

平成 23 年 度 調 査

平 成 26 年 度 実 行

内野林業専用道新設工事(H25補正)

設 計 図

分 類	自 動 車 道	規 格	林 業 専 用 道
位 置	茨城県北茨城市磯原町内野字内野山国有林		
延 長	819.3m	国有林内	819.3m
		国有林外	m
幅 員	3.00 (3.50) m	最小半径	12.0m
勾 配	最 急	平 均	設計荷重
	+14.00%	+2.56%	

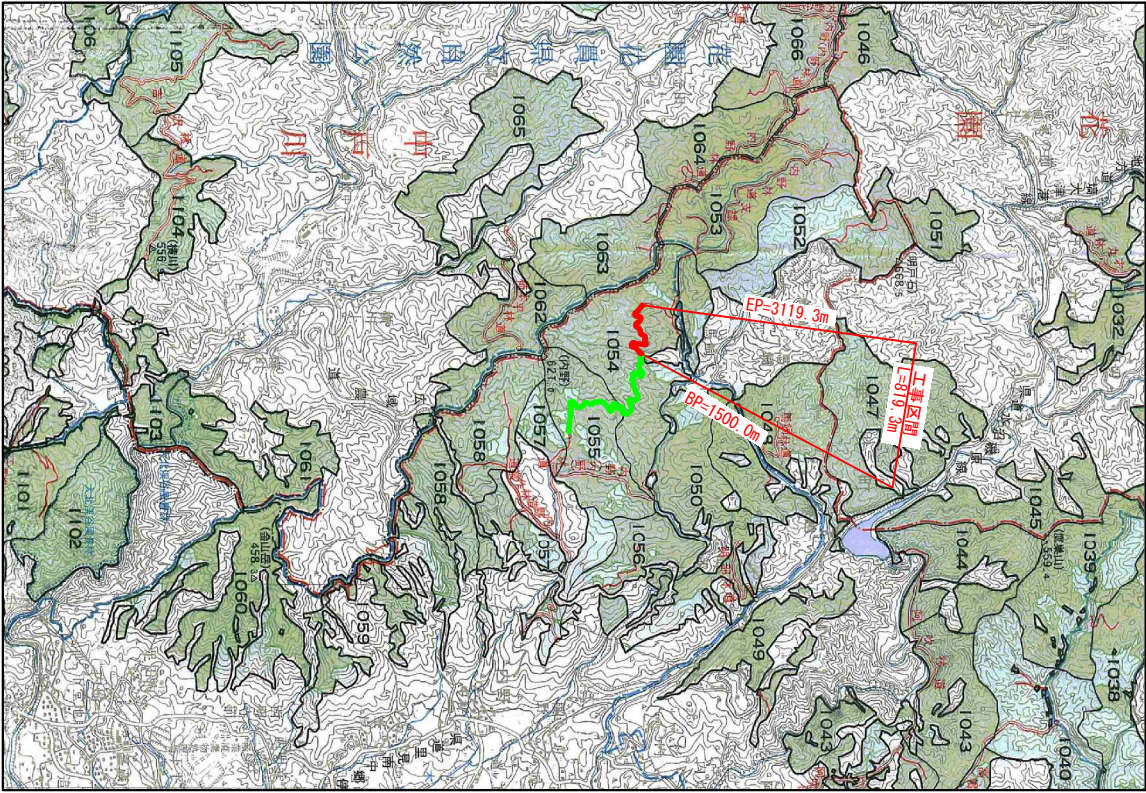
茨 城 森 林 管 理 署 管 内

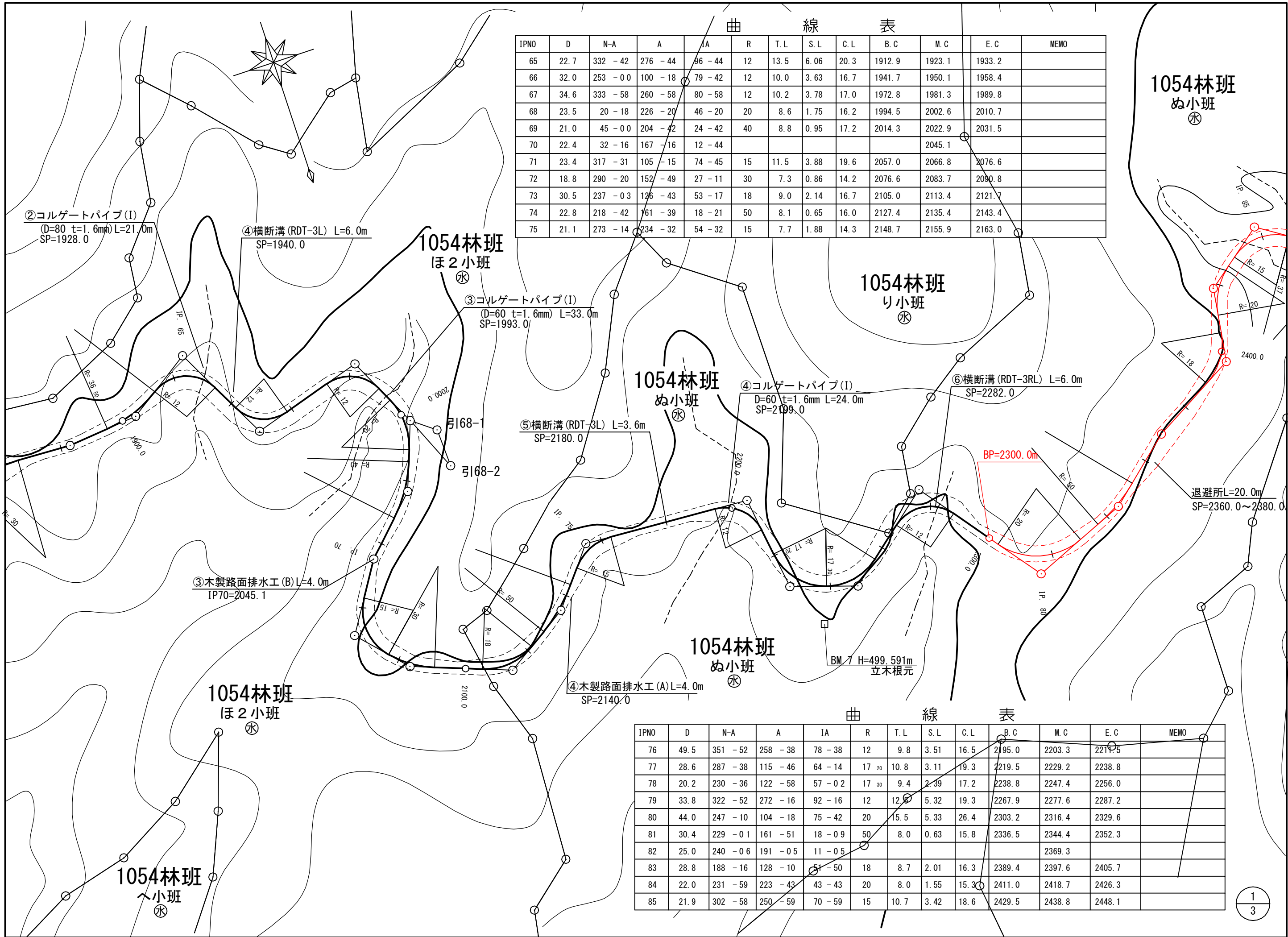
関 東 森 林 管 理 局

位 置 図

S=1:50,000

茨城県北茨城市磯原町内野字内野山国有林1054林班内





曲線表												
IPNO	D	N-A	A	IA	R	T.L	S.L	C.L	B.C	M.C	E.C	MEMO
65	22.7	332 - 42	276 - 44	96 - 44	12	13.5	6.06	20.3	1912.9	1923.1	1933.2	
66	32.0	253 - 00	100 - 18	79 - 42	12	10.0	3.63	16.7	1941.7	1950.1	1958.4	
67	34.6	333 - 58	260 - 58	80 - 58	12	10.2	3.78	17.0	1972.8	1981.3	1989.8	
68	23.5	20 - 18	226 - 20	46 - 20	20	8.6	1.75	16.2	1994.5	2002.6	2010.7	
69	21.0	45 - 00	204 - 42	24 - 42	40	8.8	0.95	17.2	2014.3	2022.9	2031.5	
70	22.4	32 - 16	167 - 16	12 - 44						2045.1		
71	23.4	317 - 31	105 - 15	74 - 45	15	11.5	3.88	19.6	2057.0	2066.8	2076.6	
72	18.8	290 - 20	152 - 49	27 - 11	30	7.3	0.86	14.2	2076.6	2083.7	2090.8	
73	30.5	237 - 03	126 - 43	53 - 17	18	9.0	2.14	16.7	2105.0	2113.4	2121.7	
74	22.8	218 - 42	161 - 39	18 - 21	50	8.1	0.65	16.0	2127.4	2135.4	2143.4	
75	21.1	273 - 14	234 - 32	54 - 32	15	7.7	1.88	14.3	2148.7	2155.9	2163.0	

1054林班
り小班

1054林班
ぬ小班

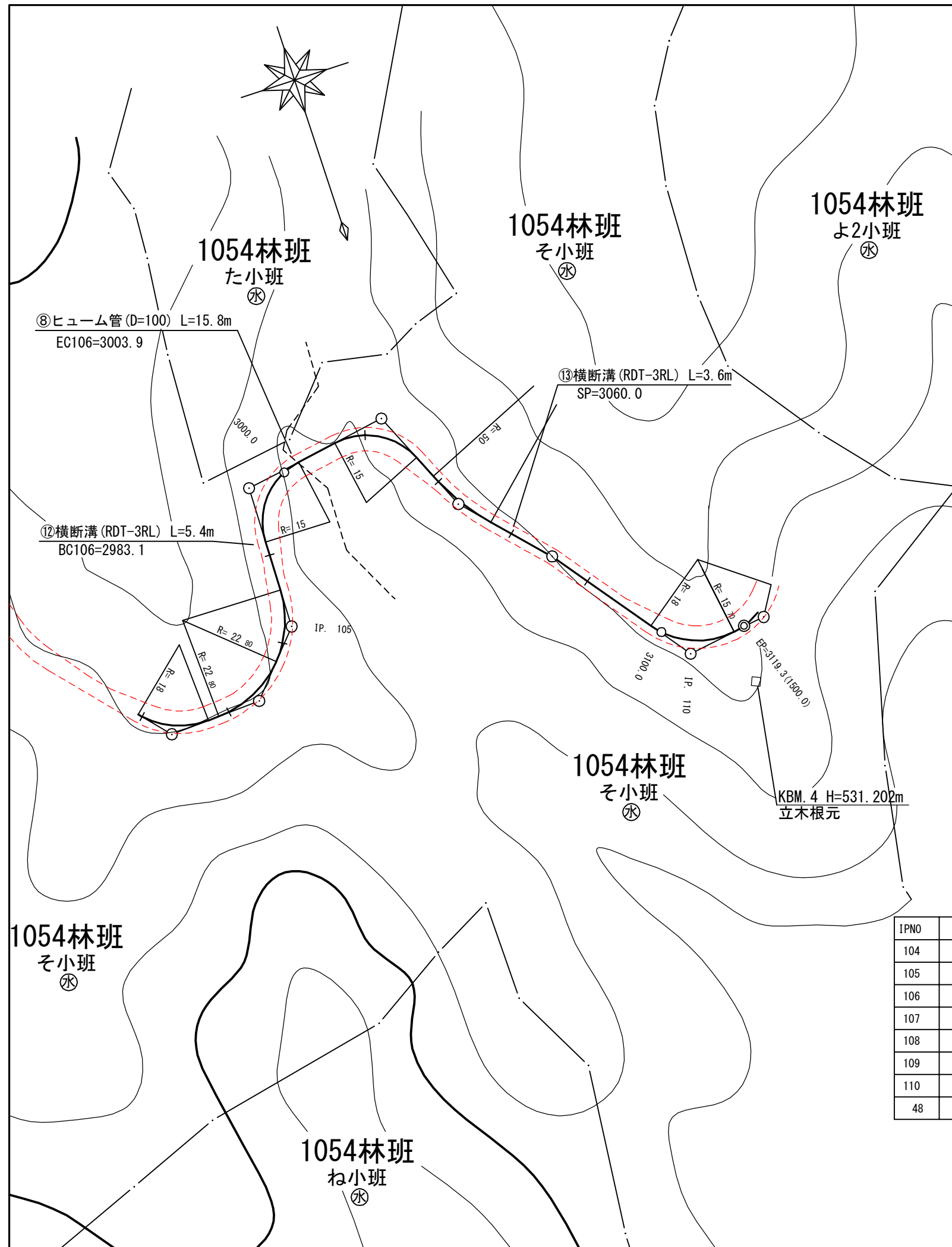
1054林班
ぬ小班

1054林班
ぬ小班

曲線表												
IPNO	D	N-A	A	IA	R	T.L	S.L	C.L	B.C	M.C	E.C	MEMO
76	49.5	351 - 52	258 - 38	78 - 38	12	9.8	3.51	16.5	2195.0	2203.3	2211.5	
77	28.6	287 - 38	115 - 46	64 - 14	17 ₂₀	10.8	3.11	19.3	2219.5	2229.2	2238.8	
78	20.2	230 - 36	122 - 58	57 - 02	17 ₃₀	9.4	2.39	17.2	2238.8	2247.4	2256.0	
79	33.8	322 - 52	272 - 16	92 - 16	12	12.8	5.32	19.3	2267.9	2277.6	2287.2	
80	44.0	247 - 10	104 - 18	75 - 42	20	15.5	5.33	26.4	2303.2	2316.4	2329.6	
81	30.4	229 - 01	161 - 51	18 - 09	50	8.0	0.63	15.8	2336.5	2344.4	2352.3	
82	25.0	240 - 06	191 - 05	11 - 05						2369.3		
83	28.8	188 - 16	128 - 10	51 - 50	18	8.7	2.01	16.3	2389.4	2397.6	2405.7	
84	22.0	231 - 59	223 - 43	43 - 43	20	8.0	1.55	15.3	2411.0	2418.7	2426.3	
85	21.9	302 - 58	250 - 59	70 - 59	15	10.7	3.42	18.6	2429.5	2438.8	2448.1	

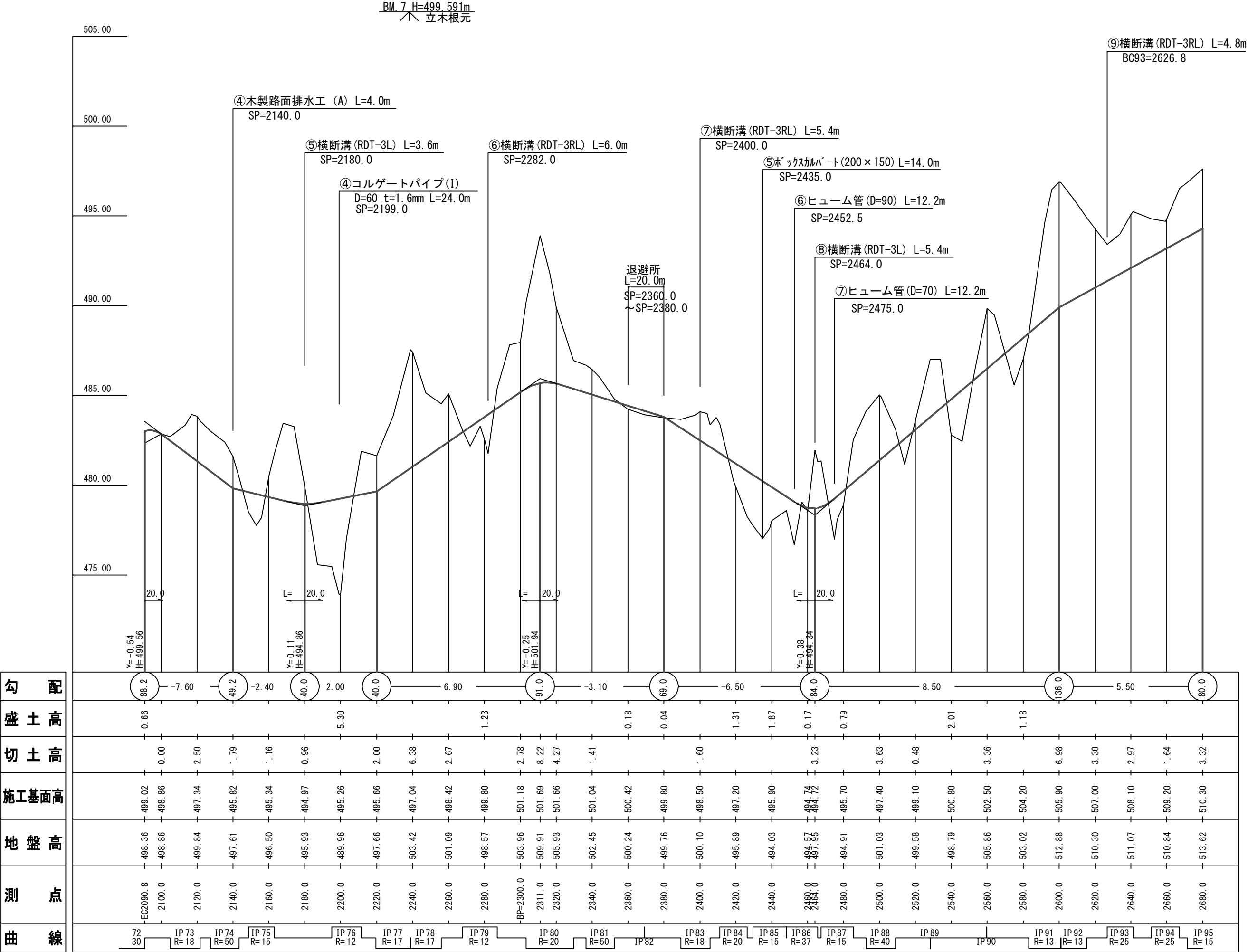
曲線表												
IPNO	D	N-A	A	IA	R	T.L	S.L	C.L	B.C	M.C	E.C	MEMO
84	22.0	231 - 59	223 - 43	43 - 43	20	8.0	1.55	15.3	2411.0	2418.7	2426.3	
85	21.9	302 - 58	250 - 59	70 - 59	15	10.7	3.42	18.6	2429.5	2438.8	2448.1	
86	19.6	330 - 07	207 - 09	27 - 09	37	8.9	1.06	17.5	2448.1	2456.9	2465.6	
87	21.1	38 - 54	248 - 47	68 - 47	15	10.3	3.18	18.0	2467.5	2476.5	2485.5	
88	25.7	15 - 12	156 - 18	23 - 42	40	8.4	0.87	16.5	2492.5	2500.8	2509.0	
89	27.6	7 - 41	172 - 29	7 - 31						2528.2		
90	31.5	18 - 46	191 - 05	11 - 05						2559.7		
91	34.1	300 - 20	101 - 34	78 - 26	13	10.6	3.78	17.8	2583.2	2592.1	2601.0	
92	18.6	237 - 19	116 - 59	63 - 01	13	8.0	2.25	14.3	2601.0	2608.2	2615.3	
93	26.9	270 - 25	213 - 06	33 - 06	25	7.4	1.08	14.4	2626.8	2634.0	2641.2	
94	25.8	306 - 10	215 - 45	35 - 45	25	8.1	1.27	15.6	2651.5	2659.3	2667.1	
95	23.1	236 - 11	110 - 01	69 - 59	15	10.5	3.31	18.3	2671.6	2680.8	2689.9	

曲線表												
IPNO	D	N-A	A	IA	R	T.L	S.L	C.L	B.C	M.C	E.C	MEMO
96	35.8	200 - 54	144 - 43	35 - 17	25	8.0	1.23	15.4	2707.2	2714.9	2722.6	
97	25.9	272 - 16	251 - 22	71 - 22	12	8.6	2.77	14.9	2731.9	2739.4	2746.8	
98	47.6	225 - 30	133 - 14	46 - 46	20	8.6	1.79	16.3	2777.2	2785.4	2793.5	
99	19.7	218 - 42	173 - 12	6 - 48						2804.6		
100	31.6	284 - 26	245 - 44	65 - 44	15	9.7	2.86	17.2	2826.5	2835.1	2843.7	
101	28.5	347 - 52	243 - 26	63 - 26	15	9.3	2.63	16.6	2853.2	2861.5	2869.8	
102	28.8	318 - 47	150 - 55	29 - 05	30	7.8	0.99	15.2	2881.5	2889.1	2896.7	
103	38.8	267 - 23	128 - 36	51 - 24	18	8.7	1.98	16.1	2919.0	2927.1	2935.1	
104	20.8	221 - 48	134 - 25	45 - 35	22 80	9.6	1.93	18.1	2937.6	2946.7	2955.7	
105	18.1	181 - 06	139 - 18	40 - 42	22 80	8.5	1.52	16.2	2955.7	2963.8	2971.9	



曲線表

IPNO	D	N-A	A	IA	R	T.L	S.L	C.L	B.C	M.C	E.C	MEMO
104	20.8	221 - 48	134 - 25	45 - 35	22 80	9.6	1.93	18.1	2937.6	2946.7	2955.7	
105	18.1	181 - 0 6	139 - 18	40 - 42	22 80	8.5	1.52	16.2	2955.7	2963.8	2971.9	
106	32.2	260 - 32	259 - 26	79 - 26	15	12.5	4.50	20.8	2983.1	2993.5	3003.9	
107	33.3	336 - 17	255 - 45	75 - 45	15	11.7	4.00	19.8	3013.0	3022.9	3032.8	
108	25.6	317 - 26	161 - 0 9	18 - 51	50	8.3	0.68	16.4	3038.4	3046.6	3054.8	
109	23.9	323 - 20	185 - 54	5 - 54						3070.4		
110	37.7	261 - 32	118 - 12	61 - 48	18	10.8	2.98	19.4	3097.3	3107.0	3116.7	
48	18.2	211 - 0 8	129 - 36	50 - 24	15 70	7.4	1.65	13.8	3116.7	3123.6	3130.5	





