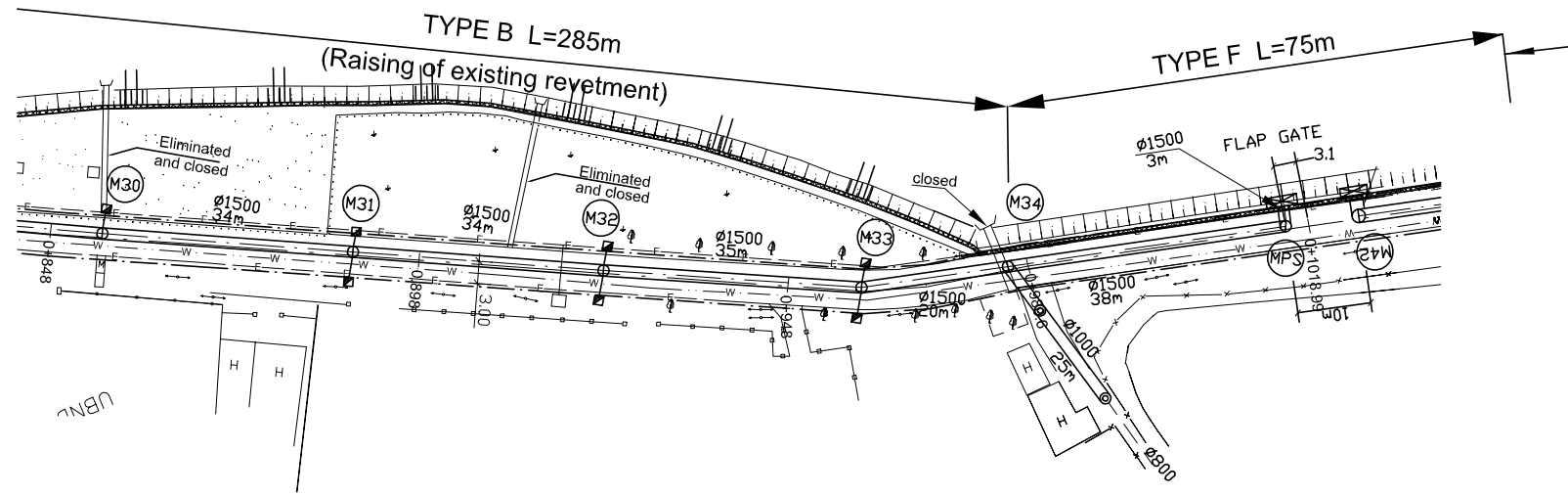
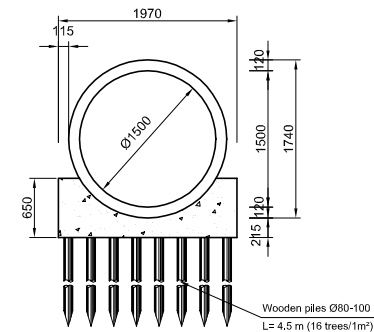
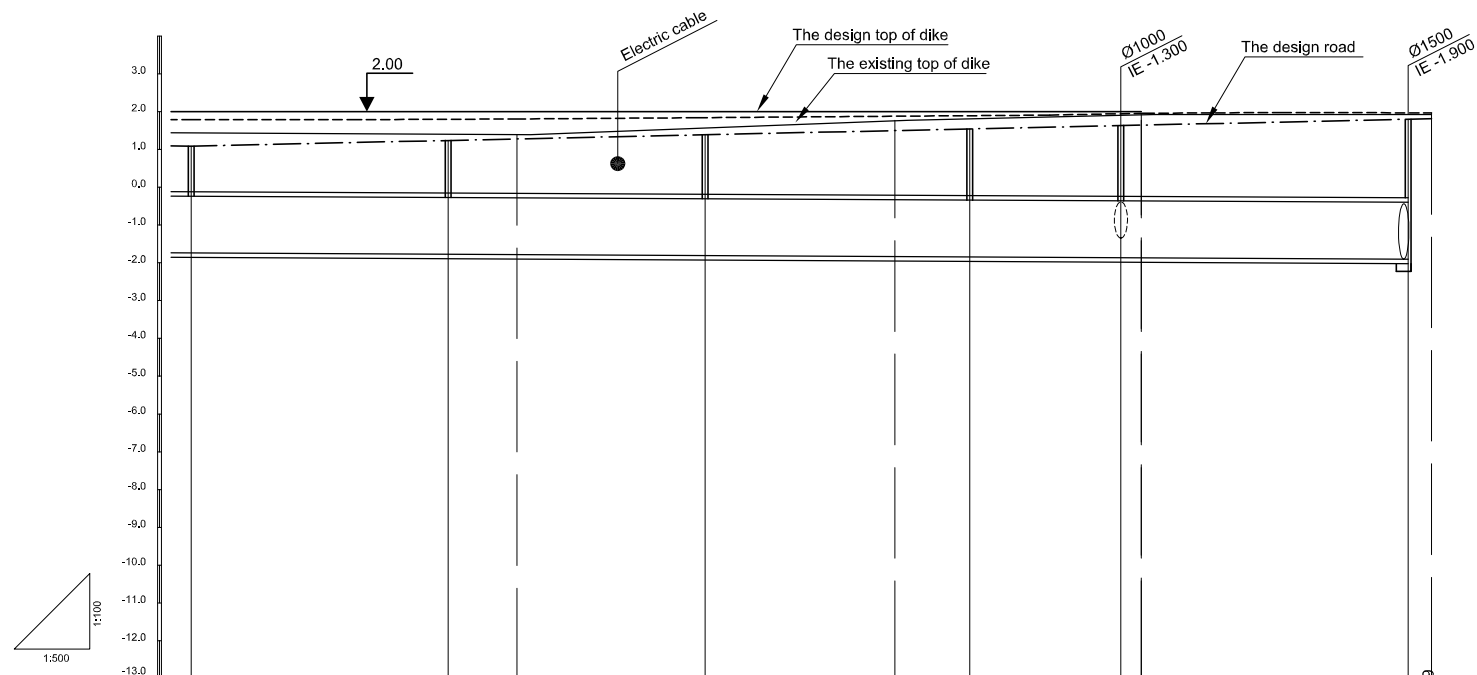


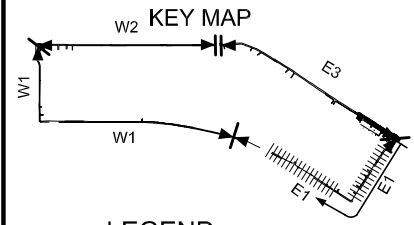
PLAN S = 1/500



PROFILE S_H = 1/500, S_V = 1/100



Location of Survey	0+898										0+948										0+980.0										1+018.90									
Manhole Number	M30		M31		M32		M33		M34		MPS																													
Diameter (mm)	Ø1500		Ø1500		Ø1500		Ø1500		Ø1500		Ø1500																													
Gradient (‰)	1‰		1‰		1‰		1‰		1‰		1‰																													
Length (m)	34.00		34.00		35.00		20.00		38.00																															
Gradient of Road (‰)	4.5										161.00																													
Design road Elevation (m)	1.085		1.238		1.278		1.391		1.504		1.549		1.639		1.627		1.810																							
Existing Ground Elevation (m)	1.43		1.40		1.39		1.58		1.77		1.82		1.90		1.92		1.92																							
Earth Covering (m)	1.204		1.391		1.441		1.578		1.717		1.771		1.881		1.890		2.090																							
Invert Elevation (m)	-1.739		-1.773		-1.783		-1.807		-1.833		-1.842		-1.862		-1.883		-1.900																							
Total Accumulation Length (m)	861.00		895.00		904.00		929.00		954.00		964.00		984.00		987.00		1022.0																							



LEGEND

- Sewer Line
- Sewer Line
- Planned Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
- Temporary dike
- Design road
- No. 1 Manhole (<600mm)
- No. 2 Manhole (<1000mm)
- No. 3 Manhole (<1500mm)
- No. 4 Manhole (<2000mm)
- Spacial Manhole
- Inlet
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant

NO.	DATE	DESCRIPTIONS	BY	APRO.
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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 B
PUMP DRAINAGE IMPROVEMENT
BEN ME COC(1) AREA
**PLAN AND PROFILE OF SEWER, ROAD
AND TEMPORARY DIKE (4)**
BM1 - E1 (M30-M35)

