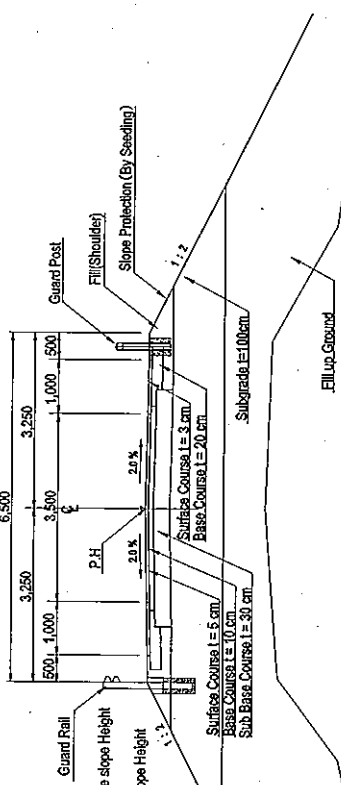
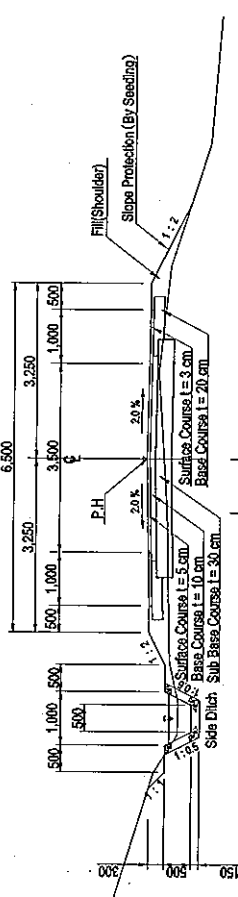


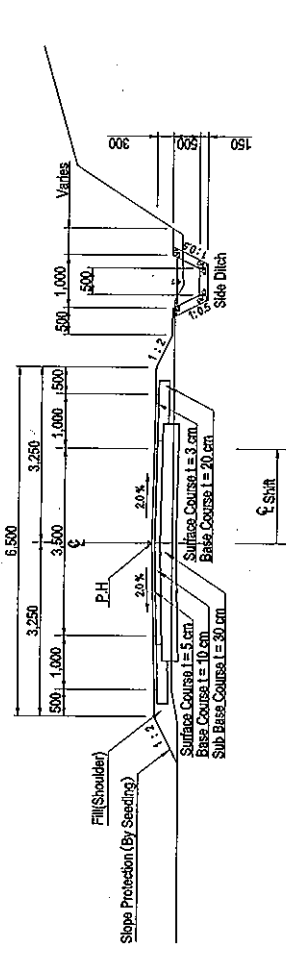
※Note:
 1. Guard posts shall be constructed where slope height is from two meters to four meters.
 2. Guard Rails shall be installed where slope height exceeds four meters.



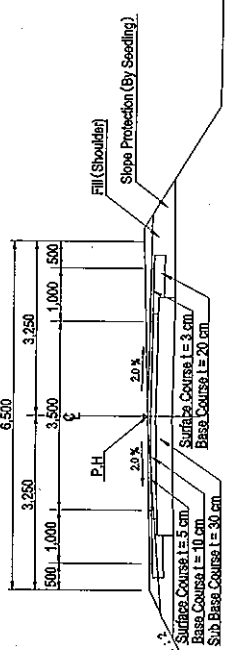
Pavement - 3
 (4+600~7+120, 13+699~13+876, 15+487~15+713)



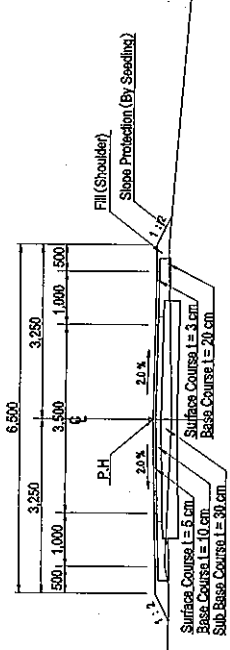
Pavement - 4
 (15+103~15+487)



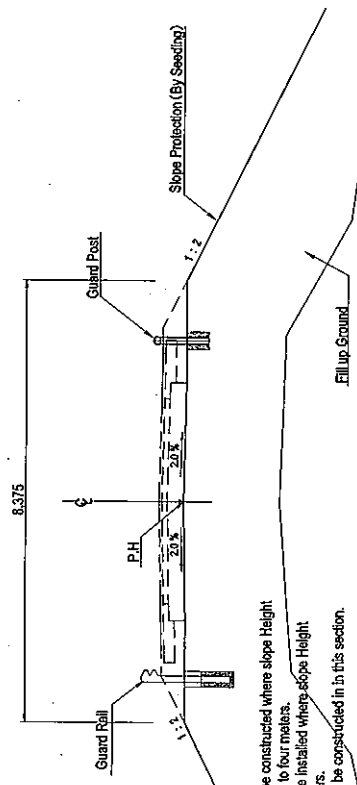
Pavement - 5
 (7+120~13+669, 14+586~14+895)



Pavement - 1
 (0+000~4+600)



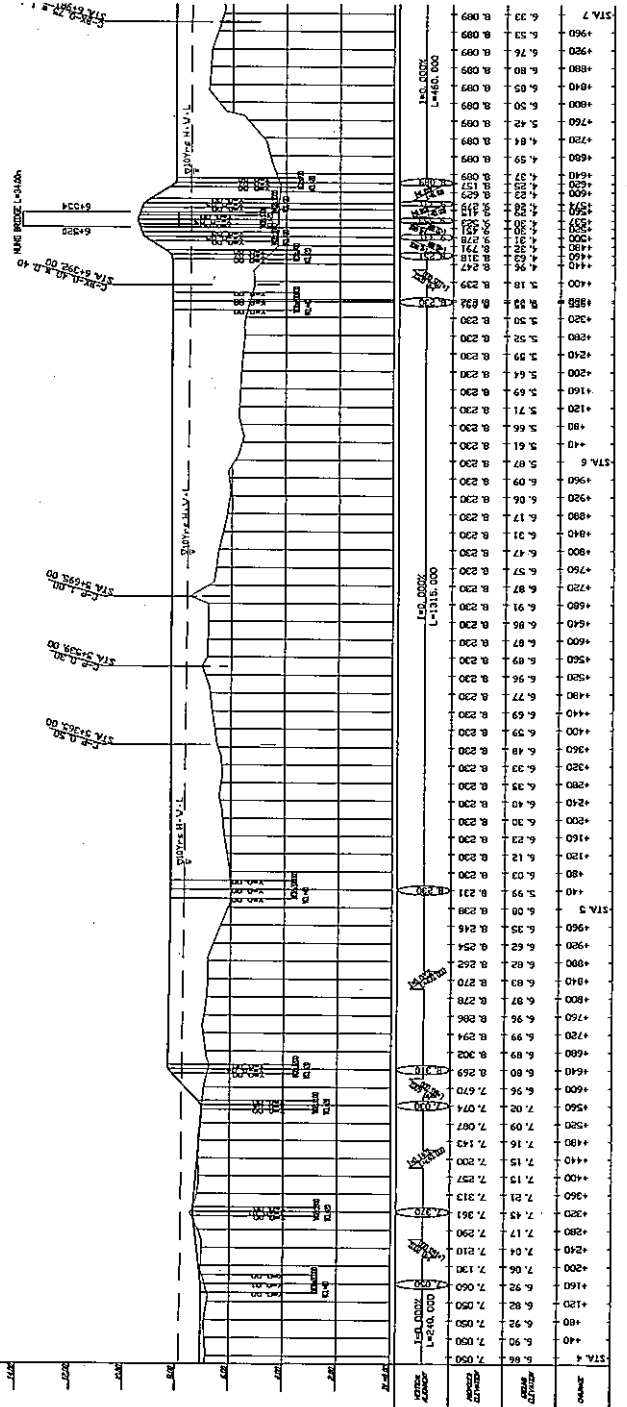
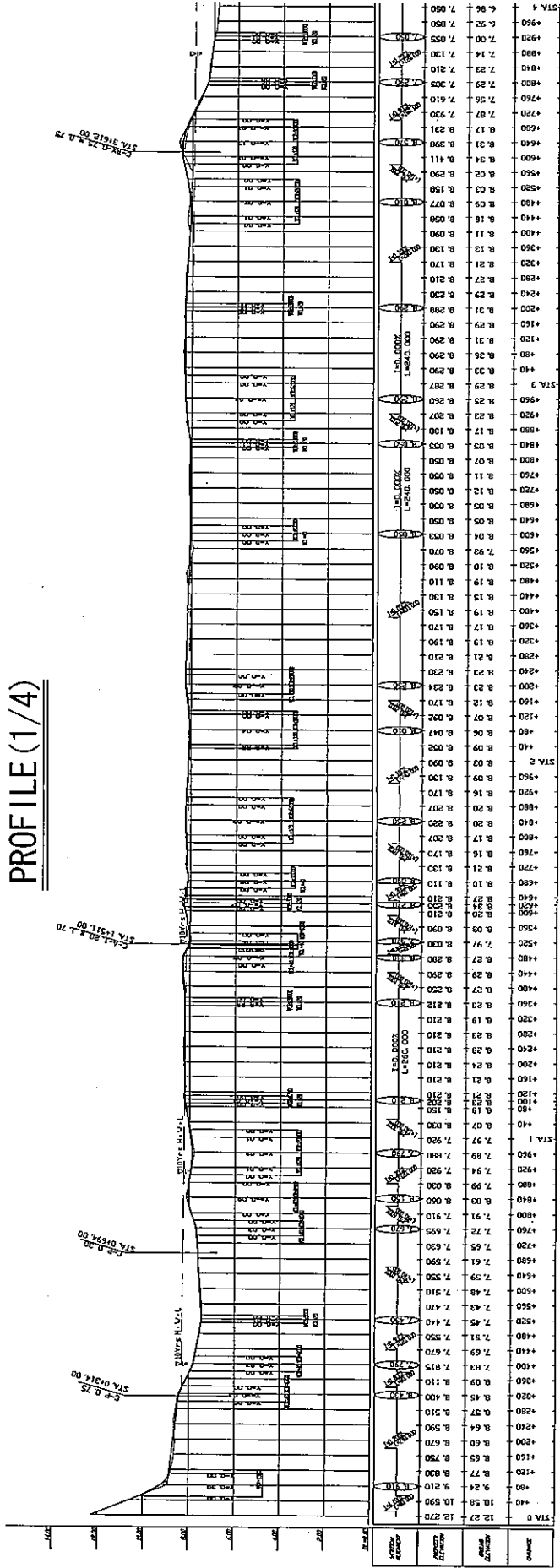
Pavement - 2
 (13+876~14+586, 14+895~15+103)



Pavement - 6
 (15+762~16+427, 18+393~18+781, 19+382~19+732)

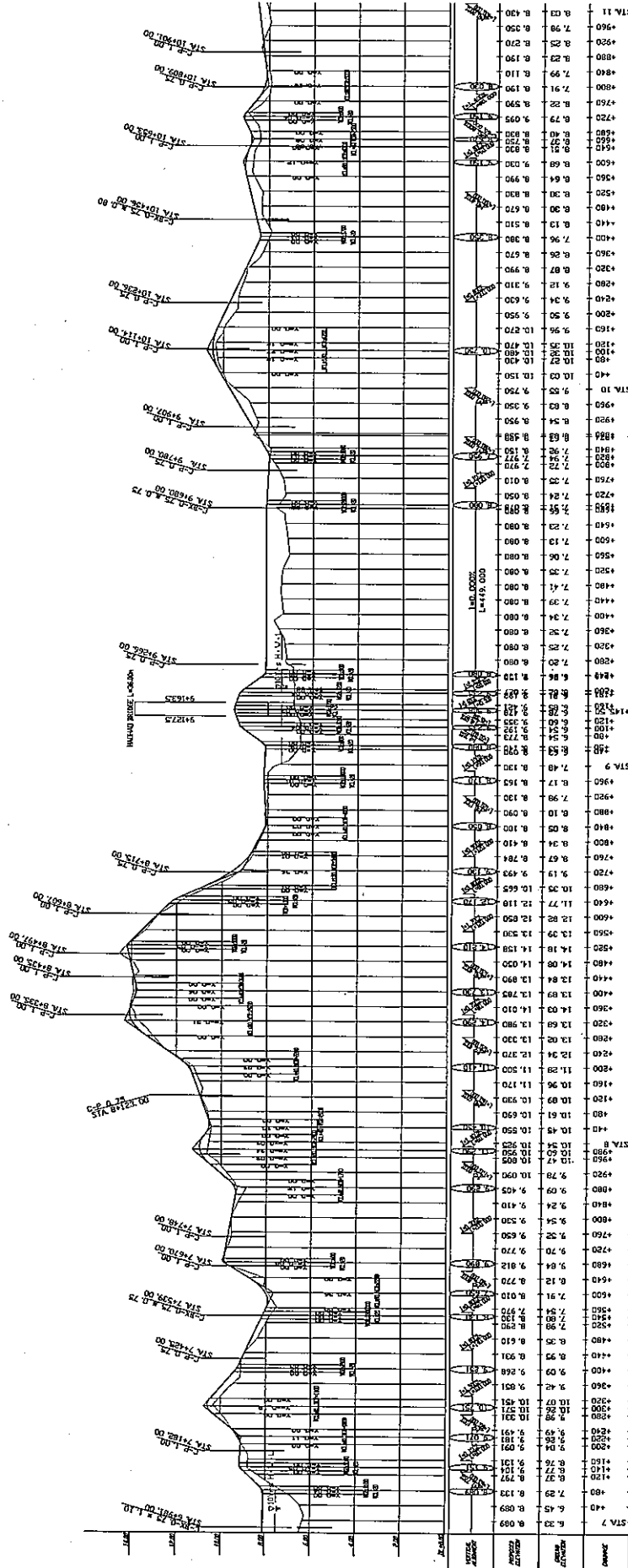
※Note:
 1. Guard posts shall be constructed where slope height is from two meters to four meters.
 2. Guard Rails shall be installed where slope height exceeds four meters.
 3. Pavement shall not be constructed in this section.

PROFILE (1/4)

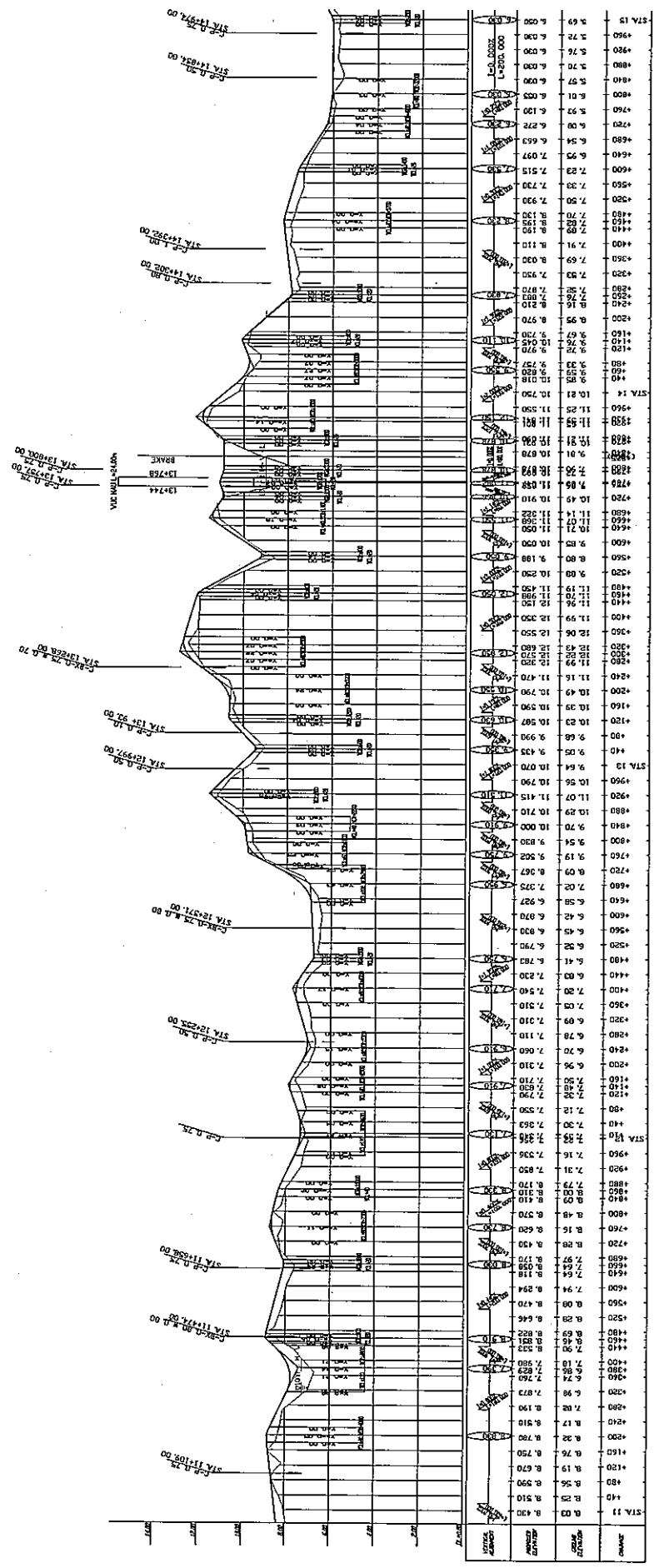


SOCIALIST REPUBLIC OF VIET NAM
 THE BASIC DESIGN STUDY ON THE PROJECT
 FOR IMPROVEMENT OF RURAL LINKING CONDITION IN NAM
 DAN DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST
 REPUBLIC OF VIETNAM
 PROFILE (1/4)
 National Road 15A
 Date: _____ No. 24: _____
 1:5000
 1:5000
 JAPAN INTERNATIONAL COOPERATION AGENCY

PROFILE (2/4)



PROFILE (3/4)



