

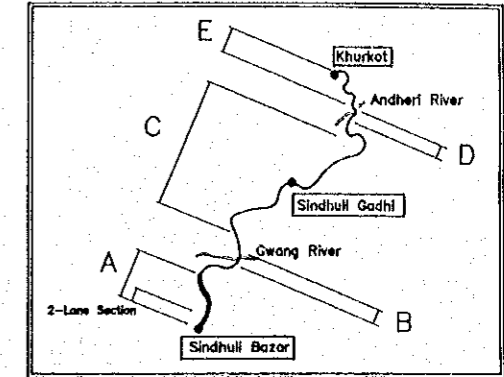
TYPICAL CROSS SECTIONS (1)

Scale : 1/200

LOCATION "A"
(PLAIN SECTION)

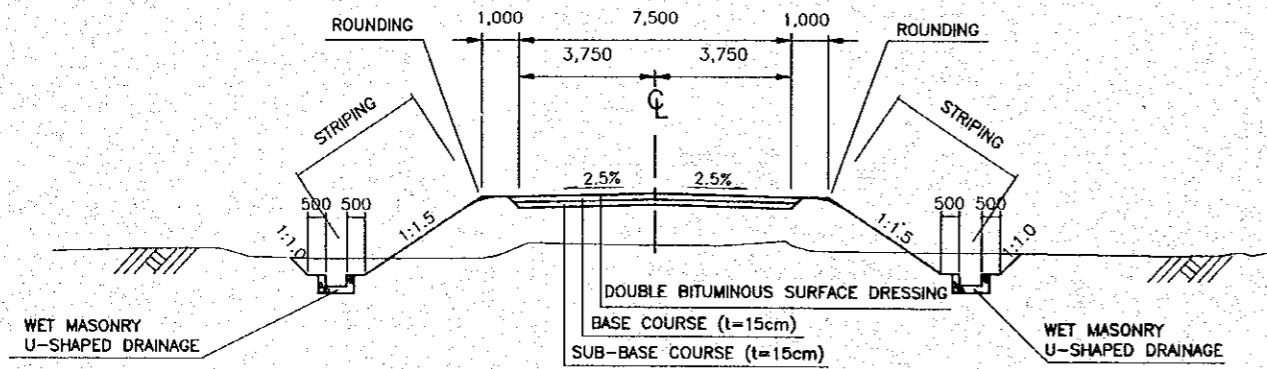
A-3-1
TYPICAL CROSS SECTIONS
(1)

LOCATION MAP



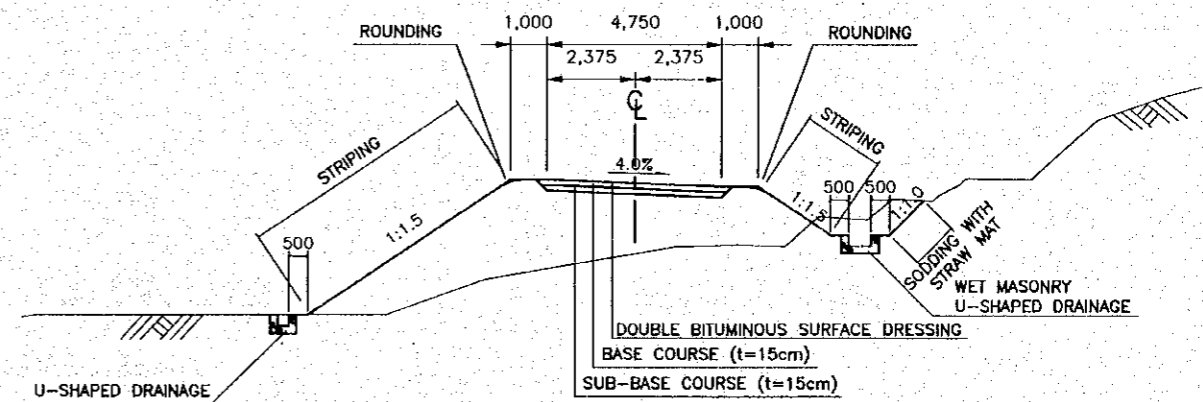
DUAL LANE SECTION

STA.3+160

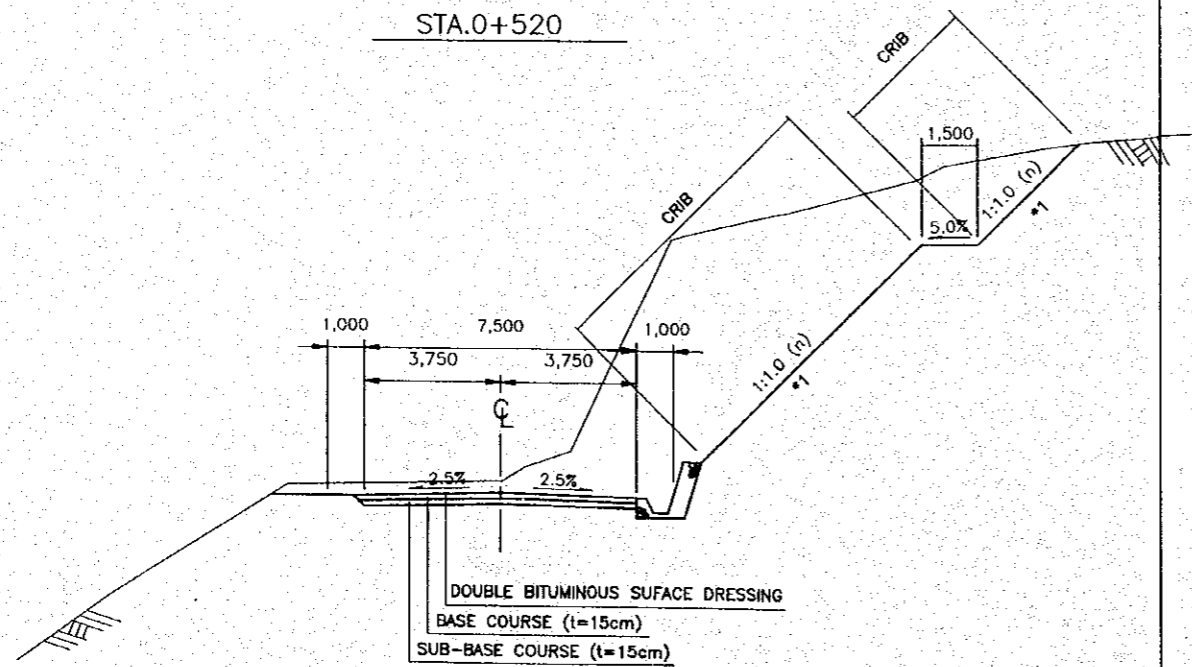


SINGLE LANE SECTION

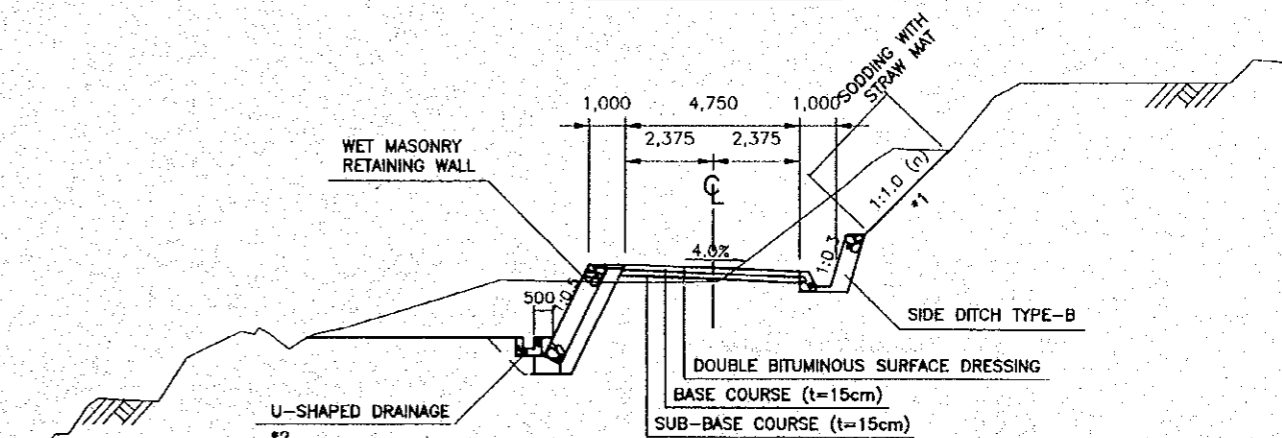
STA.3+440



STA.0+520



STA.3+960



NOTES:

- *1 - "n" value should be selected by soil condition.
- *2 - Replaced ditch for existing ditch, if necessary

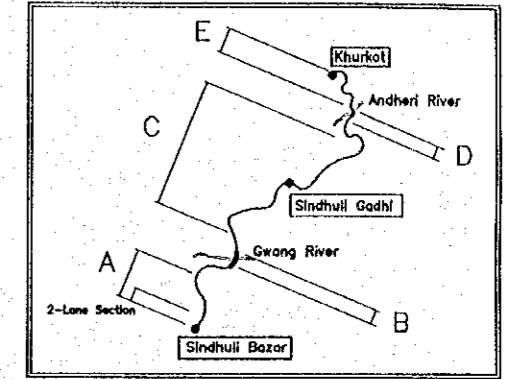
TYPICAL CROSS SECTIONS (2)

Scale : 1/200

LOCATION "B" (GWANG RIVER SECTION)

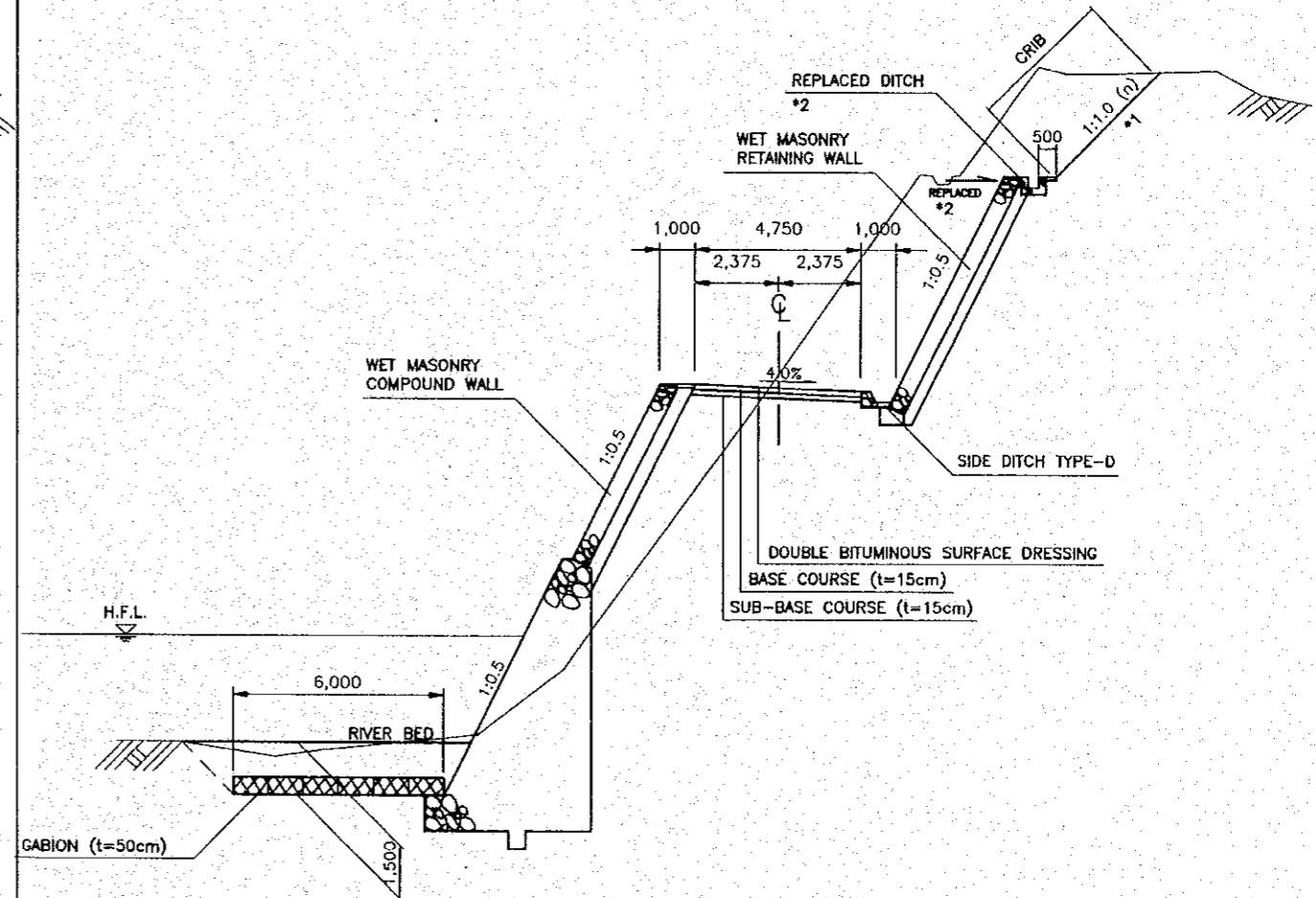
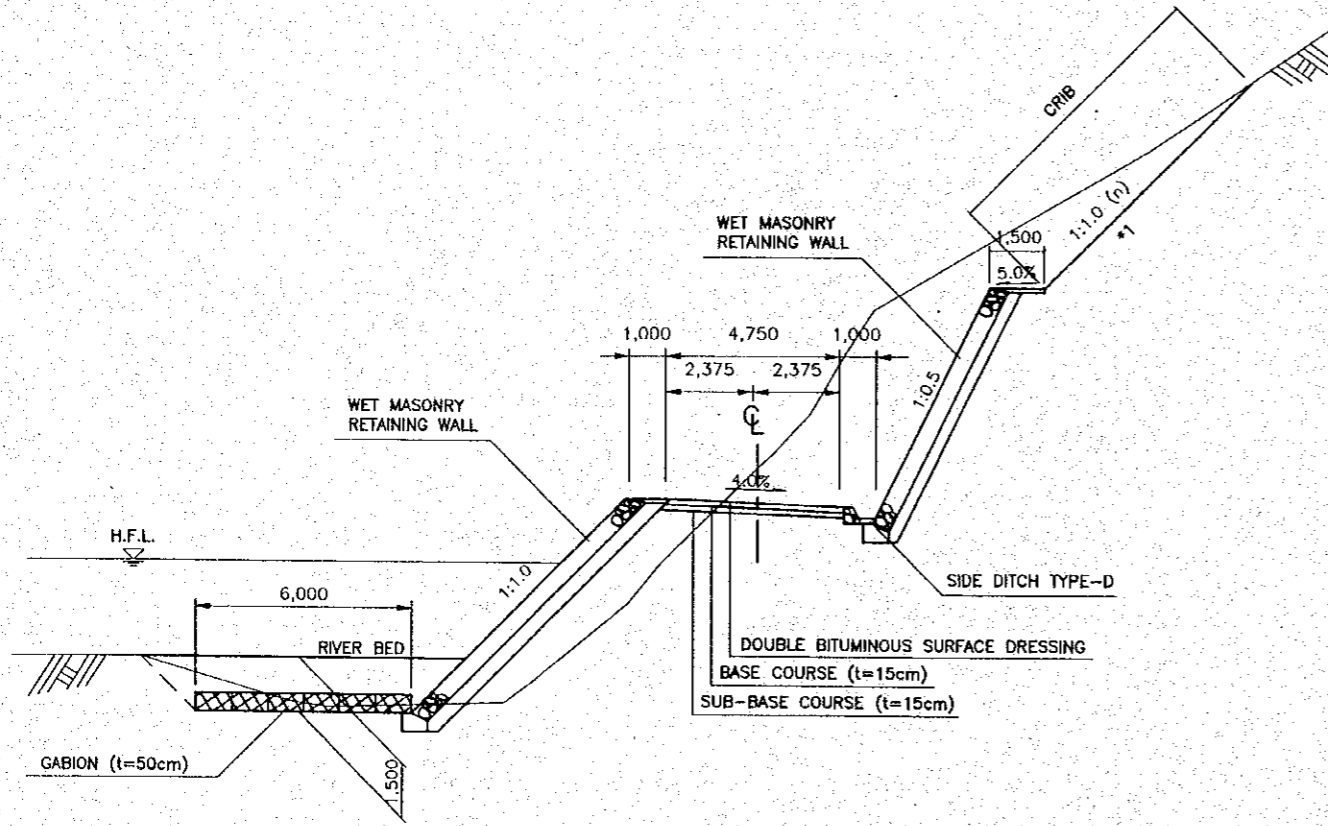
A-3-2
TYPICAL CROSS SECTIONS
(2)

