

COUNTY HIGHWAY
 BUREAU OF CONSTRUCTION
MILLERSBURG - MASSILLON ROAD
 ROAD No. 158 & 160 SEC. E' RES.
HOLMES COUNTY
 SALTCREEK TWP. FEBRUARY 1924

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The Standard Specifications of the State of Ohio Division of Highways in force on date of contract will govern improvement.

I hereby approve these plans and declare that the making of this improvement will require the closing of traffic of the highway and that detours will be provided as shown on the plan and estimate.

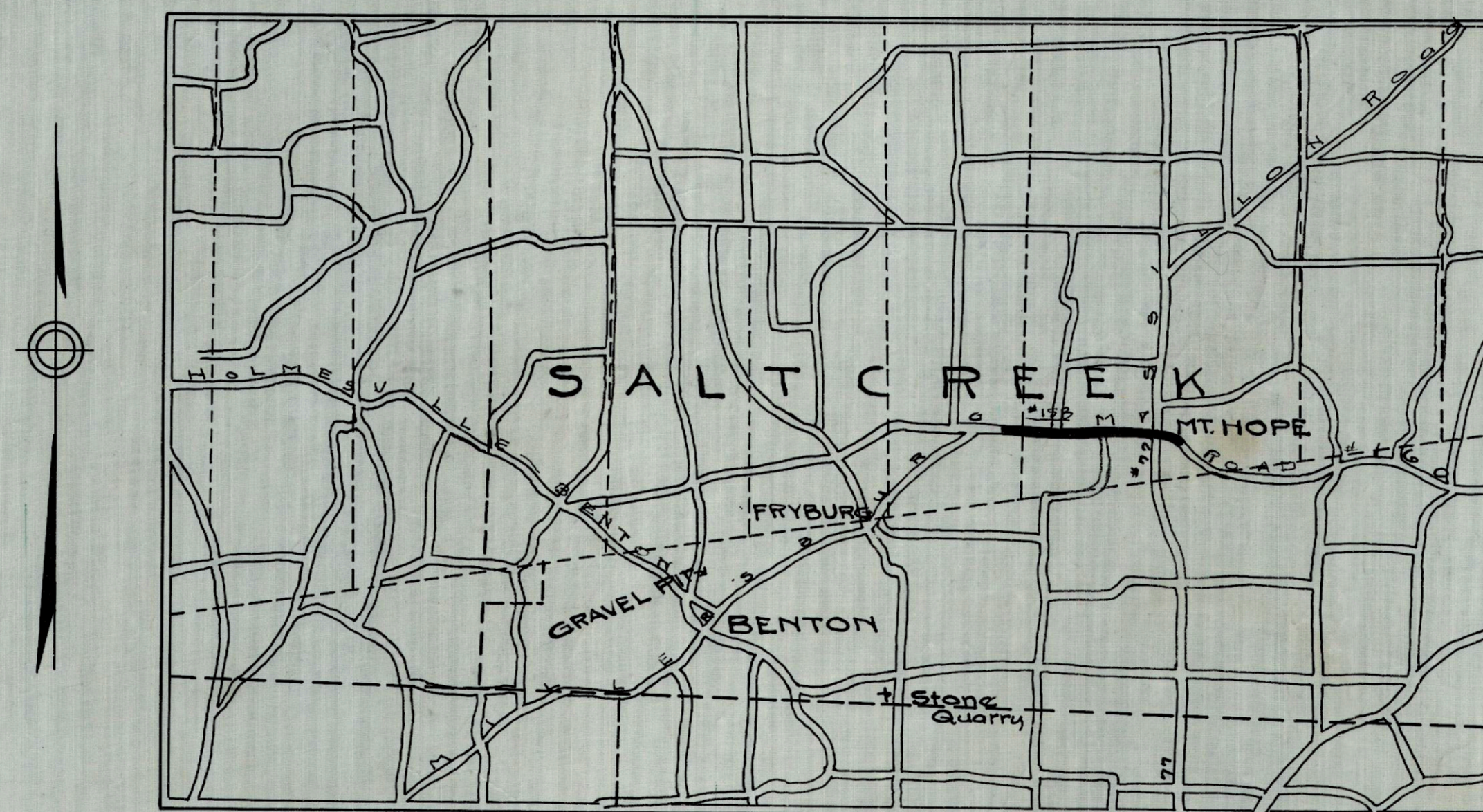
Approved *P. K. Troutman*
 Date 4-4-24 County Surveyor

We, the Commissioners of Holmes County hereby approve these plans and certify that the right of way 60 feet wide is available for the construction, maintenance & repair of highway

Date _____ County Commissioners

CONVENTIONAL SIGNS

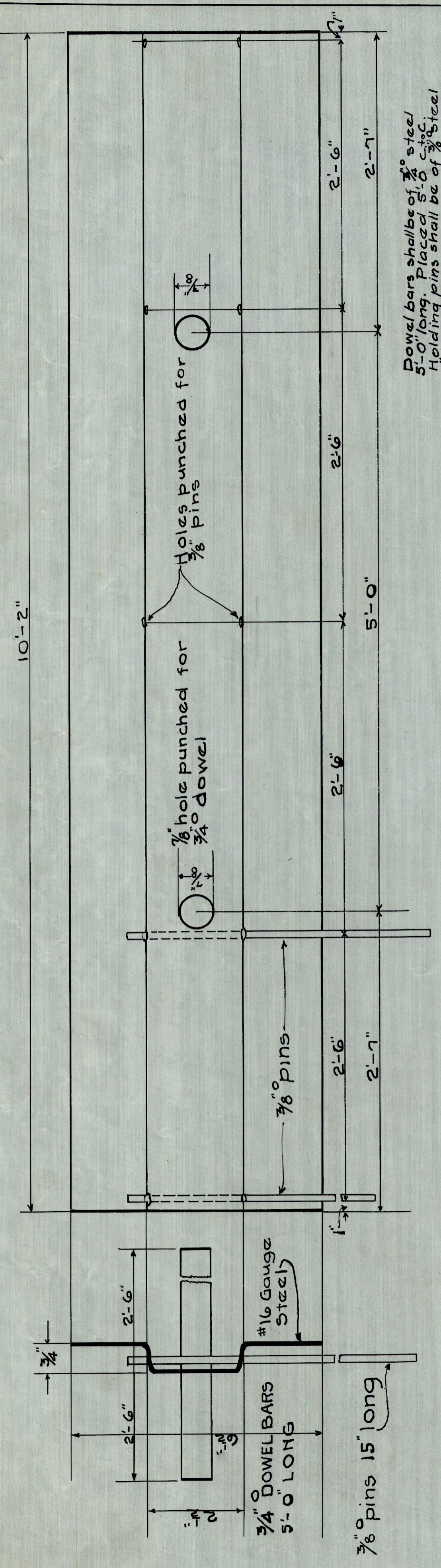
State line	_____
County line	_____
Township line	_____
Section line	_____
Property line not fenced	_____
Center line	_____
City or village line	_____
Fence	x x x x x x x x
Telephone	+++++
Steam railroad	=====
Guard Rail	-x-x-x-x-x-x-x-x-



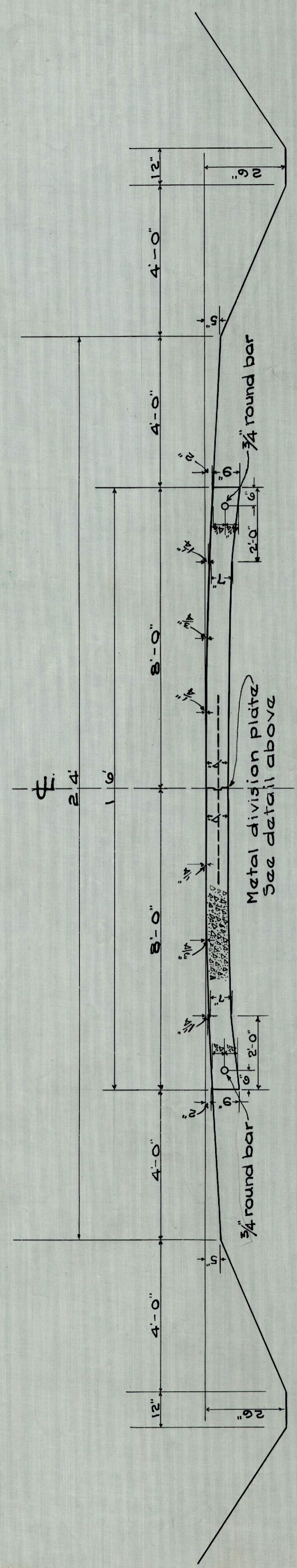
LOCATION PLAN

PORTION TO BE IMPROVED
 DETOURS SHOWN THUS → →

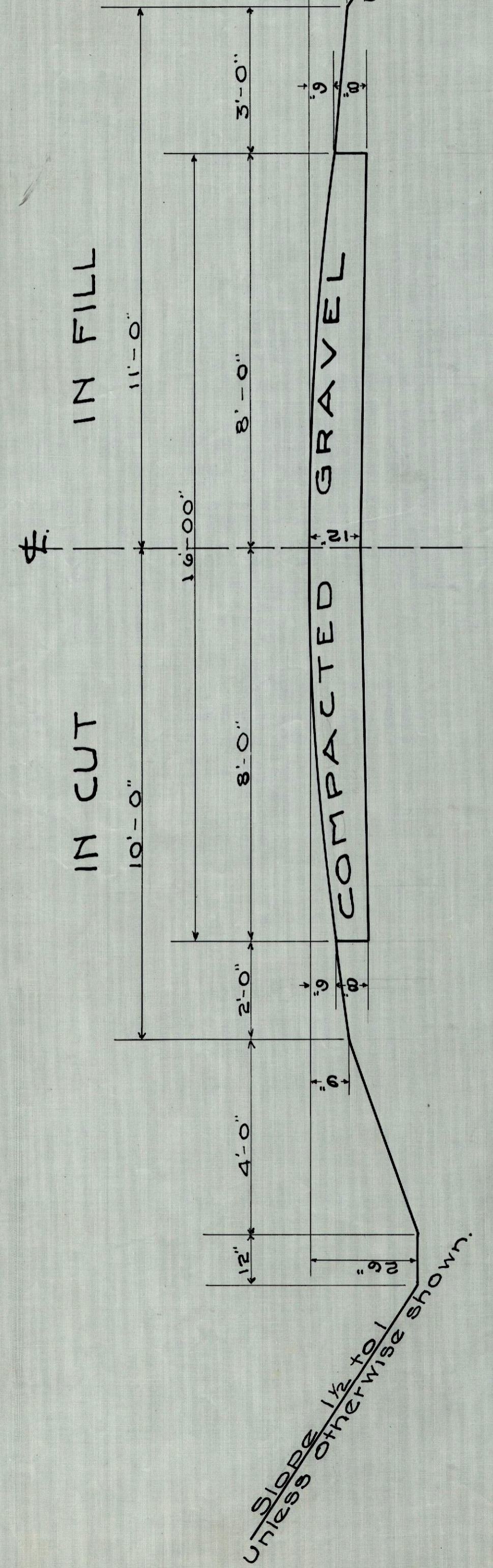
SCALES
 Plan 1"=100'
 Profile (Vert.) 1"=10'
 Profile (Hor.) 1"=100'
 Cross Sections 1"=5'



