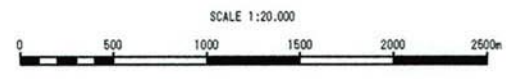
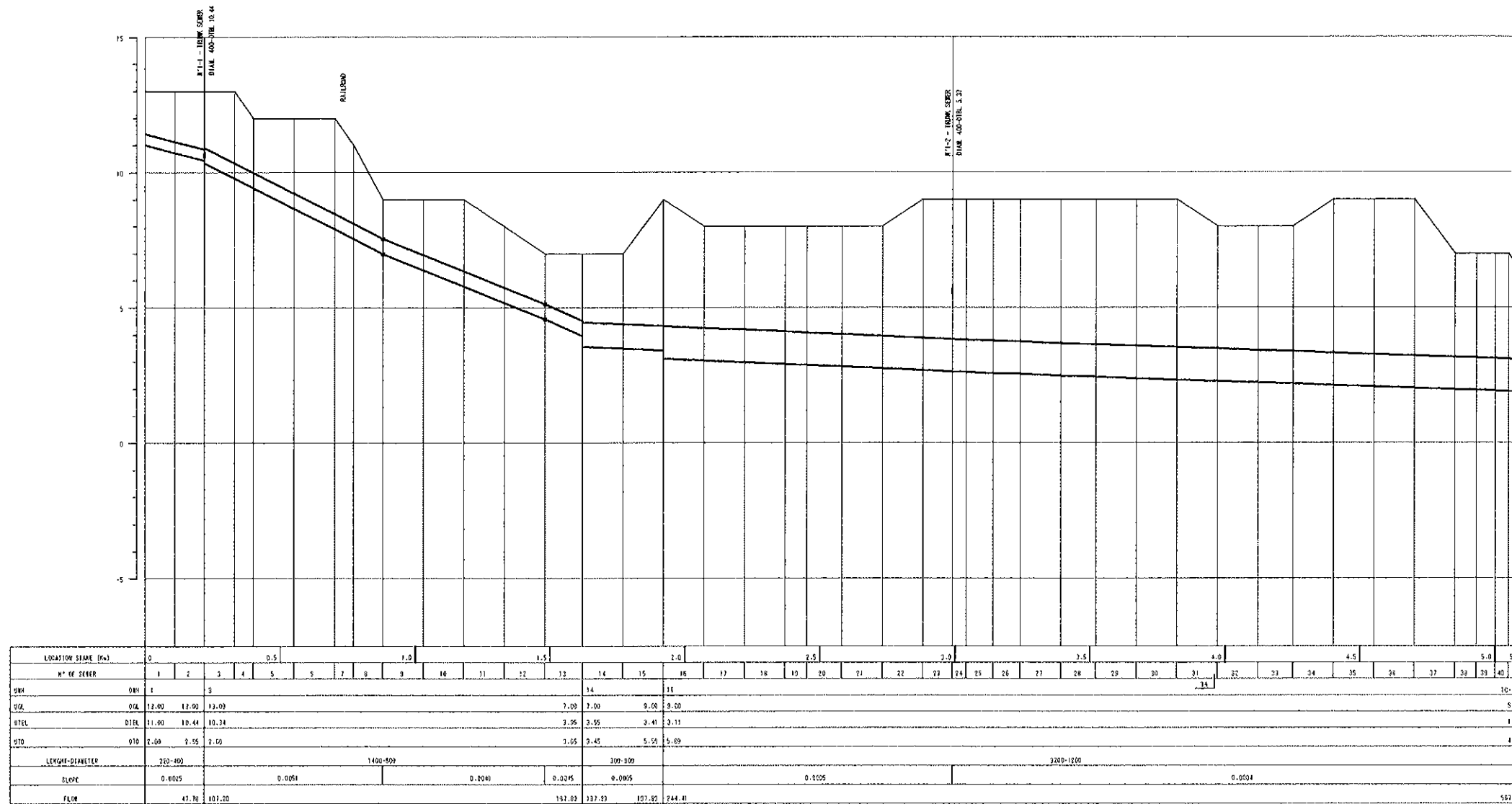


