

CHAPTER 5
EVALUATION OF THE PROJECT

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Although the forestry industry accounts for only 2.1% of Burma's GDP (1984/85) and 1.2% of Burma's labor force, forestry products accounted for a relatively high 27.3% of Burma's cumulative total exports during the 1982-86 period (the 4th Four-Year Plan period). The share held by forest products of the nation's total exports during that period was second only to that of agricultural products (51.0%). The nation has run chronic trade deficits, and its external monetary reserves have been declining. In this context, the Burmese Government now places utmost emphasis on the promotion of forestry products exports.

It is against such a background that this project, which aims at promoting forestry training programs for the staff of the Forest Department and the leaders of local communities, as well community development, is being evaluated.

1. Evaluation of the Forestry Training Programs in Burma

The existing forestry training programs implemented at the Burma Forest School and other institutions are considered insufficient due to the shortages of the necessary facilities, equipment and machinery. It should be noted that these existing training programs do not offer lectures on the latest techniques in forestry administration and control, training courses to teach the use of modern equipment and machinery, or training courses on the basics of forestry.

The prospective CFDTTC training programs, which are designed to overcome the defects of existing training programs, will greatly contribute to the improvement of forestry technology in Burma.

2. Evaluation of the Afforestation Programs in Burma

As a result of the accelerated promotion of the planting of such useful trees as teak, pyinkado and fast-growing trees such as acacia, pine and eucalyptus since the 3rd Four-Year Plan, the shortage of forestry technical staff and workers to cope with the increase in jobs to cultivate

and manage these trees and their training have become a serious problem in Burma. The prospective training programs in afforestation will greatly contribute to the expansion of the plantation areas in Burma.

3. Evaluation of Community Development

Local community residents play a very important role in conserving forests and cultivating and maintaining plants to be used as fuel. As a result, there has been an increasing demands for the expedition of community development through the promotion of forestry, but no appropriate training programs to satisfy this demand have been considered.

The prospective training programs for community leaders will contribute to enhanced community services and living standards for local residents.

4. Evaluation of the New Organization of the Forest Department

In April 1987, the Forest Department implemented a plan to increase its personnel to 14,751 from the current level of 10,625 and is going to recruit about 4,000 employees. The training programs targeted at these newly recruited personnel will contribute to the improvement in their skills and also increasing their adaptability to their work places.

5. Evaluation of Demand to Increase Domestic Supply of Timber

The Burmese effort to increase the domestic supply of timber has two aims. The first is to increase the supply of fuelwood and slim logs needed by local residents, and to meet the Burmese construction industry's increasing demand for timber. Fuelwood, in particular, is in great demand in relatively limited areas such as heavily populated regions and metropolitan areas, which means that forests in these areas are likely to be destroyed quickly. It should also be noted that the demand for fuelwood is enormous. The consumption of fuelwood during the 4th Four-Year Plan amounted to 28,037,000m³ and the rate of increase in demand for fuelwood is also very high. The average annual production of charcoal is 764,500 cubic tons.

The second is to reduce foreign currency payments on timber (particularly timber as a raw material for paper and pulp). It is estimated that Burma is currently importing about 22,000 metric tons of paper a year which is equivalent to about 88,000m³ of timber.

Since it is expected that domestic demand for paper will increase in the future, it is necessary to take steps to reduce dependence on the foreign supply of paper.

Efforts to increase the domestic production of fuelwood and timber for industrial use, in particular, will contribute to the promotion of community development and the protection of forests in densely populated areas and will reduce the drain on foreign reserves.

6. Evaluation of Environmental Protection through Forestry Promotion

The benefits of forestry promotion for local residents and the natural environment include the supply of water, the prevention of disasters and the preservation of the living environment, in addition to their function as a forestry product source. Forests exert a great influence on the catchment areas of rivers, farm land and urban areas.

Efforts to prevent artificial destruction of forests and to initiate activities by local residents to plant and tend trees by promoting the importance of forests to the general public will contribute to the conservation of the natural environment.

7. Evaluation of Burmese Export Promotion

In 1984/85 forestry products accounted for 33.4% of Burma's total exports, second only to the 43.5% for agricultural products. Since world farm product prices are declining due to the recent global oversupply, it is expected that the share of exports held by timber, particularly teak, in the nation's total exports will increase. In fact, timber is the single major export item of Burma. Therefore, efforts to increase the production of teak under a long-term program, to promote the utilization and development of "other useful hardwood" that allows massive felling, and to

develop new uses for forestry products, will contribute to the nation's export promotion.

The impacts of this project has been evaluated being divided into above seven categories. The categories listed above are so closely related to one another that the evaluation was almost redundant. Nevertheless, as a result of the above evaluations, it could be concluded that this project will have a profound impact on the future direction of the Burmese economy.

After completion of the facilities, CFDTC will come under the direct control of the Training Department established within the new organization of the Forest Department. The Training Department initially had a work force of 68, 10 managers and 58 staffers. This staff is sufficient to cover the training programs now being offered at the Burma Forest School. To cover those to be offered at CFDTC, it will be necessary to increase personnel by about 150, so the Forest Department intends to boost the number of full-time personnel before CFDTC opens. The current number of the full-time personnel of 150 for CFDTC accounts for only 1.0% of the number of full-time personnel of the recently reorganized the Forest Department (14,751). The Department intends to increase the number of its full-time personnel by about 4,000. Since construction of most of the new buildings of the Forest Department has already been completed, it will be easy to recruit additional personnel. As for the recruitment of instructors (including a gymnastics instructor), the most important members of the new training center, it was decided to transfer eight of the instructors at the Burma Forest School to this training center. In addition, some of the staff at the Forest Department headquarters, the Forest Research Institute, the Center for Research on Accumulation of State Forests, the Timber Corporation and other institutions will be transferred to this training center as instructors or lecturers. Since the CFDTC site is an 80 minute car ride from Rangoon City, there should be no difficulties in recruiting part-time lecturers.

As regards the administration of CFDTC, part of the training programs to be offered at CFDTC are already being implemented at the Burma Forest School. So it can be assumed that the administration of CFDTC will be

conducted effectively and efficiently on the basis of the administration experience accumulated at the Burma Forest School. According to the preliminary calculations, the cost for maintenance and administration of the new facilities amounts to 2,100,000Ks, which accounts for 2.11% of the Forest Department's current expenditure of 99,300,000Ks. Since the maintenance and administration costs of CFDTTC will be appropriated from the Forest Department's budget for 1989/90, its ratio to the Forest Department's current expenditure will be smaller than estimated. This means that the appropriation for the maintenance and administration cost of CFDTTC from the Forest Department's budget will be feasible.

Due to the nature of forestry, it will be very difficult to expect this project to have immediate effects on the Burmese economy. However, the potential for long-term socio-economic impact on the nation's future is great. The system of maintaining and administering the facilities is fully feasible. In view of the Burmese Government's commitment to this project, it is reasonable and advisable for the Japanese Government to offer the grant aid for implementation of this project.

CHAPTER 6
CONCLUSION AND RECOMENDATIONS

CHAPTER 6 CONCLUSION AND RECOMMENDATIONS

As a result of the examination of the contents of the request made by the Burmese Government, the field survey of the background and particulars of the project and the analysis on the results of the field survey, it has been concluded that the implementation of the project for the establishment of CFDTTC, in line with the contents of the project as detailed in this report, is deemed to be imperative.