METAL CENTER STRIP

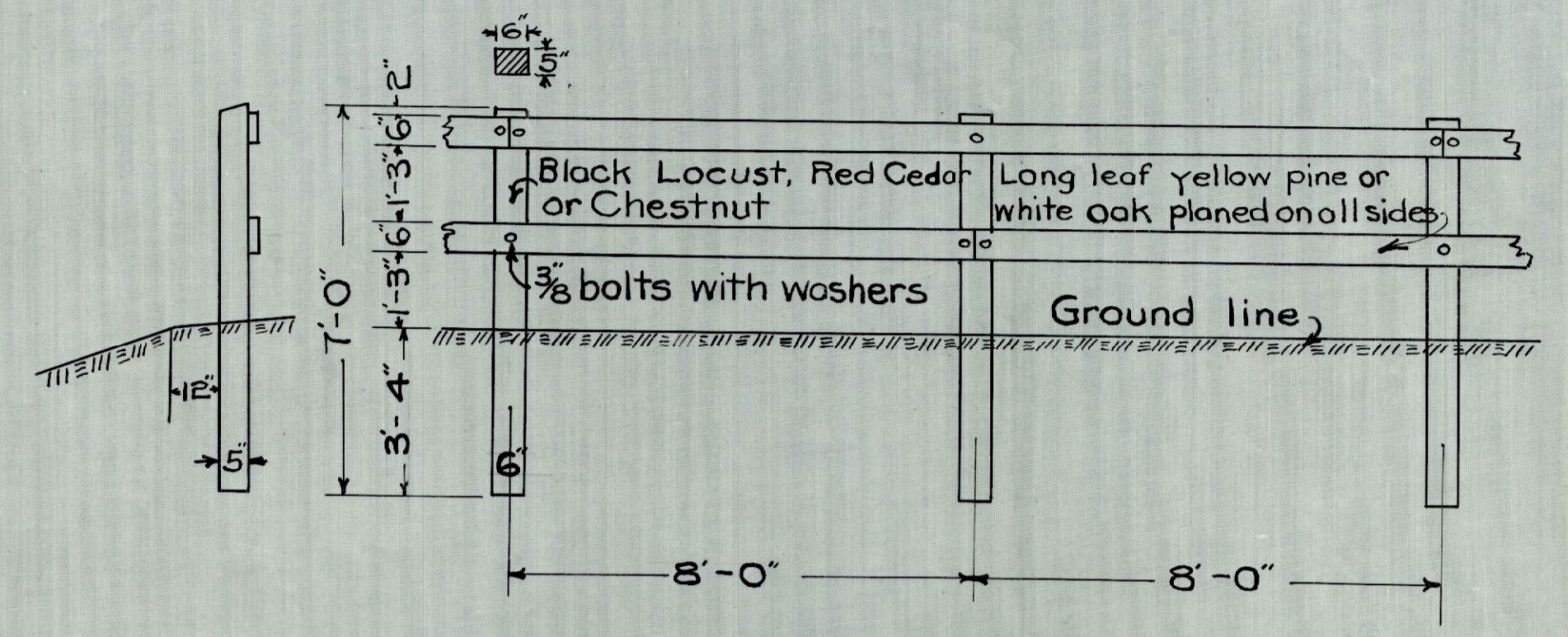


TYPICAL CROSS SECTION
PLAIN CONCRETE
1-1 1/2-3 MIX
STA. 184+50 TO STA. 197+00



TYPICAL CROSS SECTION
TRAFFIC BOUND GRAVEL
STA. 130+35 TO STA. 184+50

TYPE "E" GUARD RAIL
STATE HIGHWAY DEPARTMENT



BILL OF MATERIALS FOR TWO PANELS

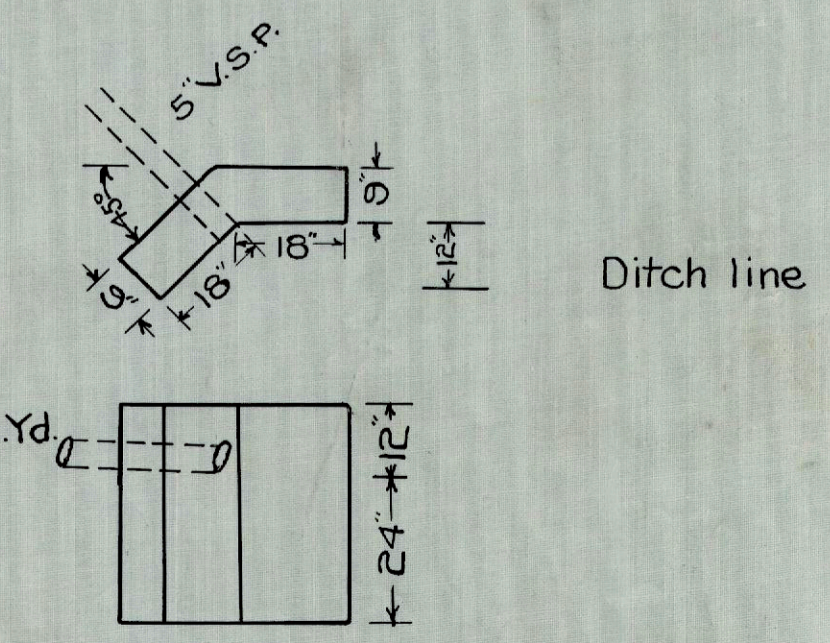
WOOD RAILS	216	16
POSTS	516	7
CARRIAGE BOLTS	3/8	16
WASHERS	3/8	16
NAIL SPIKES 40d.	1/2	5

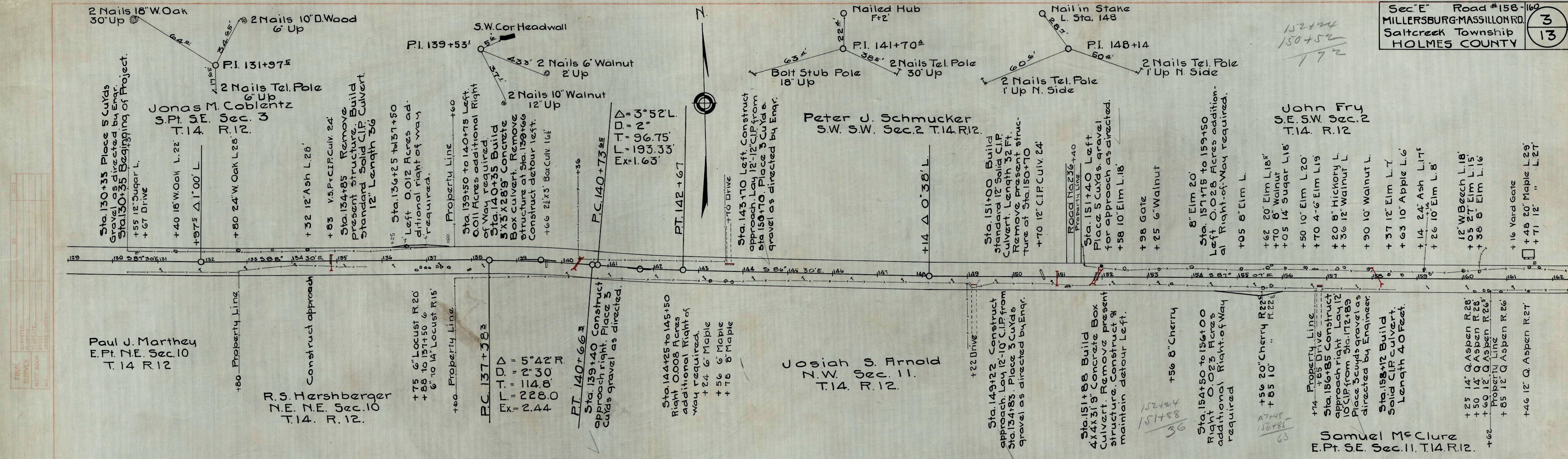
All surfaces in contact to be painted before assembling and all exposed surfaces to have two (2) coats of white lead and linseed oil paint. Posts to be set vertical, in line parallel to grade line. Rails to be secured to post without splitting. In order to secure proper alignment and grade, bolt holes shall be bored and the top of the posts trimmed after the posts are set and the rails nailed to them. Posts shall be treated with Carbolineum from a point one foot above the ground line to a point one foot below the ground line.

NOTICE

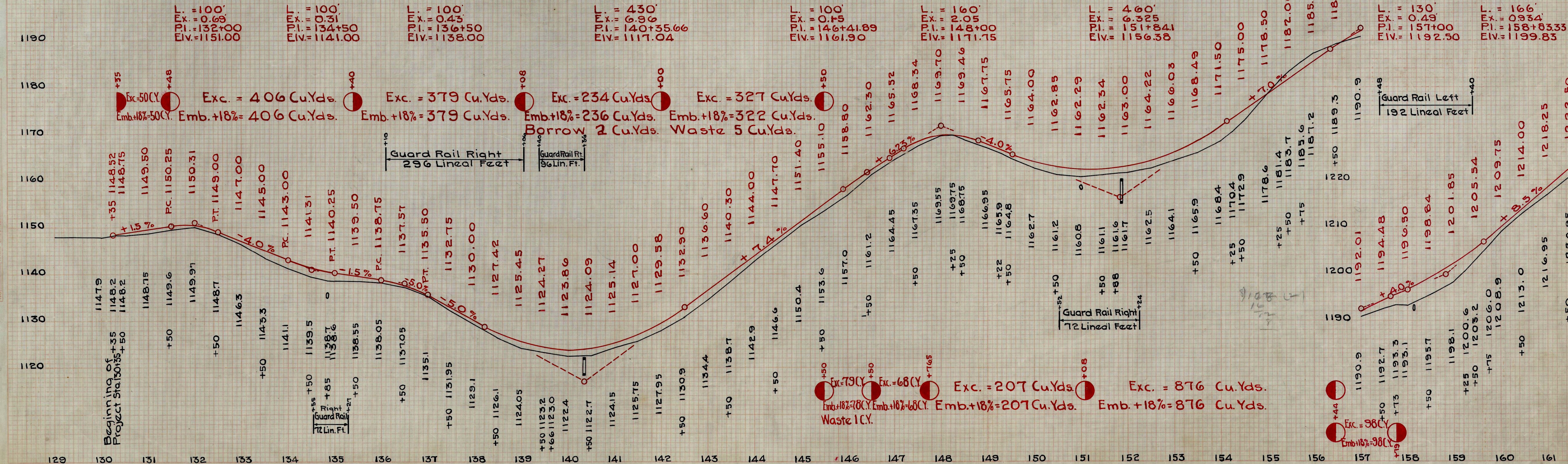
This plan contemplates placing 15" of loose gravel at center of pavement and 10" of loose gravel on the outer edge of pavement and it is assumed that the 15" in the center will compact to 12" and 10" will compact to 8" and will be accepted as such. The gravel shall be placed as follows: - Plank 10" wide shall be staked along edge of pavement with a clearance of 16" with the top edge 4" below the profile grade. Narrow plank with blocks nailed on or set on blocks in order to make 10" will not be permitted. Where ruts form in subgrade same shall be leveled off before placing gravel. The gravel shall then be placed between plank forms 10" deep at the side forms and 15" deep on the center line making 3" above profile grade and being a crown of 7" in the loose gravel. The gravel shall conform to a parabolic curve. The contractor shall provide a suitable template having this crown and check the gravel as same as spread. The berms be built up or dressed off as may be required to 2" below the top of the 10" side forms.

PLAN HEADWALL FOR UNDER DRAIN OUTLET
Sta. 161+35 R. & 162+16 L.
1 Head Wall Requires .3Cu.Yd. 1-2-4 Conc.





B.M. Sta. 128+30 R. N.E. Cor. stone step res. Elevation 1149.99	B.M. Sta. 130+35 L. N.E. Cor. N. Headwall Elevation 1146.52	B.M. Sta. 134+15 L30 Spike root chestnut Elevation 1143.56	B.M. Sta. 139+50 R. Spike in Walnut Elevation 1120.49	B.M. Sta. 143+60 L. 2 spikes 1 up 3rd post N. Elevation 1142.85	B.M. Sta. 149+20 R. 2 spikes W. gate post 1 up Elevation 1165.27	B.M. Sta. 152+80 L.60 2 spikes 10" Willow Elevation 1166.05	B.M. 157+50 L. 2 spikes 12" Walnut Elevation 1191.07
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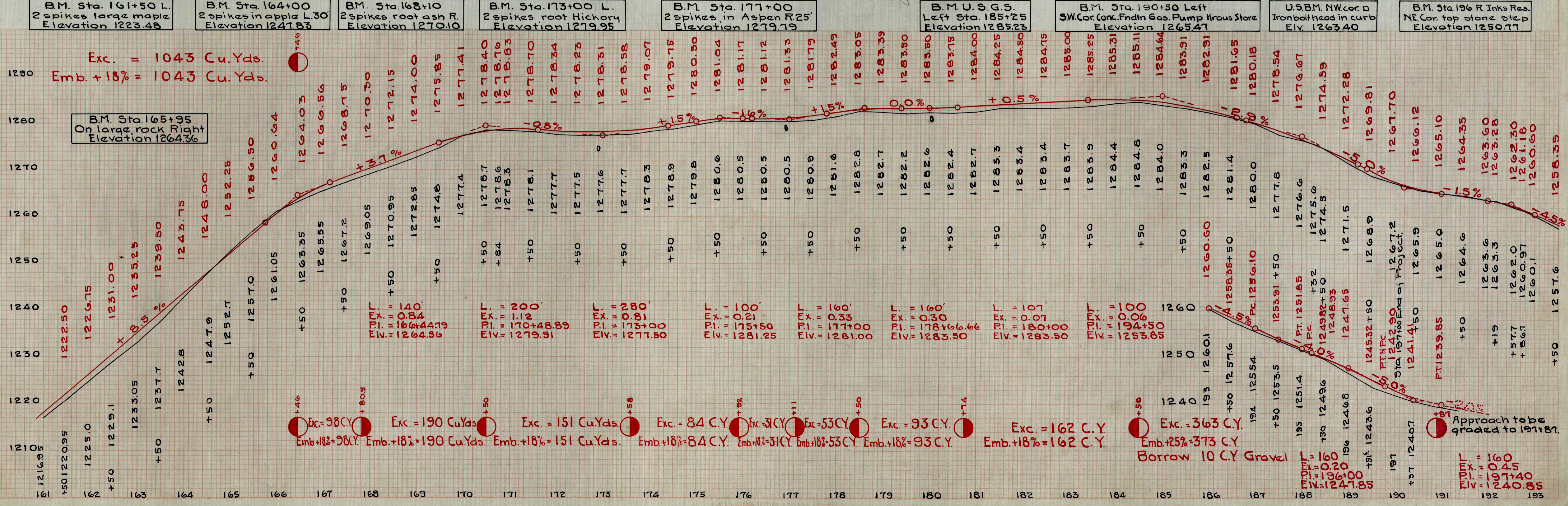
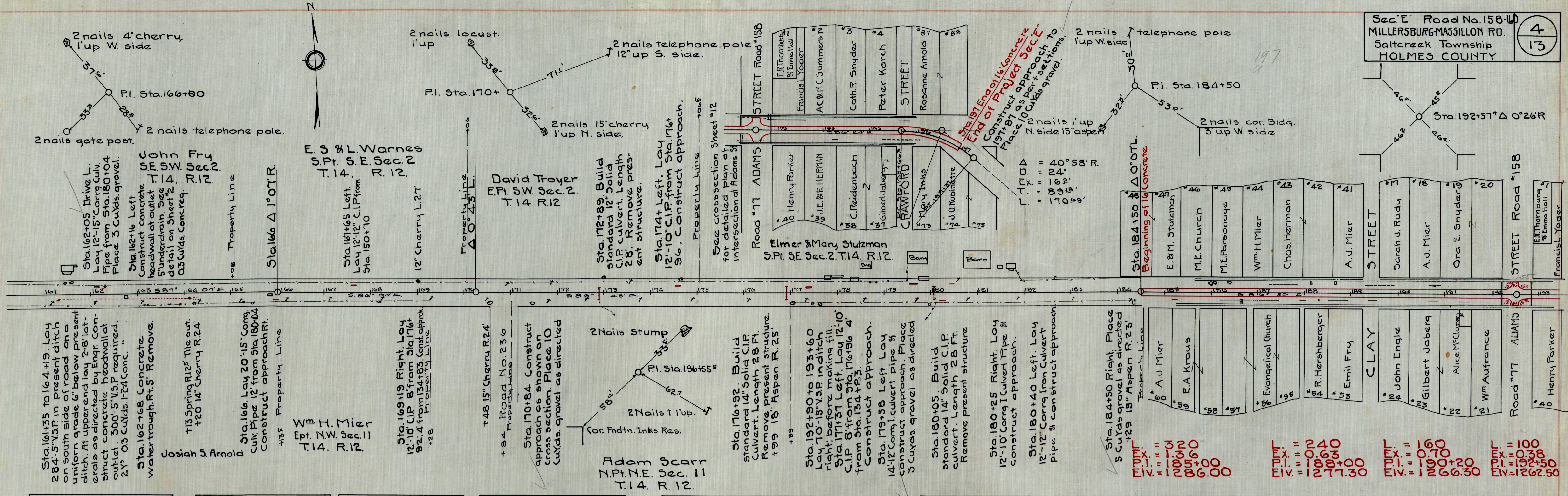


FINAL SURVEY PLANNED DATE
NOTE BOOK NO. 1111-112
AREAS CHECKED

ORIGINAL SURVEY PLANNED DATE
NOTE BOOK NO. 1111-112
AREAS CHECKED

FINAL SURVEY DRAWING
 SURVEYOR'S NAME
 DATE
 PROJECT NAME
 SHEET NO.

