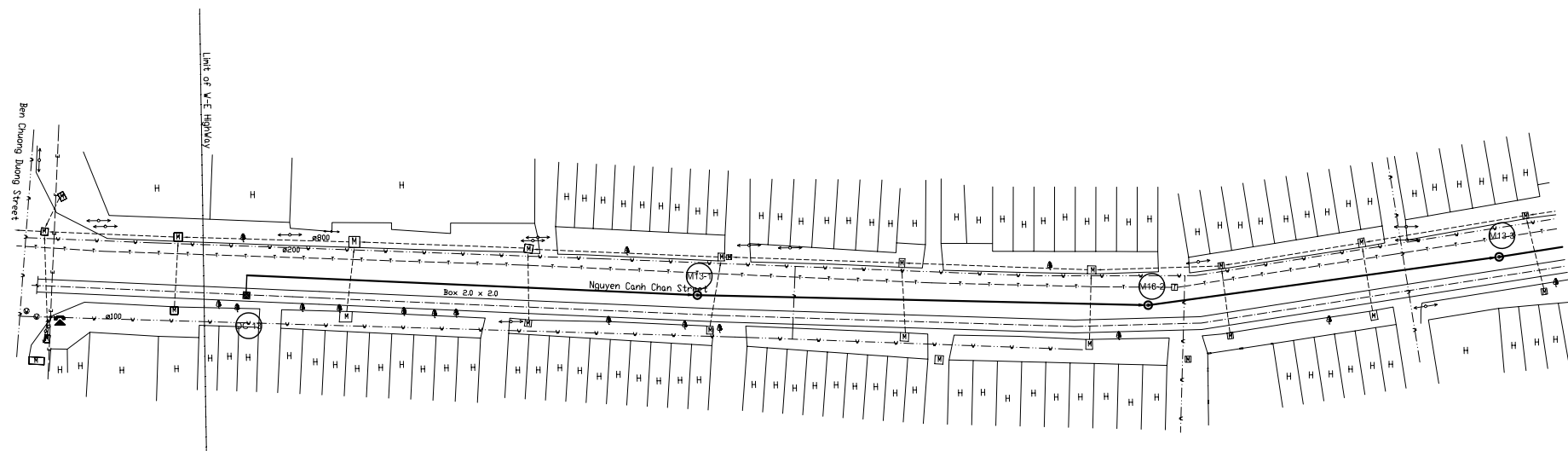
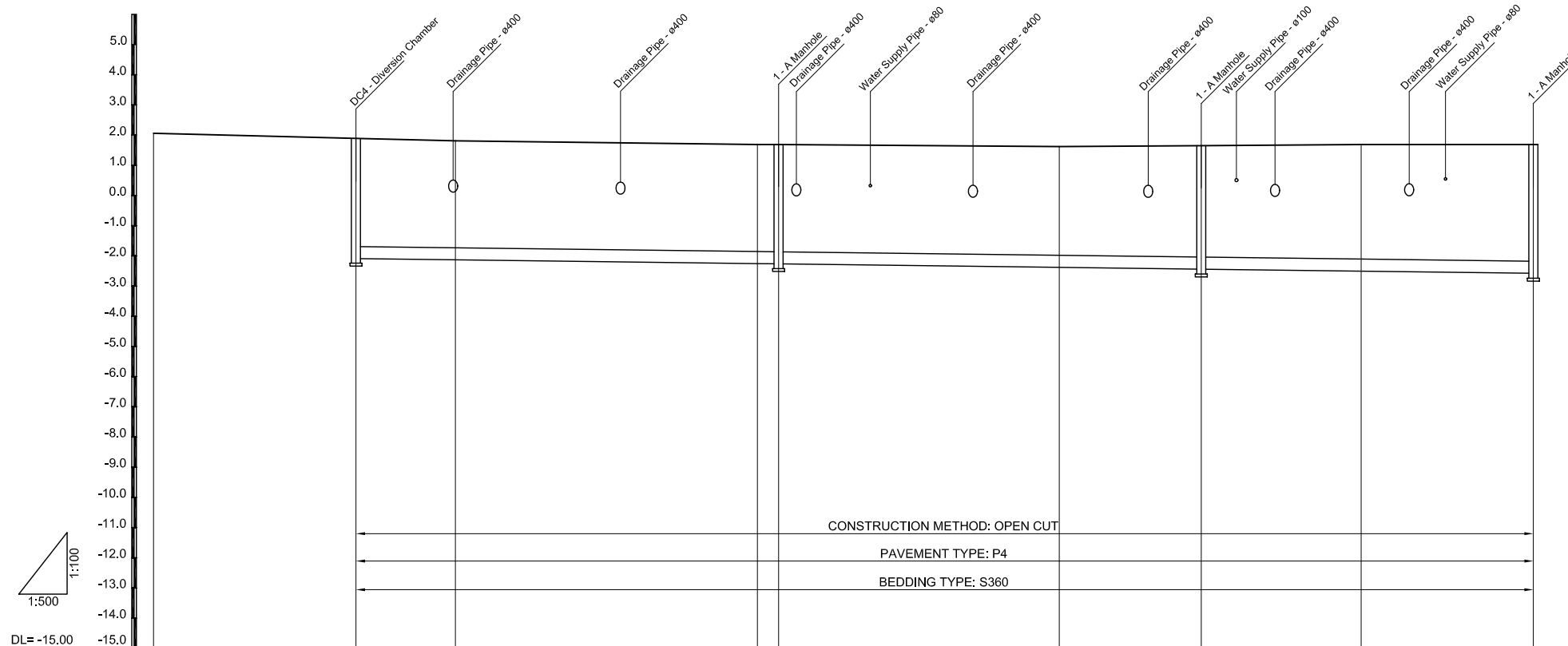