Since the project site is located on the outskirts of Rangoon City, it has many advantages in terms of transportation and administration. It will be easy to offer training programs to the staff of the Forest Department and residents of community. Furthermore, the instructors and administrative staff will find it easy to commute to work. In addition, the scale of the project site, the geographical conditions, and the local environment are appropriate for the construction of the projected facilities.

As this project has great socio-economic significance for Burmese society and will produce the multiplicative effect to the society, it is considered reasonable and advisable for the Japanese Government to offer the grant aid for implementation of this project.

The following suggestions are presented with a view to expediting the implementation of this project and ensuring the smooth and effective operation of the facilities.

A. Implementation of The Project

1. Prompt Completion of the Necessary Office Procedures

As this project will be implemented in accordance with the principles of the grant aid program of the Japanese Government, there are certain time limits involved, such as the need to complete the construction works by the end of a fiscal year. It is essential, therefore, that the necessary office procedures for the Exchange of Notes, consultant agreement, construction contract and other contracts relative to procurement of equipment shall be completed promptly.

2. Smooth Implementation of the Construction Work to Be Undertaken by the Burmese Government

The Burmese Government is required to allocate funds for the construction work to be covered by the Burmese Government at a proper date in the fiscal year and ensure smooth implementation of the construction work. It is necessary that the site preparation work and the power line installation work, in particular, be completed by Burmese side before commencement of the construction work covered by the Japanese side.

3. Cooperation for Expediting the Construction Work

It is necessary that the procedures for expediting the construction work, including negotiations with Burmese government authorities concerned, procedures for customs clearance, transportation and necessary procedures with banks, shall be implemented promptly. It is desirable that the Forest Department establish a project implementation committee in its organization with adequate administrative functions. Also, the cooperation of the Ministry of Agriculture and Forests, the Construction Corporation and other related Burmese government agencies is indispensable to the success of this project.

B. Forestry Training and Administration of the Center

1. Forestry Training

It is expected that a total of 1,100 trainees will be trained at the center each year. Planning a well balanced training and administration program that reflects the social needs of forestry training is indispensable in maintaining and administering training facilities of this scale. Furthermore, the training programs implemented in the center and their results must meet the specific needs of the Burmese forestry industry. Accordingly, it is desirable that the center be administered in close collaboration with other departments of the Forest Department and other related Burmese government agencies.

2. Selection of Instructors

A wide range of forestry training programs will be implemented in the center. It is desirable, therefore, to select administrative staffers and instructors who are expert in their respective disciplines before the commencement of the training programs and, at the same time, to establish a training and guidance system in cooperation with the Japanese experts who will be dispatched to Burma under the technical cooperation of the Japanese Government.

3. Budget

A sufficient budget is necessary for the smooth implementation of the training programs. Therefore, it is desirable that the importance of this project be fully understood and a suitable budget be drawn up for it.

4. Technical Cooperation

A long-term survey of the technical cooperation to be offered by the Japanese Government was being conducted by Japanese experts. It is to be desired that both the Burmese Government and the Japanese Government should continue their concerted efforts to realize viable technical cooperation to ensure this project achieves the maximum impact on the socio-economic welfare of the Burmese nation and its people.

ANNEX

I. Minutes of Discussion (Basic Design Study)

MINUTES OF DISCUSSIONS

ON

THE BASIC DESIGN STUDY

ON

THE PROJECT FOR CENTRAL FORESTRY DEVELOPMENT TRAINING CENTER

IN

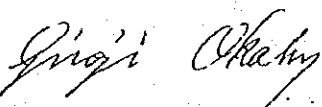
THE SOCIALIST REPUBLIC OF THE UNION OF BURMA

In response to the request of the Government of the Socialist Republic of the Union of Burma, the Government of Japan decided to conduct a basic design study on the Project for Central Forestry Development Training Center (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (JICA). JICA sent to Burma the study team headed by Mr. Hiroji Okabe, Inspector, Administrative Division, General Affairs Department of National Forests, the Forestry Agency, Ministry of Agriculture, Forestry & Fisheries (hereinafter referred to as "the Team") from February 2 to 23, 1987.

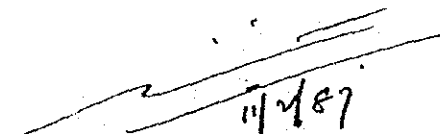
The team had a series of discussions on the Project with the officials concerned of the Government of the Socialist Republic of the Union of Burma headed by U Sein Maung Wint, Director General, Forest Department, Ministry of Agriculture & Forests and conducted a field survey.

As a result of the study, both sides 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, February 11, 1987.



MR. HIROJI OKABE
Team Leader
Basic Design Study Team
Japan International
Cooperation Agency.



U SEIN MAUNG WINT
Director General
Forest Department
Ministry of Agriculture
& Forests

ATTACHMENT

1. The objective of the Project is to establish Central Forestry Development Training Center with a view to contribute to the promotion of forestry development in Burma through the training of relevant personnel.
2. The site of the Project is located in Hmawbi Reserved Forest, Hmawbi Township, Rangoon Division.
(The site map is attached as ANNEX I)
3. Forest Department, Ministry of Agriculture & Forests is responsible for the execution of the Project.
4. Central Forestry Development Training Center will undertake the necessary training of relevant personnel for the development of forestry in Burma as follows.

(1) In-service training

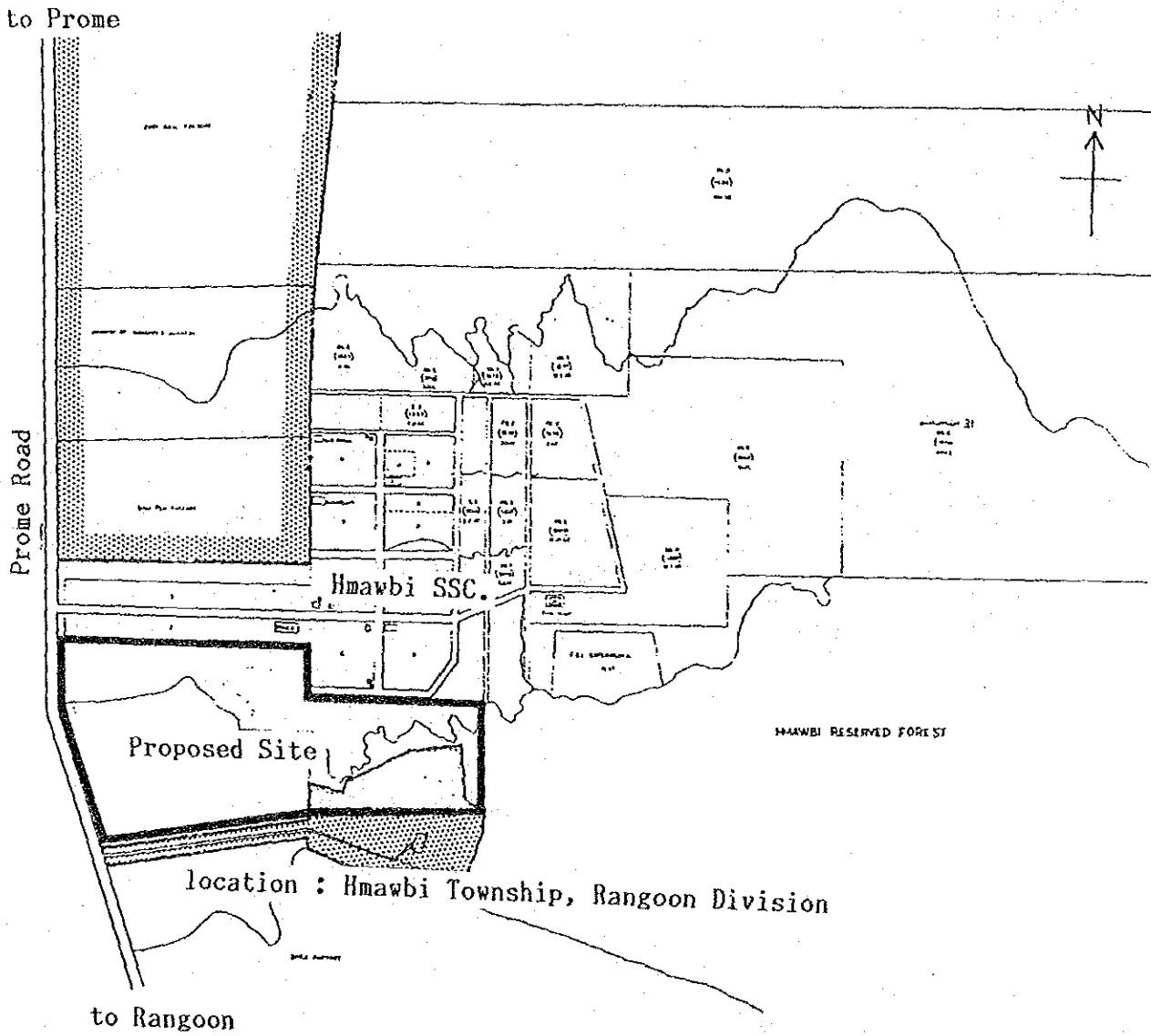
- A. Regular courses for
 - a. basic forest officer
 - b. advanced forest officer
 - c. forestry induction
- B. Special courses for
 - a. plantation technique
 - b. nursery practice
 - c. forest protection
 - d. forest road
 - e. forestry machinery
 - f. forestry extension and utilization
 - g. forest resource administration