ORIGINAL SURVEY PLOTTING
 SURVEYOR'S NAME
 DATE
 PROJECT NAME
 SHEET NO.



Sec. E' Road No. 158-16
 MILLERSBURG-MASSILLON RD.
 Saltcreek Township
 HOLMES COUNTY

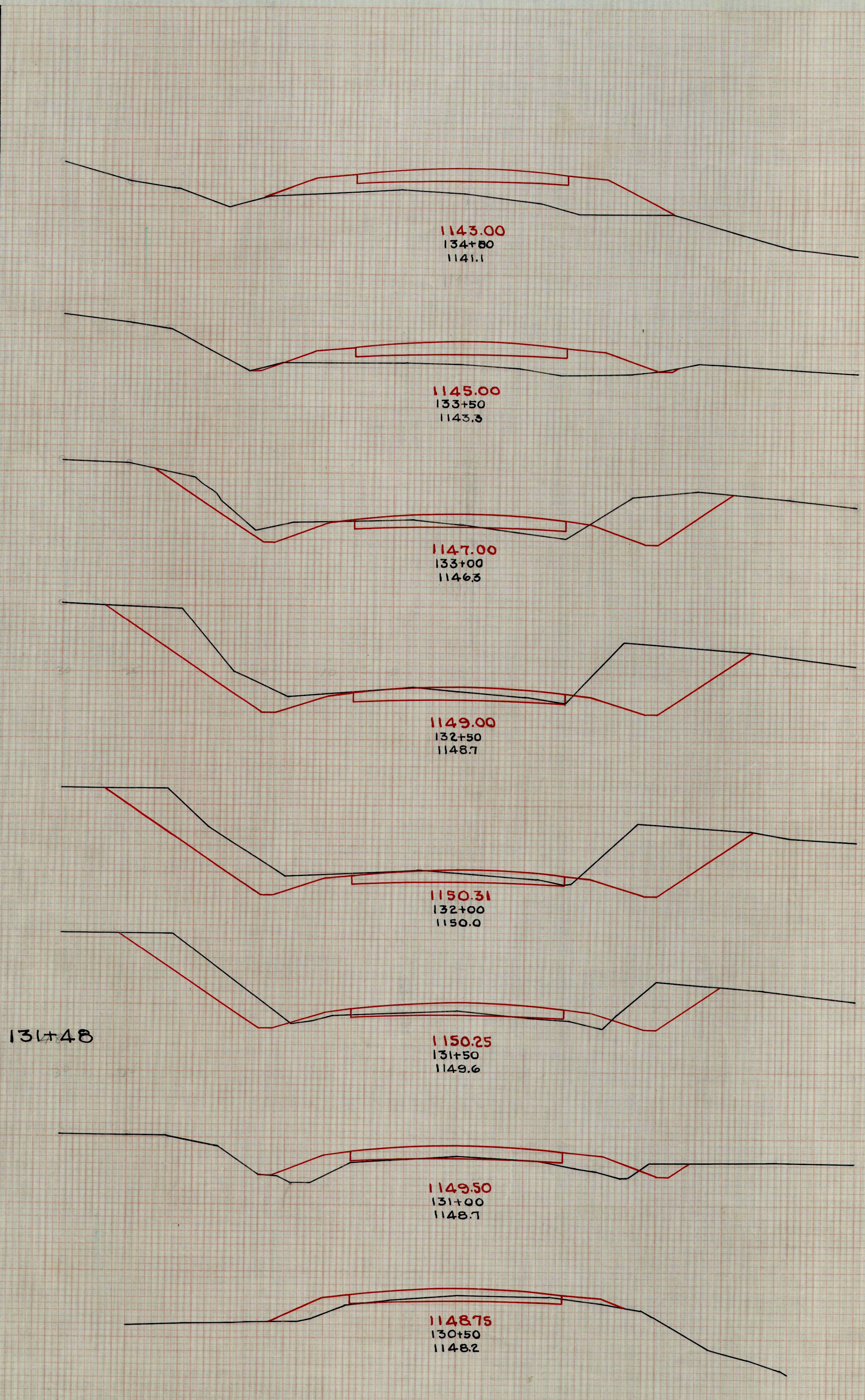
4
 13

197

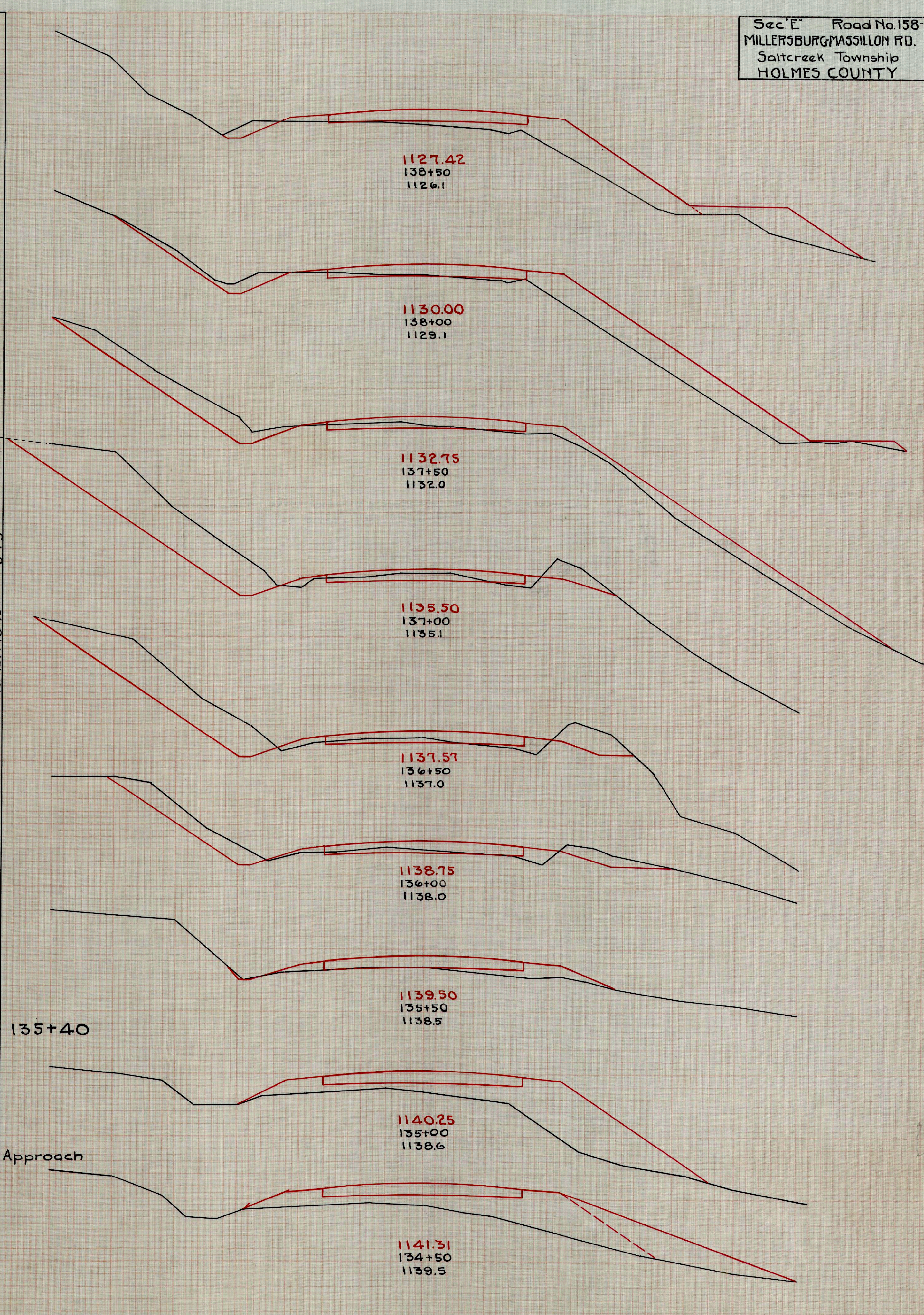
Exc. = 160
 Emb. = 0.20
 E.V. = 136.00
 E.V. = 1247.85

Exc. = 160
 Emb. = 0.45
 E.V. = 197+40
 E.V. = 1240.85

End Area Cut/Fill	Cu Yds. Cut/Fill
0° 38'	0° 60'
0° 26'	35' 28"
38° 3'	108' 5"
79° 0'	143' 0"
81° 0'	111' 5"
41° 5'	41' 18"
3° 14'	6'
4° 6'	6'

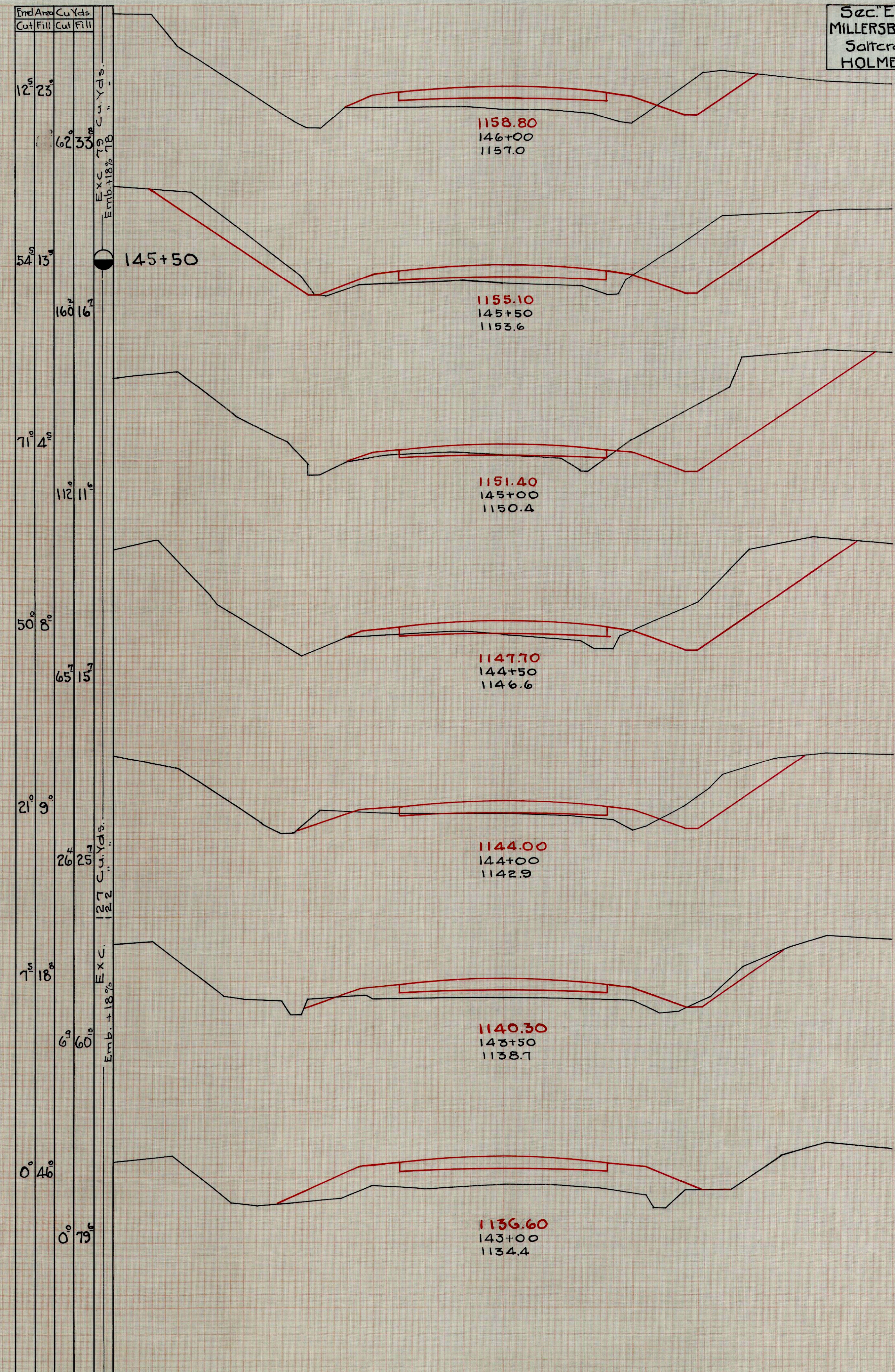
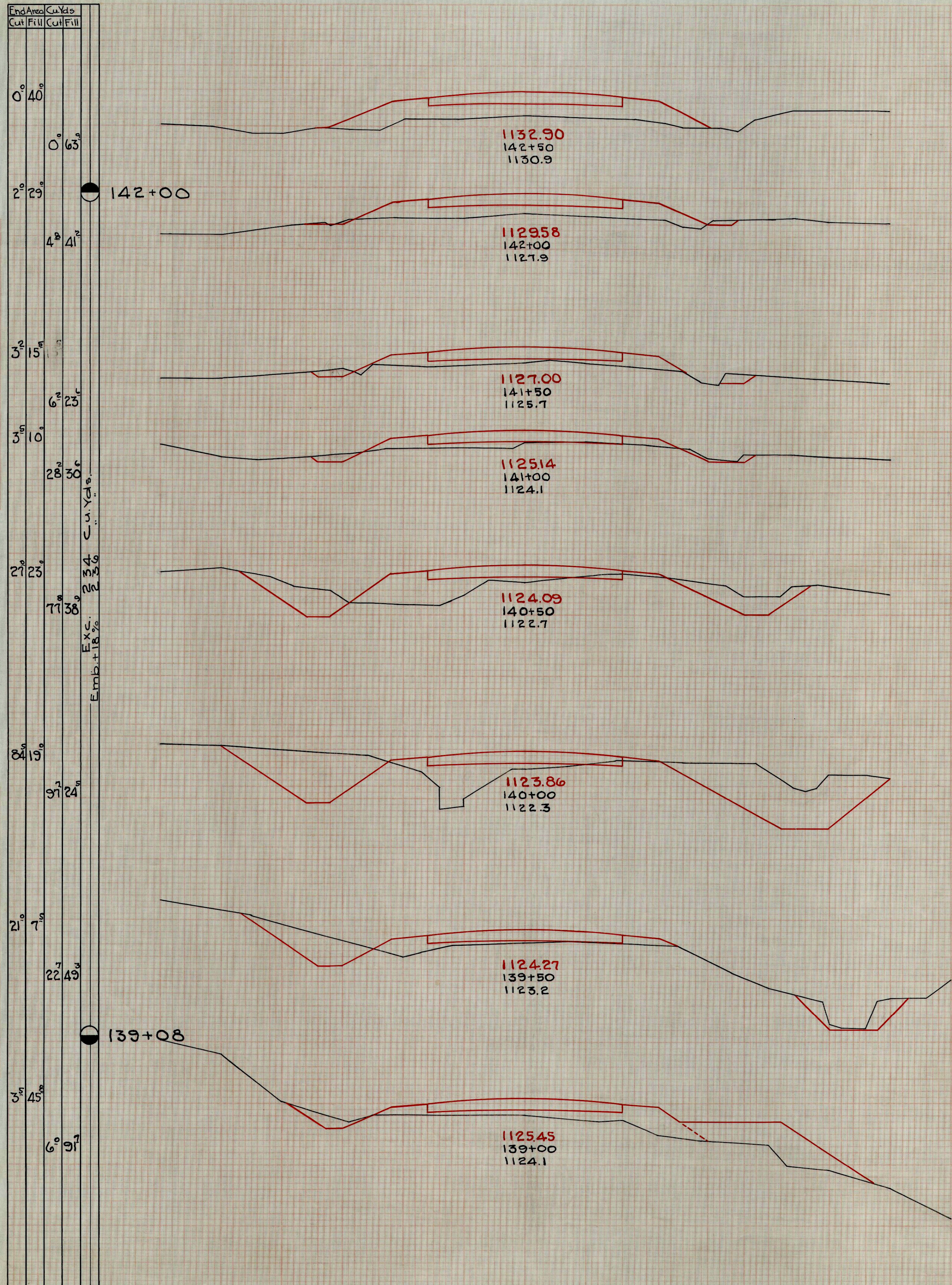