PLAN S = 1/500

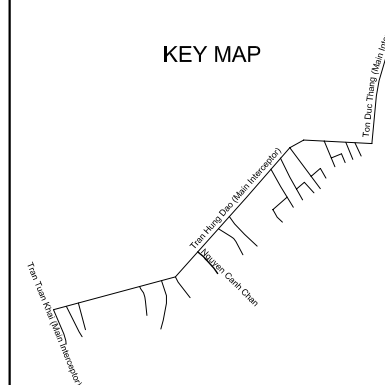


PROFILE S<sub>H</sub> = 1/500, S<sub>V</sub> = 1/100



Manhole number	DC-13		M13-1		M13-2		M13-3
Diameter (mm)	Ø400		Ø400		Ø400		
Gradient (%)	2.5		2.5		2.5		
Length (m)	70.0		70.0		55.0		
Ground Elevation (m)	2.06	1.89	1.81	1.69	1.69	1.62	1.65
Earth Covering (m)		3.58	3.54	3.55	3.56	3.60	3.69
Invert Elevation (m)		-2.09	-2.13	-2.26	-2.27	-2.38	-2.44
Accumulation Length (m)		0.0	16.5	66.5	70.0	116.5	140.0
							166.5
							195.0

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
- Manhole
- Special Manhole
- Diversion Chamber
- Diversion Chamber with Manhole
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant
- S4 - Area to be Required for Shaft
- Sewer Connected from The Right Side
- Sewer Connected from The Left Side

NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR  
HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT

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

PACKAGE C  
INTERCEPTOR SEWER CONSTRUCTION

PLAN AND PROFILE OF  
SECONDARY INTERCEPTOR SEWER  
(18)

SCALE : AS SHOWN

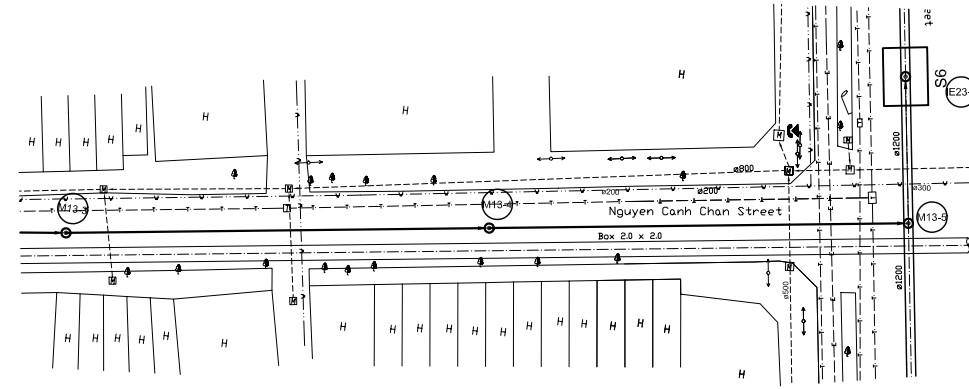
JICA JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

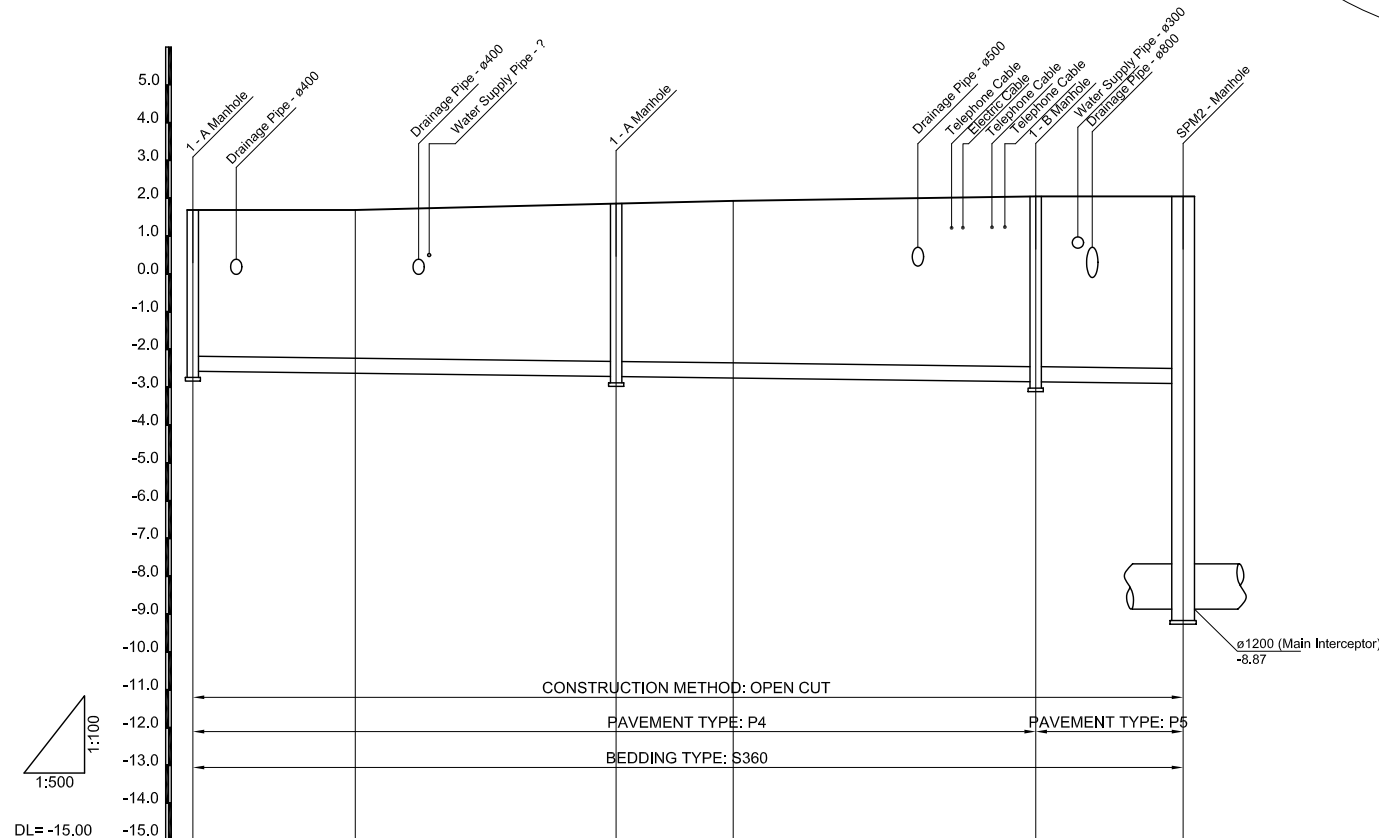
DESIGNED SATO NOBUYUKI CHECKED KONDO MASAMI

