

Hoodoo
1984

827805

STATION	CORR.	104B/14 ELEVATION
3+00 W	-	1170'
2+75	-3.6	1166
2+50	-1.74	1165
2+25	-8.7	1156
2+00	-4.0	1152
1+75 W	-6.6	1145
1+50	-6.2	1139
1+25	-4.9	1134
1+00	-9.1	1125
0+75	-11.1	1114
0+50	-14.9	1099
0+25 W	-9.3	1090
0+00	-10.1	1080
0+25 E	-9.4	1070
0+50	-6.7	1064
0+75 E	-10.1	1055
1+00 E	-11.1	1044
1+25 E	-12.3	1031
1+50 E	-10.1	1021
1+75 E	-19.4	1002
2+00	}	

LINE 3+00W BEARING: 012

	ANGLE	SLOPE	HD	VD
BLOO-	-18.5	69	65.4	-21.9
<u>3+00N</u>	-9	69	68.2	-10.8
	0	9	9	0
	-3	70	69.9	-3.7
	+3	50	49.9	2.6
	-19	22	20.8	-7.2
	-15	10.5	10.2	-2.7

TOTAL 293.4 -43.7

BEARING: 017

	ANGLE	SLOPE	HD	VD
3+00S -	15	60	58	15.5
<u>BLOO</u>	18.5	21	19.9	6.7
	35	35	34.9	2.1
	-12	69	67.5	-14.3
	-5	69	68.7	-6.0
	1.5	33	33.0	0.9
	-25	10	9.1	-4.2

TOTAL 291.1 0.7

~~11/19~~

VERTICAL DISTANCES

LINE 3+00W	
BLOO-3+00N	-43.7 m
TIE LINE 3+00N	-127.5
LINE 0+50 E	
3+00N - BLOO	40.4
BLOO - 3+00S	61.6
TIE LINE 3+00S	76.7
LINE 3+00W	
3+00S - BLOO	0.7

8.2

e

LINE O+SOE BEARING 195

	ANGLE	SLOPE	HD	VD
3100N -	10	69	68.0	12.0
<u>3100S</u>	15.5	69	66.5	18.4
	19	39.75	37.6	12.9
	-3	47	46.9	-2.5
	3.5	50	49.9	3.1
	-8	24.9	24.7	-3.5
TOTAL			293.6	40.4

BEARING 190

	ANGLE	SLOPE	HD	VD
3100N -	-0.5	50	50	-0.4
<u>3100S</u>	9.5	50	49.3	8.3
	9.5	69	68.1	11.4
	23.5	69	63.3	27.5
	9	26.3	26.0	4.1
	12.5	49.5	48.3	10.7
TOTAL			305.0	61.6

230.7

184

74.3

TIE LINE 3+00N

	BEARING	DISTANCE	NORTH	SOUTH	EAST	WEST
3+000 -	✓ 088	10.1				
0+50E	✓ 092	75.2				
	✓ 120	12.4				
	✓ 098	74.8				
	104	26.0				
	✓ 102	30.6				←
	✓ 108	47.6				
	✓ 100	50.7				
	108	65.4				

TOTAL

TIE LINE 3+00S

	BEARING	DISTANCE	NORTH	SOUTH	EAST	WEST
0+50E -	✓ 286	✓ 63.5				
3+00W	✓ 257	✓ 29.9				
	✓ 293	✓ 35.2				
	✓ 313	✓ 43.3				
	275	✓ 43.0				
	272	✓ 17.4				
	✓ 293	✓ 22.5				
	✓ 288	✓ 13.0				
	✓ 290	✓ 49.6				
	✓ 287	29.9				
	✓ 293	19.3				

TOTAL

12.2

72.3

H
A

79.8
72.3
152.1

VD = SLOPE SIN
HD = SLOPE COS α

3+00S

1+50W - 1+00W : BEARING: 088°

SLOPE: 22.2m } VD = -4.2
ANGLE: -11° } HD = 21.8

BEARING: 092°

SLOPE: 49.9m } VD = -30.0
ANGLE: -37° } HD = 39.9

VD =
HD =

3+00N

1+00W - 0+50W : BEARING: 107°

SLOPE: 54.1m } VD = -26.6
ANGLE: -29.5° } HD = 47.1

* JOG IN 0+50W @ 1+50S : BEARING: 110°

SLOPE: 11.9m } VD = -4.1
ANGLE: -20° } HD = 11.2

- LINE RESUMES BEARING 195°

1+50 - 1+75 : SLOPE = 27.2m } VD = 9.7
ANGLE = 21° } HD = 25.4

3+00S

0+50W - 0+00 : BEARING: 075°

SLOPE: 31.0m } VD = -8.3
ANGLE: -15.5° } HD = 29.9

3+00N

0+00 - 0+50E : BEARING: 109°

SLOPE: 64.9 } VD = -12.4
ANGLE: -11° } HD = 63.7

3+00S

0+50E - 1+00E : BEARING: 090°

SLOPE: 32.1 } VD = -6.7
ANGLE: -12° } HD = 31.4

3+00S

H50E - 2+00E : BEARING : 099°

SLOPE : 29.3 } VD = -9.1
 ANGLE : -18° } HD = 27.9

BEARING : 110°

SLOPE : 30.3 } VD = -13.0
 ANGLE : -25.5° } HD = 27.3

* FROM 1+00N ON 1+00E TO 0+75N ON H50E

BEARING : 129°

SLOPE : 58.7 } VD = -27.6
 ANGLE : -28° } HD = 51.8

278



LINE	TOTAL LENGTH
3+00W (N)	291.1
(S)	✓ 292.1
2+50 (S)	✓ 299.7
(N)	289.3
2+00 (N)	289.8
(S)	✓ 292.0
1+50 (S)	✓ 291.6
(N)	290.1
1+00 (N)	✓ 291.9
(S)	✓ 278.5
0+50 (S)	✓ 147.4 JOG FOR 148.4 TOTAL 295.8
(N)	✓ 291.6
0+00 (N)	290.9
(S)	✓ 296.4
0+50E (N)	289.4
(S)	288.0
1+00 (S)	✓ 287.7
(N)	99.9
1+50 (N)	72.8
(S)	✓ 286.5
2+00 (S)	243.2

37.2

3100W BLOO - 3100N

BEARING: 012°

HORIZONTAL DIST.:	65.4	VERTICLE DIST:	-21.8
	68.2		-10.8
	9.0		-
	69.9		-3.7
	49.9		2.6
	20.8		-7.2
	<u>10.1</u>		<u>-2.7</u>
	293.3		-34.6

3100S - BLOO

BEARING: 017°

<u>HORIZONTAL DIST:</u>	58.0	<u>VERTICLE DIST:</u>	15.5
	19.9		6.7
	39.9		2.1
	67.5		-14.3
	68.7		-6.0
	33.0		0.9
	<u>9.1</u>		<u>-4.2</u>
	291.1		0.7

0450E 3100N - BLOO BEARING: 195°

HORIZONTAL DIST:	68.0	VERTICLE DIST:	12.0
	66.5		18.4
	37.6		12.9
	46.9		-2.5
	49.9		3.1
	<u>24.7</u>		<u>-3.5</u>
	293.6		40.4

BLOO - 3100S BEARING 190

HORIZONTAL :	50	VERTICLE :	-0.4
	49.3		8.3
	68.1		11.4
	63.3		27.5
	26.0		4.1
	<u>48.3</u>		<u>10.7</u>
	305		61.6

3+00 N

3+00W - 2+50W	BEARING	088°	HD = 10.1
"	"	092°	74.2
2+50W - 2+00W	BEARING	120°	HD = 12.4
2+00W - 1+50W	"	098°	= 74.8
1+50W - 1+00W	"	104	= 26.8
"	"	102	=
1+00W - 0+50W	"	108	= 47.6
0+50W - 0+00	"	100	= 50.7
0+00 - 0+50E	"	108	= 65.4

3+00 S

0+50E - 0+00	BEARING	286° ✓	HD = 63.5
0+00 - 0+50W	"	257 ✓	= 29.9
0+50W - 1+00W	"	293 ✓	= 35.2
"	"	313 ✓	= 43.3
1+00 - 1+50W	"	275 ✓	= 43.0
"	"	272 ✓	= 17.4
1+50W - 2+00	"	293 ✓	= 22.5
2+00 - 2+50	"	288 ✓	= 13.0
"	"	290 ✓	= 49.6
2+50 - 3+00	"	287 ✓	= 29.9
"	"	293	= 19.3

