

CHAPTER 8
CONCLUSION AND RECOMMENDATIONS

CHAPTER 8 CONCLUSION AND RECOMMENDATIONS

As detailed in the previous chapters, the request of the Government of the Socialist Republic of the Union of Burma was reviewed and the background and detail of the Project have been surveyed in Burma and subsequently analyzed in Japan. It is concluded that there is a great necessity to carry out this Project in accordance with the policy of the project and the details of facilities and equipment described in this report.

The proposed construction site is situated at a newly developed area in Mandalay which is a central city of Upper Burma. The site is adequate for operating the Hospital since it is easy for patients and medical staff to reach it and for teaching staff to commute to the Institute of Medicine, Mandalay and the Mandalay General Hospital. The configuration, area, and surrounding environment of the proposed site are also suitable for construction of the Hospital.

As stated in Chapter 7, this Project is beneficial for the Burmese society and has a substantial effect upon the improvement of health and medical services from the present and continuing on into the future. It is concluded that the grant aid cooperation by the Japanese Government for this Project has sufficient appropriateness.

The following items are recommended so that this Project can be realized without delay and the intended objectives can be attained through smooth and effective operation of the Teaching Hospital:

(1) Implementaion of this Project

1) Prompt execution of approval procedures at every stage

This Project will be carried out according to the system of grant aid cooperation of the Japanese Government, this being subject to time limitation. It is essential, therefore, to complete procedures such as the Exchange of Notes (E/N) between both governments and conclusion of contracts on consulting, construction, and procurement of equipment with necessary promptitude.

2) Smooth execution of the Burmese work necessary for this Project

It is also necessary that the budget should be allocated at an appropriate time in accordance with the fiscal year of the Government of Burma so that the work which is the responsibility of the Burmese side may be carried out smoothly. Especially, the preliminary work such as clearing and leveling of the site and temporary power supply work for construction should be completed before the work which is the responsibility of the Japanese side is started. Also, permanent power supply work should be completed at least two months before the completion of facilities for the purpose of final inspection and trial run of the facilities and equipment. It is indispensable for the smooth progress of the work that budgets should be allocated in advance for covering necessary taxes including customs clearance tax of construction materials and equipment, and medical equipment which will be imported from Japan.

3) Support for expediting the construction work

It is also required that support for expediting the works including negotiations with other Ministries, customs clearance, transporting procedures, banking arrangements, issue of authorization to pay, and other managerial procedures should be carried out smoothly and promptly by overcoming possible difficulties caused by the geographical distance between Mandalay and Rangoon where the Department of Health is located. It is preferable that a project execution system with appropriate management ability should be established within the Department. The cooperation of related Ministries and Agencies including the Ministry of Health and the Construction Corporation is also indispensable.

(2) Medical education and hospital operation

1) Operation and administration

The Mandalay Teaching Hospital, which should be equipped to function as a general hospital at the top of the referral system in Upper Burma and as a teaching hospital to educate health manpower, must satisfy both the need for medical services and medical education in Burma at the same time. It is preferable, therefore, that the Mandalay Teaching Hospital should be operated with close cooperation among the Departments of the Ministry of Health, especially between the Departments of Health and the Department of Medical Education.

2) Selection of academic staff

The Mandalay Teaching Hospital is designed to perform the function of educating doctors of a "family doctor" type and nurses and midwives, in addition to its hospital function as a general hospital. It is preferable, therefore, that persons responsible for operating this Hospital and necessary academic staff in each field of specialty should be selected and assured prior to the beginning of its operation. Also there should be established a proper education system including the training of technicians to operate and maintain medical equipment, under close cooperation with Technical Cooperation experts who will be dispatched later from Japan.

3) Assuring of operation budgets

When ensuring smooth development of the activities of the Mandalay Teaching Hospital, it is necessary to make budgets available for supporting them, especially assuring the availability of foreign currencies budgets to furnish the Central Medicine Supply Depot (CMSD) with medicines including reagents, consumables, spare parts of medical equipment which cannot be procured domestically. In Burma, the amount of received grant aid cooperation is regarded as one of the revenue items in the national budget. So, it is earnestly expected that appropriate budget amounts should be allocated to this Hospital taking the alleviation of losses caused by abrupt exchange rate fluctuations into consideration.

4) Technical cooperation

In order to clarify the contents of the request for the Japanese Technical Cooperation, a Technical Cooperation Survey Team has already been dispatched to Burma for discussions with the Burmese side. It is preferable that the Government of Burma and the Government of Japan continue their efforts to realize the Technical Cooperation by the Government of Japan to further enhance the effects of this Project.

ANNEX

I Minutes of Discussions

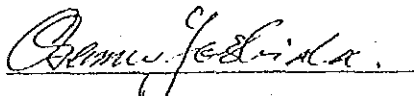
I-1 Basic Design Study Phase-1 (January 28 - February 24, 1987)

MINUTES OF DISCUSSIONS
ON
THE BASIC DESIGN STUDY
OF
THE PROJECT FOR THE CONSTRUCTION
OF
MANDALAY TEACHING HOSPITAL
IN
THE SOCIALIST REPUBLIC OF THE UNION OF BURMA

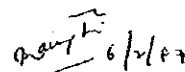
In response to the request made by the Government of the Socialist Republic of the Union of Burma for Grant Aid for the Project for the Construction of Mandalay Teaching Hospital (hereinafter referred to as "the Project"), the Government of Japan decided to conduct a basic design study on the Project and entrusted the Japan International Cooperation Agency (JICA) to send a Basic Design Study Team (Phase I) headed by Dr. Osamu Yoshida, Professor of Faculty of Medicine, Kyoto University to Burma from January 28th to February 24th, 1987.

The team had a series of discussions with the Authorities concerned of the Government of the Socialist Republic of the Union of Burma and conducted a field survey in Mandalay. As the result of the study, both parties have agreed to recommend to their respective Governments that the major points of understandings reached between them as attached herewith should be examined towards the realization of the Project.

