

令和7年度

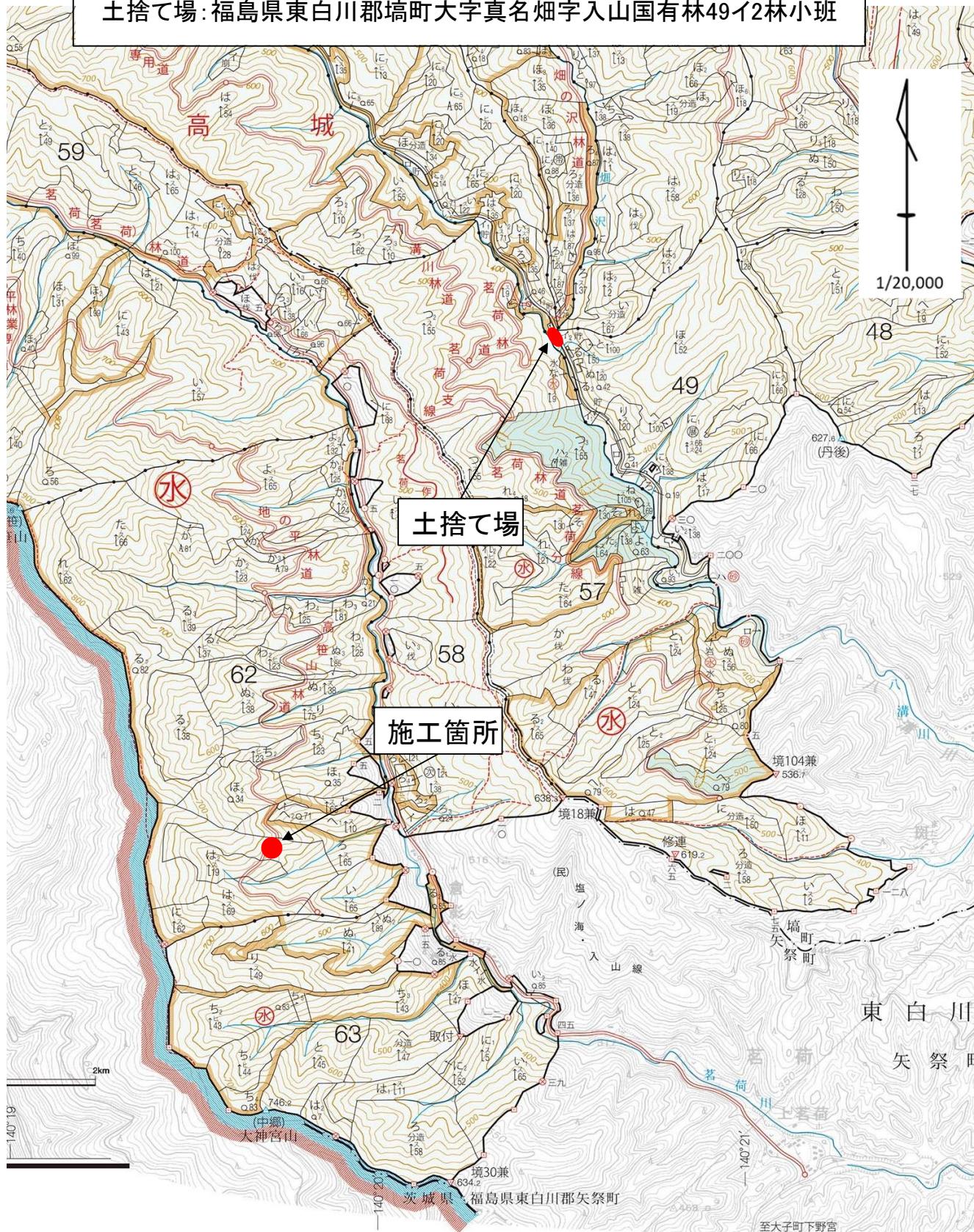
高笠山林道災害復旧工事

設計図面

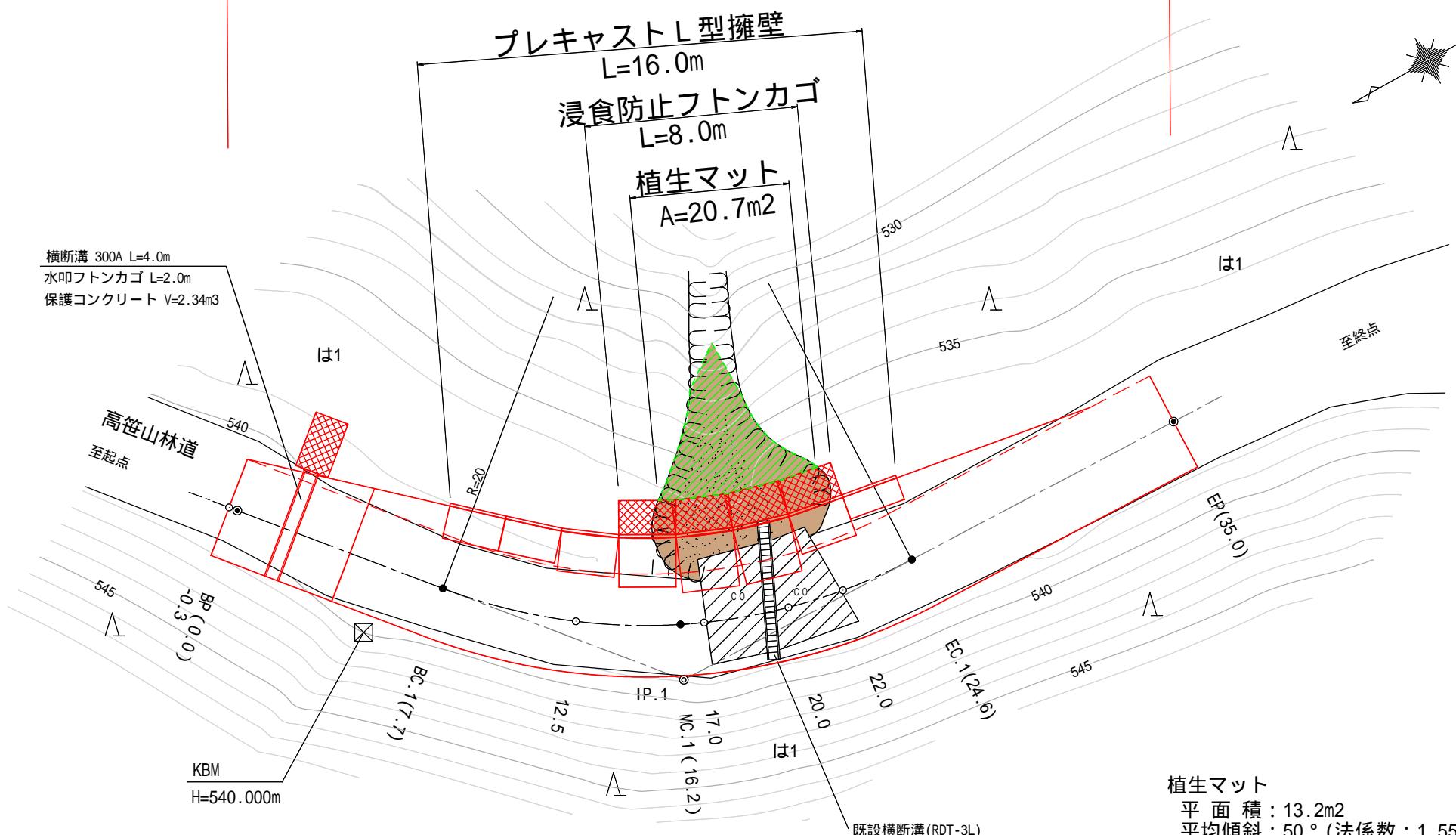
棚倉森林管理署

高笠山林道災害復旧工事

施工箇所:福島県東白川郡矢祭町大字茗荷字入山国有林62は1林小班外
土捨て場:福島県東白川郡塙町大字真名畠字入山国有林49イ2林小班



災害復旧延長 L=35.0m

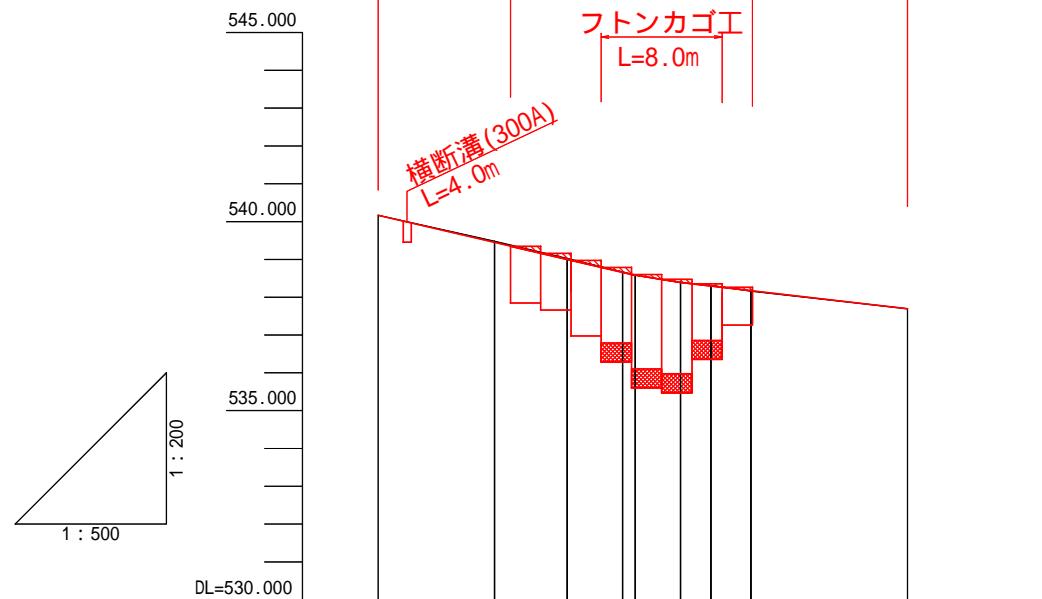


曲 線 表								
IP	IP間方向角	IA	R	TL	SL	CL	IP間距離	X座標
BP	231-34-17						16.713	1013.493
IP	183-00-29	48-33-48	20.000	9.023	1.941	16.952	19.380	1003.105
EP								983.752
								996.982

$$13.3\text{m}^2 \times 1.556 = 20.7\text{m}^2$$

縦断図

1



The figure shows a cross-section diagram of a road embankment with various parameters labeled:

- 勾配 (Slope):** The diagram illustrates two slopes: $i=9.32\%$ ($L=17.000m$) and $i=4.65\%$ ($L=15.000m$).
- 叶画高 (Bank Elevation):** The top profile shows elevations ranging from 530.168m to 540.168m.
- 地盤高 (Ground Level):** The bottom profile shows elevations ranging from 537.694m to 538.391m.
- 切土高 (Cut Height):** The vertical distance between the ground level and the cut face.
- 盛土高 (Fill Height):** The vertical distance between the ground level and the bank face.