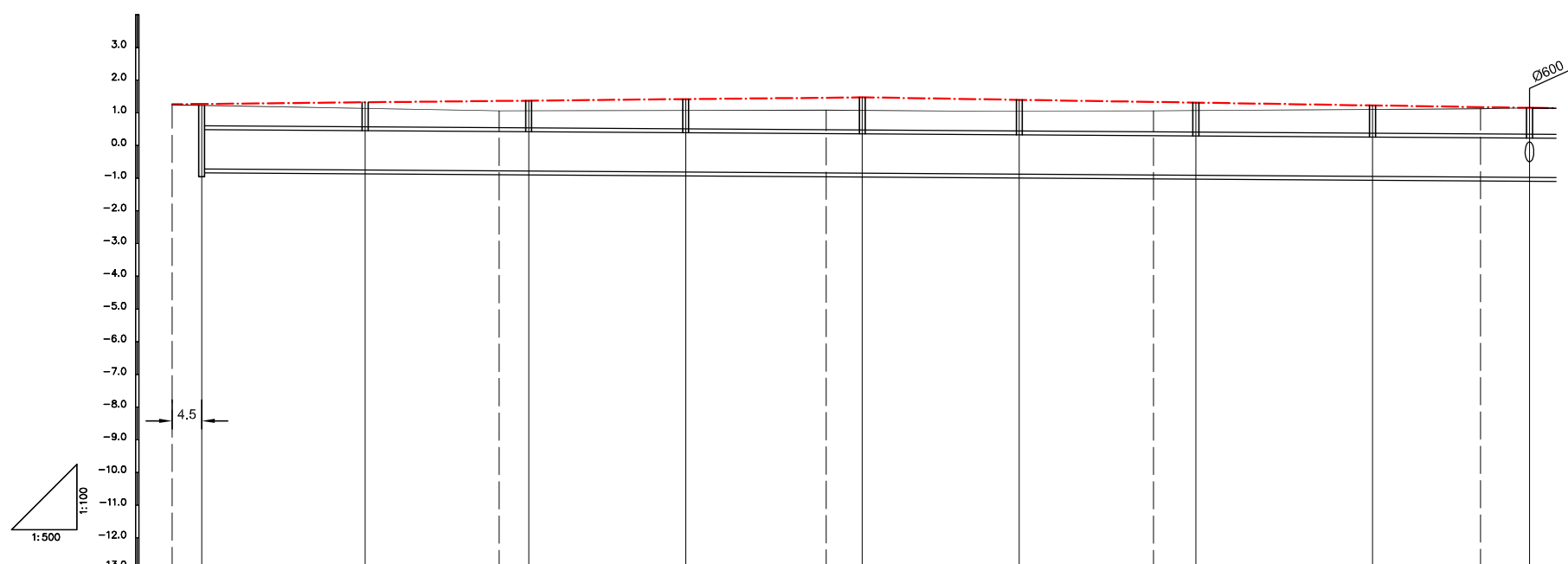
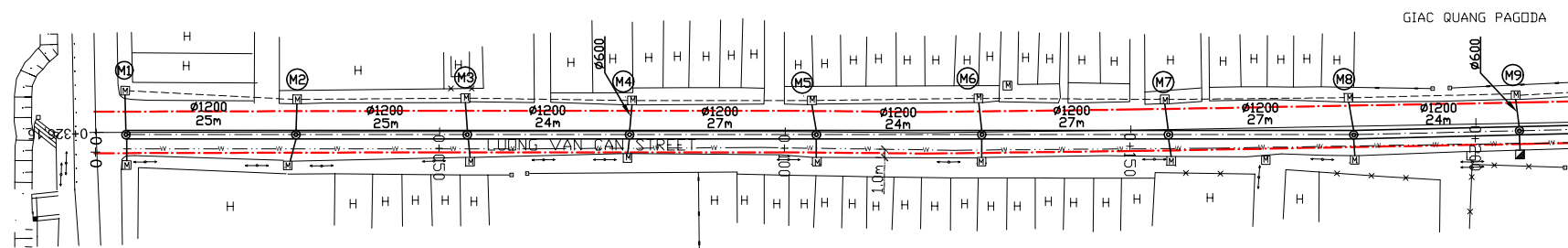
SCALE : AS SHOWN

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

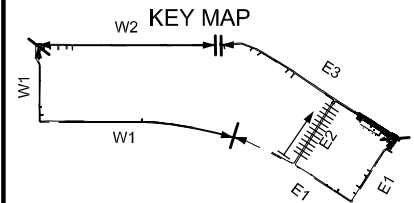
PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED TOKUMASU TOSHIAKI	CHECKED KONDO MASAMI
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DATE : JUNE 2001 DWG. No. PB - PDI - BMC1-204



Location of Survey	0+00	0+050		0+100		0+150		0+200	
Manhole Number	M1	M2	M3	M4	M5	M6	M7	M8	M9
Diameter (mm)	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200	
Gradient (%)	1.3‰	1.3‰	1.3‰	1.3‰	1.3‰	1.3‰	1.3‰	1.3‰	
Length (m)	25.00	25.00	24.00	27.00	24.00	27.00	27.00	24.00	
Gradient of Road (%)	2‰		105.00		102.00		3.28‰		
Design road Elevation (m)	1.260 1.268	1.318	1.360 1.368	1.416	1.460 1.470	1.391	1.322 1.302	1.213	1.257 1.135
Existing Ground Elevation (m)	1.26 1.24	1.15	1.08 1.08	1.09	1.10 1.10	1.09	1.08 1.09	1.12	1.14 1.14
Earth Covering (m)	0.649 0.637	0.579	0.534 0.542	0.583	0.619 0.628	0.649	0.664 0.684	0.750	0.789 0.796
Invert Elevation (m)	-0.709 -0.717	-0.749	-0.774 -0.782	-0.813	-0.839 -0.848	-0.879	-0.904 -0.914	-0.950	-0.989 -0.981
Total Accumulation Length (m)	0.00	25.00	45.50	50.00	74.00	95.50	101.00	125.00	145.50 152.00 179.00 195.50 203.00



LEGEND

- Sewer Line
- Sewer Line
- Planned Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
- Design road
- No. 1 Manhole
- No. 2 Manhole
- No. 3 Manhole
- No. 4 Manhole
- Spacial Manhole
- Inlet
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant

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 B
PUMP DRAINAGE IMPROVEMENT
BEN ME COC(1) AREA
**PLAN AND PROFILE OF SEWER, ROAD
AND TEMPORARY DIKE (5)**
BM1 - E2 (M1-M9)

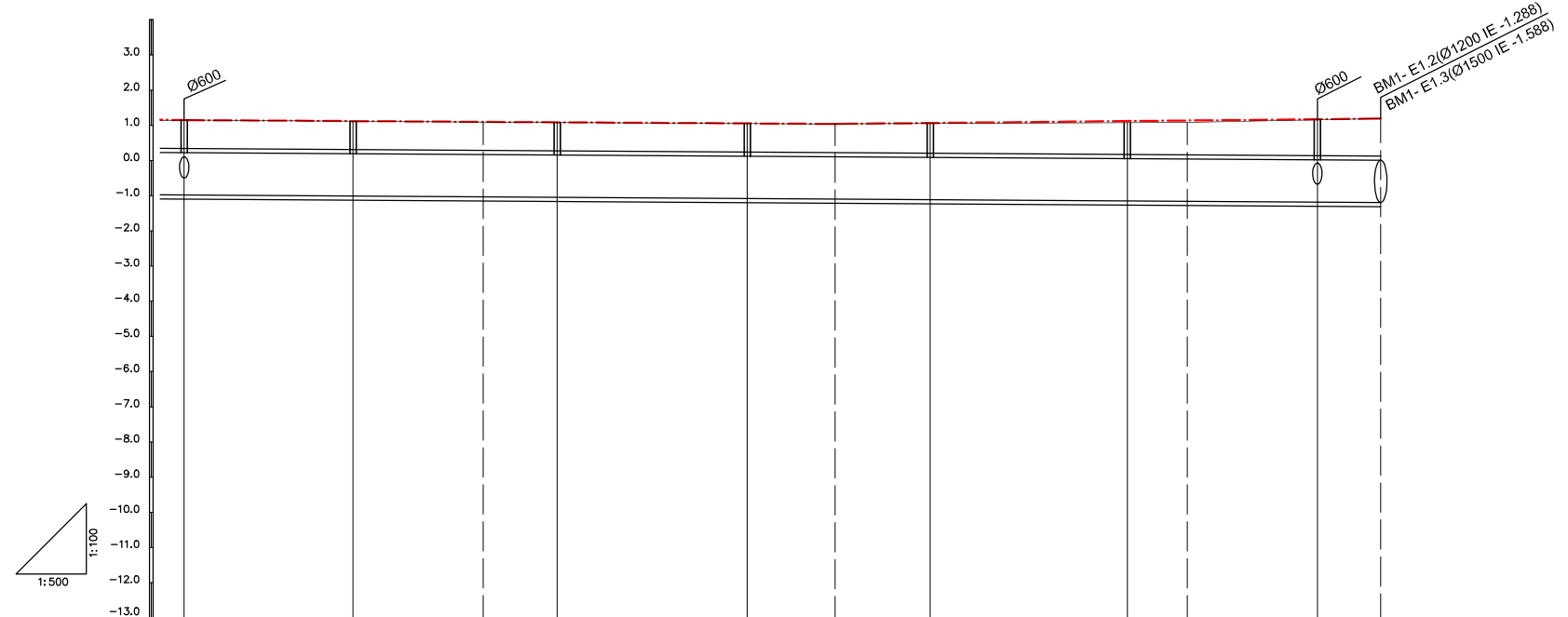
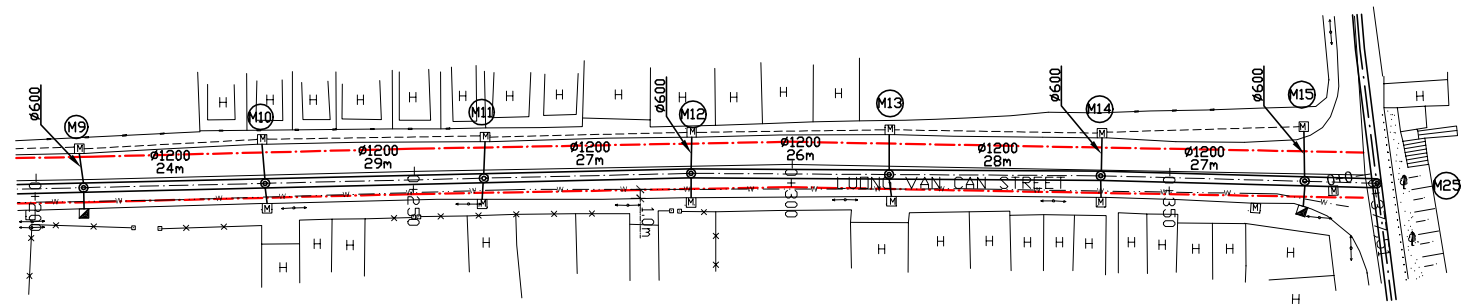
SCALE : AS SHOWN