#0 A H



LINE 2+50E Elevation Calculations

STATION 1+25N - 1+50N : 25 m @ 16° $\Delta H = 7.2$ m

STATION 1+50N - 1+75N : 25 m @ 20° $\Delta H = 9.1$ m

STATION 1+75N - 2+00N : 25 m @ 24° $\Delta H = 11.1$ m

STATION 2+00N - 2+25N : 25 m @ 9.5° $\Delta H = 4.2$ m

STATION 2+25N - 2+50N : 25 m @ 11° $\Delta H = 4.6$ m

TIE-IN Calculation For STATION 2+25N

LINE 3+00E to LINE 2+50E : 50.3 m (slope) @ 6° $\Delta H = 5.3$ m
 Actual Separation = 50.0 m

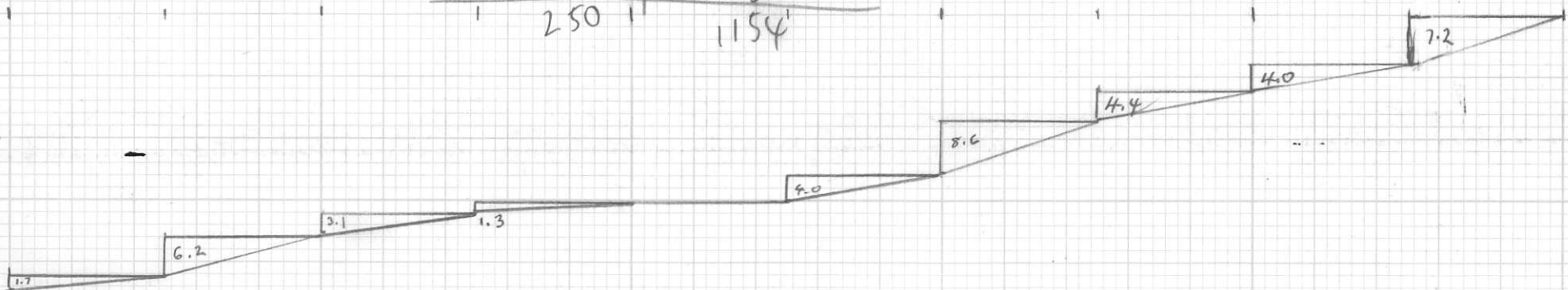
STATION Elevation

LINE 3+00E
 2+25N 1250

LINE 2+50E
 2+50N 1260
 25 1255
 2+00 1251
 75 1240
 50 1231
 1+25 1224

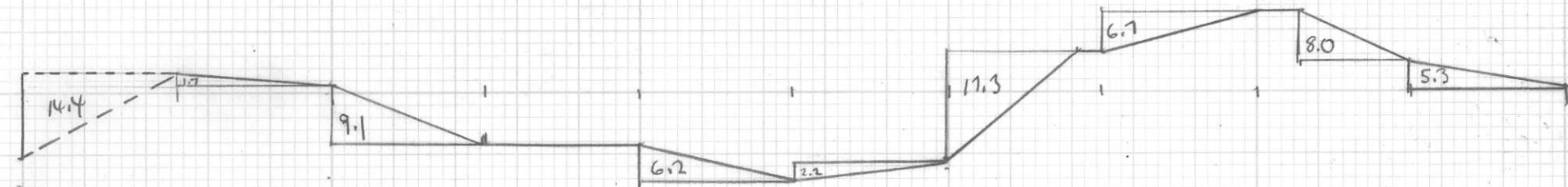
South line 1150E

Station	elevation
Bl 1150E	1194
25	1187
50	1183
75	1178
100	1170
125	1166
150	1166
175	1165
200	1161
225	1155
250	1154



250	225	200	175	150	125	100	75	50	25	Bl 1150E
			↓	↓	↓	↓	↓	↓	↓	↓
1154	1155	1161	1165	1166	1166	1170	1178	1183	1187	1194

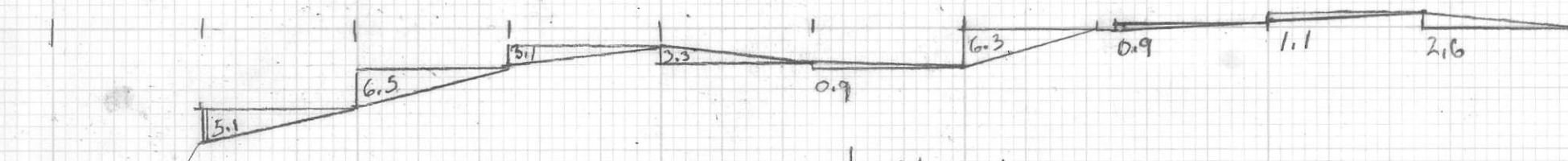
Southline 2+25E (line does not exist)
 (data points taken for elevations)



line ends at 2+25.S

250	225	200	175	150	125	100	75	50	25	
1164	1178	1176	1167	1167	1161	1163	1181	1187	1179	BL 2+25 1174

South line 3100E

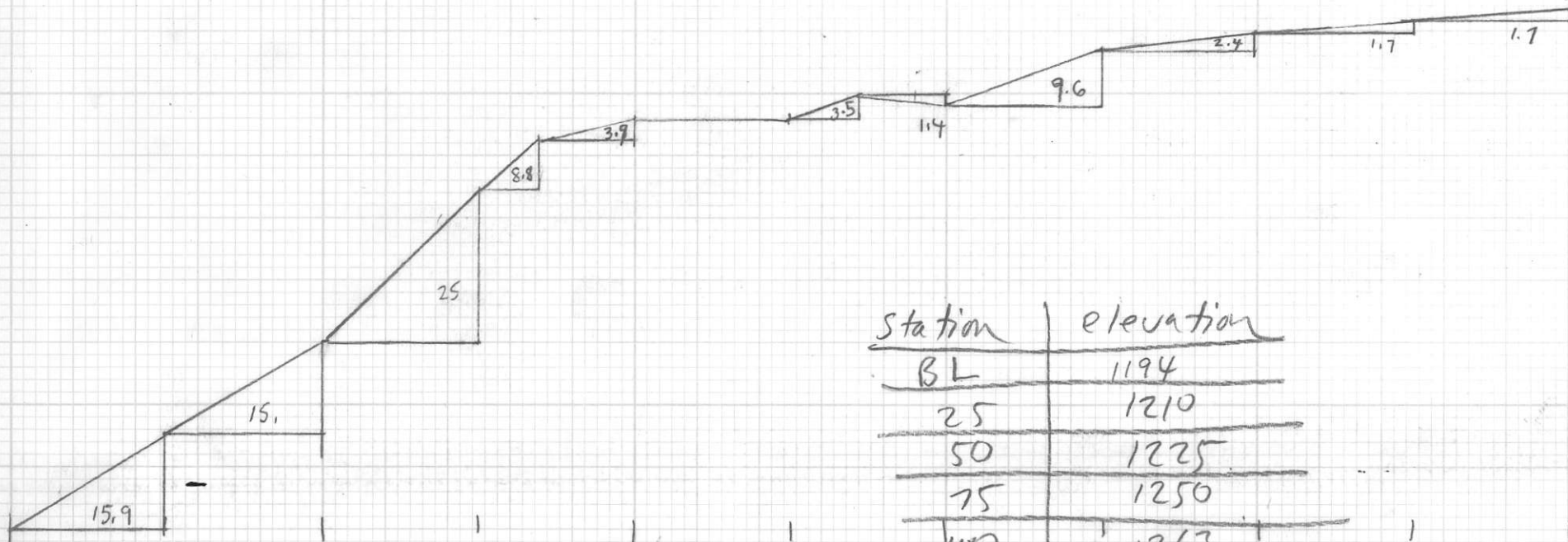


Cliff

Station	Elevation
BL	1150
25	1153
50	1152
75	1151
100	1144
125	1145
150	1149
175	1145
200	1139
225	1134
250	No Data

250	225	200	175	150	125	100	75	50	25	BL
No Data	1134	1139	1145	1149	1145	1144	1151	1152	1153	1150