- 追加距離 (Additional Distance):** The horizontal distance between the end of the cut and the start of the fill.
- 单距離 (Single Distance):** The total horizontal distance from the start of the cut to the end of the fill.
- 測点番号 (Survey Point Number):** Points labeled BC-1, MC-1, EC-1, and IP-1.
- 曲率半径 (Radius of Curvature):** Indicated as $R = 20,000$.
- 坡度 (Slope):** Indicated as $iA = 48-33-48$.
- 横幅量 (Width):** Indicated as $EP = 35.00$.

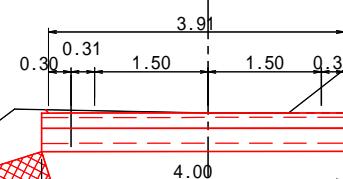
横断図

12.5

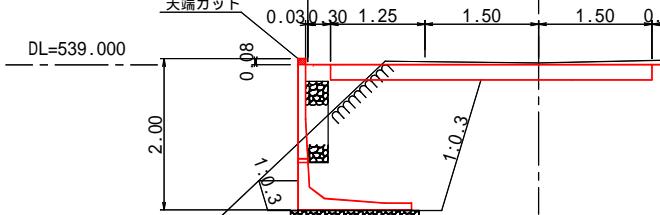
GH=539.026
FH=539.004

(2.0 横断溝 300A)

切土加算
 $1.2 \times 0.525 = 0.63\text{m}^3$



水叩フトンカゴ
L=2.0m

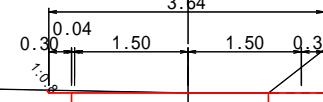


CA(S3)= 1.0
BA = 0.0
CE(S3)= 3.8
埋戻 = 3.3
路盤工= 0.9

BP (0.0)

GH=540.169
FH=540.169

DL=540.000

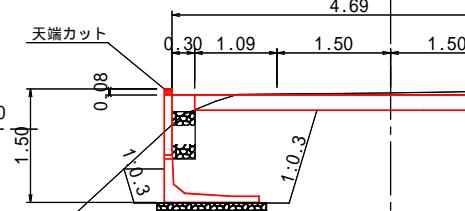


CA(S3)= 1.9
BA = 0.0
CE(S3)= 0.0
埋戻 = 0.0
路盤工= 0.6

BC.1 (7.7)

GH=539.479
FH=539.452

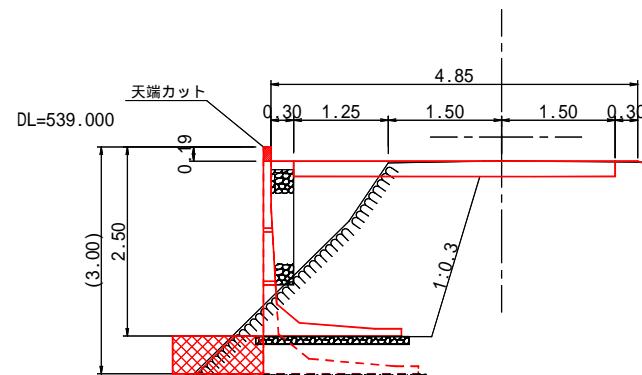
DL=539.000



CA(S3)= 1.1
BA = 0.0
CE(S3)= 2.7
埋戻 = 2.1
路盤工= 0.8

MC.1(16.2)