(2) Public training

- A. Regular courses for
 - a. local community development
- B. Special courses for
 - a. agro-forestry
 - b. dendro-energy production

5. The Team will convey to the Government of Japan the requests of the Government of the Socialist Republic of the Union of Burma that the former takes necessary measures to cooperate by providing the facilities and equipment listed in Annex II within the scope of Japanese economic cooperation programme in grant form.
6. The Government of the Socialist Republic of the Union of Burma 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 the necessary measures listed in Annex III on condition that Japan's grant aid would be extended to the Project.

SITE MAP



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Annex II

Items requested by the Government of the Socialist Republic of the Union of Burma whose cost will be borne by the Government of Japan are as follows:

1. Construction of buildings and facilities such as;

- (1) Main Building for
 - a. Administration
 - b. Training
 - c. Laboratory
 - d. Others
- (2) Training hall
- (3) Workshop
- (4) Dormitory
- (5) Canteen
- (6) Nursery (including nursery house & store)
- (7) Others

2. Provision of equipment such as;

- (1) Laboratory equipment
- (2) Equipment for nursery
- (3) Equipment for silviculture
- (4) Equipment for forest protection against fire
- (5) Equipment for the survey of forest & forest road
- (6) Equipment for forest road construction & maintenance
- (7) Meteorological equipment
- (8) Equipment for workshop
- (9) Audio-visual equipment
- (10) Equipment for making teaching materials
- (11) Vehicles

Annex III

Following arrangements will be required to be taken by the Government of Burma.

1. To secure the site for the Project
2. To clear, level and reclaim the site (including the improvement of river courses) prior to commencement of the construction.
3. To construct fence and gate in and around the site
4. To construct the access road to the site prior to commencement of the construction
5. To obtain the building permit
6. To connect distributing line of electricity to the site
7. To connect the telephone trunk line to the MDF to be equipped inside the building
8. To provide furniture and materials for daily activities
9. To exempt taxes and to take necessary measures for customs clearance of the materials and equipment brought for the Project at the port of disembarkation
10. To accord Japanese national, whose services may be required in connection with the supply of the materials and equipment 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 necessary expenses other than those to be borne by the Grant
13. The Burmese side will not change the site of the Project, nor vary the functional contents of CFDTIC after it has been agreed upon by both Governments

II Minutes of Discussion (Explanation of Draft Final Report)

MINUTES OF DISCUSSIONS

ON

THE DRAFT FINAL REPORT

OF

THE BASIC DESIGN STUDY

ON

THE PROJECT FOR CENTRAL FORESTRY DEVELOPMENT TRAINING CENTER

IN


THE SOCIALIST REPUBLIC OF THE UNION OF BURMA

In response to the request of the Government of the Socialist Republic of the Union of Burma, the Government of Japan decided to conduct a basic design study on the Project for Central Forestry Development Training Center (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (JICA). JICA sent to Burma the Basic Design Study in February, 1987. The Basic Design Study Team had a series of discussions on the Project with the officials concerned of the Government of the Socialist Republic of the Union of Burma and carried out field survey.

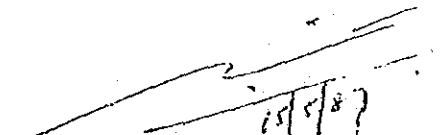
As a result of the discussions and survey, JICA prepared the Draft Final Report and dispatched a mission to explain and discuss the Draft Final Report from May 10 to 17, 1987.

Both sides had a series of discussions 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, May 15, 1987.



Mr. NORIAKI NIWA
Team Leader
JICA Study Team


U SEIN MAUNG WINT
Director General
Forest Department
Ministry of Agriculture
& Forests

ATTACHMENT

1. The Burmese side has agreed in principle to the basic design proposed in the Draft Final Report. Minor but appropriate alterations mutually agreed upon will be incorporated in the Final Report.
2. The Burmese side understood Japan's Grant Aid System and reconfirmed the measures 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 11, 1987.
3. JICA will submit the Final Reports (10 copies in English) to the Burmese side in June 1987.

(H)

III MEMBER OF THE BASIC DESIGN STUDY TEAM

III-1 Basic Design Study Team (Feb. 1 ~ Feb. 24, 1987)

. Mr. Hiroji OKABE	Team Leader	Forestry Agency, Ministry of Agriculture, Forestry and Fisheries,
. Mr. Noriaki NIWA	Project Coordinator	Grant Aid Planning and Survey Dept., JICA
. Mr. Ken MAJIMA	Project Manager Architect	Yamashita Architects and Engineers, Inc.
. Mr. Takanori TANAKA	Architect	"
. Mr. Masayoshi MASUZAWA	Mechanical Engineer	"
. Mr. Takeyoshi SUZUKI	Forestry Technique and Training	"
. Mr. Tsutou TOYAMA	Training Equipment Planning	"
. Mr. Kiyoshi FUJII	Nursery Planning	"

III-2 Basic Design Study Team

(Explanation of Draft Final Report, May 10 ~ May 17, 1987)

. Mr. Noriaki NIWA	Team Leader	Grant Aid Planning and Survey Dept., JICA
. Mr. Ken MAJIMA	Project Manager Architect	Yamashita Architects and Engineers, Inc.
. Mr. Takanori TANAKA	Architect	"
. Mr. Kiyoshi FUJII	Nursery Planning & Equipment	"