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

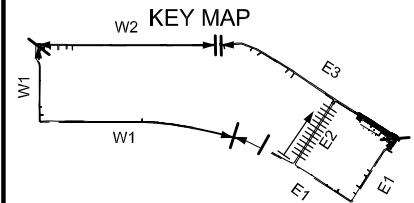
PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED TOKUMASU TOSHIAKI	CHECKED KONDO MASAMI
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DATE : JUNE 2001 DWG. No. PB - PDI - BMC1- 205



Location of Survey	0+250		0+300			0+350			0+377.5		
Manhole Number	M9	M10	M11	M12	M13	M14	M15				
Diameter (mm)	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200			
Gradient (‰)	1.3‰	1.3‰	1.3‰	1.3‰	1.3‰	1.3‰	1.3‰	1.3‰			
Length (m)	24.00	29.00	27.00	26.00	28.00	27.00	9.00				
Gradient of Road (‰)	92.00		1‰			2‰			78.00		
Design road Elevation (m)	1.135	1.111	1.092	1.082	1.055	1.043	1.071	1.127	1.145	1.181	1.199
Existing Ground Elevation (m)	1.14	1.12	1.11	1.10	1.07	1.06	1.07	1.09	1.10	1.17	1.21
Earth Covering (m)	0.796	0.812	0.824	0.830	0.835	0.839	0.869	0.925	0.944	1.040	1.090
Invert Elevation (m)	-0.981	-1.012	-1.034	-1.050	-1.085	-1.099	-1.119	-1.155	-1.164	-1.190	-1.200
Total Accumulation Length (m)	203.00	227.00	245.50	256.00	283.00	295.50	309.00	337.00	345.50	364.00	373.00



LEGEND

- Sewer Line
- Planned Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
- Design road
- No. 1 Manhole
- No. 2 Manhole
- No. 3 Manhole
- No. 4 Manhole
- Spacial Manhole
- Inlet
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant

NO.	DATE	DESCRIPTIONS	BY	APRO.
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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 B
PUMP DRAINAGE IMPROVEMENT
BEN ME COC(1) AREA
**PLAN AND PROFILE OF SEWER, ROAD
AND TEMPORARY DIKE (6)**
BM1 - E2 (M9-M15)

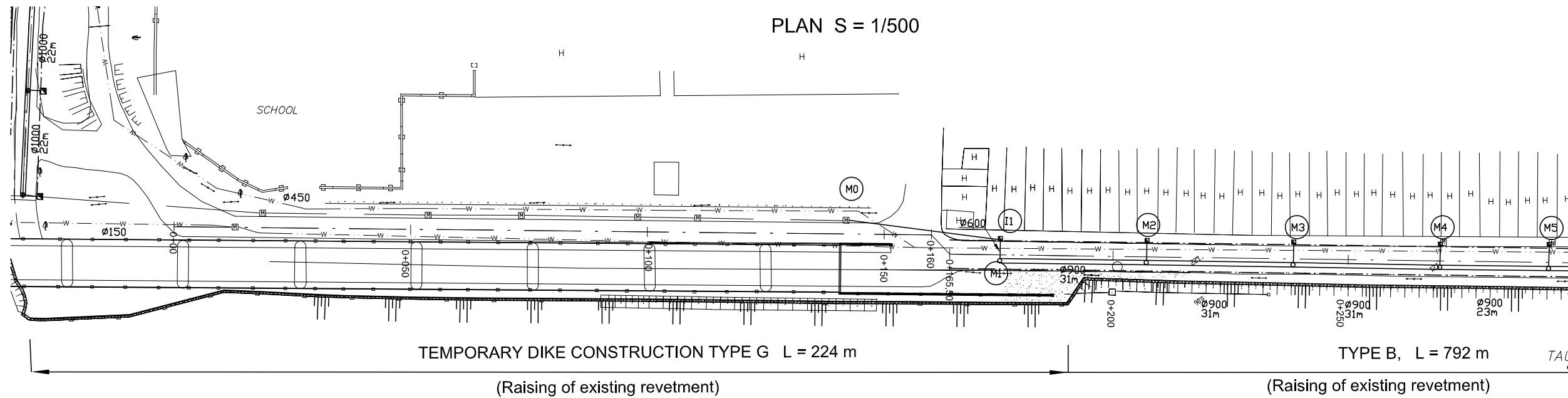
SCALE : AS SHOWN

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED TOKUMASU TOSHIAKI	CHECKED KONDO MASAMI
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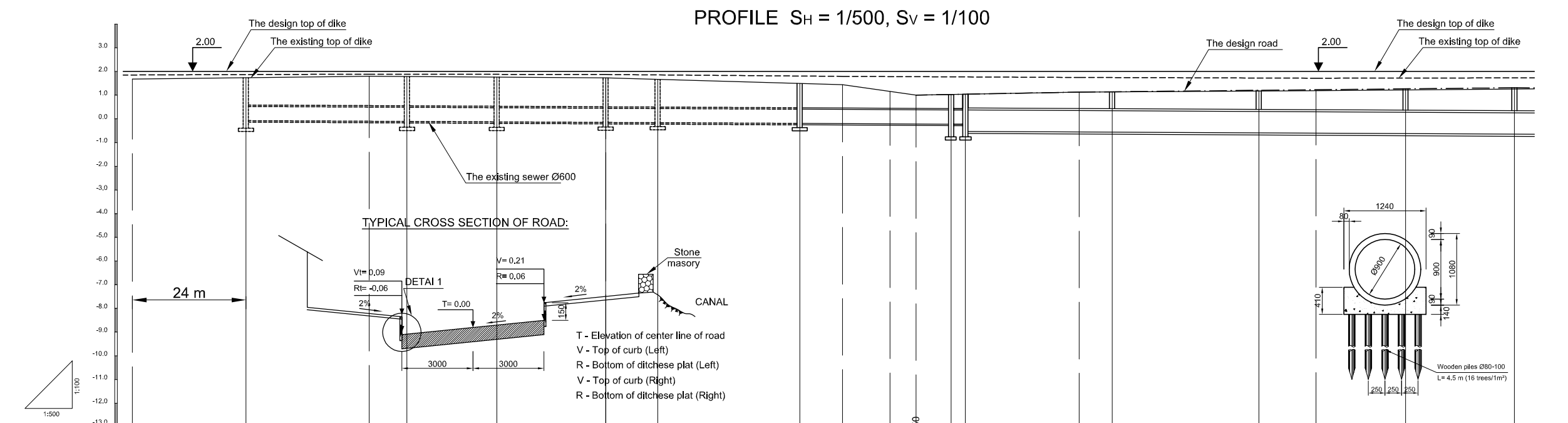
DATE : JUNE 2001 DWG. No. PB - PDI - BMC1- 206



W2 KEY MAP

LEGEND

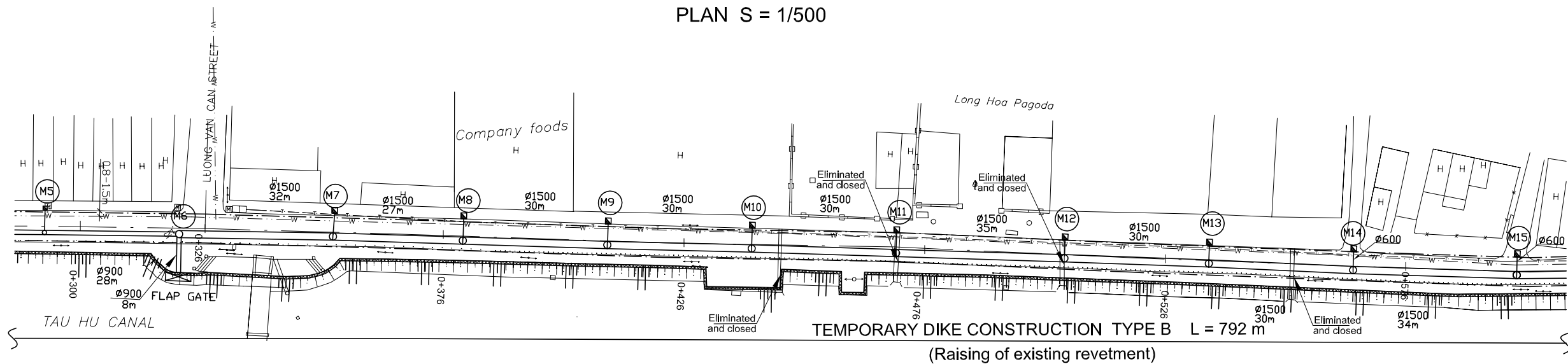
- Sewer Line
- Sewer Line
- Planned Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
- Temporary dike
- Design road
- No. 1 Manhole (<600mm)
- No. 2 Manhole (<1000mm)
- No. 3 Manhole (<1500mm)
- No. 4 Manhole (<2000mm)
- Spacial Manhole
- Inlet
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant