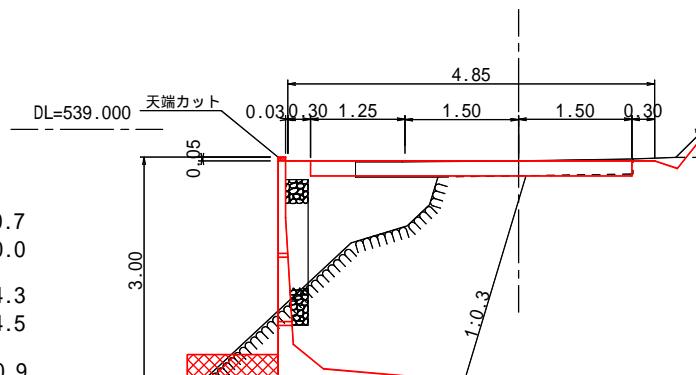
GH=538.668
FH=538.662



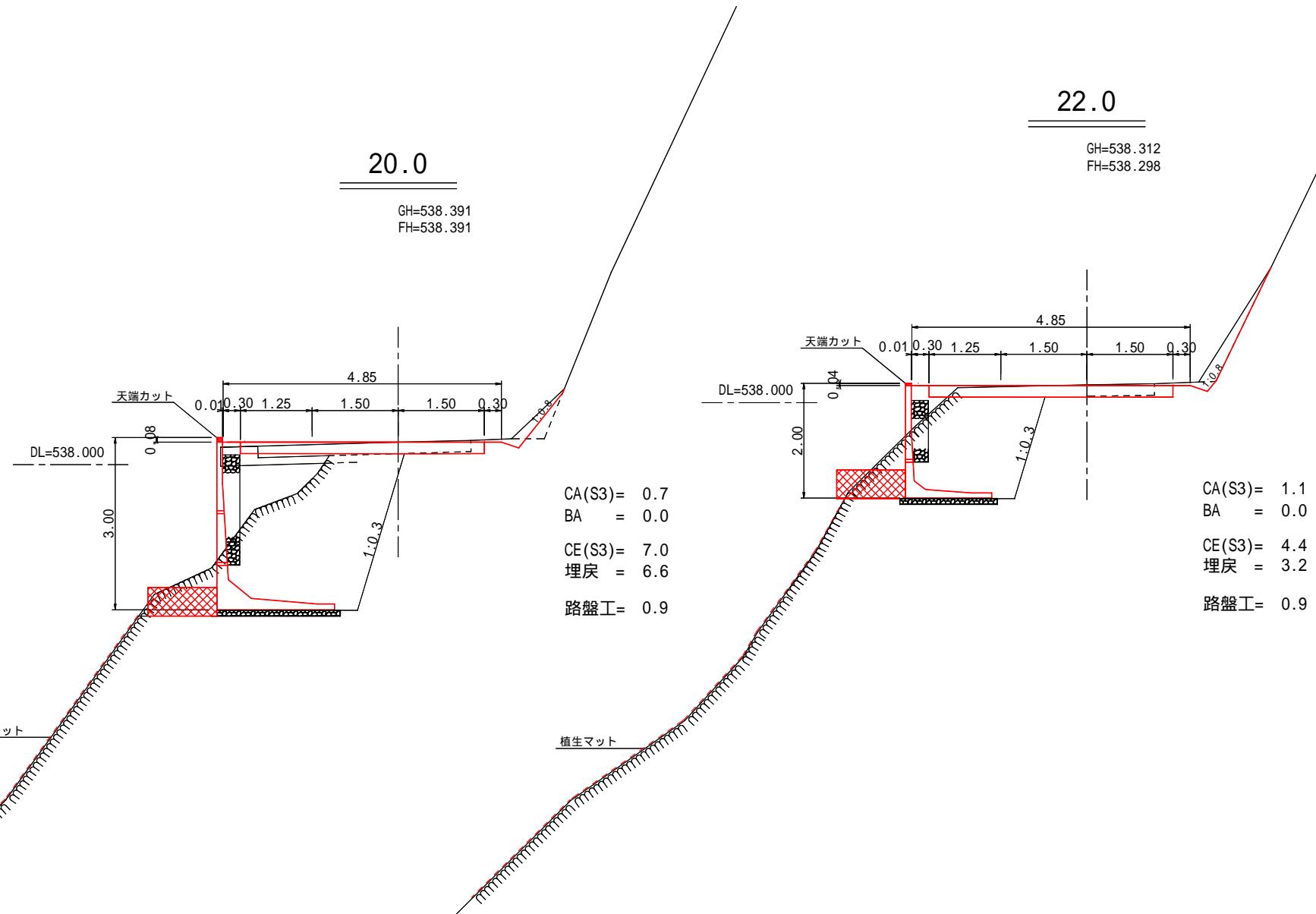
プレキャストL型擁壁
H=2.5m

17.0

GH=538.584
FH=538.584

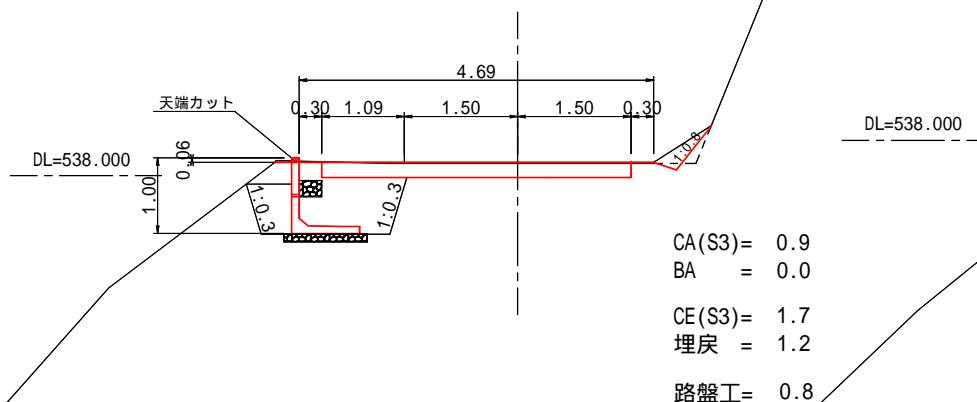


プレキャストL型擁壁
H=3.0m



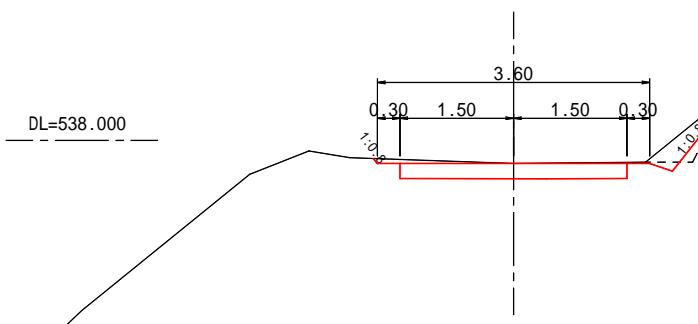
EC.1(24.6)

GH=538.160
FH=538.175



EP (35.0)

