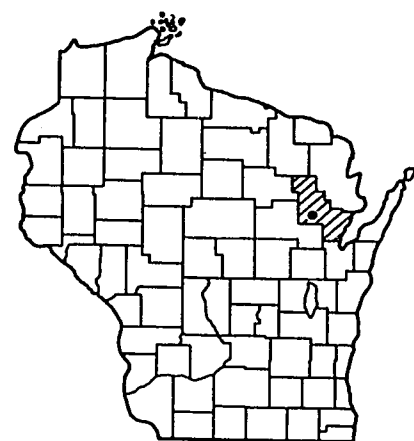


Index of Sheets

Sheet No.	1	Title
Sheet No.	2	Typical Cross Sections
Sheet No.	2	Estimate of Quantities
Sheet No.	2	Miscellaneous Quantities
Sheet No.	3-3.5	Right of Way Plat
Sheet No.	4-12	Plan and Profile Sta. 137+50 to Sta. 377+00
Sheet No.	13-13.6	Standard Details
Sheet No.	-	Drainage Structures
Sheet No.	14-46	Cross Sections



STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED GILLETT—C.T.H. "M" ROAD

(HINTZ — S.T.H. 32 SECTION)

C.T.H. "H"
OCONTO COUNTY

PROJECT IDENTIFICATION NUMBER	FEDERAL PROJECT DESIGNATION
9108-1-71	S 0186(1)

'AS BUILT' PLAN

Design Designation

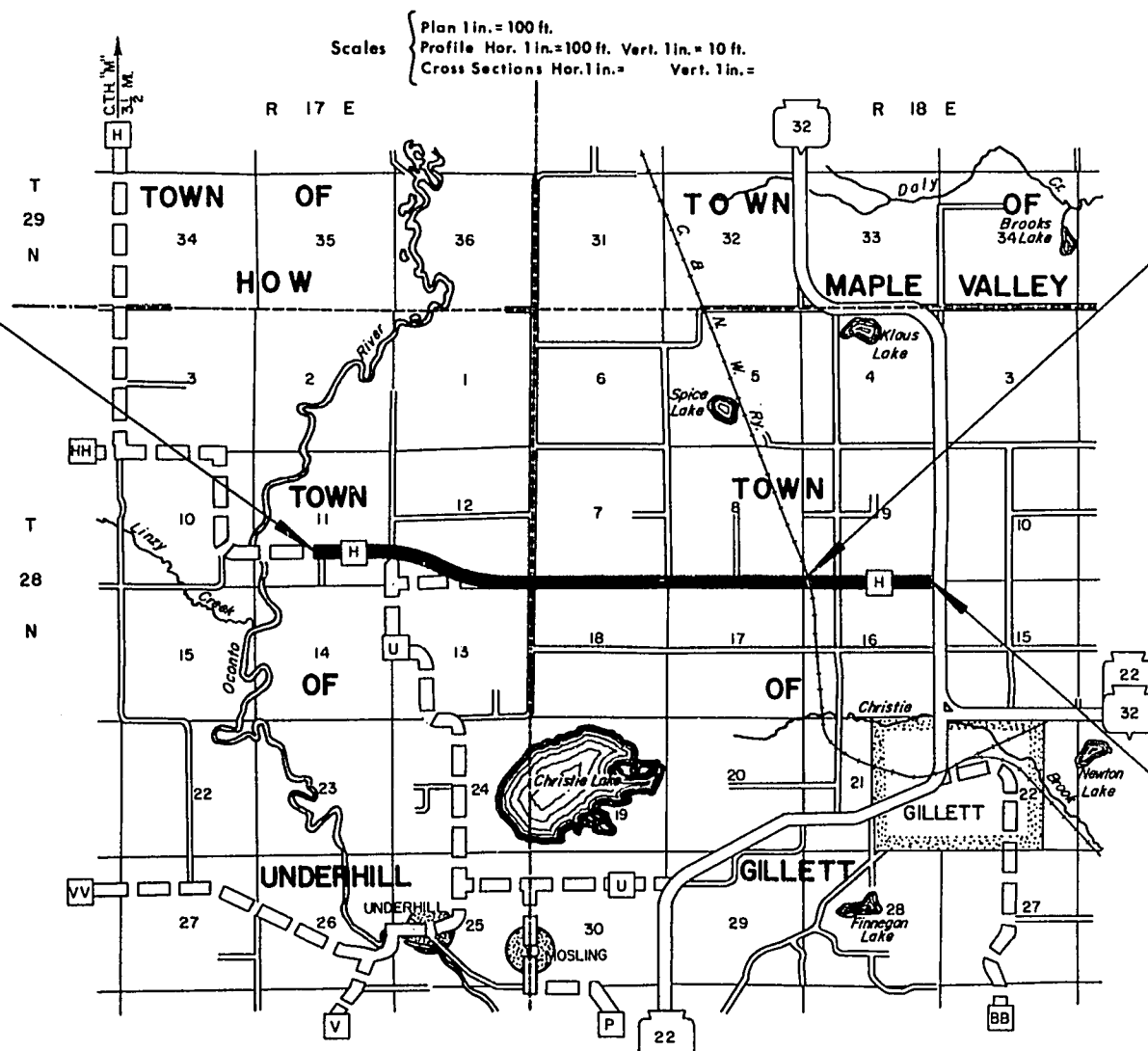
A.D.T. (1971)	205
A.D.T. (1991)	340
D.H.V.	50
D.	50%
T.	9%
V.	50 M.P.H.

BEGINNING OF PROJECT S 0186(1) / 9108-1-71
STA. 137+50
1,342 FEET NORTH & 137 FEET WEST OF THE
SOUTH 1/4 CORNER OF SECTION 11, T. 28 N., R. 17 E.

Conventional Signs

State Line	— — — — —
County Line	— — — — —
Township or Range Line	— — — — —
Section Line	— — — — —
New Right of Way Line	— — — — —
Present Right of Way Line	— — — — —
Wire Fence	Woven — — — — — Barbed — — — — —
Lot Line	— — — — —
Corporate or City Limits	— — — — —
Property Line	— — — — —
Traveled Way or P.E.	— — — — —
Railroads	— — — — —
Base or Survey Line	— — — — —
Culvert Pipe Class III	C.P.C.L. III
Corrugated Metal Culvert Pipe	C.M.C.P.

Culverts in Place	— — — — —
Culverts Required	— — — — —
Drop Inlet	— — — — —
Power Pole	— — — — —
Telephone or Telegraph Pole	— — — — —
Right of Way Markers	— — — — —
Reference Stake for Hubs Only	— — — — —
Marsh	— — — — —
Hedge	— — — — —
Trees	— — — — —
Ground Elevation	Datum Line 73.9
Grade Elevation	Datum Line 76.16
Field Entrance	— — — — — F.E.
Private Entrance	— — — — — P.E.



Layout



Total Net Length of Centerline = 4.534 Mi. (Rural)

STA. 328+63.36 TO STA. 328+76.44
EXCEPTION TO NET C LENGTH

END OF PROJECT S 0186(1) / 9108-1-71
STA. 377+00
224 FEET WEST OF THE SOUTHEAST CORNER OF
SECTION 9 T. 28 N., R. 18 E.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
Surveyor: D.G.N.	Note Book: 887,888
District Computer: R.G.P.	M.O. Checker: S.L.C.
District Checker: R.A.S.	Correct
Correct:	
Date: 3/24/71	<i>[Signature]</i>
Recommended for Approval: District Engineer	
Date: 4/30/71	<i>[Signature]</i>
Approved: Acting Chief Design Engineer	
Date: 4/30/71	<i>[Signature]</i>
State Highway Engineer	
U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION BUREAU OF PUBLIC ROADS	
REGION 4 WISCONSIN DIVISION	
Approved:	
Date:	Division Engineer

S0186(1)

ESTIMATE OF QUANTITIES

CONTRACT NO. 1 (9108-1-71)
GRADING, SUBBASE
& BASE COURSE

PROJECT ID.	SHEET NUMBER	TOTAL SHEETS
9108-1-71	2	46
FEDERAL PROJECT DESIGNATION S 0186 (1)		

THIS PROJECT IS TO BE EXECUTED UNDER THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE WISCONSIN DIVISION OF HIGHWAYS - EDITION OF 1969,
APPROVED MARCH 3, 1969, FEDERAL AID REQUIRED CONTRACT PROVISIONS APPROVED NOVEMBER 15, 1968 AND SPECIAL PROVISIONS AS ATTACHED TO PROPOSALS.

SEC. NO.	STATION TO STATION	NET LENGTH OF CENTER LINE	CLEARING		GRUBBING		REMOVING OLD CULVERT STA. 166+00	UNCLASSI- FIED EXCAVATION	MARSH EXCAVATION	BORROW EXCAVATION	GRANULAR SUBBASE COURSE 8-INCH	CRUSHED AGGREGATE BASE COURSE	FINISHING ROADWAY	CULVERT PIPE CLASS III				APRON ENDWALLS FOR CULVERT PIPE				MARKER POSTS	LANDMARK REFERENCE MONUMENTS	CALCIUM CHLORIDE SURFACE TREATMENT	SALVAGED TOPSOIL	EROSION MAT	FERTILIZER	SEEDING	FIELD OFFICE TYPE "A"			
			20101	20102	20104	20105	20301	20503	20505	20801	21208	90001	21301	52003	52005	52007	52013	52061	52063	52065	52071	61421	62101	62301	62505	62802	62901	63002	64201			
	ITEM NO.		STA.	INDIA	STA.	INDIA	L. S.	CU. YD.	CU. YD.	CU. YD.	SQ. YD.	SQ. YD.	L. S.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	EA.	EA.	EACH	EACH	TON	SQ. YD.	SQ. YD.	CWT.	LB.	L. S.			
1		137 + 50 - 377 + 00	23,936.92	13	947	13	1,156	1	62,753	6,742	14,250	103,000	93,700	1	1,128	428	66	50	76	16	2	2	24	21	50	111,000	5,000	25	1,500	1		
1	TOTALS		23,936.92	13	947	13	1,156	1	62,753	6,742	14,250	103,000	93,700	1	1,128	428	66	50	76	16	2	2	24	21	50	111,000	5,000	25	1,500	1		

GENERAL NOTES

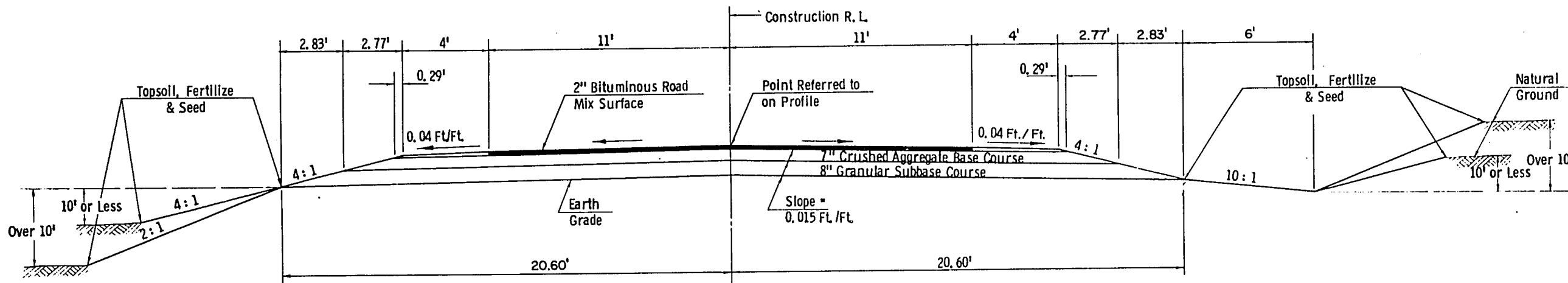
Solvged topsoil shall be placed to an approximate depth of 3" at time of placing.
Cubic yards of fill as shown on the plansheets pertains to embankment constructed from unclassified excavation computed with a shrinkage of 20% to 35% and borrow excavation with a shrinkage of 15%.
Private utility companies shall adjust or move all privately owned facilities to fit the new construction.
The exact location of culvert pipe, private entrances and field entrances shall be determined by the Engineer in the field.
Square yards of crushed aggregate base course shall be computed by using a 7 inch depth on the mainline and by converting Side Roads and Private Entrances to equivalent square yards at a 7 inch depth.
Limits of sight distance excavation at the railroad tracks to be determined by the Engineer in the field.
Bituminous road mix surface is not a part of this contract.

UTILITIES LOCATED WITHIN THIS PROJECT

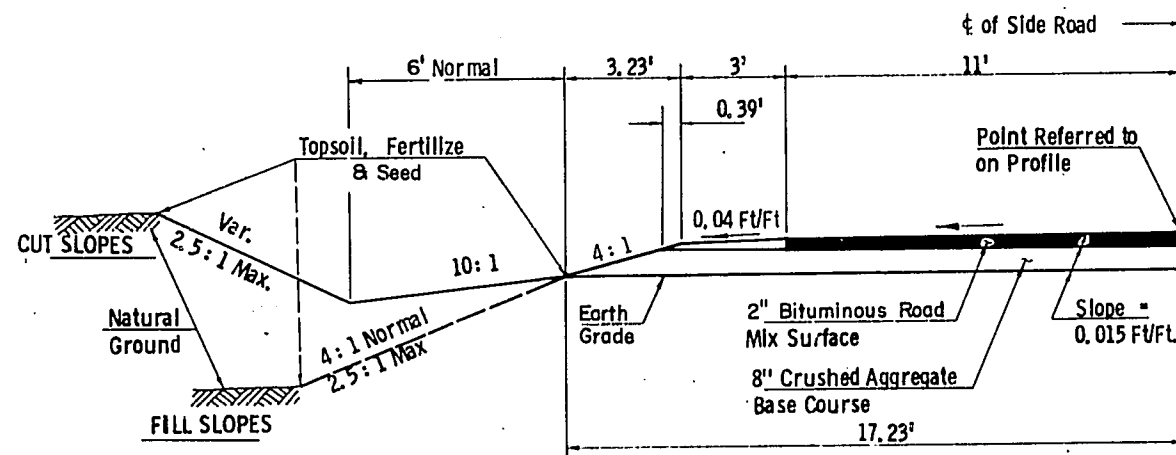
General Telephone Company
Oconto Electric Cooperative
Michigan-Wisconsin Pipe Line Co.
Chicago & Northwestern Railway Co.

STANDARD DETAIL DRAWINGS

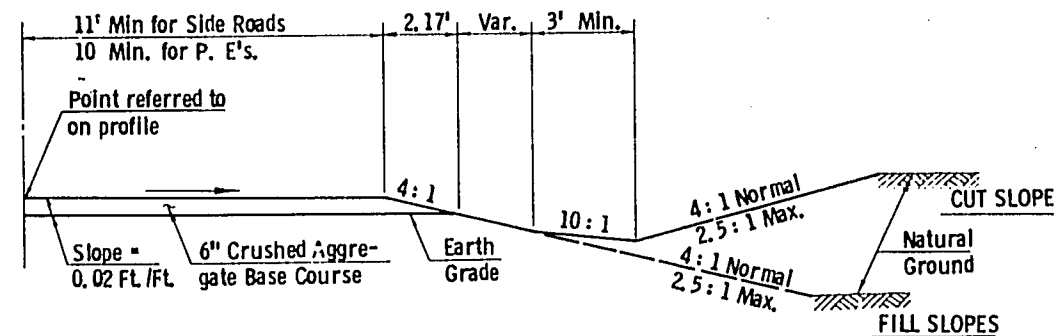
Marsh Excavation 1-1.1.2
Pavement Details For Railroad Approach 2-2.1.12
Apron Endwalls For Culvert Pipe 6-2.6.8
Marker Post 7-1.3.5
Construction Barricade 7-4.1.5
Design Details For Side Road At Grade Intersections 9-1.1.5
Landmark Reference Monuments 12-1.1.3



TYPICAL FINISHED SECTION



1/2 TYPICAL FINISHED SECTION FOR SIDE ROADS WITH BITUMINOUS SURFACE

1/2 TYPICAL SECTION FOR GRAVEL SURFACE
SIDE ROADS AND FOR PRIVATE ENTRANCES

CLEARING AND GRUBBING

Station to Station	Clearing Station In. Dia.	Grubbing Station In. Dia.
137 + 50 - 173 + 00	174	244
173 + 00 - 183 + 00	10	10
183 + 00 - 371 + 00	715	840
371 + 00 - 374 + 00	3	3
374 + 00 - 377 + 00	58	72

SEEDING

MIXTURE NO. 1 111,000 SQ. YD.

GRANULAR SUBBASE COURSE

Location	Sq. Yds.	Approximate Cu. Yds.
MAINLINE	103,000	26,000

CRUSHED AGGREGATE BASE COURSE

Location	Sq. Yds.	Approximate Cu. Yds.
MAINLINE	85,140	23,000
SIDE ROADS	5,700	1,550
PRIVATE ENTRANCES	2,860	800

MARKER POSTS FOR SHOULDER DELINEATION

Station to Station	Location	Spacing	Each
209 + 00 - 214 + 00	LT.	100'	6
UNDISTRIBUTED			14
272 + 00 - 275 + 00	LT.	100'	4

CROSS DRAIN & PRIVATE ENTRANCE PIPES

Station	Location	Diameter	Length	Type	Apron Endwalls
138 + 56	R. L.	24"	46'	C. P. CL. III	2
161 + 00	R. L.	30"	66'	"	2
162 + 80	F. E. RT.	24"	28'	"	2
9 + 05	TOWN RD.	24"	52'	"	2
9 + 90	TOWN RD.	60"	50'	"	2
221 + 23.4	TOWN RD. RT.	18"	52'	"	2
232 + 78	R. L.	24"	74'	"	2
267 + 18	R. L.	24"	54'	"	2
298 + 29	R. L.	24"	52'	"	2
300 + 25.1	TOWN RD. LT.	18"	40'	"	2
310 + 75	R. L.	24"	62'	"	2
328 + 61	R. L.	18"	42'	"	2
328 + 79	R. L.	18"	42'	"	2
372 + 84	R. L.	24"	60'	"	2
34 P.E.'S. e 18" X 28" EACH			952'	"	68

Sheet No. 4.0 Title Sheet.
Sheet No. 4.1-4.5 Plan & Parcel Sheets

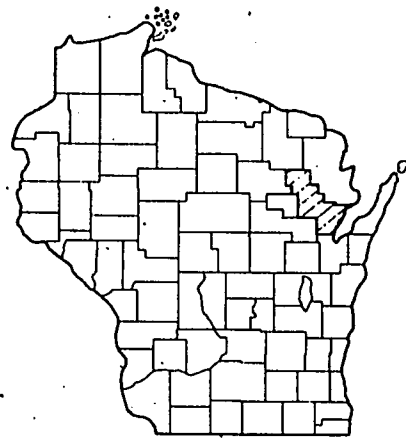
**OFFICIAL PLAT ON FILE WITH
THE REGISTER OF DEEDS OFFICE**

GILLETT - C.T.H. "M"

C.T.H. "H"
OCONTO COUNTY

PROJECT IDENTIFICATION NUMBER

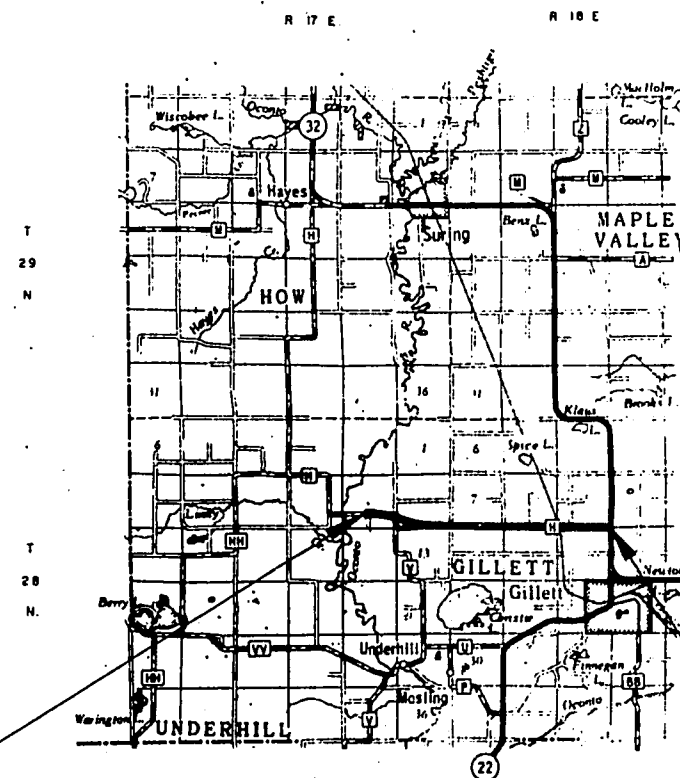
9108 1 00



STANDARD ABBREVIATIONS & CONVENTIONAL SIGNS

ABANDON
ACRES REMAINING
AND OTHERS
AND WIFE
BARN
CEMETERY
CHANNEL
CHANNEL CHANGE
CHICKEN HOUSE
COMMERCIAL
CORNER
DEED
ESTATE
FOUNDATION
GARAGE
HOTEL
HOUSE
IRON PIN
LIMITED HIGHWAY EASEMENT
MONUMENT
OUTLOT
REQUIRED

AEND.
AC. REM.
ET. AL.
ET. UX.
b
CEM.
Ch.
Ch. Ch.
C. H.
COMM.
COR.
ID.
EST.
FDN.
G.
HO.
H.
I. P.
L. H. E.
MON.
O. L.
REQ'D.



END PROJECT 9108 | 00
STATION 379 + 24.25
SOUTHEAST CORNER OF SECTION 9 ,
TOWNSHIP 28 NORTH, RANGE 18 EAST.

BEGIN PROJECT 9108 1 00

STATION 137+ 00
1,343.15 FEET NORTH OF AND 2,879.20 FEET
WEST OF THE SOUTHEAST CORNER OF SECTION 11,
TOWNSHIP 28 NORTH, RANGE 17 EAST.

Layout

Scale 0 1 2 Miles

Total Net Length of Centerline = 4.588 Mi.

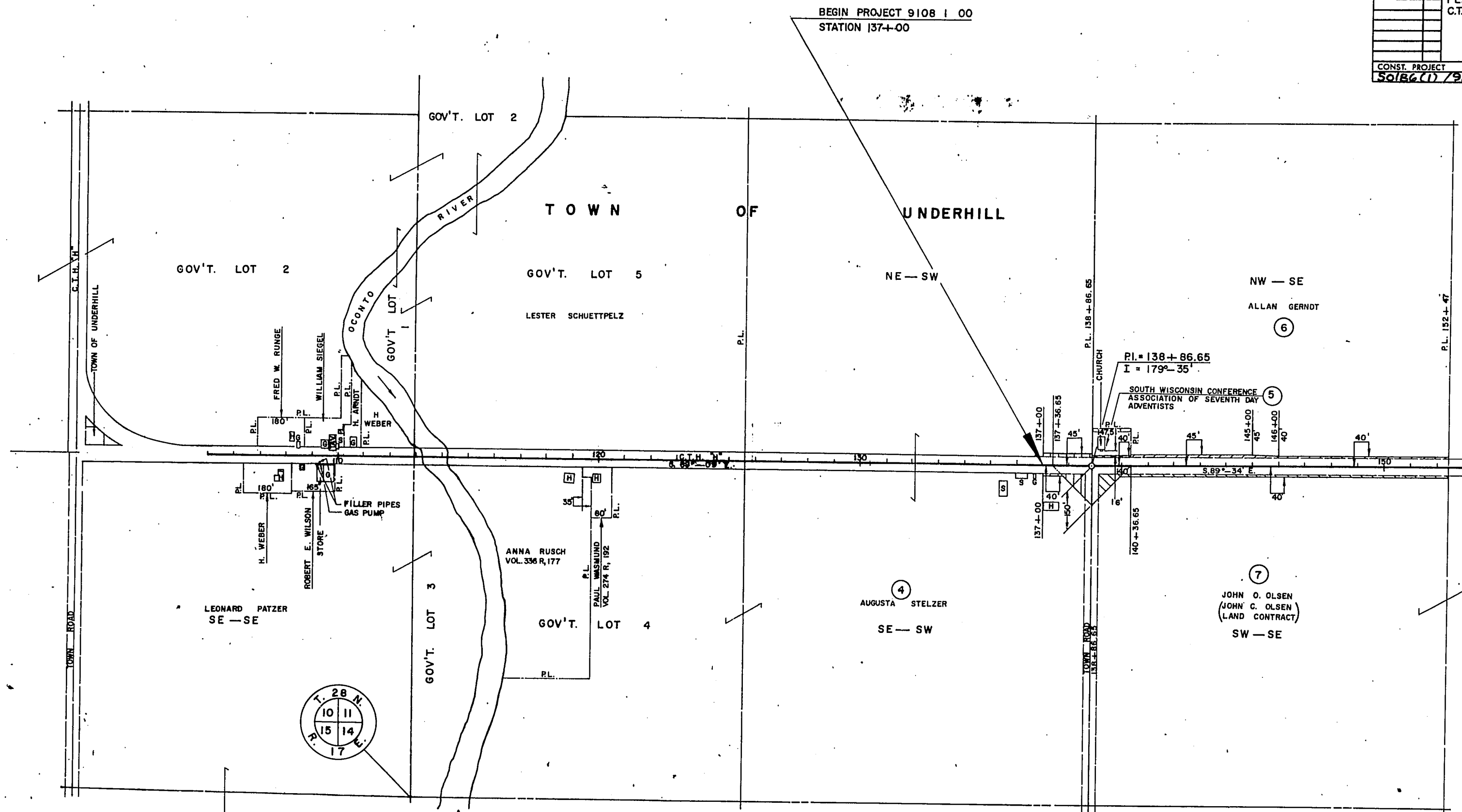
DATEC SEPT. 25, 1970

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	ACRES
1				
2				
3				
4	4.1	AUGUSTA STELZER	HIGHWAY EASEMENT	0.17
5	4.1	SOUTH WISCONSIN CONFERENCE ASSOCIA- TION OF SEVENTH DAY ADVENTISTS	HIGHWAY EASEMENT	0.02
6	4.1 - 4.2	ALLAN GERHDT	HIGHWAY EASEMENT	0.28
7	4.1 - 4.2	JOHN O. OLSEN	HIGHWAY EASEMENT	0.62
8	4.2	ORVILLE A. LADWIG	HIGHWAY EASEMENT	0.30
9	4.2	STANLEY JAREK	HIGHWAY EASEMENT	6.22
10	4.2	ARNOLD E. JENSEN	HIGHWAY EASEMENT	0.88
11	4.2-4.3-4.5	OCONTO ELECTRIC COOPERATIVE	RELEASE OF RIGHTS	--
12	4.3	DONALD GENKE	HIGHWAY EASEMENT	0.61
13	4.3	EVELYN D. CLEMENTS	HIGHWAY EASEMENT	0.10
14	4.3	THEODORE BATZER	HIGHWAY EASEMENT	0.92
15	4.3	BERTHA MILLER	HIGHWAY EASEMENT	0.76
16	4.3	RAYMOND R. MILLER	HIGHWAY EASEMENT	1.53
17	4.3	WALTER O. MUELLER	HIGHWAY EASEMENT	0.37
18	4.3	CLEOPHAS L. CYR	HIGHWAY EASEMENT	0.30
19	4.3	HENRY M. REICHWALD	HIGHWAY EASEMENT	0.11
20	4.4	EVANGELICAL LUTHERAN CHURCH	HIGHWAY EASEMENT	0.21
21	4.4	HARVIN ZAHN	HIGHWAY EASEMENT	0.59
22	4.4	MICHIGAN-WISCONSIN PIPE LINE CO.	RELEASE OF RIGHTS	--
23	4.4	MELVIN LAUERSDORF	HIGHWAY EASEMENT	0.21
24	4.4	HAROLD E. RUSCH	HIGHWAY EASEMENT	0.43
25	4.4	ARTHUR H. MOTZER	HIGHWAY EASEMENT	0.07
26	4.4	ROBERT RHODE	HIGHWAY EASEMENT	0.19
27	4.4	HARVEY BUBOLZ	HIGHWAY EASEMENT	0.21
28	4.4 - 4.5	HERMAN KOHLS	HIGHWAY EASEMENT & L.H.E.	0.72
29	4.5	ARNOLD NEUMANN	"	0.19
30	4.5	CHICAGO & NORTHWESTERN RAILWAY COMPANY	AGREEMENT	--
31	4.5	FRANCIS C. CENSKY	HIGHWAY EASEMENT	0.12
32	4.5	HERBERT KRUEGER	HIGHWAY EASEMENT	0.04
33	4.5	MELVIN A. MUCK	HIGHWAY EASEMENT	0.04
34	4.5	HENRY ORLOFSKE	HIGHWAY EASEMENT	0.07
35	4.5	MERLIN LINTER	HIGHWAY EASEMENT	0.34
36	4.5	RUBY REINHOLD	HIGHWAY EASEMENT	1.43
37	4.5	GLENN W. SHOOT	HIGHWAY EASEMENT	1.09
38	4.5	RICHARD HILL	HIGHWAY EASEMENT	0.19
39	4.5	GENERAL TELEPHONE COMPANY	RELEASE OF RIGHTS	--

