

Sheet Number	Total Sheets
1	46

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Sheet No.	2	Estimate of Quantities
Sheet No.	2	Miscellaneous Quantities
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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

'AS BUILT' PLAN

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

(HINTZ - S.T.H. 32 SECTION)

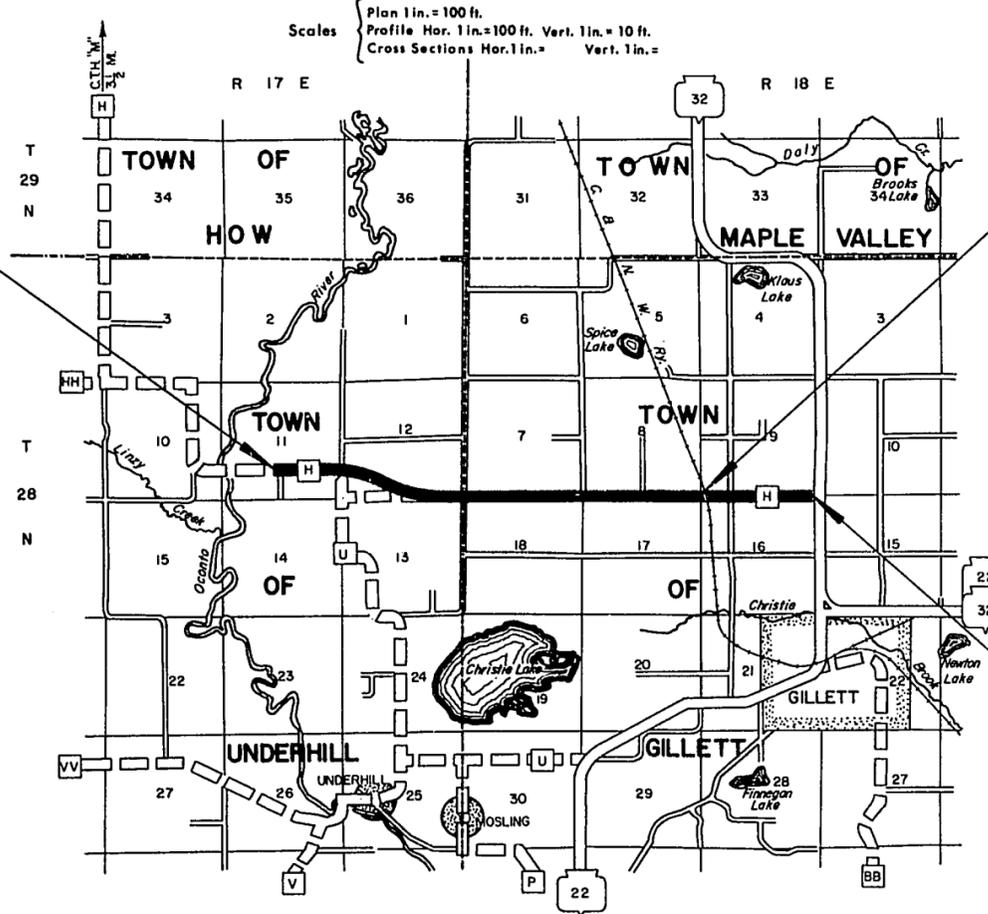
C.T.H. "H"
OCONTO COUNTY

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

Design Designation

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



STA. 328+63.36 TO STA. 328+76.44
 EXCEPTION TO NET @ 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.

Conventional Signs

State Line	-----	Culverts in Place	-----
County Line	-----	Culverts Required	-----
Township or Range Line	-----	Drop Inlet	-----
Section Line	-----	Power Pole	-----
New Right of Way Line	-----	Telephone or Telegraph Pole	-----
Present Right of Way Line	-----	Right of Way Markers	-----
Wire Fence { Woven	-----	Reference Stake for Hubs Only	-----
{ Barbed	-----	Marsh	-----
Lot Line	-----	Hedge	-----
Corporate or City Limits	-----	Trees	-----
Property Line	-----	Ground Elevation	Datum Line 73.9
Traveled Way or P.E.	-----	Grade Elevation	Datum Line 76.35
Railroads	-----	Field Entrance	----- F.E.
Base or Survey Line	-----	Private Entrance	----- P.E.
Culvert Pipe Class III	----- C.P. CL. III		
Corrugated Metal Culvert Pipe	----- C.M.C.P.		

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

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: C.L.C.
District Checker: R.A.S.	Correct
Correct:	
Date: 3/24/71	<i>A.J. Seidler</i>
Recommended for Approval: District Engineer	
Date: 4/30/71	<i>J. P. O'Donnell</i>
Approved: Acting Chief Design Engineer	
Date: 4/30/71	<i>W.J. Burmeister</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 I.D.	9108-1-71	SHEET NUMBER	2	TOTAL SHEETS	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	UNCLASSIFIED 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
UNIT	LIN. FT.	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
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

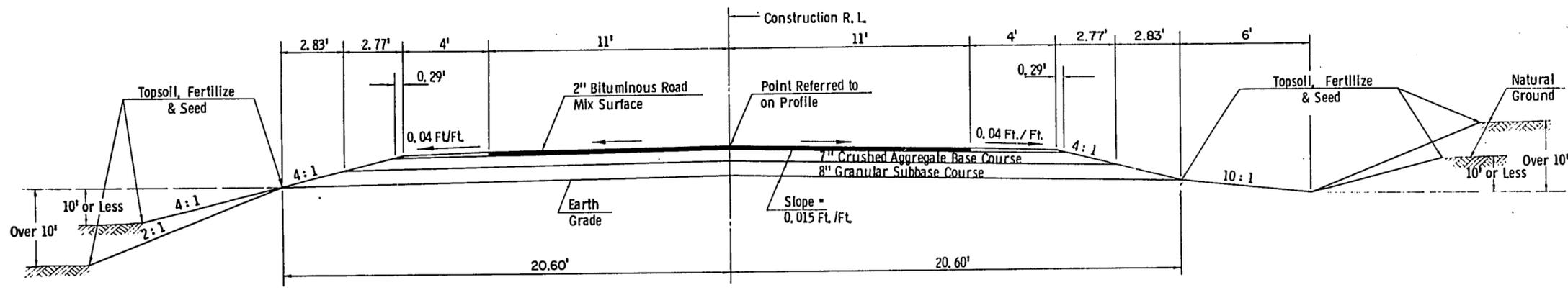
Salvaged topsoil shall be placed to an approximate depth of 3" at time of placing.
Cubic yards of fill as shown on the plansheets pertains to embankment constructed from unclassified excavation computed with a shrinkage of 20% to 35% and borrow excavation with a shrinkage of 15%.
Private utility companies 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

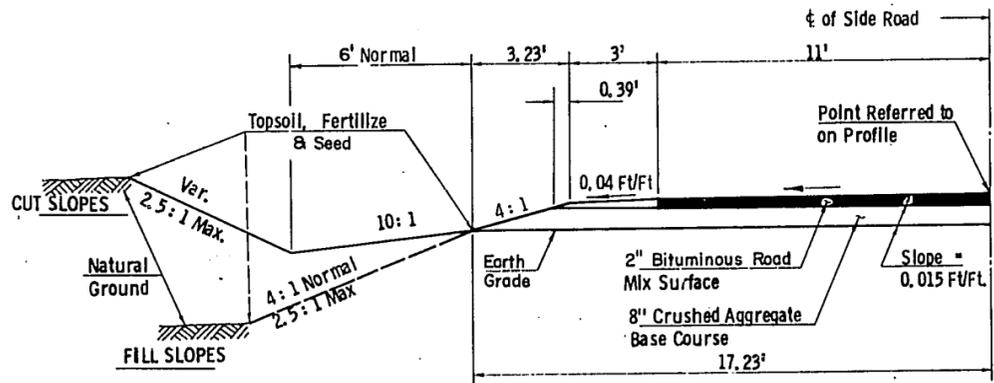
- General Telephone Company
- Oconto Electric Cooperative
- Michigan-Wisconsin Pipe Line Co.
- Chicago & Northwestern Railway Co.

STANDARD DETAIL DRAWINGS

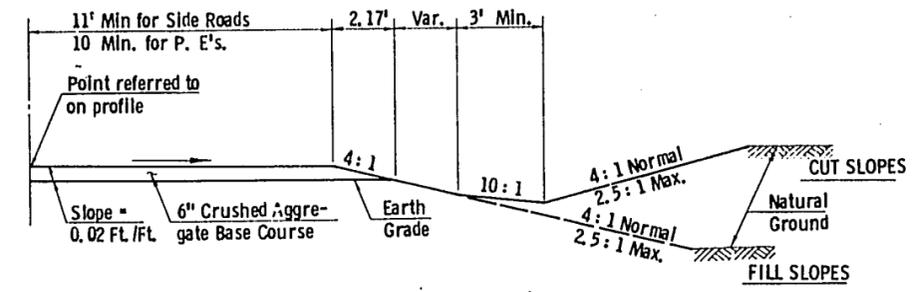
- Marsh Excavation 1-1.1.2
- Pavement Details For Railroad Approach 2-2.1.12
- Apron Endwalls For Culvert Pipe 6-2.6.8
- Marker Post 7-1.3.5
- Construction Barricade 7-4.1.5
- Design Details For Side Road At Grade Intersections 9-1.1.5
- Landmark Reference Monuments 12-1.1.3



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

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

CLEARING AND GRUBBING

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

GRANULAR SUBBASE COURSE

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

CRUSHED AGGREGATE BASE COURSE

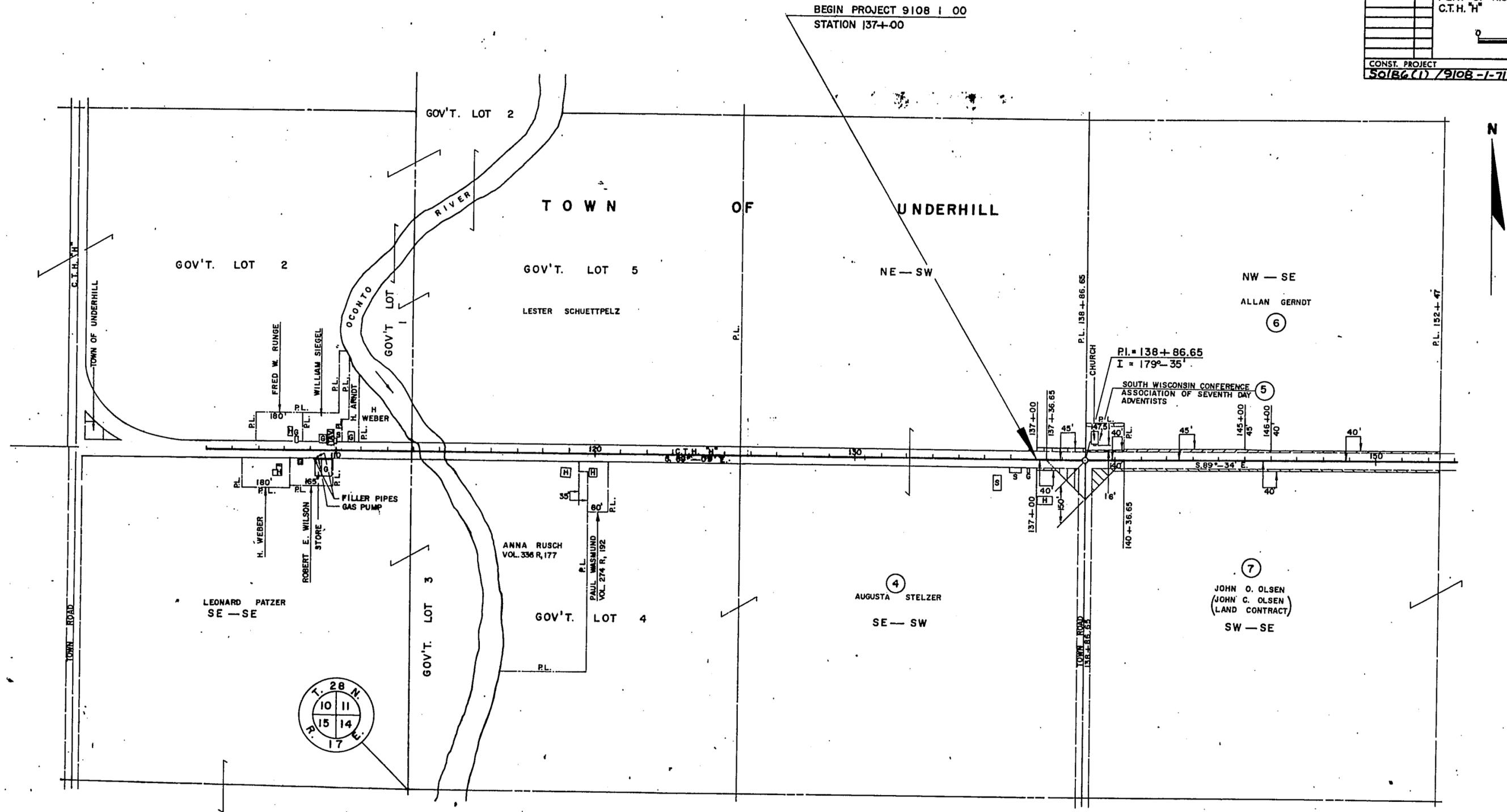
Location	Sq. Yds.	Approximate Cu. Yds.
MAINLINE	85,140	23,000
SIDE ROADS	5,700	1,550
PRIVATE ENTRANCES	2,860	800

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

SEEDING
MIXTURE NO. 1 111,000 SQ. YD.

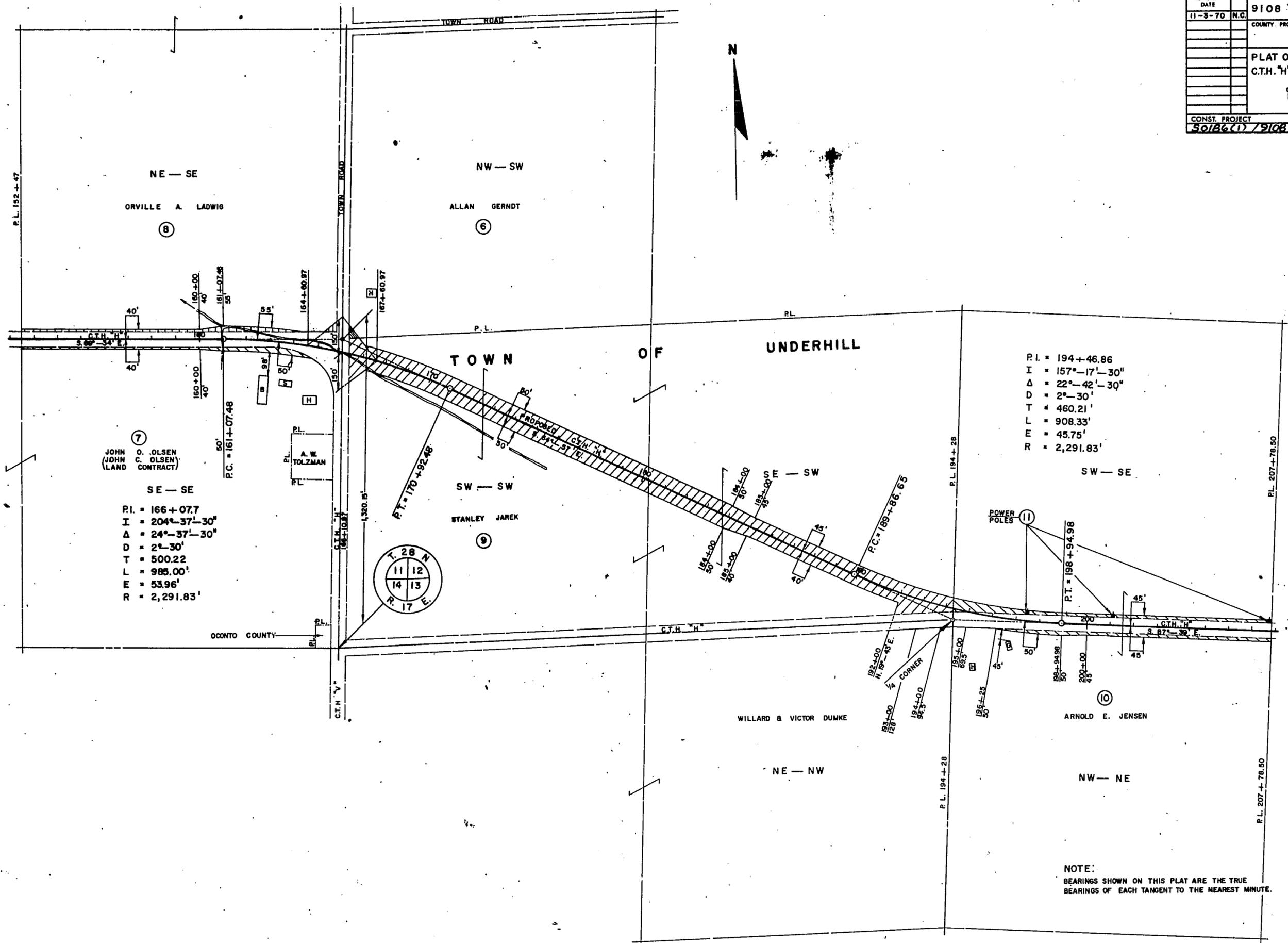
REVISION DATE	PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
11-3-70	9108 1 00	4.1	
	COUNTY PROJECT DESIGNATION		
	PLAT OF RIGHT OF WAY REQUIRED C.T.H. "H" OCONTO COUNTY		
	SCALE	400 FT.	
	DATE	9-25-70	
CONST. PROJECT		3.1-46	
So 186.11 / 9108-1-71			



BEGIN PROJECT 9108 1 00
STATION 137+00

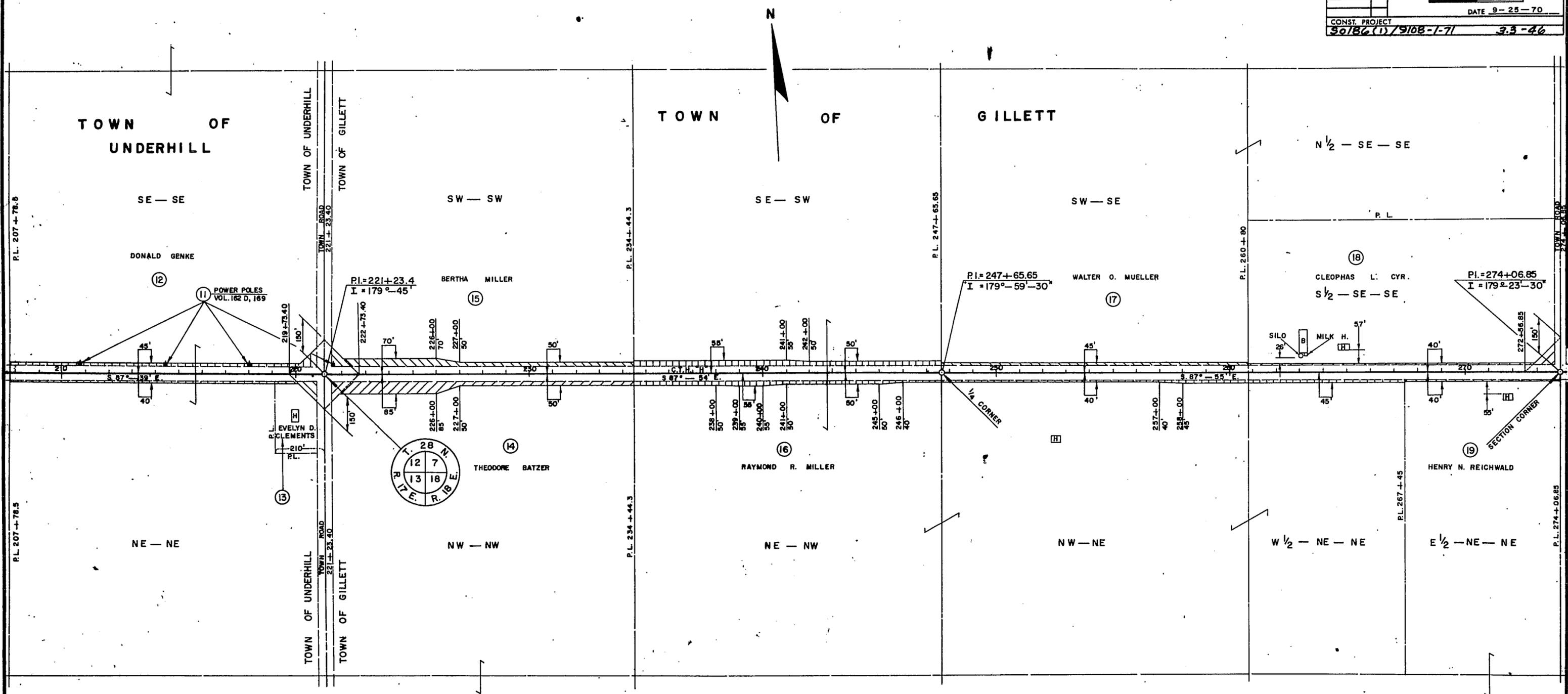
NOTE:
BEARINGS SHOWN ON THIS PLAT ARE THE TRUE
BEARINGS OF EACH TANGENT TO THE NEAREST MINUTE.

REVISION DATE	PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
11-3-70	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	



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
11-3-70	9108 1 00	4.3	
COUNTY PROJECT DESIGNATION			
PLAT OF RIGHT OF WAY REQUIRED			
C.T.H. "H" OCONTO COUNTY			
SCALE 0 400 Ft.			
DATE 9-25-70			
CONST. PROJECT			
90186(1)/9108-1-71		3.3-46	



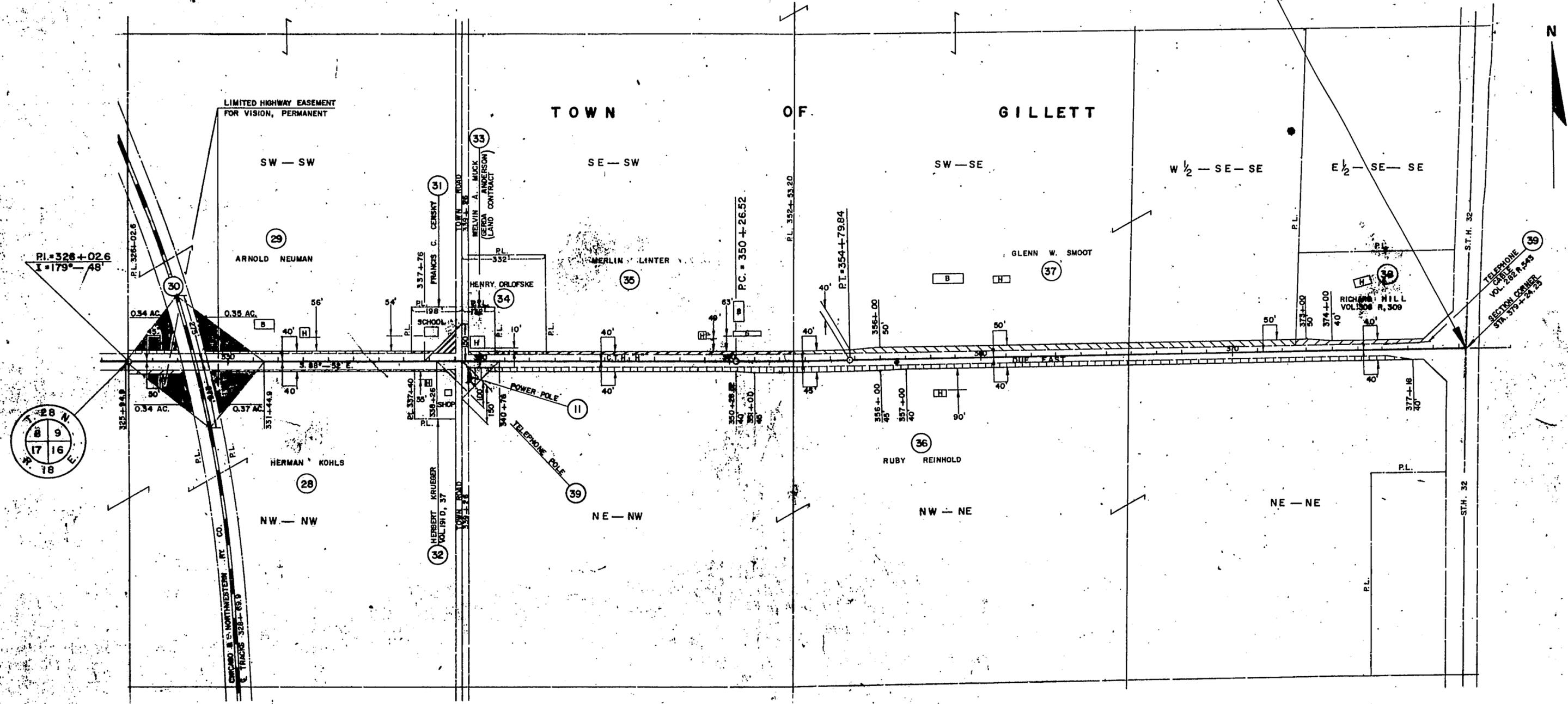
NOTE:
 BEARINGS SHOWN ON THIS PLAT ARE THE TRUE
 BEARINGS OF EACH TANGENT TO THE NEAREST MINUTE.

REVISION DATE	PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
11-3-70	9108 1 00	4, 5	
COUNTY PROJECT DESIGNATION			
PLAT OF RIGHT OF WAY REQUIRED			
C.T.H. "H" OCONTO COUNTY			
SCALE		400 Ft.	
DATE		9-25-70	
CONST. PROJECT		SCIB6(1) 9108-1-71	
		3-5-46	

P.I. = 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

TOWN OF GILLETT



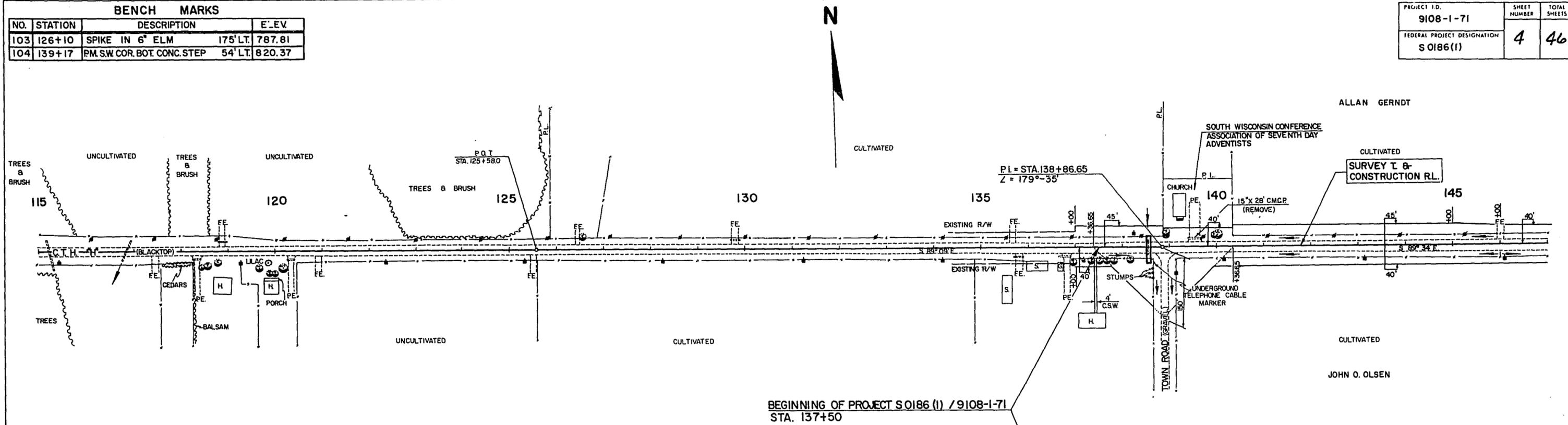
NOTE:
 BEARINGS SHOWN ON THIS PLAT ARE THE TRUE
 BEARINGS OF EACH TANGENT TO THE NEAREST MINUTE.