Rangoon, February 6, 1987



Dr. Osamu Yoshida
Leader
The Basic Design Study Team
Japan International
Cooperation Agency (JICA)



Dr. U Tin U
Director-General
Department of Health

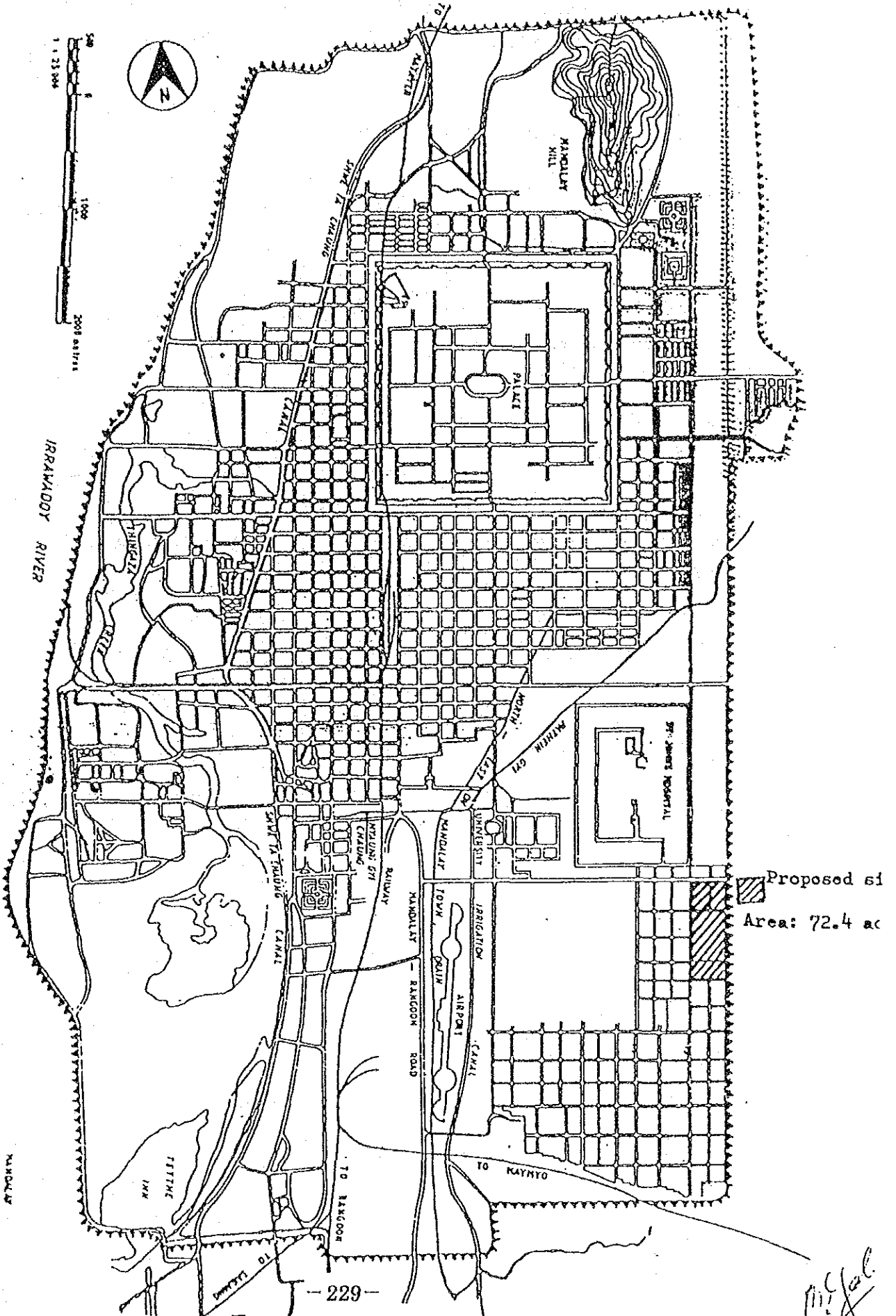
ATTACHMENT

1. The objective of the Project is to establish a teaching hospital which will provide an integrated function for medical education and medical services through construction of hospital buildings, and supply and installation of medical equipment.
2. The Project site is located at South-East newly developed area of Mandalay city as seen in Annex I. The whole land which is owned by the Department of Health is 290,000 square meters.
3. The functions of Mandalay Teaching Hospital are as follows:-
 - (1) To provide the facilities and equipment for clinical practice of the Institute of Medicine, Mandalay;
 - (2) To provide the facilities and equipment for training of nurses and midwives in Mandalay area;
 - (3) To serve as a general hospital for medicine, surgery, gynaecology and paediatrics with related diagnostic departments;
 - (4) To upgrade the quality of medical services as the central referral hospital in Upper Burma.
4. Department of Health will be responsible for the management and execution of the Project.
5. The Japanese Study Team will convey to the Government of Japan the desire of the Government of the Socialist Republic of the Union of Burma that the former takes necessary measures to cooperate by providing the buildings and other items listed in Annex II within the scope of Japanese economic cooperation programme in grant form.
6. The Burmese side has understood Japan's Grant Aid System explained by the Team.
7. The Government of the Socialist Republic of the Union of Burma will take necessary measures in Annex III on condition that the Grant Aid would be extended to the Project.
8. The Burmese side will form a Project coordinating committee and Project site implementation committee for the smooth execution of the project.

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MANDALAY TOWN MAP

ANNEX I



MANDALAY TOWN MAP

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THE REQUEST MADE BY THE GOVERNMENT OF
THE SOCIALIST REPUBLIC OF THE UNION OF BURMA

1. Construction of Mandalay Teaching Hospital with the facilities of the following departments:-
 - (1) Out-patient department
 - (2) Ward department
 - (3) Central diagnosis and treatment department
 - (4) Administration department
 - (5) Service department
 - (6) Teaching facilities
 - (7) Others

2. Provision of equipment and materials to the above mentioned facilities such as:-
 - (1) Medical equipment
 - (2) Surgical equipment
 - (3) Gynaecology and Obstetrics equipment
 - (4) Paediatric equipment
 - (5) Teaching equipment
 - (6) Others



MAJOR UNDERTAKINGS TO BE TAKEN BY THE BURMESE SIDE

1. To secure the site for the Project.
2. To clear, level and reclaim the site prior to commencement of the construction.
3. To undertake incidental out-door works such as gardening, fencing gates and exterior lighting in and around the site.
4. To construct the access road to the site prior to commencement of the construction.
5. To provide facilities for distribution of electricity, water supply, telephone, drainage and other incidental facilities before the commencement of the project.
 - (1) Electricity distributing line to the site;
 - (2) City water distribution main to the site;
 - (3) Drainage city main to the site;
 - (4) Telephone trunk line to the main, distribution panel of building.
6. To provide general furniture such as carpets, curtains, tables, chairs and others.
7. To bear commissions to the Japanese foreign exchange bank for the banking services upon the Banking Arrangement.
8. To take necessary measures for custom clearance of the materials and equipment brought for the Project at the port of disembarkation.
9. To exempt Japanese nationals from custom duties, internal taxes and other fiscal levies which may be imposed in the Socialist Republic of the Union of Burma with respect to the supply of the products and services under the Verified Contracts.
10. To accord Japanese nationals whose services may be required in connection with the supply of products and the services under the verified contract such facilities as may be necessary for their entry into Burma and stay therein for the performance of their work.
11. To maintain and use properly and effectively those facilities constructed and equipment purchased under the Grant.
12. 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 installation of the equipment.
13. The Burmese side will not change the site of the project nor vary the functional contents of the Mandalay Teaching Hospital after it has been agreed upon by both Governments.