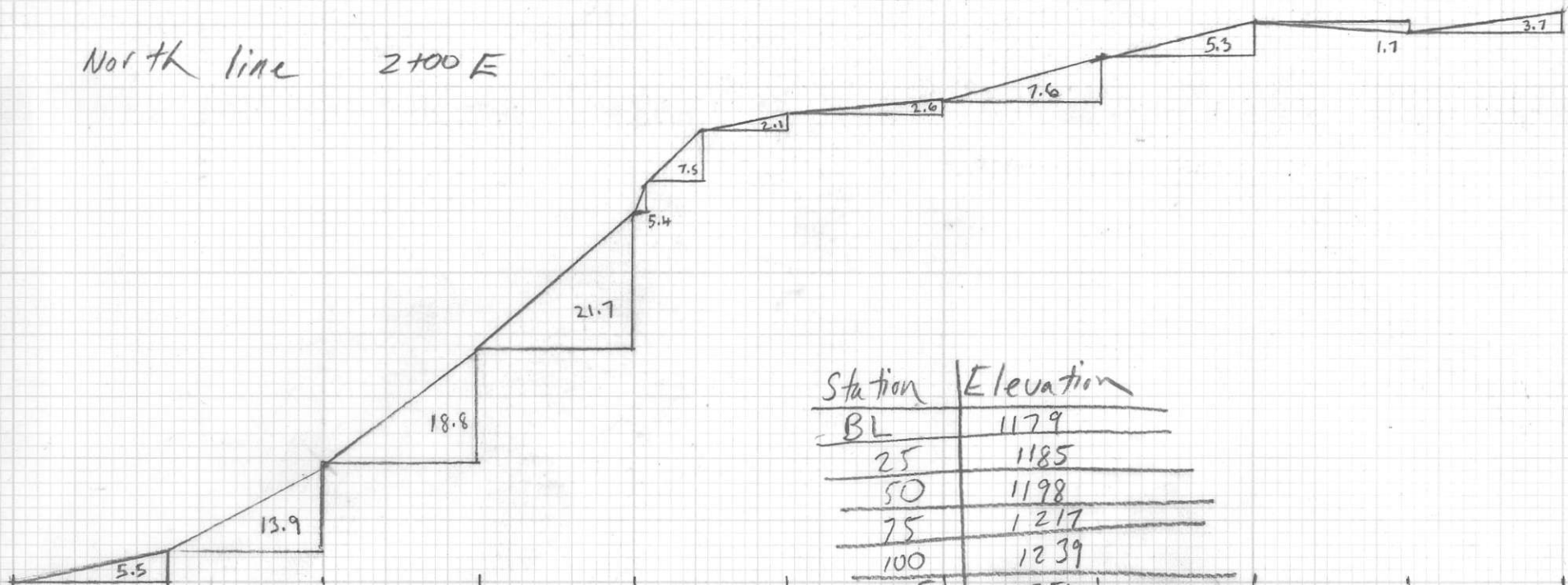
North line 1150 E



Station	elevation
BL	1194
25	1210
50	1225
75	1250
100	1263
125	1263
150	1265
175	1274
200	1277
225	1278
250	1280

BL	25	50	75	100	125	150	175	200	225	250
1194	1210	1225	1250	1263	1263	1265	1274	1277	1278	1280

North line 2+00 E

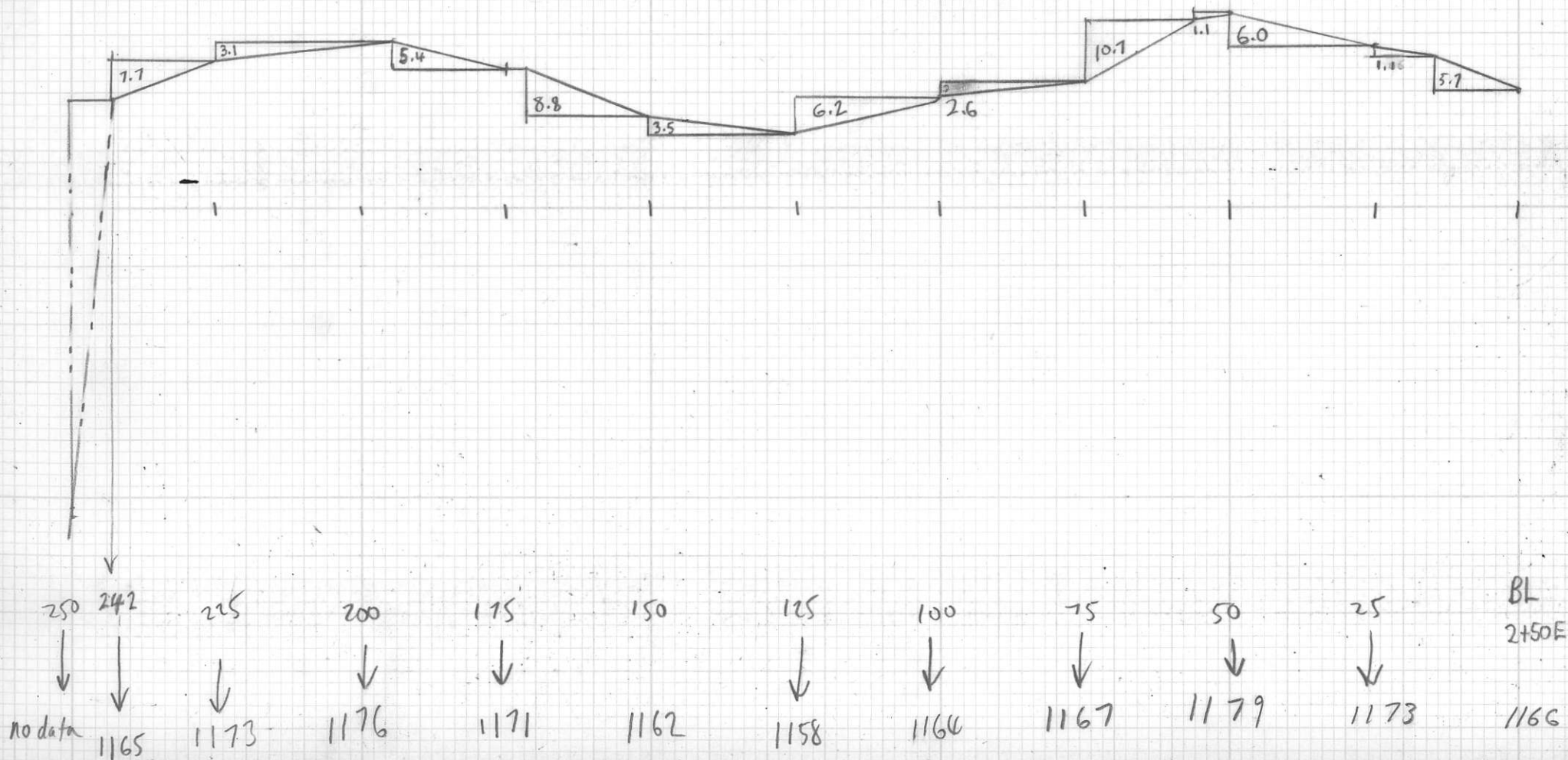


Station	Elevation
BL	1179
25	1185
50	1198
75	1217
100	1239
125	1254
150	1257
175	1264
200	1269
225	1268
250	1271

BL	25	50	75	100	125	150	175	200	225	250
1179	1185	1198	1217	1239	1254	1257	1264	1269	1268	1271

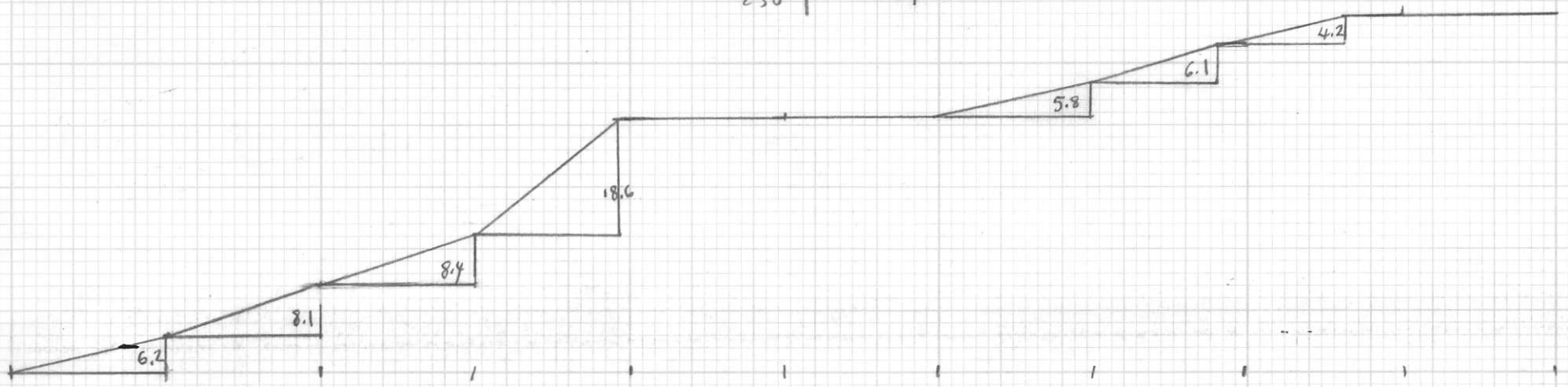
South line 2+50 E

Station	Elevation
Bl 2+50E	1166
25	1179
50	1167
75	1166
100	1158
125	1162
150	1171
175	1176
200	1173
225	1165
	No Data