BENCH MARKS			
NO.	STATION	DESCRIPTION	E. EV.
103	126+10	SPIKE IN 6" ELM 175' LT.	787.81
104	139+17	PM. 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)		

NOTE BOOK
 ALPHABETICALLY ORDERED
 BY STATION NUMBER
 No. 887

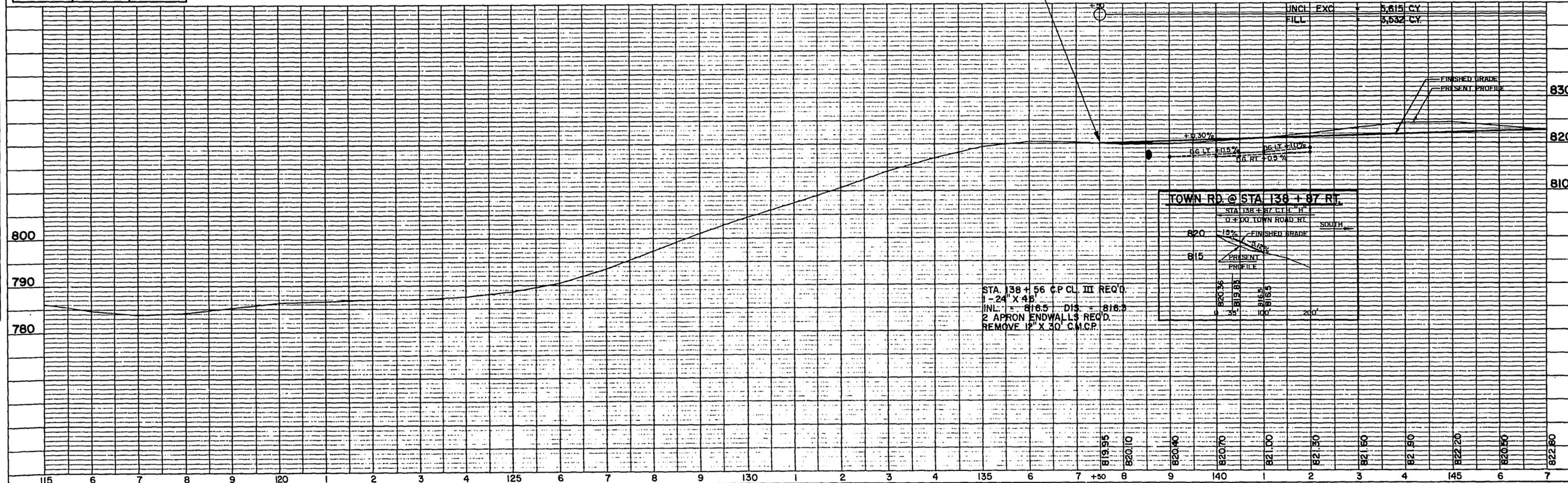
NOTE BOOK
 CHAINS ORDERED
 IN "A" POINT
 STRUCTURE NOTATIONS ORDERED
 No. 888



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

BEGINNING OF PROJECT S 0186 (1) / 9108-1-71
STA. 137+50

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

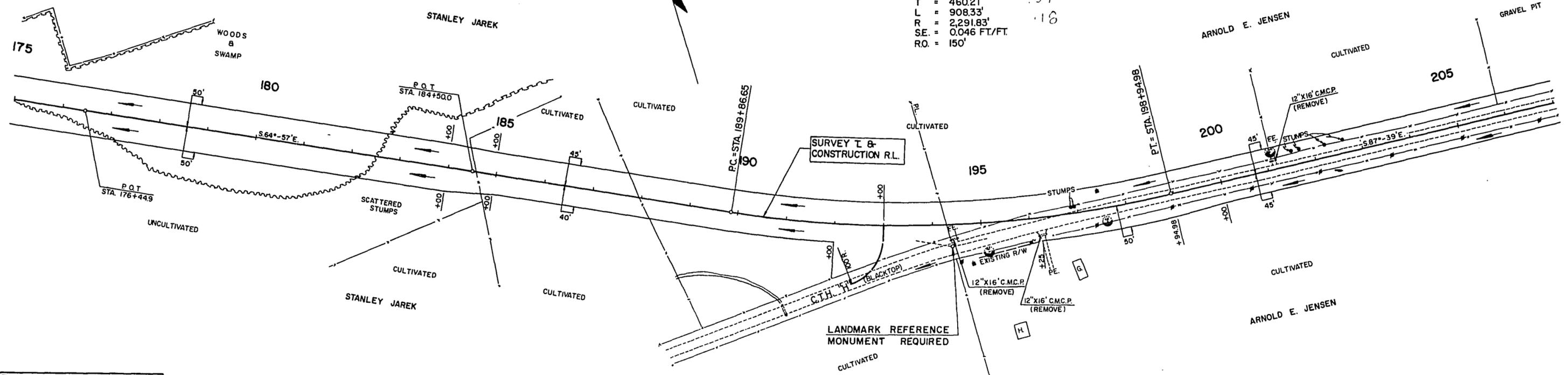


BENCH MARKS				
NO.	STATION	DESCRIPTION		ELEV.
108	188+00	SPIKE IN 24" ELM	300' RT	842.02
109	195+85	SPIKE IN 18" BOXELDER	250' RT	847.55
110	201+10	SPIKE IN 22" ELM	250' LT	850.42

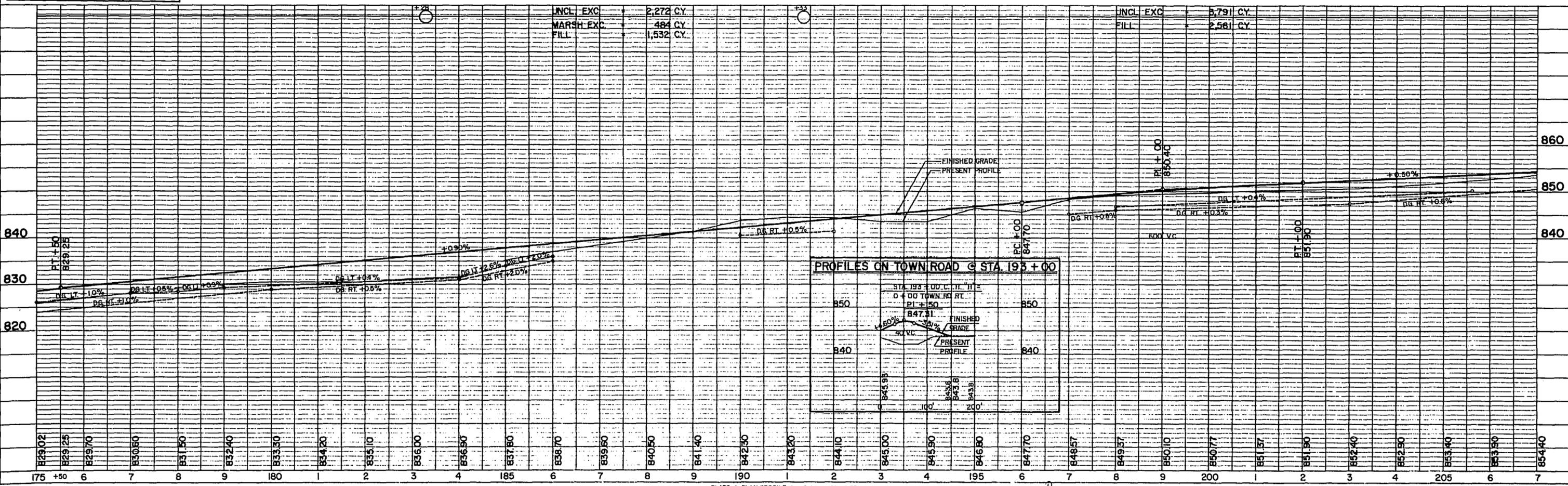
PROJECT ID	9108-1-71	SHEET NUMBER	6	TOTAL SHEETS	46
FEDERAL PROJECT DESIGNATION	S 0186 (1)				

CURVE NOTES

PI = 194 + 46.86
 L = 157°-17'-30"
 Δ = 22°-42'-30"
 D = 2°-30'
 T = 460.21'
 L = 908.33'
 R = 2,291.83'
 SE = 0.046 FT./FT.
 RO = 150'



NET LENGTH OF CENTERLINE		
STATION TO STATION	LIN. FT.	
175+00	205+00	3,000.00

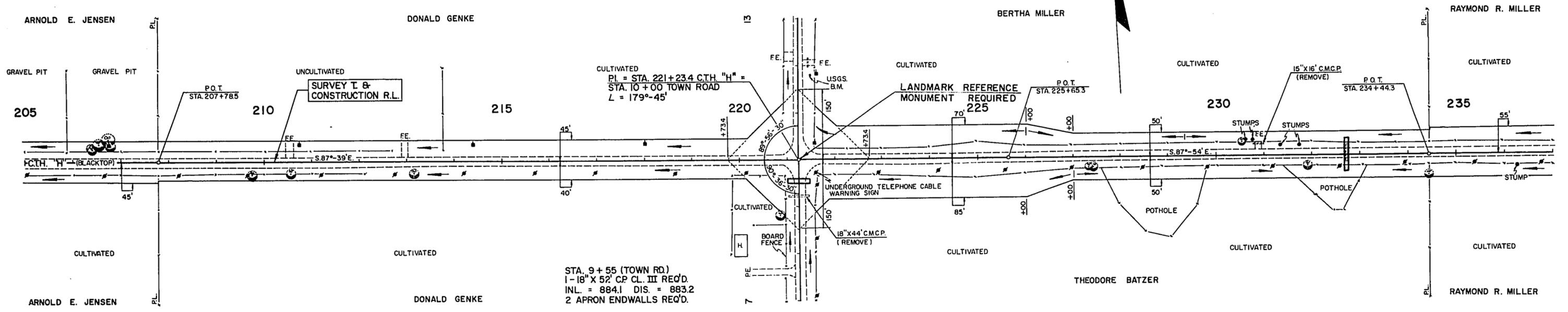


PROFILES ON TOWN ROAD C STA. 193 + 00

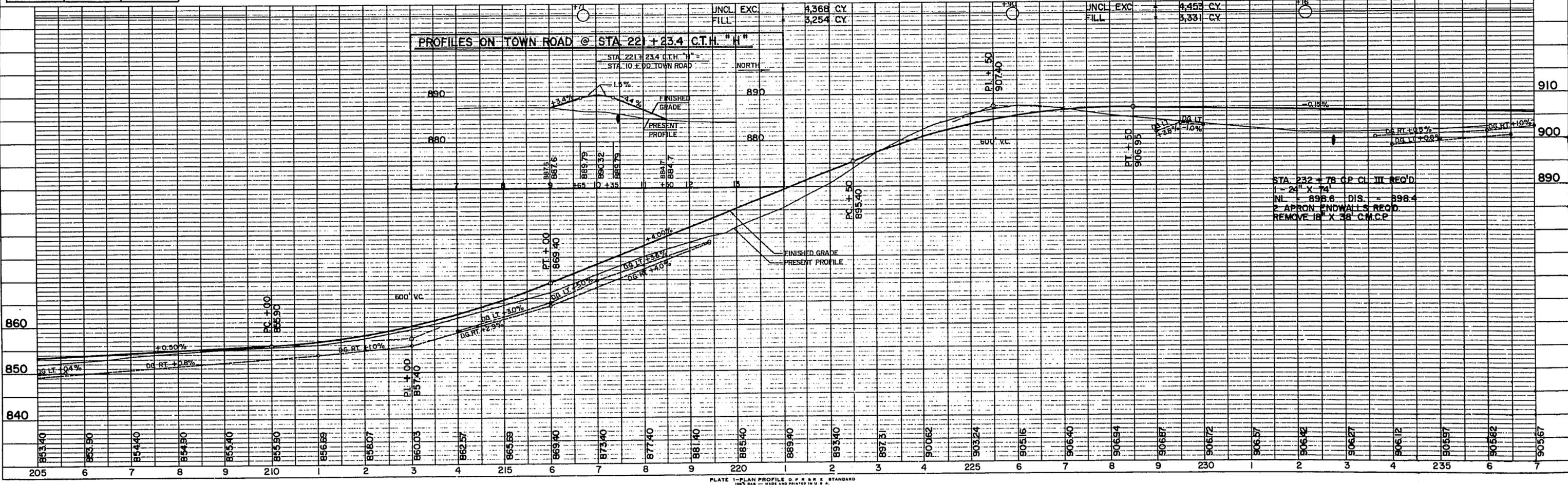
STA. 193 + 00	FINISHED GRADE	847.31
STA. 193 + 00	PRESENT PROFILE	847.31
STA. 193 + 00	GRAVEL PIT	847.31

BENCH MARKS				
NO.	STATION	DESCRIPTION		ELEV.
111	207+78	SPIKE IN 14" ELM	175' LT.	855.90
		U.S.G.S. "2 HK 1955"		884.62
112	234+43	SPIKE IN 12" ELM	42' RT.	902.31

STA. 221 + 234 (TOWN RD. LT. & RT.)
 DESIGN TYPE "C" INTERSECTION REQ'D.
 (SEE STANDARD DETAIL DRAWING NO. 9-1.1.5)



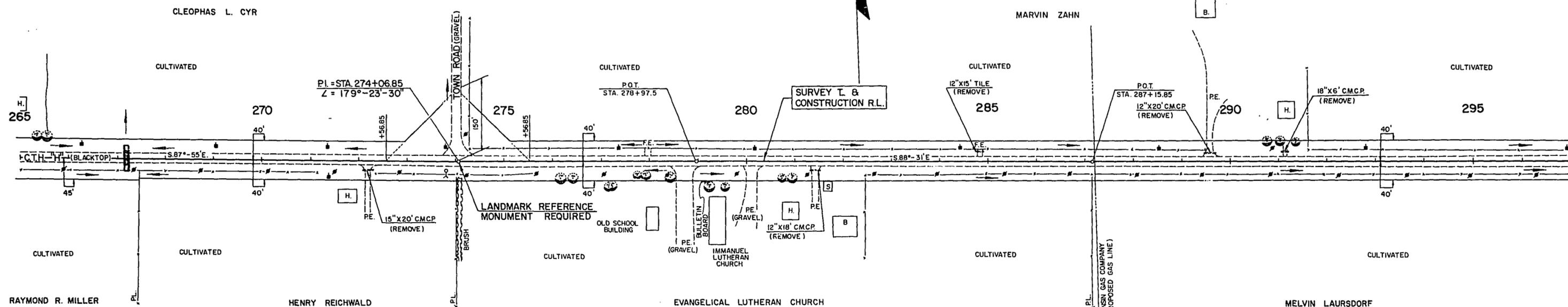
NET LENGTH OF CENTERLINE		
STATION TO STATION		LIN. FT.
205+00	235+00	3,000.00



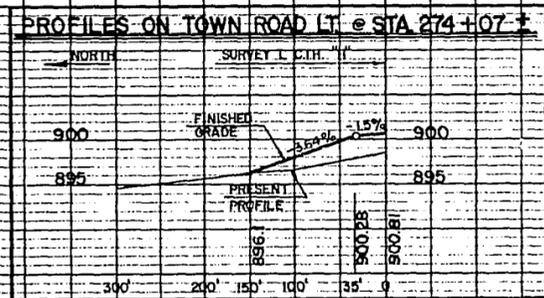
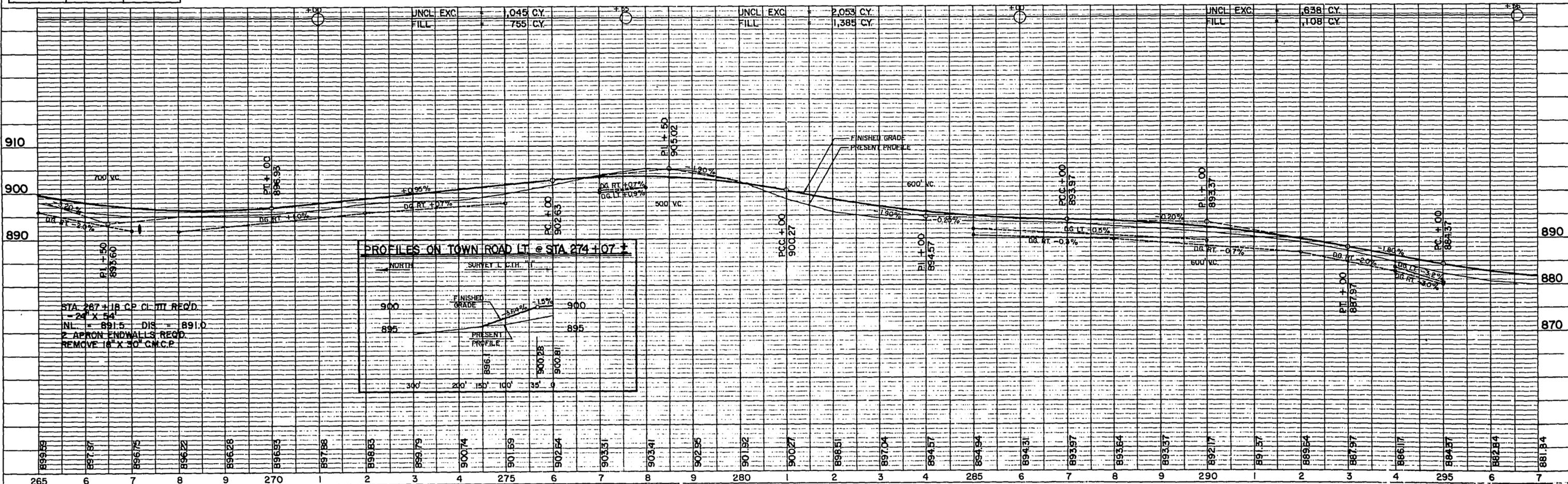
BENCH MARKS				
NO.	STATION	DESCRIPTION		ELEV.
115	277+30	SPIKE IN TWIN 20" ELM	60'RT.	905.06
116	282+50	SPIKE IN 4" B.E.	100'RT.	892.77
117	290+16	SPIKE IN 16" APPLE	108'LT.	893.27

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

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

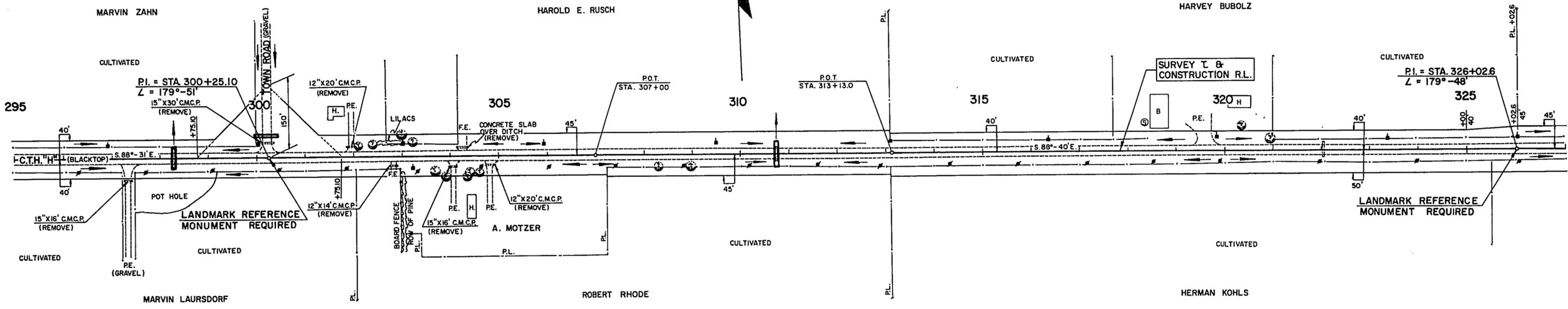


NET LENGTH OF CENTERLINE		
STATION TO STATION	LIN. FT.	
265+00	295+00	3,000.00

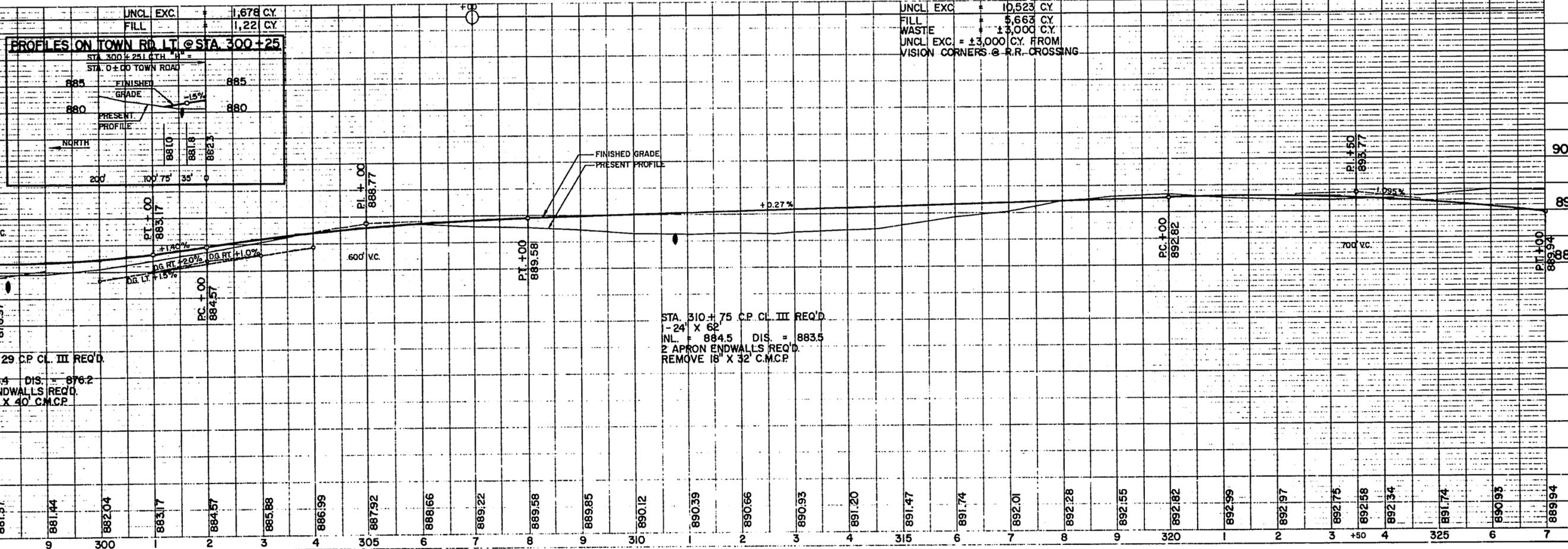


BENCH MARKS				ELEV.
NO.	STATION	DESCRIPTION		
118	297+48	SPIKE IN TELEPHONE POLE	80' RT.	878.73
119	301+45	SPIKE IN 18" B.E.	75' LT.	884.23
120	304+95	SPIKE IN 16" ASH	80' RT.	891.04
121	320+00	SPIKE IN 14" MAPLE	80' LT.	891.42

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.



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



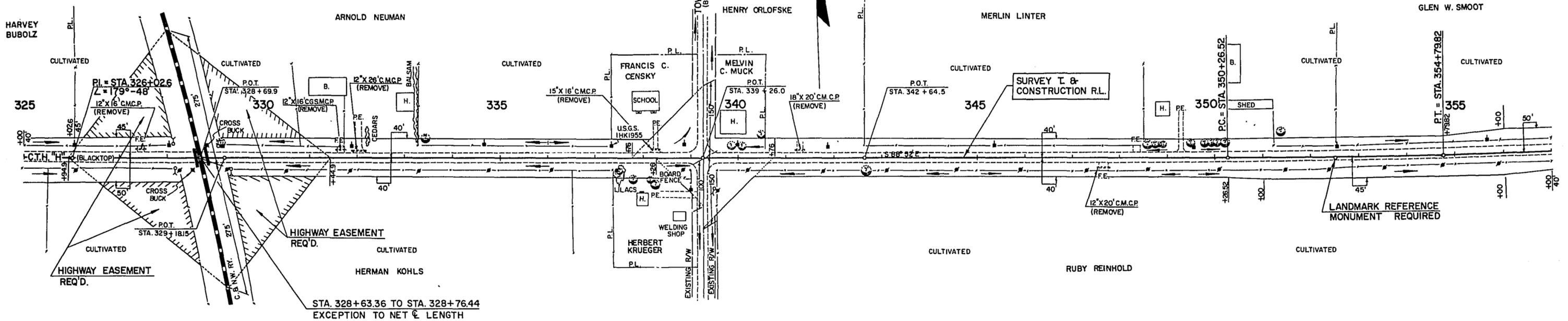
NOTE BOOK ALIGNMENT CHECKED BY: A. J. K. No. 887

NOTE BOOK GRADE CHECKED BY: A. J. K. No. 888

BENCH MARKS				
NO.	STATION	DESCRIPTION		ELEV.
122	328+50	SPIKE IN 24" OAK	175' RT.	890.61
123	332+15	SPIKE IN 10" MAPLE	90' LT.	894.85
124	338+35	PAINT MARK ON TOP OF BOTTOM STEP (S.E. CORNER OF EAST STEPS) OF SCHOOL	85' LT.	892.15
125	351+39	SPIKE IN 30" OAK	50' LT.	892.92

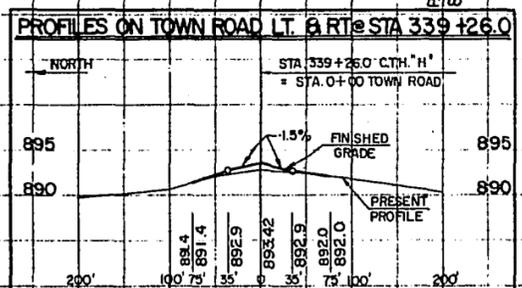
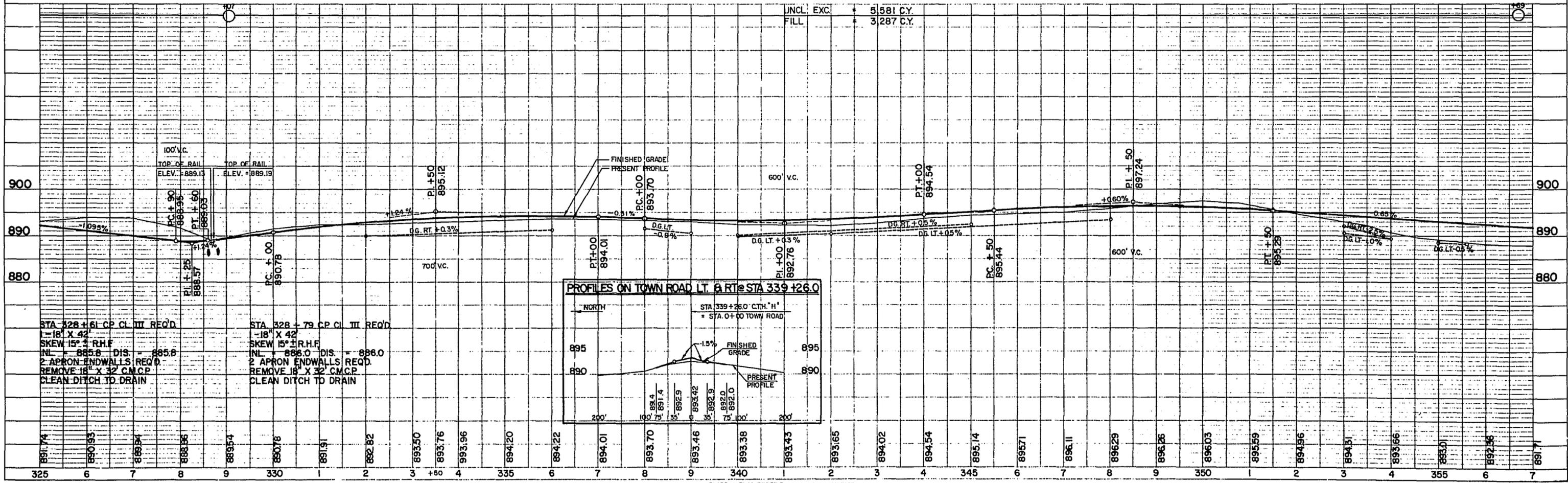
CURVE NOTES	
PI.	= 352+53.2
L	= 178°-52'
Δ	= 1°-08'
D	= 0°-15'
T	= 226.68'
R	= 453.32'
SE.	= 22,918.31
	N.C.

PROJECT ID	SHEET NUMBER	TOTAL SHEETS
9108-1-71	11	46
FEDERAL PROJECT DESIGNATION	S 0186(1)	

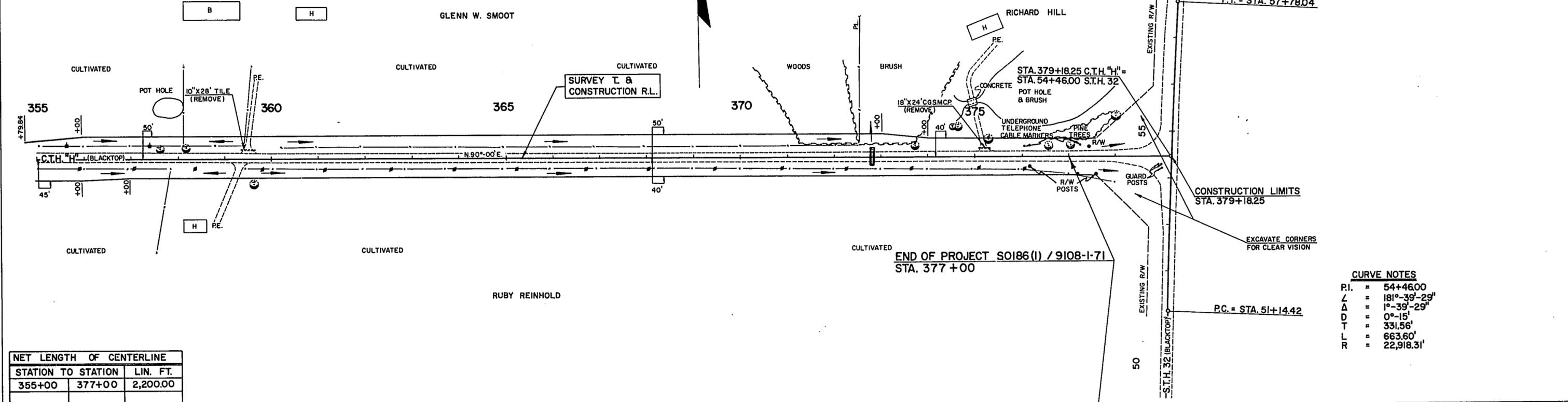


NET LENGTH OF CENTERLINE		
STATION TO STATION	LIN. FT.	
325+00	355+00	2,986.92

STA. 339+26 (TOWN RD.)
TYPE 'C' INTERSECTION REQ'D. RT. & LT.