End Area Cut/Fill	Cu Yds. Cut/Fill
3° 53'	12° 93'
10° 48'	35' 51"
28° 24'	96' 25"
76° 3'	125' 1'
58° 5'	71' 8"
25° 4'	23' 13"
0° 0'	10' 6"
0° 62'	0° 93'
0° 93'	12° 46'
0° 46'	0° 19'



FINAL SURVEY MAP

ORIGINAL SURVEY MAP



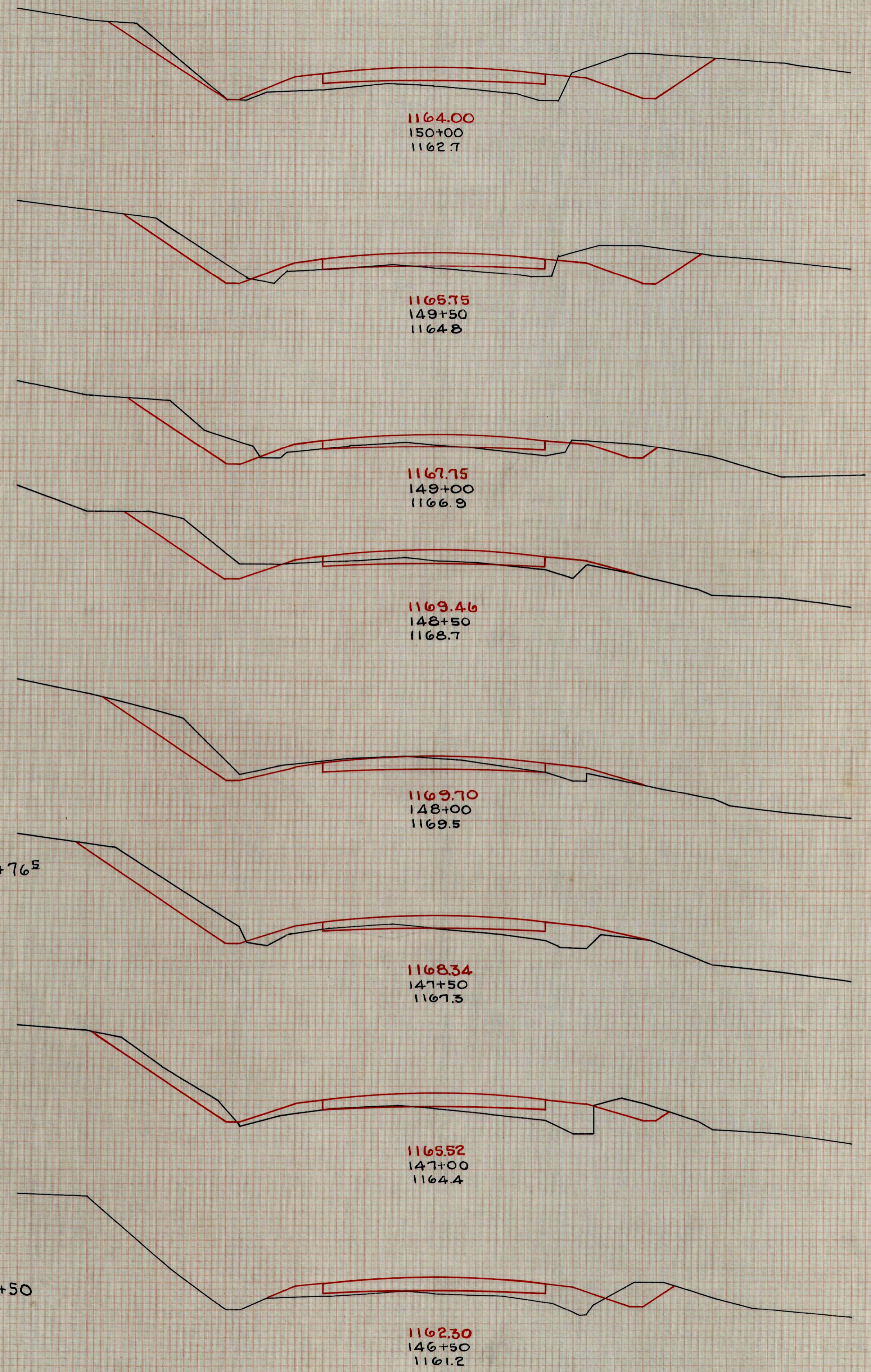
FINAL SURVEY
 NOTE BOOK
 DATE

ORIGINAL SURVEY
 NOTE BOOK
 DATE

End Area	Cu. Yds.	Cut	Fill
25° 15'			
47' 21"			
26° 7'			
41' 11"			
18° 5'			
33' 9"			
17° 5'			
41' 0"			
26° 4'			
41' 16"			
18° 13'			
28' 23"			
13° 13'			
17' 23"			
5° 11'			
16° 32'			

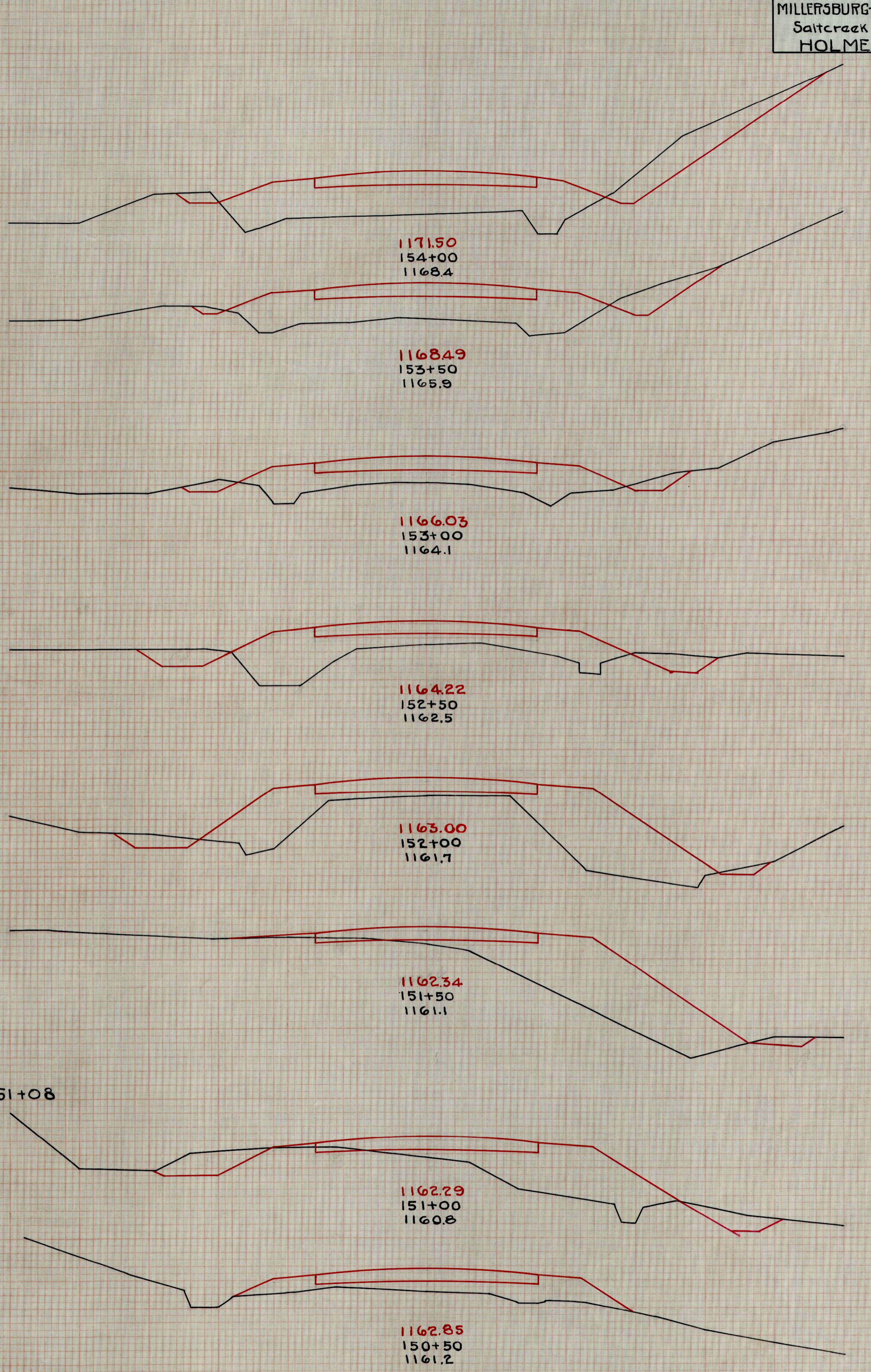
Exc. 207 Cu. Yds.
 Emb. +18%

Exc. 68 Cu. Yds.
 Emb. +18%



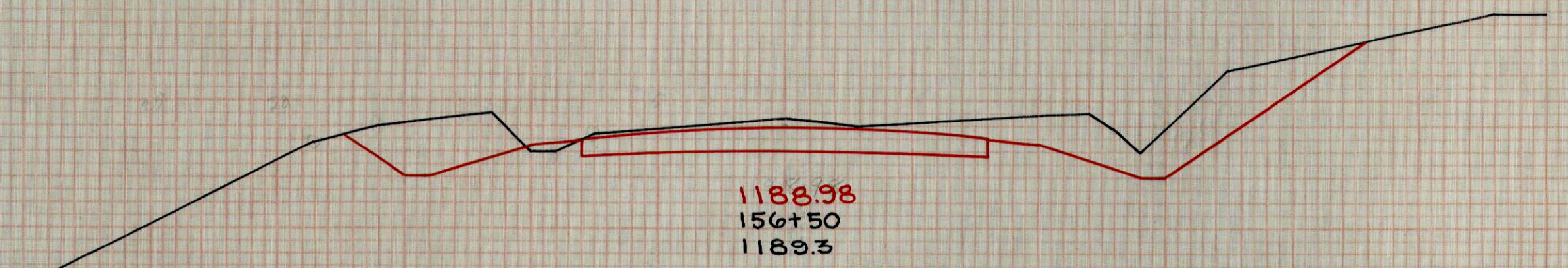
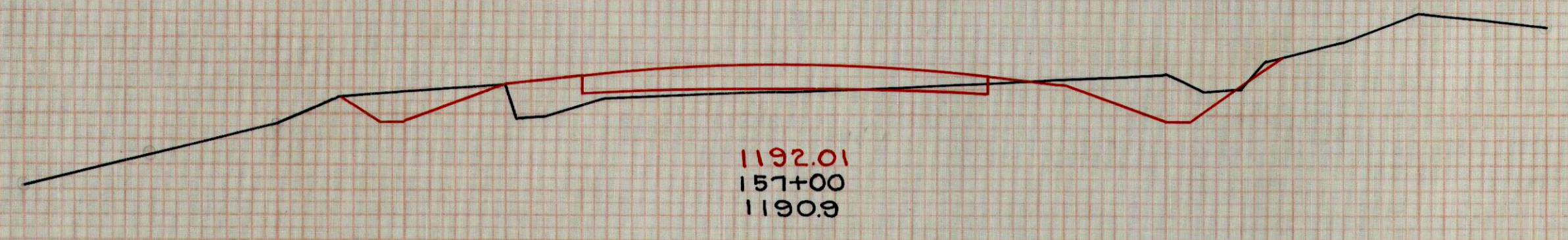
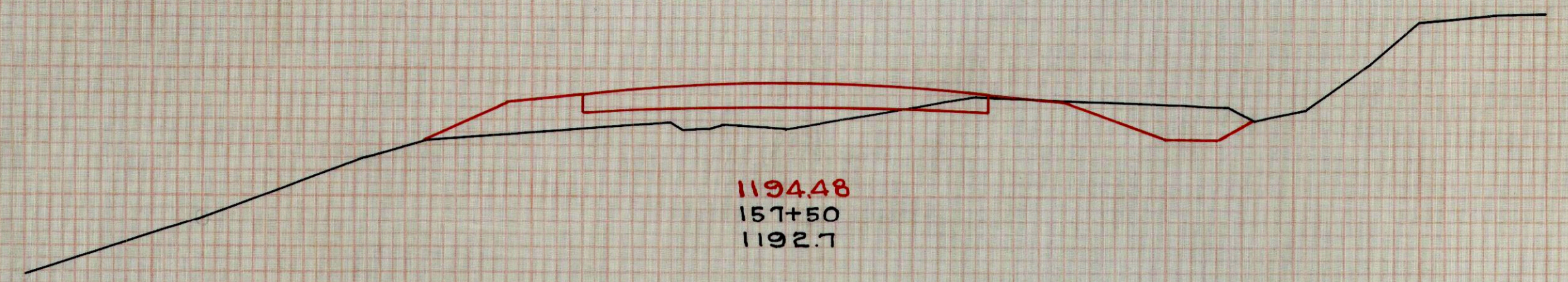
End Area	Cu. Yds.	Cut	Fill
24° 65'			
31° 10'			
9° 52'			
13° 83'			
5° 38'			
15° 77'			
11° 45'			
16° 14'			
5° 78'			
7° 137'			
3° 70'			
2° 10'			
10° 44'			
4° 63'			
0° 23'			
18° 36'			