L=13.8

1:0.6

BP=2300.0

-2.78

2.40

1:0.6

L=1.1

L=12.4

1:0.6

2311.0

-8.22

S1 CA= 82.4

L=7.6

1:0.6

3.00

S1 CA= 30.3

L=14.3

1:0.6

BC 80 2303.2

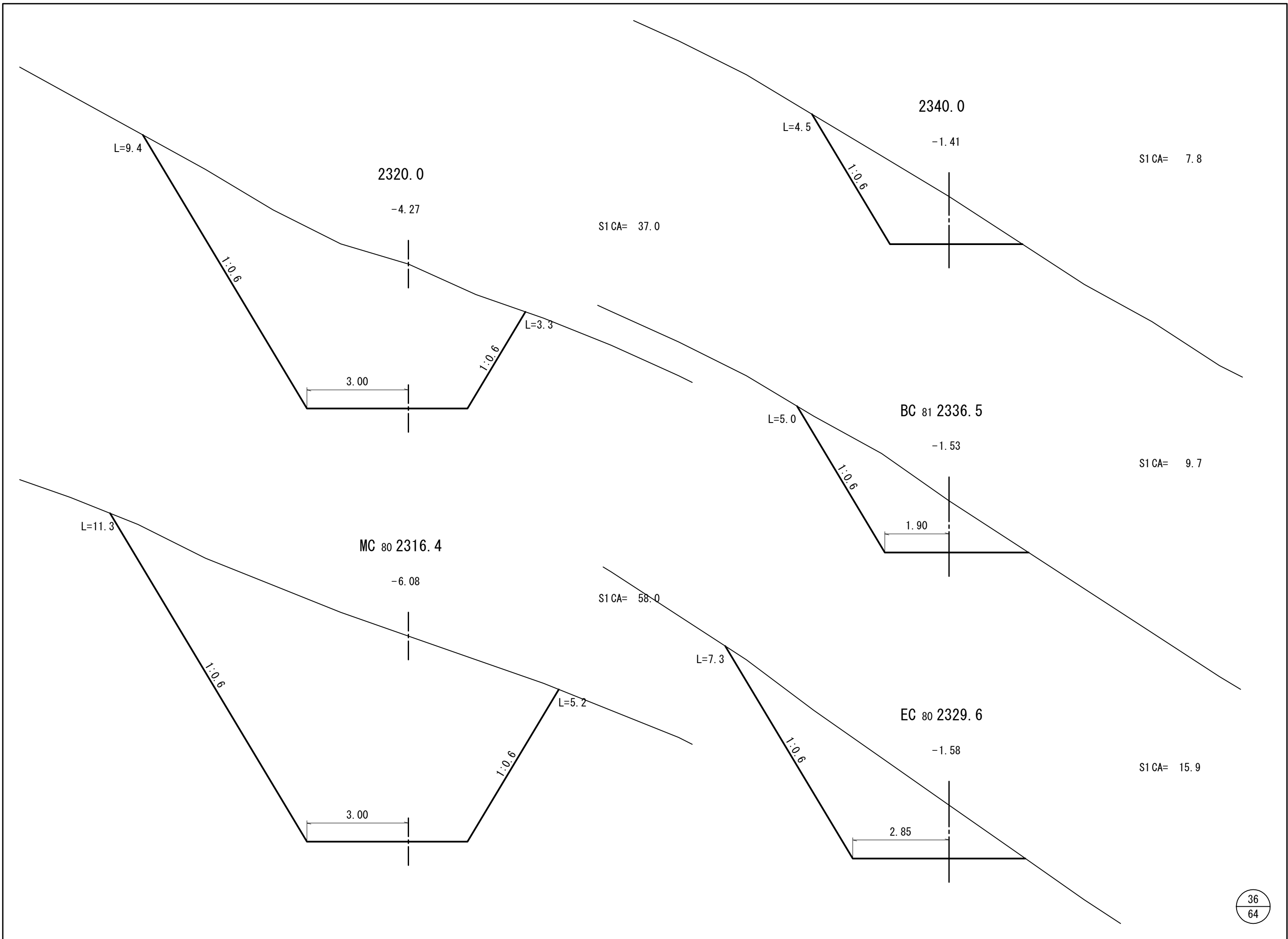
-4.82

S1 CA= 51.4

L=3.8

1:0.6

2.85



L=7.1

2404.0

-1.76

S1 CA= 18.3

MC 84 2418.7

+1.03

BA= 9.4

⑥木柵工(柵高30cm) L=17.0m
MC84=2418.7~SP=2435.0

1:0.6

3.20

1.90

3.00

1:1.5

4.7

L=5.9

2400.0

-1.60

S1 CA= 15.6

2409.1

-1.87

S1 CA= 15.4

1:0.6

3.25

3.0%

ふとん籠(水叩き)1枚

⑦横断溝(RDT-3RL) L=5.4m

L=6.5

1:0.6

2.50

2.60

L=5.6

MC 83 2397.6

-1.25

S1 CA= 13.4

EC 83 2405.7

-1.24

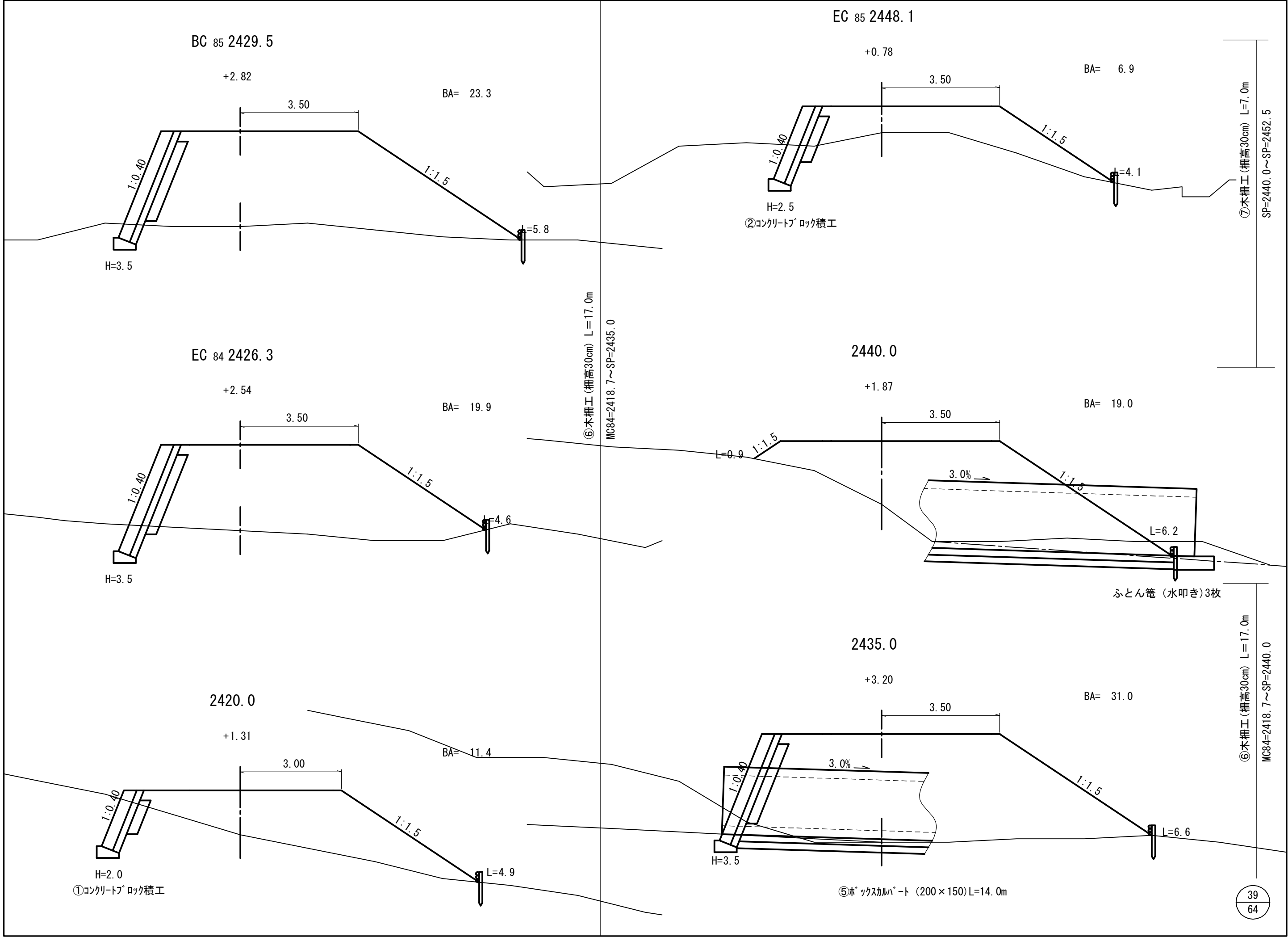
S1 CA= 16.7

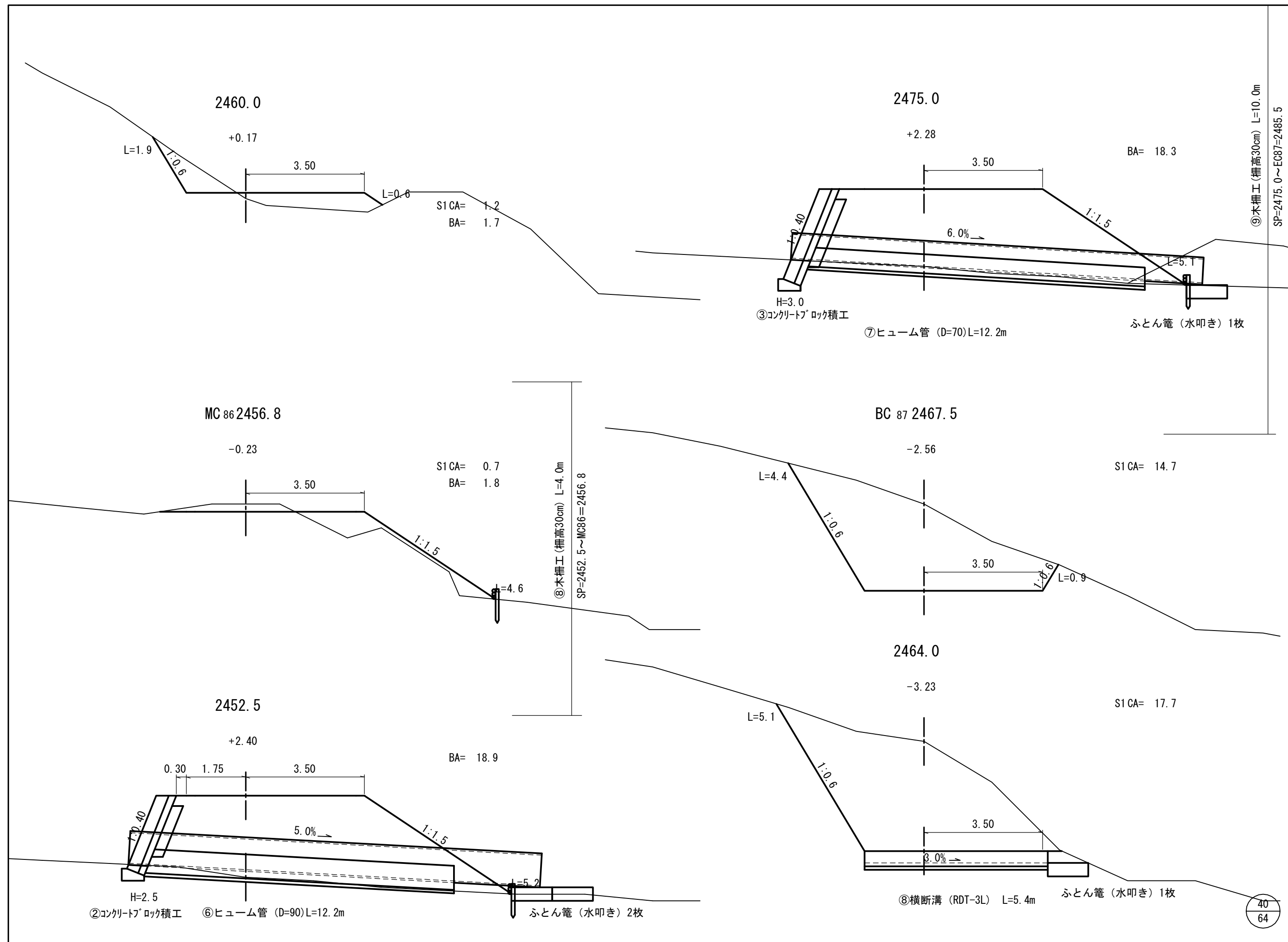
1:0.6

3.25

3.05

2.10





L=7.9

EC 87 2485.5

-2.36

S1 CA= 15.2
BA= 3.8

1:0.6

1.80

3.30

1:1.5

L=5.1

L=10.3

2500.0

-3.63

S1 CA= 30.2

1:0.6

2.25

1:0.6

L=1.8

2480.0

+0.79

S1 CA= 0.2
BA= 9.0

L=0.7

3.50

1:1.5

L=3.8

⑨木柵工(柵高30cm) L=10.0m
SP=2475.0~EC87=2485.5

L=11.1

BC 88 2492.5

-3.37

S1 CA= 30.4

1:0.6

2.20

1.95

1:0.6

L=1.4

MC 87 2476.5

+1.32

BA= 11.7

3.50

L=1.1

1:1.5

1:1.5

L=3.7

2514.0

+1.42

BA= 19.4

1.90

1:1.5

L=9.0

1:0.60

H=3.5

2534.0

-2.72

S1 CA= 15.5

L=5.6

1:0.6

L=1.6

1:0.6

IP 89 2528.2

-3.21

S1 CA= 20.8

L=7.8

1:0.6

L=1.8

1:0.6

EC 88 2509.0

-0.94

S1 CA= 8.7

BA= 4.4

2.20

1:0.6

1:1.5

L=9.0

1:0.60

H=2.5

2520.0

-0.48

S1 CA= 3.1

BA= 0.5

L=2.7

1:0.6

1:1.5

L=1.9

⑦ふとん籠工

2553.0

-0.44

S1CA= 1.3

2546.0

+2.86

BA= 40.4

2540.0

+2.01

BA= 20.6

L=9.0

1:0.5

H=2.5

⑧ふとん籠工

1:1.5

L=7.4

2575.0

+2.19

BA= 44.1

1:1.5

L=9.0

1:1.5

L=9.0

1:0.8

H=3.0

⑨ふとん簀工

2564.0

-2.64

S1CA= 14.9

L=5.6

1:0.6

1:0.6

L=1.7

2560.0

-3.36

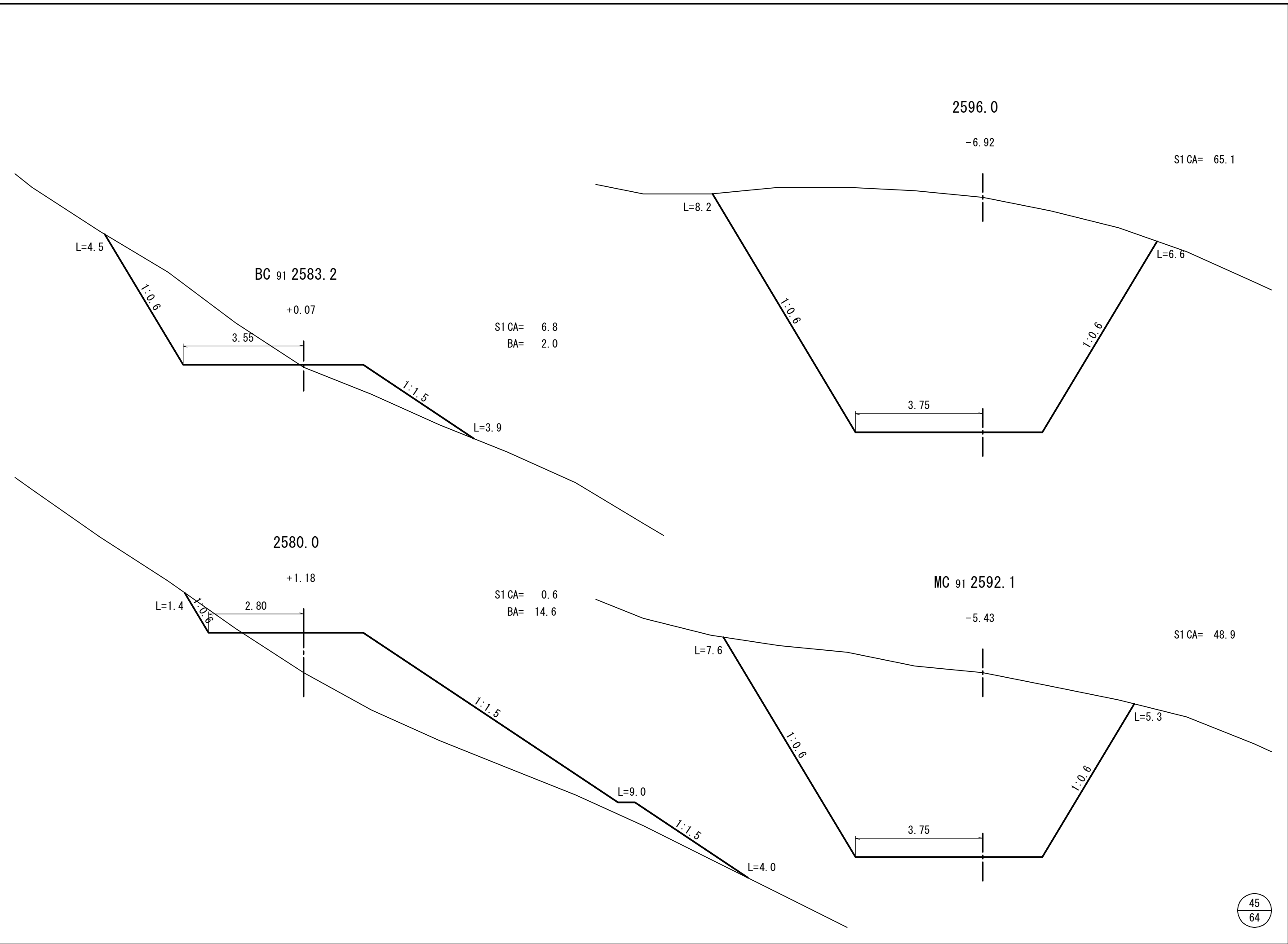
S1CA= 20.4

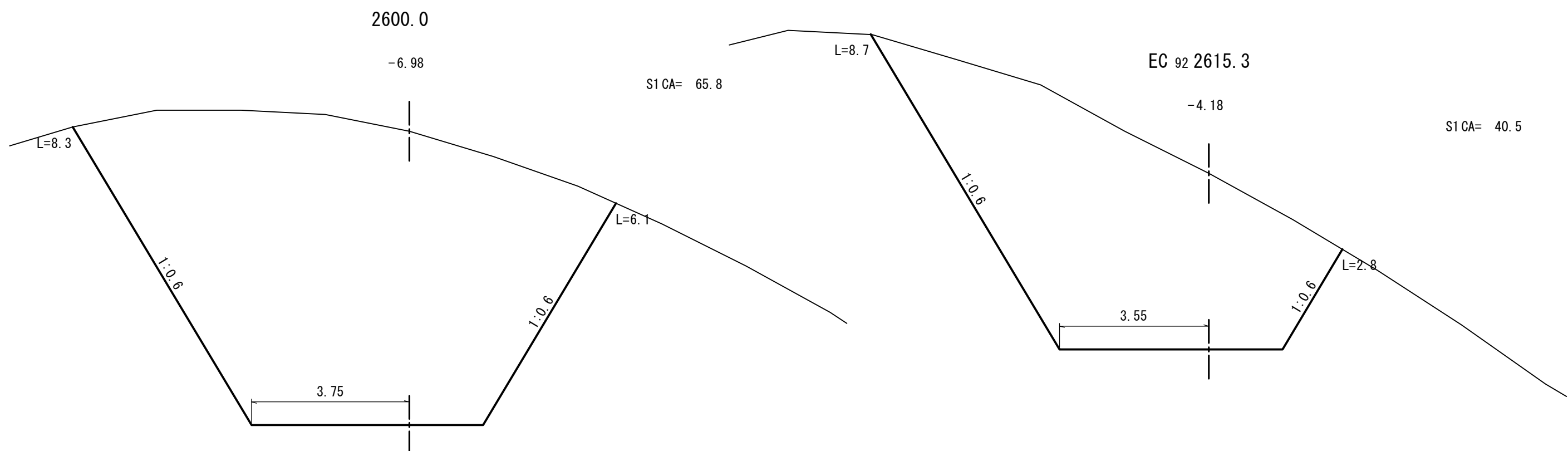
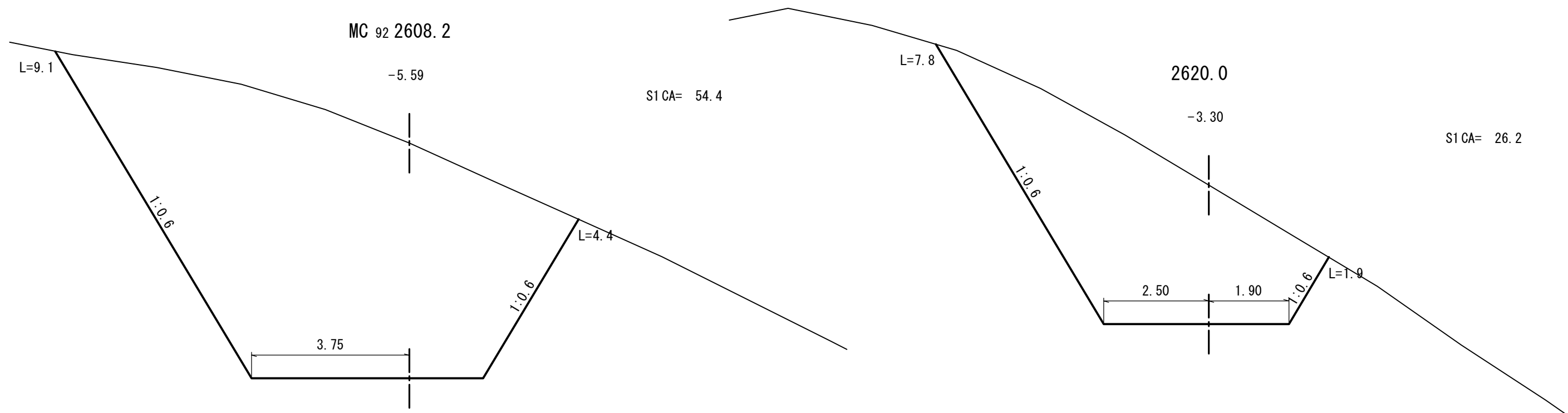
L=6.7