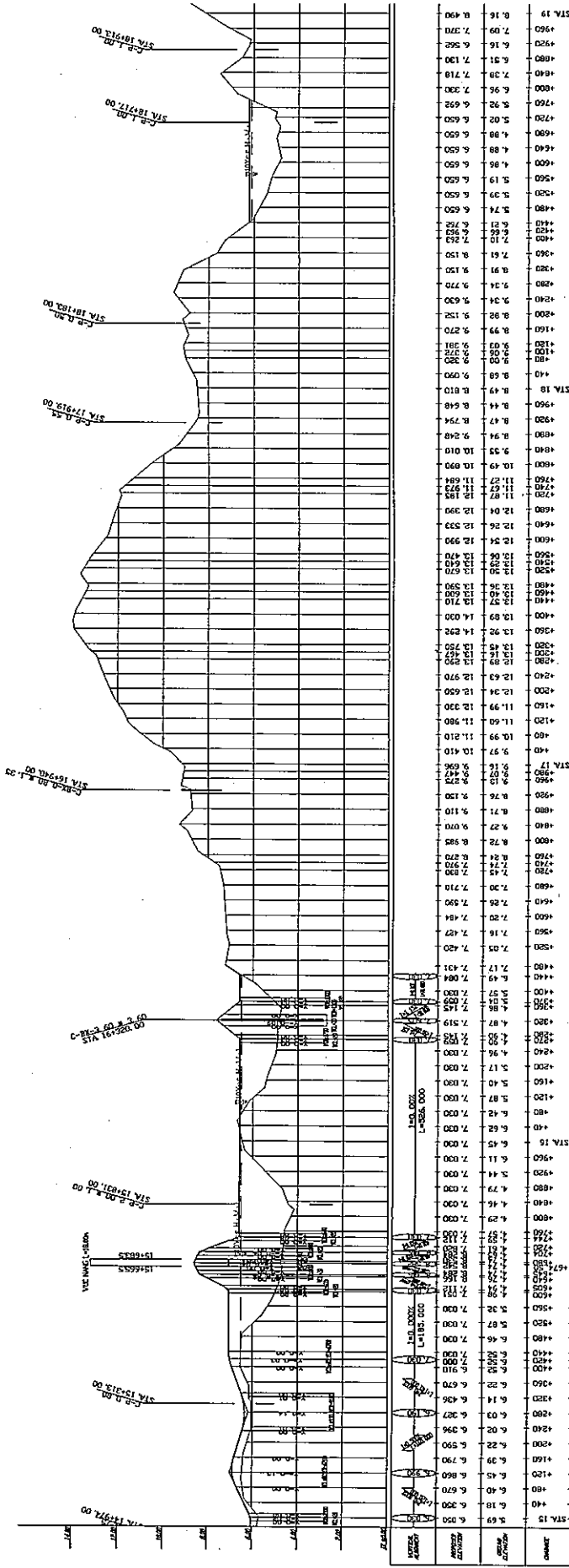
SOCIALIST REPUBLIC OF VIET NAM
 THE BASIC DEPARTMENT ON THE PROJECT
 FOR IMPROVEMENT OF RURAL LINKS CONNECTION IN NAM
 DAN DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST
 REPUBLIC OF VIET NAM

PROFILE (3/4)
 National Road 15A

Date: _____ No. 26: _____
 V.S. No. _____
 V.S. No. _____

JAPAN INTERNATIONAL COOPERATION AGENCY

PROFILE (4/4)



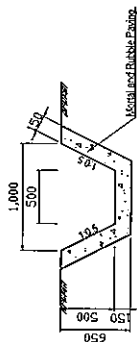
Station	Original Ground Elevation (m)	Proposed Road Elevation (m)
STA 19+00	7.09	7.09
STA 19+05	7.16	7.16
STA 19+10	7.23	7.23
STA 19+15	7.30	7.30
STA 19+20	7.37	7.37
STA 19+25	7.44	7.44
STA 19+30	7.51	7.51
STA 19+35	7.58	7.58
STA 19+40	7.65	7.65
STA 19+45	7.72	7.72
STA 19+50	7.79	7.79
STA 19+55	7.86	7.86
STA 19+60	7.93	7.93
STA 19+65	8.00	8.00
STA 19+70	8.07	8.07
STA 19+75	8.14	8.14
STA 19+80	8.21	8.21
STA 19+85	8.28	8.28
STA 19+90	8.35	8.35

SOCIALIST REPUBLIC OF VIET NAM
 THE BASIC DESIGN STUDY ON THE PROJECT
 FOR IMPROVEMENT OF RURAL LIVING CONDITION IN NAM
 DAN DISTRICT IN HINH AN PROVINCE IN SOCIALIST
 REPUBLIC OF VIET NAM
 PROFILE (4/4)
 National Road 15A
 Date: No. 27
 15/10/2007
 15/11/2006
 JAPAN INTERNATIONAL COOPERATION AGENCY

RELATIVE FACILITIES(1/5)

DETAIL OF SIDE DITCH

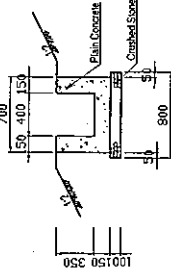
SIDE DITCH (STONE MASONRY-TYPE)
S=1:25



SCHEDULE OF SIDE DITCH

Station	Length		SIDE	Remarks
	Start	End		
6 + 800	8 + 980	2180	R	
9 + 400	13 + 755	4362	R	
13 + 792	15 + 000	1270	R	
15 + 100	15 + 600	500	L	
15 + 730	15 + 765	35	R	
15 + 870	16 + 100	230	R	
16 + 400	16 + 440	40	R	
16 + 400	17 + 920	1520	L	
18 + 000	18 + 600	600	L	
19 + 000	19 + 100	100	L	
19 + 700	20 + 060	360	R	
TOTAL			11,197	

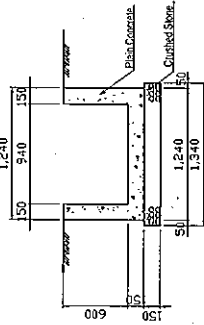
IRRIGATION DRAIN (PC-TYPE)
S=1:25



SCHEDULE OF IRRIGATION DRAIN (RC-TYPE-1)

Station	Length		SIDE	Remarks
	Start	End		
9 + 20	9 + 129	109	L	HaoHao Bridge
9 + 162	9 + 26	98	L	HaoHao Bridge
TOTAL			207	

IRRIGATION DRAIN (PC-TYPE)
S=1:25



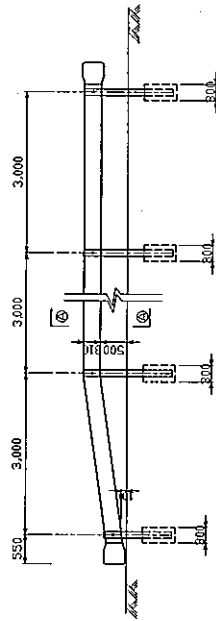
SCHEDULE OF IRRIGATION DRAIN (RC-TYPE-2)

Station	Length		SIDE	Remarks
	Start	End		
13 + 736	13 + 746	22	R	VuocMac Bridge
TOTAL			22	

GUARD RAIL & GUARD POST

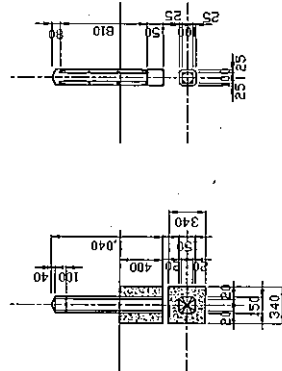
GUARD RAIL

Front View
S=1:100

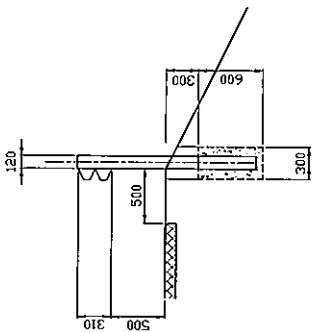


GUARD POST

S=1:50



A-A SECTION
S=1:50



SCHEDULE OF GUARD RAIL

LEFT SIDE		RIGHT SIDE	
Station	Length	Station	Length
Start	End	Start	End
0 + 0	0 + 15	0 + 0	0 + 15
6 + 450	6 + 520	6 + 480	6 + 520
6 + 554	6 + 655	6 + 554	6 + 660
9 + 80	9 + 127.5	9 + 117.5	9 + 127.5
13 + 724	13 + 744	13 + 724	13 + 744
13 + 788	13 + 778	13 + 788	13 + 788
15 + 630	15 + 665.5	15 + 630	15 + 665.5
15 + 683.5	15 + 875	15 + 683.5	15 + 830
16 + 250	16 + 317.8	16 + 265	16 + 317.8
16 + 322.2	16 + 332.2	16 + 322.2	16 + 332.2
18 + 650	18 + 700	18 + 660	18 + 670
19 + 555	19 + 565	19 + 555	19 + 565
TOTAL		710.8	

SCHEDULE OF GUIDE POST

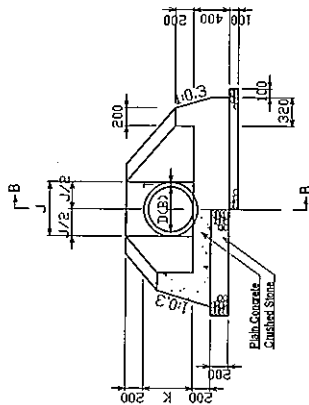
LEFT SIDE		RIGHT SIDE	
Station	Length	Station	Length
Start	End	Start	End
0 + 15	0 + 80	0 + 16	0 + 75
1 + 500	1 + 340	4 + 925	5 + 505
2 + 240	2 + 740	5 + 910	6 + 460
2 + 775	2 + 900	6 + 660	6 + 790
3 + 620	3 + 675	9 + 235	9 + 275
4 + 825	6 + 450	13 + 730	13 + 734
6 + 655	7 + 60	13 + 755	13 + 820
7 + 280	7 + 360	15 + 537	15 + 620
8 + 280	8 + 590	15 + 630	15 + 850
8 + 540	8 + 590	16 + 190	16 + 285
9 + 20	9 + 80	16 + 332.2	16 + 410
9 + 220	9 + 270	18 + 670	18 + 740
11 + 120	11 + 430	18 + 670	18 + 740
11 + 770	11 + 820	19 + 445	19 + 650
11 + 915	11 + 930	TOTAL	
11 + 260	11 + 310	2141.5	
12 + 815	12 + 885		
13 + 750	13 + 734		
13 + 778	13 + 870		
15 + 570	15 + 630		
15 + 875	15 + 915		
16 + 170	16 + 250		
16 + 332.2	16 + 365		
16 + 610	16 + 650		
16 + 700	16 + 750		
19 + 440	19 + 555		
19 + 565	19 + 650		
TOTAL		4658.8	

SOCIALIST REPUBLIC OF VIETNAM
THE BASIC DESIGN STAFF ON THE PROJECT
FOR IMPROVEMENT OF RURAL LINKS CONNECTION
DAN DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST
REPUBLIC OF VIETNAM
RELATIVE FACILITIES(1/5)
SIDE DITCH, GUARD RAIL & GUARD POST
National Road 19A
Date: _____ No. 28
S-1/50
JAPAN INTERNATIONAL COOPERATION AGENCY

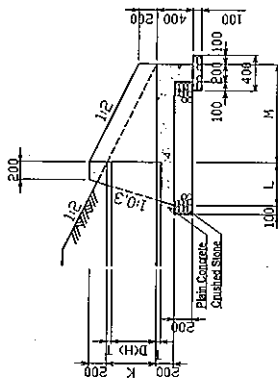
RELATIVE FACILITIES(2/5)

INLET & OUTLET (HEAD WALL)

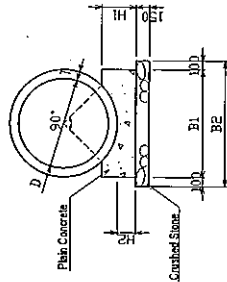
SECTION A-A



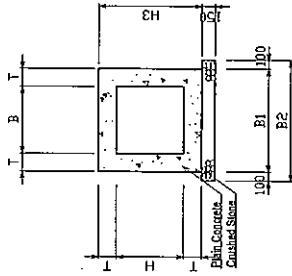
SECTION B-B



PIPE CULVERT

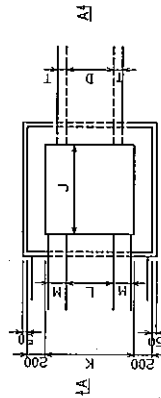


BOX CULVERT

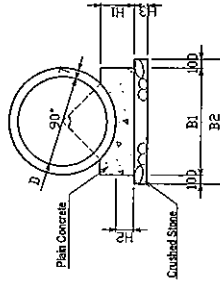


CATCH BASIN

PLAN



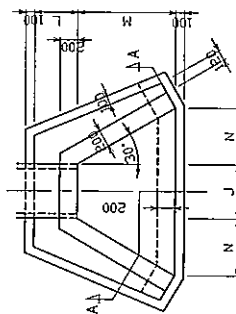
PIPE CULVERT



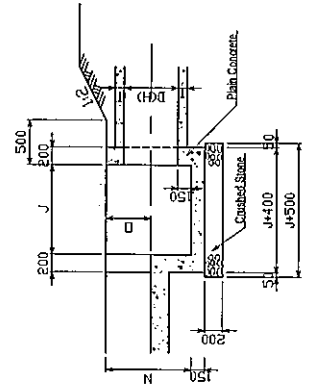
DIMENSION OF CULVERT

TYPE	A-1	A-2	A-3	A-4	A-5	A-6	A-7
D	300	500	750	800	1000	-	-
B	-	-	-	-	-	400	750
H	-	-	-	-	-	400	1100
T	50	50	80	80	100	200	200
B1	500	650	900	950	1200	800	1150
B2	700	850	1100	1150	1400	1000	1350
H1	160	240	280	340	380	-	-
H2	100	150	200	200	200	-	-
H3	-	-	-	-	-	800	1500
J	400	600	910	960	1200	800	1150
K	350	550	830	880	1100	600	1300
L	425	485	569	584	650	500	710
M	700	1100	1660	1760	2200	1200	2600
N	404	635	958	1016	1270	693	1501

PLAN



SECTION A-A



DIMENSION OF CULVERT

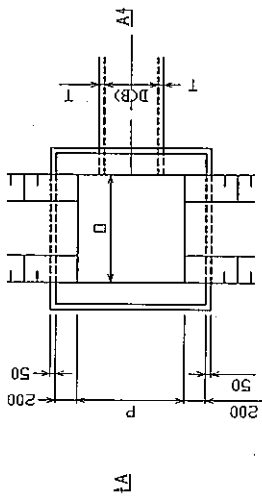
TYPE	B-1	B-2
D	750	1000
B	-	-
T	80	100
B1	900	1200
B2	1100	1400
H1	280	380
H2	200	200
H3	150	200
J	1000	1200
K	1000	1200
L	700	1000
M	120	0
N	1100	1500
O	600	1000

SOCIALIST REPUBLIC OF VIETNAM
 THE BASIC DESIGN STUDY ON THE PROJECT
 FOR IMPROVEMENT OF RURAL LIVING CONDITION IN NAM
 DAN DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST
 REPUBLIC OF VIETNAM
 RELATIVE FACILITIES(2/5)
 DETAIL OF CULVERT (1)
 National Road 15A
 Date _____ No. 28 S=1/50
 JAPAN INTERNATIONAL COOPERATION AGENCY

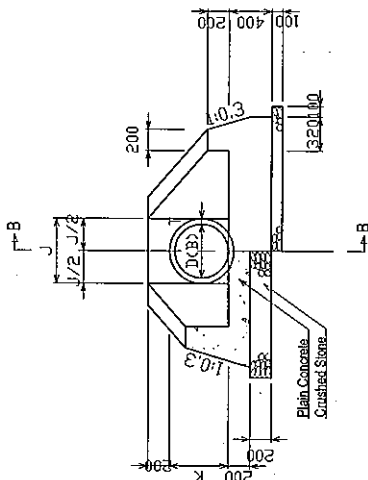
RELATIVE FACILITIES(3/5)

IN LET (CATCH BASIN)

PLAN

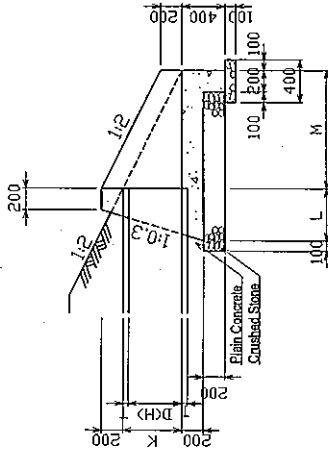


SECTION A-A

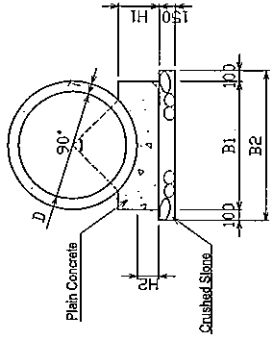


OUT LET (HEAD WALL)

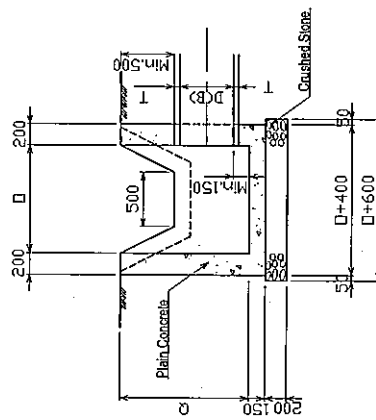
SECTION B-B



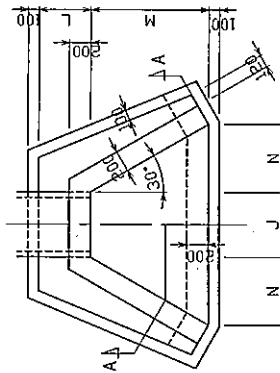
PIPE CULVERT



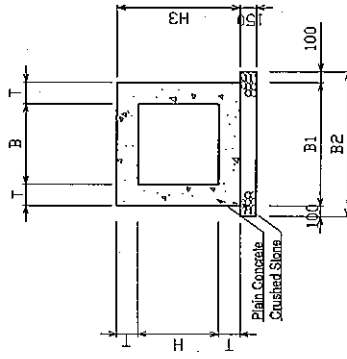
SECTION A-A



PLAN



BOX CULVERT



DIMENSION OF CULVERT

TYPE	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8
D	100	500	750	800	1000	-	-	-
B	-	-	-	-	-	750	750	750
H	-	-	-	-	-	700	750	800
T	30	50	80	80	100	200	200	200
B1	300	650	900	950	1200	1150	1150	1150
B2	500	850	1100	1150	1400	1350	1350	1350
H1	120	240	280	340	380	-	-	-
H2	100	150	200	200	200	-	-	-
H3	-	-	-	-	-	1100	1150	1200
J	160	600	910	960	1200	1150	1150	1150
K	130	550	830	880	1100	900	950	1000
L	359	485	569	584	650	580	605	620
M	260	1100	1660	1760	2200	1800	1900	2000
N	150	635	958	1016	1270	1039	1097	1155
O	1000	1000	1000	1000	1200	1000	1000	1000
P	1000	1000	1000	1000	1200	1000	1000	1000
Q	800	1400	1800	1800	1900	1300	1500	1500

SOCIALIST REPUBLIC OF VIET NAM
 THE BANG BIA PROVINCE
 FOR IMPROVEMENT OF RURAL LIVING CONDITIONS IN NAM
 DAN DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST
 REPUBLIC OF VIETNAM

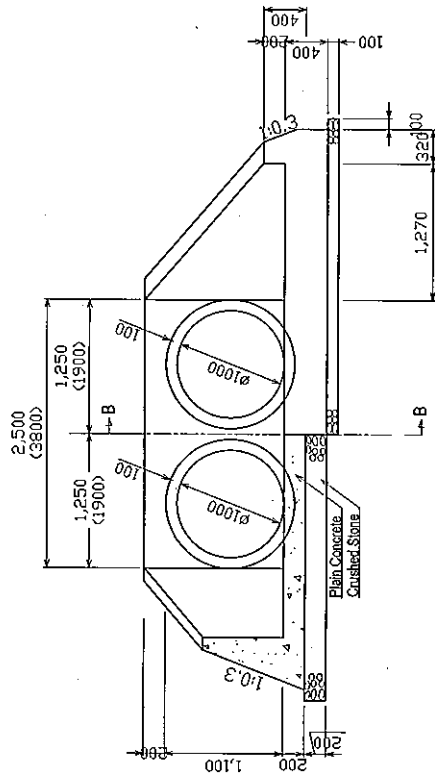
RELATIVE FACILITIES(3/5)
 DETAIL OF CULVERT (2)
 National Road 15A