LOCATION MAP



STA.5+640

STA.6+848.841



NOTES:

- *1 - "n" value should be selected by soil condition.
- *2 - Replaced ditch for existing ditch, if necessary

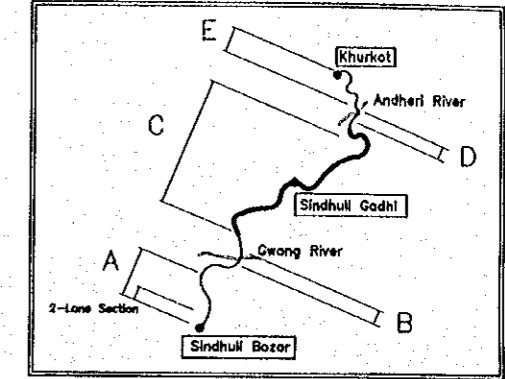
TYPICAL CROSS SECTIONS (3)

Scale : 1/200

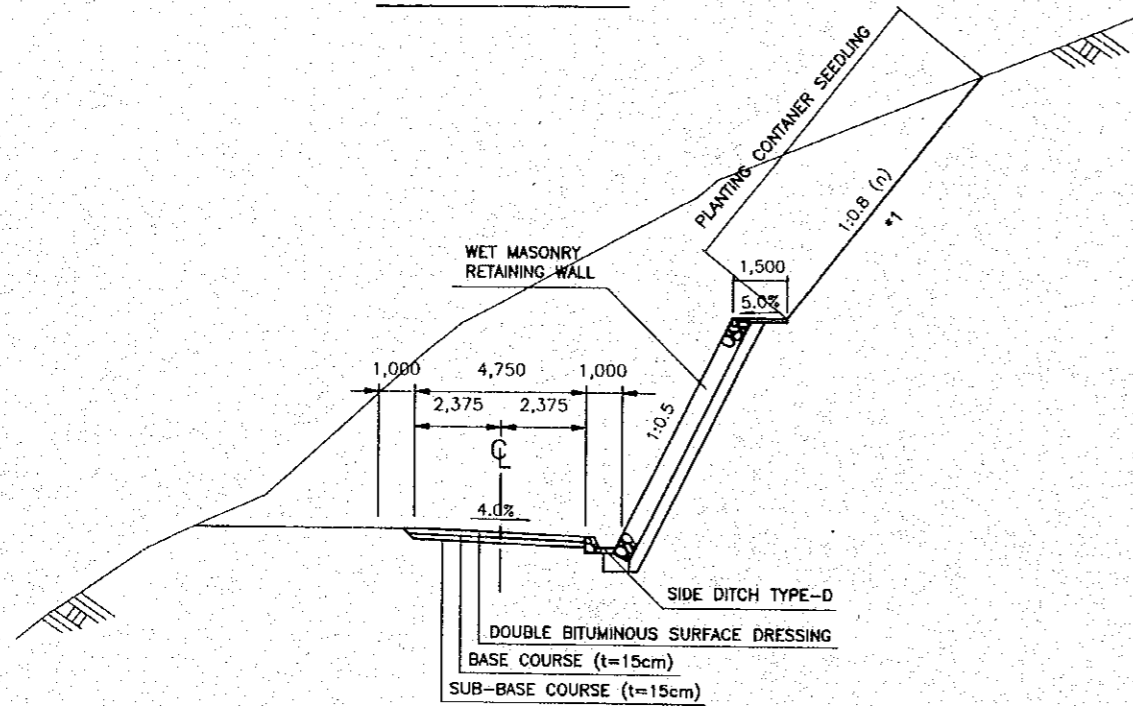
LOCATION "C" (MOUNTAINOUS SECTION) - FULL CUTTING -

A-3-3
TYPICAL CROSS SECTIONS
(3)

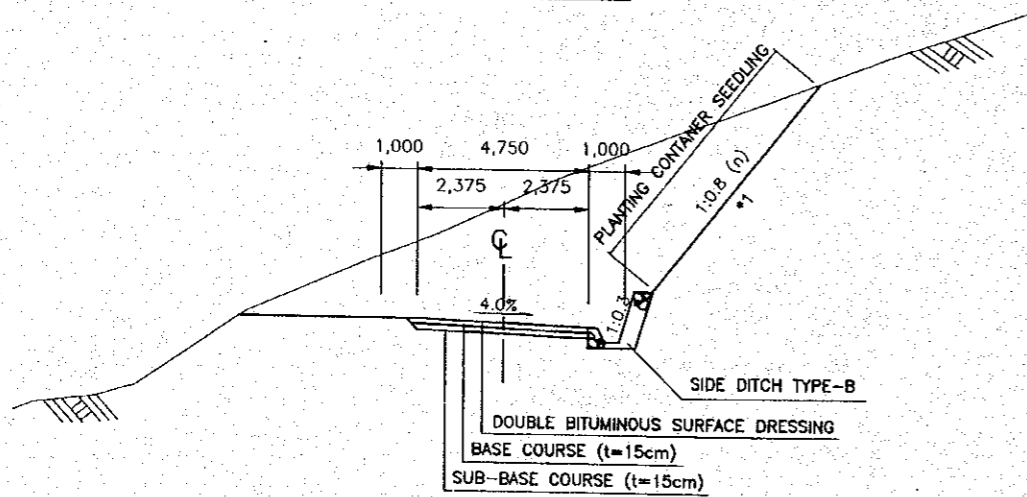
LOCATION MAP



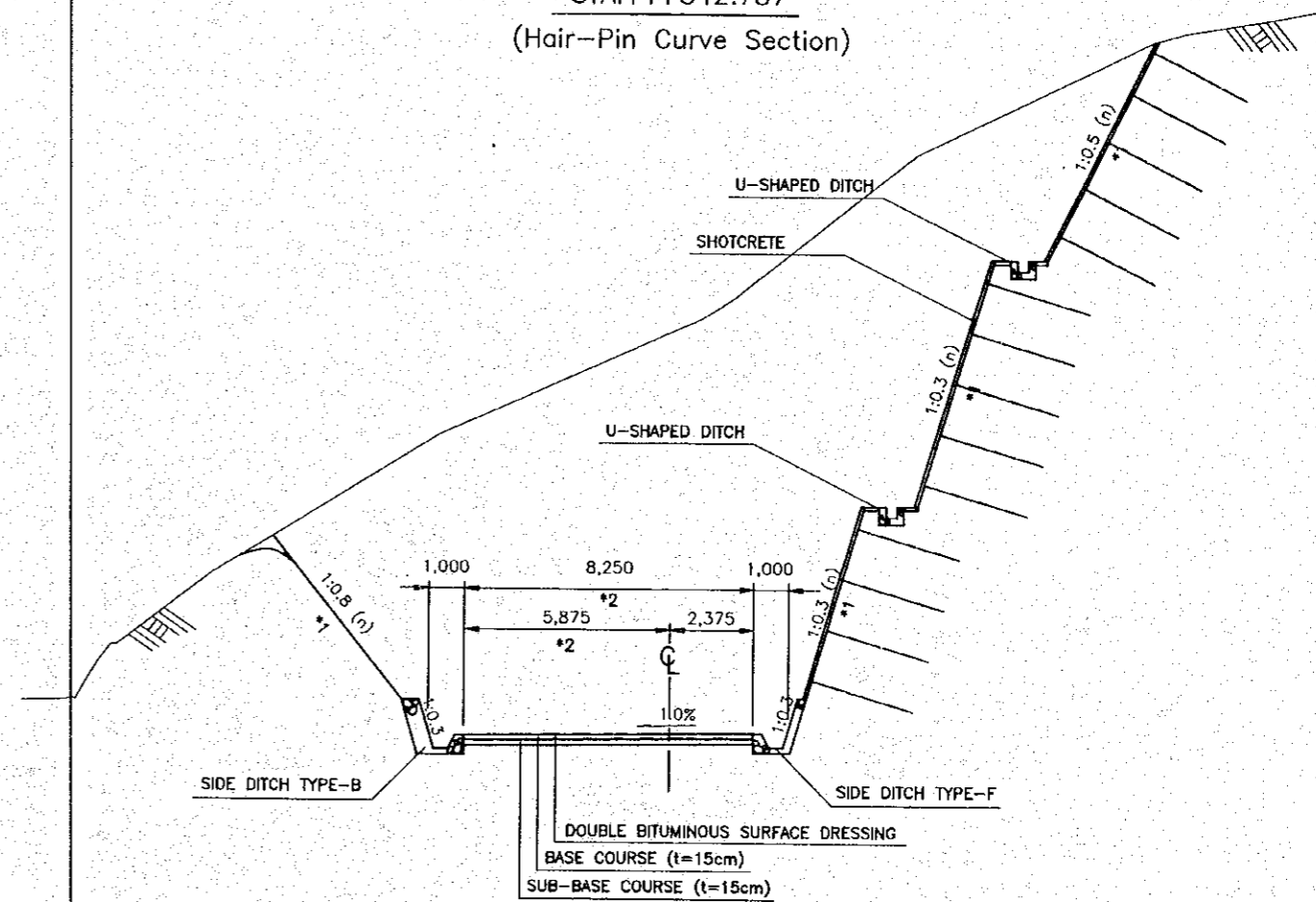
STA.9+300



STA.9+460



STA.14+542.737
(Hair-Pin Curve Section)



NOTES:

- *1 - "n" value should be selected by soil condition.
- *2 - WIDENING SECTION

TYPICAL CROSS SECTIONS (4)

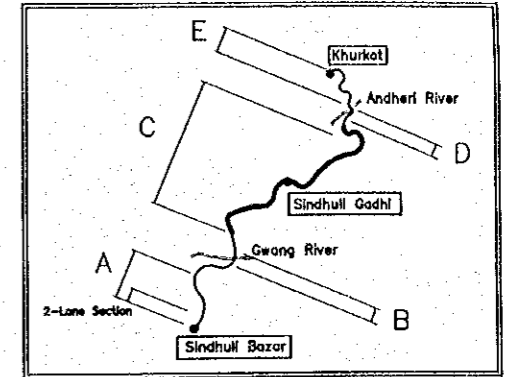
Scale : 1/200

LOCATION "C" (MOUNTAINOUS SECTION)

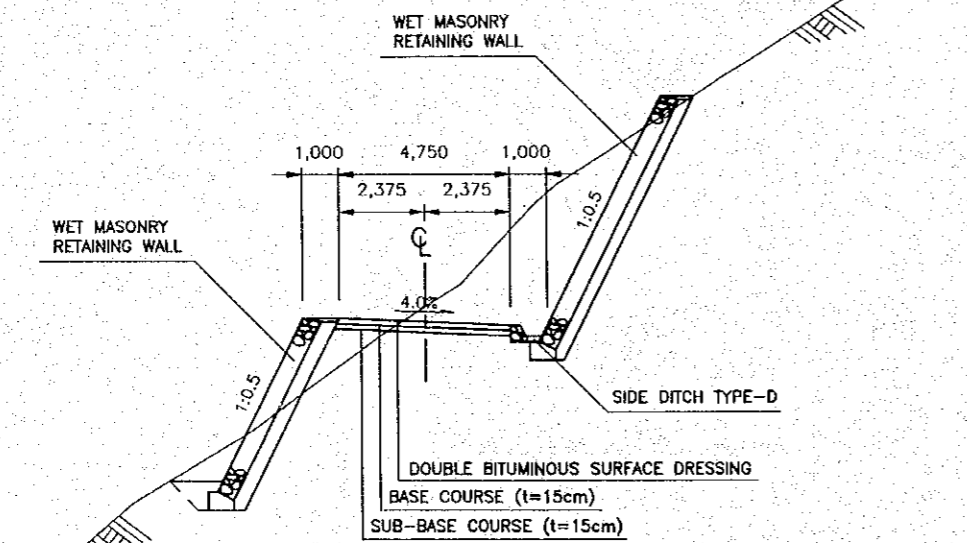
- HALF CUTTING & HALF EMBANKMENT -

A-3-4
TYPICAL CROSS SECTIONS
(4)

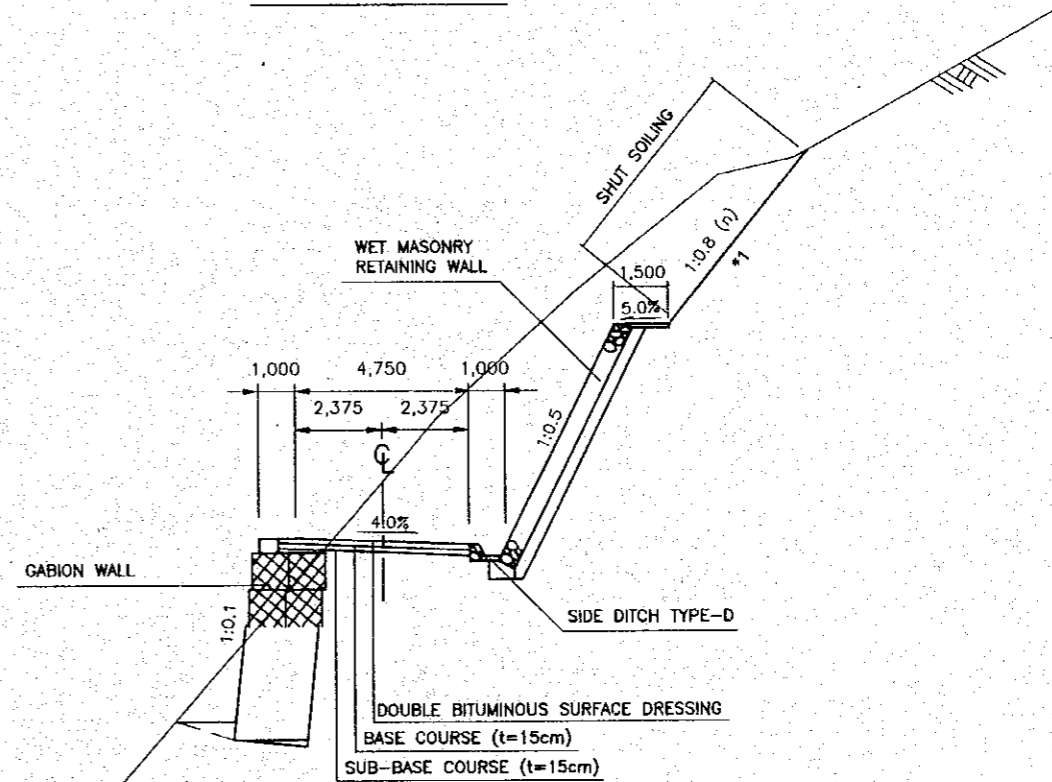
LOCATION MAP



STA.8+375.068



STA.34+809.877



NOTES:

*1 - "n" value should be selected by soil condition.