IV MEMBER OF THE BURMESE COUNTERPARTS

	NAME	STATUS
(1)	Ministry of Agriculture and Forests (MAF)	
	U HALAING MYINT	Deputy Minister
(i)	Planning and Statistic Department	
	U HLA MOE	Director General
	U MAUNG MAUNG BO	Director
(ii)	Forest Department (FD)	
	U SEIN MAUNG WINT	Director General
	U BA THWIN	Director (Administration)
	U SEIN WIN	Director (Operation)
	U OHN	Director (Planning)
	U TIN NYUNT	Director (Plantation Zone 2)
	U TIN MAUNG KYI	Dy. Director (Plantation Zone 1)
	U KYI MAUNG	Dy. Director (Planning)
	U SANN LWIN	Dy. Director (Planning)
	U SEIN TUN	Director (Burma Forest School)
	U BO THI HA	Dy. Director (Mandalay Forest Division)
	U WYNN HLAING	Assistant Director (Seed and Seedling Center, Forest Department, Hmawbi)
	U TIN WYNN	Forester (Seed and Seedling Centre, Forest Department, Hmawbi)
(2)	Foreign Economic Relations Department (FERD)	
	U SOE THWIN	Director General
	U MYINT AUNG	Director
	U THAN MYINT	Assistant Director
(3)	Construction Corporation (C.C.)	
	U MYINT THEIN	S.O.I (Architect)
	U TIN AUNG	S.O.II (Architect)
	U TINT SWE	S.O.II (Structural Design)
	U SAN TIN	S.O.II (Electric)
	U KYIN SEIN	S.O.II (Mechanical)
	U SEIN HTOON	S.O.II (Water & Sanitation)
	U SAW URBON	S.O.III (Electric)
	U NAY PHOO BA SWE	S.O.III (Q.S.)
	U THAR HAN	(Q.S.)

	NAME	STATUS
(4)	Electric Power Corporation (E.P.C.)	
	U AYE SU	Superintending Engineer
	U TIN MAUNG TUN	Assistant Executive Engineer
(5)	Post and Telecommunication Corporation (P.T.C.)	
	U HLA ZIN	Dy. General Manager (Training/Plan)
	U SOE WIN	Communication Engineer (Training/Plan)
	U HAN WIN	Communication Engineer Grade-4
	U TIN OO	Junior Communication Engineer Grade-1
	U SOE MYINT SHEIN	Communication Engineer Grade-1
	U MYO MYINT AUNG	Communication Engineer Grade-2
	U HANTHA MYINT	Dy. Superintending Engineer
(6)	Ministry of Energy	
	U TIN TUN	Head of Office
	U MYA THIN	Director
		(Petroleum Products Supply Corporation)
	U KYAW HTAY	Assistant Executive Engineer (M.O.E.)
(7)	Metal Industries Corporation (S.I.C.)	
	U THEIN SHWE	Dy. Director
(8)	Ceramic Industries Corporation (C.I.C.)	
	U KYAW WIN	Dy. Director
(9)	Agricultural Mechanization Department (A.M.D.)	
	U MYINT SOE	Assistant Director
(10)	Fire Services Department	
	U ZAW WIN	Assistant Director
	U TIN AUNG HTWE	Principal of Central Training School

V SURVEY SCHEDULE

V-1 Basic Design Study (Feb. 1 ~ Feb. 24, 1987)

	Date	Schedule and Remarks
1	Feb. 1 (Sun)	Lv. Tokyo (Messrs. Okabe, Niwa, Majima, Tanaka, Masuzawa, Suzuki, Toyama, Fujii) Ar. Bangkok
2	2 (Mon)	Lv. Bangkok, Ar. Rangoon
3	3 (Tue)	Courtesy call on the Embassy of Japan, JICA Office, Ministry of Agriculture and Forestry and FERD Submission of Inception Report and schedule meeting at Forest Department (FD) Team meeting
4	4 (Wed)	Submission and explanation of Questionnaires at FD Meeting with FD
5	5 (Thu)	Survey of the proposed construction site Survey of Central Agricultural Development Center
6	6 (Fri)	Lv. Rangoon, Ar. Maymyo Survey of Burma Forest School (Messrs. Okabe, Niwa, Suzuki, Toyama) Survey of the proposed construction site Submission of Questionnaires to CC, EPC and PTC at FD (Messrs. Majima, Tanaka, Masuzawa, Fujii)
7	7 (Sat)	Meeting at Burma Forest School (Messrs. Okabe, Niwa, Suzuki, Toyama) Survey of the proposed construction site (Messrs. Majima, Tanaka, Masuzawa, Fujii)
8	8 (Sun)	Lv. Maymyo, Ar. Rangoon (Messrs. Okabe, Niwa, Suzuki, Toyama) Preparation for the report of selection of construction site (Messrs. Majima, Tanaka, Masuzawa, Fujii) Team meeting
9	9 (Mon)	Preparation for the report of selection of construction site Meeting with FD

Date	Schedule and Remarks
10	10(Tue) Meeting with FD Survey of the proposed construction site with EPC and PTC Meeting with CC
11	11(Wed) Signing of the Minutes of Discussions Report to the Embassy of Japan and JICA Office Meeting with FD Meeting with PTC
12	12(Thu) Lv. Rangoon, Ar. Bangkok (Messrs. Okabe, Niwa) Data arrangement
13	13(Fri) Lv. Bangkok, Ar. Tokyo (Messrs. Okabe, Niwa) Survey of the proposed construction site with CC Meeting with FD
14	14(Sat) Lv. Rangoon, Ar. Bangkok (Messrs. Suzuki, Toyama, Fujii) Survey of computer center of FD Survey of new head office of FD
15	15(Sun) Lv. Bangkok, Ar. Tokyo (Messrs. Suzuki, Toyama, Fujii) Lv. Rangoon, Ar. Maymyo Meeting with Burma forest School
16	16(Mon) Meeting with Burma Forest School Survey of silviculture area Lv. Maymyo, Ar. Rangoon
17	17(Tue) Meeting with FSD, AMD, CIC and SIC Data arrangement
18	18(Wed) Meeting with PTC, EPC and ME Visit of the exhibition of local product
19	19(Thu) Meeting with TC and survey of TC's factory Meeting with FD
20	20(Fri) Report to the Embassy of Japan and JICA Office Meeting with FD
21	21(Sat) Data arrangement
22	22(Sun) Data arrangement
23	23(Mon) Meeting with FD Lv. Rangoon, Ar. Bangkok (Messrs. Majima, Tanaka, Masuzawa)
24	24(Tue) Lv. Bangkok, Ar. Tokyo

V-2 Explanation of Draft Final Report (May 10 ~ May 17, 1987)

Date		Schedule and Remarks
1	May 10 (Sun)	Lv. Tokyo, Ar. Bangkok (Messrs. Niwa, Majima, Tanaka, Fujii)
2	11 (Mon)	Lv. Bangkok, Ar. Rangoon
3	12 (Tue)	Meeting with FD and CC at the proposed construction site (Hmawbi SSC)
4	13 (Wed)	Courtesy call on the Embassy of Japan, JICA Office. Courtesy call on Ministry Agriculture and Forests, FERD. Meeting with FD (explanation of Draft Final Report)
5	14 (Thu)	Preparation for the Minutes of Discussions
6	15 (Fri)	Meeting with FD. Signing of the Minutes of Discussions. Report to the Embassy of Japan, JICA Office
7	16 (Sat)	Lv. Rangoon, Ar. Bangkok (Messrs. Niwa, Majima, Tanaka, Fujii)
8	17 (Sun)	Lv. Bangkok, Ar. Tokyo

VI Selection of Construction Site

February 9, 1987

U Sein Maung Wint
Director General,
Forest Department
Ministry of Agriculture and Forests,
The Socialist Republic of the Union of Burma

Dear Sir,

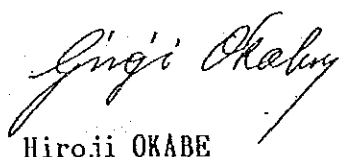
Re : Construction Site of CFDTC

As to the selection of construction site, the Basic Design Team conducted field survey on three (3) proposed sites, site A,B,C shown on the attached sheet.

