

Because the quality is thought to be satisfactory, all Project-use material and equipment, except hand pumps for deep wells, shall be procured locally for the purpose of easy maintenance and management of school facilities after Project completion.

Most of the necessary material and equipment shall be procured in the Project Area's four Region IV islands. Only those items that are needed in large quantities or are required to be of high quality will be procured in Manila.

5) Design Policies for the Project Implementing Agency's Maintenance and Management Capabilities

By taking into consideration the financial difficulties being experienced by the Government of the Philippines, school facilities shall be planned by placing top priority on easy, minimum cost maintenance and management work once facility construction has been completed. In addition, consideration shall be given to the use of domestic materials for effecting simple repairs to damaged or deteriorated facilities.

6) Design Policies for the Scope and Level of Project Facilities and the Equipment to be Provided

The contents of the Project include the construction of classrooms and toilets for primary schools, and classrooms, science laboratories, and toilets for secondary schools, and for the furnishing of associated basic education equipment. The facilities and equipment will provide the basic necessities for education and they should be planned so as to allow comfortable daily classroom activities.

For facility design, emphasis shall be placed not only on classroom use for study purposes but also for multipurpose use, such as places of refuge during natural calamities.

The equipment plan shall be made so as to provide basic units that are necessary for class activities, such as black-boards and furniture. In view of maintenance and management, these units shall be procured locally.

The quality of locally made science laboratory instruments are generally poor; thus, they shall be procured in Japan. Further, a Japanese specialist shall be dispatched to provide guidance in the use of the instruments once they are turned over to the Philippine side.

7) Design Policies for the Project Construction Period

The purpose of the Project is to construct within a short period of time 30 primary and secondary schools scattered on four Region IV islands (Mindoro, Marinduque, Palawan, and Tablas) that stretch some 500 km in a north-south direction and 460 km in an east-west direction.

An effective Project construction plan shall be prepared so that the construction and delivery of the completed facilities will be accomplished within one year after the signing of the construction contract.

Many schoolbuildings must be built simultaneously. Thus, the entire Project Area will be divided into two parts. At first, construction will take place in Mindoro and Marinduque. After completing the work there, construction will get underway in Palawan and Tablas.

4-2 Examination of Design Criteria

To meet various site conditions and the size and classroom shortage situation at each Project school, ten types of Project schoolbuildings were designed (6 primary school types and 4 secondary school types). The type adopted depended on each school's condition.

The optimum classroom sizes were decided upon by respecting the new design standards of the Philippines as well as by referring to Japanese design standards. The size decided upon for classrooms was 8 m X 7 m (56 m²). For the science laboratory it was 8 m X 10.5 m (84 m²). By comparing with Japanese standards and by taking into account the furniture arrangements, these sizes are thought to be appropriate.

Toilets are planned to be away from the buildings. The total area of one toilet facility was designed to be 24.03 m². The toilet for males is 9.45 m²;

Each type of schoolbuilding is listed in Table 4-1. The roofed corridor portions are included in floor areas of the buildings.

Table 4-1 Features of Project Schoolbuildings

Building Type	Name of Room	No. of Units	Room Area(m ²)	Open Corridor (m ²)	Area	Number of Students
Primary School Type A	Classrooms Toilet (male/female/handicapped)	3 1	168.00 24.03	31.50 12.47	236.00	120
A Type Total 6 Schools	Classrooms Toilet (male/female/handicapped)	18 6	1,008.00 144.18	189.00 74.82	1,416.00	720
Primary School Type B	Classrooms Toilet (male/female/handicapped)	4 1	224.00 24.03	42.00 12.47	302.50	160
B Type Total 3 Schools	Classrooms Toilet (male/female/handicapped)	12 3	672.00 72.09	126.00 37.41	907.50	480
Primary School Type C	Classrooms Toilet (male/female/handicapped)	5 1	280.00 24.03	52.50 12.47	369.00	200
C Type Total 9 Schools	Classrooms Toilet (male/female/handicapped)	45 9	2,520.00 216.27	472.50 112.23	3,321.00	1,800
Primary School Type D	Classrooms Corridor Toilet (male/female/handicapped)	6 2 1	336.00 112.00 24.03	123.20 12.47	607.70	240
D Type Total 1 School	Classrooms Corridor Toilet (male/female/handicapped)	6 2 1	336.00 112.00 24.03	123.20 12.47	607.70	240
Primary School Type C+A	Classrooms Toilet (male/female/handicapped)	8 1	448.00 24.03	84.00 12.47	568.50	320
C+A Type Total 1 School	Classrooms Toilet (male/female/handicapped)	8 1	448.00 24.03	84.00 12.47	568.50	320
Primary School Type C+B	Classrooms Toilet (male/female/handicapped)	9 1	504.00 24.03	94.50 12.47	635.00	360
C+B Type Total 1 School	Classrooms Toilet (male/female/handicapped)	9 1	504.00 24.03	94.50 12.47	635.00	360
Primary Schools Subtotal 21 Schools	Classrooms Corridor Toilet (male/female/handicapped)	98 2 21	5,488.00 112.00 504.63	1,050.50 261.87	7,455.70	3,920
Secondary School Type SA	Classrooms Science Lab Toilet (male/female/handicapped)	3 1 1	168.00 84.00 24.03	47.25 12.47	335.75	126
Type SA Total 2 Schools	Classrooms Science Lab Toilet (male/female/handicapped)	6 2 2	336.00 168.00 48.06	94.50 24.94	671.50	252
Secondary School Type SB	Classrooms Science Lab Toilet (male/female/handicapped)	4 1 1	224.00 84.00 24.03	57.75 12.47	402.25	168
Type SB Total 1 School	Classrooms Science Lab Toilet (male/female/handicapped)	4 1 1	224.00 84.00 24.03	57.75 12.47	402.25	168
Secondary School Type SC	Classrooms Science Lab Toilet (male/female/handicapped)	5 1 1	280.00 84.00 24.03	68.25 12.47	468.75	210
Type SC Total 5 Schools	Classrooms Science Lab Toilet (male/female/handicapped)	25 5 4	1,400.00 420.00 96.12	341.25 49.88	2,307.25	1,050
Secondary School Type SC+C	Classrooms Science Lab Toilet (male/female/handicapped)	10 1 1	560.00 84.00 24.03	120.75 12.47	801.25	400
Type SC+C Total 1 School	Classrooms Science Lab Toilet (male/female/handicapped)	10 1 1	560.00 84.00 24.03	120.75 12.47	801.25	400
Secondary Schools Subtotal 9 Schools	Classrooms Science Lab Toilet (male/female/handicapped)	45 9 8	2,520.00 756.00 192.24	614.25 99.76	4,182.25	1,890
Grand Total 30 Schools	Classrooms Science Lab Corridor Toilet (male/female/handicapped)	148 9 2 29	8,008.00 756.00 112.00 696.87	1,664.25 361.63	11,637.95	5,810

4-3 Basic Plan

4-3-1 Site and Layout Plan

As the site conditions vary from school to school, the most adequate layout plan for each Project school shall be prepared after examining the school site configuration, infrastructure development conditions, and the existing building arrangement.

The main layout-plan policies are as follows:

- 1) The arrangement of existing school facilities must be taken into consideration and the new buildings to be constructed shall be arranged to match them.
- 2) A new building shall be arranged on flat land at all if possible. Dipped areas are to be avoided in view of the structural safety of the building foundation.
- 3) By considering the prevailing wind directions and thereby utilize natural ventilation to the maximum extent, a new building shall be arranged far enough away from existing ones to allow wind gusts to pass between them and to avoid wind-force concentration during typhoon and strong wind periods.
- 4) Whenever a new building is arranged parallel to an existing one, a sufficient distance must be kept between them to allow natural lighting.
- 5) A new building shall be arranged so as not to adversely affect existing facilities. The building shall be arranged to allow for the economical and easy installation of water supply and drainage facilities and electrical supply lines.
- 6) Plans shall be made to a toilet in its own building. Its arrangement shall be made by taking into consideration the movement of between the toilet and the new and existing buildings.

4-3-2 Architectural Design

a. Floor Plan

When many schoolbuildings are being constructed simultaneously, the setting of an adequate size module is a very important factor for economic design, simplicity of construction work, and the reduction of construction time. For the Project, the adopted room sizes are 8 m X 7 m for classrooms and 8 m X 10.5 m for science laboratories. Thus, the minimum size of the module unit was decided upon as being 8 m X 3.5 m (two units for a classroom and three units for a science laboratory).

By arranging the columns that support the vertical load at the outer portions of the schoolbuildings, rectangular shaped classrooms were designed for the simple floor plan that allows furniture units to be arranged easily.

A roofed corridor was designed to allow teachers and students to move easily between classrooms on rainy days.

As site conditions vary from school to school, 10 types of schoolbuildings were designed (6 types for primary schools and 4 types for secondary schools). A particular type is selected for each school depending upon the site conditions and the degree of classroom shortage.

A comparison of the features of Project facilities to similar facilities is shown in Table 4-2.

Table 4-2 Comparison of Project Facility Features to Those Having Philippine Standards

	Name of Room	Philippine Standard	Project Facility Standard	Difference
P R I M A R Y S C H O O L	Classroom	1.2 m ² /student (minimum requirement)* but actual figure is 1.17m ² /student	1.40m ² /student (40 student/class)	<ul style="list-style-type: none"> • Durable materials will be used for the roof structures and finish material by taking into account their ability to withstand typhoon forces • A movable wall will be installed between two classrooms so that they can be combined into one meeting room. • High ceilings will be installed to allow natural ventilation
	Toilet	<p>One urinal per 50 males.</p> <p>Two urinals for additional 100 males.</p> <p>One toilet bowl per 50 students.</p> <p>One sink per one toilet bowl.</p> <p>One water faucet per two classrooms.</p>	<p>Male Toilet:</p> <ul style="list-style-type: none"> • Two toilet bowls • One urinal (4 persons use). • One local method sink. <p>Female Toilet:</p> <ul style="list-style-type: none"> • Three toilet bowls. • One local method sink. <p>Handicapped Toilet:</p> <ul style="list-style-type: none"> • One toilet bowl. • One ready-made sink 	<ul style="list-style-type: none"> • Domestic specifications are used. However, separate toilets for handicapped students are to be installed
	Corridor	<p>No rule exists for the outside corridor.</p> <p>2.0m wide for inside hallway for a school having less than 500 students.</p>	1.5m wide for outside corridor	

	Name of Room	Philippine Standard	Project Facility Standard	Reference
S E C O N D A R Y S C H O O L	Classroom	1.4 m ² /student (minimum requirement) but actual figure is 1.11m ² /student	1.33m ² /student (42 students/ class)	<ul style="list-style-type: none"> • The same as for primary school classrooms. Durable materials will be used for roof structures and finish material. A removable wall will be installed between classrooms. • The floor space per chair is somewhat than the domestic standard. However, one Project classroom can accommodate 42 students.
	Science Laboratory	2.4 m ² /student (minimum requirement) but actual figure is 1.14m ² -2.0m ² /student	2.00m ² /student (42 students/ class)	<ul style="list-style-type: none"> • The same as for ordinary classrooms. Durable materials will be used for roof structures and finish material by taking into account their ability to resist typhoon forces. • An experiment-use sink is to be installed by taking into account the curriculum to be conducted in the science lab.
	Toilet	Same as primary school standards	Same as primary school standards	
	Corridor	Same as primary school standards	Same as primary school standards	

Source: The Present situation of Educational facilities in the Philippines and Future Issues.

Note : According to DECS, standard classroom space per student is 1.2m² for a primary school and 1.4m² for a secondary school. However, RP-US Bayanihan type, one of the Philippines' standard type, has 1.17m² per student for a primary school and 1.11m² for a secondary school.

b. Section Plan

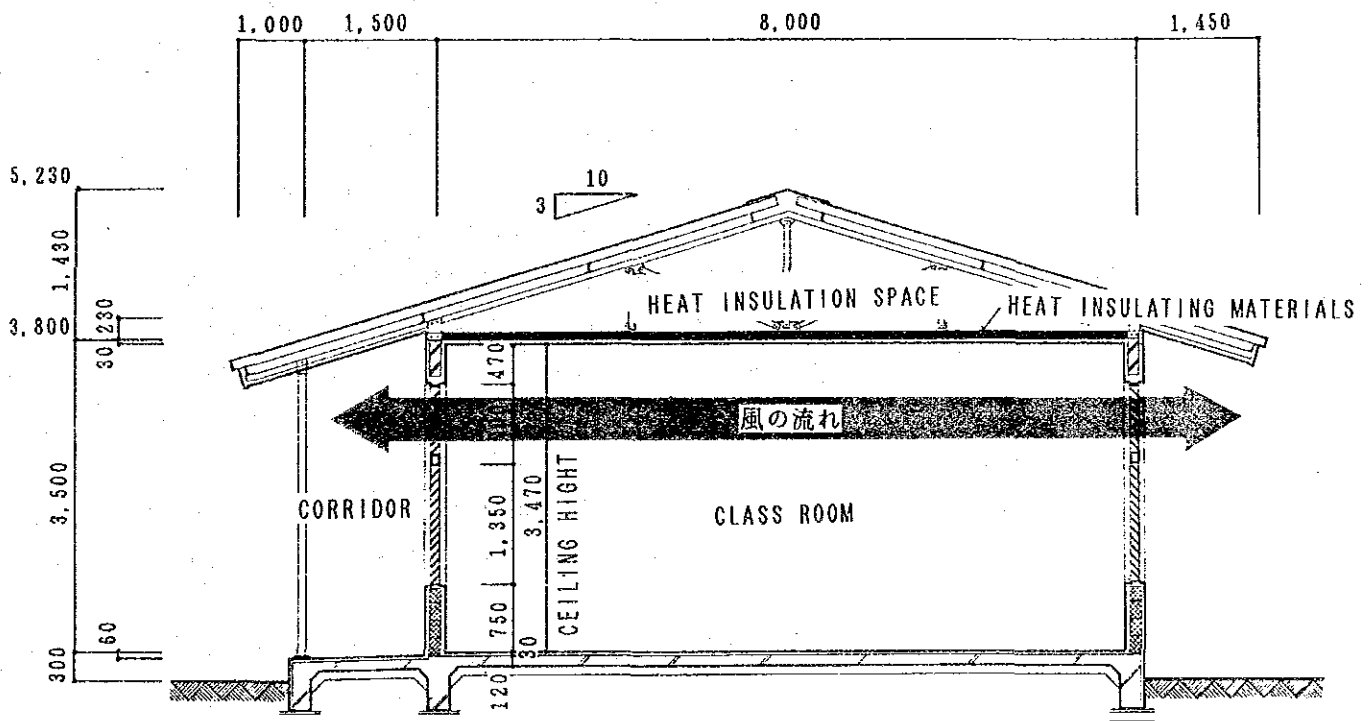
As the Philippines is in a tropical weather zone, the section plan was prepared by taking into account provisions for comfortable classroom activities.

By making the ceiling height 3.5m to retain an air strata under it, and by installing insulation, the building section was designed to prevent the entry of solar. In addition, plans were made to provide wide openings in the building to allow natural ventilation.

Eave lengths were examined from the viewpoint of the effect of intercepting direct sunshine and rain, and their strength against lifting wind forces. As a result, the lengths were decided upon as being 2.50 m (1.5 m from the building wall to the center of the corridor column and 1.00 m from the column center to the tip of the eave) on one side of the building and 1.45 m on the other side.

The standard section of Project buildings is shown in Fig. 4-1.

Fig. 4-1 Standard Section of Project Buildings



c. Structure Plan

1. Basic Requirements

The objective of the Project is to construct many schoolbuildings within a short period of time in order to alleviate the serious classroom shortage problem in the Philippines. Thus, the Project's schoolbuilding structure plan was prepared by emphasizing the following four aspects:

- (1) Economy
- (2) Uniform construction
- (3) Durability
- (4) Short construction period

As for the structure type that satisfies the above aspects, reinforced-concrete columns and beams, concrete block walls, and trussed roofs are most commonly used in the Philippines. Construction workers are familiar with these types of structure. They are thought to be suitable for Project buildings.

The structure plan should be prepared based on the above consideration.

2. Design Policies

1) Design Loads and External Forces:

As a general principle, the National Structural Code of the Philippines was adopted for the design loads and external forces of Project schoolbuildings. Also, the wind forces in the hardest hit areas indicated in the Code were used for the structure design by taking into account the typhoon damage conditions in the Project Area.

The following design loads were used for the structure design:

a. Uniform Loads:

Roof: 13 PSF \approx 63 kg/m²

Floor: 42 PSF \approx 200 kg/m²

b. Wind Forces :

40 PSF

Basic wind speed = 200 km/h

c. Seismic Forces:

Obtained by $V = ZIC/R_w \times W$

2) Building Structure Plan:

Building structures must be designed by taking into account the fixed loads, live loads on roofs, wind loads, and seismic loads. The vertical forces of the fixed loads and the live loads on roofs and the lifting forces on the roof by the wind loads will be taken by the buildings' 8 m span steel-trusses and reinforced-concrete columns.