Northline 100E

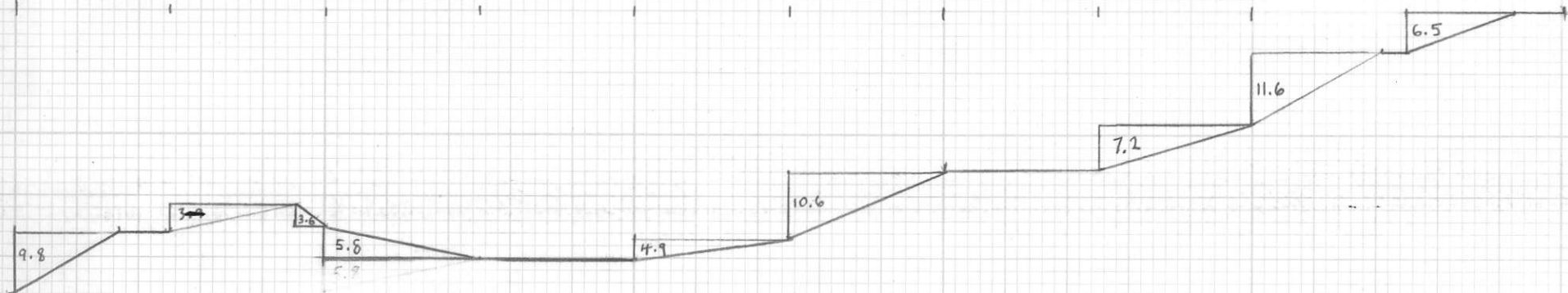
Station	Elevation
BL 100E	1222
25	1228
50	1236
75	1245
100	1263
125	1263
150	1263
175	1269
200	1275
225	1279
250	1279



BL 100E	25	50	75	100	125	150	175	200	225	250
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
1222	1228.2	1236.3	1244.7	1263.3	1263.3	1263.3	1269.1	1275.2	1279.4	1279.4

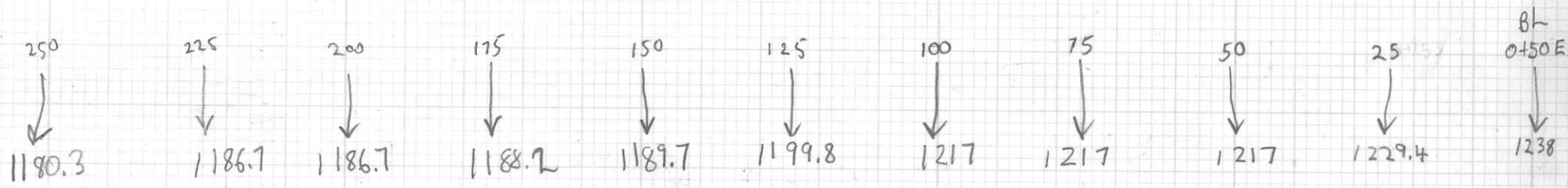
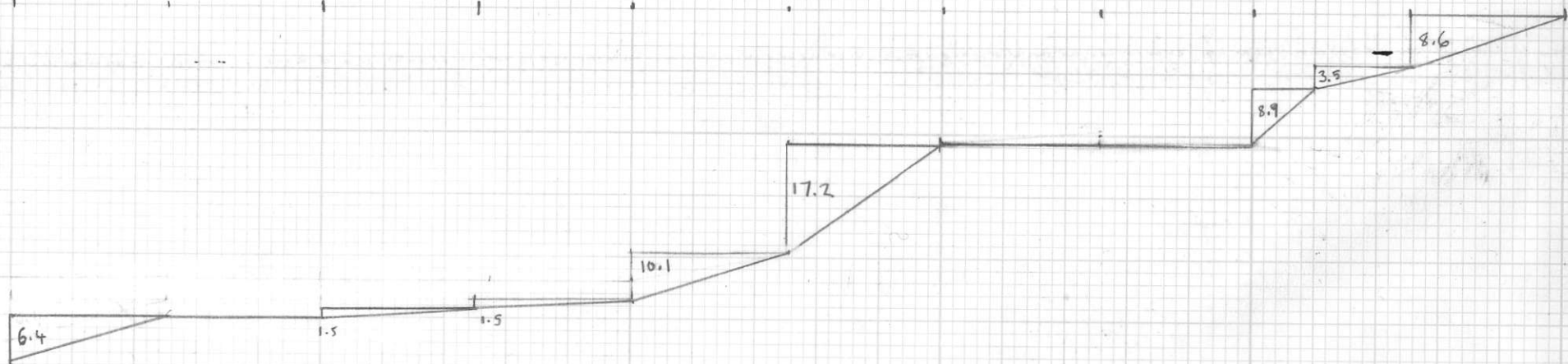
South line 1+00E

Station	Elevation
BL 1+00E	1222
25	1216
50	1204
75	1197
100	1197
125	1186
150	1181
175	1181
200	1187
225	1187
250	1177



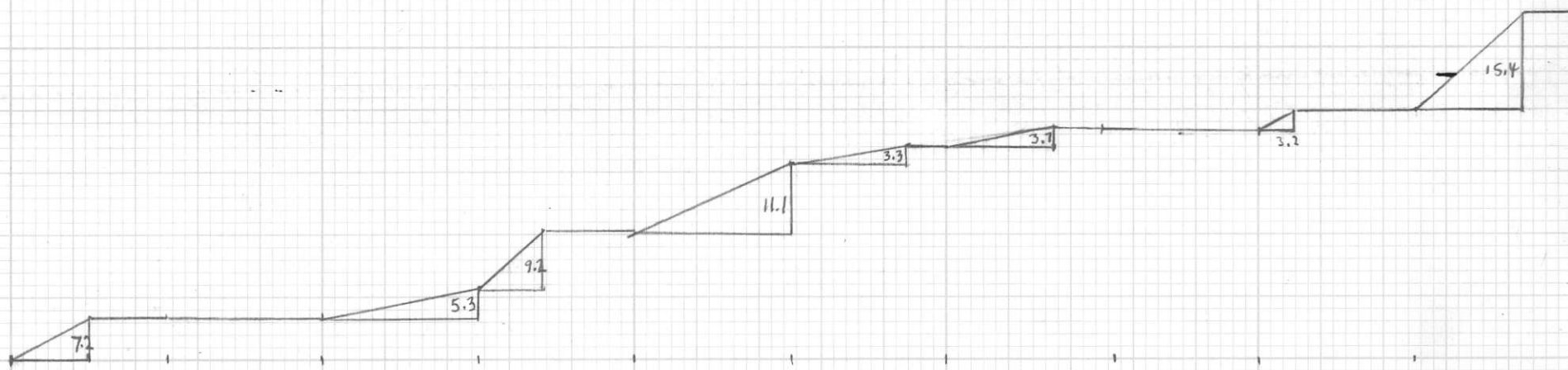
250	225	200	175	150	125	100	75	50	25	BL 1+00E
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
1176.9	1186.7	1187	1181.2	1181.2	1186.1	1196.7	1196.1	1203.9	1215.5	1222