Date _____ No. 30 _____ S=1/50
 JAPAN INTERNATIONAL COOPERATION AGENCY

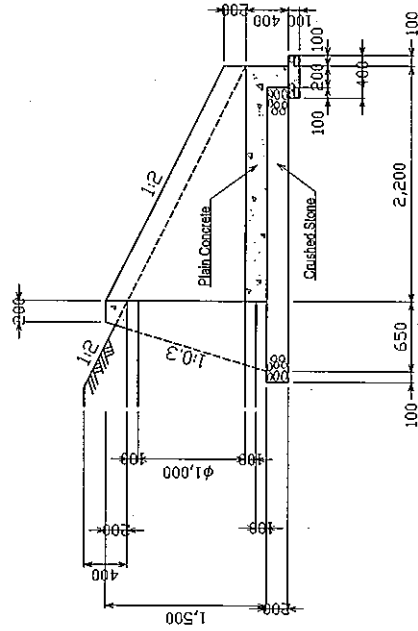
RELATIVE FACILITIES(4/5)

INLET & OUTLET (HEAD WALL)

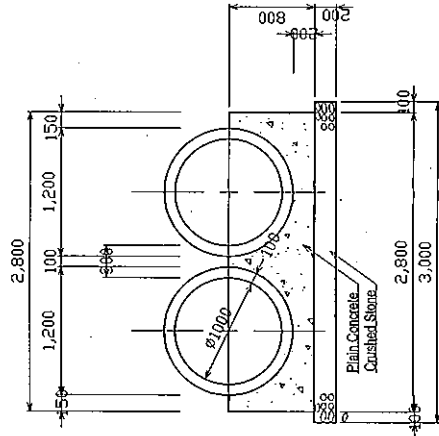
SECTION A-A



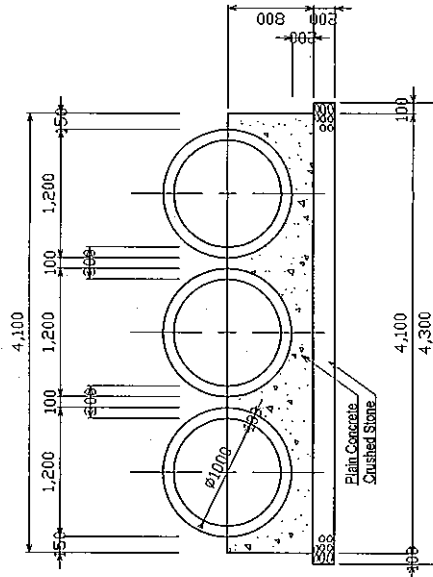
SECTION B-B



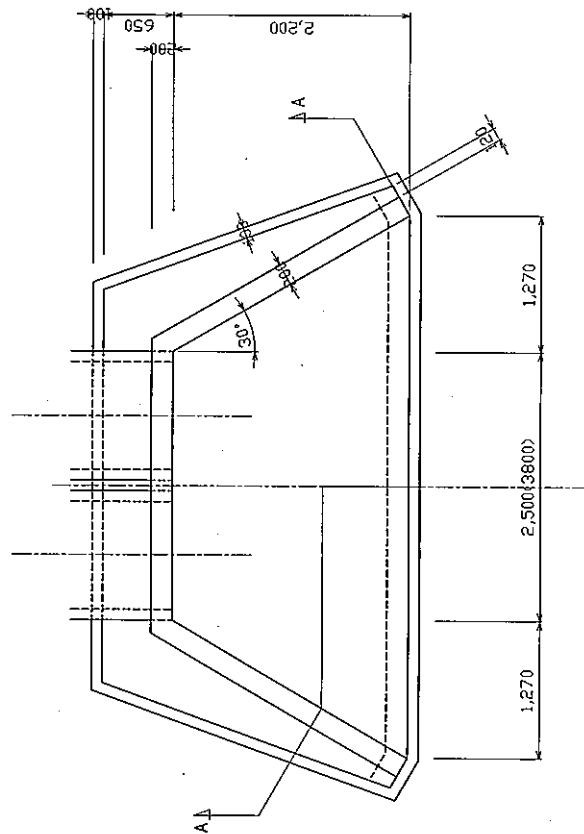
PIPE CULVERT(2CELLS)



PIPE CULVERT(3CELLS)



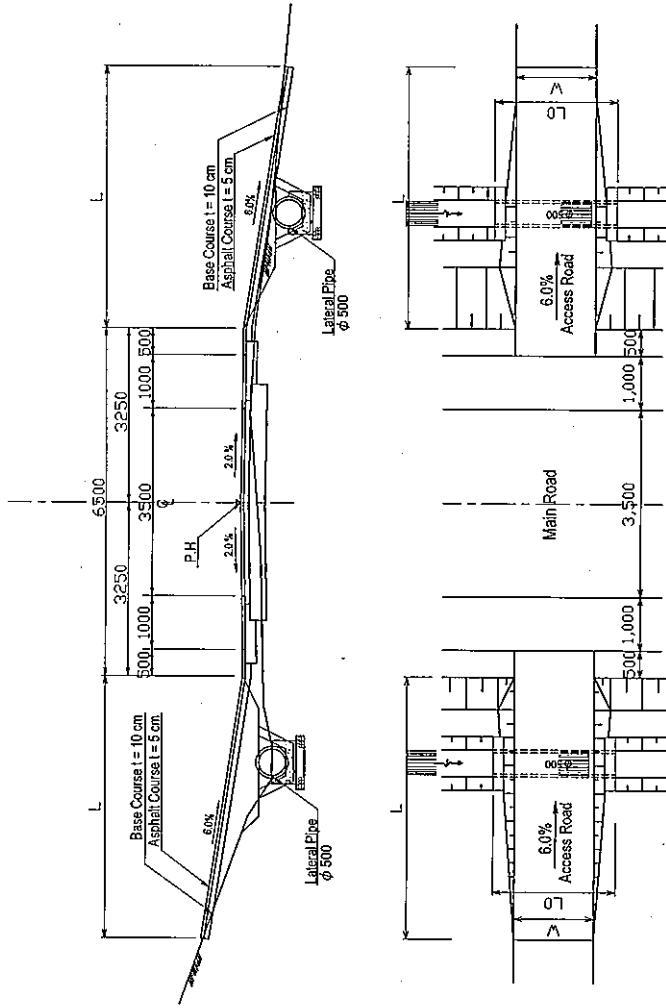
PLAN



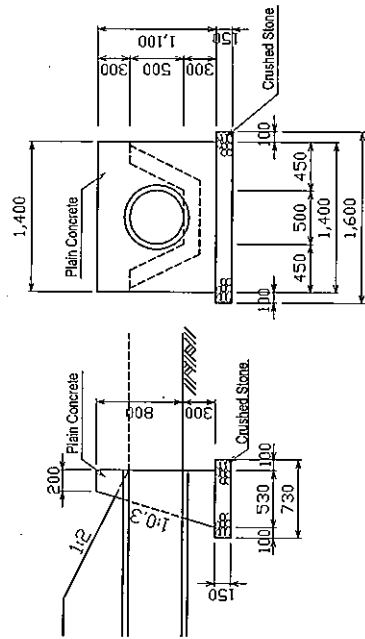
SOCIALIST REPUBLIC OF VIET NAM	
THE BASIC ORGANIZACY ON THE PROJECT FOR IMPROVEMENT OF RURAL LIVING CONDITIONS IN NAM DAN DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST REPUBLIC OF VIET NAM	
RELATIVE FACILITIES(4/5)	
DETAIL OF CULVERT (3)	
National Road 15A	
Date	No. 31
	S=1/50
JAPAN INTERNATIONAL COOPERATION AGENCY	

RELATIVE FACILITIES(5/5)

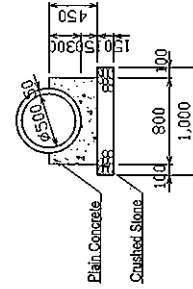
JUNCTION&ROADSIDE ENTRANCE



HEAD WALL



PIPE CULVERT



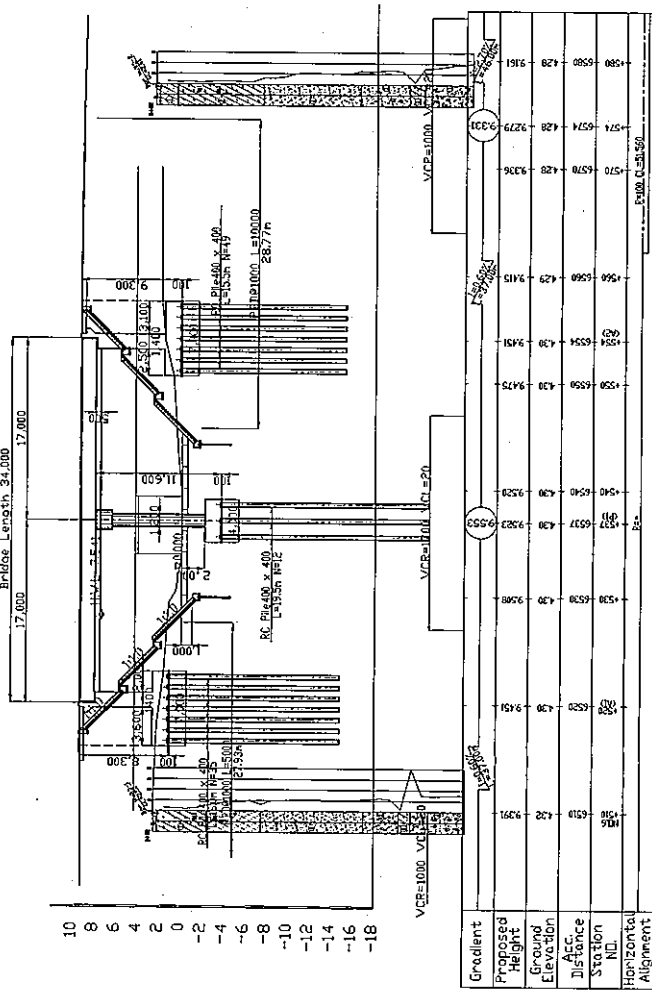
SCHEDULE OF JUNCTION ENTRANCE

Station	Left side			Right side		
	W	L	LO	W	L	LO
0 + 351	4.0	0.5	4.0	4.0	0.5	-
0 + 471	2.0	1.6	-	2.0	1.6	-
1 + 476	-	-	-	4.0	1.3	-
1 + 586	-	-	-	4.0	0.1	-
1 + 980	-	-	-	3.0	1.1	-
2 + 325	3.0	1.4	-	3.0	1.4	-
4 + 006	2.0	2.3	-	2.0	2.3	-
4 + 237	2.0	1.6	-	-	-	-
4 + 349	2.0	0.4	-	2.0	0.4	-
4 + 649	-	-	-	2.5	24.7	-
5 + 011	4.0	36.0	-	2.0	38.0	-
5 + 976	-	-	-	3.0	34.1	-
6 + 800	-	-	-	5.0	29.9	6.6
7 + 136	3.0	3.8	-	-	-	-
7 + 821	3.0	0.2	3.0	-	-	-
7 + 884	-	-	-	2.0	1.2	-
8 + 994	-	-	-	5.0	5.5	-
9 + 116	2.5	44.8	-	-	-	-
9 + 273	-	-	-	5.0	13.1	-
9 + 496	2.5	10.1	3.7	-	-	-
9 + 753	-	-	-	2.0	10.9	-
9 + 819	2.0	0.5	-	2.0	0.5	-
10 + 426	-	-	-	2.0	6.5	-
10 + 516	4.0	8.2	5.0	4.0	8.2	5.0
10 + 933	-	-	-	2.0	1.2	-
11 + 319	2.0	14.1	-	-	-	-
11 + 469	3.5	11.5	-	-	-	-
11 + 754	4.0	6.1	-	-	-	-
12 + 240	4.0	5.2	-	-	-	-
13 + 000	-	-	-	3.0	5.4	3.7
13 + 382	2.5	7.1	3.4	-	-	-
13 + 712	-	-	-	6.0	2.1	-
13 + 876	-	-	-	6.0	3.5	-
13 + 965	-	-	-	3.0	4.8	3.6
14 + 035	5.0	2.4	-	-	-	-
14 + 088	5.0	9.5	-	-	-	-
14 + 215	2.0	0.5	-	-	-	-
14 + 313	-	-	-	3.0	5.2	3.6
14 + 440	-	-	-	3.5	3.6	3.9
14 + 515	5.0	6.0	-	-	-	-
14 + 576	-	-	-	3.5	4.4	4.0

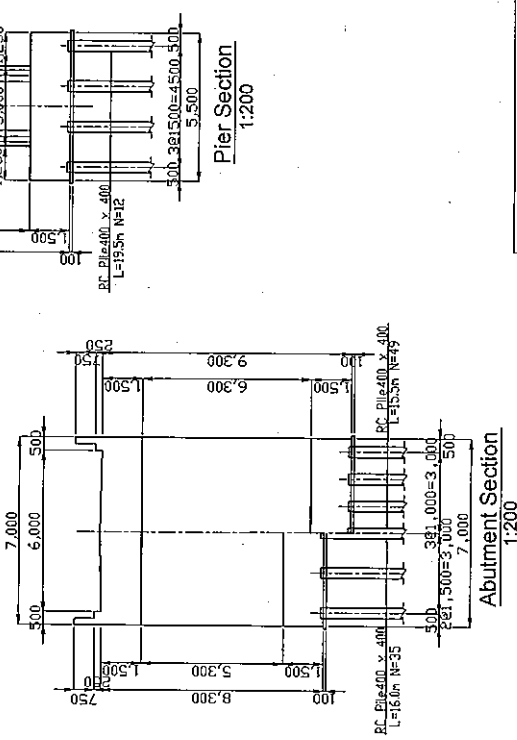
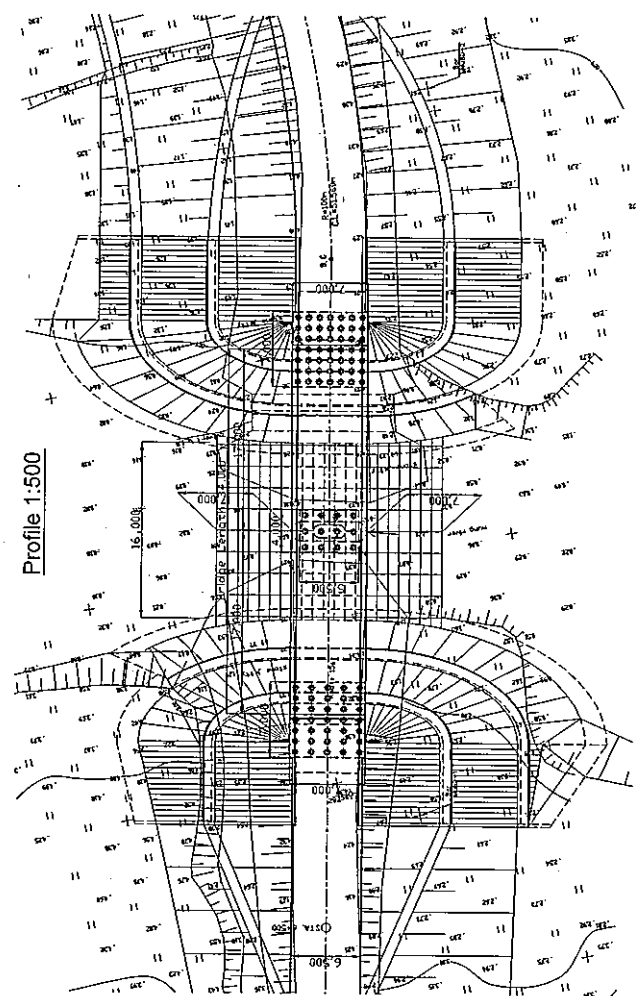
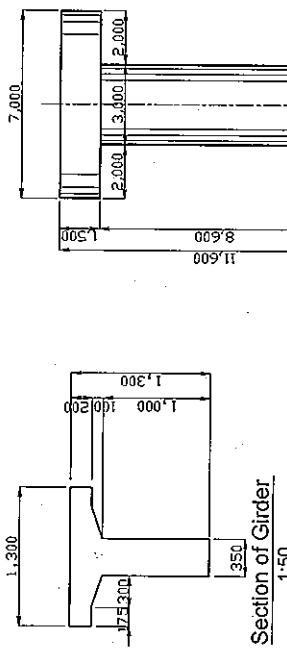
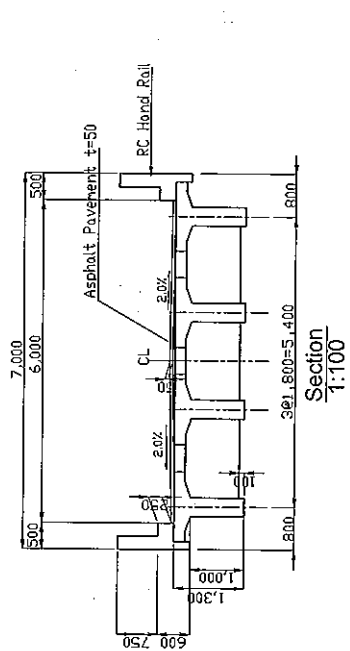
Station	Left side			Right side		
	W	L	LO	W	L	LO
14 + 727	3.5	2.1	-	-	-	-
14 + 822	2.5	5.4	-	3.5	5.4	4.2
15 + 015	3.5	4.1	-	-	-	-
15 + 650	-	-	-	4.0	41.7	-
15 + 980	4.0	11.3	-	-	-	-
16 + 142	-	-	-	2.5	6.7	-
16 + 230	-	-	-	2.5	14.9	-
16 + 325	5.0	31.3	-	-	-	-
16 + 354	4.0	23.8	-	-	-	-
16 + 437	-	-	-	2.0	0.7	-
16 + 603	-	-	-	2.5	3.3	2.9
17 + 382	-	-	-	2.0	2.1	-
17 + 385	3.0	1.4	-	-	-	-
17 + 598	3.0	6.5	3.8	-	-	-
17 + 917	5.0	4.4	5.5	-	-	-
17 + 917	5.0	4.4	5.5	-	-	-
17 + 922	5.0	4.4	5.5	3.5	4.2	4.0
19 + 528	2.5	39.9	-	2.5	39.9	-
19 + 625	-	-	-	3.0	36.6	-
19 + 668	3.0	16.9	5.0	-	-	-
19 + 768	-	-	-	1.5	1.7	-

SOCIALIST REPUBLIC OF VIET NAM
 THE MINISTRY OF THE POSTS
 AND TELECOMMUNICATIONS
 DAN DICTION IN NGHIE AN PROVINCE IN SOCIALIST
 REPUBLIC OF VIET NAM
 RELATIVE FACILITIES(5/5)
 National Road 15A
 Date: _____ No. 32
 JAPAN INTERNATIONAL COOPERATION AGENCY