Horizontal direction wind and seismic forces will be taken by the rigidity of the reinforced concrete columns and their foundations in the longitudinal direction of the building and by the rigidity of the frame structure of the columns and beams of the building in the cross sectional direction.

As site conditions vary from school to school, the soil bearing capacity of 75 KN/m² (= 7.35 t/m²) was used for building foundation design.

Whenever a building wall is broken by wind forces, the lifting forces on the roofs increase. The increased lifting forces are thought to be the major cause of typhoon damage to buildings. Thus, special care must be paid to the joints between the roof's steel frame trusses and the reinforced concrete structure portion and on the jalousie installation.

Wind force coefficients for the wall section and half-wall section of the building are as shown in Fig. 4-2.

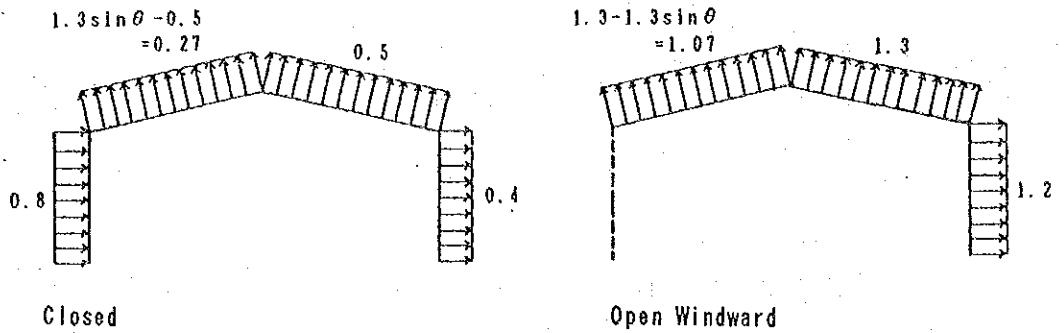


Fig. 4-2 Wind Force Coefficients

3) Structure Member Material

The requirements for selecting structure member materials are to choose those that are most commonly used and are easy to procure.

Two types of materials, wood and steel frames, can be used for the roof's steel frame trusses. As lumber products are difficult to procure in the Philippines, it was decided upon to adopt steel frames. The most commonly used equal angle section bars will be used. Concrete blocks will be used for the walls of buildings. The walls, however, are not designed to take any loads or forces.

There are no problems concerning the quality and quantity of reinforcing bars and concrete that can be procured locally. But, careful quality control is of utmost importance because of the number of schoolbuildings to be constructed simultaneously.

Materials to be used for the Project must have the following strengths:

- a) Concrete: $F_c = 2,500$ PSI
- b) Reinforcing Bars: $F_y = 33,000$ PSI
- c) Steel Frames: $F_y = 36,000$ PSI

d. Facility Plan

(1) Electrical Facility Plan:

Project schoolbuildings will not only be used for ordinary classroom activities but also for non-formal education and as meeting places for area

residents. It is assumed that the schoolbuildings will be used at night times. Thus, electrical facilities are planned to be installed in all Project schoolbuildings. All materials for the electrical facilities will be procured in the Philippines. The installation of lighting fixtures, outlets, and ceiling fans is planned.

Electrical wiring and switches for ceiling fans is planned under the Project by taking into consideration the Philippine side's plan for future ceiling fan installation.

Electricity is not supplied to some of the Project schools. However, electrical wiring will be installed to those schools to handle a future supply of electricity.

Table 4-3 The Designed Number of Fluorescent and Incandescent Lighting Fixtures, Ceiling Fans, Switches and Outlets for Each Room

Type of Room	Fluorescent Lighting Fixtures	Incandescent Lighting Fixtures	Ceiling Fans	Switches	Outlets
Classroom	4	0	2	2	2
Science Laboratory	6	0	3	3	4
Corridor	0	2	0	1	0
Toilets (Males)	2	0	0	1	0
Toilets (Females)	2	0	0	1	0
Toilet (Handicapped)	1	0	0	1	0

(2) Water Supply Facility Plan:

A water supply will be provided to the toilets and the science laboratory sinks. City water or well water will be pumped up by hand pumps into the 4 m high elevated water tanks. The water will then be supplied to each connection point. Hand pumps for deep wells will be procured in Japan because Philippine made hand pumps are not reliable for deep well use.

Receiving Tanks: F.R.P. tanks, 2.0 m³ capacity (tank will not be used when well water is used)

Elevated Tanks: F.R.P. tanks, 2.0 m³ capacity

Tanks Support Structures: Fabricated with equal angle section steel bars

Pumps: Hand pumps for shallow wells (to be procured in the Philippine)
Hand pumps for deep wells (to be procured in Japan)

Piping Material: PVC pipes and ductile iron pipe for tank connection portions

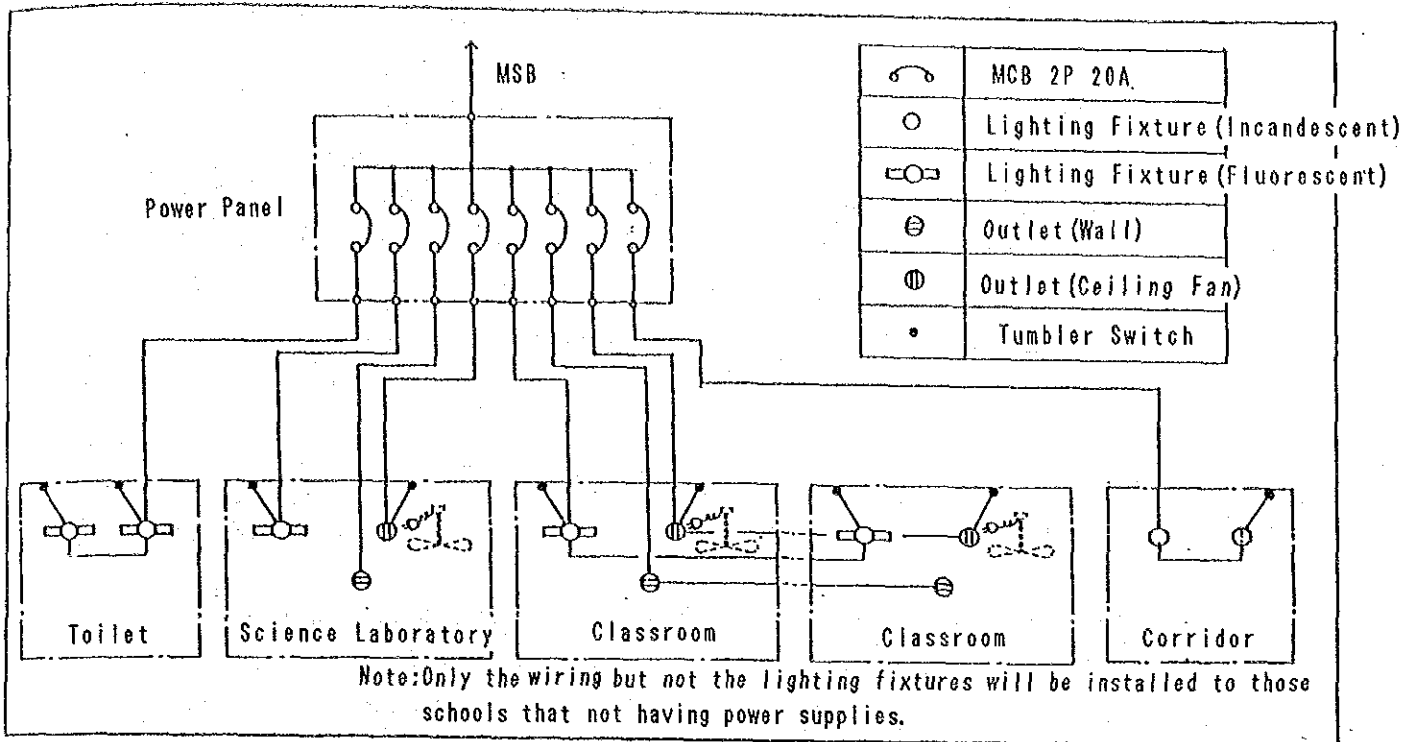
(3) Sewerage Facility Plan:

It will be necessary to install sewage treatment facilities for sewage toilet wash basins, urinals, and water closets, and waste water from science laboratory sinks.

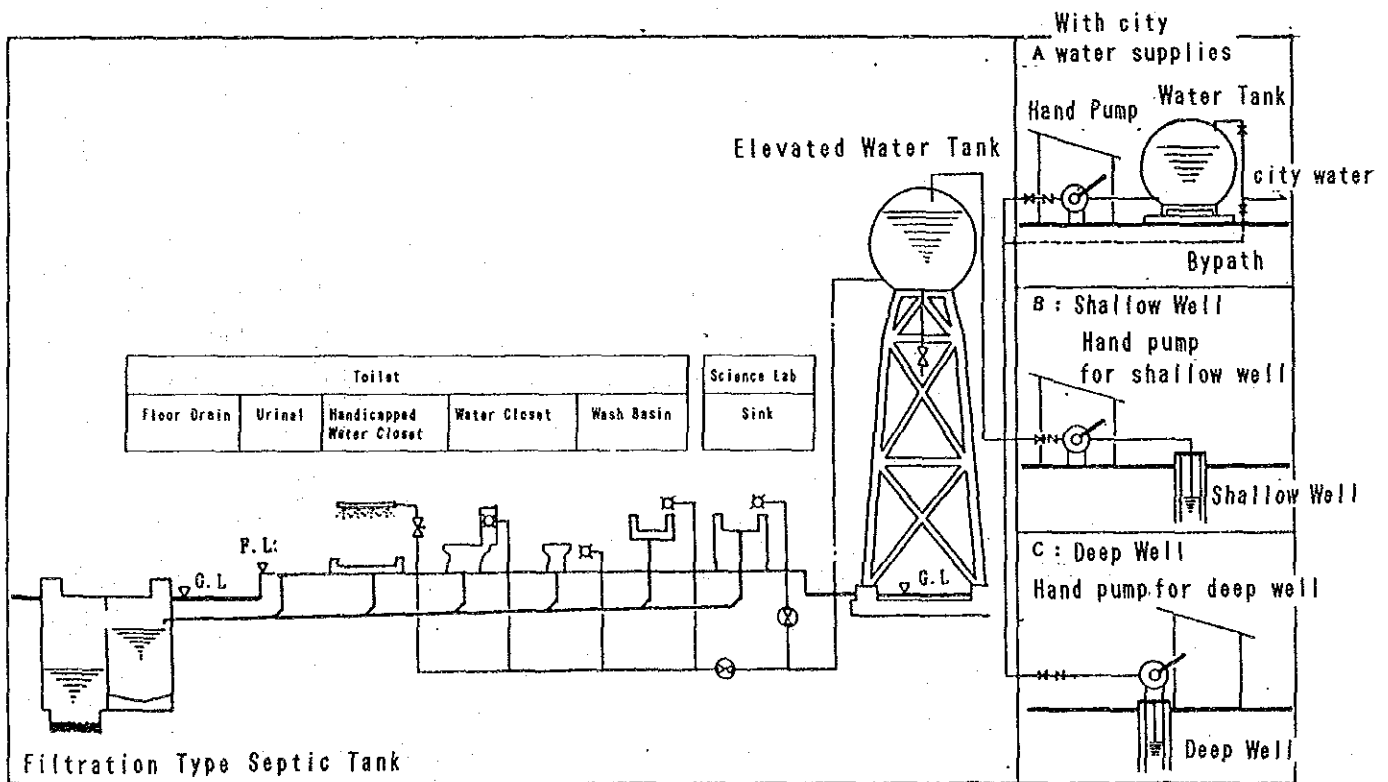
It is planned to treat sewage and waste water using the combined system of simple infiltration and septic tanks.

The sewerage facility includes the following items:

- . Water Closets: Western style
- . Urinals: Multiple unit type, partially tiled
- . Wash Basins: Reinforced-concrete made with tile.
China will be used for handicapped pupils
- . Piping Material: PVC pipe
- . Septic Tanks: Reinforced-concrete made, infiltration type



Lighting and Outlet Wiring Diagram



Water Supply and Sewerage System Diagram

e. Schoolbuilding Material Plan

1. Basic Requirements:

In the Project, all building construction materials shall be procured on the local market to keep construction costs low so that it will be possible to build many classrooms with the same amount of funds as well as to simplify the completed buildings maintenance and management work.

2. Major Materials to be Used:

a) Structure Material

The reinforced concrete that is commonly used in the Philippines shall be used for foundations, columns, and beams. As for truss structures to support roofs, wooden trusses are widely used throughout the country. However, as lumber is difficult to obtain in the Philippines, steel frame trusses shall be used for the Project.

b) Roofing Material

In the Philippines, most of the schools are roofed with zinc plated steel sheets. Many of these roofs are corroded. For the Project, aluminum-zinc alloy plated steel sheets are to be used because they have a stronger corrosion resistance than the zinc plated steel sheets.

c) Windows

Wooden jalousies are most commonly used in the Philippines. Sliding glass windows that are extensively used in Japan are rarely found in the country. Jalousies shall be adopted for the Project. However, some Project schools presently are without power supplies; therefore, glass jalousies shall be installed to efficiently utilize natural lighting. By taking into account glass protection and security, steel-bar frames will be installed to each jalousie.

d) Floors, Walls, and Ceilings

Reinforced concrete shall be used for floors by taking into account

its strength and easy maintenance and management. The floors shall be finished with color-crete on mortar.

Concrete blocks shall be used for exterior walls in view of their insulation capability. Mortar shall be placed on the walls and painted. The inside partition walls (including some movable walls) and ceilings shall be made of plywood and shall be painted.

The major materials to be used for Project schoolbuildings are shown in Table 4-4.

Table 4-4 Finish Materials to be Used for Project Schoolbuildings

E X T E R I O R F I N I S H	PORTION	PHILIPPINE METHOD	THIS PROJECT'S METHOD	REASON FOR ADOPTION
	Roofs	Zinc plated corrugated steel sheets	Aluminum-zinc alloy plated steel sheets	• Stronger anti-corrosion resistance
	Underside of Eaves	Plywood	Marine Plywood S.O.P. coating	• Easy maintenance and durability
	Walls	Concrete blocks, mortar finish	Concrete blocks coated with E.P.	• Insulating effect • Durability
	Windows	Wooden jalousies coated with S.O.P.	Glass jalousies	• Effective natural lighting
	Doors	Wooden doors	Wooden doors coated with S.O.P.	• Durability and easy maintenance
	Baseboards	Cement mortar steel trowel finish	Cement mortar steel trowel finish	• Durability and easy maintenance
	Corridor Floors	Cement mortar steel trowel finish	Cement mortar steel trowel finish	• Durability and easy maintenance
	Septic Tanks	Reinforced concrete partially made of concrete blocks	Reinforced concrete and concrete block made (inside, and outside tank tops are to be waterproof mortar steel trowel finish)	• Durability and easy construction

	PORTION	PHILIPPINE METHOD	THIS PROJECT'S METHOD	REASON FOR ADOPTION
I N T E R I O R F I N I S H	Classrooms and Science Laboratories			
	Floors	Reinforced concrete, mortar finish	Colored cement mortar steel trowel finish	• Durability
	Walls	Concrete blocks, mortar finish	Plywood coated with S.O.P	• Easy maintenance • Easy Construction
	Ceilings	Plywood	Plywood coated with S.O.P & insulation	• Insulating effect
	Other Parts		Work benches with sinks Ceramic tile finish (science laboratories only) Dadoes-- CHB mortar, E.P. coating	• Easy maintenance and accurate finish work
	Toilets			
	Floors	Mortar finish	Mosaic tile	• Easy maintenance
	Walls	Concrete blocks, E.P. laying	Concrete blocks, Mortar steel trowel finish, E.P. laying	• Easy maintenance
	Ceiling	No ceiling, O.S. finish	Plywood, O.P. finish	• Insulating effect

4-3-3 Equipment Plan

In order to fulfill the education activities after the Project facilities are opened, proper accommodations must be provided. Upon completion of the classrooms and science laboratories in the Project schools, various types of equipment will be used.

Based on the contents of the request made by the Government of the Philippines for the Project and the results of the field surveys, the basic educational equipment and science laboratory instruments will be provided as a part of the Project.

(1) Educational Equipment:

The selection of educational equipment was made by taking into consideration the standard types used in the primary and secondary schools in the Philippines as well as the following aspects:

- 1) The desks and chairs for primary school classrooms should be the double-seated types. Three different sizes of desks and chairs should be provided to suit the various body sizes of the students.
- 2) The desk-chair type for use by one person that is generally used in the Philippines should be furnished to secondary school classrooms.
- 3) For the science laboratories, three-person type tables for the students and a demonstration workbench for the teacher (one workbench per room) should be installed.
- 4) The storage cabinets to be installed in the science labs should have sufficient capacity to store the laboratory instruments.

As the equipment and instruments are to be installed in primary and secondary schools, it was planned to provide types that are practical and strong -- elaborate types were avoided.