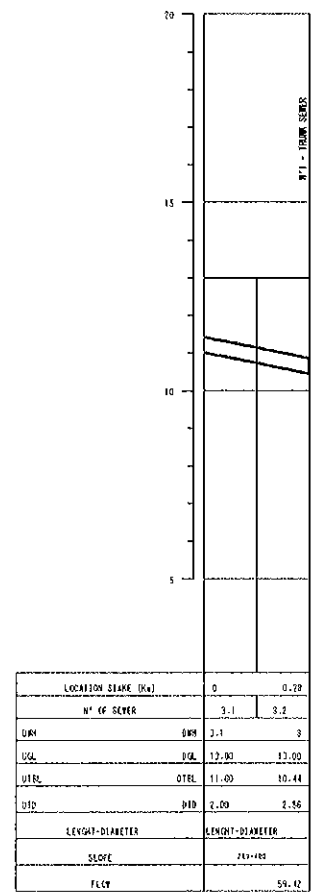
- LEGEND**
- MUNICIPALITY BOUNDARY
 - SUB-BASIN BOUNDARY
 - URBAN AREA BOUNDARY
 - TRUNK SEWER (BY GRAVITY FLOW)
 - TRUNK SEWER EXISTENT (BY GRAVITY FLOW)
 - TRUNK SEWER (BY PRESSURE FLOW)
 - 100-400 → DIAMETER (mm)
 - LENGTH (m)
 - PV MANHOLE
 - EE PUMP STATION
 - ETE TREATMENT FACILITY
 - ▣ PLANNED TREATMENT FACILITY
 - △ PLANNED PUMP STATION
 - ▲ EXISTING PUMP STATION



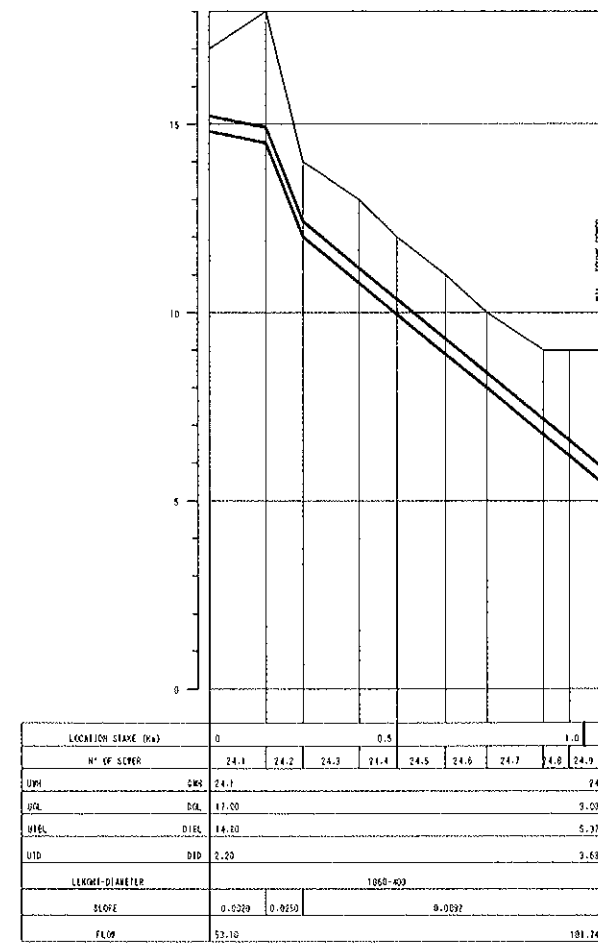
DRAW. 2.1	THE STUDY ON MANAGEMENT AND IMPROVEMENT OF THE ENVIRONMENTAL CONDITIONS OF GUANABARA BAY IN RIO DE JANEIRO	TITLE
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	LAYOUT PLAN OF PAVUNA SEWER DISTRICT



N°1 - TRUNK SEWER



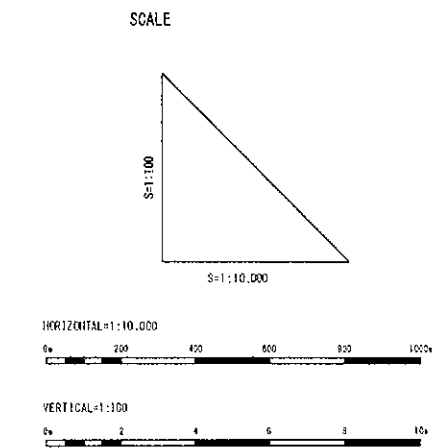
N°1-1 - TRUNK SEWER



N°1-2 - TRUNK SEWER

NOTE:
1- DIAMETERS IN MILLIMETERS, SLOPES IN METER PER METER,
LEVELS AND LENGTHS IN METERS.