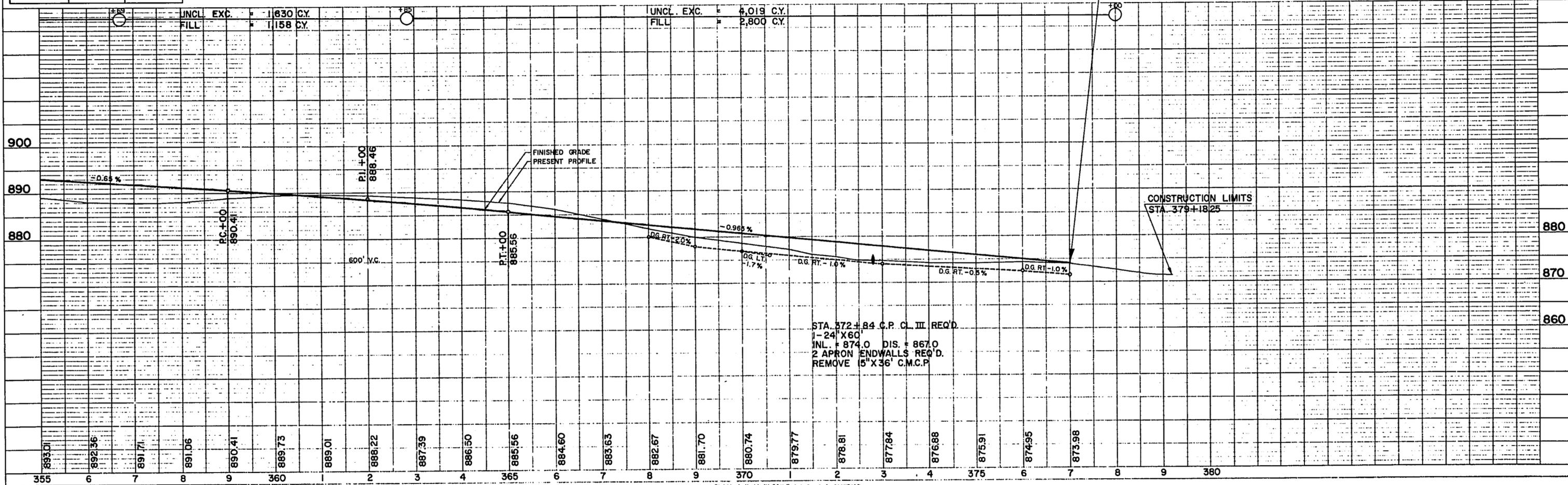
BENCH MARKS				
NO.	STATION	DESCRIPTION		ELEV.
126	359+67	SPIKE IN 10" APPLE	50' RT.	889.07
127	370+80	SPIKE IN 10" OAK	100' LT.	875.95
128	374+60	SPIKE IN 20" PINE	70' LT.	871.39
129	377+70	SPIKE IN 13" PINE	70' LT.	871.71



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

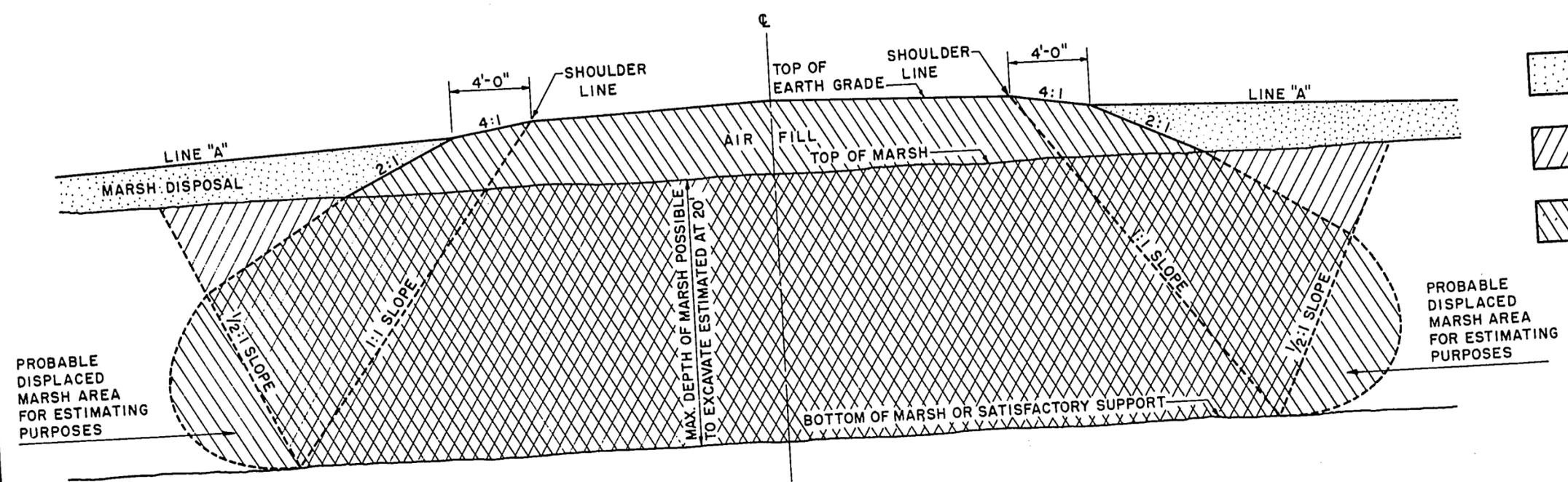
CURVE NOTES

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



NOTE BOOK ALIGNMENT CHECKED No. 887

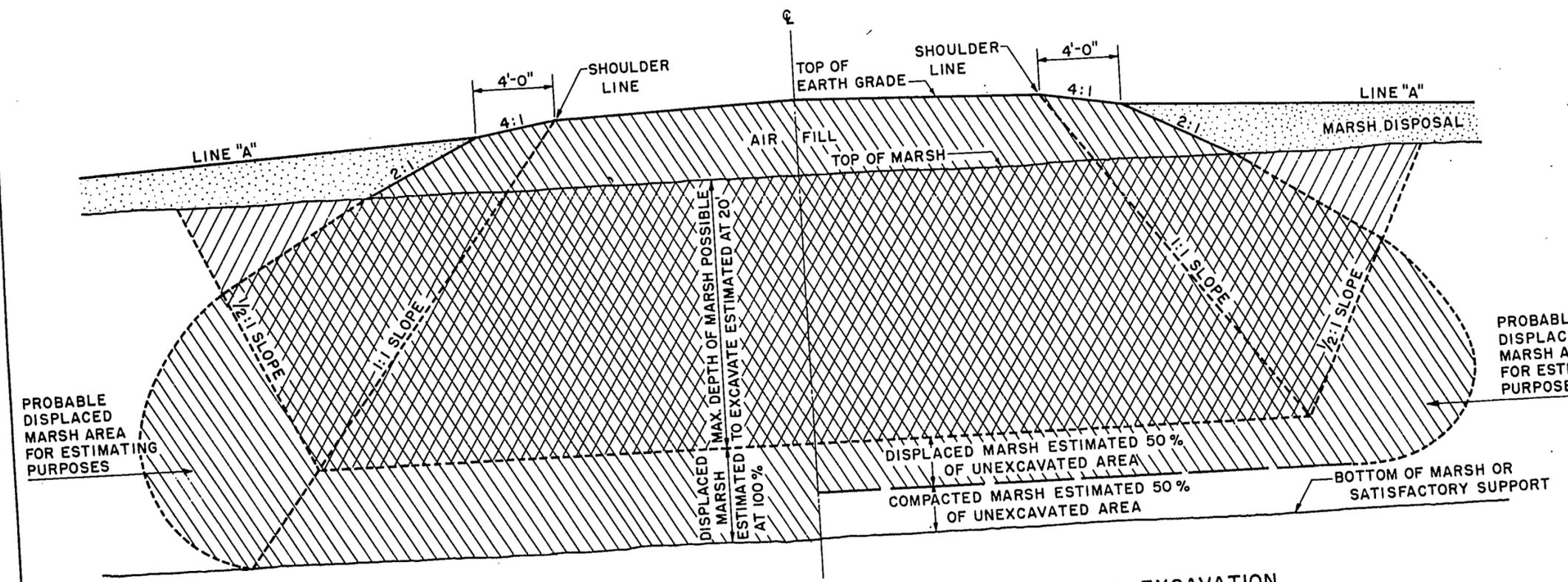
NOTE BOOK GRADES CHECKED E. A. J. K. No. 888 STRUCTURE NOTATIONS CHECKED A. J. K. 4-70



COMPLETE MARSH EXCAVATION

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

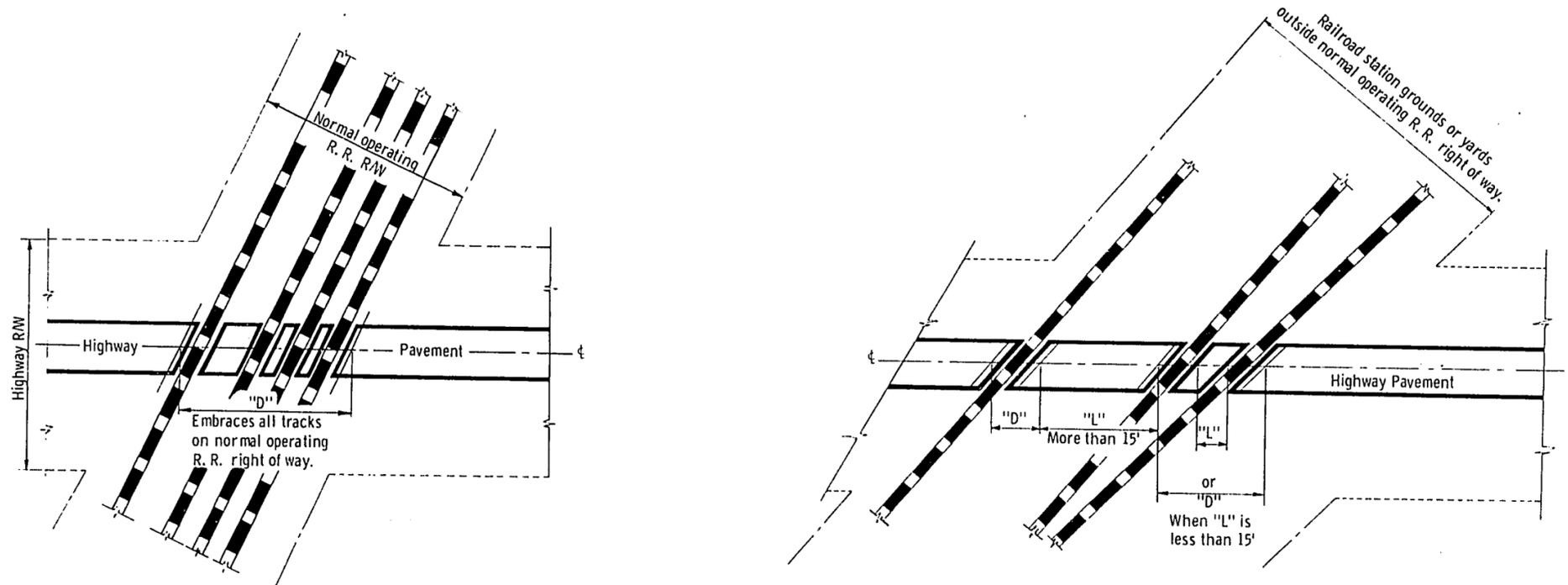
GENERAL NOTES
 DETAILS OF CONSTRUCTION NOT SHOWN SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
 ANY MATERIAL TEMPORARILY PLACED ABOVE THE LINE MARKED "LINE A" IS TO BE REMOVED UPON COMPLETION OF THE AIR FILL.



PARTIAL EXCAVATION PLUS 100% DISPLACEMENT

PARTIAL EXCAVATION PLUS 50% DISPLACEMENT

MARSH EXCAVATION	
STATE HIGHWAY COMMISSION OF WISCONSIN	
RECOMMENDED FOR APPROVAL:	
DATE <u>2/11/52</u>	 CONSTRUCTION ENGINEER
APPROVED:	
DATE <u>2/11/52</u>	 STATE HIGHWAY ENGINEER
DRAWN LJD	1-1.1.2
CHECKED	

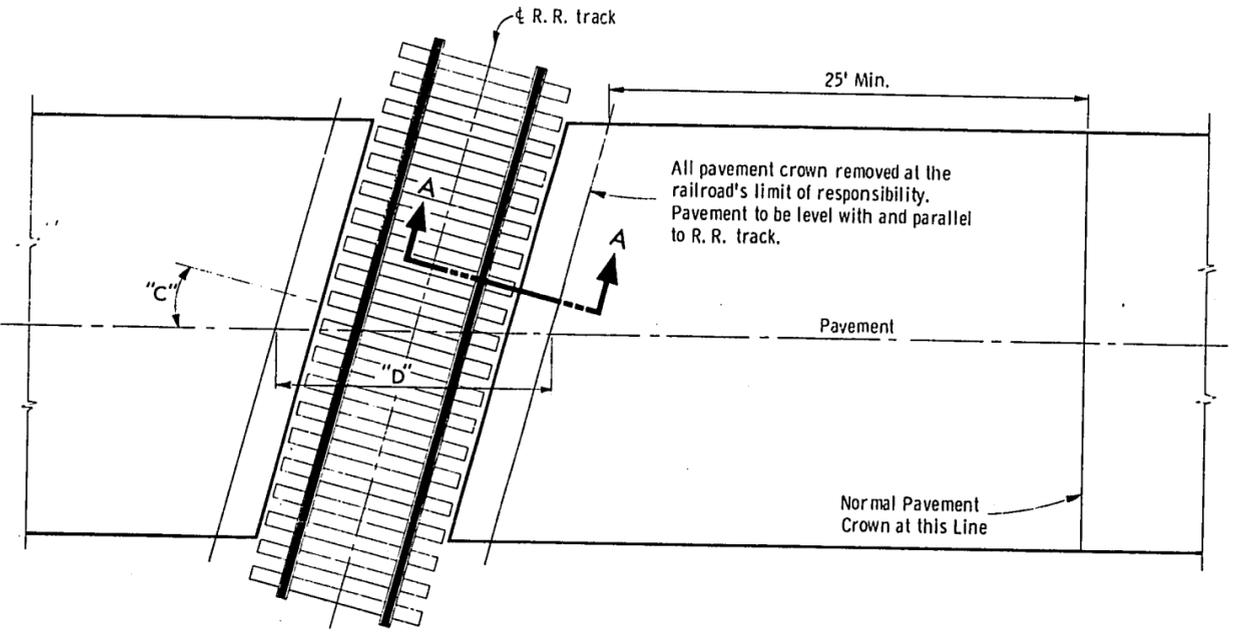


**TYPICAL TYPES OF RAILROAD GRADE CROSSINGS
SHOWING THE RAILROAD'S LIMIT OF RESPONSIBILITY
AND MEASUREMENT DETAILS**

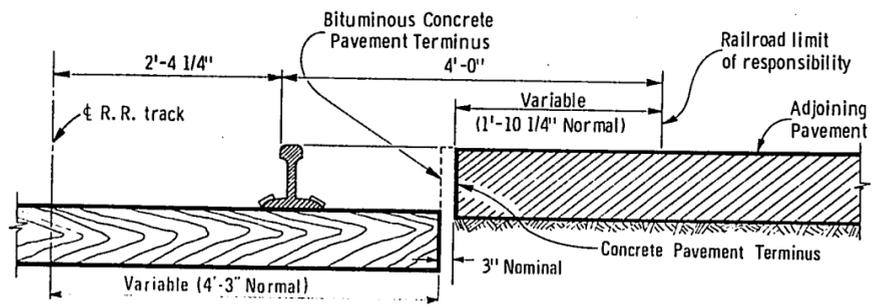
GENERAL NOTES

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.



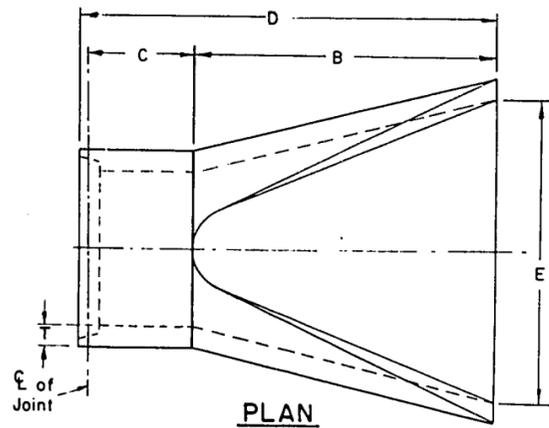
NOTE: $D = 12.71$
Cos. "C"



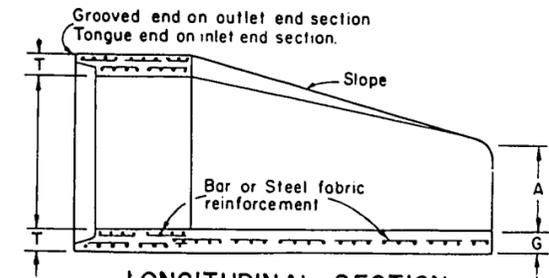
SECTION 'A-A'

**RAILROAD APPROACH
CONSTRUCTION DETAILS**

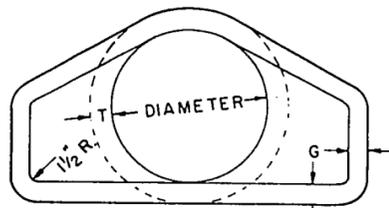
PAVEMENT DETAILS FOR RAILROAD APPROACH	
State of Wisconsin Department of Transportation Division of Highways	
RECOMMENDED FOR APPROVAL: DATE: 3/3/69	<i>E.J. Byrd</i> CHIEF DESIGN ENGINEER
APPROVED: DATE: 3/27/69	<i>H. J. ...</i> STATE HIGHWAY ENGINEER



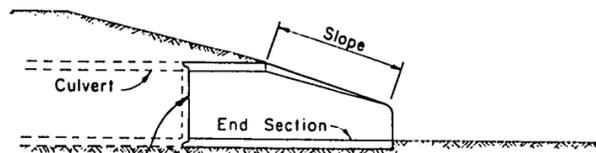
PLAN



LONGITUDINAL SECTION



END VIEW

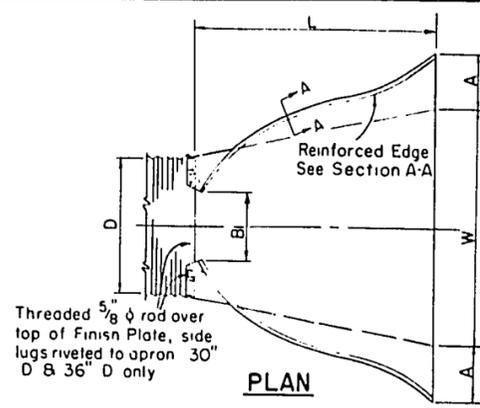


SLOPE DETAIL

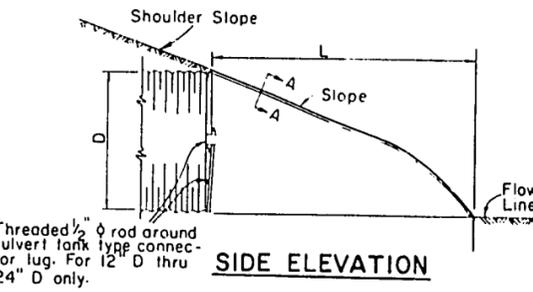
DIA	APPROX WEIGHT / SECTION	APPROX SLOPE	T	A	B	C	D	E	G
12"	530	3 to 1	2"	4"	24"	48 7/8"	72 7/8"	24"	2"
15"	740	3 to 1	2 1/4"	6"	27"	46"	73"	30"	2 1/4"
18"	990	3 to 1	2 1/2"	9"	27"	46"	73"	36"	2 1/2"
21"	1280	3 to 1	2 3/4"	9"	36"	37 1/2"	73 1/2"	42"	2 3/4"
24"	1520	3 to 1	3"	9 1/2"	43 1/2"	30"	73 1/2"	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	96 1/4 min 98 max	90"	5"
60"	8730	2 to 1	6"	30"	60"	39"	99"	96"	5"
66"	10,630	2 to 1	6 1/2"	30"	72 min 78 max	21 min 27 max	99"	102"	5 1/2"
72"	12,520	2 to 1	7"	36"	78 min 84 max	21 min 27 max	99"	108"	6"
78"	14,430	2 to 1	7 1/2"	36"	78 min 84 max	21 min 27 max	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

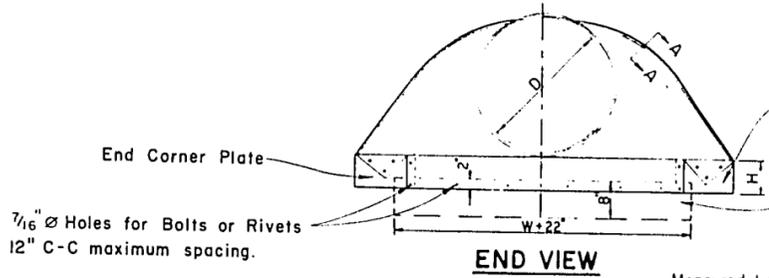
APRON ENDWALLS FOR CULVERT PIPE



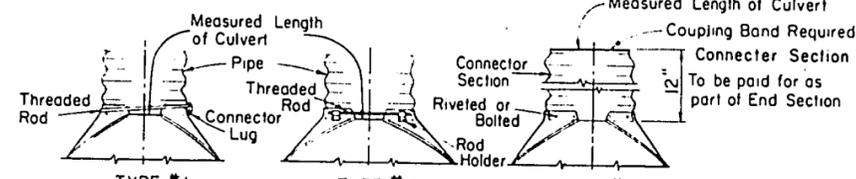
PLAN



SIDE ELEVATION



END VIEW

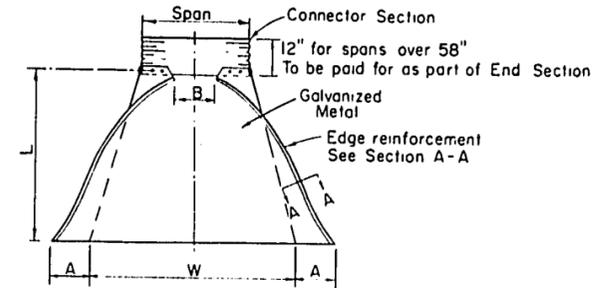


CONNECTION DETAILS

D Pipe Diam	Gage Min	Dimensions					Approx Slope
		A ± 1"	B Max ± 1"	H ± 1/2"	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

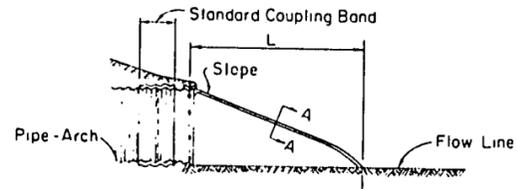
Note: All splices to be lap riveted or bolted.

METAL APRON ENDWALLS

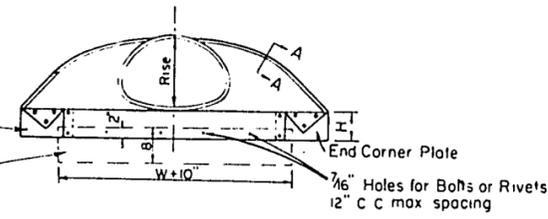


PLAN

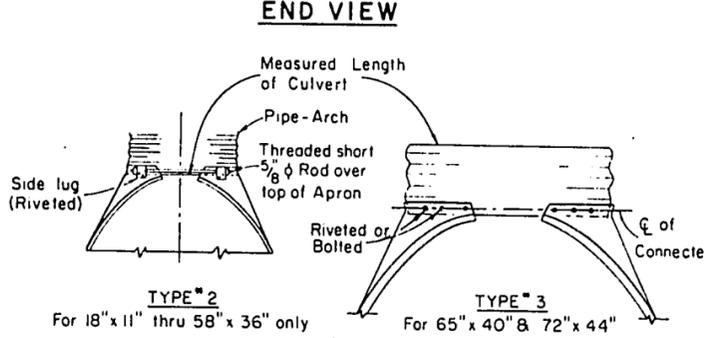
showing alternate type with connector section



SIDE ELEVATION



END VIEW

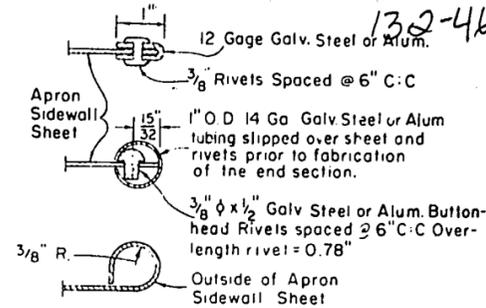


CONNECTION DETAILS

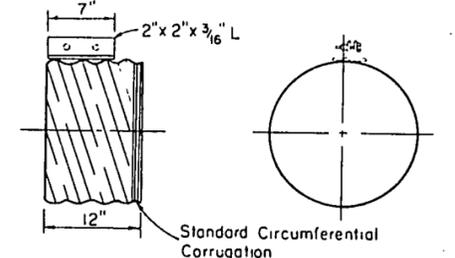
Pipe - Arch Dimensions	Gage Min.	Dimensions					Approx. Slope
		A ± 1"	B Max.	H ± 1/2"	L ± 1/2"	W ± 2"	
18" x 11"	16	7"	9"	6"	19"	30"	2 1/2 to 1
22" x 13"	16	7"	10"	6"	23"	36"	"
25" x 16"	16	8"	12"	6"	28"	42"	"
29" x 18"	16	9"	14"	6"	32"	48"	"
36" x 22"	14	10"	16"	6"	39"	60"	"
43" x 27"	14	12"	18"	8"	46"	75"	"
50" x 31"	12	13"	21"	9"	53"	85"	"
58" x 36"	12	18"	26"	12"	63"	90"	"
65" x 40"	12	18"	30"	12"	70"	102"	2 1/4 to 1
72" x 44"	12	18"	33"	12"	77"	114"	"

Note: All splices to be lap riveted or bolted

APRON ENDWALLS FOR PIPE ARCH



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 herein 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.

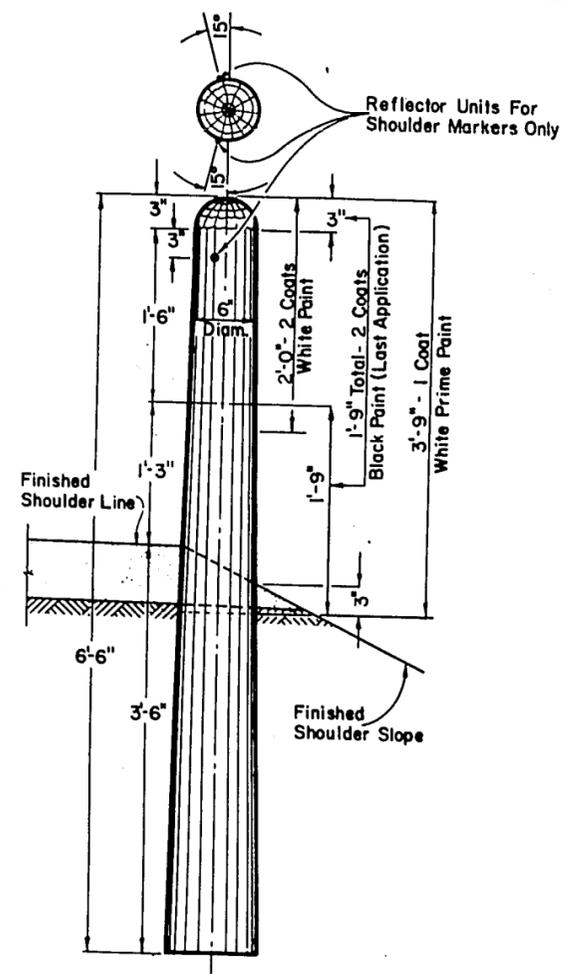
When two or more pipes or pipe arches with apron endwalls are to be laid adjacent to each other, they shall be separated by the following amount:

- 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.

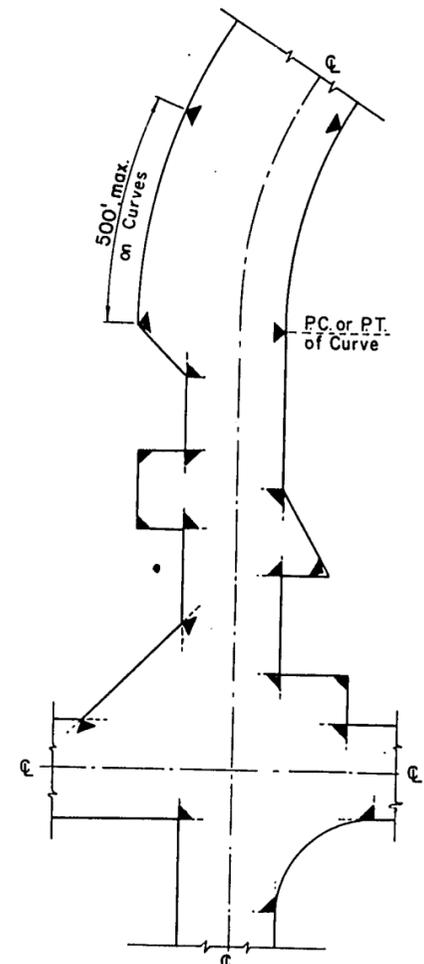
APRON ENDWALLS FOR CULVERT PIPE & PIPE ARCH

State of Wisconsin
Department of Transportation
Division of Highways

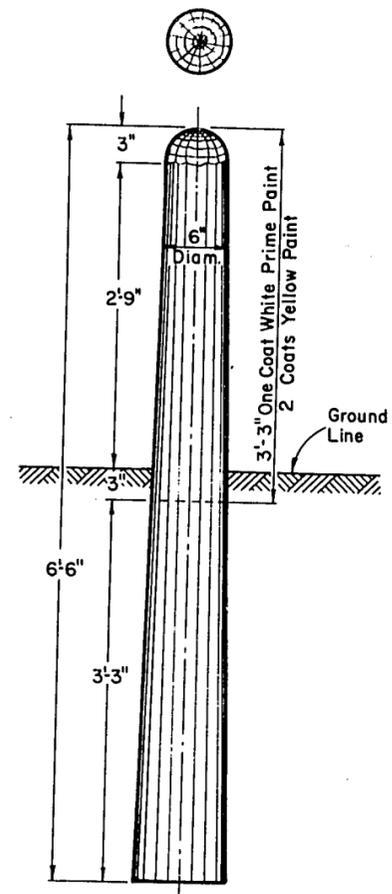
RECOMMENDED FOR APPROVAL:
DATE: 12/9/69
E. J. Bykitt
CHIEF DESIGN ENGINEER
DATE: 12/30/69
H. J. Dammeter
STATE HIGHWAY ENGINEER



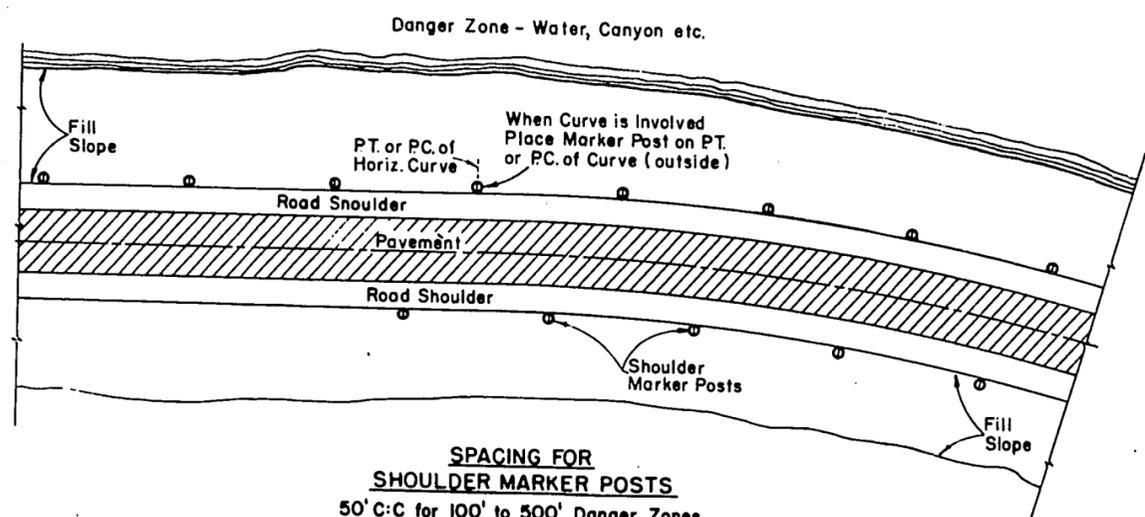
MARKER POST FOR ROAD SHOULDERS



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	<i>E.J. Byrkit</i> CHIEF DESIGN ENGINEER
APPROVED: DATE 7/9/66	<i>H.S. Summerville</i> STATE HIGHWAY ENGINEER
Plate No. 7-1.3.5	

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 perceptible 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.