DATE : JUNE 2001 DWG. No. PC - ISC - 240

PLAN S = 1/500

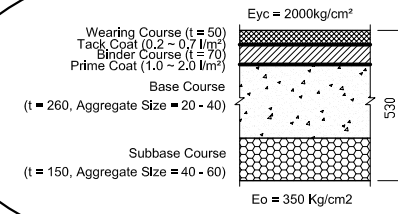


PROFILE S<sub>H</sub> = 1/500, S<sub>V</sub> = 1/100

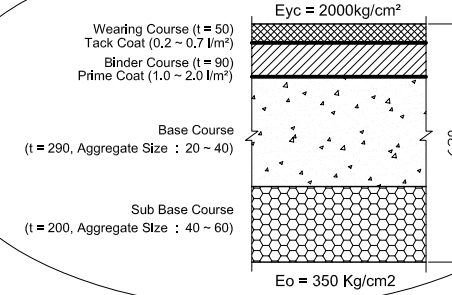


Manhole number	M13-3	M13-4	M13-5	IE23-1
Diameter (mm)	Ø400	Ø400	Ø400	Ø400
Gradient (%)	2.5	2.5	2.5	
Length (m)	56.0	55.5	19.5	
Ground Elevation (m)	1.89	1.89	1.86	1.93
Earth Covering (m)	3.87	3.92	4.18	4.29
Invert Elevation (m)	-2.56	-2.63	-2.72	-2.76
Accumulation Length (m)	195.0	216.5	251.0	266.5
			306.5	326.0

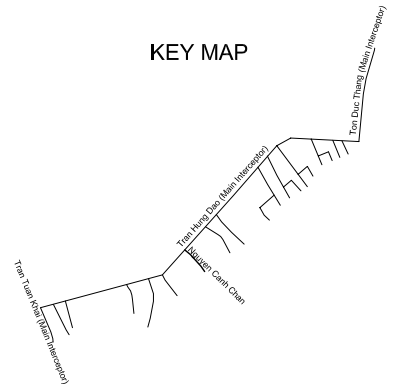
PAVEMENT TYPE P4



PAVEMENT TYPE P5



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
- Manhole
- Special Manhole
- Diversion Chamber
- Diversion Chamber with Manhole
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant
- S4 - Area to be Required for Shaft
- Sewer Connected from The Right Side
- Sewer Connected from The Left Side

NO.	DATE	DESCRIPTIONS	BY	APRO.
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REVISIONS

PROJECT MANAGEMENT UNIT FOR  
HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT

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

PACKAGE C  
INTERCEPTOR SEWER CONSTRUCTION

PLAN AND PROFILE OF  
SECONDARY INTERCEPTOR SEWER  
(19)

SCALE : AS SHOWN

JAPAN INTERNATIONAL COOPERATION  
AGENCY ( JICA )

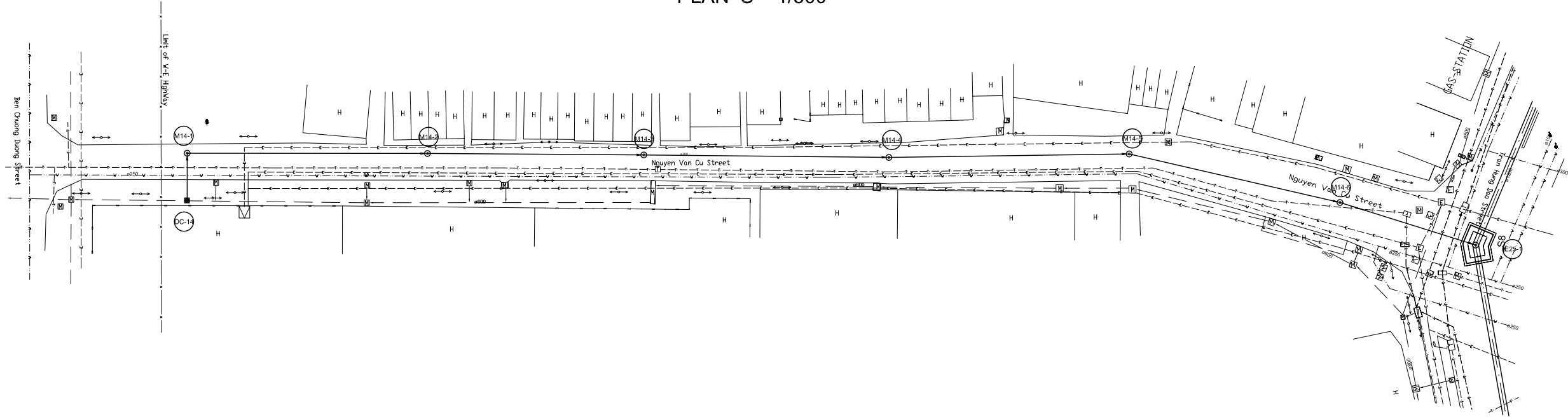
PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED  
SATO NOBUYUKI