Location of Survey	0+00	0+50	0+100	0+150	0+165.60	0+200	0+250												
Manhole Number								I1	M1		M2		M3		M4		M5		
Diameter (mm)		Ø600	Ø600	Ø600	Ø600	Ø600	Ø600	Ø600	Ø600		Ø900		Ø900		Ø900		Ø900		
Gradient (‰)											1‰		1‰		1‰		1‰		
Length (m)		34.00	19.00	23.00	11.00	30.00	32.00	3.00			31.00		31.00		31.00		23.00		
Gradient of Road (‰)									3.76				2				92.00		
Design road Elevation (m)									1.000	1.028	1.039		1.130	1.144		1.206	1.230	1.268	1.314
Existing Ground Elevation (m)	1.68		1.80			1.73													
Earth Covering (m)																			
Invert Elevation (m)																			
Total Accumulation Length (m)																			

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 B PUMP DRAINAGE IMPROVEMENT BEN ME COC(1) AREA PLAN AND PROFILE OF SEWER, ROAD AND TEMPORARY DIKE (7) BM1 - E3 (M1-M5)				
SCALE : AS SHOWN				
JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)				
PACIFIC CONSULTANTS INTERNATIONAL				
DESIGNED TOKUMASU TOSHIKI		CHECKED KONDO MASAMI		
DATE : JUNE 2001		DWG. No. PB - PDI - BMC1-207		

PLAN S = 1/500

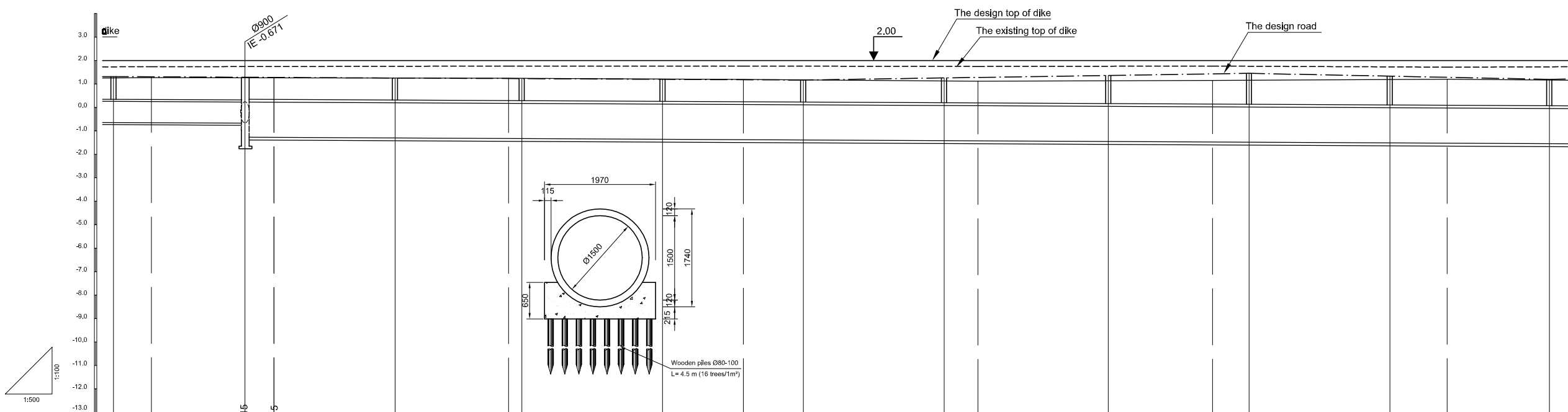


TEMPORARY DIKE CONSTRUCTION TYPE B L = 792 m

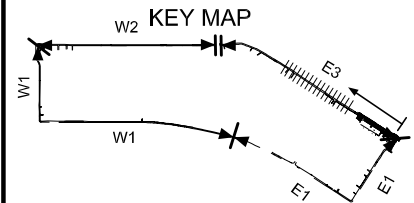
(Raising of existing revetment)

TAU HU CANAL

PROFILE S_H = 1/500, S_V = 1/100



Location of Survey	0+300	0+320.15	0+326.15	0+376	0+426	0+476	0+526	0+576											
Manhole Number	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15								
Diameter (mm)	Ø900	Ø1500	Ø1500	Ø1500	Ø1500	Ø1500	Ø1500	Ø1500	Ø1500	Ø1500	Ø1500								
Gradient (%)	1‰	1‰	1‰	1‰	1‰	1‰	1‰	1‰	1‰	1‰	1‰								
Length (m)	28.00	32.00	27.00	30.00	30.00	30.00	35.00	30.00	30.00	34.00									
Gradient of Road (%)																			
Design road Elevation (m)	1.314	1.306	1.286	1.280	1.254	1.230	1.227	1.197	1.180	1.167	1.257	1.278	1.362	1.431	1.452	1.332	1.284	1.196	
Existing Ground Elevation (m)	1.26	1.27	1.26	1.26	1.25	1.24	1.24	1.22	1.19	1.17	1.13	1.12	1.14	1.15	1.16	1.19	1.20	1.16	
Earth Covering (m)	0.967	0.966	0.967	0.937	0.937	0.937	0.937	0.937	0.937	0.937	1.057	1.085	1.197	1.288	1.317	1.227	1.191	1.125	
Invert Elevation (m)	-0.643	-0.650	-0.671	-1.271	-1.277	-1.303	-1.327	-1.330	-1.360	-1.377	-1.390	-1.420	-1.427	-1.455	-1.477	-1.485	-1.515	-1.527	-1.549
Total Accumulation Length (m)	151.00	159.00	179.00	185.00	211.00	235.00	238.00	268.00	285.00	298.00	328.00	335.00	363.00	386.00	393.00	423.00	435.00	457.00	



LEGEND

- Sewer Line
- Sewer Line
- Planned Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
- Temporary dike
- Design road
- No. 1 Manhole (<600mm)
- No. 2 Manhole (<1000mm)
- No. 3 Manhole (<1500mm)
- No. 4 Manhole (<2000mm)
- Spatial Manhole
- Inlet
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant

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 B
PUMP DRAINAGE IMPROVEMENT
BEN ME COC(1) AREA
**PLAN AND PROFILE OF SEWER, ROAD
AND TEMPORARY DIKE (8)**
BM1 - E3 (M5-M15)

SCALE : AS SHOWN

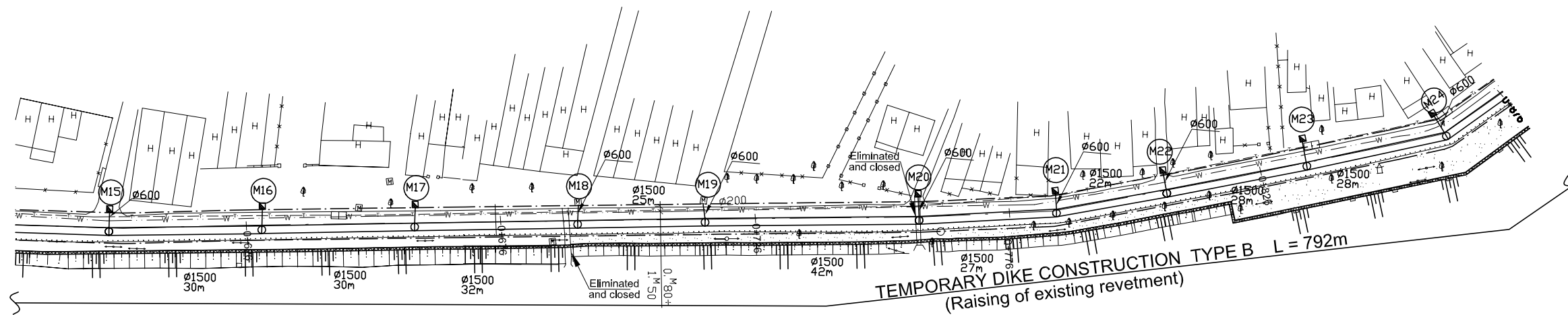
JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

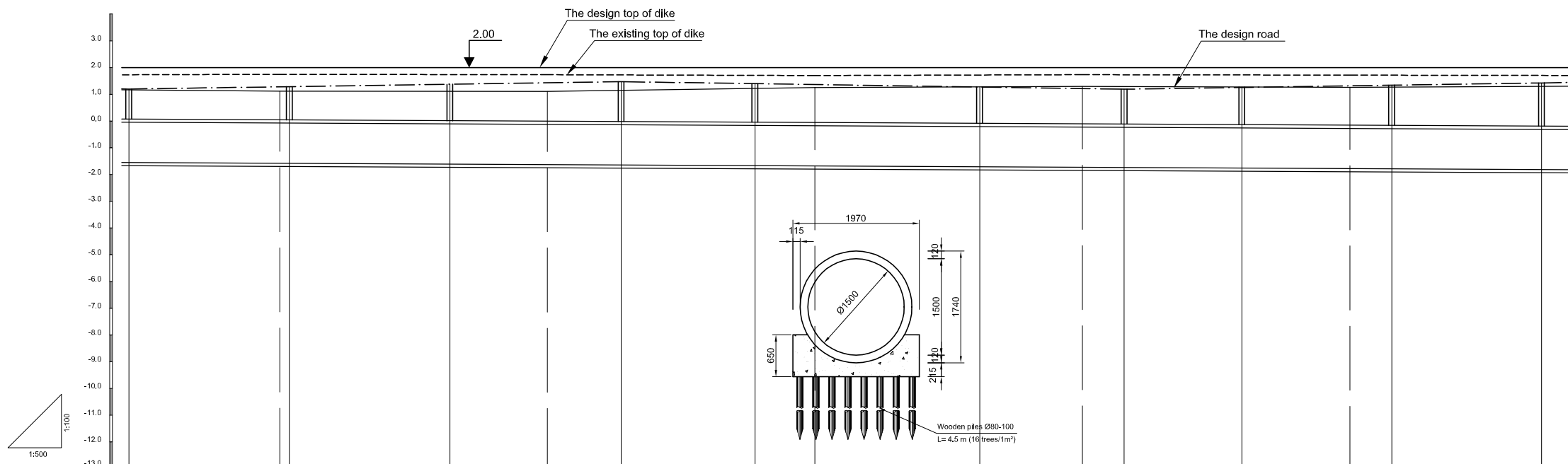
DESIGNED: TOKUMASU TOSHIKI
CHECKED: KONDO MASAMI