1:0.6

1:0.6

L=2.9





L=7.9

2640.0

-2.97

S1 CA= 20.2

1:0.6

2.75

1:0.6

L=0.9

L=8.1

EC 94 2667.1

-2.94

S1 CA= 23.0

1:0.6

2.30

2.55

1:0.6

L=1.0

L=6.3

MC 93 2634.0

-2.22

S1 CA= 14.2

1:0.6

2.75

L=4.7

2660.0

-1.64

S1 CA= 8.9

1:0.6

2.75

L=5.8

BC 93 2626.8

-2.05

S1 CA= 12.6

1:0.6

2.60

3.0%

L=6.7

BC 94 2651.5

-2.10

S1 CA= 13.6

1:0.6

2.75

⑨横断溝 (RDT-3RL) L=4.8m

L=9.8

1:0.6

2680.0

-3.32

3.50

1:0.6

L=2.1

L=10.0

1:0.6

EC 95 2689.9

-2.61

3.30

L=0.7

ふとん箆（水叩き）1枚

⑤木製路面排水工（A） L=6.0m

S1 CA= 32.6

L=9.4

1:0.6

BC 95 2671.6

-3.03

3.25

1.90

1:0.6

L=1.5

L=10.9

1:0.6

2685.0

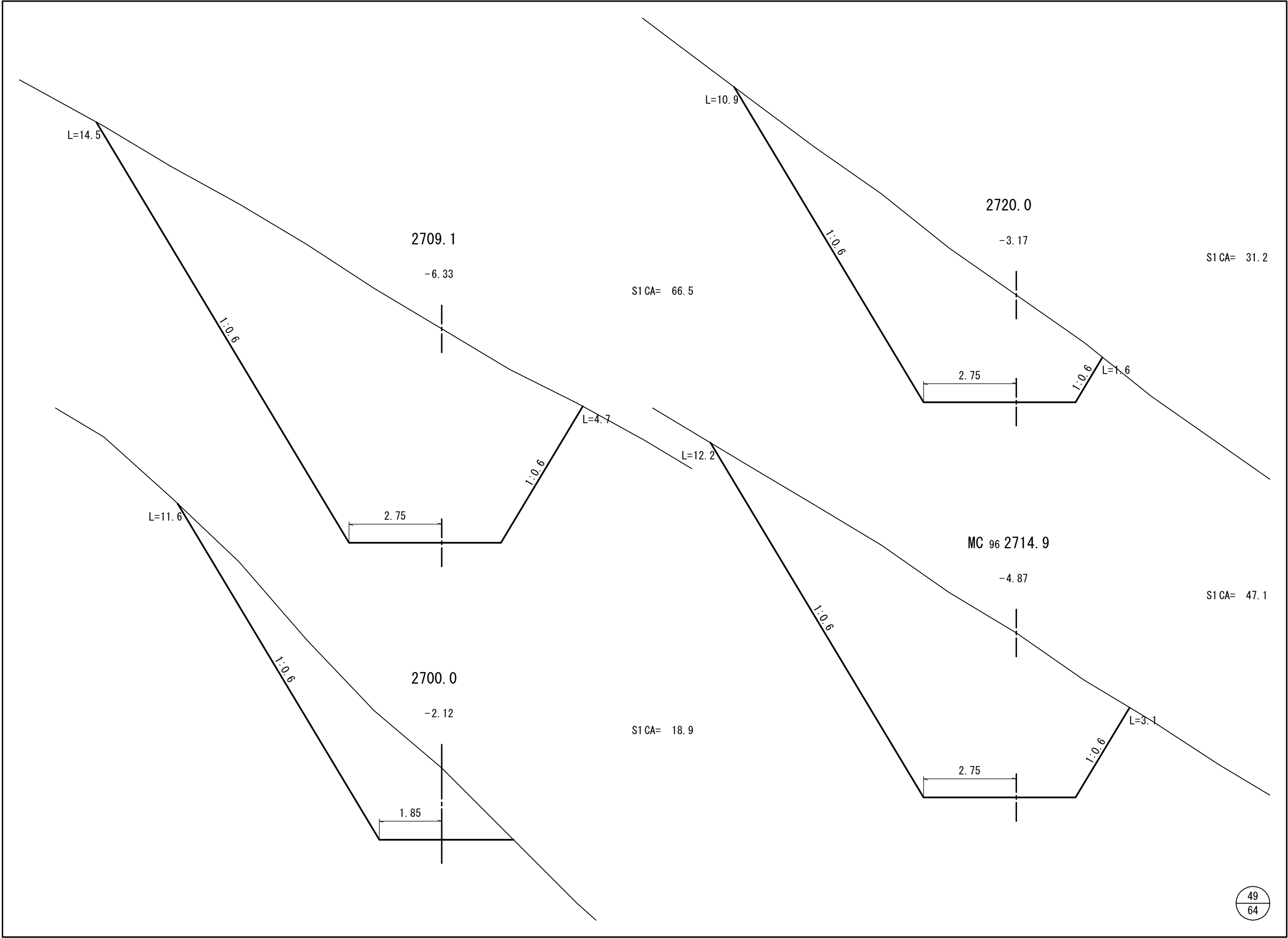
-4.07

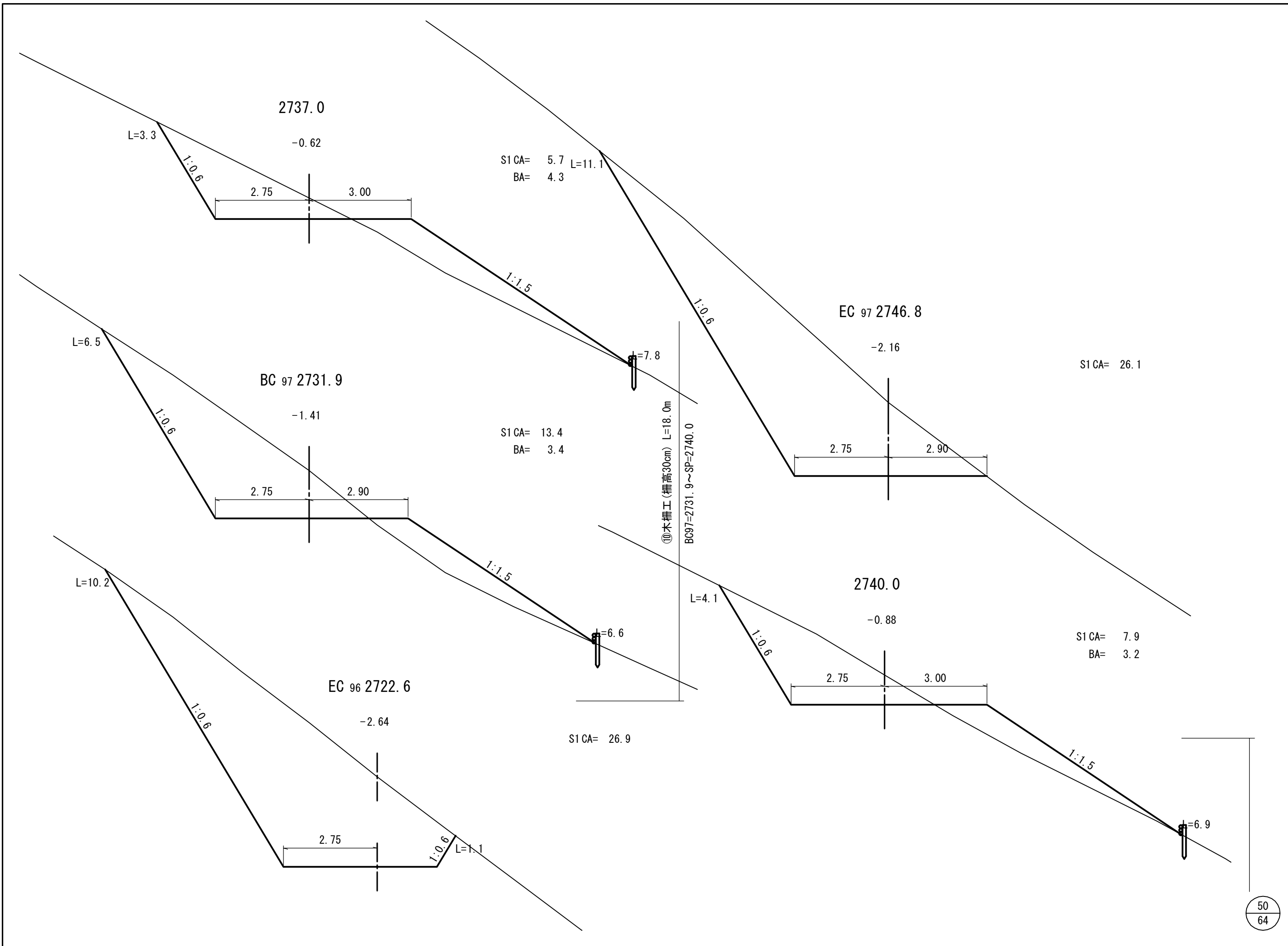
3.50

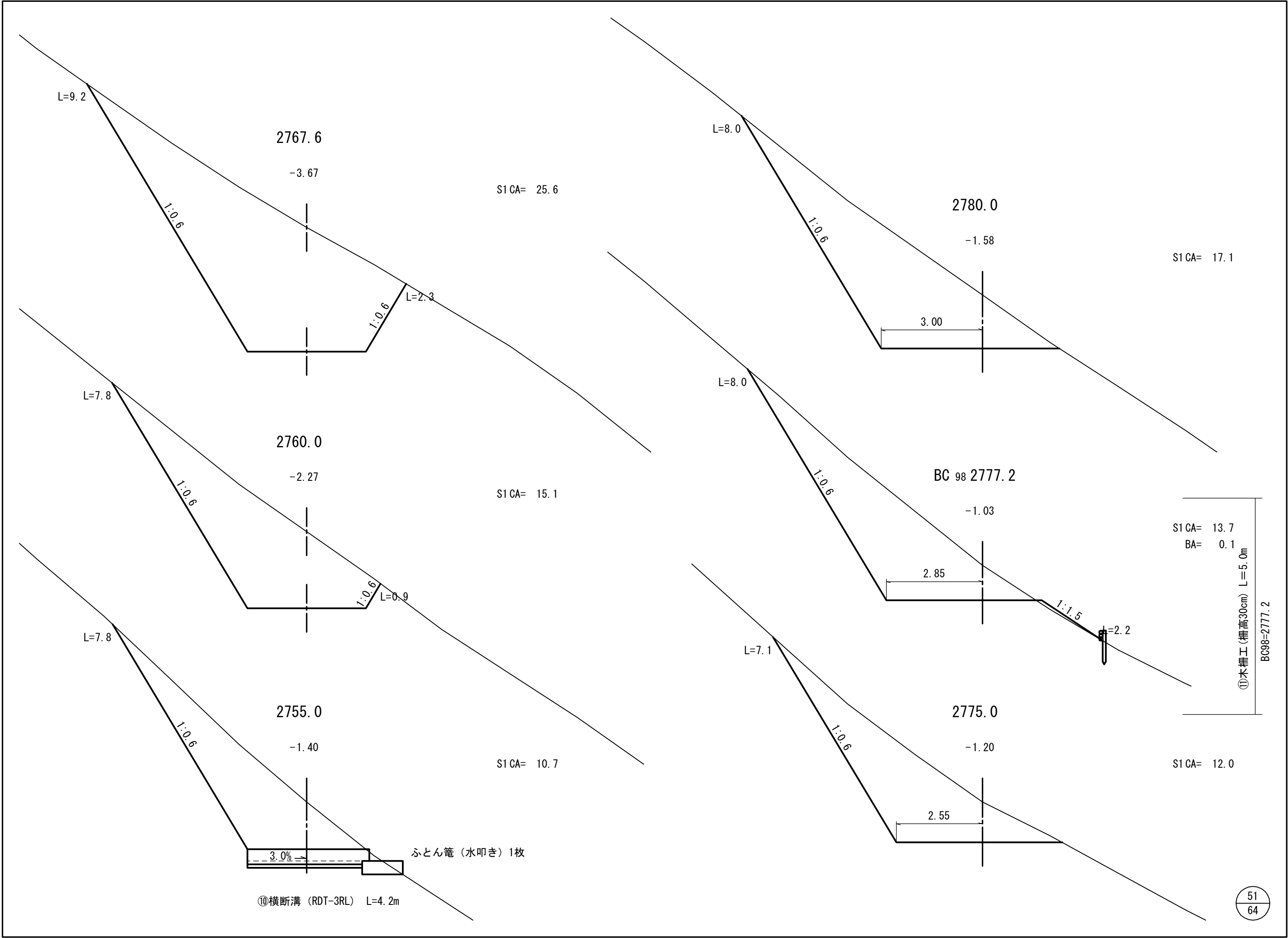
1:0.6

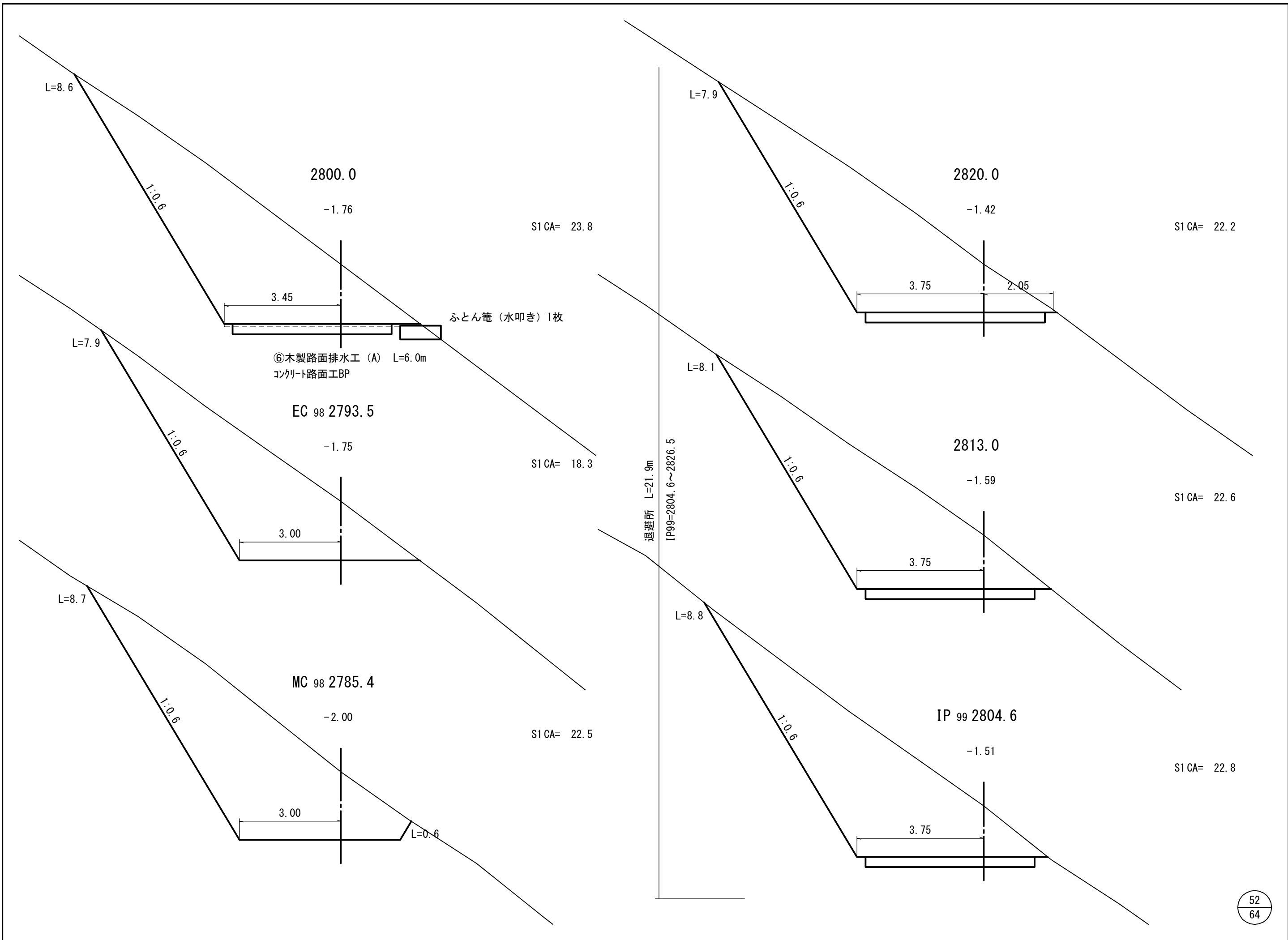
L=2.7

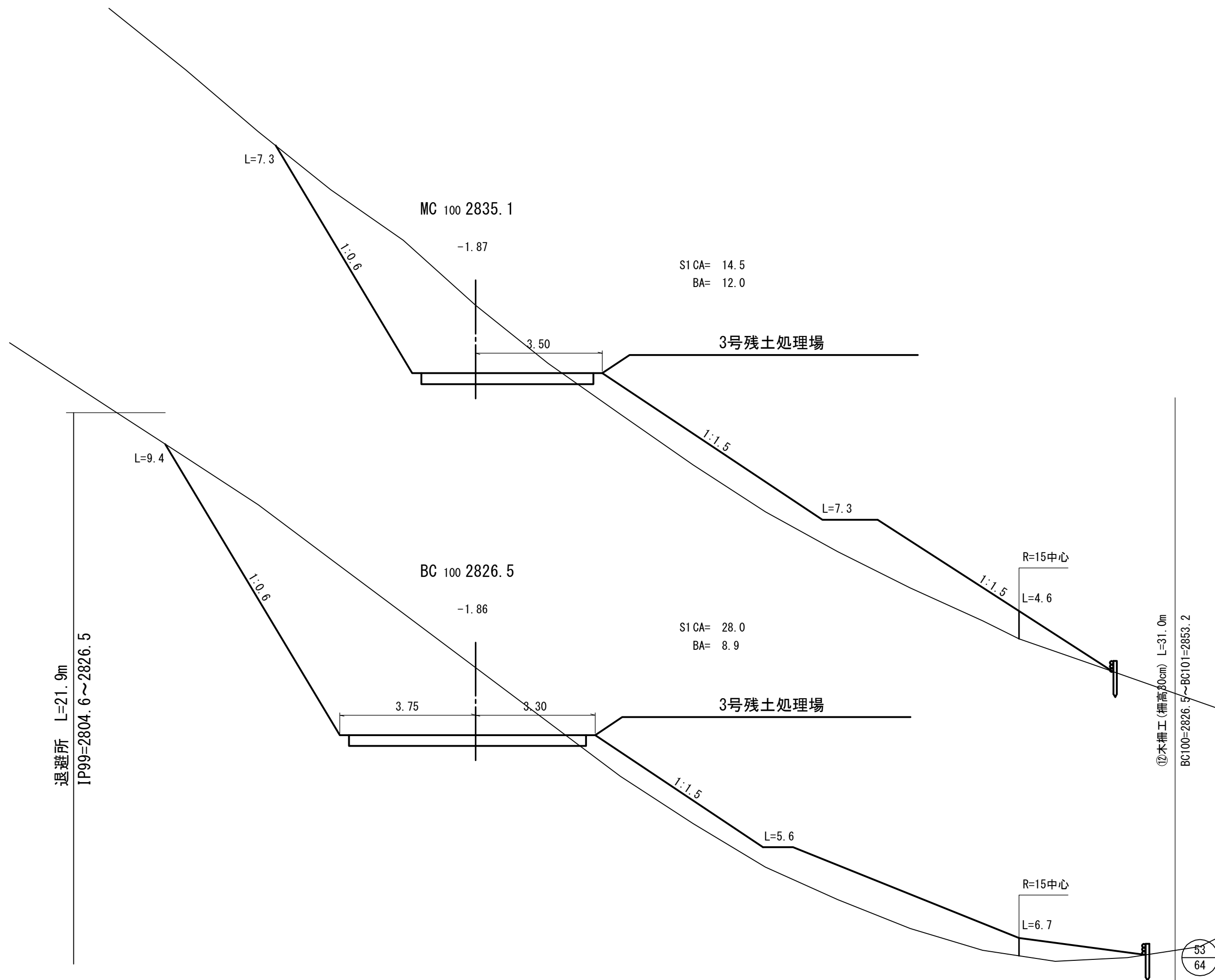
S1 CA= 43.6

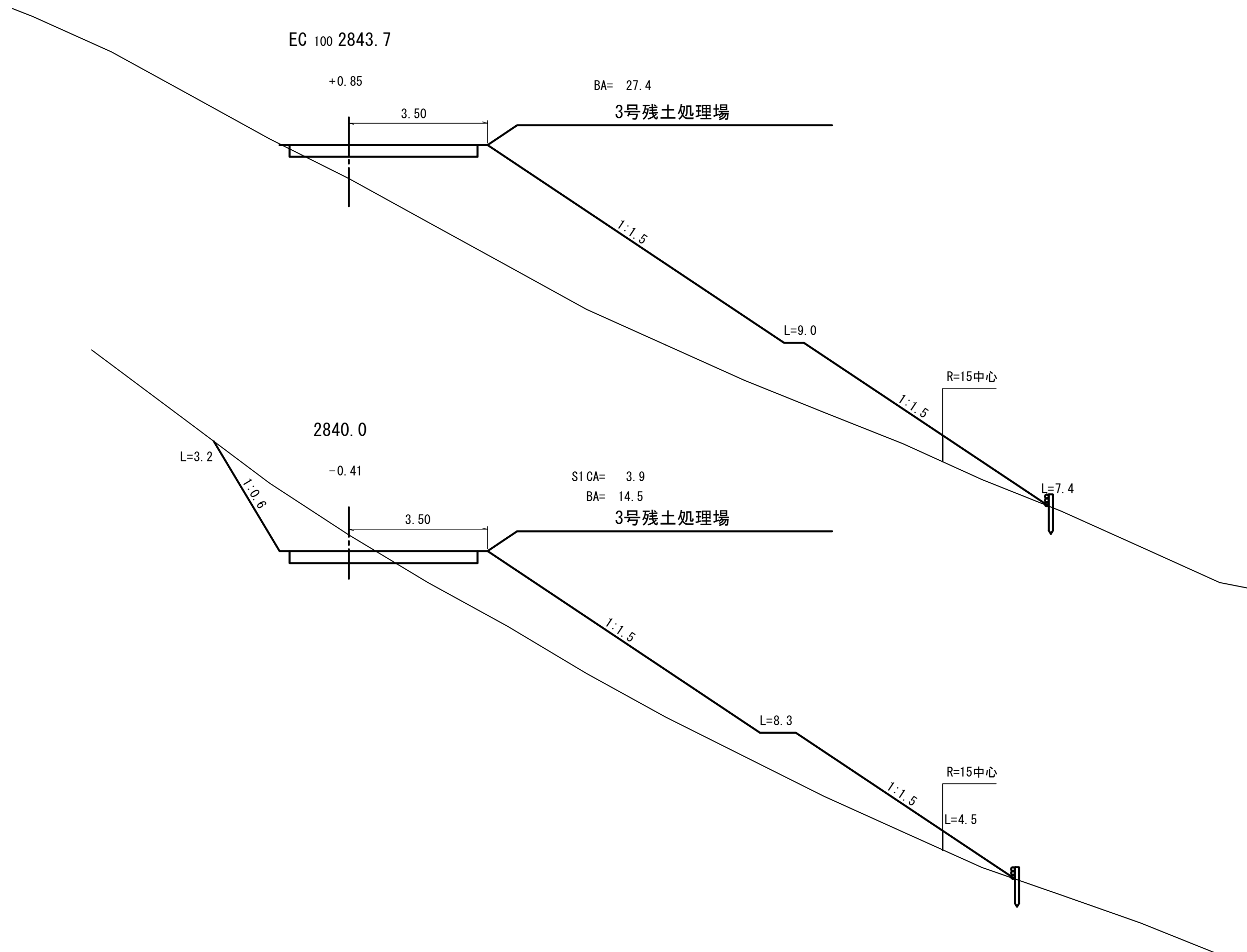












BC 101 2853.2

+1.16

BA= 8.8

3号残土処理場

3.50

1:1.5

4.6

2848.0

+1.81

BA= 36.1

3号残土処理場

3.50

1:1.5

L=9.0

1:1.5

8.8

暗渠工 (D=15cm) L=55.0m

⑫木柵工 (柵高30cm) L=31.0m
BC100=2826.5~BC101=2853.2

L=6.2

EC 101 2869.8

-2.22

S1 CA= 15.5

1:0.6

3.30

2893.0

-1.97

S1 CA= 13.6

L=5.0

1:0.6

2.50

1:0.6

L=1.0

L=6.9

MC 101 2861.5

-2.63

S1 CA= 19.0

1:0.6

3.50

MC 102 2889.1

-2.27

S1 CA= 17.3

L=6.2

1:0.6

2.50

1:0.6

L=1.2

L=5.3

2860.0

-2.06

S1 CA= 13.6

1:0.6

3.50

L=6.3

1:0.6

2880.0

-1.72

S1 CA= 14.4

2.30

L=0.7

コンクリート路面工EP

⑪横断溝 (RDT-3RL) L=5.4m

コルゲートフラット (A-350) L=46.0m
至残土処理場 ふとん竜

2904.5

+0.23

L=0.9

1:0.6

S1 CA= 0.5
BA= 3.5

1:1.5

5.7

2900.0

-0.27

L=1.9

1:0.6

2.15

S1 CA= 2.3
BA= 2.8

1:1.5

7.9

⑬木柵工 (柵高30cm) L=20.0m

SP=2900.0~SP=2904.5

EC 103 2935.1

-1.99