The Team hereby submit you the survey result report and recommend you to select site A as the most suitable area for the construction of the Central Forest Development Training Center.

Thanking you.

Yours faithfully,

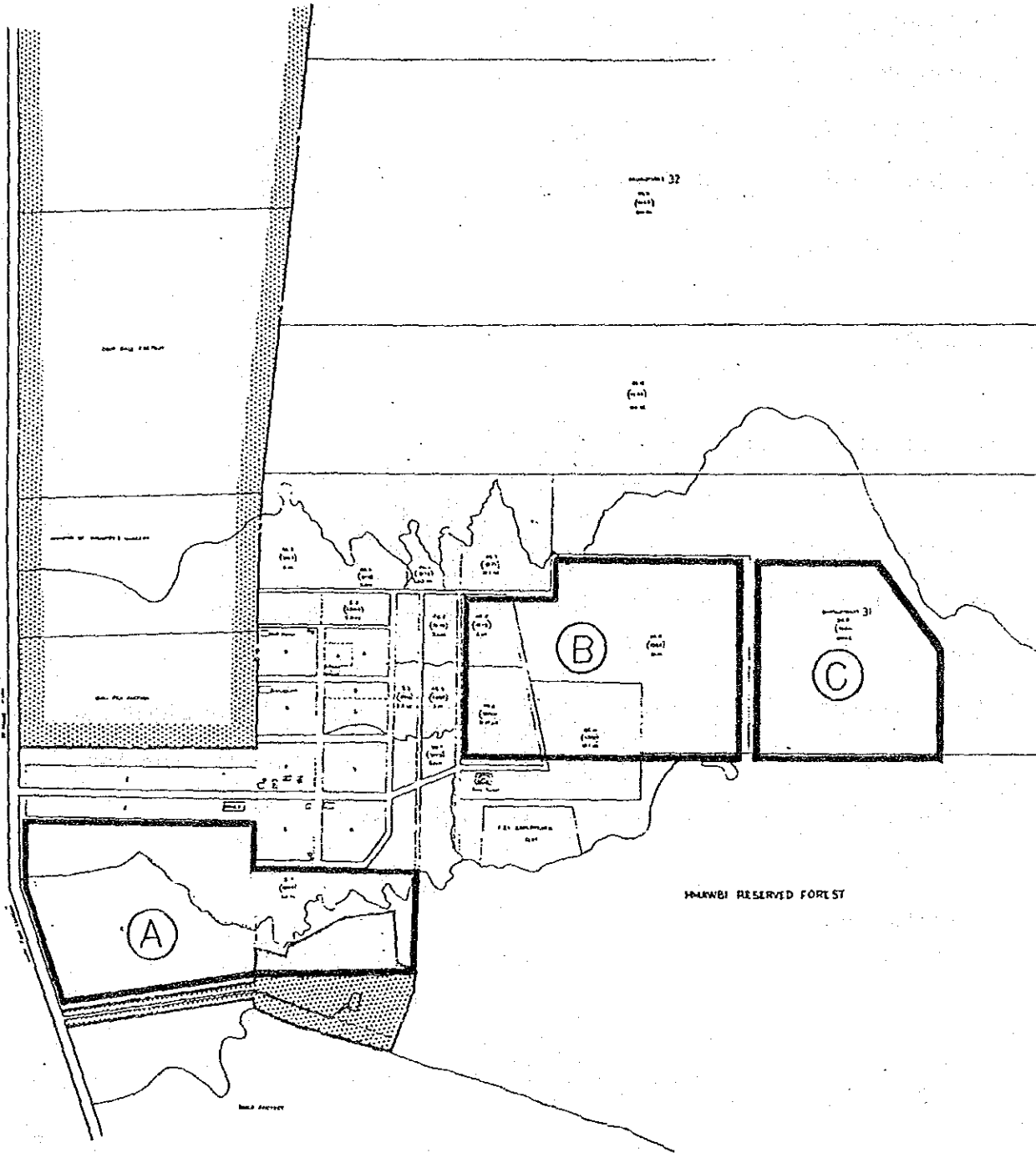


Hiroji OKABE

Team Leader

The Basic Design Study Team

MAP SHOWING OF FOREST DEPARTMENT
SEED AND SEEDLING CENTRE
HAWKBI



Proposed sites

SITE SELECTION

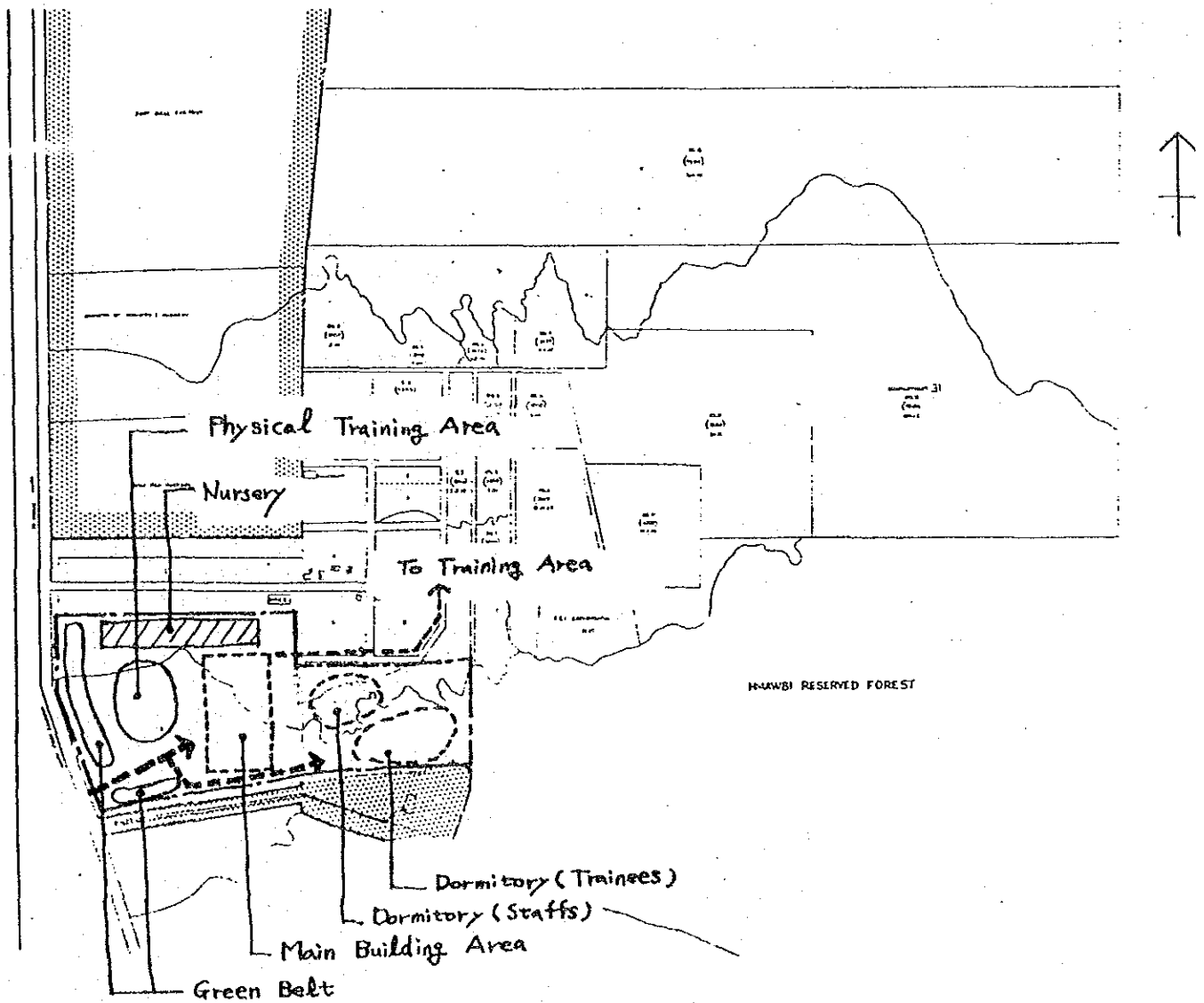
Investigation Items		Proposed Site	Priority	Site A	Site B	Site C	Remarks
Access Road	distance from Prom Road to site		10	10 (0 m)	5 (900 m)	1 (1,250 m)	
	difficulty for construction of access road		7	7	4	1	
Site area and shape	area		7	7 (9.8 ha)	7 (9.5 ha)	7 (6.6 ha)	
	shape		7	1	4	7	
Site development	construction of inner access		7	7	4	7	
	development for facility area		10	10	5	5	
	electricity supply distance		3	3	2	1	
	drainage and sewage		3	3	1	3	
Soile condition			7	7	7	7	
Environmental condition	affect from outside area		10	5	10	5	
	view		7	1	4	7	
	admittance of air		5	1	3	5	
Effect to public			10	10	5	1	
Affect to existing facilities			7	4	7	7	
Total Evaluation			100	76	68	64	