TYPICAL CROSS SECTIONS (5)

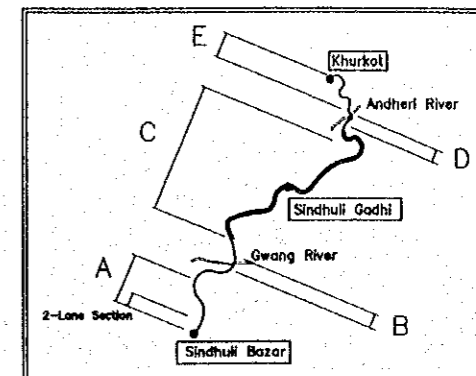
Scale : 1/200

LOCATION "C" (MOUNTAINOUS SECTION)

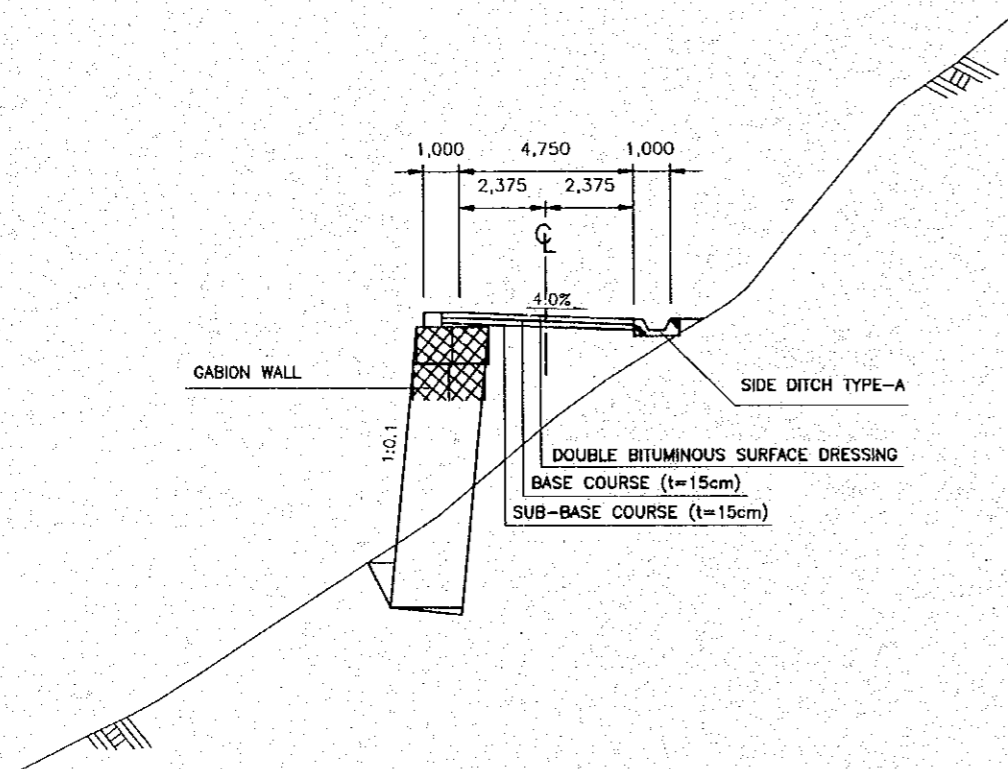
- FULL EMBANKMENT -

A-3-5
TYPICAL CROSS SECTIONS
(5)

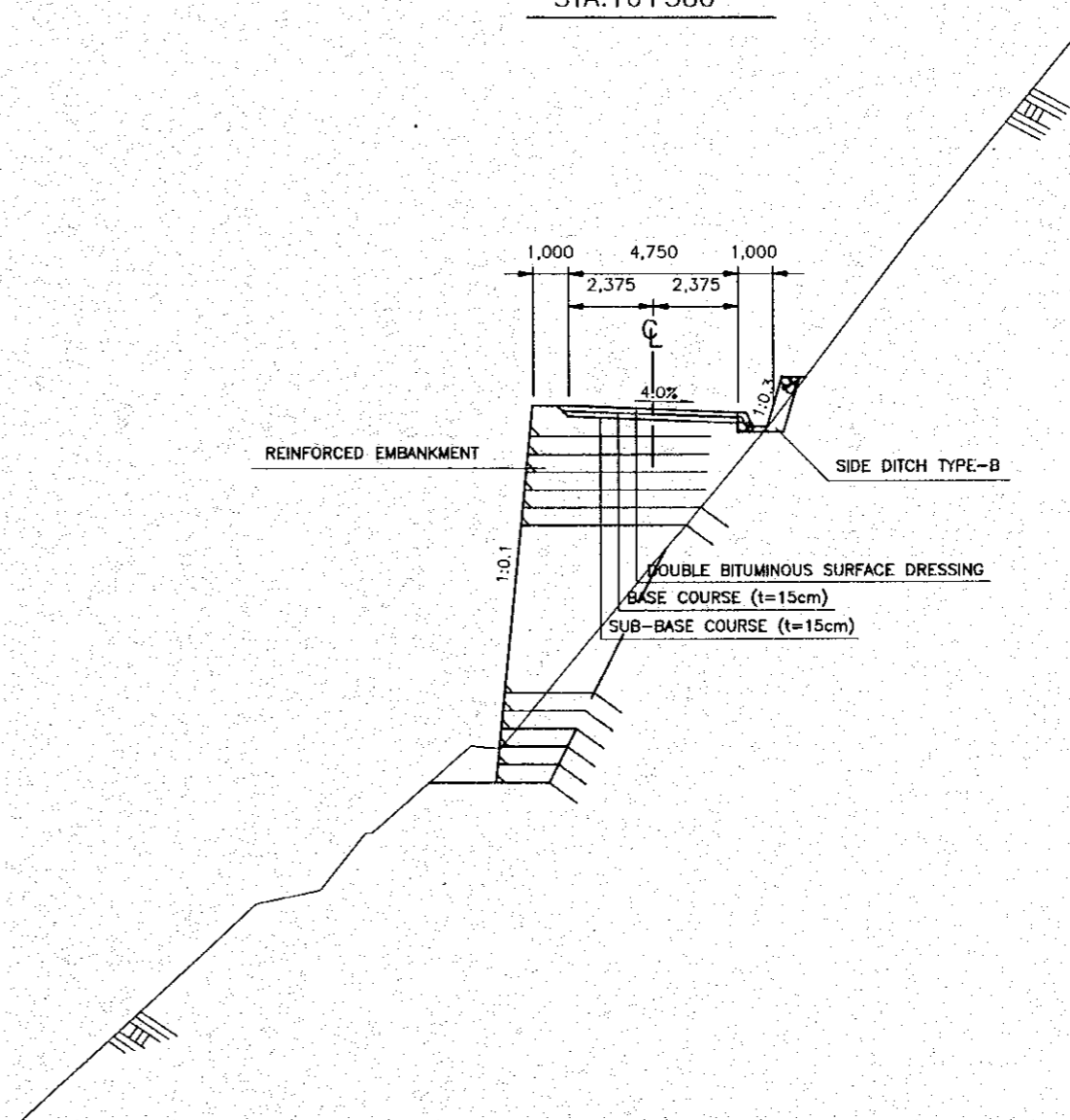
LOCATION MAP



STA.35+240



STA.16+580



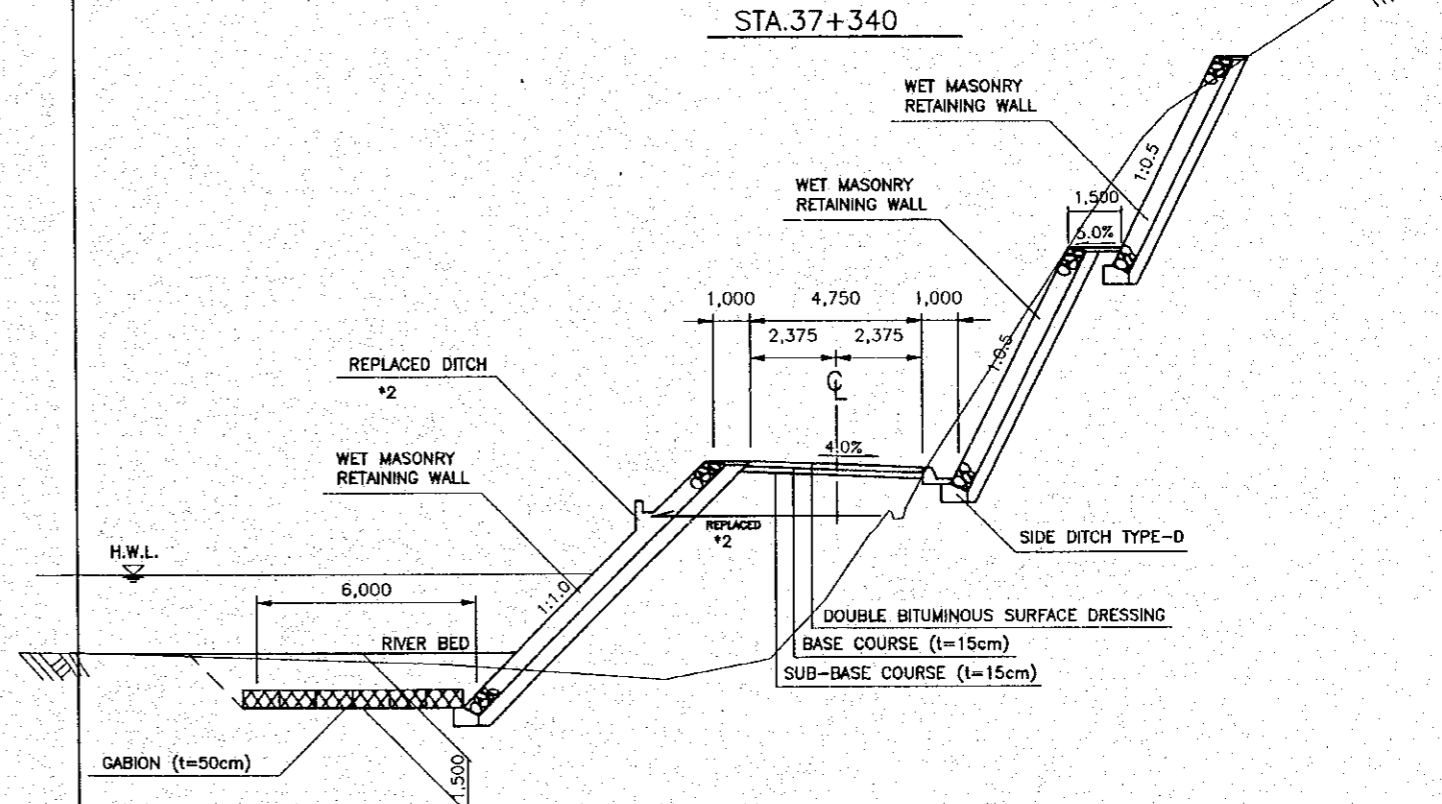
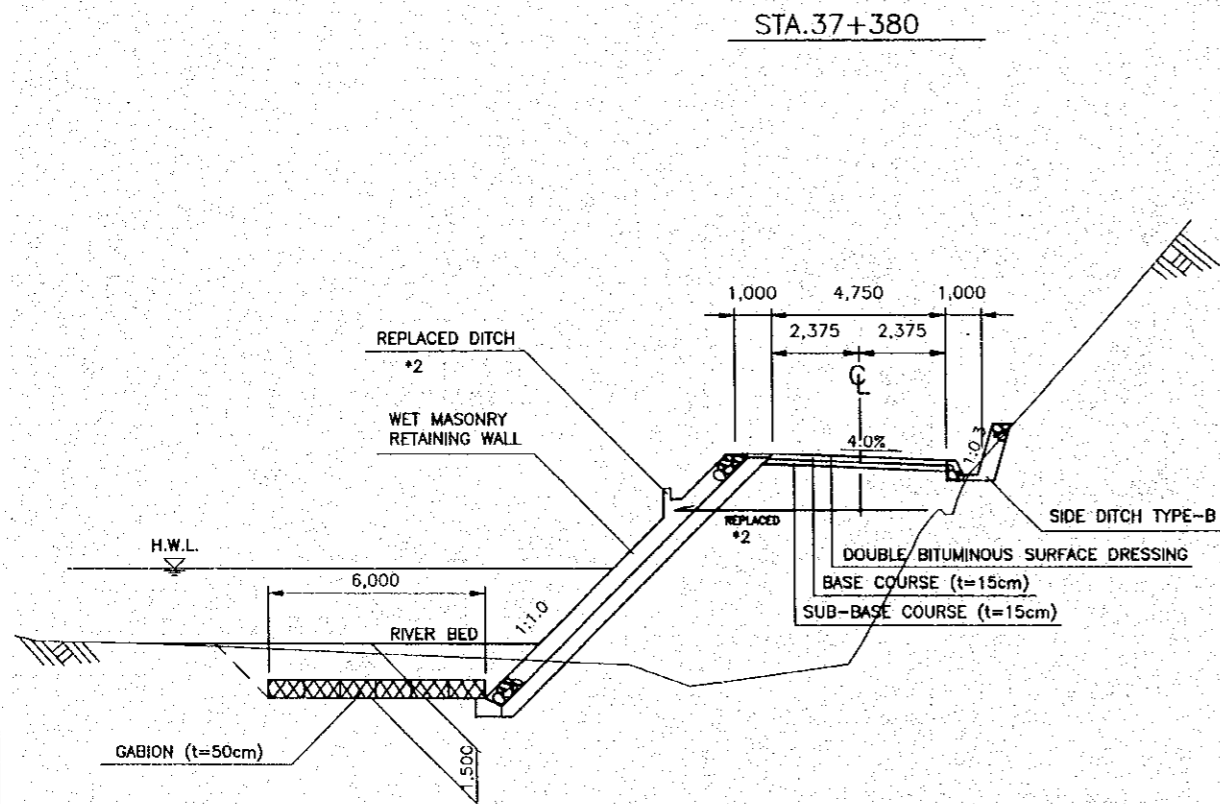
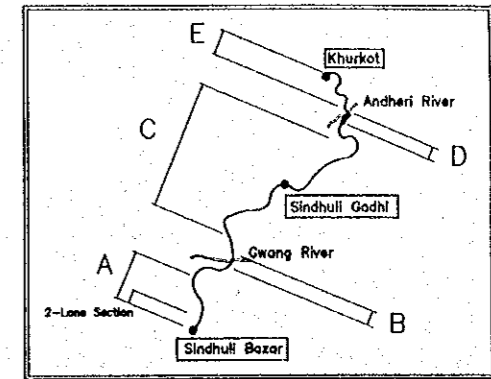
TYPICAL CROSS SECTIONS (6)

Scale : 1/200

LOCATION "D" (ANDHERI RIVER SECTION)

A-3-6
TYPICAL CROSS SECTIONS
(6)

LOCATION MAP



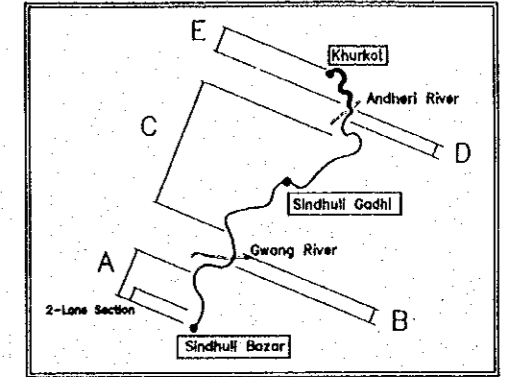
TYPICAL CROSS SECTIONS (7)

