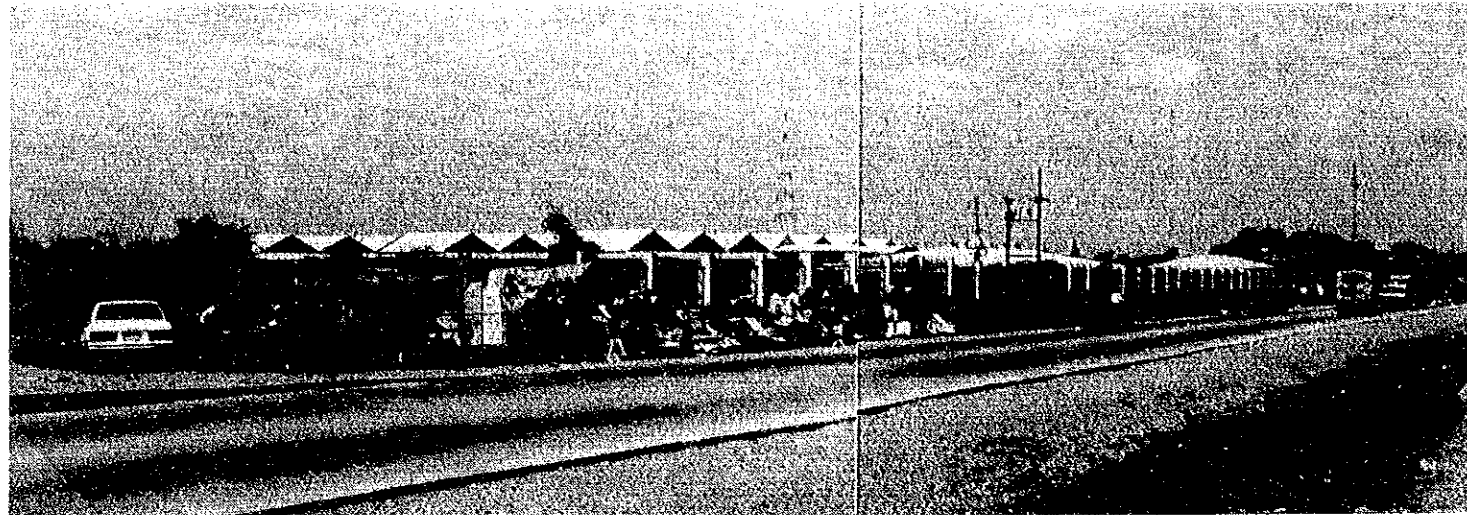


6. 建設予定地状況

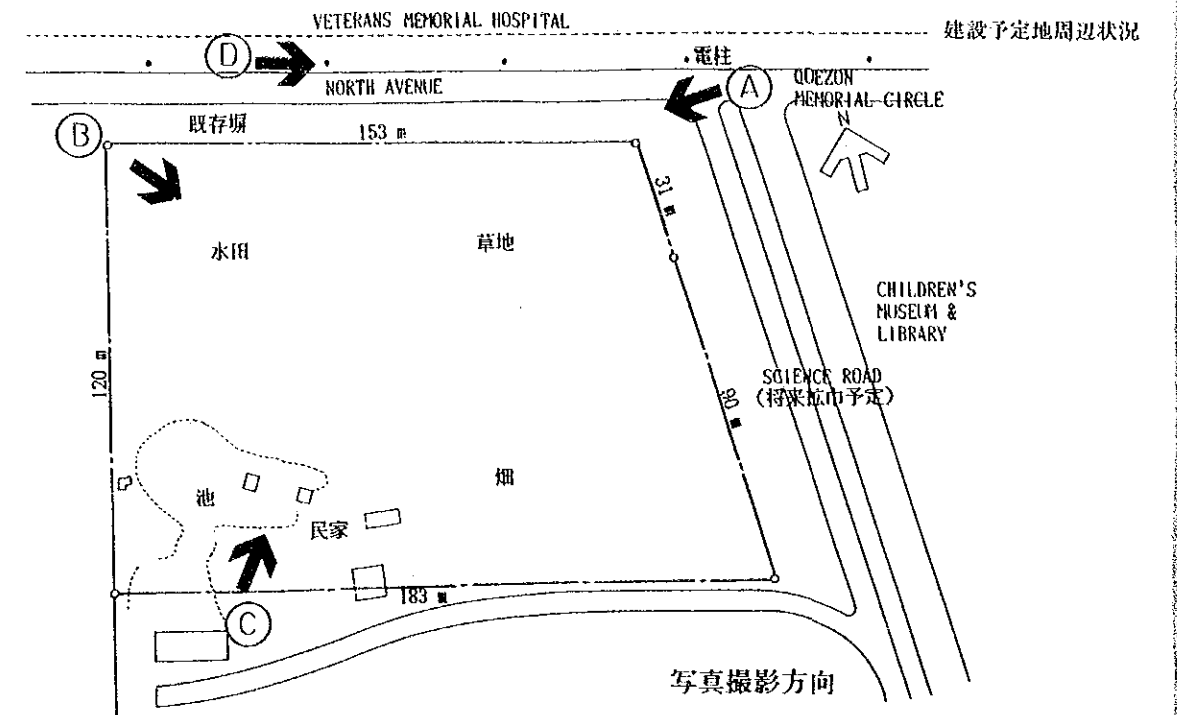
6-1. 建設予定地周辺状況

6-2. 敷地測量図

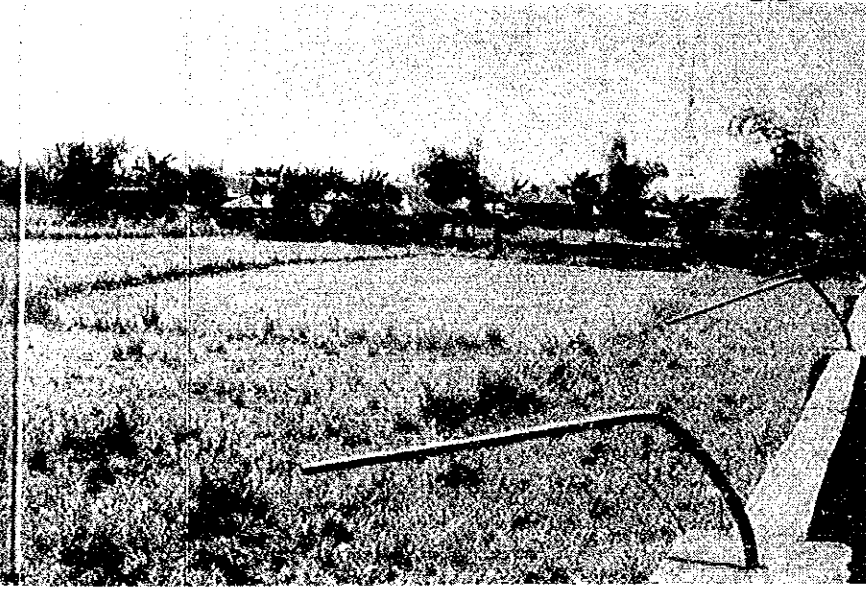
6-3. 地質調査報告書



① アプローチ方向



② 敷地 北西角より全体を見る



③ 敷地 南西角の池と既存民家



④ 敷地に電力引き込み可能な電柱

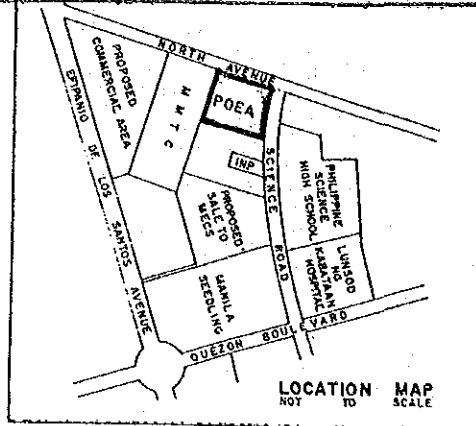
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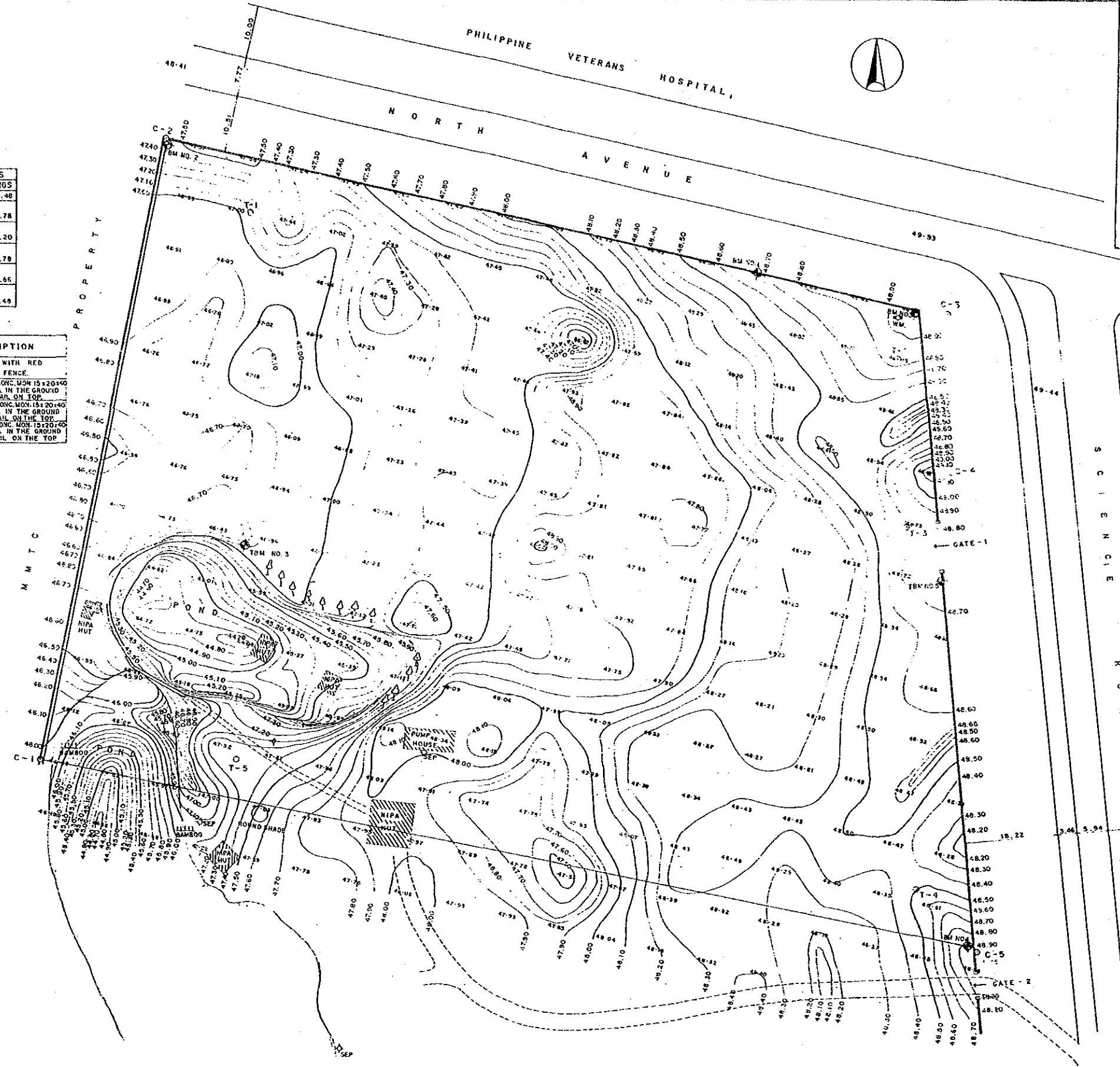
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CORNER	BEARING	DISTANCE	COORDINATES	
			NORTHINGS	EASTINGS
1	N 11° 37' E	120.69	20,163.39	26,940.48
2	S 77° 23' E	153.12	20,281.61	26,964.78
3	S 01° 04' E	31.02	20,248.16	27,114.20
4	S 03° 43' E	90.66	20,217.15	27,114.78
5	N 78° 29' W	183.88	20,128.68	27,125.66
1			20,163.39	26,940.48

BM NO.	ELEV.	COORDINATES		DESCRIPTION
		NORTHINGS	EASTINGS	
1	49.34	25,256.23	27,078.70	X - MARKED WITH RED PAINT ON CHB FENCE.
2	47.80	20,280.15	26,965.18	TRAPEZOIDAL CONC. MON 15x20x40 CM. SET 35 CM. IN THE GROUND WITH CONC. NAIL ON TOP.
3	49.05	20,248.45	27,108.48	TRAPEZOIDAL CONC. MON 15x20x40 CM. SET 35 CM. IN THE GROUND WITH CONC. NAIL ON THE TOP.
4	49.99	20,128.21	27,119.14	TRAPEZOIDAL CONC. MON 15x20x40 CM. SET 35 CM. IN THE GROUND WITH CONC. NAIL ON THE TOP.