STATION	ELEVATION
Bl 0+50E	1238
25	1229
50	1217
75	1217
100	1217
125	1200
150	1190
175	1188
200	1187
225	1187
250	1180



North line 0+50.E

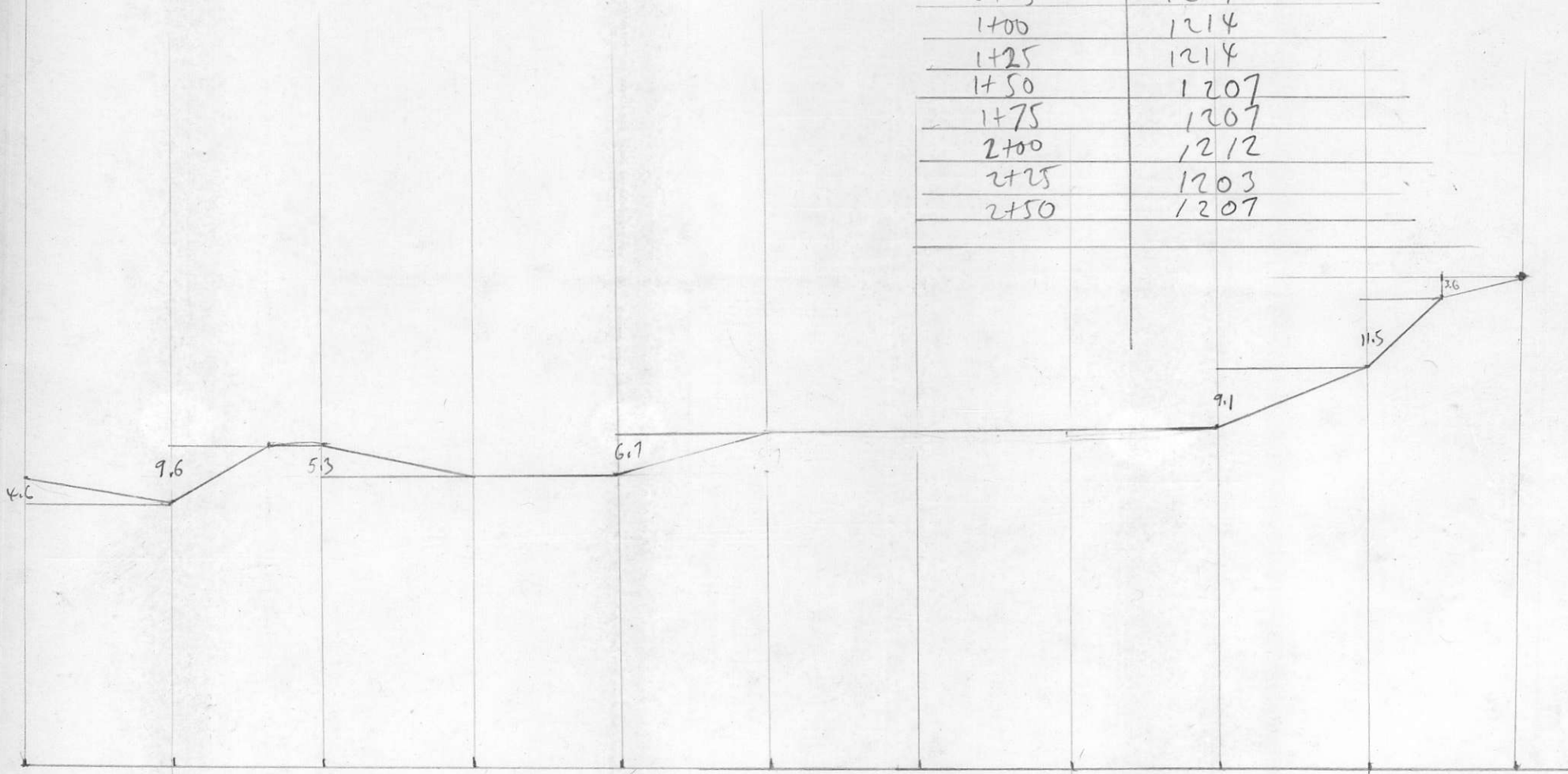
Station	Elevation
BL 0+50E	1238
25	1245
50	1245
75	1251
100	1260
125	1271
150	1274
175	1278
200	1278
225	1281
250	1296



BL 0+50E	25N	50N	75	100	125	150	175	200	225	250
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
1238	1245.2	1245.2	1250.5	1259.7	1270.8	1274.1	1277.8	1277.8	1281	1296.4

0+00 South line

Station	elevation
BL 0+00	1238
0+25	1223
0+50	1214
0+75	1214
1+00	1214
1+25	1214
1+50	1207
1+75	1207
2+00	1212
2+25	1203
2+50	1207