L=6.2

1:0.6

3.25

1:0.6

L=1.1

S1 CA= 19.5

MC 103 2927.1

-1.85

L=5.0

1:0.6

3.25

1:0.6

L=1.0

S1 CA= 16.7

2920.0

-1.91

L=5.2

1:0.6

3.15

1:0.6

L=1.1

S1 CA= 16.7

EC 102 2896.7

-1.19

L=3.6

1:0.6

2.40

S1 CA= 7.6

コンクリート路面工BP

L=8.1

MC 104 2946.7

-3.98

S1 CA= 35.1

1:0.6

3.00

L=3.0

1:0.6

L=8.6

EC 104 2955.7

-4.12

S1 CA= 36.6

1:0.6

3.00

L=3.4

1:0.6

L=6.9

2940.0

-2.49

S1 CA= 23.5

1:0.6

3.25

L=1.4

1:0.6

L=8.7

2951.5

-4.55

S1 CA= 40.6

1:0.6

3.00

L=3.8

1:0.6

L=6.3

BC 104 2937.6

-2.21

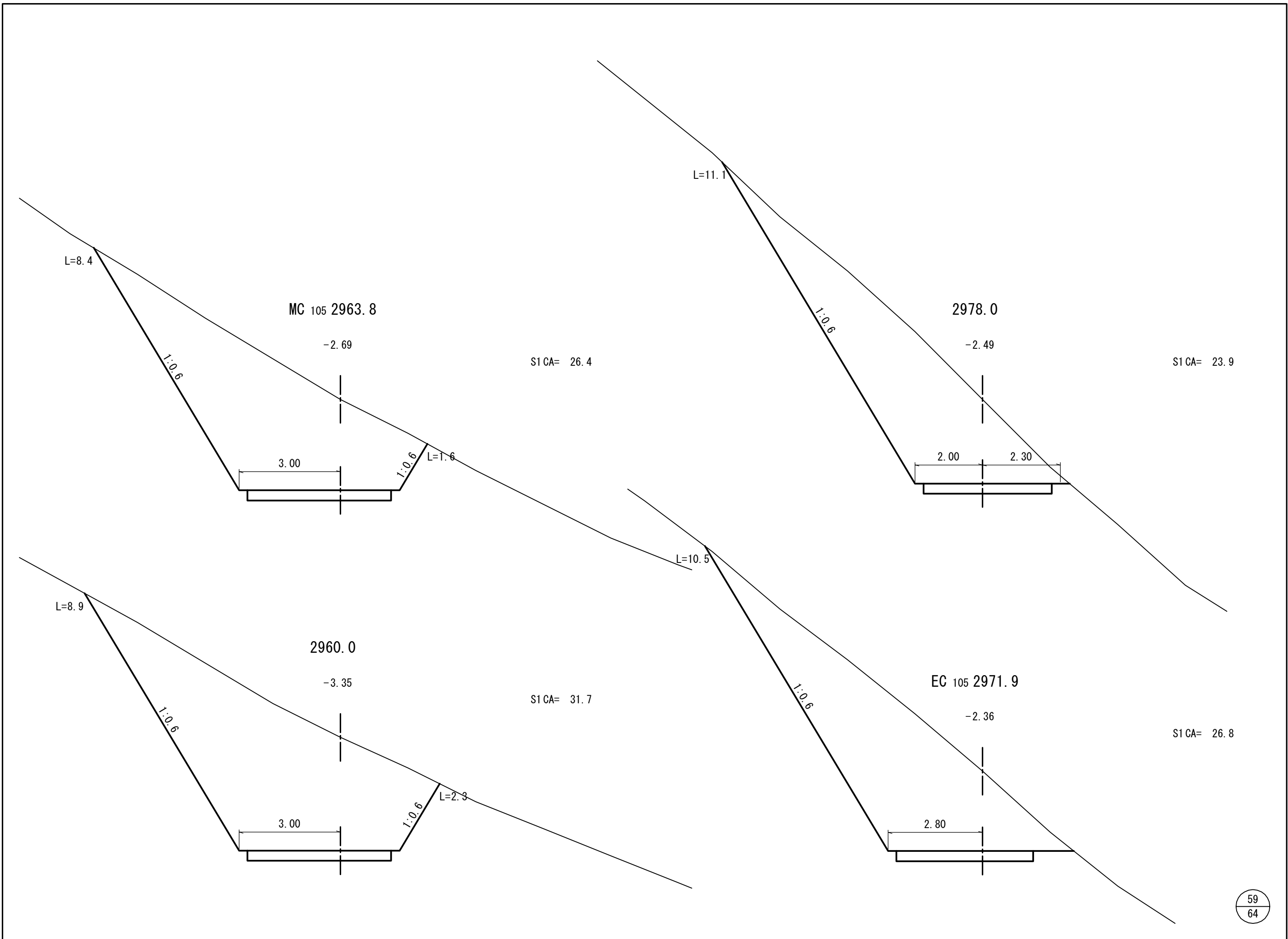
S1 CA= 21.2

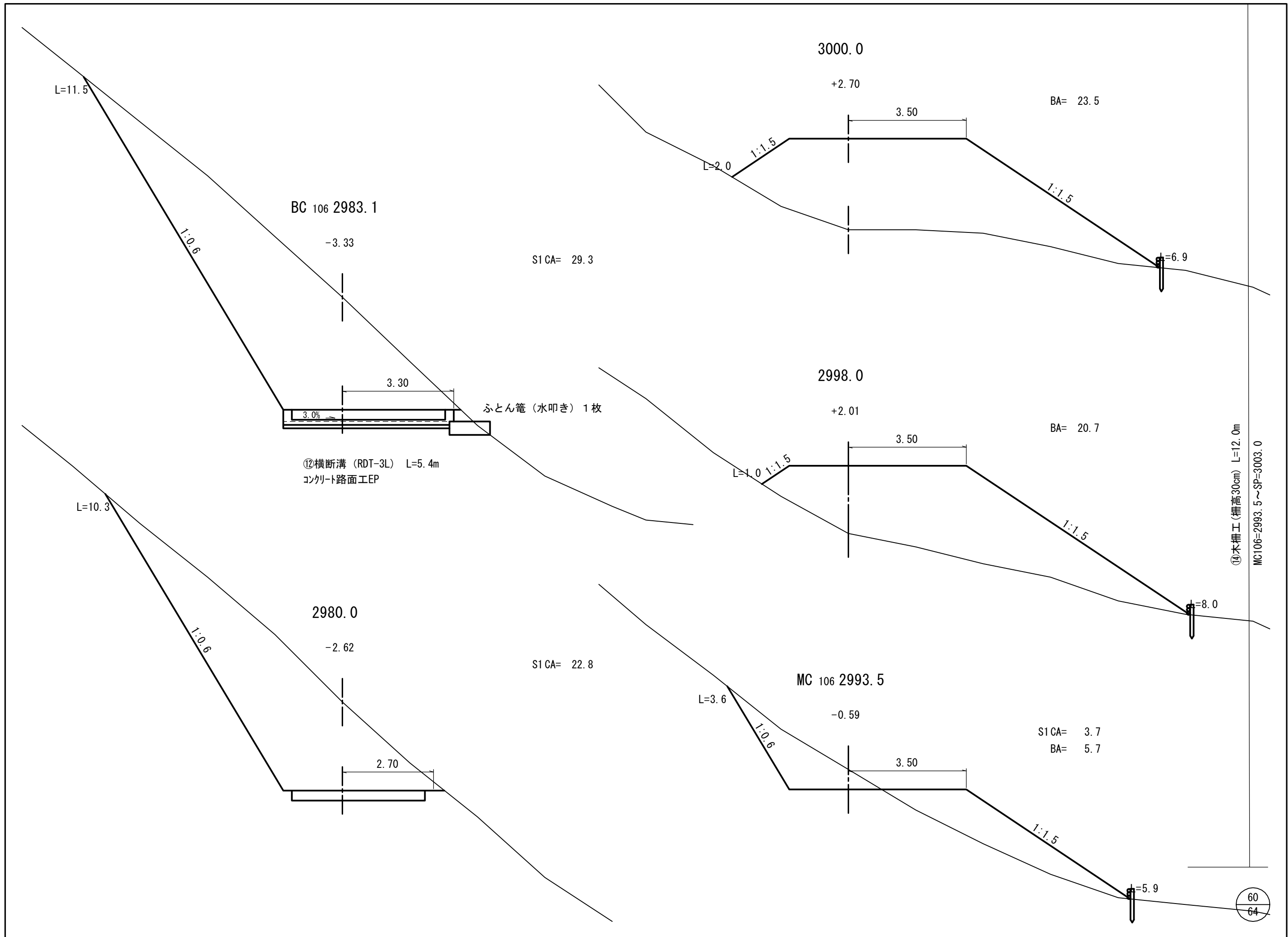
1:0.6

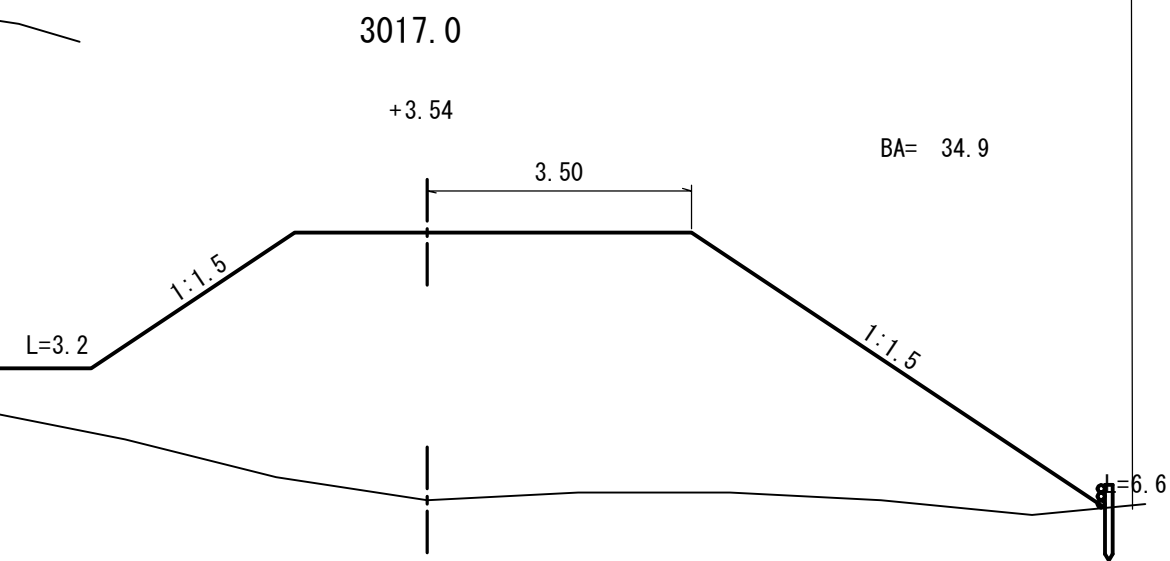
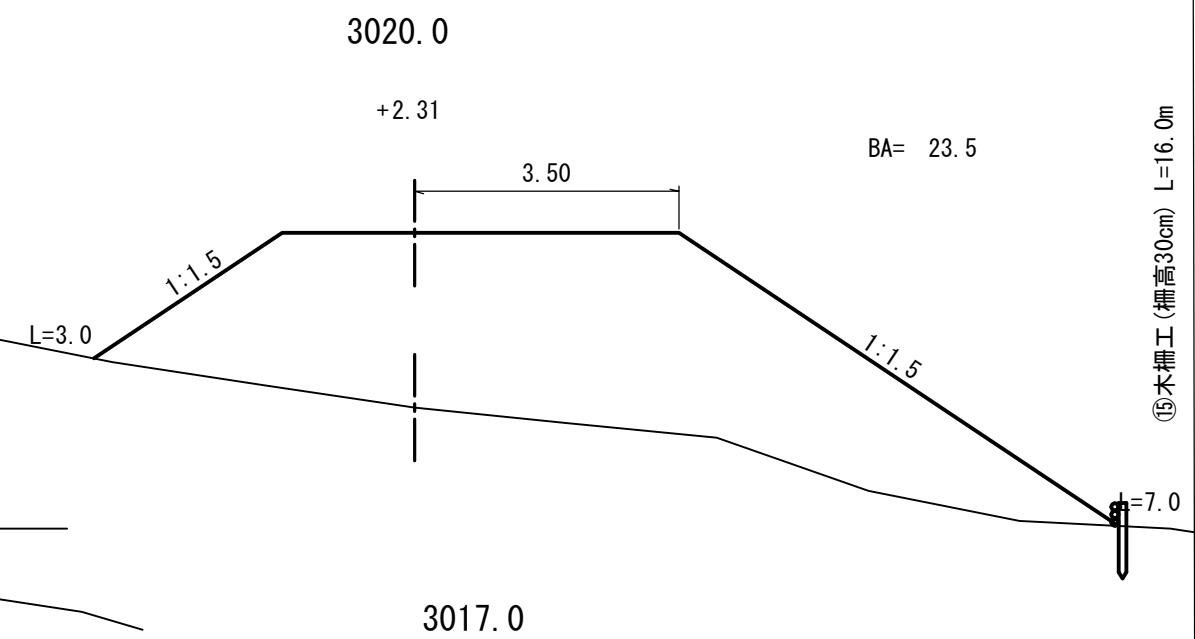
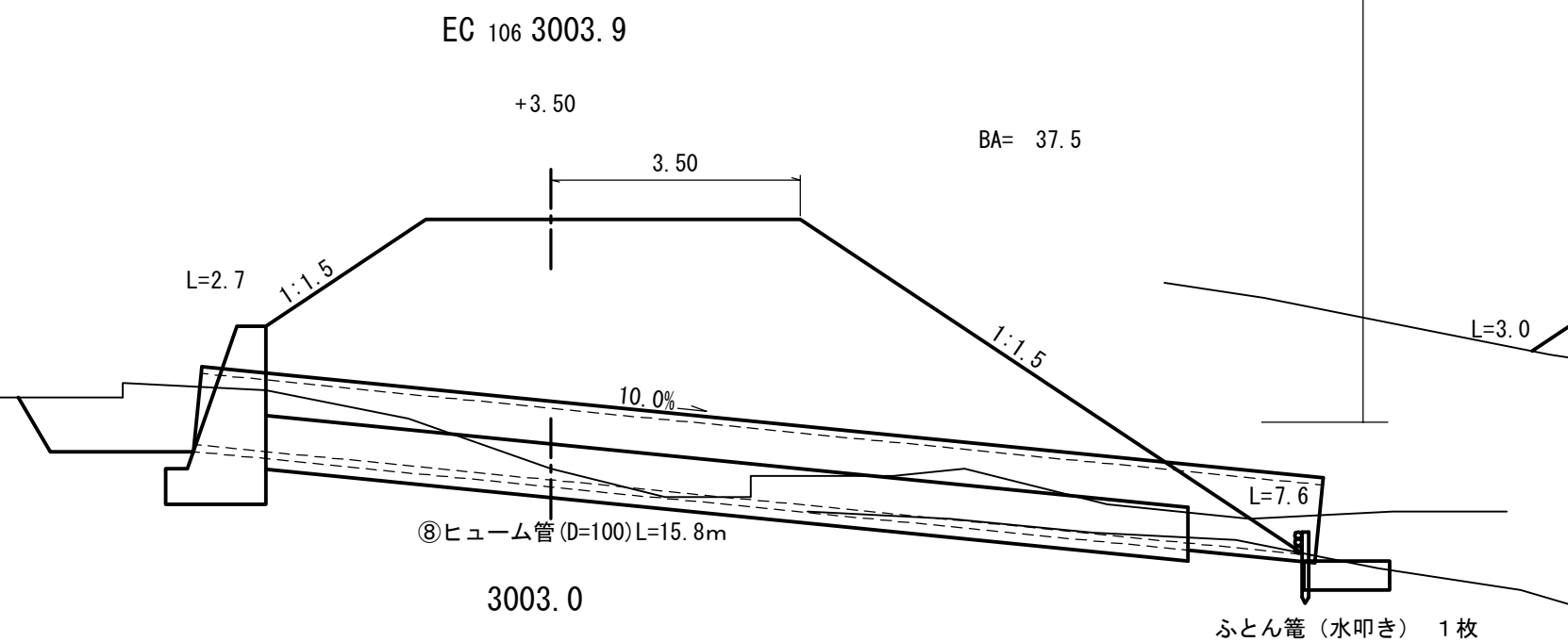
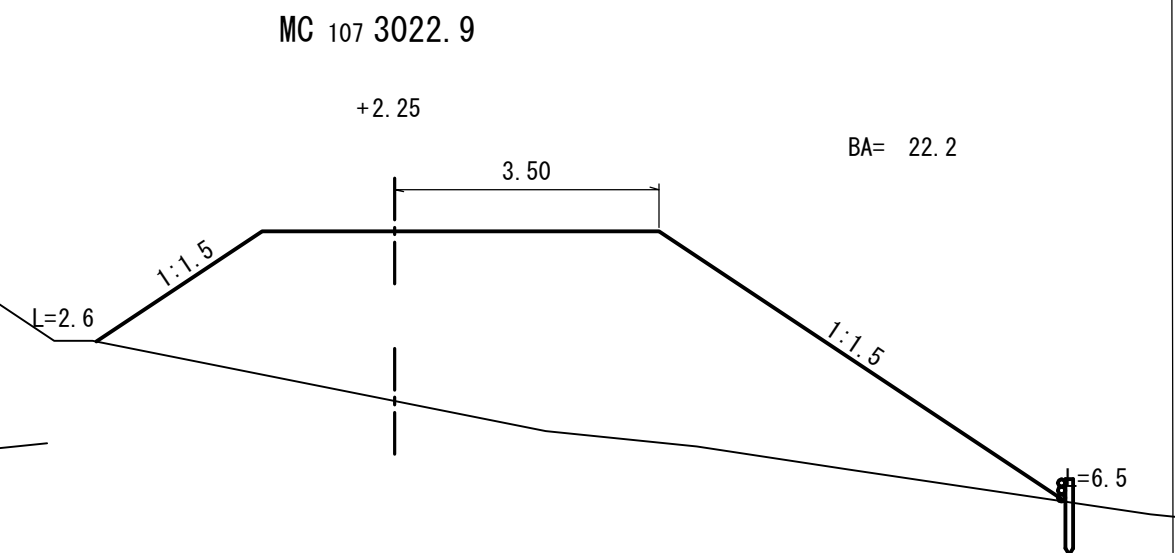
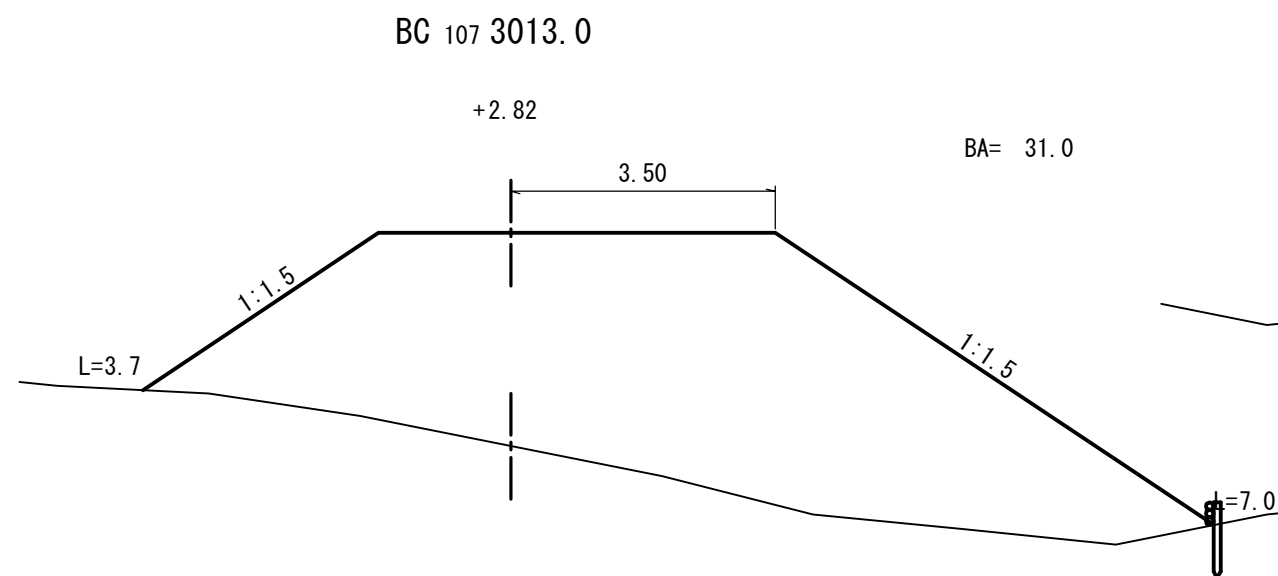
3.25

L=1.2

1:0.6







⑮木柵工(柵高30cm) L=16.0m
EC109=3003.9~EC107=3032.8

L=6.1

3040.0

-2.06

S1 CA= 13.5

1:0.6

1.90

L=0.7

L=4.9

3060.0

-1.43

S1 CA= 9.3

1:0.6

⑬横断溝 (RDT-3RL) L=3.6m

EC 107 3032.8

-1.45

S1 CA= 9.4

BA= 3.9

L=4.5

1:0.6

3.30

コンクリート路面工BP

L=5.8

EC 108 3054.8

-1.46

S1 CA= 10.1

1:0.6

3025.0

+0.64

S1 CA= 0.1

BA= 13.9

3.50

H=7.5

L=6.1

MC 108 3046.6

-1.66

S1 CA= 11.3

1:0.6

1:1.5

1:1.5

⑮木柵工 (柵高30cm) L=16.0m

SP=3003.0~EC107=3032.8

H=6.6

L=5.4

3088.0

-1.38

S1 CA= 9.4

1:0.6

1:0.15

H= 2.0

④コンクリート擁壁工

L=6.2

3080.0

-2.04

S1 CA= 13.4

1:0.6

L=0.7

L=5.9

IP 109 3070.4

-2.00

S1 CA= 13.1

1:0.6

1:0.6

L=0.0

L=5.5

MC 110 3107.0

-1.07

S1 CA= 13.7

1:0.6

3.25

コンクリート路面工EP

L=5.9

3100.0

-0.70

S1 CA= 12.6

1:0.6

3.25

1:0.15

H= 2.5

L=6.2

BC 110 3097.3

-0.77

S1 CA= 12.6

1:0.6

3.05

1:0.15

H= 2.5

EP=3119.3 (1500.0)

