075 | GEL Date 10/65 | 10/65



1+22 "C" BACK ONLY
85

0+72 "C" AHEAD ONLY
85

289+88 S/L BACK ONLY
85

289+50 S/L
85

SAVE 20" MAPLE
STA. 289+49-24' RT.

289+00 S/L
85

SCALES: HOR. 1"=10'
VER. 1"=5'

STATION	DISTANCE	YARDAGE UNCLASS.	YARDAGE EXCAVATION	YARDAGE FILL
2+22 "C"	50	41		98
0+72 "C"				
289+88	38	42		28
289+50	50	81		46
289+00				
SHEET TOTAL		164		172

FUNCTIONAL CROSS SECTION - OPEN DOTTED
CHARLES BRUNING COMPANY, INC.