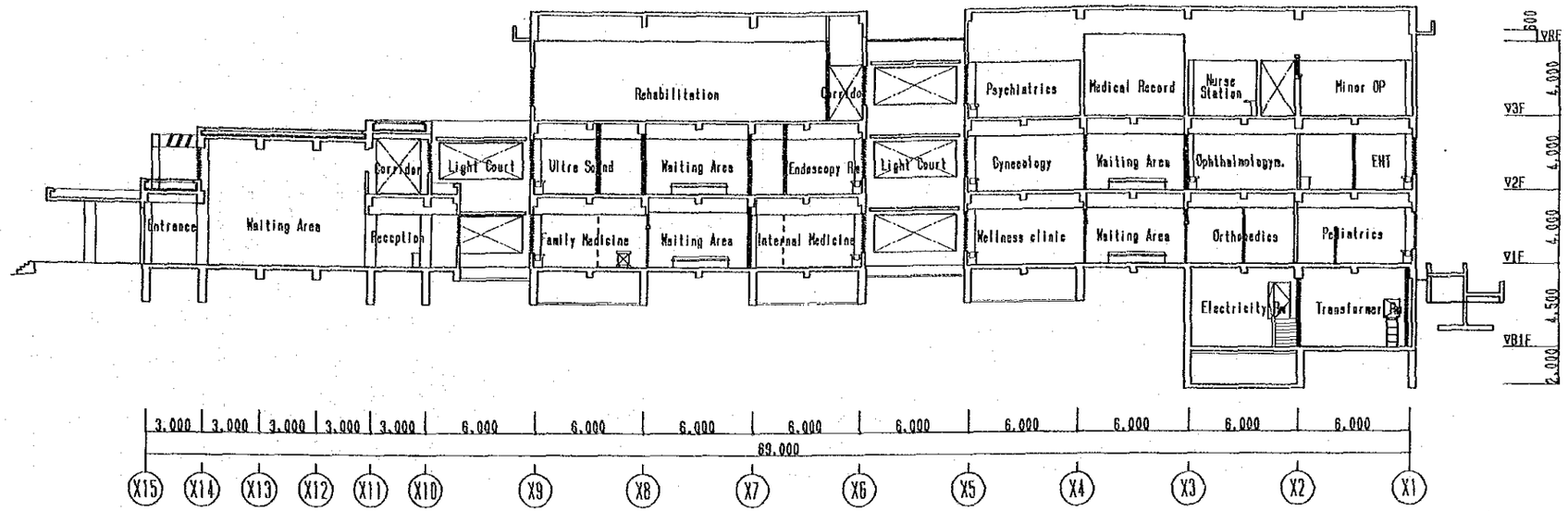
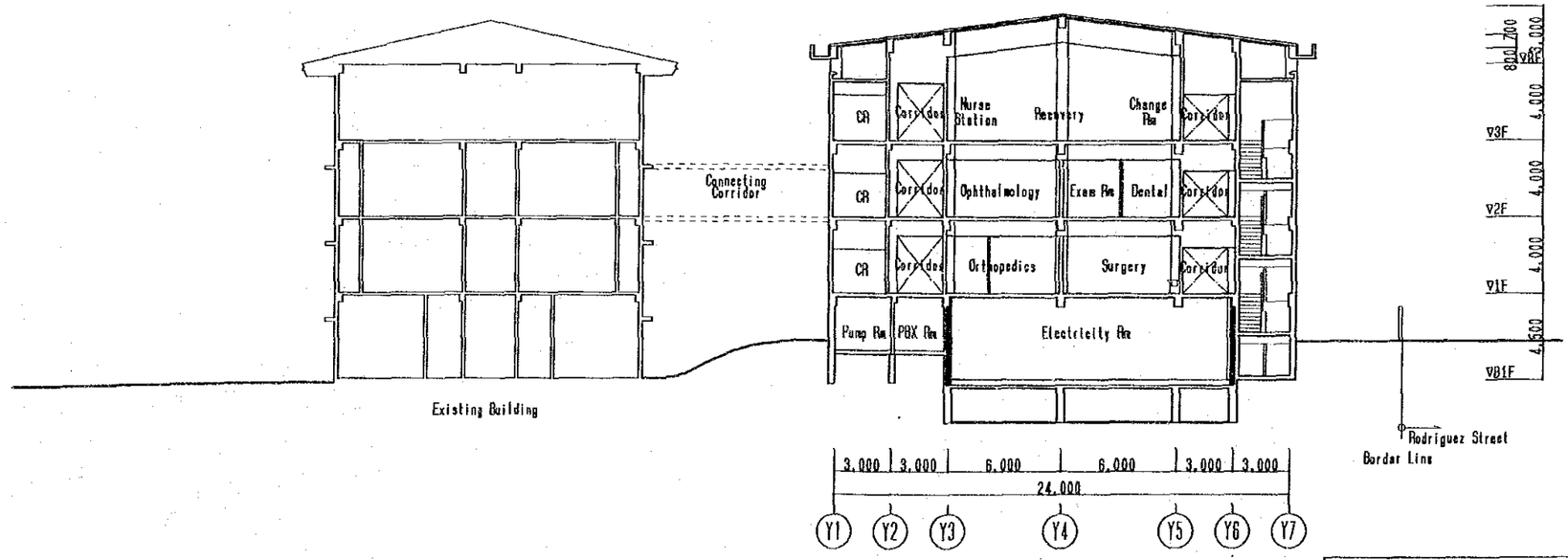
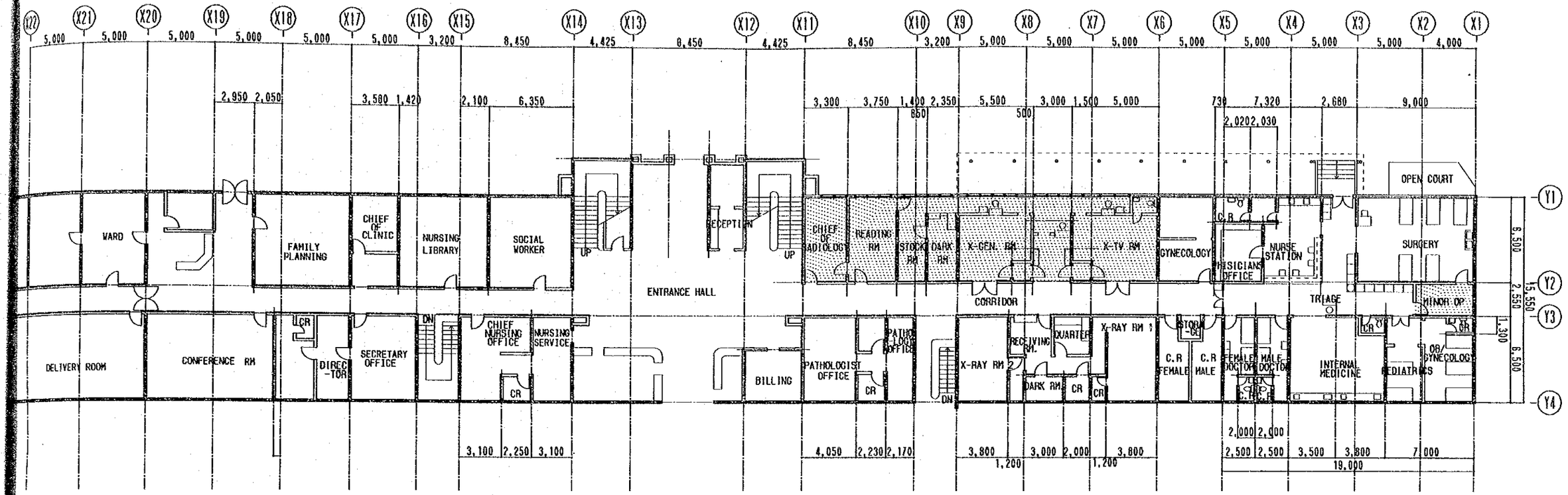