Exc. 876 Cu. Yds.
 Emb. +18%

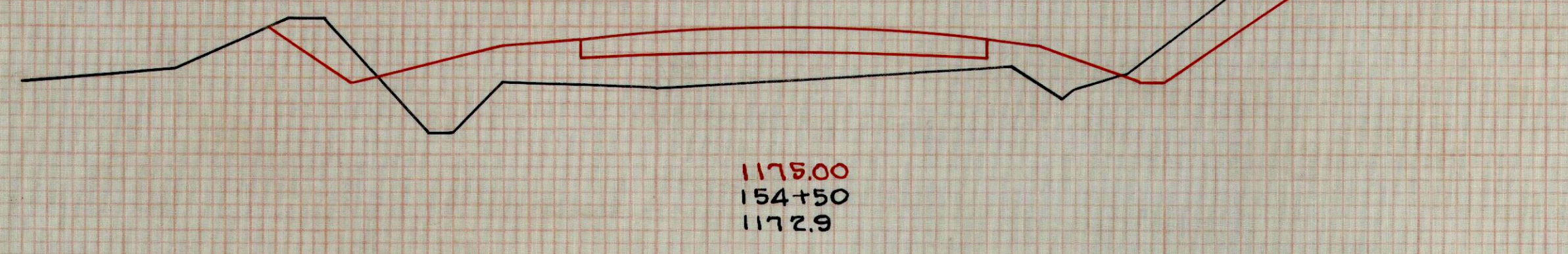
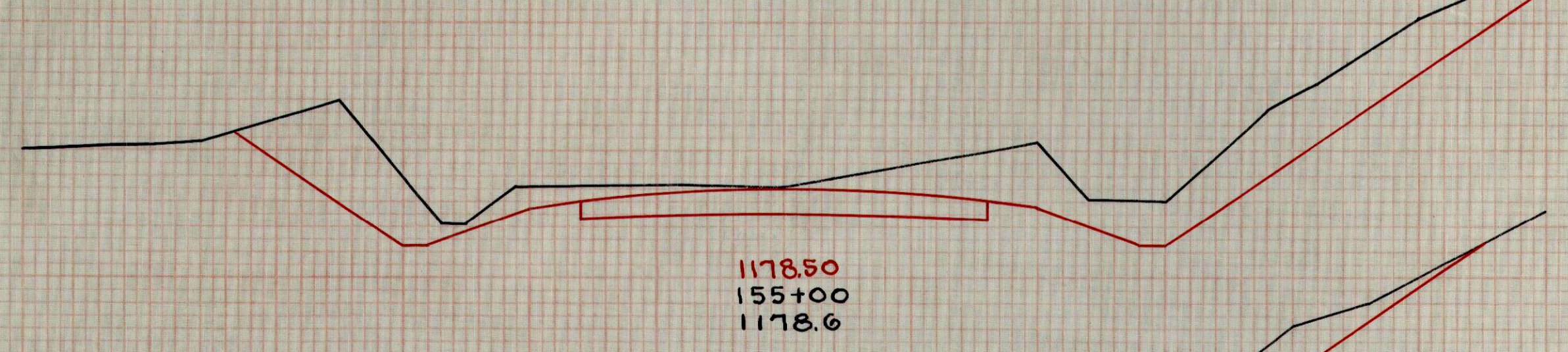
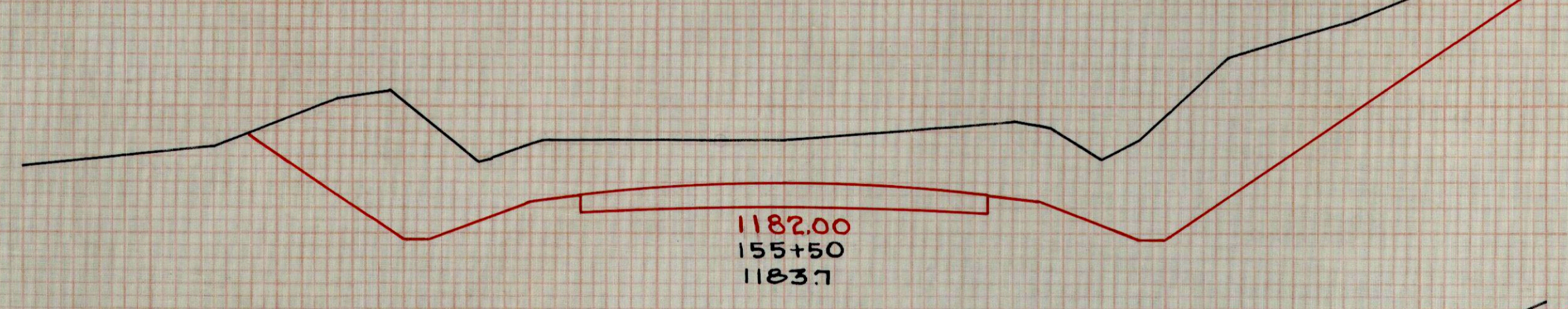
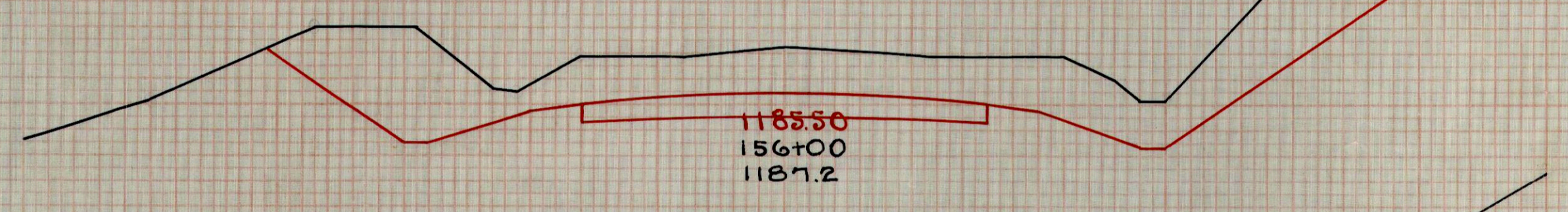


End Area	Cu. Yds.	Cut	Fill	Cut	Fill
7 ⁵ 14 ²					
17 ⁵ 18 ²					
11 ⁵ 5 ⁵					
56 ² 5 ⁵					
50 ⁰ 5 ⁵					
148 ⁰ 0 ⁰					
110 ⁰ 0 ⁰					
266 ⁰ 0 ⁰					
175 ⁰ 0 ⁰					
240 ⁰ 0 ⁰					
92 ⁰ 0 ⁰					
105 ³ 34 ¹					
20 ⁰ 36 ⁸					
41 ⁹ 92 ⁴					

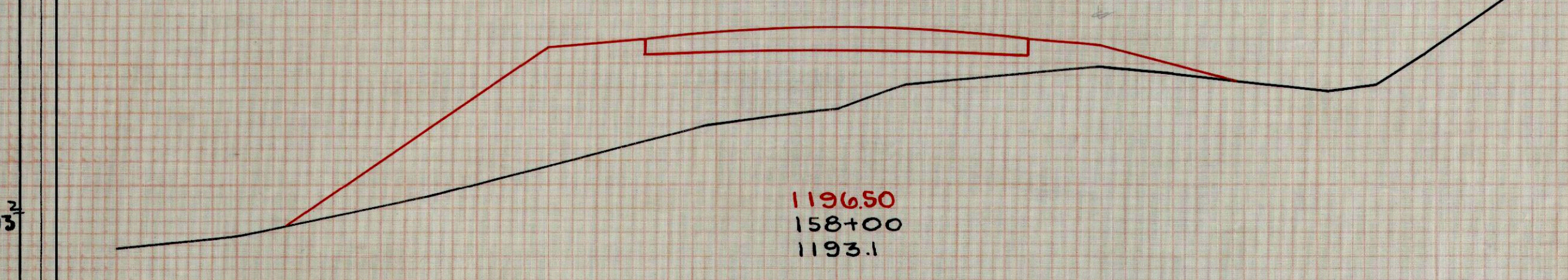
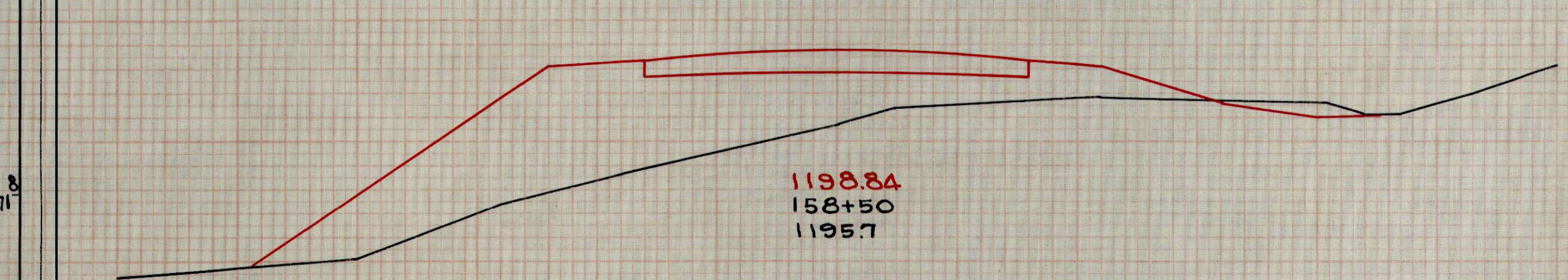
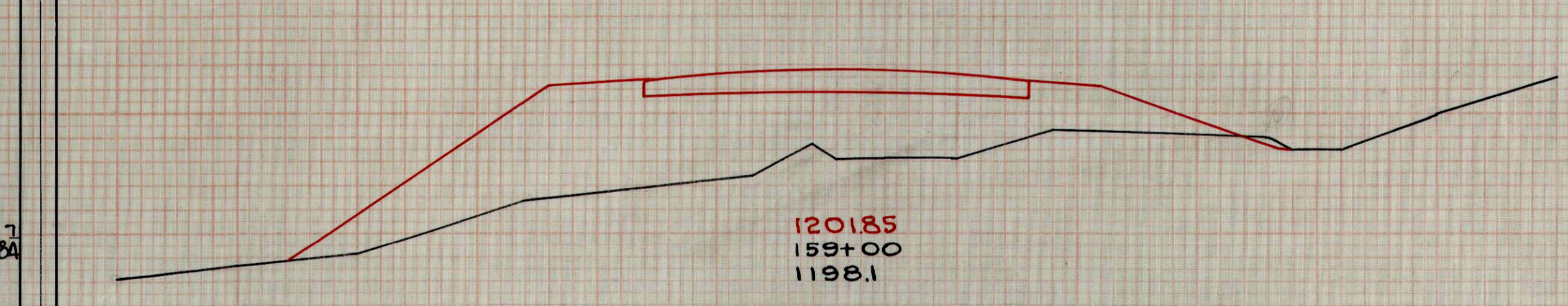
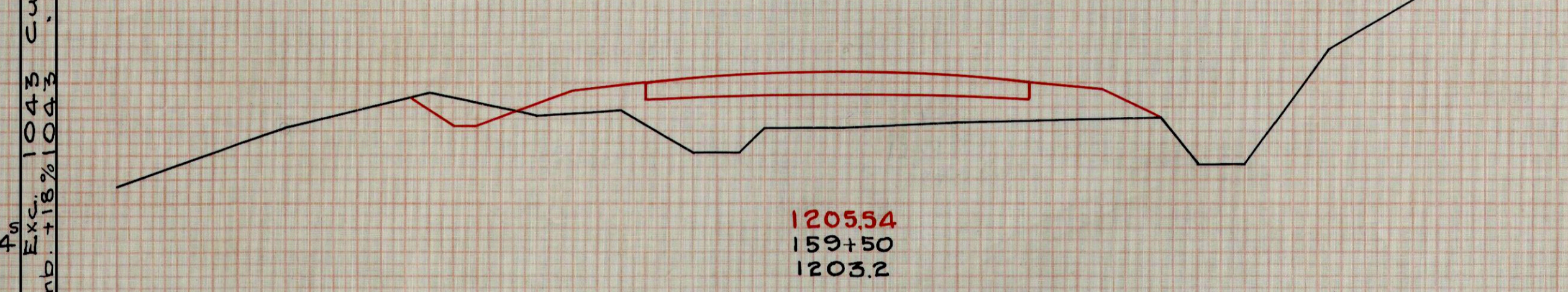
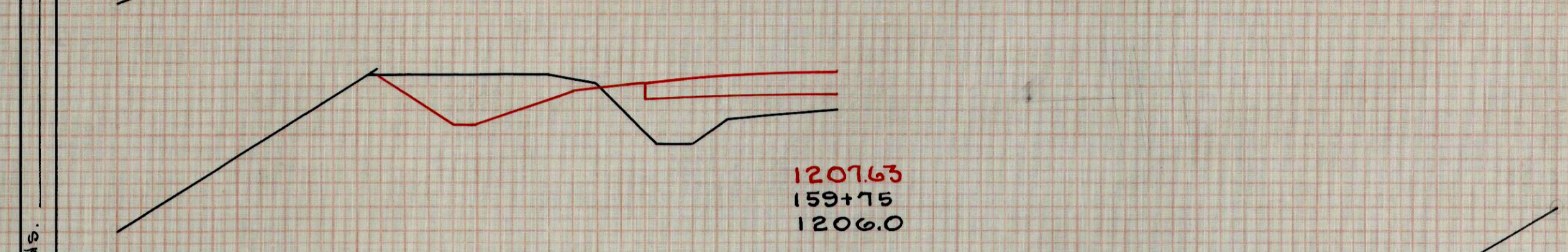
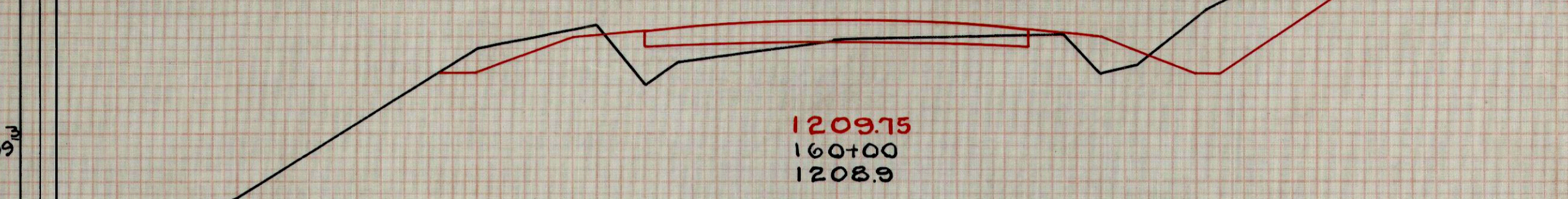
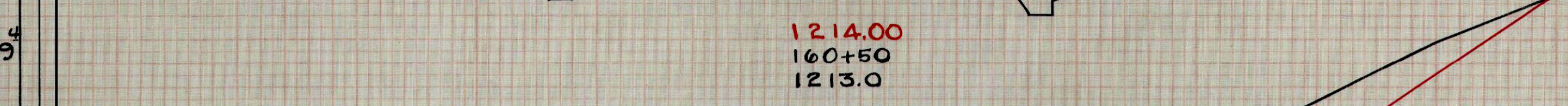
157+79