- LEGEND:**
- TRaverse Station / Corners
 - BOUNDARY
 - STEEL ELECTRIC POST
 - NIPA HUT
 - CHB FENCE
 - BAMBOO CLUSTER
 - COMMERCIAL TREES
 - WATER METER
 - POND
 - EXISTING ASPHALT



RCG CONSULT
R.C.G. BLDG. 1770 KANANOR GARCIA STREET
MAKATI, METRO MANILA, PHILIPPINES

Leonardo V. Revuelta
DOMINADOR J. PASCUA
TRANSMAN
LEONARDO V. REVUELTA
LEVELMAN
PETER V. MANZANO
COMPUTER/PLOTTER

Engr. Danilo E. Ojeda
ENGR. DANILLO E. OJEDA
PROJECT DIRECTOR

Antonio A. Marsueto
ANTONIO A. MARSUETO
GEODETIC ENGINEER
REG. NO.: 2 DATE ISSUED: JULY 29, 1985
PTR. NO.: 8990221 DATE ISSUED: JAN. 4, 1985



TITLE:
TOPOGRAPHIC MAP
SCALE: 1:400 M.

PROJECT:
POEA
LOT NO.: 38-45-1A-3A
PSD NO.: 22007
TCT NO.: 310271
LOCATION: NORTH AVENUE, OLMUN, QUEZON CITY, M.M.

PROJECT : GEOTECHNICAL INVESTIGATION
SUBJECT : GEOTECHNICAL INVESTIGATION REPORT
LOCATION : POEA LOT NO. 3E-4B-1A-3A Diliman, Quezon City

1.0 INTRODUCTION

This Soils and Materials Report describes the geotechnical investigations undertaken within the 20,000 sq.m. area of the Philippine Overseas Employment Agency in front of the Philippine Veterans Memorial Hospital, and adjacent to the Metro Manila Transit on the eastern side, and KKK self help project on the southern side of the lot.

2.0 GEOLOGY OF QUEZON CITY

The eastern part of the Metro Manila deltaic plain which extends to Quezon City, and Novaliches and south to as far as Cavite is exposed to a thick sequence of well bedded tuff and tuffaceous clastics known as the Guadalupe formation. Bedding planes regionally dip from 5 to 10 degrees to the west. The bulk of the formation consists of lithified volcanic ash lapilli and crystal sands. Beds rich in sand not directly derived from volcanic activity are common especially in the upper stratigraphic section. They are generally compacted and slightly lithified or cemented by precipitated silica and or clay. Thick beds or partly welded agglomeratic tuff occur, sporadically specifically from the Blue Ridge Vicinity in Quezon City.

3.0 INVESTIGATION CARRIED OUT

The project site is enclosed by a concrete wall on the west side, bounded by the Metro Manila Transit, on the North side bounded by the North Road, and on the east side bounded by the Science Road, and open on the south side. The land is utilized as a rice paddy during the rainy days and vegetable plantation during summer.

3.1 Six (6) drill holes were undertaken by rotary wash boring using the RCG Consult, Inc. Mechanical type drilling rig, standard sub-surface exploration equipment with high pressure pump, split spoon for soil sampling, to represent every 1.5 meter strata and penetration testing accessories. Boring logs and summary of test results attached herewith includes the visual description of the different soil formation and materials encountered.

4.0 STANDARD PENETRATION TEST

The penetration test is performed by lowering the split tube sampler to the bottom of the cleaned drill hole, it is given a few taps to set it. Then the sampler is driven continuously for 18 inches (0.457 m) penetration. This is accomplished by dropping a 140 lbs. (63.6 kgs.) weight through a distance of 30 inches (0.75 m) over and over again. The number of drops or blows it takes to drive the sampler is recorded. Separate counts are made for the second 6 inches (0.15 m) and the third 6 inches (0.15 m) of penetration with the first 6 inches (0.15 m) considered to be a seating drive. The sum of the second and third counts is the penetration resistance. A penetration of less than 1 ft. (0.30 m) for 100 blows is considered already a refusal.

5.0 SUB-SURFACE CONDITION

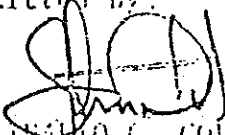
The soil deposit encountered at the proposed site is composed of silty clay and sandy clay on the top strata, but hard compact sandy clay with partly welded or cemented agglomerate. This has exhibited a high penetration resistance of the split spoon at 1.5 meters and 3.00 meters depth on all 6 holes specially common to the Guadalupe formation or soft adobe. The thickness of this formation has not been determined.