GH=537.694
FH=537.694



プレキャストL型擁壁展開図

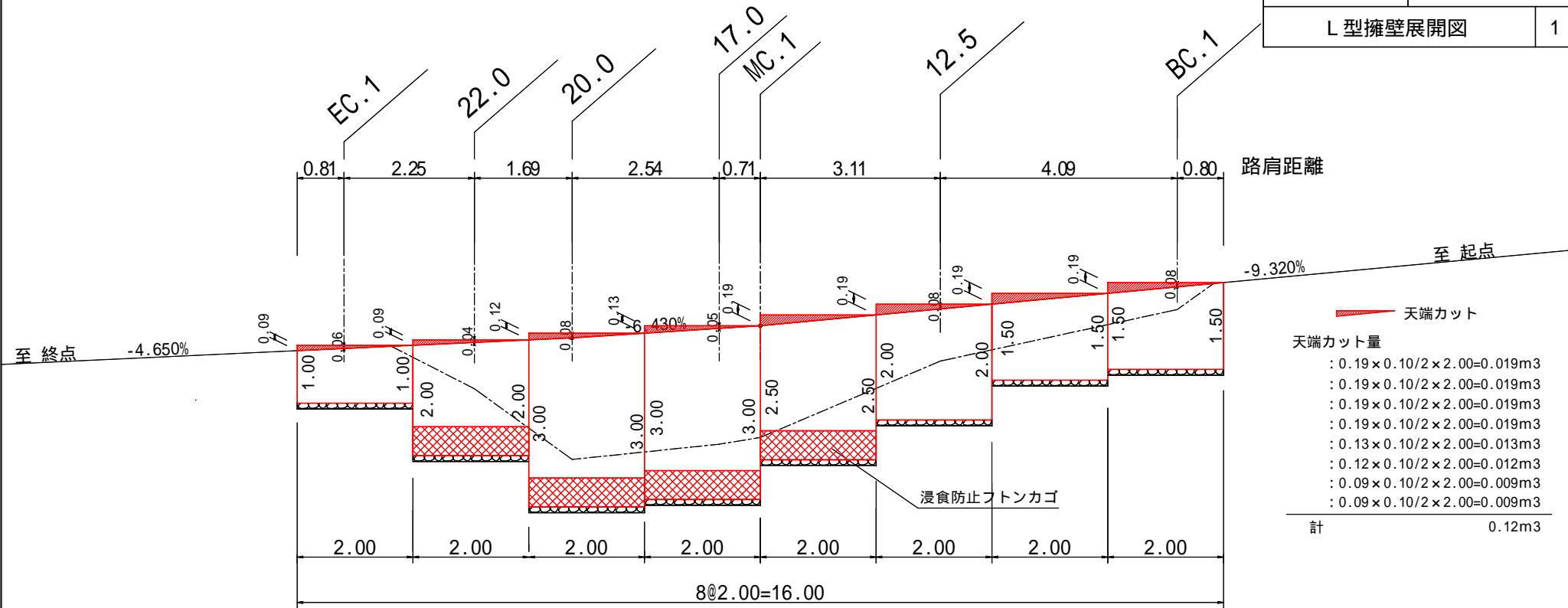
S=1:100

関東森林管理局
棚倉森林管理署

高笠山林道
S=1:100

L型擁壁展開図

1



数 量

、(H=1.5m)

敷モルタル
 $1.25 \times 0.01 \times 2.00 \times 2 = 0.050\text{m}^3$

基礎礫

$1.45 \times 0.10 \times 2.00 \times 2 = 0.58\text{m}^3$

基面整正

$1.45 \times 2.00 \times 2 = 5.80\text{m}^2$

裏込排水材

$0.38 \times 2 = 0.76\text{m}^3$

、(H=2.0m)

敷モルタル
 $1.50 \times 0.01 \times 2.00 \times 2 = 0.060\text{m}^3$

基礎礫

$1.70 \times 0.10 \times 2.00 \times 2 = 0.68\text{m}^3$

基面整正

$1.70 \times 2.00 \times 2 = 6.80\text{m}^2$

裏込排水材

$0.65 \times 2 = 1.30\text{m}^3$

(H=2.5m)

敷モルタル
 $1.825 \times 0.01 \times 2.00 = 0.037\text{m}^3$

基礎礫

$2.025 \times 0.10 \times 2.00 = 0.41\text{m}^3$

基面整正

$2.025 \times 2.00 = 4.05\text{m}^2$

裏込排水材

0.92m^3

、(H=3.0m)

敷モルタル
 $2.05 \times 0.01 \times 2.00 \times 2 = 0.082\text{m}^3$

基礎礫

$2.25 \times 0.10 \times 2.00 \times 2 = 0.90\text{m}^3$

基面整正

$2.25 \times 2.00 \times 2 = 9.00\text{m}^2$

裏込排水材

$1.16 \times 2 = 2.32\text{m}^3$

(H=1.0m)