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

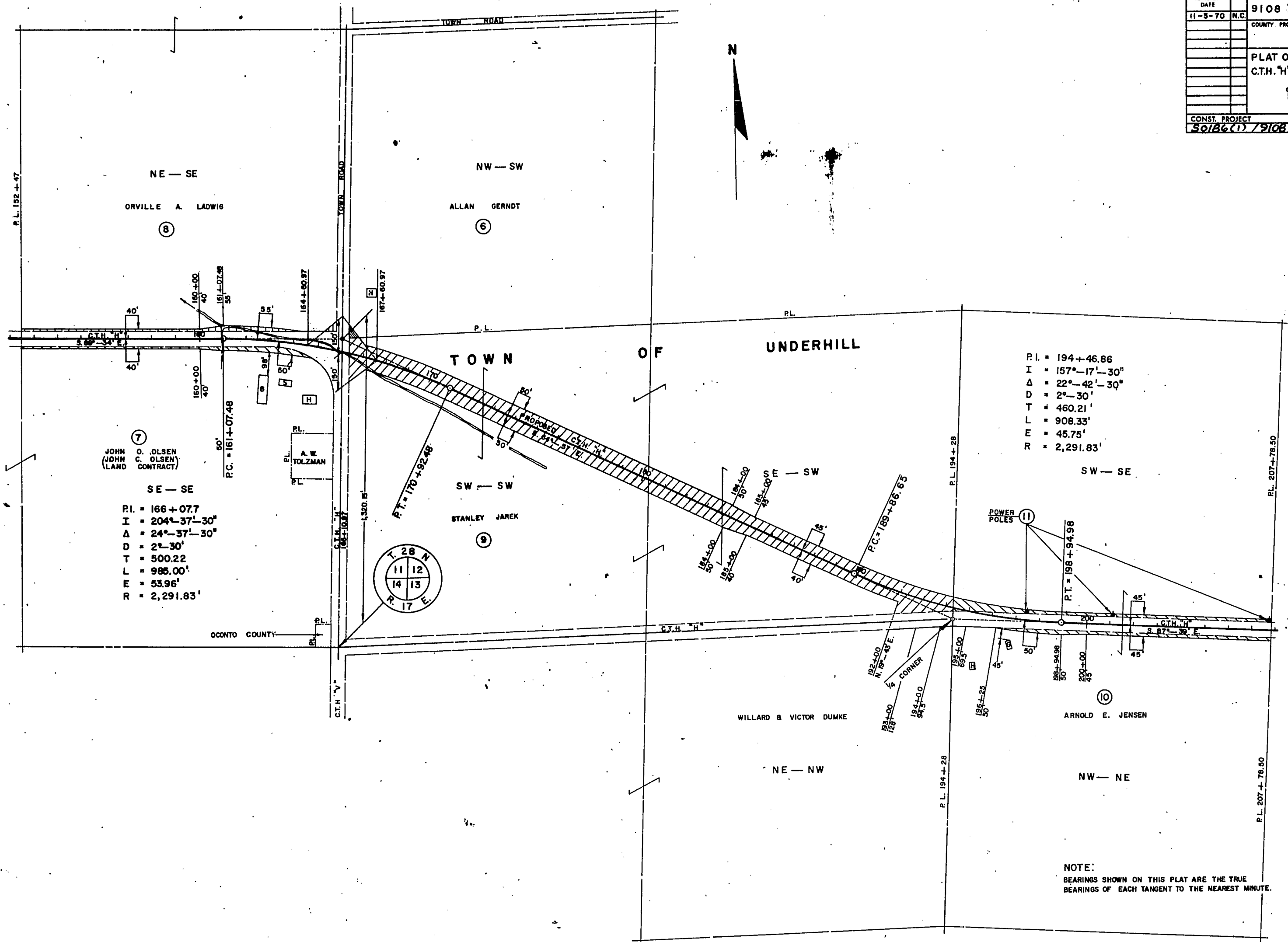
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REVISION DATE	PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
11-3-70	9108 1 00	4.1	
	COUNTY PROJECT DESIGNATION		
	PLAT OF RIGHT OF WAY REQUIRED		
	C.T.H. "H" OCONTO COUNTY		
	SCALE		
	DATE 9-25-70		
CONST. PROJECT			
50186(1) 9108-1-71			3.1-46

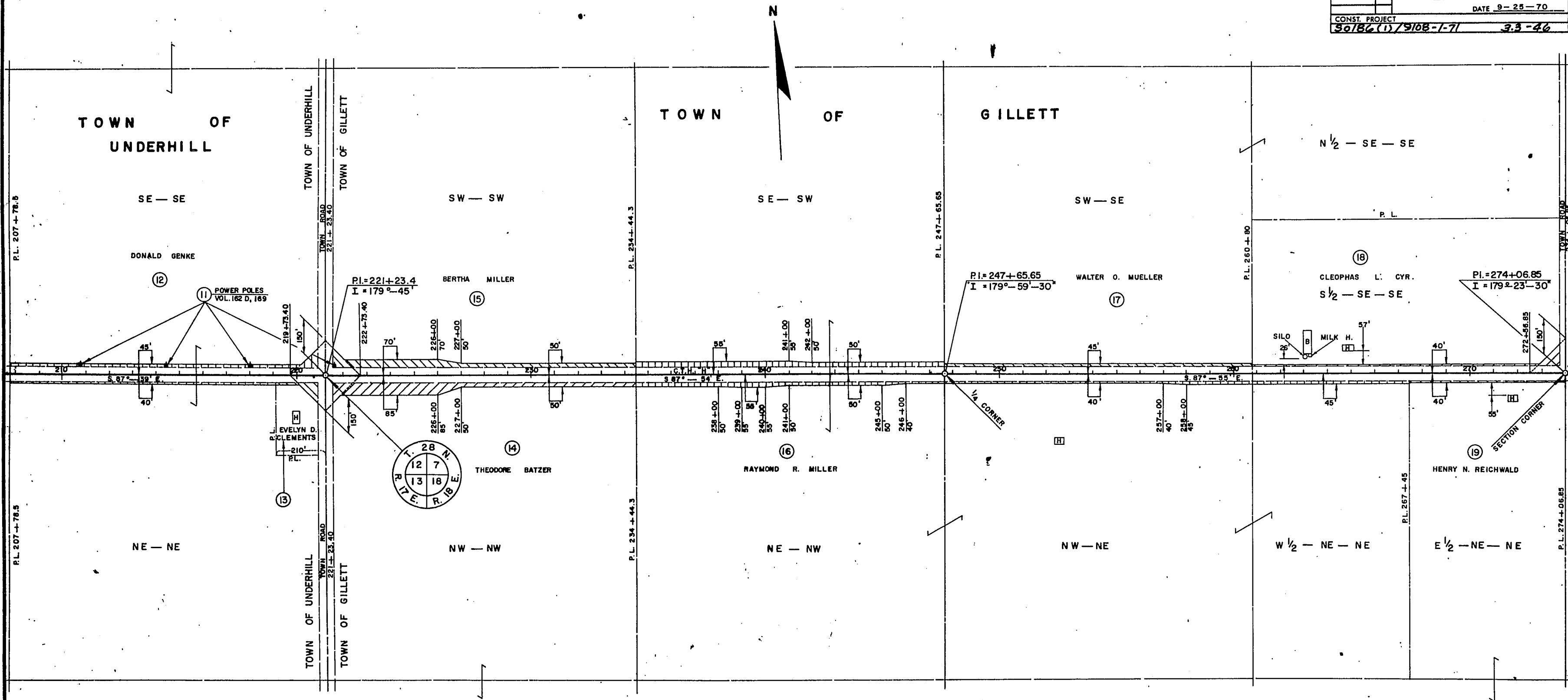


NOTE:
BEARINGS SHOWN ON THIS PLAT ARE THE TRUE
BEARINGS OF EACH TANGENT TO THE NEAREST MINUTE.

REVISION	DATE	PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
11-5-70	N.C.	9108 00	4.2	
		COUNTY PROJECT DESIGNATION		
		PLAT OF RIGHT OF WAY REQUIRED		
		C.T.H. "H"	OCONTO COUNTY	
		SCALE	400 Ft.	
		DATE	9-25-70	
CONST. PROJECT				
50186(1) / 9108-1-71		3-2-46		



REVISION DATE	PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
11-3-70	9108 1 00	4.3	
COUNTY PROJECT DESIGNATION			
PLAT OF RIGHT OF WAY REQUIRED			
C.T.H. "H" OCONTO COUNTY			
SCALE		400 Ft.	
DATE		9-25-70	
CONST. PROJECT			
90186(1)/9108-1-71		3.3-46	

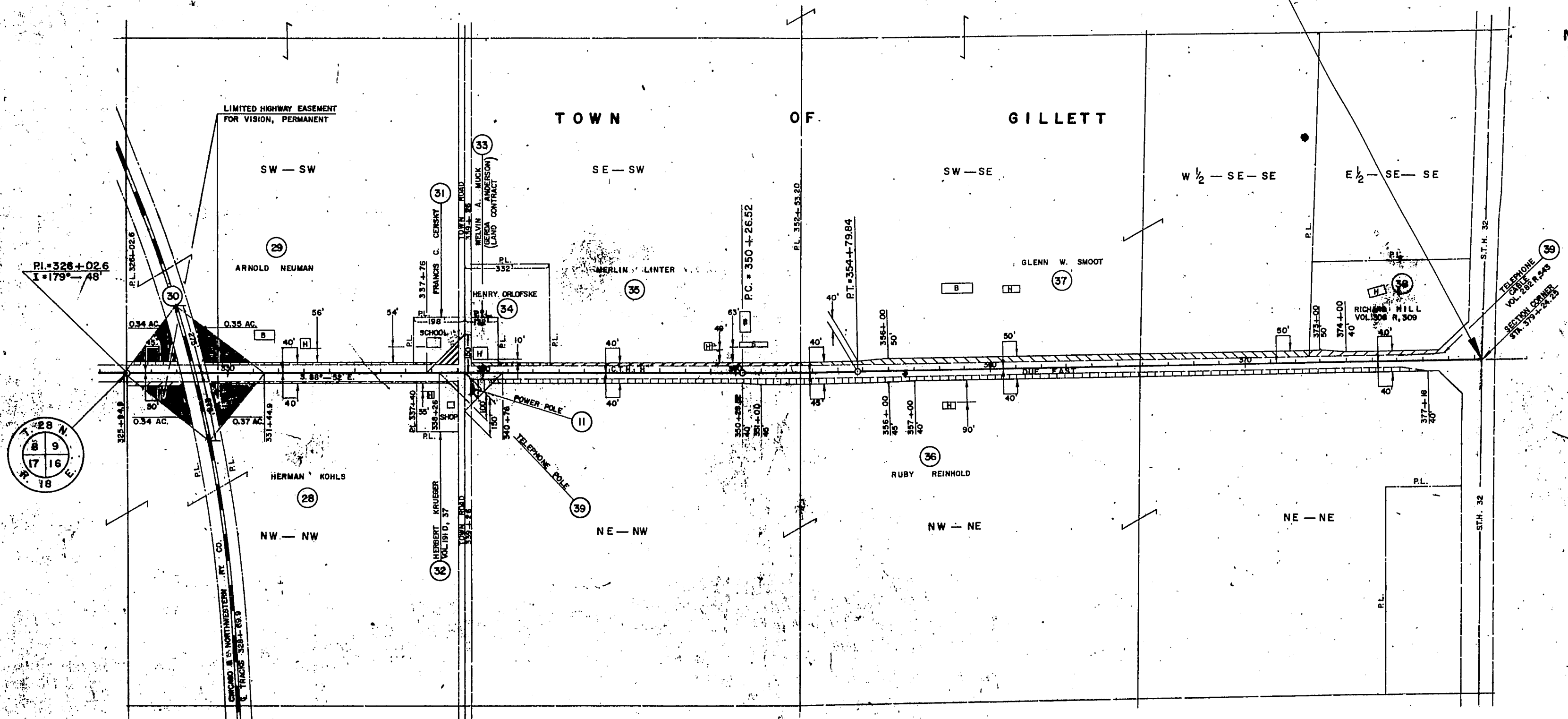


NOTE:
BEARINGS SHOWN ON THIS PLAT ARE THE TRUE
BEARINGS OF EACH TANGENT TO THE NEAREST MINUTE.

REVISION	PROJECT I.D.	SHEET	TOTAL
DATE	9108 1 00	NUMBER	SHEETS
11-3-70	COUNTY PROJECT DESIGNATION	4, 5	
PLAT OF RIGHT OF WAY REQUIRED			
C.T.H. "H" OCONTO COUNTY			
SCALE 0 400 Ft.			
DATE 9-25-70			
CONST. PROJECT			
50186(1)/9108-1-71 3.5-46			

P.L. = 352+53.2
 I = 178°-52'
 Δ = 1°-08'
 D = 0°-15'
 T = 226.68'
 L = 453.32'
 E = 1.12'
 R = 22,918.31'

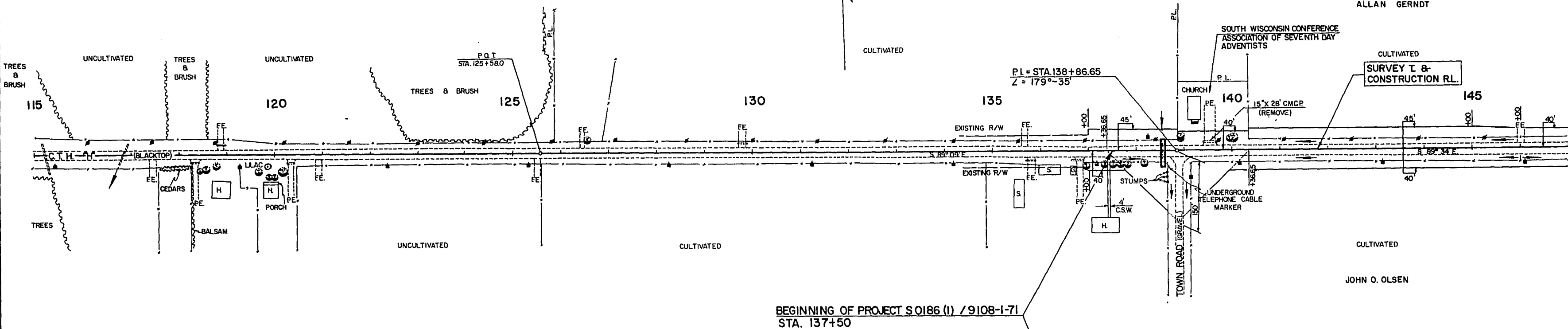
END PROJECT 9108 1 00
 STATION 379+24.25



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

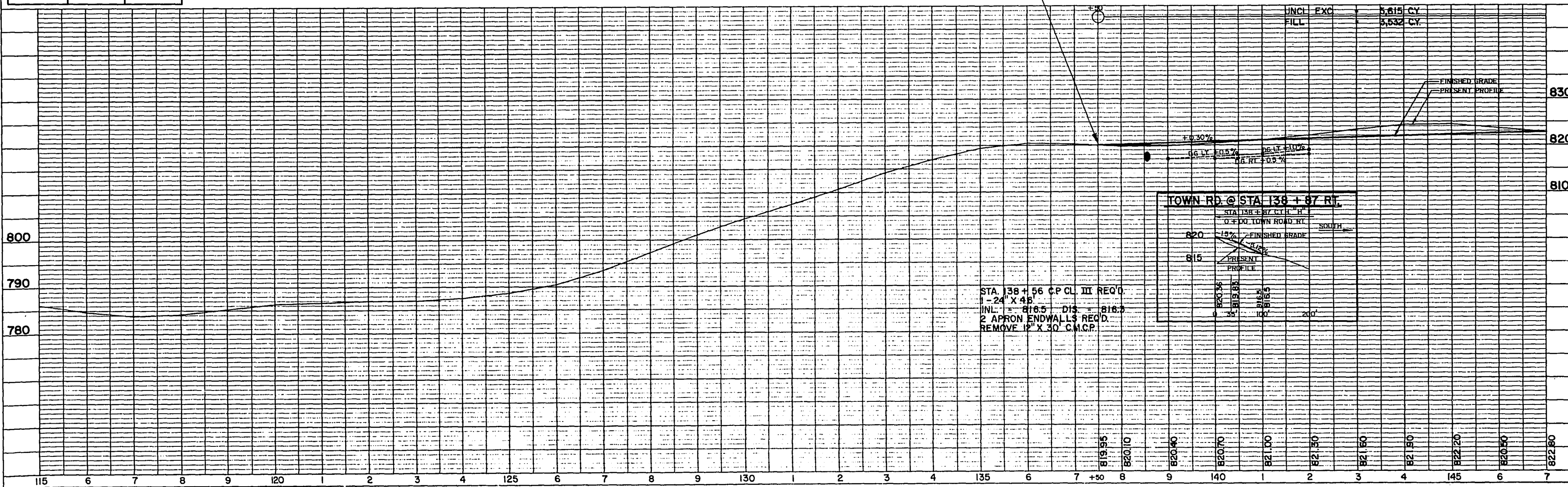
BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
103	126+10	SPIKE IN 6" ELM	175' LT. 787.81
104	139+17	P.M. SW COR. BOT. CONC. STEP	54' LT. 820.37

PROJECT I.D.	9108-1-71	SHEET NUMBER	4	TOTAL SHEETS	46
FEDERAL PROJECT DESIGNATION	S 0186(1)				



NET LENGTH OF CENTERLINE		
STATION TO STATION	LIN. FT.	
137+50	145+00	750.00

STA. 138 + 86.65 (TOWN RD. RT.)
DESIGN TYPE "C" INTERSECTION REQ'D.
(SEE STANDARD DETAIL DRAWING NO. 9-1.1.5)



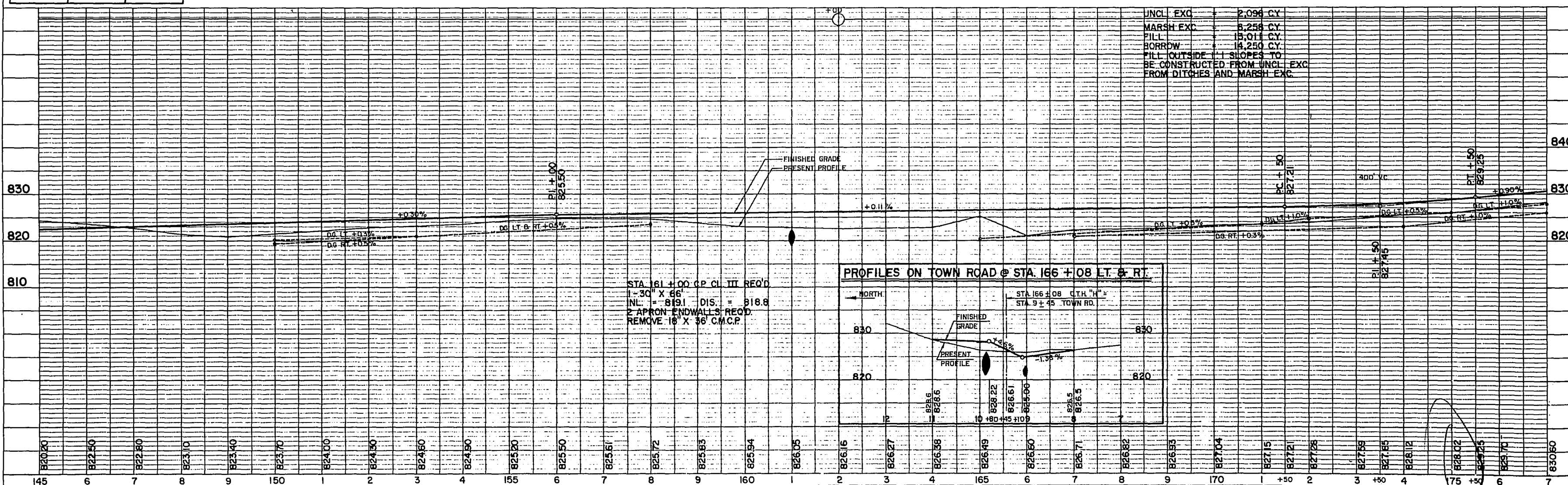
PROJECT ID	SHEET NUMBER	TOTAL SHEETS
9108-1-71	5	46
FEDERAL PROJECT DESIGNATION		
S 0186 (1)		



STA. 9 + 05 (TOWN RD.)
1-24" X 52' C.P. CL. III REQ'D.
INL. = 820.8 DIS. = 820.6
SKEW 10° ± L.H.F.
2 APRON ENDWALLS REQ'D.

STA. 166 + 08±(TOWN RD. LT. & RT.)
DESIGN TYPE "C" INTERSECTION REQ'D.
(SEE STANDARD DETAIL DRAWING NO. 9-1.1.5)

NET LENGTH OF CENTERLINE		
STATION TO STATION		LIN. FT.
145+00	175+00	3,000.00

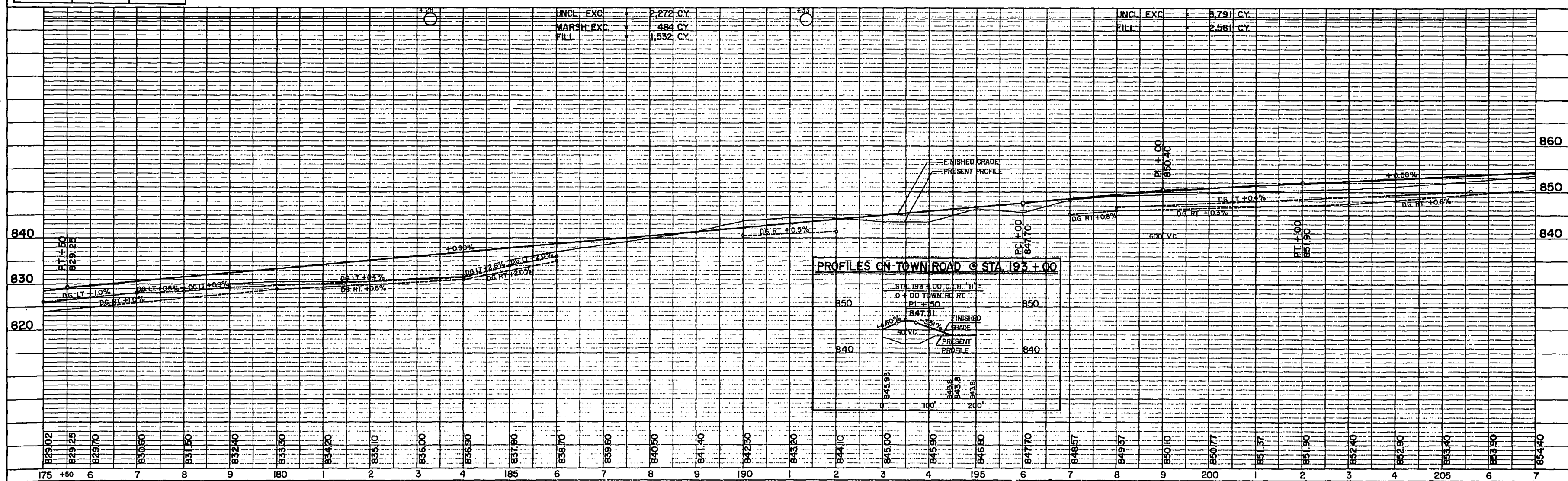
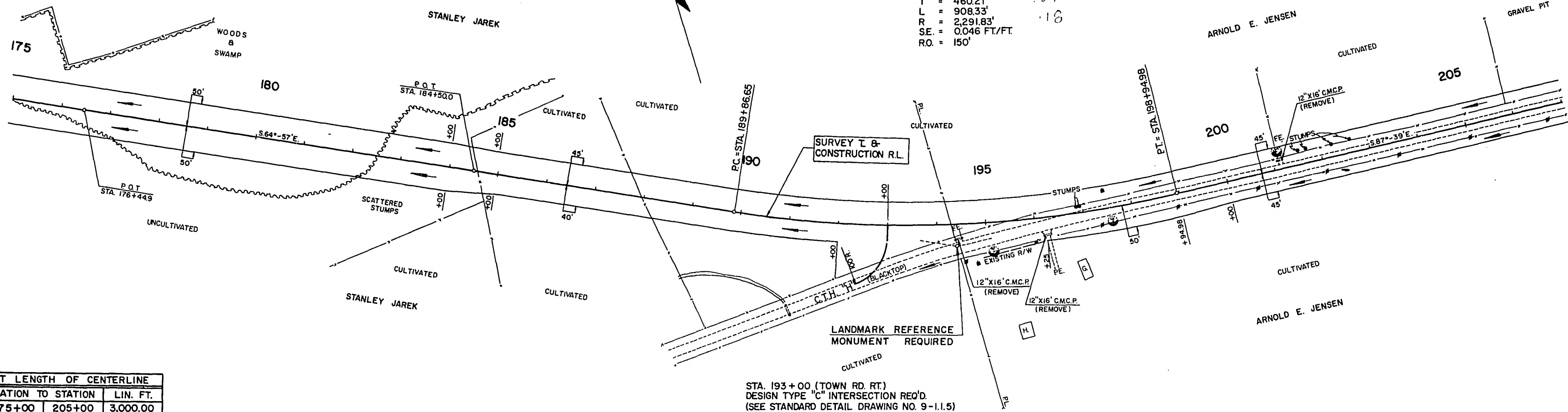


NOTE BOOK	ALIGNMENT CHECKED	K. G. P.	9-70
No. 887	INT. OF WAY CHECKED	R. G. P.	9-70

No. 888	ISSUES LISTED	D. U. F.	3-10
	S. M.'S NOTED	G. E. K.	3-70
	STRUCTURE NOTATIONS CHECKED		

CURVE NOTES

P.I. = 194 + 46.86
 Z = 157°-17'-30"
 Δ = 22°-42'-30"
 D = 2°-30'
 T = 460.21'
 L = 908.33'
 R = 2,291.83'
 S.E. = 0.046 FT./FT.
 R.O. = 150'

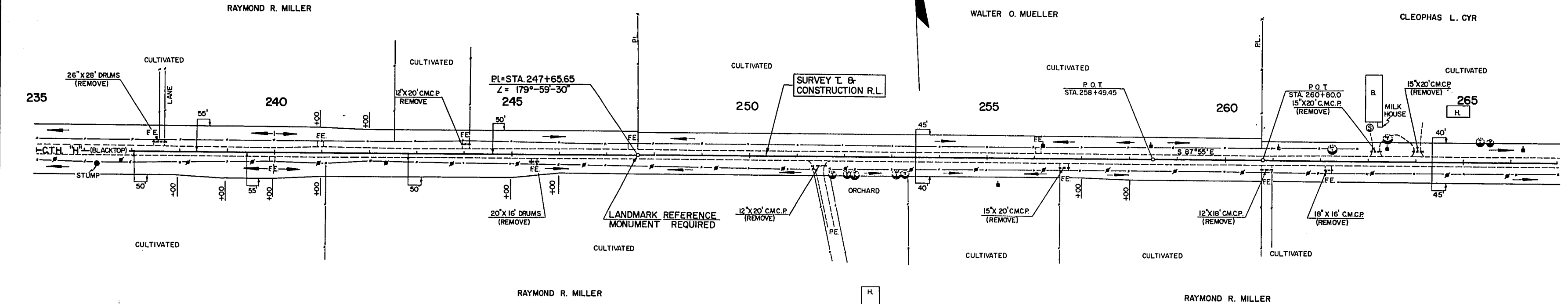


BENCH MARKS				
NO.	STATION	DESCRIPTION		ELEV.
113	252+15	SPIKE IN 18" APPLE	60' RT	913.41
114	264+68	SPIKE IN 18" ASH	85' LT	898.06

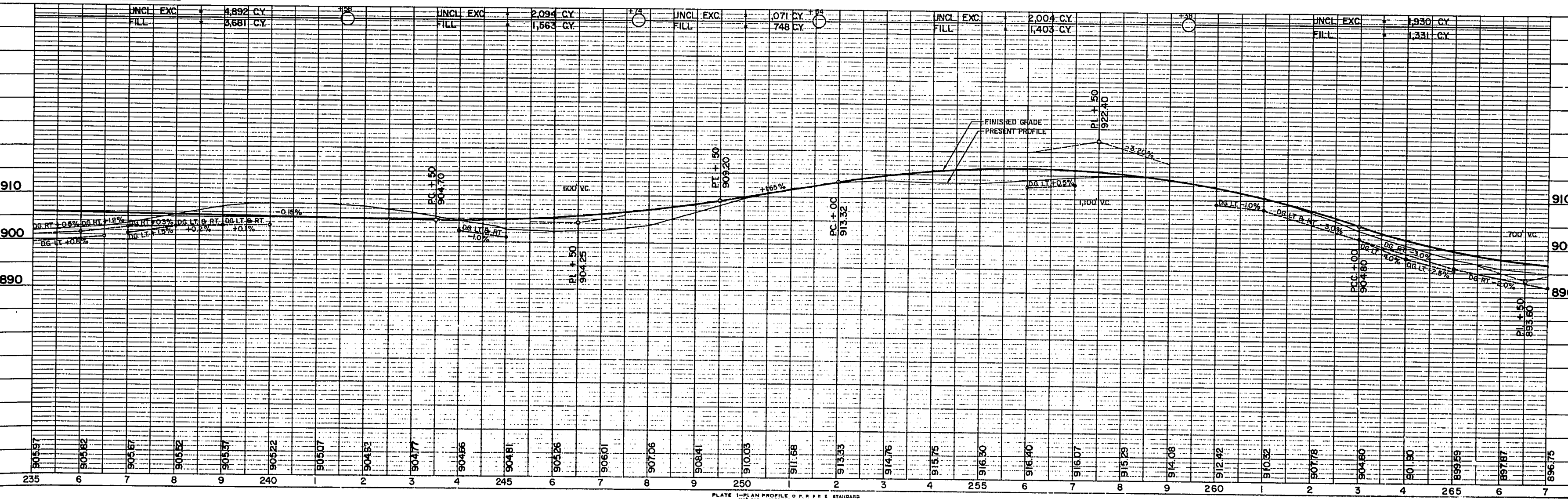
PROJECT ID	9108-1-71	SHEET NUMBER	3	TOTAL SHEETS	46
FEDERAL PROJECT DESIGNATION	S 0186 (I)				