MINUTES OF DISCUSSIONS
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THE PROJECT FOR CONSTRUCTION
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In response to the request made by the Government of The Socialist Republic of The Union of Burma for Grant Aid for the Project for Construction of Mandalay Teaching Hospital (hereinafter referred to as "The Project"), the Government of Japan decided to conduct a Basic Design Study on the Project and entrusted the Japan International Cooperation Agency (JICA) to send a Basic Design Study Team (Phase II) headed by Dr. Kanji TORIZUKA, Vice President, Fukui School of Medicine to Burma from April 22 to May 3, 1987.

The Team had a series of discussions with the Authorities concerned of the Government of the Socialist Republic of the Union of Burma and conducted a field survey in Mandalay. As the result of the study, both parties have agreed to recommend to their respective Governments that the major points of understandings reached between them as attached herewith should be examined towards the realization of the Project.

Rangoon, April 30, 1987



Kanji Torizuka

DR. KANJI TORIZUKA
Leader
The Basic Design Study Team (Phase II)
Japan International Cooperation
Agency (JICA)

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DR. U TIN U
Director-General
Department of Health

ATTACHMENT

1. Both parties have agreed to reconfirm the Minutes of Discussions which was mutually signed on February 6, 1987.
2. The Burmese side has agreed in principle to the Schematic Design on the Project proposed by the Team of which specifications are shown in Annex I .
3. The Japanese side has explained the Proposed Operation & Maintenance Plan and also the Construction Work Plan to be undertaken by the Burmese Side of which details are shown in Annex II , and expressed the Budgetary Measures by the Burmese side to carry out the above-mentioned Plans must be necessary for the realization and implementation of the Project.
The Burmese side has understood the explanation by the Team, and confirmed the Budgetary Allocation necessary for the Project.
4. Next Mission for the explanation of Draft Final Report will be despatched to Burma by the end of June, 1987.

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ANNEX I

(1) Outline of the buildings:

The building composition of the Project will be as follows:-

(1) Administration and Out-patient Building

1st Floor

- . Internal Medicine
- . Surgical
- . Paediatric
- . Obstetric and Gynaecology
- . Treatment Room
- . Medical Record Room

2nd Floor

- . Superintendent Room
- . Dy. Superintendent Room
- . Japanese Expert Room
- . Office
- . Conference Room
- . Administrative Officer's Room

(2) Emergency and Operation Building

- . Emergency Laboratory
- . Emergency Operation Theatre
- . Examination
- . Observation
- . Operation Theatre
- . Recovery Room
- . Intensive Care Unit
- . Coronary Care Unit
- . Central Sterilizing Supply Room

(3) Diagnostic Laboratory and Academic Building

1st Floor

- . X-ray Room
- . Blood Bank
- . Physiotherapy
- . Diagnostic Room
- . Endoscopy
- . Forensic

2nd Floor

- . Biochemistry
- . Haematology
- . Bacteriology
- . Pathology
- . Lecture Rooms
- . Library
- . Student Lounge
- . Doctor's Lounge

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(4) Ward Buildings

1st Floor

- . Surgical
- . Gynecology
- . Obstetric
- . Delivery

2nd Floor

- . Internal medicine
- . Paediatric

(5) Service Building

- . Canteen
- . Repair Shop
- . Store
- . Solution Making
- . Medicine Store
- . Power Station
- . Reagent Making

(6) Other Buildings

- . Mortuary
- . Laundry
- . Kitchen
- . Oxygen Mini Plant
- . Guest House
- . Pump House
- . Garage
- . Maintenance

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(2) Outline of Medical and Educational Equipment

The medical and educational equipment for the Project will be planned to cope with the function of each department.

The composition of department of the Project will be as shown in below:-

(1) Out-patient Department

- . Internal Medicine
- . Surgical
- . Paediatric
- . Obstetric and Gynaecology
- . Treatment
- . Emergency

(2) Ward Department

- . Internal Medicine
- . Surgical
- . Paediatric
- . Obstetric
- . Gynaecology
- . ICU, CCU

(3) Central Diagnostic Department

- . X-ray
- . Physiotherapy
- . Endoscopic
- . Medical Laboratory
- . Central Sterilizing Supply
- . Blood Bank
- . Operation Theatre
- . Mortuary
- . Forensic
- . Delivery

(4) Service Department

- . Pharmaceutical Supply
- . Solution Making
- . Reagent Making
- . Equipment Maintenance
- . Oxygen Mini Plant

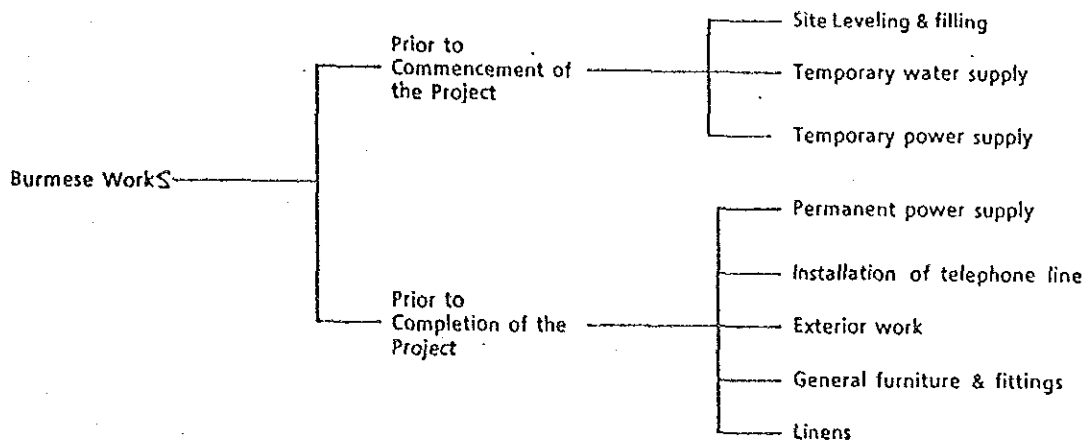
(5) Academic Department

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ANNEX II

(1) Summary of Cost Estimation of the Works which will be undertaken by the Burmese side.