敷モルタル
 $0.90 \times 0.01 \times 2.00 = 0.016\text{m}^3$

基礎礫

$1.10 \times 0.10 \times 2.00 = 0.22\text{m}^3$

基面整正

$1.10 \times 2.00 = 2.20\text{m}^2$

裏込排水材

0.13m^3

合計	敷モルタル	基礎礫	基面整正	裏込排水材	浸食防止トンカゴ
	0.229m ³	2.79m ³	27.85m ²	5.43m ³	8.0m

プレキャストL型擁壁構造図

S=1:50

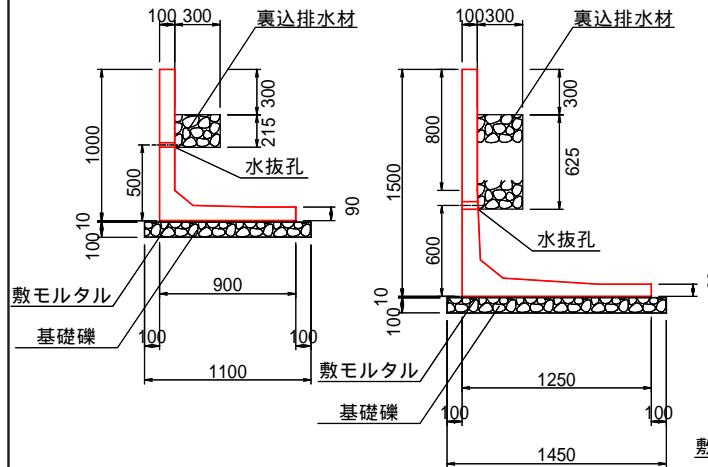
関東森林管理局
棚倉森林管理署

高笠山林道
S=1:50

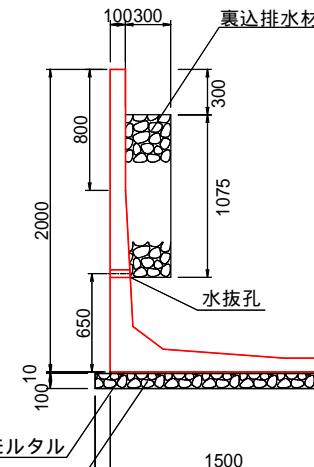
L型擁壁構造図

1

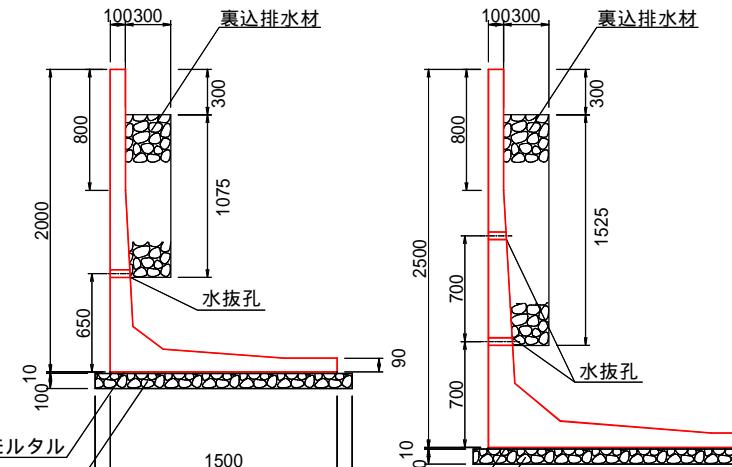
H=1.0



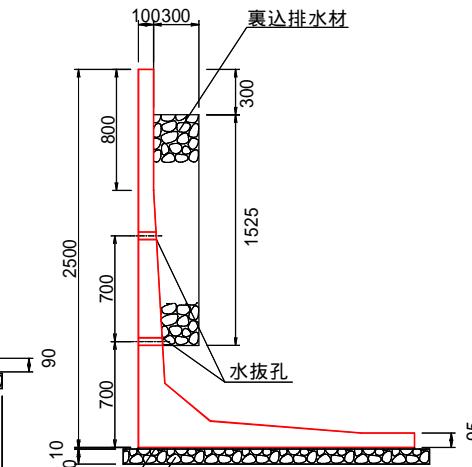
H=1.5



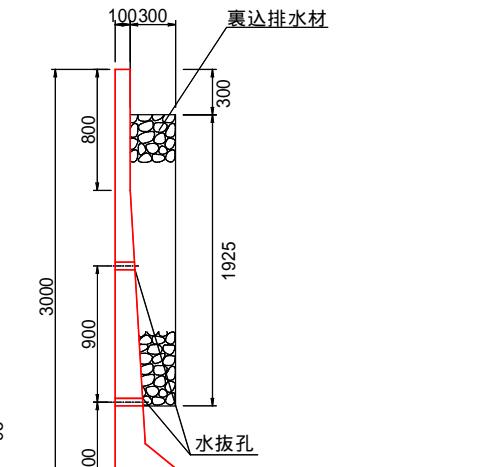
H=2.0



H=2.5



H=3.0



数量(2m当たり)

$$\text{敷モルタル} \\ 0.90 \times 0.01 \times 2.00 = 0.016\text{m}^3$$

基礎碟

$$1.10 \times 0.10 \times 2.00 = 0.22\text{m}^3$$

基面整正

$$1.10 \times 2.00 = 2.20\text{m}^2$$

裏込排水材

$$0.30 \times 0.215 \times 2.00 = 0.13\text{m}^2$$

数量(2m当たり)

$$\text{敷モルタル} \\ 1.25 \times 0.01 \times 2.00 = 0.025\text{m}^3$$

基礎碟

$$1.45 \times 0.10 \times 2.00 = 0.29\text{m}^3$$

基面整正

$$1.45 \times 2.00 = 2.90\text{m}^2$$

裏込排水材

$$0.30 \times 0.625 \times 2.00 = 0.38\text{m}^2$$

数量(2m当たり)

$$\text{敷モルタル} \\ 1.50 \times 0.01 \times 2.00 = 0.030\text{m}^3$$

基礎碟

$$1.70 \times 0.10 \times 2.00 = 0.34\text{m}^3$$

基面整正

$$1.70 \times 2.00 = 3.40\text{m}^2$$

裏込排水材

$$0.30 \times 1.075 \times 2.00 = 0.65\text{m}^2$$

数量(2m当たり)

$$\text{敷モルタル} \\ 1.825 \times 0.01 \times 2.00 = 0.037\text{m}^3$$

基礎碟

$$2.025 \times 0.10 \times 2.00 = 0.41\text{m}^3$$

基面整正

$$2.025 \times 2.00 = 4.05\text{m}^2$$

裏込排水材

$$0.30 \times 1.525 \times 2.00 = 0.92\text{m}^2$$

数量(2m当たり)

