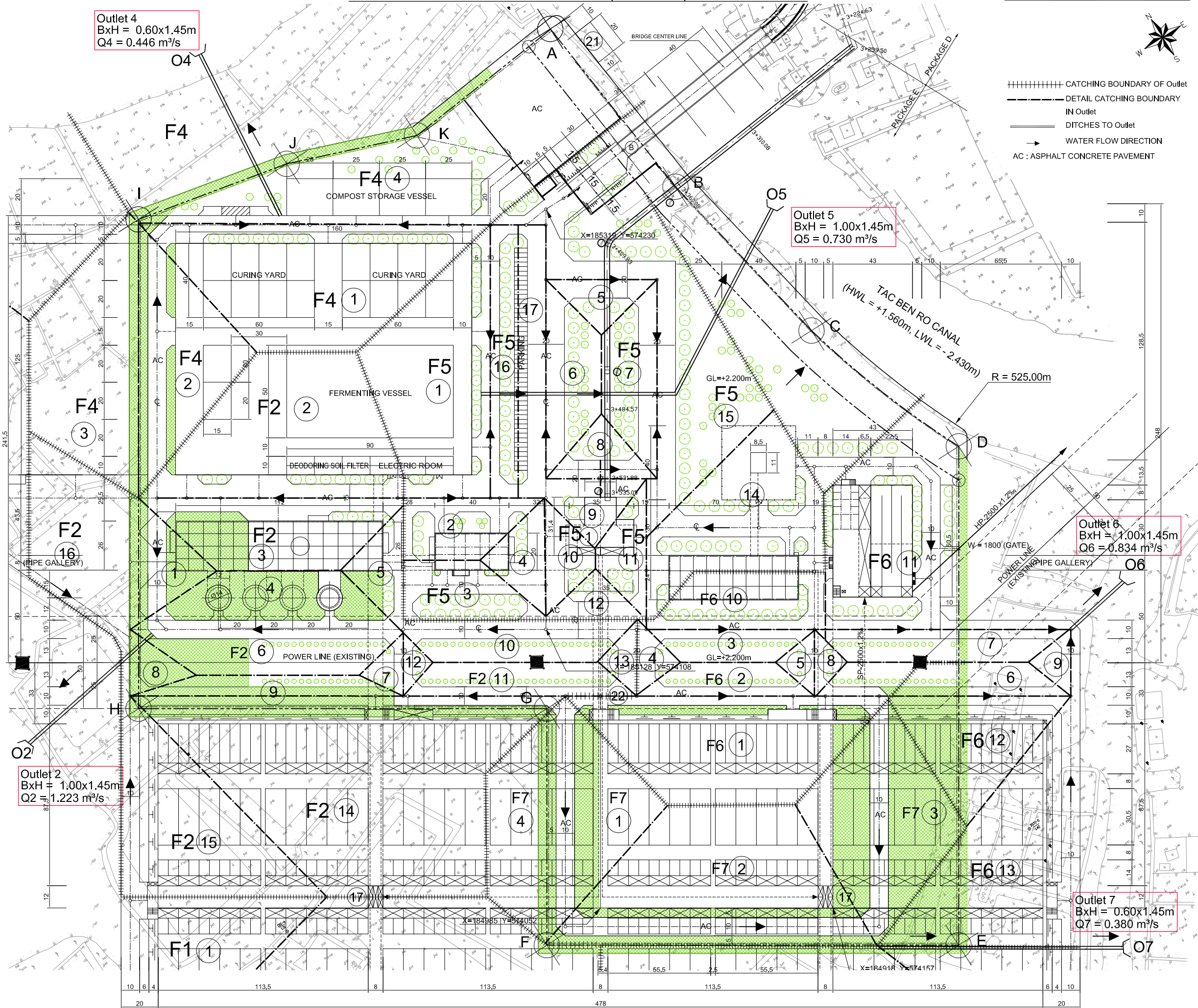


RAIN DISCHARGE PLAN OF WWTP (PHASE I) Scale: 1/ 1000

0 25 50 75 100m



Outlet 4
BxH = 0.60x1.45m
Q4 = 0.446 m³/s

Outlet 5
BxH = 1.00x1.45m
Q5 = 0.730 m³/s

Outlet 6
BxH = 1.00x1.45m
Q6 = 0.834 m³/s

Outlet 2
BxH = 1.00x1.45m
Q2 = 1.223 m³/s

Outlet 7
BxH = 0.60x1.45m
Q7 = 0.380 m³/s

Outlet No	F (ha)	Outlet No	F (ha)
O2 : Outlet Area 2		O5	3.12
F2-1	0.16	F5-1	0.60
F2-2	0.61	F5-2	0.21
F2-3	0.42	F5-3	0.21
F2-4	0.16	F5-4	0.14
F2-5	0.42	F5-5	0.09
F2-6	0.26	F5-6	0.24
F2-7	0.04	F5-7	0.24
F2-8	0.04	F5-8	0.09
F2-9	0.26	F5-9	0.06
F2-10	0.26	F5-10	0.15
F2-11	0.26	F5-11	0.15
F2-12	0.04	F5-12	0.06
F2-13	0.04	F5-13	0.06
F2-14	1.73	F5-14	0.24
F2-15	0.55	F5-15	0.48
F2-16	5.73	F5-16	0.22
Sub Total	0.48	F5-17	0.22
		Sub Total	3.46
O4 : Outlet Area 4		O6 : Outlet Area 6	
F4-1	0.77	F6-1	0.75
F4-2	0.44	F6-2	0.16
F4-3	0.63	F6-3	0.16
F4-4	0.66	F6-4	0.16
Sub Total	2.50	F6-5	0.04
		F6-6	0.38
O7 : Outlet Area 7		F6-7	0.38
F7-1	0.30	F6-8	0.04
F7-2	0.70	F6-9	0.04
F7-3	0.80	F6-10	0.27
F7-4	0.38	F6-11	0.48
Sub Total	2.18	F6-12	0.27
		F6-13	0.60
		Sub Total	3.61

NO.	DATE	DESCRIPTIONS	BY	APRO.
REVISIONS				

PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN STUDY ON HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT PROJECT
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E
WASTEWATER TREATMENT PLANT
RAIN DISCHARGE PLAN,
SECTION AND DETAIL (No.2)