6.0 INVESTIGATION RESULTS

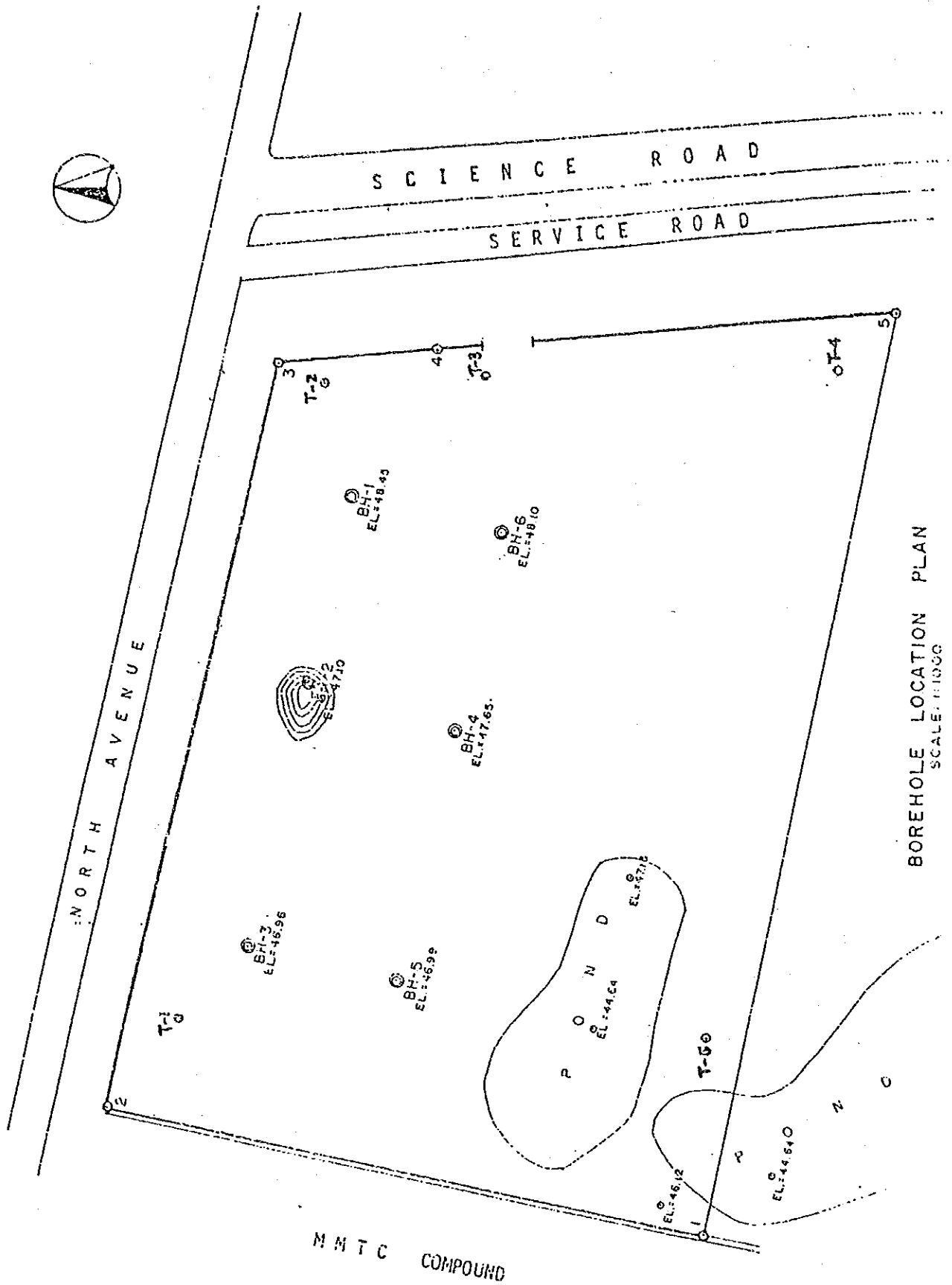
Penetration resistance results on the layers of soil materials encountered are as follows:

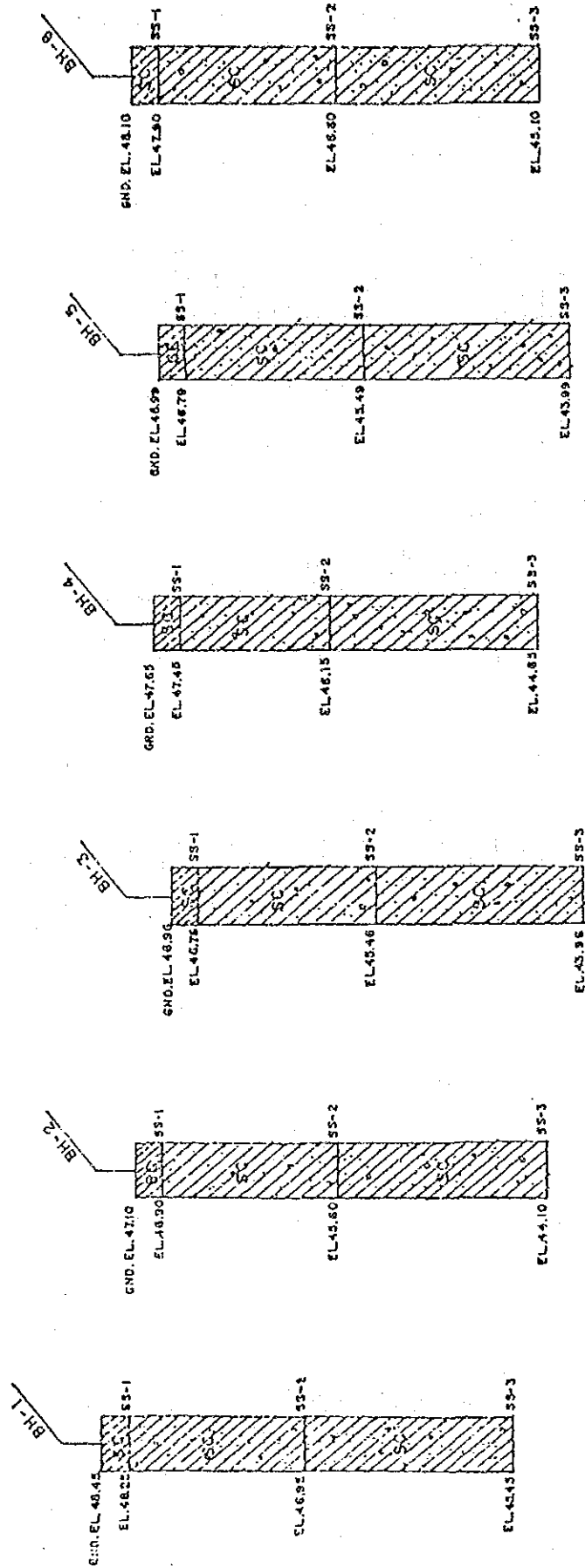
<u>BOREHOLE NO.</u>	<u>DEPTH</u>	<u>STANDARD PENETRATION TEST (N-BLOWS)</u>
1	1.50 m	54/6
	3.00 m	56/5
	Total depth of borehole	3.00 m
2.	1.50 m	61/9
	3.00 m	60/7
	Total depth of borehole	3.00 m
3.	1.50 m	62/8
	3.00 m	60/5
	Total depth of borehole	3.00 m
4.	1.50 m	60/8
	3.00 m	62/9
	Total depth of borehole	3.00 m
5.	1.50 m	104
	3.00 m	64/9
	Total depth of borehole	3.00 m
6.	1.50 m	109
	3.00 m	60/7
	Total depth of borehole	3.00 m

Submitted by:



APOLINARIO C. COLASITO
 Chief Geotechnical Service
 RCG Consult, Inc.





SUB-SOIL PROFILE
Scale: 1:100 M.