NOTE BOOK CHAINS ORDERED
No. 887

NOTE BOOK CHAINS ORDERED
No. 888



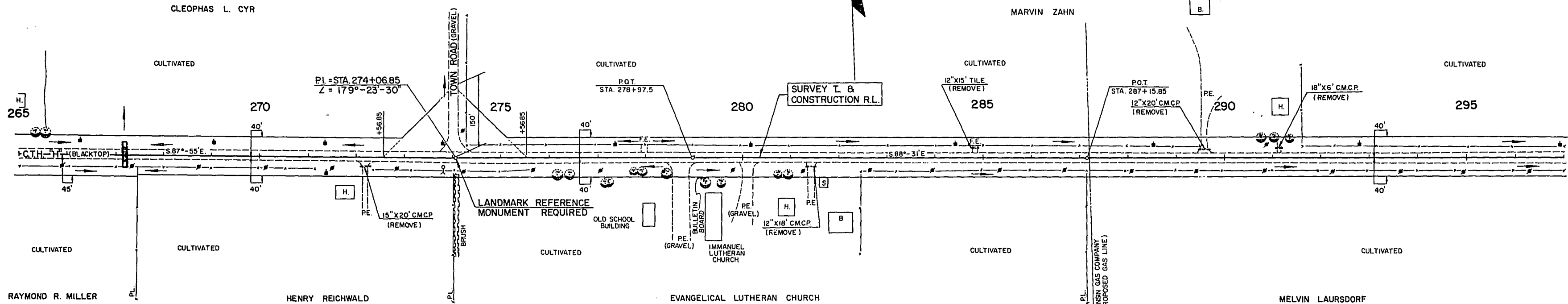
NET LENGTH OF CENTERLINE		
STATION TO STATION		LIN. FT.
235+00	265+00	3,000.00



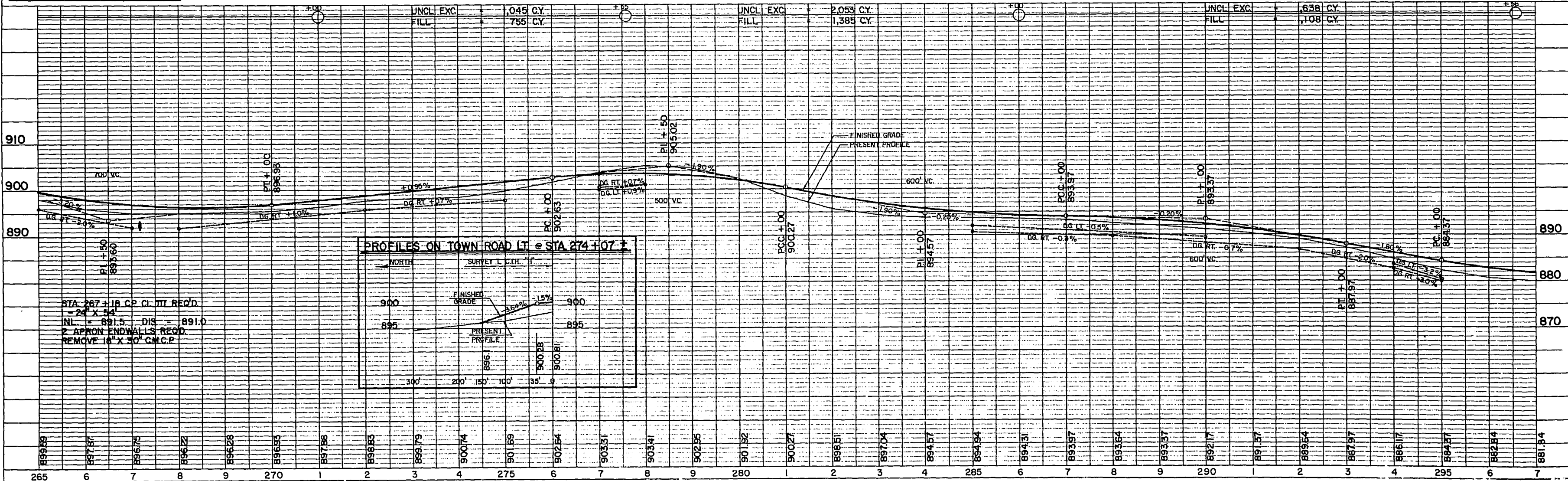
BENCH MARKS				
NO.	STATION	DESCRIPTION		ELEV.
115	277+30	SPIKE IN TWIN 20" ELM	60'RT.	905.06
116	282+50	SPIKE IN 4" B.E.	100'RT.	892.77
117	290+16	SPIKE IN 16" APPLE	108'LT.	893.27

STA. 274 + 06.85 (TOWN RD. LT.)
 DESIGN TYPE "C" INTERSECTION REQ'D.
 (SEE STANDARD DETAIL DRAWING NO. 9-1.1.5)

PROJECT ID	SHEET NUMBER	TOTAL SHEETS
9108-1-71	9	46
FEDERAL PROJECT DESIGNATION S 0186(1)		



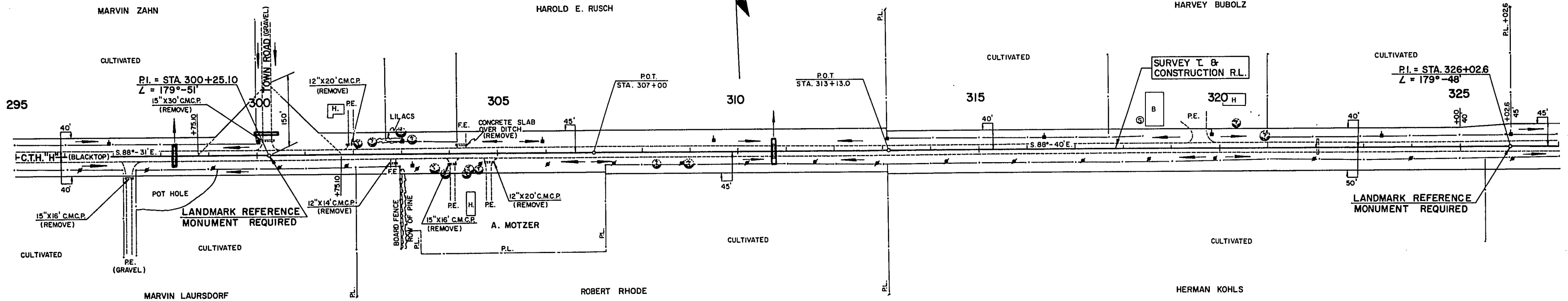
NET LENGTH OF CENTERLINE		
STATION TO STATION	LIN. FT.	
265+00	295+00	3,000.00



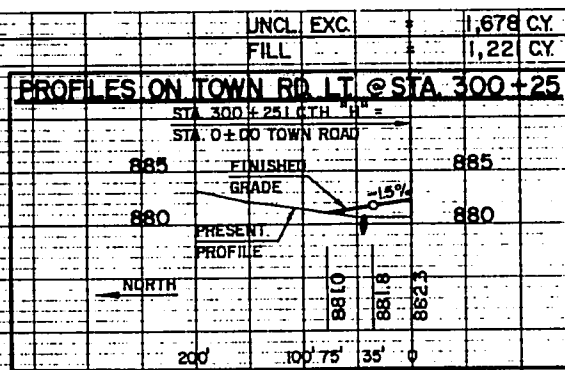
BENCH MARKS				
NO.	STATION	DESCRIPTION		ELEV.
118	297+48	SPIKE IN TELEPHONE POLE	80' RT.	878.73
119	301+45	SPIKE IN 18" B.E.	75' LT.	884.23
120	304+95	SPIKE IN 16" ASH	80' RT.	891.04
121	320+00	SPIKE IN 14" MAPLE	80' LT.	891.42

STA. 300 + 25.10 (TOWN RD. LT.)
 DESIGN TYPE "C" INTERSECTION REQ'D.
 (SEE STANDARD DETAIL DRAWING NO. 9-1.1.5)
 1-18" X 40' CP CL. III REQ'D.
 2 APRON ENDWALLS REQ'D.

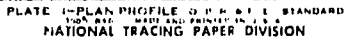
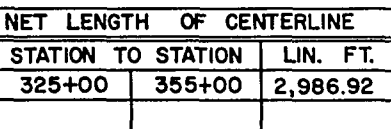
PROJECT NO.	9108-1-71	SHEET NUMBER	10	TOTAL SHEETS	46
FEDERAL PROJECT DESIGNATION	S 0186 (I)				



NET LENGTH OF CENTERLINE		
STATION TO STATION	LIN. FT.	
295+00	325+00	3,000.00

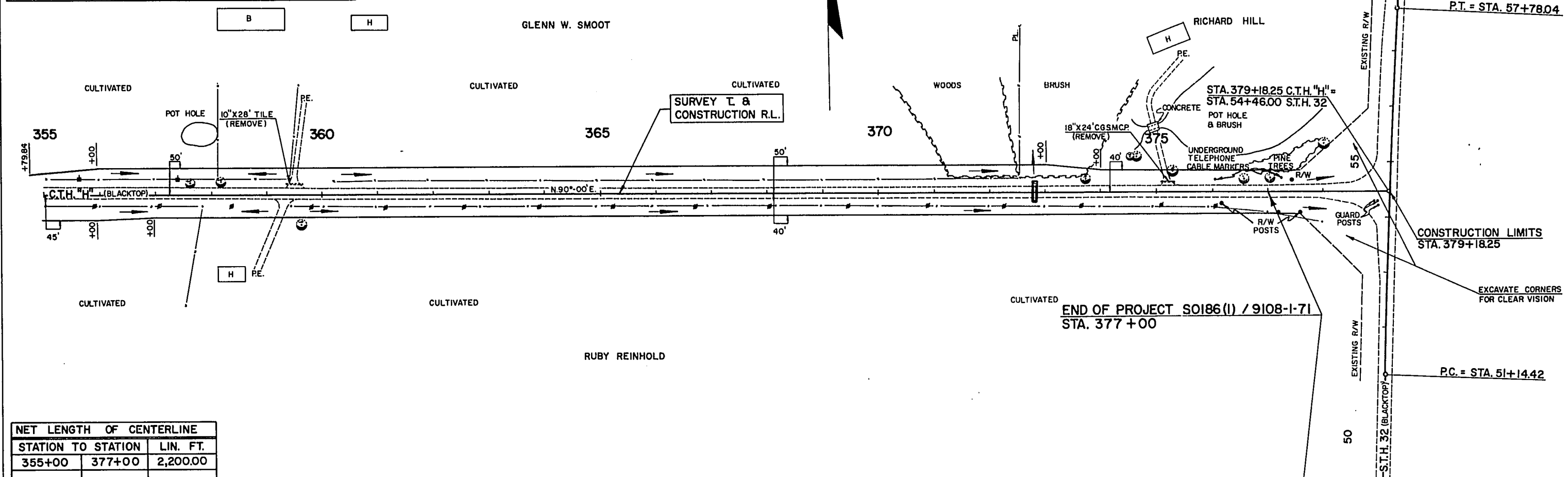


P.I.	=	352+53.2
Z	=	178°-52'
Δ	=	1°-08'
D	=	0°-15'
T	=	226.68'
L	=	453.32'
R	=	22,918.31
S.E.	=	N.C.



BENCH MARKS				
NO.	STATION	DESCRIPTION		ELEV.
126	359+67	SPIKE IN 10" APPLE	50' RT.	889.07
127	370+80	SPIKE IN 10" OAK	100' LT.	875.95
128	374+60	SPIKE IN 20" PINE	70' LT.	871.39
129	377+70	SPIKE IN 13" PINE	70' LT.	871.71

PROJECT NO.	9108-1-71	SHEET NUMBER	12	TOTAL SHEETS	46
FEDERAL PROJECT DESIGNATION	S 0186 (I)				



NET LENGTH OF CENTERLINE		
STATION TO STATION	LIN. FT.	
355+00	377+00	2,200.00

CURVE NOTES	
P.I.	= 54+46.00
L	= 181°-39'-29"
Δ	= 1°-39'-29"
D	= 0°-15'
T	= 331.56'
L	= 663.60'
R	= 22,918.31'

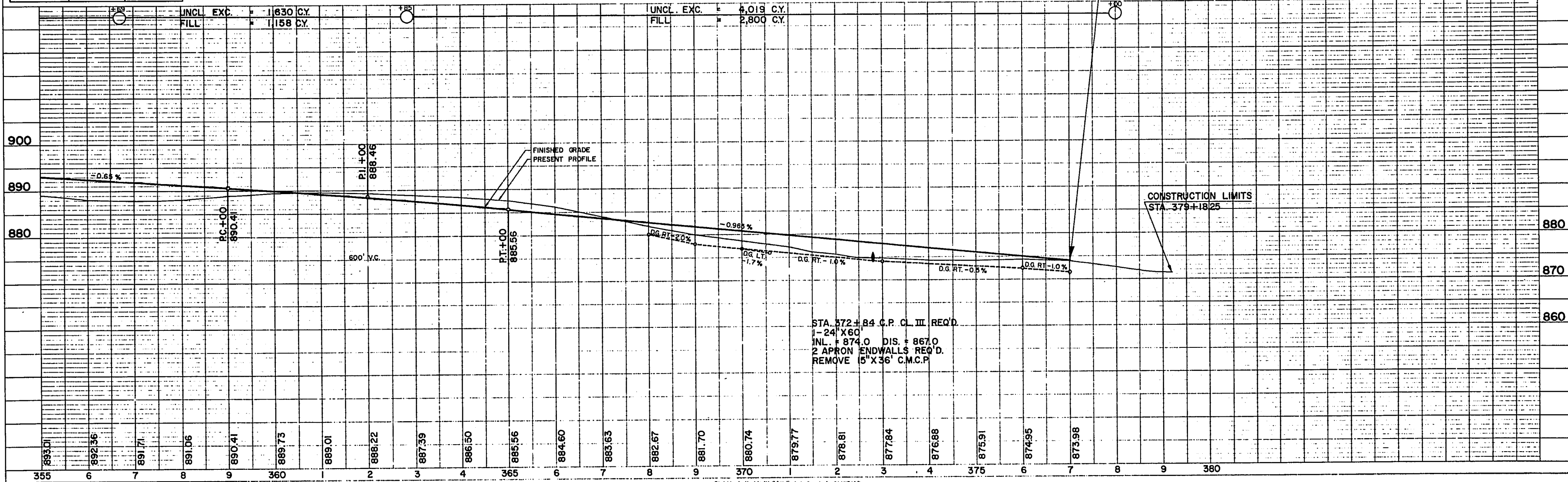
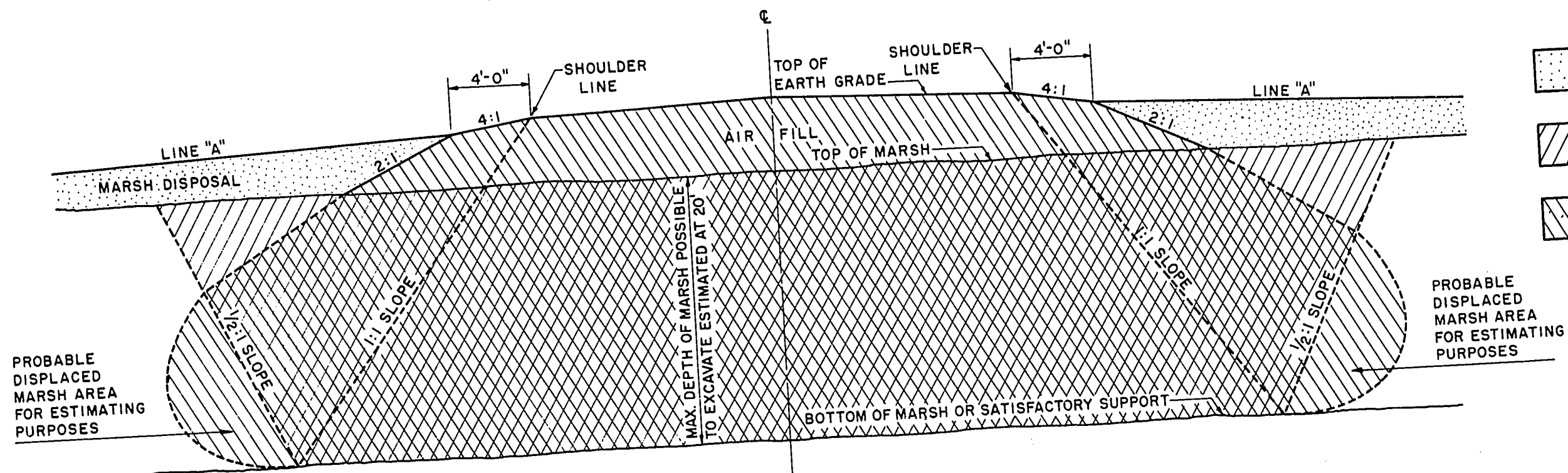


PLATE 1-1 PLAN PROFILE OF ROAD STANDARD
NATIONAL TRACING PAPER DIVISION

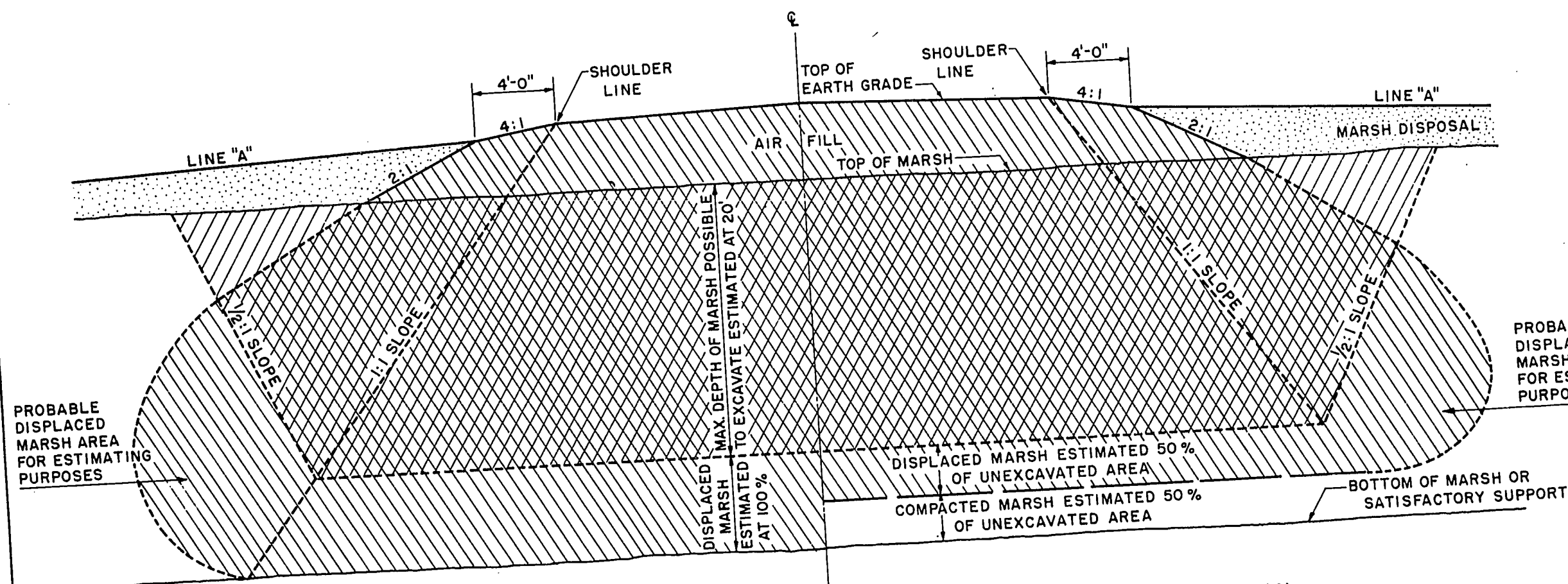


COMPLETE MARSH EXCAVATION

- MARSH DISPOSAL PERMITTED IN THIS AREA UNLESS OTHERWISE PROVIDED IN THE CONTRACT
- EXCAVATION
- BACKFILL

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
 ANY MATERIAL TEMPORARILY PLACED ABOVE THE LINE MARKED "LINE A" IS TO BE REMOVED UPON COMPLETION OF THE AIR FILL.



PARTIAL EXCAVATION PLUS 100% DISPLACEMENT

PARTIAL EXCAVATION PLUS 50% DISPLACEMENT

MARSH EXCAVATION

STATE HIGHWAY COMMISSION OF WISCONSIN

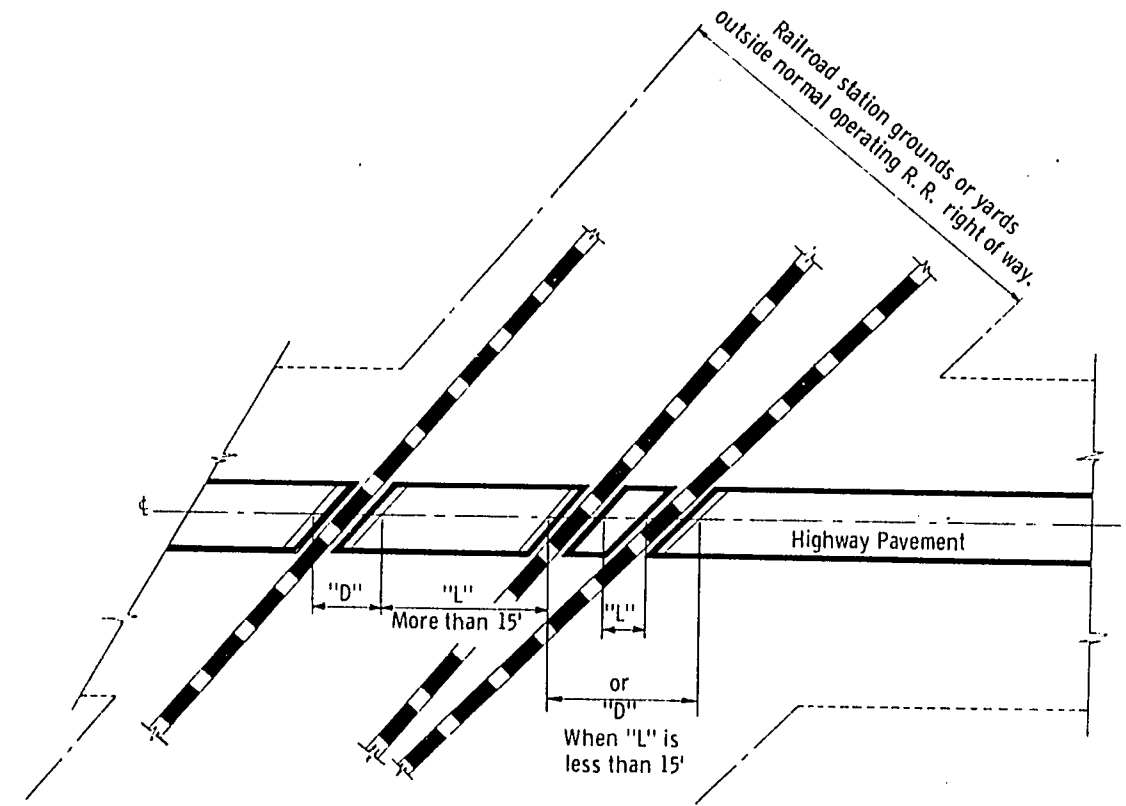
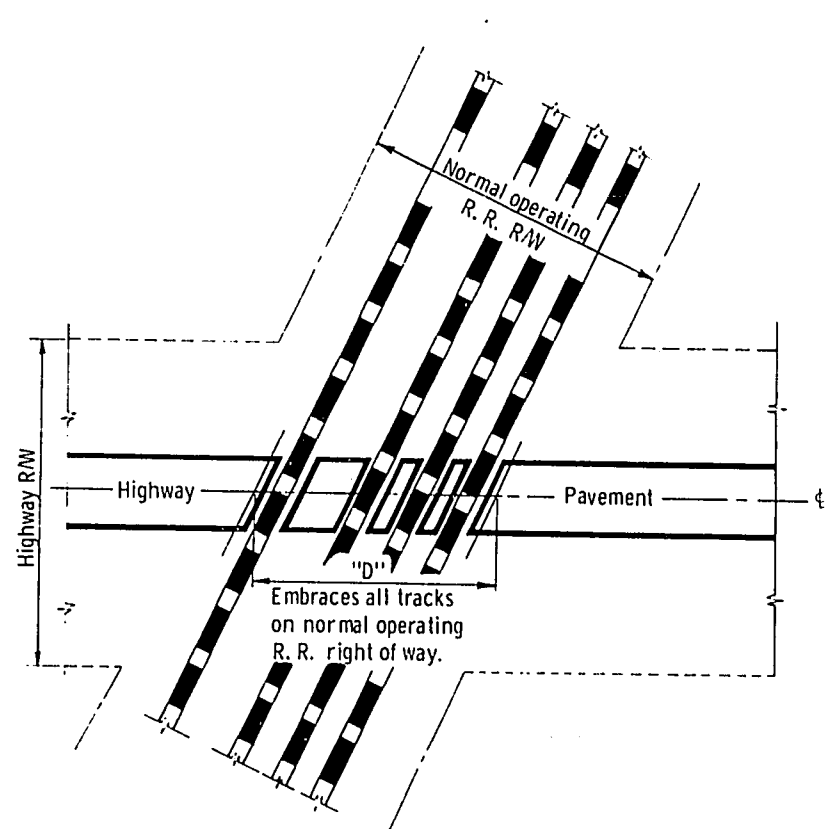
RECOMMENDED FOR APPROVAL:

DATE 2/11/52 CONSTRUCTION ENGINEER

APPROVED:

DATE 2/11/52 STATE HIGHWAY ENGINEER

DRAWN LJD
 CHECKED

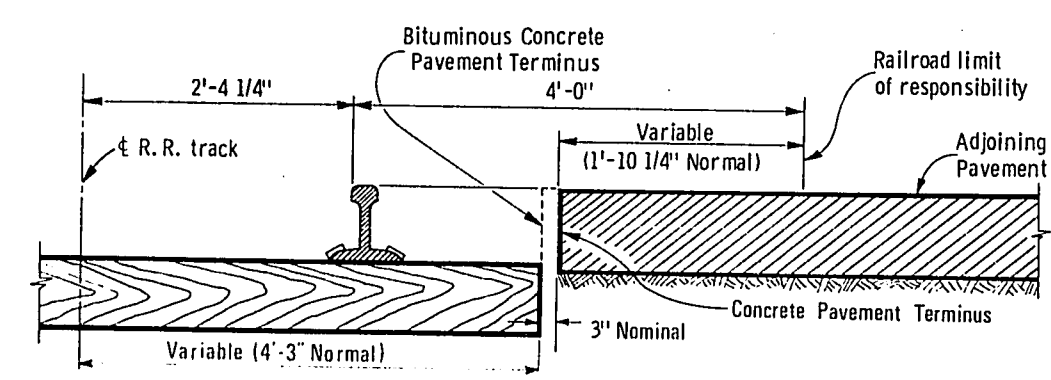
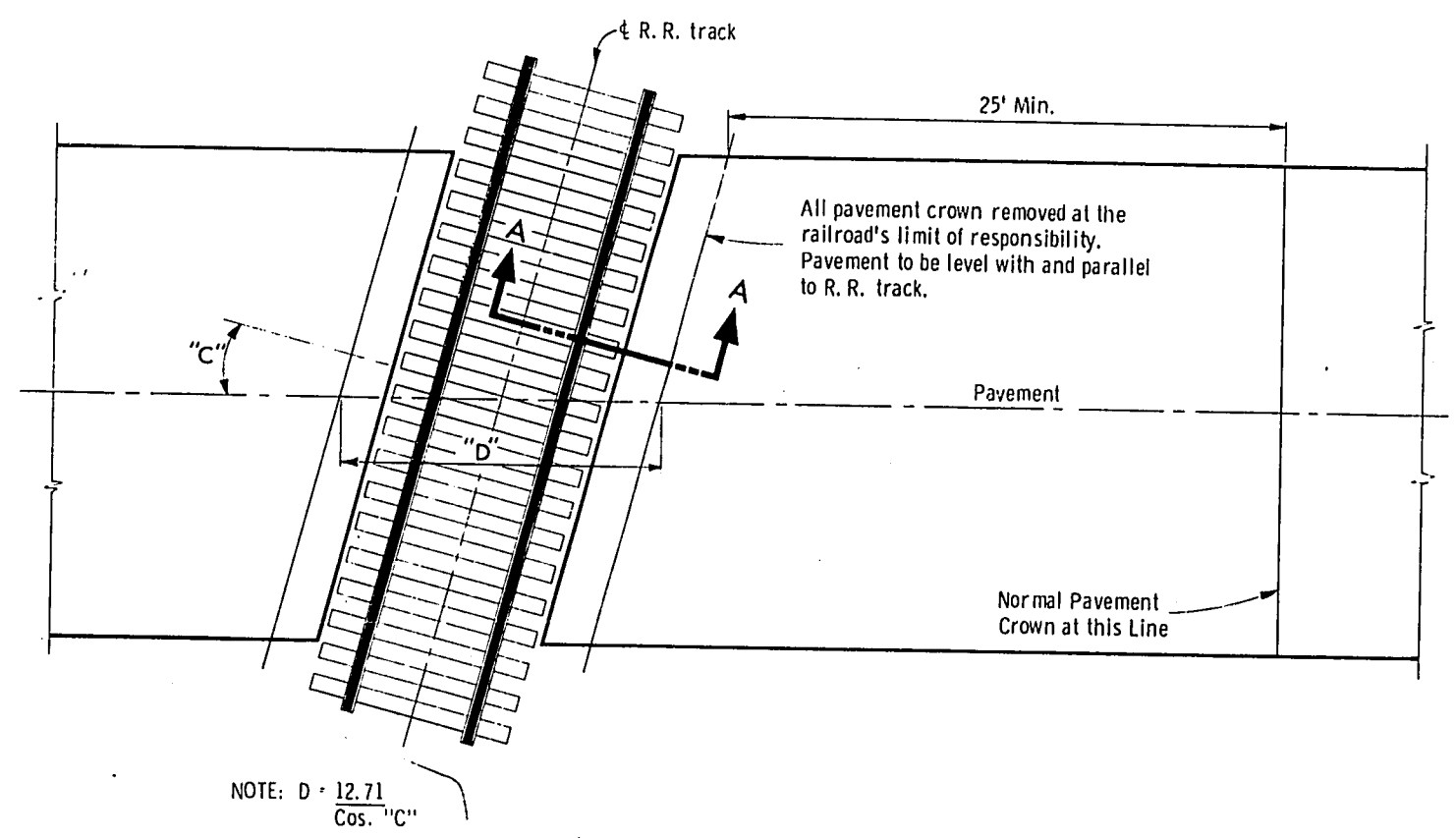


**TYPICAL TYPES OF RAILROAD GRADE CROSSINGS
SHOWING THE RAILROAD'S LIMIT OF RESPONSIBILITY
AND MEASUREMENT DETAILS**

GENERAL NOTES

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

"D" = Exception to net length of ϵ . Paving or surfacing and shoulder material within 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.