Scale : 1/200

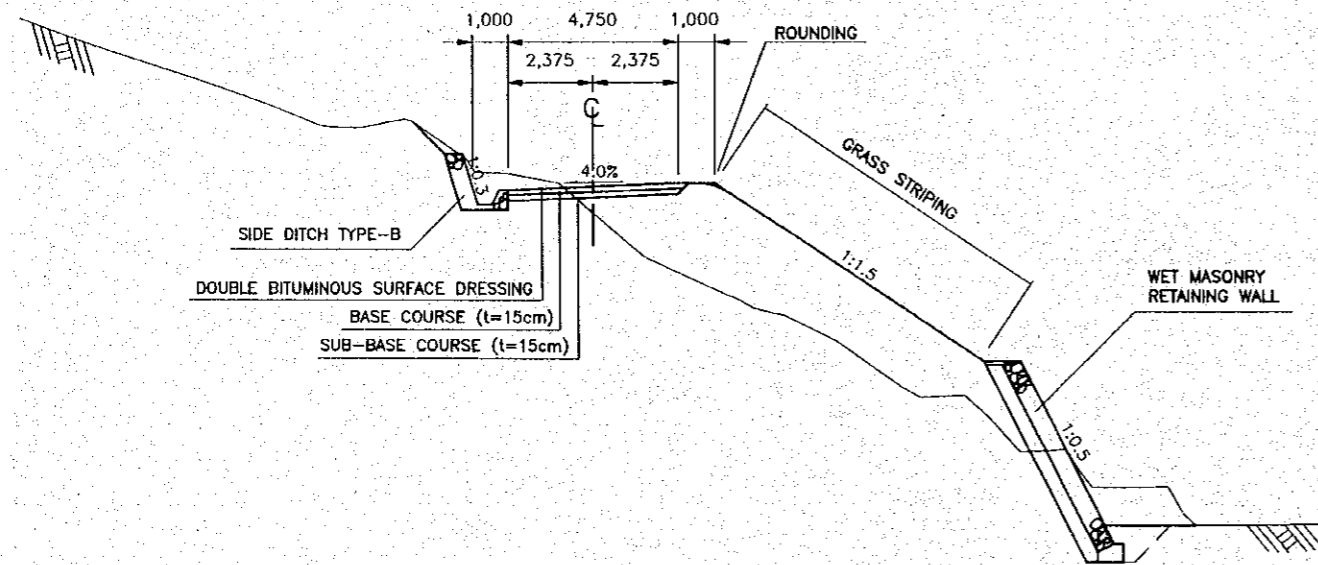
LOCATION "E" (PLAIN SECTION)

A-3-7
TYPICAL CROSS SECTIONS
(7)

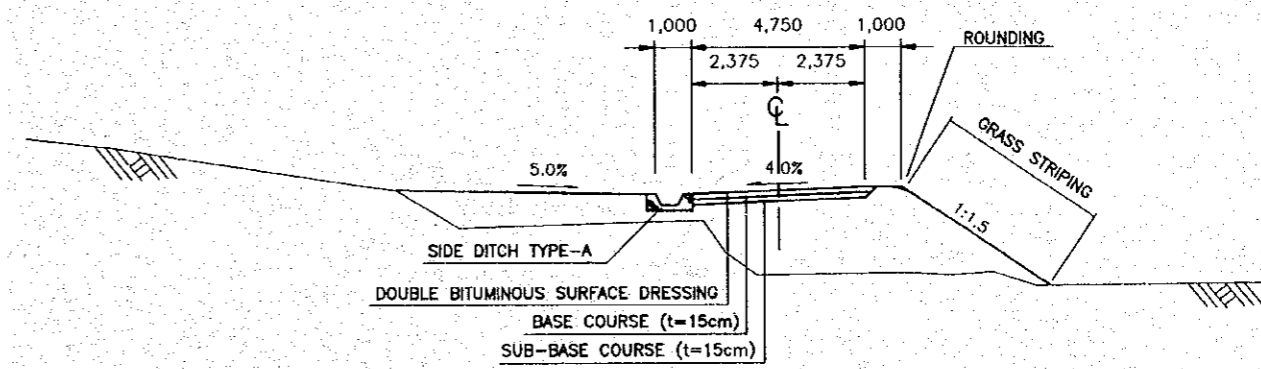
LOCATION MAP



STA.39+052.404

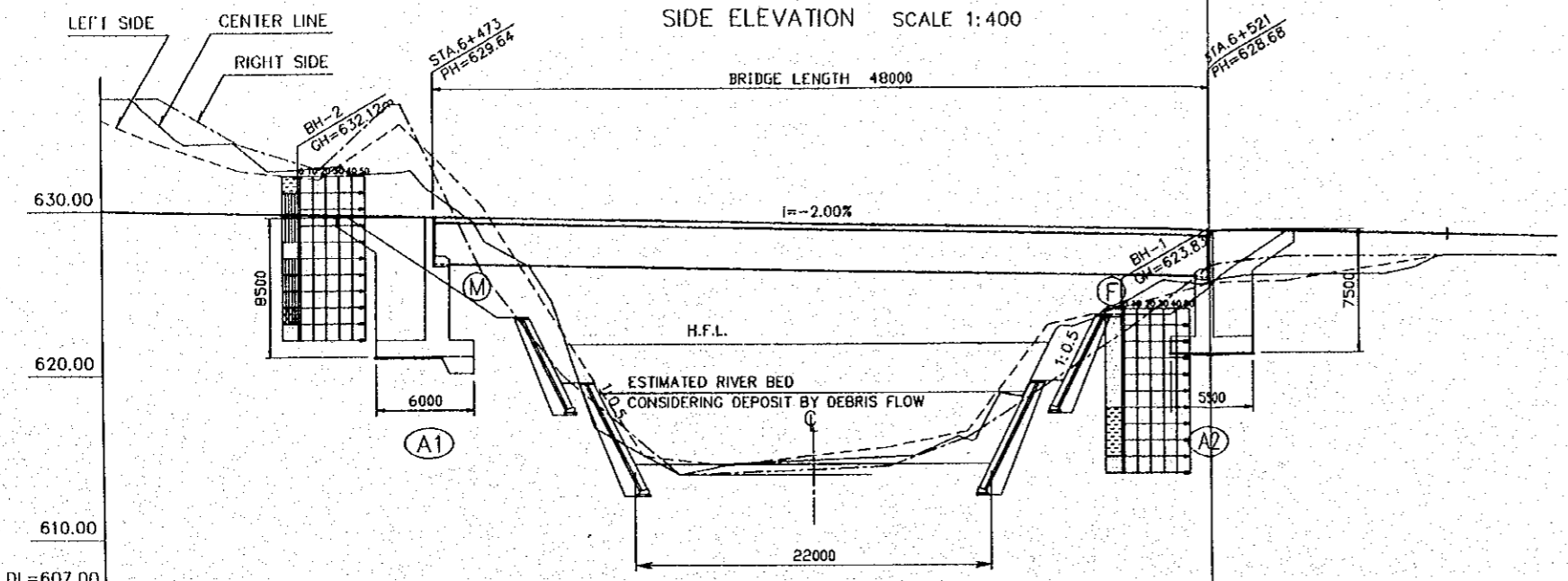


STA.39+220

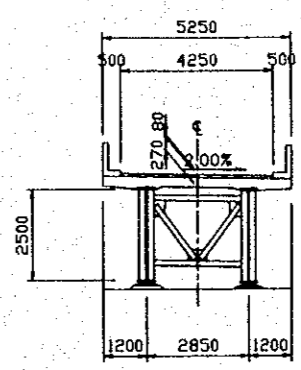


GENERAL VIEW

A-4-1
GENERAL PLAN OF
GWANG RIVER BRIDGE

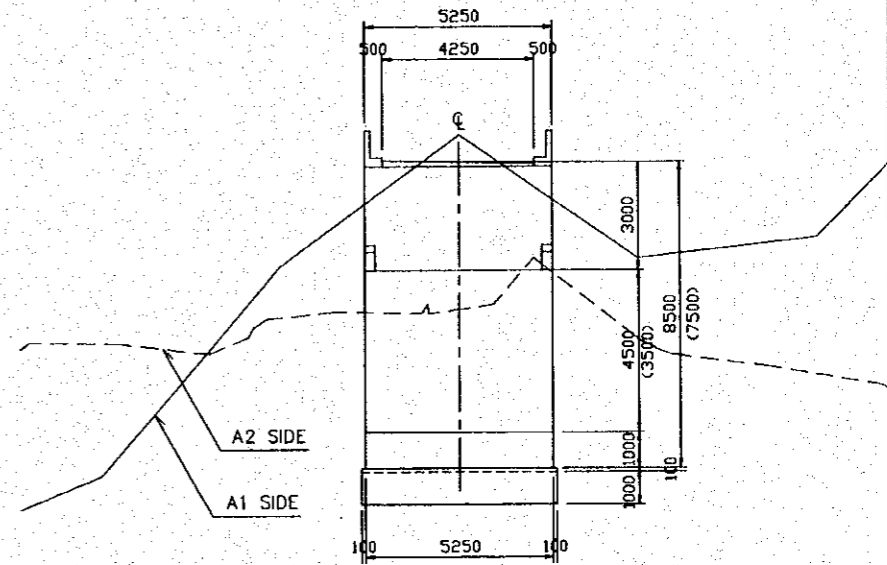


CROSS SECTION SCALE 1:200



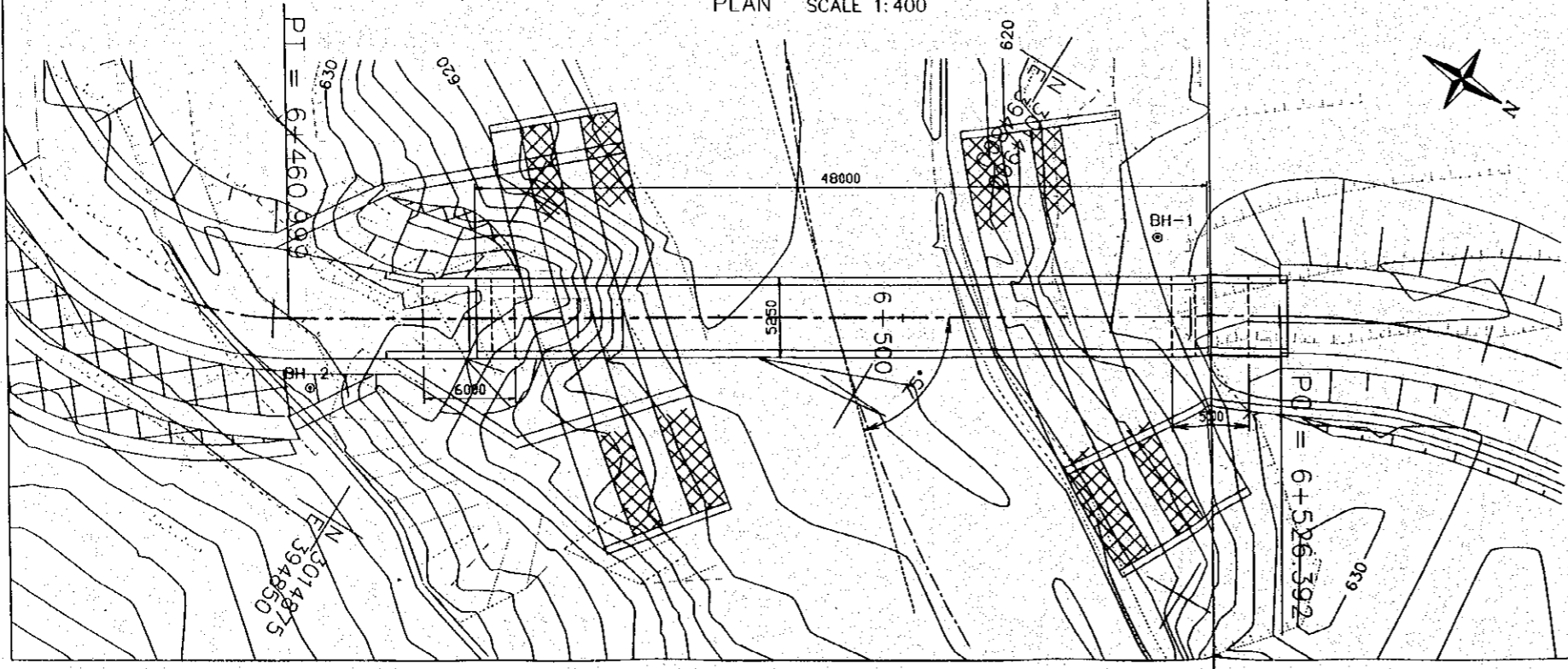
SUBSTRUCTURES SCALE 1:200

A1 (A2)



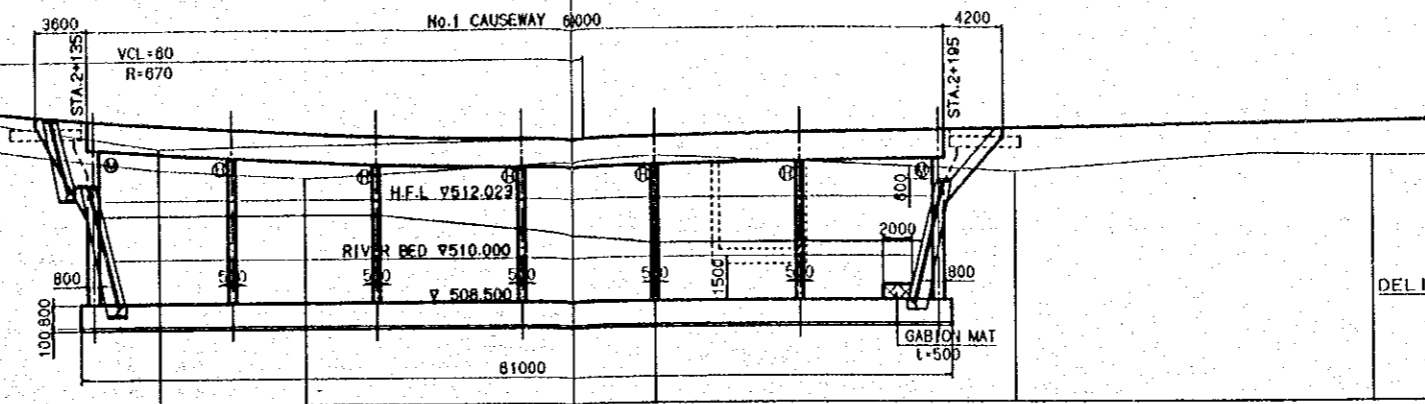
GRAND	629.91		628.51			
PROPOSED HEIGHT	629.91	629.64	629.51	629.11	628.71	628.51
GROUND HEIGHT	634.15	631.03	625.52	614.89	625.45	625.92
DISTANCE	6460.0	6473.3	6480.0	6500.0	6520.0	6530.0
STATION	6+460	+473.3	6+480	6+500	6+520	6+530
CURVE ELEMENT	R=20 L=35.999		R=∞ L=65.392		R=50 L=47.177	

PLAN SCALE 1:400



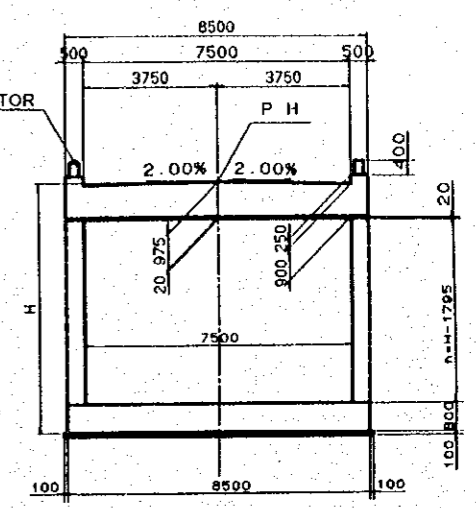
520.00
515.00
510.00
DL=505.00

ELEVATION SCALE 1:500 VER. 1:250



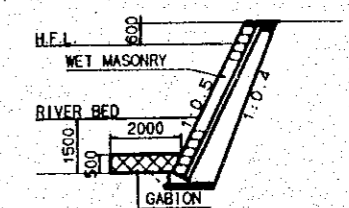
A-5-1: CAUSEWAY (NO. 1)
STA. 2+135~STA. 2+195
GENERAL PLAN