Equipment units are to be procured in the Philippines. By taking into consideration the domestic manufacturing technologies, easy procurement, and the quality of the material, steel and plywood made equipment are to be adopted.

The types of equipment and the number of units to be provided for each Project school classroom and science lab are listed in Table 4-5. The types of equipment and the number of units to be provided for each different size Project school are shown in Table 4-6.

Table 4-5 Equipment Types and Number of Units to be Provided for Each Project School Classroom
Primary Schools

Name of Room	Name of Item	No. of Units for One Room
Classroom	• Teacher's desk	1
	• Teacher's chair	1
	• Teacher's filing cabinet	1
	• Student's chair-desks (large size)	8
	• Student's chair-desks (medium size)	8
	• Student's chair-desks (small size)	8
	• Student's closets	8
	• Blackboard	1
	• Bulletin board	1

Secondary Schools

Name of Room	Name of Item	No. of Units for One Room
Classroom	• Teacher's desk	1
	• Teacher's chair	1
	• Teacher's filing cabinet	1
	• Student's chair-desks	4 2
	• Student's closets	8
	• Blackboard	1
	• Bulletin board	1
Science Laboratories	• Experiment workbenches	1 4
	• Student's closets	5
	• Demonstration table	1
	• Stools (1 for Teacher, 42 for Students)	4 3
	• Blackboard	1
	• Bulletin board	1
	• Storage shelves • Steel shelves	1 1

Table 4-6 Equipment Types and Number of Units to be Provided for Each Different Size Project School.

Furniture	Primary Schools										Secondary Schools										Grand Total of All Project Schools						
	A Type Three Classrooms (6 schools)		B Type Four Classrooms (3 schools)		C Type Five Classrooms (9 schools)		D Type Six Classrooms (1 schools)		C+A Type Eight Classrooms (1 schools)		C+B Type Nine Classrooms (1 schools)		Total		SA Type Three Classrooms and Science Laboratories (2 schools)		SB Type Four Classrooms and Science Laboratories (1 schools)		SC Type Five Classrooms and Science Laboratories (5 schools)			SC+C Type Ten Classrooms and Science Laboratories (1 schools)		Total			
	For one school	Sub- total	For one school	Sub- total	For one school	Sub- total	For one school	Sub- total	For one school	Sub- total	For one school	Sub- total	For one school	Sub- total	For one school	Sub- total	For one school	Sub- total	For one school	Sub- total		For one school	Sub- total	For one school	Sub- total	For one school	Sub- total
Teacher's desk	3	18	4	12	5	45	6	6	8	8	8	9	9	98	3	6	4	4	5	25	10	10	10	10	45	143	
Teacher's chair	3	18	4	12	5	45	6	6	8	8	8	9	9	98	3	6	4	4	5	25	10	10	10	10	45	143	
Teacher's filing cabinet	3	18	4	12	5	45	6	6	8	8	8	9	9	98	3	6	4	4	5	25	10	10	10	10	45	143	
Student's chair(Large)	24	144	32	96	40	360	48	48	64	64	64	72	72	784												784	
Student's chair(Medium)	24	144	32	96	40	360	48	48	64	64	64	72	72	784													784
Student's chair(Small)	24	144	32	96	40	360	48	48	64	64	64	72	72	784													784
Armchair															126	252	168	168	210	1050	420	420	420	420	1890		
Student's closet	24	144	32	96	40	360	48	48	64	64	64	72	72	784	29	58	37	37	45	225	85	85	85	85	405	1189	
Experiment Workbench															14	28	14	14	14	70	14	14	14	14	126	126	
Demonstration Table															1	2	1	1	1	5	1	1	1	1	9	9	
Stool															43	86	43	43	43	215	43	43	43	43	387	387	
Blackboard	3	18	4	12	5	45	6	6	8	8	8	9	9	98	4	8	5	5	6	30	11	11	11	11	54	152	
Bulletin board	3	18	4	12	5	45	6	6	8	8	8	9	9	98	4	8	5	5	6	30	11	11	11	11	54	152	
Storage shelf															1	2	1	1	1	5	1	1	1	1	9	9	
Steel shelf															1	2	1	1	1	5	1	1	1	1	9	9	

(2) Science Laboratory Instruments:

The following aspects were taken into consideration when selecting the science laboratory instruments to be provided:

- 1) Instrument types shall be selected from the standard laboratory instrument list requested based on the new secondary school curricula that were established by the secondary education development program.
- 2) Instruments shall be selected by carefully studying and examining facility conditions of the Project schools.
- 3) To effectively use the science labs to be constructed by the Project, basic packaged instruments for ordinary science and physics class use should be provided.
- 4) Instruments that require electrical facilities or chemical hard to obtain shall be avoided.

There are some problems with the science laboratory instruments manufactured in the Philippines. Thus, all other instruments to be provided under the Project are to be procured in Japan.

As 5 of the 9 Project schools are already included in the Secondary Education Instructional Equipment Program (Phase II), they will not be provided science laboratory instruments under the Project.

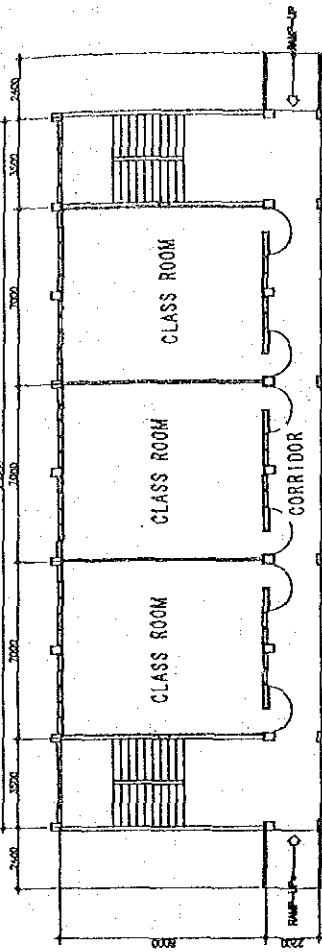
Table 4-7 List of Science Laboratory Instruments to be
Provided to Each School

Class Name	Standard Instrument List No.	Instrument Name	Quantity
General Science	1	Platform Balance	1
	2	Anemometer	1
	3	Hand Lens	4
	4	Magnetic Compass	4
	5	Stop Watch (Digital)	4
	6	Mercury Thermometer (-5°C to 105°C)	4
Biology	1	Compound Microscope (with cleaning set)	4
	2	Slide Glass (50 pieces in a box)	8
	3	Cover Glass (22mm x 22mm, 100 pieces in a box)	4
Chemistry	1	Triple Beam Balance	1
Physics	1	Convex and Concave Mirrors	4
	2	Demonstration Lens set	1
	3	Spring Balance (Newton)	8
	4	Dynamic Carts (two pulleys & one test bench)	2
	5	Electroscope	1
	6	Prism Set (Equilateral)	4
	7	Magnet (U-shape)	4
	8	Magnet (Alcomax)	4
	9	Magnet (bar)	4
	10	Multi-tester (analog)	4
	11	Logic Gates (for teacher)	1
		Logic Gates (for students)	12
	12	Set of Tuning Fork	2
	13	Resonance Apparatus	1
	14	Electric Motor Generator	4
	15	Free Fall Apparatus	1
	16	Scientific Calculator	8
	17	Concave and Convex Lens Set	1
	18	Lead Line with Alligator Clip Attached	4
	19	Mercury Manometer	1
20	Electric Circuit Experimental Apparatus	4	
TOTAL			110

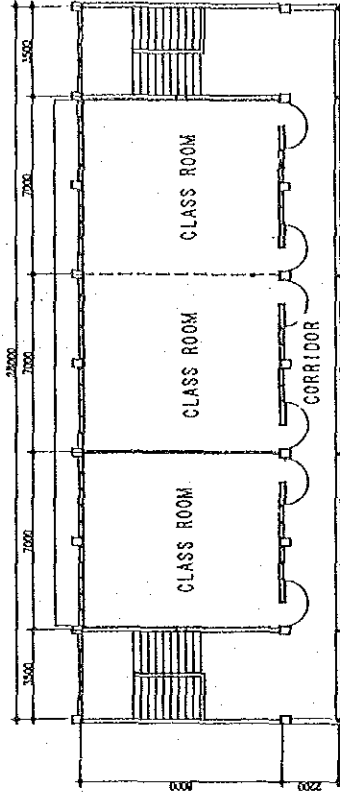
4-3-4 Basic Design Drawings

Drawing List

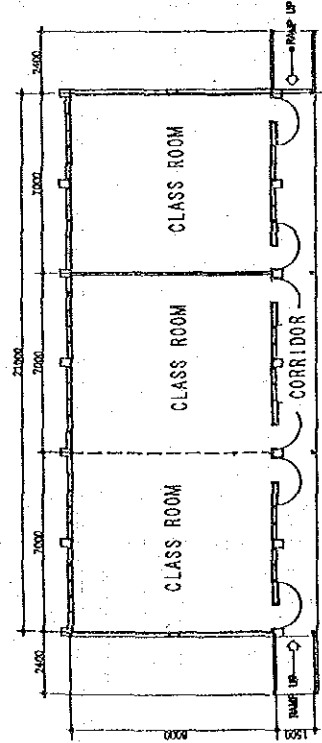
<u>No.</u>	<u>Title</u>
01	Primary School A, B, C, and D Types, Plans
02	Secondary School SA, SB, and SC Types, Plans
03	Primary School C and D Types, Elevations and Sections
04	Secondary School SC Type, Elevations, Sections, and Toilet
05	Primary School A, B, C, and D Types, Equipment Arrangement
06	Secondary School SA, SB, and SC Types, Equipment Arrangement



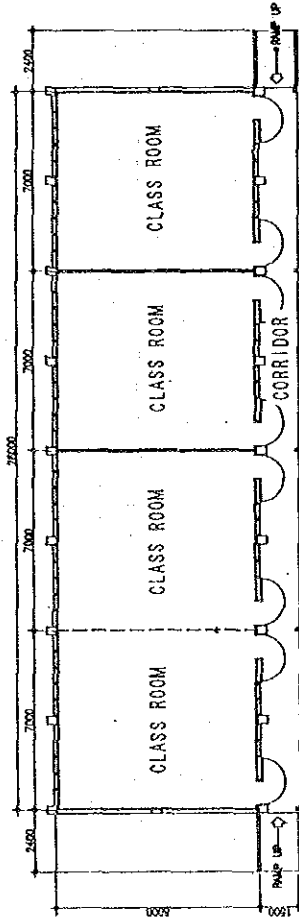
FIRST FLOOR PLAN



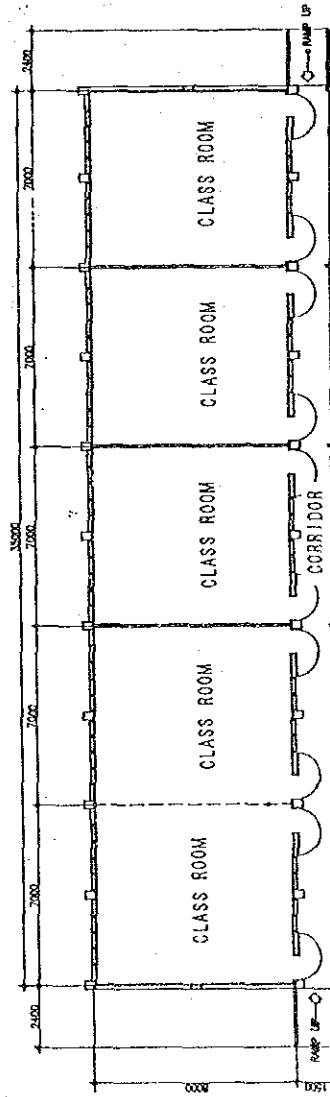
SECOND FLOOR PLAN



ELEMENTARY SCHOOL A-TYPE PLAN



ELEMENTARY SCHOOL B-TYPE PLAN

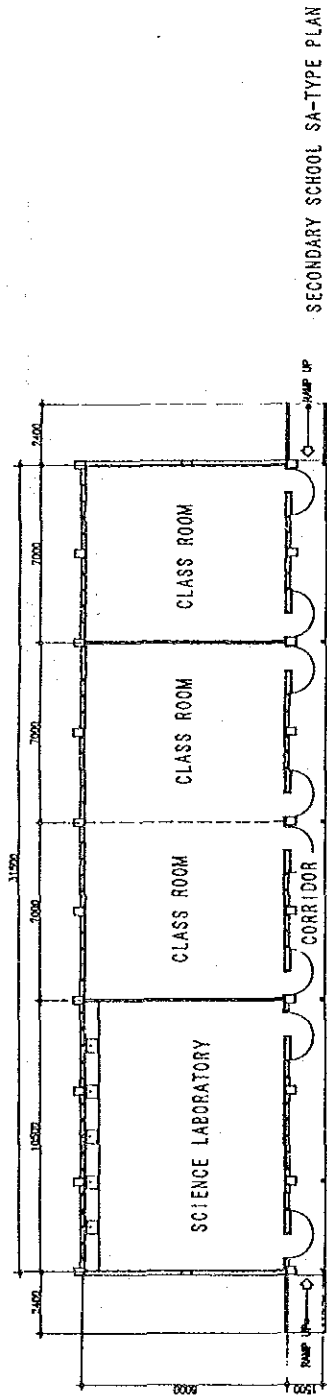


ELEMENTARY SCHOOL C-TYPE PLAN

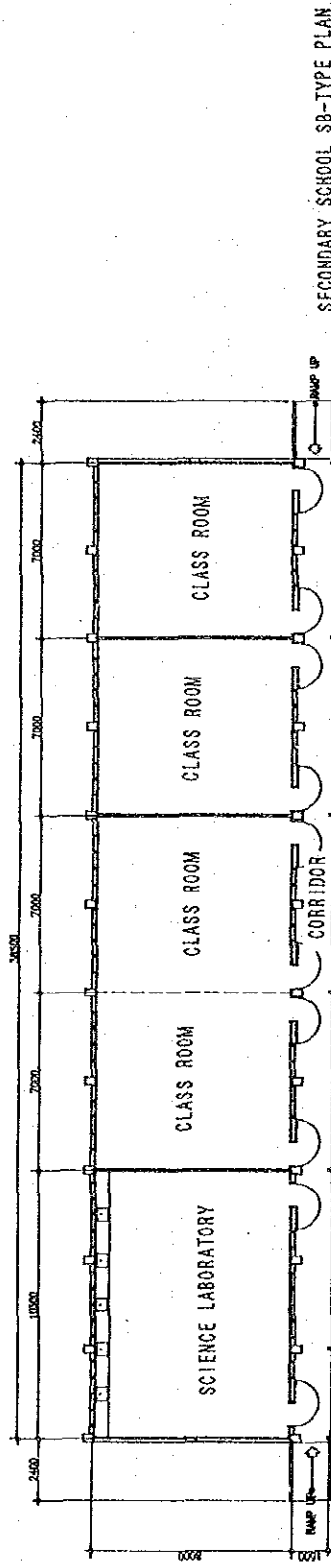
ELEMENTARY SCHOOL D-TYPE PLAN

--- REMOVABLE PARTITION WALL

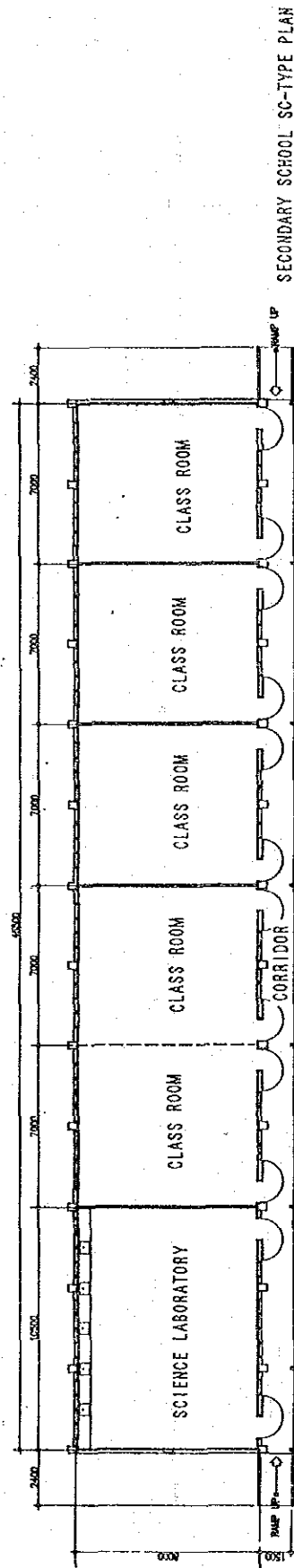




SECONDARY SCHOOL SA-TYPE PLAN



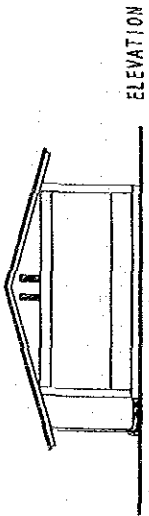
SECONDARY SCHOOL SB-TYPE PLAN



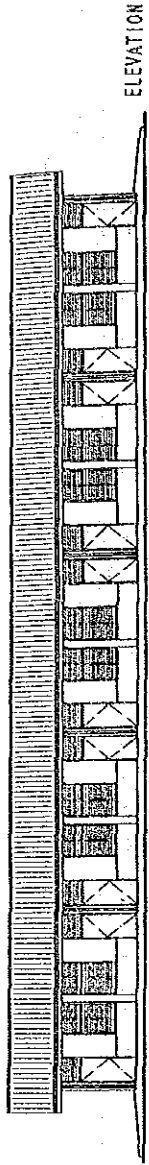
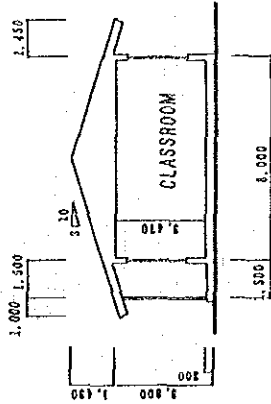
SECONDARY SCHOOL SC-TYPE PLAN