$$\text{敷モルタル} \\ 2.05 \times 0.01 \times 2.00 = 0.041\text{m}^3$$

基礎碟

$$2.25 \times 0.10 \times 2.00 = 0.45\text{m}^3$$

基面整正

$$2.25 \times 2.00 = 4.50\text{m}^2$$

裏込排水材

$$0.30 \times 1.925 \times 2.00 = 1.16\text{m}^2$$

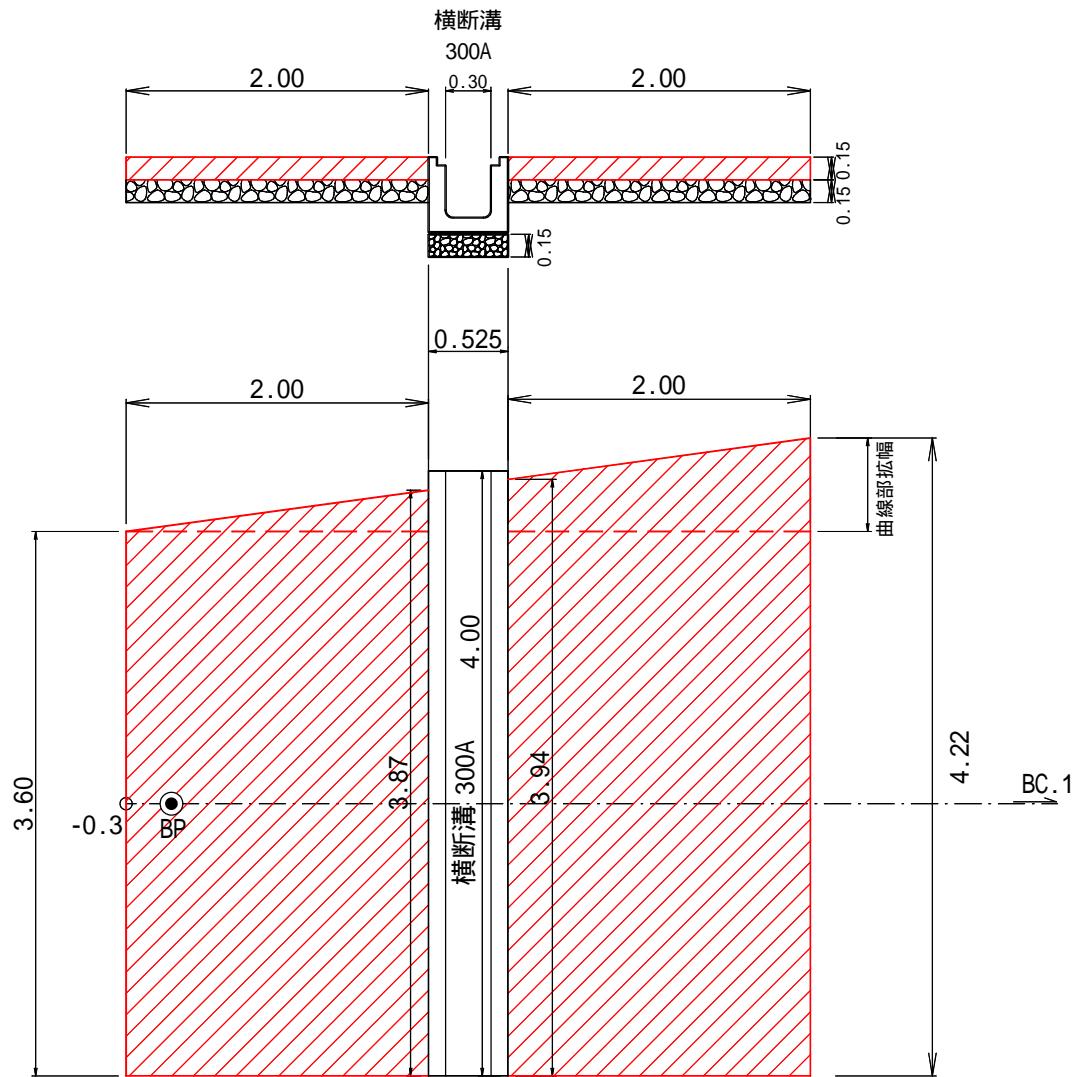
保護コンクリート詳細図

S=1:50

関東森林管理局
棚倉森林管理署

高笠山林道
S=1:50

保護コンクリート工詳細図 1



保護コンクリート

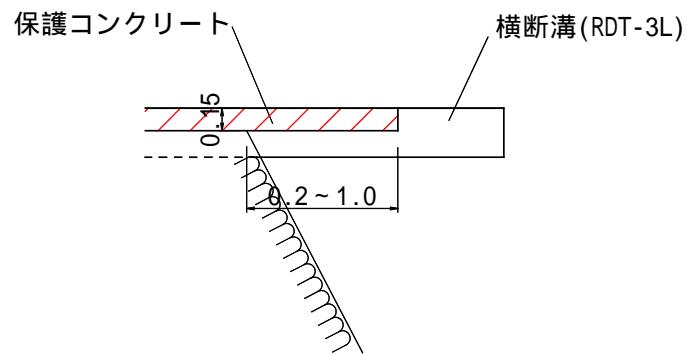
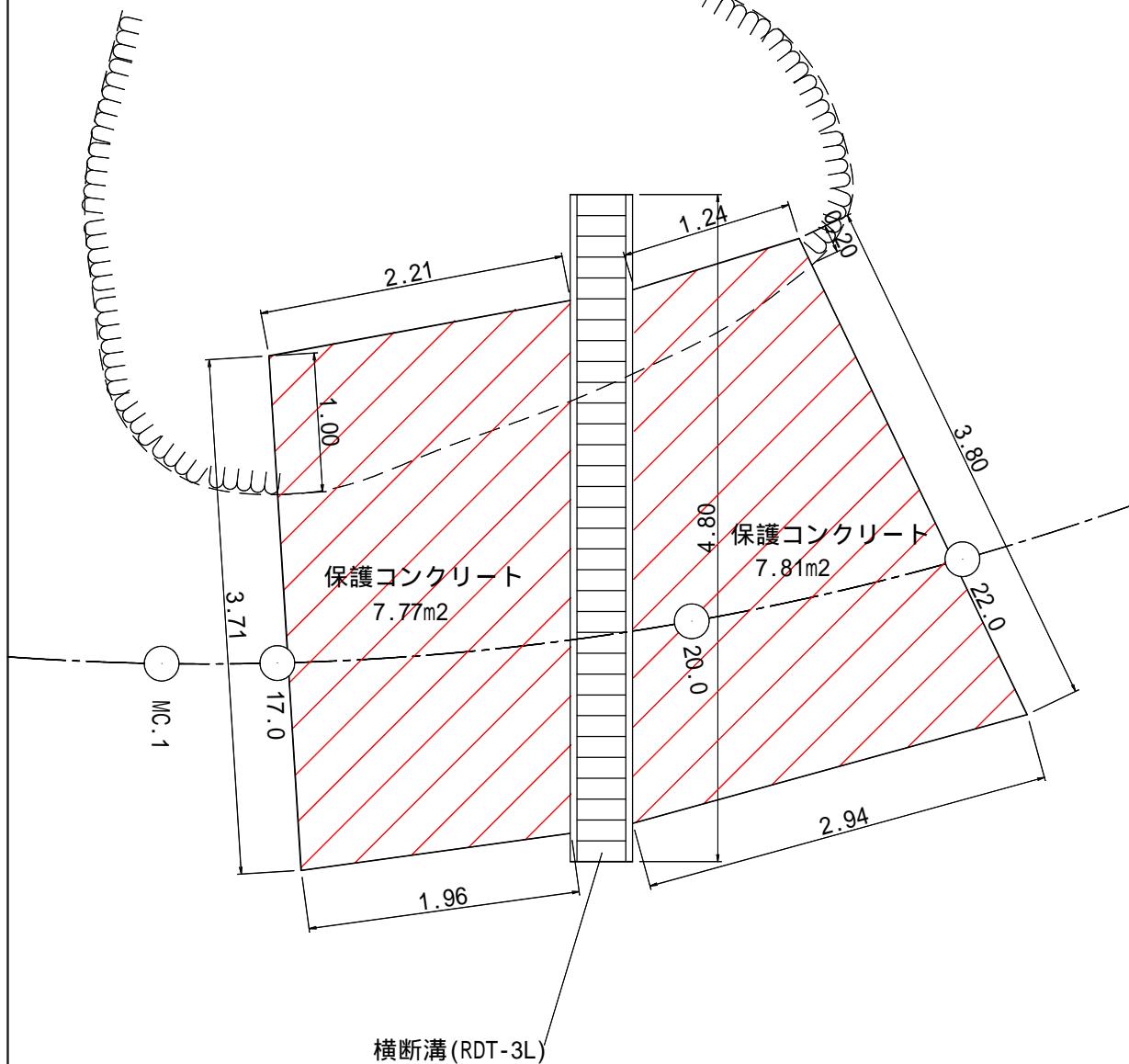
$$((3.60+3.87)/2 \times 2.00 + (3.94+4.22)/2 \times 2.00) \times 0.15 = 2.34\text{m}^3$$

基礎礎

$$((3.60+3.87)/2 \times 2.00 + (3.94+4.22)/2 \times 2.00) \times 0.15 = 2.34\text{m}^3$$