1. Scope



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2. Summary of Cost Estimation of the Works:

	Item	Foreign Currency (Yen)	Local Currency (KY)
Prior to Commencement of the Project	1. Site leveling & filling	—	2,570,400
	2. Temporary water supply	705,000	28,100
	3. Temporary power supply	1,295,000	1,760
	Sub Total	2,000,000	2,600,260
Prior to Completion of the Project	4. Permanent power supply	2,874,000	6,570
	5. Installation of telephone line	3,170,000	54,100
	6. Exterior work	—	234,150
	7. General furniture & fittings	—	63,620
	8. Linens	—	539,630
	Sub Total	6,044,000	898,070
	Grand Total	8,044,000	3,498,330

K. T.

(3) Summary of Cost Estimation of Operation & Maintenance of the Project

Item		Operation & Maintenance Cost (Annually)			
		F. Currency (Yen)	L. Currency(KY)		
Personnel Expenses	1. Personnel Expense		1654860	From PHP-III	
Operation & Maintenance Expenses	2. Utility	-	504500	Supplied from CMSD	
	3. Telephone Charge	-	70000		
	4. Building Operation & maintenance	6380000	250000		
	5. Medical Equipment operation & maintenance	(58246000)	(140000)		
	6. Administration Expenses		50000		
	7. Transportation		38000		
	8. Pharmacuetical	(100000)	(1800000)		CMSD Rgn-Mdy. Supplied from CMSD
		Total	6380000 (58346000)		2567360 (1940000)

CMSD: Central. Medical Store Depot.

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MINUTES OF DISCUSSIONS
ON
THE DRAFT REPORT OF THE BASIC DESIGN STUDY
OF
MANDALAY TEACHING HOSPITAL
IN
THE SOCIALIST REPUBLIC OF THE UNION OF BURMA

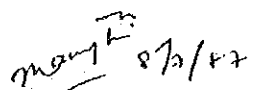
At the request of the Government of the Socialist Republic of the Union of Burma for Grant Aid for the Project for Construction of Mandalay Teaching Hospital (hereinafter referred to as "the Project "), the Government of Japan decided to conduct a Basic Design Study on the Project and entrusted the study to the Japan International Cooperation Agency (JICA). JICA sent the Basic Design Study (Phase I) Team headed by Dr. Osamu YOSHIDA, Professor of Faculty of Medicine, Kyoto University to Burma from January 28th to February 24th, 1987 and the Basic Design Study (Phase II) Team headed by Dr. Kanji TORIZUKA, Vice President, Fukui School of Medicine from April 22nd to May 3rd, 1987.

As the result of the survey and discussions, JICA prepared a Draft Final Report on the study and dispatched a Mission to explain and discuss the Report starting from July 1st to July 10th, 1987.

Both parties had a series of discussions on the Report and have agreed to recommend to their respective Governments that the major points of understanding reached between them, attached herewith, should be examined towards the realization of the Project.

Rangoon, July 8th, 1987


DR. YOSHIHIRO YAMASHITA
Leader
The Basic Design Study Team
Japan International Cooperation
Agency (JICA)


DR. U TIN U
Director-General
Department of Health

ATTACHMENT

1. The Burmese side principally has agreed to the basic design proposed in the Draft Final Report (with minor but appropriate alterations in design, facilities and equipment, mutually agreed upon to be incorporated in the Final Report).
2. The Final Report (10 copies in English) on the Project will be submitted to the Burmese side by the middle of August, 1987.
3. The Burmese side understood the system of Japan's Grant Aid Programme and confirmed the arrangements to be taken by the Government of the Socialist Republic of the Union of Burma for the realization of the Project as agreed upon in the "Minutes of Discussions" dated February 6th, 1987.
4. The Government of the Socialist Republic of the Union of Burma will release the necessary budget at the proper time upon the signing and exchanging of Note for the Project by both Governments.

*manipulated
8/13/87*

K.H.

II Member of the Basic Design Study Team

II-1 Basic Design Study Phase-1 (January 28 - February 24, 1987)

Dr. Osamu YOSHIDA	Team Leader	Professor, Department of Urology, Faculty of Medicine, Kyoto University
Dr. Takahide MORI	Medical Care Planning	Professor, Department of Gynaecology and Obstetrics, Faculty of Medicine, Kyoto University
Dr. Toshihiko BAN	"	Professor, Department of Cardio Vascular Surgery, Faculty of Medicine, Kyoto University
Dr. Kunihiro UEDA	Medical Care Planning	Associate Professor, Department of Laboratory Medicine, Faculty of Medicine, Kyoto University
Ms. Yuriko MINAMOTO	Project Coordinator	Grant Aid Planning and Survey Department, JICA
Mr. Toshio ITO	Project Manager Architect	Yamashita Architects and Engineers, Inc.
Mr. Munetake SUGANO	Architect	"
Mr. Norio ISHIOKA	Electrical Engineer	"
Mr. Tsukasa TAMAKI	Mechanical Engineer	"
Mr. Minoru TANAKA	Structural Engineer	"
Mr. Akira SATO	Medical System	"
Mr. Kazumi AKITA	Medical Equipment	"

II-2 Basic Design Study Phase-2 (April 22 - May 3, 1987)

Dr. Kanji TORIZUKA	Team Leader	Vice President, Fukui School of Medicine
Mr. Toshio NAMAI	Project Coordinator	Grant Aid Planning and Survey Department, JICA
Mr. Toshio ITO	Project Manager Architect	Yamashita Architects and Engineers, Inc.
Mr. Munetake SUGANO	Architect	"
Mr. Akira SATO	Medical System	"

II-3 Explanation of Draft Report (July 1 - July 10, 1987)