A-A' Section

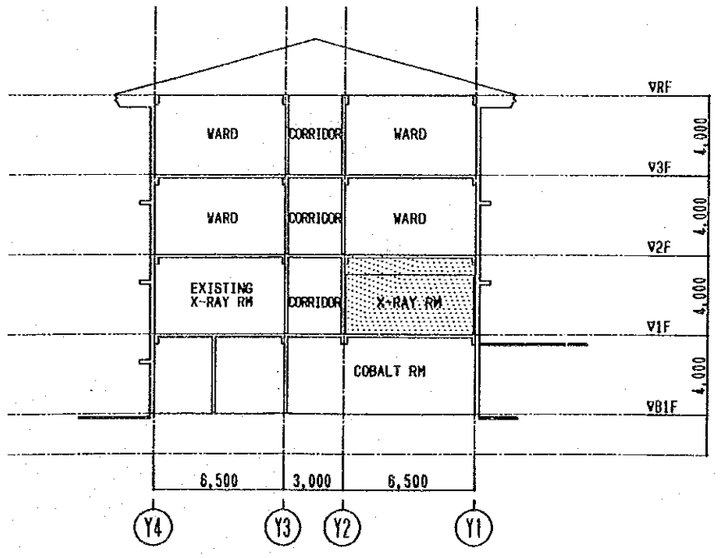


B-B' Section

New OPD Building Section	1/300	7



PLAN 1/300



Section 1/300

:Renovation Work Area

Renovation Plan, Section	1/300	8

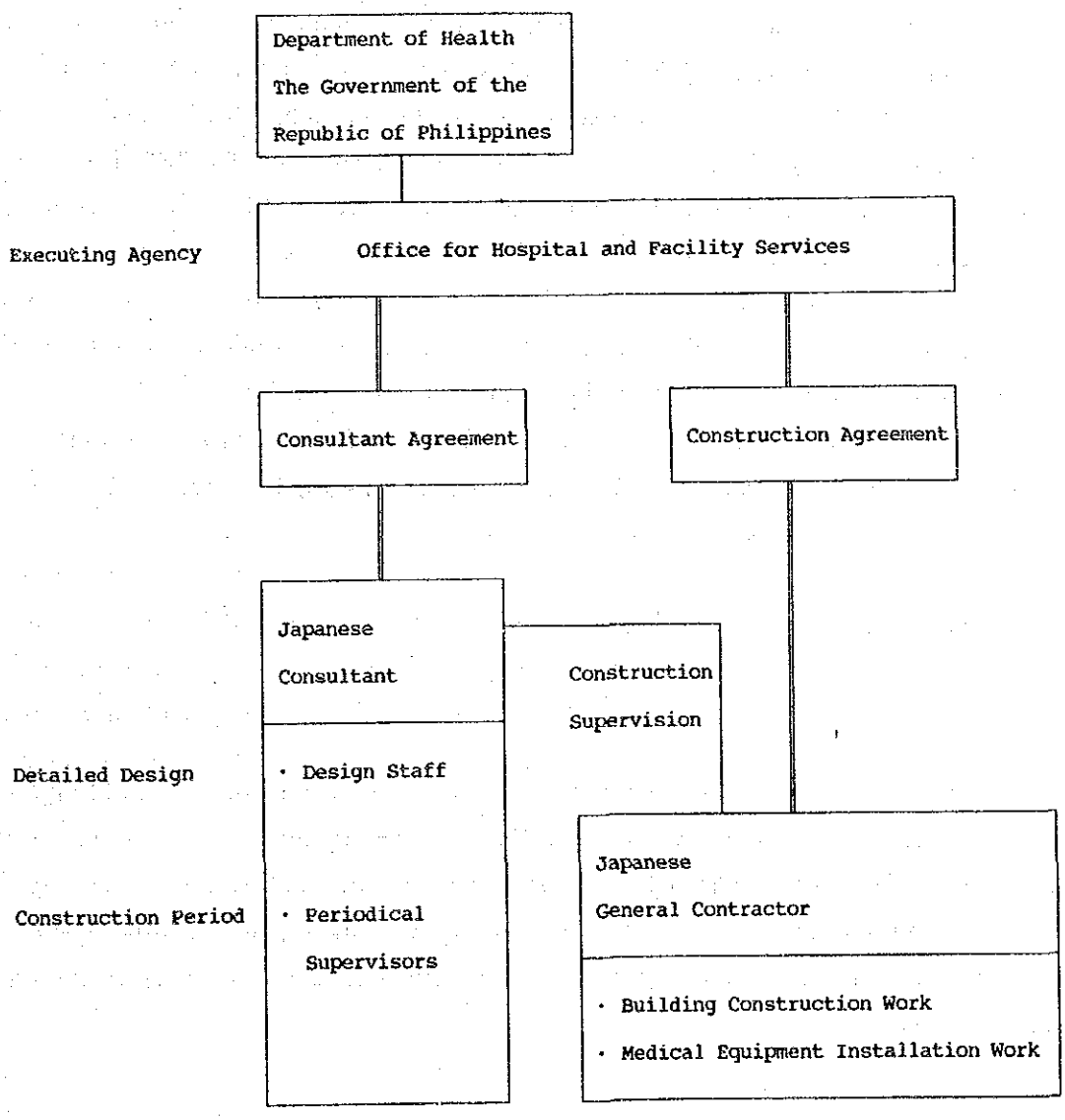
4-4 Implementation Plan

4-4-1 Implementation Policy

(1) System for Implementation of the Project

The Project will be executed in compliance with Japan's grant aid system after it is approved at a Cabinet meeting of the Japanese Government and after an Exchange of Notes (E/N) regarding the Project is concluded between the two Governments. The executing agency on the Philippine side is the Office for Hospital and Facility Services of the DOH. This office is to execute a consulting contract and construction contract for the Project and complete those parts of the Project for which the Philippines is responsible.

Figure/Table 4-21 Organization for Project Execution



(2) Consultant

After the Exchange of Notes is concluded, the Office for Hospital and Facility Services of the DOH is to execute a consulting contract regarding the detailed design and supervision of the Project with the Japanese consulting company. This contract is to be verified by the Japanese Government. It is important to execute a consulting contract soon after the conclusion of the Exchange of Notes in order to implement the Project smoothly. After executing the contract, the consultant is to prepare detailed design documents based on the Basic Design Study Report by discussing the matter with the Office for Hospital and Facility Services of the DOH and obtaining its approval. Tendering and construction supervision for the Project are to be performed based on these detailed drawings.

(3) General Contractor

The work to be completed under the Project consists of building construction, renovation of existing facilities, and procurement and installation of medical equipment. Building construction, renovation of existing facilities and work on medical equipment must all be coordinated because the maintenance and management system, after completion and transfer, will be centralized. They should be ordered collectively not separately. The contractor for the work will be a Japanese company selected by competitive tender from among companies meeting certain fixed requirements.

Based on the result of the tender, the Office for Hospital and Facility Services of the DOH is to award the contract to the qualified bidder with the lowest price, conclude a contract with this company, and have the contract verified by the Japanese Government.

The contractor will then start the work and complete it within the period specified in the contract documents. The contractor is to hand the facilities and equipment over to the Republic of the Philippines after a completion inspection is done.

4-4-2 Construction Condition

(1) Circumstances

Generally a separate ordering method is adopted for construction work in the Philippines. However, separately ordered works are not coordinated smoothly and the process is not well managed. Since several large construction projects are currently underway in Cebu city, the increased demand for raw concrete has driven up its price considerably. Generally construction companies in Cebu city exhibit the following differences from Japanese construction companies:

a. They do not prepare temporary construction plans.
b. They are not as advanced in mechanization.
c. Quality is not uniform because they are not in the habit of preparing shop drawings.
d. Construction work is not coordinated with building facility work and other works.

Generally a shop in Cebu city consists of about 15 engineers and about 15 office workers. When they receive an order, they make a personnel assignment plan and hire workers to suit the order.

The contractor for the Project is a Japanese company. Philippine laborers are to be assigned to work under the Japanese company. However, skilled workers for special facilities and operations requiring advanced skills are difficult to hire in the Philippines. Therefore experts will have to be dispatched from Japan to provide engineering guidance and manage the work.

(2) Remarks about Construction Work

The construction site of the Project is located in front of the existing main building of VSMMC. Since patients come and go frequently a temporary construction plan will have to be made. The flow of construction vehicles and workers should not intersect with the flow of patients and hospital staff. Since the construction site is quite close to the existing wards, noise, vibrations and dust must be minimized. Detailed procedures for repair work should be prepared in close consultation with VSMMC.

4-4-3 Construction and Supervision Plan

The Office for Hospital and Facility Services of the DOH and the Japanese consulting company are to execute a consulting contract, prepare a detailed design for the Project and supervise its execution.

The objective of this supervision is to make sure that the work is executed according to the contract documents. The Supervisor will provide impartial guidance and advice to promote coordination during the work period so that the contract can be reasonably fulfilled. Supervision includes the following operations:

(1) Cooperation in the tendering and contracting process

The consultant will prepare the tender documents necessary for determining the building contractor and the equipment contractor. The consultant will publicly announce the tender, receive applications, examine applicants' qualifications, hold an explanatory meeting, distribute tender documents, receive completed tender documents, evaluate the results of the tender etc. It will give advice to the Office for Hospital and Facility Services of the DOH in negotiating a contract with the successful tenderer, the contractor.

(2) Guidance, advice and coordination for the contractor

The consultant will study the implementation process, the implementation plan, the construction materials and equipment procurement plan, the medical equipment procurement and installation plan etc. and give guidance and advice to the contractor and ensure coordination.

(3) Inspection and approval of construction drawings, production drawings etc.

The consultant will study the shop drawings, production drawings and other documents submitted by the contractor and approve them after making any necessary adjustments.

(4) Examination and approval of construction machinery, materials and medical equipment

The consultant will determine whether the construction machinery, materials and medical equipment which the contractor proposes to procure are consistent with the contract documents and will then approve their procurement.

(5) Inspection of work

When necessary, the consultant will attend inspections and tests at plants where construction parts and medical equipment are manufactured in order to make sure that they meet the necessary quality and performance standards.

(6) Progress Reports

The consultant will keep track of the progress of the execution process at the construction site and report this to the organizations concerned.

(7) Completion inspection and testing

The consultant will perform a completion inspection and test inspection for the building, its facilities and medical equipment to make sure that the standards stated in the contract documents have been met. The consultant will submit an inspection completion report to the Philippine Government.

(8) Training in operating the facilities and medical equipment

Some of the machinery and equipment provided under the Project will require basic knowledge on operation, maintenance and management. Training will be provided for Philippine medical staff and engineers so that they may master operating and trouble-shooting procedures and repair skills. This training should be started during the period of equipment installation, adjustment and testing. The consultant is to give guidance and advice regarding this training plan.