- LEGEND:
- UWH - UPSTREAM MANHOLE
 - UGL - UPSTREAM GROUND LEVEL
 - UTBL - UPSTREAM TRUNK SEWER BOTTOM LEVEL
 - UTD - UPSTREAM TRUNK SEWER DEPTH
 - DWH - DOWNSTREAM MANHOLE
 - DGL - DOWNSTREAM GROUND LEVEL
 - DTBL - DOWNSTREAM TRUNK SEWER BOTTOM LEVEL
 - DTD - DOWNSTREAM TRUNK SEWER DEPTH
 - GROUND
 - PROPOSED LINE
 - TRUNK SEWER STUDY
 - TRUNK SEWER EXISTENT
 - MANHOLE

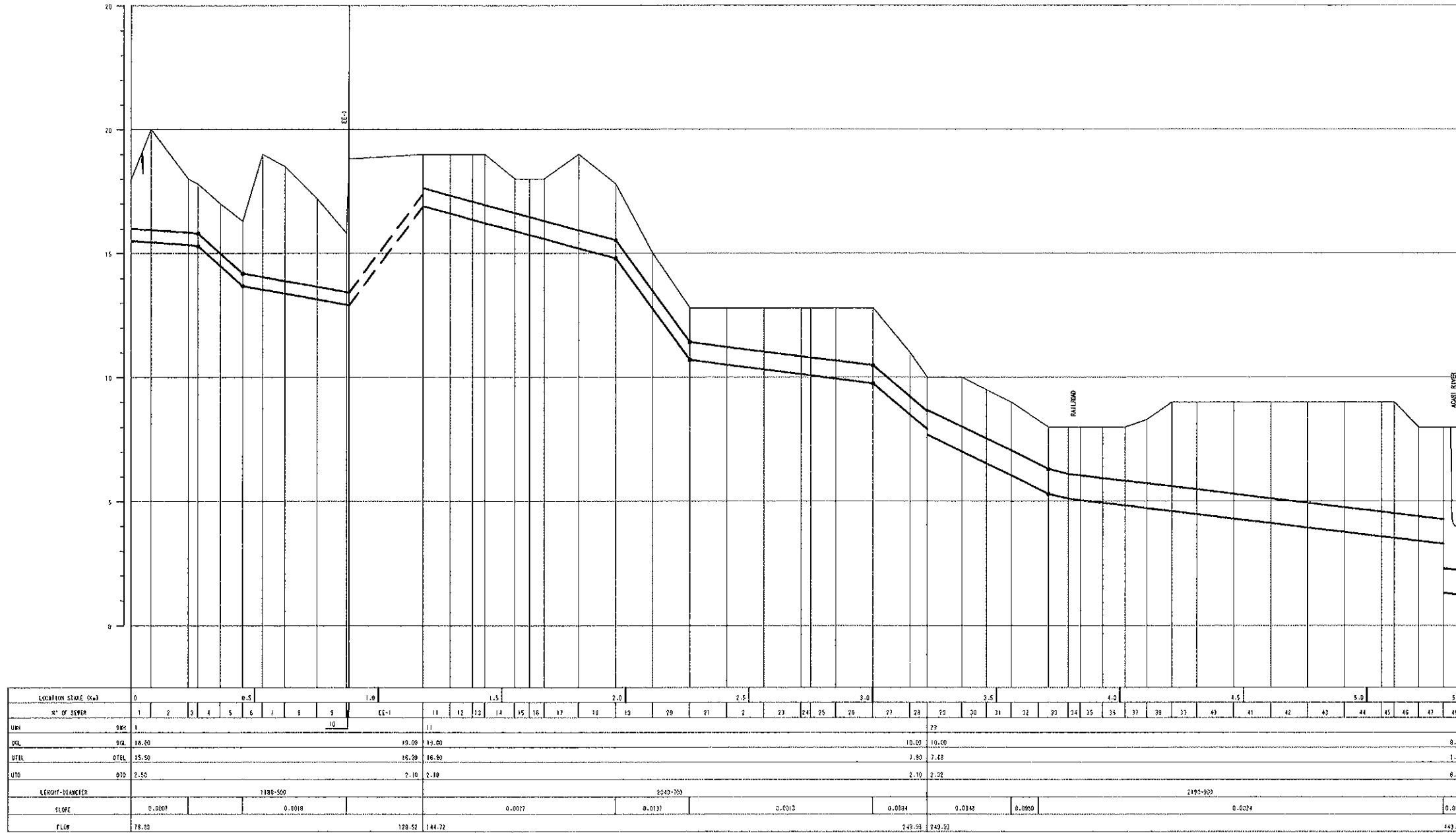


NOTE:

1 - DIAMETERS IN MILLIMETERS, SLOPES IN METER PER METER,
LEVELS AND LENGTHS IN METERS.