BH-1

DEPTH (M)	SOIL DESCRIPTION	N - BLOWS				ATTERBERG LIM WATER CONT. %				SOIL OTHER TEST
		20	40	60	80	20	40	60	80	
0.20	Brownish, gray Silty clay soil									SC
1.50	Pale brown hard sandy clay with broken adobe fragments									SC
3.00	Pale brown hard sandy clay with broken adobe fragments									SC
	End of Hole									

BH-2

DEPTH (M)	SOIL DESCRIPTION	N-BLOWS				ATTERBERG LIMIT % WATER CONTENT %				SOIL OTHER TEST
		20	40	60	80	20	40	60	80	
0.20	Brownish gray silty clay soil									SC
1.50	Grayish brown very dense sandy clay with broken soft rocks fragments (adobe)									SC
3.00	Grayish brown very dense sandy clay with broken soft rocks fragments (adobe)									SC
	End of Hole									

BH-3

DEPTH (M)	SOIL DESCRIPTION	N-BLOWS				ATTERBERG LIMIT % WATER CONTENT %				SOIL OTHER TEST
		20	40	60	80	20	40	60	80	
0.20	Brownish gray silty clay soil									SC
1.50	Grayish brown very dense sand clay soils with broken rocks (adobe) fragments									SC
3.00	Grayish brown very dense sand clay soil with broken rocks (adobe) fragments									SC
	End of hole									

BH-4

DEPTH (M)	SOIL DESCRIPTION	N-BLOWS				ATTERBERG LIMIT % WATER CONTENT %				SCIL OTHER TEST
		20	40	60	80	20	40	60	80	
0.20	Brownish gray silty clay soil									SC
1.50	Grayish brown very dense sandy clay with broken rocks fragments (nodules)									SC
3.00	Grayish brown very dense sandy clay with broken fragments									SC
	End of hole									

BH-5

DEPTH (M)	SOIL DESCRIPTION	N-BLOWS			ATTERBERG LIMIT % WATER CONTENT %				SOIL OTHER TEST
		20	40	60	20	40	60	80	
0.20	Brownish gray silty clay soil								CL
1.50	Grayish brown very dense sandy clay with traces of broken rock fragments (adobe)								SC
3.00	Grayish brown very dense sandy clay with broken rock fragments (adobe)								SC
	End of hole								

BH-6

DEPTH (M)	SOIL DESCRIPTION	N. BLOWS			ATTERBERG LIMIT % WATER CONTENT %				SOIL OTHER TEST
		20	40	60	20	40	60	80	
0.20	Brownish gray silty clay soil								SC
1.50	Grayish brown dense sandy clay with traces of broken rock fragments								SC
3.00	Grayish brown dense clay with trace of broken rock fragments								SC
	End of hole								

7. 収集資料

7-1. スタッフ配置計画

7-2. 水道料算出に関する資料

REQUIREMENT OF FULL-TIME PERSONNELS IN OSHC

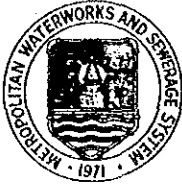
OFFICE	JICA LONG-TERM EXPERT	LINE PERSONNEL	SUPPORT PERSONNEL
1. Executive Director's Office	(1)	2 → 5	6 → 7
Executive Director		1	
Chief Adviser	(1)		
Deputy Executive Director		1	
Secretary/Clerk			3
Messenger			1
Driver			2
2. Administrative Division	(1)	8	8
Chief of the Division		1	
Coordinator of Experts	(1)		
Secretary			1
a) Chief, Finance & Budget Sec. (Budget Officer)		1	
Budget Analyst		1	
Budget Cashier		1	
Accountant		1	
Property and Supply Officer		1	
Clerk		1	1
b) Chief Administrative Sec. (Personnel Officer)		1	
Mechanical Technician			1
Electrical Technician			1
Clerk			1
c) Chief, Dormitory		1	
Caretaker			3
3. Training & Public Information Division	(1)	21	9
Chief of the Division		1	
Expert on Training & Education	(1)		
Secretary			1
Driver			2
a) Chief, Training Coordination Section		1	
Training Coordinator		4	
(Occ. Safety, Ind. Hygiene, Medicine, Labor Inspector etc.)			
Clerk			1
b) Chief, Audio-visual Education Section		1	
Audio-visual Editor		1	
Audio Visual Cameraman		1	
Audio Visual Engineer		1	
Audio Visual Aide			1
Clerk			1
c) Chief, Public Information Section		1	
Editor		1	
Photographer		1	
Illustrator		1	
Printing Engineer			
Printing Aide			1
Displayer of Museum		1	
Librarian		1	
Clerk			1
d) Chief, Electronic Data Processing Section		1	
System Analyst		1	
Data Programmer		1	
Clerk			1
4. Medical Control Division	(4)	21	14
Chief of the Division			
Expert on Occ. Medicine	(1)		
Expert on Clinical Technology	(1)		
Expert on X-ray Technology	(1)		

} Move To 1.

OFFICE	JICA LONG-TERM EXPERT	LINE PERSONNEL	SUPPORT PERSONNEL
Expert on Bacteria Cultivation	(1)		
Secretary			1
Driver			4
a) Chief, Medical Examination Section		1	
Industrial Physician		4	
Industrial Nurse		4	
Medical Examination Aide			4
Clerk			2
b) Chief, Diagnostic Laboratory		1	
Clinical Technologist		4	
X-ray Technologist		4	
Bacteria Cultivation Technologist		2	
Medical Examination Aide			2
Clerk			1
* See below			
4. Safety Control Division	(1)	11	10
Chief of the Division		1	
Expert on Occ. Safety	(1)		
Secretary			1
Driver			1
a) Chief, Safety Test Section		1	
Senior Safety Engineer (boiler, other safety device)		2	
Junior Safety Engineer - do -		2	
Safety Test Aide			2
Clerk			1
b) Chief, Safety Research & Survey Section		1	
Researcher		4	
(Machinery, Chemistry, Civil Engineering, Electricity)			
Research Aide			4
Clerk			1
5. Environment Control Division	(1)	17	13
Chief of the Division		1	
Expert on Working Environment	(1)		
Measurement			
Secretary			1
Driver			3
a) Chief, Working Environment Section		1	
Senior Measurement Expert		5	
(dust, metals, organic solvents, other chemical, physical factors)			
Junior Measurement Expert		5	
(- do -)			
Measurement Aide			5
Clerk			1
b) Chief, Industrial Hygiene Section		1	
Senior Industrial Hygienist		2	
(Respirator, Environmental Improvement)			
Junior Industrial Hygienist		2	
(- do -)			
Industrial Hygiene Aide			2
Clerk			1
(In the Future) TOTAL	(9) ← (6) + Short Time 79		60
* c) Medical Research Section			
Chief, Medical Research Section		1	
Medical Researchers		3	
Clerk			1
TOTAL		83	61

CABLE ADDRESS:
"MWSS"

IN REPLY PLEASE REFER TO _____
TEL. NOS. 95-32-11 TO 29



REPUBLIC OF THE PHILIPPINES
METROPOLITAN WATERWORKS AND SEWERAGE SYSTEM
KATIPUNAN ROAD, BALARA, QUEZON CITY

11 December 1984

TO : The Department Manager, North Collection
The Department Manager, South Collection

THRU: The AGM for Commercial and Customer Service *dw-1/1/84*

FROM: The Department Manager, Computer Service Center

RE : Computation of the Currency Exchange Rate Adjustment (CERA)

The CERA is an adjustment to the water rate "authorized for the MWSS... to equip it at managing its foreign debt service, on the basis of an adjustment factor of 0.0056202 for every P0.10 upward or downward fluctuation in the exchange rate " (see Attachment - 1).