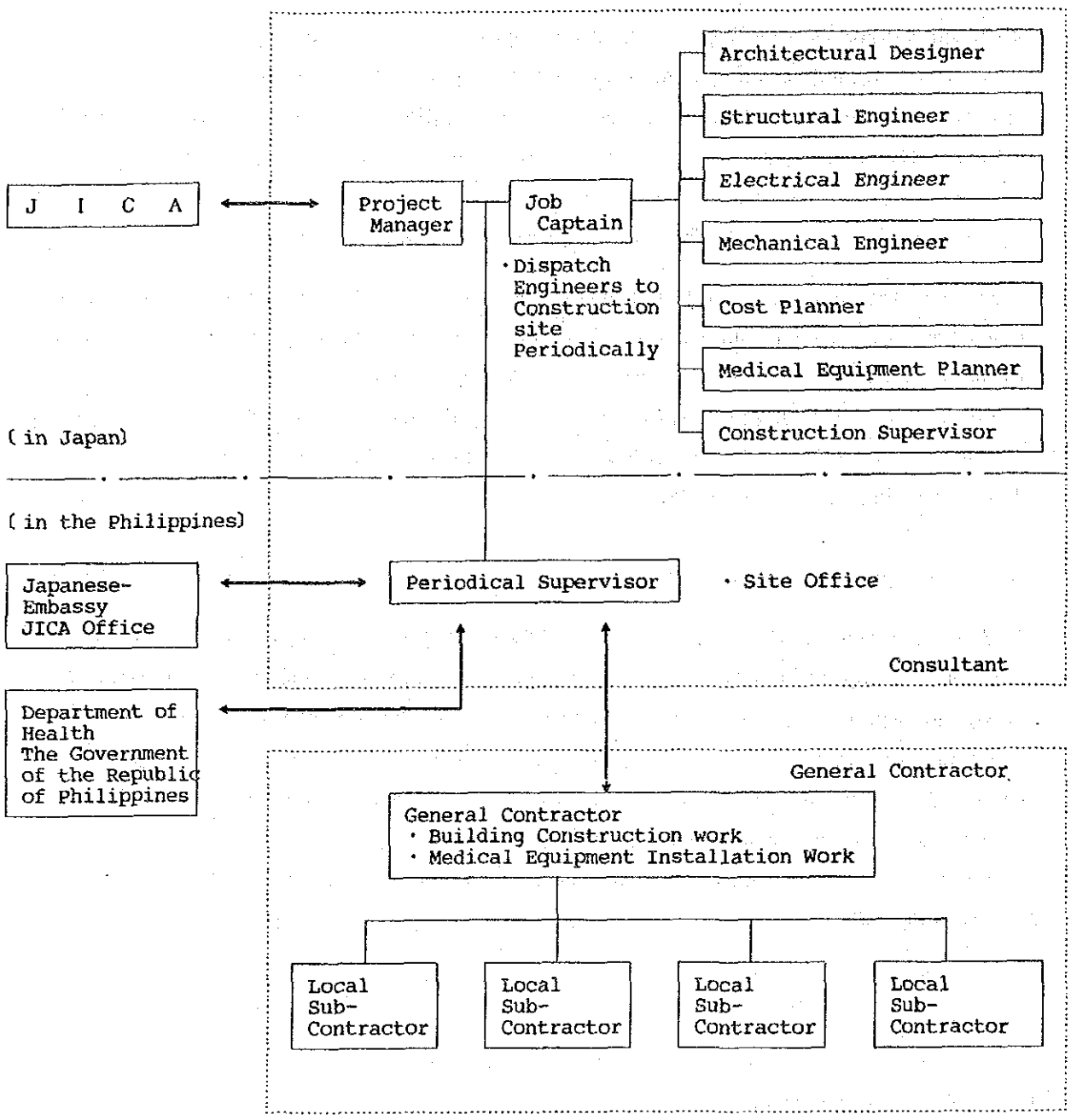
(9) Supervisory system

Given the scale of the Project, the consultant will perform periodical supervision from Japan. The consultant must also make sure that the domestic work is progressing smoothly and should dispatch engineers to the Philippines as needed throughout the supervisory stage.

During the supervisory stage the work in Japan will consist of weekly meetings and the review of construction and installation drawings, process management and witnessed inspections at manufacturer's factories etc.

The supervisory system is to be organized in Japan and the Philippines as shown in Figure/Table 4-22.

Figure/Table 4-22 Organization for Construction Supervision



4-4-4 Procurement Plan

(1) Procurement Policy

1) Local Procurement

The machinery, equipment and materials used for the Project are to be procured in the Philippines whenever possible in order to facilitate their repair, maintenance and management after completion of the facilities. A supply system should be established that will not interfere with the construction period so that the progress and quality of work is not affected.

2) Procurement by import

Those items which are unavailable in the Philippines or which are unsatisfactory in terms of quality or available quantity are to be imported from Japan.
In this case, the general contractor must contact the Office for Hospital and Facility Services of the DOH to ensure that importation and customs clearance procedures go smoothly.

3) Transportation plan

The machinery, equipment and materials to be imported from Japan will be carried to Cebu Port, which is close to the construction site, by ship. Trucks will be used for overland transportation from Cebu Port to the construction site. Since the functioning of some machinery, equipment and materials may be adversely affected by shocks, humidity or high temperature, they should be packed to withstand the rigors of transport.

(2) Procurement Plan for Construction Machinery, Equipment and Materials

The construction machinery, equipment and materials to be procured in the Philippines and those which are to be imported from Japan were determined under the above policy. They are classified and shown in Figure/Table 4-23.

Japanese products (imported products) are used where high quality is essential to maintain a functioning medical institution.

(3) Procurement Plan for Medical Equipment

Most of the medical equipment will be imported from Japan because it is not manufactured in the Philippines.

1) Since medical equipment must be fully operational at all times, the following requirements were set. The hospital must be able to obtain spare parts and consumable supplies easily. Equipment manufacturers should provide an after-sales service system in the Philippines.

2) Beds and bedside cabinets do not have many moving parts, nor do they suffer from frequent quality problems. Such equipment will be procured in the Philippines to facilitate maintenance and management. Similarly, items which can be obtained easily in the Philippines will be procured in the Philippines.

3) Experts will be dispatched from Japan to deal with medical equipment that requires special skills for installation and adjustment.

Figure/Table 4-23 Procurement Plan for Major Construction Materials Works

Work Item	Materials	Domestic Made	Made in Japan	Remarks
Reinforced concrete works	Portland cement	○		
	Fine aggregate (sand)	○		
	Coarse aggregate (gravel, crushed stone)	○		
	Deformed bar	○		
	Mold	○		
Masonry works	Concrete block	○		
	Brick	○		
Water-proofing works	Asphalt proofing		○	To keep good quality
	Sealing material	○		
Masonry	Line stone	○		
Tile works	Earthen tile	○		
	Ceramic tile	○		
	Mosaic tile	○		
Carpentry	Timber	○		
	Compiling material	○		
	Plywood	○		
Roofing works	Roof tile	○		
Metal works	Light-weight rough steel		○	Few locally-made items
	Aluminum louver		○	Few locally-made items
	Dressed metal		○	Few locally-made items
Plaster works	Cement mortar	○		
	Plaster	○		
Works for wooden fitting of doors and screens	Hinged door	○		
	Slicing door	○		
	Wooden frame for doors and windows	○		
Works for metal fittings of doors, windows and screens	Aluminum made slicing windows		○	To keep good quality
	Aluminum made hinged doors		○	To keep good quality
	Steel made fittings		○	To keep good quality
	Sliding doors		○	No good quality
Metal fittings	Door checker		○	Few locally-made items
Glass works	Ordinary plate glass	○		
	Reinforced glass		○	Few locally-made items
	Joint glass		○	Few locally-made items
Painting	Interior painting	○		
	Exterior painting	○		
Outer works	Pavement materials (asphalt concrete)	○		
	Catch basin	○		

Work Item	Materials	Domestic Made	Made in Japan	Remarks
Interior Works	Plastic tile		○	To keep good quality
	Long size vinyl sheets		○	To keep good quality
	Gypsum board		○	To keep good quality
	Rock wool made sound absorbing board		○	To keep good quality
	Glass wool		○	To keep good quality
	Sealed Panel		○	Few locally-made items
	X-ray protection materials		○	Few locally-made items
Miscellaneous works	Sink		○	All cistern type
Electrical works	Electricity and wiring instrument		○	To keep good quality
	Luminaire		○	To keep good quality
	Panels		○	To keep good quality
	Generator and transformer		○	Local made is not available
Mechanical works	Packaged air conditioner	○	○	Local made is not available
	Blowing and exhaust unit		○	Local made is not available
	Outlet, inlet		○	Local made is not available
	Sanitary ware		○	To keep good quality
	Water treatment unit		○	Local made is not available
	Duct material		○	To keep good quality
	Piping material		○	To keep good quality
	Vinyl pipe	○		
	Heat insulator		○	Local made is not available
	Automatic control unit		○	Local made is not available
Works for ELV	Elevator		○	Local made is not available

4-4-5 Implementation Schedule

(1) Figure/Table 4-16 shows the implementation schedule following the conclusion of the Exchange of Notes on the Project between the two Governments. Separate schedules were made for the detailed design work (including tendering) and the construction work.

(2) Construction work is to be started after the work contract is executed and verified by the Japanese Government. The work period is estimated at about 12 months given the following conditions (considering also the scale of the Project and the availability of local construction workers):