DATE : JUNE 2001 DWG. No. PB - PDI - BMC1-208

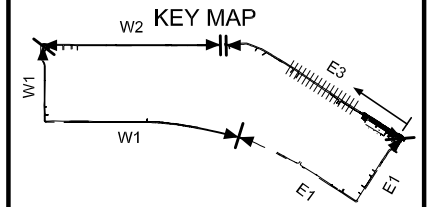
PLAN S = 1/500



PROFILE S_H = 1/500, S_V = 1/100



Location of Survey	0+626		0+676		0+726		0+776		0+826					
Manhole Number	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24				
Diameter (mm)	Ø1500	Ø1500	Ø1500	Ø1500	Ø1500	Ø1500	Ø1500	Ø1500	Ø1500	Ø1500				
Gradient (%)	1‰	1‰	1‰	1‰	1‰	1‰	1‰	1‰	1‰	1‰				
Length (m)	30.00	30.00	32.00	25.00	42.00	27.00	22.00	28.00	28.00					
Gradient of Road (%)	3		92.00		3		94.00		3					
Design road Elevation (m)	1.198	1.280 1.286	1.376	1.430	1.472	1.397	1.364	1.271	1.214	1.190	1.256	1.316	1.340	1.424
Existing Ground Elevation (m)	1.16	1.12 1.12	1.11	1.11	1.15	1.22	1.25	1.27	1.29	1.28	1.27	1.26	1.27	1.30
Earth Covering (m)	1.125	1.237 1.157	1.365	1.437	1.493	1.443	1.401	1.359	1.321	1.305	1.393	1.473	1.505	1.617
Invert Elevation (m)	-1.549	-1.577 -1.579	-1.609	-1.627	-1.641	-1.666	-1.657	-1.708	-1.727	-1.735	-1.757	-1.777	-1.785	-1.813
Total Accumulation Length (m)	457.00	485.00 487.00	517.00	535.00	549.00	574.00	585.00	616.00	635.00	643.00	665.00	685.00	693.00	721.00



LEGEND

- Sewer Line
- Sewer Line
- Planned Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
- Temporary dike
- Design road
- No. 1 Manhole (<600mm)
- No. 2 Manhole (<1000mm)
- No. 3 Manhole (<1500mm)
- No. 4 Manhole (<2000mm)
- Spacial Manhole
- Inlet
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant

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 B
PUMP DRAINAGE IMPROVEMENT
BEN ME COC(1) AREA
PLAN AND PROFILE OF SEWER, ROAD
AND TEMPORARY DIKE (9)
BM1 - E3 (M15-M24)

SCALE : AS SHOWN

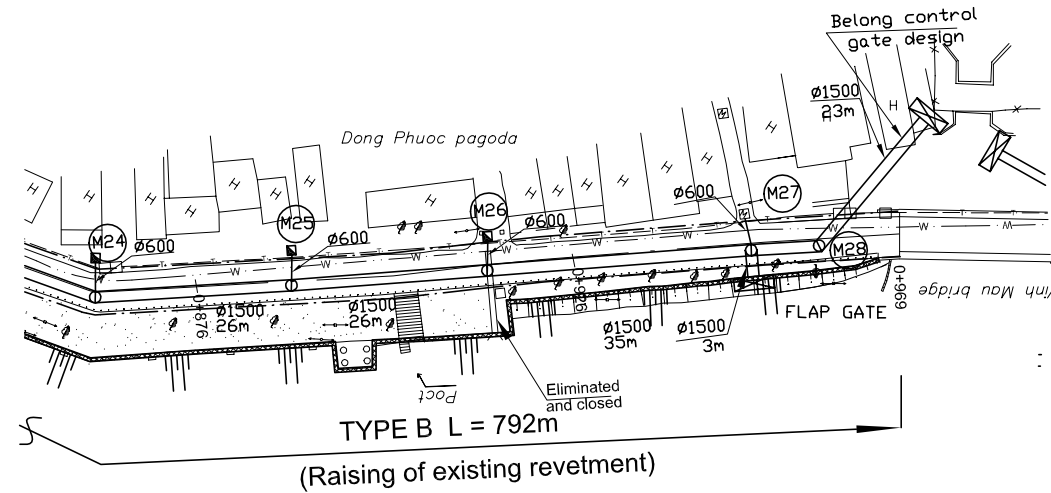
JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

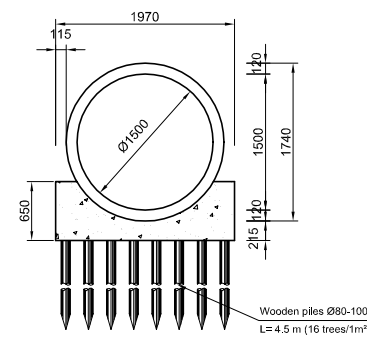
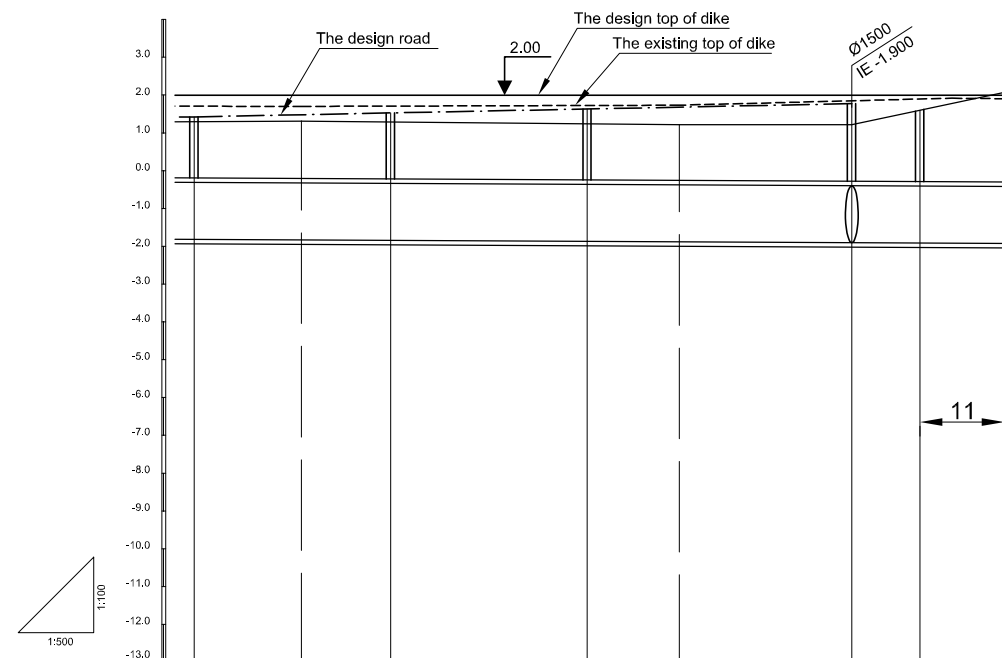
DESIGNED TOKUMASU TOSHIAKI
CHECKED KONDO MASAMI

DATE : JUNE 2001 DWG. No. PB - PDI - BMC1-209

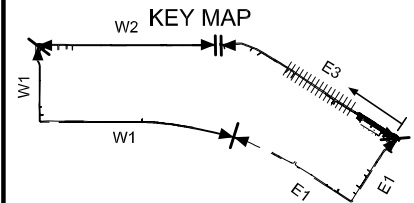
PLAN S = 1/500



PROFILE S_H = 1/500, S_V = 1/100



Location of Survey	0+876		0+926		0+969
Manhole Number	M24	M25	M26	M27	M28
Diameter (mm)	Ø1500	Ø1500	Ø1500	Ø1500	
Gradient (‰)	1‰	1‰	1‰	1‰	
Length (m)	26.00	26.00	35.00	9.00	
Gradient of Road (‰)	3 / 87.00				
Design road Elevation (m)	1.424	1.480	1.528	1.632	1.680
Existing Ground Elevation (m)	1.30	1.31	1.29	1.24	1.22
Earth Covering (m)	1.617	1.687	1.747	1.877	2.052
Invert Elevation (m)	-1.813	-1.827	-1.839	-1.865	-1.877
Total Accumulation Length (m)	721.00	735.00	747.00	775.00	785.00
				808.00	817.00
					828.00