横断溝基礎礎

$$0.525 \times 0.15 \times 4.00 = 0.32\text{m}^3$$

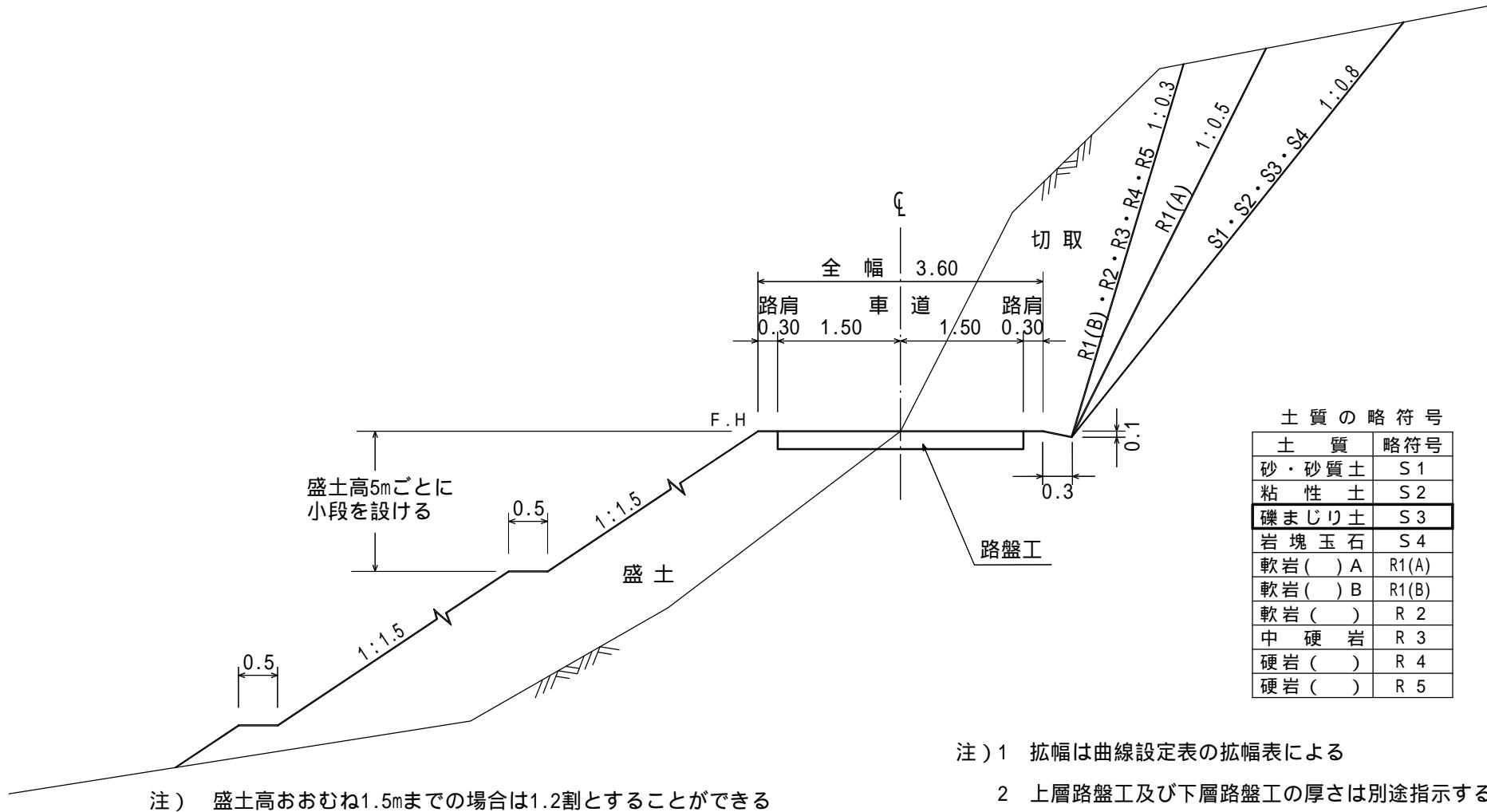


横断溝撤去
(RDT-3L) 4.8m
 $4.8\text{m}/0.6 \times 37.8\text{kg} = 302.4\text{kg}$

保護コンクリート撤去
 $(7.77+7.81) \times 0.15 = 2.34\text{m}^3$
 $2.34\text{m}^3 \times 23.0\text{kg} = 53.8\text{kg}$

林道 土工標準図

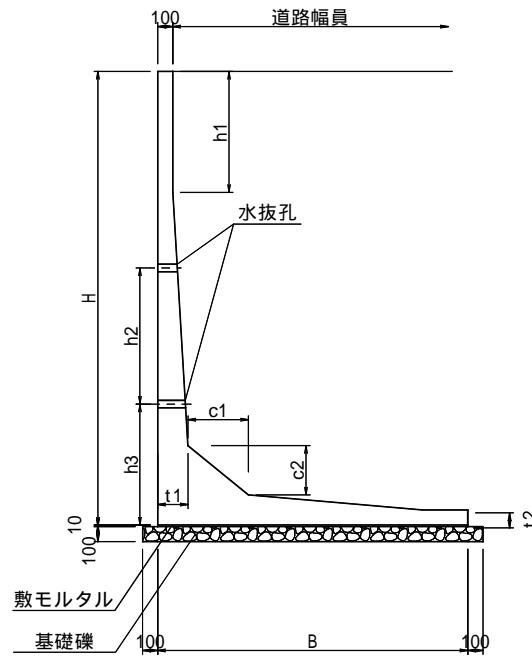
$S=free$



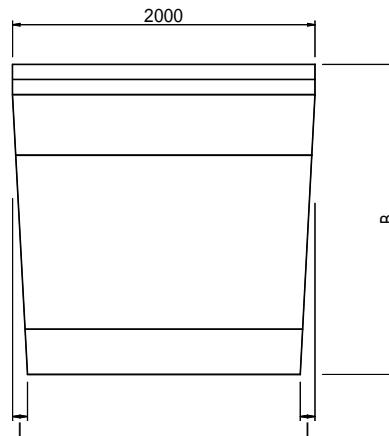
プレキャスト L型擁壁標準図 S=free

(T-25対応)

断面図



平面図



寸法表

単位 : mm

呼び名 (H)	参考質量 (kg)	B	b	c1	c2	h1	h2	h3	t1	t2	I
1,000	815	850	250	120	100			500	100	90	35
1,500	1,230	1,150	350	150	120	800		600	120	80	46
2,000	1,860	1,450	350	200	150	800		650	150	90	63
2,500	2,660	1,750	350	300	250	800	700	700	175	95	79
3,000	3,600	2,050	300	400	325	800	900	800	200	100	98

細部寸法等は採用メーカーに確認の事

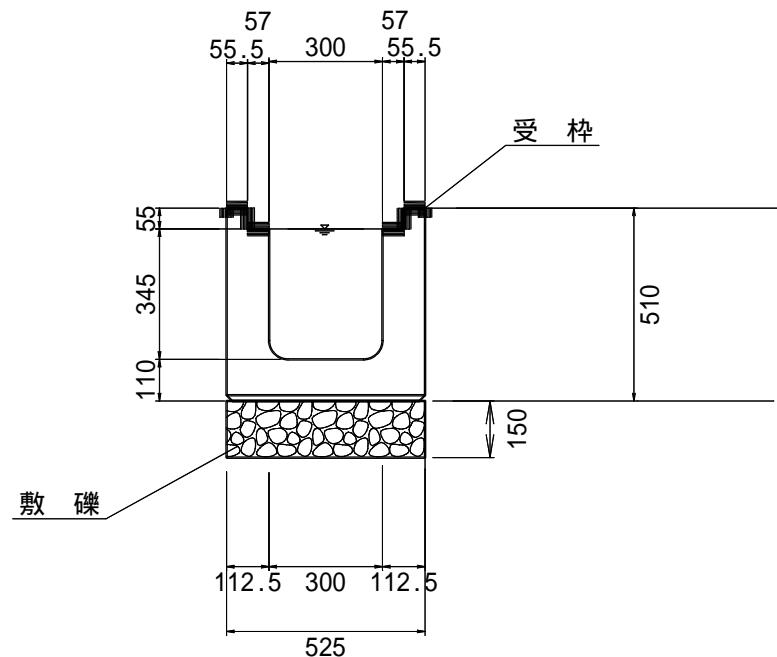
横断溝標準図

S=1:20

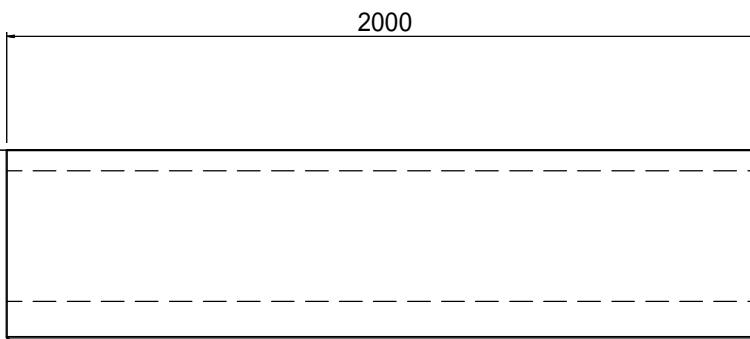
単位:mm

300A(T-25対応)