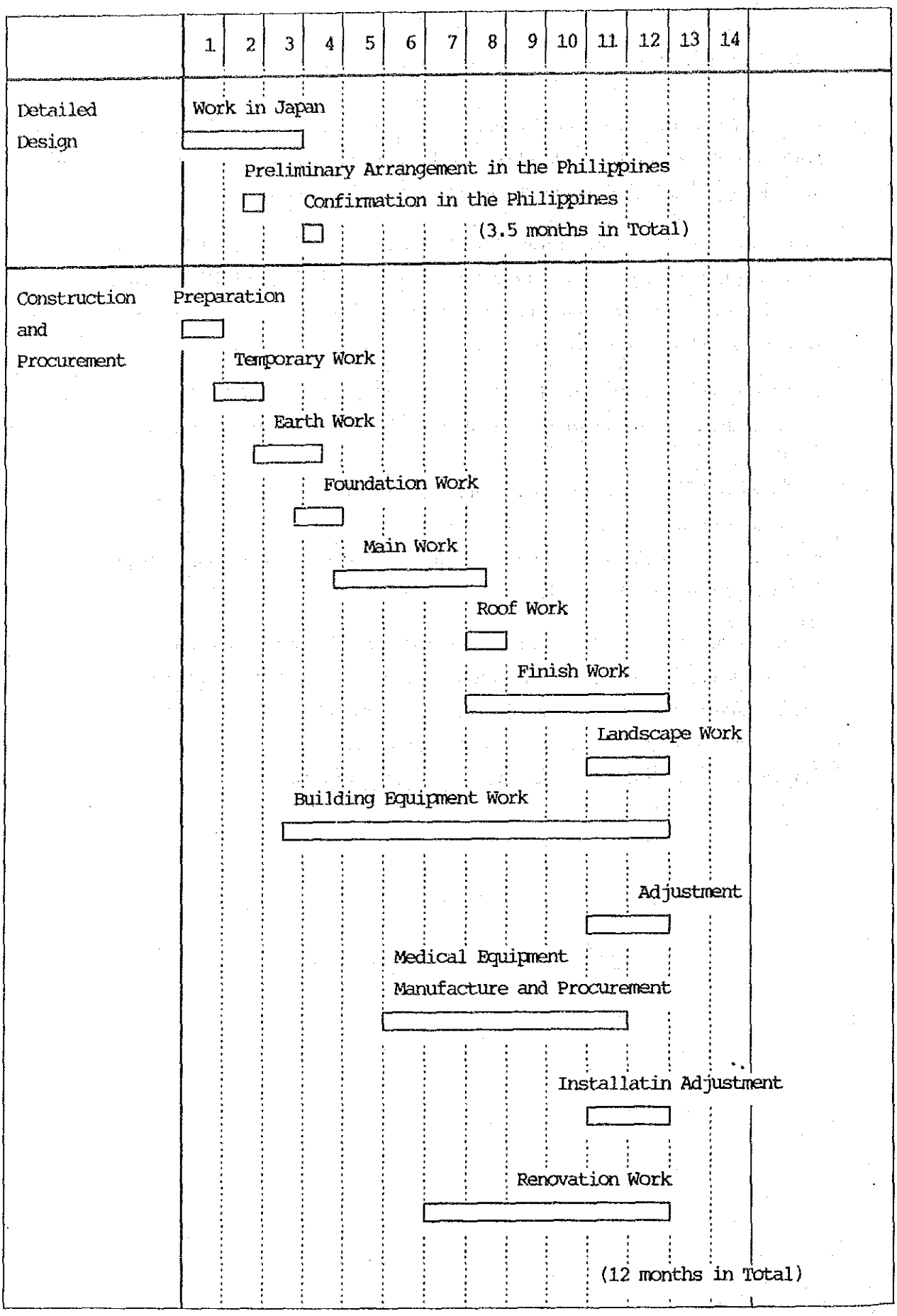
a. The Project construction site is located on the premises of VSMMC and its distance from the adjacent building is small. Therefore only a limited space is available for the work.

b. Since the adjacent building is a hospital, special consideration must be made for noise and working hours.

c. Cebu city does not have a clearly-defined rainy season, but typhoons frequently pass through the city.

(3) The Project is to be executed under Japan's grant aid system and must be completed within a specified period. It is desirable that the Philippine Government complete the preparations and operations (such as ground preparation) which must be performed before beginning construction work and implement the necessary administrative procedures so that construction work can get underway without any problems.

Figure/Table 4 – 24 Implementation Schedule



4-4-6 Scope of Work

(1) Division of Duties

It is necessary to clarify the work responsibilities of Japan and the Philippines in order to execute the project smoothly. Japan is in charge of the facilities and the equipment used at these facilities, while the Philippines is in charge of other infrastructure work and operation of the facilities after their completion and transfer. The division of duties is shown below.

Figure/Table 4-25 Scope of Construction Works

Work by Japan	Work by the Philippine
1. Building construction Framing works, Fnishing works, Installation works of standard furniture, Renovation works	1. Preparation of construction site for building and its renovation
2. Electrical works Electrical transforming facilities, Generator and main wiring facilities, Light and wall outlet facilities, Telephone and communication facilities, Public address facilities, Lightning rod facilities, Fire alarm facilities	2. Outer works Gardening, Tree planting, Construction of gate, Construction of wall, Pavement works for road, Construction of out site road
3. Sanitary and air conditioning works Water supply facilities, Hot water supply facilities, Drainage and ventilation facilities, Sanitation instrument facilities, Air conditioning and ventilation facilities, Hydrant facilities	3. Lead-in works for each infrastructure · Lead-in works for electricity, water supply, telephone, drainage canal. (including renovation works) · Reconstruction of existing telephone operating system
4. Works for specified facilities Water treatment facilities, sewage treatment plant, Deep well Power generator facilities, UPS facilities	4. Furniture and utensils Curtains, blinds, ordinary furniture
5. Works for elevator	5. Others · Application and acquisition of permission for construction works of buildings and other necessary approvals for the Project
6. Outer works Hydrant and outdoor drainage facilities	
7. Medical equipment installation works Procurement and installation of medical equipment	

The major procedural and other items for which the Philippines is responsible are listed below:

1) Exemption of any taxes related to the Project

2) Charges for issuing the Banking Arrangement (B/A) and Authorization to Pay (A/P)

3) Prompt unloading of equipment and materials, tax exemption and customs clearance procedures at the unloading port and prompt domestic transport

4) Facilitating the entry and stay in the Philippines of those Japanese supplying equipment and materials and doing work under the verified contract

5) Complete exemption from customs and various taxes for those Japanese supplying equipment and materials and doing work under the verified contract

6) Budget appropriation for effective operation, maintenance and management of the facilities constructed and equipment provided under the grant aid

7) Necessary expenses incurred under the Project, except those which are provided by the grant aid

(2) Approximate Project Expenses

The breakdown of expenses to be borne by the Philippines is estimated as follows:

1) Expenses borne by the Philippines 4 million pesos (about 20 million yen)

a. Ground preparation and infrastructure work	2 million pesos
b. External wall and other work	1 million pesos
c. Furniture and fixture work	1 million pesos
Total	4 million pesos

2) Estimate Conditions

a. Time : April 1993

b. Exchange rate : 1 US dollar = 123.38 yen; 1 yen = 4.90 P

c. Construction period : The construction period is to consist of one (1) phase. The periods required for detailed design and construction work are as shown in the construction schedule.

d. Miscellaneous : The Project is to be executed in compliance with Japan's grant aid system.

CHAPTER 5 PROJECT EVALUATION AND CONCLUSIONS

CHAPTER 5 PROJECT EVALUATION AND CONCLUSIONS

5-1 Project Evaluation

The Project is expected to result in the following effects and improvements in medical services in Region No. 7 and surrounding areas in the Republic of the Philippines:

Figure/Table 5-1 Effects of the Project and Degree of Improvement

Present Condition	Measures to be taken in the Project	Expected Effects and Improvements
VSMMC, which is a tertiary medical institution in Region No.7, has been repeatedly extended and renovated in response to immediate needs since its establishment in 1913. As a result the overall functionality of the hospital has been reduced. In particular, the OPD Building is in an inefficient location and is very small. It will be unable to meet a future increase in out-patients and the potential demand for medical services.	A New OPD Building of optimum size is to be constructed at the functionally best location in order to concentrate the out-patient examination and treatment functions currently scattered among different sections in one location. Part of the related sections in existing facilities are to be renovated. At the same time medical equipment is to be improved. The number of staff members in the out-patient department is to be increased from 93 to 136.	The number of out-patients is 520 persons/day at present, but can be increased to the predicted number, 700 persons/day (about 40% increase). This will improve both the quality and quantity of medical services in this area.
VSMMC accepts students from various medical institutions and related educational institutions in Region No. 7 and adjacent areas and gives them education and training. However, they cannot make sufficient progress because the current facilities and equipment are extremely old, outdated and inadequate.	An education and training facility that can provide education and training in medical services at the New OPD Building is to be constructed.	The new facilities and equipment will enable VSMMC to play an important role in medical staff education in the area and raise medical technology standards.
One of the two X-ray units currently installed in the X-ray room is out of order. Since only one unit is operating at present, it will be unable to meet future demand. Out-patients account for only about 5% of X-ray examinations. (15,000/year) This indicates just how low the examination capacity of the out-patient department has become.	A room which is convenient for access from the existing X-ray room is to be renovated as a new X-ray room. Two new X-ray units are to be installed there to meet demand in the immediate future. Thus the current X-ray room will be able to be repaired in future without discontinuing X-ray examinations.	It will become possible to perform 30,000 - 40,000 examinations per year by increasing X-ray units. As a result more out-patients will be given X-ray examinations. Examination capacity will increase and the speed of medical services will be raised.
Since the emergency section has no minor operating room, even simple operations are performed in the operation section at VSMMC. This interferes with the original function of the operation section.	One minor operating room is to be constructed in the existing emergency section and the necessary equipment is to be installed. The New OPD Building is to have three minor operating rooms where simple operations can be performed.	When the minor operating rooms in the emergency section and the New OPD Building begin operation, the division of roles between major operations and minor operations will become clear. This will raise the overall functionality of VSMMC, making appropriate medical services available to regional residents.

5-2 Conclusion

The long economic depression in the Republic of the Philippines has seriously delayed improvement of medical facilities and equipment, especially at public medical institutions. As a result it has become difficult to offer adequate medical services to the people. In particular, a noticeable difference in medical services exists between Metro Manila and the Regions. The number of beds versus the number of residents is 1: 639 in Metro Manila, but the national average is 1: 1445.

In view of this situation and as a step towards the decentralization described in the National Health Plan, it is important and indeed essential to improve the functionality of VSMMC which is located in the second largest city in the Philippines.

At VSMMC the medical services have suffered due to the shortage of floor area, inefficient layout of the facilities, and the old and outdated state of medical equipment. A project to improve medical services is quite necessary.

The medical service activities of the entire hospital will increase in efficiency once the New OPD Building is constructed, the related sections are repaired and renovated, and medical equipment is upgraded under the Project. VSMMC will become able to offer adequate tertiary medical services to 13 million residents (20% of the total population) living in its service area and to offer adequate education and training to medical staff. The Project will make a significant contribution to health and medical care in the Regions. Therefore it is appropriate to execute the Project under the grant aid system.

5-3 Recommendations

The following recommendations are made with a view to ensuring swift implementation of the Project and smooth and effective operation of the facilities and equipment once they are completed.

1) Swift contract and approval procedures

The Project has a time restriction because it will be executed under Japan's grant aid system. For this reason the Philippine Government must complete the necessary actions and procedures as swiftly as possible, including the execution of the Exchange of Notes and the consulting contract, getting approval for the detailed design documents based on this report (Basic Design Study Report), and completing other contracts connected with the work.