SCALE : 1 / 1000

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

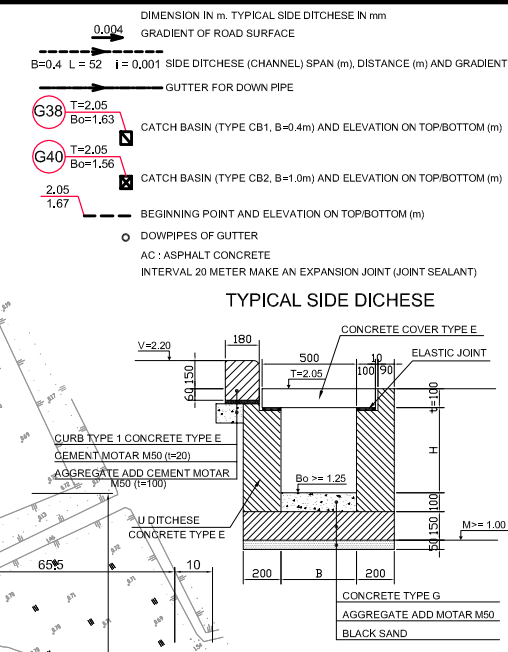
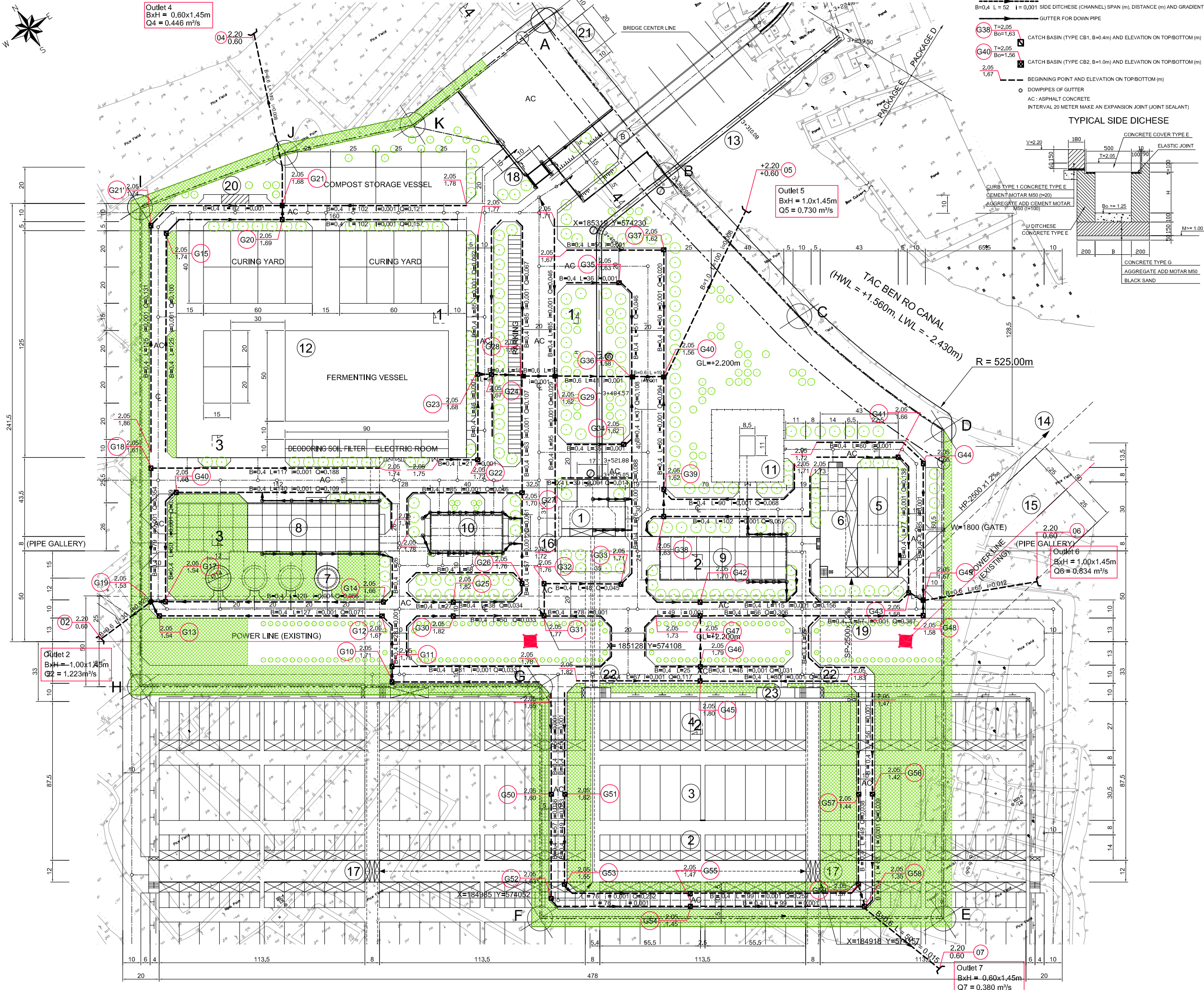
PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED
KIMURA TORU

CHECKED
KONDO MASAMI

DATE : JUNE 2001 DWG. No. PE - WWTP - 222 - 02

LAYOUT OF STORM WATER DRAINAGE SYSTEM (PHASE I) Scale: 1/ 1000



H OF CATCH BASIN		H OF CATCH BASIN	
Type 1 (B=0.4m)		Type 1 (B=0.4m)	
No. G	H (m)	No. G	H (m)
10	0.24	45	0.15
11	0.25	46	0.16
12	0.28	47	0.24
13	0.41	48	0.37
14	0.29	50	0.35
15	0.33	51	0.33
16	H	52	0.42
17	0.14	53	0.40
18	0.21	54	0.50
20	0.26	55	0.48
22	0.23	56	0.53
23	0.27	57	0.51
24	0.28		
25	0.13		
26	0.19		
27	0.25		
30	0.13	H OF CATCH BASIN	
		Type 2 (B=1m)	
No. G	H (m)	No. G	H (m)
31	0.18	19	0.37
32	0.19	21	0.22
33	0.24	28	0.20
34	0.33	29	0.28
35	0.32	36	0.32
37	0.33	40	0.34
38	0.32	49	0.33
39	0.33	58	0.55
41	0.29		
42	0.25		
43	0.37		
44	0.39		