The formula for CERA on a cu.m. basis is:

$$\text{cera} = \frac{\text{Forex} (\text{FOREX} - 18)}{0.1} \times 0.0056202$$

Where: cera = Currency Adjustment/cu.m.

FOREX = Foreign Exchange

In the computation of the water bill, the following formulas are used:

1) Non-sewered services

$$\text{Billed Amount} = (\text{RATE} + \text{cera}) \times \text{CONS} \times 1.1$$

2) Services with Water & Sewer

$$\text{Billed Amount} = (\text{RATE} + \text{cera}) \times \text{CONS} \times 1.6$$

3) Sewer only

$$\text{Billed Amount} = (\text{RATE} + \text{cera}) \times \text{CONS} \times 0.6$$

Note: Light bills are not affected by the CERA.

Where: Rate = Rate/cu.m. for the month
cera = CERA/cu.m. for the month
CONS = effective consumption

The CERA was applied to the water bill effective 16 November 1984, corresponding with the October 16 to November 15 consumption (the peso was allowed to float on 16 October 1984, according to CORPLAN).

- 2 -

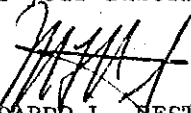
The CURRENCY ADJ printed in the bill receipt is ~~cer~~ x CONS, for the purpose of informing the customers only.

On November 16 and every 16th of the month thereafter, the CORPLAN Staff shall be providing the CSC with the averaged exchange rate of the immediate 30 day period.

The FOREX value provided by CORPLAN for November was ₱19.9910/US\$, with the corresponding CERA of approx. 01118/cubic meter.

To facilitate processing of adjustments and response to customer complaints, the CSC shall provide the Collection Departments with the values of FOREX and ~~ceras~~ once they are received from CORPLAN.

For your information.


MEDARDO L. BESTAÑO
Department Manager, CSC

Attachment: a/s

METROPOLITAN WATERWORKS AND SEWERAGE SYSTEM
Katipunan Road, Balara, Quezon City

SCHEDULE OF WATER RATES BY MONTH AND BY SERVICE PIPE

TYPE OF SERVICE/ CONSUMPTION RANGE	MAY 16 - JUN 15/85	JUN 16 - JUL 15/85	JUL 16 - AUG 15/85	AUG 16 - SEP 15/85	SEP 16 - OCT 15/85	OCT 16 - NOV 15/85
DOMESTIC USERS						
Up to 15 Cu. M.	P 10.85*	P 11.00*	P 11.45*	P 11.85*	P 12.45*	P 13.10*
16 to 20 Cu. M.	18.45*	18.85*	19.55*	20.25*	21.20*	22.20*
21 to 25 Cu. M.	27.95*	28.55*	29.70*	30.80*	32.15*	33.55*
26 to 30 Cu. M.	41.10*	42.15*	43.75*	45.35*	47.20*	49.05*
31 to 50 Cu. M.	1.6905x	1.7375x	1.8045x	1.8715x	1.9460x	2.0205x
51 to 70 Cu. M.	2.1425x	2.2025x	2.2825x	2.3625x	2.4475x	2.5325x
71 to 100 Cu. M.	2.6825x	2.7600x	2.8575x	2.9550x	3.0535x	3.1520x
101 Cu. M. & above	3.4085x	3.5050x	3.6215x	3.7380x	3.8520x	3.9660x
COMMERCIAL USERS						
Up to 25 Cu. M.	86.65*	89.05*	92.00*	94.90*	97.75*	100.60*
26 to 1000 Cu. M.	3.4660x	3.5625x	3.6790x	3.7955x	3.9095x	4.0235x
1001 Cu. M. & above	4.1810x	4.2975x	4.4340x	4.5705x	4.7005x	4.8305x
INDUSTRIAL USERS						
Up to 25 Cu. M.	118.40*	121.35*	124.75*	128.15*	131.40*	134.65*
26 to 1000 Cu. M.	4.7360x	4.8525x	4.9890x	5.1255x	5.2555x	5.3855x
1001 Cu. M. & above	5.5835x	5.7200x	5.8765x	6.0330x	6.1790x	6.3250x
SEA TRANSPORT	9.0775x	9.3665x	9.6755x	9.9845x	10.2935x	10.6025x
RAW WATER	1.0250x	1.0400x	1.0750x	1.1100x	1.1450x	1.1800x

LEGEND: *-Flat Rate ADD: 10% for Environmental Charge
x-Per Cu. M. 50% for Sewer Service
Currency Exchange Rate Adjustment
Service Charge (CERA)