156+44



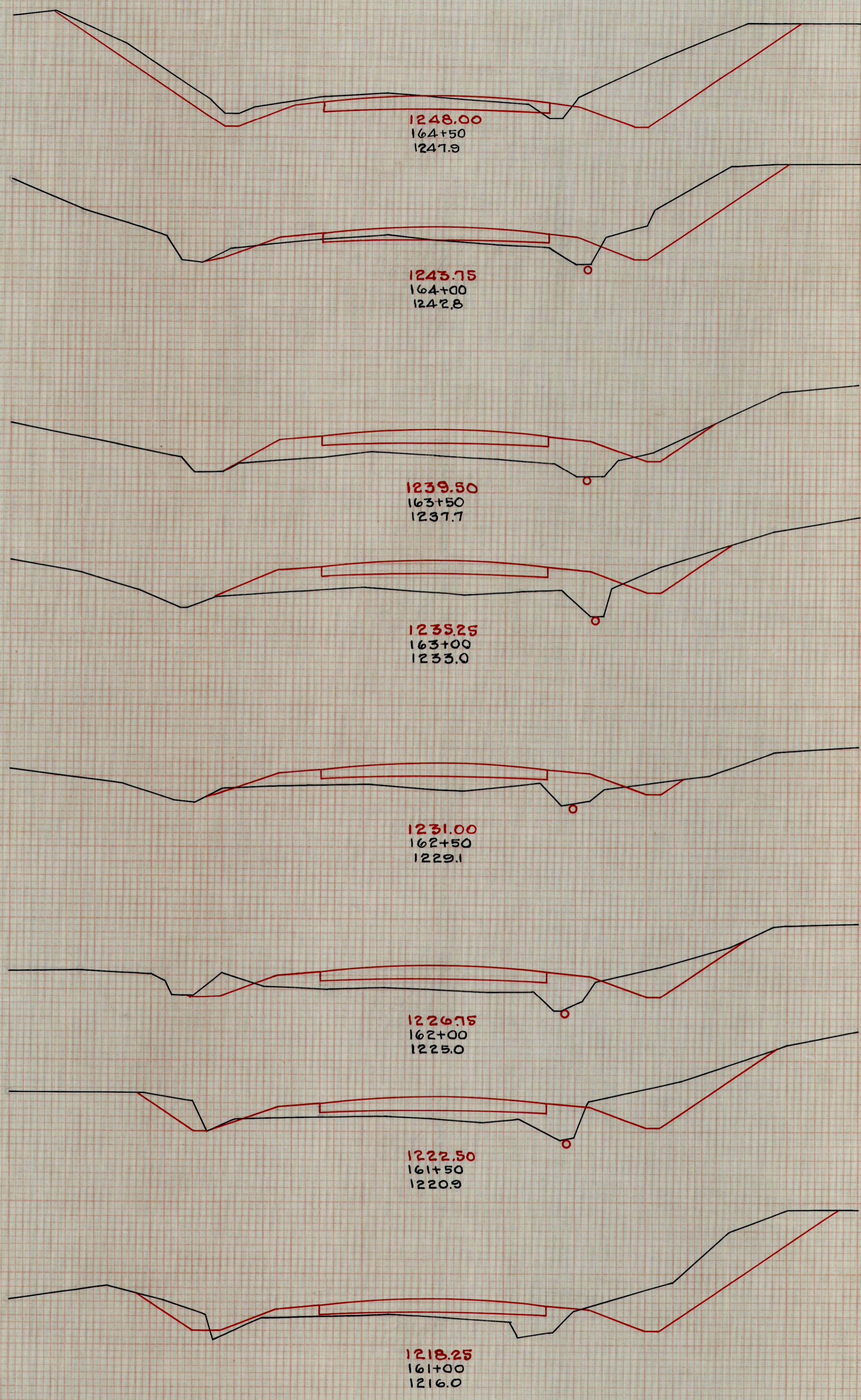
End Area	Cu. Yds.	Cut	Fill	Cut	Fill
32 ² 12 ⁵					
60 ⁰ 19 ⁵					
31 ⁵ 8 ⁵					
37 ² 39 ³					
9 ⁰ 0 ⁰					
3 ² 34 ⁴					
4 ² 14 ⁵					
1 ⁵ 10 ⁵					
3 ² 18 ⁴					
2 ⁰ 99 ⁹					
1 ² 17 ⁸					
0 ⁰ 86 ⁵					
7 ⁰ 93 ¹					



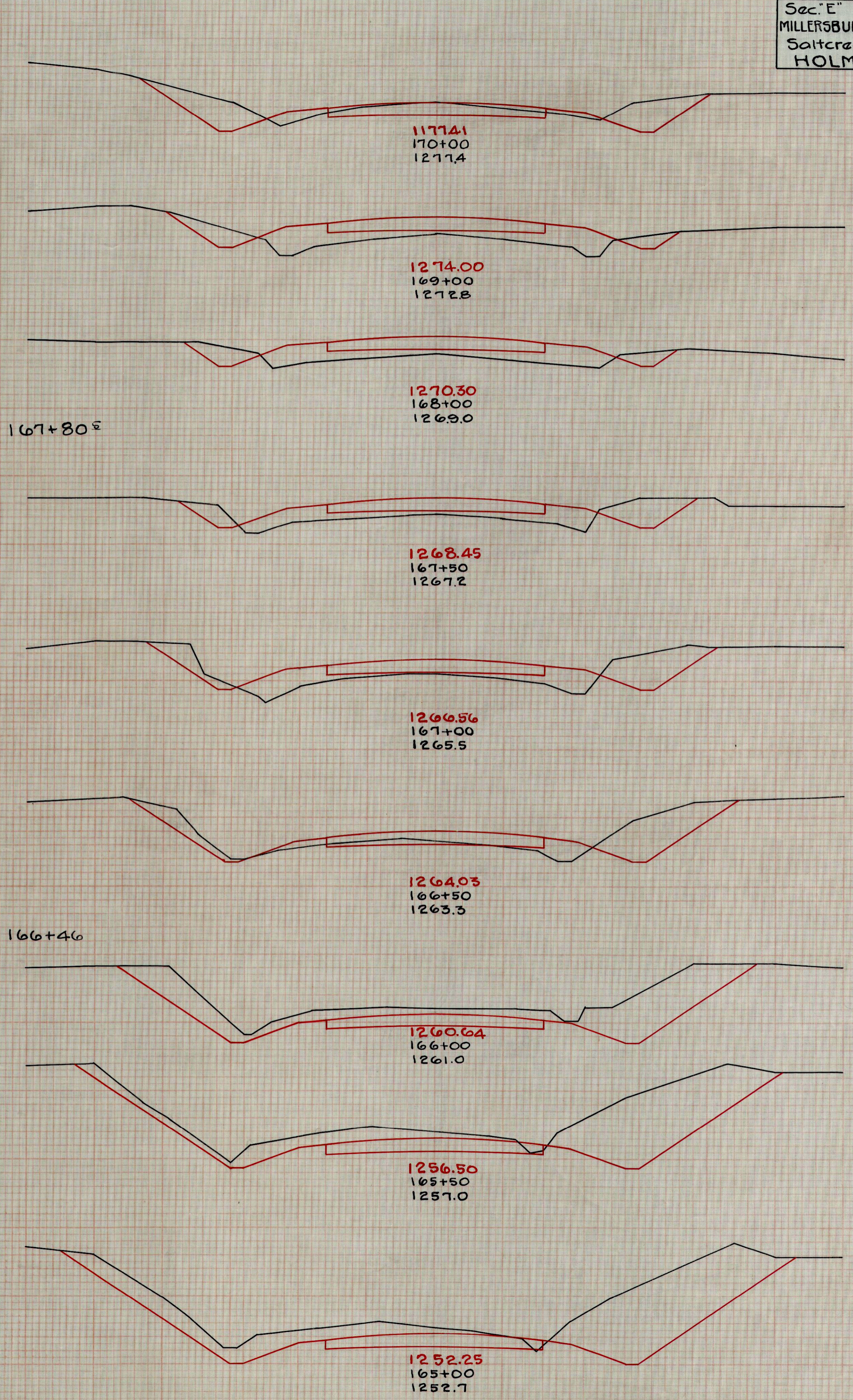
FINAL SURVEY BOOK NO. 1000

ORIGINAL SURVEY BOOK NO. 1000

End Area	Cu. Yds.	Cut	Fill	Cut	Fill
72 ⁸	1 ⁵	96 ⁹	9 ⁰		
31 ⁵	8 ²	31 ⁵	36 ⁸		
2 ²	31 ⁶				
7 ³	37 ⁵	9 ²	63 ³		
9 ³	59 ⁸				
2 ⁵	22 ²				
16 ²	41 ¹				
15 ⁵	22 ²				
38 ⁸	38 ⁸				
26 ¹	18 ⁸				
66 ⁶	30 ²				
45 ⁸	15 ⁸				
72 ⁷	21 ³				

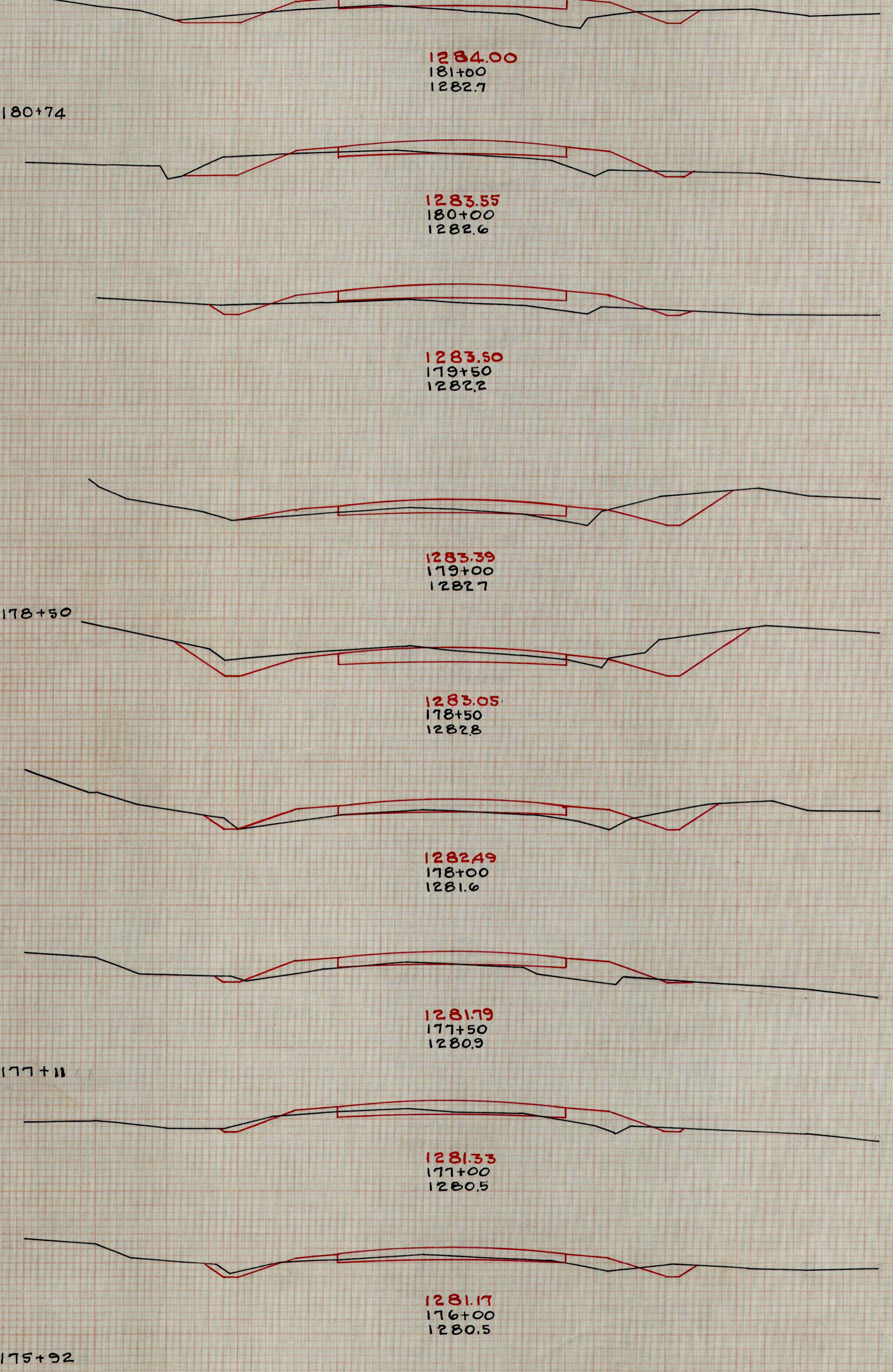
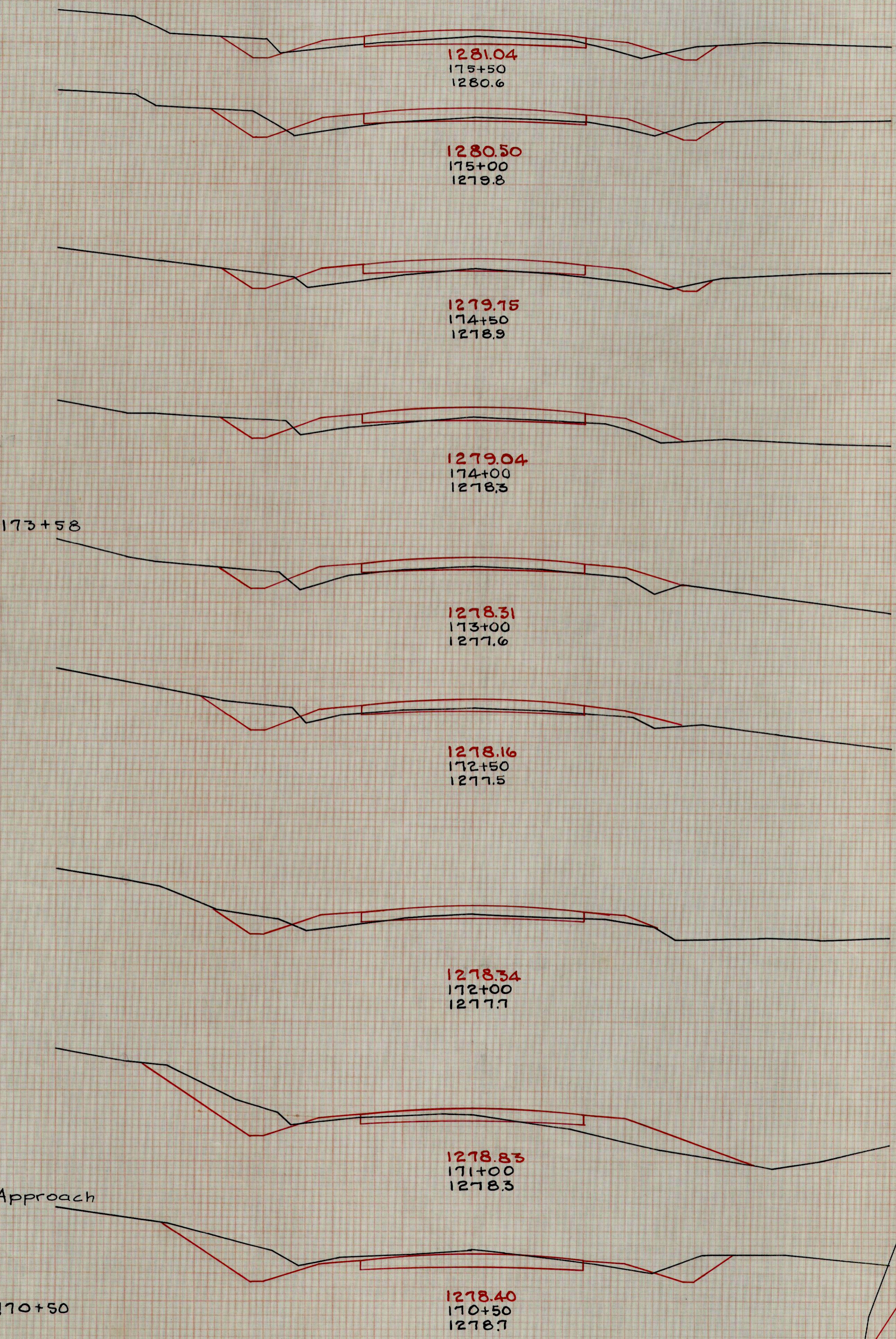