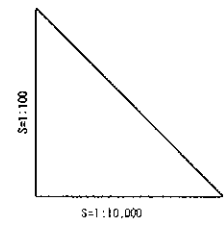
LEGEND:

- UMH - UPSTREAM MANHOLE
- UGL - UPSTREAM GROUND LEVEL
- UTBL - UPSTREAM TRUNK SEWER BOTTOM LEVEL
- UTD - UPSTREAM TRUNK SEWER DEPTH
- DMH - DOWNSTREAM MANHOLE
- DGL - DOWNSTREAM GROUND LEVEL
- DTBL - DOWNSTREAM TRUNK SEWER BOTTOM LEVEL
- DTD - DOWNSTREAM TRUNK SEWER DEPTH
- - GROUND
- == - PRESSING LINE
- - TRUNK SEWER STUDY
- : — - TRUNK SEWER EXISTENT
- | - MANHOLE



N°2 - TRUNK SEWER

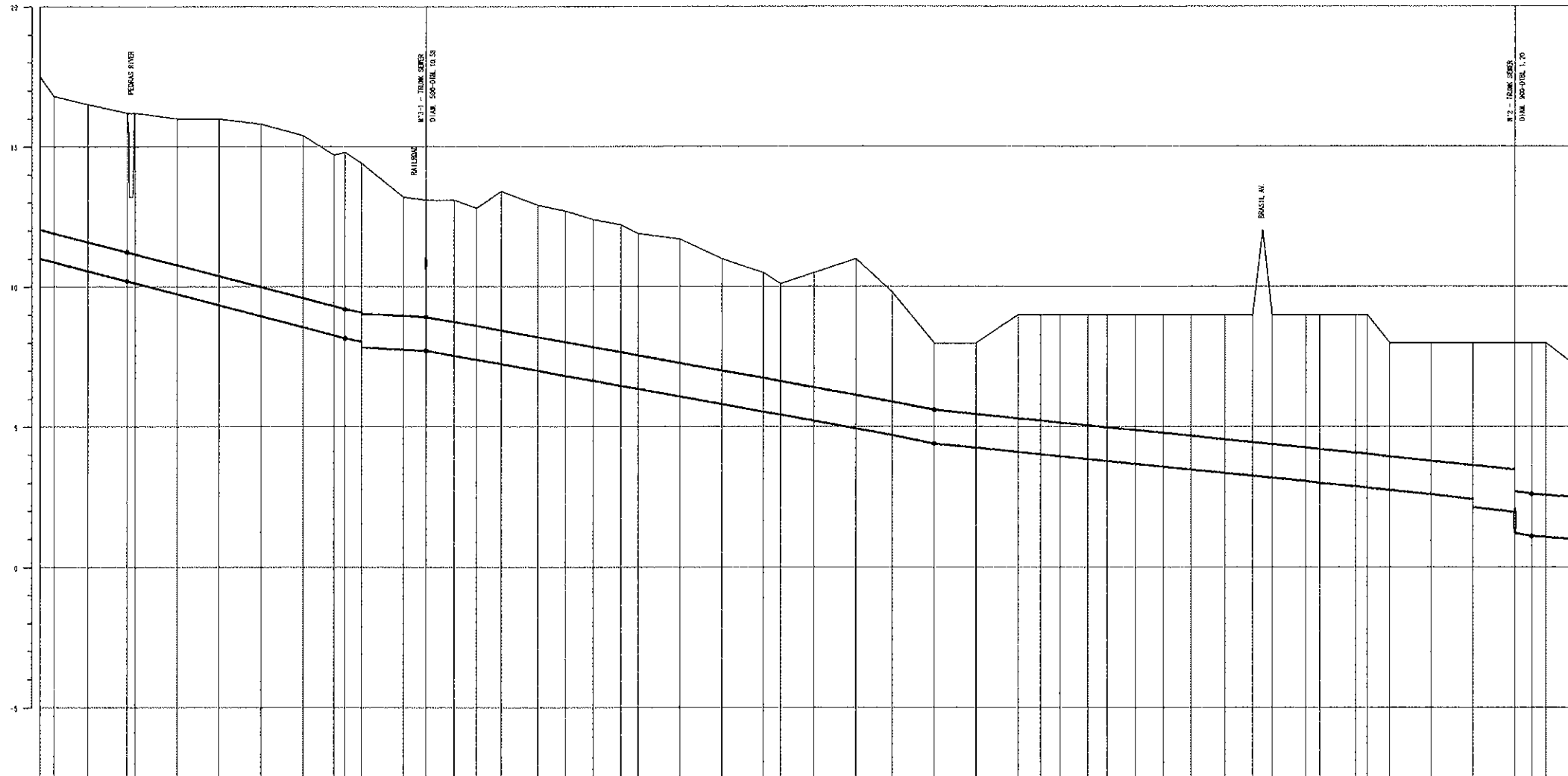
SCALE



DRAW. 2.3	THE STUDY ON MANAGEMENT AND IMPROVEMENT OF THE ENVIRONMENTAL CONDITIONS OF GUANABARA BAY IN RIO DE JANEIRO	TITLE
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	TRUNK SEWER PROFILE (2/4) PAVUNA SEWER DISTRICT

NOTE:
 1- DIAMETERS IN MILLIMETERS, SLOPES IN METER PER METER,
 LEVELS AND LENGTHS IN METERS.

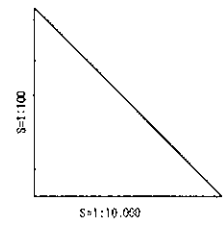
- LEGEND:
- UPH - UPSTREAM MANHOLE
 - UGL - UPSTREAM GROUND LEVEL
 - UTBL - UPSTREAM TRUNK SEWER BOTTOM LEVEL