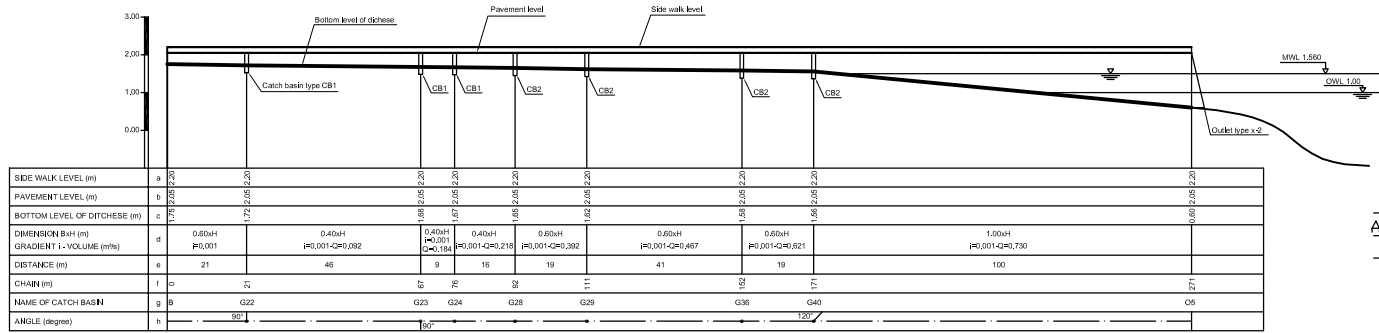
NOTE

- ELEVATION B₀ AT CATCH BASIN LOWER THAN BOTTOM OF SIDE DICHESE 0.2m
- PORTION TO OUTLET USE BxH = 600x1450 OR 1000x1450mm
- THICKNESS OF CONCRETE COVER t = 150mm
- H_{max} = 0.95m, H_{min} = 0.20m

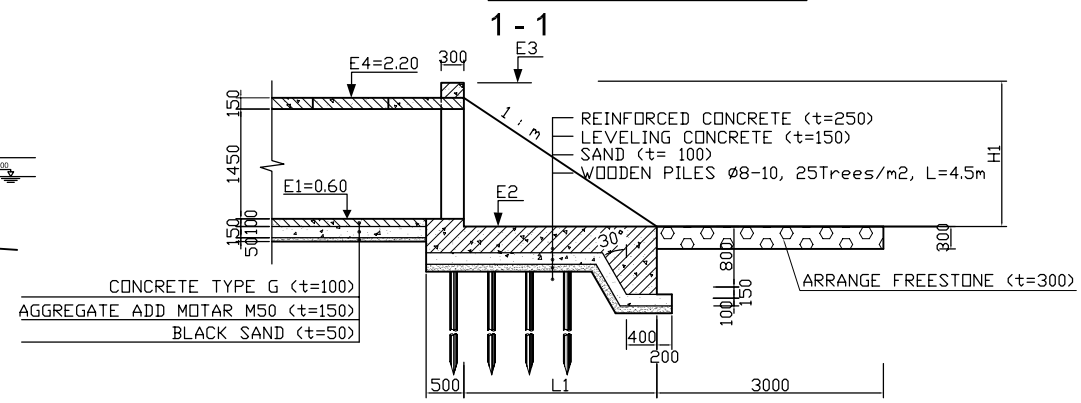
NO.	DATE	DESCRIPTIONS	BY	APRO.
REVISIONS				
PROJECT MANAGEMENT UNIT FOR HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT				
THE DETAILED DESIGN STUDY ON HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT PROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM				
PACKAGE E WASTEWATER TREATMENT PLANT RAIN DISCHARGE PLAN, SECTION AND DETAIL (No.3)				
SCALE: 1/ 1000				
JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)				
PACIFIC CONSULTANTS INTERNATIONAL				
DESIGNED KIMURA TORU		CHECKED KONDO MASAMI		
DATE : JUNE 2001		DWG. No. PE - WWTP - 222 - 03		