Dr. Yoshihiro HAMASHIMA	Team Leader	Professor, Kyoto Women's University
Mr. Kensei ODA	Cooperation Planning	Grant Aid Cooperation Division, Economic Cooperation Bureau, Ministry of Foreign Affairs
Mr. Toshio NAMAI	Project Coordinator	Grant Aid Planning and Survey Department, JICA
Mr. Toshio ITO	Project Manager Architect	Yamashita Architects and Engineers, Inc.
Mr. Norio ISHIOKA	Electrical Engineer	"
Mr. Akira SATO	Medical System	"

III Survey Schedule

III-1 Basic Design Study Phase-1 (January 28 - February 24, 1987)

No.	Date	Place	Survey Schedule
1	Jan. 28 (Wed)	Movement	Lv. Tokyo, Ar. Bangkok
2	29 (Thu)	Movement	Lv. Bangkok, Ar. Rangoon (Ms. MINAMOTO and Messrs. MORI, BAN and UEDA)
3	30 (Fri)	Rangoon	Meetings at the Embassy of Japan and JICA Rangoon Office Survey of Department of Medical Research Courtesy call on Department of Health (DOH)
		Movement	Lv. Tokyo, Ar. Bangkok (Messrs. ITO, SUGANO, ISHIOKA, TANAKA, TAMAKI, SATO and AKITA)
4	31 (Sat)	Rangoon	Discussion at DOH
		Movement	Lv. Bangkok, Ar. Rangoon (Messrs. ITO, SUGANO, ISHIOKA, TANAKA, TAMAKI, SATO and AKITA)
		Rangoon	Team meeting
5	Feb. 1 (Sun)	Movement	Lv. Rangoon, Ar. Mandalay (Messrs. MORI, BAN and UEDA)
		Rangoon	Survey of local construction situation Team meeting
6	2 (Mon)	Movement	Lv. Rangoon, Ar. Mandalay (Ms. MINAMOTO and Messrs. ITO, SUGANO, ISHIOKA, TANAKA, TAMAKI, SATO and AKITA)
		Mandalay	Survey of the proposed construction site, construction site of Worker's Hospital, and Mandalay General Hospital (MGH) Team meeting

No.	Date	Place	Survey Schedule
		Movement	Lv. Tokyo, Ar. Bangkok (Mr. YOSHIDA)
7	3 (Tue)	Mandalay	Survey of the Primary Health Center and the Township Hospital at Maymyo Discussion at MGH
		Movement	Lv. Bangkok, Ar. Rangoon (Mr. YOSHIDA)
8	4 (Wed)	Mandalay	Lv. Rangoon, Ar. Mandalay (Mr. YOSHIDA) Discussion at MGH and survey of MGH
9	5 (Thu)	Movement	Lv. Mandalay, Ar. Rangoon (Messrs. YOSHIDA, MORI, BAN, UEDA, ITO, SATO and AKITA and Ms. MINAMOTO)
		Mandalay	Survey of the proposed construction site, infrastructure and local construction situation
10	6 (Fri)	Rangoon	Signing of the Minutes of Discussions at Rangoon Courtesy call on Foreign Economic Relations Department (FERD)
		Mandalay	Discussion at MGH Survey of MGH, EENT Hospital and Township Hospitals (Amarapura and Sagain Division)
11	7 (Sat)	Mandalay	Lv. Rangoon, Ar. Mandalay (Messrs. ITO, SATO and AKITA) Survey of Worker's Hospital Discussion at MGH Team meeting
		Movement	Lv. Rangoon, Ar. Bangkok (Messrs. YOSHIDA, MORI, BAN and UEDA and Ms. MINAMOTO)
12	8 (Sun)	Movement	Lv. Mandalay, Ar. Rangoon (Messrs. ISHIOKA, TANAKA and TAMAKI)
		Rangoon	Analysis of related data

No.	Date	Place	Survey Schedule
13	9 (Mon)	Mandalay Rangoon	Discussion at MGH Report to the JICA Rangoon Office Discussion with Construction Corporation, Timber Corporation, Electric Power Corporation and Mining Ministry at DOH. Survey of New Rangoon General Hospital and Nurse Training Center
14	10 (Tue)	Mandalay Rangoon	Discussion at MGH and survey of MGH Discussion with Road Transport Corporation, Railway Corporation, Inland Water Transport Corporation and Burma Airway corporation at DOH Survey of Rangoon General Hospital
15	11 (Wed)	Mandalay Rangoon Movement	Discussion at MGH Survey of Furniture Factories of Timber Corporation and New Rangoon General Hospital Lv. Mandalay, Ar. Rangoon (Messrs. ITO, SUGANO, SATO and AKITA)
16	12 (Thu)	Rangoon	Team meeting Analysis of related data
17	13 (Fri)	Rangoon	Report to the JICA Rangoon Office Discussion at DOH Discussion at Construction Corporation Team meeting
18	14 (Sat)	Rangoon	Survey of the Vegetable and Fruit Research and Development Center Survey of the Youth Training Center Lv. Rangoon, Ar. Bangkok (Messrs. ISHIOKA, TANAKA and TAMAKI)
19	15 (Sun)	Rangoon	Team meeting Lv. Bangkok, Ar. Tokyo (Messrs. ISHIOKA, TANAKA and TAMAKI)

No.	Date	Place	Survey Schedule
20	16 (Mon)	Rangoon	Survey of New Rangoon General Hospital, Nurse Training Center and Rangoon General Hospital Discussion at DOH
21	17 (Tue)	Rangoon	Discussion at Central Medical Store Depot (CMSD) and survey of CMSD Discussion at National Health Laboratory
22	18 (Wed)	Rangoon	Survey of Institute of Medicine 1, Rangoon and Institute of Medicine 2, Rangoon
23	19 (Thu)	Rangoon	Survey of North Okkalapa Hospital
24	20 (Fri)	Rangoon	Report to the JICA Rangoon Office Discussion at DOH
25	21 (Sat)	Rangoon	Team meeting Analysis of collected data
26	22 (Sun)	Rangoon	Team meeting Analysis of collected data
27	23 (Mon)	Rangoon Movement	Discussion at DOH Lv. Rangoon, Ar. Bangkok (Messrs. ITO, SUGANO, SATO and AKITA)
28	24 (Tue)	Movement	Lv. Bangkok, Ar. Tokyo (Messrs. ITO, SUGANO, SATO and AKITA)

III-2 Basic Design Study Phase-2 (April 22 - May 3, 1987)