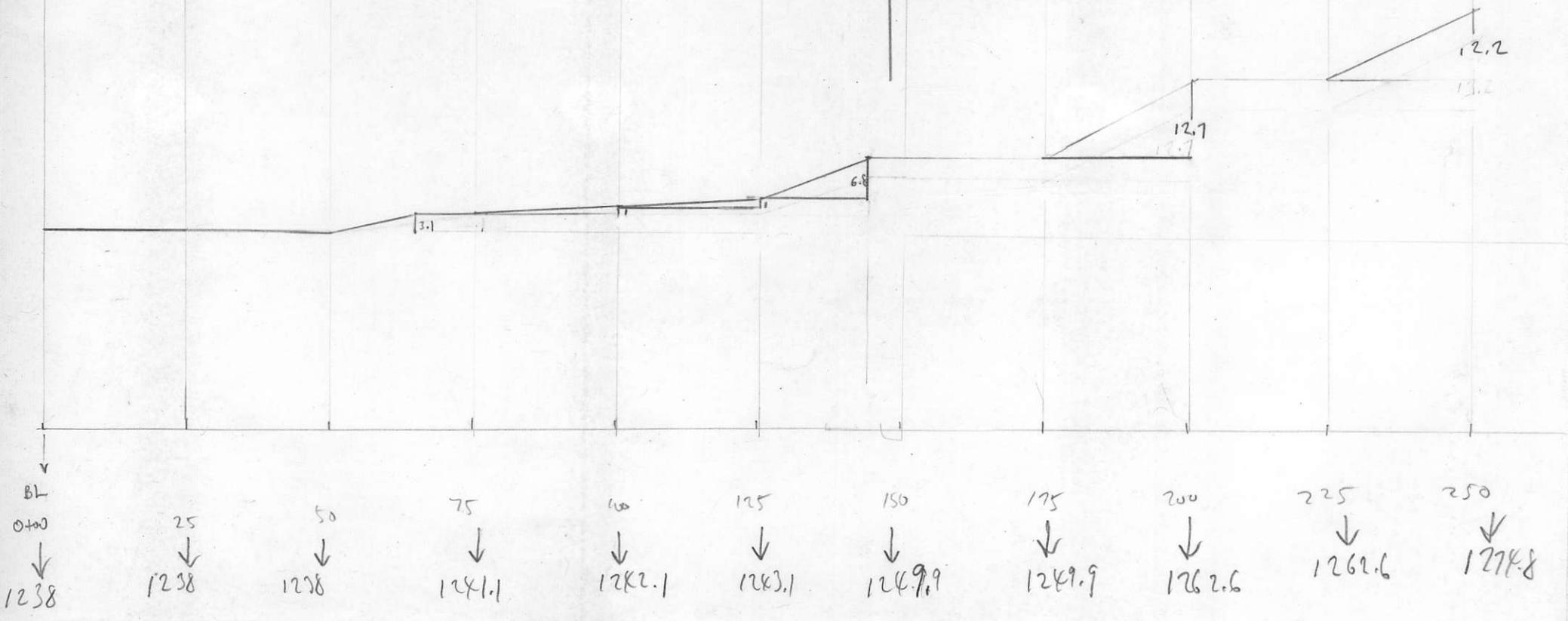


250 225 200 175 150 125 100 75 50 25 0+00
 ↓
 1238

0+00

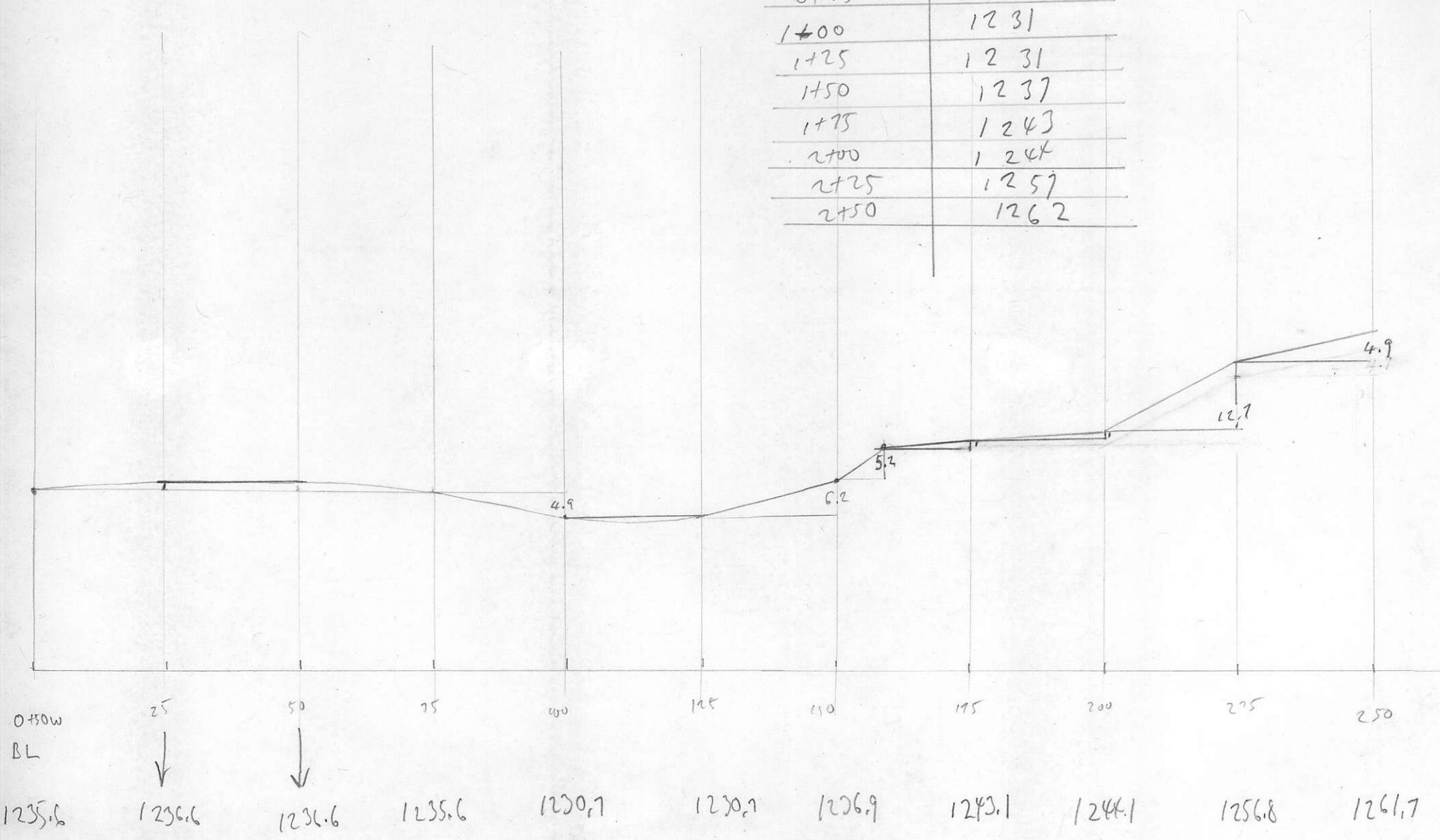
North line

Station	elevation
0+00 BL	1238
0+25 N	1238
0+50	1238
0+75	1241
1+00	1242
1+25	1243
1+50	1256
1+75	1256
2+00	1263
2+25	1267
2+50	1275



line 0+50 w North, line

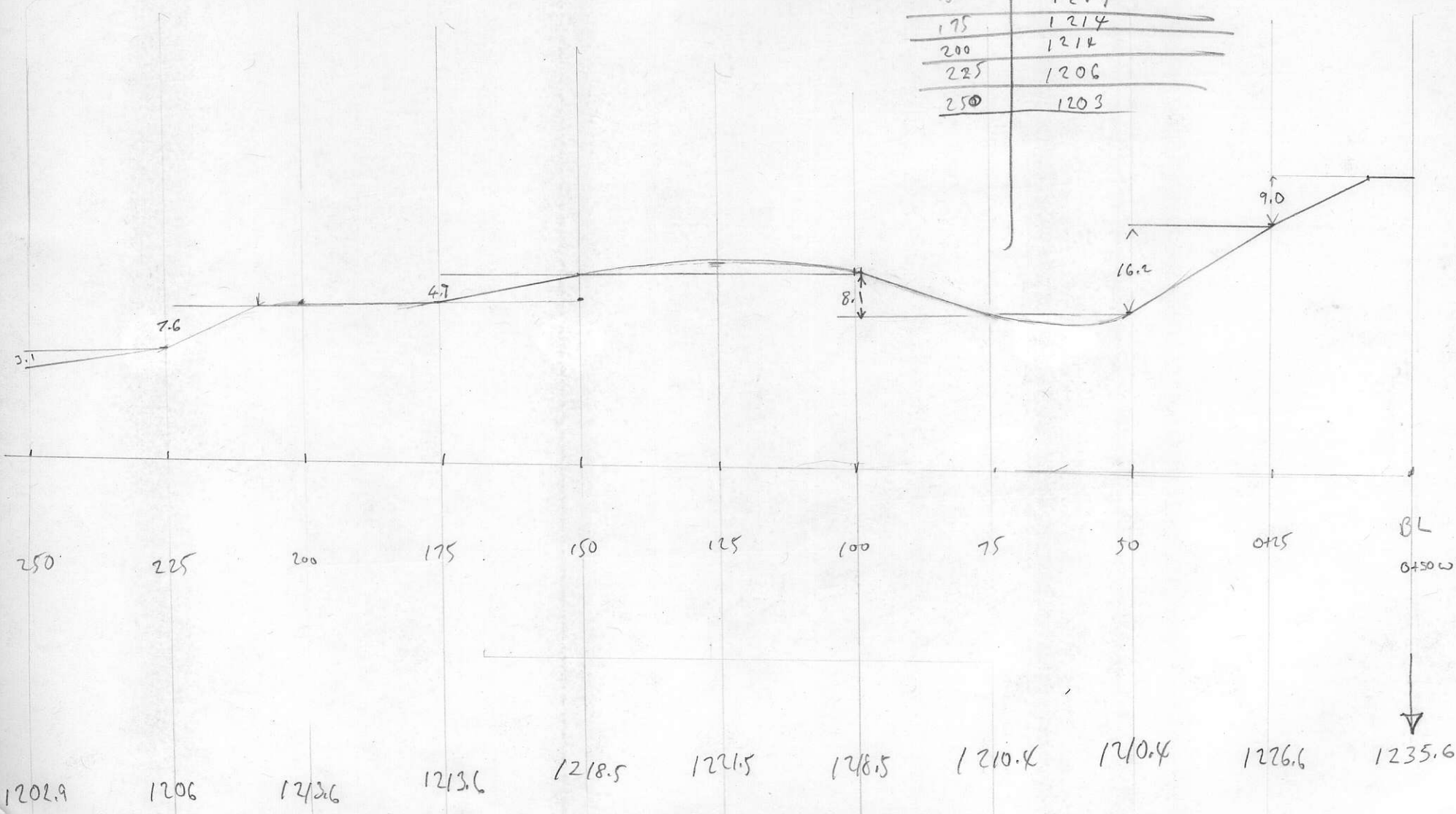
station	elevation
0+50w BL	1236
0+25 N	1237
0+50	1237
0+75	1236
1+00	1231
1+25	1231
1+50	1237
1+75	1243
2+00	1244
2+25	1257
2+50	1262



0+50W

South line

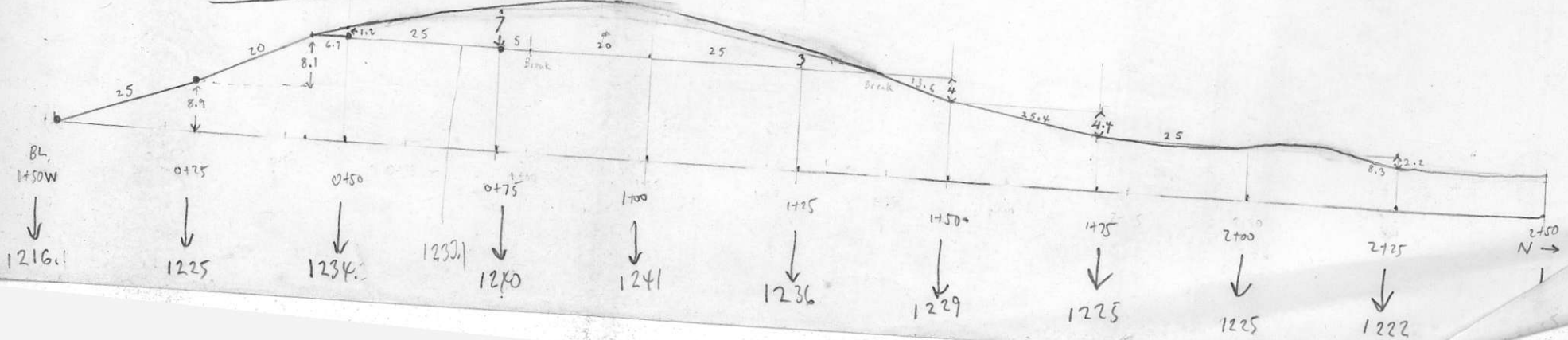
Station	elevation
BL 0+50W	1236
0+25S	1227
50	1210
75	1210
100	1219
125	1222
150	1219
175	1214
200	1214
225	1206
250	1203