End Area	Cu. Yds.	Cut	Fill	Cut	Fill
35 ⁴	2 ²	8 ⁵	54 ⁴		
9 ⁹	25 ⁵	31 ⁸	8 ⁷		
7 ⁸	21 ⁸				
20 ²	37 ⁶				
14 ⁰	18 ⁸				
32 ³	35 ⁵				
20 ⁵	19 ⁵				
45 ⁷	24 ⁶				
28 ⁸	6 ⁸				
97 ⁷	2 ⁸				
76 ⁷	0 ⁰				
15 ⁹	0 ⁰				
93 ²	0 ⁰				
18 ³	0 ⁰				
108 ⁰	0 ⁰				
167 ⁴	1 ⁴				



End Area	Cu. Yds.	Cut	Fill
15 ² 6°	22 ⁹ 13°		
11 ⁸ 8°	15 ⁶ 17°		
5 ² 11 ⁷	20 ⁷ 17°		
6° 8°	20 ⁷ 34 ⁸		
5 ¹ 10 ⁸	15 ⁹ 14 ⁴		
12 ⁹ 4 ²	18 ⁵ 10 ⁸		
8° 6 ⁵	51 ⁵ 38 ¹		
19 ⁸ 14 ²	15 ⁴ 4 ¹		
32 ² 40 ⁴ 48 ¹			
37 ¹ 1 ²			

End Area	Cu. Yds.	Cut	Fill
6° 14 ⁸	27 ⁸ 44 ⁸		
9° 10 ⁷	10 ⁸ 22 ⁷		
2 ⁸ 13 ⁸	16 ⁵ 16 ³ 9 ²		
14 ⁵ 4°	43 ⁸ 6 ⁹		
7° 9 ²	38 ⁹ 9 ²		
2° 12 ⁸	8 ³ 20 ¹		
7 ² 11 ⁹			
6° 6 ⁵	25 ⁹ 20 ¹		
8° 4 ⁵			
19 ⁶ 9 ⁷			



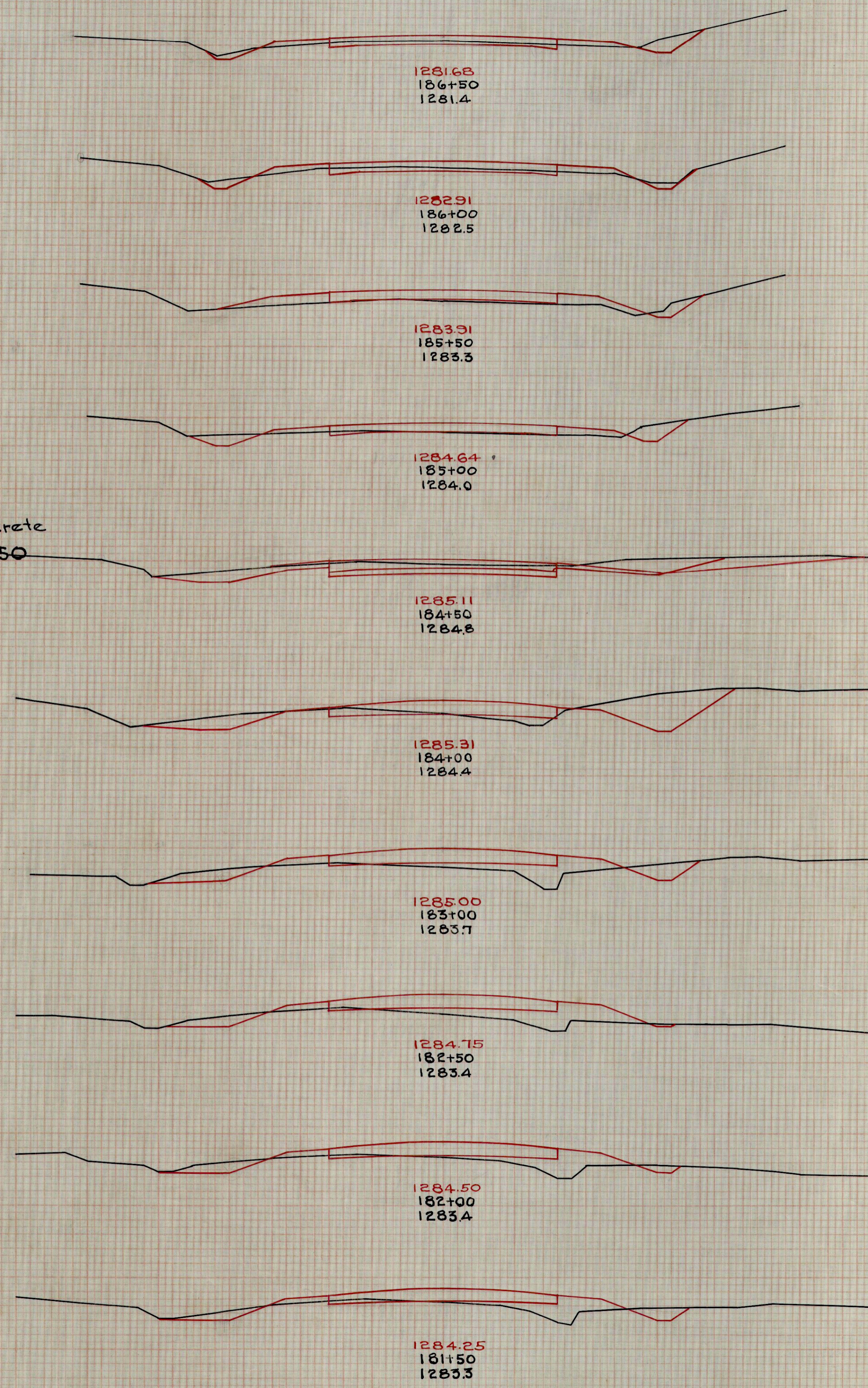
APPROACH 10% Grade

170+84
1278.60

FINAL SURVEY BOOK NO. 1013

OPTIONAL SURVEY BOOK NO. 1013

End Area	Cu. Yds.	Cut	Fill
8° 4'	13° 7'		
7° 4'	9° 10'		
3° 7'	9° 10'		
6° 3'	18° 4'		
12° 1'	26° 0'		
4° 7'	24° 2'		
24° 2'	61° 2'		
8° 12'	12° 2'		
4° 15'	9° 2'		
5° 11'	11° 2'		
6° 10'	11° 2'		



1281.68
 186+50
 1281.4

1282.91
 186+00
 1282.5

1283.31
 185+50
 1283.3

1284.64
 185+00
 1284.0

1285.11
 184+50
 1284.8

1285.31
 184+00
 1284.4

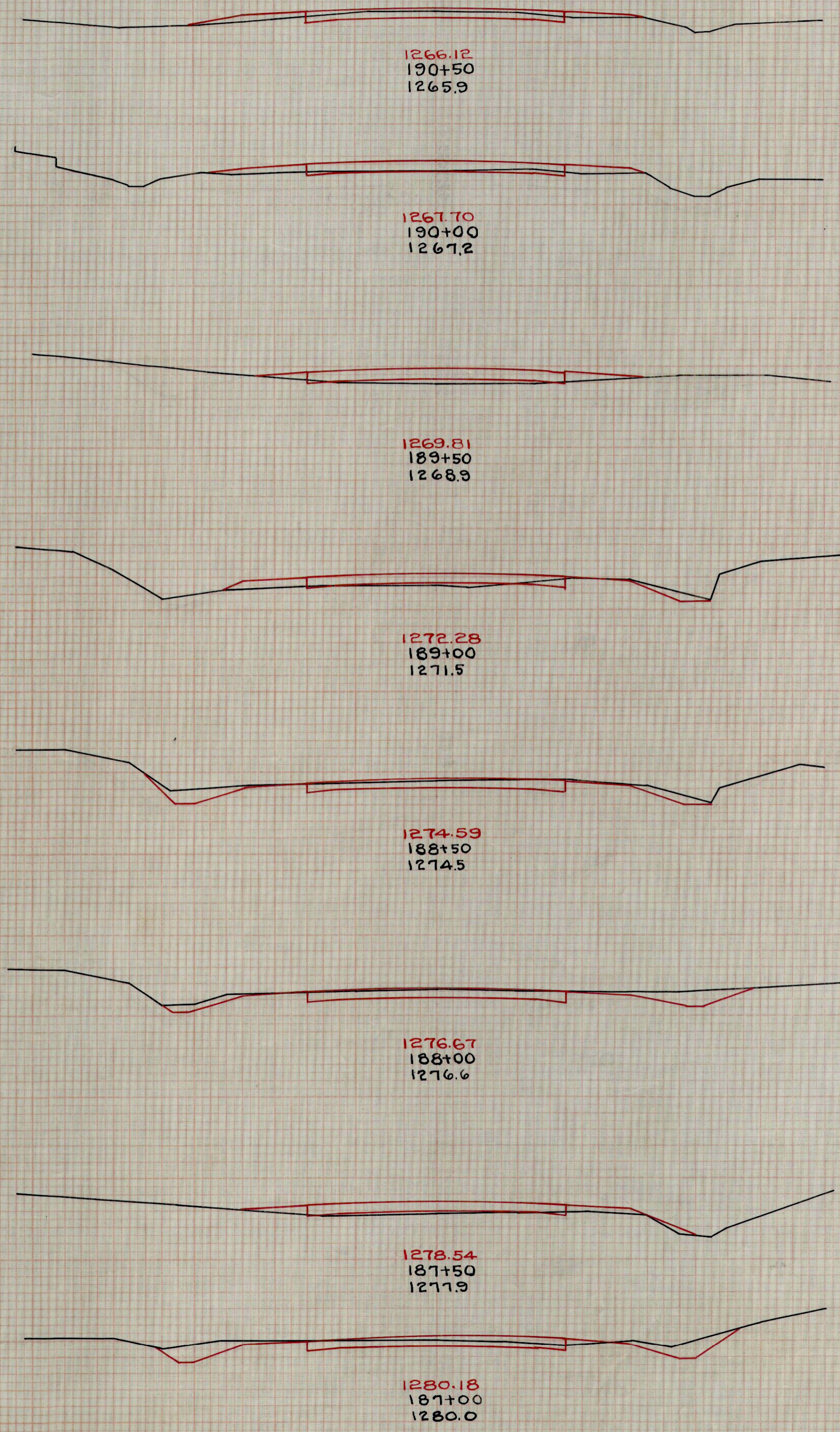
1285.00
 183+00
 1283.7

1284.75
 182+50
 1283.4

1284.50
 182+00
 1283.4

1284.25
 181+50
 1283.3

End Area	Cu. Yds.	Cut	Fill
7° 4'	8° 7'		
2° 4'	3° 9'		
1° 6'	4° 1'		
4° 1'	3° 3'		
3° 3'	17° 2'		
15° 0'	27° 0'		
14° 0'	13° 4'		
0° 5'	14° 1'		
14° 1'	21° 4'		