No.	Date	Place	Survey Schedule
1	Apr. 22 (Wed)	Movement	Lv. Tokyo, Ar. Bangkok (Messrs. ITO, SUGANO and SATO)
2	23 (Thu)	Movement	Lv. Bangkok, Ar. Rangoon (Messrs. ITO, SUGANO and SATO)
3	24 (Fri)	Rangoon	Meeting at JICA Rangoon Office Courtesy call on DOH and explanation of the Interim Report Courtesy call on FERD
4	25 (Sat)	Movement	Lv. Rangoon, Ar. Mandalay (Messrs. ITO, SUGANO and SATO)
		Mandalay	Survey of the construction site Discussion at MGH
5	26 (Sun)	Mandalay	Discussion at MGH
		Movement	Lv. Tokyo, Ar. Bangkok (Messrs. TORIZUKA and NAMAI)
6	27 (Mon)	Movement	Lv. Mandalay, Ar. Rangoon (Messrs. ITO, SUGANO and SATO)
		Rangoon	Discussion at DOH Team meeting
		Movement	Lv. Bangkok, Ar. Rangoon (Messrs. TORIZUKA and NAMAI)
7	28 (Tue)	Rangoon	Meetings at the Embassy of Japan and JICA Rangoon Office Discussion at DOH Team meeting
8	29 (Wed)	Rangoon	Courtesy call on Ministry of Health Discussion at DOH
9	30 (Thu)	Rangoon	Signing of the Minutes of Discussions Survey of Burma Pharmaceutical Industry and Development Center for Pharmaceutical Technology

No.	Date	Place	Survey Schedule
			Report to the Embassy of Japan and JICA Rangoon Office
10	May 1 (Fri)	Rangoon	Survey of the construction site of the Irrigation Technology Center
		Movement	Lv. Rangoon, Ar. Bangkok (Messrs. TORIZUKA and NAMAI)
11	2 (Sat)	Movement	Lv. Rangoon, Ar. Bangkok (Messrs. ITO, SUGANO and SATO)
			Lv. Bangkok, Ar. Tokyo (Messrs. TORIZUKA and NAMAI)
12	3 (Sun)	Movement	Lv. Bangkok, Ar. Tokyo (Messrs. ITO, SUGANO and SATO)

III-3 Explanation of Draft Report (July 1 - July 10, 1987)

No.	Date	Place	Survey Schedule
1	July 1 (Wed)	Movement	Lv. Tokyo, Ar. Bangkok (Messrs. HAMASHIMA, NAMAI, ITO, ISHIOKA and SATO)
2	2 (Thu)	Movement	Lv. Bangkok, Ar. Rangoon (Messrs. HAMASHIMA, NAMAI, ITO, ISHIOKA and SATO)
3	3 (Fri)	Rangoon	Courtesy call on the Embassy of Japan and Meeting at JICA Rangoon Office, and explanation of the Draft Report Courtesy call on FERD Explanation of Draft Report at Department of Health (DOH)
		Movement	Lv. Tokyo, Ar. Bangkok (Mr. ODA)
4	4 (Sat)	Rangoon	Explanation of Draft Report and Discussion at DOH
		Movement	Lv. Bangkok, Ar. Rangoon (Mr. ODA) Team meeting
5	5 (Sun)	Rangoon	Team meeting
6	6 (Mon)	Rangoon	Courtesy call on Ministry of Health Explanation of Draft Report and Discussion at DOH Team meeting
7	7 (Tue)	Rangoon	Discussion at DOH Team meeting
8	8 (Wed)	Rangoon	Signing of the Minutes of Discussions Survey of Department of Medical Research
9	9 (Thu)	Movement	Lv. Rangoon, Ar. Bangkok (Messrs. HAMASHIMA, ODA, NAMAI, ITO, ISHIOKA and SATO)
10	10 (Fri)	Movement	Lv. Bangkok, Ar. Tokyo (Messrs. ODA, NAMAI, ITO, ISHIOKA and SATO) Lv. Bangkok, Ar. Osaka (Dr. HAMASHIMA)

IV Member of the Burmese Counterparts

1. Ministry of Health

H.E. U Tun Wai (Minister)
Dr. U Tun Hla Pru (Deputy Minister)
U Tha Lwin (Head of Minister's Office)

2. Department of Health

Dr. U Tin U (Director General)
Dr. U Kyaw (Director of Medical Care)
Dr. U Myint Thein (Deputy Director of Medical Care)
Dr. U Ohn Han (Assistant Director of Medical Care)
Dr. Daw May Saw Myint (Medical Statistician)

3. Department of Medical Education

Dr. U Pe Thein (Director General)

4. Mandalay General Hospital

Dr. U Aung Myint (Medical Superintendent)
Dr. Thaug Myint (Police Surgeon)
Dr. U Khin Mg Yin (Department of Pathology)
Dr. Daw Sheila San San Myint (Chief Anaesthetist)
Dr. U Tun Aung Gyaw (Deputy Medical Superintendent)
Dr. U Nu (Assistant Medical Superintendent)
Dr. U Ohn Swe (Medical Officer, Blood Bank)

5. Institute of Medicine, Mandalay

Dr. U Tun Thin (Rector)
Prof. U Bo Ni (Department of Surgery)
Prof. U Khin Mg Win (Department of Medicine)
Prof. U Aung Khin (Department of Surgery)

- Prof. Daw Mya Mya (Department of Obstetrics & Gynaecology)
 Prof. Daw Thein Thein Myint (Head of Department of Paediatrics)
 Prof. U Hla Oo (Department of Pathology)
6. New Rangoon General Hospital
- Dr. Ko Ko Gyi (Deputy Medical Superintendent)
 U Khin Maung Aye (Administrative Officer)
7. Nurse Training Center
- Daw Khin Htwe (Deputy Principial)
 Daw Aye Myint (Administrative Officer)
8. Central Medical Store Depot
- Dr. Than Tun (Assistant Manager)
 Dr. San Tin (Assistant Director)
 U Khin Soe (Electrical Engineer)
9. National Health Laboratory
- Dr. Mehn Soe Myint (Director)
10. Institute of Medicine 1, Rangoon
- Dr. U Hla Myint (Rector)
11. Institute of Medicine 2, Rangoon
- Dr. U Tin Aung Swe (Rector)
 Dr. Tin Pe (Assistant Director,
 Department of Medical Education)
12. Rangoon Children Hospital