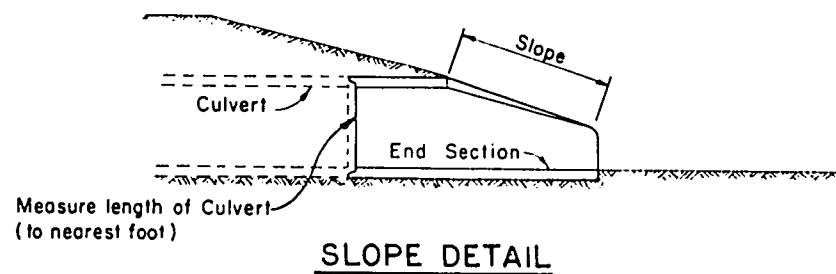
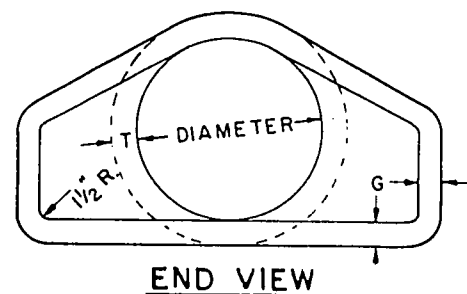
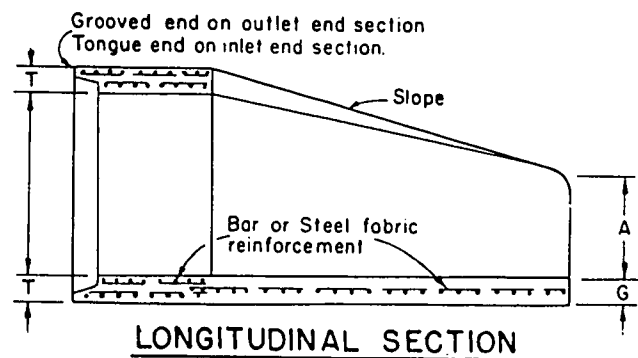
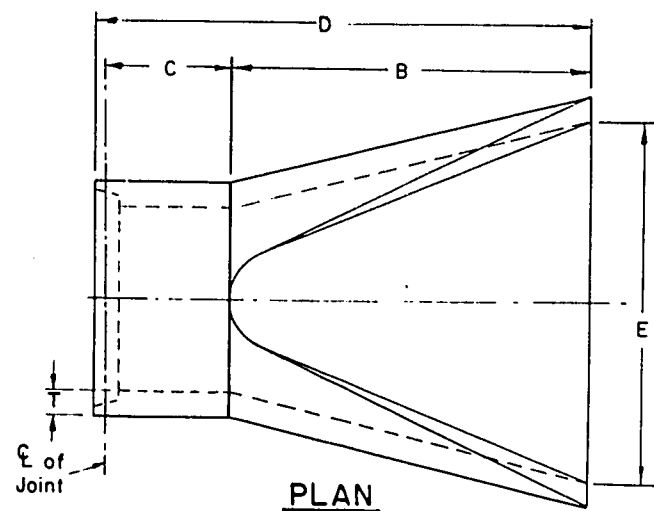
SECTION 'A-A'

**RAILROAD APPROACH
CONSTRUCTION DETAILS**

**PAVEMENT DETAILS
FOR RAILROAD APPROACH**

State of Wisconsin
Department of Transportation
Division of Highways

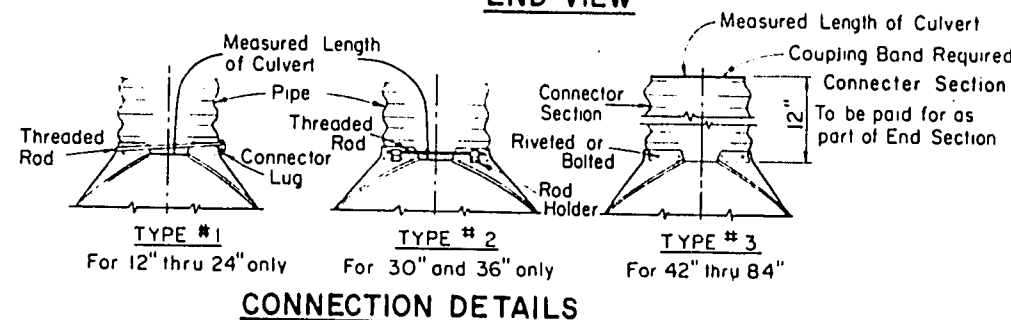
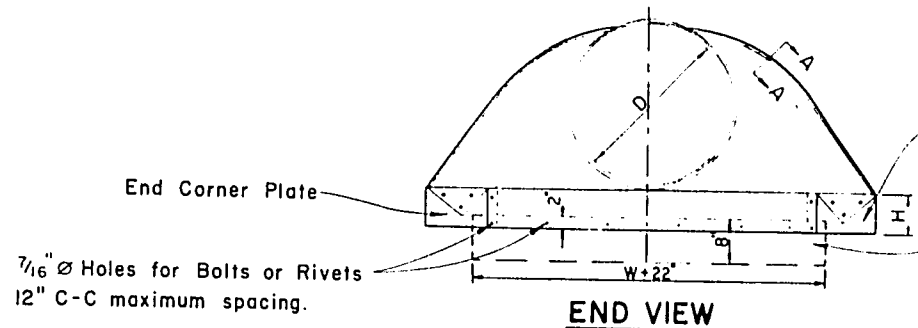
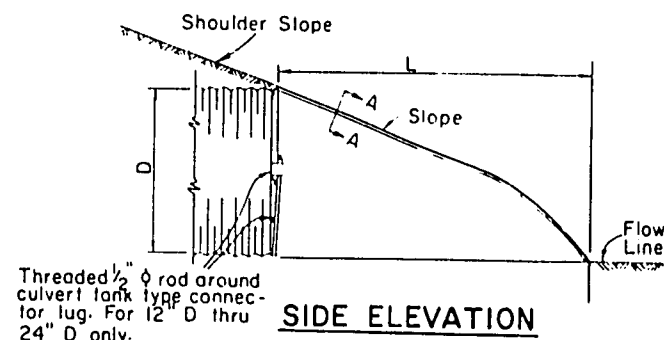
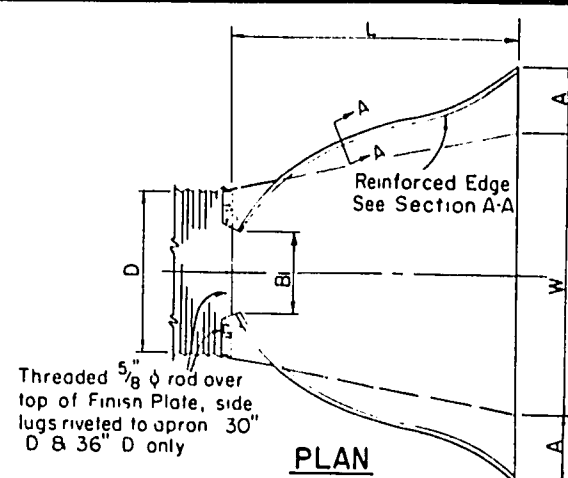
RECOMMENDED FOR APPROVAL:
DATE 3/3/69
APPROVED:
DATE 3/27/69
CHIEF DESIGN ENGINEER
STATE HIGHWAY ENGINEER



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	2 1/4"	6"	27"	46"	73"	30"	2 1/4"
18"	990	3 to 1	2 1/2"	9"	27"	46"	73"	36"	2 1/2"
21"	1280	3 to 1	2 3/4"	9"	36"	37 1/2"	73 1/2"	42"	2 3/4"
24"	1520	3 to 1	3"	9 1/2"	43 1/2"	30"	73 1/2"	48"	3"
27"	1930	3 to 1	3 1/4"	10 1/2"	49 1/2"	24"	73 1/2"	54"	3 1/4"
30"	2190	3 to 1	3 1/2"	12"	54"	19 3/4"	73 3/4"	60"	3 1/2"
36"	4100	3 to 1	4"	15"	63"	34 3/4"	97 3/4"	72"	4"
42"	5380	3 to 1	4 1/2"	21"	63"	35"	98"	78"	4 1/2"
48"	6550	3 to 1	5"	24"	72"	26"	98"	84"	5"
54"	8040	2 1/2 to 1	5 1/2"	27"	65"	33 1/4 min 35 max	98 1/4 min 100 max	90"	5"
60"	8730	2 to 1	6"	30"	60"	39"	99"	96"	5"
66"	10,630	2 to 1	6 1/2"	34"	72 min 78 max	21 min 27 max	99"	102"	5 1/2"
72"	12,520	2 to 1	7"	36"	78"	21"	99"	108"	6"
78"	14,430	2 to 1	7 1/2"	38"	84"	21"	99"	114"	6 1/2"
84"	18,160	1 1/2 to 1	8"	36"	90 1/2"	21"	111 1/2"	120"	6 1/2"

REINFORCED CONCRETE APRON ENDWALLS

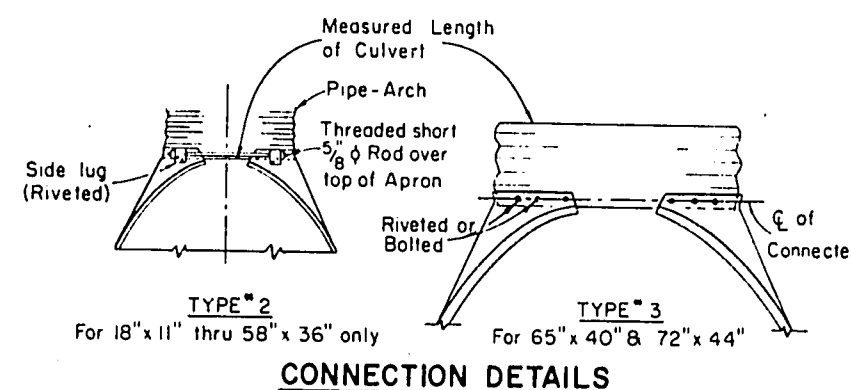
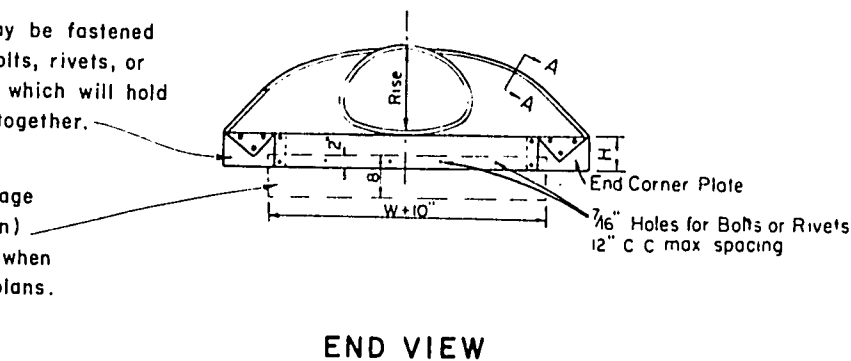
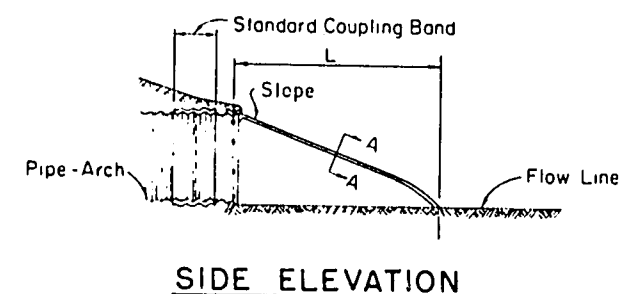
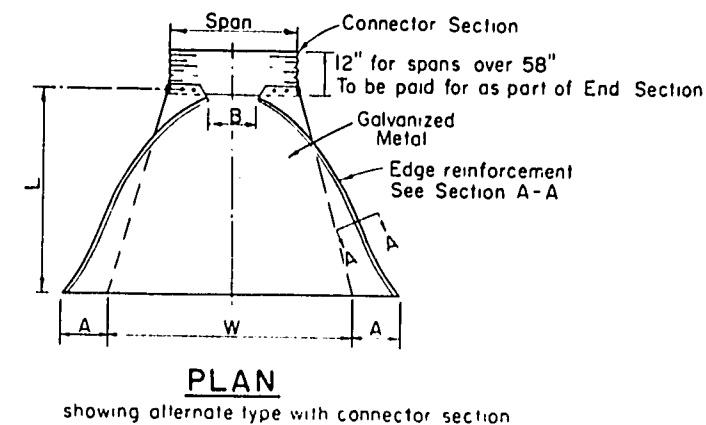
APRON ENDWALLS FOR CULVERT PIPE



D Pipe Digm	Gage Min	Dimensions					Approx Slope
		A ± 1"	B Max	H ± 1"	L ± 1/2"	W ± 2"	
12"	16	6"	6"	6"	21"	24"	2 1/2 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"	2 1/4 to 1
54"	12	18"	30"	12"	84"	102"	2 to 1
60"	12	18"	33"	12"	87"	114"	1 3/4 to 1
66"	12	18"	36"	12"	87"	120"	1 1/2 to 1
72"	12	18"	39"	12"	87"	126"	1 1/3 to 1
78"	12	18"	42"	12"	87"	132"	1 1/4 to 1
84"	12	18"	45"	12"	87"	138"	1 1/6 to 1

Note: All splices to be lap riveted or bolted.

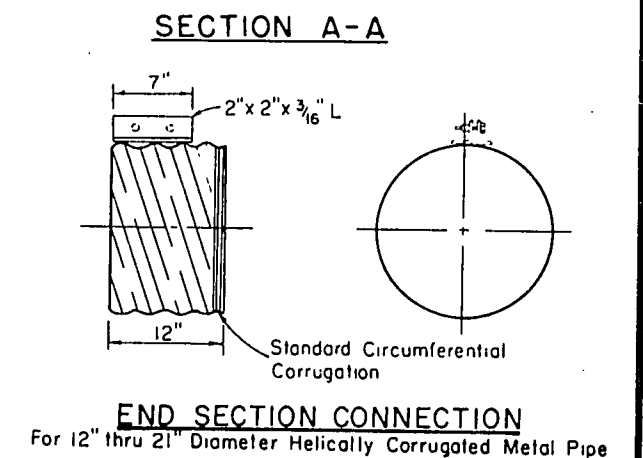
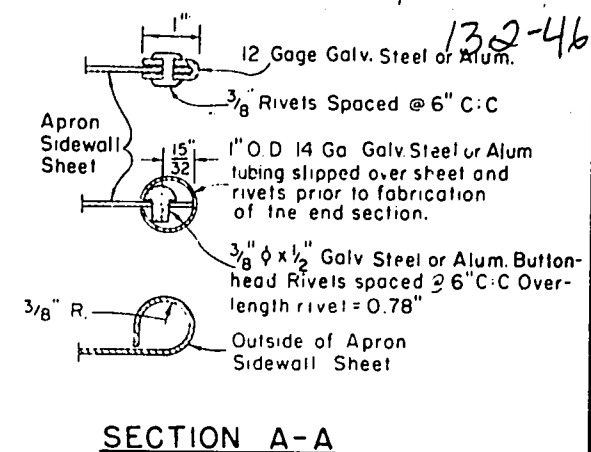
METAL APRON ENDWALLS



Pipe – Arch Dimensions		Gage Min.	Dimensions					Approx. Slope
Span	Rise		A ± 1"	B Max.	H ± 1"	L ± 1/2"	W ± 2"	
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

APRON ENDWALLS FOR PIPE ARCH



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-metallic insulation material is placed between the steel and aluminum. The non-metallic 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:

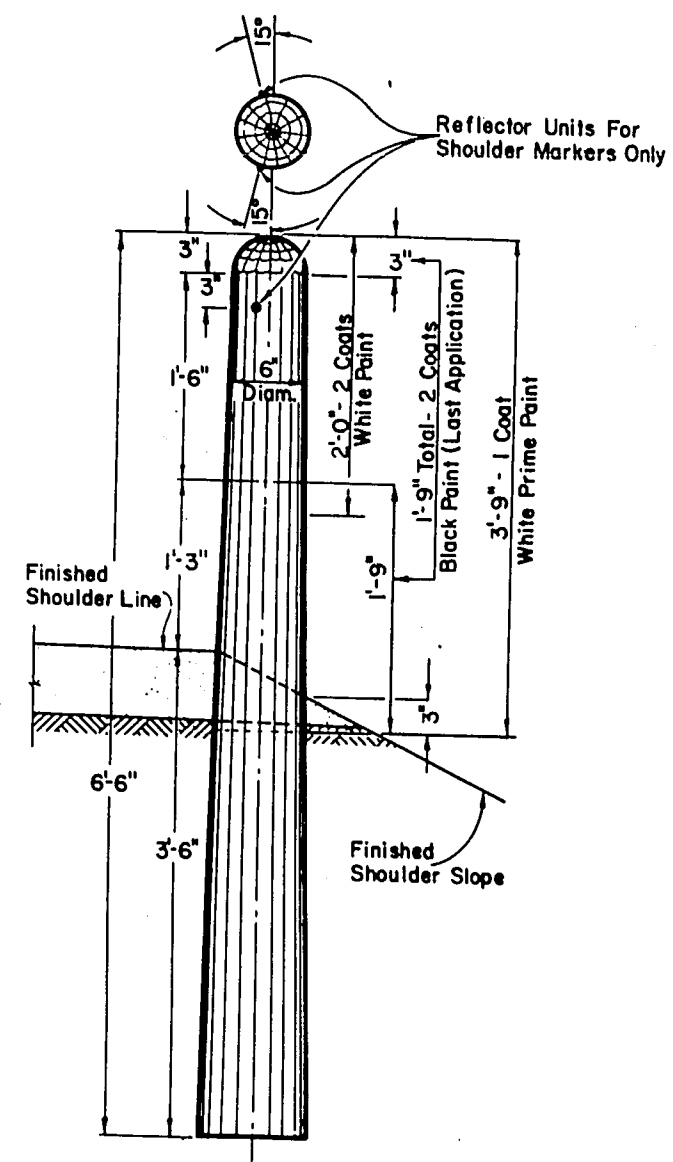
12/9/69
DATE

APPROVED:

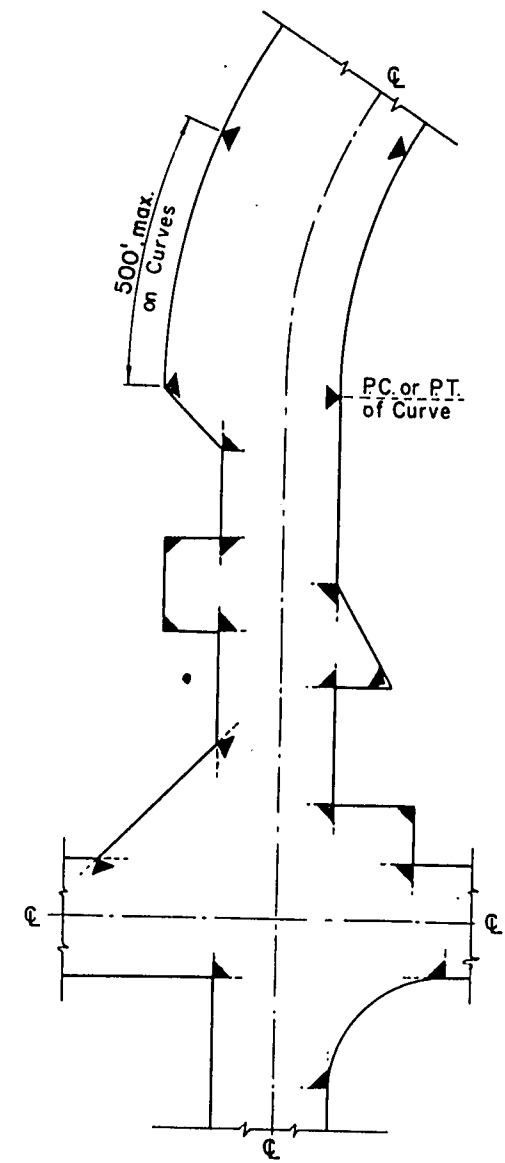
12/30/69
DATE

E. J. Byrkit
CHIEF DESIGN ENGINEER

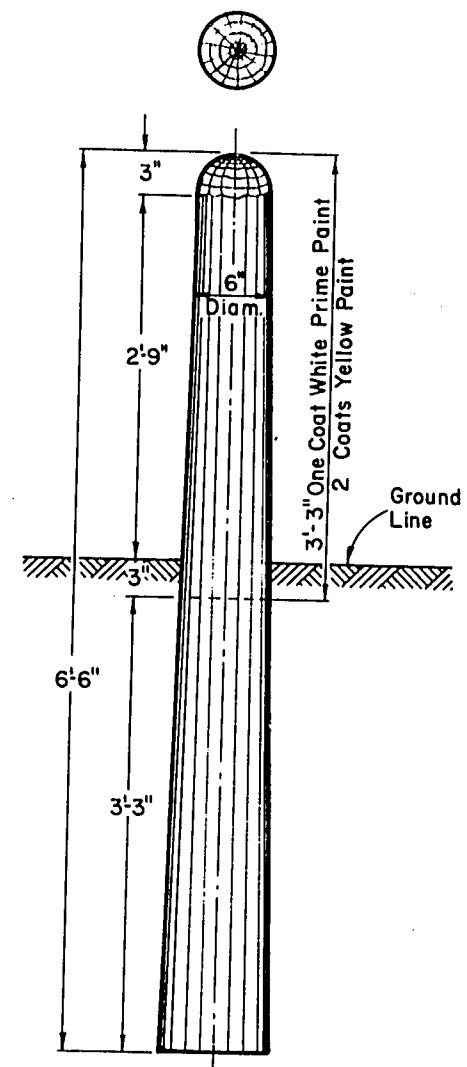
H. J. Hammeiter
STATE HIGHWAY ENGINEER



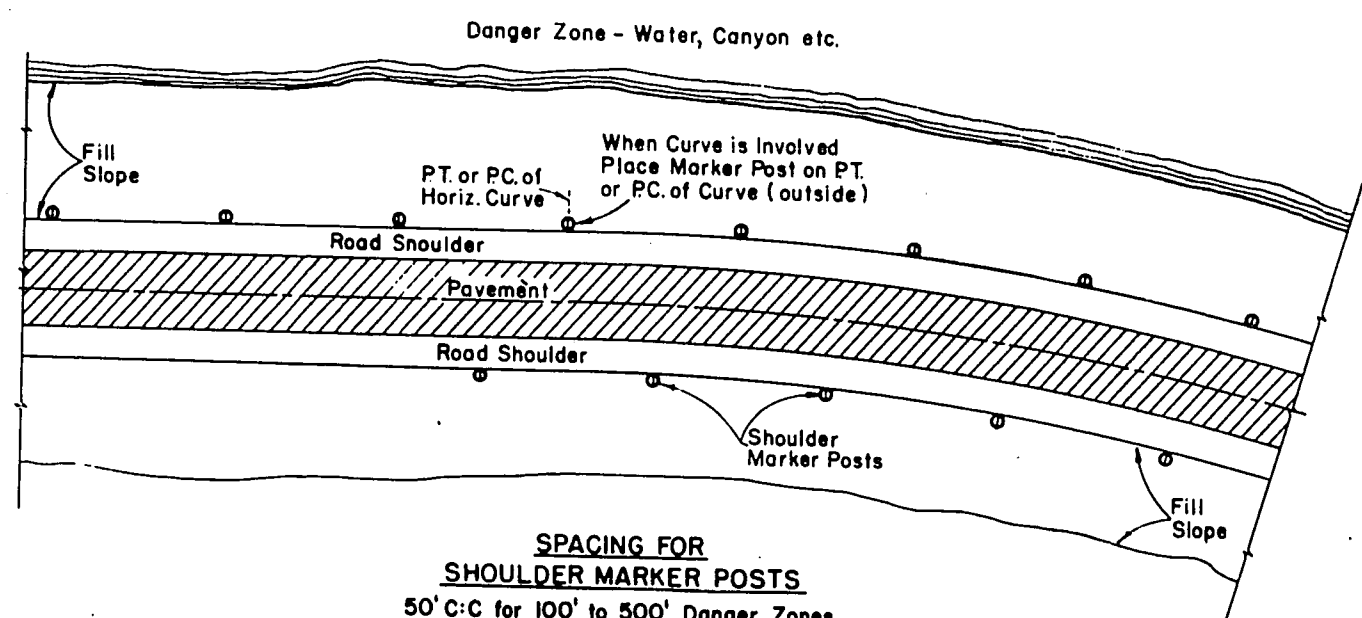
MARKER POST FOR
ROAD SHOULDERS



LOCATION DIAGRAM
SHOWING TYPICAL LOCATIONS OF
MARKER POSTS FOR RIGHT OF WAY



MARKER
POST
FOR
RIGHT OF WAY



SPACING FOR
SHOULDER MARKER POSTS
50' C:C for 100' to 500' Danger Zones
100' C:C for Over 500' Danger Zones

LOCATION DIAGRAM
SHOWING RELATIVE LOCATIONS OF SHOULDER MARKER POSTS

MARKER POSTS FOR ROAD SHOULDERS

MARKER POST FOR RIGHT OF WAY

GENERAL NOTES

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

MARKER POSTS FOR RIGHT OF WAY

Right of Way Marker Posts shall be erected in advance of grading operations. Posts shall be placed at the outer limits of the highway Right of Way, but entirely within the Right of Way, and shall be so placed that the outer edge of the posts shall be tangent to the Right of Way line or lines extended. The exact location of all Right of Way posts will be staked in the field by the Engineer.

REFLECTOR UNITS

Reflector Units shall be installed in road shoulder marker posts only. Reflector Units shall have plastic crystal lens 7/8" in diameter. Unit assembly shall be a minimum of 7/8" in length. Reflector Units shall be furnished with flared expanding metal clips for wood mounting. Units shall be mounted in tightest fit possible and securely stayed in posts.

MARKER POSTS & MARKER POSTS FOR RIGHT OF WAY

State Highway Commission of Wisconsin

RECOMMENDED FOR APPROVAL:

DATE 7/6/66

DATE _____
APPROVED.
26/1

75/66
DATE

BY: E. J. Byrkit
CHIEF DESIGN ENGINEER

H. K. Linn
STATE HIGHWAY ENGINEER

STATE HIGHWAY ENGINEER
Plate No. 7-1.3.5

GENERAL NOTES

13.4-46

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.