A site

A-site directly faces to Prom Road. Construction cost is absolutely low and its site development is relatively easy.

Environmental condition is inferior to [B]and[C].

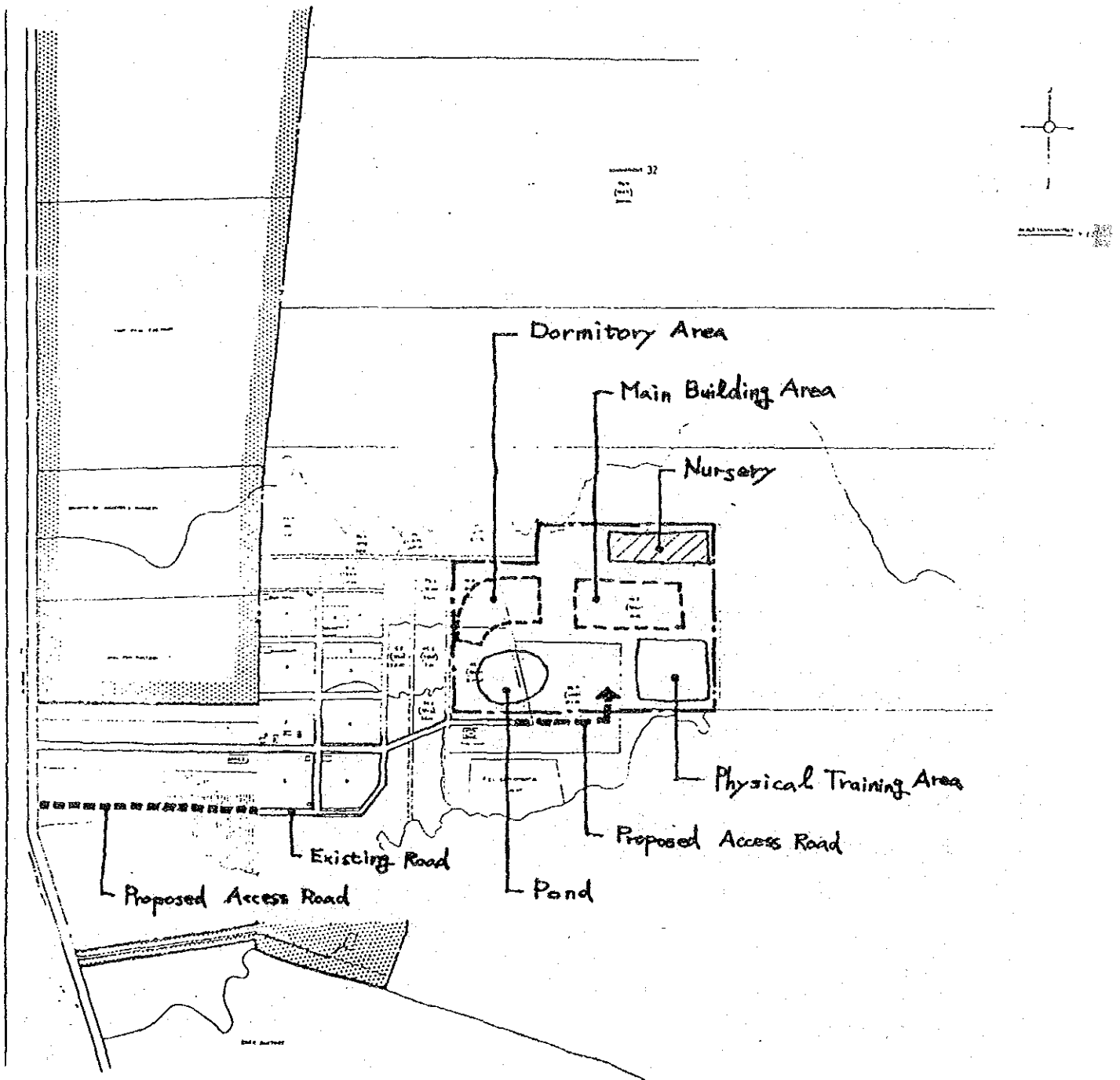
There is possibility to be in Industrial area, but it has high publicity effect.



B site

B-site is far from Prom Road and its site development is not easy because of its relatively complex geological shape.

Construction cost is high, but environmental condition is superior to [A] and [C].