TYPICAL CROSS SECTION
SCALE 1:200

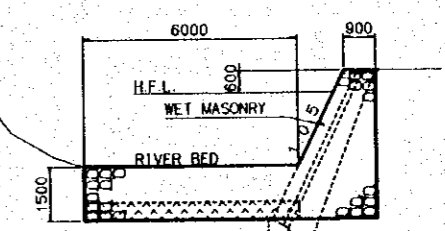


GRADIENT	L=8.000m L=70.000m		L=1.000m L=215.000m						
PROPOSED HEIGHT (PH)	516.986	516.186	515.135	514.461	514.186	514.086	514.136	514.386	514.636
GROUND ELEVATION	516.05	514.10	514.10	513.05	512.75	513.33	513.47	512.90	513.46
ACCUMULATED DISTANCE	2100.000	2110.000	2125.000	2140.000	2150.000	2170.000	2175.000	2200.000	2225.000
STATION	STA. 2+100	STA. 2+110	STA. 2+125	STA. 2+140	STA. 2+150	STA. 2+170	STA. 2+175	STA. 2+200	STA. 2+225
CURVE ELEMENT	R=300		R=		R=		R=350		

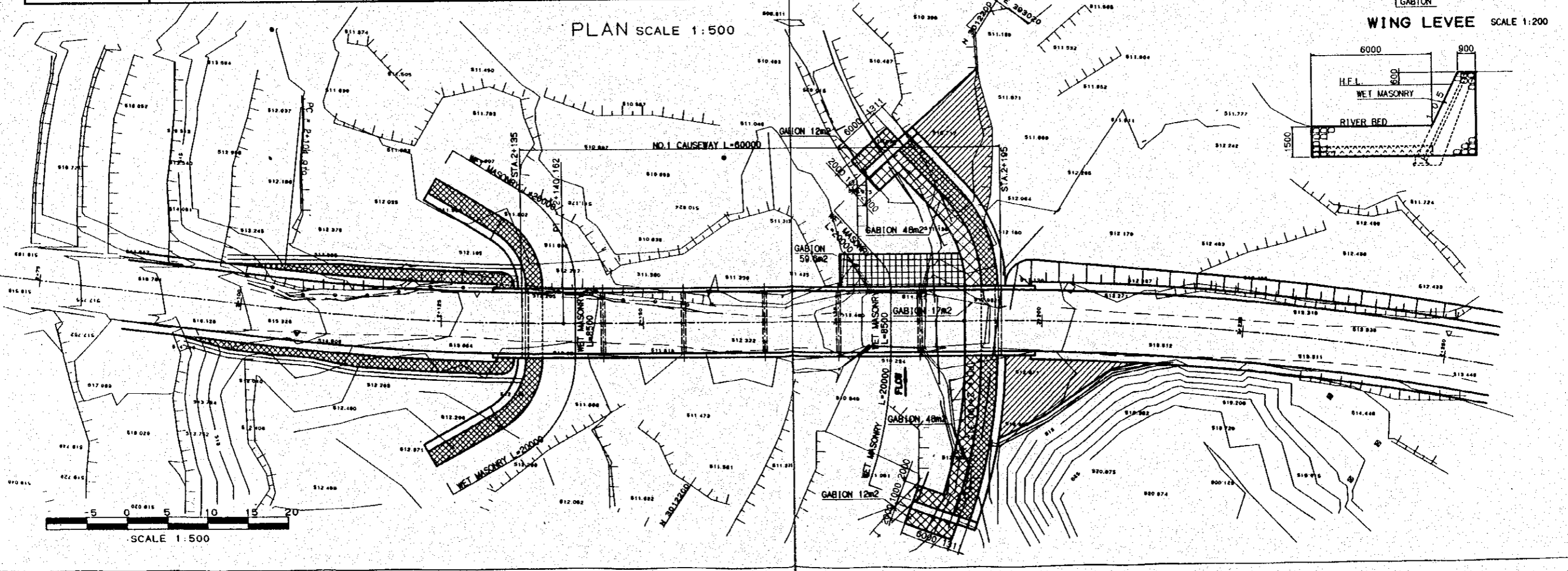
REVTMENT SCALE 1:200



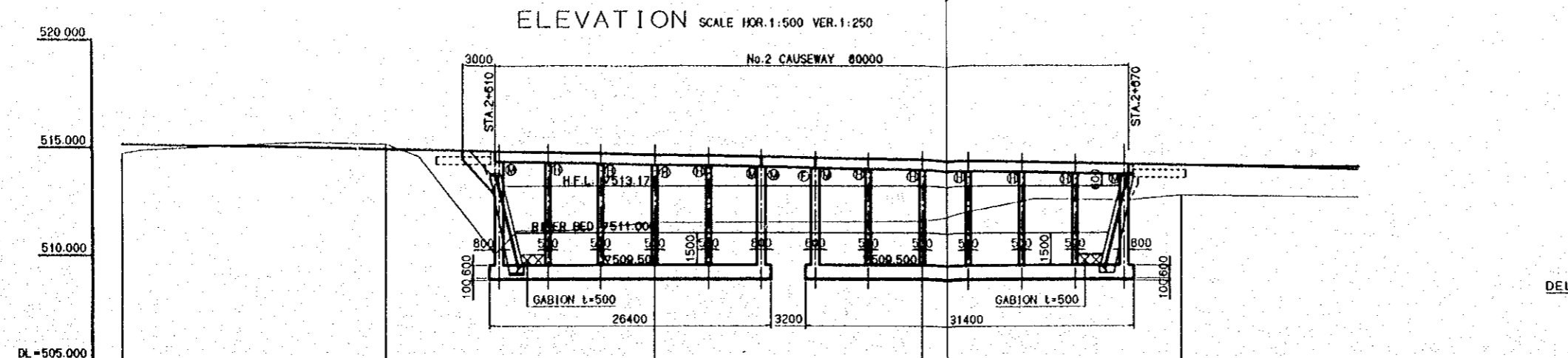
WING LEVEE SCALE 1:200



PLAN SCALE 1:500

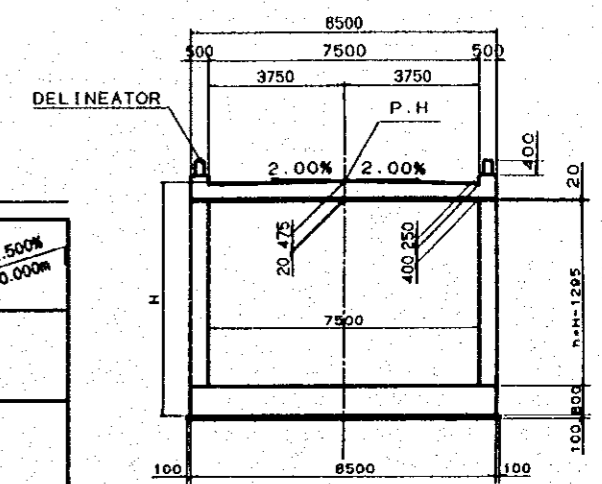


SCALE 1:500



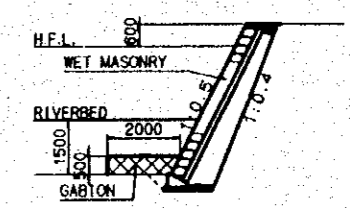
A-5-2: CAUSEWAY (NO. 2)
STA. 2+610~STA. 2+670
GENERAL PLAN

TYPICAL CROSS SECTION
SCALE 1:200

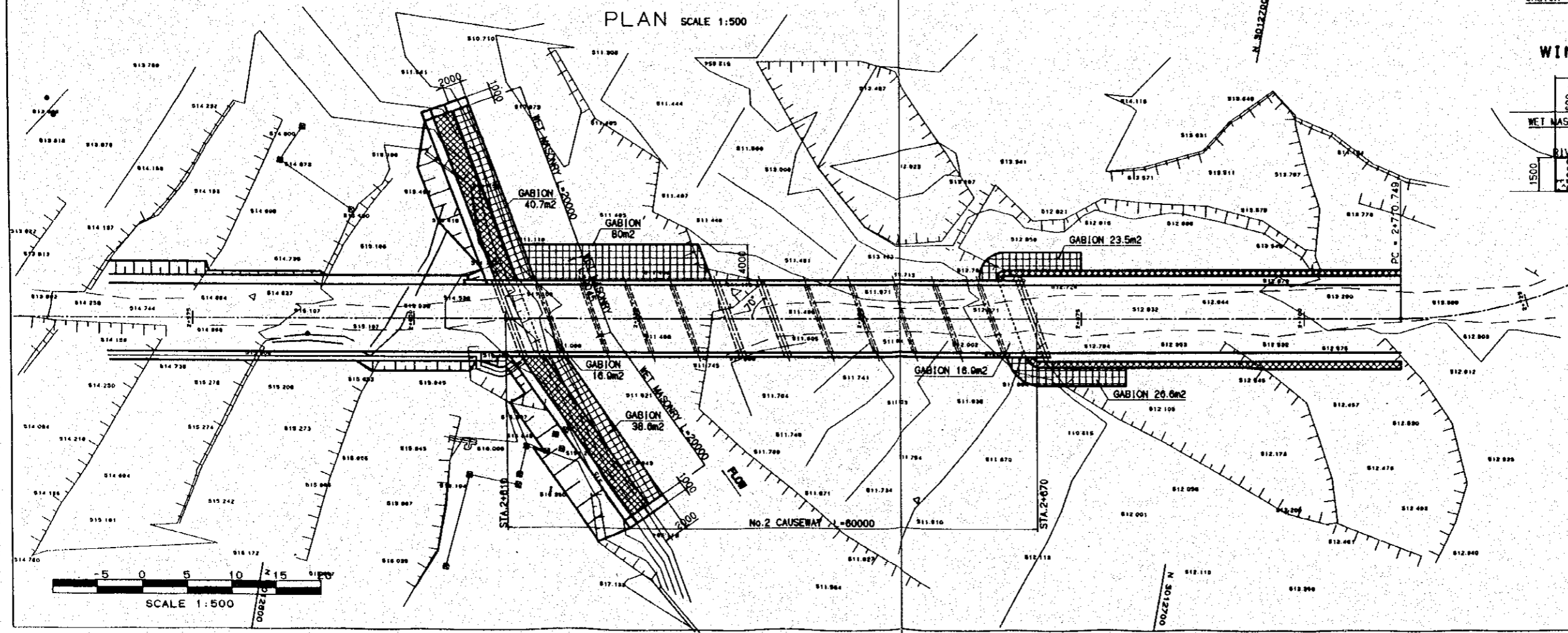
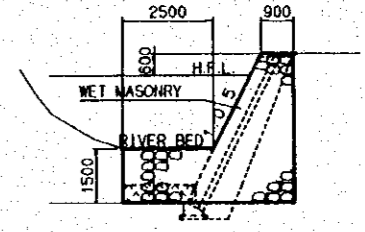


GRADIENT	1-1.000% L=205.000m		1-2.500% L=60.000m				
PROPOSED HEIGHT (PH)	515.136	514.886	514.836	514.386	514.186	514.136	513.886
GROUND ELEVATION	514.71	515.12	511.47	511.53	512.51	512.78	512.85
ACCUMULATED DISTANCE	2575.000	2800.000	2825.000	2850.000	2870.000	2875.000	2700.000
STATION	STA. 2+575	STA. 2+600	STA. 2+625	STA. 2+650	STA. 2+670	STA. 2+675	STA. 2+700
CURVE ELEMENT	R=∞						

REVETMENT SCALE 1:200

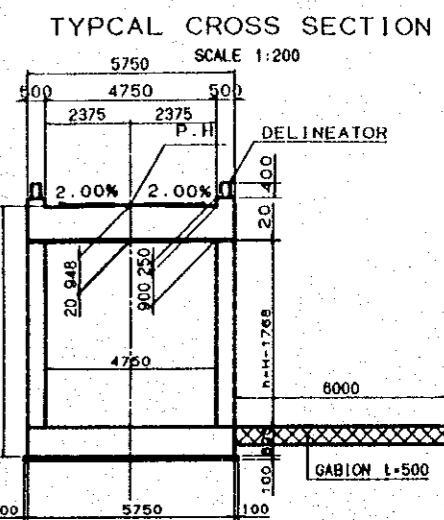
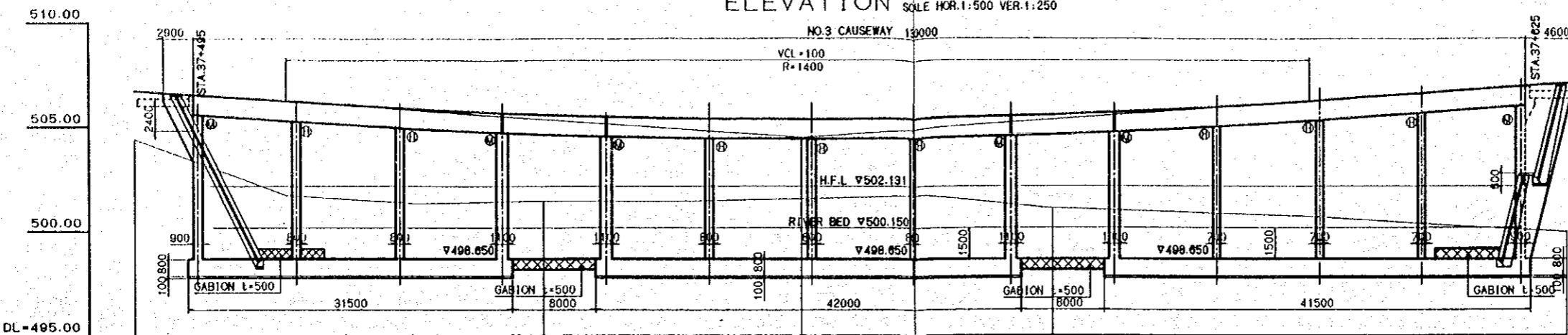


WING LEVEE SCALE 1:200

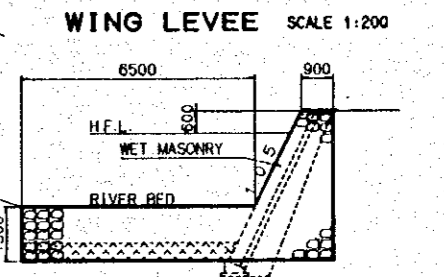
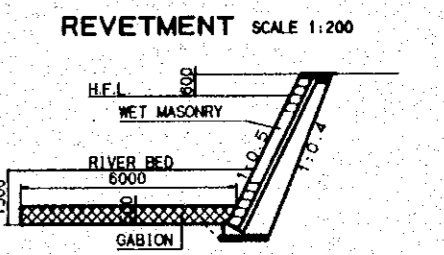