PROFILE OF SIDE DITCHES

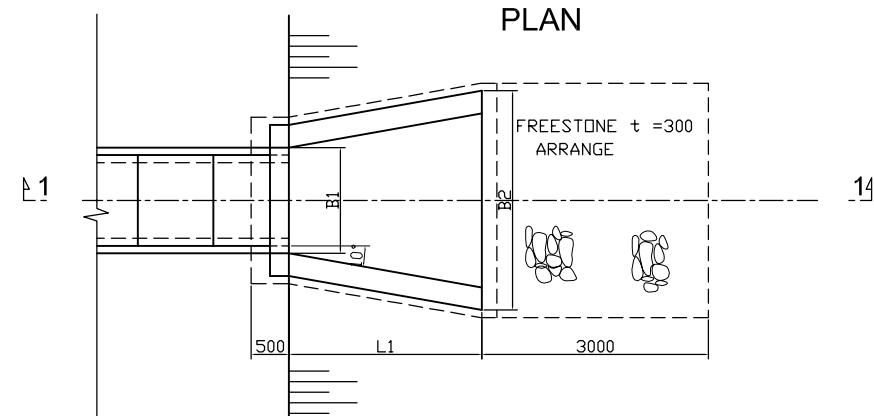
SCALE HORIZON: 1/1000
VERTICAL: 1/100



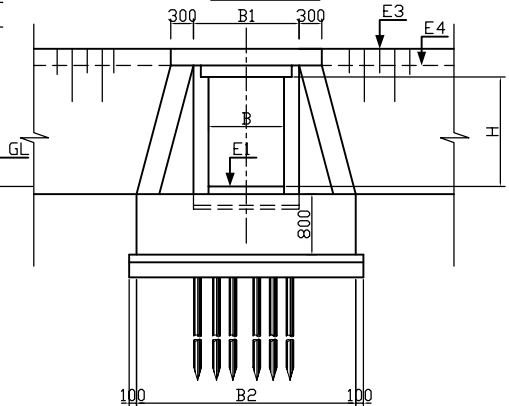
OUTLET Scale: 1/50



PLAN



FRONT



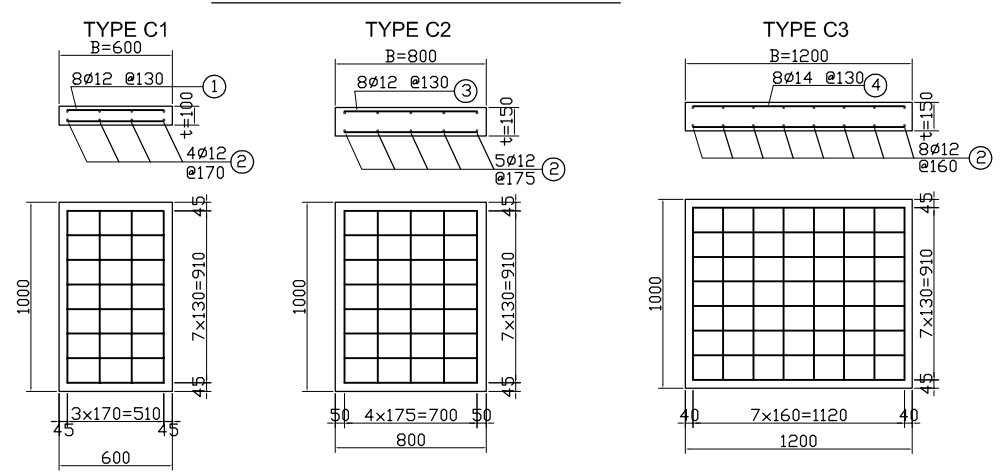
LEGEND:

- E1: INVERT ELEVATION OF SEWER PIPE
- E2: ELEVATION OF OUTLET FLOOR
- E3: TOP ELEVATION OF OUTLET VERTICAL WALL
- E4: TOP ELEVATION OF OUTLET WING WALL
- E5: EXISTING GROUND LEVEL