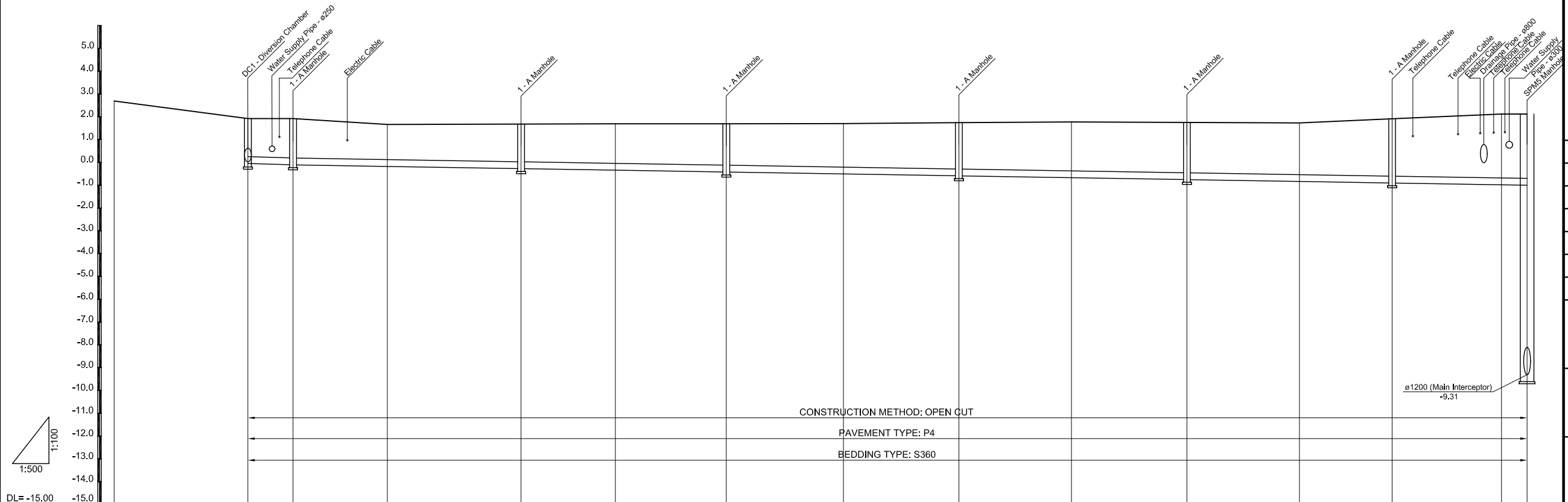
CHECKED  
KONDO MASAMI

DATE : JUNE 2001      DWG. No. PC - ISC - 241

PLAN S = 1/500

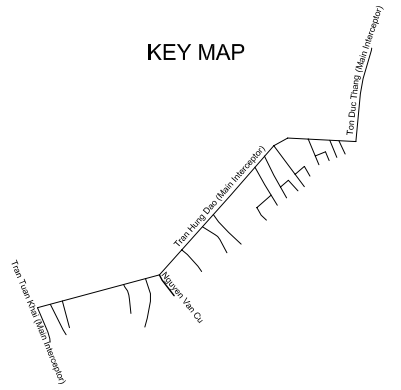


PROFILE S<sub>H</sub> = 1/500, S<sub>V</sub> = 1/100



Manhole number	DC-14	M14-1	M14-2	M14-3	M14-4	M14-5	M14-6	IE25-1							
Diameter (mm)		Ø300	Ø300	Ø300	Ø300	Ø300	Ø300	Ø300							
Gradient (%)		6	3.3	3.3	3.3	3.3	3.3	3.3							
Length (m)		9.9	50.0	45.0	51.0	50.0	45.0	29.6							
Ground Elevation (m)	2.88	1.92	1.92	1.66	1.68	1.69	1.69	1.70	1.74	1.77	1.75	1.73	1.91	2.12	2.12
Earth Covering (m)		1.67	1.73	1.54	1.66	1.73	1.81	1.91	2.03	2.14	2.21	2.27	2.52	2.80	2.82
Invert Elevation (m)		-0.05	-0.11	-0.18	-0.27	-0.34	-0.42	-0.51	-0.59	-0.67	-0.76	-0.84	-0.91	-0.96	-1.00
Accumulation Length (m)	0	0.0	9.9	30.6	59.9	80.6	104.9	130.6	155.9	180.6	205.9	230.6	250.9	274.9	280.5

KEY MAP



LEGEND

- Sewer Line
- Sewer Line
- Planted Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
- Manhole
- Special Manhole
- Diversion Chamber
- Diversion Chamber with Manhole
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant
- S4 - Area to be Required for Shaft
- Sewer Connected from The Right Side
- Sewer Connected from The Left Side

NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR  
HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT

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

PACKAGE C  
INTERCEPTOR SEWER CONSTRUCTION

PLAN AND PROFILE OF  
SECONDARY INTERCEPTOR SEWER  
(20)