--- REMOVABLE PARTITION WALL

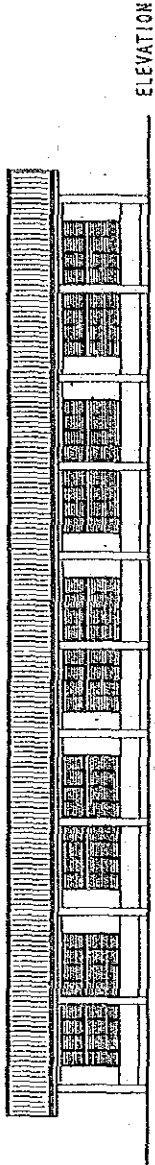




ELEVATION



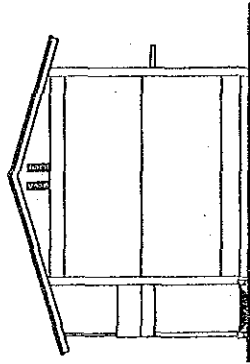
ELEVATION



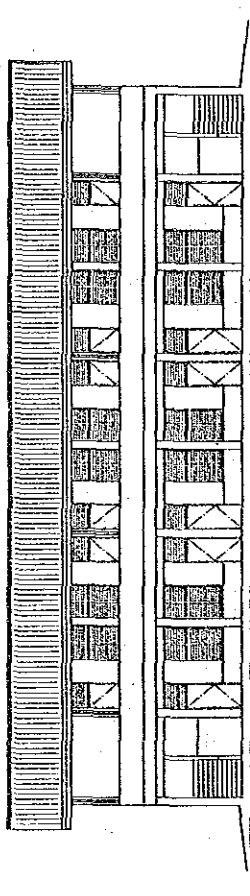
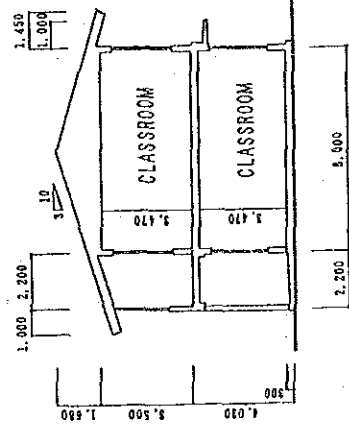
ELEVATION

ELEMENTARY SCHOOL C-TYPE

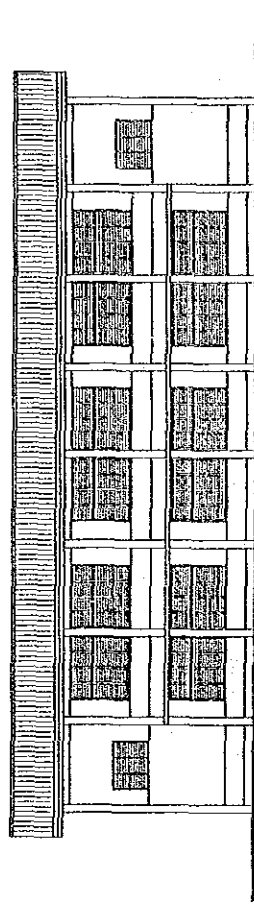
ELEMENTARY SCHOOL D-TYPE



ELEVATION

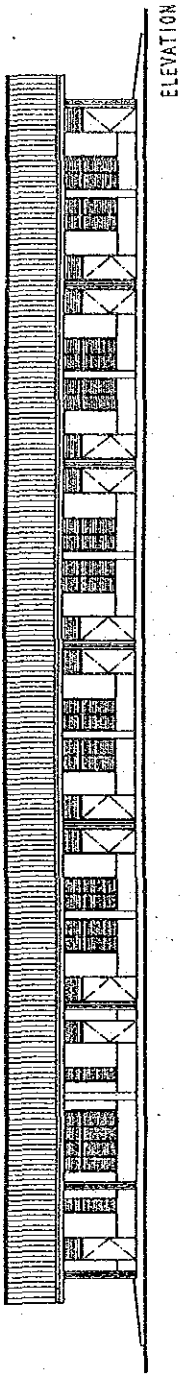


ELEVATION

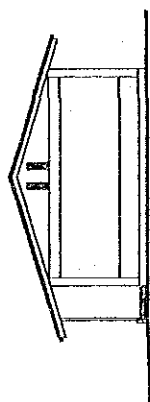


ELEVATION

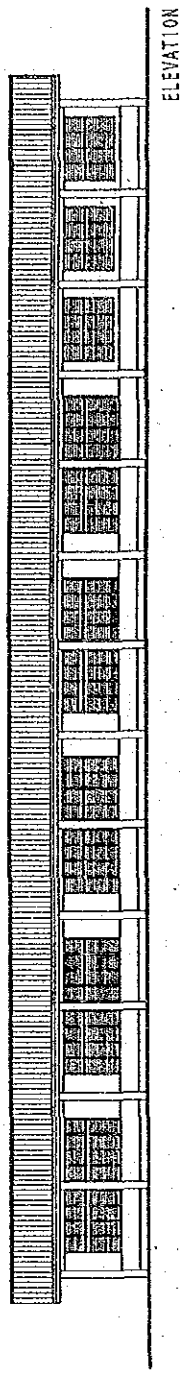
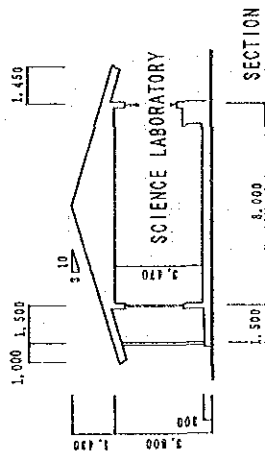




ELEVATION



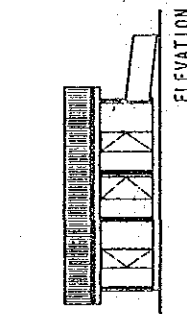
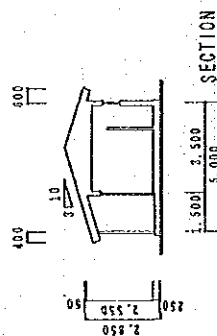
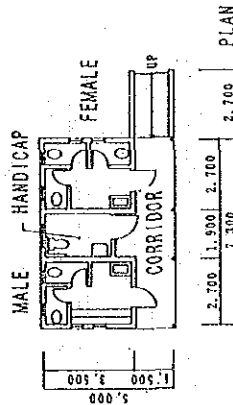
ELEVATION



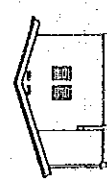
ELEVATION

SECONDARY SCHOOL SC-TYPE

TOILET



ELEVATION



ELEVATION

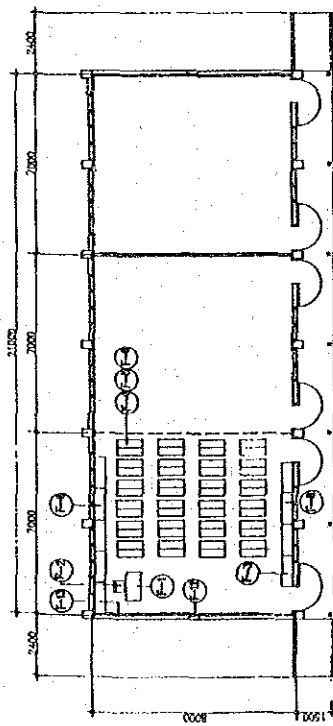


ELEVATION

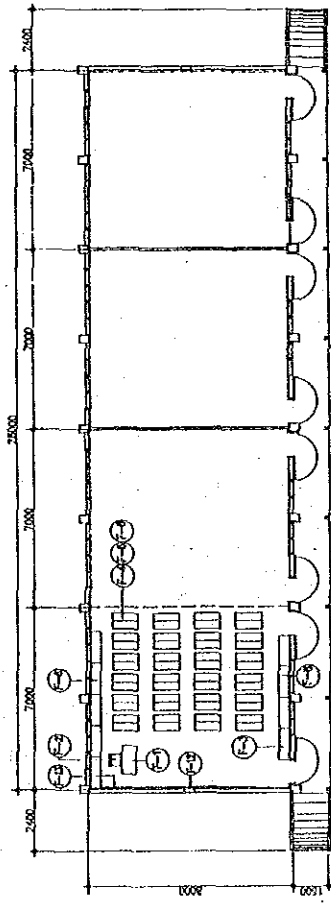
SECONDARY SCHOOL SC-TYPE ELEVATION SECTION
TOILET PLAN ELEVATION SECTION



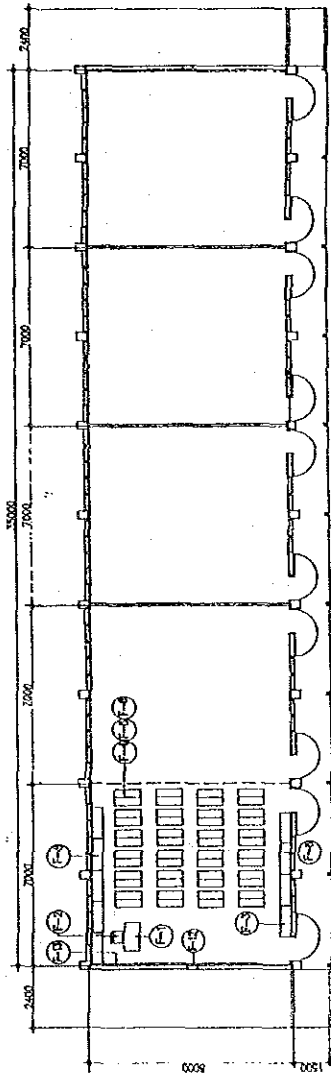
THE EDUCATIONAL FACILITIES IMPROVEMENT PROGRAM (PHASE I)



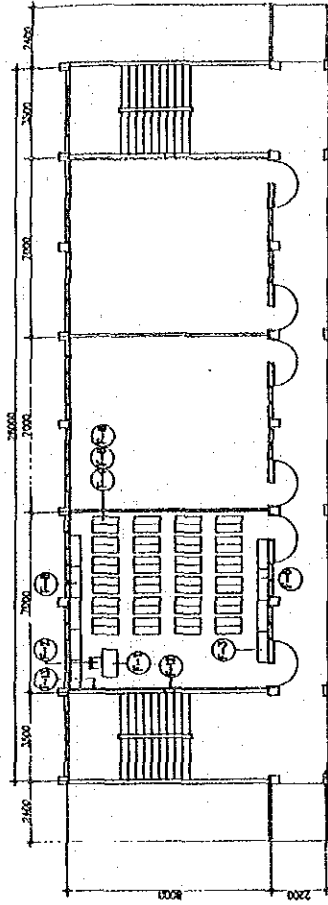
ELEMENTARY SCHOOL A-TYPE EQUIPMENT PLAN



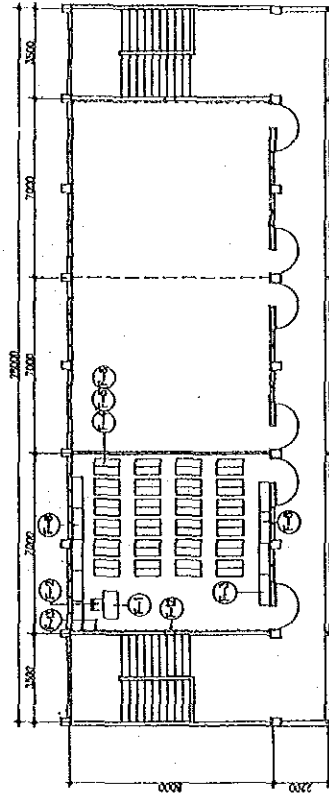
ELEMENTARY SCHOOL B-TYPE EQUIPMENT PLAN



ELEMENTARY SCHOOL C-TYPE EQUIPMENT PLAN



FIRST FLOOR PLAN

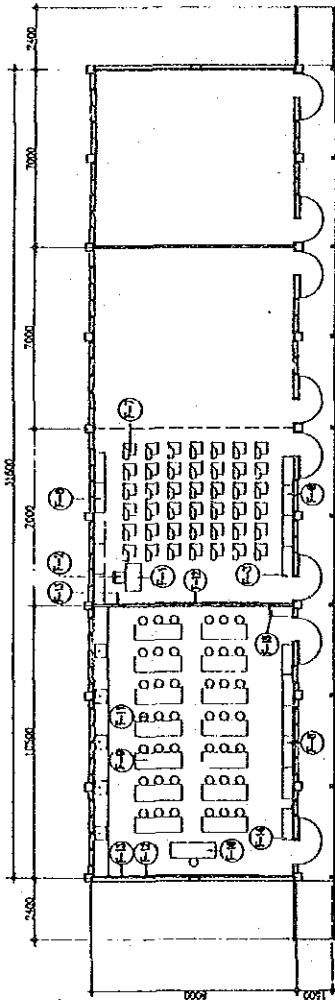


SECOND FLOOR PLAN

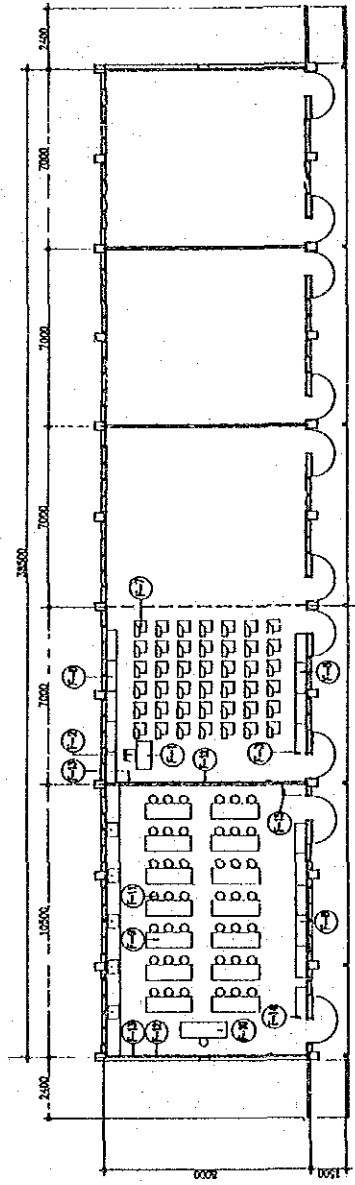
ELEMENTARY SCHOOL D-TYPE EQUIPMENT PLAN

NO.	ITEM	DESCRIPTION
F-1	TEACHER'S DESK	300 x 500 x 750
F-2	TEACHER'S CHAIR	385 x 410 x 860
F-3	TEACHER'S CABINET	1200 x 400 x 1800
F-4	STUDENT'S CHAIR (SMALL)	1010 x 590 x 577
F-5	STUDENT'S CHAIR (MEDIUM)	1010 x 615 x 617
F-6	STUDENT'S CHAIR (LARGE)	1010 x 640 x 661
F-8	STUDENT'S CLOSET	1200 x 400 x 600
F-12	BLACKBOARD	4800 x 1200
F-13	BULLETIN BOARD	1200 x 1200

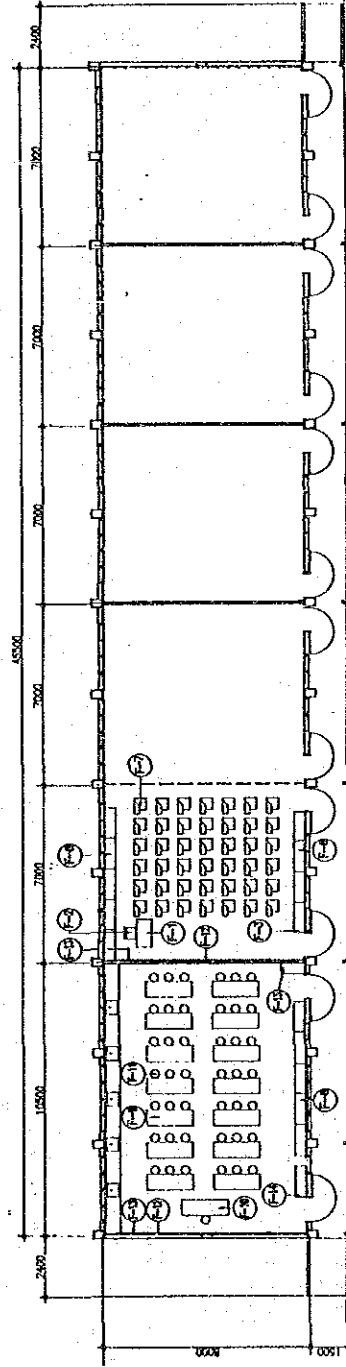
NO.	ITEM	DESCRIPTION
F-1	TEACHER'S DESK	900 x 500 x 760
F-2	TEACHER'S CHAIR	385 x 410 x 860
F-3	TEACHER'S CABINET	1200 x 400 x 1800
F-7	STUDENT'S TABLET ARMCHAIR	460 x 630 x 800
F-8	STUDENT'S CLOSET	1200 x 400 x 800
F-12	BLACKBOARD	4800 x 1200
F-13	BULLETIN BOARD	1200 x 1200
F-9	EXPERIMENT TABLE	1800 x 600 x 850
F-10	DEMONSTRATION TABLE	1800 x 600 x 850
F-11	STOOL	ø 530 x 600
F-14	STORAGE SHELF	1200 x 400 x 1800
F-15	STEEL SHELF	900 x 400 x 1830



SECONDARY SCHOOL SA-TYPE EQUIPMENT PLAN



SECONDARY SCHOOL SB-TYPE EQUIPMENT PLAN



SECONDARY SCHOOL SC-TYPE EQUIPMENT PLAN

4-4 Implementation Plan

4-4-1 Implementation Policies

The purpose of the Project is to construct many schoolbuildings during a short period of time on the four islands that stretch some 500 km in a north-south direction and 460 km in an east-west direction in Region IV. An adequate implementation plan must be prepared by full understanding of the area conditions.