ELEVATION SCALE HOR. 1:500 VER. 1:250

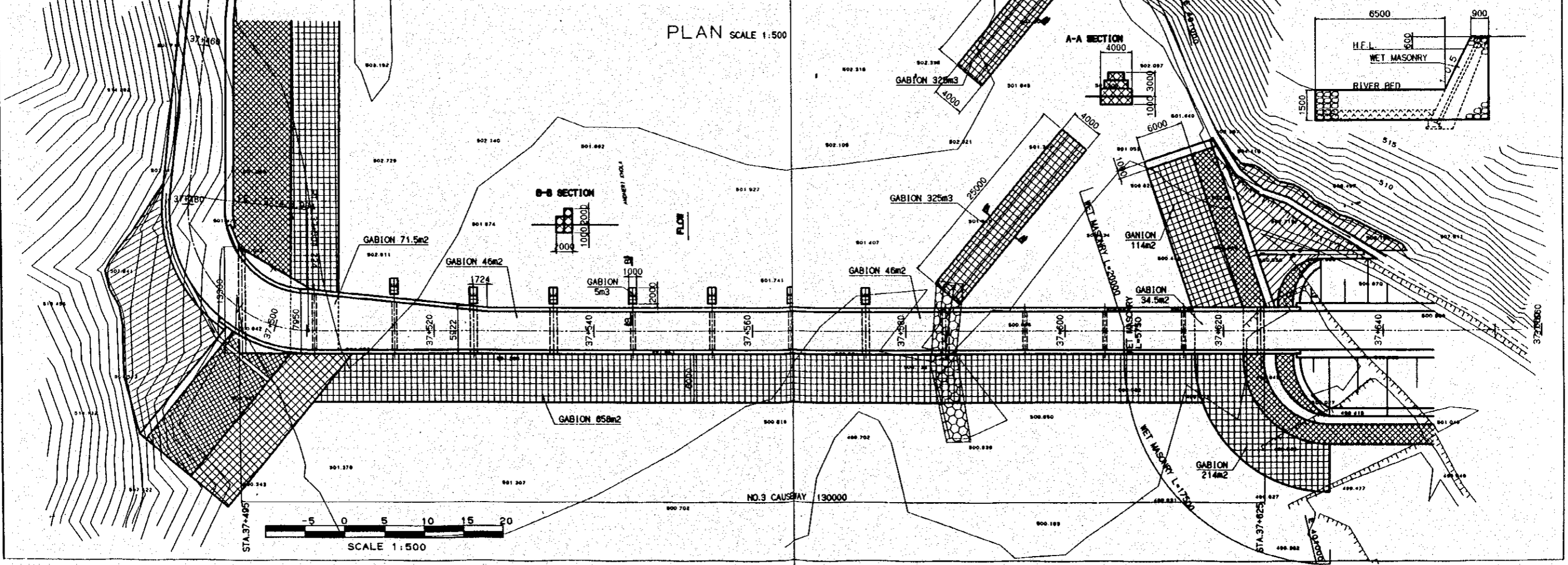
A-5-3: CAUSEWAY (NO. 3)
STA. 37+495~STA. 37+625
GENERAL PLAN



GRADIENT	1+3.500% L=475.000m		504.456		1+3.500% L=110.000m	
PROPOSED HEIGHT (PH)	508.346	508.736	505.400	505.344	505.568	506.072
GROUND ELEVATION	502.42	501.34	501.40	501.61	501.06	500.75
ACCUMULATED DISTANCE	37500.000	37520.000	37540.000	37560.000	37580.000	37600.000
STATION	37+500	37+520	37+540	37+560	37+580	37+600
CURVE ELEMENT	R=15		R=∞		R=∞	

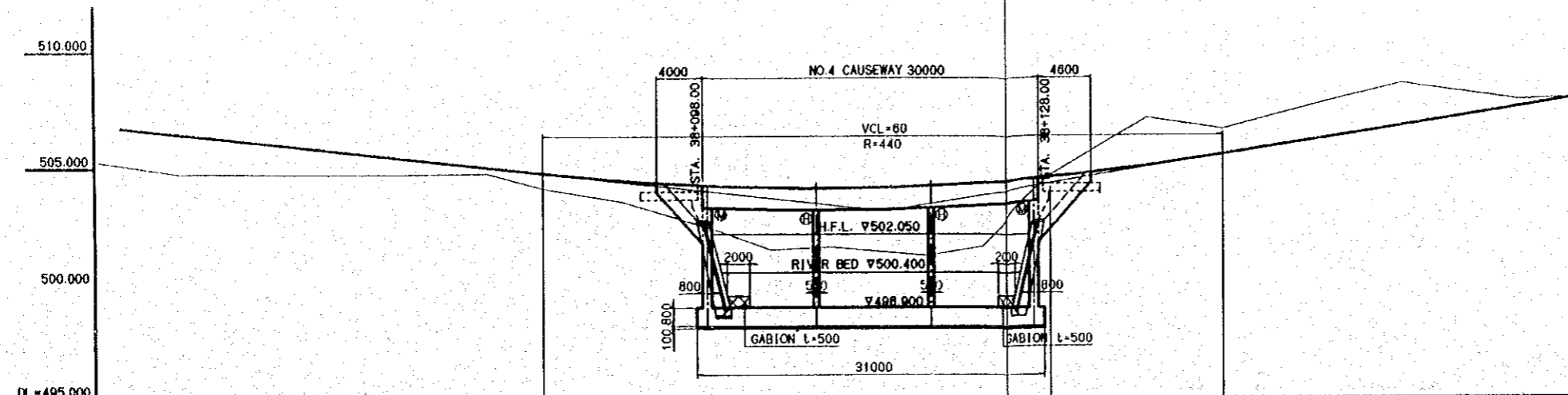


PLAN SCALE 1:500

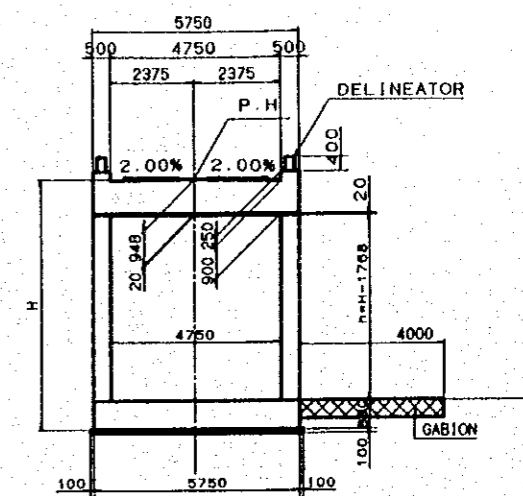


ELEVATION SCALE HOR. 1:500 VER. 1:20

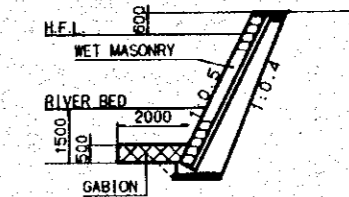
A-5-4: CAUSEWAY (NO. 4)
STA. 38+98~STA. 38+128
GENERAL PLAN



TYPICAL CROSS SECTION
SCALE 1:200

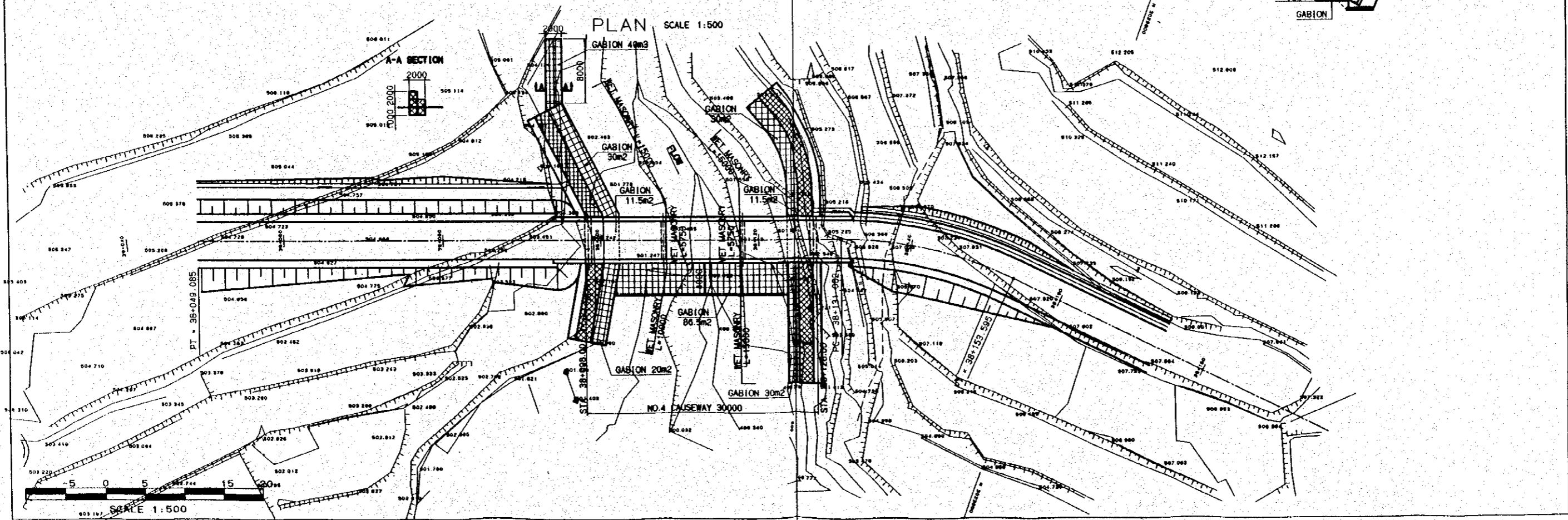


REVETMENT SCALE 1:200



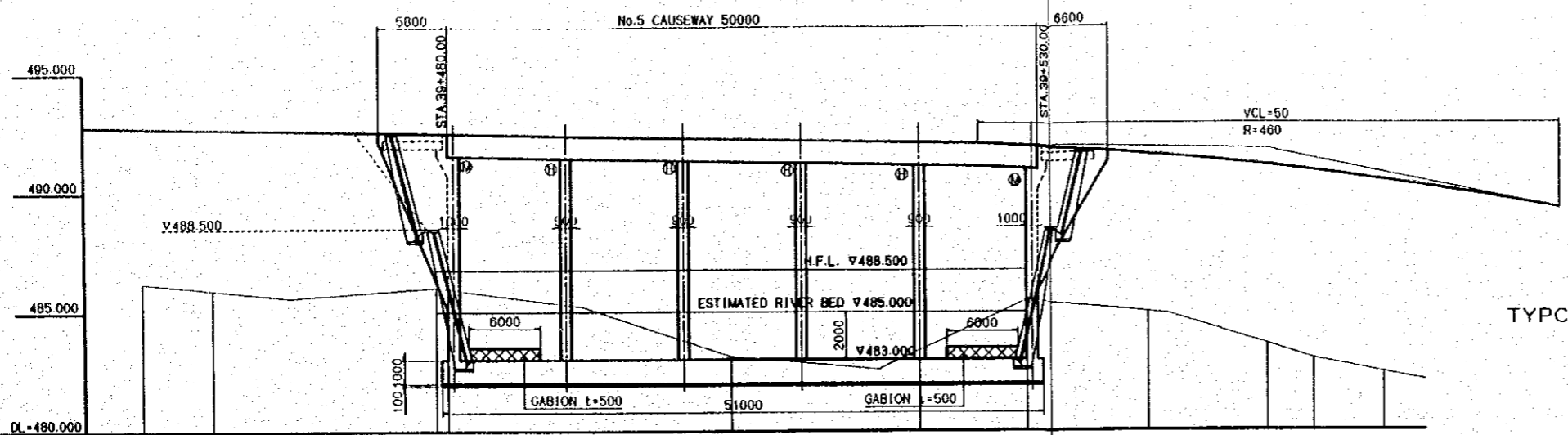
GRADIENT	1=5.500% L=120.000m		503.031		1=8.000% L=90.000m	
PROPOSED HEIGHT (PH)	506.001	504.901	504.089	504.044	504.159	506.711
GROUND ELEVATION	504.68	504.57	502.08	501.28	501.30	508.51
ACCUMULATED DISTANCE	38+000.000	38+080.000	38+100.000	38+114.000	38+120.000	38+160.000
STATION	STA. 38+000	STA. 38+080	STA. 38+100	STA. 38+114	STA. 38+120	STA. 38+160
CURVE ELEMENT	R=80		R=∞		R=50	R=∞

PLAN SCALE 1:500

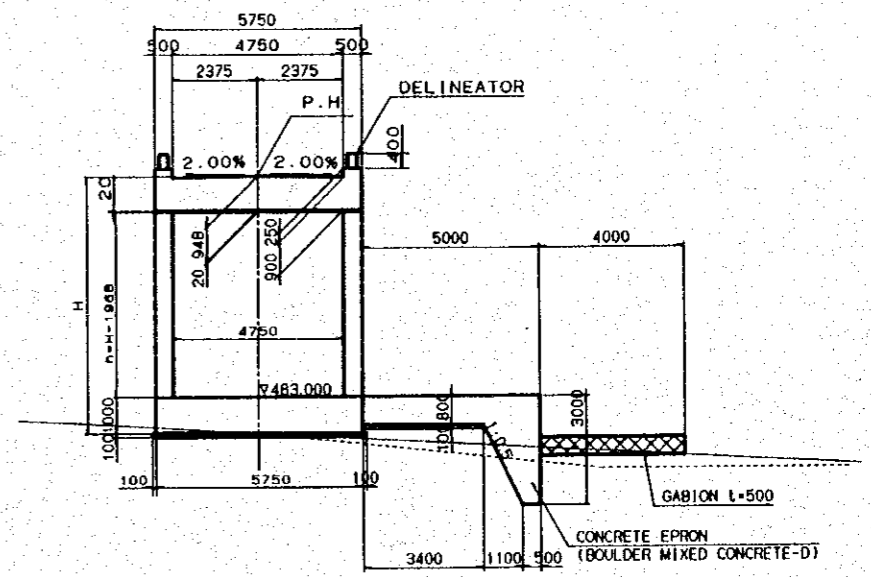


ELEVATION SCALE HOR:1:500 VER:1:250

A-5-5: CAUSEWAY (NO.5)
STA. 39+480~STA. 39+530
GENERAL PLAN

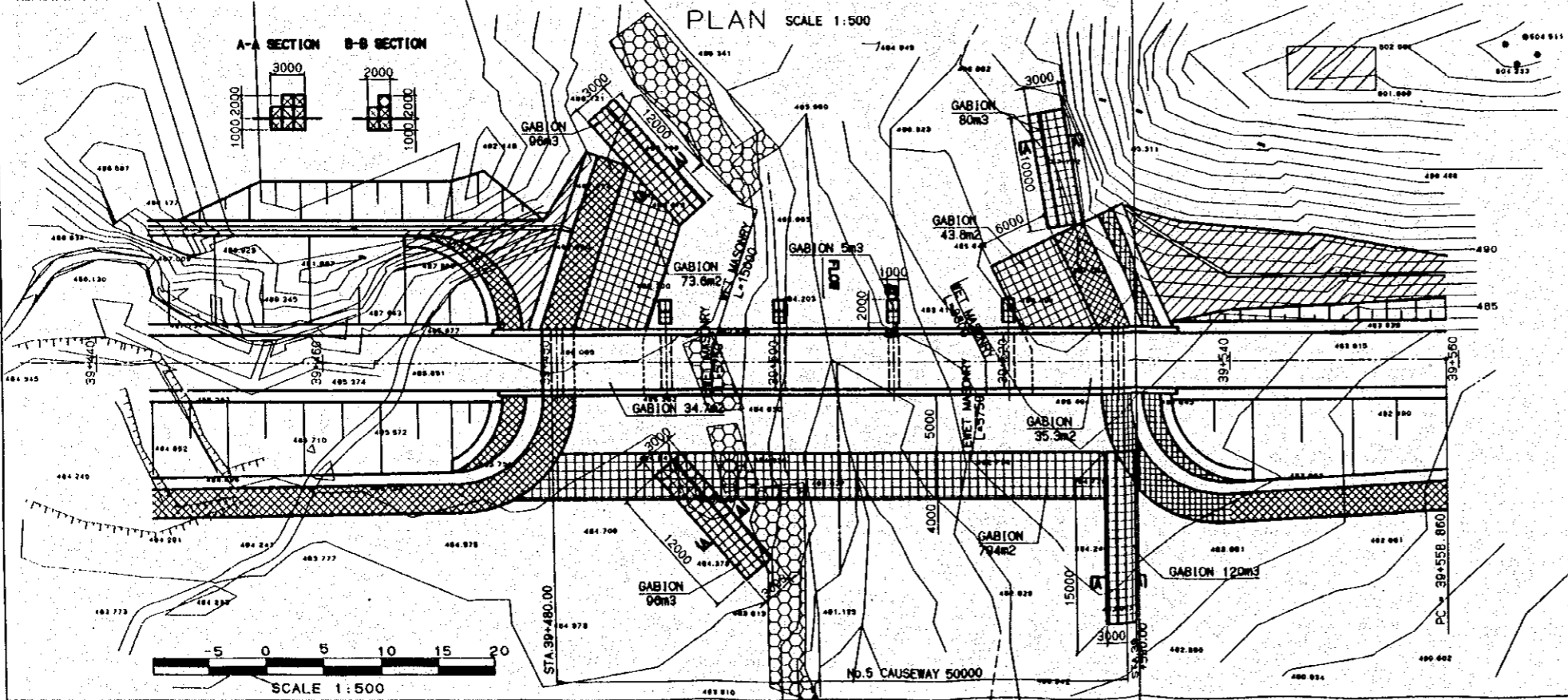
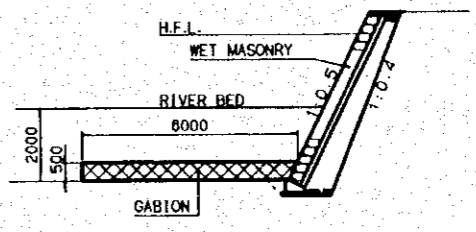