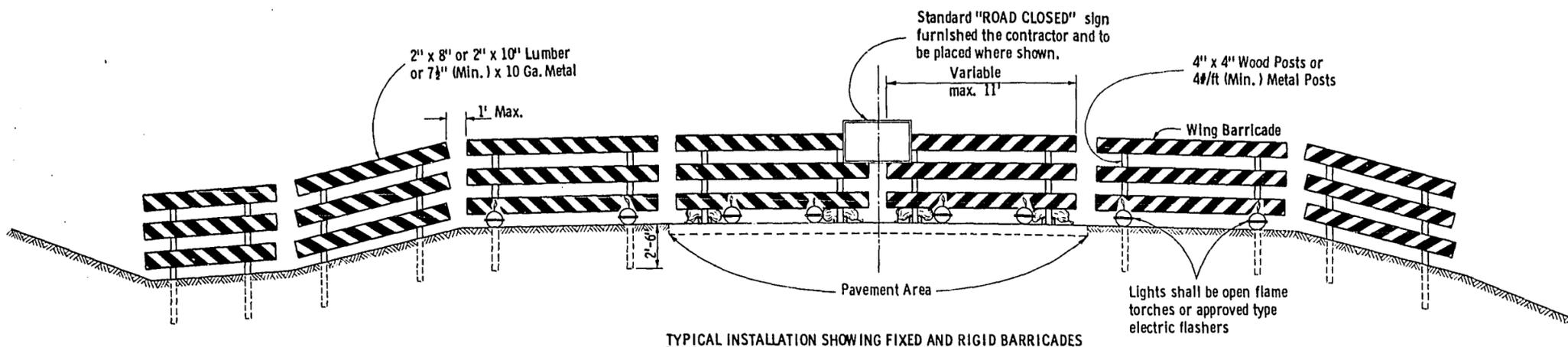
The stripes on wing barricades shall point downward toward the roadway.

LIGHTING:

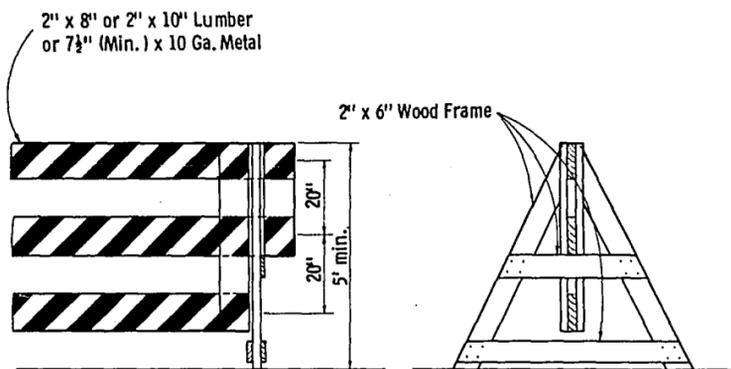
Lighting devices for barricades shall conform to the requirements of the Standard Specifications.

MEASUREMENT & PAYMENT:

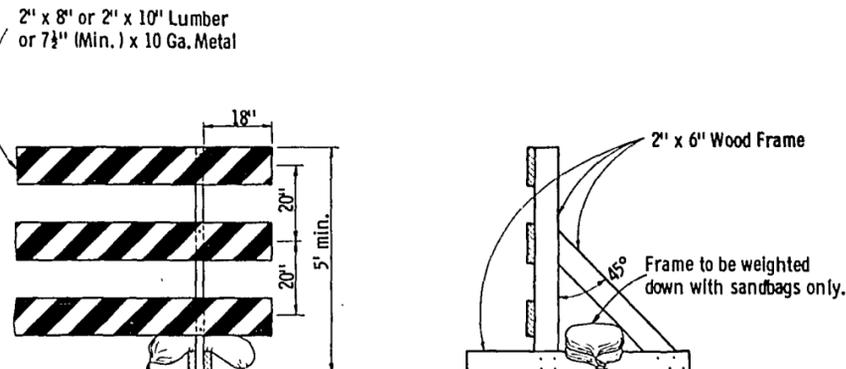
All barricades, unless otherwise provided for in the plans and/or special provisions shall be furnished, placed, and maintained as noted above, and no additional compensation will be allowed but shall be construed to be included in the price bid for other items.



TYPICAL INSTALLATION SHOWING FIXED AND RIGID BARRICADES

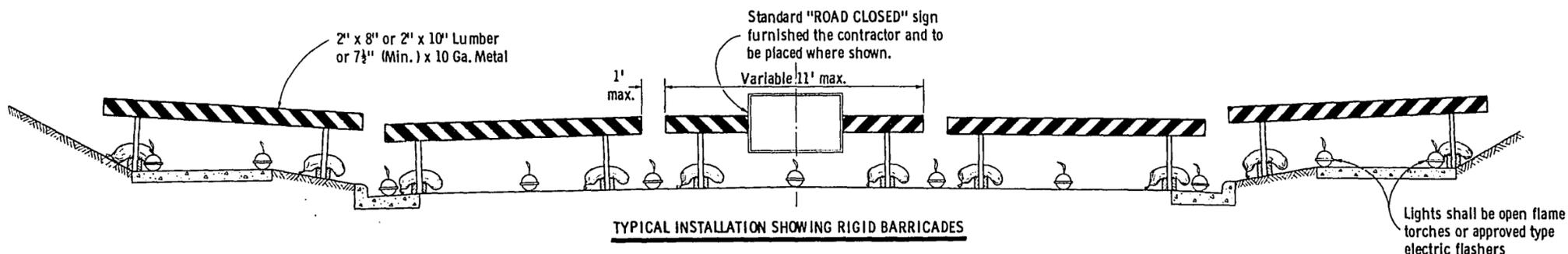


ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

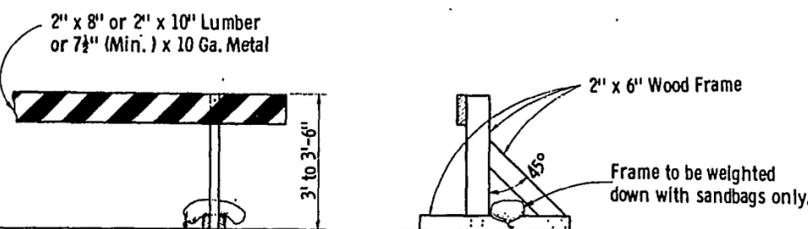


ALTERNATE TYPE INSTALLATION (RIGID)

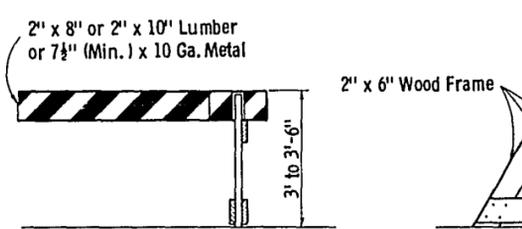
CLASS I BARRICADES



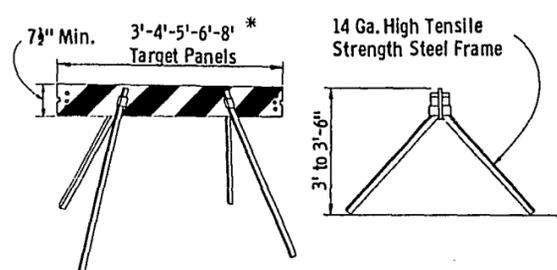
TYPICAL INSTALLATION SHOWING RIGID BARRICADES



ALTERNATE TYPE INSTALLATION (RIGID)

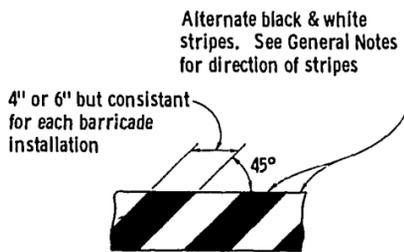


ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)



ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

CLASS II BARRICADES



TYPICAL DIAGONAL STRIPES
Applies to all Classes & Types of Barricades

CONSTRUCTION BARRICADE

State Highway Commission of Wisconsin

RECOMMENDED FOR APPROVAL:

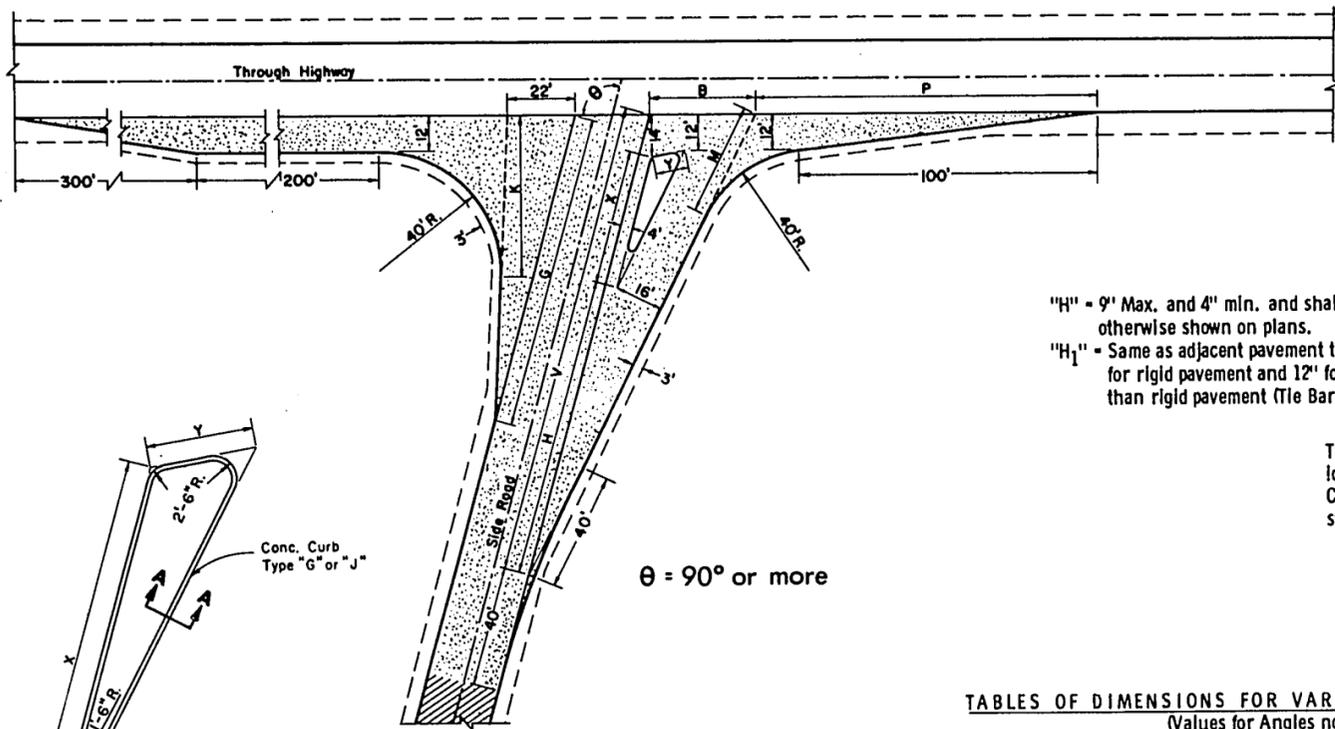
1/11/67
DATE

E. J. Bobb
CHIEF DESIGN ENGINEER

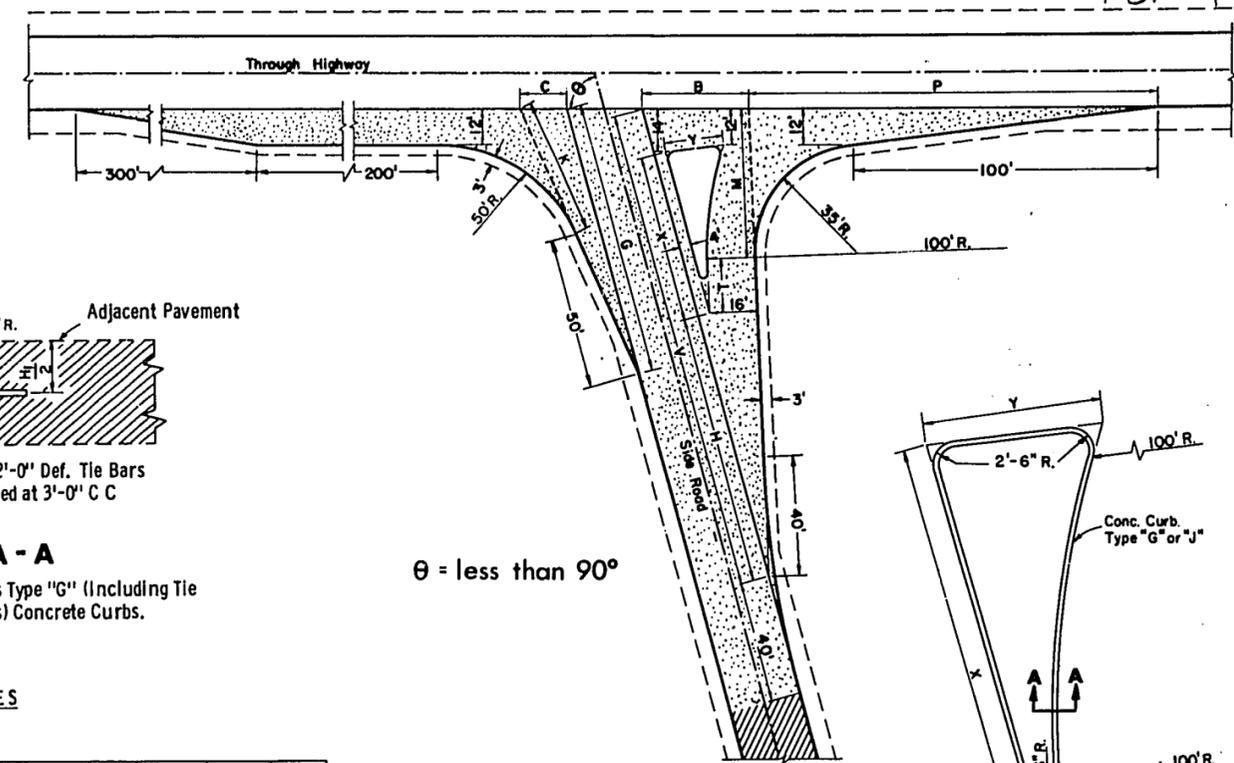
APPROVED:

1/13/67
DATE

J. J. Lummata
STATE HIGHWAY ENGINEER



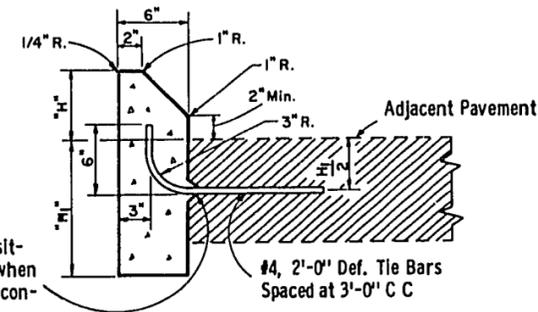
$\theta = 90^\circ$ or more



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

"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

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.

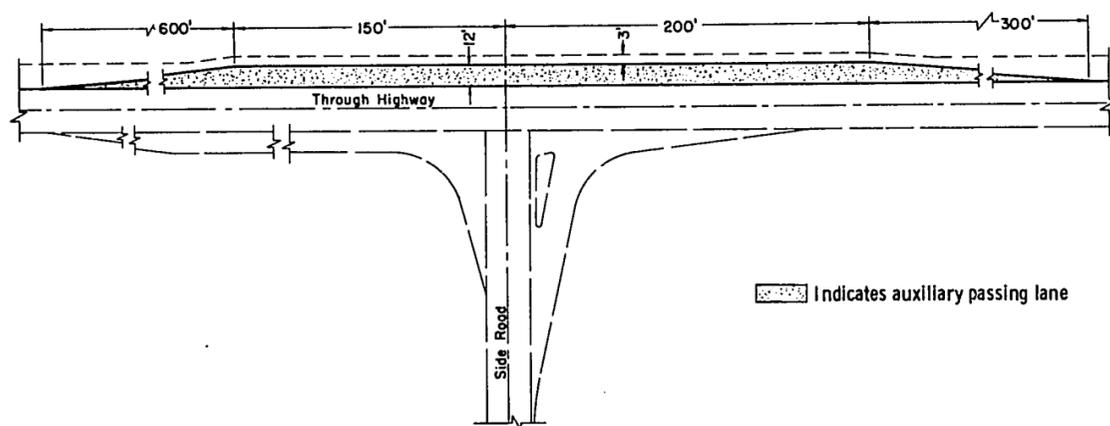
SIDE ROAD SURFACING NOTE

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.

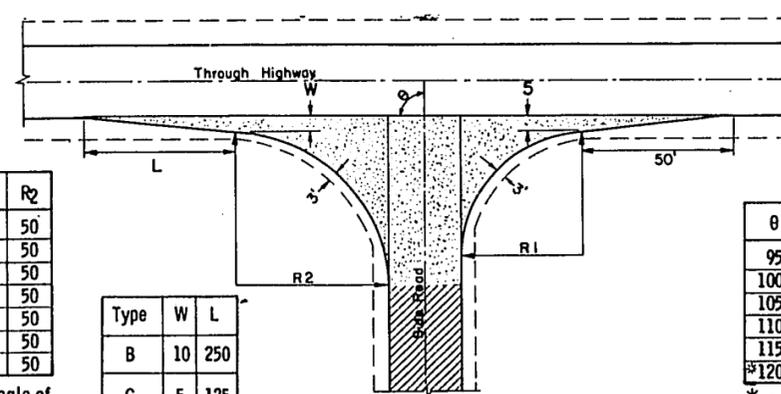
If the side road is presently paved, new pavement shall be placed to the limits of design as shown and beyond, if necessary, to meet existing pavement.

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:

8/9/67

DATE

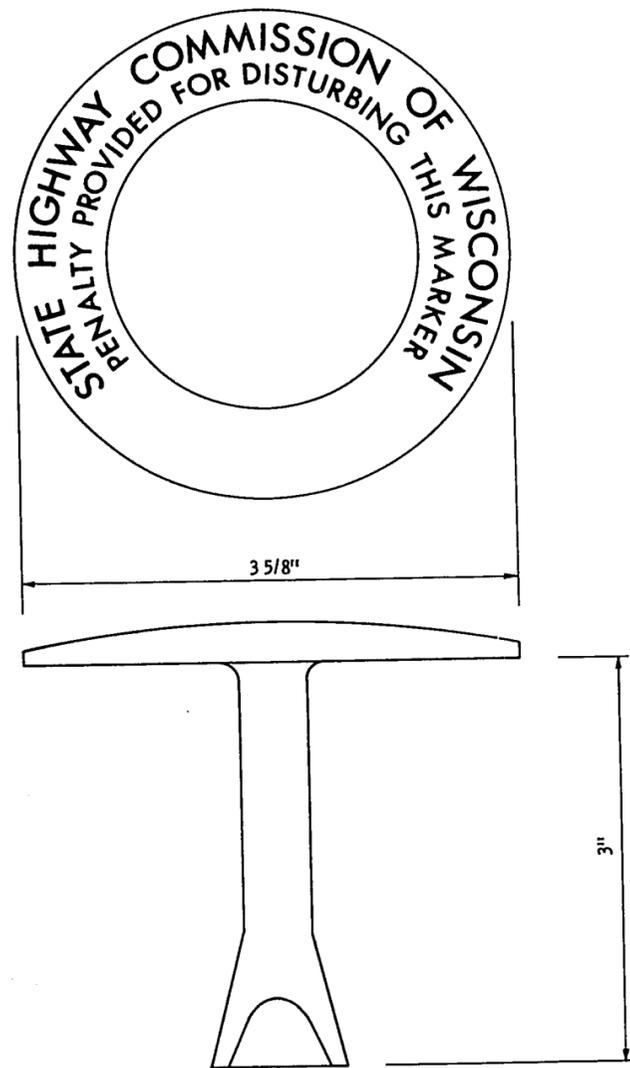
E.J. Rykel
 CHIEF DESIGN ENGINEER

APPROVED:

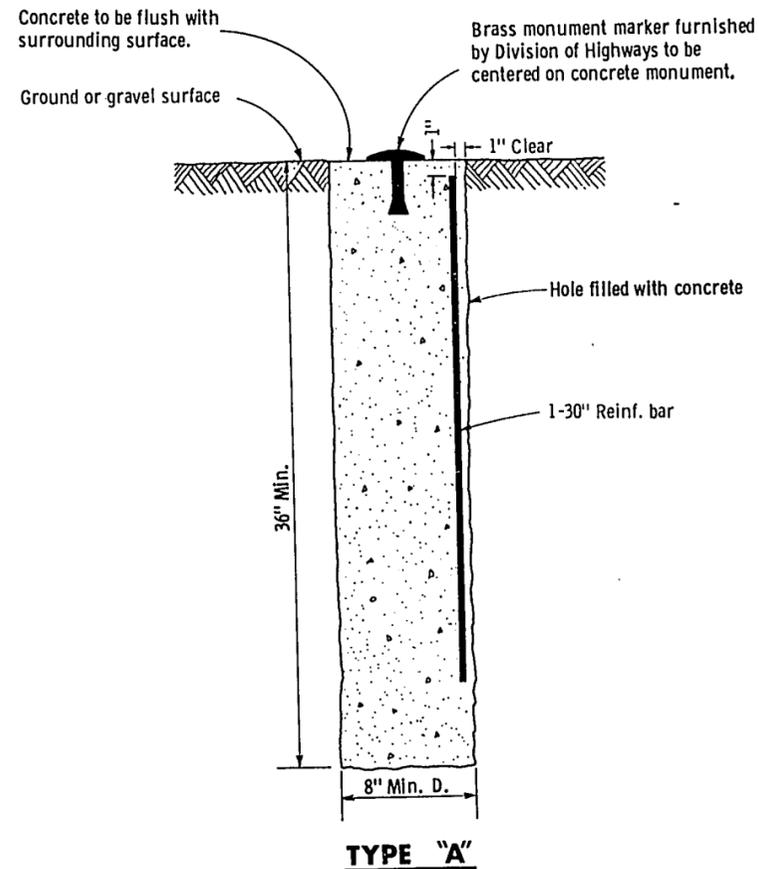
8/9/67

DATE

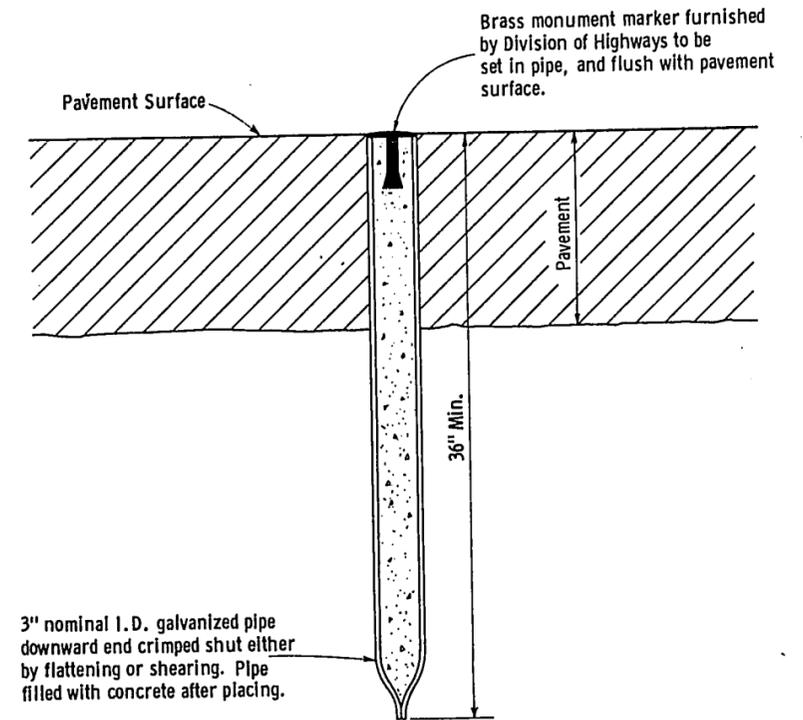
D. J. Bernhardt
 STATE HIGHWAY ENGINEER



**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.



3" nominal I.D. galvanized pipe
downward end crimped shut either
by flattening or shearing. Pipe
filled with concrete after placing.

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 1/25/68

E.J. Byckit
CHIEF DESIGN ENGINEER

APPROVED:
DATE 2/8/68

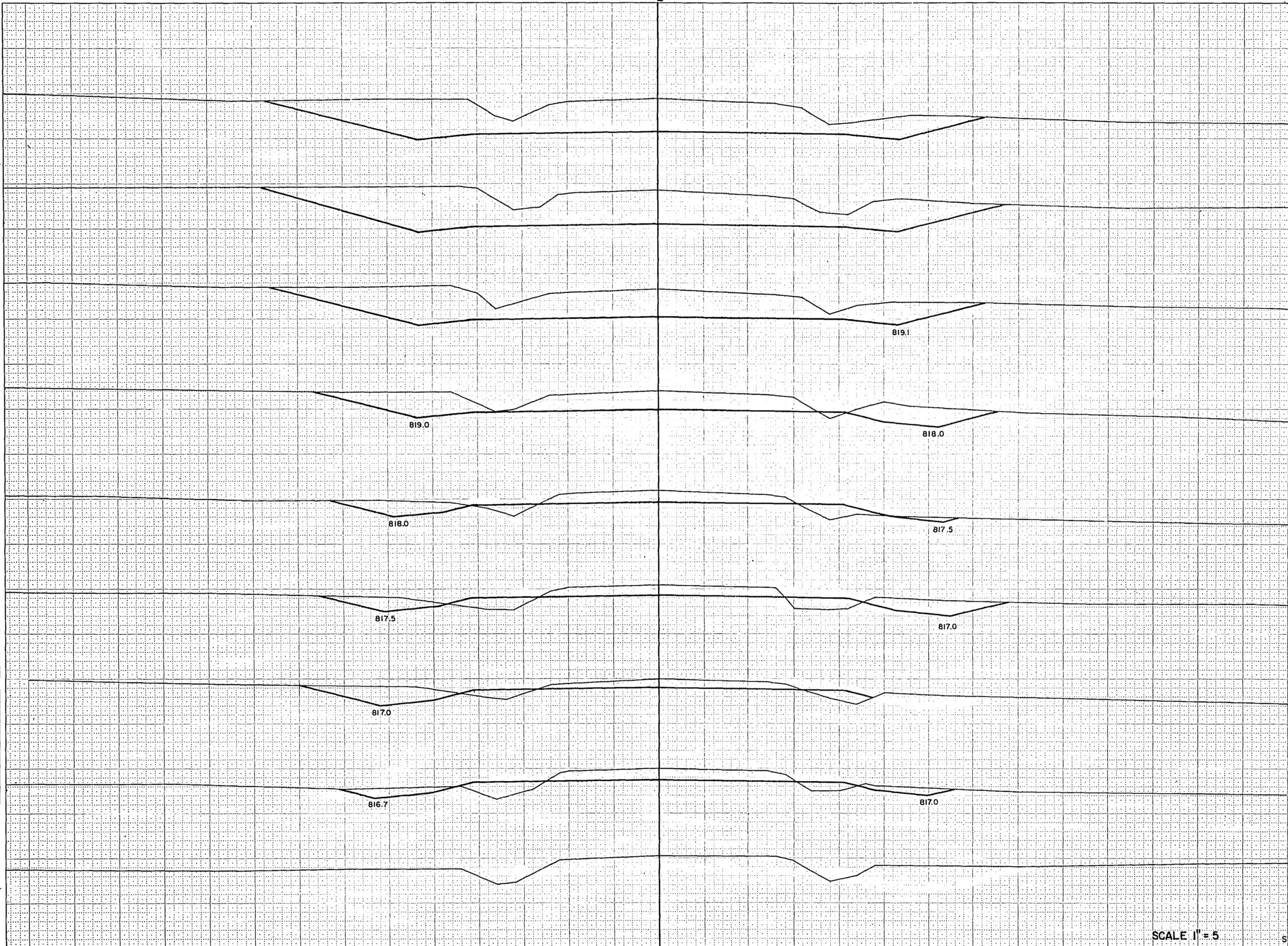
H. J. ...
STATE HIGHWAY ENGINEER

SURVEY

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

SURVEY	DATE	BY
NOTE BOOK		
NO.		

SURVEY	DATE	BY
NOTE BOOK		
NO.		