 - UTD - UPSTREAM TRUNK SEWER DEPTH
 - DMH - DOWNSTREAM MANHOLE
 - DGL - DOWNSTREAM GROUND LEVEL
 - DTBL - DOWNSTREAM TRUNK SEWER BOTTOM LEVEL
 - DTD - DOWNSTREAM TRUNK SEWER DEPTH
 - GROUND
 - PRESSING LINE
 - TRUNK SEWER STUDY
 - TRUNK SEWER EXISTENT
 - MANHOLE



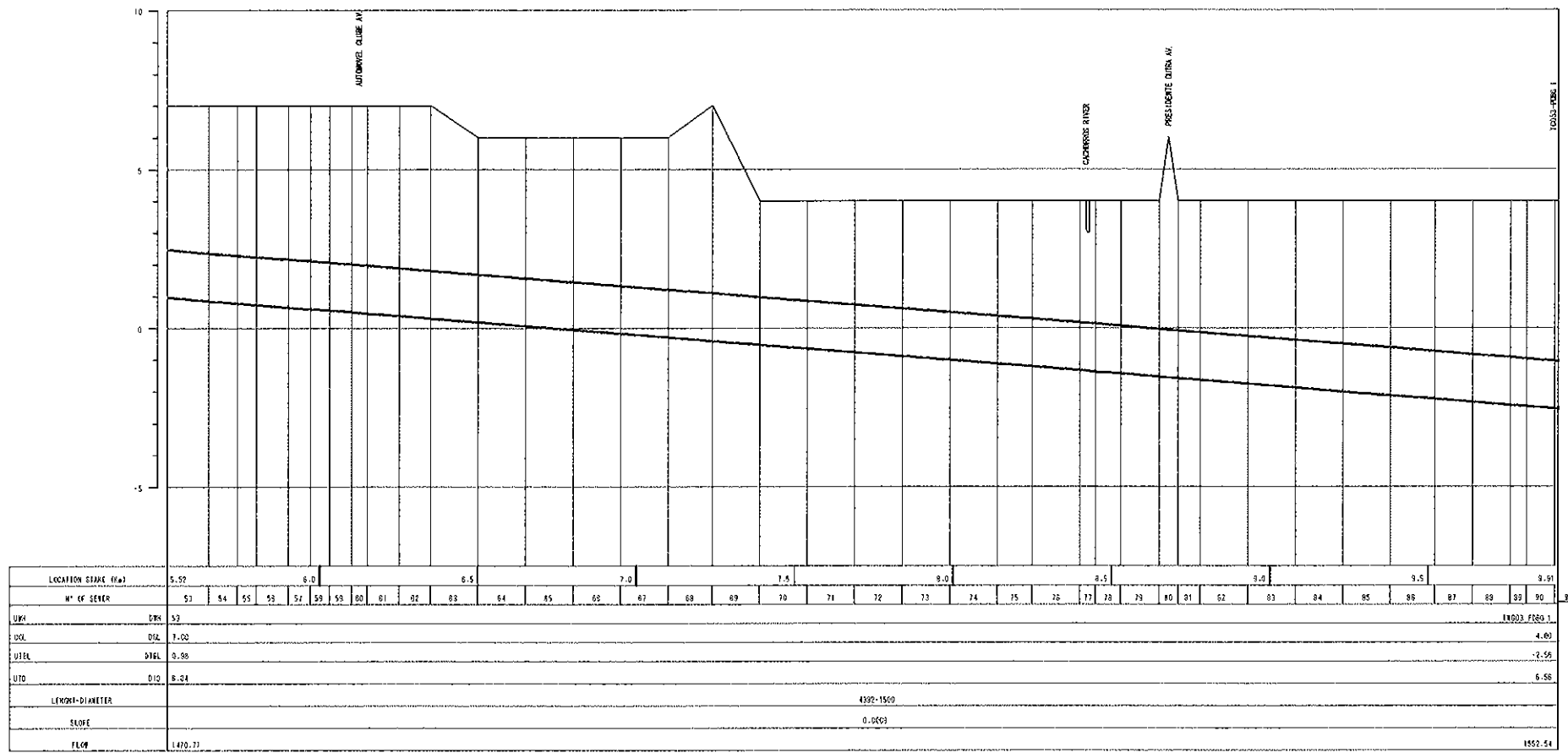
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N° OF SEWER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52		
UNKI																							12																															
DIA	13.50				14.40		14.40																																															
UTBL	11.00				8.91		7.94																																															
UTD	2.50				2.30		2.50																																															
LENGTH-DIAMETER					1150-1000																																																	
SLOPE	0.0016				0.0018		0.0025																																															
FLOOR	539.91				539.21		521.59																																															