The major policies for the implementation plan are as follows:

- 1) The Project Area shall be divided in two. At first, schoolbuildings of 16 schools shall be built in Mindoro and Marinduque islands. After turning over the completed buildings to the Philippine side, the remaining schoolbuildings of 14 schools shall be built in Palawan and Tablas islands.
- 2) Project construction work will be undertaken in the existing school complexes. Thus, construction work must be carried so as not to interfere with daily school activities and by paying special attention to the safety of students.
- 3) As many schoolbuildings will be built simultaneously, each engineer in charge of each school site must maintain close communications with each other for the smooth progress of the construction work.
- 4) Some Project schools do not have electricity. At the schools, portable generators shall be used for construction work.

As a water supply is available at each Project school, city or well water can be used for construction work.

- 5) Throughout the entire construction period, it will be necessary to establish a security system for each construction site.
- 6) For successful Project construction, cooperation with local contractors is absolutely necessary. The work boundary between a prime contractor and its subcontractors must be clarified and a

construction team consisting of an adequate personnel must be organized for smooth construction supervision work.

- 7) Science laboratory instruments to be procured in Japan must be carefully inspected for their quality and manufacturing to avoid any future problems.

As the quality of reinforced concrete work will be greatly affected by the quality control to be conducted at each construction site, careful construction management must be carried out by local consultants under the guidance of Japanese consultant personnel.

The land clearing work at schoolbuilding construction sites must be properly conducted and completed on schedule by the Philippine side. Delay of this work may jeopardize the commencement of Project construction.

Because many schoolbuildings have to be built simultaneously, local contractors who are fully familiar with the procurement of construction materials and the laborers to be used.

As for the instruments to be installed in the science labs, a Japanese specialist shall be dispatched to provide instructions and guidance concerning their use once they are turned over to the Philippine side.

Accomplishment of the undertaking to be borne by the Philippine side (refer to 4-4-4, (1)) is essential for the smooth implementation of the Project. In particular, without obtaining water sources by drilling wells, the toilets and science laboratories to be built by the Project will not function. Thus, well drilling must be completed by the Philippine side. The Japanese side will assist the Philippine side with the well drilling work by providing technical guidance and well drilling specifications.

4-4-2 Construction Management System

As the Project Area is scattered on 4 islands, the construction management system must be established by paying careful consideration to carry out the construction schedule and quality control management smoothly.

To control the overall construction management, the consultants and

contractors shall establish their own management headquarters in Manila. Under these headquarters, two construction management bases (one for Mindoro and Marinduque islands; the other for Palawan and Tablas islands) shall be set up.

At first, a construction management base shall be built at Calapan in Mindoro island. Then, the construction of the schoolbuildings of 16 schools in Mindoro and Marinduque shall be conducted.

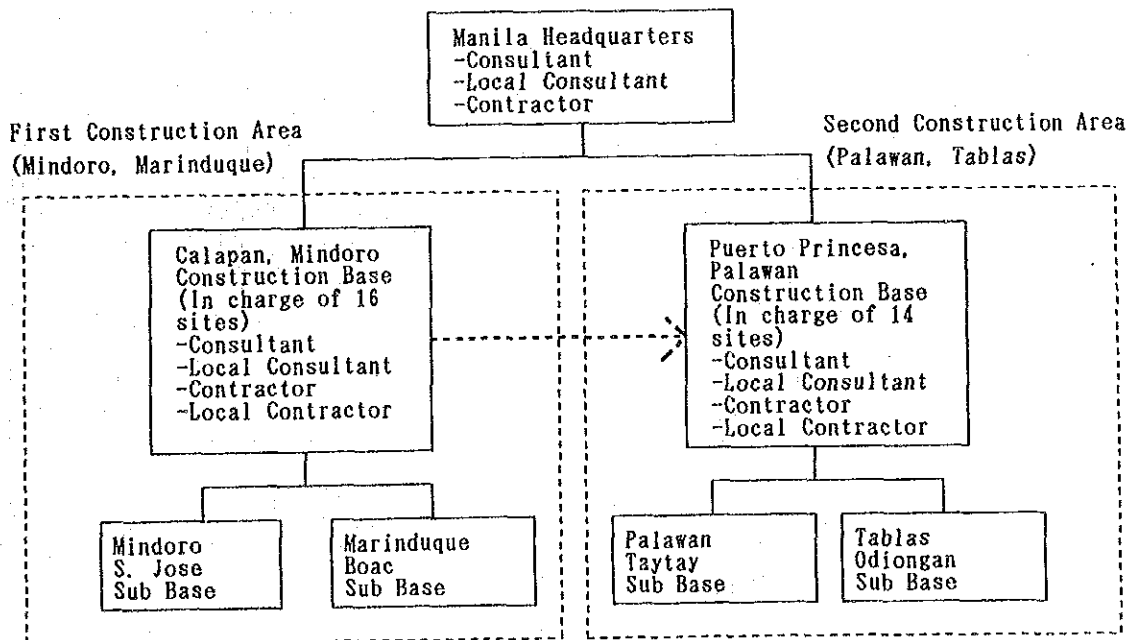
In order to support the construction management base at Calapan, two sub-bases should be built (one at San Jose on Mindoro Island; the other at Boac on Marinduque Island). The sub-bases will conduct construction supervision at each construction area. After turning over the completed schoolbuildings of 16 schools to the Philippine side, the construction management base will be relocated to Puerto Princesa on Palawan Island and the construction of schoolbuildings of 14 schools on Palawan and Tablas islands will be conducted.

To assist the construction management base at Puerto Princesa, two sub-bases (one at Taytay on Palawan; the other at Ojongung at Tablas) will be set up.

Construction materials and equipment will be transported to these bases and careful construction management will be conducted by the consultants, contractors and local engineers.

The Project construction management organization structure is shown in Table. 4-8.

Table 4-8 Project Construction Management Organization Chart



4-4-3 Equipment and Material Procurement Plan

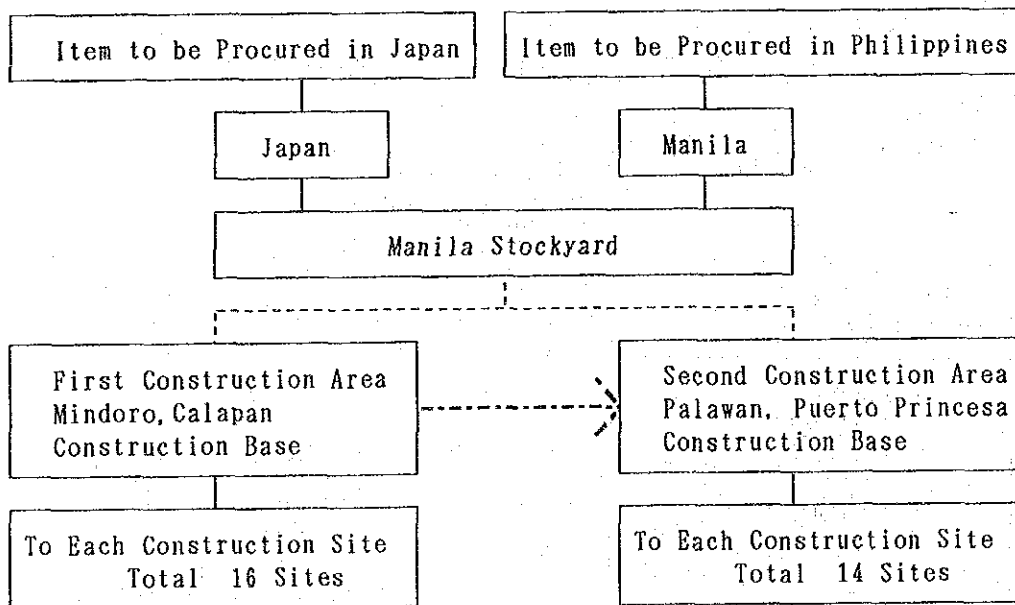
(1) Equipment and Material Procurement Policies

For easy maintenance and management of Project facilities after turning them over to the Philippine side, all construction material and equipment, including furniture with the exception of deep-well hand pumps, shall be procured in the Philippines. Most of the necessary construction material is obtainable in Mindoro and Palawan islands. But, it is extremely difficult to procure construction material in Marinduque and Tablas islands; thus, it should be procured in Manila. In Mindoro or Palawan certain construction material is either difficult to procure or is of poor quality. In such case, procurement should be made in Manila.

There are some problems with the science laboratory instruments manufactured in the Philippines. Thus, all instruments to be provided under the Project are to be procured in Japan.

A shipping plan for the science laboratory instruments to be procured shall be prepared by taking into account the procurement schedule in Japan and the work progress on each school in the Philippines in order to effect smooth delivery to each school after completing the schoolbuilding.

Table 4-9 Transportation Plan for Procured Equipment and Materials



Note : ——— Land Transportation
 - - - - - Sea Transportation

(2) Shipping and Storage Plan

Science laboratory instruments and deep well-hand pumps that are procured in Japan will be shipped to the Philippines and disembarked at the Manila International Port. After customs inspection, the instruments will be stored temporarily at the material and equipment storage base in Manila together with the material and equipment procured in Manila. They will then be shipped by boats, together with the material and equipment procured in Manila, to each Project area's stockyard. They will be transported by boats to each Project school depending upon the progress of schoolbuilding construction.

Major roads in the Project Area are well maintained. However, the access roads to Project construction sites have various problems, such as insufficient bridge capacities or narrow road widths. Thus, alternative access road routes must be examined and a careful shipping plan must be prepared.

4-4-4 Implementation Schedule

(1) Project Construction Boundaries

The construction boundaries to be undertaken by the Japanese and Philippine sides are as shown in Table 4-10.

Table 4-10 Project Construction Boundaries to be Undertaken by the Japanese and Philippine Sides

Work Item	Japanese Side	Philippine Side
1. Securing of Project sites.		○
2. Site clearing prior to commencing Project construction work.		○
3. Incidental work, such as gardening and fencing.		○
4. Securing access roads to Project sites prior to the commencement of Project construction work.		○
5. Installation of facilities for distribution of electricity, water supply, drainage and other incidental facilities to Project sites when needed.		○
6. Obtaining building, occupancy and all necessary permits for the Project with respect to the laws and regulations of the Philippine Government.		○
7. Securing the necessary budget and personnel for the proper and effective maintenance of Project schoolbuildings and equipment.		○
8. Procurement of Project use equipment and materials in Japan and their shipment to Project sites in the Philippines.	○	
9. Procurement of Project use equipment, materials and labour in the Philippines and their transportation to Project sites.	○	
10. Construction of Project facilities.	○	
11. Exempting Taxes and all other levies and duties and ensuring prompt unloading and customs clearances at the port of disembarkation in the Philippines for Project use materials and equipment.		○
12. Exempting Japanese nationals involved in the Project from customs duties, internal taxes and other fiscal levies which may be imposed in the Philippines with respect to the supply of the equipment and services under the verified contracts.		○
13. According Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contracts for their entry into the Philippines and stay therein for the execution of the Projects.		○
14. Bearing of commissions to the Japanese foreign exchange bank for the banking services based on the Banking Arrangement in accordance with the standard grant procedure.		○
15. Bearing all expenses other than those to be borne by the Grant, necessary for the construction of the schoolbuildings as well as for the transportation and installation of the equipment.		○
16. Effective operation and management of the facilities and equipment to be provided under the Grant Aid.		○

(2) Implementation Schedule

The preparation of the Project implementation schedule shall be based on the premise that the measures to be taken by the Philippine and Japanese governments will be conducted smoothly in accordance with procedures established by the Grant Aid Program of the Government of Japan.

Project implementation will commence when the Exchange of Notes is signed by both governments. Then the preparation of the detailed design, the tendering for the construction work, the procurement of construction materials, equipment, and instruments, the shipping of the materials, equipment, and instruments, and the facility construction work will follow in five steps.

• Detailed Design:

After the confirmation of the consultant contract agreement by the Government of Japan, the consultant will prepare the tender documents based on the Basic Design Study Report. The specifications and detailed items for Project facilities should be decided upon as a result of discussions to be held with the actual users, or their representatives, of the facilities.

As for the boundaries between the measures to be undertaken by the Philippine and Japanese governments for the Project under the Grant Aid Program of the Government of Japan, they must be clarified during the early stage of the detailed design period based on the Exchange of Notes.

Both governments will take the necessary steps to promote the formation of the organization structure of the Project implementing agency, and to secure the necessary funds to enable the Project to meet the requirements of the Grant Aid Program which is based on the single fiscal year system. It will take about two months to prepare the detailed design.

• Tendering for Project Construction Work:

The tender period is the time required for the tender announcement, the

prequalification evaluation of tenders, the tender opening, and the tender evaluation for reaching contract agreement.

The methods for tendering and for reaching contract agreement must be carefully decided upon after discussions are held with representatives from both governments.

About forty days will be needed for the tender period.

• Material and Equipment Procurement and Shipping:

After the construction contract agreement is made, the detailed design drawings will be prepared. Once the drawings are approved, material and equipment procurement will start. The first shipment of the procured material and equipment will arrive at Project construction sites about thirty days after the construction contract agreement is made.

• Construction:

After approximately thirty days of site preparation work, the building foundation construction work will begin.

As the Project Area is scattered on four islands, the Area will be divided into two area groups. At first, construction work will commence on Mindoro and Marinduque islands. About four months will be needed to construct one schoolbuilding. The construction of schoolbuildings of 16 schools will begin simultaneously.

After turning the completed schoolbuilding over to the Philippine side, schoolbuildings of 14 schools will be constructed on Palawan and Tablas islands.

Approximately ten months will be required to construct all thirty Project schoolbuildings.

The Project implementation schedule is shown in Table 4-11

Table 4-11 The Project Implementation Schedule

	1	2	3	4	5	6	7	8	9	10	11	12	
DESIGN & TENDER		(Design Work in the Philippines)											
		(Design Work in Japan) (Total 2 Months)											
		(Tender Work) (Total 1.3 Months)											
		(Grand Total 3.3 Months)											
	1	2	3	4	5	6	7	8	9	10	11	12	
PROCUREMENT & CONSTRUCTION		Preparation Work					Preparation Work						
		Foundation Work					Foundation Work						
		Building Construction					Building Construction						
		Procurement of Equipment							Transportation				
		Inspection & Turn over					Inspection & Turn over						
		First Construction Area					Second Construction Area						
		(Mindoro, Marinduque)					(Palawan, Romblon)						
												(Total 10 Months)	

4-4-5 Construction Costs to be Borne by the Philippine Side

Project construction costs to be borne by the Philippine side is estimated to be 4,898,000 pesos. The cost breakdown is as follows:

(1) Land Clearance:	2,057,000 pesos
(2) Removal of Existing Buildings:	784,000 pesos
(3) Water Supply Work:	686,000 pesos
(4) Power Supply Work:	1,371,000 pesos
TOTAL	4,898,000 pesos

CHAPTER 5. PROJECT EVALUATION AND CONCLUSION

CHAPTER 5 PROJECT EVALUATION AND CONCLUSION

The Government of the Philippines acknowledges the importance of upgrading the qualities of education, and improving and building educational facilities. It has been making effort to establish the foundation for manpower development. However, due to the financial difficulties being experienced by the Government, the country's educational facilities and associated equipment are still inadequate. Furthermore, due to chronic natural hazards, such as typhoon damage inflicted on school facilities every year, and the country's high annual population increase rate, the classroom shortage situation has become a serious problem. Thus, the construction of school facilities is a very important subject for the Government of the Philippines.