0.00

3.50

EC 110 3116.7

-2.25

S1 CA= 17.0

L=4.4

1:0.6

3.45

1:0.6

L=1.8

3114.7

-2.43

S1 CA= 19.6

L=5.0

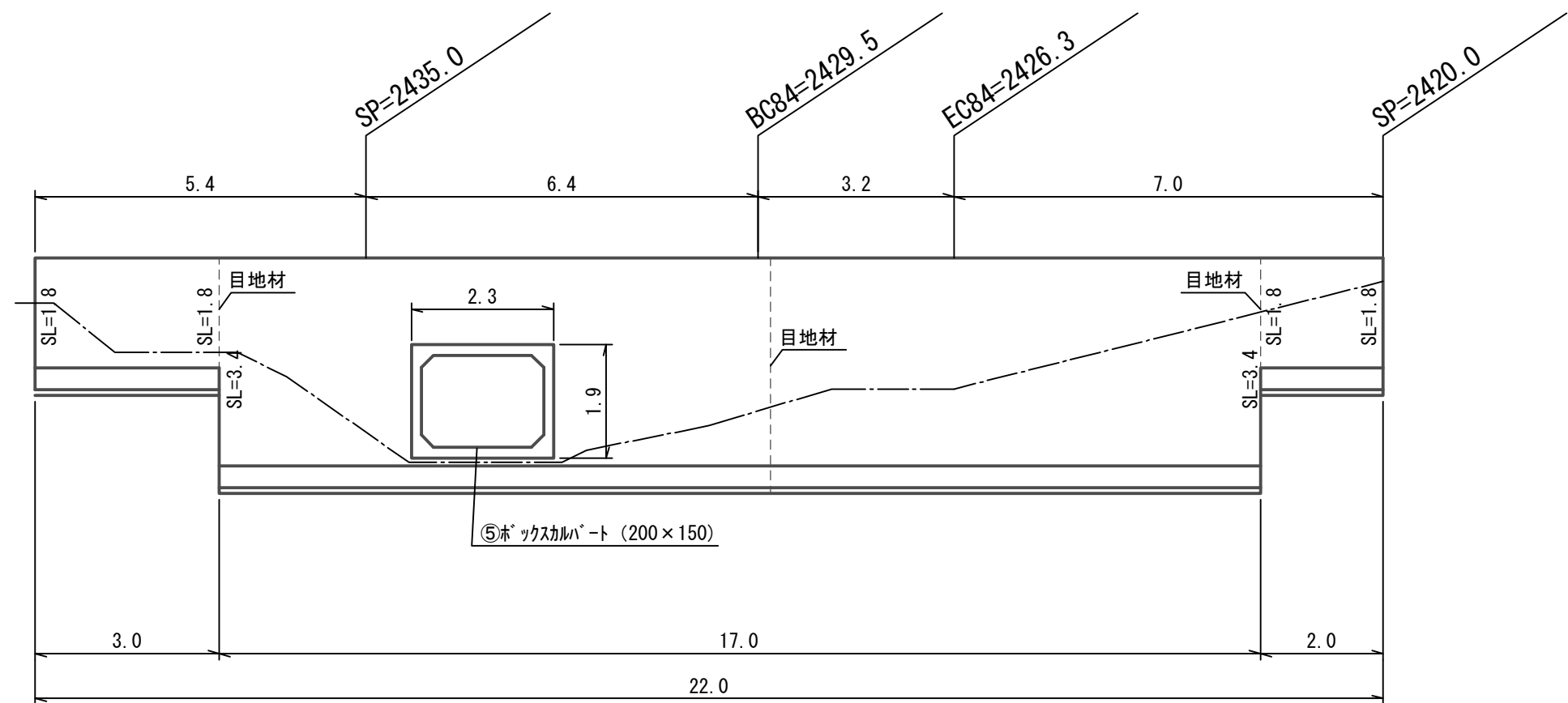
1:0.6

3.40

1:0.6

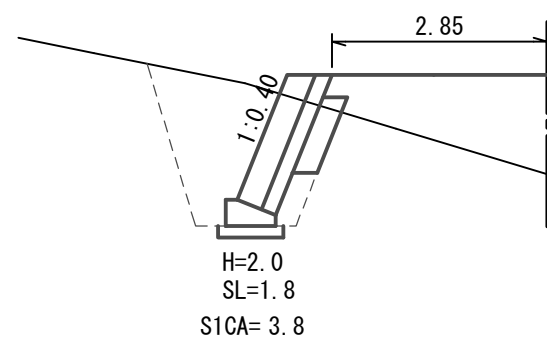
L=2.2

① コンクリートブロック積



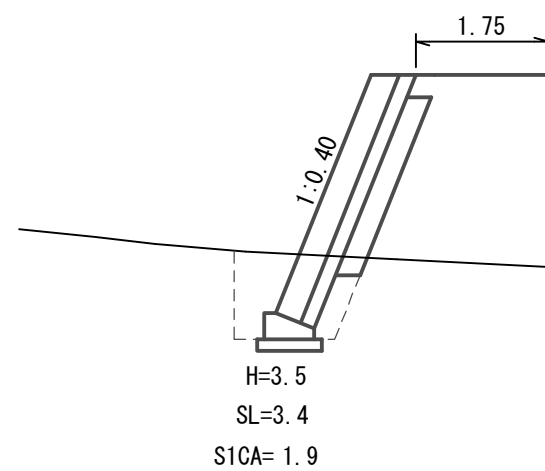
2420.0

+1.31



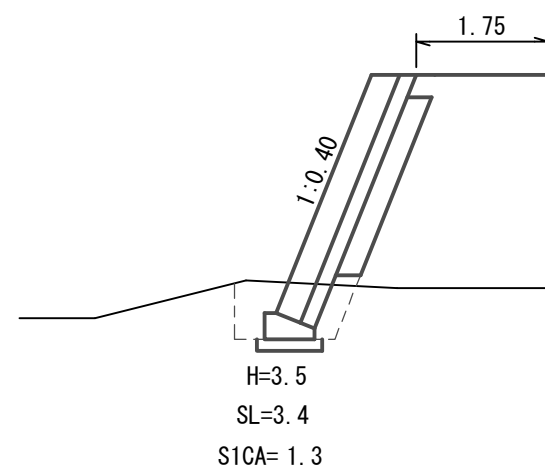
EC 84 2426.3

+2.54



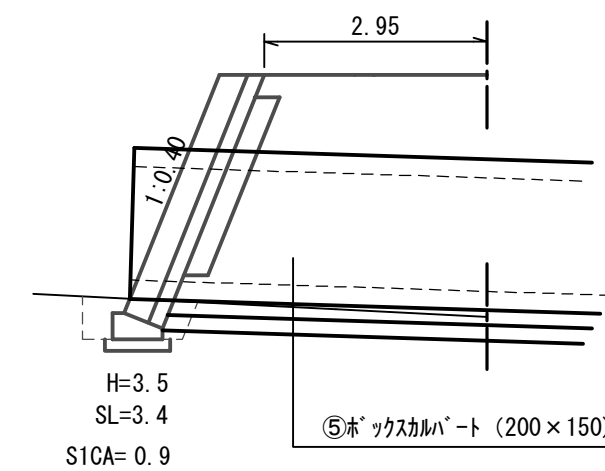
BC 85 2429.5

+2.82

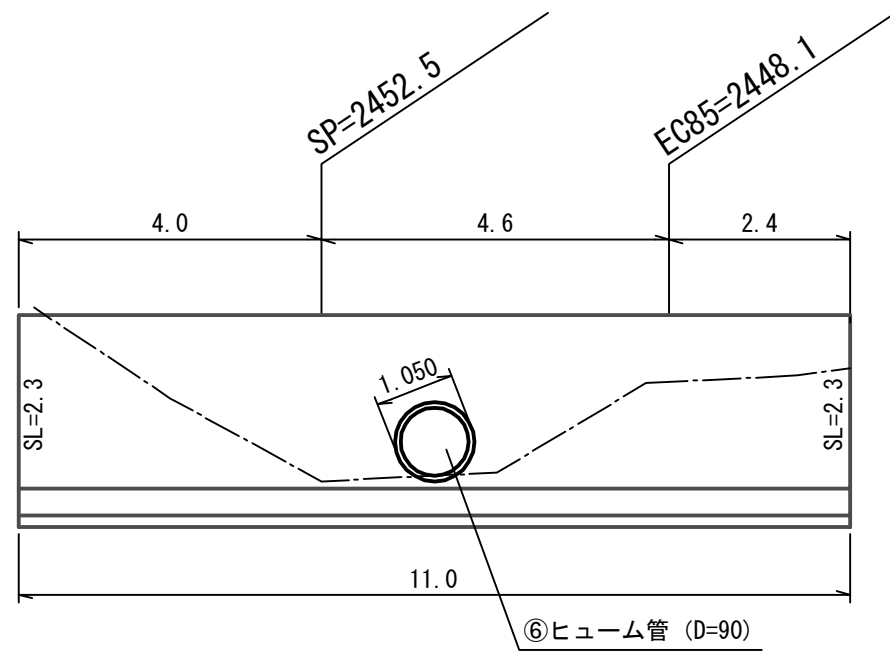


2435.0

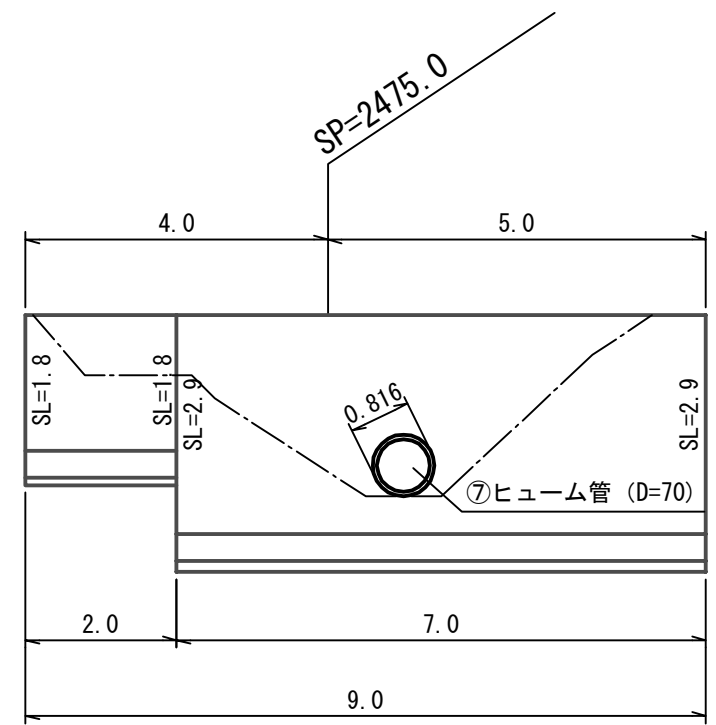
+3.20



② コンクリートブロック積

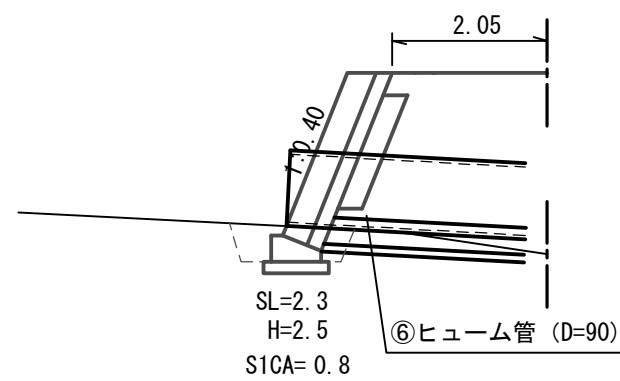


③ コンクリートブロック積



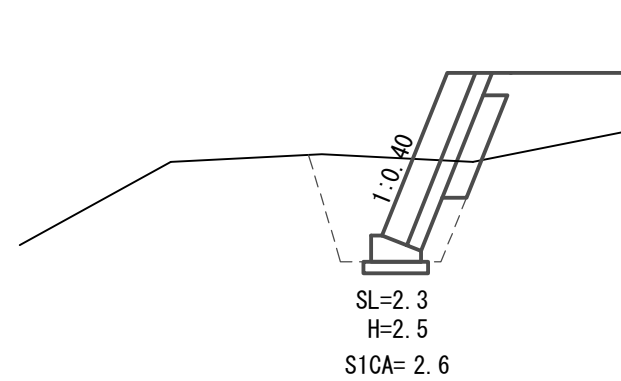
2452.5

+2.40



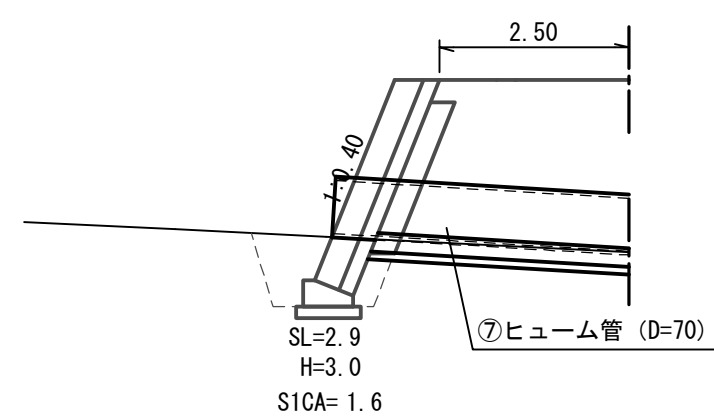
EC 85 2448.1

+0.78



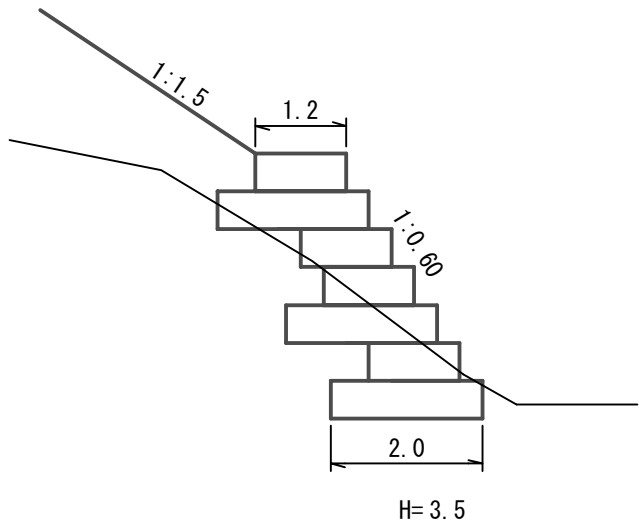
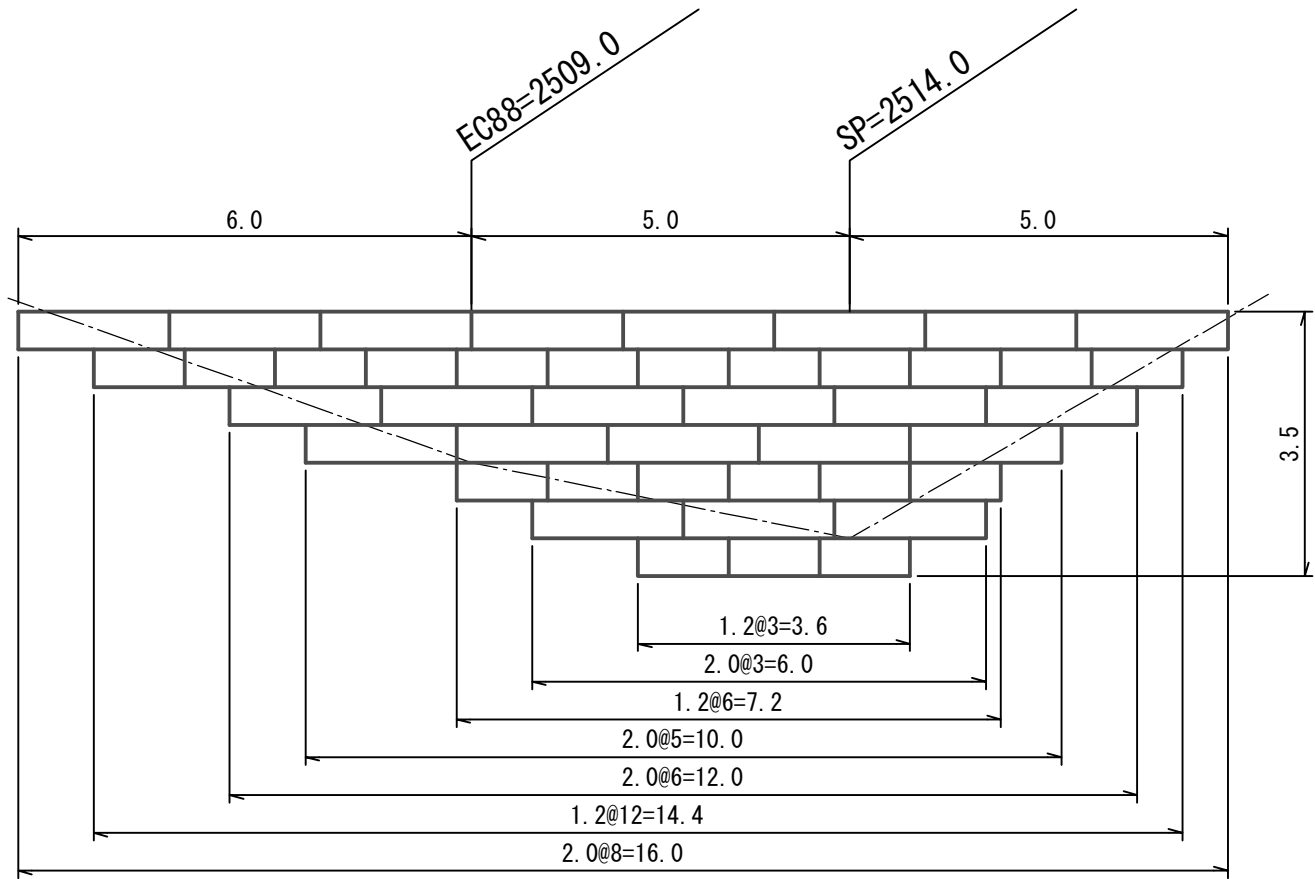
2475.0

+2.28



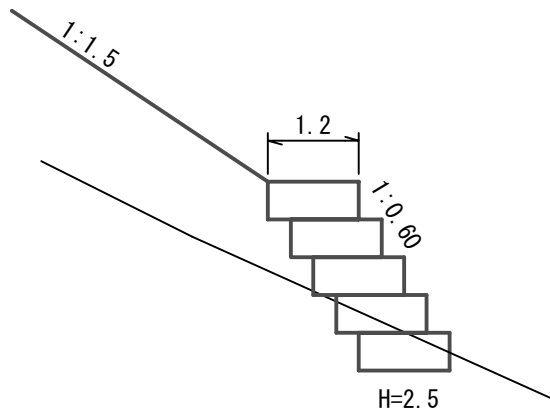
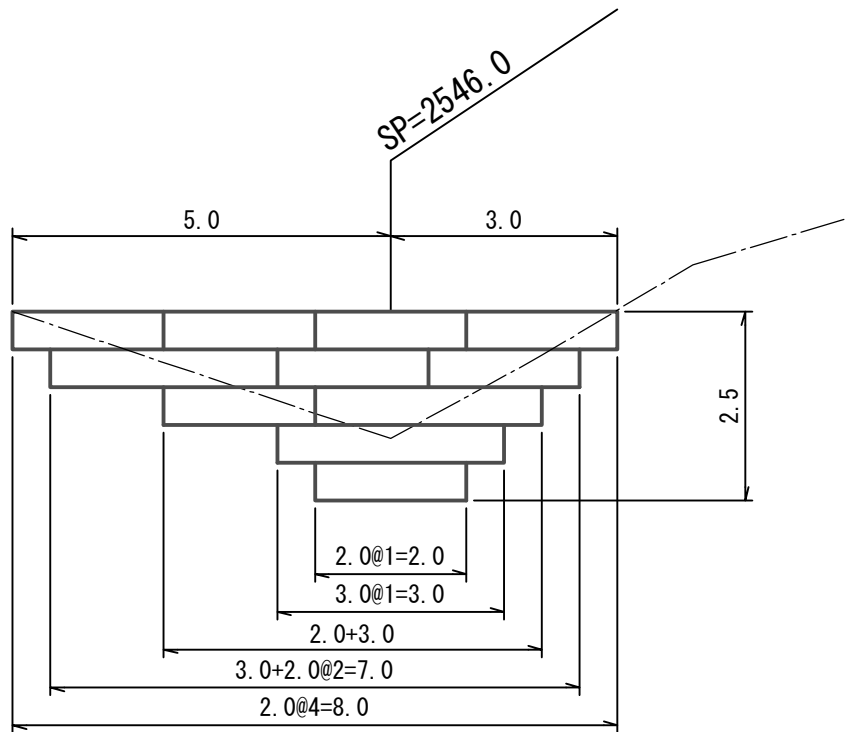
⑦ ふとん籠工

φ3.2 1.2×0.5 L= 86.0m



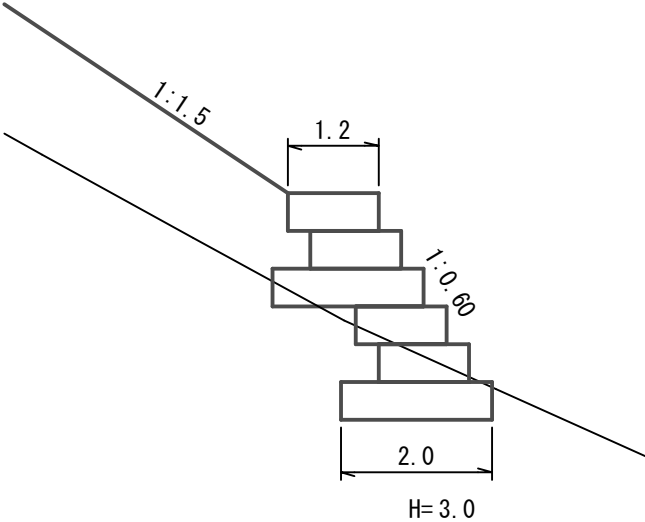
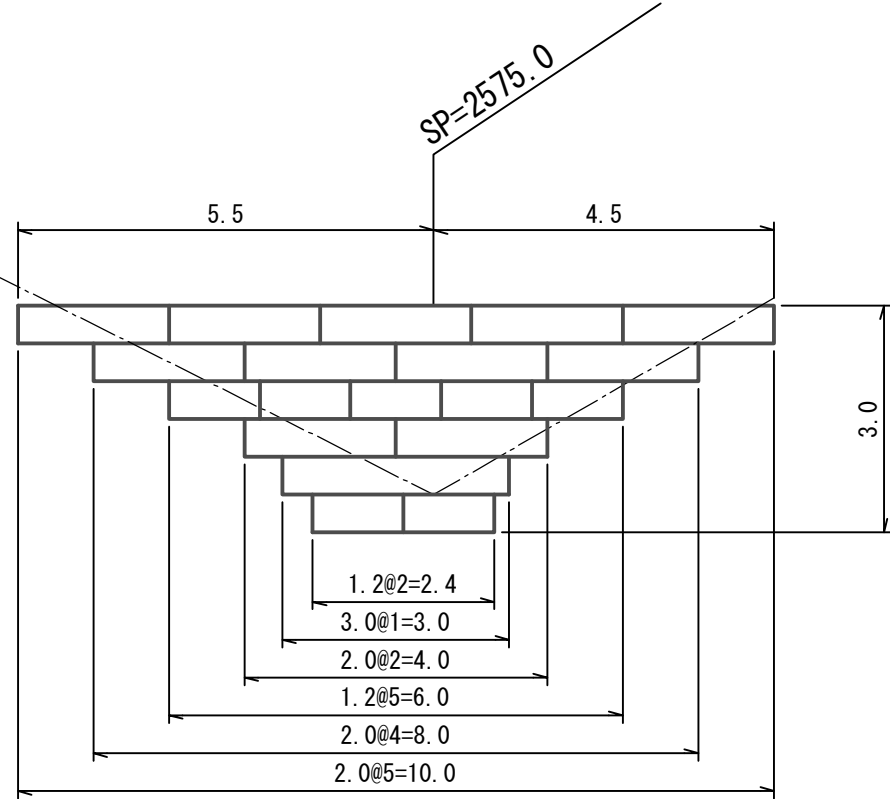
⑧ ふとん籠工