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

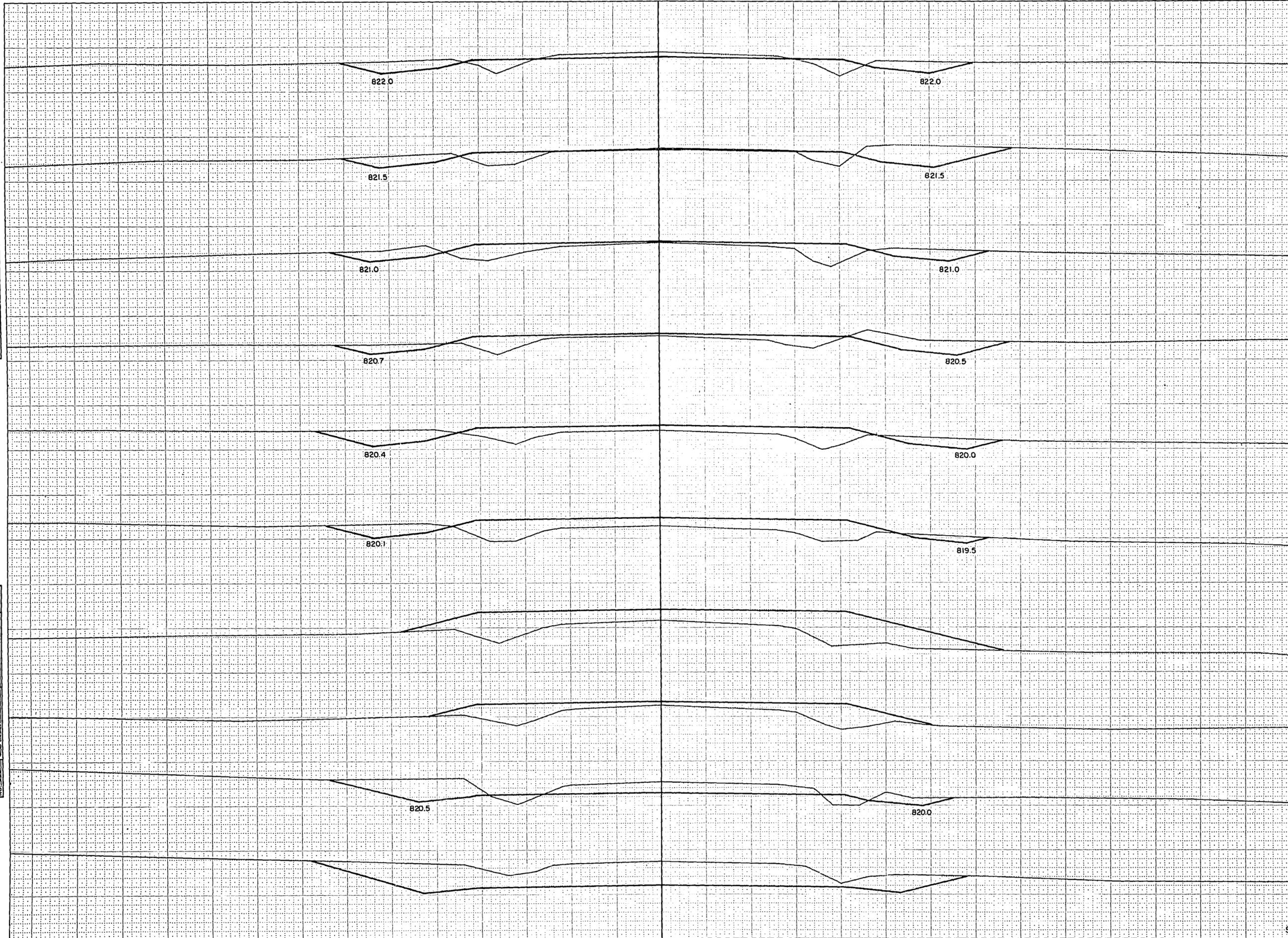
SCALE 1" = 5'

SURVEY

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

NOTE BOOK NO. 888
 TYPICAL MEAS. CHECKED

7-70
 8-70
 9-70
 R.G.P.
 R.G.P.
 R.G.P.
 NOTE BOOK NO. 888
 TYPICAL MEAS. CHECKED



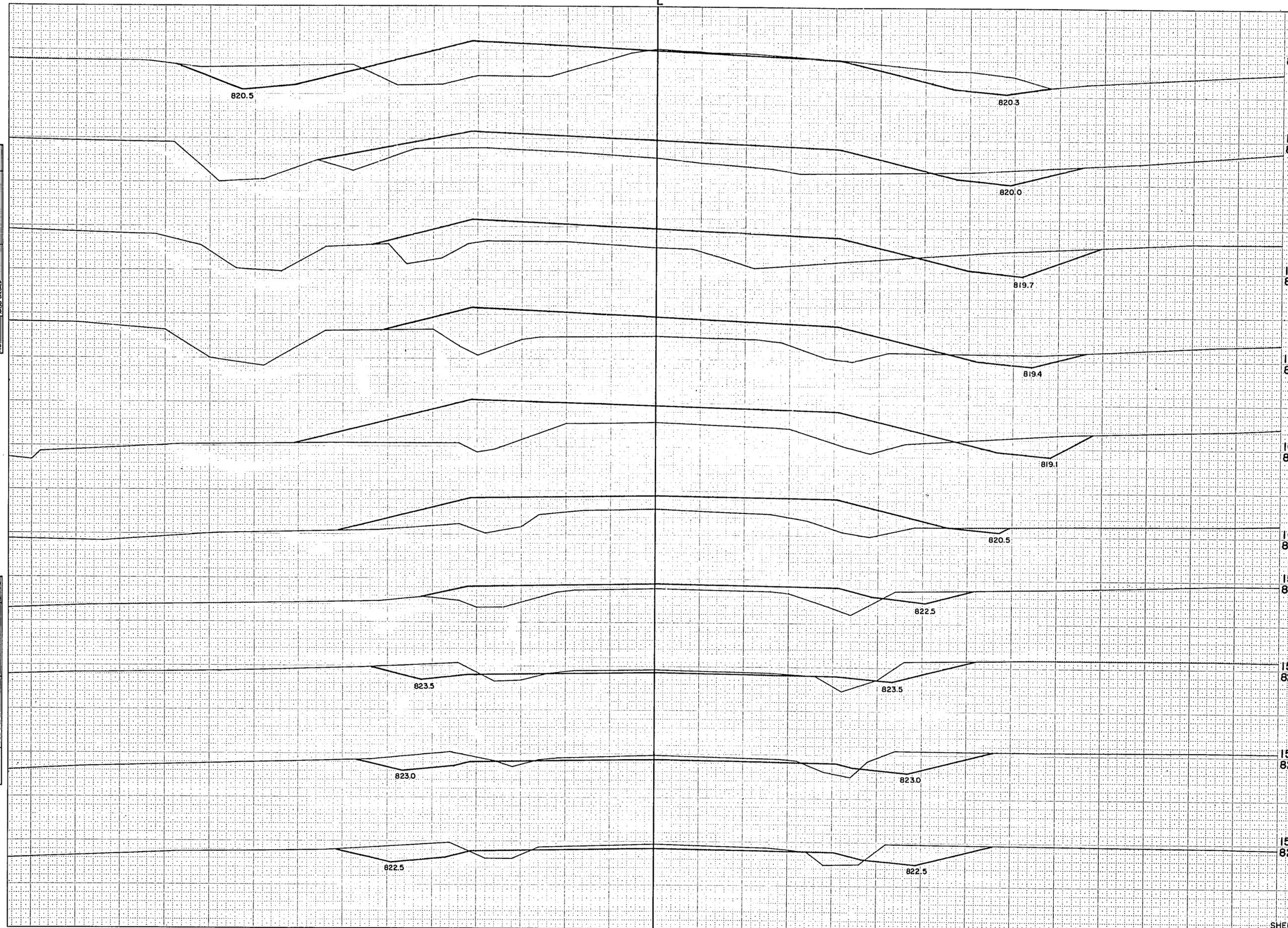
STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
		UNCL.	
155 820			
145 820		683	
146			
147		417	11
153 820		130	117
148			326
149			
152 820		30	341
150		76	196
151			
151 820		93	126
152		83	113
153			
150 820		106	94
154		131	54
155			
149 820			
148 820			
147 820			
146 820			
SHEET TOTAL		1,749	1,378

SURVEY

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S OIB6 (I)	16	46

SURVEY	PLATTED	DATE
NOTE BOOK	TEMPERATURE	
NO.	WIND DIRECTION	

SURVEY	PLATTED	DATE
NOTE BOOK	TEMPERATURE	
NO.	WIND DIRECTION	



STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
		UNCL.	
165 825			
164 825			
155		165	41
156		193	31
157			
163 820		141	43
158		69	198
159			
162 820		19	365
160		39	624
161 820		57	657
162		83	565
163			
160 820		300	300
164			
159 825		365	78
165			
158 825			
157 825			
156 825			
SHEET TOTAL		(43)	2,902

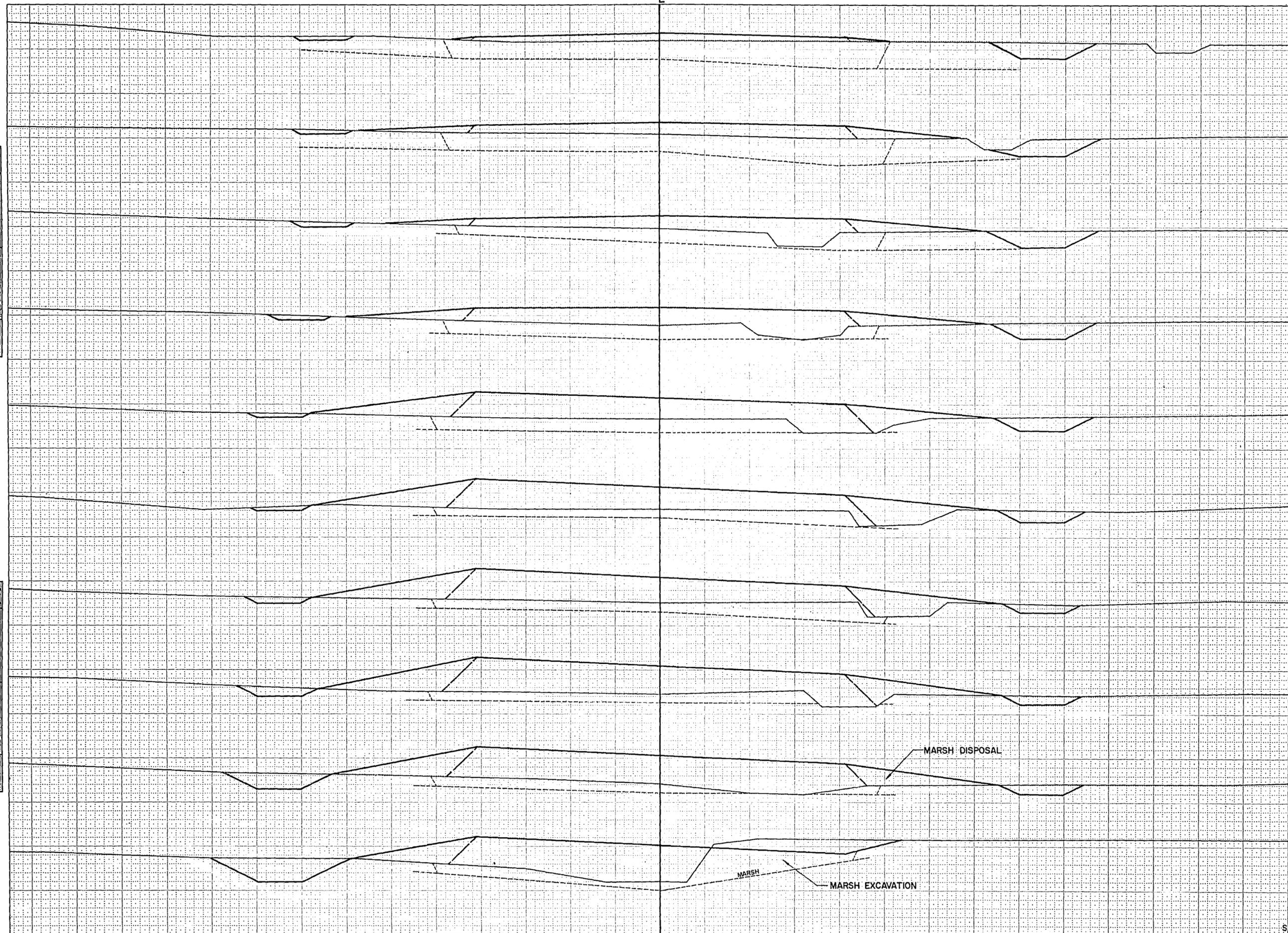
SURVEY

15/44

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

NOTE BOOK SERIAL NO. 16-30
15-30
14-30
13-30
12-30
11-30
10-30
9-30
8-30
7-30
6-30
5-30
4-30
3-30
2-30
1-30

NOTE BOOK SERIAL NO. 16-30
15-30
14-30
13-30
12-30
11-30
10-30
9-30
8-30
7-30
6-30
5-30
4-30
3-30
2-30
1-30



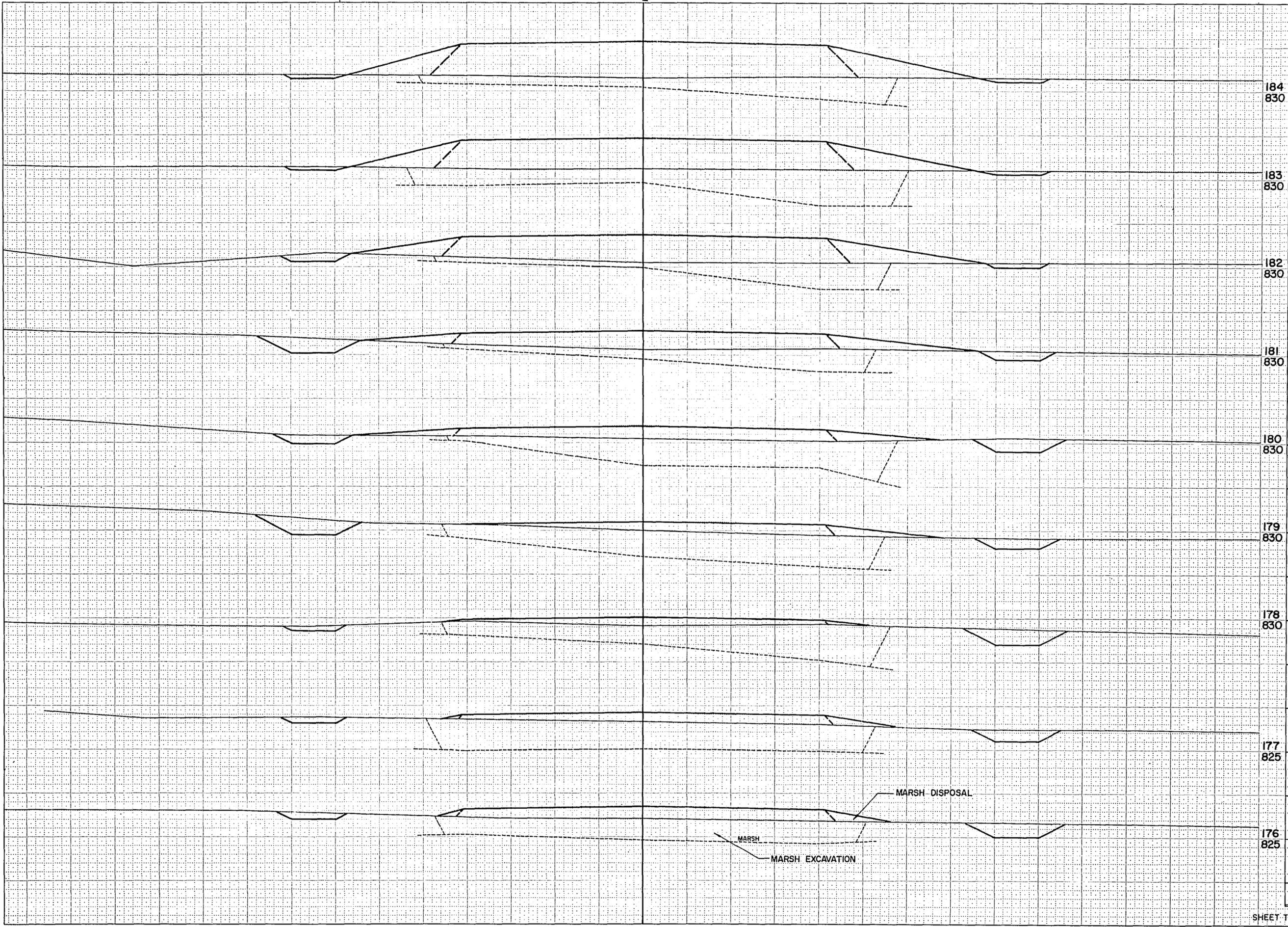
STATION	DISTANCE	YARDAGE		
		EXCAVATION		FILL
		UNCL.	MARSH	
175 825				
174 825				
	165	182	178	421
	166			
173 825		44	252	724
	167	72	165	711
	168			
172 825		52	220	720
	169	52	235	685
	170			
171 825		61	219	650
	171	74	228	604
	172			
170 825		91	233	518
	173	85	335	555
	174			
169 825		70	430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

SURVEY

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

SURVEY PLOTTED
NOTE BOOK
NO. 888

D.W.
E.G.P.
R.C.L.
F.L.



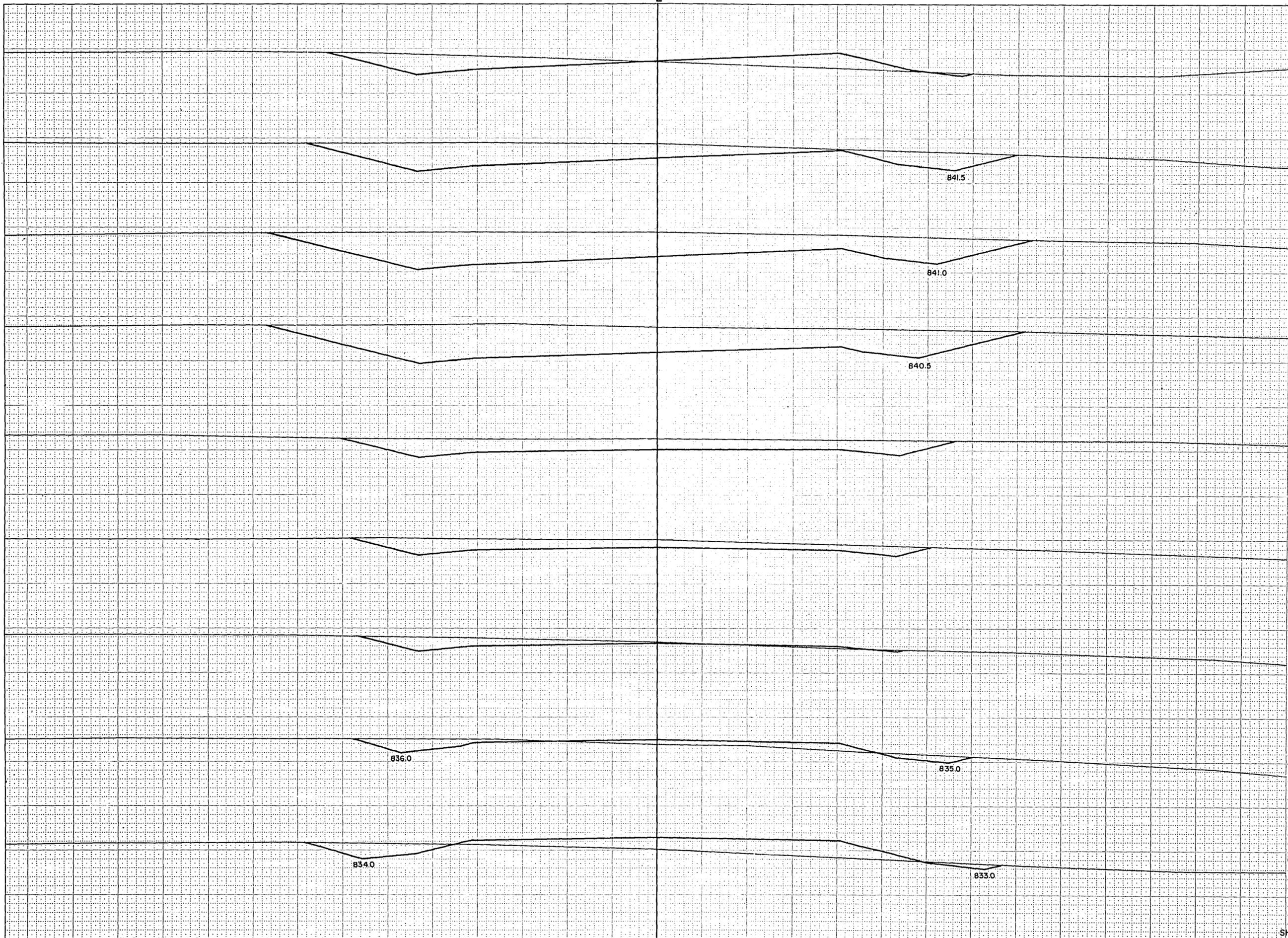
STATION	DISTANCE	YARDAGE		
		UNCL.	MARSH	FILL
184 830				
175 830		69	424	654
176		57	506	662
177				
182 830		57	607	724
178		76	569	686
179				
181 830		89	489	656
180		94	354	606
181				
180 830		69	248	642
182		54	437	963
183				
179 830			461	1,076
184				
178 830				
177 825				
176 825				
SHEET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

SURVEY

B.P.R. REGION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S OIB6 (1)	19	46

NOTE BOOK TEMPLATE
NO. 888
AREA CHECKED

NOTE BOOK TEMPLATE
NO. 888
AREA CHECKED



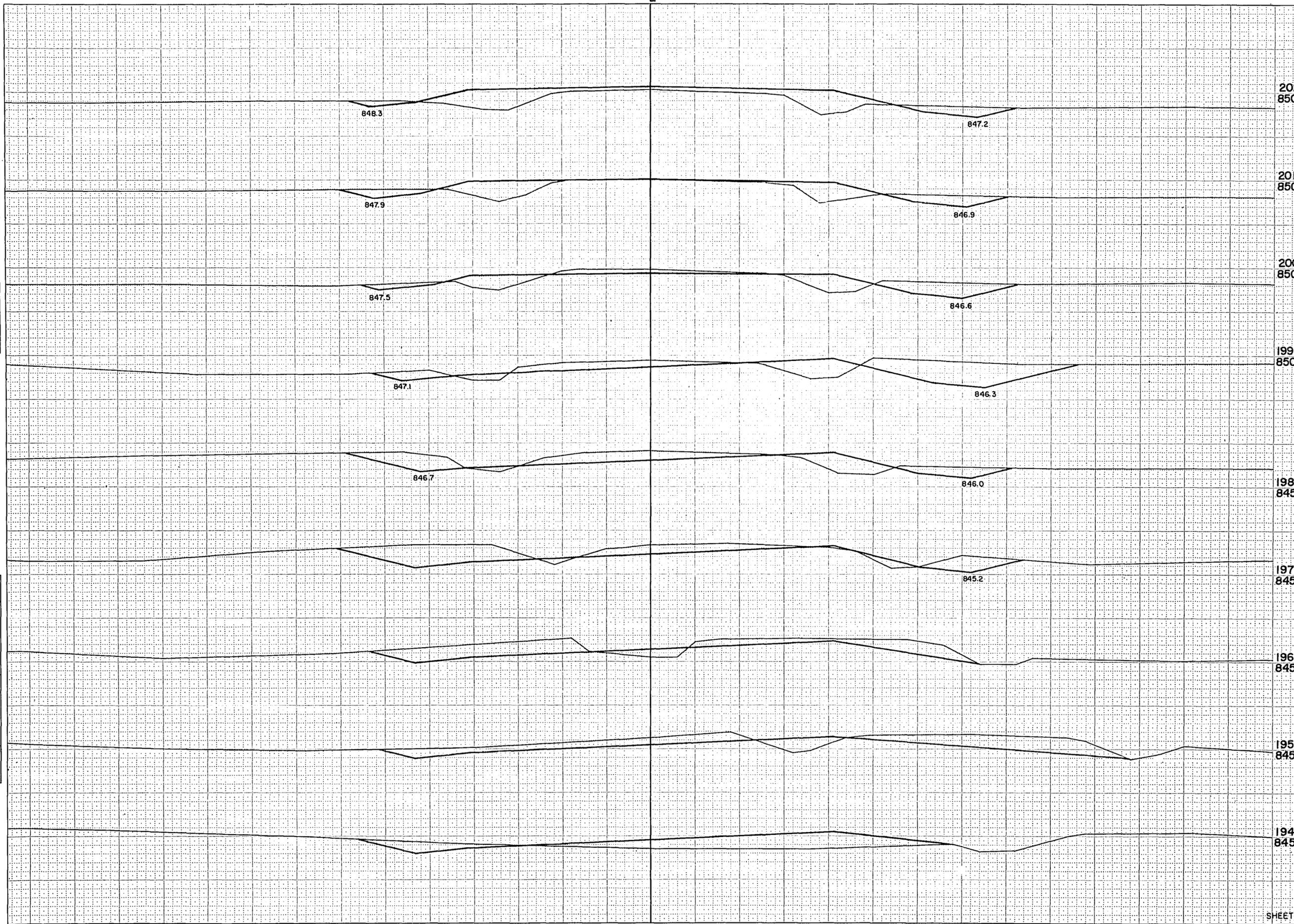
STATION	DISTANCE	YARDAGE		
		EXCAVATION		
		UNCL.	MARSH	FILL
193	845			
192	845			
184		35	152	596
185		76		135
191	845			
186		104		24
187		176		2
188				
190	840	278		
189		591		
190				
189	840	809		
191		617		
192				
188	840	307		52
193				
187	835			
186	835			
185	835			
SHEET TOTAL		2,993	152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

SURVEY

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

SURVEY NO. 888
 DATE 7-70
 BY R.C.B.
 CHECKED R.L.S.P.

SURVEY NO. 888
 DATE 7-70
 BY R.C.B.
 CHECKED R.L.S.P.

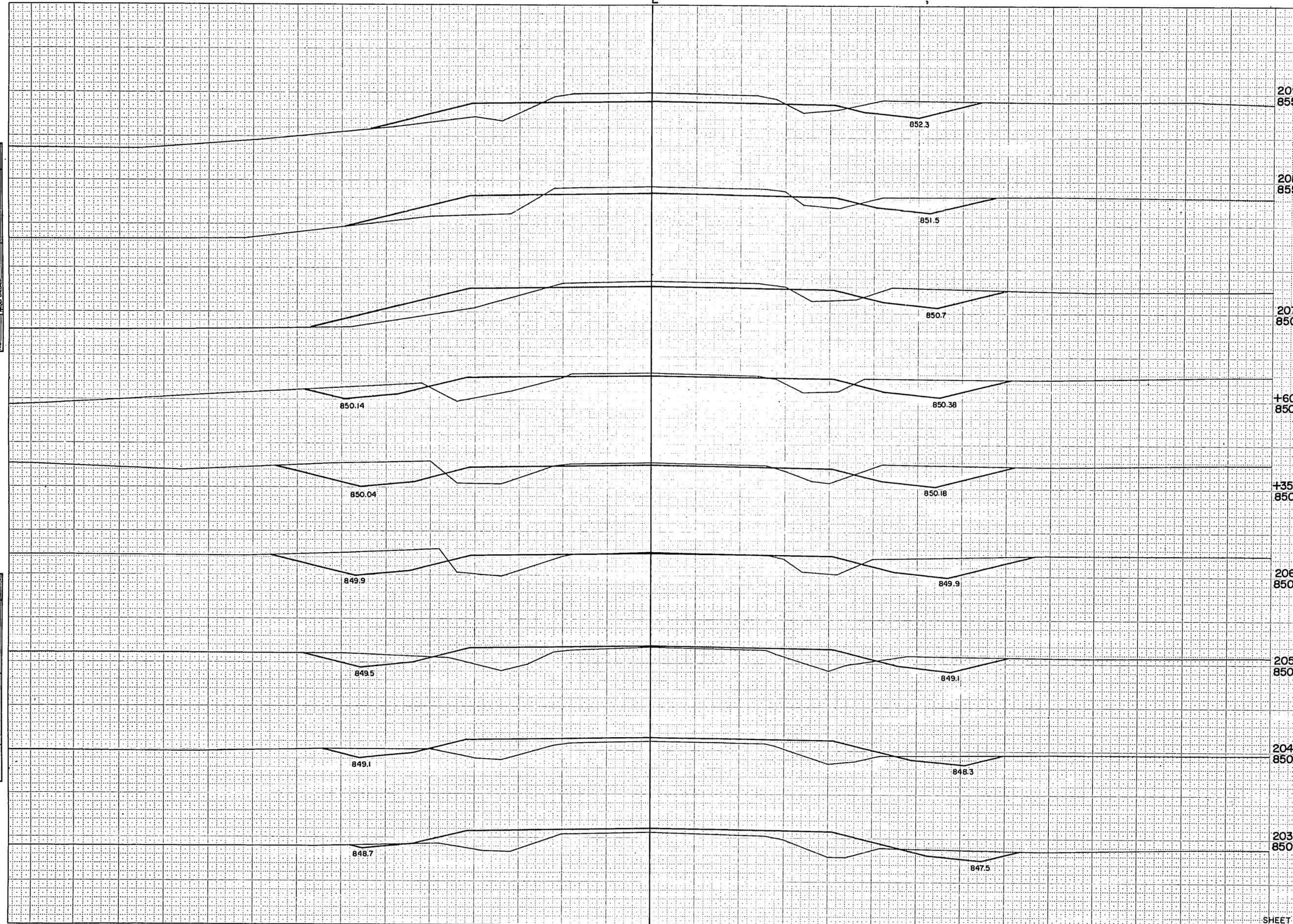


STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
		UNCL.	
202 850			
193			
201 850	100		133
194	91		100
195			
200 850	156		30
196	231		17
197			
199 850	250		35
198	235		61
199	185		70
200			
198 845	96		91
201			
202	59		143
197 845			
196 845			
195 845			
194 845			
SHEET TOTAL	1,403		680