(1) Project Effects

In view of the above background, the construction of schoolbuildings for 30 primary and secondary schools in Region IV under the Project will have the following effects:

(a) Increase Opportunities for Children to Attend School

The project is to construct 98 classrooms for primary schools and 54 (including 9 science laboratory rooms) for secondary schools. The classrooms will be able to accommodate 5,810 students. Thus, the Project will represent a meaningful contribution towards increasing the opportunities for children to attend school.

(b) Contribution to Area Residents

The school facilities to be built under the Project will not only be used for ordinary classroom activities (including the classes that will be conducted in two or three shifts), they will be used for non-formal education as well as places of refuge for area residents during periods of natural calamities and as meeting places.

This additional use of the school facilities will be a beneficial contribution to the area residents.

(c) Activation of Rural Economies

The construction of many schoolbuildings in the rural areas of the Philippines will provide employment opportunities for area residents. Except for the science laboratory instruments and deep well-hand pumps that will be procured in Japan, all Project use materials and equipment will be procured locally. This will contribute significantly towards stimulating the rural economies of the Philippines.

2) Conclusion

The chronic shortage of school facilities in the Philippines is a serious problem facing the country. Further, the problem has been compounded by the damage inflicted on school facilities by typhoons and by the high annual population increase of 2.4%.

In the Medium-term Philippine Development Plan, the National Economic and Development Authority indicated that the improvement of school education is one of the important mainstays for the development of the country's manpower resources, and that it is of utmost importance to determine the best way for improving the quality of education while, at the same time, promoting industrial development and economic growth.

It is believed that the implementation of the Project will be absolutely essential for the achievement of the country's Education Development Plan; it will contribute greatly to the promotion of the National Development Plan.

The contents of the Project is such that it will not create any problems for the maintenance and management of the Project's school facilities. Thus, the construction of the school facilities will alleviate the chronic school facility shortage thereby enabling many children to receive a proper education which, in turn, will contribute to the improvement of the country's education conditions. Therefore, it is considered to be appropriate to implement the Project under the Grant Aid Program of the Government of Japan.

(3) Recommendations

- (a) The Project shall be implemented with the cooperation of both Japan and the Philippines. Thus, it will be of great importance that the construction work to be borne by the Philippine side must be carried out for successful Project implementation. In particular, without the Philippine side obtaining water sources by drilling wells, the toilets and science laboratories to be built by the Project will not function. Thus, the Japanese side should provide the Philippine side with technical guidance for well drilling.

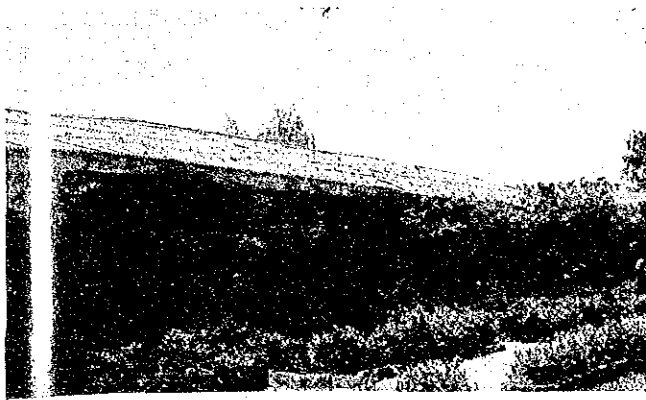
- (b) Although the school facilities were designed after thoroughly examining the principles of minimum maintenance and management costs, it would be desirable to give more consideration to the management system. For example, it is recommended that a system utilizing the students to clean the facilities and to pump water into the elevated tanks be established as part of the school's education program.

APPENDICES

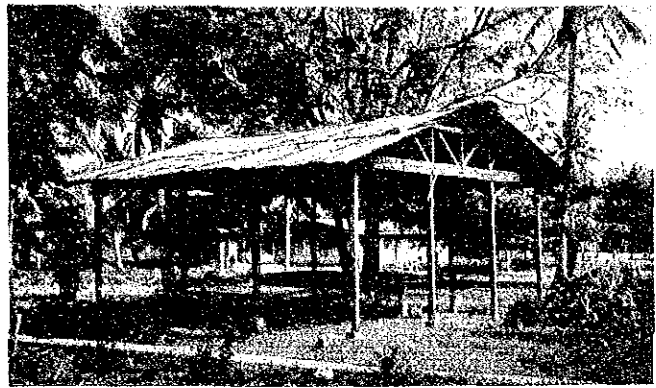
APPENDICES

1. Area Photographs
2. Member List of the Basic Design Study Team
3. Itinerary of the Study Team
4. List of Personnel Interviewed
5. Minutes of Discussions
6. Letters from DECS
 - a. Letter concerning the change of one project School
 - b. Promise concerning the Project Schools' Maintenance and Management

APPENDIX 1. Area Photographs



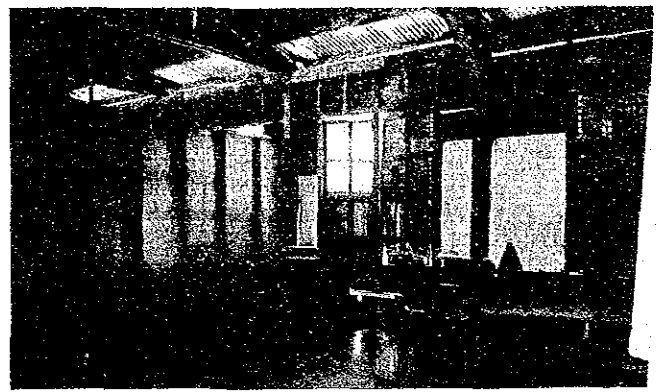
E-01. Narra Central School



E-02. Quezon Central School



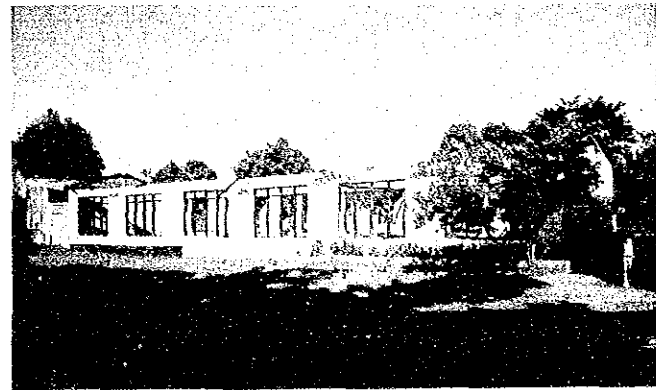
E-03. Adriatico Memorial Elementary School



E-04. B. del Mundo Elementary School



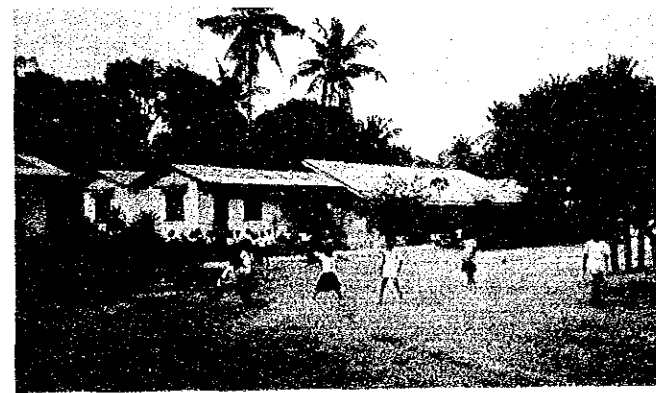
E-05. Siete Elementary School



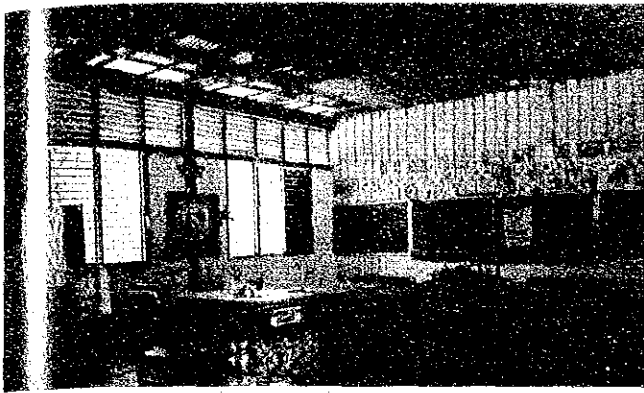
E-06. Juan Morente Pilot



E-07. San Pedro Central School



E-08. A. Soriano Memorial Elementary School



E-09. Sablayan Elementary School



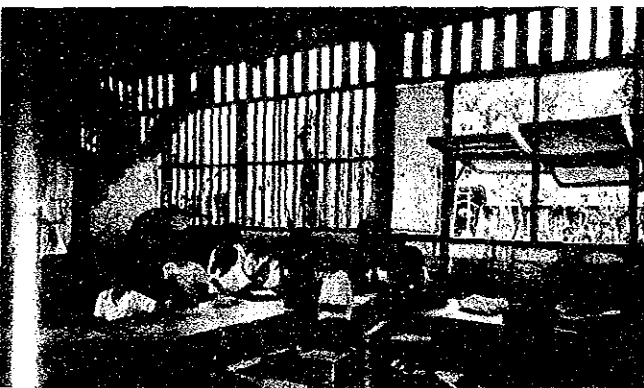
E-10. Abangan Central School



E-11. Ipilan Elementary School



E-12. Libertad Elementary School



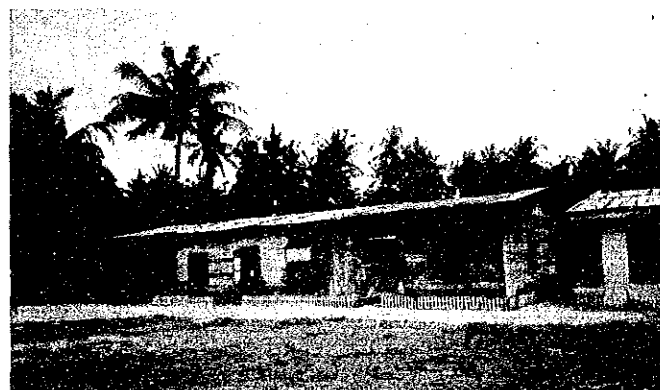
E-13. Malaya Elementary School



E-14. Looc Central School



E-15. Concepcion Central School



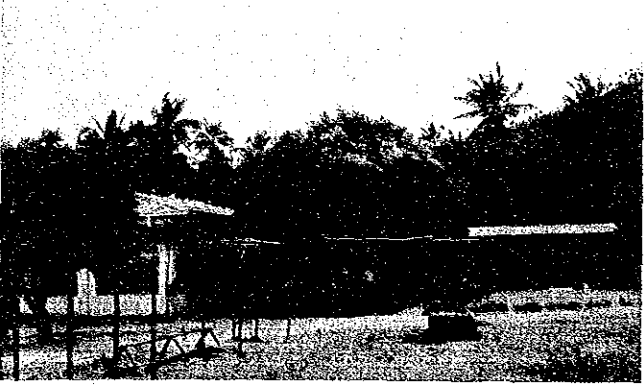
E-16. Port Barton Central School



E-17. Adela Elementary School



E-18. Mogpog Elementary School



E-19. San Agustin Central School



E-20. Masiga Elementary School



E-21. Balatero Elementary School



E-22. Marinduque National High School



S-23. Rio Tuba Barangay High School



S-24. Bulbugan Barangay High School



S-25. El Nido Barangay High School



S-26. Alcadesma Barangay High School



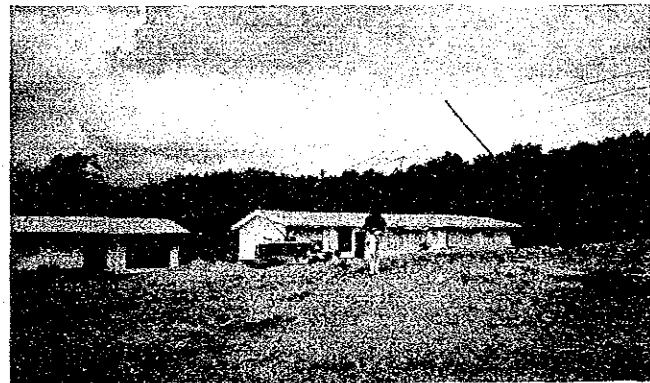
S-27. Barahan Barangay High School



S-28. Palawan INS



S-29. Alcantara National High School



S-30. Matalaba National High School

APPENDIX 2. MEMBER LIST OF THE STUDY TEAM
BASIC STUDY TEAM (February 21 through March 15, 1993)

<u>NAME</u>	<u>ASSIGNMENT</u>	<u>AFFILIATION</u>
Mr. Takuo Kidokoro	Leader	Director, First Project Management Division, Grant Aid Project Management Dept., Japan International Cooperation Agency
Mr. Naohiro Watari	Project Coordinator	Grant Aid Division, Bureau of Economic Cooperation, Ministry of Foreign Affairs
Mr. Takenobu Mohri	Architectural Planner	Mohri, Architect and Associates, Inc.
Mr. Shiro Sasaki	Architectural Designer	Mohri, Architect and Associates, Inc.
Mr. Shinsuke Nomura	Facility and Equipment Planner	Mohri, Architect and Associates, Inc.
Mr. Nobuhiro Mohri	Construction Planner and Cost Estimator	Mohri, Architect and Associates, Inc.

BASIC DESIGN STUDY DRAFT REPORT EXPLANATION TEAM (May 16 to 25, 1993)

Mr. Katsuo Shoji	Leader	Officer, First Project Management Division Grant Aid Project Management Dept. Japan International Cooperation Agency
Mr. Takenobu Mohri	Architectural Planner	Mori, Architect and Associates, Inc.

Mr. Shiro Sasaki	Architectural Designer	Mohri, Architect and Associates, Inc.
Mr. Shinsuke Nomura	Facility and Equipment Planner	Mohri, Architect and Associates, Inc.

APPENDIX 3 ITINERARY OF THE STUDY TEAM

(1) Basic design Study Team

NO	MON/DY	ITINERARY			
1	Feb. 21 (Sun)	JAL-741: Lv. Narita 9:45AM → Arr. Manila 13:20 *Meeting with Philippine JICA office, Japanese Embassy			
2	Feb. 22 (Mon)	*Courtesy visit and meeting with DECS *Inspection on JICA Schoolbuildings (Phase III) & ESF Schoolbuildings			
3	Feb. 23 (Tue)	*Inspection on ADB Schoolbuildings *Meeting with DECS			
4	Feb. 24 (Wed)	*Meeting with DECS			
5	Feb. 25 (Thu)	*Meeting among team members *Data collection & analysis			
6	Feb. 26 (Fri)	*Meeting with DECS · Signing of Minutes *Mr. Watari: JL-742 Lv. Manila 14:40PM → Arr. Narita 19:30PM			
7	Feb. 27 (Sat)	*Mr. Kidokoro: NW-006 Lv. Manila 9:10AM → Arr. Narita 14:05PM			
		(Team A)	(Team B)	(Team C) PR231	(Team D) PR129
		Meeting with DECS Division Office PR195: Lv. MNL 5:40AM → Arr. P. Prin 6:50AM (P. Princesa)		Lv. Manila 6:00AM Arr. Mar 6:30AM Sitev survey (Boac)	Lv. Manila 10:35AM Arr. Sn. Jose 11:15AM Site survey (Sn. Jose)
8	Feb. 28 (Sun)	PR196 Lv. P. Prin 7:45AM Arr. Mnl 8:45AM	Sitev survey (P. Princesa)	PR-232: Lv. Mar 7:00AM Arr. Mnl 7:30AM	Site survey (Sn. Jose)
9	Mar. 1 (Mon)	*Data collection & analysis	Sitev survey (Brooke's Pt.)	*Data collection & analysis	PR-130 Lv. Sn. Jose 12:55PM Arr. Mnl 1:15PM
10	Mar. 2 (Tue)	*Data collection & analysis	Sitev survey (Caparii)	PR-323 Lv. Mnl 9:05AM Arr. Tablas 10:05AM Site survey (Alcantara)	Data collection & analysis
11	Mar. 3 (Wed)	*Data collection & analysis	Sitev survey (El Nido)	Sitev survey (Alcantara)	By ferry boat Lv. Batangas 6:00AM Arr. Calapan 8:17AM (Puerto Calera)
12	Mar. 4 (Thu)	*Data collection & analysis	PR196 Lv. P. Prin 7:45AM Arr. Mnl 8:55AM	PR324 Lv. Tablas 9:30AM Arr. Mnl 10:30AM	Site survey (Calapan)
13	Mar. 5 (Fri)	*Meeting among team members *Data collection & analysis & analysis			By ferry boat Lv. Calapan 2:37PM Arr. Batangas 4:45PM
14	Mar. 6 (Sat)	*Meeting among team members *Data analysis of site survey			