SCALE : AS SHOWN

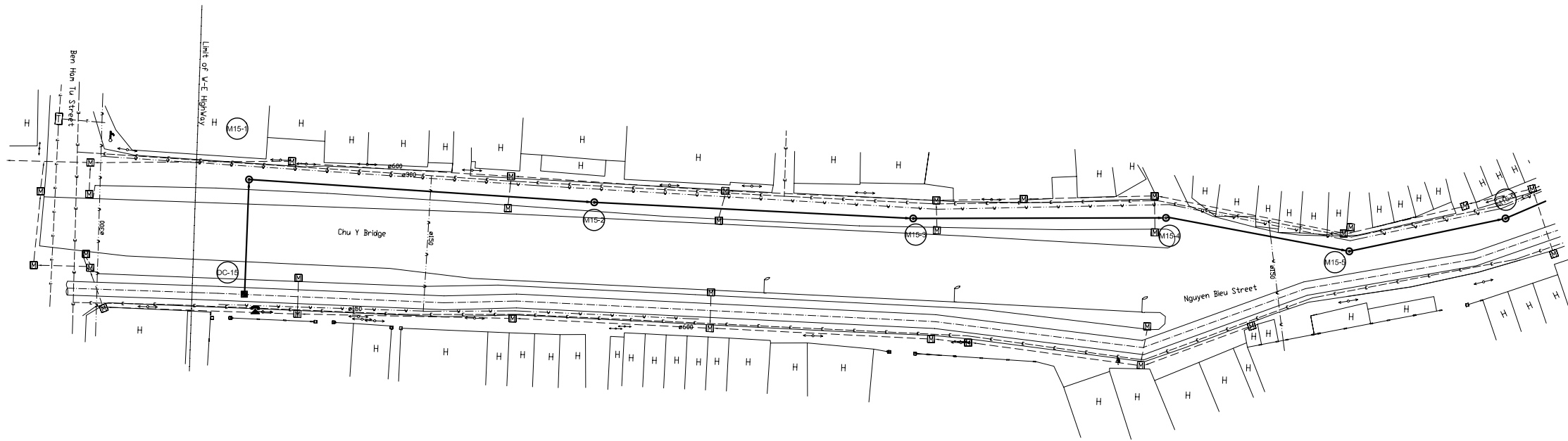
JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

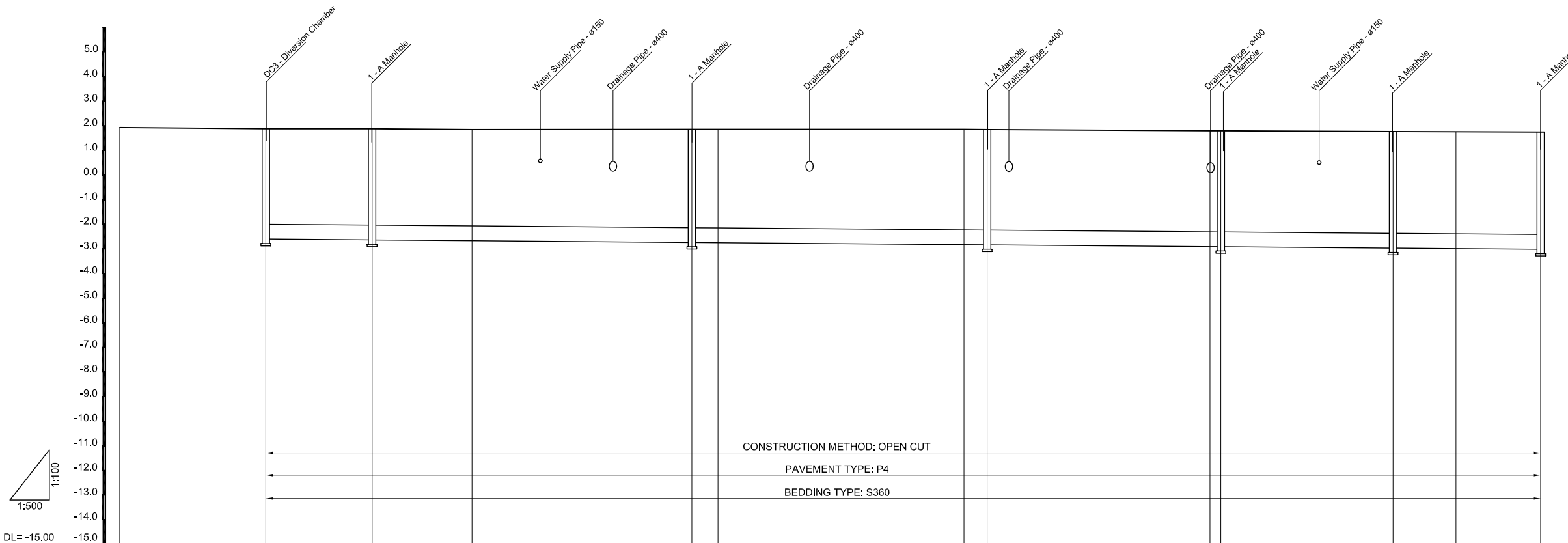
DESIGNED SATO NOBUYUKI	CHECKED KONDO MASAMI
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DATE : JUNE 2001    DWG. No. PC - ISC - 242