GENERAL VIEW OF MUNG BRIDGE



Gradient	Proposed Height	Ground Elevation	Dist. to Station	Station No.	Horizontal Alignment
10	10.00	10.00	0.00	0+00	PC=0+00, PT=0+00
8	8.00	8.00	0.00	0+00	PC=0+00, PT=0+00
6	6.00	6.00	0.00	0+00	PC=0+00, PT=0+00
4	4.00	4.00	0.00	0+00	PC=0+00, PT=0+00
2	2.00	2.00	0.00	0+00	PC=0+00, PT=0+00
0	0.00	0.00	0.00	0+00	PC=0+00, PT=0+00
-2	-2.00	0.00	0.00	0+00	PC=0+00, PT=0+00
-4	-4.00	0.00	0.00	0+00	PC=0+00, PT=0+00
-6	-6.00	0.00	0.00	0+00	PC=0+00, PT=0+00
-8	-8.00	0.00	0.00	0+00	PC=0+00, PT=0+00
-10	-10.00	0.00	0.00	0+00	PC=0+00, PT=0+00
-12	-12.00	0.00	0.00	0+00	PC=0+00, PT=0+00
-14	-14.00	0.00	0.00	0+00	PC=0+00, PT=0+00
-16	-16.00	0.00	0.00	0+00	PC=0+00, PT=0+00
-18	-18.00	0.00	0.00	0+00	PC=0+00, PT=0+00



Pier Section
1:200

DESIGN CRITERIA	
Design Speed	V=20km/h
Bridge Length	34,000 (2x17,000)
Total Width	7,000
Longitudinal Gradient	0.5%
Cross-fall of Carriage way	2.0%
Substructure Type	Abutment RC Reinforced T-Shape
Foundation Type	RC Pile 400 x 400

Abutment Section
1:200

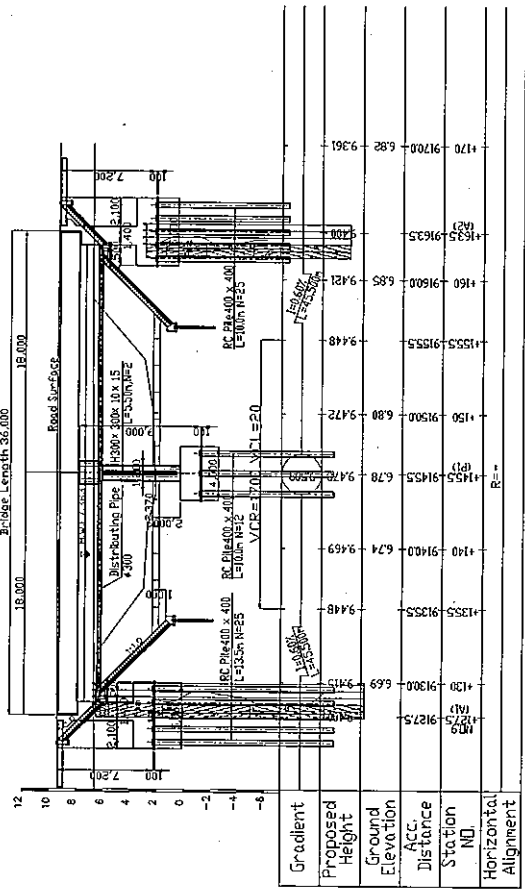
Plan 1:500

SOCIALIST REPUBLIC OF VIETNAM
THE BASIC DESIGN STUDY ON THE PROJECT
FOR IMPROVEMENT AND MAINTENANCE
OF NATIONAL ROAD 15A IN PROVINCE IN SOCIALIST
REPUBLIC OF VIETNAM

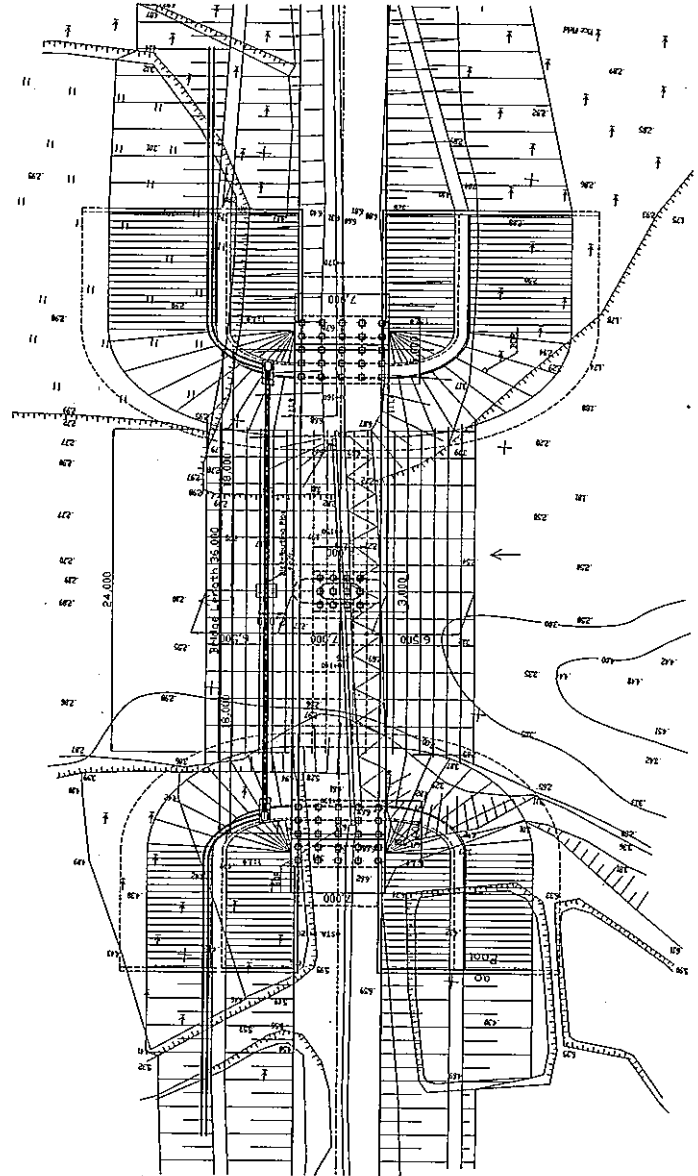
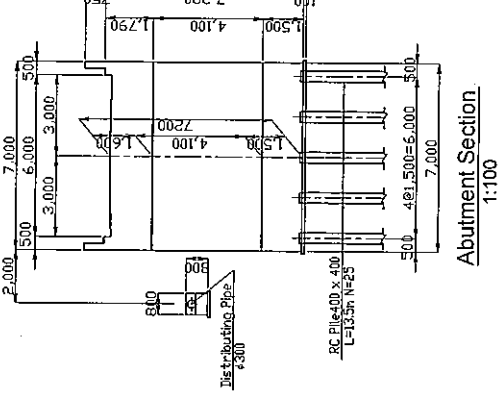
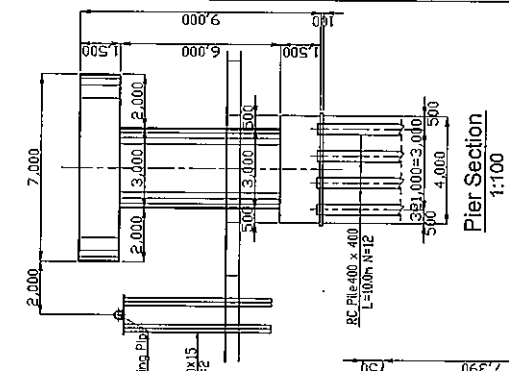
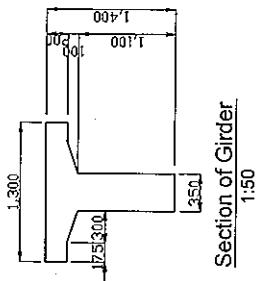
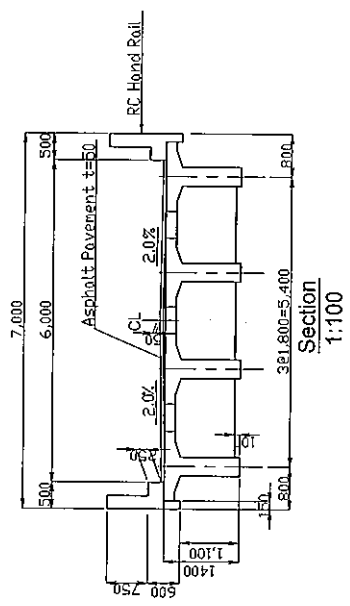
GENERAL VIEW OF MUNG BRIDGE
National Road 15A

Date: _____ No. 33: _____
JAPAN INTERNATIONAL COOPERATION AGENCY

GENERAL VIEW OF HAOHAO BRIDGE



Profile 1:400



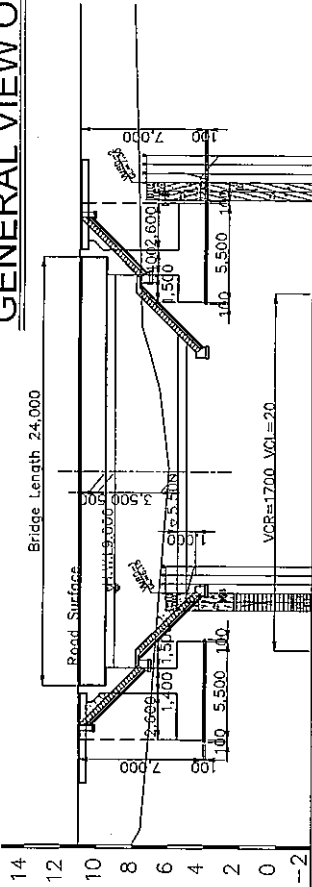
SOCIALIST REPUBLIC OF VIET NAM
 THE BASIC DESIGN STUDY ON THE PROJECT
 FOR IMPROVEMENT OF RURAL LIVING CONDITION IN NAM
 DAN DISTRICT IN HOANG AN PROVINCE IN SOCIALIST
 REPUBLIC OF VIET NAM

GENERAL VIEW OF HAOHAO BRIDGE
 National Road 15A

Date: 1990
 No. 34
 1:00, 1:50, 1:100
 JAPAN INTERNATIONAL COOPERATION AGENCY

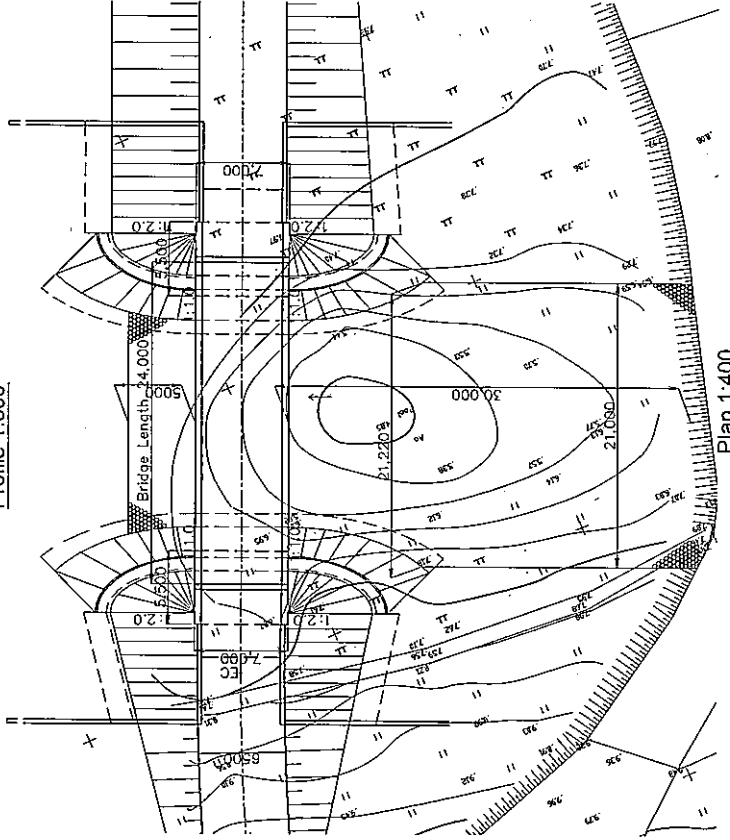
DESIGN CRITERIA	
Design Speed	V=20km/h
Bridge Length	36.00m (5 \times 7.20m)
Total Length	36.00m (5 \times 7.20m)
Grade	3.0%
Gross Fall of Approach Way	3.0%
Superstructure Type	RC-T Shallow Girder
Substructure Type	Abutment: RC Reversed T-Shape Pier: RC Wall
Foundation Type	RC Pile 400 x 400

GENERAL VIEW OF VUC MAU BRIDGE

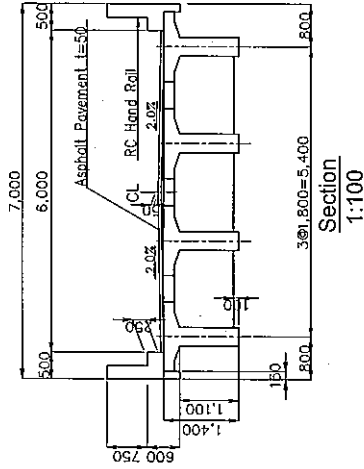


Gradient	Proposed Height	Ground Elevation	Acc. Distance	Station NO.	Horizontal Alignment
				+744 (A1)	11.010
				+750 13750	7.17
				+758 13758	11.052
				+760 13760	7.17
				+768 13768	11.010
				+770 13770	6.50
					10.998

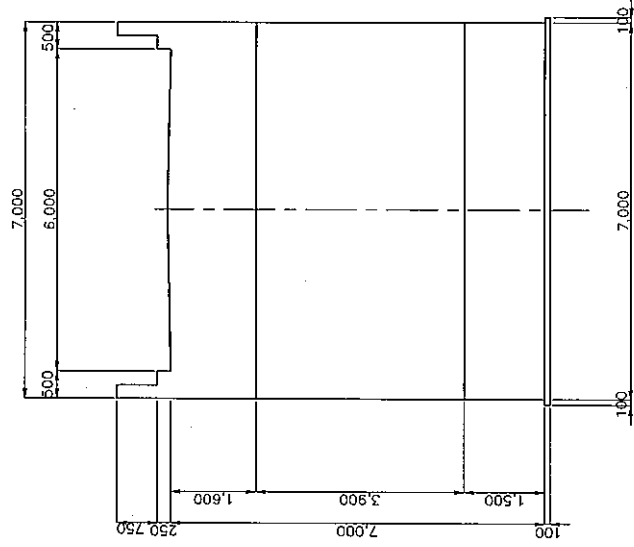
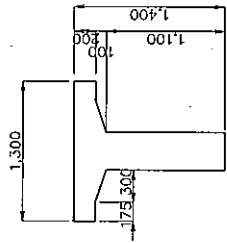
Profile 1:300



Plan 1:400



Section of Girder 1:50



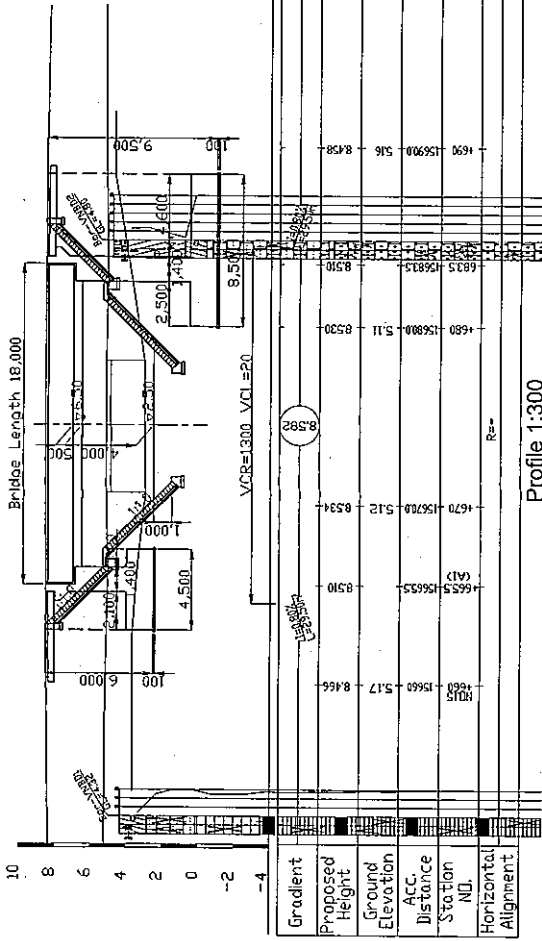
DESIGN CRITERIA	
Design Speed	V=70km/h
Bridge Length	24,000
Total Width	7,000
Longitudinal Gradient	0.80%
Cross-fall of bridge way	RC 2.0%
Substructure Type	Multimall RC Rowlock 1-Shape
Foundation Type	Spread

SOCIALIST REPUBLIC OF VIET NAM
 THE BASIC DESIGN STUDY ON THE PROJECT
 FOR IMPROVEMENT OF RURAL LIVING CONDITION IN NAM
 DAN DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST
 REPUBLIC OF VIETNAM

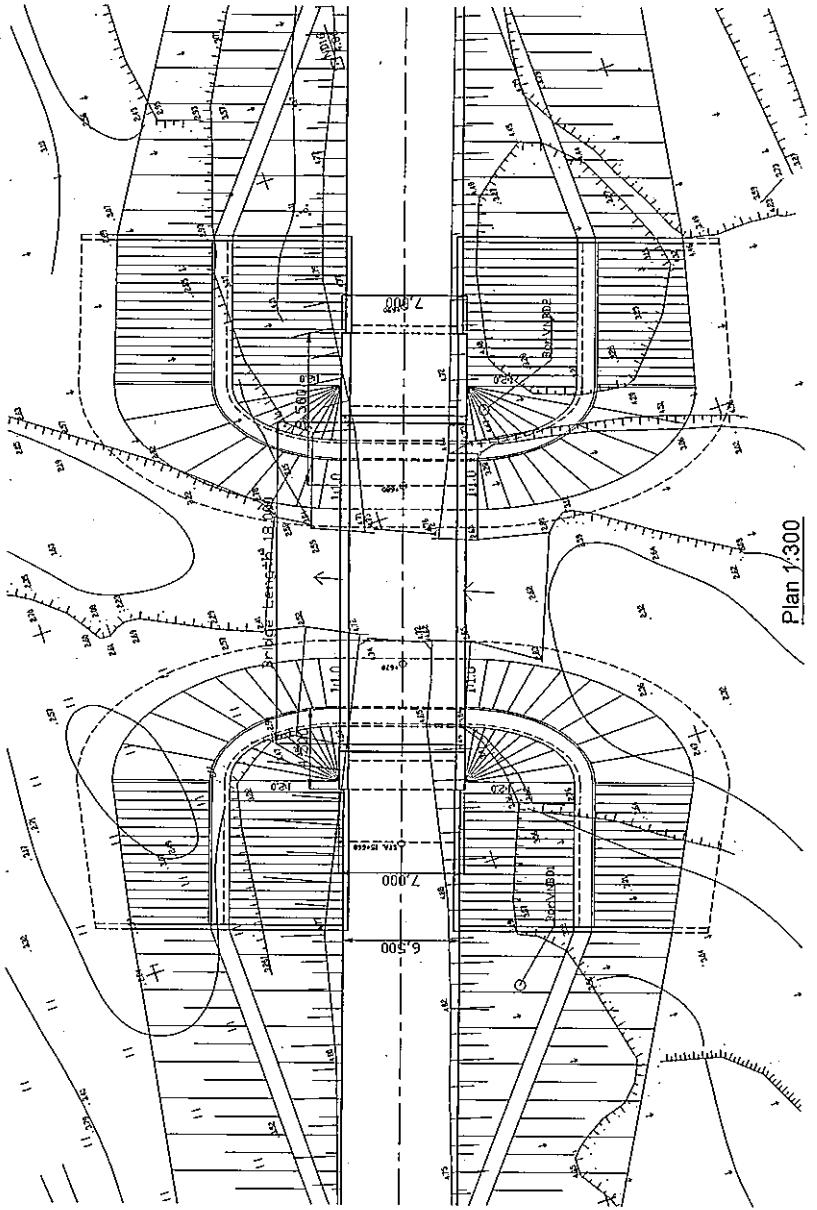
GENERAL VIEW OF VUC MAU BRIDGE
 National Road 15A