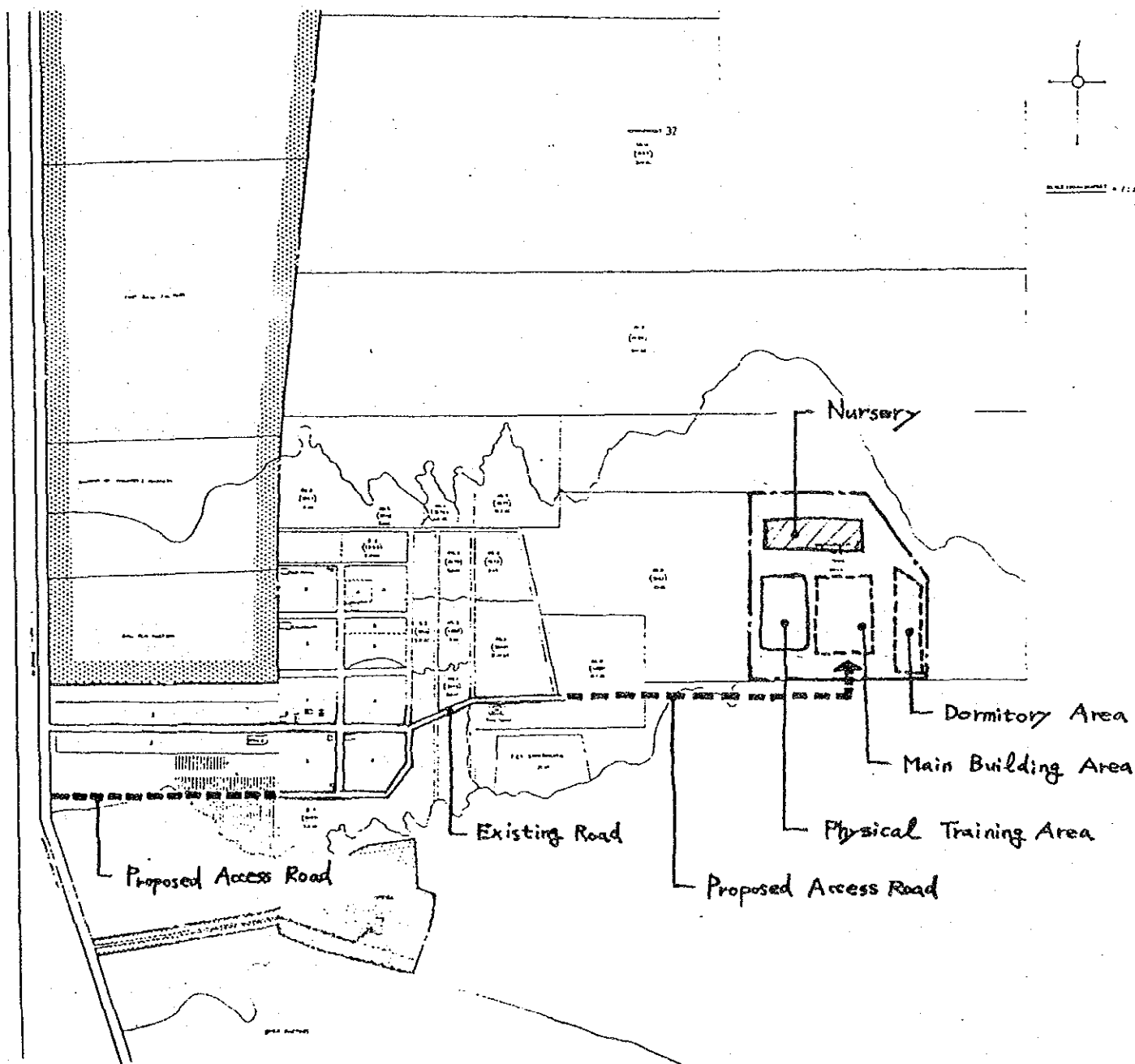




C site

C-site is farist from Prom Road, but its site development is easy because of simple geological shape.

Environmental condition is nice and airly, and it has nice view.



VII Soil Investigation Data

THE SOCIALIST REPUBLIC OF THE UNION OF BURMA
MINISTRY OF CONSTRUCTION
CONSTRUCTION CORPORATION

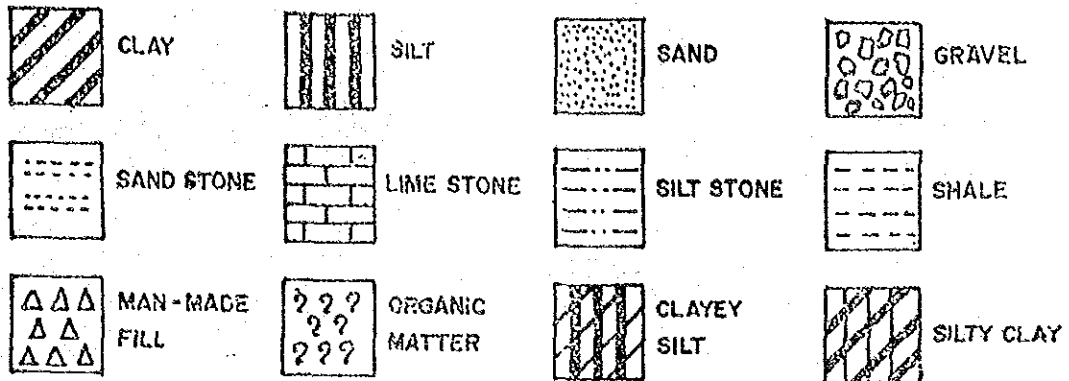
REPORT ON SUBSURFACE INVESTIGATION OF
CENTRAL FORESTRY DEVELOPMENT TRAINING CENTRE PROJECT
H M A W B I