METROPOLITAN WATERWORKS AND SEWERAGE SYSTEM
Katipunan Road, Balara, Quezon City

SCHEDULE OF WATER RATES BY MONTH AND BY SERVICE PIPE

TYPE OF SERVICE/ CONSUMPTION RANGE	NOV 16 - DEC 15/85	DEC 16/85 JAN 15/86	JAN 16 - FEB 15/86	FEB 16 - MAR 15/86	MAR 16 - APR 15/86	APR 16 - MAY 15/86
DOMESTIC USERS						
Up to 15 Cu. M.	P 13.75*	P 14.35*	P 14.95*	P 15.60*	P 16.25*	P 16.85*
16 to 20 Cu. M.	23.20*	24.20*	25.15*	26.15*	27.15*	28.15*
21 to 25 Cu. M.	34.90*	36.25*	37.65*	39.00*	40.35*	41.75*
26 to 30 Cu. M.	50.90*	52.75*	54.60*	56.45*	58.30*	60.15*
31 to 50 Cu. M.	2.0950x	2.1695x	2.2440x	2.3185x	2.3930x	2.4675x
51 to 70 Cu. M.	2.6175x	2.7025x	2.7875x	2.8725x	2.9575x	3.0425x
71 to 100 Cu. M.	3.2505x	3.3490x	3.4475x	3.5460x	3.6445x	3.7430x
101 Cu. M. & above	4.0800x	4.1940x	4.3080x	4.4220x	4.5360x	4.6500x
COMMERCIAL USERS						
Up to 25 Cu. M.	103.45*	106.30*	109.15*	112.00*	114.85*	117.70*
26 to 1000 Cu. M.	4.1375x	4.2515x	4.3655x	4.4795x	4.5935x	4.7075x
1001 Cu. M. & above	4.9605x	5.0905x	5.2205x	5.3505x	5.4805x	5.6105x
INDUSTRIAL USERS						
Up to 25 Cu. M.	137.90*	141.15*	144.40*	147.65*	150.90*	154.15*
26 to 1000 Cu. M.	5.5155x	5.6455x	5.7755x	5.9055x	6.0355x	6.1655x
1001 Cu. M. & above	6.4710x	6.6170x	6.7630x	6.9090x	7.0550x	7.2010x
SEA TRANSPORT	10.9115x	11.2205x	11.5295x	11.8385x	12.1475x	12.4565x
RAW WATER	1.2150x	1.2500x	1.2850	1.3200x	1.3550x	1.3900x

LEGEND: *-Flat Rate ADD: 10% for Environmental Charge
x-Per Cu. M. 50% for Sewer Service
Currency Exchange Rate Adjustment
Service Charge (CERA)

8. その他資料

8-1. 維持管理運営費資料

8-2. 類似施設の現況

■ 維持管理運営費資料

1. 人件費

1) 審議会メンバー		640,000P	
2) ラインスタッフ	3,500 P/月 x 13月 x 83人	=	3,776,500
3) サポートスタッフ	2,000 P/月 x 13月 x 61人	=	1,586,000
4) 臨時雇用者	2,500 P/月 x 13月 x 4人	=	130,000
			6,132,500P/年

2. 施設運転光熱費

1) 電力量の試算

1日8時間、1ヶ月使用日数25日と仮定する。

最大使用電力に対する平均負荷率を60%に仮定する。

(1) 使用電力量

電灯関係	300 kw
動力関係	200 kw
計	500 kw

契約電力 = $500 \text{ kw} \times 0.6 = 300 \text{ kw}$
(デマンドファクター)

$300 \text{ kw} \times 0.6 \times 8\text{h/日} \times 25\text{日/月} = 36,000 \text{ kwh/月}$

(2) 電力量料金

a. Demand charge	$300 \text{ kw} \times 12.6 \text{ P/kw} =$	3,780 P/月
b. Energy charge	$36,000 \text{ kwh/月} \times 0.25 \text{ P/kwh} =$	9,000 P/月
a~b 小計		12,780 P/月
c. CERA	$12,780 \text{ P/月} \times 0.3206 =$	4,097 P/月
d. Generation charge	$36,000 \text{ kwh/月} \times 1.877 \text{ P/kwh} =$	67,572 P/月
	合計 84,449 P/月 → 85,000 P/月	
e. 合計	$85,000\text{P/月} \times 12\text{月} =$	<u>1,020,000 P/年</u>

■ 水道量の試算

- ・ 1ヶ月使用日数25日と仮定する。
最大使用量に対する平均負荷率を80%に仮定する。

(1) 使用水量

$$60\text{m}^3/\text{日} \times 25\text{日}/\text{月} \times 0.8 = 1,200\text{m}^3/\text{月}$$

(2) 水道料金

a. Basic charge	$1,200\text{m}^3/\text{月} \times 4.7075\text{P}/\text{m}^3 =$	5,649 P/月
b. Environmental charge	$5,649\text{P}/\text{月} \times 0.1 =$	565 P/月
c. CERA	$1,200\text{m}^3/\text{月} \times 0.654\text{P}/\text{m}^3 =$	785 P/月
	合計	6,999 P/月 → 7,000 P/月
d. 合計	$7,000\text{P}/\text{月} \times 12\text{月} =$	<u>84,000 P/年</u>

■ LPガス量の試算

- ・ 厨房1日500食、実験関係200,000kcal/日で、1ヶ月25日使用と仮定する。

(1) 使用ガス量

$$500\text{食}/\text{日} \times 25\text{日}/\text{月} \times 600\text{kcal}/\text{食} \div 12,000\text{kcal}/\text{kg} = 625\text{kg}/\text{月}$$

$$200,000\text{kcal}/\text{日} \times 25\text{日}/\text{月} \div 12,000\text{kcal}/\text{kg} = 417\text{kg}/\text{月}$$

計 1,042 kg/月

(2) LPガス料金

$$1,042\text{kg}/\text{月} \times 10\text{P}/\text{kg} = 10,420\text{P}/\text{月}$$

$$10,420\text{P}/\text{月} \times 12\text{月} = 125,040 \rightarrow \underline{125,000\text{P}/\text{年}}$$

3. 施設保守管理費(建設費 x 0.1%)

$$\underline{150,000\text{P}/\text{年}}$$

4. 機材保守管理費(機材費 x 5%)

$$\underline{3,600,000\text{P}/\text{年}}$$

5. 雑費(4-1~4-4の合計 x 5%)

$$\underline{555,000\text{P}/\text{年}}$$

■ 類似施設の現況

現地調査期間中、労働安全衛生に関連する類似施設を視察した。各施設の概要は、以下の通りである。

● マニラ電力会社(MERALCO)

フィリピン国の現状では、労働安全衛生分野の公的施設が極めて少ないため、各大企業は独自に社内クリニックを持ち、社員の健康管理を行ったり、独自に労働安全対策を実施している。MERALCOは社員数6,000名、小会社社員数1万人を超える、同国を代表する大企業の1つである。このような大企業には、MERALCOの他にサンミゲール社やフィリピン鉱山社等がある。