Draw No.35 1:50
 JAPAN INTERNATIONAL COOPERATION AGENCY

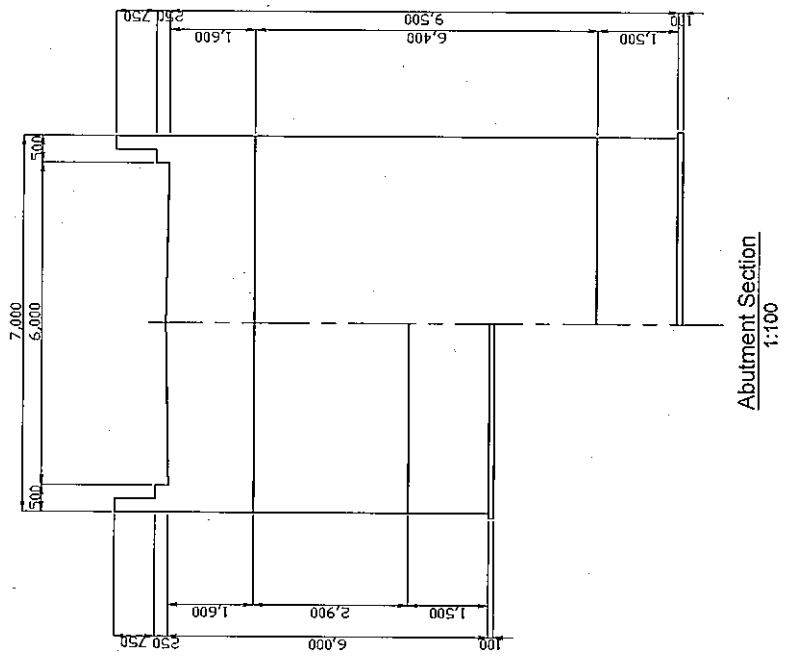
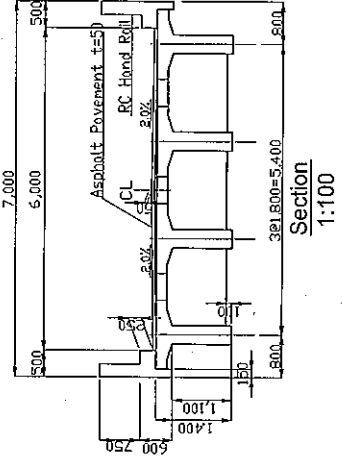
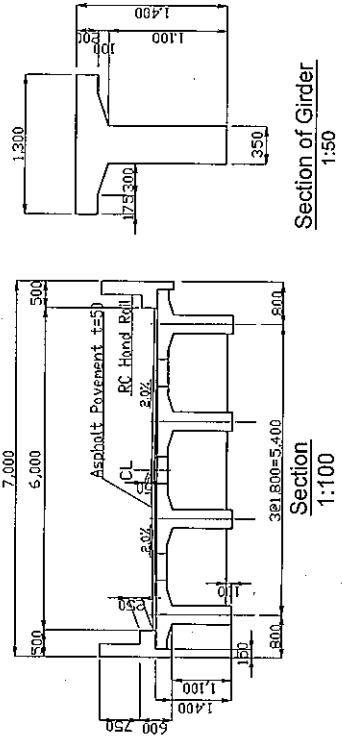
GENERAL VIEW OF VUC NANG BRIDGE



Profile 1:300



Plan 1:300



DESIGN CRITERIA	
GENERAL CONDITION	
Design Speed	V=20km/h
Bridge Length	18,00m
Longitudinal Gradient	0%
Cross-fall of Carriage way	2.0%
Substructure Type	Abutment RC Reversed T-Shape
Foundation Type	Spread

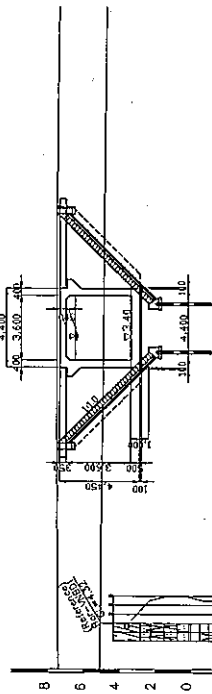
SOCIALIST REPUBLIC OF VIETNAM
THE BASIC REGULATORY ON THE PROJECT
FOR IMPROVEMENT OF RURAL LINK CONDITION IN NAM
DAN DISTRICT IN NGHE AN PROVINCE IN SOCIALIST
REPUBLIC OF VIETNAM

GENERAL VIEW OF VUC NANG BRIDGE
National Road 15A

Date: _____ No. 35: _____
1:50
1:100/1:50

JAPAN INTERNATIONAL COOPERATION AGENCY

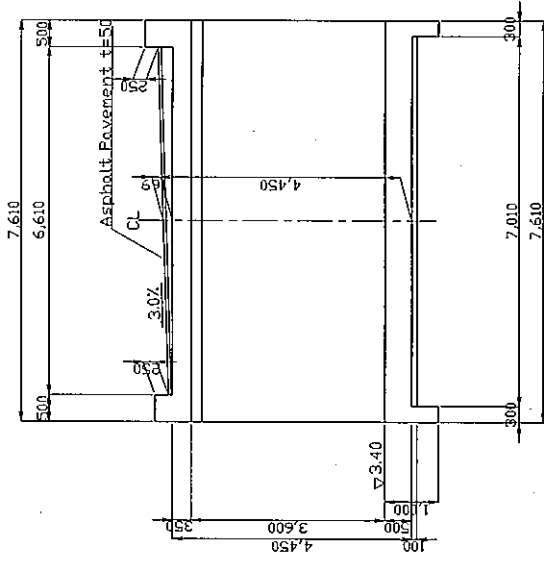
GENERAL VIEW OF CONG VINH BOX CULVERT



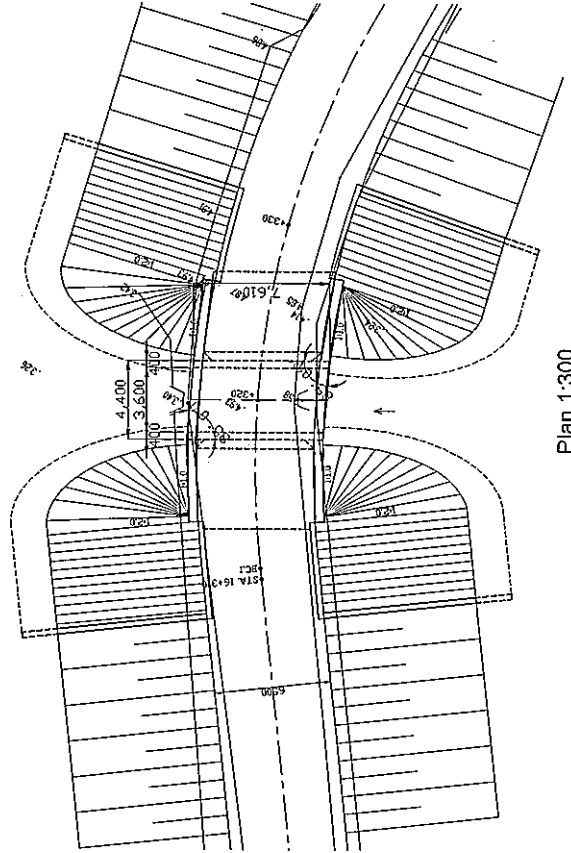
VFR=1:100, VA=30

Gradient	7.610	7.610	7.610
Proposed Height	7.480	7.519	7.605
Ground Elevation	4.87	4.87	4.87
Acc. Distance	120	63200	487
Station No.	1016	H63106	H63106
Horizontal Alignment	0.332m		

Profile 1:300



Abutment Section
1:100



Plan 1:300

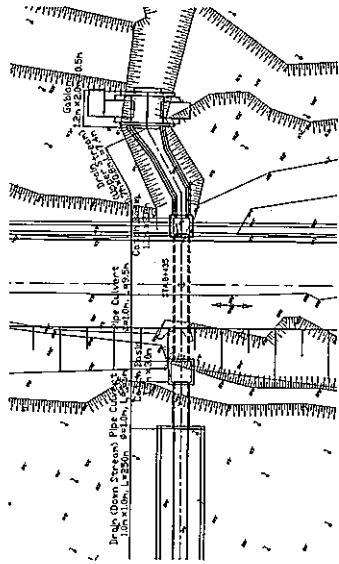
DESIGN CRITERIA	
GENERAL CONDITION	
Design Speed	V=50km/h
Total Width	7.61m
Longitudinal Gradient	1.5%
Cross-fall of Carriage way	3.0%
Structure type	Box Culvert 03.60m x 4.3.60m
Foundation Type	Spread

SOCIALIST REPUBLIC OF VIET NAM
 THE BASIC REGULATORY ON THE PROJECT
 FOR IMPROVEMENT OF RURAL LIVING CONDITION IN NAM
 DUY DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST
 REPUBLIC OF VIETNAM
**GENERAL VIEW OF
 CONG VINH BOX CULVERT**
 National Road 15A
 Date: _____ No. 37 _____
 1:50
 1:100
 JAPAN INTERNATIONAL COOPERATION AGENCY

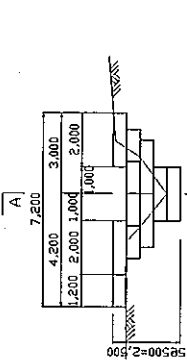
CONSTRUCTION OF EROSION CONTROL FACILITY

No. 8+435

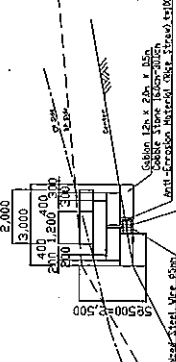
PLAN S=1/400



FRONT VIEW S=1/200

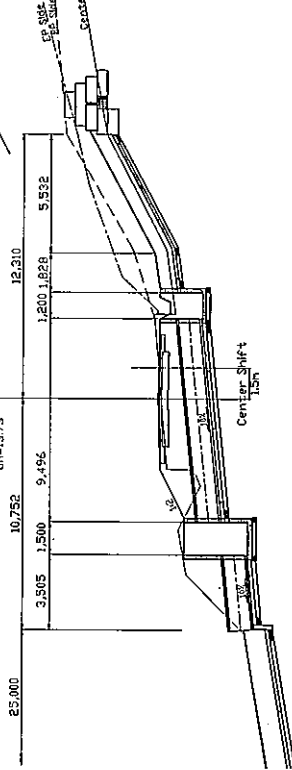


A-A SECTION S=1/200



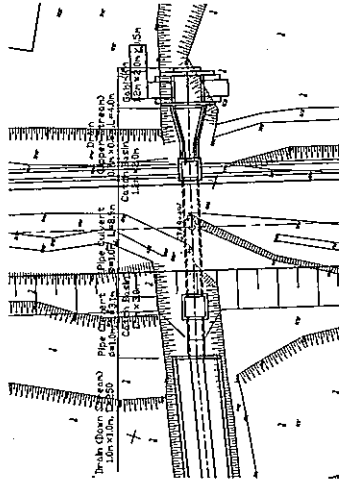
PROFILE S=1/250

PH=13.870 CL
GH=13.773

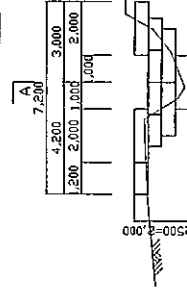


No. 8+496

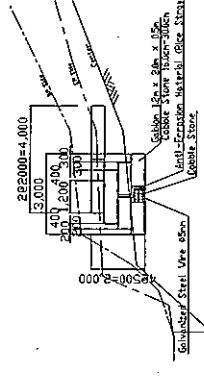
PLAN S=1/400



FRONT VIEW S=1/200

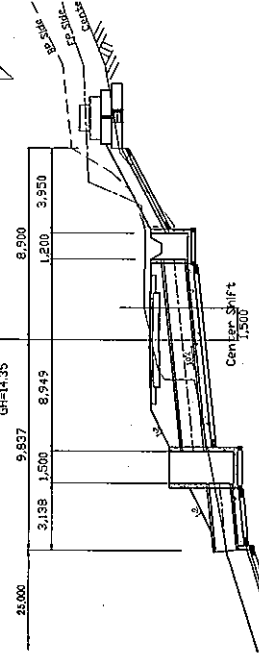


A-A SECTION S=1/200



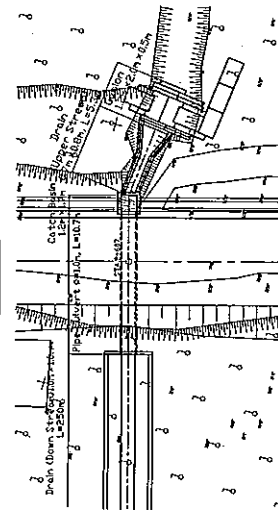
PROFILE S=1/250

PH=14.118 CL
GH=14.135

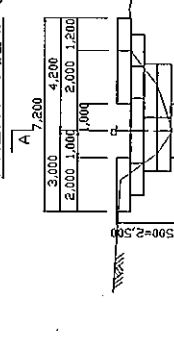


No. 8+607

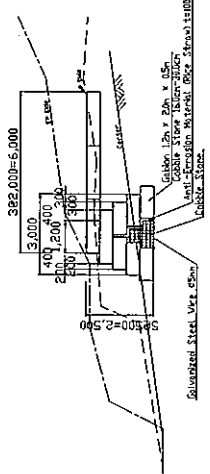
PLAN S=1/400



FRONT VIEW S=1/200

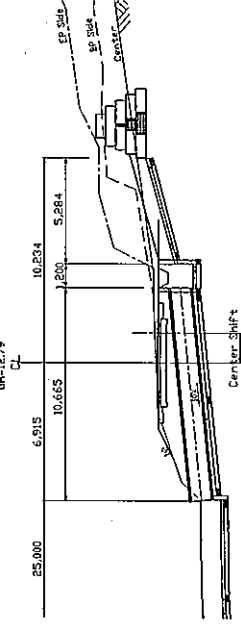


A-A SECTION S=1/200

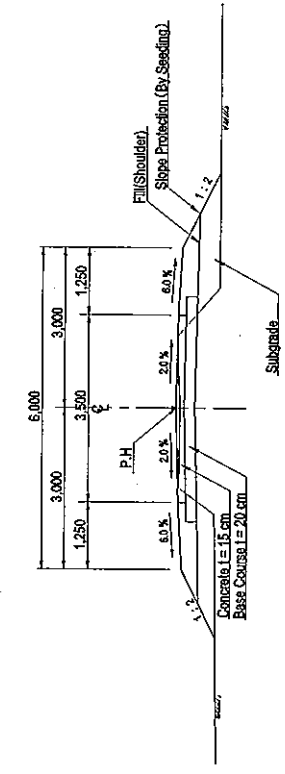


PROFILE S=1/250

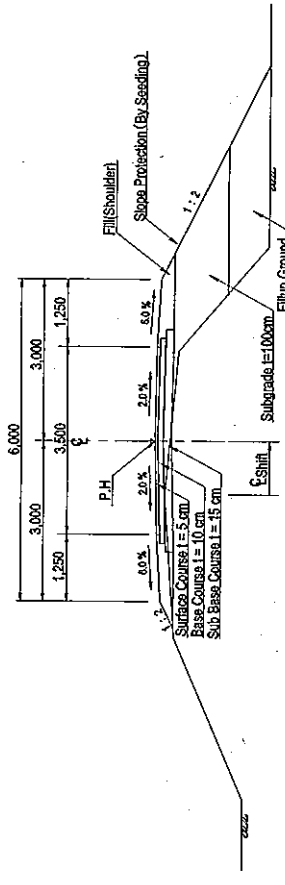
PH=12.731 CL
GH=12.79



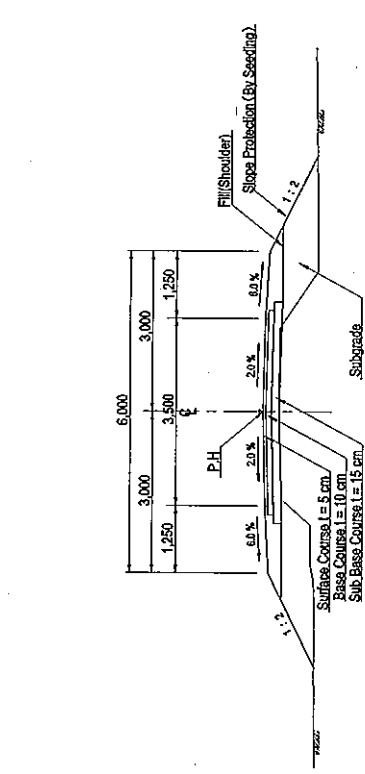
SOCIALIST REPUBLIC OF VIET NAM	
THE BASIC DESIGN STUDY ON THE PROJECT FOR THE CONSTRUCTION OF AN EROSION CONTROL FACILITY IN HO CHI MINH PROVINCE IN SOCIALIST REPUBLIC OF VIET NAM	
CONSTRUCTION OF EROSION CONTROL FACILITY	
National Road 19A	
Date	No. 38
S17460178A 1/88	
JAPAN INTERNATIONAL COOPERATION AGENCY	



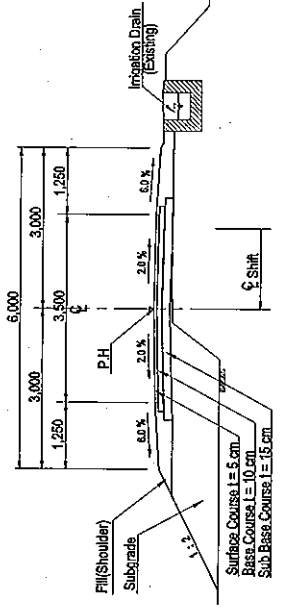
Concrete Pavement - 1
(2+040~2+760, 2+850~3+160, 3+200~3+840, 6+040~6+330)



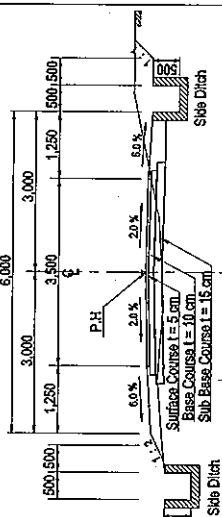
Asphalt Pavement - 2
(4+260~4+320, 5+510~5+950, 6+330~6+370, 6+510~6+590)