Soil Testing & Research Laboratories

Emagyi Road, Hlu-gaung

APRIL - 1987

LEGEND OF SYMBOLS USED TO INDICATE MATERIAL IN PROFILE OF BOREHOLE

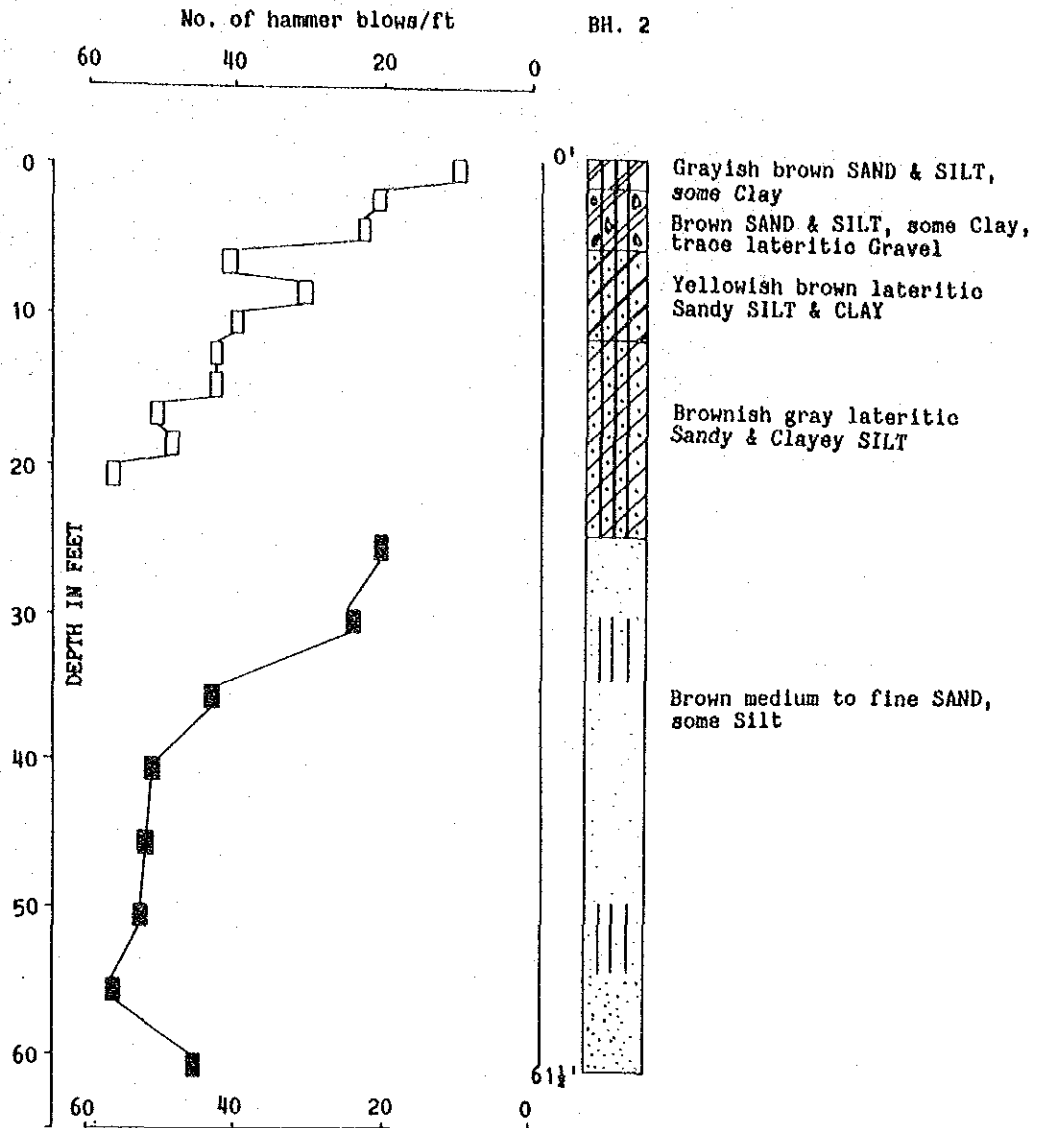


TERMINOLOGY USED TO DENOTE THE PERCENTAGE BY WEIGHT OF EACH COMPONENT

<u>DESCRIPTIVE TERM</u>	<u>RANGE OF PROPORTION</u>
TRACE	1 - 9 %
SOME	10 - 19 %
ADJECTIVE (eg: Sandy, Silty)	20 - 34 %
AND (Major Soil)	≥ 35 %

TERMINOLOGY USED TO INDICATE THE CONSISTENCY OF THE UNDISTURBED MATERIAL

DESCRIPTIVE TERM	RANGE OF UNCONFINED COMPRESSIVE STRENGTH	
	TON PER SQUARE FOOT	KILO NEWTON PER SQUARE METER
VERY SOFT	< 0.20	< 20
SOFT	0.20 - 0.40	20 - 40
FIRM OR MEDIUM STIFF	0.40 - 0.75	40 - 75
STIFF	0.75 - 1.50	75 - 150
VERY STIFF	1.50 - 3.00	150 - 300
HARD	> 3.00	> 300



BASED ON TERZAGHI STANDARD FOR SPT

LEGEND FOR SAMPLING

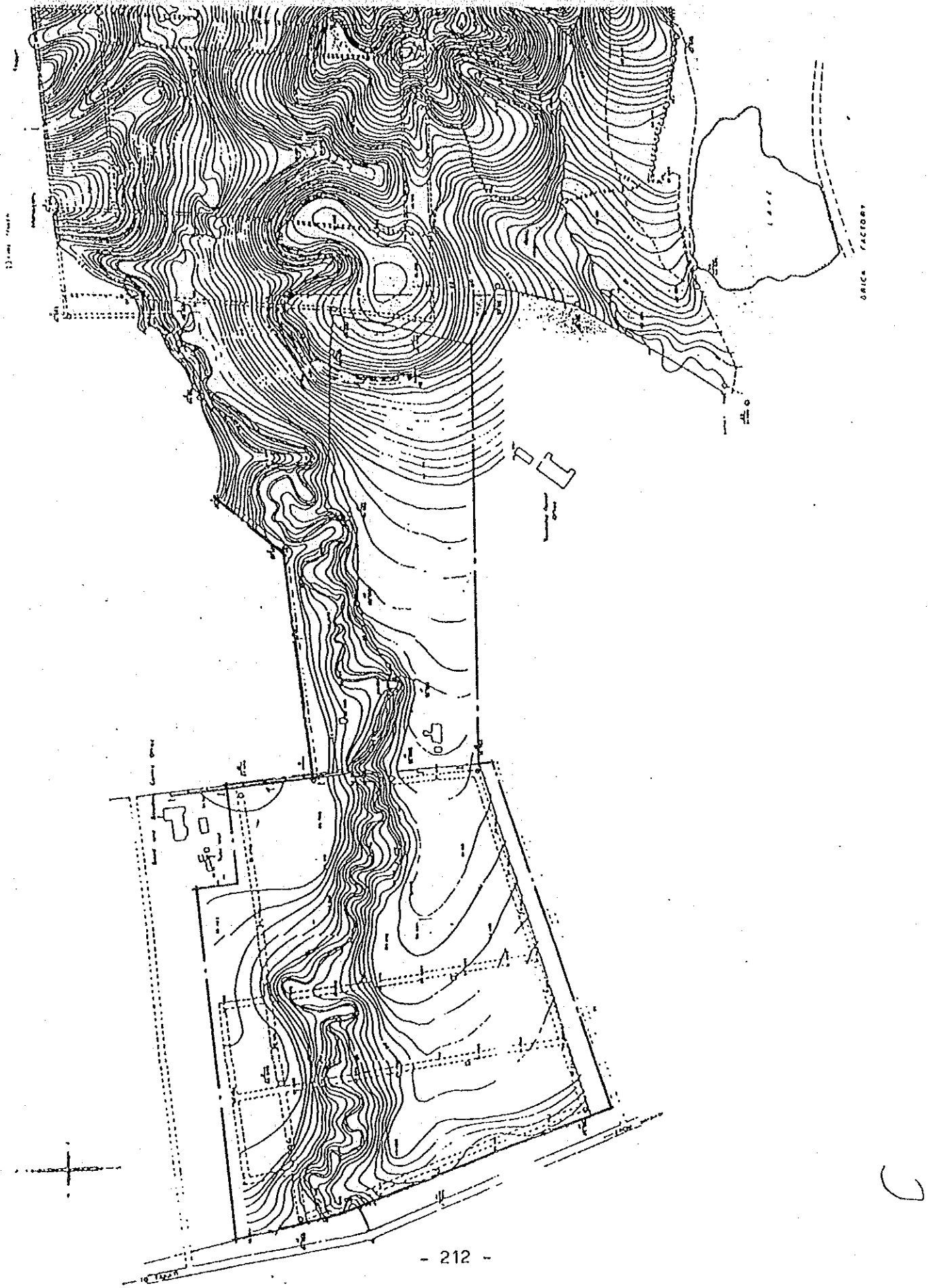
□ Standard shelly sampler driven with 140 lbs hammer, drop 30"

■ Standard split spoon sampler driven with 140 lbs hammer, drop 30"

VIII List of Collected Data

Title of Data	Source
1. FACTS ABOUT BURMA FOREST SCHOOL MAYMYO	FOREST DEPARTMENT
2. BURMA FOREST SCHOOL, MAYMYO. LIST OF EQUIPMENTS	FOREST DEPARTMENT
3. PRODUCTS OF FURNITURE FACTORY	TIMBER CORPORATION
4. DRAWING OF STANDARD FURNITURE	TIMBER CORPORATION
5. REPORT TO THE PYITHU HLUTTAW on The Financial, Economic and Social Conditions of The Socialist Republic of the Union of Burma for 1986/87	MINISTRY OF PLANNING AND FINANCE

IX Site Survey Map



JICA