Dr. Tin Maung Aye (Medical Superintendent)
Dr. Khin Khin Lin (Assistant Medical Superintendent)
Dr. Hla Tun (Chief Anaesthesiologist)

13. Foreign Economic Relations Department

U Soe Thwin (Director General)
U Myint Aung (Director)
U Antt Kyaw (Deputy Director)
U Than Myint (Assistant Director)
U Kyaw Tin (Acting Director General)

14. Construction Corporation

U Aye Ko Ko (Director of Planning)
U Win Htain (Staff Officer I, Electrical)
U Myint Thein (Staff Officer I, Architect)
U Tha Ka Doe (Staff Officer II, Water & Sanitary)
U San Pe (Staff Officer II, Design)
U Sein Win (Staff Officer II, Soil Lab.)
U Khin Mg Yin (Staff Officer II, Architect)
U Aung Hla (Staff Officer III, Q/S)
U Than Aung (Staff Officer III, Soil Lab.)
U Myint Maung (Executive Engineer, Mandalay)
U Soe Myint (Assistant Engineer, Mandalay)

15. Irrigation Department

U Ko Ko Gyi (Executive Engineer, Mandalay)

16. Mandalay City Development Committee

U Yu Tin (Engineer)
U Mya Thaug (Project Manager,
Mandalay Water Supply Project)

17. Electrical Power Corporation

U Aye Su (Assistant Chief Engineer, Rangoon)

U Ne Win (Engineer, Mandalay)

18. Ministry of Mining

U Hla Sint (Director General,
Planning and Inspection Inspectorate)

19. Personnel Related to Transportation

U Win Pe (Senior Traffic Assistant,
Burma Airway Corporation)

U Kyaw (Divisional Manager,
Inland Water Transport Corporation)

Dr. Myo Aung (Chief Medical Officer,
Railway Corporation)

U Tin Latt (Lieutenant Colonel,
Road Transport Corporation)

20. Timber Corporation

U Aung Kyi (Deputy General Manager)

21. Department of Medical Research

Dr. U Aung Than Batu (Director General)

V Well Water Analysis

Well water analysis of Mandalay Water Supply Project is attached.

MANDALAY WATER SUPPLY PROJECT

CONTRACT No. ² EN-045

SCHEDULE OF WATER ANALYSIS

PAGE 1 OF 1

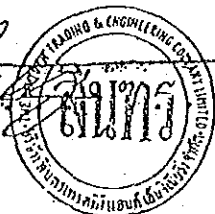
CONTRACT NAME : CHLORINATION EQUIPMENT

Tenderer THE SINTORN TRADING & ENGINEERING COMPANY LIMITED

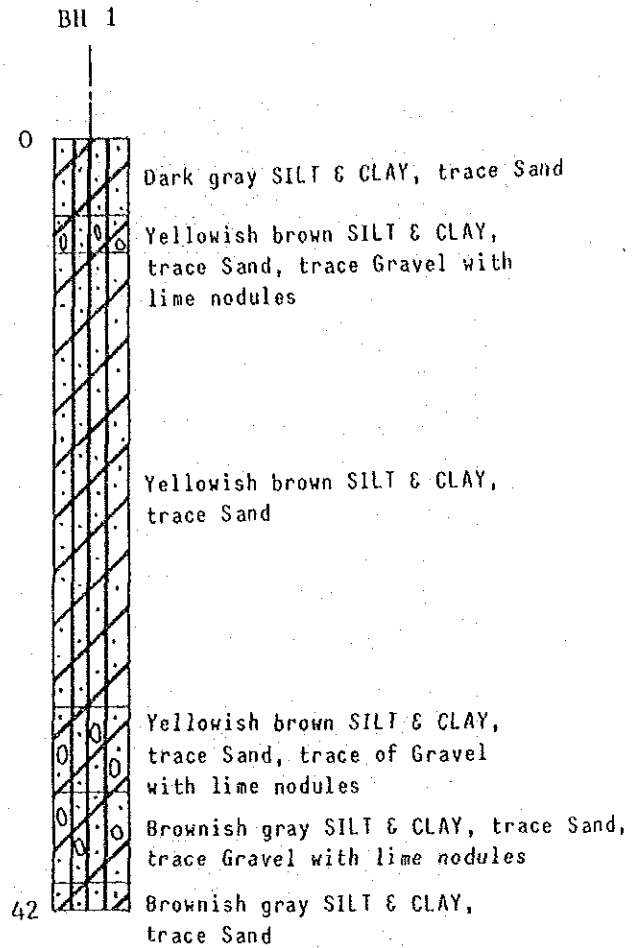
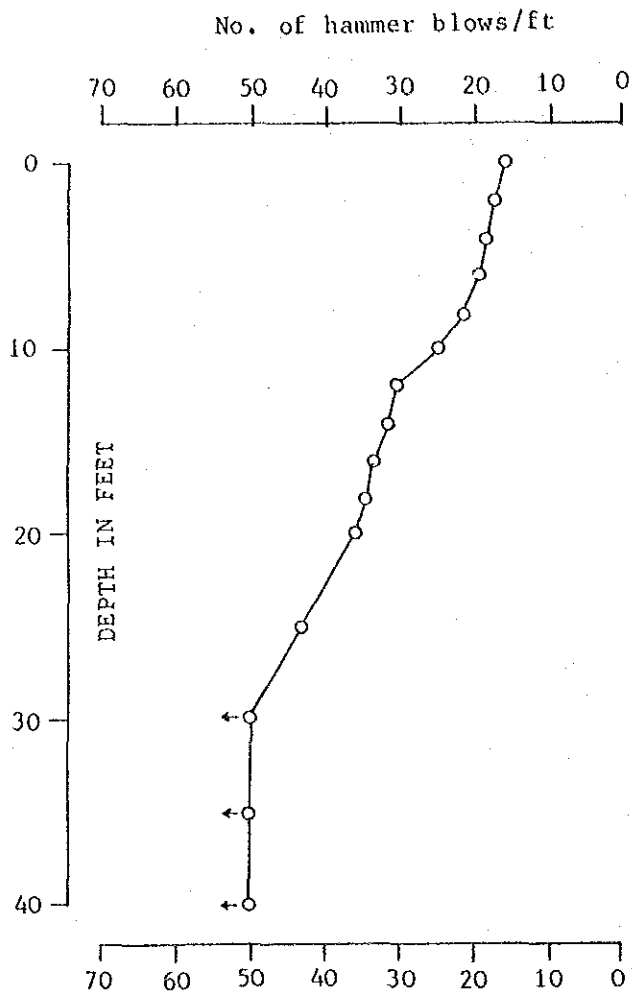
DESCRIPTION	REQUIREMENT	OFFER
DEPTH OF WELL = 400 ft		(-/-) Indicate Compliance
DEPTH COLLECTED = 200 ft		
<u>PHYSICAL PROPERTIES</u>		
(1) COLOUR	2 Units (Pt.Co) Scale	
(2) ODCUR	Nil	
(3) TURBLDITY	0.60 FTU (Formagin turbidity Units)	
(4) CONDUCTIVITY	360 micro-mhos/cm	
(5) pH	6.9 (BDH Full Range Indicator)	
<u>CHEMICAL PROPERTIES</u>		
(1) CALCIUM	8.58 mg/l	
(2) CHLORIDE	45.00 mg/l	
(3) COPPER	Nil	
(4) HARDNESS (Ca CO ₃)	18.50 mg/l	
(5) IRON (Dissolved)	0.02 mg/l	
(6) NITRATE	1.25 mg/l	
(7) NITRITE	0.028 mg/l	
(8) NITROGEN (Ammonia)	0.009 mg/l	
(9) MANGANESE	Nil	
(10) SULPHATE	11.50 mg/l	
(11) OXYGEN (Dissolved)	7.00 mg/l	