OUTLET OF WWTP

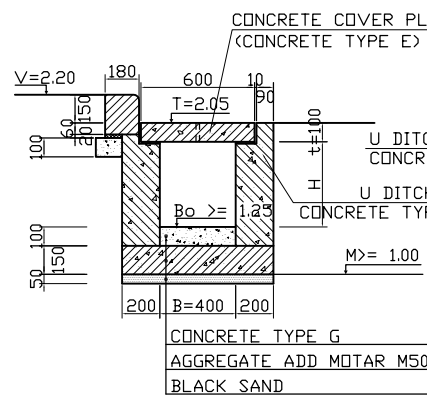
Type	B (mm)	POSITION	ELEVATION (m)					m	H1 (m)	B1 (m)	B2 (m)	L1 (m)
			E1(=Bo)	E2	E3	E4	E5					
1	600	D4, D7	0.60	0.50	2.40	2.20	0.60	1.5	1.90	1.00	2.50	2.55
2	1000	D2, D5, D6	0.60	0.50	2.40	2.20	0.60	1.5	1.90	1.40	2.90	2.55

CONCRETE COVER PLATE SCALE: 1/20



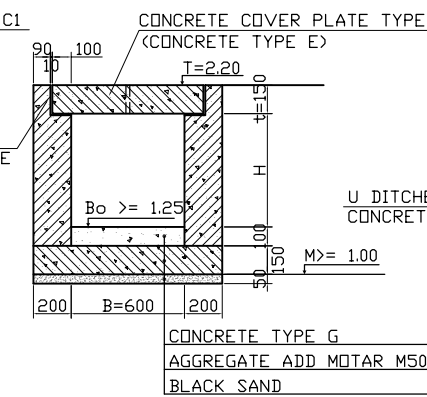
SIDE DICHESE TYPE 1 SCALE: 1/20

SECTION D1 - D1



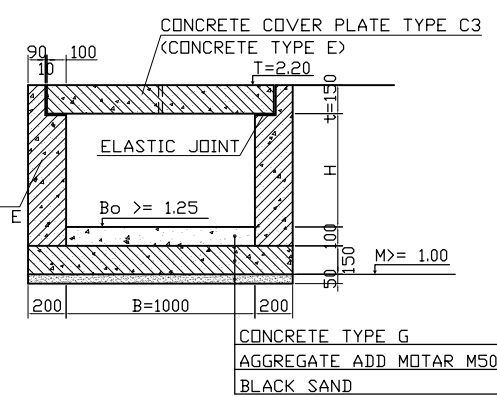
SIDE DICHESE TYPE 2 SCALE: 1/20

SECTION D2 - D2

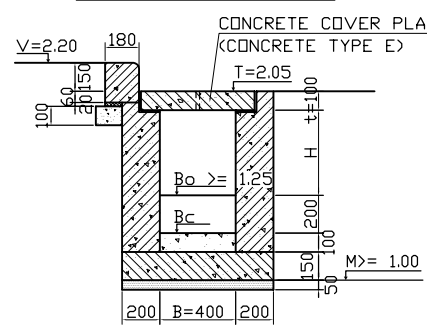


SIDE DICHESE TYPE 3 SCALE: 1/20

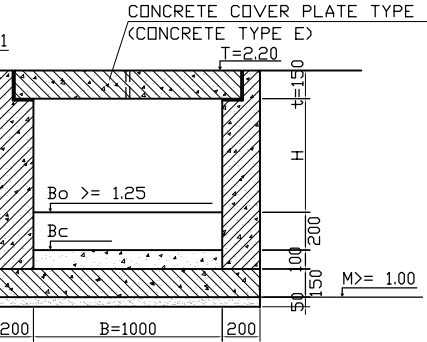
SECTION D3 - D3



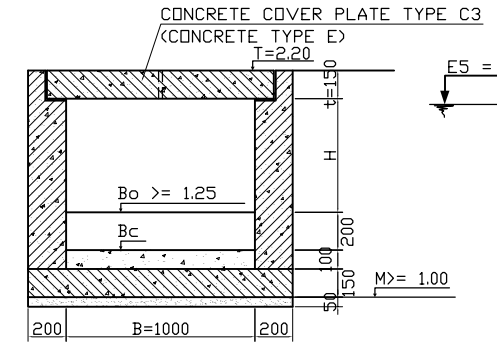
SECTION C1 - C1