2) Smooth execution of work assigned to the Philippine Government

The Basic Design Study Team has already explained Japan's grant aid system to the Philippine government staff. In executing the work assigned to it the Philippine Government must make the necessary budget appropriations according to that country's fiscal year. In particular, the land preparation, and the power, telephone and service water supply work necessary for the Project must be completed and permission to start construction must be given before construction begins. Power and service water supply work on the facilities should be completed at least 2 months before the completion of the facilities themselves because the water will be necessary for inspection and testing of the facilities and equipment.

3) Appropriate personnel assignment and budget planning

The funds required for maintenance and management of the New OPD Building will take up only a very small part of the entire DOH's budget, as stated above. The DOH can maximize the benefits of the Project by assigning capable staff to operate the New OPD Building and by facilitating budget appropriations for the maintenance and management of this facility in the future.

4) Establishment of maintenance and management system

The facility maintenance and management system related to the Project must be planned and carried out without delay. Systematic staff assignments must be made for the maintenance and management of the new facilities and equipment. Effective contracts for machinery and medical equipment maintenance must be executed with specialized agents.

5) Repair and improvement plan for existing facilities

The New OPD Building is planned as a self-contained facility that can function independently. However, the maximum benefit will be achieved by efficiently linking together all the functions of VSMMC. For this reason the Philippine Government is requested to smoothly execute the VSMMC repair and improvement project that is being carried out independently.

6) Establishment of an income generation system

VSMMC obtains its budget entirely from the DOH. It currently submits all of its income from medical activities to the Department.

At present the Philippine Government is studying the possibility of adopting a system (the income generation system) that would allow each hospital to spend its income from medical activities at its own discretion. If VSMMC becomes able to appropriate some funds on its own under this system, it could increase its budget for maintenance and management and operate more smoothly. Therefore it is desirable that this system be adopted as soon as possible.

APPENDIX

1. Member List of Study

2. Survey Schedule

3. List of Major People Interviewed

4. Minutes of Discussions

5. Soil Exploration Data etc.

6. Water Analysis Data

1. List of Study Team

Basic Design Study Team

Title	Name	Organization
Leader	Dr. Takeki SHIINA	Department of International Cooperation, National Medical Center Hospital, Ministry of Health and Welfare
Grant Aid Planner	Mr. Hiroyuki KANZAKI	First Basic Design Study Div. Grant Aid Study & Design Dept. JICA
Architectural Planner	Mr. Mamoru NAKAJIMA	NIHON SEKKEI, INC.
Architectural Designer	Mr. Masahiro IKAWA	NIHON SEKKEI, INC.
Mechanical Designer	Mr. Motohiro OKADA	NIHON SEKKEI, INC.
Medical Equipment Planner	Mr. Katsuo TATENO	NIHON SEKKEI, INC.

Draft Report Explanation Team

Title	Name	Organization
Leader	Dr. Takeki SHIINA	Department of International Cooperation, National Medical Center Hospital, Ministry of Health and Welfare
Grant Aid Planner	Mr. Toshiyuki NAKAMURA	First Basic Design Study Div. Grant Aid Study & Design Dept. JICA
Architectural Planner	Mr. Mamoru NAKAJIMA	NIHON SEKKEI, INC.
Medical Equipment Planner	Mr. Katsuo TATENO	NIHON SEKKEI, INC.

2. Survey Schedule

Basic Design Study 4-27 March, 1993

No.	Date	Place	Activities
1	March 4 (Thu)	Travel Manila	• Narita – Manila • Courtesy Call to Japanese Embassy and JICA
2	5 (Fri)	Manila	• Courtesy Call to and Meeting with Department of Health (DOH) • Visit to Philippine General Hospital (PGH) • Visit to Makati Medical Center
3	6 (Sat)	Manila	• Visit to National Orthopedic Hospital
4	7 (Sun)	Travel	• Manila – Cebu • Mr. Okada arrives at Cebu
5	8 (Mon)	Cebu	• Observation of and Meeting with VSMMC
6	9 (Tue)	Cebu	• Interview with VSMMC • Equipment and Site Survey
7	10 (Wed)	Cebu	• Meeting with VSMMC and Site Survey • Observation of Medical Equipment Maintenance Center (GTZ)
8	11 (Thu)	Cebu	• Observation of Cebu City Hospital • Observation of Cebu Doctor's Hospital • Observation of Guba Community Hospital (Extension of VSMMC)
9	12 (Fri)	Cebu	• Site and Building Survey • Meeting with VSMMC for Minutes of Discussion
10	13 (Sat)	Cebu	• Analysis of Information
11	14 (Sun)	Travel	• Cebu – Manila
12	15 (Mon)	Manila	• Meeting with DOH for Minutes of Discussion • Sign and Exchange Minutes of Discussion
13	16 (Tue)	Manila	• Report to the Japanese Embassy and JICA
14	17 (Wed)	Manila	• Dr. Shiina and Mr. Kanzaki return to Japan • Investigation of Construction Field and Medical Equipment Conditions

No.	Date	Place	Activities
15	18 (Thu)	Travel	• Manila – Cebu
16	19 (Fri)	Cebu	• Meeting with VSMMC
17	20 (Sat)	Cebu	• Investigation of Construction Field and Medical Equipment Conditions
18	21 (Sun)	Cebu	• Analysis of Information
19	22 (Mon)	Cebu	• Meeting with VSMMC • Site Survey
20	23 (Tue)	Cebu	• Meeting with VSMMC • Site Survey
21	24 (Wed)	Travel	• Cebu – Manila
22	25 (Thu)	Manila	• Report to DOH • Observation of PGH • Report to Japanese Embassy and JICA
23	26 (Fri)	Manila	• Investigation of Construction Field and Medical Equipment Conditions
24	27 (Sat)	Travel	• Manila – Narita

Draft Report Explanation 30 May – 5 June, 1993

No.	Date	Place	Activities
1	May 30 (Sun)	Travel	• Narita – Manila
2	31 (Mon)	Manila	• Courtesy Call to Japanese Embassy and JICA • Courtesy Call to and Explanation of Draft Report to DOH
3	Jun 1 (Tue)	Travel	• Manila – Cebu • Explanation of Draft Report to VSMMC
4	2 (Wed)	Cebu	• Meeting with VSMMC
5	3 (Thu)	Travel	• Cebu – Manila • Team Meeting
6	4 (Fri)	Manila	• Sign and Exchange Minutes of Discussion • Report to JICA
7	5 (Sat)	Travel	• Manila – Narita

3. List of Major People Interviewed

DEPARTMENT OF HEALTH

Dr. Jaime Z. Galvez Tan	Undersecretary of Heath and Chief of Staff
Dr. Juan Nanagas	Undersecretary
Dr. Margarita Galon	Chief of Hospital Operation and Management

VICENTE SOTTO MEMORIAL MEDICAL CENTER

Dr. Quintin Derikito	Director
Dr. Eusebio Alquizalas	Chief of Clinic
Dr. Filomena G. Delos Santos	Chief Training Officer
Ms. Delia Z. Mediano	Chief Nurse
Ms. Carnekuta T. Villanobos	Assistant Chief Nurse
Dr. Joy Fe A. Lim, Head	Out-patient Department and Department of Family Medicine
Dr. Francisca Manulat	Department of Medicine
Dr. Rosita Galdo	Department of Pediatrics
Dr. Belinda Panares	Department of OB-GYN
Dr. Emmanuel Miel	Department of EENT
Dr. Gaudelia Reyes	Department of Anesthesia
Dr. Fidencio Panares	Department of Orthopedics
Dr. Augustos Costas	Department of Psychiatry
Dr. Denia Mapalo	Department of Radiology
Dr. Philip Yray	Radiologist for Cobalt 60
Dr. Cecilia Bernad	Emergency Room Service
Dr. Joel Alvez	Department of Pathology and Laboratory
Dr. Bonifacio David	Dental Unit
Dr. Flordeliz	Rehabilitation Unit
Dr. Purita Taneo	Acupuncture Unit Administration Division Officer
Dr. John Mata	Department of Neurosurgery
Mr. Leo D. Odi	Technical Consultant
Mr. Robedillo Manigsaca	Technical Consultant, Department of Public Works & Highways
Mr. Jeff T. Vivares	Mechanical Plant Supervisor
Mr. Pablito V. Taneo	Administration Division Officer
Ms. Josefa Bacaltos	Administration Division Officer

Mrs. Lydia B. Jaban	Accountant
Mr. Atty Dionisio d. Tee	Legal Officer

PHILIPPINE GENERAL HOSPITAL

Dr. Felipe A. Estrella	Director

CEBU CITY MEDICAL CENTER

Dr. Francisco B. Diy, Jr.	Director

MAKATI MEDICAL CENTER

Dr. Raul G. Fores	Executive Vice President

EMBASSY OF JAPAN

Dr. Etsuro Kashiwagi	First Secretary

JICA PHILIPPINES

Mr. Masataka Iijima	Resident Representative
Mr. Satoshi Machida	Deputy Resident Representative
Mr. Kenji Matsumoto	Assistant Resident Representative

4. Minutes of Discussions
(For Basic Design Study)

MINUTES OF DISCUSSIONS

ON

BASIC DESIGN STUDY ON THE PROJECT FOR
CONSTRUCTION AND EQUIPPING OF THE OUT-PATIENT
DEPARTMENT OF THE VICENTE SOTTO MEMORIAL
MEDICAL CENTER

IN

THE REPUBLIC OF PHILIPPINES

Based on the results of the Preliminary Study, the Japan International Cooperation Agency (JICA) decided to conduct a Basic Design Study on the Project for Construction and Equipping of the Out-Patient Department of the Vicente Sotto Memorial Medical Center (hereinafter referred to as "the Project").

JICA has sent to Philippines a study team headed by Dr. Takeki Shiina, Department of International Cooperation, National Medical Center Hospital, Ministry of Health and Welfare, from March 4 to March 27, 1993.

The team had a series of discussions with concerned officials of the Philippine Department of Health and conducted a field survey at the study area.

As a result of discussions and field survey, both sides have confirmed the main items described in the attached sheets.