SCALE 1:1000

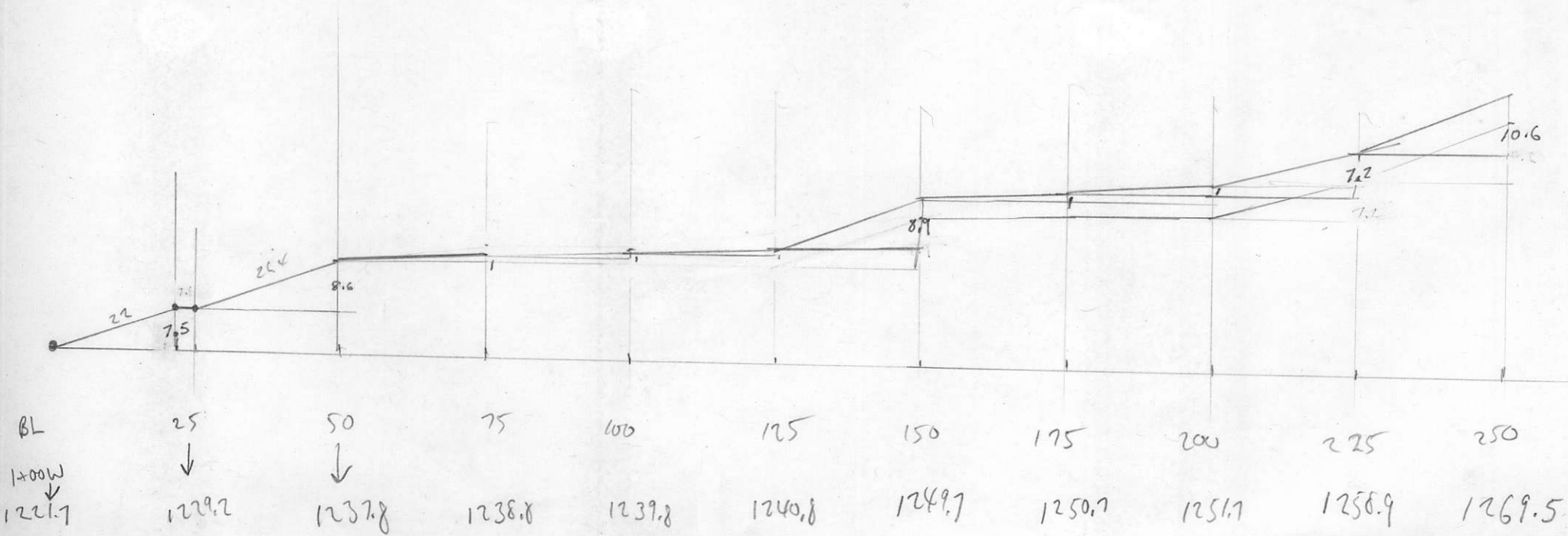
line 1+50W North side

Station	Elevation
1+50W; BL	1216 M
0+25	1225 m
0+50	1234
0+75	1240
1+00	1241
1+25	1236
1+50	1229
1+75	1225
2+00	1225
2+25	1222
2+50	1222



1+00W North line

Station	elevation
100W BL 1221.7	1222
0+25N	1229
0+50	1238
0+75	1239
1+00	1240
1+25	1241
1+50	1250
1+75	1251
2+00	1252
2+25	1260
2+50	1270

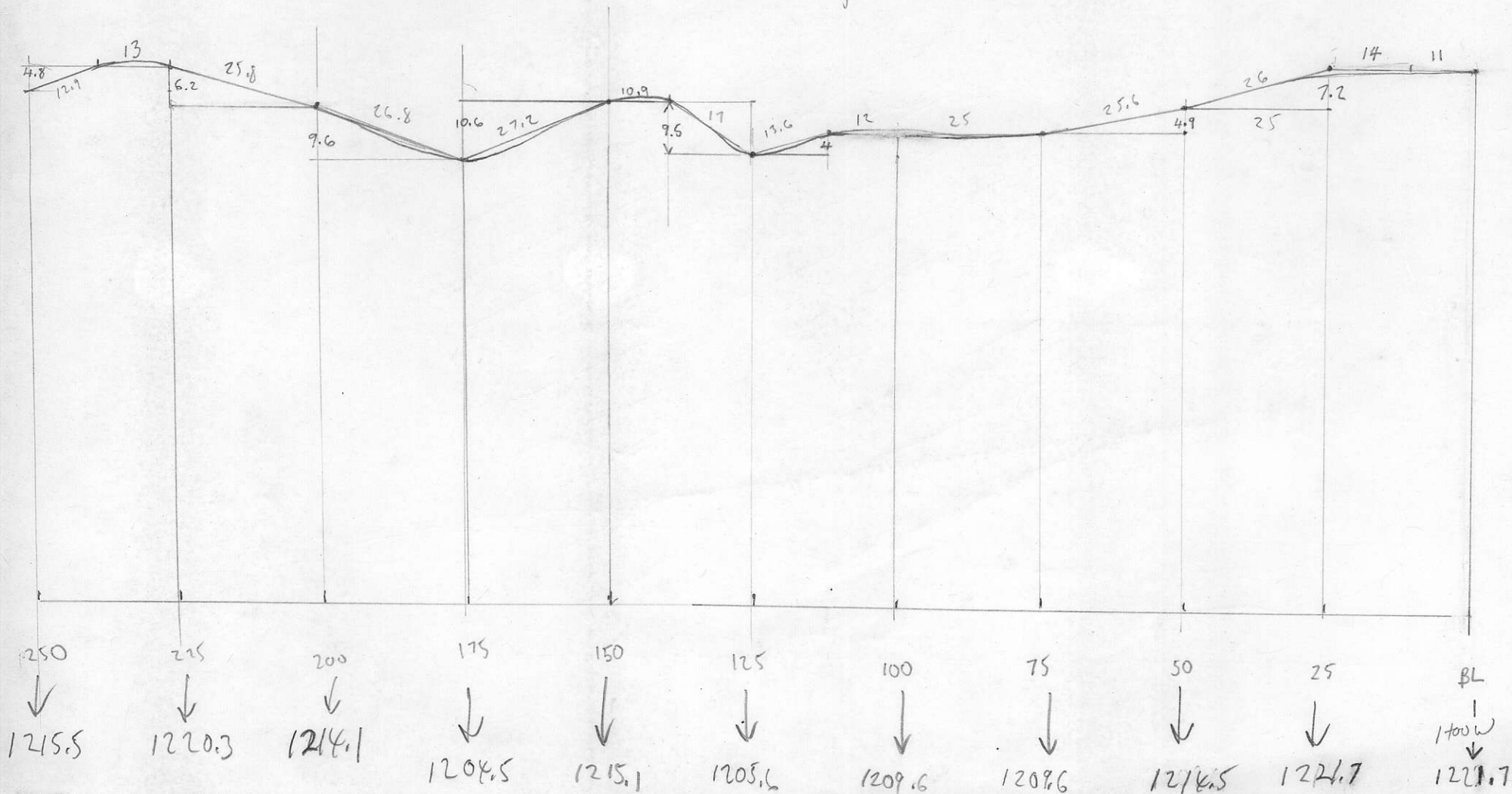


1+00 W

South line

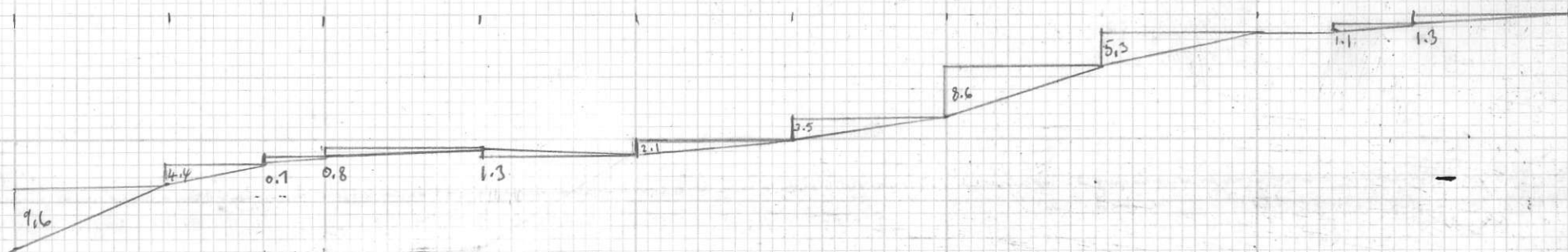
Station	elevation
BL 1+00 W	1222
0+25 S	1222
0+50 S	1215
0+75 S	1210
1+00 S	1210
1+25 S	1206
1+50 S	1215
1+75 S	1205
2+00 S	1214
2+25 S	1220
2+50 S	1216