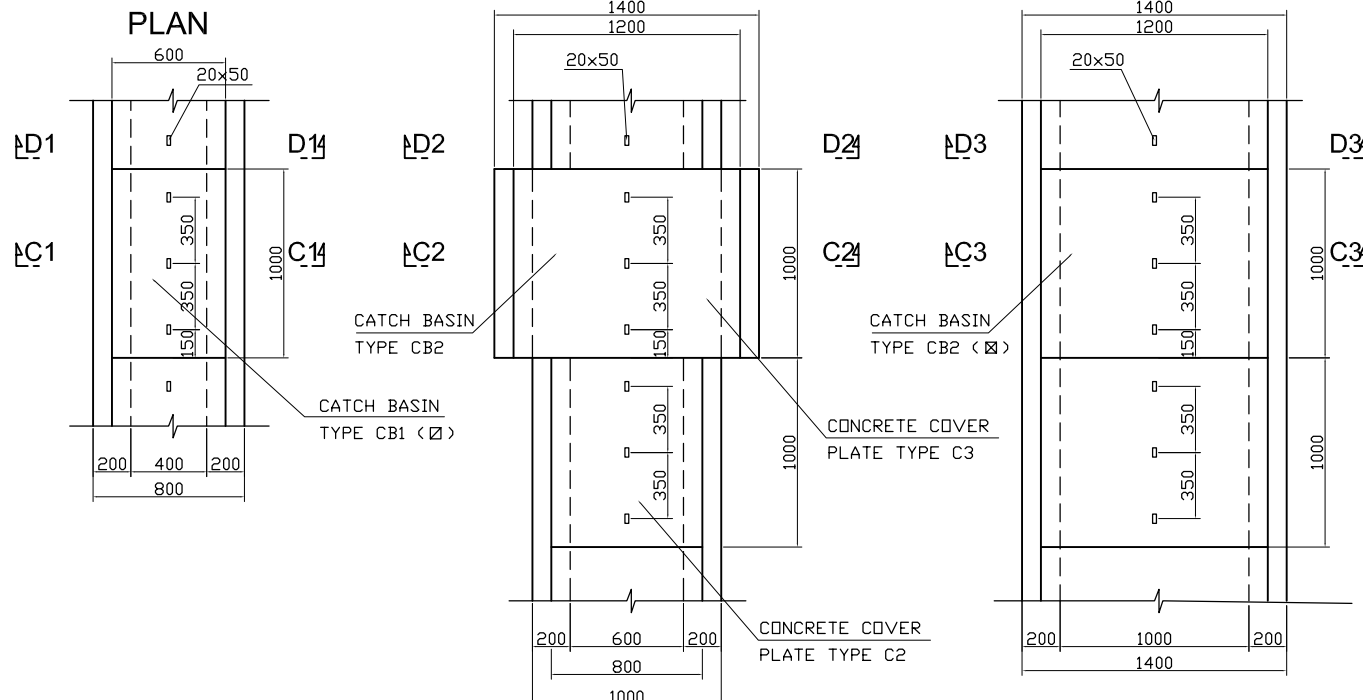
SECTION C2 - C2



SECTION C3 - C3



PLAN



NO.	DATE	DESCRIPTIONS	BY	APRO.
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PROJECT MANAGEMENT UNIT FOR HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT				
THE DETAILED DESIGN STUDY ON HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT PROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM				
PACKAGE E WASTEWATER TREATMENT PLANT RAIN DISCHARGE PLAN, SECTION AND DETAIL (No.4)				
SCALE = AS SHOWN				
JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)				
PACIFIC CONSULTANTS INTERNATIONAL				
DESIGNED KIMURA TORU		CHECKED KONDO MASAMI		
DATE : JUNE 2001		DWG. No. PE - WWTP - 222 - 04		