Manila, March 15, 1993

Dr. Takeki Shiina
Leader
Basic Design Study Team
JICA

Dr.Quintin T. Derikito
Medical Center Chief
Vicente Sotto Memorial
Medical Center

Dr. Jaime Z. Galvez Tan
Undersecretary of Health
Department of Health
Republic of Philippines

ATTACHMENT

1. Objective

The objective of the Project is to improve the services of the Out-Patient Department (OPD) of the Vicente Sotto Memorial Medical Center by expanding and renovating necessary facilities and providing necessary equipment for clinical and training service.

2. Project Site

The Project site is located in front of the main building of the Vicente Sotto Memorial Medical Center, with the total area of approximately 4,000㎡, as shown in Annex I.

3. Responsible and Executing agency

(1) Responsible agency : Department of Health
(2) Executing agency : Vicente Sotto Memorial Medical Center

4. Items requested by the Philippines side

After discussions with the Basic Design Study team, the following items were finally requested by the Philippines side.

(1) Construction of the OPD with the facilities described in Annex II
(2) Renovation of the Department of Radiology and Emergency Room
(3) Provision of equipment related to the Project which are described in Annex II

However, the final items of the Project will be decided after further studies.

5. Japan's Grant Aid system

(1) The Philippines side has understood the system of Japan's Grant Aid as explained by the team.
(2) The Philippines side will take necessary measures, as described in Annex III for the smooth implementation of the Project on condition that the Grant Aid by the Government of Japan is extended to the Project.

6. Other Important Issues Related to the Project

On condition that Japan's Grant Aid is extended to the Project;

(1) the Department of Health will allocate the necessary budget to the

Project for securing sustainable and proper operation and maintenance of the Vicente Sotto Memorial Medical Center

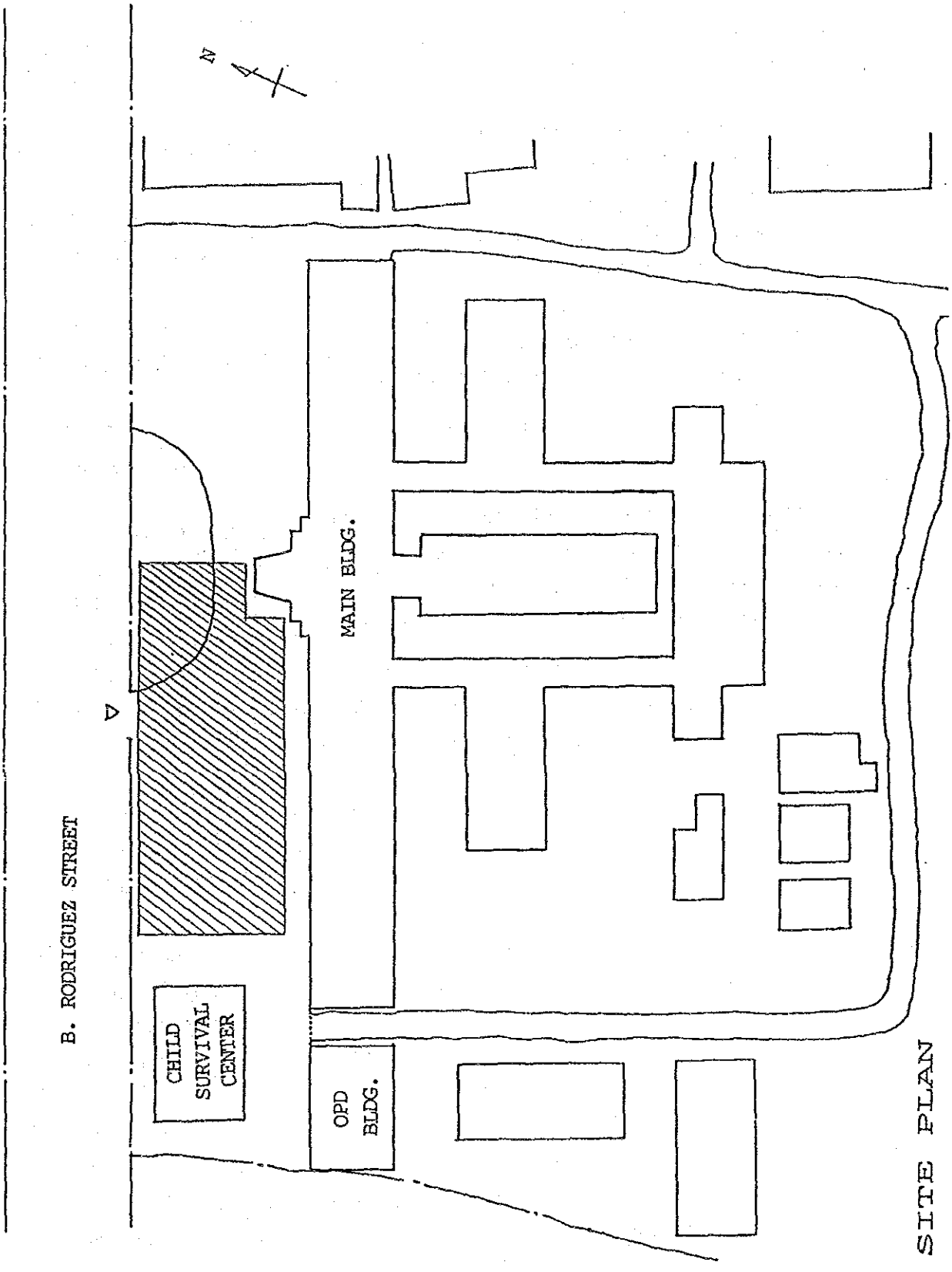
(2) the Department of Health will provide the necessary personnel as required under the Project for the normal operation of the Vicente Sotto Memorial Medical Center

(3) the Vicente Sotto Memorial Medical Center will make an inventory list on the major equipment included in the Project and maintain the adequate performance and utilization data on the facilities and equipment included in the Project. These data will be submitted to the Japanese side annually

7. Schedule of the Study

(1) The consultants will proceed to further studies in Philippines until March 27, 1993.

(2) JICA will prepare the draft report in English and dispatch a mission in order to explain its contents around May, 1993.


N
B. RODRIGUEZ STREET
MAIN BLDG.
CHILD SURVIVAL CENTER
OPD BLDG.

SITE PLAN

Annex II

1. Construction of the OPD with the following facilities
   1) Department of Medicine
   2) Department of ENT
   3) Department of Ophthalmology
   4) Department of Surgery
   5) Department of Family Medicine
   6) Department of Rehabilitation
   7) Department of Pediatrics
   8) Department of Orthopedics
   9) Department of Psychiatry
   10) Department of Obstetrics & Gynecology
   11) Dental Section

2. Provision of equipment related to the Project
   1) Equipment for Clinical Services
   2) Equipment for Training Services
   3) Equipment for Administration Services

Annex III

Necessary measures to be taken by the Government of Philippines on condition that Japan's Grant Aid is extended;

1. To secure the site for the Project

2. To clear, level and reclaim the site prior to the commencement of the construction

3. To undertake incidental outdoor works such as gardening, fencing, gates and exterior lighting within and around the site

4. To provide general furniture such as carpets, curtains, tables, chairs, and others

5. To provide facilities for distribution of water supply, drainage, sewage and other incidental facilities to the Project site
   5.1) Water distribution main to the site (including deep well)
   5.2) Drainage main from the site
   5.3) Electric power incoming line to the site
   5.4) Telephone incoming line to the MDF of the building
   5.5) Renovation of power house for the back-up generater

6. To exempt taxes and to take the necessary measures for customs clearance of the materials and equipment brought for the Project at the port of disembarkation

7. To exempt Japanese Nationals from customs duties, internal taxes and other fiscal levies which may be imporsed in the Philippines with respect to the supply of the products and services under the verified contracts

8. To accord Japanese Nationals, whose services may be required in connection with the supply of products and the services under the verified contracts, such facilities as may be necessary for their entry into the Philippines and stay therein for the duration of their work

9. To use and maintain properly and effectively all the facilities

constructed and equipment purchased under the Grant

10. To bear all the expenses other than those to be borne by the Grant, necessary for construction of the facilities as well as for the transportation and the installation of the equipment

(For Draft Report Explanation)

MINUTES OF DISCUSSION

ON

BASIC DESIGN STUDY ON THE PROJECT FOR CONSTRUCTION AND EQUIPPING OF THE OUT-PATIENT DEPARTMENT OF THE VICENTE SOTTO MEMORIAL MEDICAL CENTER

IN

THE REPUBLIC OF THE PHILIPPINES

(CONSULTATION ON DRAFT REPORT)

In March 1993, the Japan International Cooperation Agency (JICA) dispatched a Basic Design Study Team on the Project for the Construction and Equipping of the Out-Patient Department of the Vicente Sotto Memorial Medical Center (hereinafter referred to as "the Project") to the Republic of the Philippines, and through discussions, field survey and technical examination of the results in Japan, JICA has prepared the draft report of the study.

In order to explain and discuss the contents of the draft report, JICA sent to the Philippines a study team, which is headed by Dr.Takeki Shiina, Department of International Cooperation, National Medical Center Hospital, Ministry of Health and Welfare, from May 30 to June 5, 1993.

As a result of discussions, both parties confirmed the main items described in the attached sheets.

Manila, June 4, 1993

Dr. Takeki Shiina
Leader
Draft Report Explanation Team
JICA

Dr. Quintin T. Derikito
Medical Center Chief
Vicente Sotto Memorial
Medical Center

Dr. Juan Nanagas
Undersecretary
Department of Health
The Republic of the Philippines

ATTACHMENT

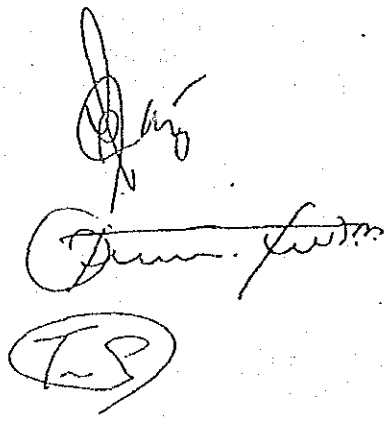
1. Contents of the Draft Report
The Government of the Philippines has agreed and accepted in principle the contents of the Draft Report proposed by the team.