PLAN S = 1/500

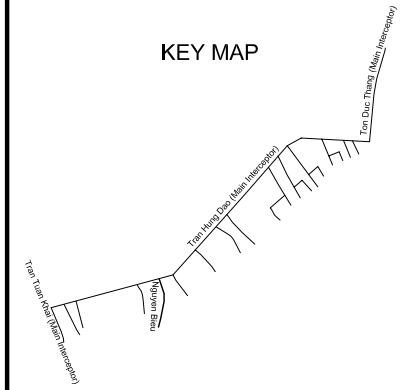


PROFILE S<sub>H</sub> = 1/500, S<sub>V</sub> = 1/100

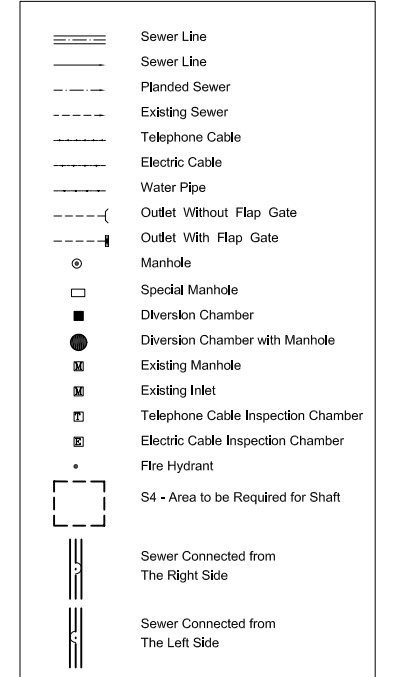


Manhole number	DC15-1		M15-1		M15-2		M15-3		M15-4		M15-5		M15-6
Diameter (mm)		Ø600		Ø600		Ø600		Ø600		Ø600		Ø600	
Gradient(‰)		1.6		1.6		1.6		1.6		1.6		1.6	
Length (m)		21.6		65.0		60.0		47.5		35.0		30.0	
Ground Elevation (m)	1.93	1.88	1.88	1.85	1.86	1.86	1.86	1.85	1.80	1.80	1.77	1.76	1.75
Earth Covering (m)		3.88	3.92	3.92	4.00	4.01	4.09	4.09	4.11	4.11	4.14	4.15	4.17
Invert Elevation (m)		-3.12	-3.15	-3.19	-3.26	-3.27	-3.36	-3.36	-3.43	-3.43	-3.49	-3.51	-3.54
Accumulation Length (m)		0.0	21.6	41.9	86.6	91.9	141.9	146.6	191.9	194.1	229.1	241.9	259.1

KEY MAP



LEGEND



NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR  
HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT

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

PACKAGE C  
INTERCEPTOR SEWER CONSTRUCTION

PLAN AND PROFILE OF  
SECONDARY INTERCEPTOR SEWER  
(21)

SCALE : AS SHOWN

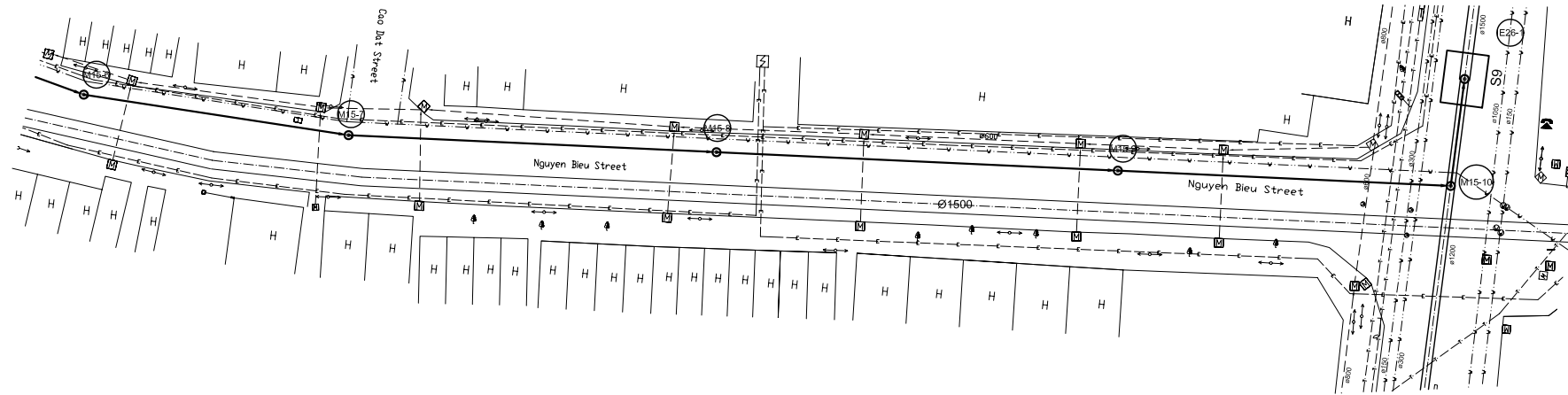
JICA JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

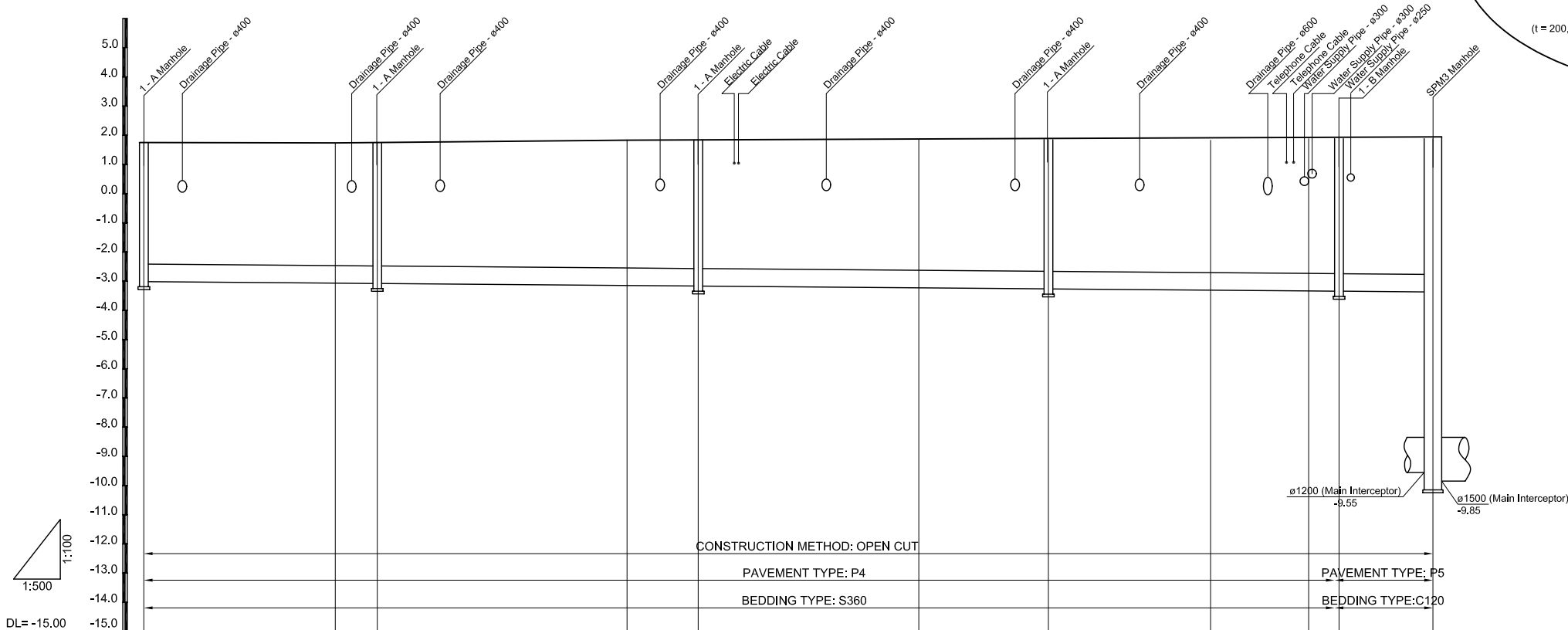
DESIGNED: SATO NOBUYUKI  
CHECKED: KONDO MASAMI