1266.12
 190+50
 1265.9

1267.70
 190+00
 1267.2

1269.81
 189+50
 1268.9

1272.28
 189+00
 1271.5

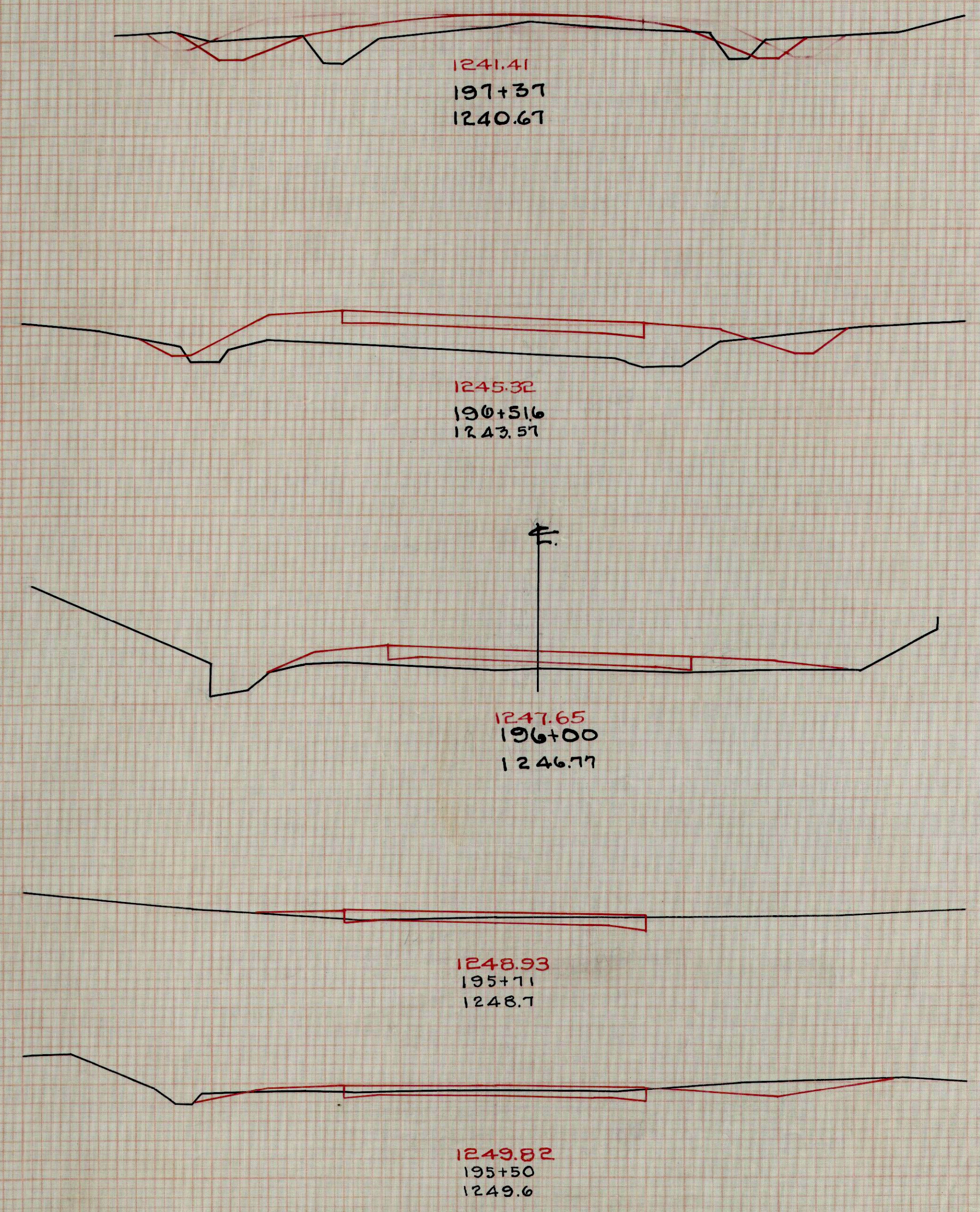
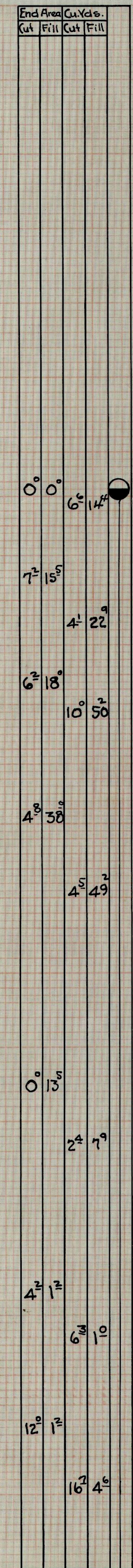
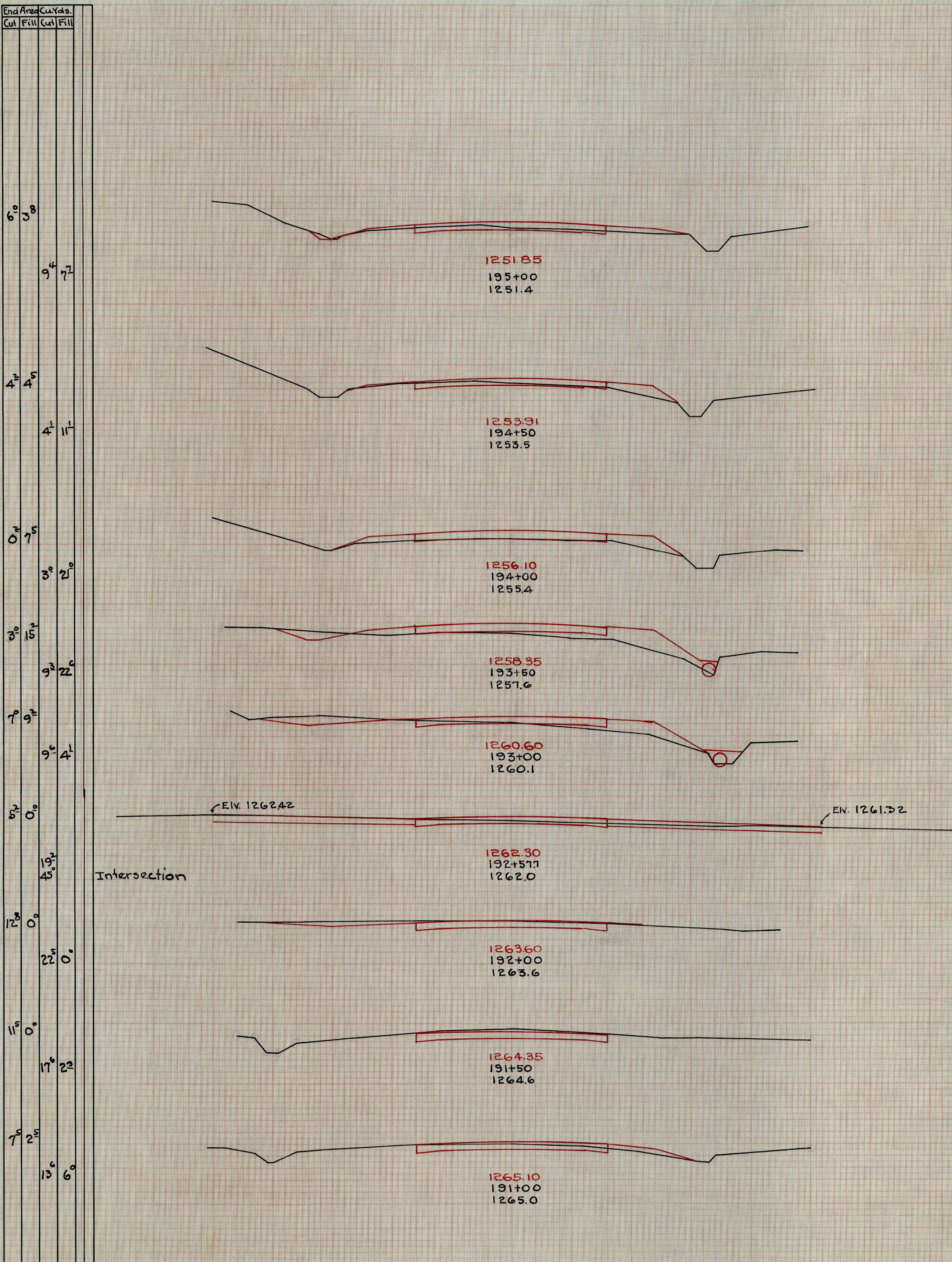
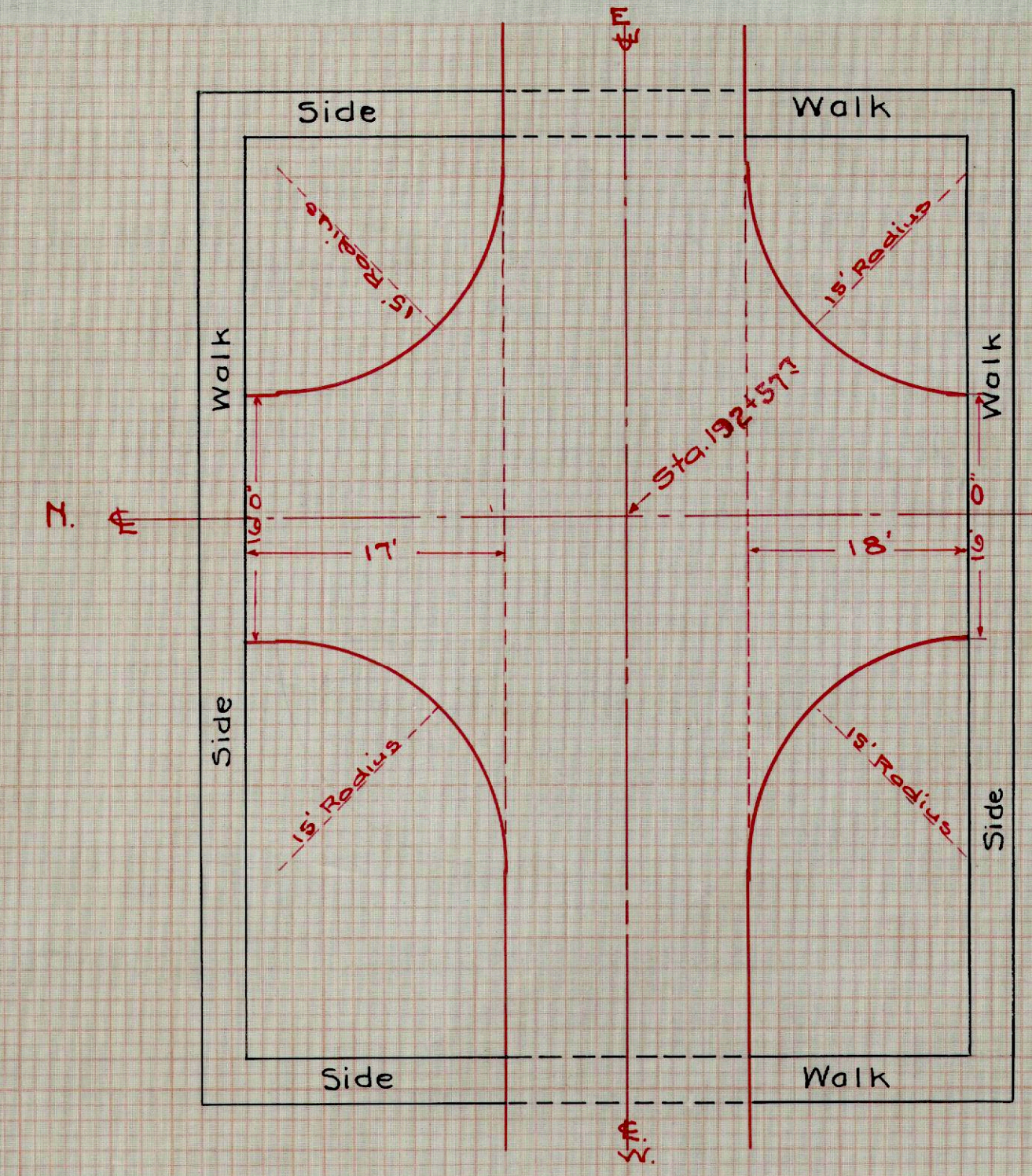
1274.59
 188+50
 1274.5

1276.67
 188+00
 1276.6

1278.54
 187+50
 1277.9

1280.18
 187+00
 1280.0

Sketch showing pavement at intersection of Jackson & Adams streets Mt Hope.



FINAL SURVEY

ORIGINAL SURVEY

SUMMARY OF QUANTITIES

ROADWAY STA. 130+35 TO 184+50

	ITEM	MATERIAL ITEM		
EXCAVATION			4629	Cu.Yds.
GRAVEL PAVING			9629	Sq.Yds.
GRAVEL (Loose for approaches)			43	Cu.Yds.
GUARD RAIL Type "E"			728	Lin.Ft.
FINISHING ROADWAY SLOPES & DITCHES (Both sides)			5415	" "
UNDERDRAIN 5 inch V.S.P. 2Y ^s .			300	" "
1-2-4 CONCRETE (2 Underdrain Headwalls)			0.6	Cu.Yds.
PIPE RELAID 10"-12"-15" C.I.P. & Corrugated			108	Lin.Ft.
PIPE LAID 10" Corrugated			12	" "
" " 12" " (1-12') (1-14')			26	" "
" " 15" "			8	" "
CLEARING & GRUBBING				

ROADWAY STA. 184+50 TO 197+00

(Including approach to Sta. 197+87)

EXCAVATION			363	Cu.Yds.
CONCRETE PAVING 1-1½-3 MIX 9" SIDES 7" CENTER			2306	Sq.Yds.
GRAVEL (Loose)			10	Cu.Yds.
15" V.S.P.			70	Lin.Ft.
FINISHING SHOULDERS SLOPES & DITCHES (Both sides)			1337	" "

CULVERTS

EXCAVATION			139	Cu.Yds.
" CHANNEL			10	" "
CONCRETE 1-2-4 MIX			53 ^e	" "
GROUTED STONE PAVING			13	Sq.Yds.
REINFORCING STEEL			2659	LBS.
12" CAST IRON CULVERT PIPE (Solid)			96	Lin.Ft.
14" " " " " "			56	" "
16" " " " " "			40	" "
TEMPORARY DETOURS				
REMOVING PRESENT STRUCTURES				