TYPICAL CROSS SECTION SCALE 1:200



GRADIENT	I=1.000% L=246.000		I=10.000% R=80			
PROPOSED HEIGHT (PH)	492.871	492.471	492.271	491.869	491.209	489.569
GROUND ELEVATION	485.93	485.96	485.78	483.39	484.97	482.43
ACCUMULATED DISTANCE	39+480.000	39+480.000	39+500.000	39+520.000	39+540.000	39+560.000
STATION	STA. 39+480	STA. 39+480	STA. 39+500	STA. 39+520	STA. 39+540	STA. 39+560
CURVE ELEMENT	R=					R=80

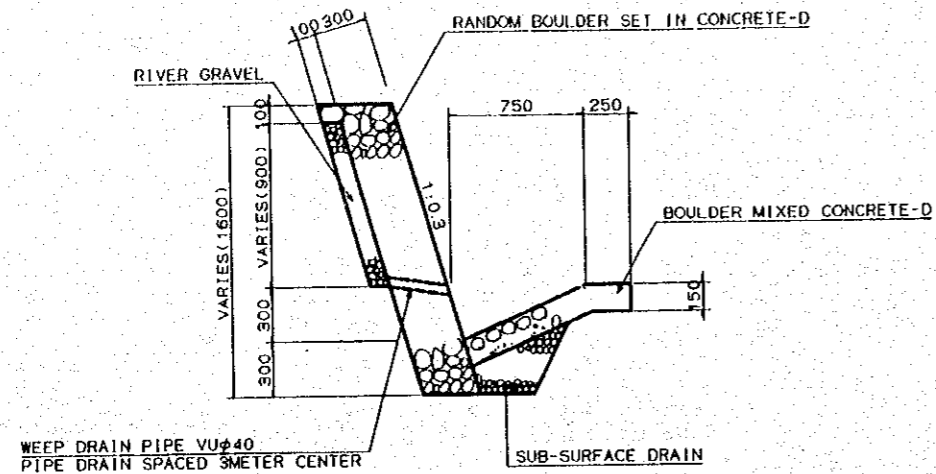
REVTMENT SCALE 1:200



DETAIL OF SIDE DITCH (1)

A-6-1
DETAIL OF SIDE DITCH
(1)

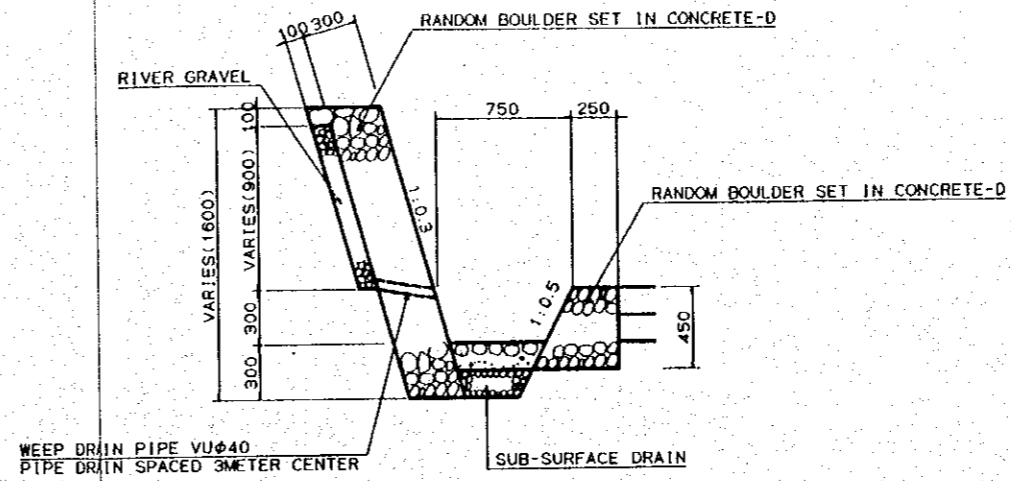
SIDE DITCH TYPE-A (SD-A) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	5.01	
BOULDER MIXED CONCRETE-D	m ³	1.50	
RIVER GRAVEL	m ³	0.94	
SUB-SURFACE DRAIN	m ³	0.97	
WEEP DRAIN PIPE VUφ40	m	1.10	
EXCAVATION	m ³	2.11	

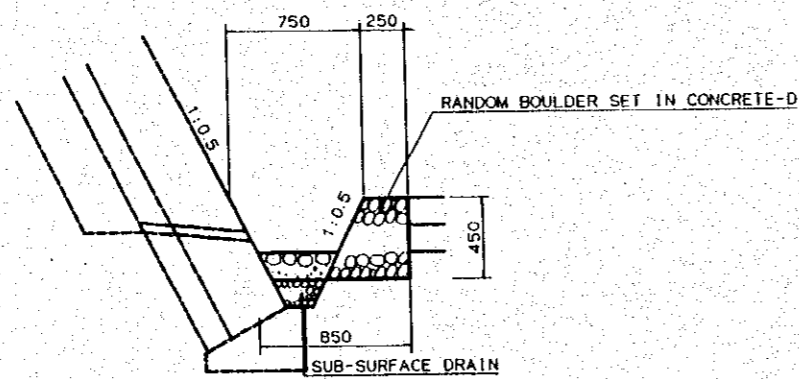
SIDE DITCH TYPE-B (SD-B) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	0.64	
BOULDER MIXED CONCRETE-D	m ³	0.68	
RIVER GRAVEL	m ³	0.94	
SUB-SURFACE DRAIN	m ³	0.50	
WEEP DRAIN PIPE VUφ40	m	1.10	
EXCAVATION	m ³	2.77	

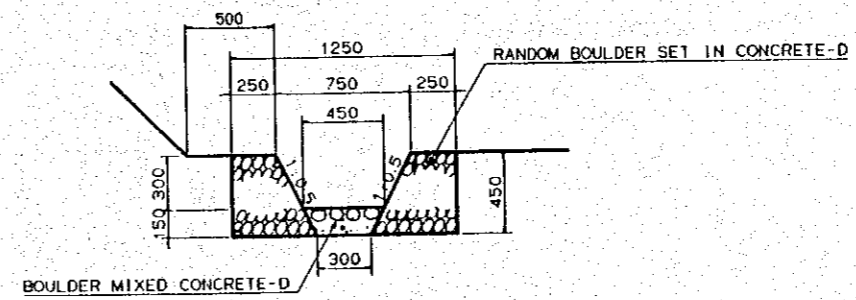
SIDE DITCH TYPE-C (SD-C) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	1.63	
BOULDER MIXED CONCRETE-D	m ³	0.56	
SUB-SURFACE DRAIN	m ³	0.34	
EXCAVATION	m ³	0.47	

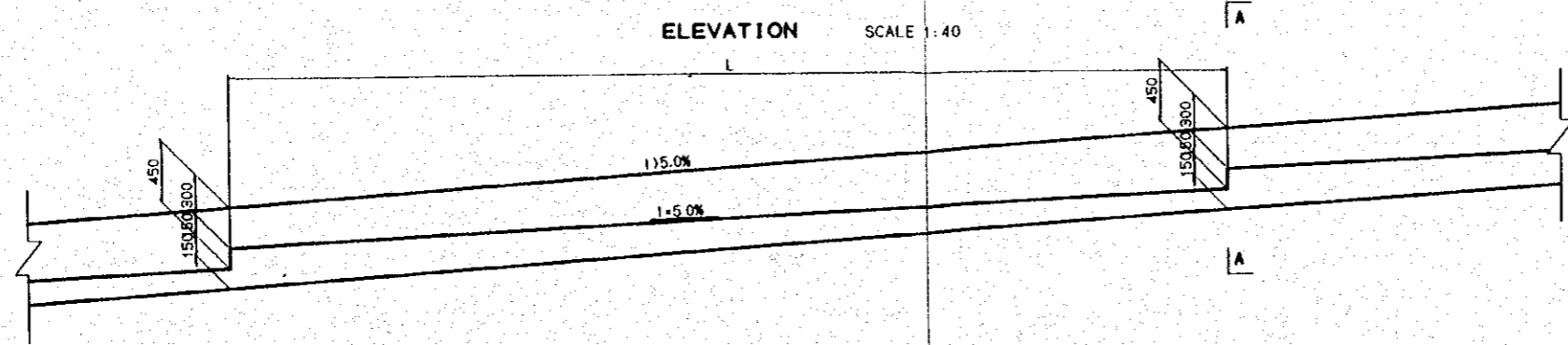
SIDE DITCH TYPE-D (SD-D) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

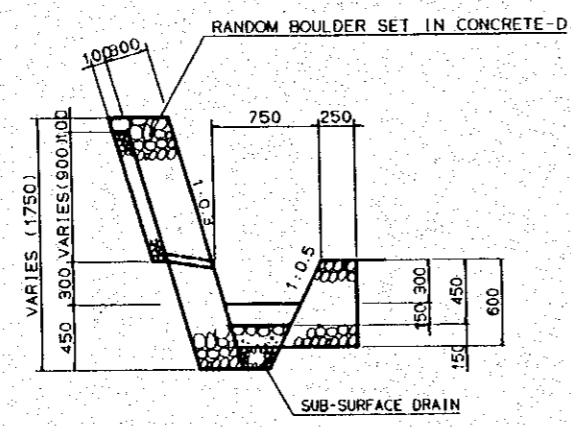
ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	3.26	
BOULDER MIXED CONCRETE-D	m ³	0.50	
EXCAVATION	m ³	1.88	

DETAIL OF SIDE DITCH AT STEP SECTION

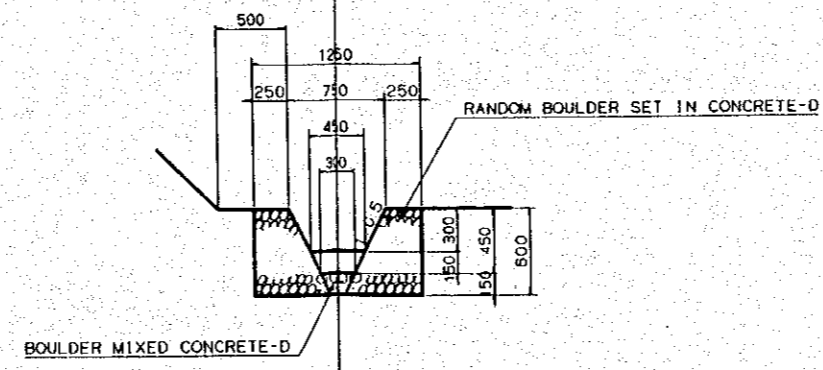


CROSS SECTION A-A SCALE 1:40

SIDE DITCH TYPE-B (SD-B)



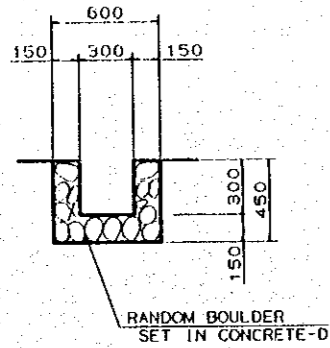
SIDE DITCH TYPE-D (SD-D)



DETAIL OF U-SHAPED DRAIN (1)

A-6-4
DETAIL OF
U-SHAPED DRAIN
(1)

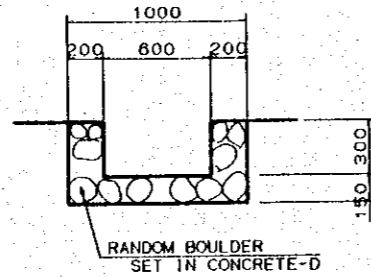
U-SHAPED DRAINAGE 300x300
(UD-300x300) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	1.80	
EXCAVATION	m ³	3.71	

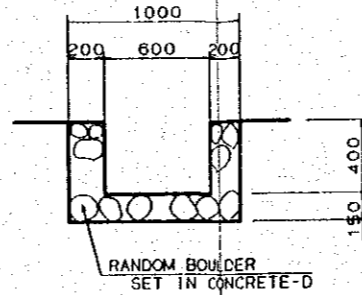
U-SHAPED DRAINAGE 600x300
(UD-600x300) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	2.70	
EXCAVATION	m ³	5.51	

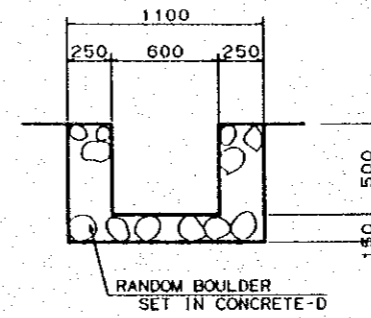
U-SHAPED DRAINAGE 600x400
(UD-600x400) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	3.10	
EXCAVATION	m ³	7.01	

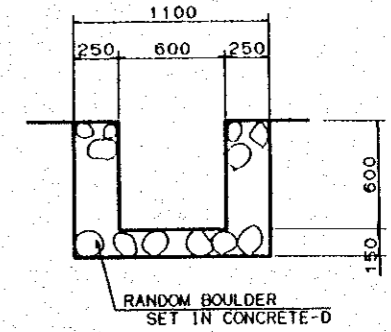
U-SHAPED DRAINAGE 600x500
(UD-600x500) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	4.15	
EXCAVATION	m ³	9.26	

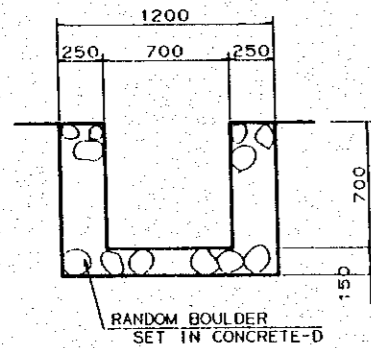
U-SHAPED DRAINAGE 600x600
(UD-600x600) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	4.85	
EXCAVATION	m ³	11.06	