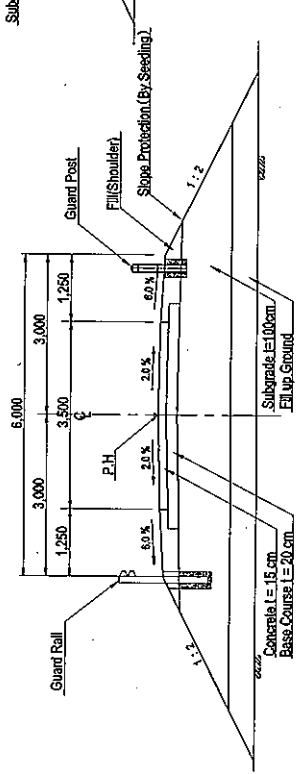
Asphalt Pavement - 1
(0+000~2+040, 2+760~2+850, 3+160~3+200)



Asphalt Pavement - 3
(5+170~5+510)



Asphalt Pavement - 4
(6+590~6+861)

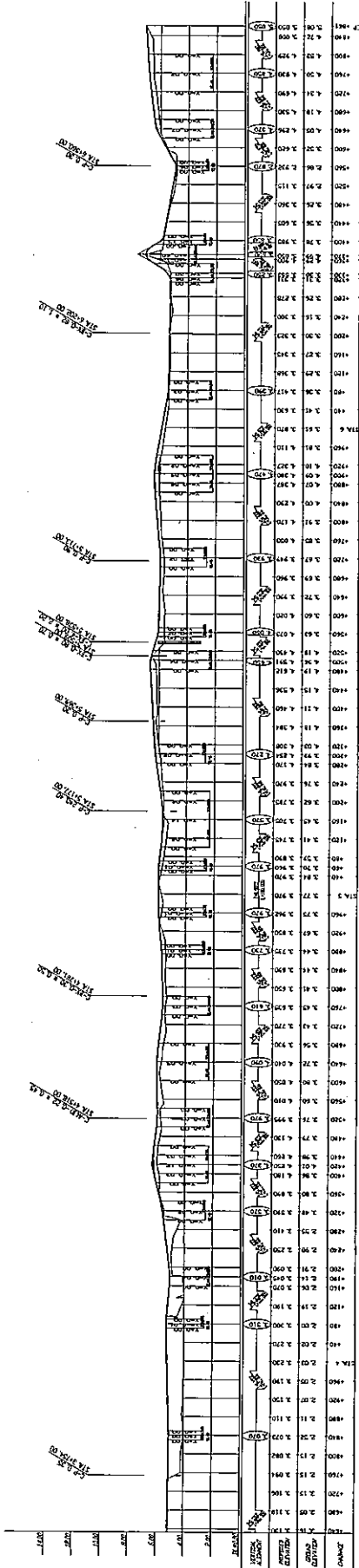
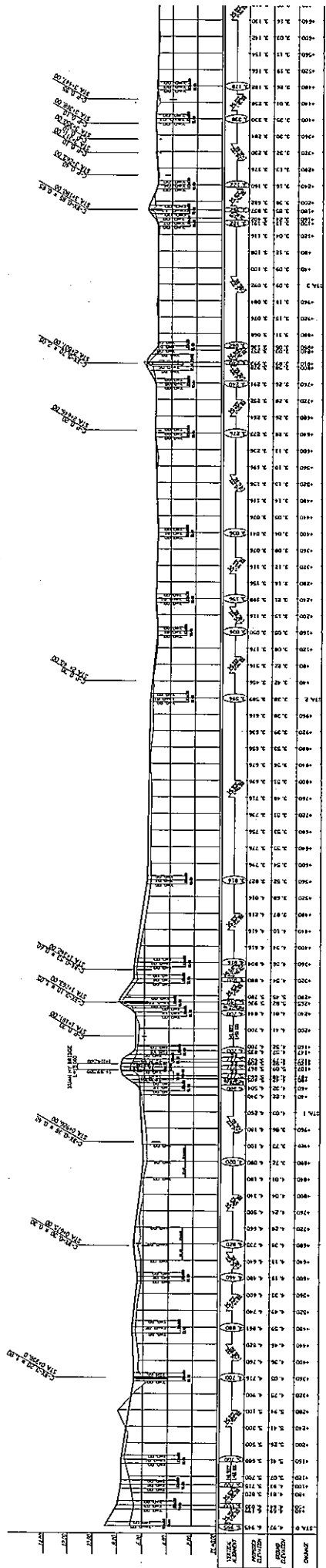


Concrete Pavement - 2
(3+840~4+260)

※Note:
1. Guard posts shall be constructed where slope height from two meters to four meters.
2. Guard Rails shall be installed where slope height exceeds four meters.

SOCIALIST REPUBLIC OF VIET NAM	
THE BASIC RESEARCH AND DESIGN PROJECT FOR IMPROVEMENT OF RURAL HIGHWAYS IN NAM DAI DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST REPUBLIC OF VIET NAM	
TYPICAL CROSS SECTION	
Nam Kim-Nam Phuoc-Nam Cuong Road	
Date	No.39
JAPAN INTERNATIONAL COOPERATION AGENCY	

PROFILE



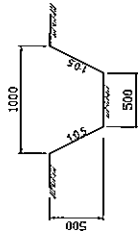
SOCIALIST REPUBLIC OF VIET NAM
 THE BASIS DESIGN STUDY ON THE PROJECT
 FOR IMPROVEMENT OF RURAL LINKS IN NAM
 DAN DISTRICT IN NGHE AN PROVINCE IN SOCIALIST
 REPUBLIC OF VIETNAM

PROFILE
 Nam Kim-Nam Phuc-Nam Cuong Road
 Date: _____ No. 40
 V.S. 10/1990
 JAPAN INTERNATIONAL COOPERATION AGENCY

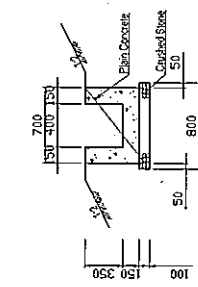
RELATIVE FACILITIES(1/3)

DETAIL OF SIDE DITCH

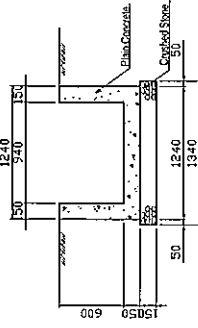
SIDE DITCH (EARTH-TYPE)
S=1/50



IRRIGATION DRAIN (PC-TYPE)
S=1/50



IRRIGATION DRAIN (PC-TYPE)
S=1/50



SCHEDULE OF SIDE DITCH (EARTH-TYPE)

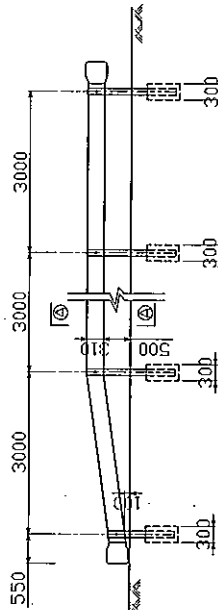
Station	Length m	SIDE L/R	Remarks	
				Start
2 + 40	2 + 295	L		
TOTAL				255

SCHEDULE OF SIDE DITCH (STONE MASONRY-TYPE)

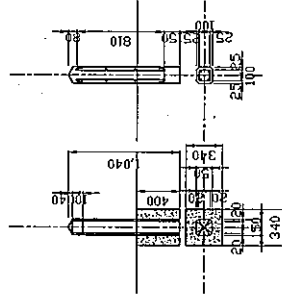
Station	Length m	SIDE L/R	Remarks	
				Start
0 + 60	0 + 330	L		
TOTAL				270

GUARD RAIL & GUARD POST

GUARD RAIL
Front View S = 1:100



GUARD POST
S = 1:50



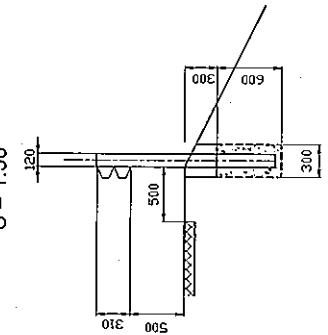
SCHEDULE OF GUARD RAIL

Station	Length m	SIDE	Remarks	
				Start
0 + 0	0 + 15	L		
6 + 450	6 + 520	R		
6 + 554	6 + 655	L		
9 + 80	9 + 127.5	R		
9 + 127.5	9 + 220	L		
13 + 784	13 + 744	R		
13 + 784	13 + 778	L		
15 + 630	15 + 665.5	R		
15 + 665.5	15 + 875	L		
16 + 250	16 + 317.8	R		
16 + 322.2	16 + 382.2	L		
18 + 650	18 + 700	R		
18 + 555	18 + 565	L		
TOTAL				710.8

SCHEDULE OF GUARD POST

Station	Length m	SIDE	Remarks	
				Start
0 + 0	0 + 15	L		
6 + 450	6 + 520	R		
6 + 554	6 + 650	L		
9 + 117.5	9 + 127.5	R		
9 + 183.5	9 + 235	L		
13 + 734	13 + 744	R		
13 + 768	13 + 785	L		
15 + 620	15 + 655.5	R		
15 + 683.5	15 + 830	L		
16 + 265	16 + 317.8	R		
16 + 322.2	16 + 332.2	L		
18 + 650	18 + 670	R		
TOTAL				554.3

AA SECTION
S = 1:50



SCHEDULE OF SIDE DITCH (RC-TYPE)

Station	Length m	SIDE L/R	Remarks	
				Start
4 + 325	5 + 170	L		
4 + 325	5 + 170	R		
5 + 950	6 + 40	L		
6 + 380	6 + 510	L		
6 + 380	6 + 500	R		
TOTAL				2,030

SCHEDULE OF GUIDE POST

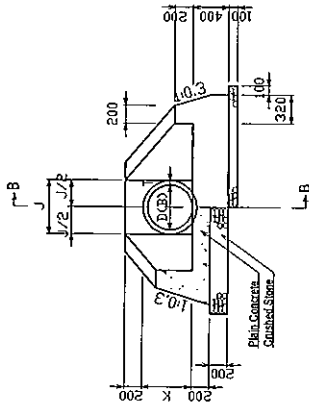
Station	Length m	No. of Posts 2m Pitch	SIDE	Remarks
0 + 15	0 + 80	34	L	
0 + 295	0 + 340	24	R	
1 + 500	1 + 595	45	L	
2 + 240	2 + 740	251	R	
2 + 775	2 + 900	64	L	
3 + 620	3 + 675	29	R	
4 + 625	6 + 450	1825	L	
6 + 655	7 + 60	405	R	
7 + 200	7 + 250	150	L	
8 + 290	8 + 450	81	R	
8 + 540	8 + 590	28	L	
9 + 20	9 + 80	31	R	
9 + 220	9 + 270	26	L	
11 + 120	11 + 430	156	R	
11 + 770	11 + 820	26	L	
11 + 915	11 + 930	9	R	
11 + 260	11 + 310	50	L	
12 + 815	12 + 865	70	R	
13 + 730	13 + 734	4	L	
13 + 778	13 + 870	47	R	
15 + 570	15 + 630	31	L	
15 + 875	15 + 915	40	R	
16 + 170	16 + 250	80	L	
16 + 332.2	16 + 365	32.8	R	
18 + 610	18 + 650	40	L	
18 + 700	18 + 750	50	R	
18 + 440	18 + 555	115	L	
19 + 585	19 + 650	85	R	
TOTAL				4688.8

SOCIALIST REPUBLIC OF VIET NAM
THE BASIC DESIGN STUDY ON THE PROJECT
FOR IMPROVEMENT OF RURAL LIVING CONDITION IN NAM
DAN DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST
REPUBLIC OF VIETNAM
RELATIVE FACILITIES(1/3)
SIDE DITCH, GUARD RAIL & GUARD POST
Nam Kiep-Nam Phuc-Nam Cong Road
Date _____ No.41
8x150
JAPAN INTERNATIONAL COOPERATION AGENCY

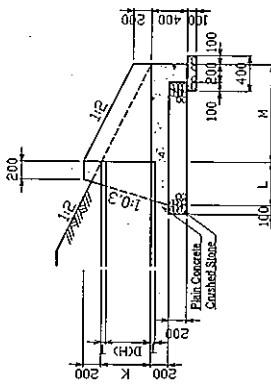
RELATIVE FACILITIES(2/3)

INLET & OUTLET (HEAD WALL)

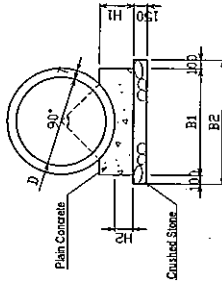
SECTION A-A



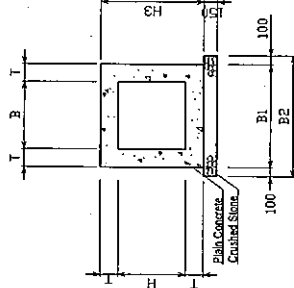
SECTION B-B



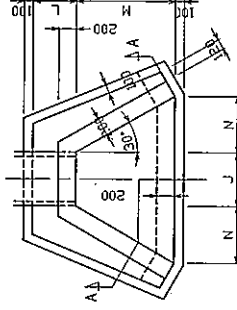
PIPE CULVERT



BOX CULVERT

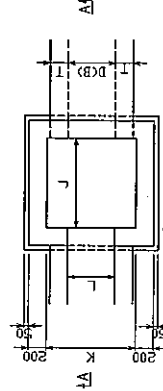


PLAN

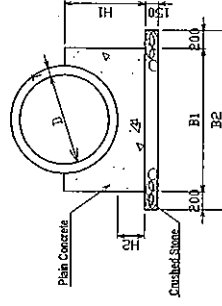


CATCH BASIN

PLAN



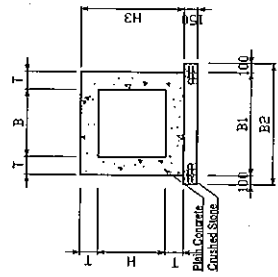
PIPE CULVERT



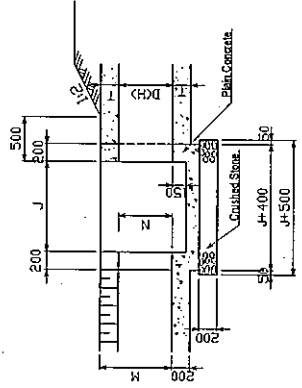
DIMENTION OF CULVERT

TYPE	E-1	E-2	E-3	E-4	E-5	E-6	E-7	E-8	E-9	E-10	E-11	E-12
D	100	300	350	400	2-400	550	900	-	-	-	-	-
B	-	-	-	-	-	-	220	300	300	300	380	820
H	-	-	-	-	-	-	450	300	300	500	420	1100
T	30	50	50	50	50	50	100	150	180	150	150	150
B1	300	500	550	550	1150	650	1050	420	600	660	660	1120
B2	500	700	750	750	1350	850	1250	620	800	860	860	1320
H1	120	160	170	220	220	240	360	-	-	-	-	-
H2	100	100	100	150	150	200	200	-	-	-	-	-
H3	-	-	-	-	-	-	650	600	600	860	720	1400
J	160	400	450	500	1100	650	1100	420	600	660	660	1120
K	130	350	400	450	600	1000	550	450	450	680	570	1250
L	359	425	440	455	500	620	485	455	524	524	536	695
M	260	700	800	900	1200	2000	1100	900	1360	1140	2500	-
N	150	404	462	520	520	693	1155	635	520	785	658	1443

BOX CULVERT



SECTION A-A



DIMENTION OF CULVERT

TYPE	F-1	F-2	F-3
D	500	-	-
B	-	530	850
H	-	600	850
T	50	200	100
B1	800	930	1050
B2	1000	1130	1250
H1	450	-	-
H2	150	-	-
H3	-	1000	1050
J	700	700	1000
K	700	700	1000
L	370	530	850
M	700	950	1100
N	440	600	850

DEMOCRATIC REPUBLIC OF VIETNAM

THE BASIC DESIGN STUDY ON THE PROJECT FOR IMPROVING TRANSPORTATION IN HANOI CANAL DISTRICT IN NGHE AN PROVINCE IN SOCIALIST REPUBLIC OF VIETNAM

RELATIVE FACILITIES(2/3)

DETAIL OF CULVERT

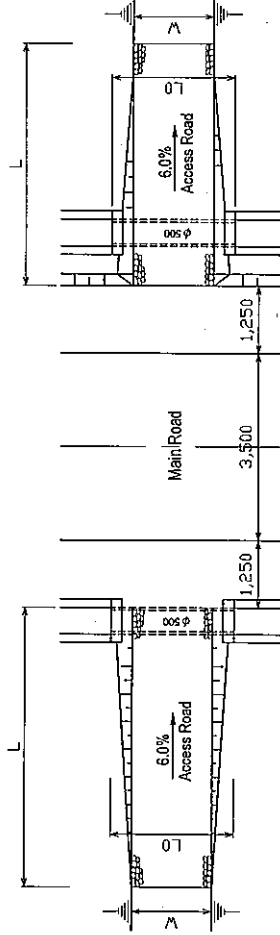
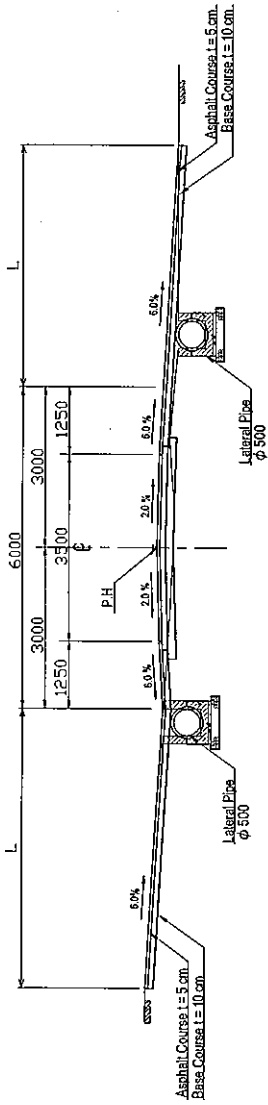
Nam Kim-Nam Phlu-Vam Cui-ong Road

Date No.42 S=1/50

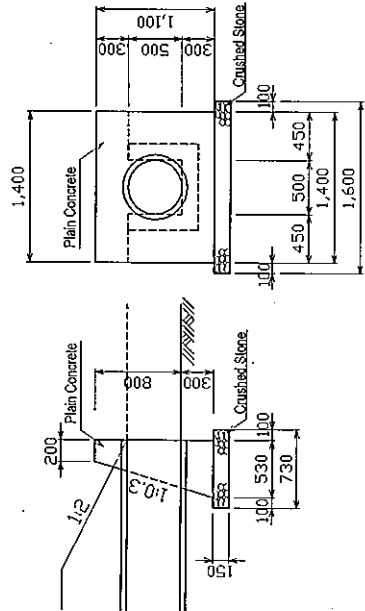
JAPAN INTERNATIONAL COOPERATION AGENCY

RELATIVE FACILITIES(3/3)