φ3.2 1.2×0.5 L= 25.0m



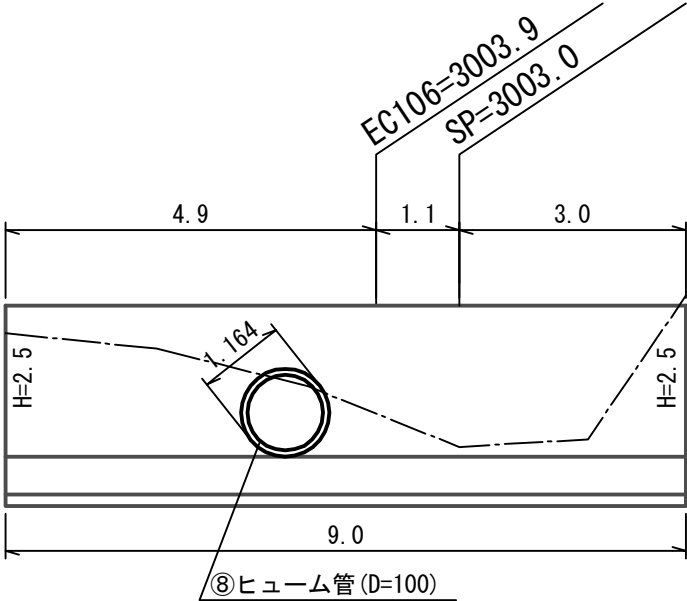
⑨ ふとん籠工

φ3.2 1.2×0.5 L= 39.0m



③ コンクリート擁壁工

GW-1.5-I (b-S)

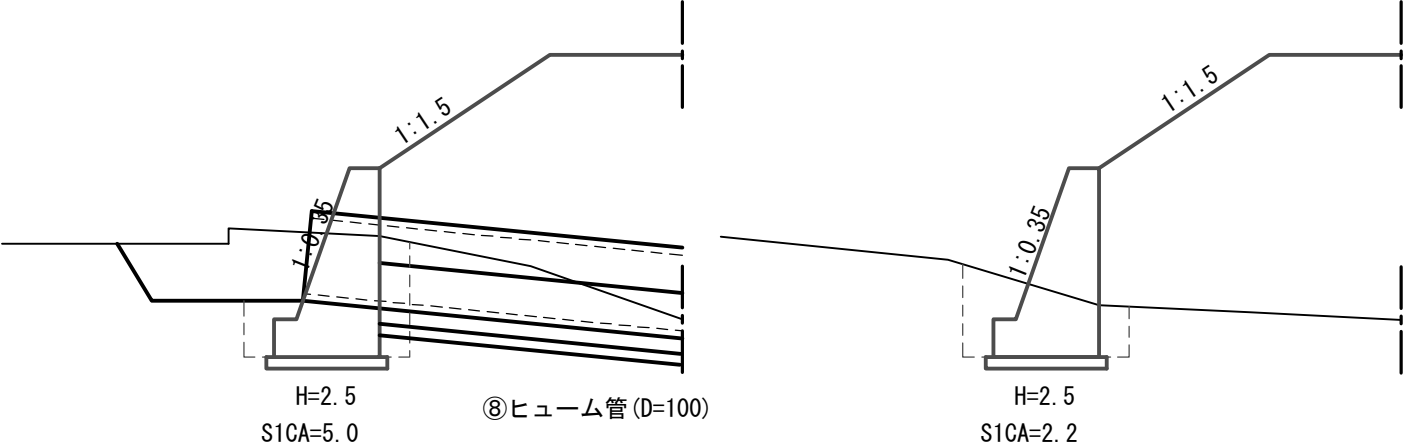


EC 106 3003.9

+3.50

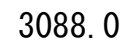
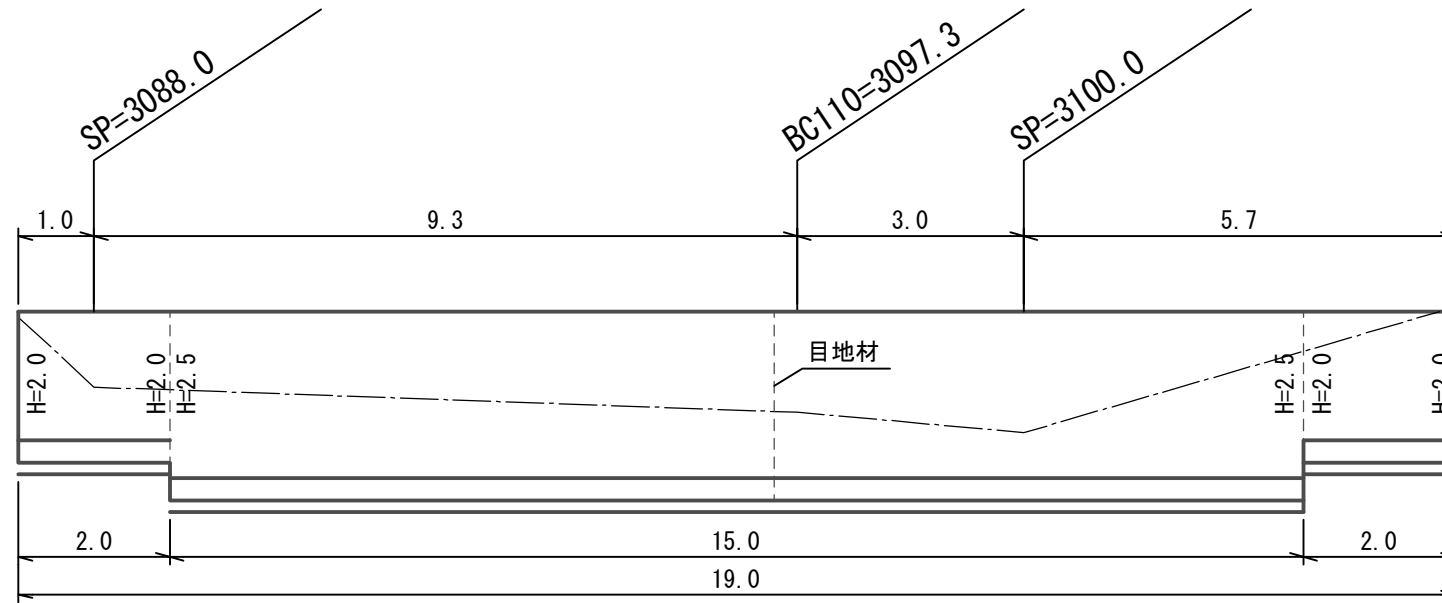
3003.0

+3.51

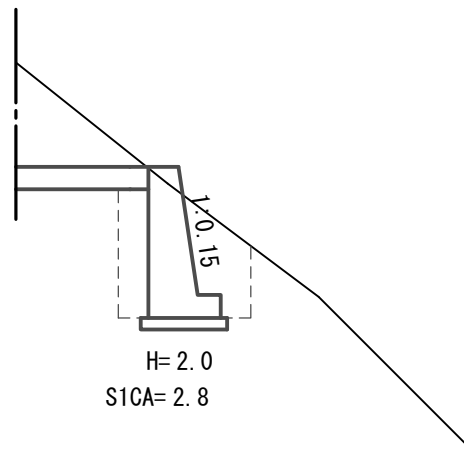


④ コンクリート擁壁工

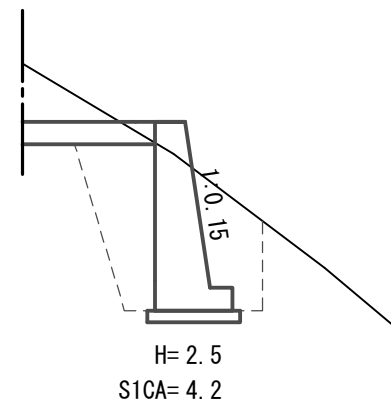
GW-L-I-0.3 (b-S)



-1.38

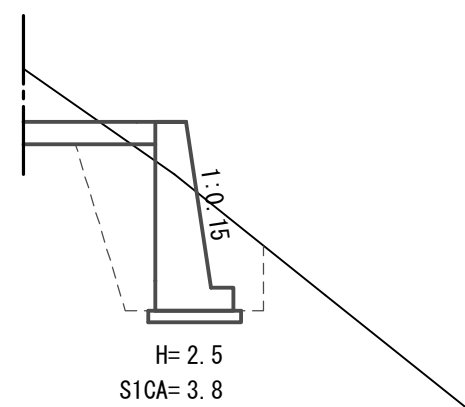
BC₁₁₀ 3097.3

-0.77



3100.0

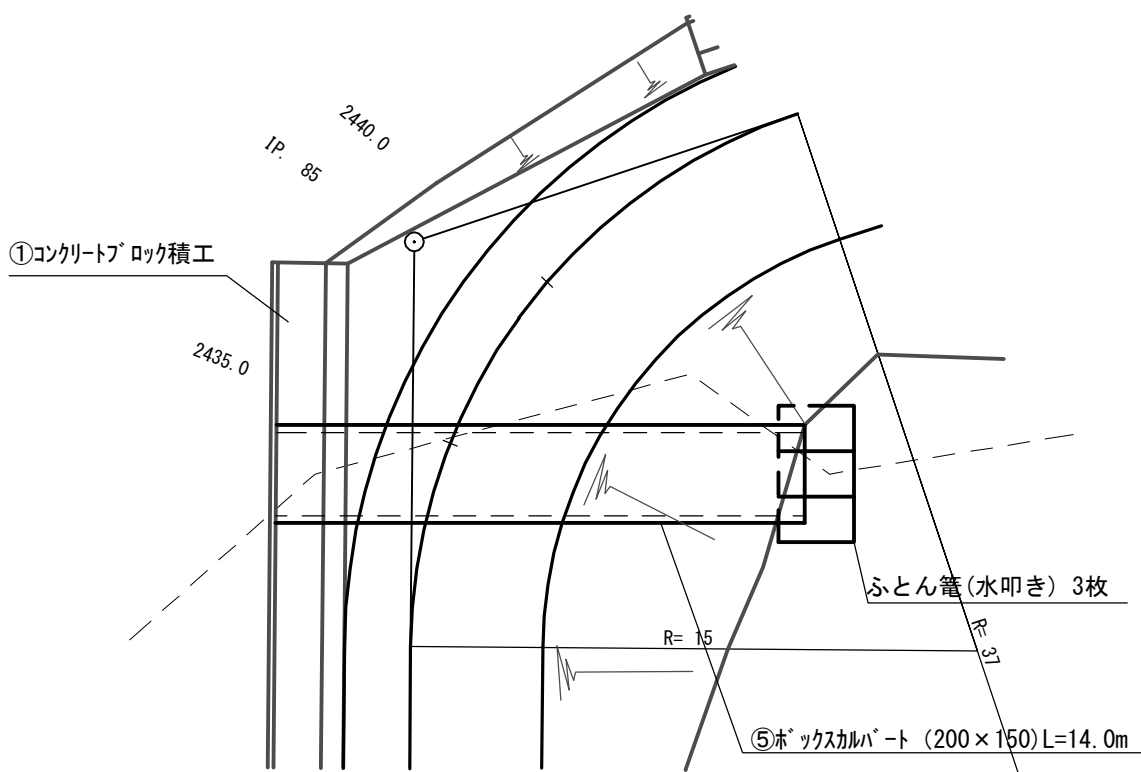
-0.70



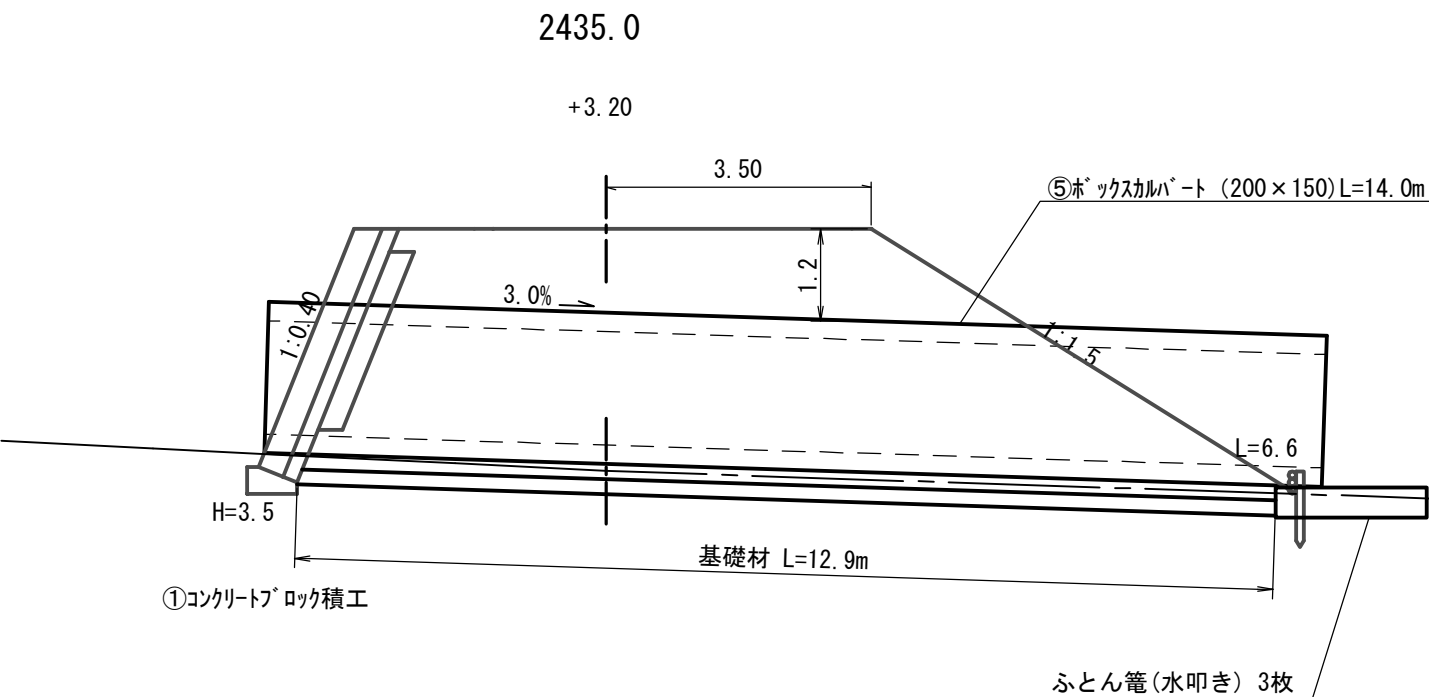
排水施設図

⑤ボックスカルバート (200×150) L=14.0m

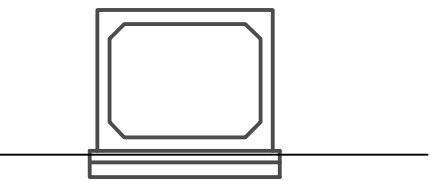
平面図 S=1 : 200



横断面図 S=1 : 100

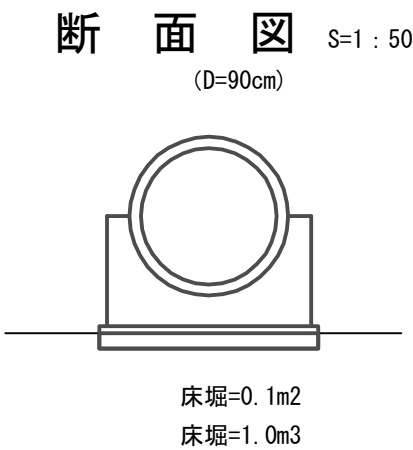
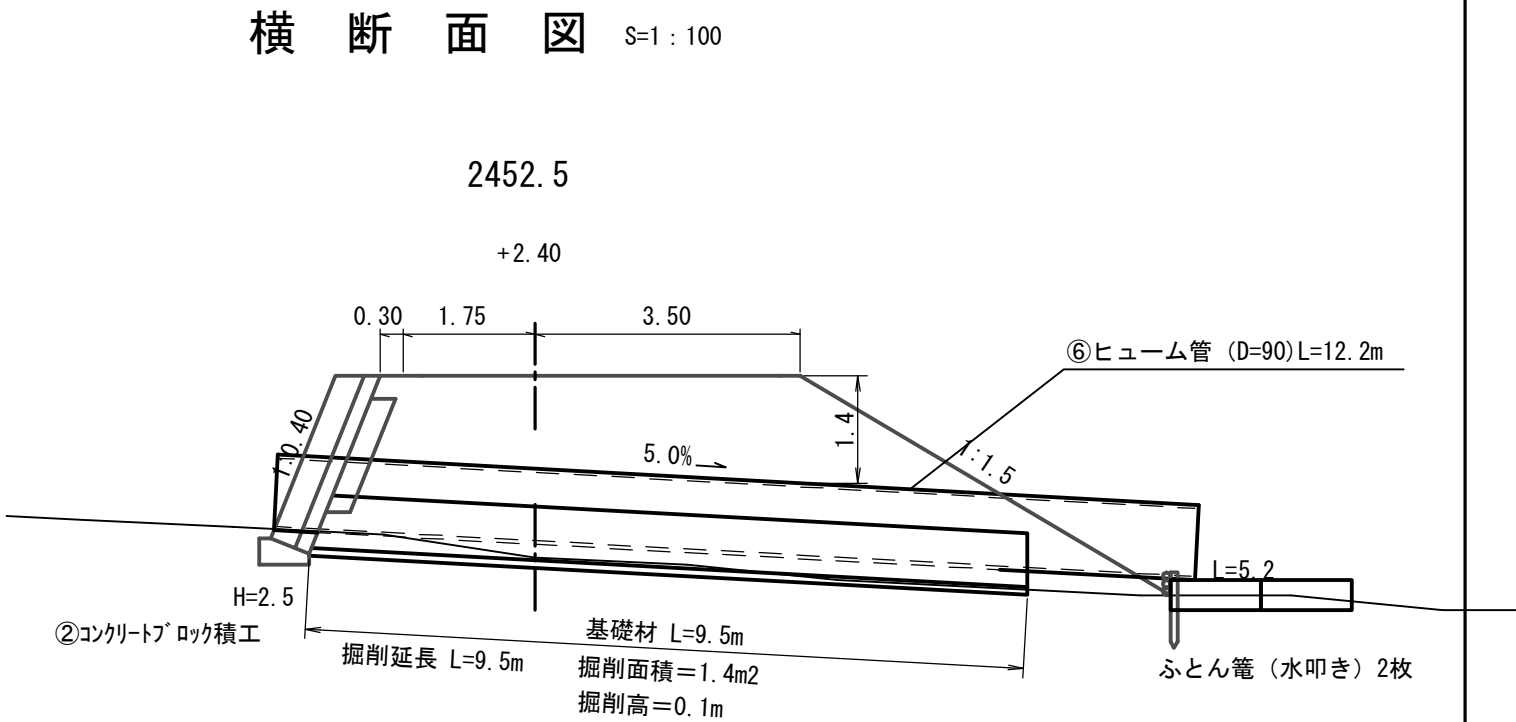
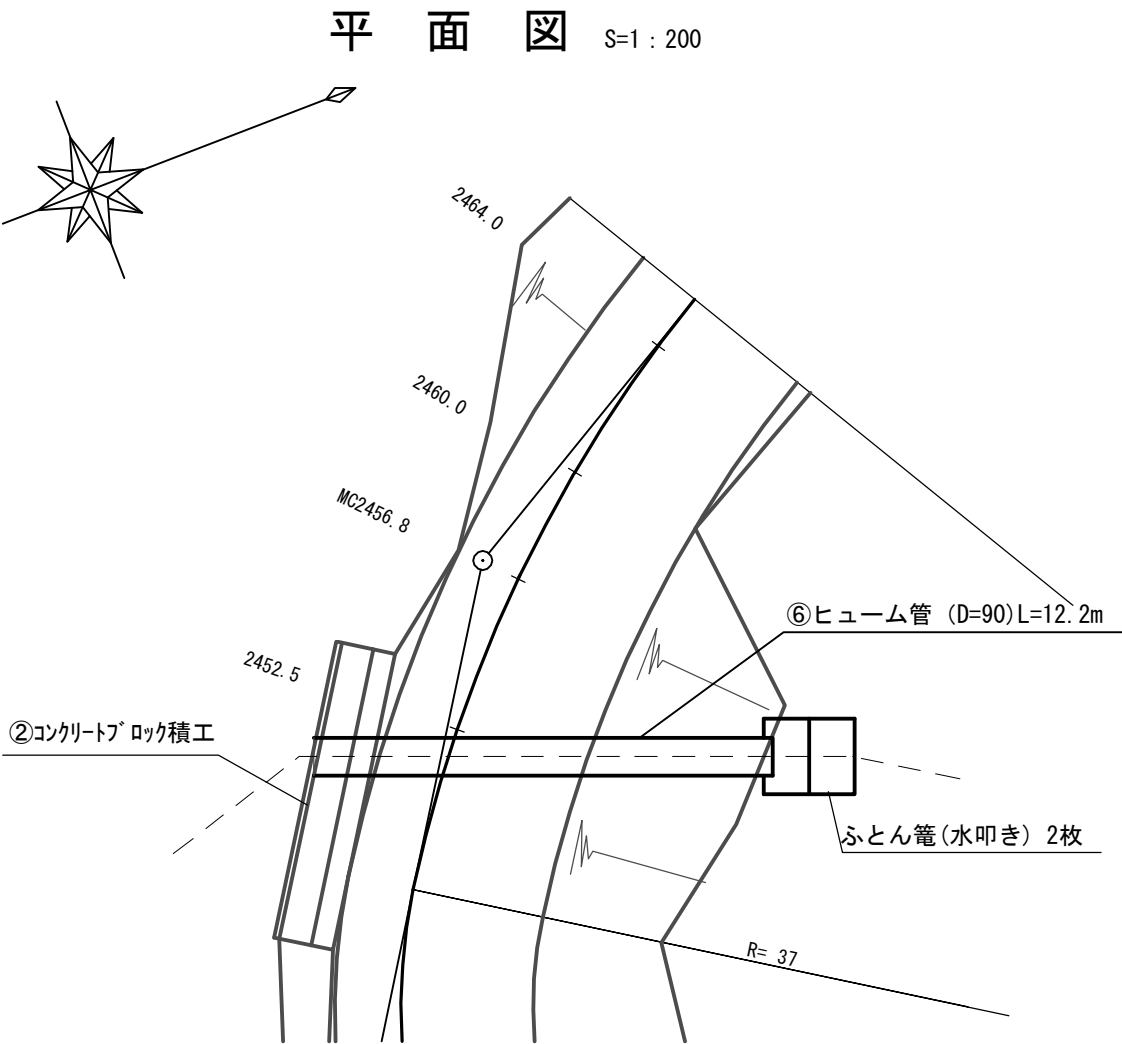