DATE : JUNE 2001 DWG. No. PC - ISC - 243

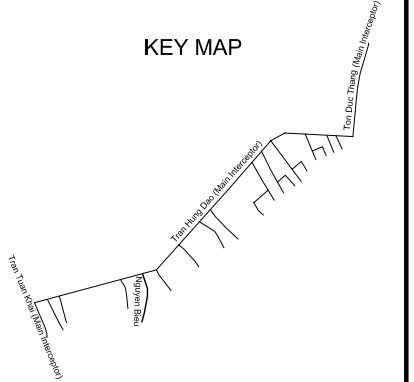
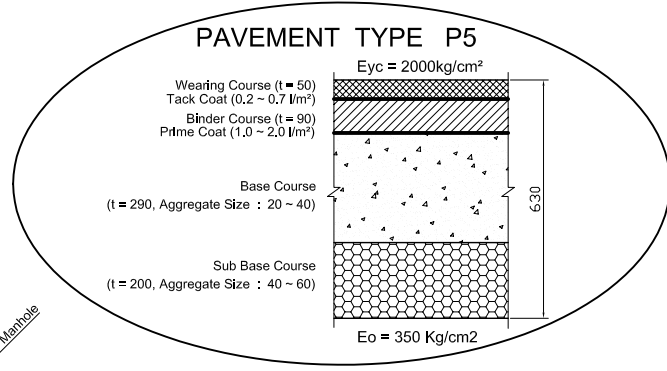
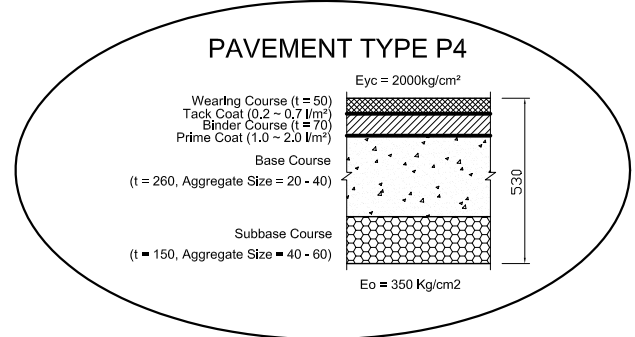
PLAN S = 1/500



PROFILE S<sub>H</sub> = 1/500, S<sub>V</sub> = 1/100



Manhole number	M15-6	M15-7		M15-8		M15-9		M15-10		IE26-1
Diameter (mm)	Ø600	Ø600		Ø600		Ø600		Ø600		Ø600
Gradient (‰)	1.6	1.6		1.6		1.6		1.6		1.6
Length (m)	40.0	55.0		60.0		49.8		16.1		
Ground Elevation (m)	1.75	1.74	1.75	1.83	1.84	1.86	1.85	1.83	1.88	1.88
Earth Covering (m)	4.17	4.21	4.23	4.38	4.41	4.49	4.51	4.54	4.61	4.65
Invert Elevation (m)	-3.84	-3.99	-3.60	-3.67	-3.69	-3.75	-3.78	-3.83	-3.95	-3.96
Accumulation Length (m)	2691.1	2911.9	2991.1	3411.9	3541.1	3911.9	4141.1	4411.9	4567.7	4801.0



**LEGEND**

- Sewer Line
- Sewer Line
- Planned Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
- Manhole
- Special Manhole
- Diversion Chamber
- Diversion Chamber with Manhole
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant
- S4 - Area to be Required for Shaft
- Sewer Connected from The Right Side
- Sewer Connected from The Left Side

NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR  
HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT

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

PACKAGE C  
INTERCEPTOR SEWER CONSTRUCTION

**PLAN AND PROFILE OF  
SECONDARY INTERCEPTOR SEWER  
(22)**

SCALE : AS SHOWN

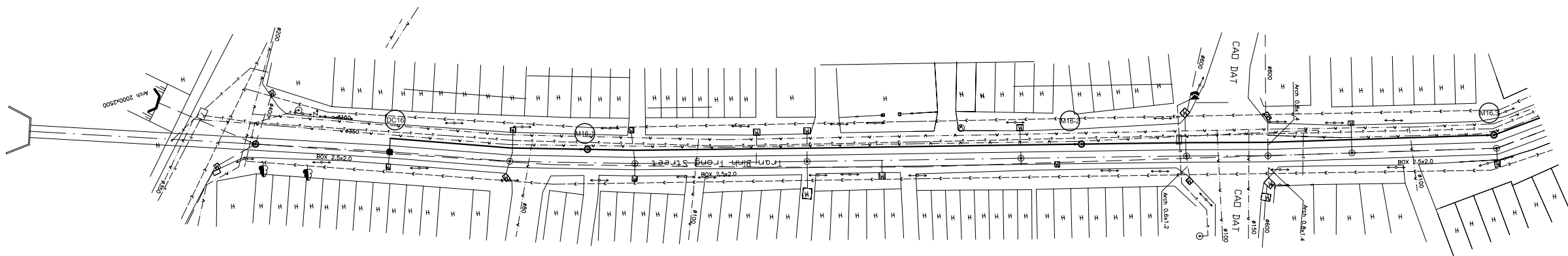
JAPAN INTERNATIONAL COOPERATION  
AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