LEGEND

- Sewer Line
- Sewer Line
- Planned Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
- Temporary dike
- Design road
- No. 1 Manhole (<600mm)
- No. 2 Manhole (<1000mm)
- No. 3 Manhole (<1500mm)
- No. 4 Manhole (<2000mm)
- Spacial Manhole
- Inlet
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant

NO.	DATE	DESCRIPTIONS	BY	APRO.
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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 B
PUMP DRAINAGE IMPROVEMENT
BEN ME COC(1) AREA
**PLAN AND PROFILE OF SEWER, ROAD
AND TEMPORARY DIKE (10)**
BM1 - E3 (M24-M28)

SCALE : AS SHOWN

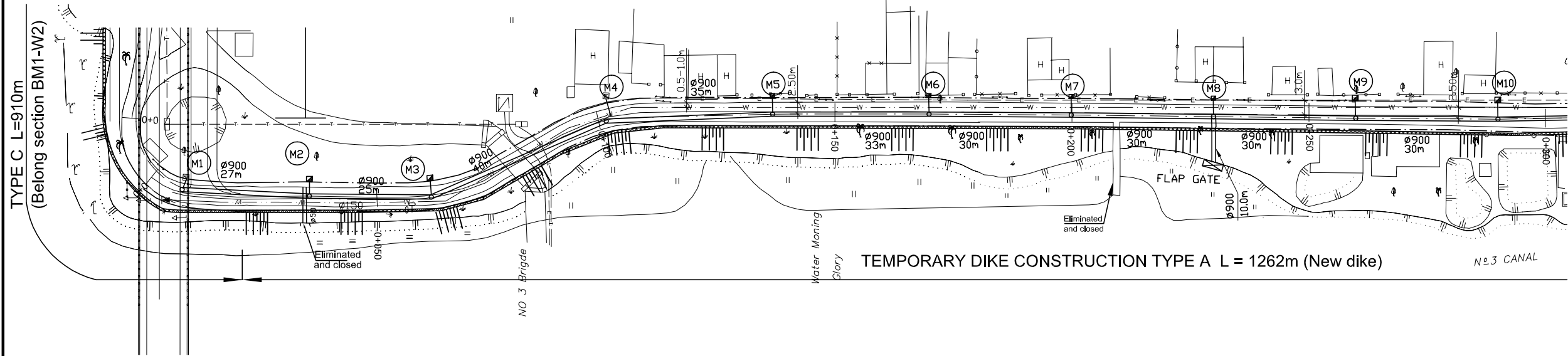
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED TOKUMASU TOSHIAKI	CHECKED KONDO MASAMI
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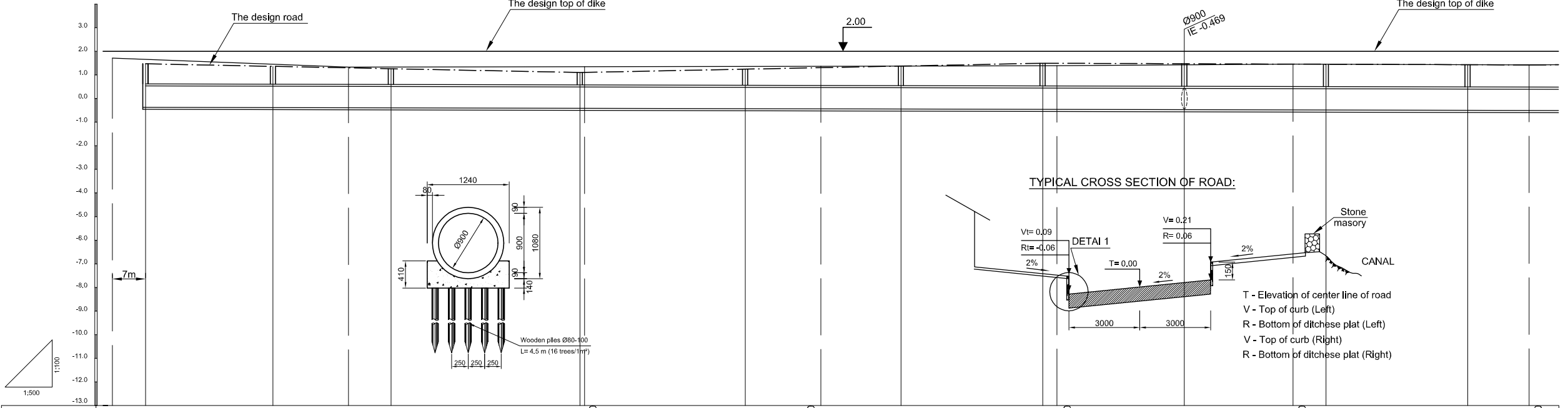
DATE : JUNE 2001 DWG. No. PB - PDI - BMC1-210

PLAN S = 1/500

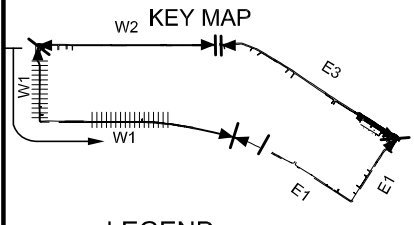


TEMPORARY DIKE CONSTRUCTION TYPE A L = 1262m (New dike)

PROFILE S_H = 1/500, S_V = 1/100



Location of Survey	0+00	0+50	0+100	0+150	0+200	0+250	0+300										
Manhole Number	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10							
Diameter (mm)	Ø900	Ø900	Ø900	Ø900	Ø900	Ø900	Ø900	Ø900	Ø900	Ø900							
Gradient (‰)	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰							
Length (m)	27.00	25.00	40.00	35.00	33.00	30.00	30.00	30.00	30.00	30.00							
Gradient of Road (‰)	92.00		4			98.00		103.00		3							
Design road Elevation (m)	1.71	1.467	1.359	1.295	1.259	1.099	1.103	1.239	1.303	1.371	1.491	1.482	1.401	1.332	1.311	1.221	1.182
Existing Ground Elevation (m)	1.71	1.47	1.33	1.33	1.34	1.34	1.36	1.36	1.36	1.37	1.39	1.39	1.43	1.45	1.44	1.43	1.42
Earth Covering (m)	0.837	0.742	0.685	0.663	0.507	0.513	0.672	0.743	0.820	0.855	0.855	0.847	0.880	0.822	0.805	0.730	0.697
Invert Elevation (m)	-0.360	-0.373	-0.380	-0.394	-0.407	-0.400	-0.423	-0.430	-0.439	-0.454	-0.455	-0.469	-0.480	-0.484	-0.484	-0.499	-0.505
Total Accumulation Length (m)	0.00	27.00	43.00	52.00	92.00	93.00	127.00	143.00	160.00	190.00	193.00	220.00	243.00	250.00	280.00	293.00	



LEGEND

- Sewer Line
- Sewer Line
- Planned Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
- Temporary dike
- Design road
- No. 1 Manhole (<600mm)
- No. 2 Manhole (<1000mm)
- No. 3 Manhole (<1500mm)
- No. 4 Manhole (<2000mm)
- Spatial Manhole
- Inlet
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant

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 B
PUMP DRAINAGE IMPROVEMENT
BEN ME COC(1) AREA
**PLAN AND PROFILE OF SEWER, ROAD
AND TEMPORARY DIKE (11)**
BM1 - W1 (M1-M10)

SCALE : AS SHOWN

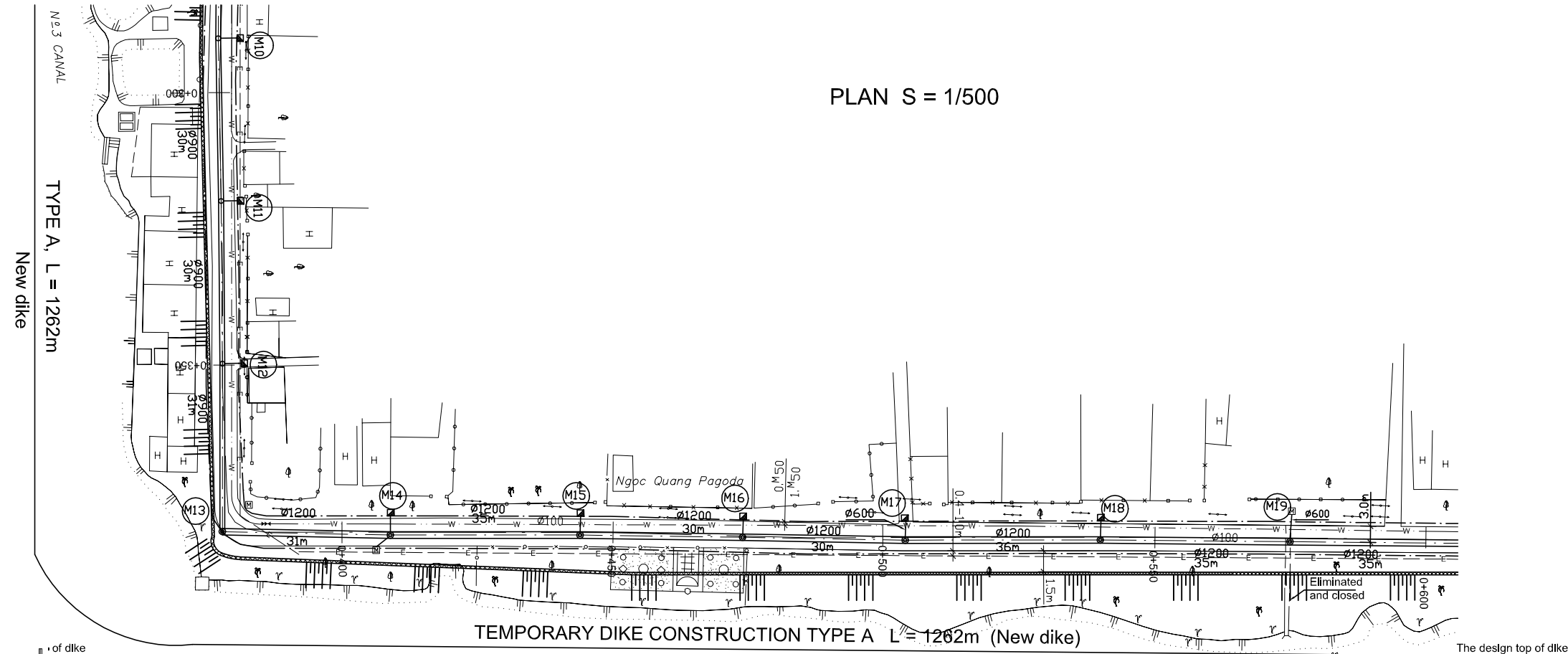
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