150 W BL 1216



Base line 250w ← 0+00

Station	elevation
0+00 BL	1238
25 W	1237
50	1236
75	1230
100	1227
125	1218
150	1216
175	1217
200	1217
225 V	1212
250 W	1207



245W	242.5W	2400W	1725W	1750W	1725W	1700W	0+175W	0+50W	0+225W	BL 0+00
↓	↓		↓	↓	↓	↓	↓	↓	↓	↓
1201.9	1211.5	1216.6	1217.4	1216.1	1216.2	1221.7	1230.3	1235.6	1236.7	1238 m

South

S	DH	Elevation
0+00	0	1217
25	-5.8	1211
50	-8.6	1203
75	-3.5	1199
1+00	1.3	1200
25	—	1200
50	—	1200
75	—	1200
2+00	3.1	1203
25	—	1203
50	4.4	1208

2+00W

602+1

North

S	DH	Elevation
0+00	0	1217
25	8.1	1225
50	4.3	1229
75	6.7	1236
1+00	6.2	1242
25	-4.4	1238
50	-4.4	1234
75	-10.1	1223
2+00	-3.5	1220
25	-5.3	1215
50	2.2	1217

2+50S

S	DH	Elev
0+00	0	1202
+25	-6.2	1196
50	-6.2	1190
75	3.5	1193
1+00	5.3	1198
25	5.3	1204
50	-3.1	1201
75	-3.5	1197
2+00	0	1197
25	+3.5	1201
50	0	1201

2+50W

0+00

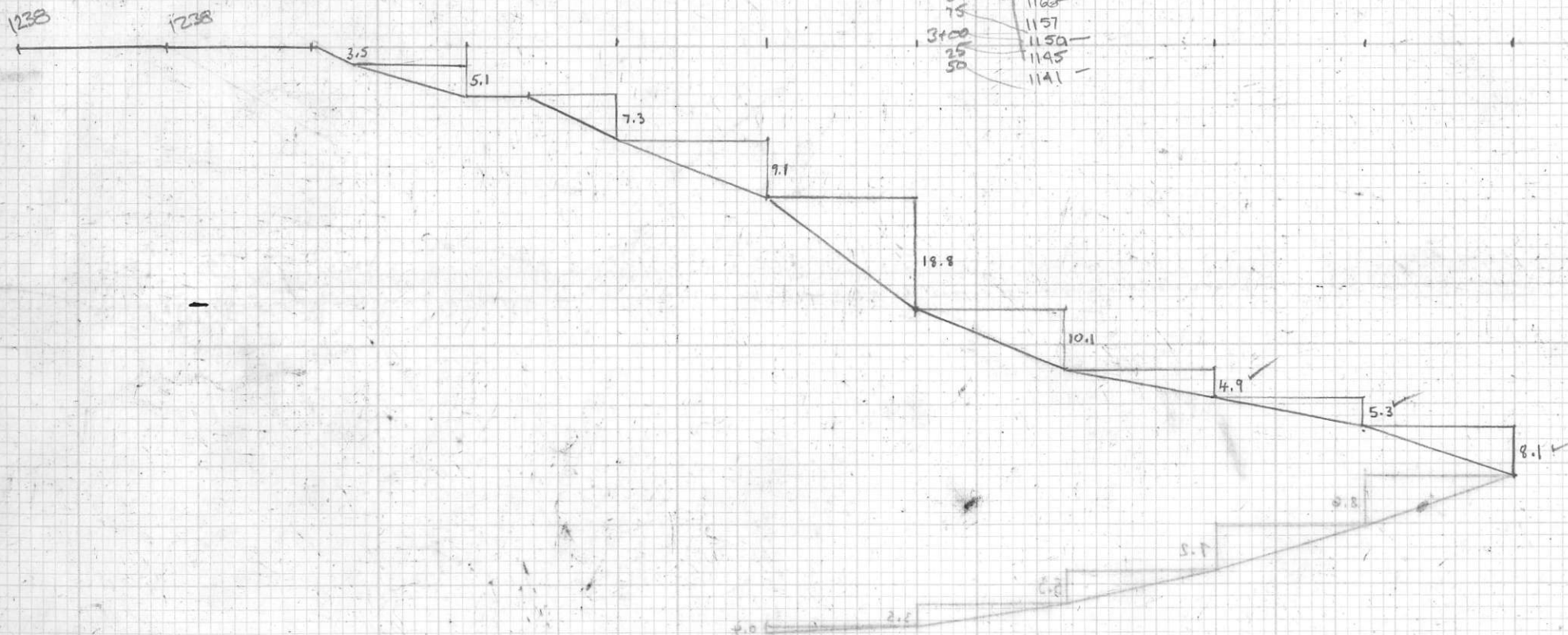
2+50N

N	DH	Elev
0+00	0	1202
25	-1.8	1200
50	10.1	1210
75	-1.0	1209
1+00	0	1209
25	-4.7	1205
50	—	1205
75	-19.5	1189
2+00	2.2	1185
25	6.3	1187
50	0	1194

1238

1238

STN	Elev.
0+00	1238 ✓
25	1238
50	1238
75	1229
1+00	1222 ✓
25	1213
50	1194
75	1184
2+00	1179 ✓
25	1174
50	1166
75	1157
3+00	1150 ✓
25	1145
50	1141



0

25

50

75

100

125

150

175

200

225

250

STATION	ELEVATION
0+00	1138
0+15	1138
0+30	1138
0+45	1138
0+60	1138
0+75	1138
0+90	1138
1+05	1138
1+20	1138
1+35	1138
1+50	1138
1+65	1138
1+80	1138
1+95	1138
2+10	1138
2+25	1138
2+40	1138
2+55	1138
2+70	1138
2+85	1138
3+00	1138



North

WOODS

South

1+50W

South

44

Time	HD	→
1515	5.4	20
1516	2.4	32
1518	2.2	30
1520	2.2	30
1522	2.2	30
1524	2.2	30
1526	2.2	30
1528	2.2	30
1530	2.2	30
1532	2.2	30
1534	2.2	30
1536	2.2	30
1538	2.2	30
1540	2.2	30
1542	2.2	30
1544	2.2	30
1546	2.2	30
1548	2.2	30
1550	2.2	30
1552	2.2	30
1554	2.2	30
1556	2.2	30
1558	2.2	30
1600	2.2	30

Time	ΔH	Elevation
0+00		1216
25	-6.2	1210
50	-10.6	1199
75	-	1199
1+00	-	1199
25	-6.2	1193
50	-3.5	1197
75	2.2	1199
2+00	-	1199
25	7.2	1206
50	-	1206

WOODS

WOODS

WOODS

Time	HD	→
1515	5.4	20
1516	2.4	32
1518	2.2	30
1520	2.2	30
1522	2.2	30
1524	2.2	30
1526	2.2	30
1528	2.2	30
1530	2.2	30
1532	2.2	30
1534	2.2	30
1536	2.2	30
1538	2.2	30
1540	2.2	30
1542	2.2	30
1544	2.2	30
1546	2.2	30
1548	2.2	30
1550	2.2	30
1552	2.2	30
1554	2.2	30
1556	2.2	30
1558	2.2	30
1600	2.2	30

WOODS

Time	HD	→
1515	5.4	20
1516	2.4	32
1518	2.2	30
1520	2.2	30
1522	2.2	30
1524	2.2	30
1526	2.2	30
1528	2.2	30
1530	2.2	30
1532	2.2	30
1534	2.2	30
1536	2.2	30
1538	2.2	30
1540	2.2	30
1542	2.2	30
1544	2.2	30
1546	2.2	30
1548	2.2	30
1550	2.2	30
1552	2.2	30
1554	2.2	30
1556	2.2	30
1558	2.2	30
1600	2.2	30