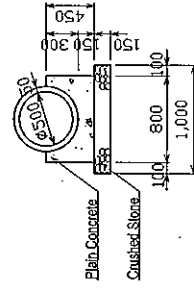
JUNCTION&ROADSIDE ENTRANCE



HEAD WALL



PIPE CULVERT

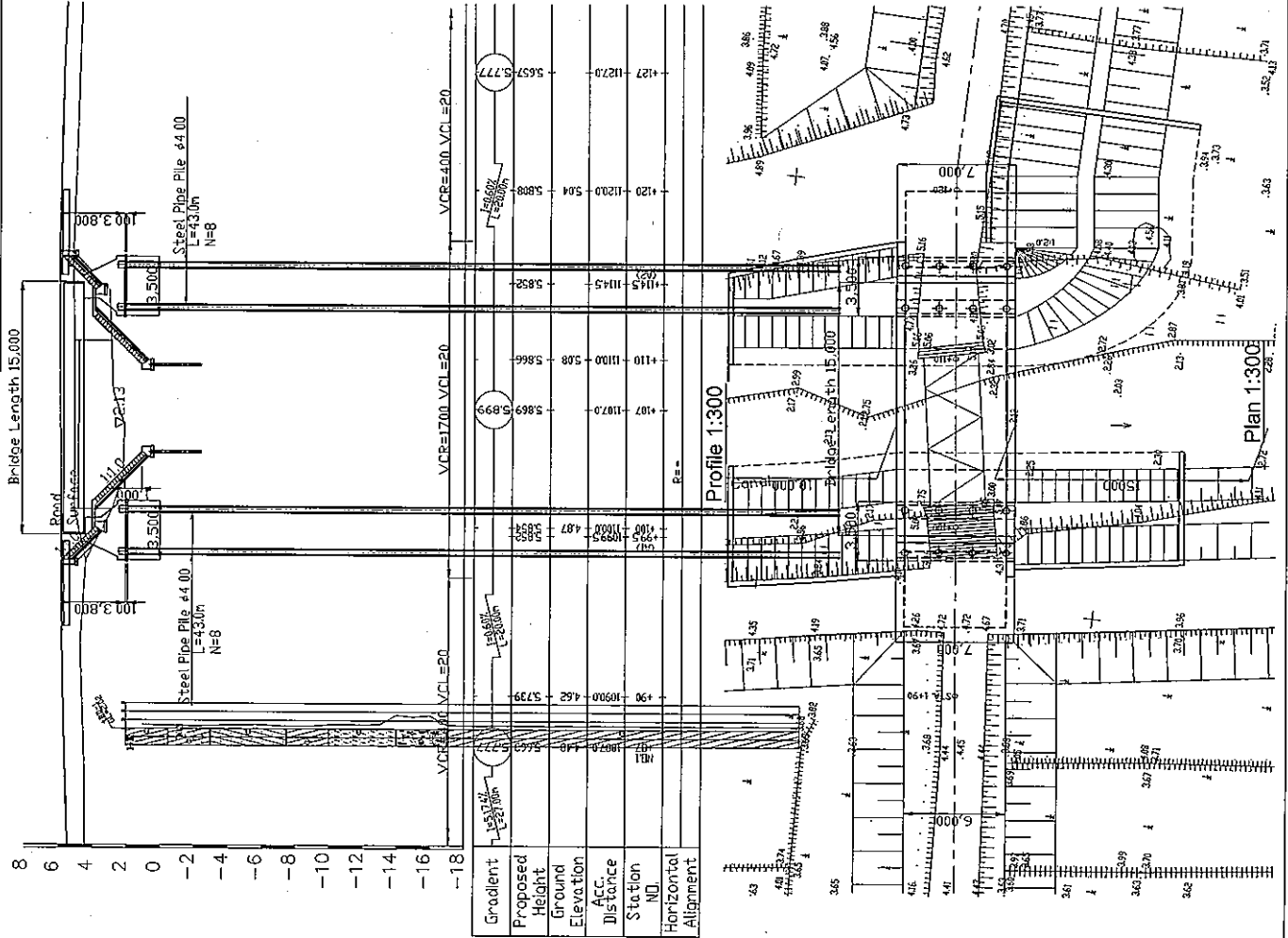
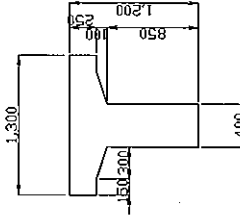
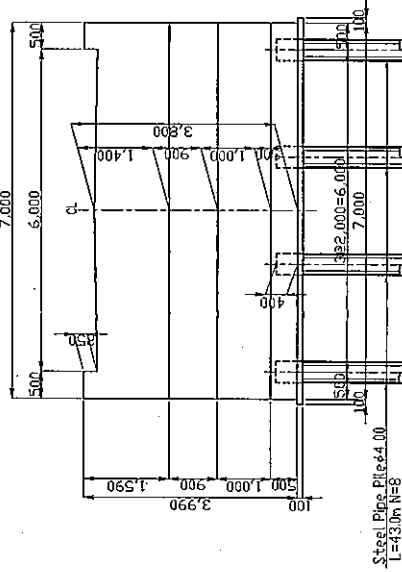
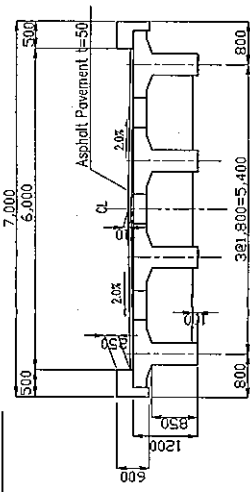


SCHEDULE OF JUNCTION & ENTRANCE

No.	Left side			Right side		
	W	L	LO	W	L	LO
0	490	1.0	2.0	-	-	-
1	496	3.5	16.7	3.5	16.7	-
1	120	8.0	11.8	-	-	-
1	340	3.0	1.3	-	-	-
2	440	-	-	1.0	1.2	-
2	474	1.0	0.5	-	-	-
2	592	1.0	2.3	-	-	-
2	493	-	-	1.0	2.2	-
2	515	1.0	1.8	-	-	-
3	539	-	-	2.0	0.3	-
3	439	4.0	2.5	-	4.0	2.5
3	754	4.0	2.7	-	-	-
4	323	5.0	0.8	5.1	5.0	0.8
4	393	-	-	3.0	4.0	-
4	405	-	-	-	2.0	1.1
4	439	-	-	-	2.0	2.0
4	461	1.0	2.9	-	-	-
4	495	3.0	4.9	3.8	4.0	4.9
4	545	3.0	5.8	3.7	5.0	5.8
4	615	-	-	1.0	1.3	-
4	665	2.0	3.8	-	-	-
4	683	1.0	2.5	-	-	-
4	688	-	-	2.0	6.1	-
4	703	3.0	5.8	3.7	-	-
4	892	1.0	3.2	-	-	-
4	809	1.0	4.0	-	-	-
4	852	1.0	0.5	-	-	-
4	882	5.0	4.0	5.5	5.0	4.0
5	421	-	-	5.0	1.4	5.0
5	409	-	-	-	2.0	1.5
5	475	-	-	-	2.0	0.3
5	287	-	-	1.0	4.2	-
5	385	1.0	4.0	-	-	-
5	503	3.0	0.7	-	5.0	-
5	506	-	-	3.0	1.3	3.0
5	540	5.0	3.8	-	5.0	3.8
6	385	5.0	2.5	-	5.0	2.9
6	415	4.0	0.9	4.0	4.0	0.9
6	511	2.0	0.0	-	-	-

SOCIALIST REPUBLIC OF VIET NAM
 THE BASIC DESIGN STUDY ON THE PROJECT
 FOR IMPROVEMENT OF RURAL LIVING CONDITION IN NAM
 DAN DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST
 REPUBLIC OF VIET NAM
 RELATIVE FACILITIES(3/3)
 DETAIL OF JUNCTION&ENTRANCE
 Nam Kim-Nam Phuoc-Nam Cuong Road
 Date _____
 Scale _____
 No.43
 JAPAN INTERNATIONAL COOPERATION AGENCY

GENERAL VIEW OF XUAN MY BRIDGE



THE SOCIALIST REPUBLIC OF VIETNAM
 THE BASIC DESIGN STUDY ON THE PROJECT
 FOR IMPROVEMENT OF RURAL LINKS CONNECTION IN NAM
 DAN DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST
 REPUBLIC OF VIETNAM

GENERAL VIEW OF XUAN MY BRIDGE
 Nam Kim-Nam Phuoc-Nam Cuong Road

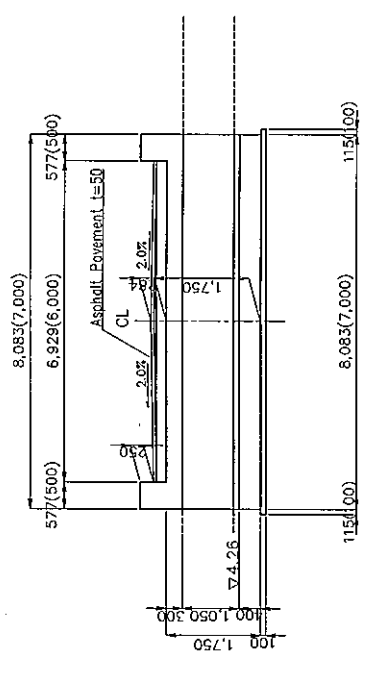
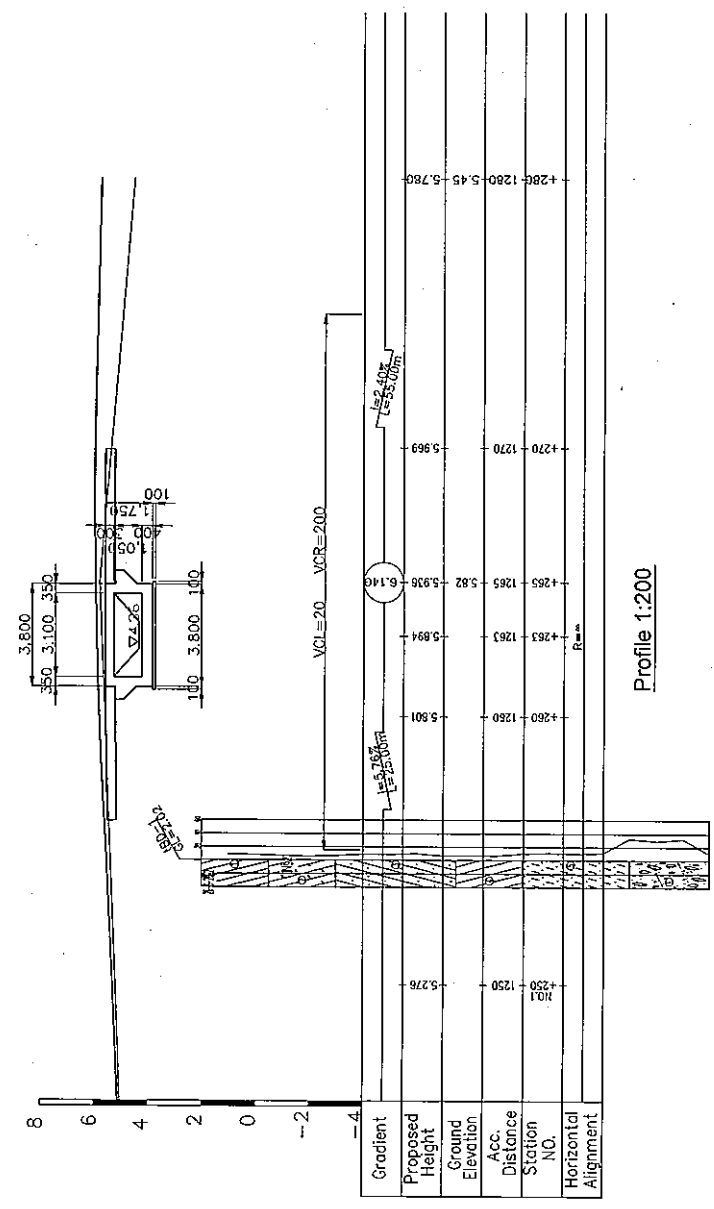
Date: 11/02/96
 No. 44
 1:50

JAPAN INTERNATIONAL COOPERATION AGENCY

DESIGN CRITERIA

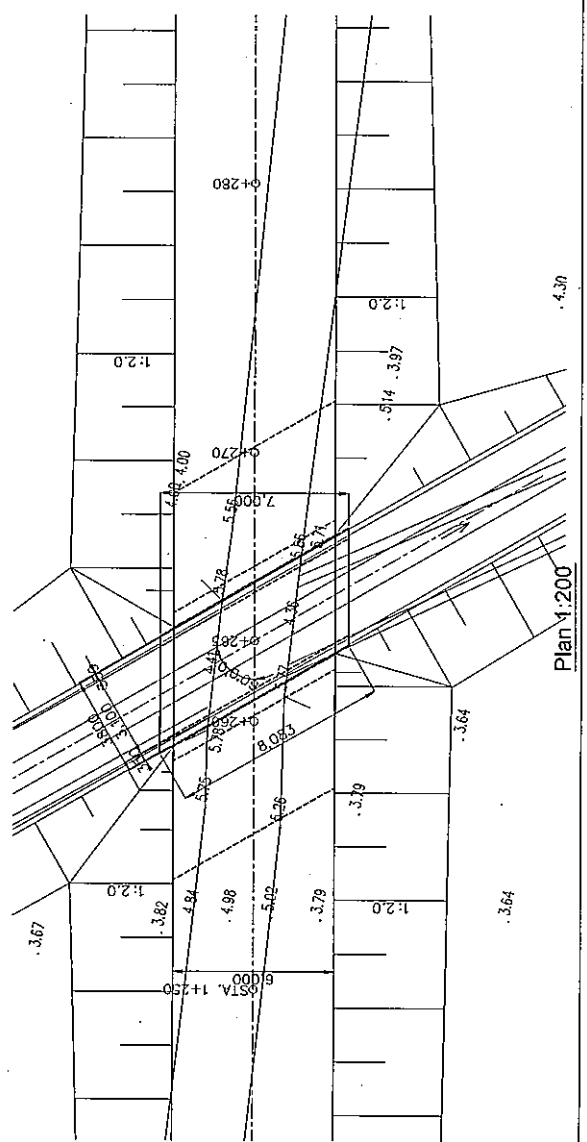
GENERAL CONDITION	Value
Design Speed	40 km/h
Bridge Length	15.00m
Bridge Width	7.00m
Construction Standard	Grade 2
Substructure Type	RC-T Shape Girder
Foundation Type	Abutment
Construction Year	1996
Drawn	11/02/96
Checked	11/02/96
Scale	1:50

GENERAL VIEW OF NAM DON BOX CULVERT



Section 1:100

DESIGN CRITERIA	
GENERAL CONDITION	
Design Speed	V=15km/h
Total Width	7.00m
Longitudinal Gradient	2.40%
Structure width	0.90m
Structure type	Box Culvert (3.10m x H.05m)
Foundation type	Spread



Plan 1:200

SOCIALIST REPUBLIC OF VIET NAM
THE BASIC DESIGN STUDY ON THE PROJECT
FOR IMPROVEMENT OF RURAL LIVING CONDITION IN NAM
DAN DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST
REPUBLIC OF VIETNAM

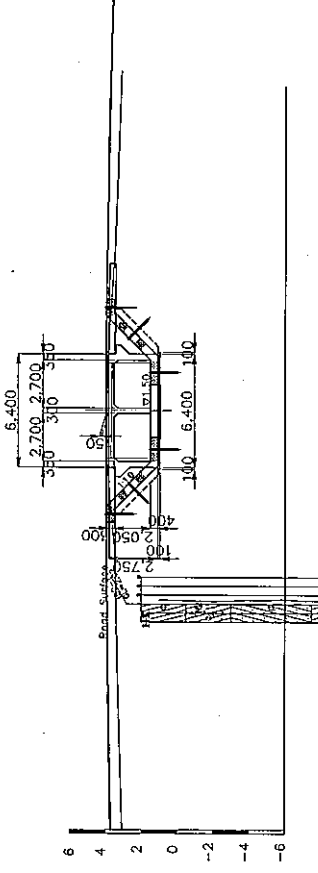
**GENERAL VIEW OF NAM DON
BOX CULVERT**

Nam Kim-Nam Phuoc-Nam Cuong Road

Date: _____ No.45: _____

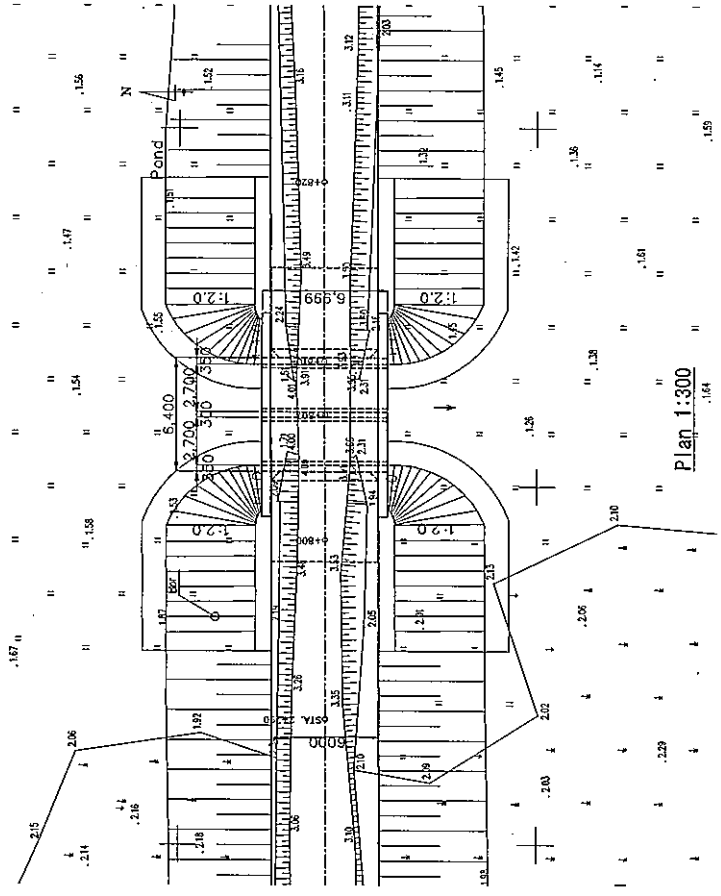
JAPAN INTERNATIONAL COOPERATION AGENCY

GENERAL VIEW OF TRAO BOX CULVERT

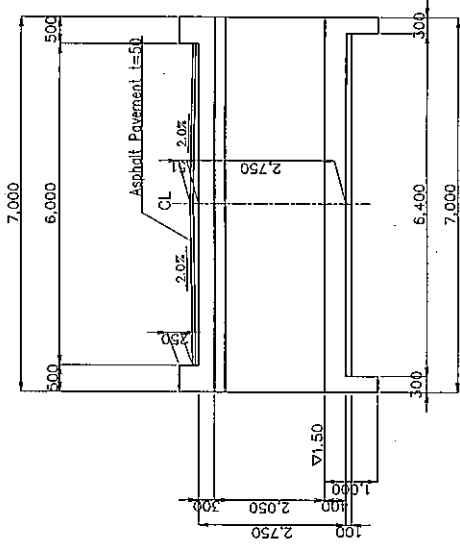


Gradient	Proposed Height	Ground Elevation	Acc. Distance	Station NO.	Horizontal Alignment
				1+790	R=∞
		3.25	3.840	2800	
		3.59	3.978	2800	
		4.001		2807	
		3.89	3.993	2810	
		3.36	3.984	2820	
				2820	