NO	MON/DY	ITINERARY
15	Mar. 7 (Sun)	*Meeting among team members *Data analysis of site survey
16	Mar. 8 (Mon)	*Meeting with Philippine JICA office and Japanese Embassy *Meeting with DECS
17	Mar. 9 (Tue)	*Data collection Team C·D NW006: Lv. Manila 9:10PM → Arr. Narita 14:05PM
18	Mar.10 (Wed)	*Meeting with DECS *Inspection on building material factories
19	Mar.11 (Thu)	*Inspection on furniture factories *Data collection
20	Mar.12 (Fri)	*Meeting with DECS *Meeting with Philippine JICA office and Japanese Embassy *Inspection on steel manufacturing factory
21	Mar.13 (Sat)	*Data analysis
22	Mar.14 (Sun)	*Meeting among team members *Summary & evaluation of the result of survey
23	Mar.15 (Mon)	Team A·B NW-006: Lv. Manila 9:10AM → Arr. Narita 14:05PM

Note: Team A—T. Mohri Team B—Sasaki Team C—N. Mohri Team D—Nomura

(2) Basic Design study draft Report Explanation Team

No.	Month/ Day	ITINERARY
1	May 16 (Sun)	JAL 741: Lv. Narita 9:45 AM, Arr. Manila 13:00
2	May 17 (Mon)	*Courtesy visit and meeting with DECS
3	May 18 (Tue)	*Mr. Shoji: JAL Lv. Narita 9:45 AM, Arr. Manila 13:00 *Courtesy visit to JICA Office and Japanese Embassy in Manila *Meeting with DECS
4	May 19 (Wed)	*Meeting with DECS *Data Collection
5	May 20 (Thu)	*Meeting with DECS *Data Collection
6	May 21 (Fri)	*Meeting with JICA Office and Japanese Embassy *Minutes of Meeting was signed by the representative of both sides
7	May 22 (Sat)	*Mr. Shoji: Lv. Manila 9:05 by NW 002, Arr. Narita 14:05 *Meeting among team, data clarification and analysis
8	May 23 (Sun)	*Meeting among team, data clarification and analysis
9	May 24 (Mon)	*Final meeting with DECS *Meeting among team and data clarification
10	May 25 (Tue)	*Team: Lv. Manila 9:05 by NW 002, Arr. Narita 14:05

APPENDIX 4. LIST OF PERSONNEL INTERVIEWED

During the Basic Design Study's field survey period, the Study Team interviewed the following personnel:

(1) Concerned Personnel of the Philippine Side:

DECS (Manila)

Armand V. Fabella	Secretary, DECS
Luis R. Baltazar	Under Secretary, DECS
Erlinda C. Pefianco	Under Secretary, DECS
Ramon C. Bacani	Assistant Secretary, DECS
Achilles B. del Callar	Executive Director, EDPITAF-DECS
Amelita A. Cruz	Deputy Executive Director, EDPITAF-DECS
Alberto Mendoza	Director, Bureau of Secondary Education
Edith B. Carpio	Director, Bureau of Elementary Education
Carol Guerrero	Division Chief, Bureau of Secondary Education
Ma. Lourdes G. de Vera	Chief, EDPITAF-RPDD
Teresita D. Felipe	Head, Grants Administration Office/Project Devt., Office IV
Julio P. Agarano	Assistant Chief, EDPITAF-RPDD
Celerino Calinisan	Engineer III, Bureau of Secondary Education/ OIC, Physical Facilities Division
Luis G. Purisima, Jr.	Engineer III, Bureau of Elementary Education
Gil Talindan	Engineer III, EDPITAF, JAPS-PMU
Alberto M. Bantugan	EPS II, Office of Planning Services-DECS
Salvacion Santiago	EPS II, Office of Planning Services-DECS
Miriam n. Coprado	PDO II, EDPITAF-RPDD
Amilyn M. Bala	PDO II, EDPITAF-RPDD
Ma. Lucila M. Torres	PDO II, EDPITAF-RPDD
Adela A. Capistrano	Bureau of Secondary Education, DECS
Victoria Cervantes	Bureau of Secondary education, DECS

DECS' REGION IV LOCAL OFFICE

Domingo Z. Cabasal	Assistant Director
Rodelio B. Maglapuz	Supervisor, Physical Facilities (Secondary)

Ruben M. Dolor	Supervisor, Physical Facilities (Elementary)
Aurora Lagrada	Assistant Superintendent, Division of Palawan
Alfred Camacho	General Supervisor In Charge, Physical Facilities Division of Palawan
Virginia Manrique	Educational Supervisor, Division of Marinduque
Erlinda Prado	Home Economics Supervisor, Division of Romblon
Virgilio Gonzales	Physical Facilities Coordinator, Division of Oriental Mindoro
Claudio Orilla	Supply Officer, Division of Marinduque
Nestor Arcilla	Physical Facilities Staff, Division of Oriental Mindoro
Cenon Pascual	Principal, Alcantara National Trade School, Division of Romblon
Castor Manao, Jr.	Head, Vocational Dept., Alcantara National Trade School, Division of Romblon

(2) Concerned Personnel of the Japanese Side:

Japanese Embassy in Manila

Mr. Hisato Murayama	Ambassador
Mr. Isao Dekiba	First Secretary

JICA Manila Office

Mr. Masataka Iijima	Resident Representative
Mr. Tooru Machida	Deputy Resident Representative
Miss Emiko Ibaraki	Assistant Resident Representative
Mr. Nobuyuki Kobayashi	Assistant Resident Representative

MINUTES OF DISCUSSIONS

BASIC DESIGN STUDY ON THE PROJECT FOR

THE EDUCATIONAL FACILITIES IMPROVEMENT PROGRAM (PHASE I)

IN

THE REPUBLIC OF THE PHILIPPINES

MINUTES OF DISCUSSIONS
BASIC DESIGN STUDY ON THE PROJECT FOR
THE EDUCATIONAL FACILITIES IMPROVEMENT PROGRAM (PHASE I) IN
THE REPUBLIC OF THE PHILIPPINES

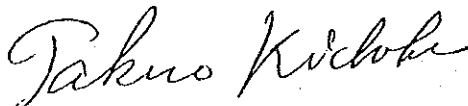
In response to a request from the Government of the Philippines, the Government of Japan decided to conduct a Basic Design Study on the Project for the Educational Facilities Improvement Program (Phase I) (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA sent to the Philippines a study team headed by MR. TAKUO KIDOKORO, Director, First Project Management Division, Grant Aid Project Management Department, JICA. The team is scheduled to stay in the country from February 21 to March 15, 1993.


The team held discussions with the officials concerned of the Government of the Philippines.

In the course of discussions, both parties have confirmed the main items described on the attached sheets. The team will continue on with further work and prepare the Basic Design Study report.

Manila, February 26, 1993



TAKUO KIDOKORO
Leader
Basic Design Study Team
JICA



LUIS R. BALTAZAR
Undersecretary
Department of Education,
Culture and Sports
The Republic of the Philippines

ATTACHMENT

1. OBJECTIVE

The objective of the Project is to construct primary and secondary schoolbuildings in Region IV using domestic construction methods, and provide them with basic furniture. In addition, basic science equipment for recipient secondary schools are being considered.

2. SCHOOLS TO BE COVERED BY THE PROJECT

About thirty (30) primary and secondary recipient schools in the Islands of Marinduque, Mindoro, Palawan and Tablas of Romblon are to be covered by the project. The list of requested recipient schools where the primary and secondary schoolbuildings are to be constructed is attached as Annex 1. The list of requested alternate recipient schools is attached as Annex 2.

3. EXECUTING AGENCY

The Department of Education, Culture and Sports (DECS) through the Educational Development Projects Implementing Task Force (EDPITAF) is responsible for the administration and execution of the Project.

4. ITEMS REQUESTED BY THE GOVERNMENT OF THE PHILIPPINES

After discussions with the Basic Design Study Team, the items listed in Annex 3 were finally requested by the Philippine side. However, the final components of the Project will be decided after further studies.

5. TENTATIVE FLOOR PLANS

The tentative floor plans for the primary and secondary schoolbuildings will be developed and incorporated in the Draft Final Report.

6. JAPAN'S GRANT AID SYSTEM

1) The Government of the Philippines understands the Japanese Grant Aid system as explained by the team.

2) The Government of the Philippines will take the necessary measures (described in Annex 4) for the smooth implementation of the Project on the condition that the Grant Aid Assistance by the Government of Japan is extended to the Project.

7. SCHEDULE OF THE STUDY

1) The consultants will continue with further studies including field survey in the Philippines until March 15.

2) Based on the Minutes of Discussions and the technical examination of the study results, a Draft Final Report will be prepared and another team will be dispatched to explain and discuss it with the concerned officials of the Government of the Philippines.

P.K

ANNEX 1

PROPOSED RECIPIENT SCHOOLS
FOR THE PROJECT FOR THE EDUCATIONAL FACILITIES IMPROVEMENT PROGRAM

SCHOOL NO.	NAME OF SCHOOLS	LOCATION
ELEMENTARY SCHOOLS		
E-01	Adriatico Memorial Elementary School	Calapan, Or. Mindoro
E-02	Mansalay Central School	Mansalay, Or. Mindoro
E-03	Juan Morente Pilot	Pinamalayan, Or. Mindoro
E-04	Libertad Elementary School	Roxas, Or. Mindoro
E-05	Malaya Elementary School	Victoria, Or. Mindoro
E-06	Concepcion Central School	Sta. Maria, Tablas, Romblon
E-07	San Agustin Central School	San Agustin, Tablas, Romblon
E-08	Looc Central School	Looc, Tablas, Romblon
E-09	Mogpog Elementary School	Mogpog, Marinduque
E-10	Gasan Elementary School	Gasan, Marinduque
E-11	Matalaba Elementary School	Sta. Cruz, Marinduque
E-12	A. Soriano Memorial Elementary School	Roxas, Palawan
E-13	Narra Central School	Narra, Palawan
E-14	Brooke's Point Central School	Brooke's Pt., Palawan
E-15	Quezon Central School	Quezon, Palawan
E-16	Port Barton Central School	San Vicente, Palawan
E-17	Taytay Central School	Taytay, Palawan
E-18	San Pedro Central School	Puerto Princesa, Palawan
E-19	Sablayan Elementary School	Sablayan, Occ. Mindoro
E-20	Adela Elementary School	Rizal, Occ. Mindoro
E-21	Magsaysay Elementary School	Magsaysay, Occ. Mindoro
SECONDARY SCHOOLS		
S-22	Bulbugan Barangay High School	Gloria, Or. Mindoro
S-23	Alcadesma Barangay High School	Bansud, Or. Mindoro
S-24	Alcantara National High School	Alcantara, Tablas, Romblon
S-25	Marinduque National High School	Boac, Marinduque
S-26	Buenavista High School	Buenavista, Marinduque
S-27	El Nido Barangay High School	El Nido, Palawan
S-28	Rio Tuba Barangay High School	Bataraza, Palawan
S-29	Palawan INS	San Jose, Palawan
S-30	Barahan Barangay High School	Sta. Cruz, Occ. Mindoro

P.K



ANNEX 2

PROPOSED ALTERNATE RECIPIENT SCHOOLS
FOR THE PROJECT FOR THE EDUCATIONAL FACILITIES IMPROVEMENT PROGRAM

SCHOOL NO.	NAME OF SCHOOLS	LOCATION
ALTERNATE ELEMENTARY SCHOOL		
AE-01	Sambat Simaron Memorial Elementary School	Calapan, Or. Mindoro
AE-02	B. del Mundo Elementary School	Mansalay, Or. Mindoro
AE-03	Quinabigan Elementary School	Pinamalayan, Or. Mindoro
AE-04	Cantil Elementary School	Roxas, Or. Mindoro
AE-05	Nangca Elementary School	Mogpog, Marinduque
AE-06	Masiga Elementary School	Gasan, Marinduque
AE-07	Igabas Elementary School	Magsaysay, Palawan
AE-08	P. Urduja Elementary School	Narra, Palawan
AE-09	Ipilan Elementary School	Brookes Pt. Palawan
AE-10	Panitian Elementary School	Quezon, Palawan
AE-11	Pagdanan Elementary School	San Vicente, Palawan
AE-12	Abangan Central School	Taytay, Palawan
AE-13	F. Ubay Elementary School	Puerto Princesa, Palawan
AE-14	Buenavista Elementary School	Sablayan, Occ. Mindoro
AE-15	Siete Elementary School	Rizal, Occ. Mindoro
AE-16	Sta. Teresa Elementary School	Magsaysay, Occ. Mindoro
ALTERNATE SECONDARY SCHOOL		
AS-17	Ilaya Barangay High School	Boac, Marinduque
AS-18	Tigwi Barangay High School	Torrijos, Marinduque
AS-19	San Vicente Barangay High School	San Vicente, Palawan
AS-20	Palawan INS	Bataraza, Palawan
AS-21	Bacungan Barangay High School	San Jose, Palawan
AS-22	Sta. Cruz National High School	Sta. Cruz, Occ. Mindoro

P.K



ANNEX 3

THE MAJOR ITEMS INCLUDED IN THE PROJECT

1. Buildings

(1) Primary school

Classrooms
Toilets

(2) Secondary School

Classrooms
Science Laboratory
Toilets

2. Furniture

(1) Primary School

- Pupil's desks, chairs and side shelves
- Teacher's desks, chairs and storage cabinets
- Blackboards and bulletin boards

(2) Secondary Schools

- Pupil's desks, chairs and side shelves
- Teacher's desks, chairs and storage cabinets
- Tables, stools and workbenches for science laboratory
- Blackboards and bulletin boards

ADDITIONAL ITEMS FOR CONSIDERATION

3. Equipment

(1) Secondary School

- Basic Science Equipment for Science Laboratory

P.k

ANNEX 4

NECESSARY MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE PHILIPPINES IN THE EVENT JAPAN'S GRANT AID IS EXECUTED

1. To secure the sites for the Project.
2. To clear, level and reclaim the sites prior to the commencement of construction
3. To undertake incidental outdoor work, such as gardening, fencing, gates and exterior lighting in and around the sites, if necessary.
4. To construct the access roads to the sites prior to the commencement of construction only in cases there are none.
5. To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities to the Project sites.
 - 1) Electricity distributing lines to the sites.
 - 2) Water distribution mains to the sites.
6. To obtain building, occupancy and all necessary permits for the Project with respect to the laws and regulations in the Philippines.
7. To bear commissions to the Japanese foreign exchange bank for the banking services based on the Banking Arrangement, in accordance with standard grant procedures.
8. To exempt taxes and to take the necessary measures to obtain customs clearance at the port of disembarkation for Project material and equipment.
9. To accord Japanese nationals whose services may be required in connection with the supply of products and services under the verified contract such facilities as may be necessary for their entry into the Philippines and stay therein for the performance of their work.
10. To maintain and use properly and effectively the facilities constructed and equipment purchased under the Grant.
11. To bear all the expenses, other than those to be borne by the Grant, necessary for the construction of the facilities as well as for the transportation and installation of equipment.

J. K



MINUTES OF DISCUSSIONS

BASIC DESIGN STUDY ON THE PROJECT FOR

THE EDUCATIONAL FACILITIES IMPROVEMENT PROGRAM (PHASE I)

IN

THE REPUBLIC OF THE PHILIPPINES

(CONSULTATION ON DRAFT REPORT)

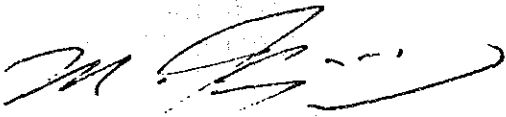
**MINUTES OF DISCUSSIONS
BASIC DESIGN STUDY ON THE PROJECT FOR
THE EDUCATIONAL FACILITIES IMPROVEMENT PROGRAM (PHASE I) IN
THE REPUBLIC OF THE PHILIPPINES
(CONSULTATION ON DRAFT REPORT)**

In February 1993, the Japan International Cooperation Agency (JICA) dispatched a Basic Design Study team on the Project for the Educational Facilities Improvement Program (Phase I) (hereinafter referred to as "the Project") to the Republic of the Philippines. Through discussions, field surveys and the technical evaluation of the results in Japan, the draft report of the study has been prepared.

To explain and to provide consultation to the Philippines side on the components of the draft report, JICA sent to the Philippines a study team. The team is scheduled to remain in the country from the 16th to the 25th day of May, 1993.

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

Manila, May 21, 1993



MASATAKA IIJIMA
Resident Representative
JICA, Philippine Office



ARMAND V. FABELLA
Secretary
Department of Education,
Culture and Sports
The Republic of the Philippines

ATTACHMENT

1. Components of the Draft Report

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

2. Confirmation of Thirty (30) Recipient Schools.

The Government of the Philippines and the team confirmed the thirty (30) Recipient Schools as shown in Annex 1. The locations of each recipient school are shown in Annex 2-a and 2-b.