断面図



側面図



基礎礫(1m当たり) $0.15 \times 0.525 = 0.079\text{m}^3$

参考重量(2m当たり) 701kg

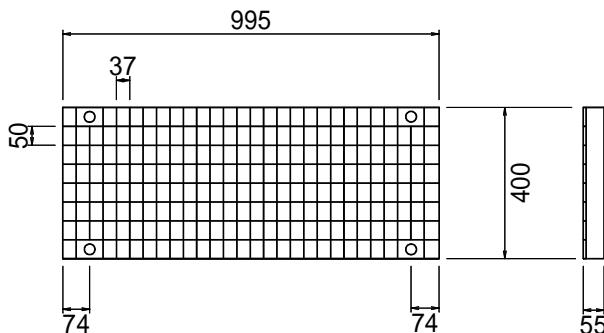
流水断面 0.102m² (満流)

潤辺 0.948m

径深 0.108m

粗度係数 0.013

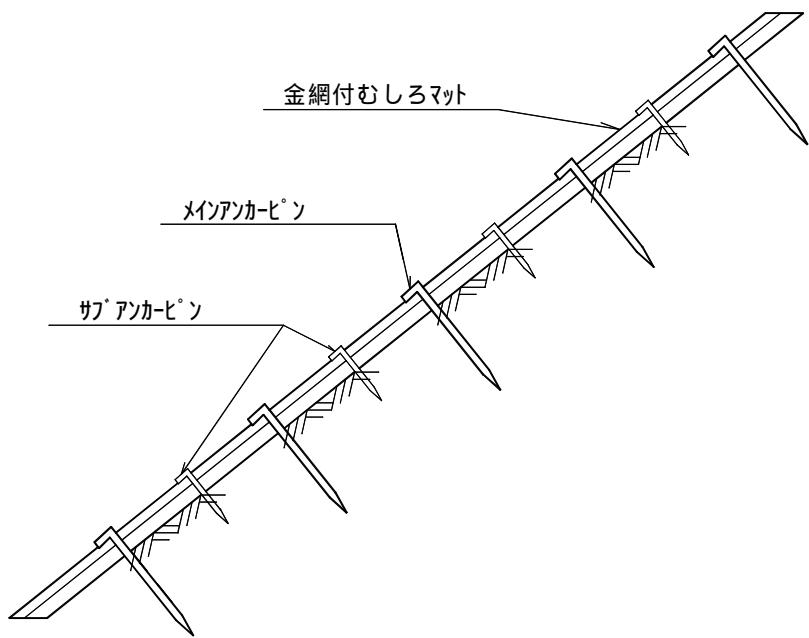
横断溝300用 T-25 並目グレーチング



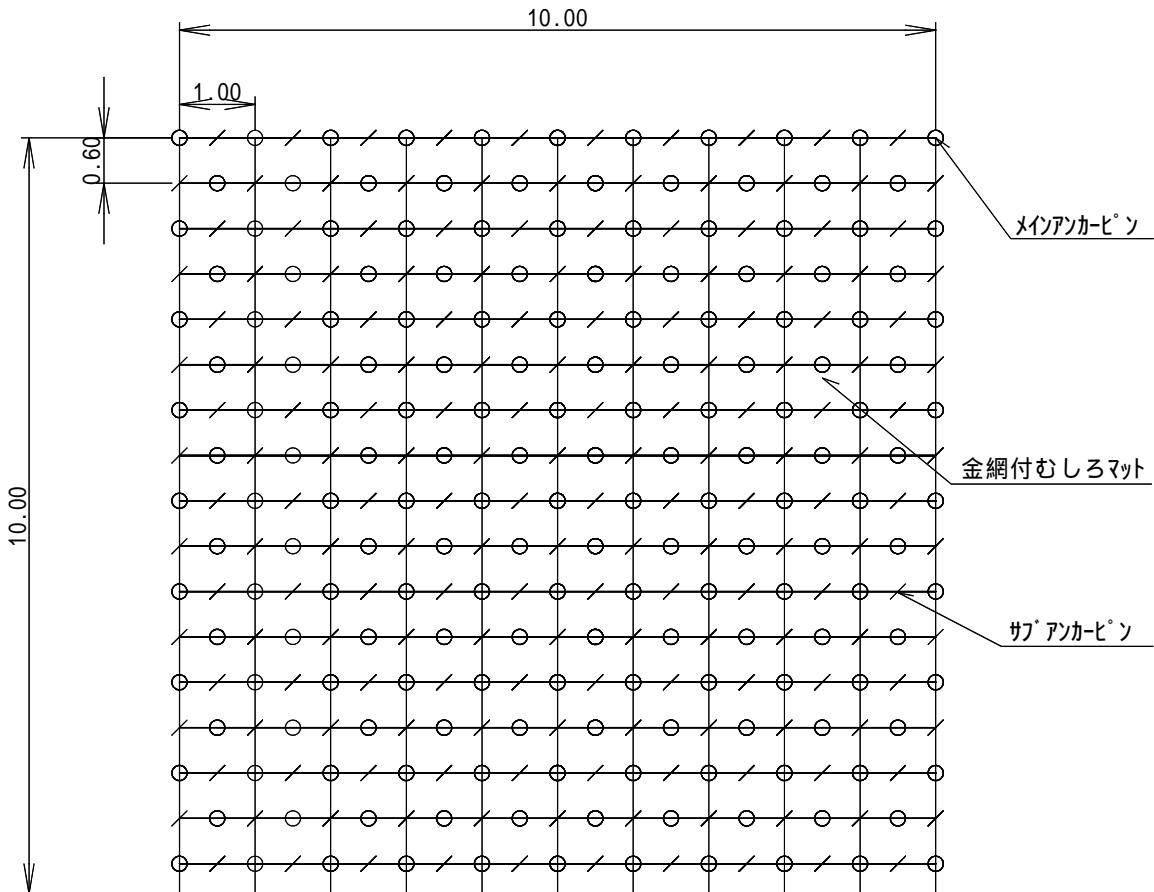
植生マット標準図 S=free

単位:m

側面図



正面図



100.0m²当たり 材料明細表

種別	規格・寸法	数量	単位	単位重量(kg)	備考
金網付むしろマット	1.0m * 20.0m 亜鉛引亜金網(径0.7m・網目40mm)付わらむしろ(種子・肥料付)	115	m ²	68.8	
メインアンカーピン	径13mm 長さ400mm フック約30mm	186	本	83.7	
サブ'アンカーピン	径 9mm 長さ200mm フック約30mm	186	本	22.3	

フトンカゴ工標準図

S=free

1.20 × 0.50 × 2.00