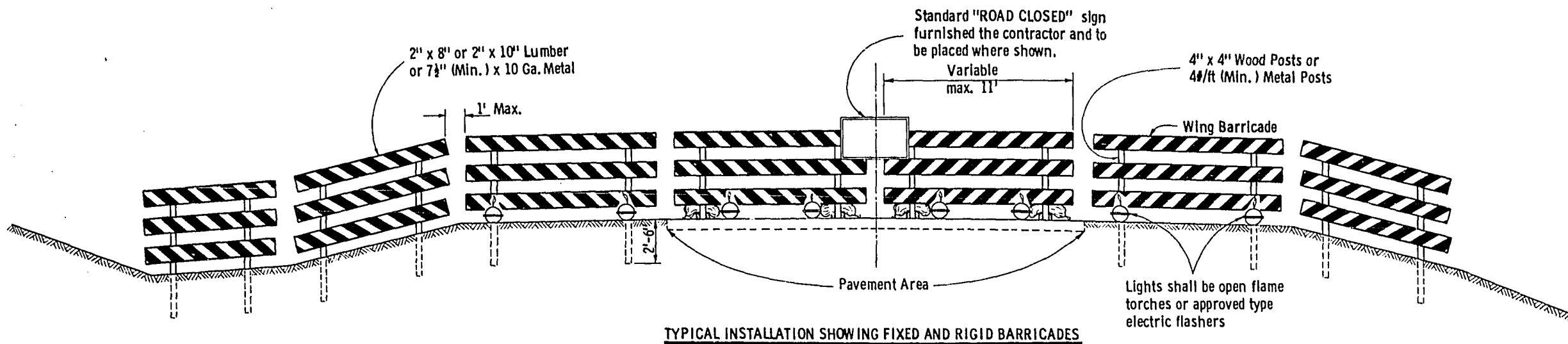
The stripes on wing barricades shall point downward toward the roadway.

LIGHTING:

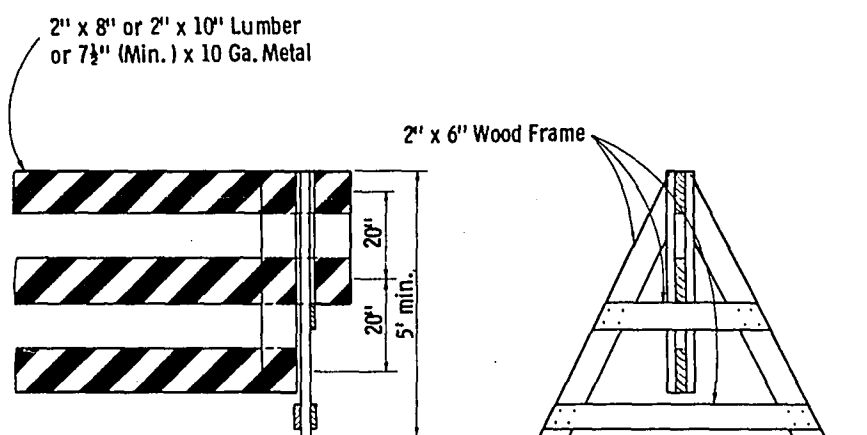
Lighting devices for barricades shall conform to the requirements of the Standard Specifications.

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.

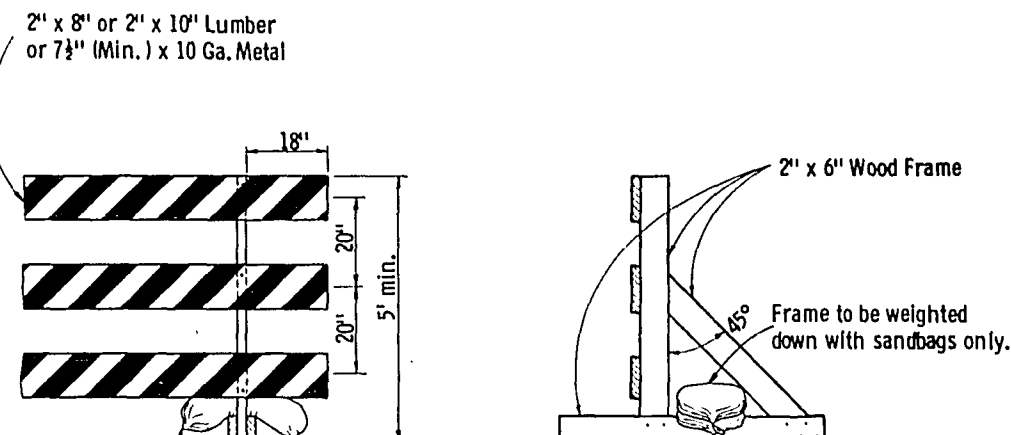


TYPICAL INSTALLATION SHOWING FIXED AND RIGID BARRICADES

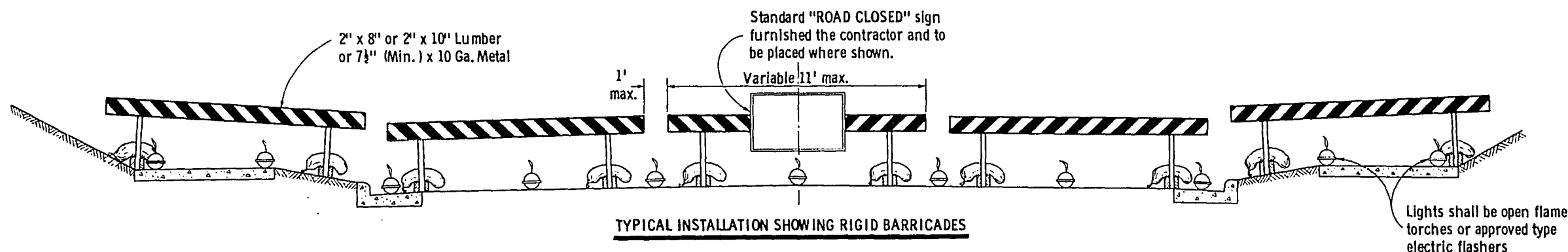


ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

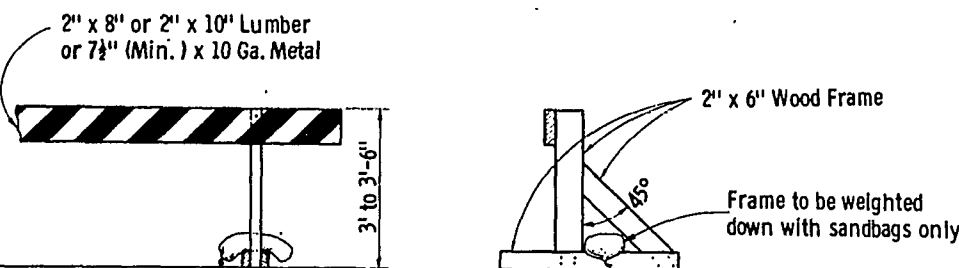
CLASS I BARRICADES



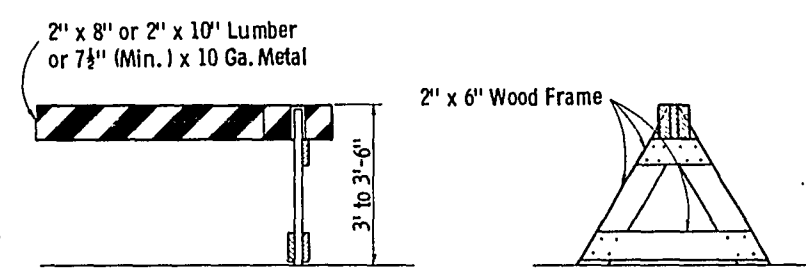
ALTERNATE TYPE INSTALLATION (RIGID)



TYPICAL INSTALLATION SHOWING RIGID BARRICADES

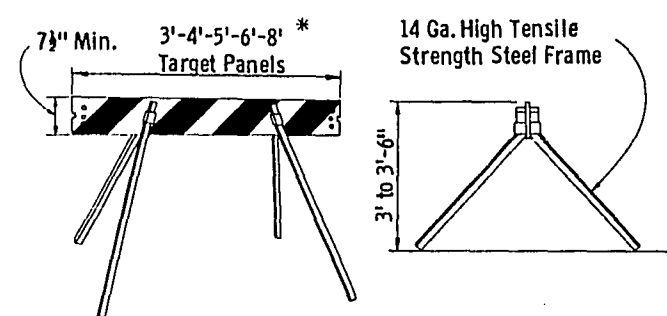


ALTERNATE TYPE INSTALLATION (RIGID)



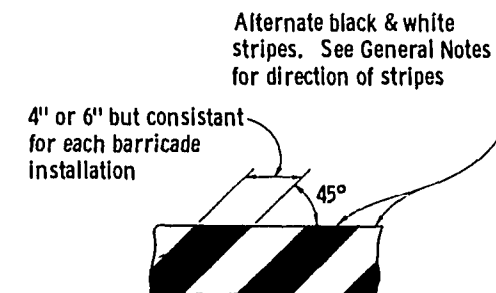
ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

CLASS II BARRICADES



* Maximum length of combination panels 16'

ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)



TYPICAL DIAGONAL STRIPES
Applies to all Classes & Types of Barricades

CONSTRUCTION BARRICADE

State Highway Commission of Wisconsin

RECOMMENDED FOR APPROVAL:

1/11/67

DATE

APPROVED:

1/13/67

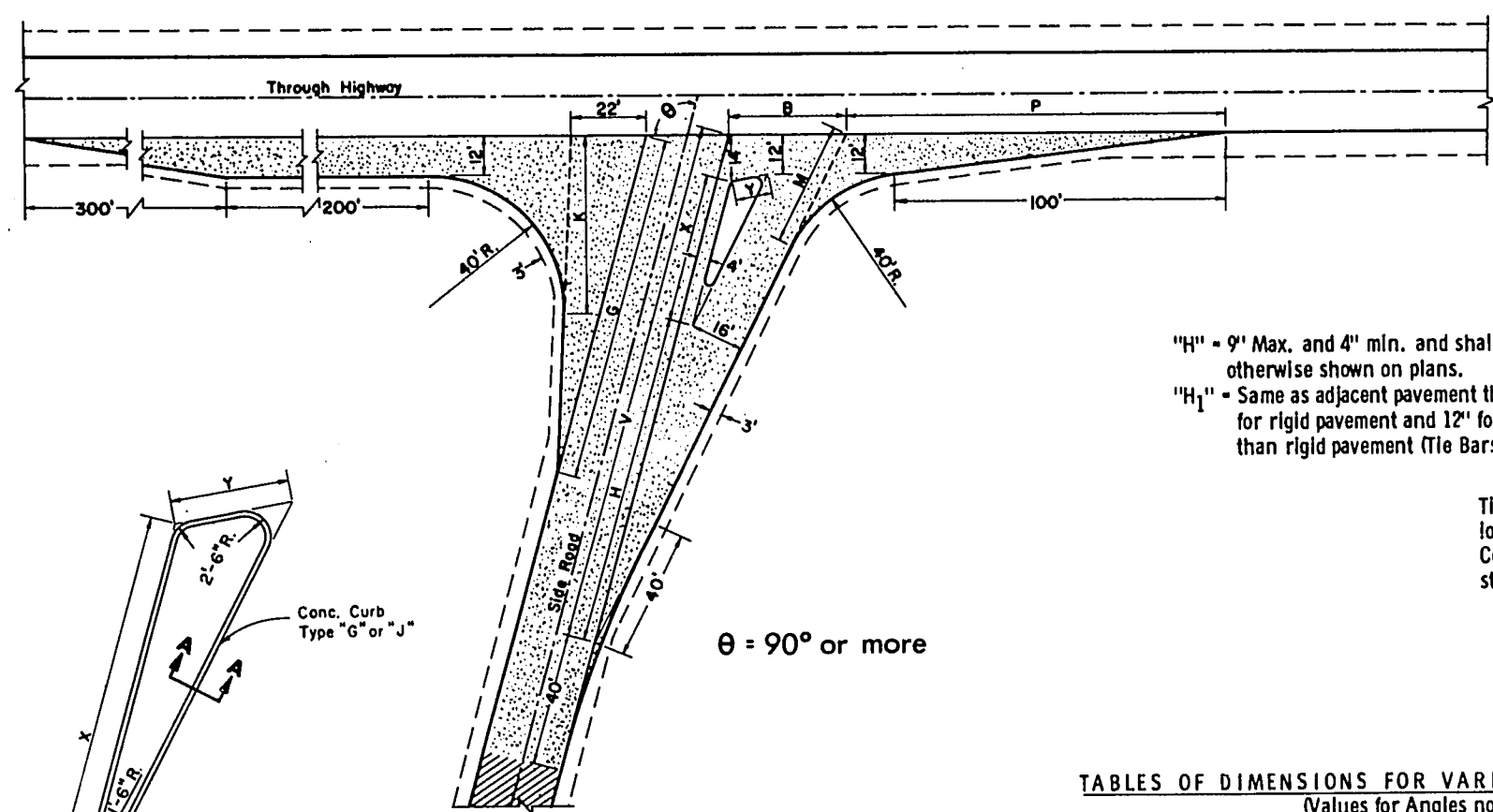
DATE

E. J. B. B. B.

CHIEF DESIGN ENGINEER

J. J. L. L. L.

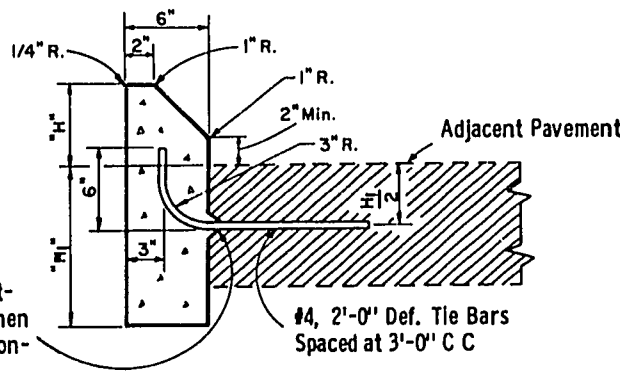
STATE HIGHWAY ENGINEER



$\theta = 90^\circ$ or more

"H" = 9" Max. and 4" min. and shall be 6" unless otherwise shown on plans.
"H₁" = Same as adjacent pavement thickness for rigid pavement and 12" for other than rigid pavement (Tie Bars Omitted).

Tie Bar recess positioned in reverse when Concrete Curb is constructed first



SECTION A-A

Note: To be measured and paid for as Type "G" (Including Tie Bars) or Type "J" (Excluding Tie Bars) Concrete Curbs.

TABLES OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES
(Values for Angles not shown shall be Interpolated)

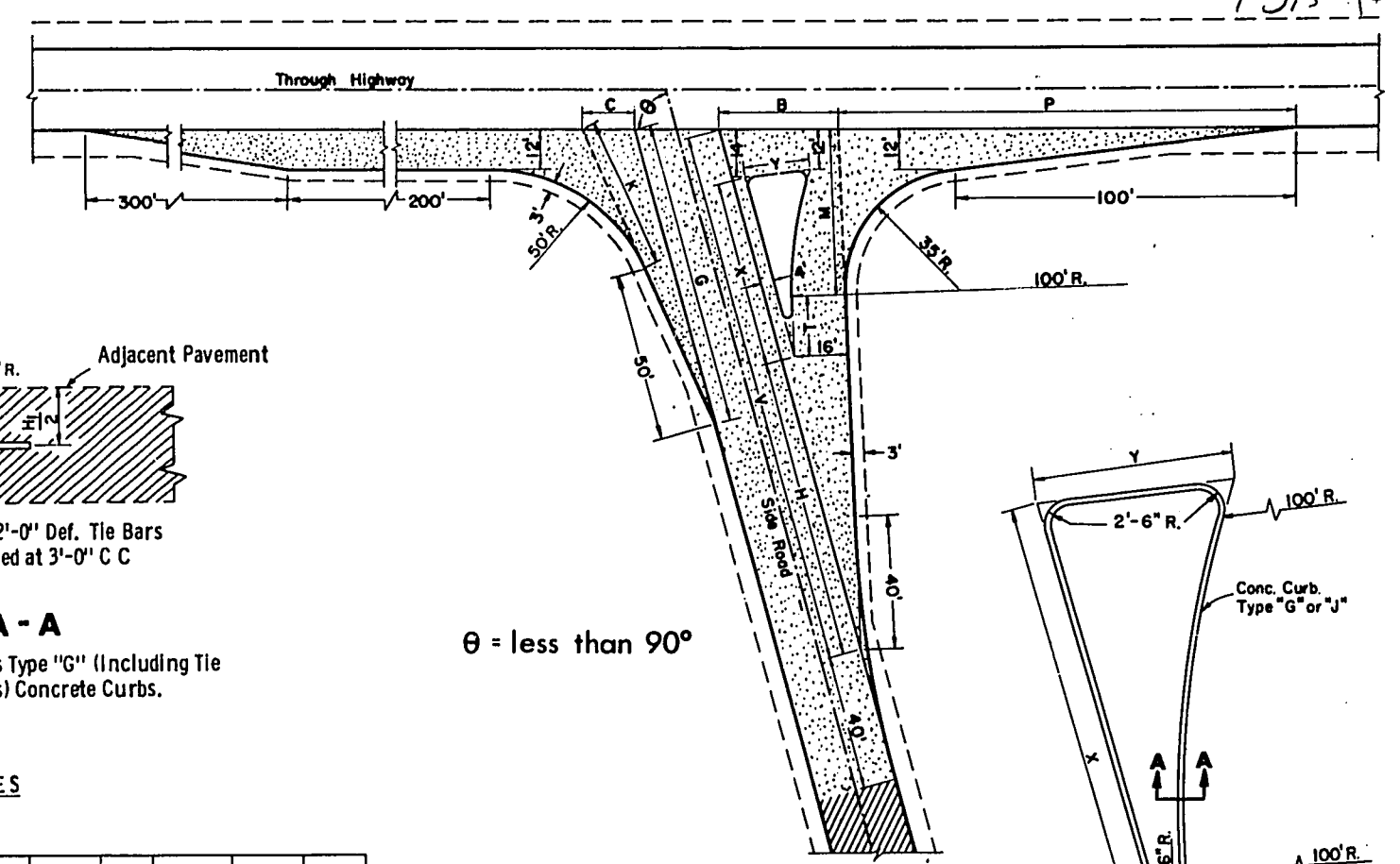
θ	G	K	B	V	H	X	Y	P	M
90	90	43.8	33.9	156.0	94	48.0	11.0	125.0	44.2
95	94	46.7	34.0	156.7	96	47.0	11.0	121.3	41.9
100	98	50.0	34.4	157.4	98	45.9	11.0	117.7	39.7
105	102	53.8	35.2	158.3	100	44.9	11.2	114.2	37.8
110	106	58.2	36.4	159.2	102	43.7	11.4	110.6	36.2
115	110	63.4	38.4	161.8	104	42.6	11.7	107.1	34.8
*120	114	69.4	40.1	161.2	106	41.4	12.2	103.4	33.7

*Maximum angle of intersection

θ	C	G	K	B	V	X	Y	H	P	M	T
*60	19.7	76.3	38.6	41.5	169.9	67.4	29.3	84	144.5	58.8	21.6
65	17.8	82.6	40.6	39.4	166.9	63.6	25.0	86	141.2	54.9	20.7
70	15.8	87.2	43.1	37.4	164.1	59.7	21.9	88	136.8	51.4	19.2
75	15.7	90.9	45.6	35.7	161.4	55.9	19.3	90	132.7	48.2	17.4
80	15.9	94.9	48.3	34.4	158.9	51.9	17.0	92	128.8	45.3	14.9
85	16.2	99.3	51.4	33.4	156.4	48.0	15.0	94	125.2	42.7	10.4

*Desirable Minimum angle of intersection

TYPE "A" SIDE ROAD INTERSECTION DETAILS



$\theta = \text{less than } 90^\circ$

GENERAL NOTES

Designs may be used interchangeably in combination or separately for any one complete intersection depending upon intersection angle and surfacing of each approach roadway.

Details on this drawing are for minimum design only, and not applicable to special conditions, as shown elsewhere on the plans.

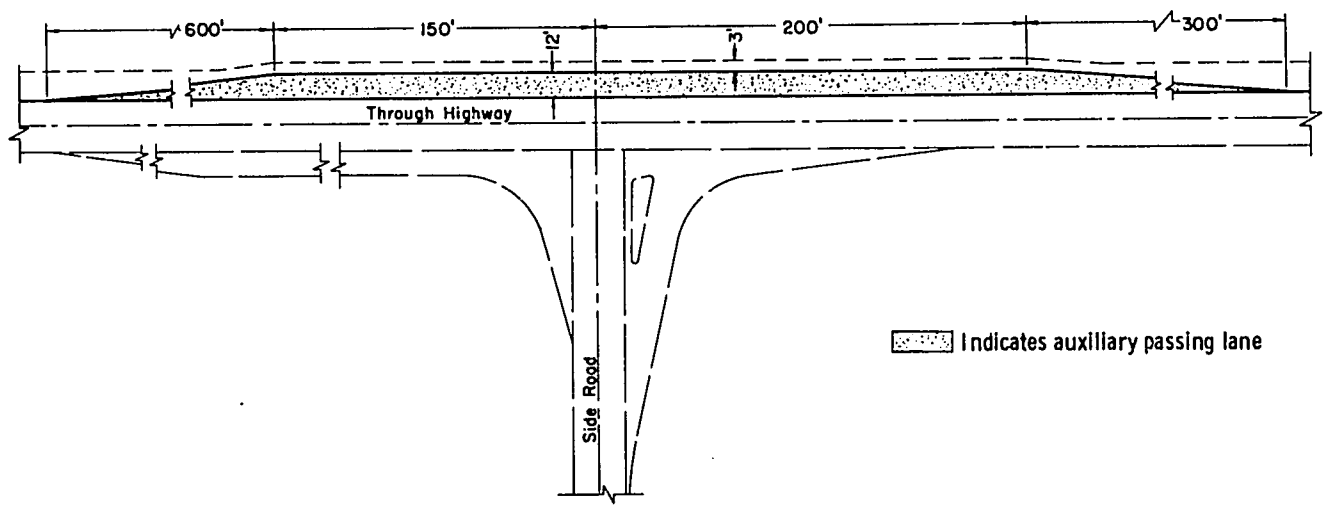
SIDE ROAD SURFACING NOTE

If the side road is not presently paved, pavement shall be placed to the limits shown. In the case where the construction limits are beyond the paving limits, gravel or crushed stone surfacing shall be placed between the paving limits and construction limits.

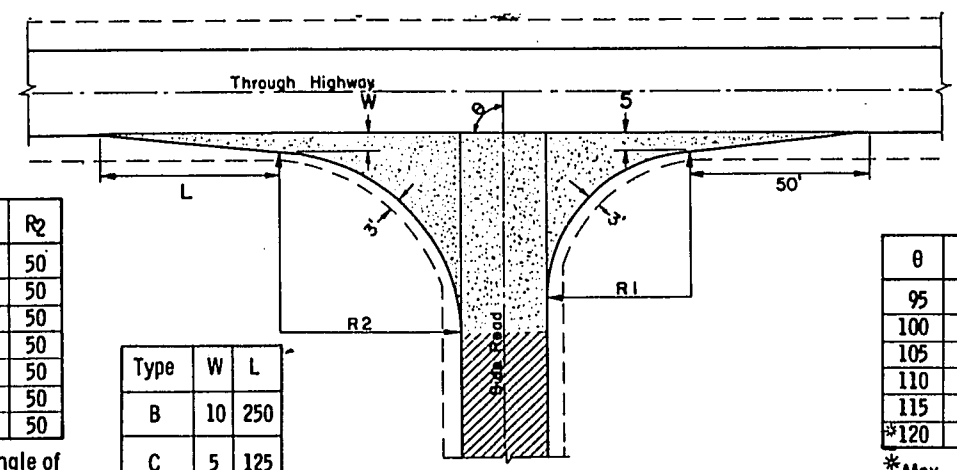
If the side road is presently paved, new pavement shall be placed to the limits of design as shown and beyond, if necessary, to meet existing pavement.

If side road is the construction project, the intersection surfacing shall be the same as for the project.

- New Pavement
- Existing Surface



PASSING LANE DETAIL



θ	R ₁	R ₂
*60	40	50
65	40	50
70	40	50
75	40	50
80	40	50
85	40	50
90	40	50

*Min. Angle of Intersection

Type	W	L
B	10	250
C	5	125

TYPE "B" & "C" SIDE ROAD INTERSECTION DETAILS

θ	R ₁	R ₂
95	45	49
100	50	48
105	55	47
110	60	46
115	65	45
*120	70	44

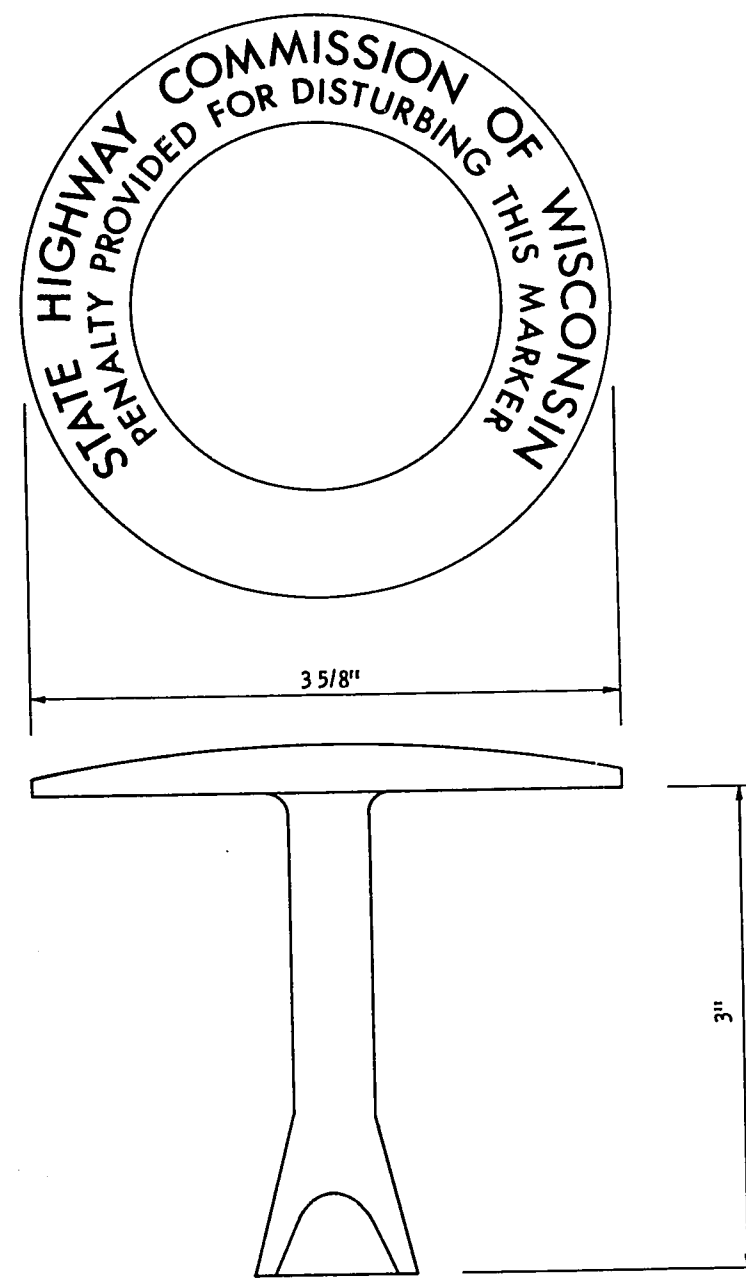
*Max. Angle of Intersection

LAYOUT DETAILS FOR AT-GRADE SIDE ROAD INTERSECTIONS

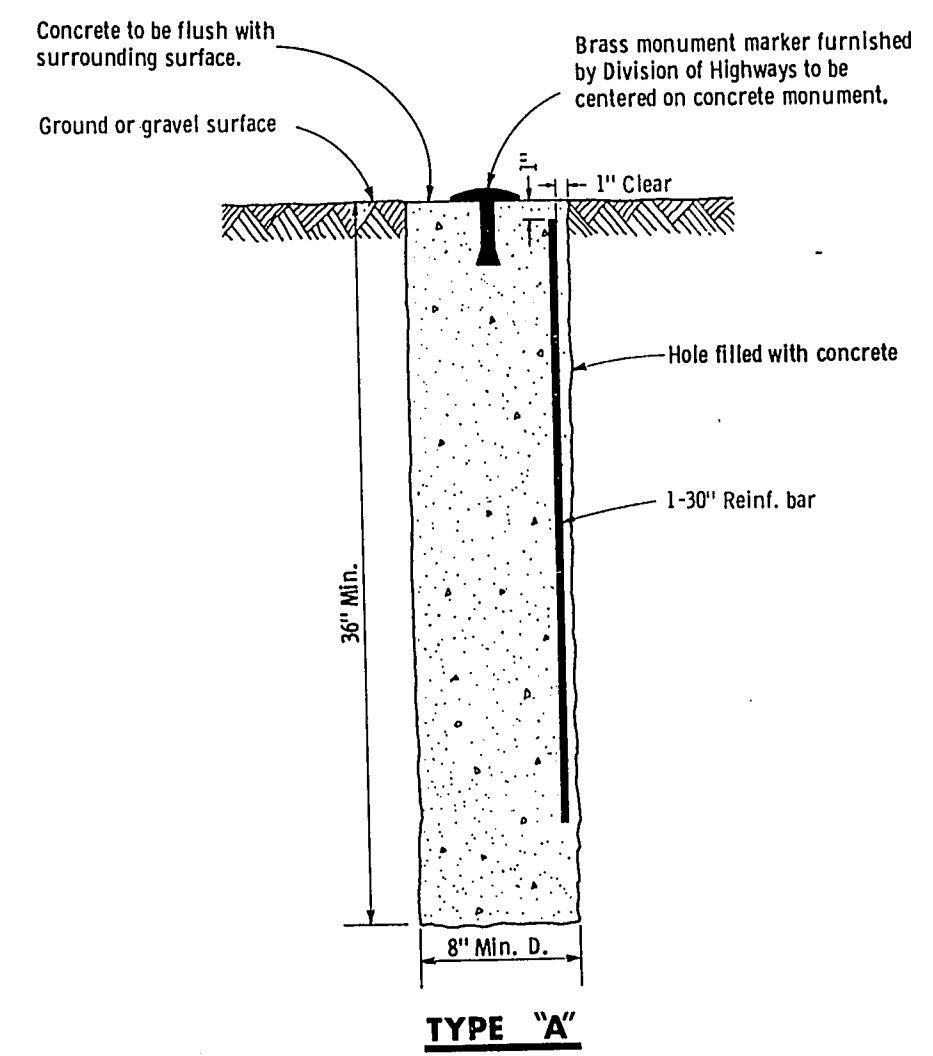
State Highway Commission of Wisconsin

RECOMMENDED FOR APPROVAL: *E.J. Babel*
DATE: 8/9/67
DESIGN ENGINEER

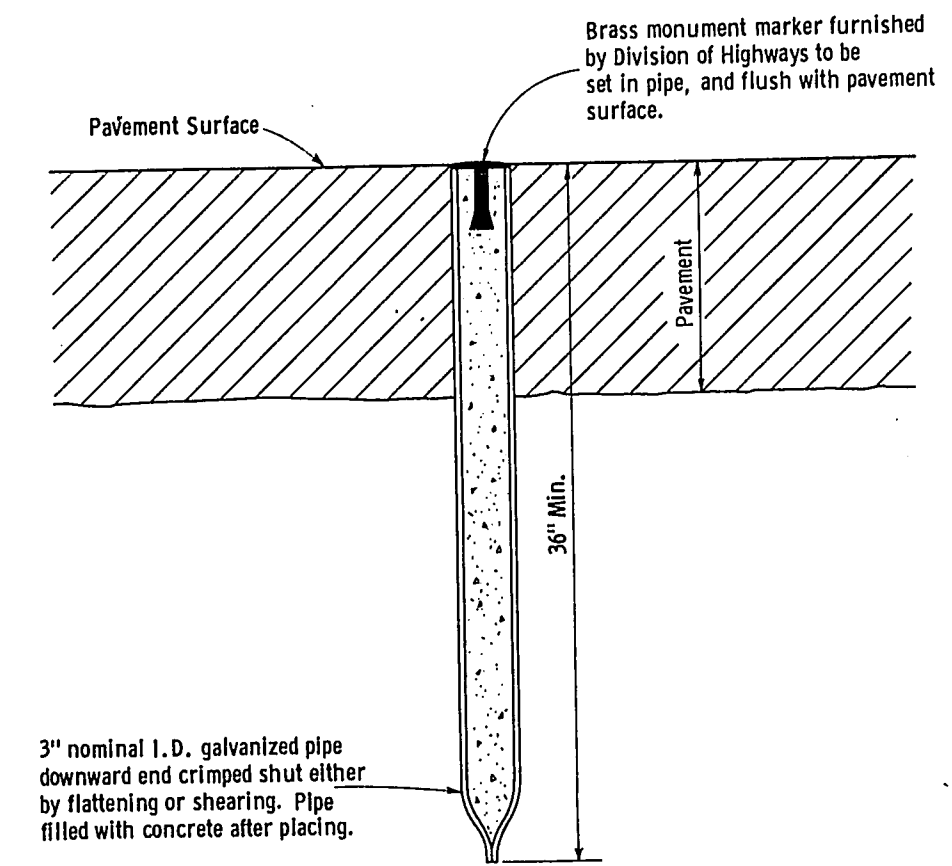
APPROVED: *A. J. Bernhardt*
DATE: 8/9/67
STATE HIGHWAY ENGINEER