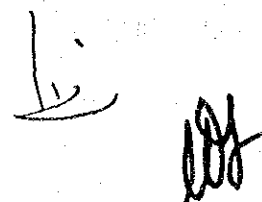
3. Japan's Grant Aid System

1) The Government of the Philippines understands the Japanese Grant Aid system as explained by the team.

2) The Government of the Philippines will take the necessary measures (described in Annex 4 of the MINUTES OF DISCUSSIONS on the Project signed February 26, 1993) for the smooth implementation of the Project on the condition that Grant Aid Assistance by the Government of Japan will be extended to the Project.

4. Future Schedule

The team will prepare the Final Report in accordance with the confirmed items and send it to the Government of the Philippines by the end of August 1993.

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ANNEX 1
LIST OF THIRTY (30) RECIPIENT SCHOOLS

ELEMENTARY SCHOOL

E-01 NARRA CENTRAL SCHOOL
E-02 QUEZON CENTRAL SCHOOL
E-03 ADRIATICO MEMORIAL ELEMENTARY SCHOOL
E-04 B. DEL MUNDO ELEMENTARY SCHOOL
E-05 SIETE ELEMENTARY SCHOOL
E-06 F. UBAY ELEMENTARY SCHOOL
E-07 JUAN MORENTE PILOT
E-08 A. SORIANO MEMORIAL ELEMENTARY SCHOOL
E-09 SABLAYAN ELEMENTARY SCHOOL
E-10 ABONGAN CENTRAL SCHOOL
E-11 IPILAN ELEMENTARY SCHOOL
E-12 LIBERTAD ELEMENTARY SCHOOL
E-13 MALAYAS ELEMENTARY SCHOOL
E-14 LOOC CENTRAL SCHOOL
E-15 CONCEPCION CENTRAL SCHOOL
E-16 PORT BARTON CENTRAL SCHOOL
E-17 ADELA ELEMENTARY SCHOOL
E-18 MOGPOG ELEMENTARY SCHOOL
E-19 SAN AGUSTIN CENTRAL SCHOOL
E-20 MASIGA ELEMENTARY SCHOOL
E-21 SUHA ELEMENTARY SCHOOL

LOCATION

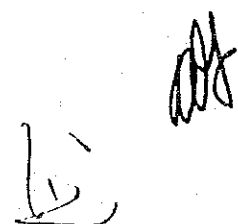
Narra, Palawan
Quezon, Palawan
Calapan, Or. Mindoro
Mansalay, Or. Mindoro
San Jose, Occ. Mindoro
Puerto Princesa, Palawan
Pinamalayan, Or. Mindoro
Roxas, Palawan
Sablayan, Occ. Mindoro
Taytay, Palawan
Brookes Pt., Palawan
Roxas, Or. Mindoro
Victoria, Or. Mindoro
Looc, Tablas, Romblon
Sta. Maria, Tablas, Romblon
San Vicente, Palawan
Rizal, Occ. Mindoro
Mogpog, Marinduque
San Agustin, Tablas, Romblon
Gasan, Marinduque
Torrijos, Marinduque

SECONDARY SCHOOL

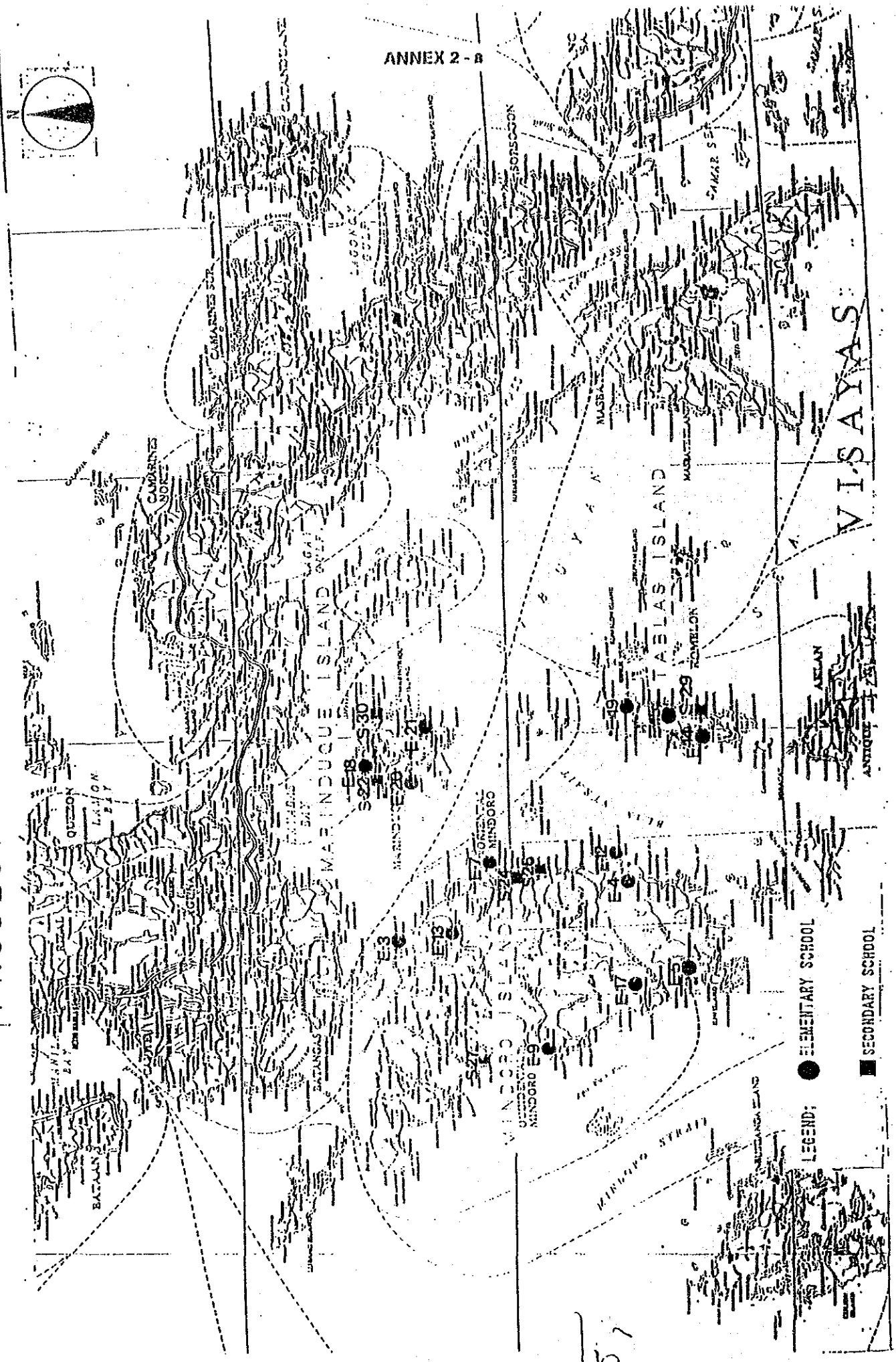
S-22 MARINDUQUE NATIONAL HIGH SCHOOL
S-23 RIO TUBA BARANGAY HIGH SCHOOL
S-24 BULBUGAN BARANGAY HIGH SCHOOL
S-25 EL NIDO BARANGAY HIGH SCHOOL
S-26 ALCADESMA BARANGAY HIGH SCHOOL
S-27 BARAHAN BARANGAY HIGH SCHOOL
S-28 PALAWAN INS
S-29 ALCANTARA NATIONAL HIGH SCHOOL
S-30 MATALABA NATIONAL HIGH SCHOOL

LOCATION

Boac, Marinduque
Bataraza, Palawan
Gloria, Or. Mindoro
El Nido, Palawan
Bansud, Or. Mindoro
Sta. Cruz, Occ. Mindoro
San Jose, Palawan
Alcantara, Tablas, Romblon
Sta. Cruz, Marinduque



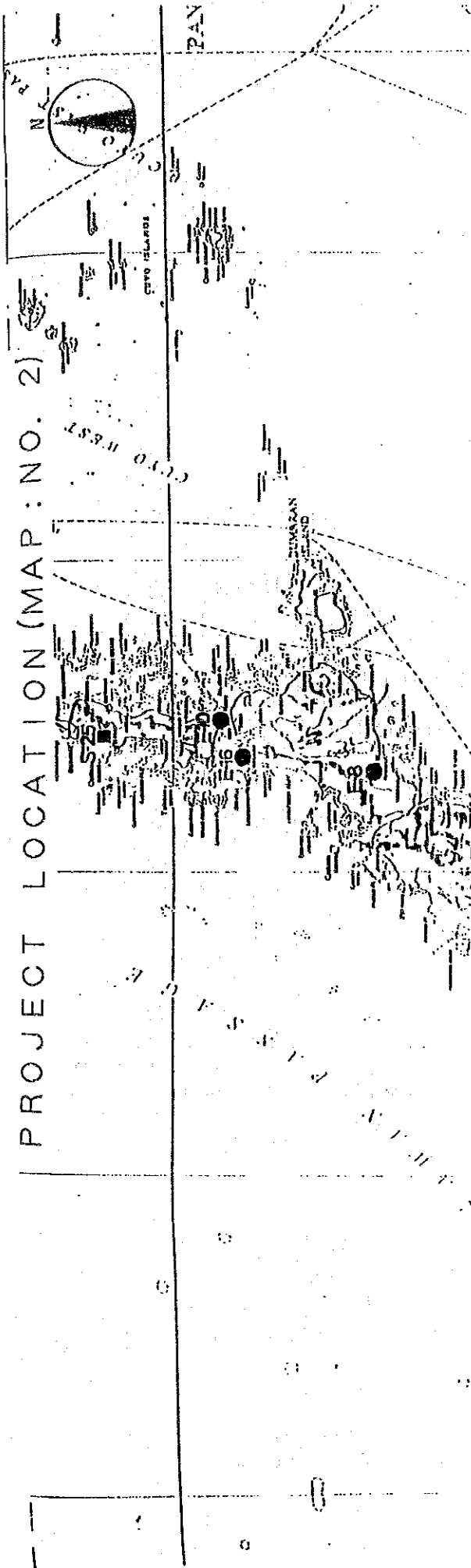
PROJECT LOCATION (MAP: NO. 1)



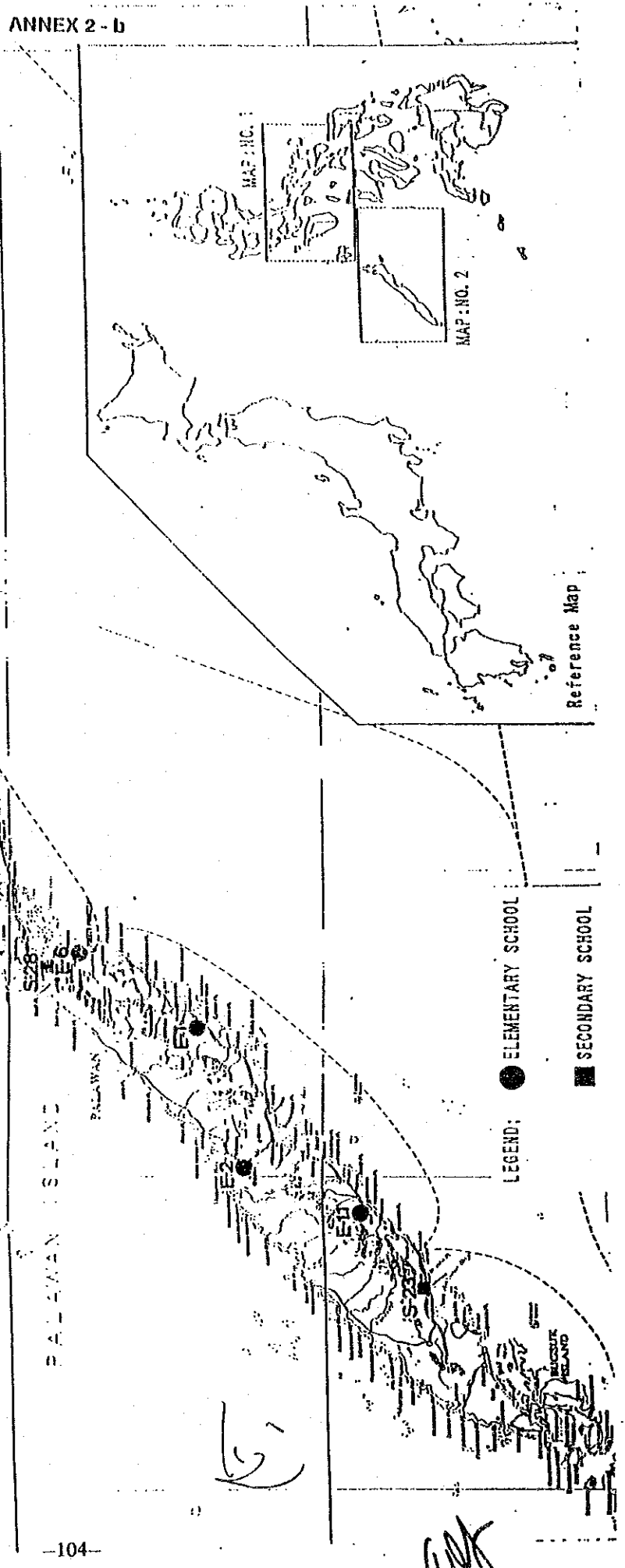
ANNEX 2 - B

LEGEND:
● ELEMENTARY SCHOOL
■ SECONDARY SCHOOL

PROJECT LOCATION (MAP: NO. 2)



ANNEX 2 - b



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REPUBLIKA NG PILIPINAS
REPUBLIC OF THE PHILIPPINES
KAGAWARAN NG EDUKASYON, KULTURA AT ISPORTS
DEPARTMENT OF EDUCATION, CULTURE AND SPORTS
UL Complex, Meralco Avenue
Pasig, Metro Manila

TANGGAPAN NG KALINIM
(OFFICE OF THE SECRETARY)

July 21, 1993

MR. KATSUO SHOJI
Team Leader
First Project Management Division
Grant Aid Project Management Department
JAPAN INTERNATIONAL COOPERATION AGENCY
45th, Flr. Shinjuku Mitsui Bldg.,
1-1, Nishi-Shinjuku 2-Chome,
Shinjuku-ku, Tokyo, 163-04 Japan

Re: Educational Facilities Improvement Program (EFIP) Phase I

Dear Mr. Shoji:

We have taken note of the communication from Mohri Architect and Associates, Inc. (MAAI) dated July 14, 1993 regarding the proposed change of a recipient elementary school under EFIP I (see attached).

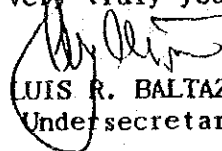
We understand that MAAI has rectified its data such that San Pedro Central Elementary School will now replace F. Ubay Elementary School as recipient school. With the rectification, MAAI's data now reconcile with DECS' own data, as follows:

<u>School</u>	<u>Classroom Shortage</u>
San Pedro Central School	6.275
F. Ubay Elementary School	1.975

The Department is happy to know that this rectification is being made and that JICA Head Office is agreeable to the change in favor of San Pedro Central School. The Department is amenable to this change. We will inform the DECS Regional Office IV and the field units concerned of this development for their guidance.

With best regards.

Very truly yours,


LUIS R. BALTAZAR
Undersecretary

cc.: Ramon Bacani, Asst. Secretary
Marcelina Miguel, BEE Director
Miguel Garcia, DECS IV Regional Officer-in-Charge
Achilles del Callar, EDPITAF Executive Director

APPENDICES 6.b Promise concerning the Project Schools'
Maintenance and Management



REPUBLIKA NG PILIPINAS
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DEPARTMENT OF EDUCATION, CULTURE AND SPORTS
UL Complex, Meralco Avenue
Pasig, Metro Manila

TANGGAPAN NG KALIHIM
(OFFICE OF THE SECRETARY)

July 5, 1993

MR. KATSUO SHOJI
Team Leader
First Project Management Division
Grant Aid Project Management Department
JAPAN INTERNATIONAL COOPERATION AGENCY
45th, Flr. Shinjuku Mitsui Bldg.,
1-1, Nishi-Shinjuku 2-Chome,
Shinjuku-ku, Tokyo, 163-04 Japan

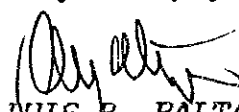
Dear Mr. Shoji:

Pertinent to the implementation of the Educational Facilities Improvement Program (EFIP), this Department reiterates its assurance to program and extend priority within its annual appropriations adequate amount of allocations to cover the repair and maintenance of the facilities provided. Corollarily, this Department further assures availability of School Teachers for each and every classroom built under the said Project.

It is therefore the desire and intention of this Department to mobilize all of the resources at its disposal to ensure, among others, sustainability of project benefits.

With best regards.

Very truly yours,


LUIS R. BALTAZAR
Undersecretary