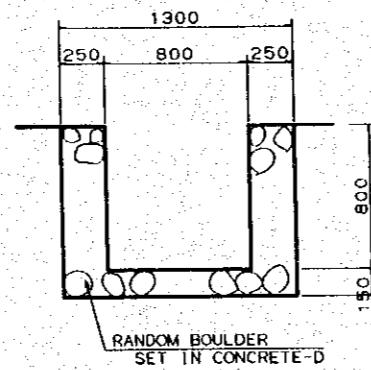
U-SHAPED DRAINAGE 700x700
(UD-700x700) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	5.30	
EXCAVATION	m ³	13.81	

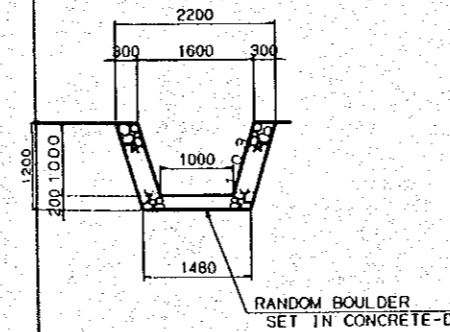
U-SHAPED DRAINAGE 800x800
(UD-800x800) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	5.95	
EXCAVATION	m ³	16.88	

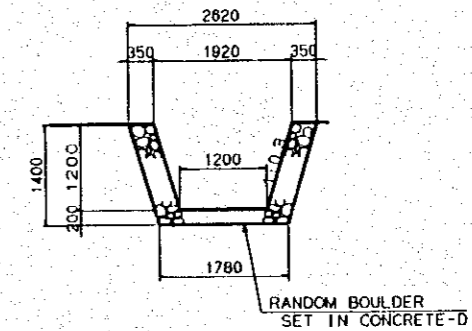
U-SHAPED DRAINAGE 1000x1000
(UD-1000x1000) SCALE 1:100



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	9.08	
EXCAVATION	m ³	22.08	

U-SHAPED DRAINAGE 1200x1200
(UD-1200x1200) SCALE 1:100



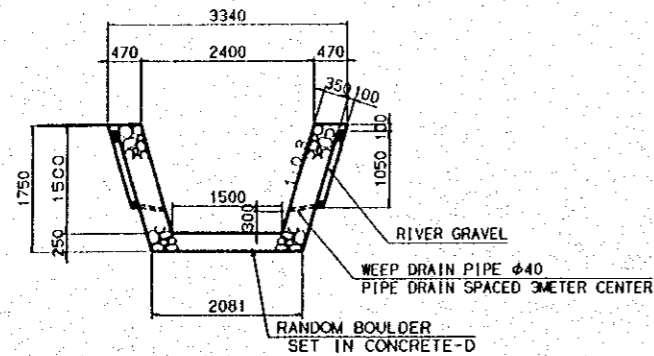
WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	12.08	
EXCAVATION	m ³	30.80	

DETAIL OF U-SHAPED DRAIN (2)

A-8-5
DETAIL OF
U-SHAPED DRAIN
(2)

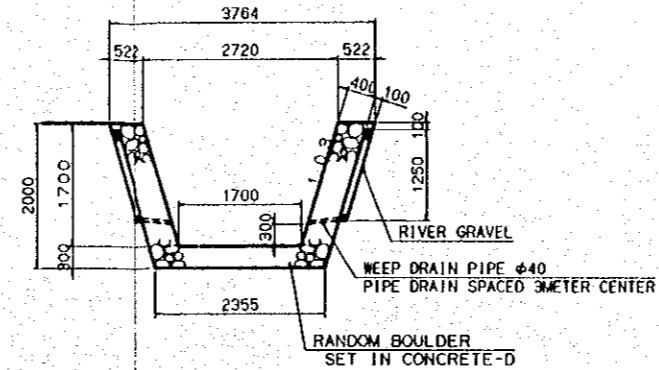
U-SHAPED DRAINAGE 1500x1500
(UD-1500x1500) SCALE 1:100



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	14.89	
EXCAVATION	m ³	47.43	
FILTER MATERIAL	m ³	2.18	
WEEP DRAIN PIPE	m	2.93	

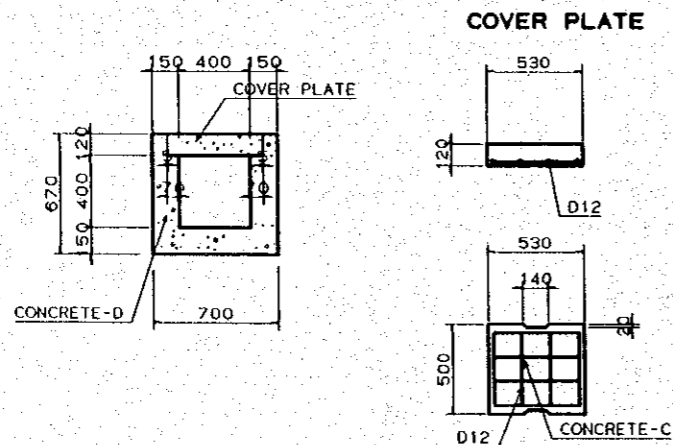
U-SHAPED DRAINAGE 1700x1700
(UD-1700x1700) SCALE 1:100



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	22.57	
EXCAVATION	m ³	61.19	
FILTER MATERIAL	m ³	2.60	
WEEP DRAIN PIPE	m	2.67	

U-SHAPED DRAINAGE WITH COVER 400x400
(UDC-400x400) SCALE 1:40



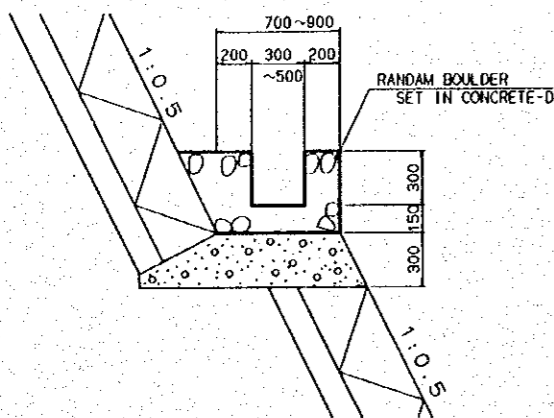
WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
CONCRETE-C	m ³	0.50	COVER PLATE
CONCRETE-D	m ³	2.41	
FORM	m ²	27.65	
REINFORCEMENT BAR D12	k#f	50	
EXCAVATION	m ³	2.93	

DETAIL OF U-SHAPED DRAIN (3)

A-6-6
DETAIL OF
U-SHAPED DRAIN
(3)

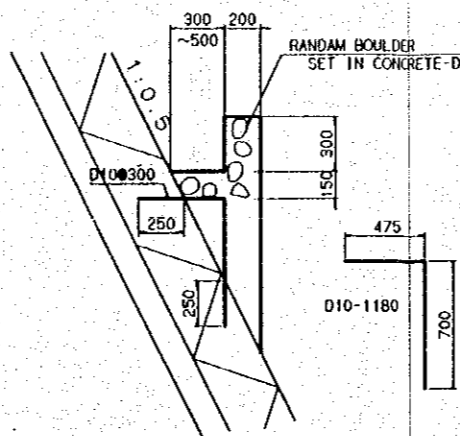
U-SHAPED DRAINAGE TYPE-M
(UD-K) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	2.76	

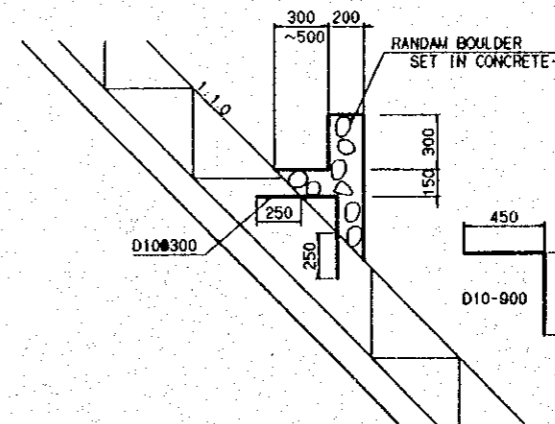
U-SHAPED DRAINAGE TYPE-N
(UD-RW05) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	3.10	
REINFORCEMENT BAR ϕ 0.10	kg	24	

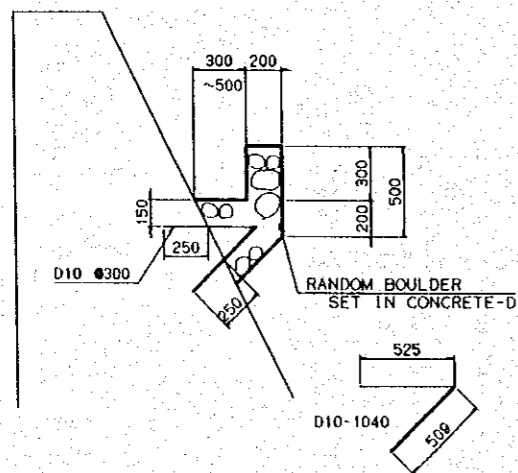
U-SHAPED DRAINAGE TYPE-O
(UD-RW10) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	1.85	
REINFORCEMENT BAR ϕ 0.10	kg	18	

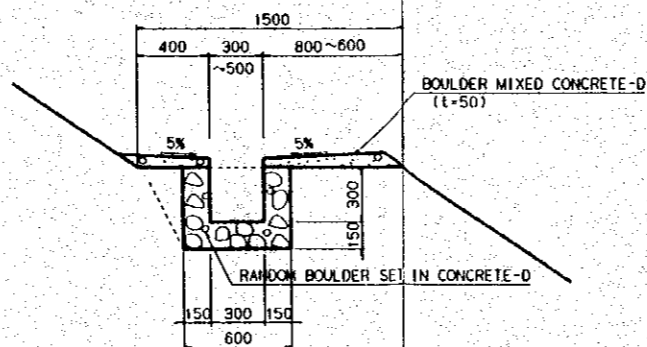
U-SHAPED DRAINAGE TYPE-P
(UD-GW) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	2.03	
REINFORCEMENT BAR ϕ 0.10	kg	21	
FORM	m ²	5.77	

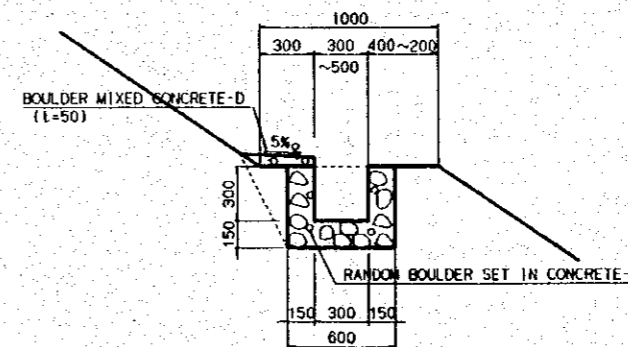
U-SHAPED DRAINAGE TYPE-Q
(UDK-150) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	1.80	
BOULDER MIXED CONCRETE-D	m ³	0.78	
FORM	m ²	1.0	

U-SHAPED DRAINAGE TYPE-R
(UDK-100) SCALE 1:40



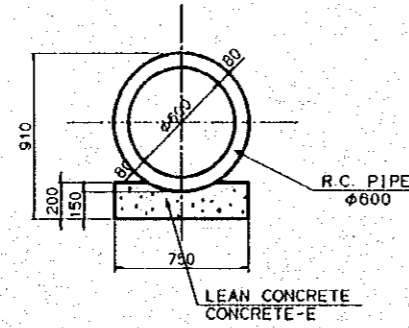
WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
RANDOM BOULDER SET IN CONCRETE-D	m ³	1.80	
BOULDER MIXED CONCRETE-D	m ³	0.20	
FORM	m ²	0.5	

DETAIL OF CROSS DRAIN (1)

A-6-7
DETAIL OF CROSS DRAIN
(1)

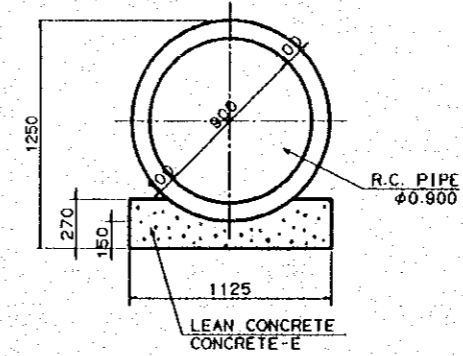
PIPE (φ600) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
R.C. PIPE (φ600)	m	10.00	
LEAN CONCRETE-E	m ³	1.37	
FORM WORK	m ²	4.00	
EXCAVATION	m ³	7.50	

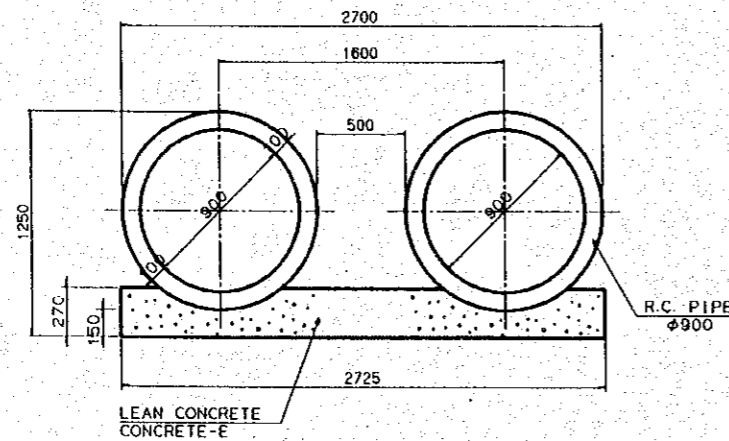
PIPE (φ900) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
R.C. PIPE (φ900)	m	10.00	
LEAN CONCRETE-E	m ³	2.48	
FORM WORK	m ²	5.40	
EXCAVATION	m ³	11.25	

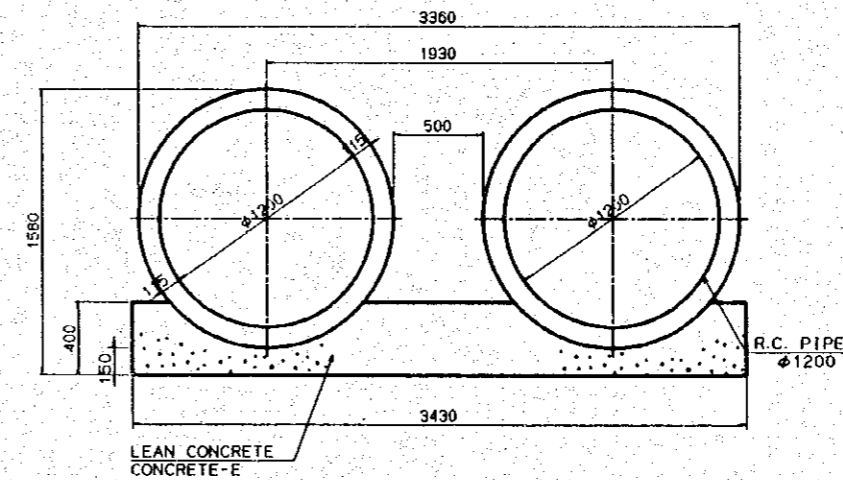
PIPE (φ900×2) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
R.C. PIPE (φ900)	m	20.00	
LEAN CONCRETE-E	m ³	5.80	
FORM WORK	m ²	5.40	
EXCAVATION	m ³	27.25	

PIPE (φ1200×2) SCALE 1:40



WORK QUANTITIES PER UNIT (PER 10.0 m)

ITEM	UNIT	QUANTITY	REMARKS
R.C. PIPE (φ1200)	m	20.00	
LEAN CONCRETE-E	m ³	11.83	
FORM WORK	m ²	8.00	
EXCAVATION	m ³	34.30	