N°3 - TRUNK SEWER

SCALE



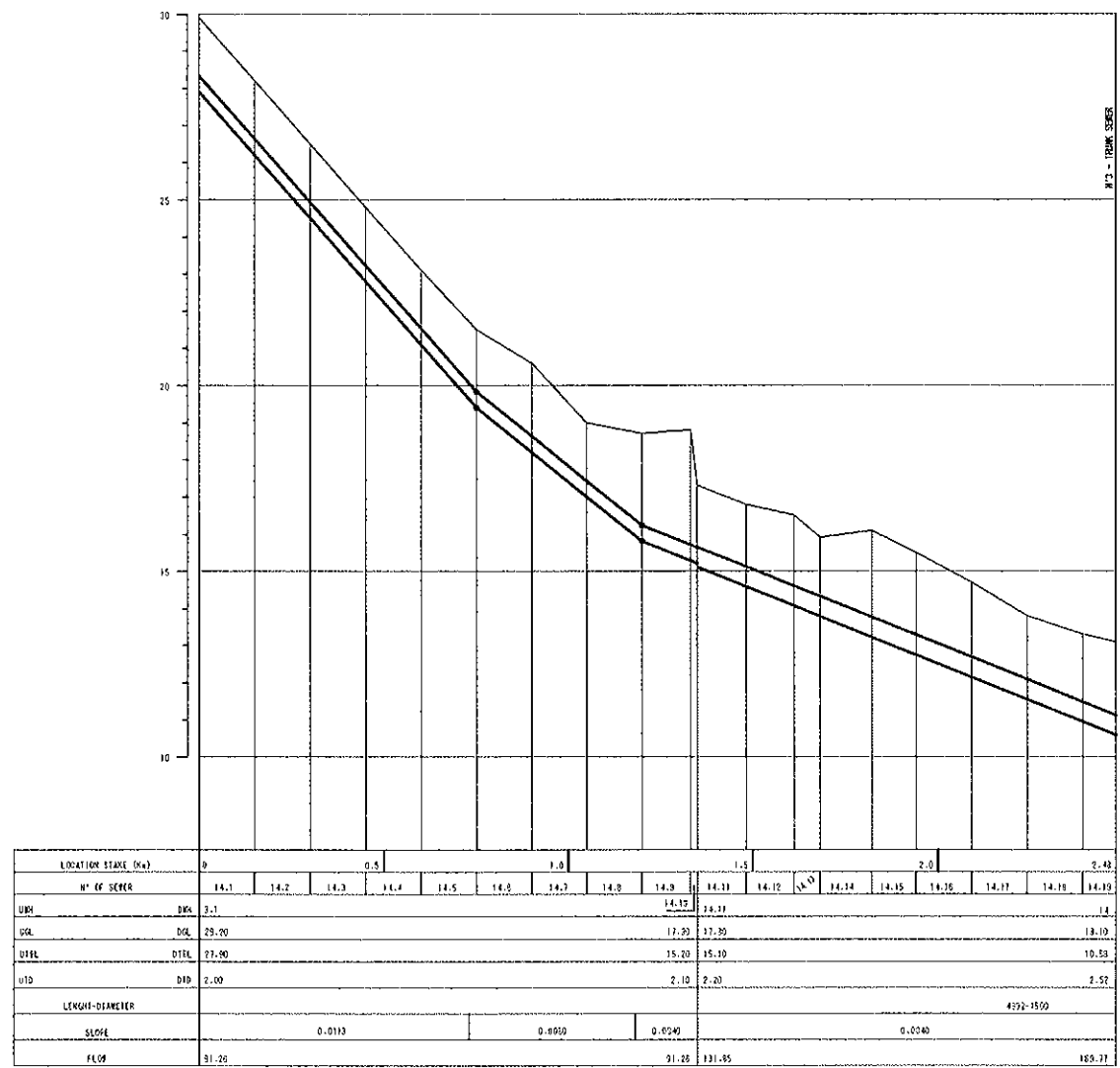
DRAW. 2.4	THE STUDY ON MANAGEMENT AND IMPROVEMENT OF THE ENVIRONMENTAL CONDITIONS OF GUANABARA BAY IN RIO DE JANEIRO	TITLE
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	TRUNK SEWER PROFILE (3/4) PAVUNA SEWER DISTRICT