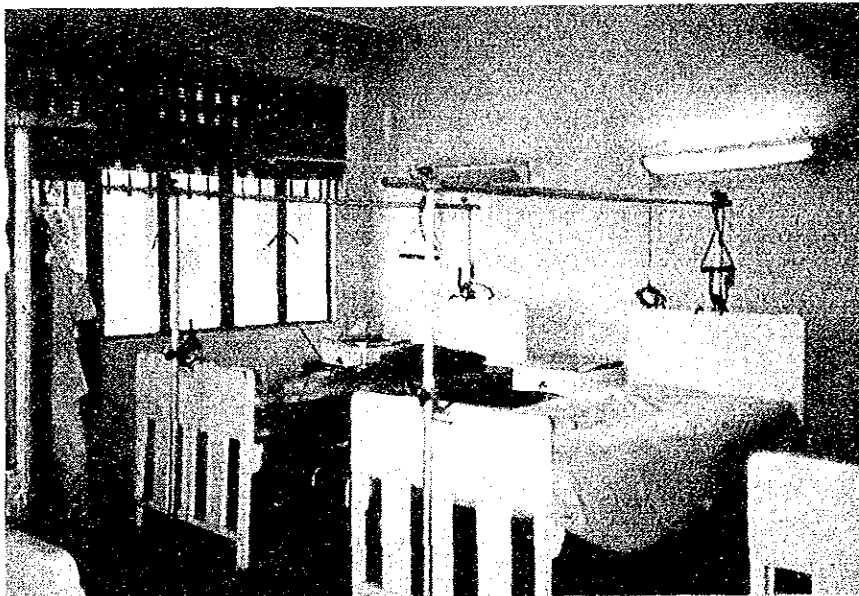
・ 社内クリニック(Cotton Hospital)

1964年設立され、現在36床(うち特床4床、女性専用2床)を有する総合クリニックである。医師25名、スタッフ100名により運営されており、眼科、耳鼻科、歯科、外科、内科、精神科、研究室より構成されている。開院時間は午前8時より午後5時である。

社員の定期検診、労働災害による傷病の治療やリハビリテーションだけでなく、社員家族への医療行為も実施しており、市中クリニックと全くかわらない医療内容である。使用している医療機器は、やや旧式のものが多いが、メンテナンスが良好であり医療レベルも高いと思われる。

・ 安全管理部

企業の性格上、労働災害の発生も多く、このため安全管理部が設置され、労災防止に大きく貢献している。安全管理部は、総務課、工業安全課、交通・火災安全課より成っており、年間予算60万ペソ、16名のスタッフ(うち13名はエンジニア)で運営されている。安全管理についての調査研究と安全管理社内研修を主に実施しているが、安全管理研修は、10コース各年間3回行われ、各コースは30名程度で5日間研修となっている。

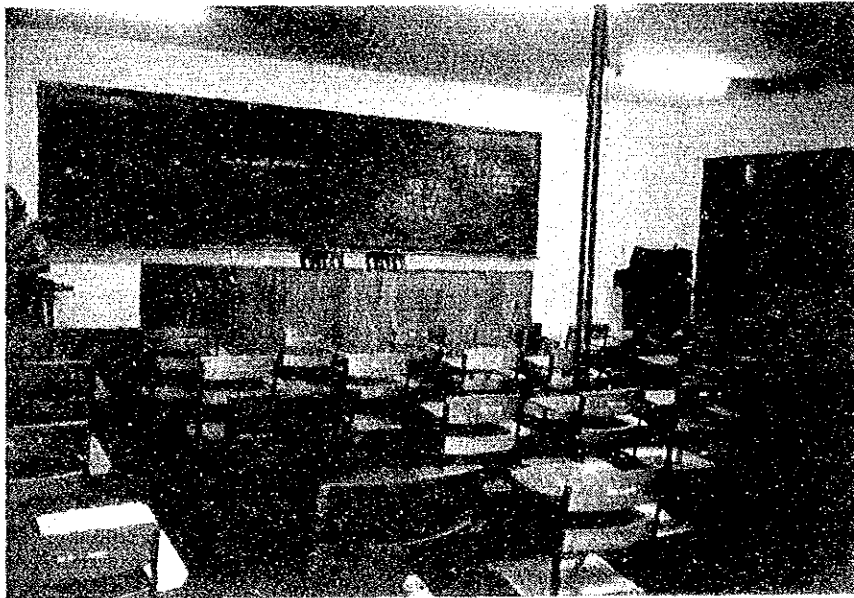


ベツトルーム

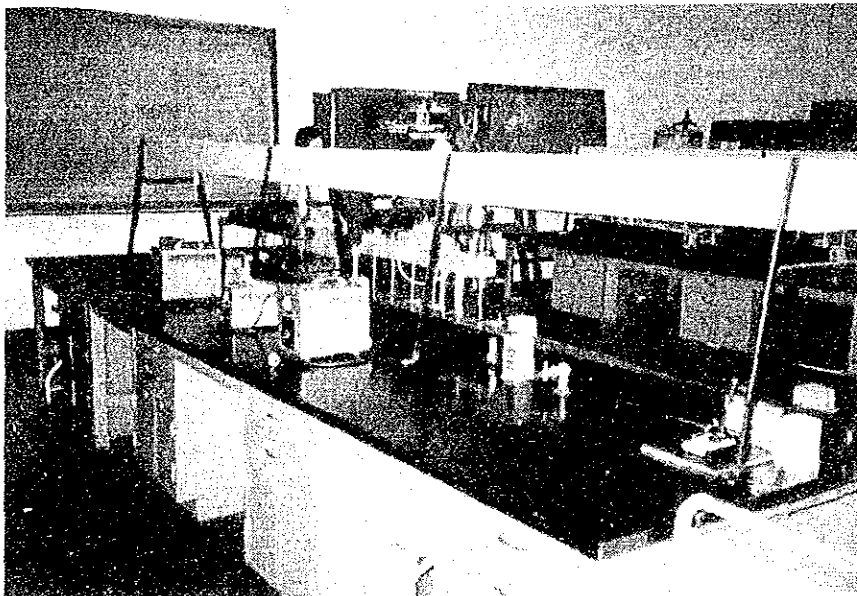
● 公衆衛生研究所(UP-IPH)

UP-IPHは、フィリピン大学付属の公衆衛生研究所であり、研究、広報だけでなく、フィリピン大学院生の教育活動を実施している。UP-IPHは7つの学科より成っており、修士コース院生200名が所属している。今回視察したのは、このうち労働環境科(Department of Environmental Occupational Health)である。

労働環境科も、他の科と同様に院生教育、調査研究、広報活動を行っているが、なかでも同国では少ない事業場の環境測定を実施しており、一般事業場よりの委託も多い。施設内容としては、20~30名用研修室2室、130名用大研修室1室、化学実験室(約60m²)、試験室(約80m²)、スタッフ用の研究室から成る。使用施設は、戦前の建物であり、各部で補修されているものの、相当傷みが激しい。また、使用機器も旧式なものが多く、研究レベルも高いとは言い難い。



研修室



化学実験室

JICA