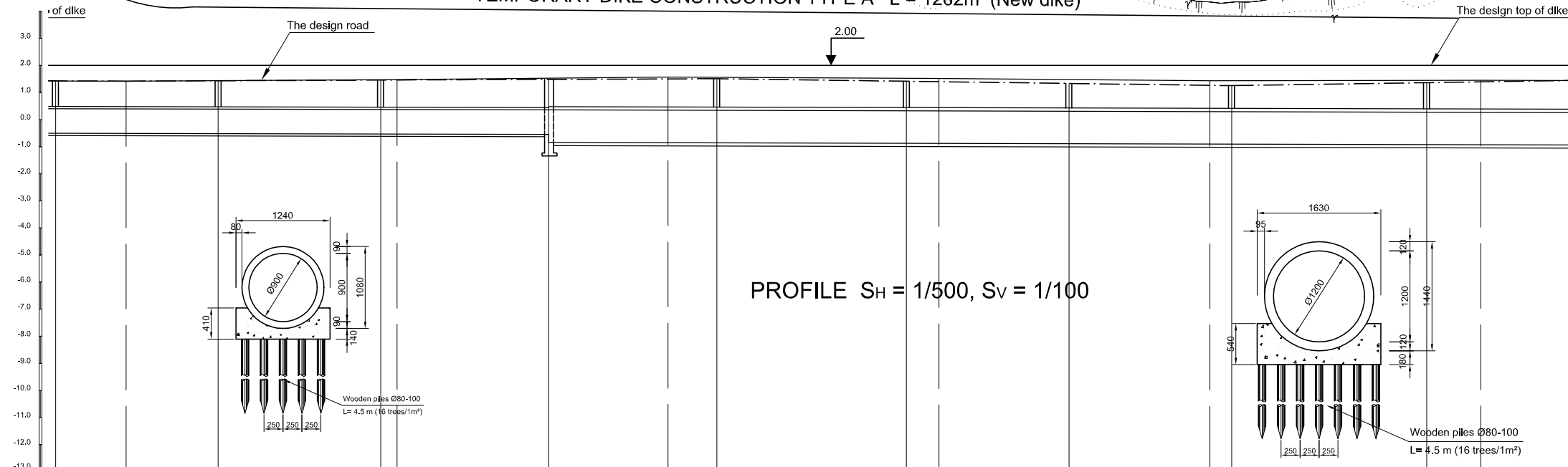
DESIGNED TOKUMASU TOSHIKI	CHECKED KONDO MASAMI
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DATE : JUNE 2001 DWG. No. PB - PDI - BMC1-211

PLAN S = 1/500

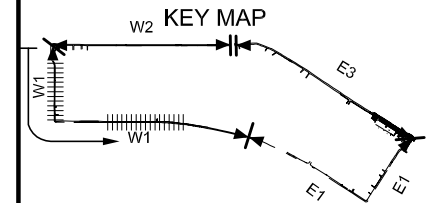


TEMPORARY DIKE CONSTRUCTION TYPE A L = 1262m (New dike)



PROFILE S_H = 1/500, S_V = 1/100

Location of Survey	0+300	0+350	0+400	0+450	0+500	0+550										
Manhole Number	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19						
Diameter (mm)	Ø900	Ø900	Ø900	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200						
Gradient (‰)	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰						
Length (m)	30.00	30.00	31.00	31.00	35.00	30.00	30.00	36.00	35.00							
Gradient of Road (‰)	3		109.00			95.00		3		71.00						
Design road Elevation (m)	1.221	1.182	1.233	1.323	1.332	1.416	1.482	1.509	1.404	1.386	1.314	1.286	1.254	1.362	1.382	1.467
Existing Ground Elevation (m)	1.43	1.42	1.44	1.48	1.48	1.53	1.53	1.57	1.56	1.53	1.52	1.43	1.43	1.45	1.45	1.44
Earth Covering (m)	0.730	0.697	0.757	0.862	0.872	0.971	1.017	1.049	0.862	0.946	0.887	0.851	0.842	0.968	1.002	1.090
Invert Elevation (m)	0.669	-0.505	-0.514	-0.529	-0.530	-0.845	-0.855	-0.860	-0.878	-0.880	-0.893	-0.905	-0.908	-0.926	-0.930	-0.943
Total Accumulation Length (m)	280.00	293.00	310.00	340.00	340.00	371.00	393.00	402.00	437.00	443.00	467.00	493.00	497.00	533.00	543.00	568.00



LEGEND

- Sewer Line
- Sewer Line
- Planned Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
- Temporary dike
- Design road
- No. 1 Manhole (<600mm)
- No. 2 Manhole (<1000mm)
- No. 3 Manhole (<1500mm)
- No. 4 Manhole (<2000mm)
- Spatial Manhole
- Inlet
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant

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 B
PUMP DRAINAGE IMPROVEMENT
BEN ME COC(1) AREA
**PLAN AND PROFILE OF SEWER, ROAD
AND TEMPORARY DIKE (12)**
BM1 - W1 (M10-M19)

SCALE : AS SHOWN

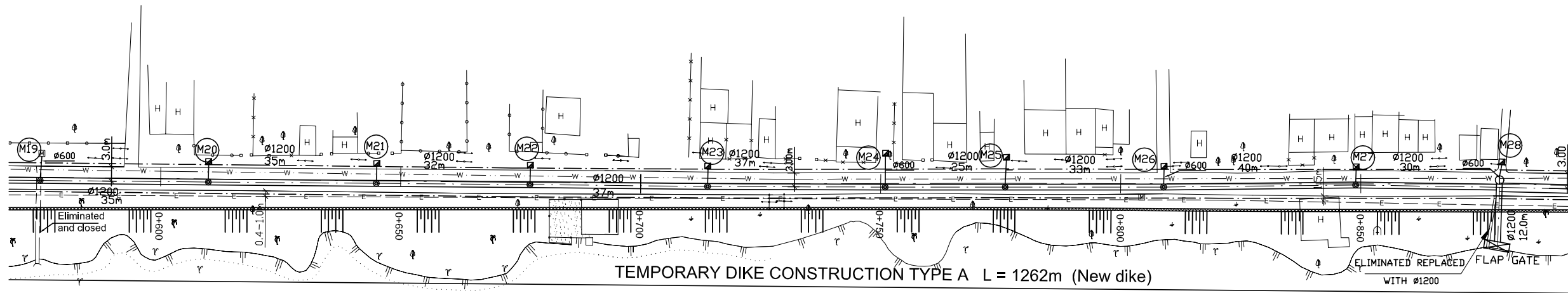
JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

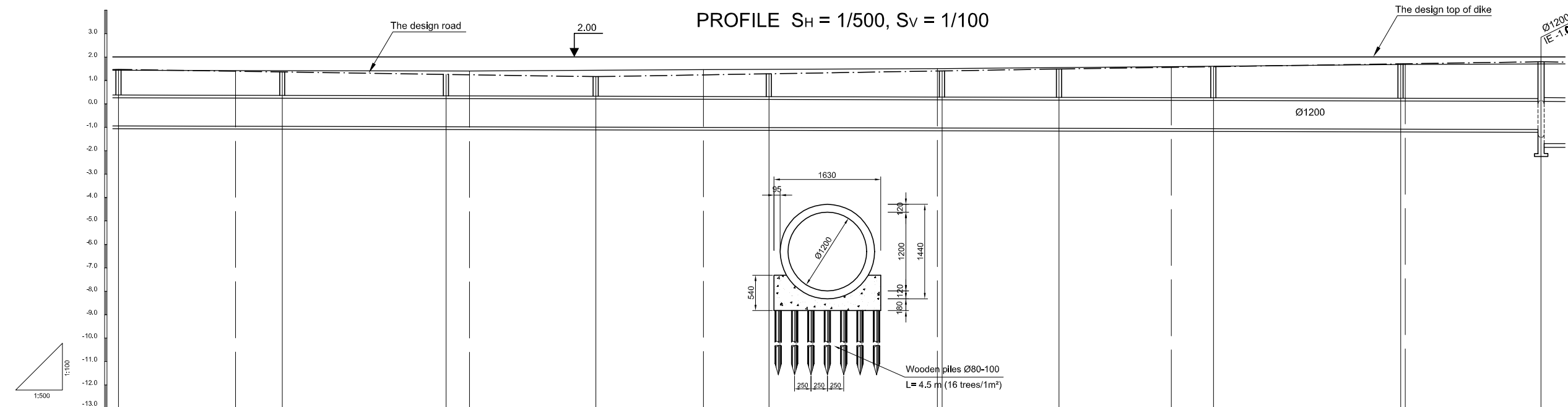
DESIGNED: TOKUMASU TOSHIKI
CHECKED: KONDO MASAMI