N°3 - TRUNK SEWER

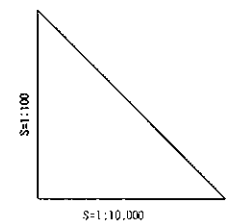
NOTE:
1 - DIAMETERS IN MILLIMETERS, SLOPES IN METER PER METER,
LEVELS AND LENGTHS IN METERS.

- LEGEND:
- URH - UPSTREAM MANHOLE
 - UGL - UPSTREAM GROUND LEVEL
 - UTBL - UPSTREAM TRUNK SEWER BOTTOM LEVEL
 - UTO - UPSTREAM TRUNK SEWER DEPTH
 - DNH - DOWNSTREAM MANHOLE
 - DGL - DOWNSTREAM GROUND LEVEL
 - DTBL - DOWNSTREAM TRUNK SEWER BOTTOM LEVEL
 - DID - DOWNSTREAM TRUNK SEWER DEPTH
 - - GROUND
 - — — - PRESSURE LINE
 - — — — - TRUNK SEWER STUDY
 - — — — - TRUNK SEWER EXISTENT
 - | - MANHOLE



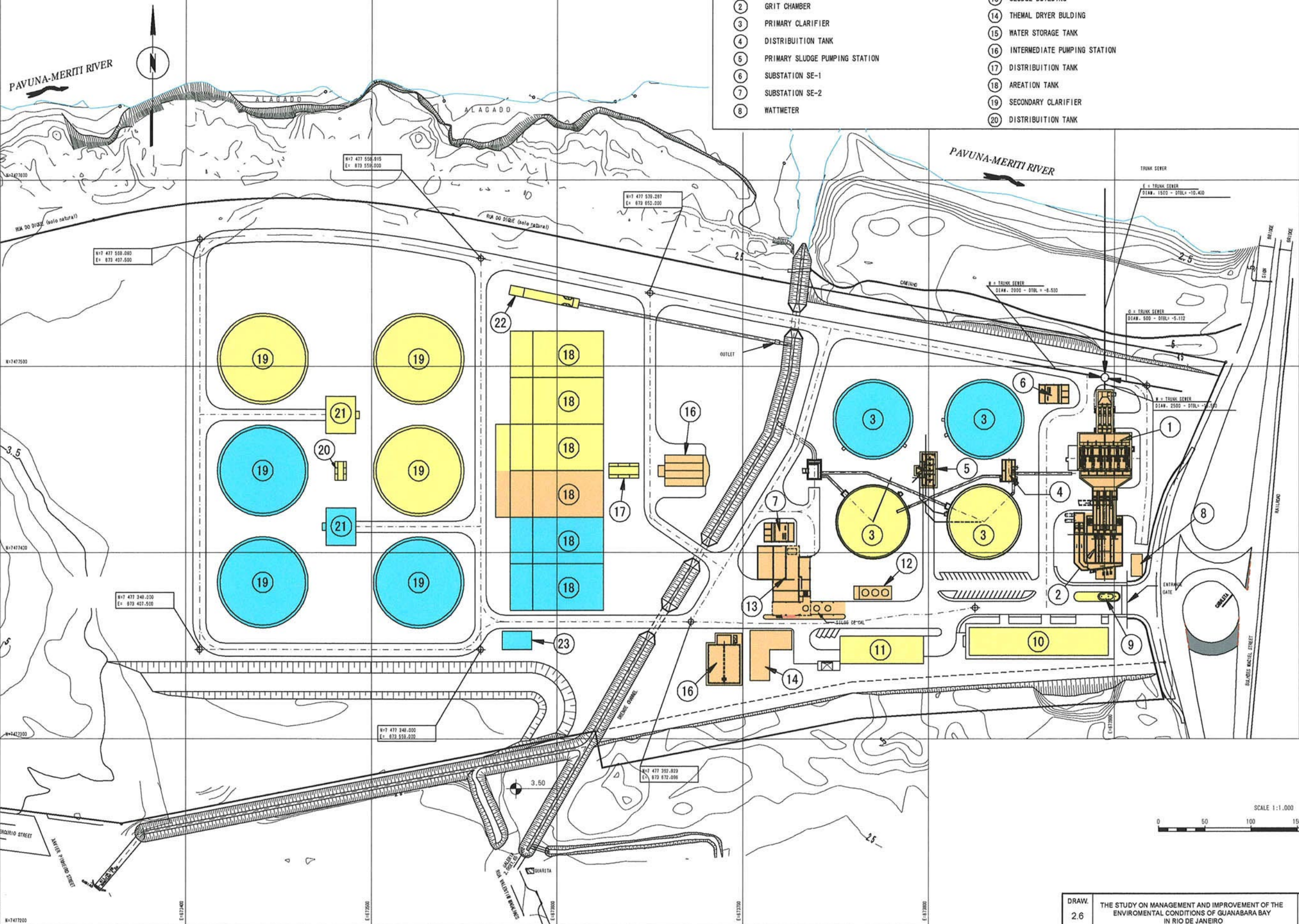
N°3-1 - TRUNK SEWER

SCALE



DRAW. 2.5	THE STUDY ON MANAGEMENT AND IMPROVEMENT OF THE ENVIRONMENTAL CONDITIONS OF GUANABARA BAY IN RIO DE JANEIRO	TITLE TRUNK SEWER PROFILE (4/4) PAVUNA SEWER DISTRICT
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

N=747700



LEGEND:

- UNITS ALREADY IMPLEMENTED-PDBG 1