SURVEY

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

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



NOTE BOOK (INPUT)
NO. 888
AREA CHECKED

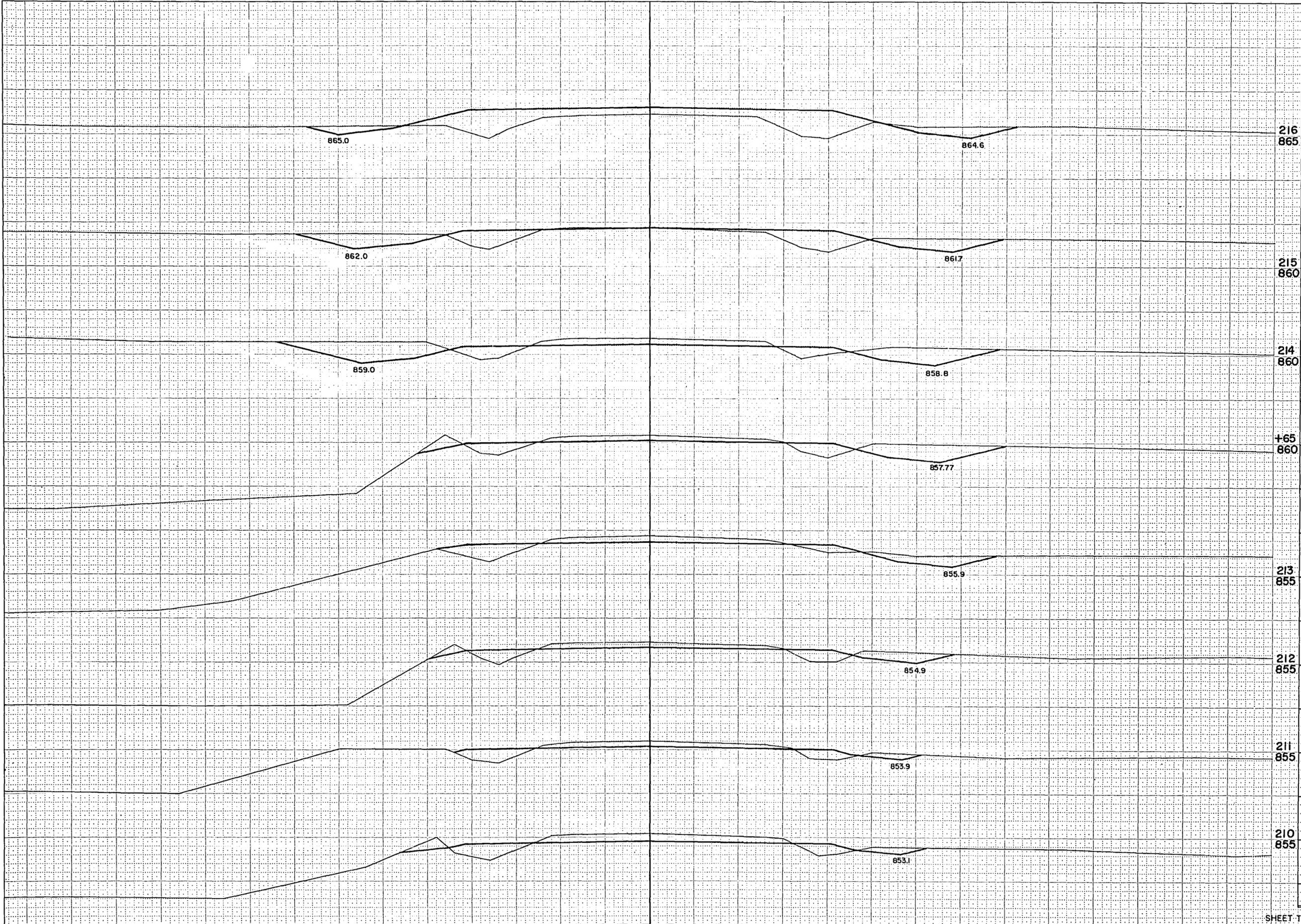
NOTE BOOK (INPUT)
NO. 888
AREA CHECKED

SURVEY

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0186(1)	22	46

SURVEY PLOTTED
 NOTE BOOK NO. 888
 MAPS MADE
 CHECKED

SURVEY PLOTTED
 NOTE BOOK NO. 888
 MAPS MADE
 CHECKED



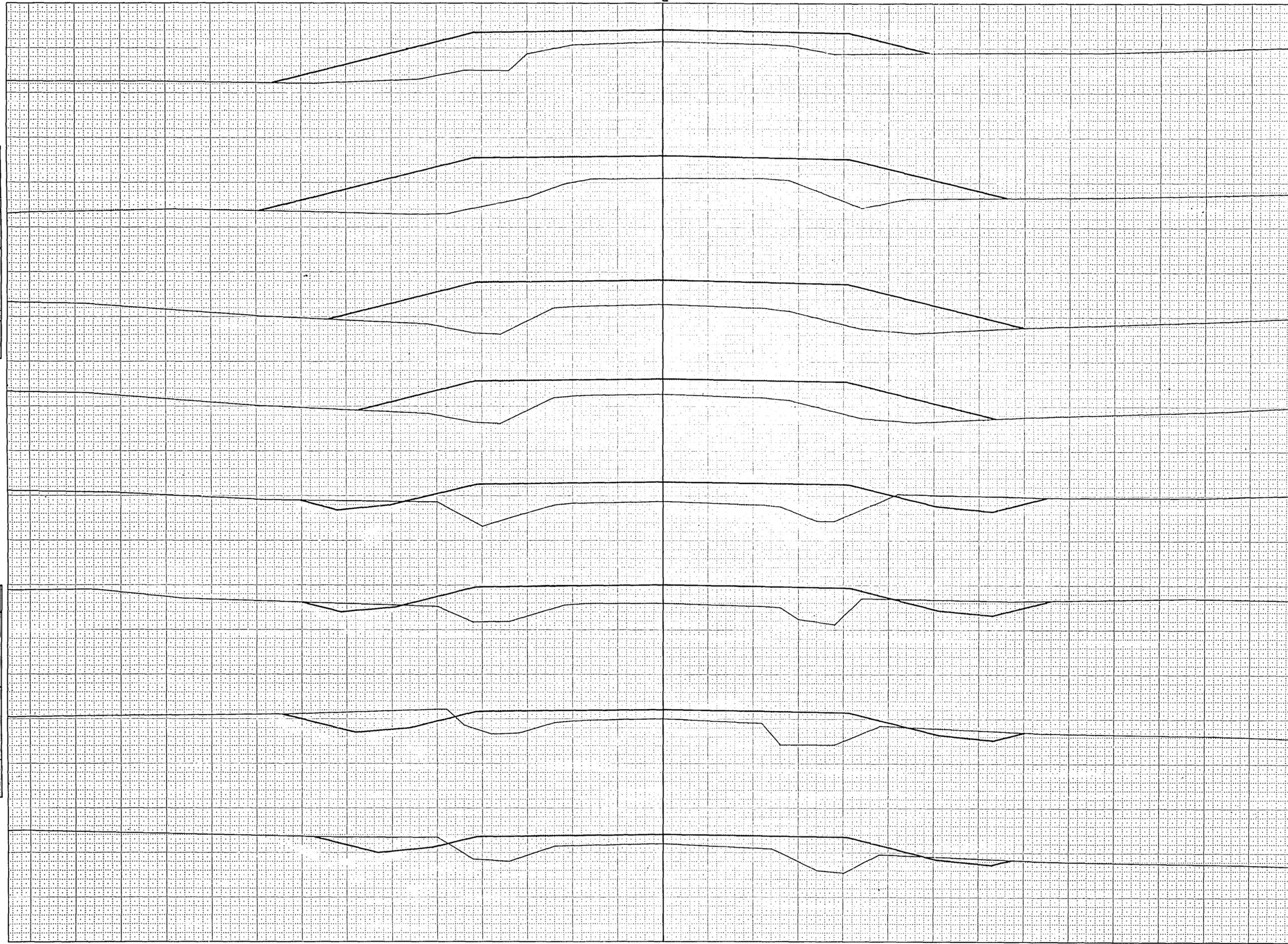
STATION	DISTANCE	YARDAGE	
		EXCAVATION	
		UNCL.	FILL
216 865			
209			
210	126		74
211	85		56
215 860	80		52
212	96		54
213			
214 860	75		35
+65			
214	64		18
+65 860	176		80
215	85		187
216			
213 855			
212 855			
211 855			
210 855			
SHEET TOTAL	787		556

SURVEY

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0186 07	23	46

NOTE BOOK NO. 1000
 AREA CHECKED

NOTE BOOK NO. 1000
 AREA CHECKED

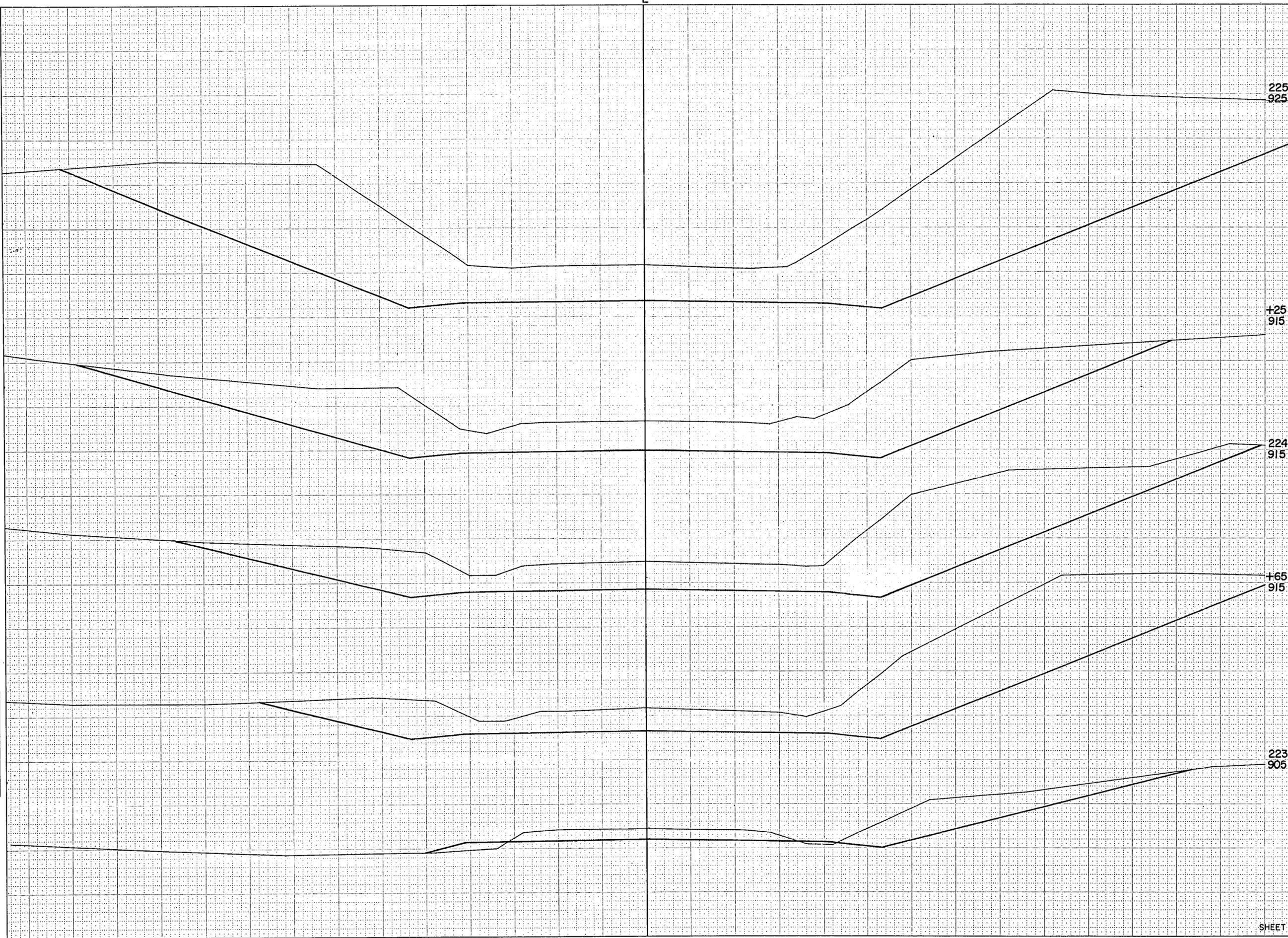


STATION	DISTANCE	YARDAGE	
		EXCAVATION	
		UNCL.	FILL
222 890			
216 885		65	291
217		107	311
218		113	378
219		36	192
220 880	+40	17	216
+75			197
220 880			883
221			717
+40 880			
222			
219 880			
218 870			
217 870			
SHEET TOTAL		338	3,185

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

SURVEY	PROJCTD	4-70
NOTE BOOK	TEMPAT	7-70
NO.	AREA	8-70
	AREA CHECKED	9-70

SURVEY	PROJCTD	4-70
NOTE BOOK	TEMPAT	7-70
NO.	AREA	8-70
	AREA CHECKED	9-70



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

SURVEY

B.P.R. REGION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	S 0186 (1)	25	46
WIS.			

STATION	DISTANCE	YARDAGE		
		UNCL.	EXCAVATION	FILL
227 905	+40	1,585		
226	+40	1,563		
	+40	477		
+40 910	227	311		7
226 915				
225 +40 925				
SHEET TOTAL		3,936		7

NOTE BOOK TEMPLATE
NO. 888E - AREA CHECKED

NOTE BOOK TEMPLATE
NO. 888E - AREA CHECKED

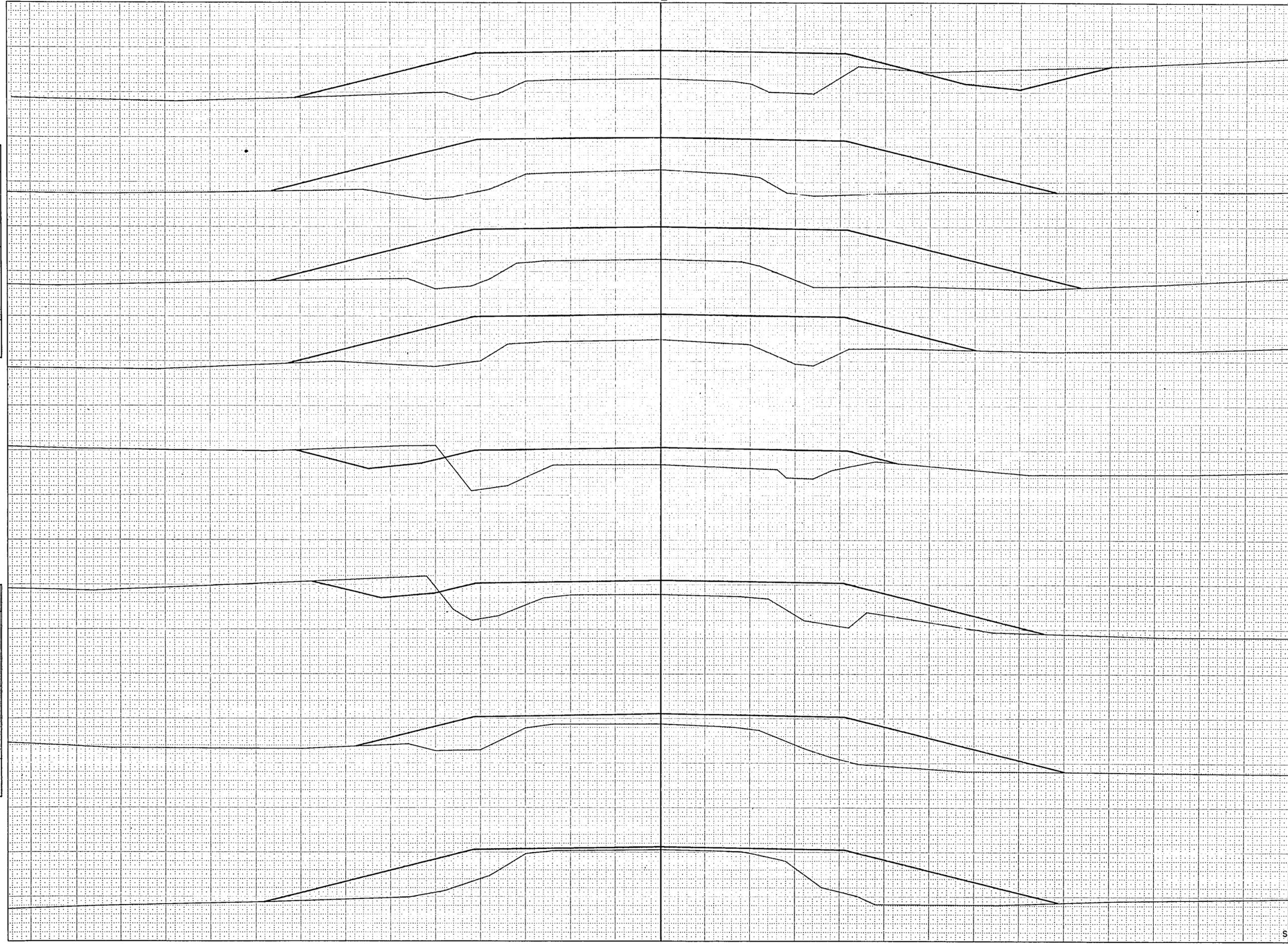
H. 12. 5
R. 12. 5
G. 12. 5
S. 12. 5
L. 12. 5

SURVEY

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

PLUMB LINE
NOTE BOOK
NO. 1111
DATE
11-1-70
CHECKED
MKS
MKS CHECKED

PLUMB LINE
NOTE BOOK
NO. 1111
DATE
11-1-70
CHECKED
MKS
MKS CHECKED

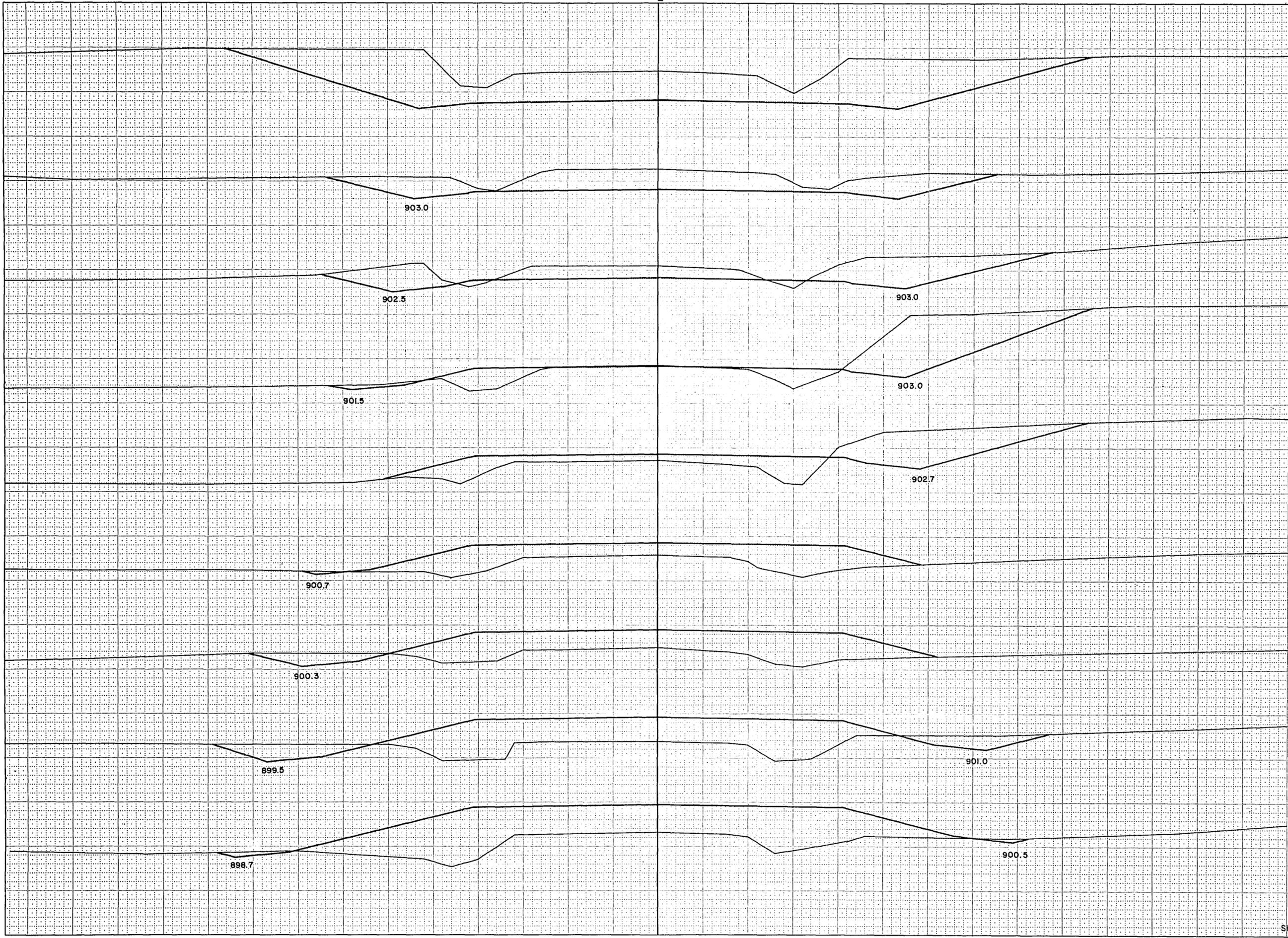


STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
		UNCL.	
+65 900			
227			
233 900		102	330
228			631
229			
232 900		18	292
+50 900			
		41	239
230			
231 900		46	617
231			1,024
232			
			1,193
233			
230 900		34	622
+65 900			
+50 900			
229 900			
228 900			
SHEET TOTAL		241	4,948

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

NOTE BOOK (UPDATE) AREA MEAS CHECKED
 NO. _____

U.S.C. & G.S. B.S.P.
 NOTE BOOK (UPDATE) AREA MEAS CHECKED
 NO. BBE _____



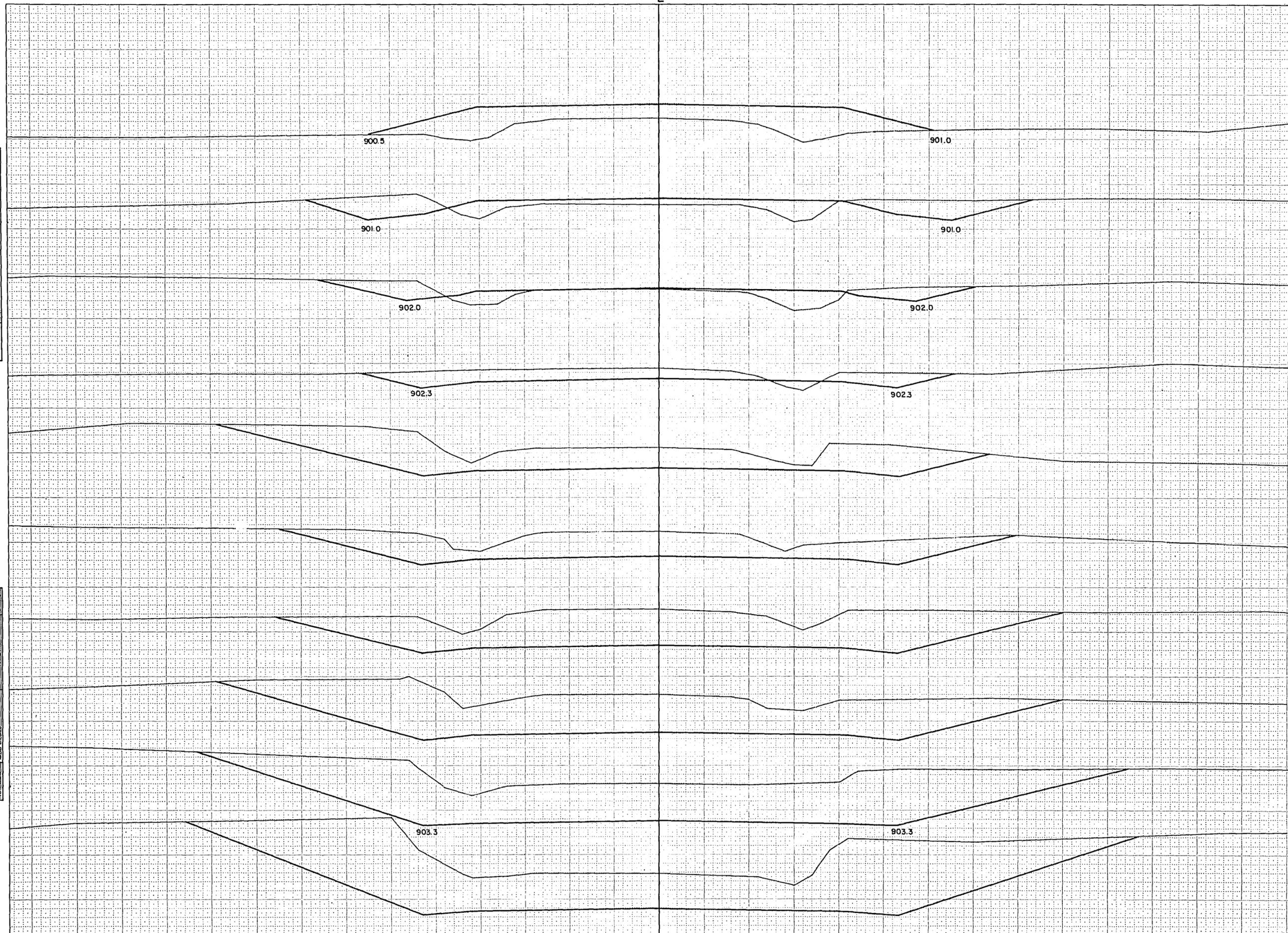
STATION	DISTANCE	YARDAGE	
		EXCAVATION	
		UNCL.	FILL
239 905			
+50 905	21	286	
238 910	80	735	
235	96	550	
+35 910	13	230	
+50	62	156	
237 910	104	57	
+35	256	40	
238	234	3	
+50	434		
239			
+50 900			
236 905			
235 905			
234 900			
SHEET TOTAL	1,300	2,057	

SURVEY 1

BPR REGION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	SO186(1)	28	46

SURVEYED _____
 PLOTTED _____
 SURVEY BOOK _____
 NOTE BOOK _____
 NO. _____
 AREAS CHECKED _____

1-70 _____
 2-70 _____
 3-70 _____
 4-70 _____
 5-70 _____
 6-70 _____
 7-70 _____
 8-70 _____
 9-70 _____
 SURVEYED _____
 PLOTTED _____
 SURVEY BOOK _____
 NOTE BOOK _____
 NO. _____
 AREAS CHECKED _____



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

SURVEY

B.P.R. REGION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	S.O1B6(I)	29	46
WIS.			

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

NOTE BOOK
NO. 1000
DATE
CHECKED

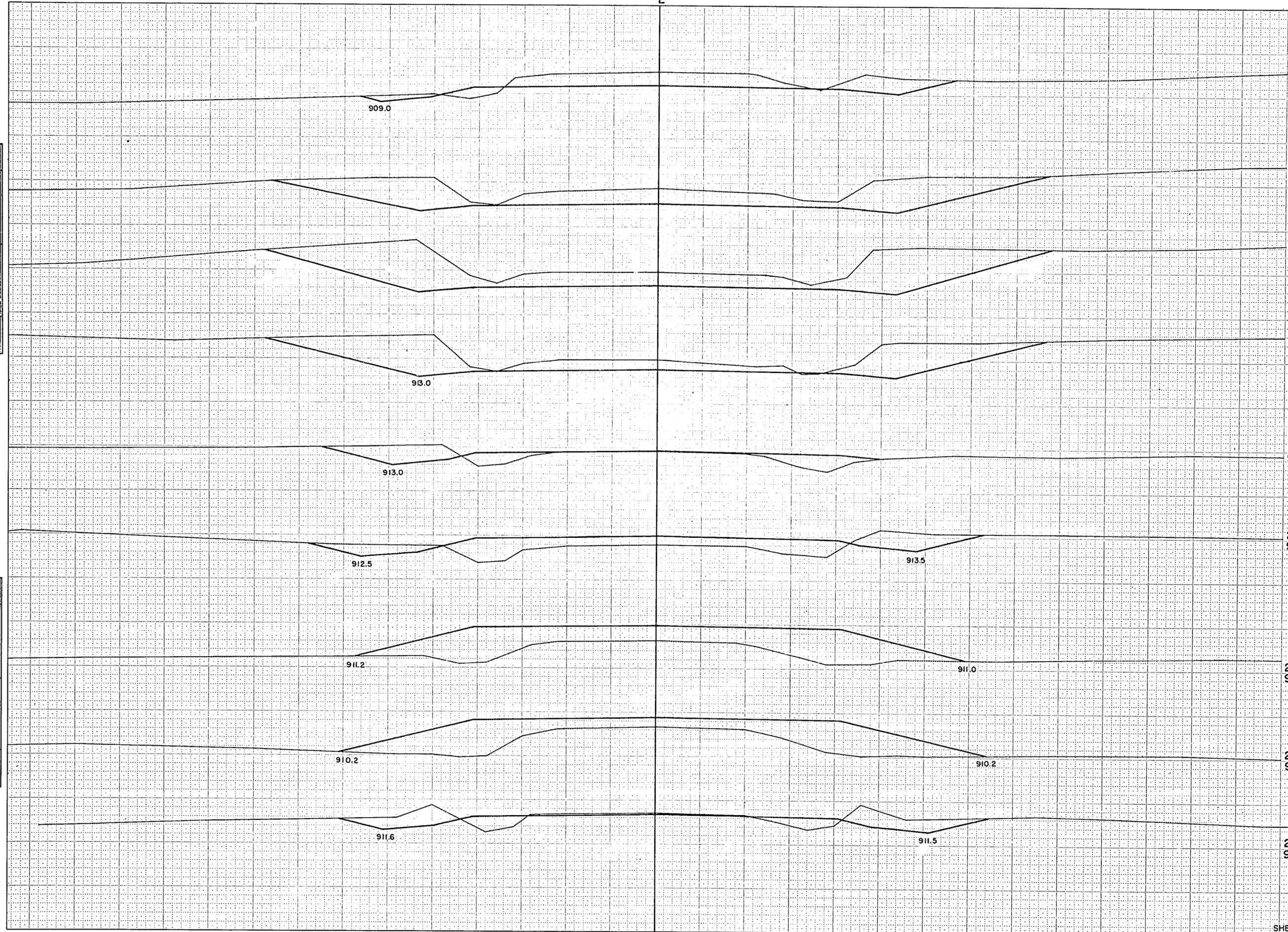
NOTE BOOK
NO. 1000
DATE
CHECKED

SURVEY

B.P.R. REGION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0186 (1)	30	46

SURVEY	PLOTTED	DATE
NOTE BOOK	TEMP	
NO.	NO.	NO.