**BRASS
MONUMENT MARKER**
To be furnished to contractor by
Division of Highways



TYPE "A"
To be used only when monument is
required outside of pavement surface.



TYPE "B"

To be used only when monument
is required to be located within the
limits of a pavement surface.

GENERAL NOTES

Details of construction, materials and workmanship not
shown on this drawing shall conform to the Standard
Specifications and the applicable Special Provisions.
Monuments conforming to Type "A" or Type "B", as
shown hereon, shall be placed at the direction of the
engineer.

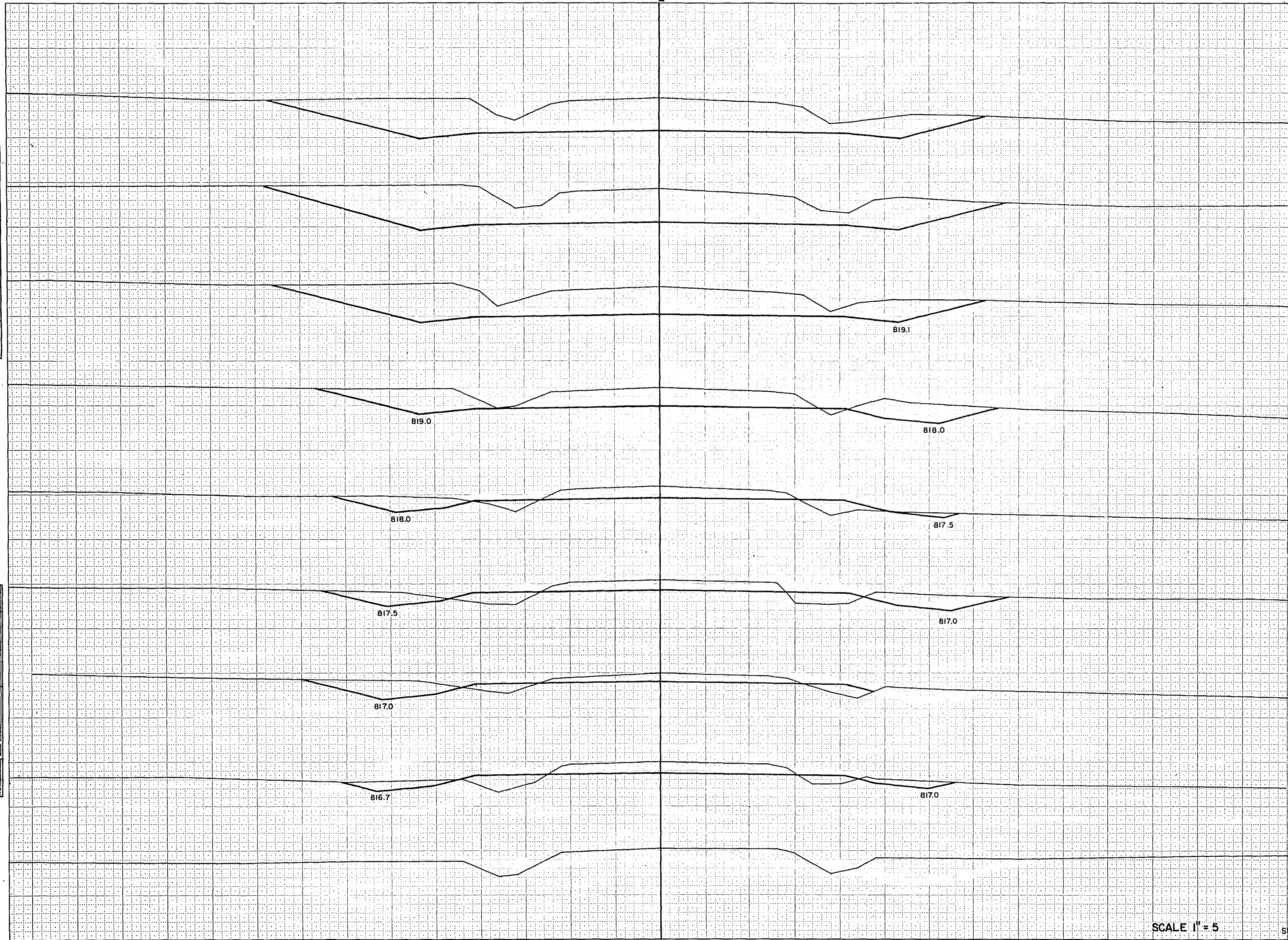
LANDMARK REFERENCE MONUMENTS	
State of Wisconsin Department of Transportation Division of Highways	
RECOMMENDED FOR APPROVAL: DATE <u>1/25/68</u>	<u>E.J. Byckit</u> CHIEF DESIGN ENGINEER
APPROVED: DATE <u>2/8/68</u>	<u>H.J. Lumsden</u> STATE HIGHWAY ENGINEER

SURVEY

SURVEY	DATE	TIME	NO.
NO. 888	NO. 888	NO. 888	NO. 888
NO. 888	NO. 888	NO. 888	NO. 888
NO. 888	NO. 888	NO. 888	NO. 888
NO. 888	NO. 888	NO. 888	NO. 888

SURVEY	DATE	TIME	NO.
NO. 888	NO. 888	NO. 888	NO. 888
NO. 888	NO. 888	NO. 888	NO. 888
NO. 888	NO. 888	NO. 888	NO. 888
NO. 888	NO. 888	NO. 888	NO. 888

B.P.R. REGION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	SO186 (1)	14	46



STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
145 825					
137 +50					
144 825		41			15
138		165			48
139		191			54
140		206			54
143 820		317			22
142		576			2
142 820		824			
143		863			
144					
141 820					
145					
140 820					
139 820					
138 820					
137 820					
SHEET TOTAL		3,183			195

SCALE 1" = 5'

B.P.R. REGION	PROJECT	SHEET NUMBER	TOTAL SHEETS
DIVISION			
4	S 0186 (1)	15	46
WIS.			

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
155 820					
145 820		683			
146					
147		417			11
153 820		130			117
148					326
149					
152 820		30			341
150		76			196
151					
151 820		93			126
152		83			113
153					
150 820		106			94
154		131			54
155					
149 820					
148					
148 820					
147 820					
146 820					
SHEET TOTAL		1,749			1,378

822.0

822.0

821.5

821.5

821.0

821.0

820.7

820.5

820.4

820.0

820.1

819.5

820.5

820.0

NOTE BOOK TYPAL
NO. 888
WIS. CHECKED

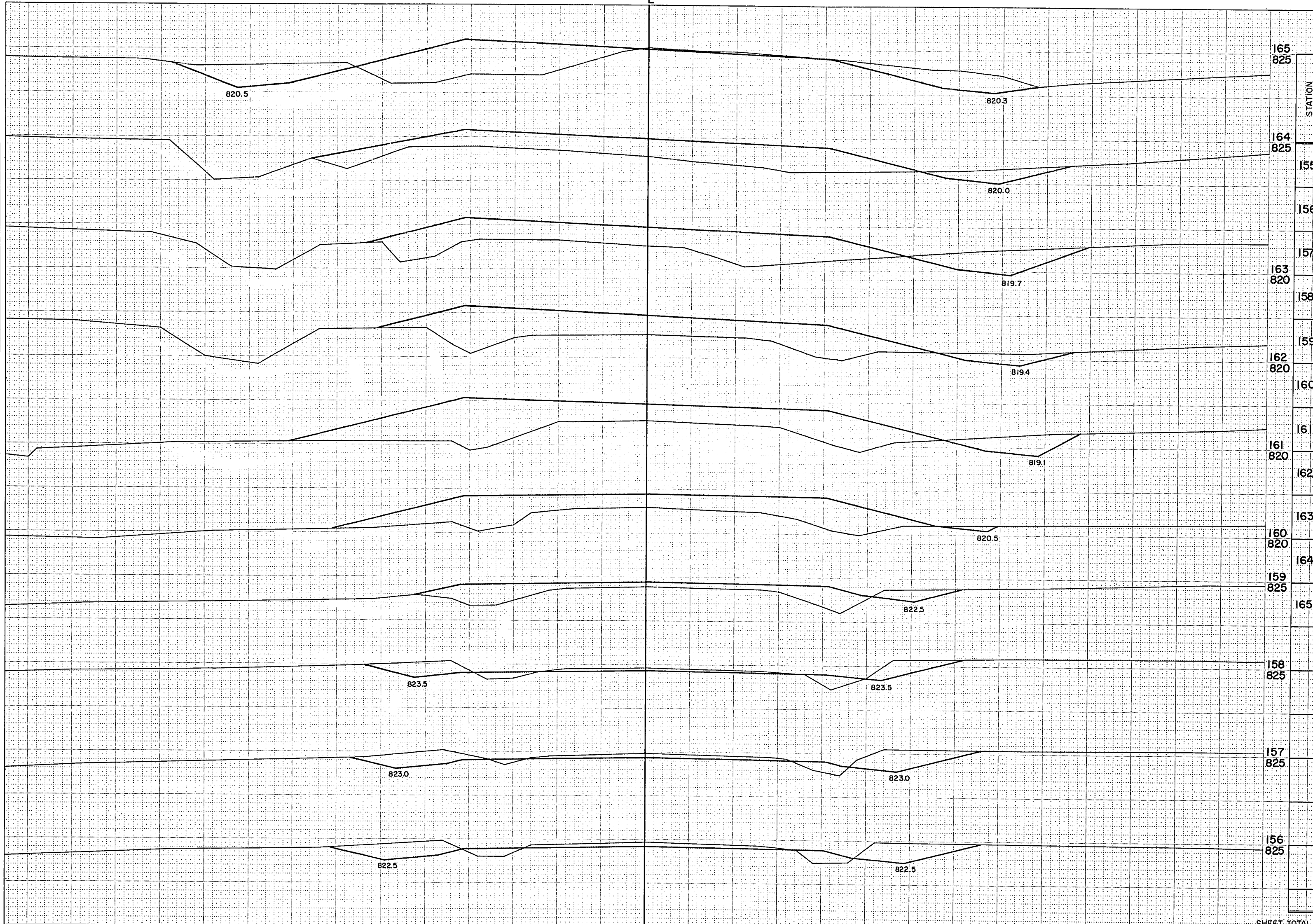
NOTE BOOK TYPAL
NO. 888
WIS. CHECKED

R.G.P.
R.G.P.
R.G.P.

7-70
8-70
9-70

SURVEY	ROUTED
NOTE BOOK	TEMP
NO.	DATE

SURVEY	ROUTED
NOTE BOOK	TEMP
NO.	DATE



B.P.R. REGION		PROJECT	SHEET NUMBER	TOTAL SHEETS
4		S.O.B. (1)	16	46
STATION	DISTANCE	YARDAGE		
		EXCAVATION		
		UNCL		FILL
165 825				
164 825	155	165		41
	156	193		31
	157	141		43
163 820	158	69		198
	159	19		365
162 820	160	39		624
	161	57		657
161 820	162	83		565
	163	300		300
160 820	164	365		78
159 825	165			
158 825				
157 825				
156 825				
SHEET TOTAL		1,431		2,902

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	SOB6 (I)	17	46

STATION	DISTANCE	YARDAGE		
		EXCAVATION		FILL
		UNCL.	MARSH	
175 825				
174 825	165	182	178	421
	166			
173 825	167	44	252	724
	168	72	165	711
	169	52	220	720
172 825	170	52	235	685
	171	61	219	650
171 825	172	74	228	604
	173	91	233	518
170 825	174	85	335	555
	175	70	430	586
169 825				
168 825				
167 825				
166 825				
SHEET TOTAL		783	2,495	6,174

MARSH DISPOSAL

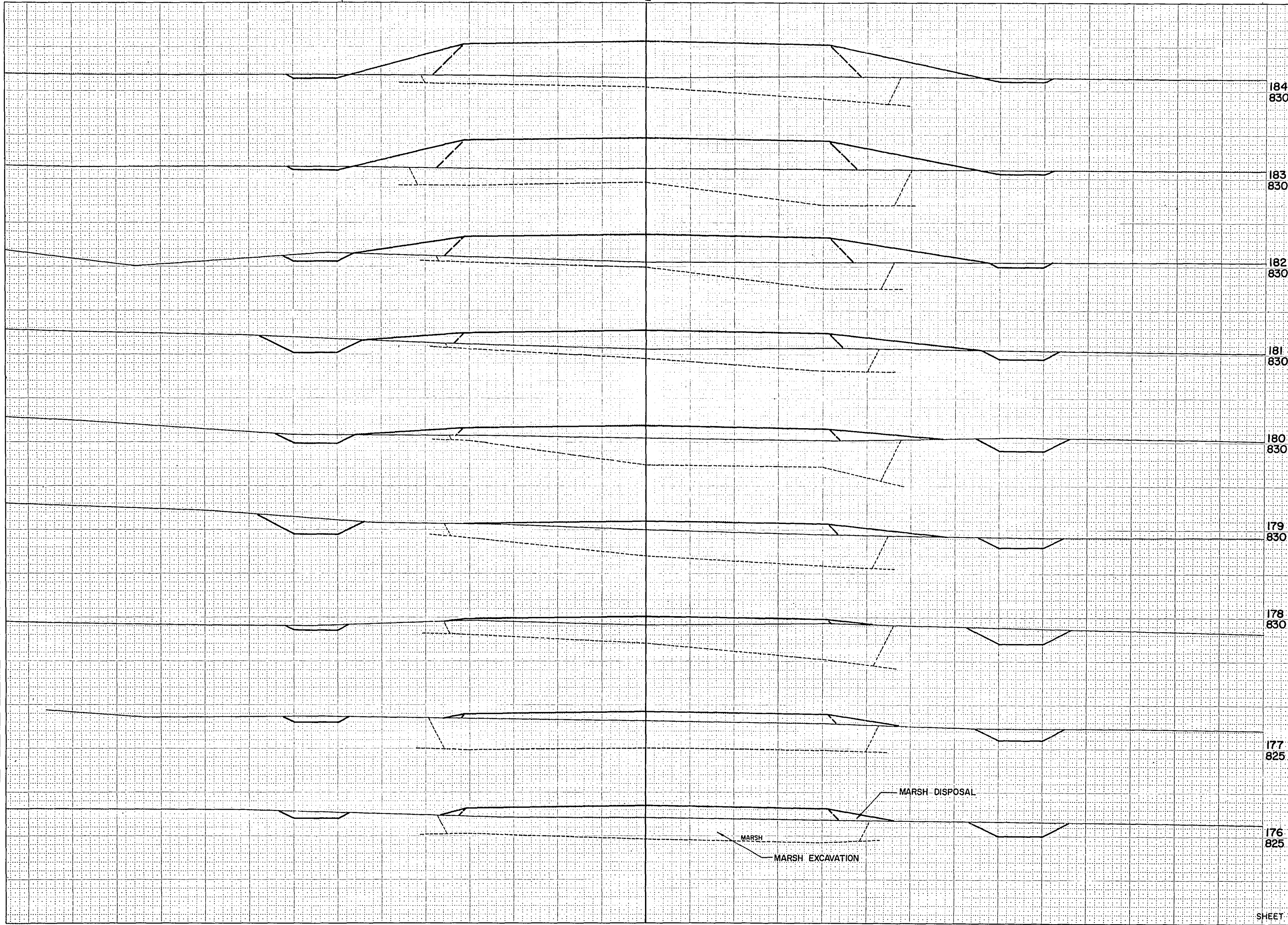
MARSH

MARSH EXCAVATION

SURVEY PLotted
NOTE BOOK
NO. 888
DATE
10-10-70
CHECKED
10-10-70
10-10-70
10-10-70

SURVEY PLotted
NOTE BOOK
NO. 888
DATE
10-10-70
CHECKED
10-10-70
10-10-70
10-10-70

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S-0186 (1)	18	46



STATION	DISTANCE	YARDAGE		
		EXCAVATION		
		UNCL.	MARSH	FILL
184 830	175	69	424	654
183 830	176	57	506	662
182 830	177	57	607	724
	178	76	569	686
181 830	179	89	489	656
	180	94	354	606
180 830	181	69	248	642
	182	54	437	963
179 830	183		461	1,076
	184			
178 830				
177 825				
176 825				
SHEET TOTAL		565	4,095	6,669

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	50186(1)	19	46

193
845

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.	MARSH		
192 845	184	35	152		596
191 845	185	76			135
	186	104			24
	187	176			2
190 840	188	278			
	189	591			
189 840	190	809			
	191	617			
188 840	192	307			52
	193				
187 835					
186 835					
185 835					
SHEET TOTAL		2,993	152		809

841.5

841.0

840.5

836.0

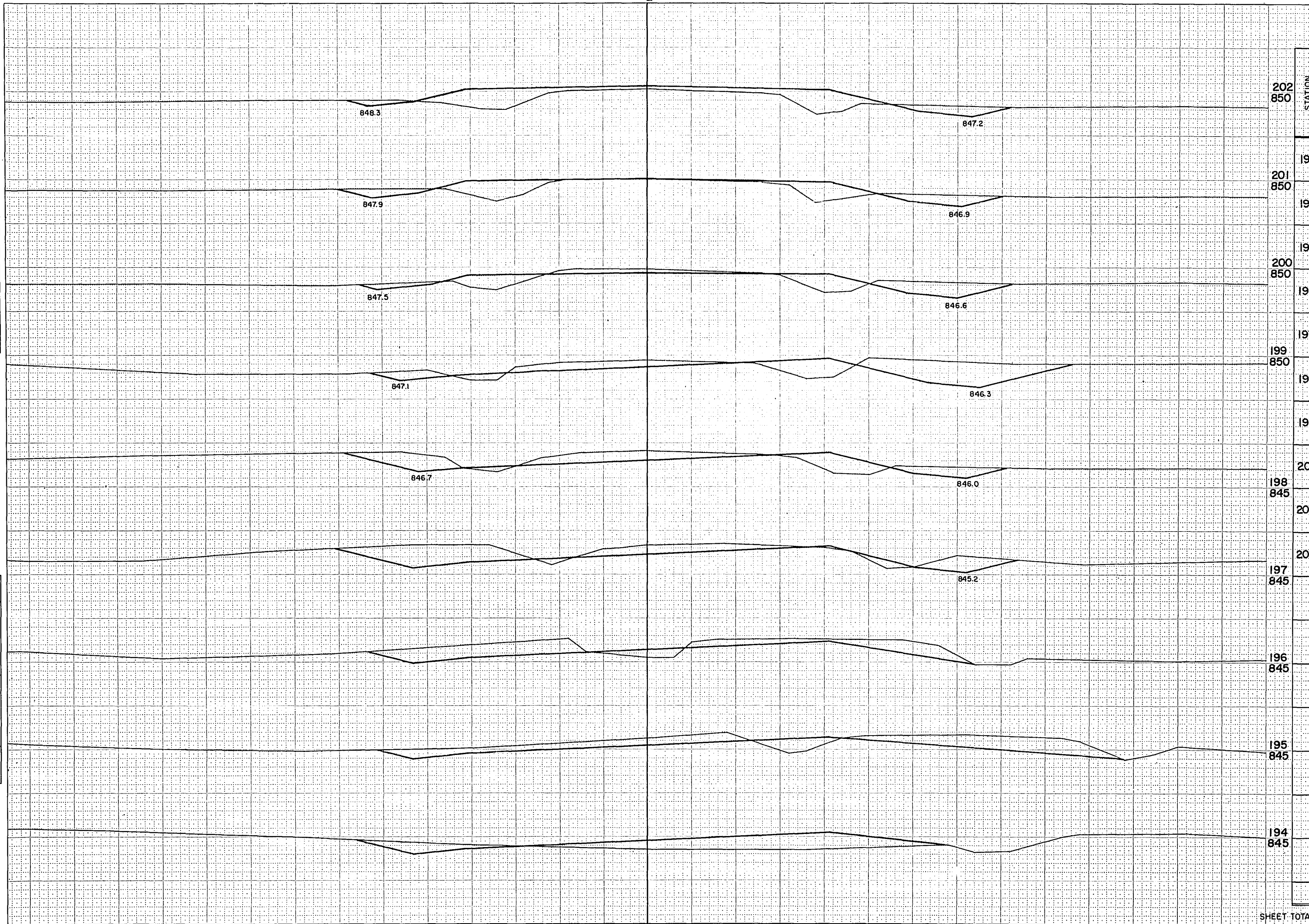
835.0

834.0

833.0

SURVEY

BPR REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0186 (1)	20	46



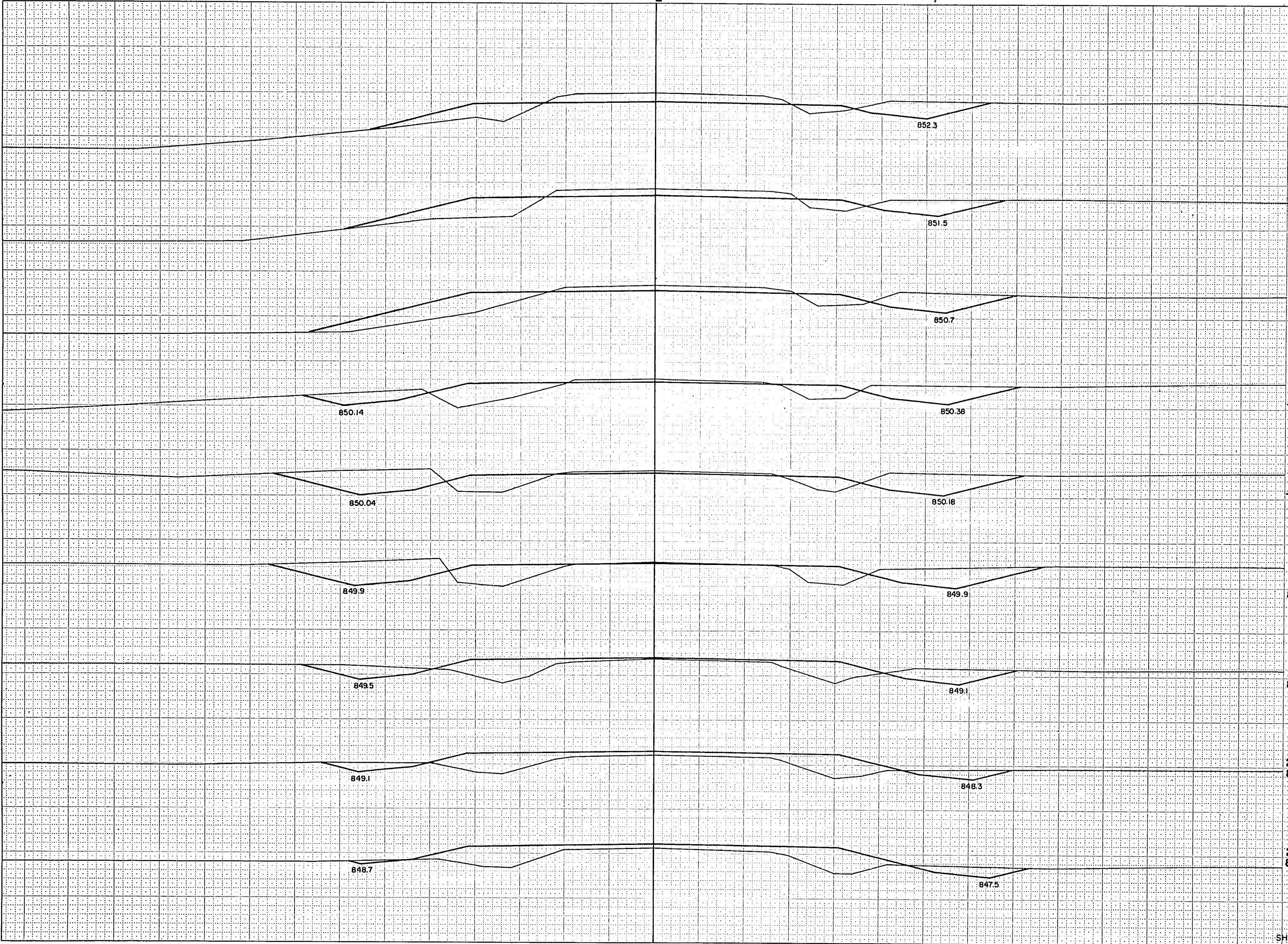
STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
3					
4		100			133
5		91			100
6		156			30
7		231			17
8		250			35
9		235			61
0		185			70
1		96			91
2		59			143