Date

Tenderer's Signature . 14/3/66 . . .

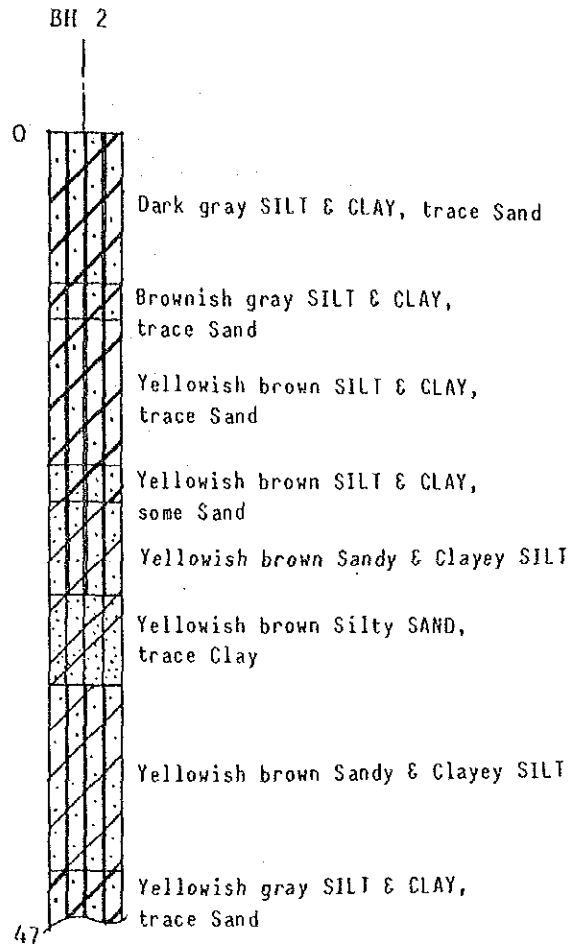
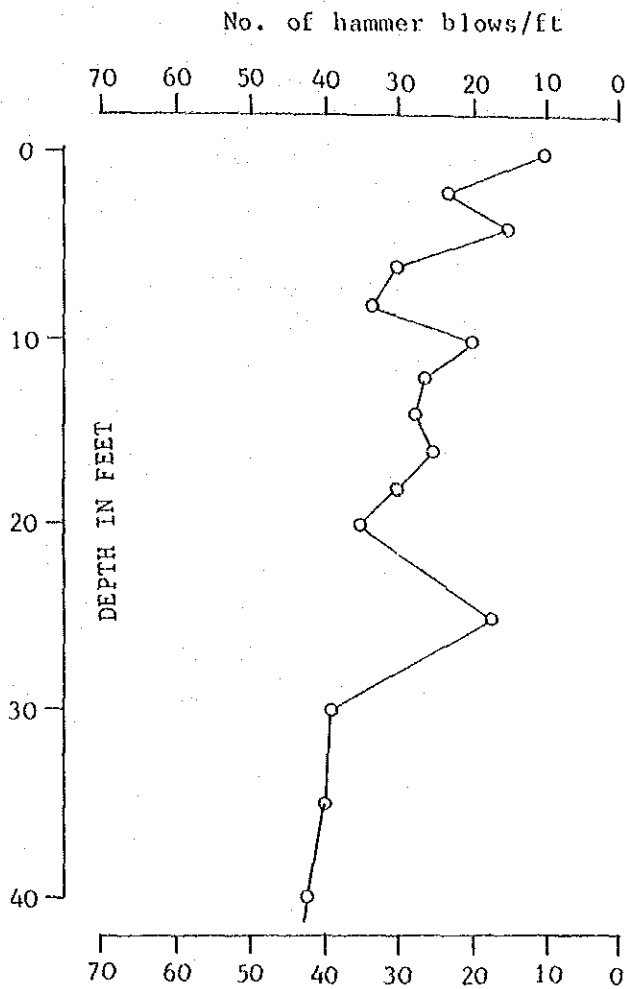


VI Boring Data



LEGEND FOR SAMPLING

- STANDARD SHELBY SAMPLER DRIVEN WITH 140 LB HAMMER DROP, 30"



LEGEND FOR SAMPLING

○ STANDARD SHELBY SAMPLER DRIVEN WITH 140 LB HAMMER DROP, 30"

VII List of Collected Data

Title of Data	Source
1. BASIC DATA RELATED TO MANDALAY TEACHING HOSPITAL	DEPARTMENT OF HEALTH JANUARY 1987
2. MANUAL FOR APPRENTICE DOCTOR (1977)	DEPARTMENT OF MEDICINE, INSTITUTE OF MEDICINE, MANDALAY
3. MANUAL FOR APPRENTICE DOCTOR (1985-1986)	DEPARTMENT OF MEDICINE
4. PRODUCTS INDEX	BURMA PHARMACEUTICAL INDUSTRY, MINISTRY OF NO. 1 INDUSTRY PHARMACEUTICAL INDUSTRIES CORPORATION
5. FURNITURE PRICES (January 22, 1986)	TIMBER CORPORATION

JICA