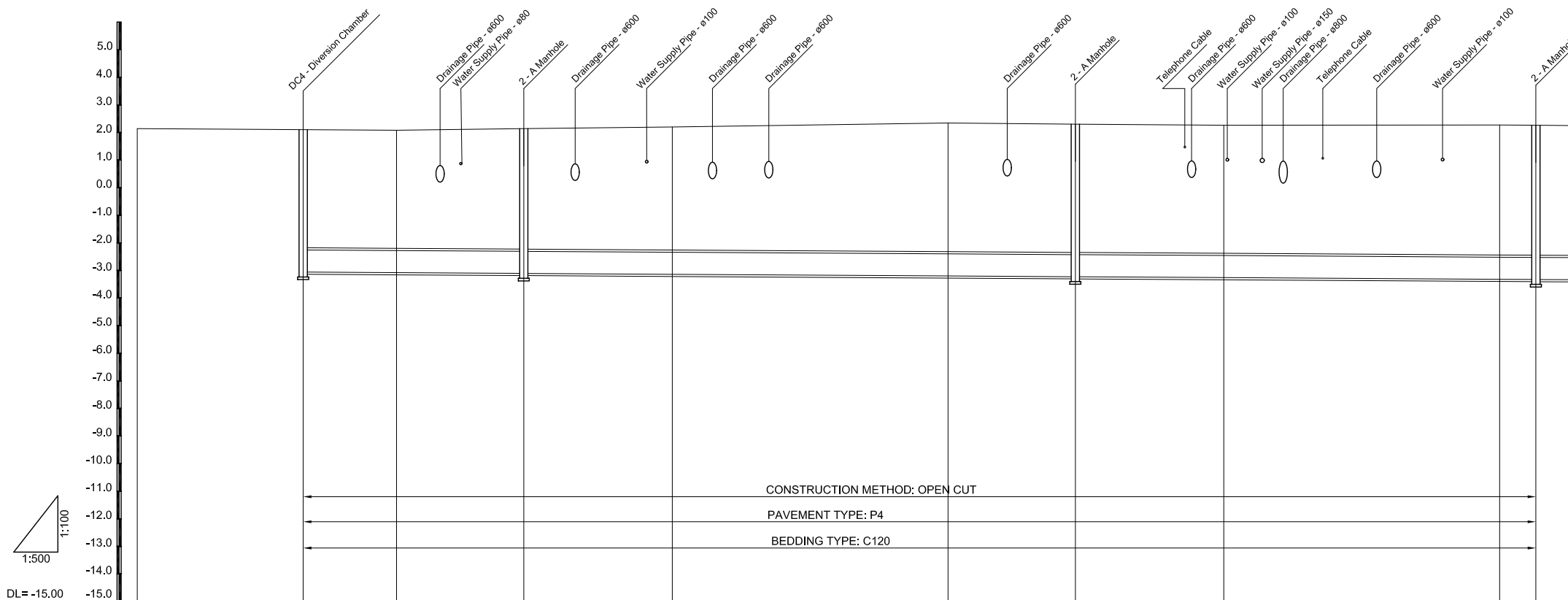
DESIGNED: SATO NOBUYUKI  
CHECKED: KONDO MASAMI

DATE : JUNE 2001      DWG. No. PC - ISC - 244

PLAN S = 1/500

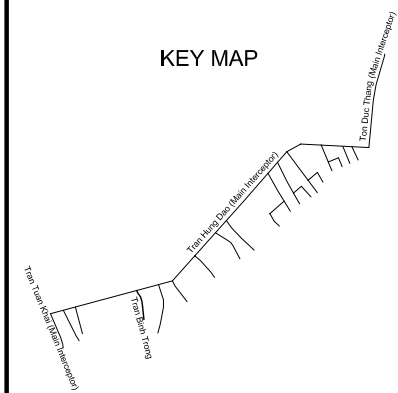


PROFILE S<sub>H</sub> = 1/500, S<sub>V</sub> = 1/100



Manhole number	DC16		M16-1		M16-2		M16-3	
Diameter (mm)	Ø800		Ø800		Ø800		Ø800	
Gradient (‰)	1.2		1.2		1.2		1.2	
Length (m)	40.0		100.0		83.5			
Ground Elevation (m)	2.14	2.10	2.08	2.14	2.20	2.24	2.30	2.28
Earth Covering (m)	4.36	4.36	4.36	4.45	4.54	4.74	4.73	4.72
Invert Elevation (m)	-3.06	-3.08	-3.11	-3.14	-3.20	-3.23	-3.26	-3.32
Accumulation Length (m)	0.0	16.9	40.0	66.9	116.9	140.0	166.9	216.9

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
- Manhole
- Special Manhole
- Diversion Chamber
- Diversion Chamber with Manhole
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant
- S4 - Area to be Required for Shaft
- Sewer Connected from The Right Side
- Sewer Connected from The Left Side

NO.	DATE	DESCRIPTIONS	BY	APRO.
REVISIONS				
PROJECT MANAGEMENT UNIT FOR HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT				
THE DETAILED DESIGN ON HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT PROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM				
PACKAGE C INTERCEPTOR SEWER CONSTRUCTION				
PLAN AND PROFILE OF SECONDARY INTERCEPTOR SEWER (23)				
SCALE : AS SHOWN				
JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )				
PACIFIC CONSULTANTS INTERNATIONAL				
DESIGNED SATO NOBUYUKI		CHECKED KONDO MASAMI		
DATE : JUNE 2001		DWG. No. PC - ISC - 245		