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

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0188(1)	21	46

NOTE BOOK INPUT
NO. 888
CHECKED

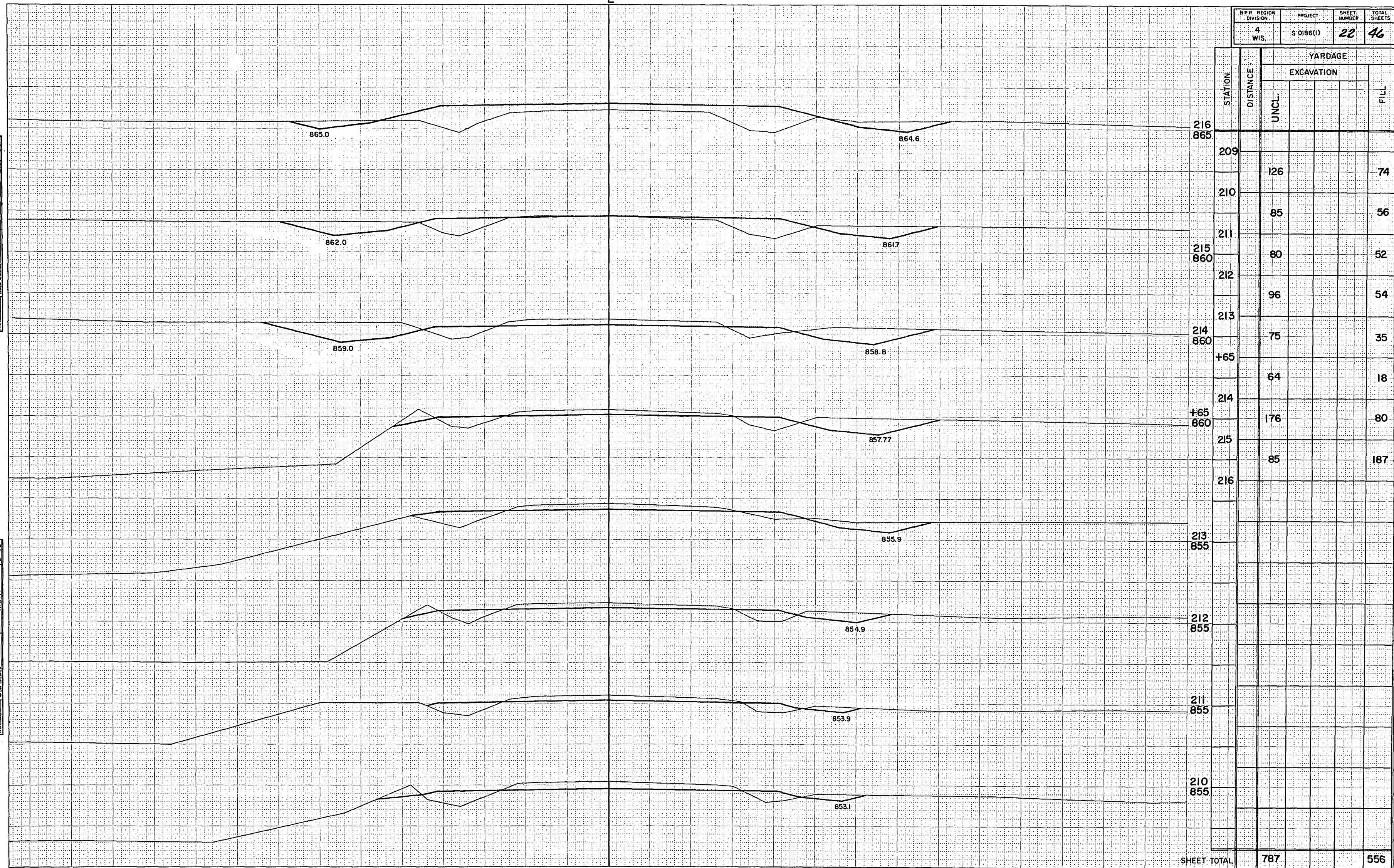
NOTE BOOK INPUT
NO. 888
CHECKED



STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
209 855	202				
208 855	203	43			194
	204	50			200
	205	81			176
207 850	206	174			139
	+35	87			38
+60 850	+60	51			25
	207	59			52
+35 850	208	141			137
	209	148			106
206 850					
205 850					
204 850					
203 850					
SHEET TOTAL		834			1,067

SURVEY	PLOTTED	
NOTE BOOK	TEMPLATE	
	AREAS	
NO.	AREAS CHECKED	

JURALS	PLOTTED	L. D. W.	9-0
NOTE BOOK	TEMPLATE	R. G. P.	7-70
	AREAS	B. R. S.	8-70
NO. 888	AREAS CHECKED	R. G. P.	9-70



B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0186 (J)	23	46

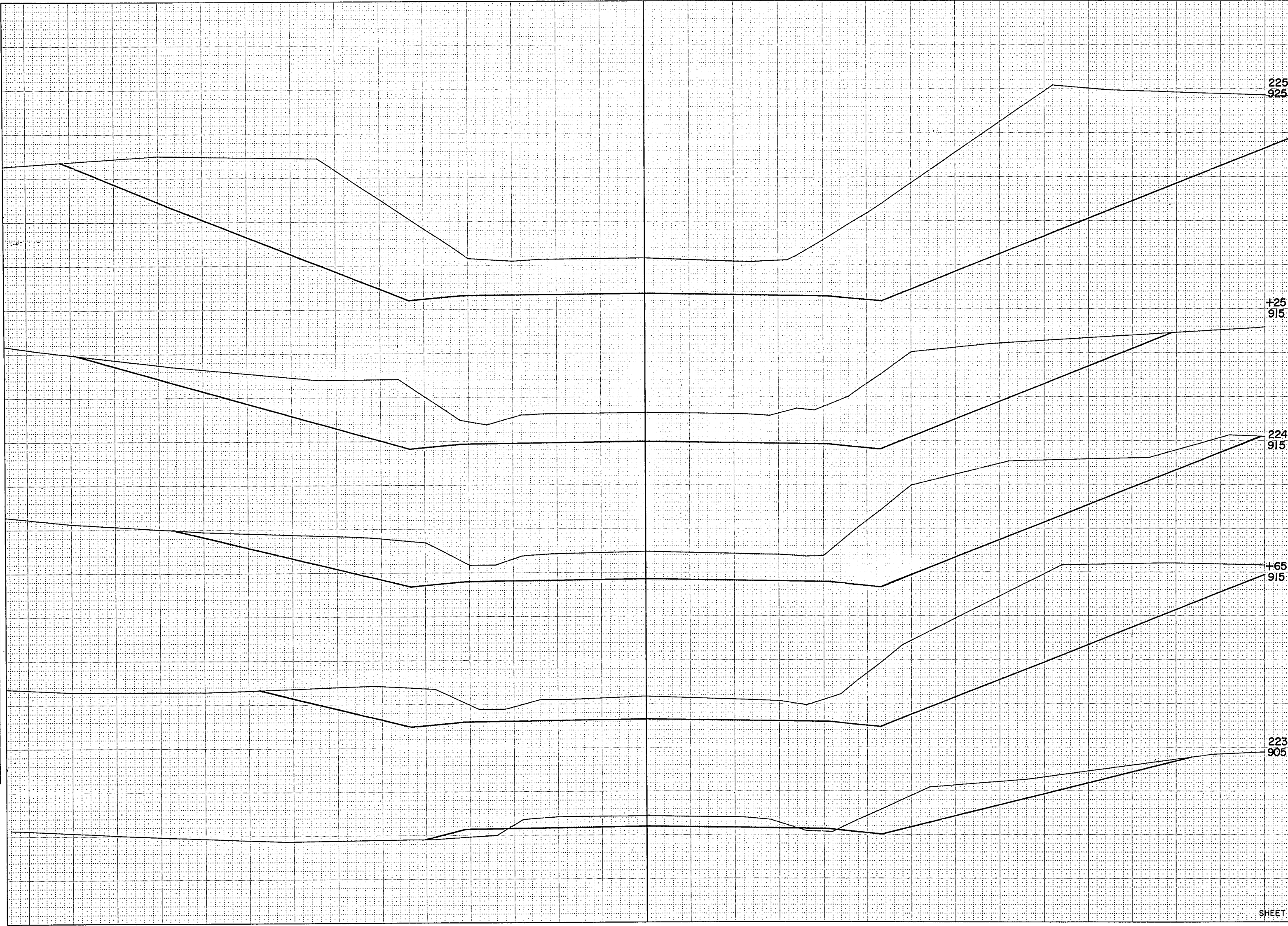
222
890

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
216					
221 885		65			291
217		107			311
218		113			378
219					
220 880		36			192
+40					
		17			216
+75					
+75 880					197
220					
					883
221					
+40 880					717
222					
219 880					
218 870					
217 870					
SHEET TOTAL		338			3,185

BPR REGION/ DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0186 (1)	24	46

SURVEY	NOTED	PLOTTED	TEMPERATURE	NOTE BOOK	AREA	AREA CHECKED
NO.						

SURVEY	NOTED	PLOTTED	TEMPERATURE	NOTE BOOK	AREA	AREA CHECKED
NO.						



STATION	DISTANCE	YARDAGE	
		EXCAVATION	
		UNCL.	FILL
225 925			
222		226	269
223		782	6
+65		672	
224		453	
+25 915		2,253	
225			
224 915			
+65 915			
223 905			
SHEET TOTAL		4,386	275

STATION	DISTANCE	YARDAGE		
		UNCL.	EXCAVATION	FILL
27 05	225			
+40		1,585		
226		1,563		
+40		477		
910				
227		311		
226				
915				
225				
+40				
925				
SHEET TOTAL		3,936		

SURVEI

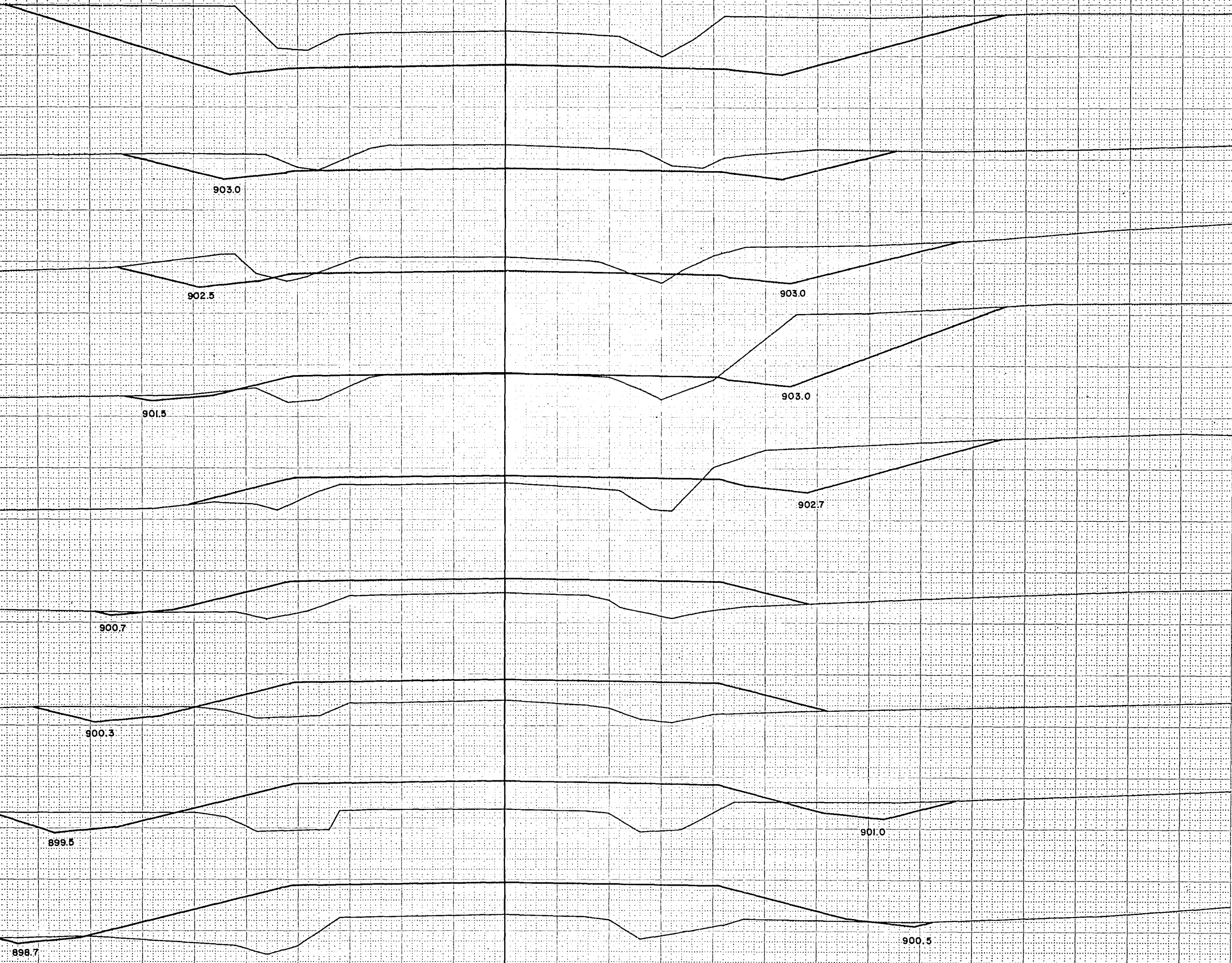
FUNCTIONAL CROSS SECTION - OPEN DOTTED
CHARLES BRUNING COMPANY, INC.

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0185 (I)	26	46

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
+65 900	227				
233 900	228	102			330
	229				631
232 900	230	18			292
+50	231	41			239
230 900	232	46			617
	233				1,024
	234				1,193
230 900	235	34			622
+65					
+50 900					
229 900					
228 900					
SHEET TOTAL		241			4,948

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0186 (I)	27	46

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
239 905					
+50 905	233 +65	21			286
238 910	234	80			735
	235	96			550
+35 910	236	13			230
+50		62			156
237 910	237	104			57
	+35	256			40
	238	234			3
	+50	434			
+50 900	239				
236 905					
235 905					
234 900					
SHEET TOTAL		1,300			2,057



NOTE BOOK (LUMPLIN)
AREA
NO. 888

NOTE BOOK (LUMPLIN)
AREA
NO. 888

天

BPR REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S0186(I)	28	46

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
246 905					
239					
245 905		841			
+55					
		732			
240					
+80 905		1,339			
241					
		1,115			
242					
244 905		809			
243					
		235			
+35					
+35 905		312			4
244					
		139			43
+80					
243 905		30			24
245					
242 910		100			296
246					
241 910					
240 910					
239 +55 910					
SHEET TOTAL		5,652			367

SHEET TOTAL	5,652			367
-------------	-------	--	--	-----

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

SURVEY	SURVEYED	
	PLOTTED	
	TEMPLATE	
	AREAS	
NO.	AREAS CHECKED	

SURVEY	SURVEYED	U. G. N.	1-70
	PLOTTED	L. D. W.	4-70
NOTE BOOK	TEMPLATE	R. G. P.	7-70
	AREAS	B. R. S.	8-70
NO. 888	AREAS CHECKED	R. G. P.	9-70

SURVEY

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S-0186(1)	29	46

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
+25 915					
246					626
247					772
252 910					
248		52			459
249		293			87
251 910					
250		247			
+50 910		213			
251		493			
252		154			
250 910					
+25					
249 905					
248 900					
247 900					
SHEET TOTAL		1,452			1,944

BPR REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0186 (1)	30	46

260
915

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
252 +25					
259 915		289			24
253		91			274
254					
+50 915					519
255					
256		56			385
258 915		94			154
257		302			43
258					
257 915		328			
+50					
259		323			
256 915		369			11
260					
255 910					
254 910					
253 910					
SHEET TOTAL		1,852			1,410

909.0

913.0

913.0

912.5

913.5

911.2

911.0

910.2

910.2

911.6

911.5

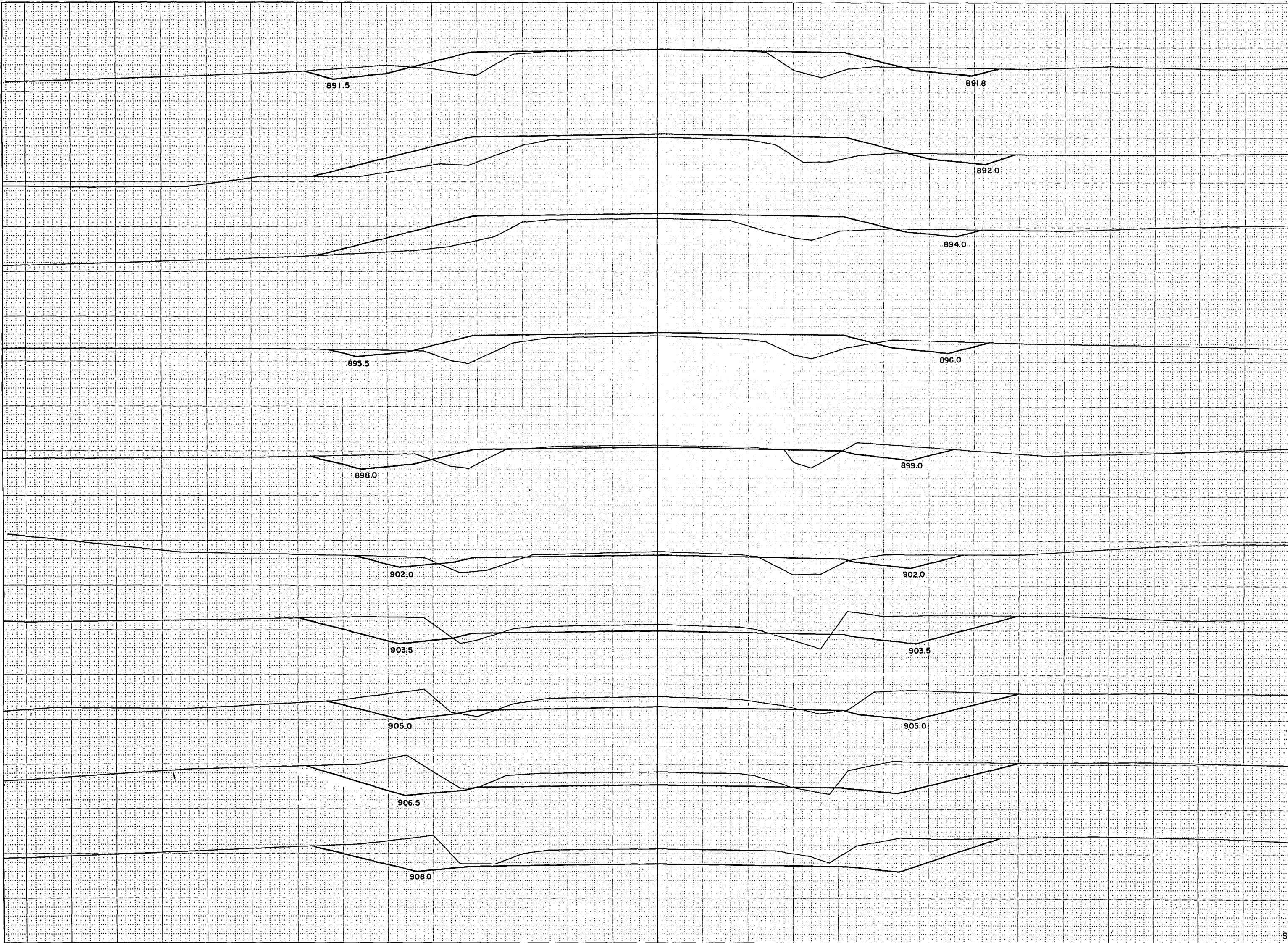
SURVEY	PLotted	TEMP
NOTE BOOK	NO.	NO.
NO.	NO.	NO.

SURVEY	PLotted	TEMP
NOTE BOOK	NO.	NO.
NO.	NO.	NO.

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S.OIB6 (1)	31	46

NO. 1
NO. 2
NO. 3
NO. 4
NO. 5
NO. 6
NO. 7
NO. 8
NO. 9
NO. 10
NO. 11
NO. 12
NO. 13
NO. 14
NO. 15
NO. 16
NO. 17
NO. 18
NO. 19
NO. 20
NO. 21
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NO. 84
NO. 85
NO. 86
NO. 87
NO. 88
NO. 89
NO. 90
NO. 91
NO. 92
NO. 93
NO. 94
NO. 95
NO. 96
NO. 97
NO. 98
NO. 99
NO. 100

NO. 1
NO. 2
NO. 3
NO. 4
NO. 5
NO. 6
NO. 7
NO. 8
NO. 9
NO. 10
NO. 11
NO. 12
NO. 13
NO. 14
NO. 15
NO. 16
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NO. 18
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NO. 20
NO. 21
NO. 22
NO. 23
NO. 24
NO. 25
NO. 26
NO. 27
NO. 28
NO. 29
NO. 30
NO. 31
NO. 32
NO. 33
NO. 34
NO. 35
NO. 36
NO. 37
NO. 38
NO. 39
NO. 40
NO. 41
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NO. 61
NO. 62
NO. 63
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NO. 65
NO. 66
NO. 67
NO. 68
NO. 69
NO. 70
NO. 71
NO. 72
NO. 73
NO. 74
NO. 75
NO. 76
NO. 77
NO. 78
NO. 79
NO. 80
NO. 81
NO. 82
NO. 83
NO. 84
NO. 85
NO. 86
NO. 87
NO. 88
NO. 89
NO. 90
NO. 91
NO. 92
NO. 93
NO. 94
NO. 95
NO. 96
NO. 97
NO. 98
NO. 99
NO. 100

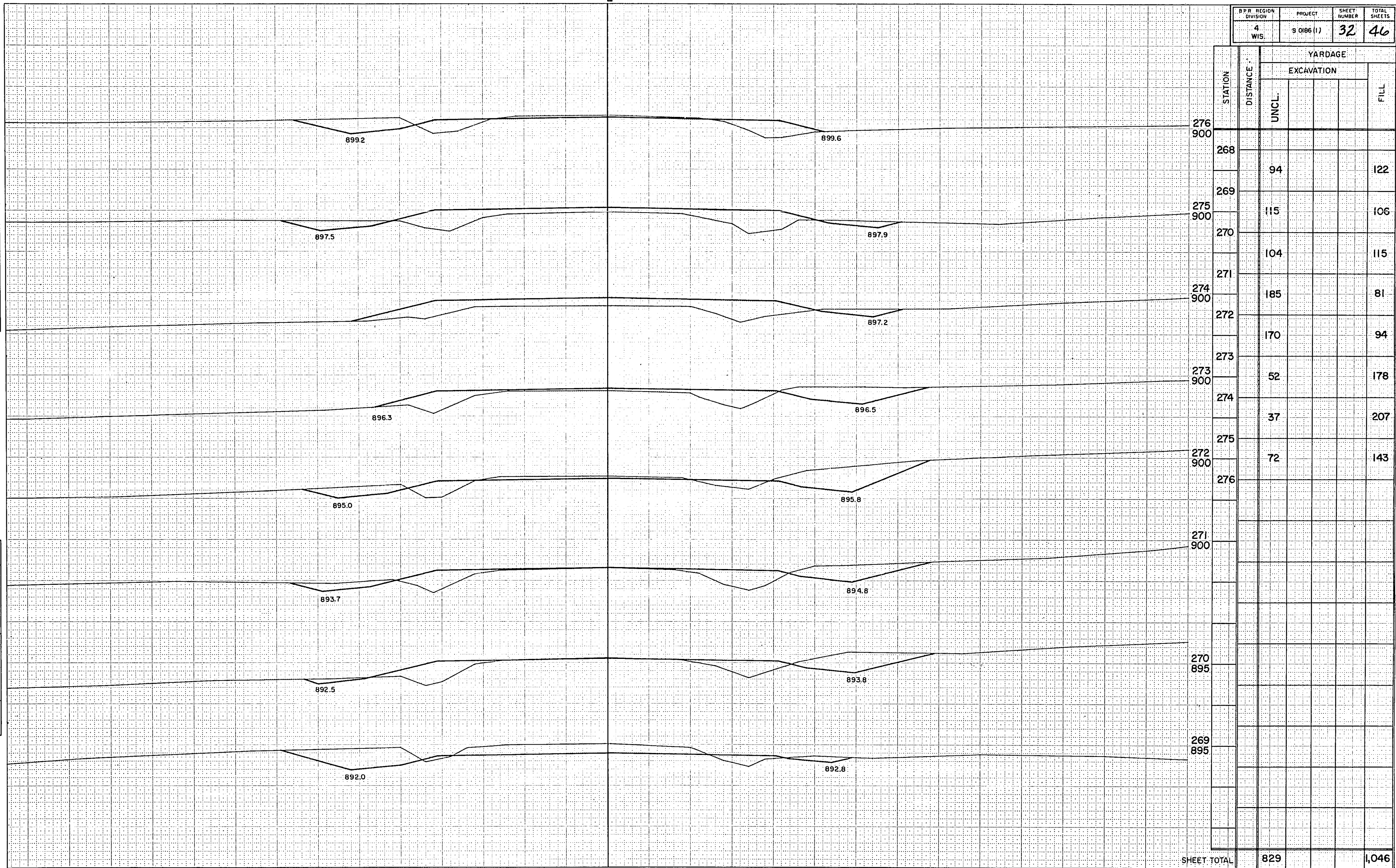


STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
268 895					
267 895					
260					
261		361			11
266 895		231			2
+50					
262		175			5
+50					
265 895		131			11
263		88			28
264		113			70
264 900		139			117
265		83			226
266		24			287
263 905		43			224
267					
268					
+50 905					
262 910					
+50 910					
261 910					
SHEET TOTAL		1,388			981

SURVEY	SECTION	DATE	BY
NOTE BOOK	DATE	DATE	DATE
NO.	NO.	NO.	NO.

SURVEY	SECTION	DATE	BY
NOTE BOOK	DATE	DATE	DATE
NO.	NO.	NO.	NO.

B.P.R. REGION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	9 086 (1)	32	46
WIS.			



B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	\$0186 (1)	33	46

283
895

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL			
276					
282 895		217			50
277		569			4
278					
281 900		826			
279		635			
280					
		206			81
281					
280 900					276
282					404
283					
279 905					
278 905					
277 900					
SHEET TOTAL		2,453			815

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SURVEY ROUTED
NOTE BOOK TEMPLATE
NO. 4 WIS. AREA MEAS CHECKED

SURVEY ROUTED
NOTE BOOK TEMPLATE
NO. 4 WIS. AREA MEAS CHECKED

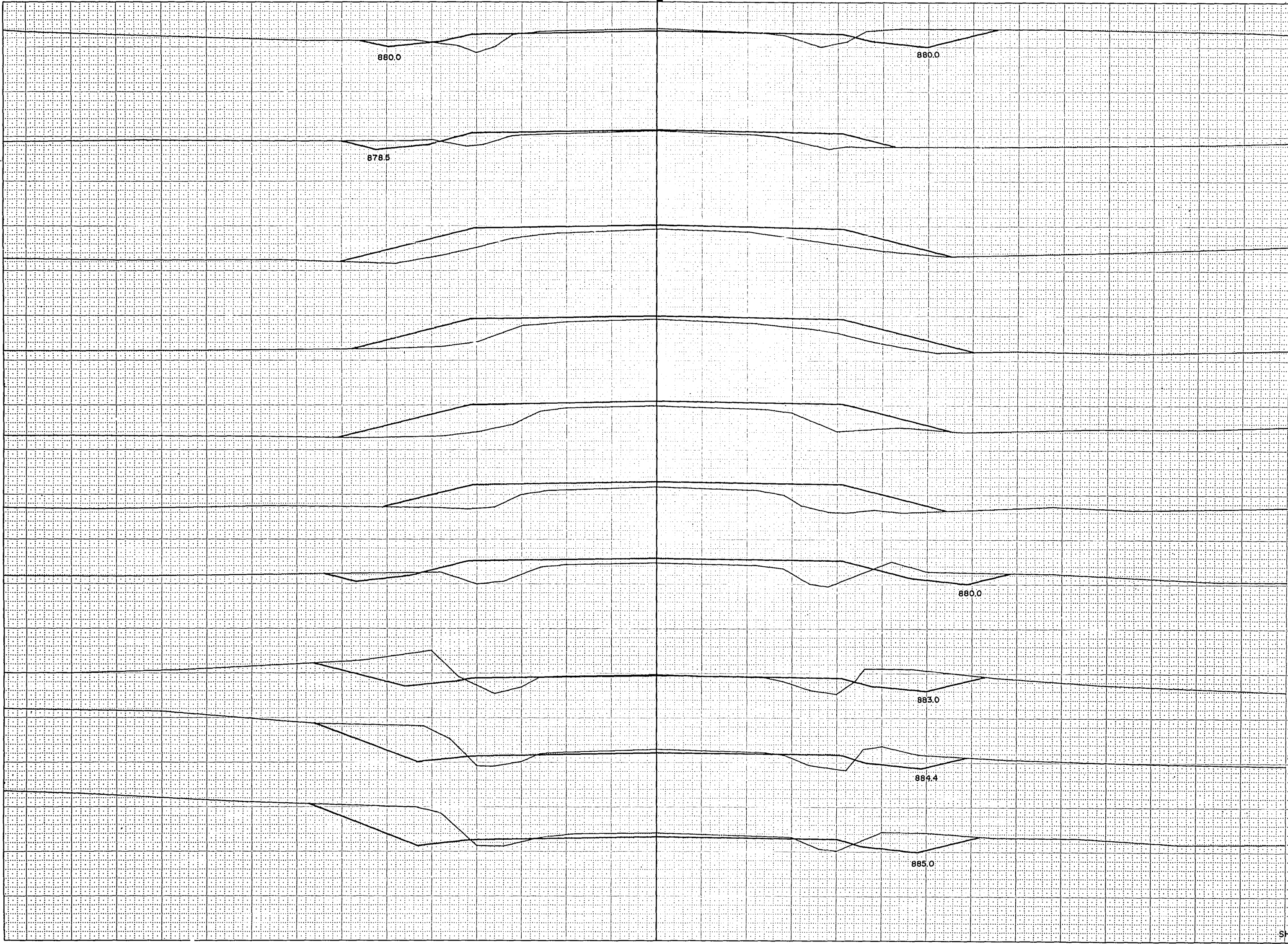
D.P.R. REGION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	S.0186 (I)	34	46

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
292 890	283				344
291 890	284	22			189
	285	107			89
290 890	286	193			67
	287	152			72
289 890	288	63			83
	289	69			85
288 890	290	143			67
	291	259			33
287 890	292				
286 890					
285 890					
284 890					
SHEET TOTAL		1,008			1,029

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	9 0186(1)	35	46

SURVEY	PLUMB	TEMP	AREA	NO.
NOTE BOOK	NO.	NO.	NO.	NO.
NO.	NO.	NO.	NO.	NO.