2. Japan's Grant Aid system
1) The Government of the Philippines has understood the system of Japan's Grant Aid as explained by the team.
2) The Government of the Philippines will take the neccesary measures, as described in the Annex I, for the smooth implementation of the Project on condition that the Grant Aid assistance by the Government of Japan is extended to the project.

3. An Important Issue Related to the Project
The Philippine side should secure approval from Investment Coordination Committee (ICC) until the end of June,1993 and send copies of the approval to JICA, Manila immediately.

4. Other relevant issues
On condition that Japan's Grant Aid is extended to the Project;
1) the Department of Health will allocate the necessary budget to the Project for securing sustainable and proper operation and maintenance of the Vicente Sotto Memorial Medical Center.
2) the Department of Health will provide the necessary personnel (especially nurse) as required under the Project for the proper operation of the Vicente Sotto Medical Center.
3) Vicente Sotto Memorial Medical Center will maintain adequate performance and utilization data as described in the Annex II on the facilities included in the Project. And these data will be submitted annually to the Japanese side.
4) Vicente Sotto Memorial Medical Center will make an inventory list on the equipment and spare parts included in the Project. And the list will be renewed in accordance with the conditions of the equipment and the consumption of the spare parts.

5. Further Study
JICA will complete the final report with the confirmed items, and send it to the Government of the Philippines around July 1993.



Annex I

Necessary measures to be taken by the Government of the Philippines on condition that Japan's Grant Aid is extended;

1. To secure the site for the Project

2. To clear, level and reclaim the site prior to the commencement of the construction

3. To undertake incidental outdoor works such as gardening, fencing, gates and exterior lighting within and around the site

4. To provide general furniture such as carpets, curtains, tables, chairs and others

5. To provide facilities for distribution of drainage, sewage and other incidental facilities to the Project site
   5.1 Drainage main from the site
   5.2 Electric power incoming line to the site
   5.3 Telephone incoming line to the MDF of the building

6. To relocate of Pharmacy Section and Histopathology Section as described in the Basic Design Study Report of the Project.

7. To exempt taxes and to take the necessary measure for customs clearance of the materials and equipment brought for the Project at the port of disembarkation

8. To exempt Japanese Nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the Philippines with respect to the supply of the products and services under the verified contracts

9. To accord Japanese Nationals, whose services may be required in connection with the supply of the products and the services under the verified contracts such facilities as may be necessary for their entry into the Philippines and stay therein fir the duration of their work

10. To use and maintain properly and effectively all the facilities constrcuted and equipment purchased under the Grant

11. To bear all the expenses other than those to be borne by the Grant

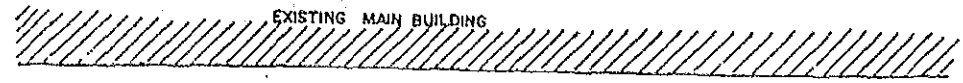
Annex II

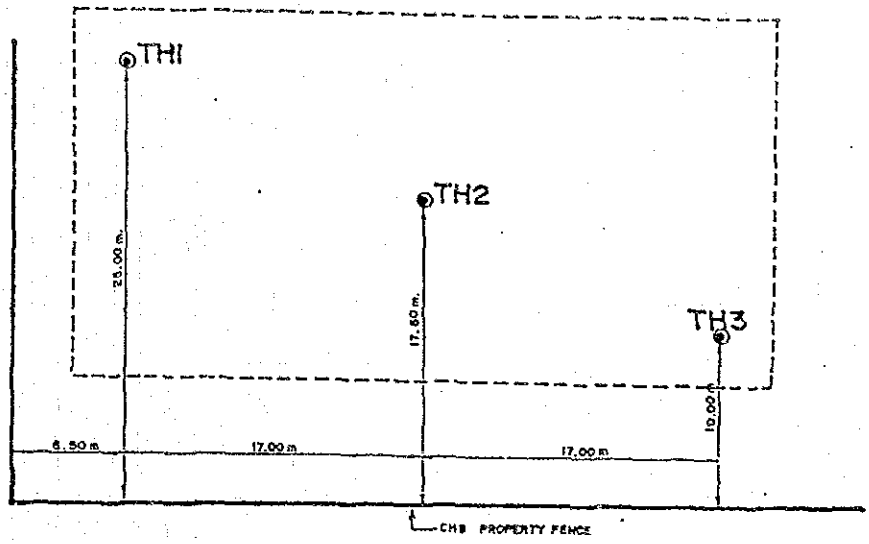
ANNUAL DATA/PERFORMANCE OF

THE OUT-PATIENT DEPARTMENT OF THE VICENTE SOTTO MEMORIAL MEDICAL CENTER

ITEMS	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
1 Out-patient Department										
Number of Out-Patients										
① Internal Medicine										
② Surgery										
③ Orthopedic										
④ Pediatric										
⑤ Pediatric (under 5)										
⑥ Obstetric/Gynecology										
⑦ Dental										
⑧ Ophthalmology										
⑨ ENT										
⑩ Family Medicine (including Dermatology)										
⑪ Physiotherapy										
⑫ Acupucture										
⑬ Psychiatric										
⑭ Family Planning										
2 Radiology Department										
Number of X-Ray Exam.										
3 Emergency Section										
Number of Out-Patients										
Number of Minor Operations										
4 In-patient Activities										
Number of In-Parients										
① Internal Medicine										
② Surgery										
③ Neurosurgery										
④ Orthopedic										
⑤ Pediatric										
⑥ Obstetric/Gynecology										
⑦ Ophthalmology										
⑧ ENT										
⑨ Family Medicine										
⑩ Psychiatric										
⑪ Infectious Word										
⑫ Pay Ward										
5 Training Activities										
Number of Students										