DATE : JUNE 2001 DWG. No. PB - PDI - BMC1-212

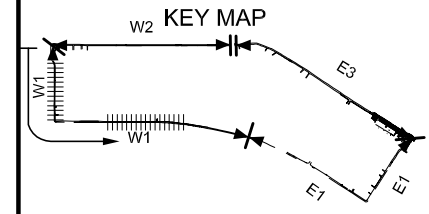
PLAN S = 1/500



PROFILE SH = 1/500, Sv = 1/100



Location of Survey	0+600	0+650	0+700	0+750	0+800	0+850											
Manhole Number	M19	M20	M21	M22	M23	M24	M25	M26	M27	M28							
Diameter (mm)	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200	Ø1200							
Gradient (‰)	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰							
Length (m)	35.00	35.00	32.00	37.00	37.00	25.00	33.00	40.00	30.00								
Gradient of Road (‰)	3			3			99.00		3		103.00						
Design road Elevation (m)	1.467	1.392	1.362	1.257	1.242	1.161	1.260	1.302	1.410	1.413	1.488	1.560	1.587	1.707	1.710	1.797	
Existing Ground Elevation (m)	1.44	1.42	1.42	1.40	1.40	1.43	1.46	1.47	1.50	1.50	1.54	1.59	1.59	1.68	1.68	1.70	1.70
Earth Covering (m)	1.090	1.027	1.003	0.915	0.902	0.835	0.945	0.995	1.120	1.124	1.212	1.295	1.327	1.457	1.470	1.572	1.695
Invert Elevation (m)	-0.943	-0.955	-0.961	-0.978	-0.980	-0.994	-1.005	-1.013	-1.030	-1.031	-1.044	-1.055	-1.060	-1.080	-1.080	-1.095	-1.095
Total Accumulation Length (m)	566.00	593.00	603.00	636.00	643.00	670.00	693.00	707.00	743.00	744.00	768.00	793.00	802.00	842.00	843.00	872.00	872.00



LEGEND

- Sewer Line
- Sewer Line
- Planned Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
- Temporary dike
- Design road
- No. 1 Manhole (<600mm)
- No. 2 Manhole (<1000mm)
- No. 3 Manhole (<1500mm)
- No. 4 Manhole (<2000mm)
- Spatial Manhole
- Inlet
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant

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 B
PUMP DRAINAGE IMPROVEMENT
BEN ME COC(1) AREA
**PLAN AND PROFILE OF SEWER, ROAD
AND TEMPORARY DIKE (13)**
BM1 - W1 (M19-M28)

SCALE : AS SHOWN

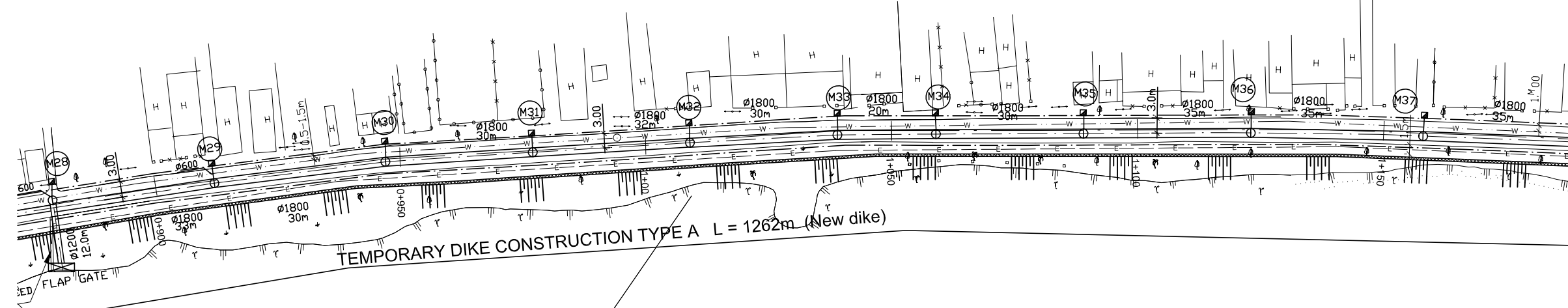
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED: TOKUMASU TOSHIAKI
CHECKED: KONDO MASAMI

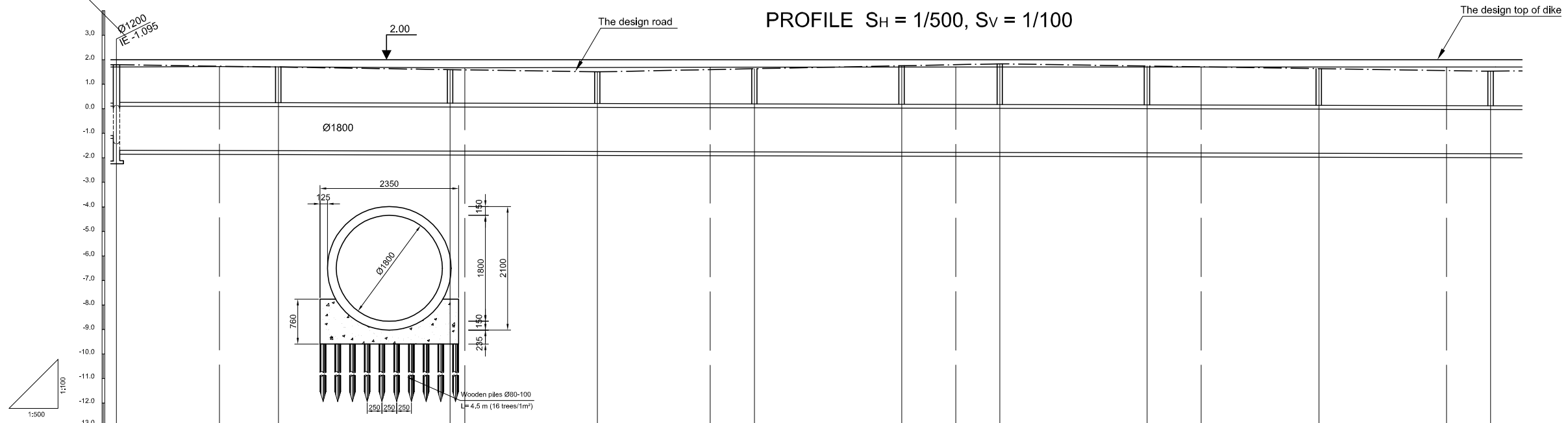
DATE : JUNE 2001 DWG. No. PB - PDI - BMC1-213

PLAN S = 1/500

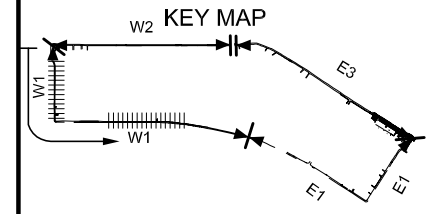


TEMPORARY DIKE CONSTRUCTION TYPE A L = 1262m (New dike)

PROFILE S_H = 1/500, S_V = 1/100



Location of Survey	0+900	0+950	1+000	1+050	1+100	1+150								
Manhole Number	M28	M29	M30	M31	M32	M33	M34	M35	M36	M37				
Diameter (mm)	Ø1800	Ø1800	Ø1800	Ø1800	Ø1800	Ø1800	Ø1800	Ø1800	Ø1800	Ø1800				
Gradient (‰)	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰	0.5‰				
Length (m)	33.00	35.00	30.00	32.00	30.00	20.00	30.00	35.00	35.00					
Gradient of Road (‰)	98.00		82.00			100.00								
Design road Elevation (m)	1.797	1.734	1.698	1.503	1.595	1.631	1.751	1.795	1.831	1.741	1.708	1.636	1.558	1.531
Existing Ground Elevation (m)	1.70 1.70	1.72 1.71	1.67 1.67	1.68	1.69	1.69	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70
Earth Covering (m)	1.572	1.489	1.460	1.297	1.400	1.441	1.576	1.625	1.666	1.594	1.564	1.506	1.439	1.418
Invert Elevation (m)	-1.095 -1.695	-1.705	-1.712	-1.744	-1.755	-1.760	-1.775	-1.780	-1.785	-1.803	-1.806	-1.820	-1.831	-1.837
Total Accumulation Length (m)	872.00	893.00	905.00	940.00 943.00	970.00	993.00	1002.00	1032.00	1043.00	1052.00	1082.00	1093.00	1117.00	1143.00 1152.00



LEGEND

- Sewer Line
- Sewer Line
- Planned Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
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- Outlet Without Flap Gate
- Outlet With Flap Gate
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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 B
PUMP DRAINAGE IMPROVEMENT
BEN ME COC(1) AREA
**PLAN AND PROFILE OF SEWER, ROAD
AND TEMPORARY DIKE (14)**
BM1 - W1(M28-M37)

SCALE : AS SHOWN

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED TOKUMASU TOSHIKI	CHECKED KONDO MASAMI
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DATE : JUNE 2001 DWG. No. PB - PDI - BMC1-214