断面図 S=1 : 100
(200×150)



排水施設図

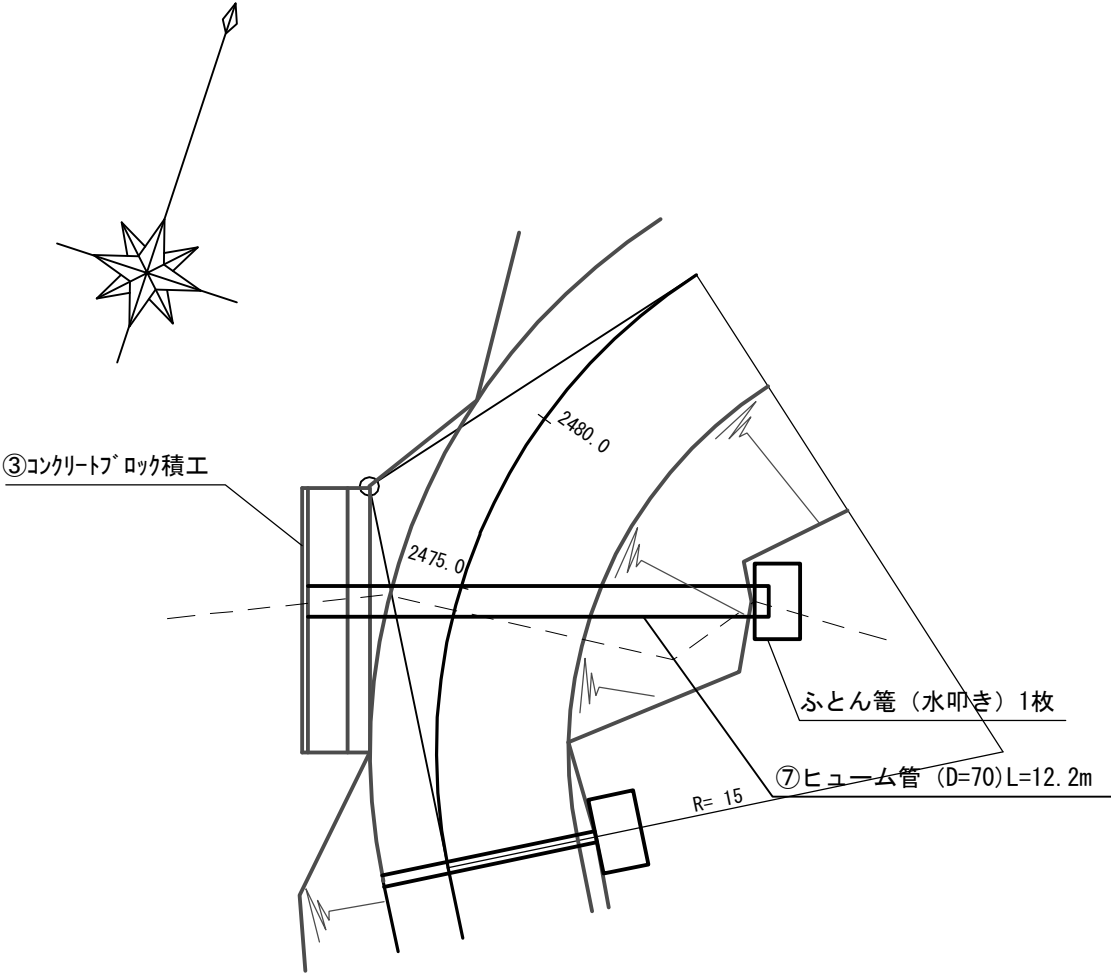
⑥ヒューム管 (D=90) L=12.2m



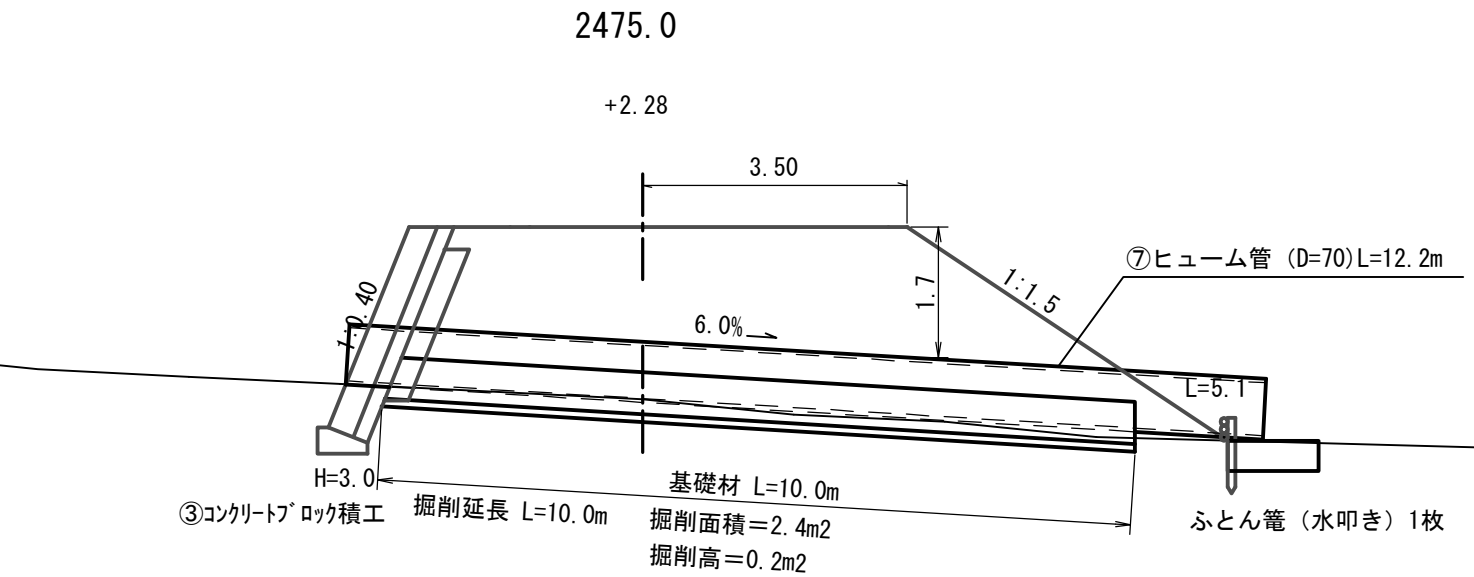
排水施設図

⑦ヒューム管 (D=70) L=12.2m

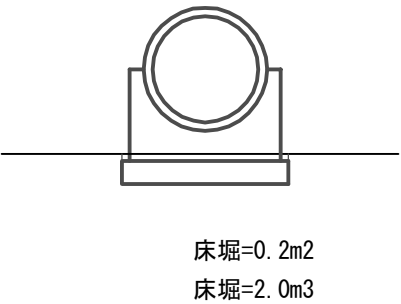
平面図 S=1 : 200



横断面図 S=1 : 100



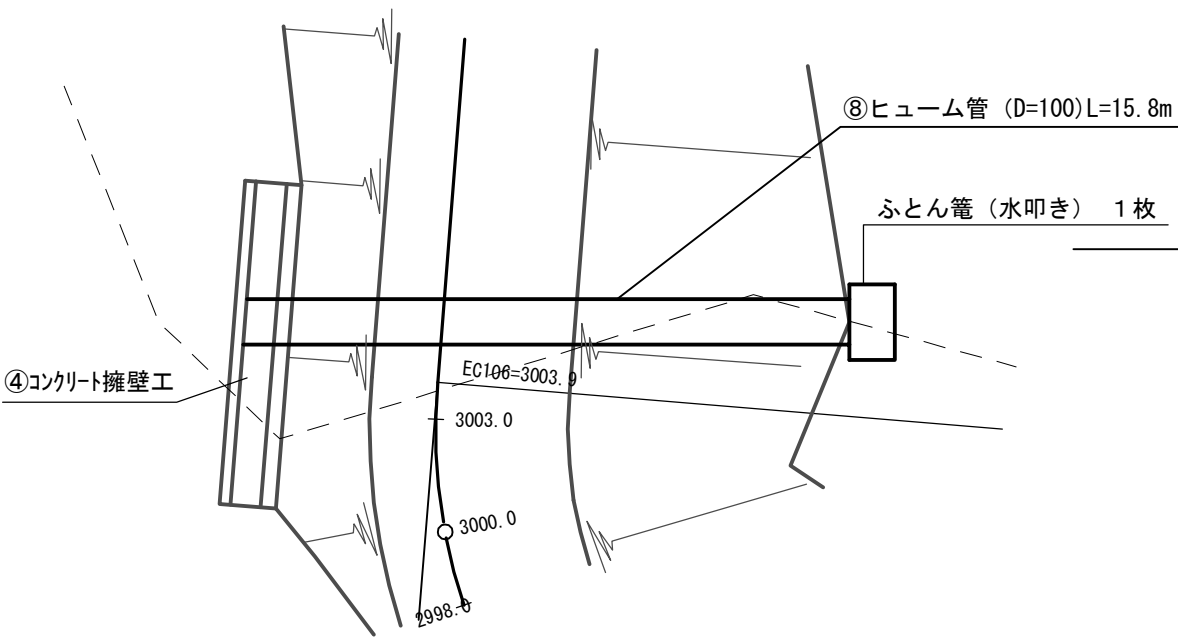
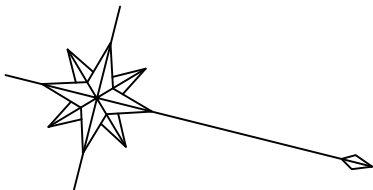
断面図 S=1 : 50
(D=70cm)



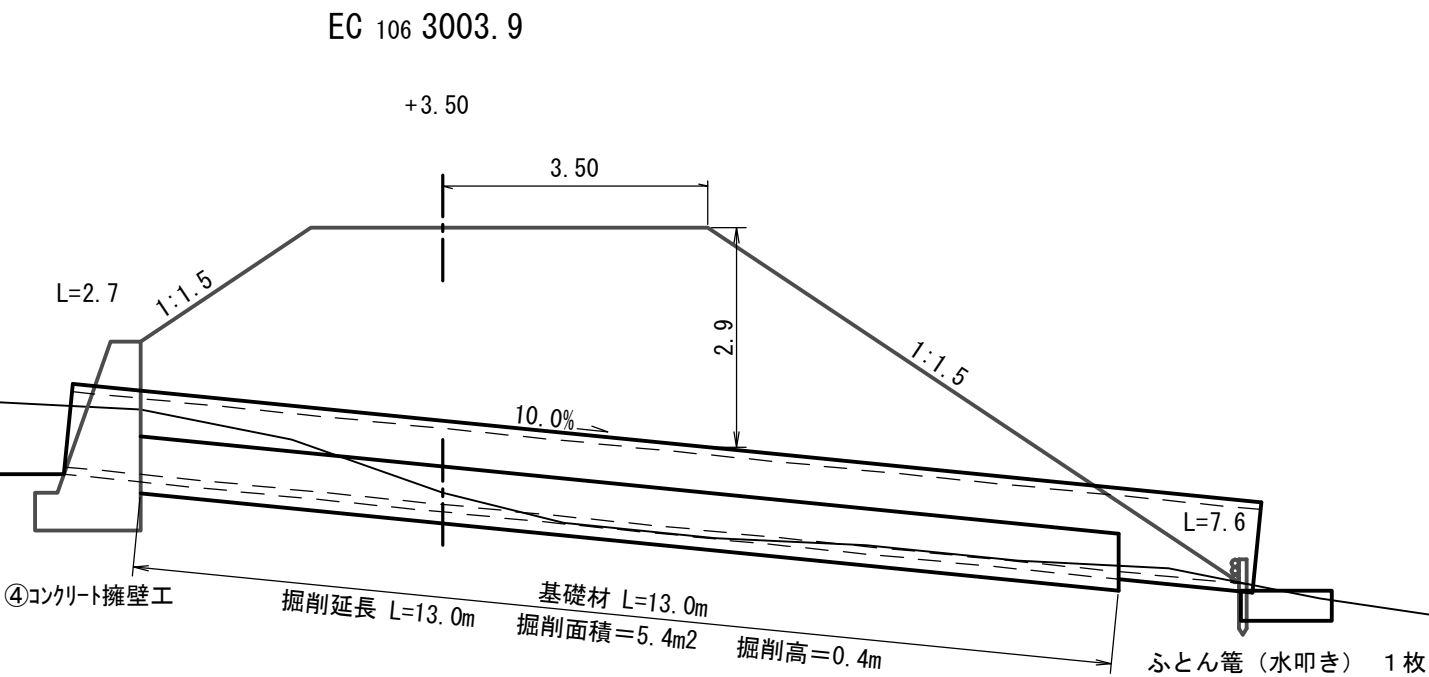
排水施設図

⑧ヒューム管 (D=100) L=15.8m

平面図 S=1 : 200

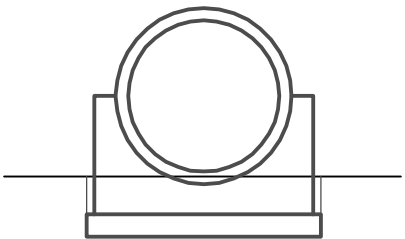


横断面図 S=1 : 100



断面図 S=1 : 50

(D=100cm)