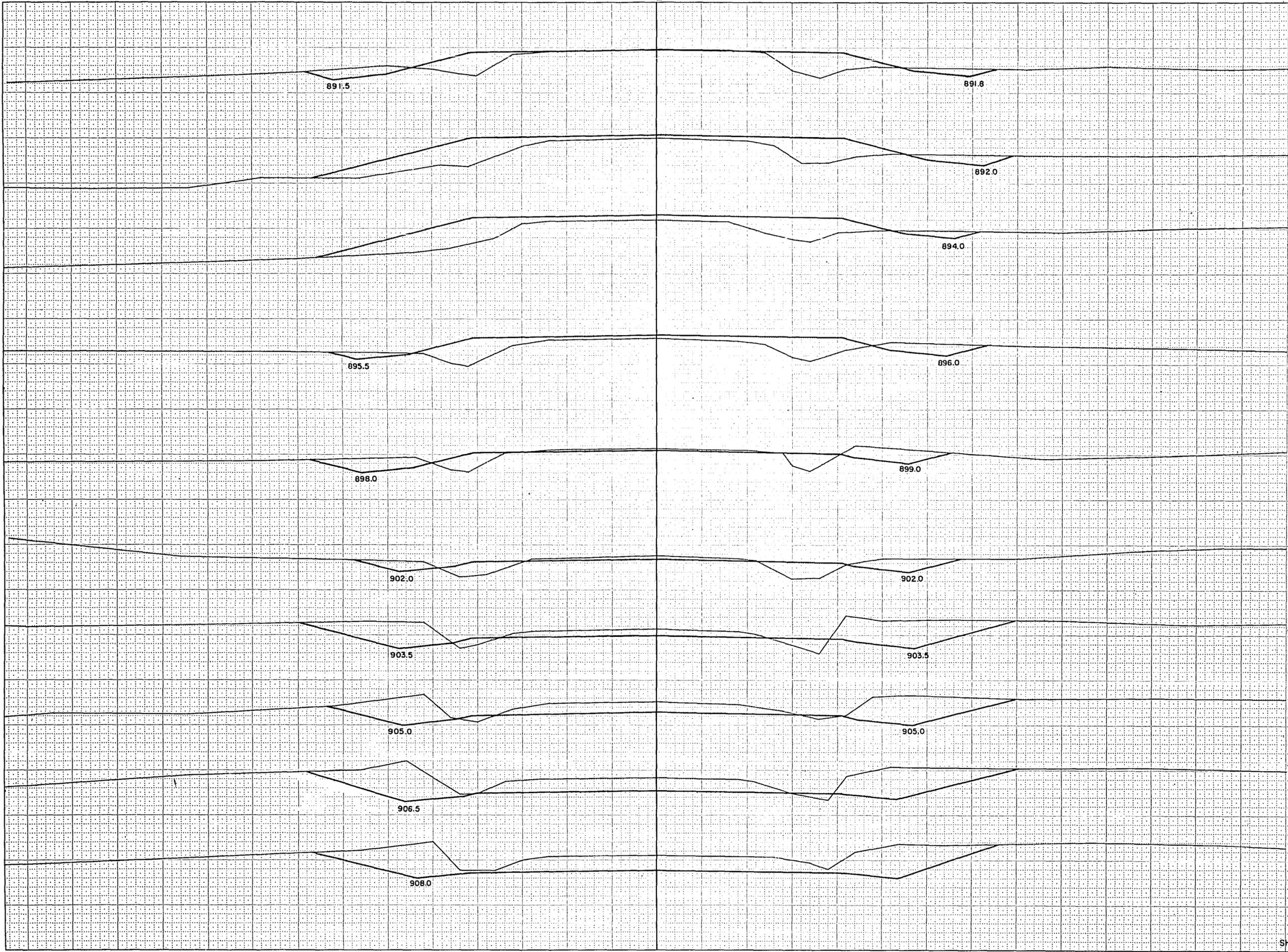
SURVEY	PLOTTED	DATE
NOTE BOOK	TEMP	
NO. B.B.R.	NO.	NO.



STATION	DISTANCE	YARDAGE		
		EXCAVATION		FILL
		UNCL.		
260 915				
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

SURVEY
L

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

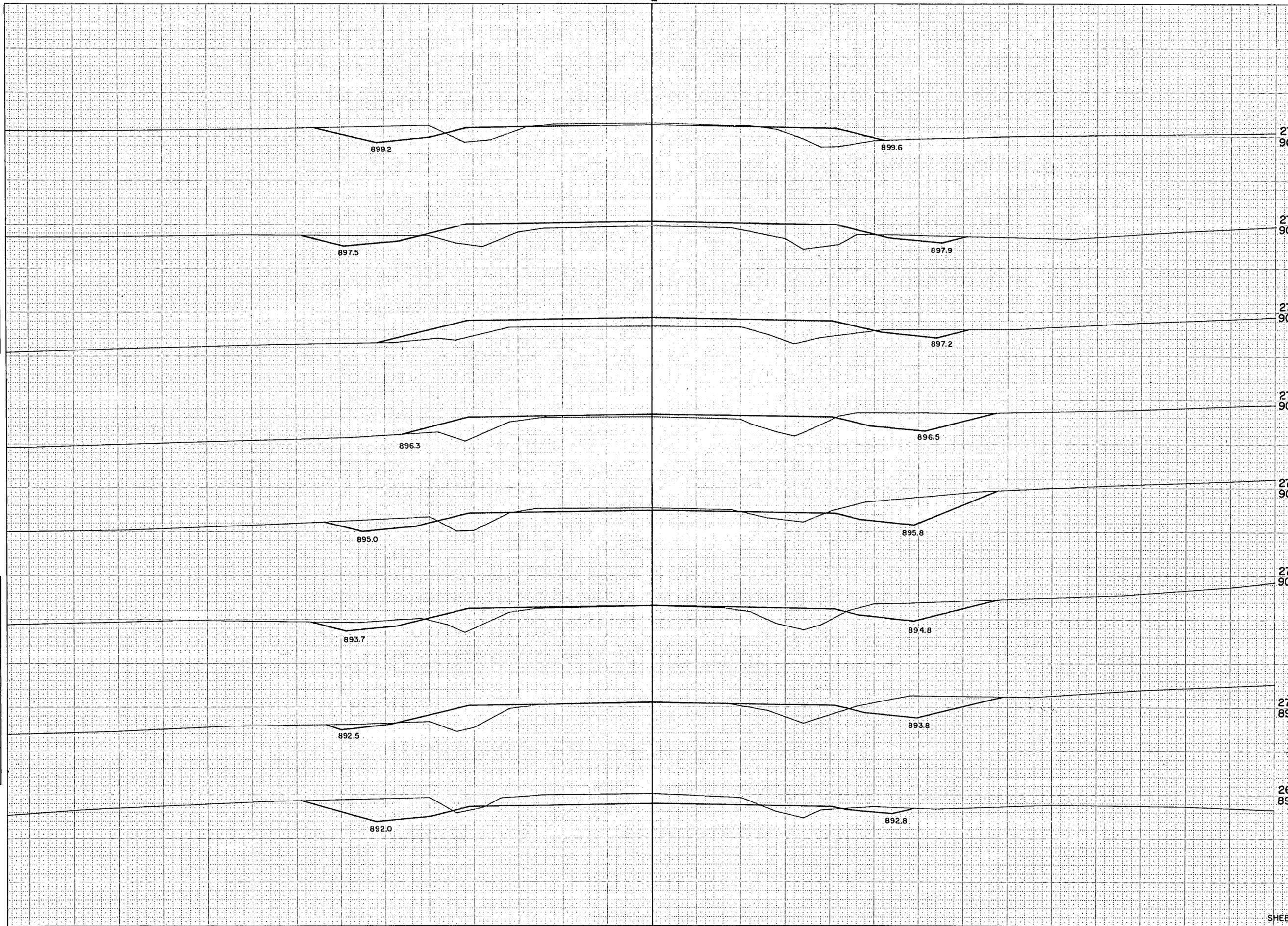


STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
		UNCL.	
268+95			
267+95	260		
	261	361	11
266+95	+50	231	2
	262	175	5
	+50	131	11
265+95	263	88	28
	264	113	70
264+90	265	139	117
	266	83	226
263+95	267	24	287
	268	43	224
+50+905			
262+910			
+50+910			
261+910			
SHEET TOTAL		1,388	981

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	9 0186 (1)	32	46

SURVEY POINTS
NOTE BOOK
NO.

SURVEY POINTS
NOTE BOOK
NO.



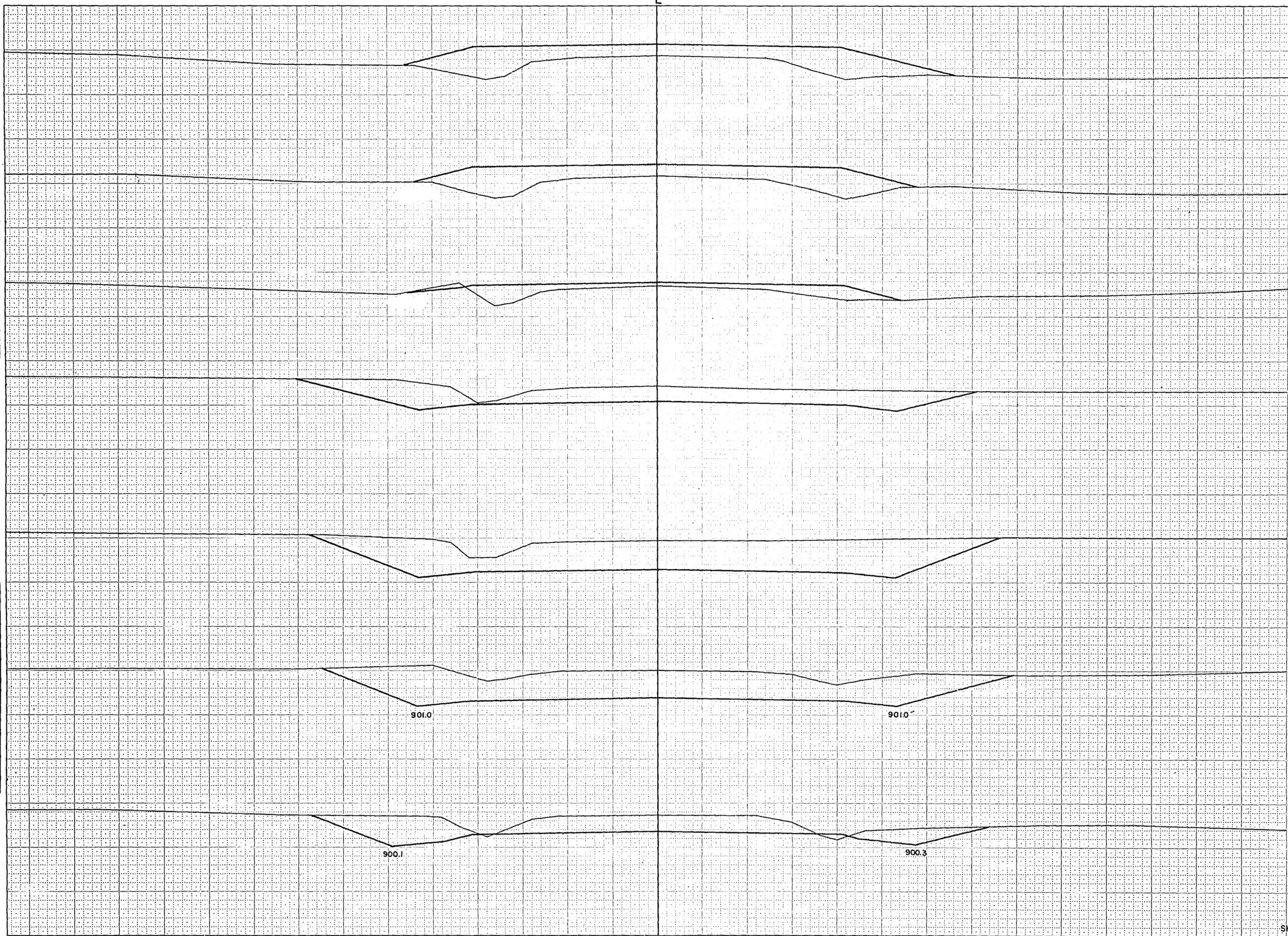
STATION	DISTANCE	YARDAGE		
		EXCAVATION		FILL
		UNCL.		
276 900				
268		94		122
269				
275 900		115		106
270		104		115
271				
274 900		185		81
272		170		94
273				
273 900		52		178
274		37		207
275				
272 900		72		143
276				
271 900				
270 895				
269 895				
SHEET TOTAL		829		1,046

SURVEY

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

NOTE BOOK TEMPLATE
NO. AREA CHECKED

NOTE BOOK TEMPLATE
NO. AREA CHECKED

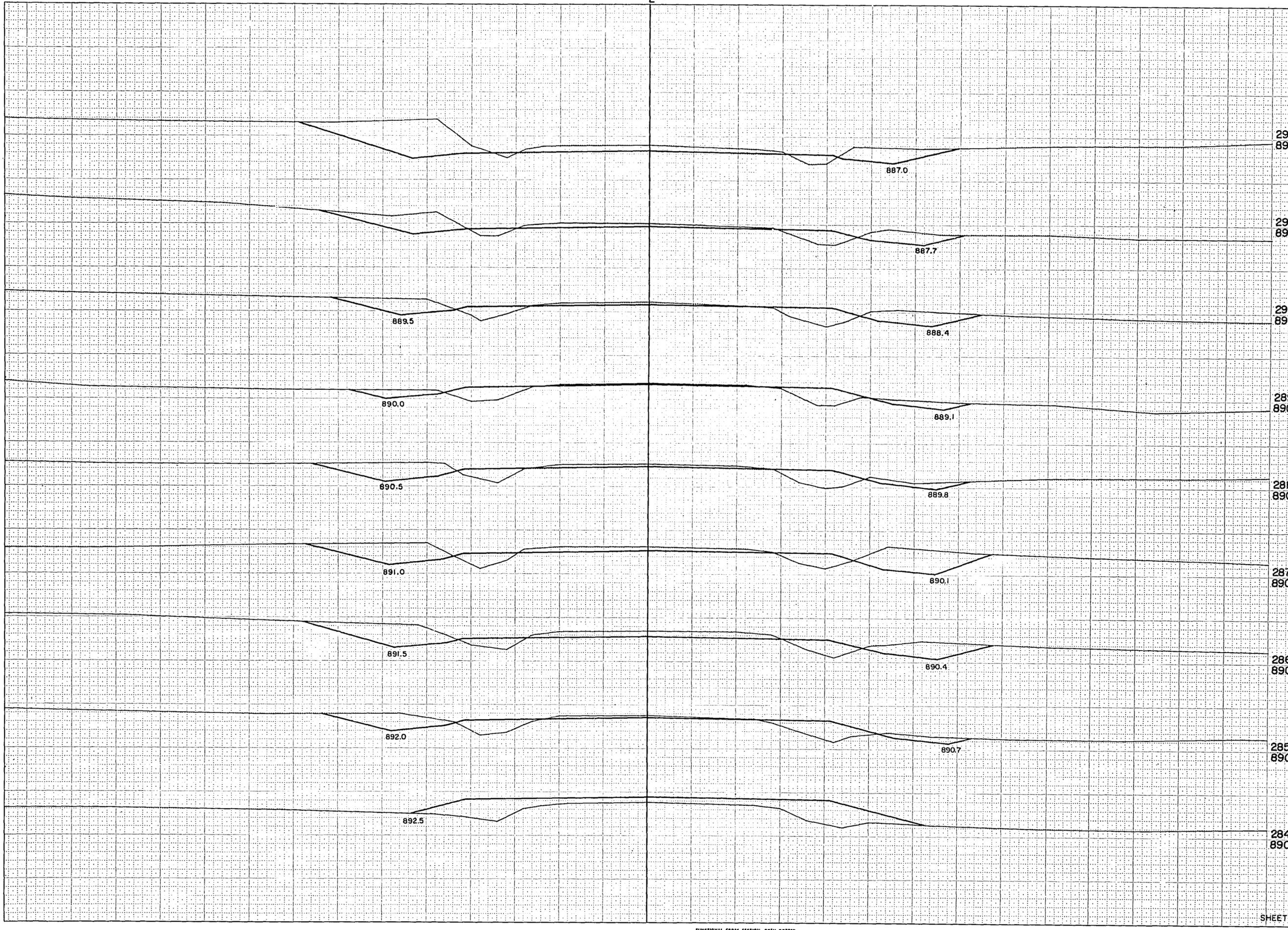


STATION	DISTANCE	YARDAGE		
		EXCAVATION		FILL
		UNCL		
283 895				
276 895		217		50
277		569		4
278		826		
281 900		635		
279		206		81
280				276
281				404
280 900				
282				
283				
279 905				
278 905				
277 900				
SHEET TOTAL		2,453		815

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

SURVEYED BY: []
 CHECKED BY: []
 DATE: []

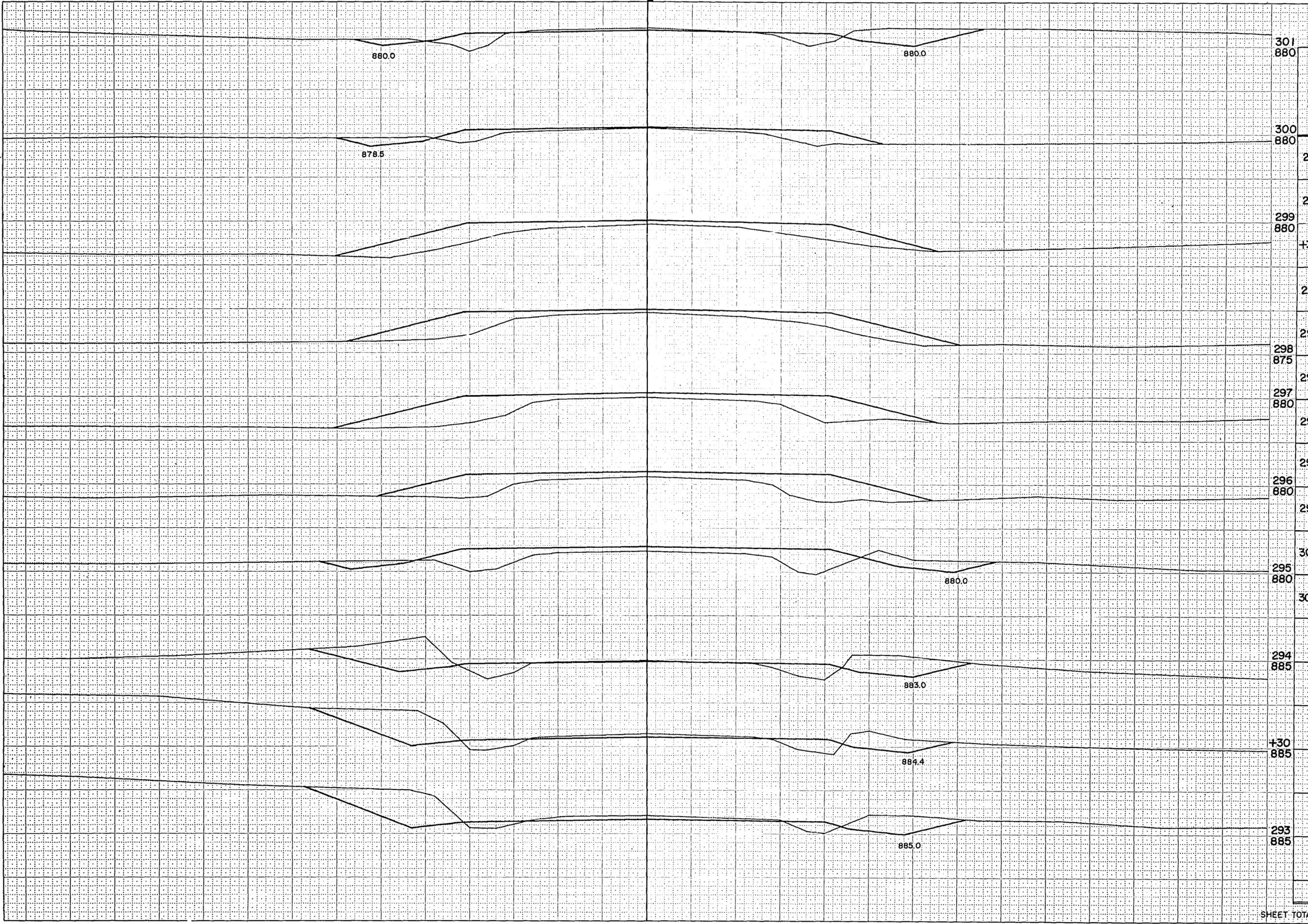
U.S. GEOLOGICAL SURVEY
 WASHINGTON, D.C.



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

SURVEY

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



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			
300		13	198
295 880		61	91
301			
294 885			
+30 885			
293 885			
SHEET TOTAL		833	1,739

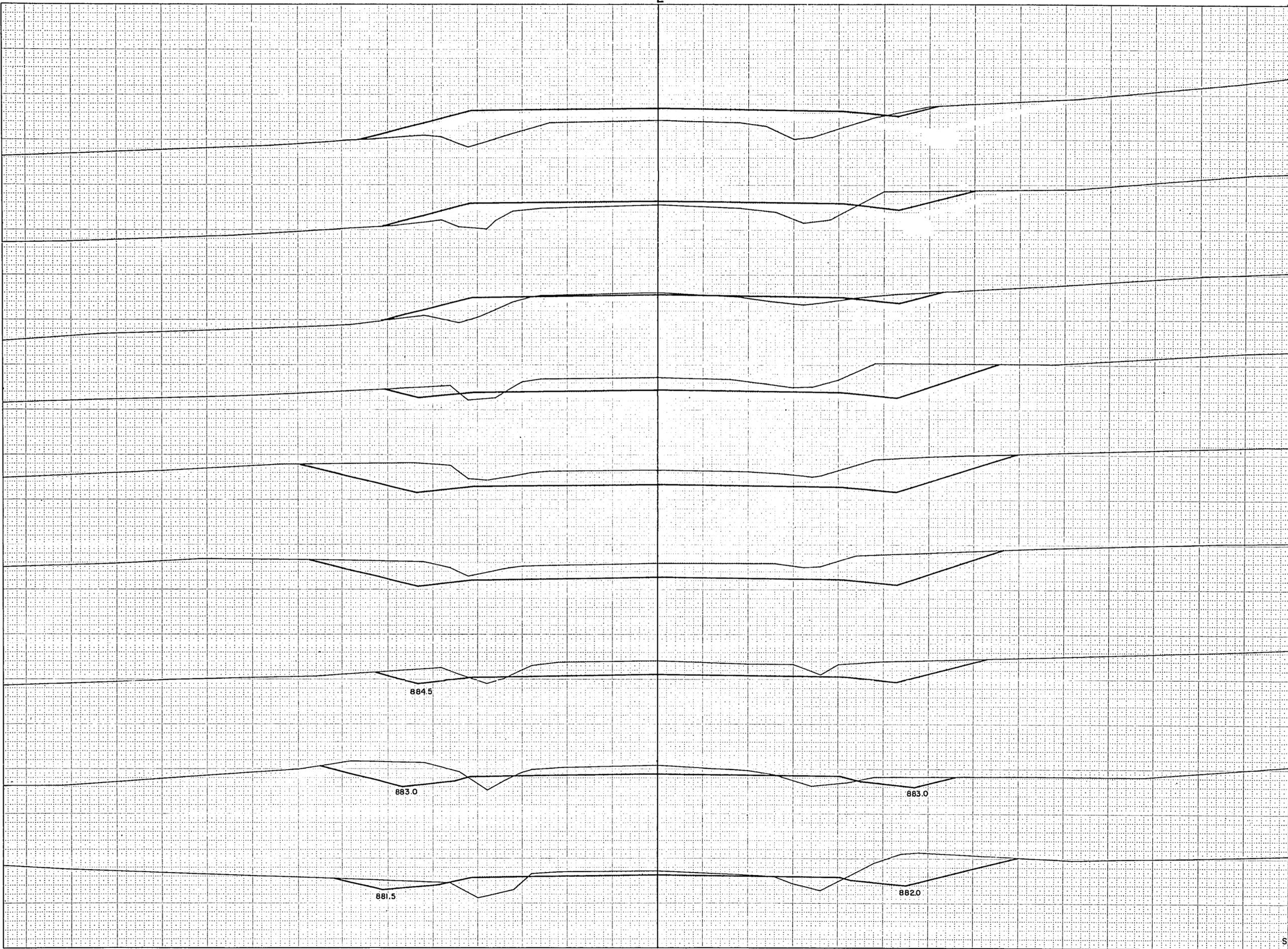
SURVEY PLUTO
 NOTE BOOK
 NO. 888
 AREA
 CHECKED

SURVEY PLUTO
 NOTE BOOK
 NO. 888
 AREA
 CHECKED

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

SURVEY	PLOTTED	DATE
NOTE BOOK	NO.	
NO.		

SURVEY	PLOTTED	DATE
NOTE BOOK	NO.	
NO.		

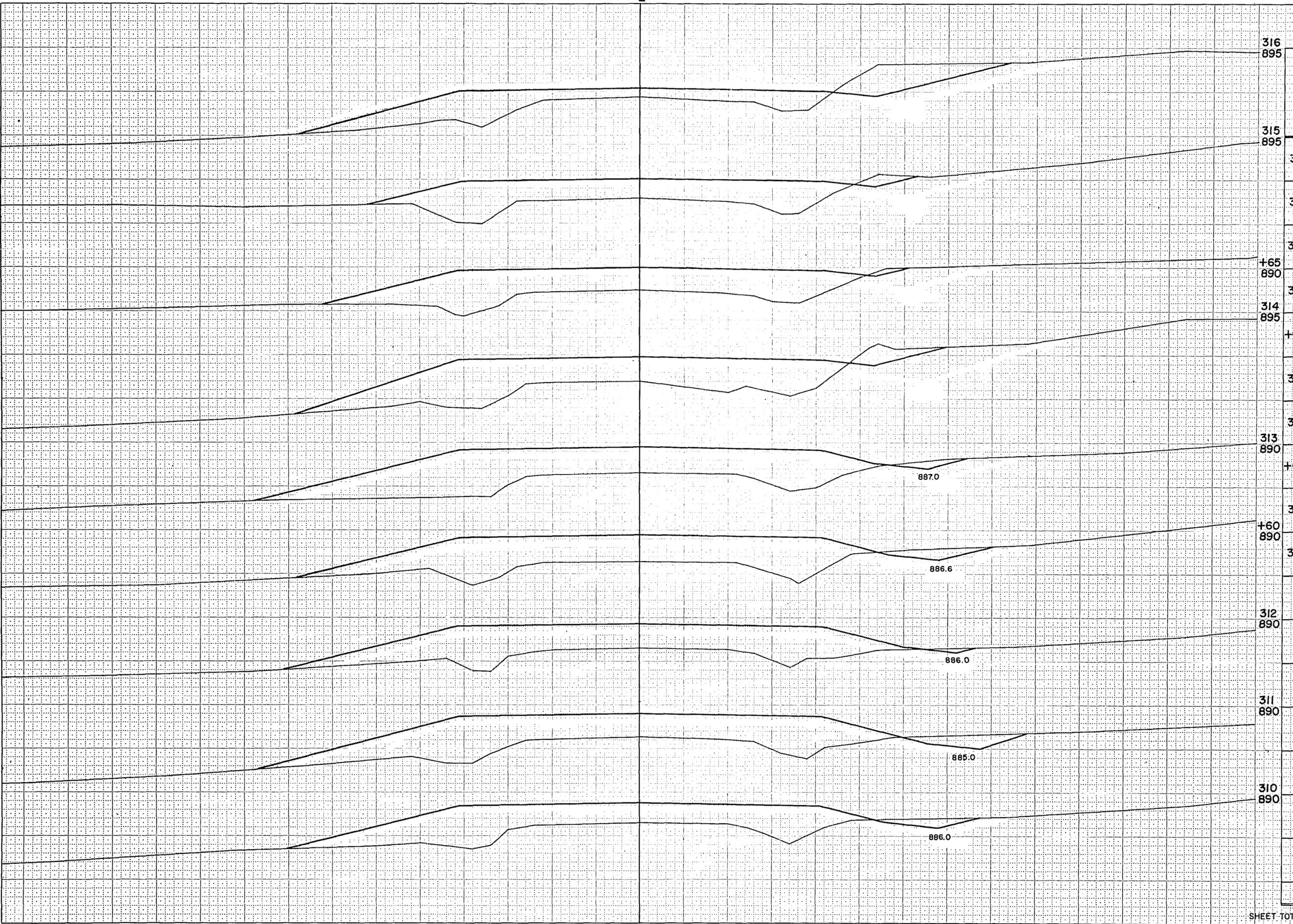


STATION	DISTANCE	YARDAGE		
		UNCL.	EXCAVATION	FILL
309 890				
301 890		139		74
302 890		189		57
303 890		244		24
304 890		380		4
305 890		232		
+47 890		233		4
306 890		187		54
307 890		48		150
308 890		32		298
309 890				
304 885				
303 885				
302 885				
SHEET TOTAL		1,684		665

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS	501860	37	46

NOTE BOOK SERIAL NO. 888
 DATE CHECKED 8-10-10
 BY S. R. P.

NOTE BOOK SERIAL NO. 888
 DATE CHECKED 8-10-10
 BY S. R. P.