5. Soil Exploration Data, etc.

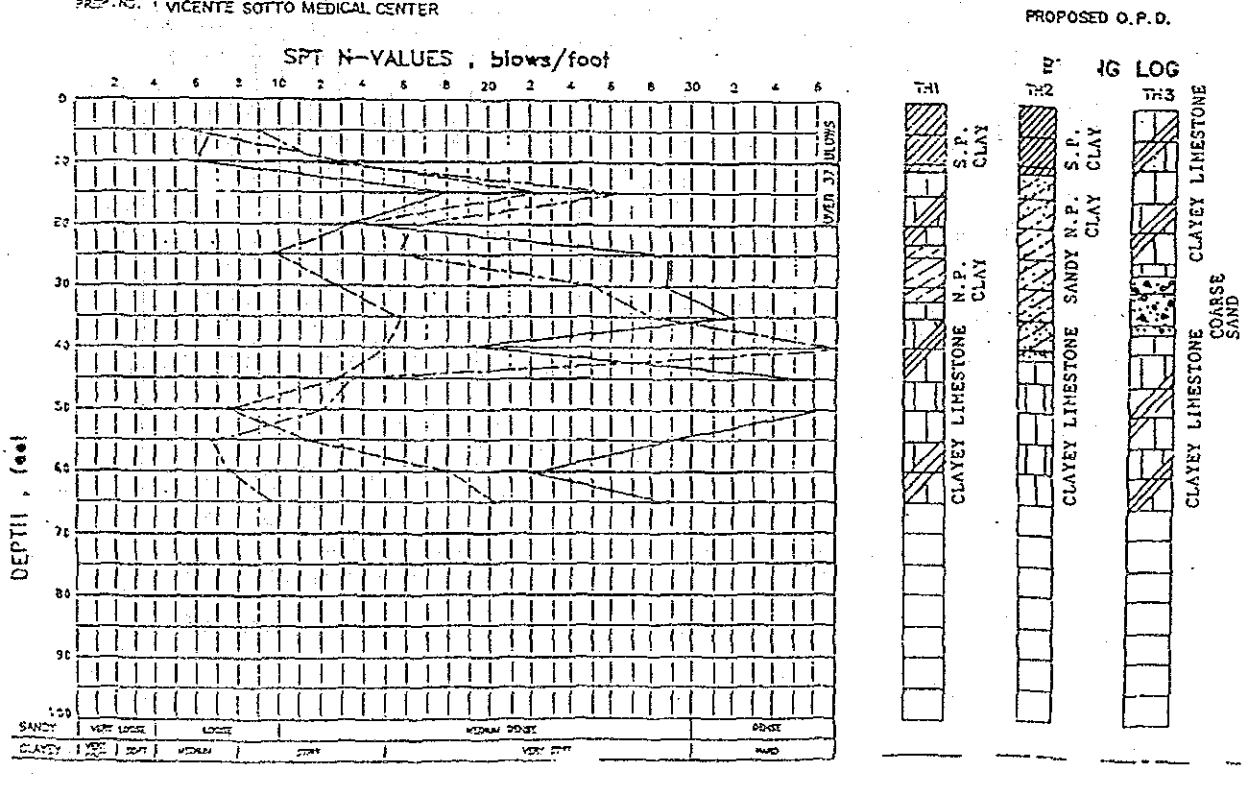




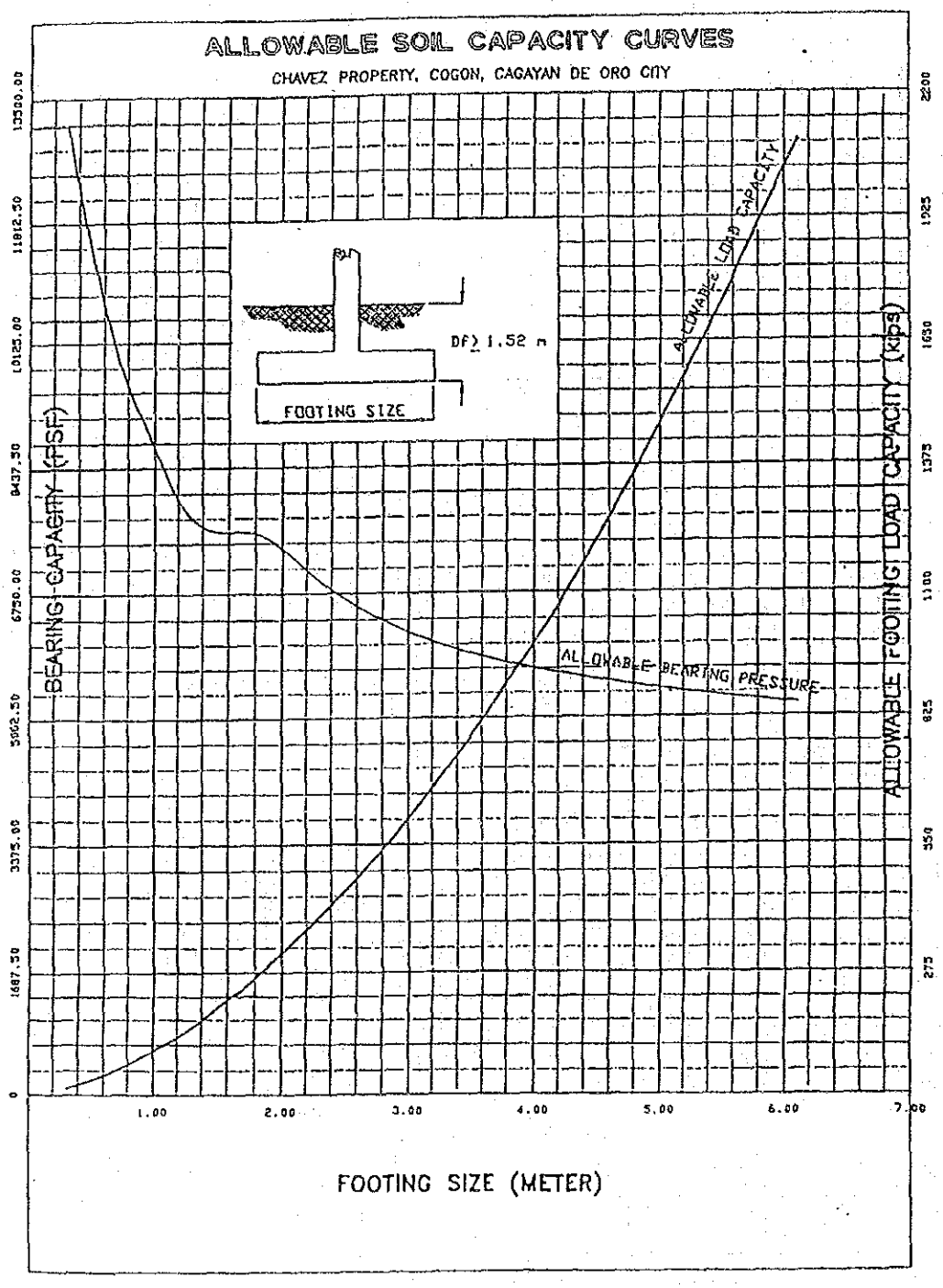
SOIL EXPLORATION TESTHOLES
LOCATION PLAN
VICENTE SOTTO MEDICAL CENTER , Cebu City

SOIL EXPLORATION & BEARING CAPACITY EVALUATION

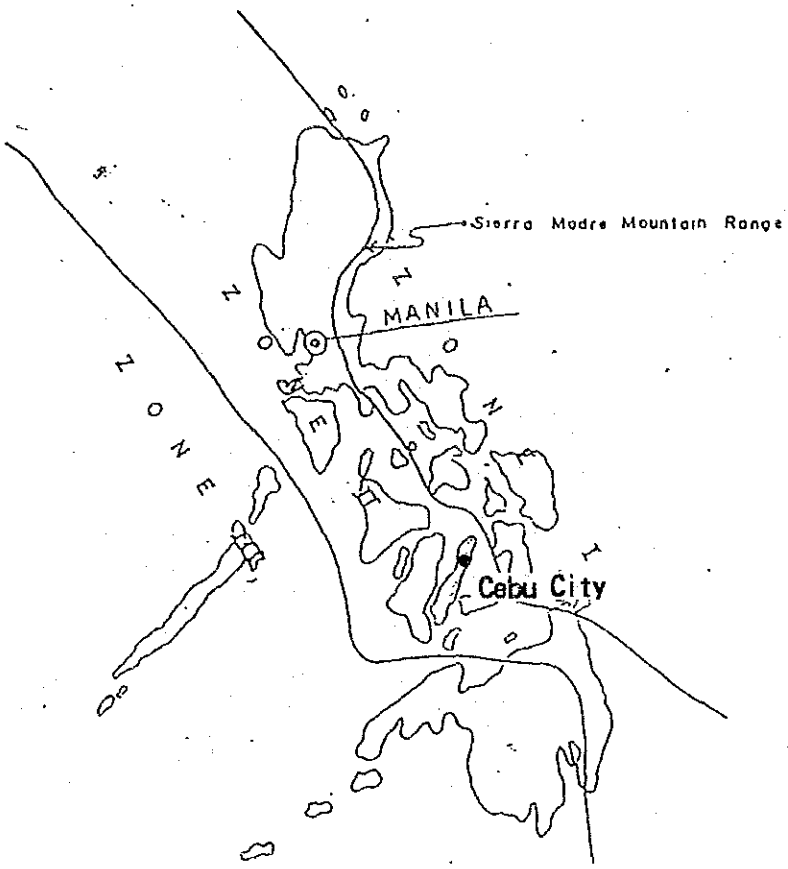
LOCATION : B. RODRIGUEZ ST., CEBU CITY
PROJECT : VICENTE SOTTO MEDICAL CENTER



Allowable Soil Capacity Curves



Wind Pressure Zoning Map



ZONE I

V=200 KPH=125 MPH

p=300 ksm= 60 psf, h above 100'

p=250 ksm= 50 psf, h 30' to 100'

P=200 ksm= 40 psf, h 0 to 30'

ZONE II

V=175 KPH=108 MPH

p=250 ksm= 50 psf, h above 100'

p=200 ksm= 40 psf, h 30' to 100'

P=150 ksm= 30 psf, h 0 to 30'

Recommended wind pressure

per unit area of vertical projections

ZONE III

V=153 KPH= 96 MPH

p=200 ksm= 40 psf, h above 100'

p=150 ksm= 30 psf, h 30' to 100'

P=100 ksm= 20 psf, h 0 to 30'

LEGEND :

KPH = kilometers per hour

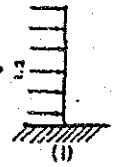
MPH = miles per hour

ksm = kilograms per squaremeter

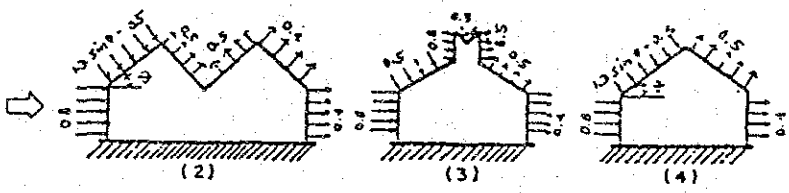
psf = pounds per square foot

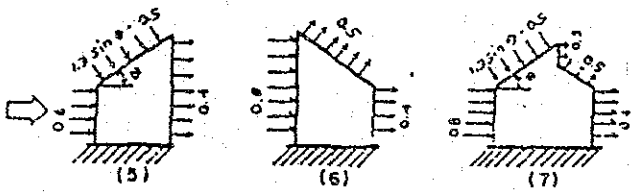
Wind Pressure Coefficient Diagram

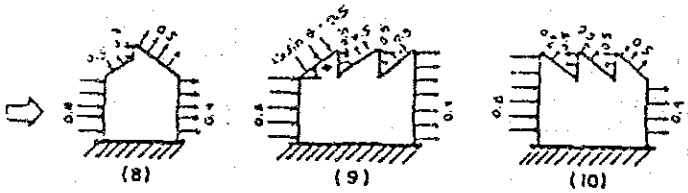
Vertical plane surface

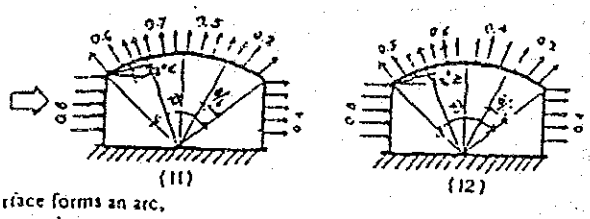


Type of structure in closed form.









In case the roof surface forms an arc, changes in pressure may be assumed at the quarter points of the arc.

6. Water Analysis Data

METRO CEBU WATER DISTRICT
Cebu City

MCWD LABORATORY WATER ANALYSIS

Well No. [ ] V. Sotto Memorial Medical Center Date: 4-22-93

	mg/L		mg/L
Chloride Cl^-	79	Calcium Ca^{++}	132.8
		Magnesium Mg^{++}	16.1
Sulfate SO_4^{-2}	22	Iron Fe^{++}	less than 0.02
		Manganese Mn^{++}	less than 0.02
Nitrate NO_3^-	35	Copper Cu^{++}	less than 0.02
		Barium Ba^{++}	
Flouride F^-		Selenium Se^{++}	
		Zinc Zn^{++}	0.06
Cyanide CN^-			
TOTAL		TOTAL	
			ug/L
pH	6.9		
		Cadmium Cd^{++}	
		Lead Pb^{++}	
	$mgCaCO_3/L$		mg/L
Total Hardness	398	Total Solids	756
		Total Dissolved Solids	728
		Total Suspended Solids	28
	mg/L		
		Color equivalent to	0
		Turbidity	0.1NTU
Dissolved Oxygen		REMARKS: Calcium exceeds the permissible limit of 75 mg/L; Total solids exceeds the permissible limit of 500 mg/L.	
Oil in Water			
Detergent			
Phenols			

emma . escalante
Water Analyst

Noted by:

Head, Water Qlty Section

MANUEL B. GALANG, JR.
Manager, Prod.& Dist. Dept.