SURVEY	PLUMB	TEMP	AREA	NO.
NOTE BOOK	NO.	NO.	NO.	NO.
NO.	NO.	NO.	NO.	NO.



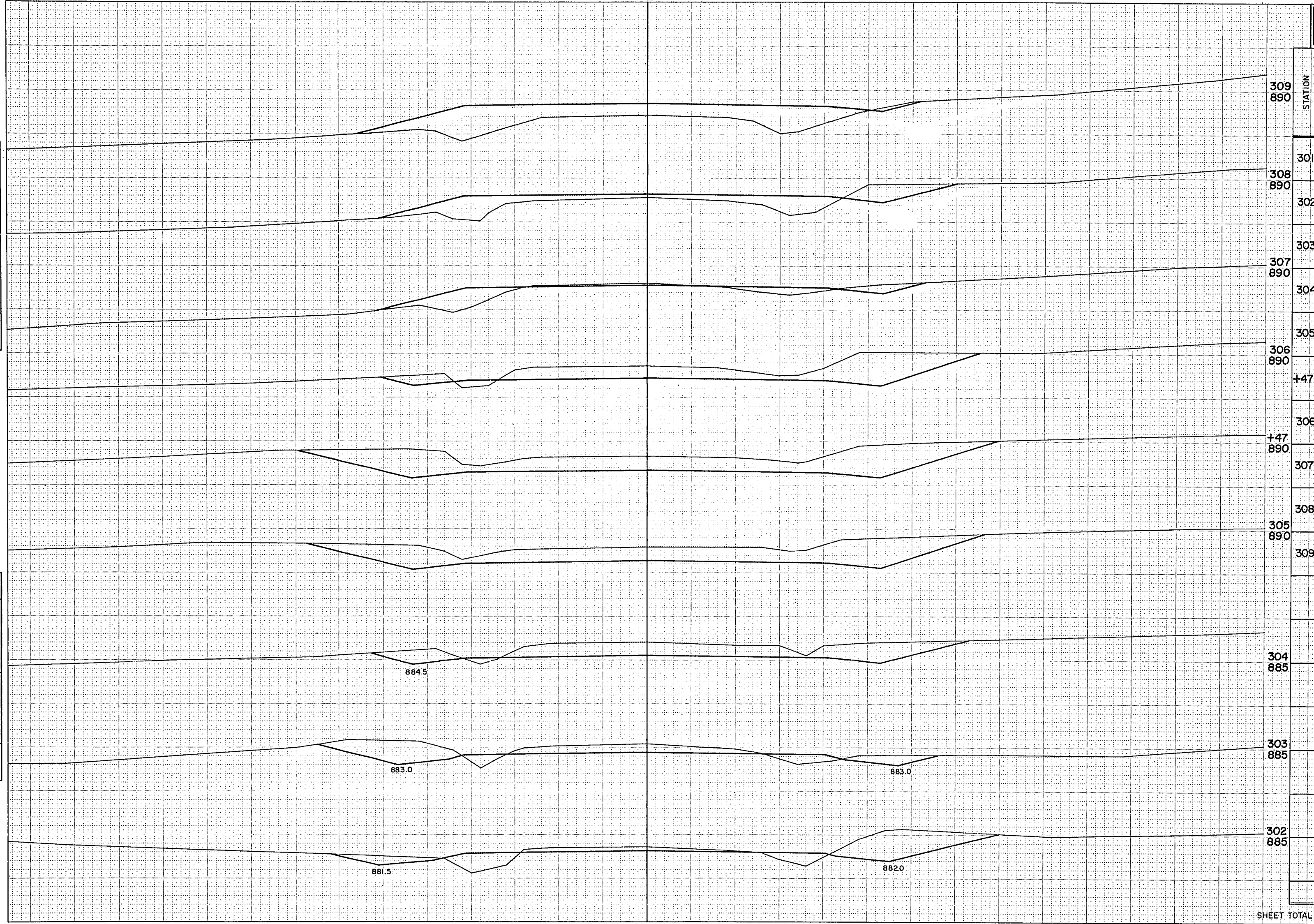
STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL			
301 880					
300 880	292	324			26
	293				
299 880		66			13
	+30				
	294	166			48
	295	146			154
298 875		37			274
	296				
297 880					333
	297				
	298				315
	296 880				287
	299	13			198
	300				
295 880		61			91
	301				
294 885					
+30 885					
293 885					
SHEET TOTAL		833			1,739

309 L 1

SURVEY	SURVISED	PLOTTED	TEMPERATURE	WIND	WIND DIRECTION
NO. 888					

SURVEY	SURVISED	PLOTTED	TEMPERATURE	WIND	WIND DIRECTION
NO. 888					

B.P.R. REGION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	S 0186 (1)	36	46
WIS.			



STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
309 890					
301 890		139			74
302 890		189			57
303 890		244			24
304 890		380			4
305 890		232			
+47 890		233			4
+47 890		187			54
307 890		48			150
308 890		32			298
309 890					
304 885					
303 885					
302 885					
SHEET TOTAL		1,684			665

NOTE BOOK	IDENTIFY	
NO.	AREAS	
	AREAS CHECKED	

NOTE BOOK	TEMPERATURE	B. R. S.	8-70
NO. 888	AREAS	R. G. P.	9-70



	STATION	DISTANCE	YARDAGE			
			EXCAVATION			FILL
			UNCL.			
309			19			513
310			41			707
311			28			757
312			15			435
+60			13			311
313			35			749
314			19			441
+65			4			202
315			78			457
316						
					</	

SURVEY

DATE

TIME

NO.

NOTE BOOK

NO.

AREA

CHECKED

SURVEY

DATE

TIME

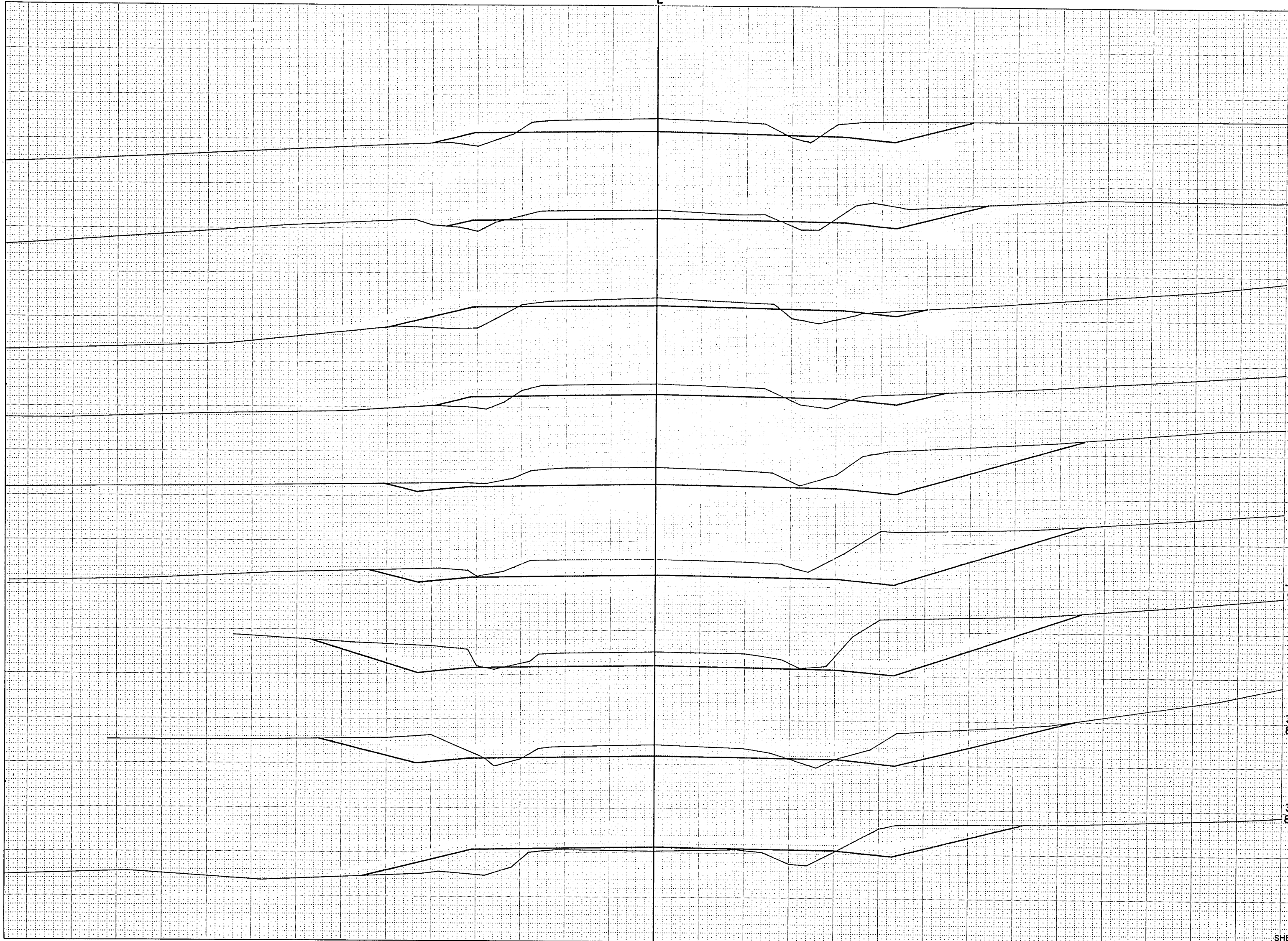
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NOTE BOOK

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AREA

CHECKED



B.P.R. REGION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	S 0186(1)	38	46

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
324 895	316				
323 895	317	139			283
	318	272			96
322 895	319	239			6
+45	320	352			2
321 895	321	589			4
320 900	322	352			24
	323	117			76
319 900	324	141			69
		222			32
+45 900					
318 895					
317 895					
SHEET TOTAL		2,423			592

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0186(1)	39	46

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
330 890					
329 890	324	400			17
	325	824			
	326	1,254			
+80 890	327	1,341			
	328	484			
+55 895	+40	144			
	+55	158			
+40 895	+80	122			
	329	581			
328 895	330				
	327 895				
	326 895				
	325 895				
SHEET TOTAL		5,308			17

886.0

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SURVEY

SHRUBS

PLANTED

TEMPERATURE

NOTE BOOK

AREA

NO.

CHECKED

SURVEY

SHRUBS

PLANTED

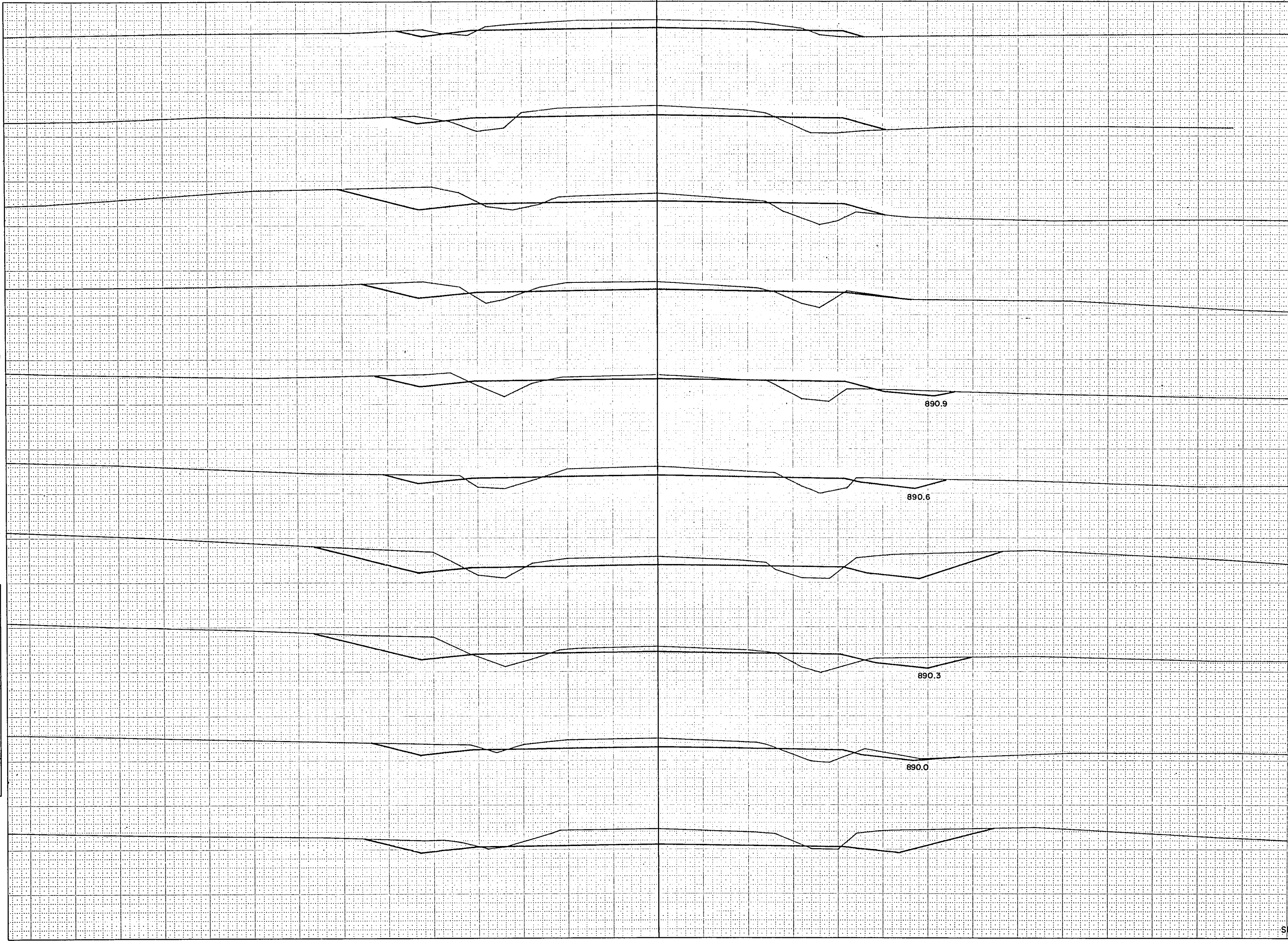
TEMPERATURE

NOTE BOOK

AREA

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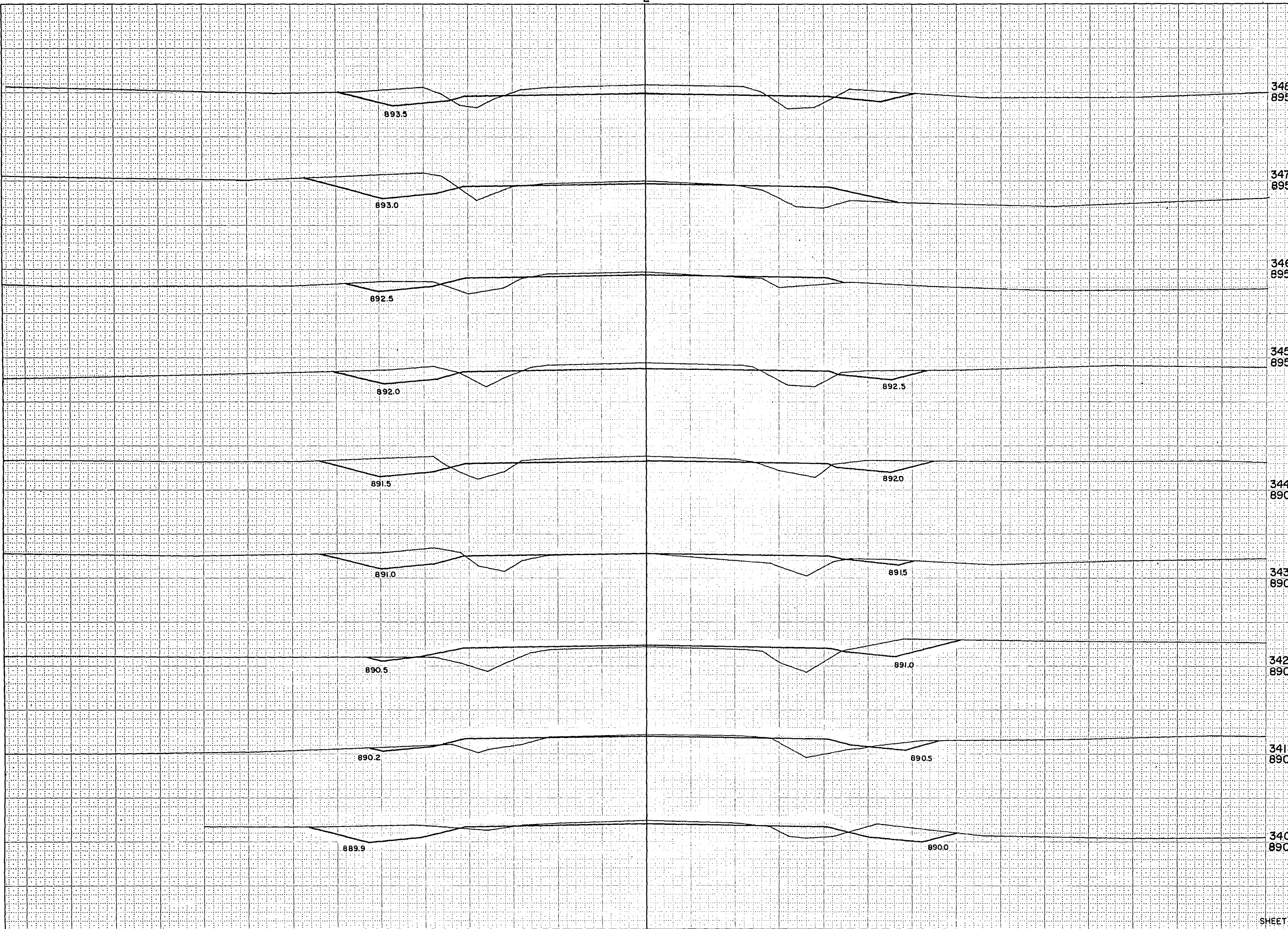
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B.P.R. REGION DIVISION		PROJECT		SHEET NUMBER		TOTAL SHEETS	
4 WIS.		S 0186(1)		40		46	
339 890	STATION	DISTANCE	YARDAGE				
UNCL			EXCAVATION			FILL	
338 890							
	330						
			378				2
	331						
337 890			231				15
	332						
			178				44
	333						
336 890			85				23
	+35						
			132				43
	334						
335 890			100				70
	335						
			93				65
	336						
334 890			126				63
	337						
			124				82
	338						
+35 890			115				57
	339						
333 890							
332 890							
331 890							
SHEET TOTAL			1,562				464

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0188 (1)	41	46

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
348 895					
347 895	339				
	340	141			35
	341	96			65
346 895	342	46			122
	343	72			124
345 895	344	122			72
	345	154			56
	346	100			59
344 890	347	96			76
	348	156			69
343 890					
342 890					
341 890					
340 890					
SHEET TOTAL		983			678



NOTE BOOK
NO. 888

NOTE BOOK
NO. 888

SURVEY

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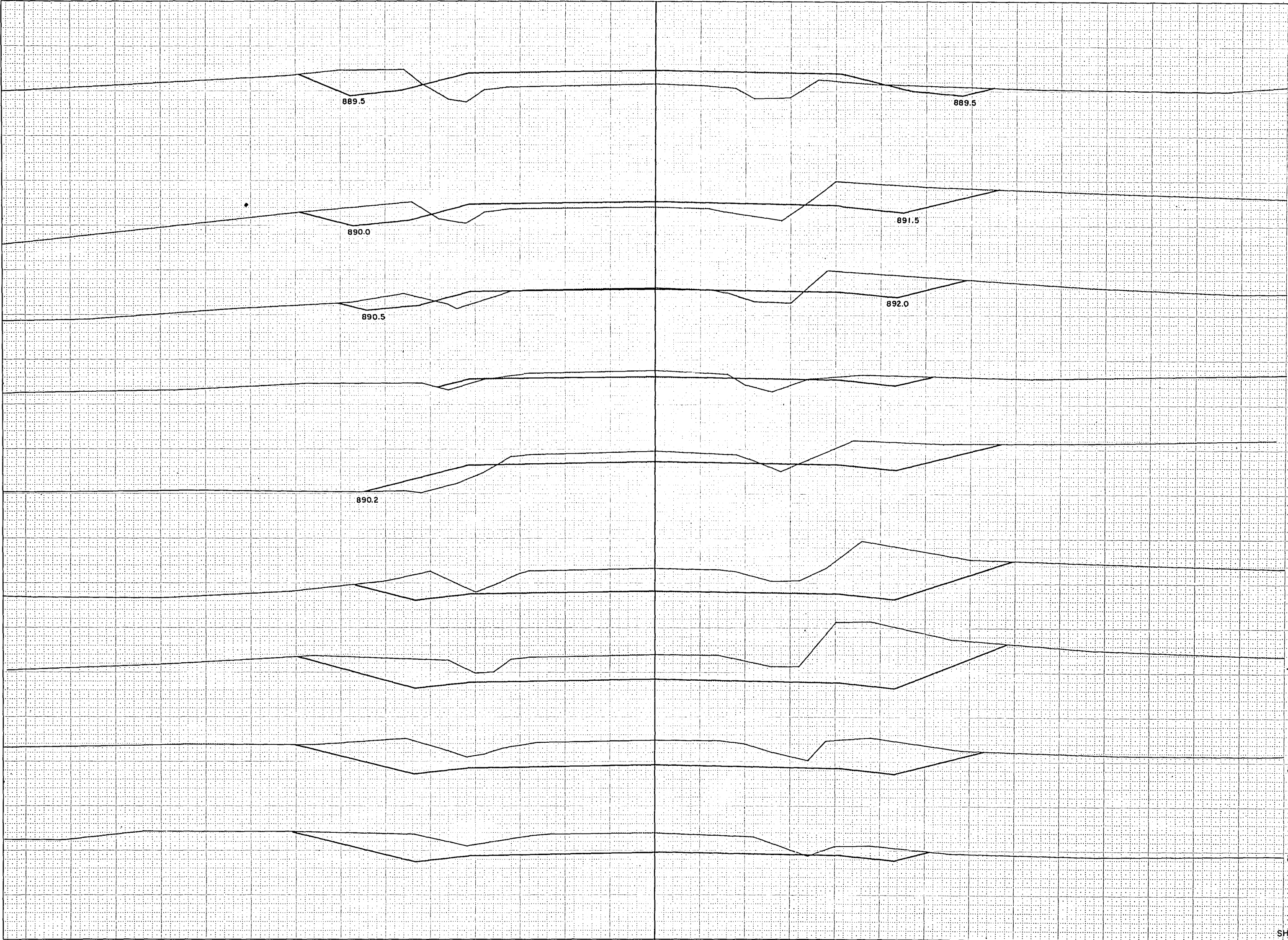
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B.P.R. REGION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0186 (I)	42	46

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
354 890					
+50 895	348	285			22
	349	520			
353 895	350	569			
+75 895		194			
	351	474			33
+60 895	352	106			30
	+60	50			18
352 895	353	99			42
	+50	92			101
	354				
351 895					
+75 895					
350 895					
349 895					
SHEET TOTAL		2,389			246

361-1

B.P.R.	REGION	PROJECT	SHEET	TOTAL
4	WIS.	50185(1)	44	46

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
368 880	360				
	361	339			9
367 885	362	580			
	363	600			
	+70	481			
366 885	364	247			
	365	798			
	366	757			
	367	572			2
364 885	368	287			22
	+70				
	363 885				
	362 890				
	361 890				
SHEET TOTAL		4,661			33

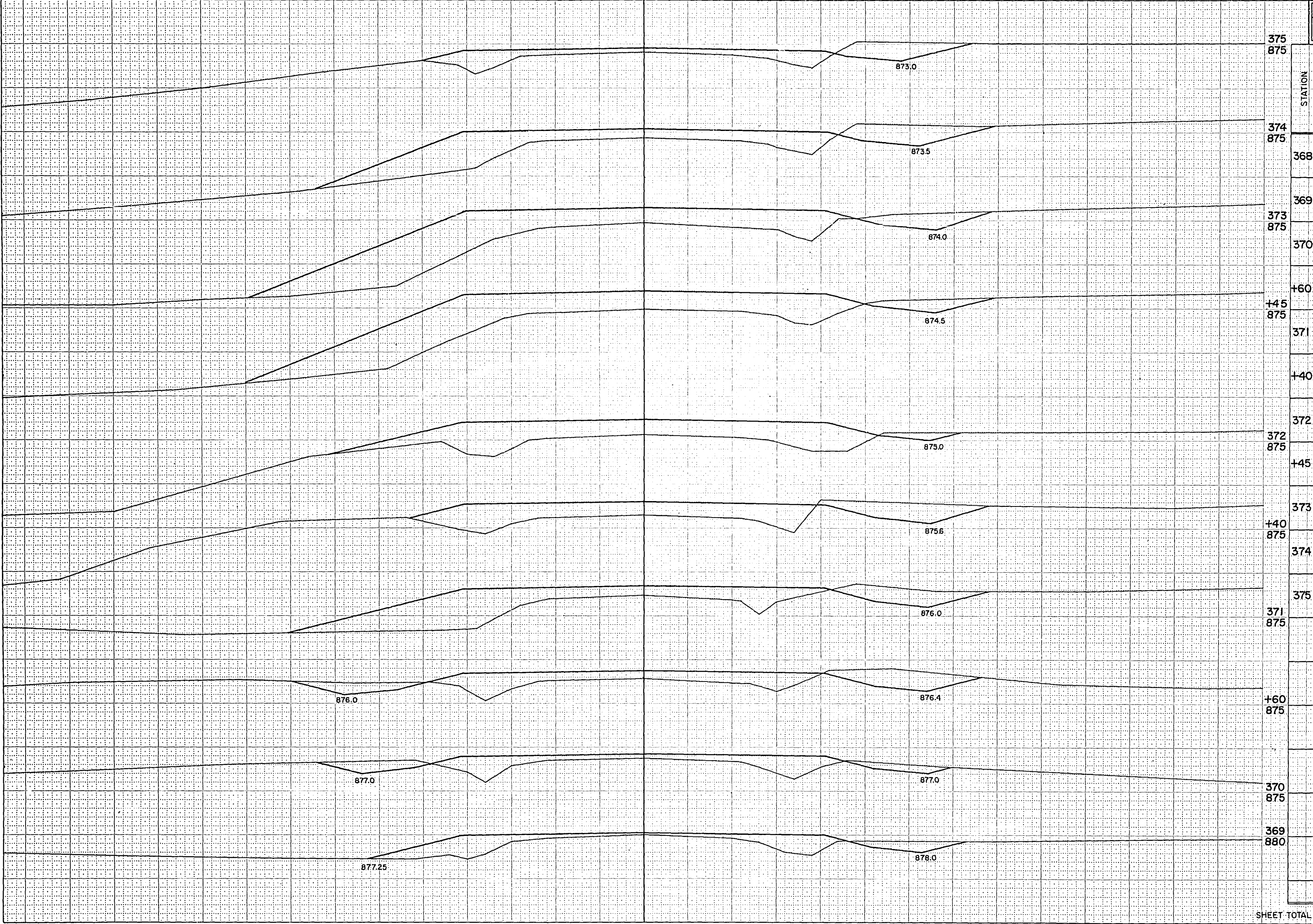
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SURVEY	ROUTED
NOTE BOOK	TEMPLE
NO.	MEAS. CHECKED

SURVEY	ROUTED
NOTE BOOK	TEMPLE
NO. 888	MEAS. CHECKED

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	50188 (I)	45	46



STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL			
375 875					
374 875	368				
		102			117
373 875	369				
		56			191
	370				
		62			120
+60 875	+60				
		44			134
	371				
		37			158
	+40				
		36			233
	372				
372 875		14			267
	+45				
		30			399
	373				
+40 875		80			639
	374				
		89			354
	375				
371 875					
	+60 875				
	370 875				
	369 880				
SHEET TOTAL		550			2,612

SURVEY	ROUTED	DATE	TIME
NOTE BOOK	NO.	AREA	CHECKED

SURVEY	ROUTED	DATE	TIME
NOTE BOOK	NO.	AREA	CHECKED

B.P. REGION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	S 0186 (1)	46	46

STATION	DISTANCE	YARDAGE			
		EXCAVATION			FILL
		UNCL.			
375		102			107
376		61			35
377		74			22
370					
379					
870					
+85					
870					
+60					
875					
378					
875					
377					
875					
376					
875					
SHEET TOTAL		237			164