- UNITS FOR EQUIPMENTS INSTALATION-FS
- UNITS TOBE CONSTRUCTED-FS
- ① INLET PUMPING STATION
- ② GRIT CHAMBER
- ③ PRIMARY CLARIFIER
- ④ DISTRIBUTION TANK
- ⑤ PRIMARY SLUDGE PUMPING STATION
- ⑥ SUBSTATION SE-1
- ⑦ SUBSTATION SE-2
- ⑧ WATTMETER
- ⑨ RECEPTION / TRUCK SCALE
- ⑩ ADMINISTRATION/LABORATORY BUILDING
- ⑪ WORKSHOP
- ⑫ CHEMICAL FEEDER (FE CL3)
- ⑬ SLUDGE BUILDING
- ⑭ THERMAL DRYER BUILDING
- ⑮ WATER STORAGE TANK
- ⑯ INTERMEDIATE PUMPING STATION
- ⑰ DISTRIBUTION TANK
- ⑱ AREATION TANK
- ⑲ SECONDARY CLARIFIER
- ⑳ DISTRIBUTION TANK
- ㉑ RETURN ACTIVATED SLUDGE PUMPING STATION
- ㉒ PARSHALL FLUME
- ㉓ SUBSTATION SE-3



NOTE:
1 - ELEVATION E DIMENSION IN METER.
REFERENCE DRAW:
DE-3,380-130,401-CPV-14-001

DRAW. 2.6	THE STUDY ON MANAGEMENT AND IMPROVEMENT OF THE ENVIRONMENTAL CONDITIONS OF GUANABARA BAY IN RIO DE JANEIRO	TITLE
	PAVUNA - WWTP LAYOUT PLAN	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		