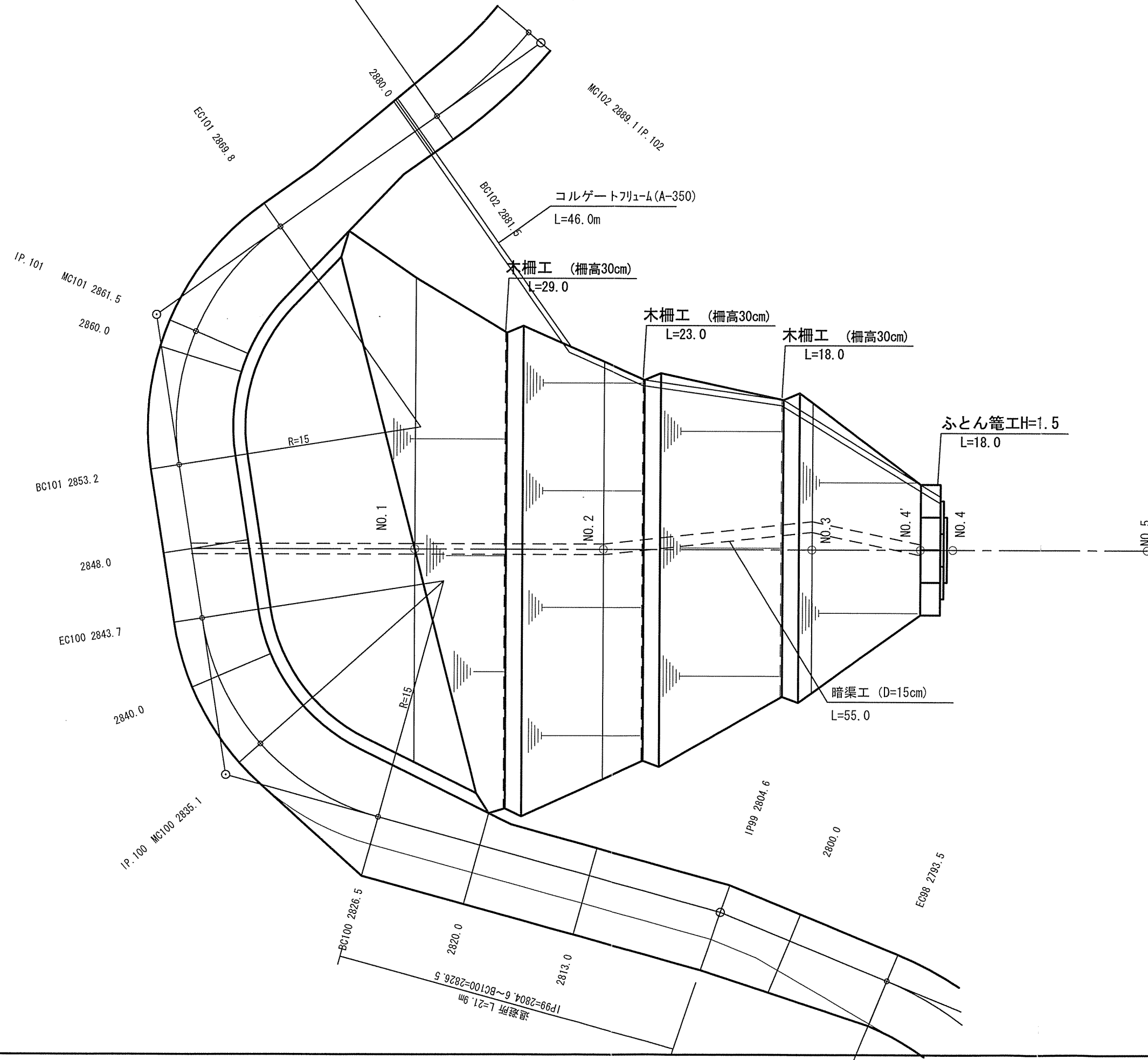


床堀=0.6m²

床堀=7.8m³

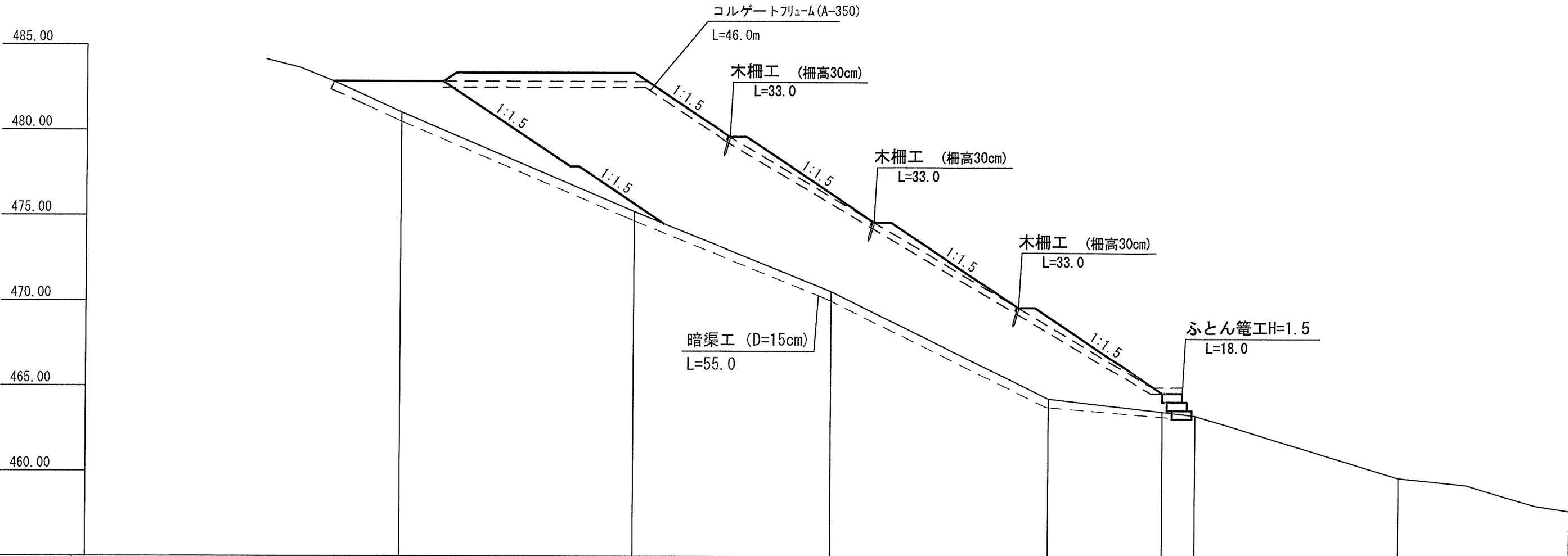
縮尺 1/250

縮尺 1/250



3号残土処理箇所縦断図

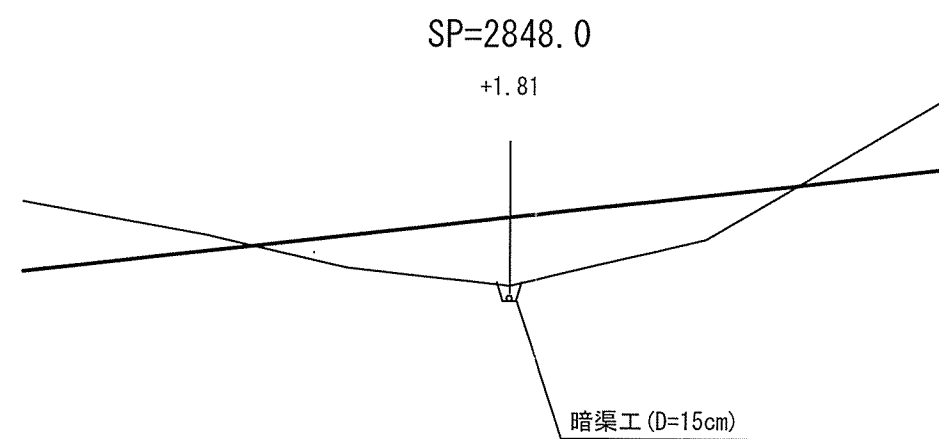
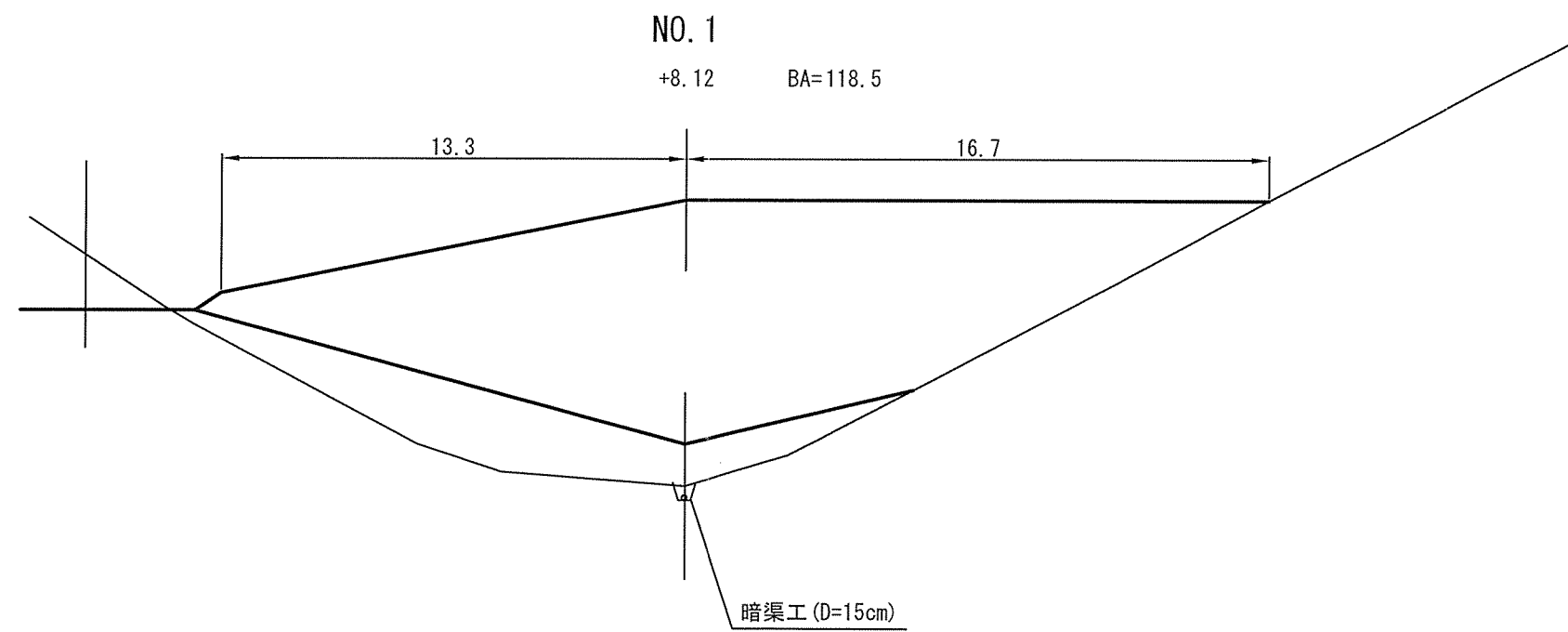
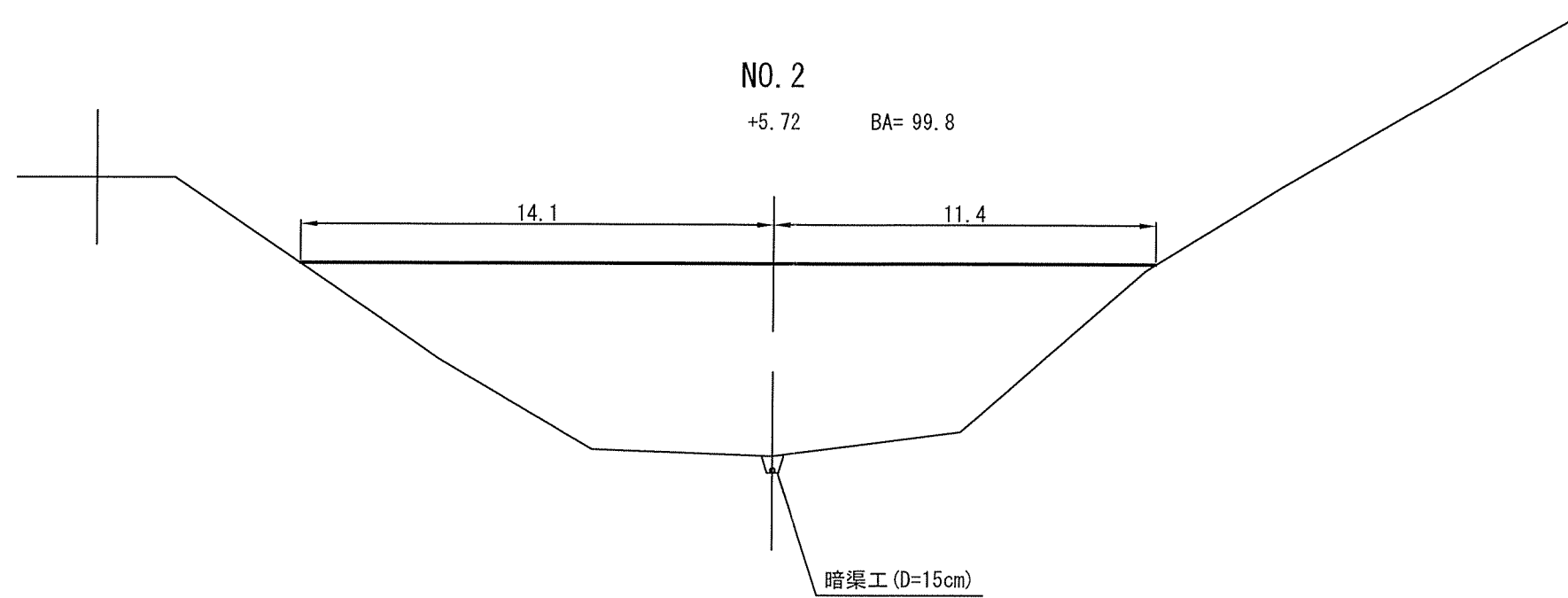
縮尺 1/250



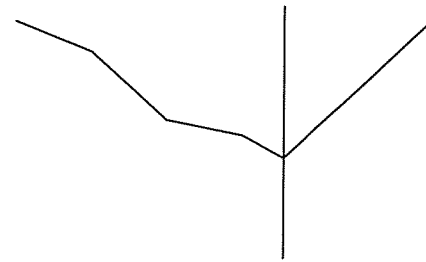
勾配	1:1.5 L=0.75	LEVEL 10.5	1:1.5 L=5.6	LEVEL 11.0	1:1.5 L=7.5	LEVEL 11.0	1:1.5 L=7.5	LEVEL 11.0	1:1.5 L=7.5	
盛土	1.81		8.12		5.72		4.79		1.07	
切土										
計画高	522.87		523.37		516.30		509.10		504.63	
地盤高	521.06		515.25		510.58		504.31		503.56	
追加距離	0.0	2.5	13.7		25.3		38.1		44.8	58.8
単距離	0.0	2.5	11.2		11.6		12.8		6.7	12.0
測点	SP=2848.0 (BP)		NO.1		NO.2		NO.3		NO.4 NO.4	NO.5

3号残土处理箇所平面図

縮尺 1/200

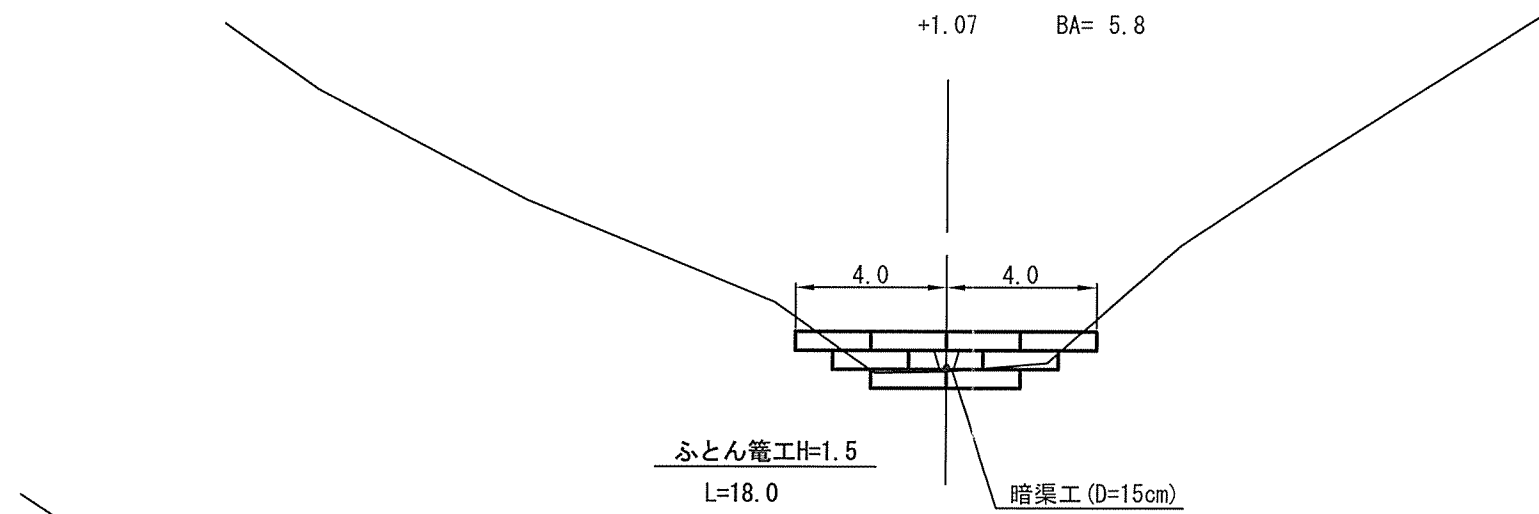


NO. 5



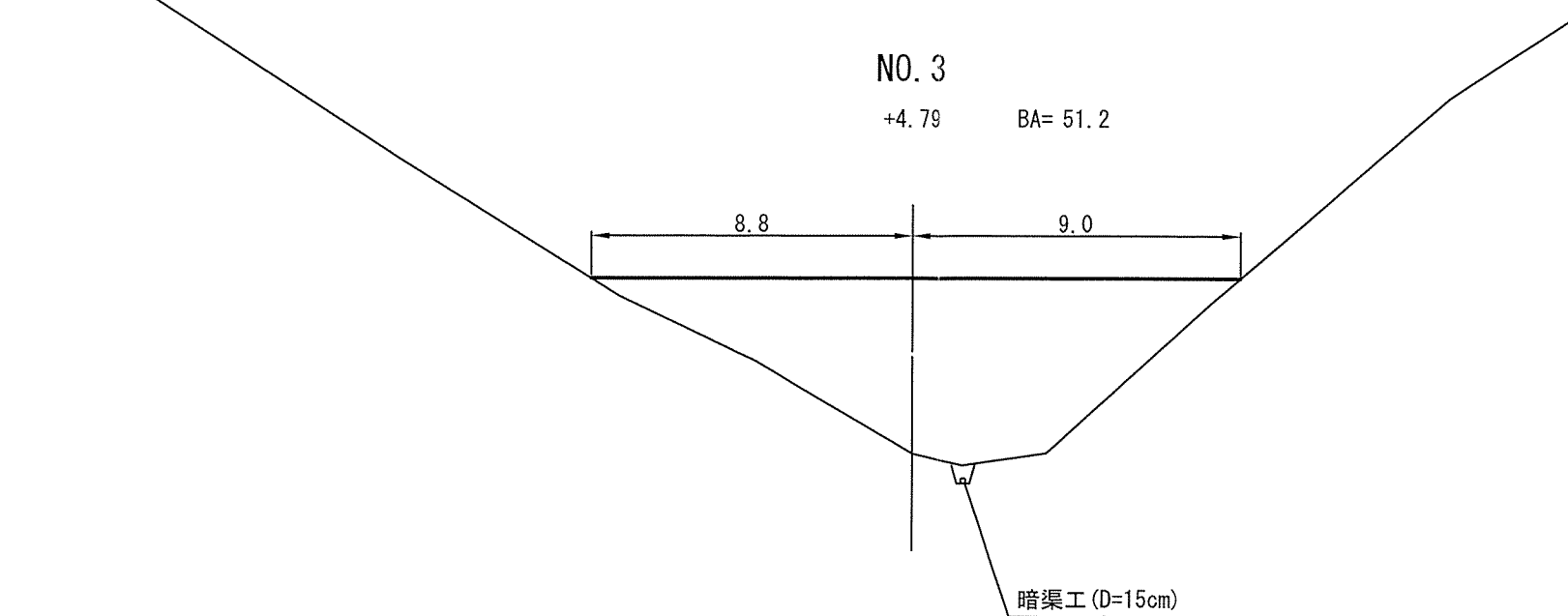
NO. 4

+1.07 BA= 5.8

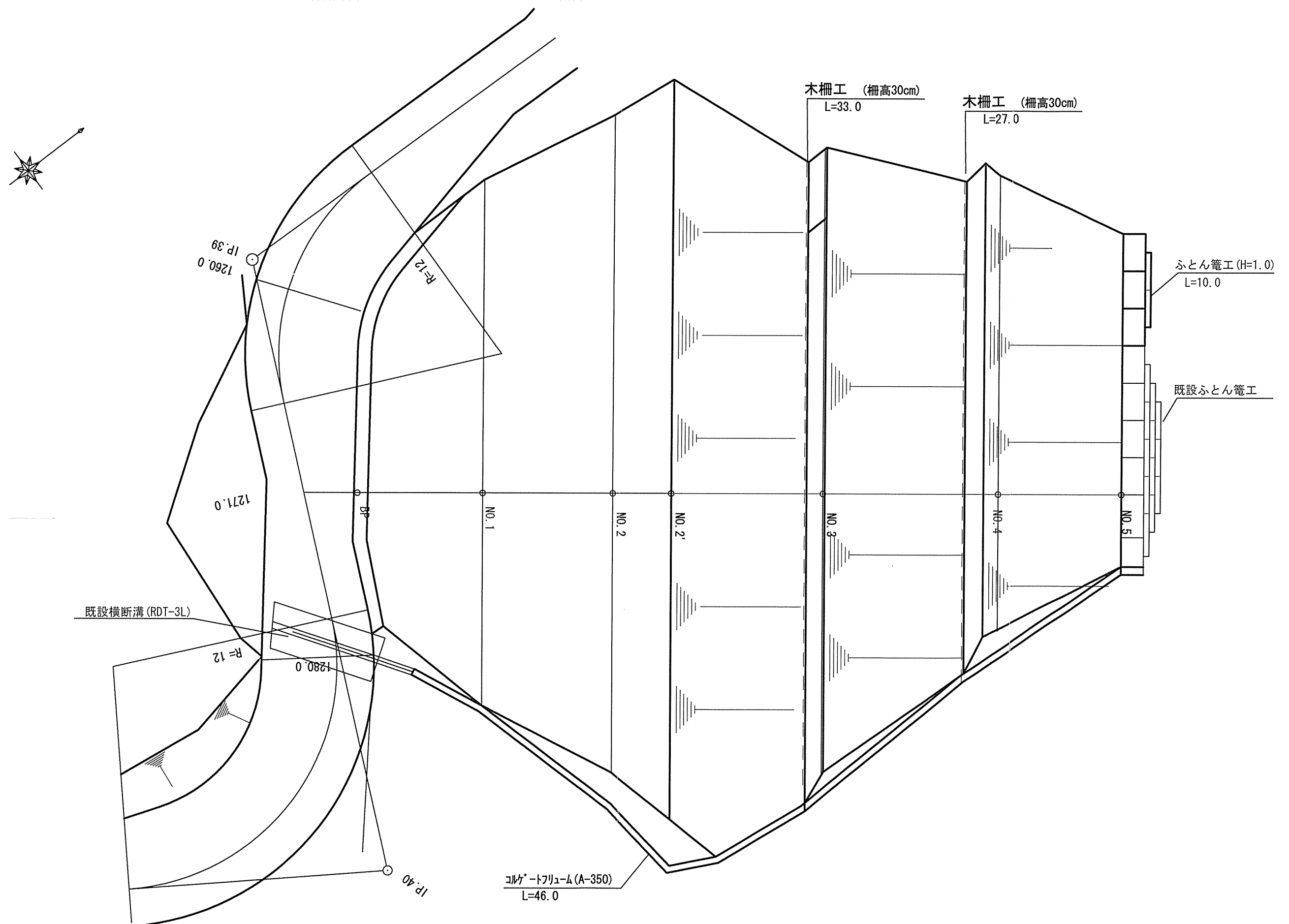


NO. 3

+4.79 BA= 51.2

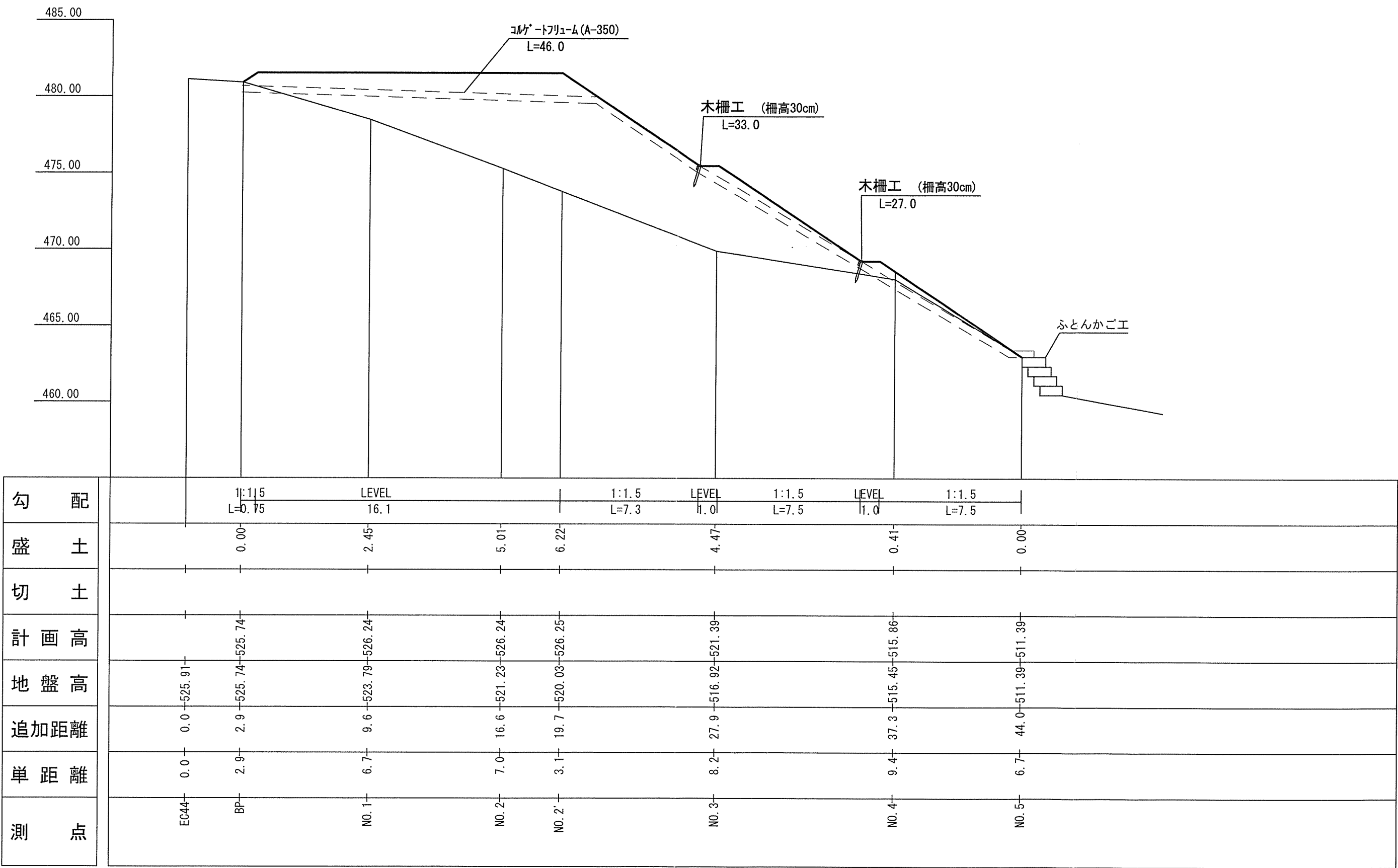


縮尺 1/200



4号残土処理箇所縦断図

縮尺 1/200



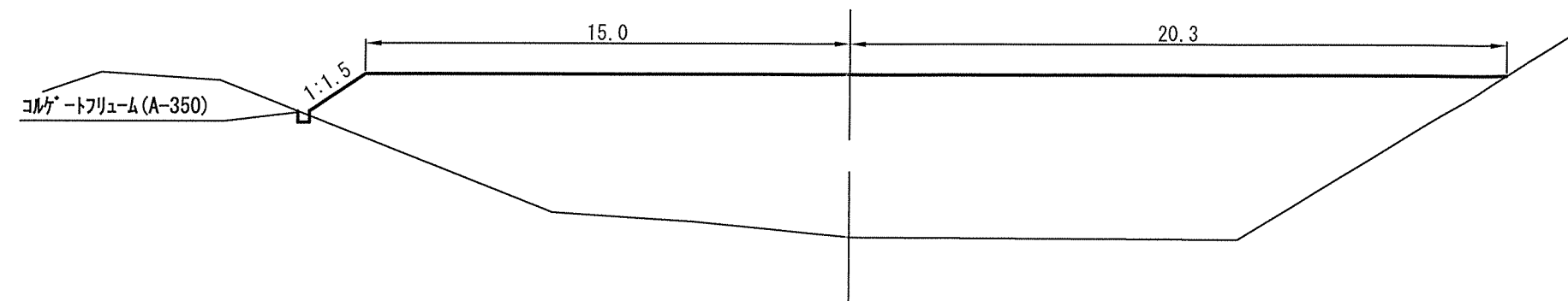
4号残土処理箇所平面図

縮尺 1/200

NO. 2

+5.01

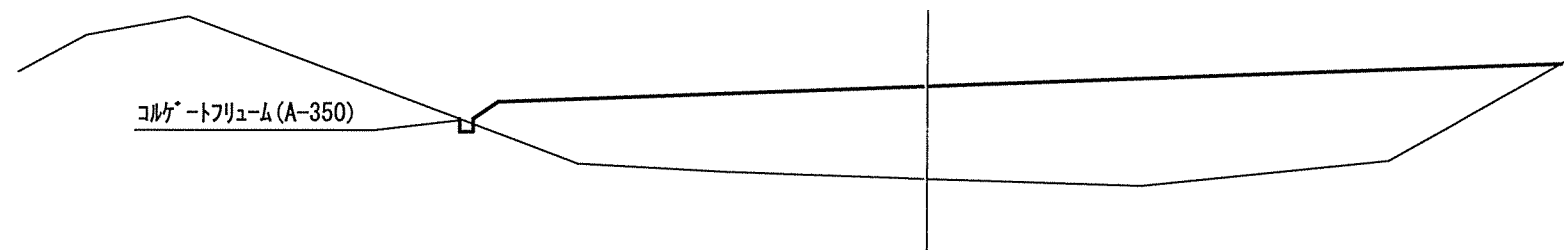
BA=143.5



NO. 1

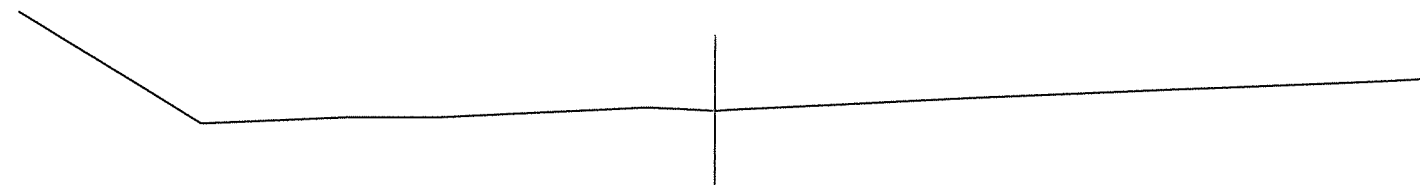
+2.45

BA= 60.6



BP

+0.00



NO. 5

+0.00

BA= 1.6

コルゲートパイプ (A-350)

既設ふとん管

ふとん管 H=1.0
L=10.0

NO. 4

+0.41

BA= 12.1

コルゲートパイプ (A-350)

NO. 3

+4.47

BA= 116.1

コルゲートパイプ (A-350)

NO. 2'

+6.22

BA= 194.1

コルゲートパイプ (A-350)