Profile 1:300



Plan 1:300



Section 1:100

DESIGN CRITERIA	
Design Speed	V=150km/h
Design Life	20 years
Load Class	LC-III
Load Factor	1.2
Structure Type	Box Culvert (8.20m x H2.05m x 2)
Foundation Type	Spread

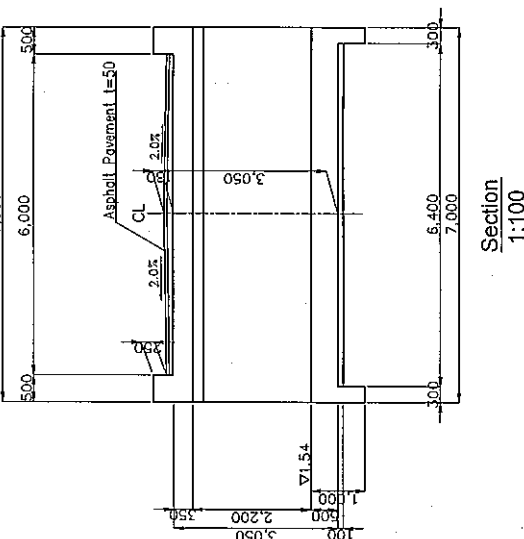
SOCIALIST REPUBLIC OF VIET NAM
THE BASIC DESIGN STUDY ON THE PROJECT
FOR IMPROVEMENT OF RURAL LIVING CONDITION IN NAM
DAN DISTRICT IN NGHE AN PROVINCE IN SOCIALIST
REPUBLIC OF VIET NAM

GENERAL VIEW OF TRAO BOX CULVERT
Nam Kim-Nam Phuc-Nam Cuong Road

Date: _____ No.46: _____
1:500
1:100

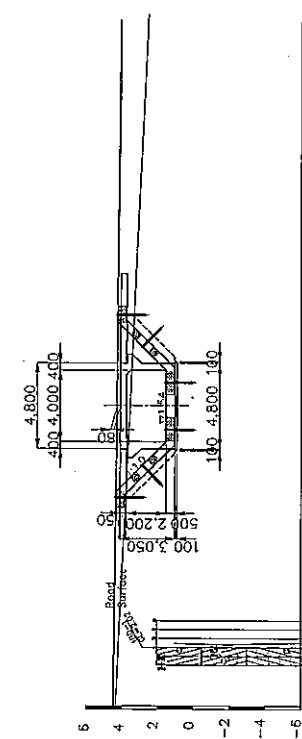
JAPAN INTERNATIONAL COOPERATION AGENCY

GENERAL VIEW OF COI BOX CULVERT



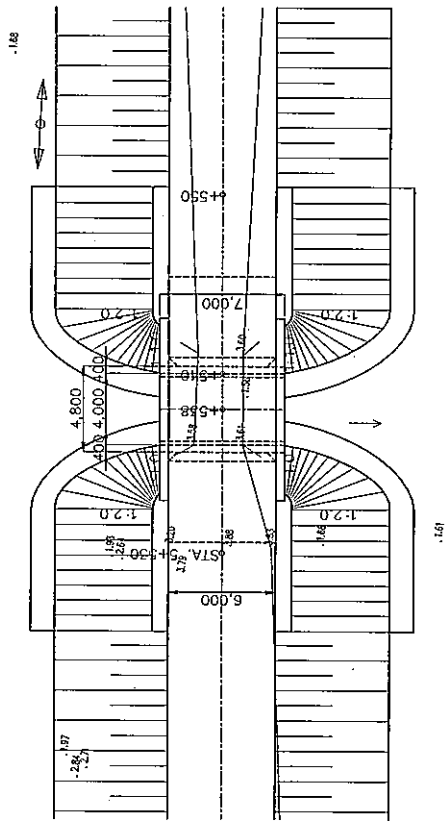
Section
1:100

DESIGN CRITERIA	
GENERAL CONDITION	
Design Speed	V=15km/h
Road Width	7.00m
Structure Width	6.40m
Grade-fall of Corridor way	2.0%
Structure Type	Box Culvert (84.00m x H2.20m)
Foundation Type	Spread



Gradient	Proposed Height	Ground Elevation	Acc. Distance	Station NO.	Horizontal Alignment
1:1.54	2.20	4.150	3.88	105+5530	R=∞
1:1.54	2.20	4.290	3.60	138+5538	R=∞
1:1.54	2.20	4.270	5.58	153+5538	R=∞
1:1.54	2.20	4.250	5.40	154+5540	R=∞
1:1.54	2.20	4.150	5.50	156+5550	R=∞

Profile 1:300



Plan 1:300

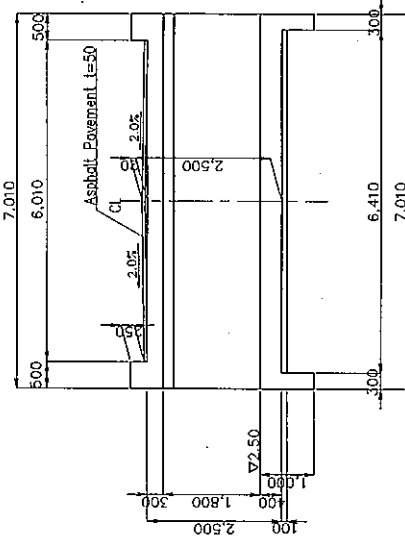
SOCIALIST REPUBLIC OF VIET NAM
THE BASIC DESIGN STUDY ON THE PROJECT
FOR IMPROVEMENT OF RURAL LIVING CONDITION IN NAM
DANG DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST
REPUBLIC OF VIETNAM

GENERAL VIEW OF COI BOX CULVERT
Nam Kim-Nam Phuc-Nam Cuong Road

Date: _____ No.47: _____ 1:500
1:100

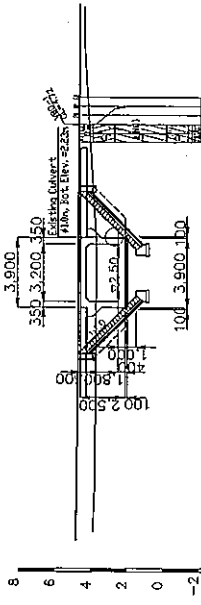
JAPAN INTERNATIONAL COOPERATION AGENCY

GENERAL VIEW OF VEN BOX CULVERT



Section
1:100

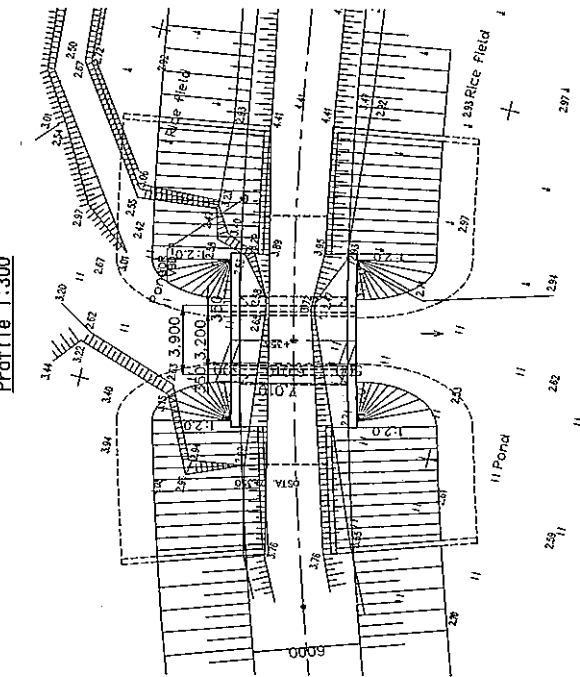
DESIGN CRITERIA	
GENERAL CONDITIONS	
Design Speed	V=30km/h
Total Width	7.01m
Longitudinal Gradient	-0.5%
Cross-fall of Carriage way	2.0%
Structure Type	Box Culvert (R3.2m x H 5.0m)
Foundation Type	Spread



VCE=3100 VCI=20

Gradient	Proposed Height	Ground Elevation	Acc. Distance	Station NO.	Horizontal Alignment
-1.0	3.900	3.200	3.50	15	
-2.0	3.800	3.100	3.40	16	
-3.0	3.700	3.000	3.30	17	
-4.0	3.600	2.900	3.20	18	
-5.0	3.500	2.800	3.10	19	
-6.0	3.400	2.700	3.00	20	
-7.0	3.300	2.600	2.90	21	
-8.0	3.200	2.500	2.80	22	
-9.0	3.100	2.400	2.70	23	
-10.0	3.000	2.300	2.60	24	

Profile 1:300



Plan 1:300

THE SOCIALIST REPUBLIC OF VIETNAM
 THE BASIC REGIONAL STRATEGY ON THE PROJECT
 FOR IMPROVEMENT OF RURAL LIVING CONDITION IN NAM
 DAN DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST
 REPUBLIC OF VIETNAM

GENERAL VIEW OF VEN BOX CULVERT
 Nam Kim-Nam Phuc-Nam Cuong Road

Date: 1980
 No. 48
 1:300
 JAPAN INTERNATIONAL COOPERATION AGENCY

General Plan (1/2)



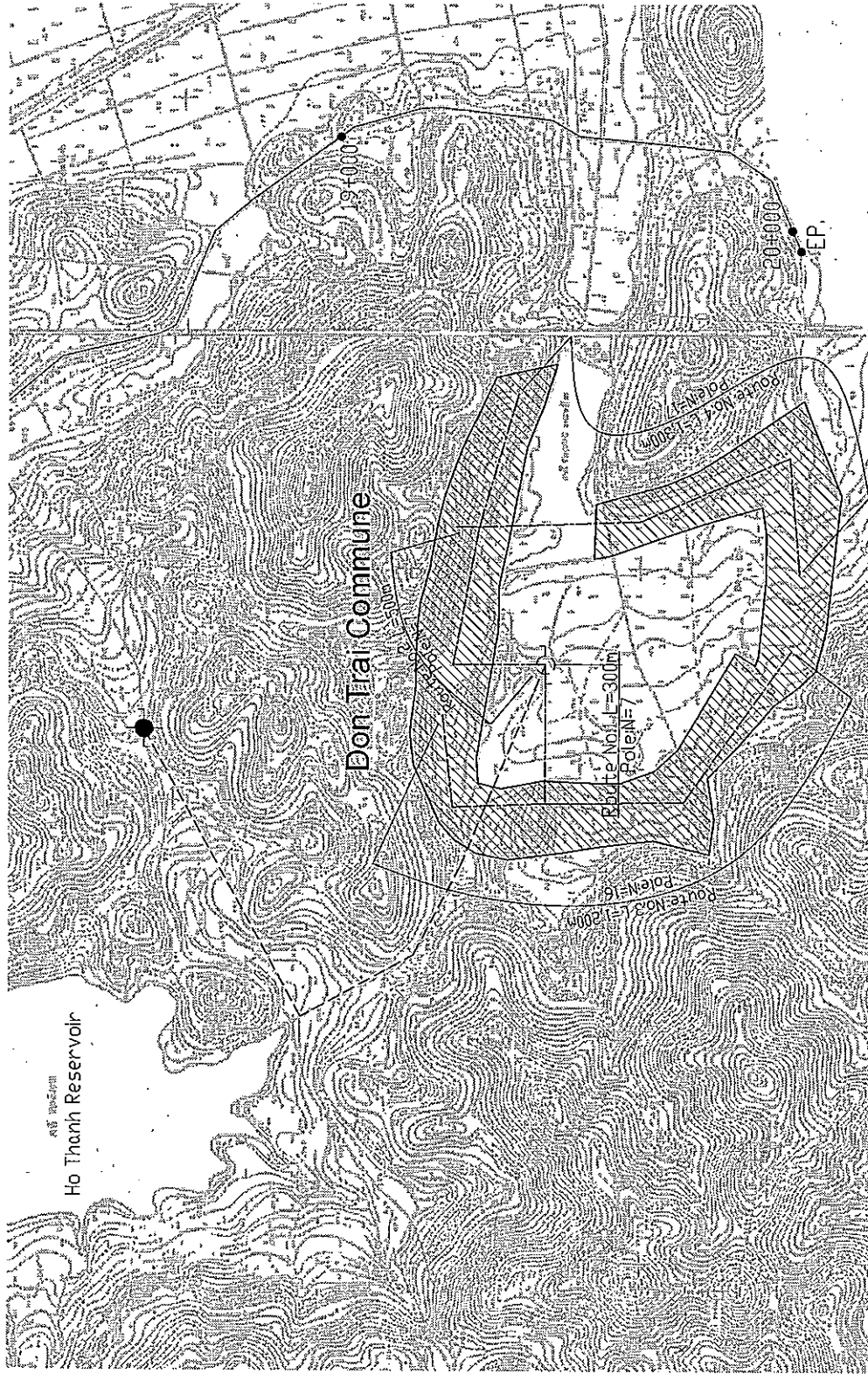
Legend	
	Electrification Area
	Existing Substation
	New Substation
	Existing Transmission Line
	New Transmission Line
	New Distribution Line

SOCIALIST REPUBLIC OF VIET NAM
 THE BASIC DESIGN STUDY ON THE PROJECT
 FOR IMPROVEMENT OF RURAL LIVING CONDITION IN NAM
 DAN DISTRICT IN NGHIE AN PROVINCE IN SOCIALIST
 REPUBLIC OF VIET NAM

GENERAL PLAN (1/2)
 Rural Electrification

Date: No. 49 S=1:110,000
 JAPAN INTERNATIONAL COOPERATION AGENCY

General Plan (2/2)



Rural Electrification

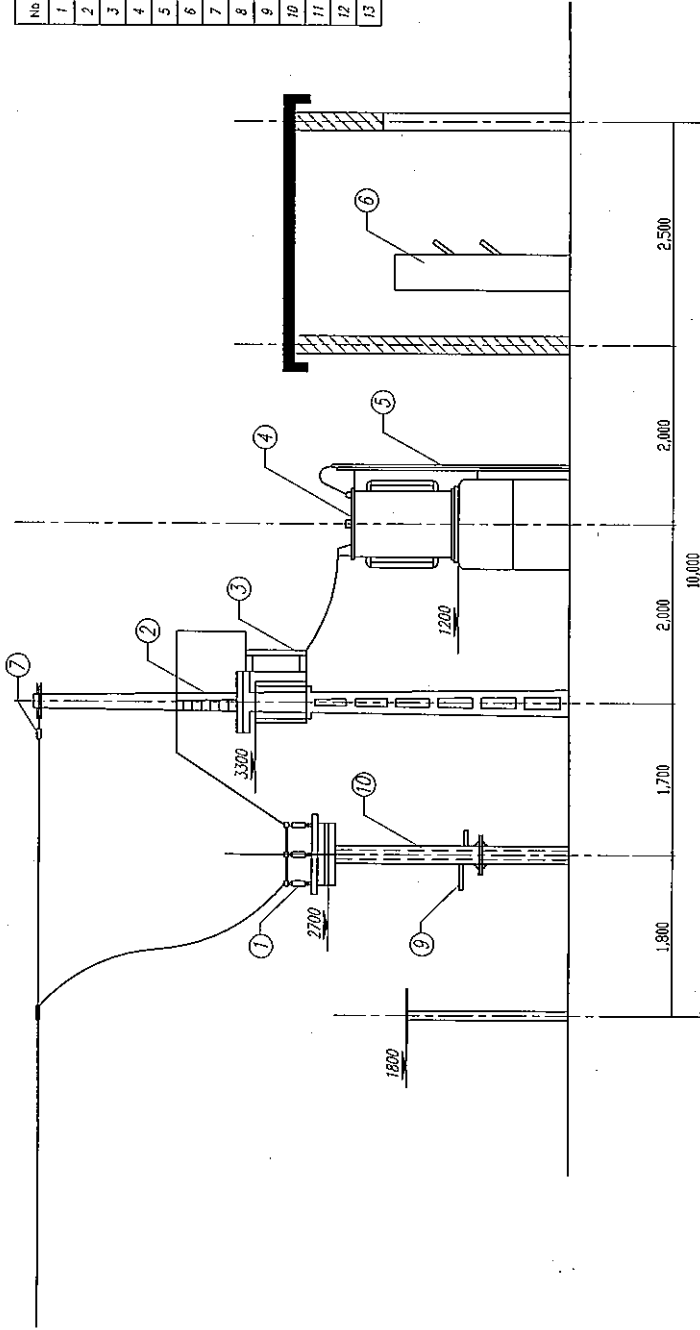
Legend	
	Electrification Area
	Existing Substation
	New Substation
	Existing Transmission Line
	New Transmission Line
	New Distribution Line

SOCIALIST REPUBLIC OF VIET NAM	
THE BASIC DESIGN STUDY ON THE PROJECT FOR IMPROVEMENT OF RURAL LIVING CONDITION IN NAM DAN DISTRICT IN HANGH AI PROVINCE IN SOCIALIST REPUBLIC OF VIET NAM	
GENERAL PLAN (2/2)	
Rural Electrification	
Date	No. 50
S-1110,000	
JAPAN INTERNATIONAL COOPERATION AGENCY	

10KV/0.4KV Sub Station (2/2)

LOCATION OF COMPLETE EQUIPMENT

S=1:60

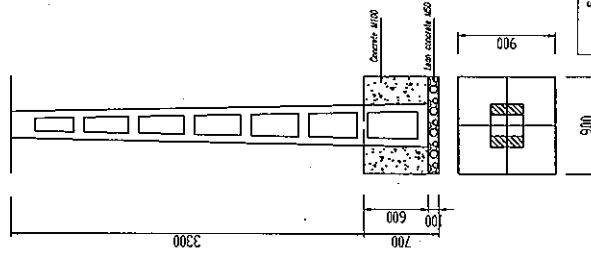


LIST OF MATERIAL

No	ITEMS AND SPECIFICATION	UNIT	QUANTITY
1	Breaker	Set	1
2	Anti-thunder valve	Set	1
3	Fuse	Set	1
4	Transformer	Pc	1
5	Cable into low voltage control panel	m	10
6	Control panel	Pc	1
7	Shackle □ #70		
8	Brass bar	m	20
9	Breaker handle	Pc	1
10	Pipe for breaker movement	m	3
11	House for control panel	Pc	1
12	Connection cable	Pc	3
13	Beam for cable holding L25x75x7x2000	Pc	1

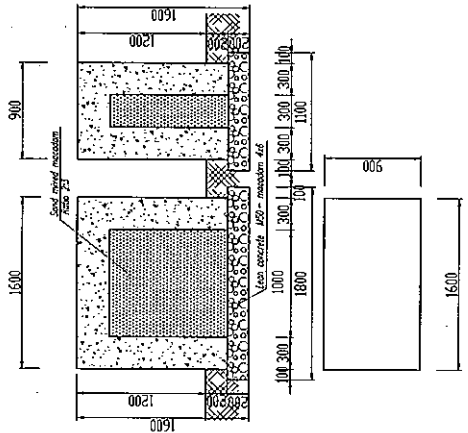
□ - SHAPED PILE FOUNDATION

S=1:50



Base of 180 KVA TRANSFORMER

S=1:50



FOUNDATION OF BREAKER

S=1:50