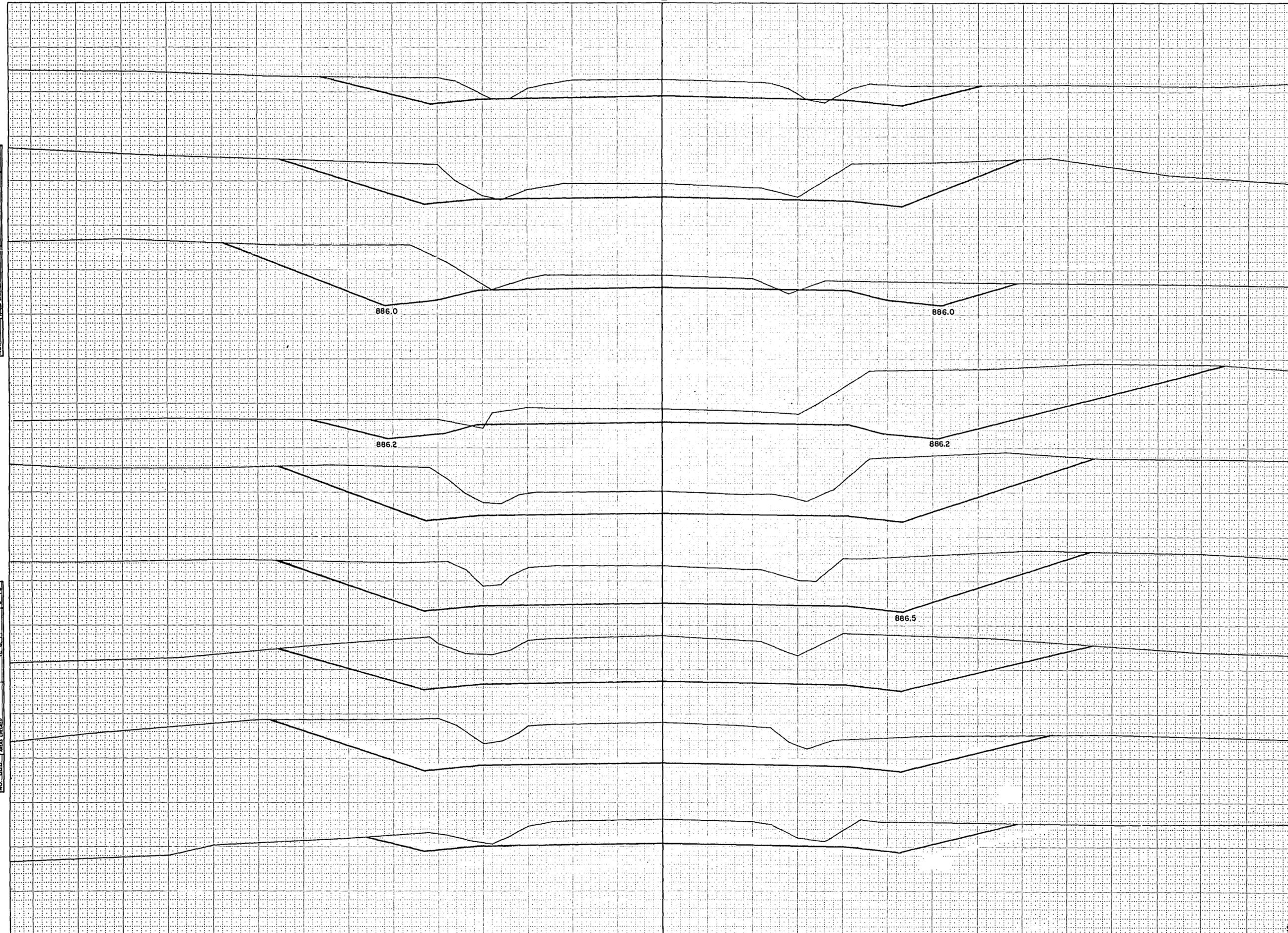


STATION	DISTANCE	YARDAGE		
		EXCAVATION		
		UNCL.		FILL
316 895				
315 895				
309		19		513
310		41		707
311		28		757
+65 890		15		435
314 895		13		311
+60		35		749
313		19		441
+65		4		202
315		78		457
+60 890				
316				
312 890				
311 890				
310 890				
SHEET TOTAL		252		4,572

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

NOTE BOOK
NO. 1

NOTE BOOK
NO. 2

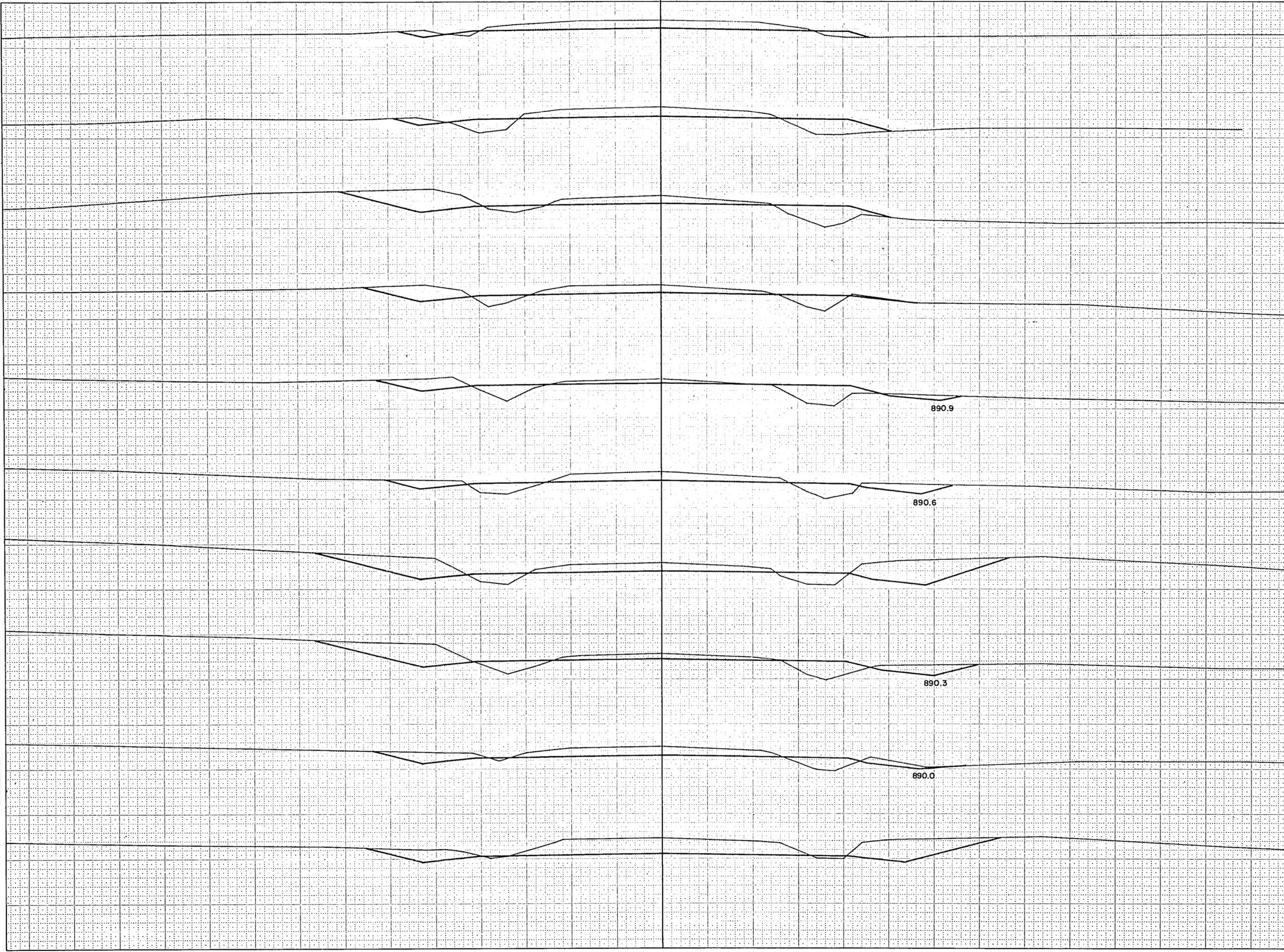


STATION	DISTANCE	YARDAGE		
		EXCAVATION		FILL
		UNCL.		
330 890				
324 890		400		17
325		824		
326		1,254		
+80 890				
327		1,341		
328		484		
+55 895				
+40		144		
+55				
+40 895		158		
+80				
329		122		
328 895		581		
330				
327 895				
326 895				
325 895				
SHEET TOTAL		5,308		17

BPR REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0186(1)	40	46

SURVEY	PLOTTED	DATE
NOTE BOOK	TEMP.	
NO.	AREA	
	ADJ. CHECKED	

SURVEY	PLOTTED	DATE
NOTE BOOK	TEMP.	
NO.	AREA	
	ADJ. CHECKED	

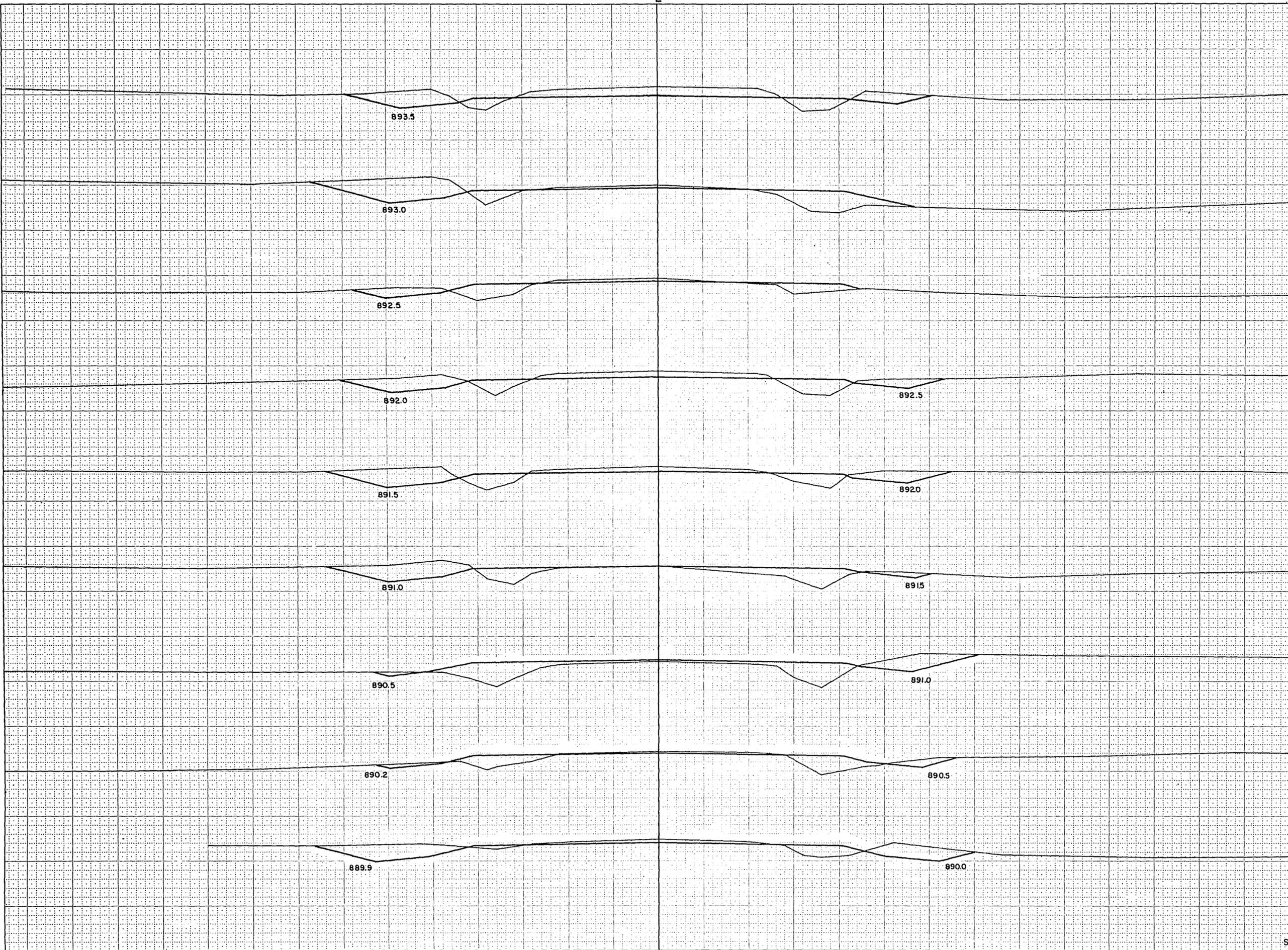


STATION	DISTANCE	YARDAGE	
		EXCAVATION	
		UNCL.	FILL
339			
890			
338			
890			
330		378	2
331			
337		231	15
890			
332		178	44
333			
890		85	23
+35			
		132	43
334			
890		100	70
335			
		93	65
336			
890		126	63
337			
		124	82
338			
+35			
890		115	57
339			
333			
890			
332			
890			
331			
890			
SHEET TOTAL		1,562	464

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

NOTE BOOK
 TITLE:
 AREA:
 DATE:
 BY:
 NO. 288

NOTE BOOK
 TITLE:
 AREA:
 DATE:
 BY:
 NO. 288



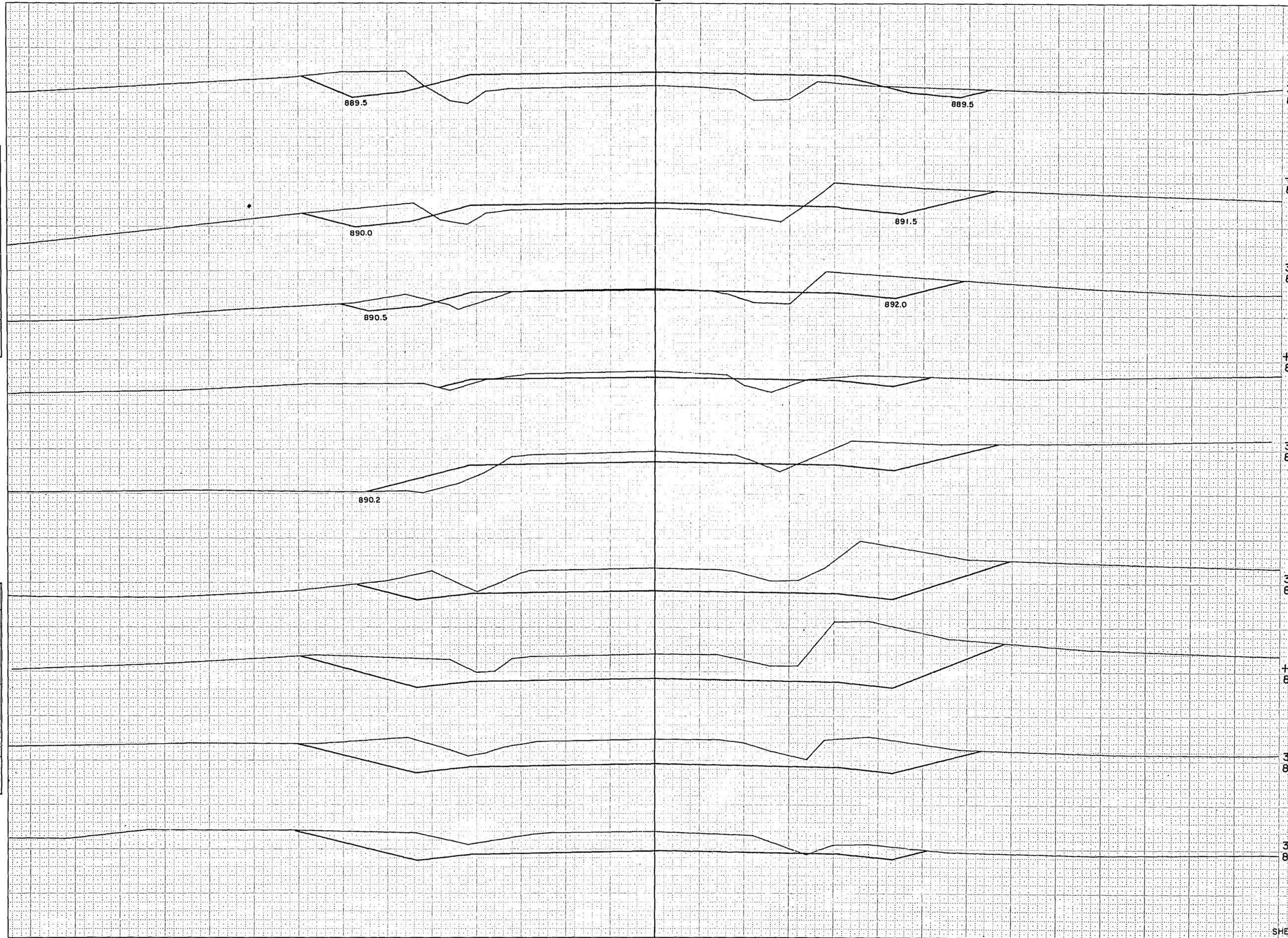
STATION	DISTANCE	YARDAGE		
		EXCAVATION		
		UNCL.		FILL
348 895				
339				
347 895		141		35
340				
341		96		65
346 895		46		122
342				
343		72		124
345 895		122		72
344				
345		154		56
346		100		59
344 890		96		76
347				
348		156		69
343 890				
342 890				
341 890				
340 890				
SHEET TOTAL		983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

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

SURVEY NO.	PLOTTED BY	DATE
NOTE BOOK NO.	AREAS CHECKED	

1-70	2-70	3-70	4-70	5-70
6-70	7-70	8-70	9-70	

SURVEY NO.	PLOTTED BY	DATE
NOTE BOOK NO.	AREAS CHECKED	

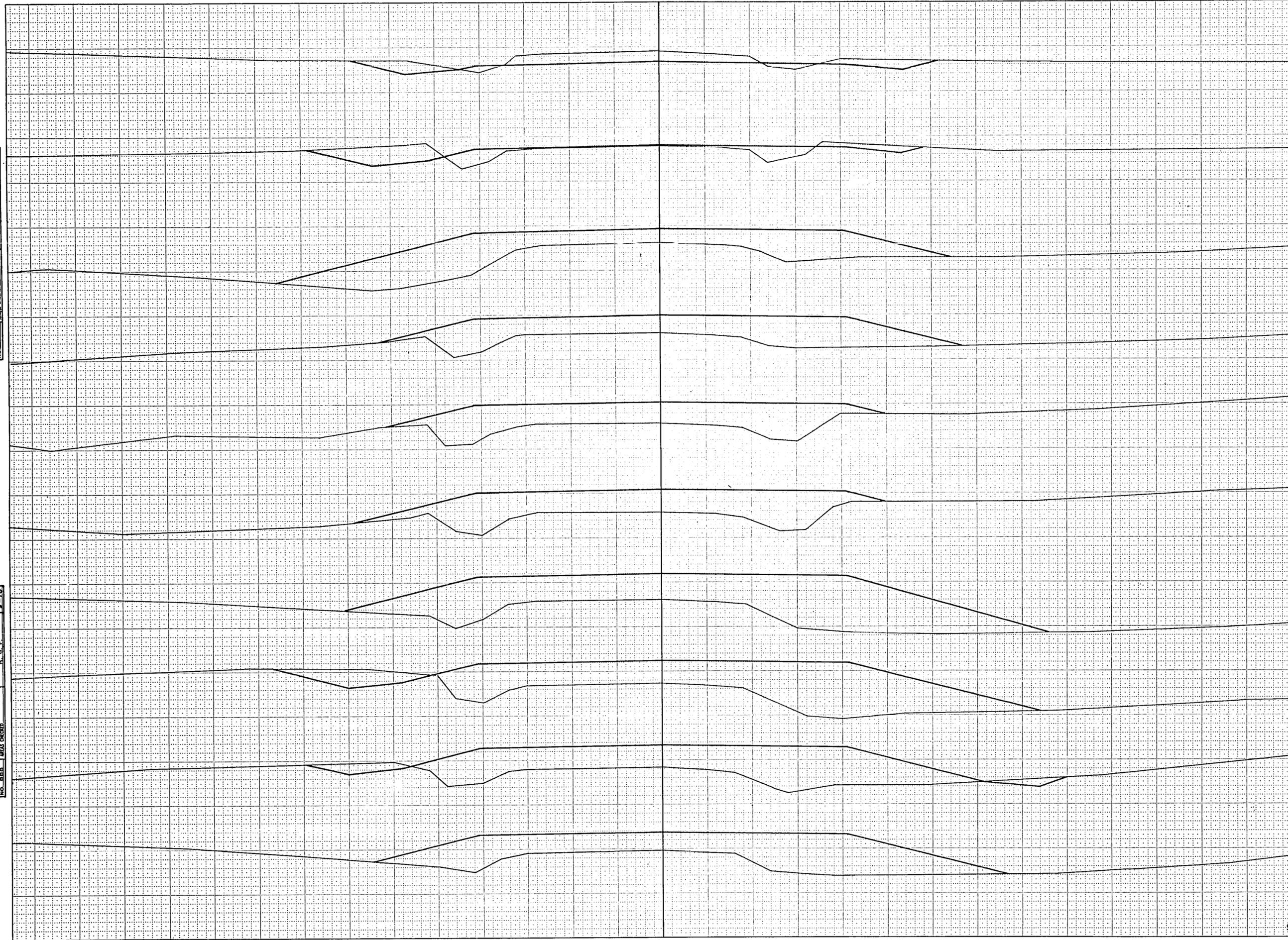


STATION	DISTANCE	YARDAGE		
		UNCL.	EXCAVATION	FILL
354	890			
+50	895	285		22
349	895	520		
353	895	569		
+75	895	194		
351	895	474		33
352	895	106		30
+60	895	50		18
353	895	99		42
+50	895	92		101
354	895			
351	895			
+75	895			
350	895			
349	895			
SHEET TOTAL		2,389		246

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0166(1)	43	46

NOTE BOOK TEMPLATE AREA CHECKED
NO. 1

NOTE BOOK TEMPLATE AREA CHECKED
NO. 2



STATION	DISTANCE	YARDAGE		
		EXCAVATION		FILL
		UNCL		
360 890				
359 890				
+50		34		241
358 890		15		331
+50		42		439
355		16		361
+50				597
356				112
+78				253
357 890				296
+50				370
358		57		48
+78		144		
359				
360				
356 885				
+60				
355 885				
355 890				
+50				
354 890				
+50				
354 890				
SHEET TOTAL		308		3,048

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	S 0186(1)	44	46

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

880.0

880.0

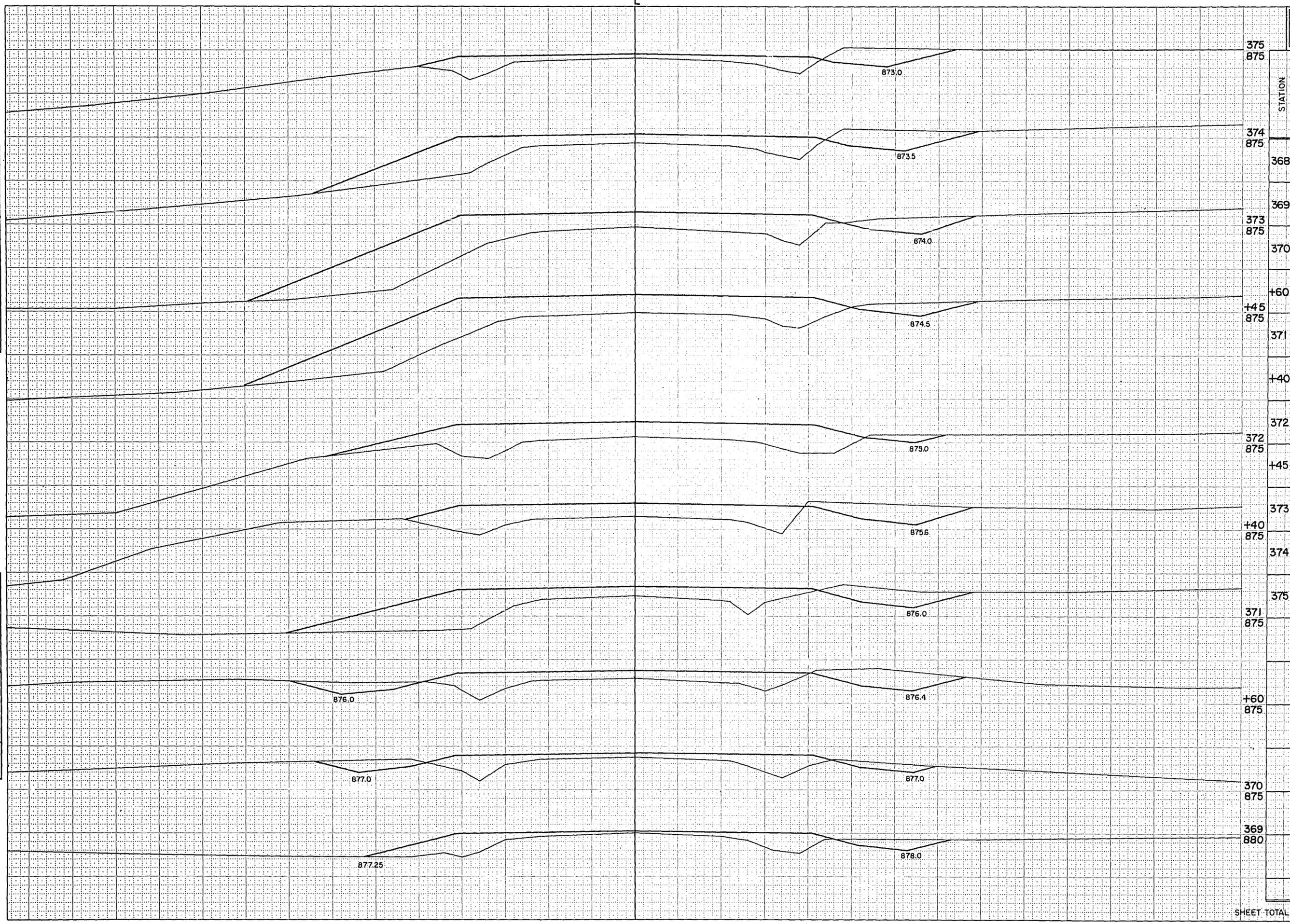
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 NOTE BOOK NO. 888
 MAPS CHECKED: [blank]

SURVEY PLOTTED BY: [blank]
 NOTE BOOK NO. 888
 MAPS CHECKED: [blank]

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	50186 (I)	45	46

NOTE BOOK NUMBER
NO. 888
CHECKED

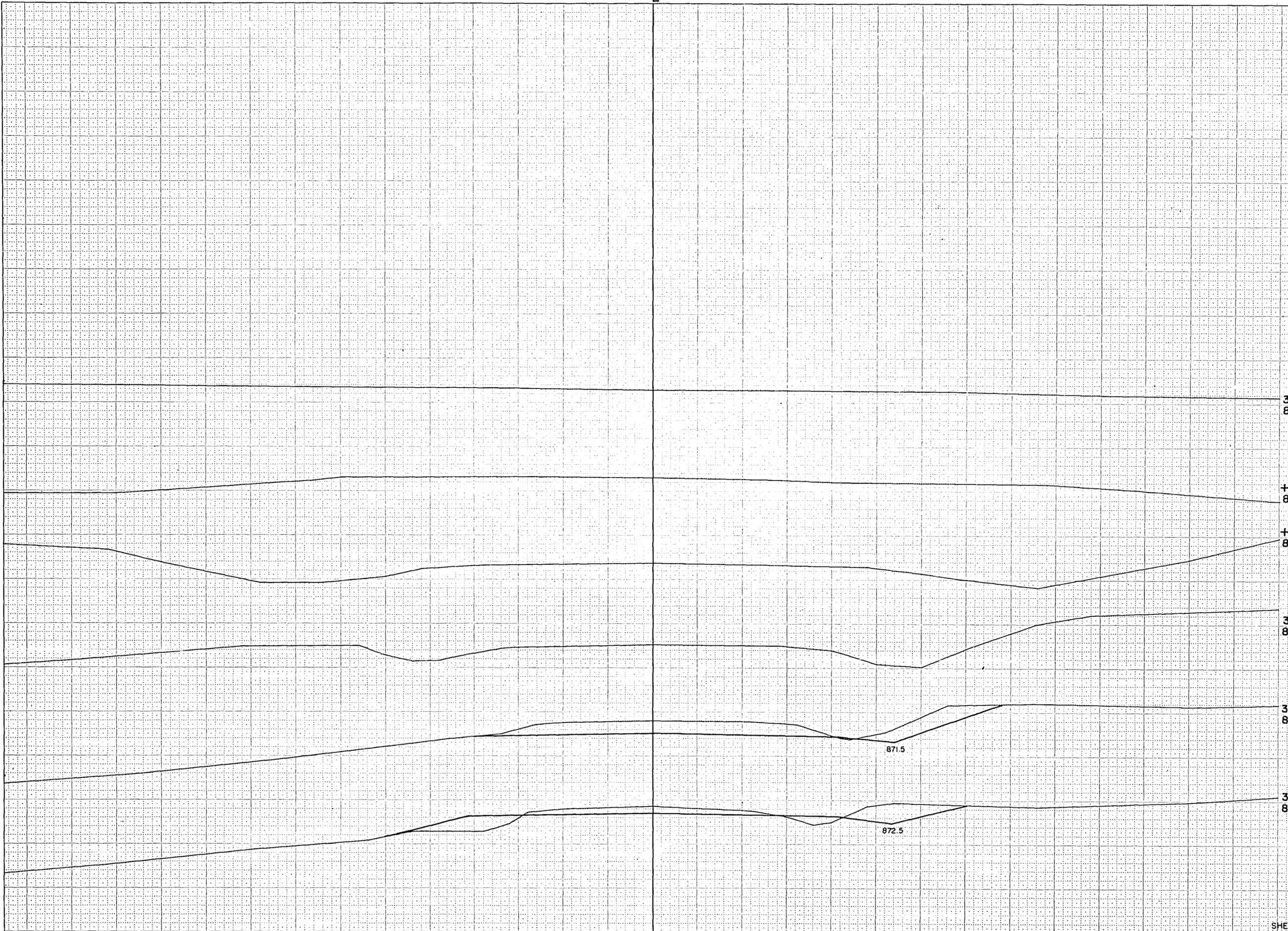
NOTE BOOK NUMBER
NO. 888
CHECKED



STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
		UNCL.	
375			
875			
374			
875			
368			
369			
373			
875			
370			
+60			
875			
371			
+40			
372			
875			
+45			
373			
+40			
875			
374			
375			
371			
875			
+60			
875			
370			
875			
369			
880			
SHEET TOTAL		550	2,612

B.P.R. REGION/ DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	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



SURVEY PLOTTED: _____
 NOTE BOOK: _____
 NO. _____
 AREA CHECKED: _____

14-70
 7-70
 8-70
 9-70
 D.W.
 R.G.P.
 B.S.
 R.G.P.
 SURVEY PLOTTED: _____
 NOTE BOOK: _____
 NO. 888
 AREA CHECKED: _____