

APPENDICES



Appendix 1 Member List of the Survey Team (April 1995)

Mr. K. Kitazawa	Leader	Director, First Project Management Division, Grant Aid Project Management Department, Japan International Cooperation Agency (JICA)
Mr. N. Hanazato	Project Coordinator	Second Basic Design Study Division, Grant Aid Study and Design Department, Japan International Cooperation Agency (JICA)
Mr. H. Komori	Airport Planner	Special Assistant Director, Kansai Int'l Airport Division, Aerodrome Department, Civil Aviation Bureau, Ministry of Transport
Mr. A. Inoue	Airport Facilities Planner	Special Assistant Director, Construction Division, Aerodrome Department, Civil Aviation Bureau, Ministry of Transport
Mr. M. Tanaka	Chief Consultant	Executive Managing Director, Pacific Consultants International
Mr. I. Fukuwatari	Building Designer	Pacific Consultants International
Mr. S. Sakabe	Civil Facilities Designer	Pacific Consultants International
Mr. S. Hayakawa	Facilities Designer	Pacific Consultants International
Mr. Y. Urabe	Equipment Planner/ Cost Estimator	Pacific Consultants International

Member List of Explanation of Draft Basic Design (August 1995)

Mr. E. Kawahara	Leader	Assistant Director, Grant Aid Division, Economic Cooperation Bureau, Ministry of Foreign Affairs
Mr. K. Takizawa	Coordinator	Second Regional Division, Planning Department, Japan International Cooperation Agency
Mr. A. Inoue	Technical Adviser	Special Assistant Director, Construction Division, Aerodrome Department, Civil Aviation Bureau, Ministry of Transport
Mr. M. Tanaka	Chief Consultant	Executive Managing Director, Pacific Consultants International
Mr. I. Fukuwatari	Building Designer	Pacific Consultants International

Appendix 2 Survey Schedule (April 1995)

Date	Movement	Accommodation	Activities
Apr.10 (Mon)	Arrival at Honiara	Honiara	
11 (Tue)	Arrival at Honiara (Mr. Hanasato)		Courtesy call on the Embassy of Japan Meeting with JOCV office Courtesy call to the Ministry of Foreign Affairs and Trade Relations, and the Ministry of Finance and Economic Planning
12 (Wed)			Explanation of Inception Report to Civil Aviation Division (CAD), Ministry of Tourism and Civil Aviation
13 (Thu)			Discussion with CAD on related foreign aids Courtesy call and discussion with AIDAB
14 (Fri)			Site inspection at the Henderson Airport
15 (Sat)		Honiara	Site inspection at the Henderson Airport
16 (Sun)		Honiara	Data collection Internal meeting
17 (Mon)		Honiara	Discussion with CAD (Basic Concept)
18 (Tue)		Honiara	Discussion with CAD (Basic Concept)
19 (Wed)		Honiara	Discussion with CAD (Draft of Minutes of Discussion)
20 (Thu)		Honiara	Signing of Minutes of Discussion Reporting to Embassy of Japan Reporting to JOCV Office
21 (Fri)	Leave Honiara (Four members)	Brisbane/Honiara	Leave Honiara (Members of JICA and MOT) Additional Survey (Members of Consultant)
22 (Sat) to May.4 (Thu)		Honiara	Additional Survey
May. 5 (Fri)	Leave Honiara		

Survey Schedule (August 1995)

Date	Movement	Accommodation	Activities
Aug.21 (Mon)	Arrival at Honiara	Honiara	
22 (Tue)		Honiara	Courtesy call on the Embassy of Japan, Courtesy call on the Ministry of Foreign Affairs and Trade Relations, Courtesy call on the Ministry of Culture, Tourism and Aviation Meeting with Civil Aviation Division (CAD)
23 (Wed)		Honiara	Meeting with CAD
24 (Thu)		Honiara	Meeting with CAD and Drafting of Minutes of Discussion
25 (Fri)		Honiara	Drafting and Signing of Minutes of Discussion Reporting to the Embassy of Japan
26 (Sat)		Honiara	Additional Survey
27 (Sun)	Leave Honiara	Honiara	Leave Honiara (Members of MOFA, JICA and MOT)
28 (Mon)		Honiara	Additional Survey (Members of Consultant)
29 (Tue)	Leave Honiara		Leave Honiara (Consultant)

Appendix 3 List of Party Concerned in the Recipient Country

John Baura	Permanent Secretary / Ministry of Culture, Tourism and Aviation
John Saunana	Under Secretary / Ministry of Culture, Tourism and Aviation
Michael Anita	Director / Civil Aviation Department/ Ministry of Culture, Tourism and Aviation
Garnet Babaua	Deputy Director (Ag) / Ministry of Culture, Tourism and Aviation
Reuben Natowan	Under-Secretary / Ministry of Finance & Economic Planning
Stephen Basile	Chief Finance Officer / Ministry of Finance & Economic Planning
Shadrach Fanega	Under Secretary / Ministry of National Planning and Development
Steve Likaveke	Chief Physical Planner / Ministry of Lands
Cherry Tanito	Commissioner of Lands
George Ohi	Principal Immigration Officer / Immigration Division
Patrick Kuri	Solomon Islands Meteorological Service
Donald R. Makini	Solomon Islands Water Authority
Barry Horvath	Solomon Islands Water Authority

Minutes of Discussions
on
Basic Design Study
on
The Project for Henderson International Airport Development
in
the Solomon Islands

In response to a request from the Government of the Solomon Islands, the Government of Japan decided to conduct a Basic Design Study on the Project for Henderson International Airport Development (hereinafter referred to as "the Project"), and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA sent to the Solomon Islands a Basic Design Study Team (hereinafter referred to as "the Team") headed by Mr. Kanji KITAZAWA, Director, First Project Management Division, Grant Aid Project Management Department, JICA, which is scheduled to stay in the country from April 10 to May 5, 1995.

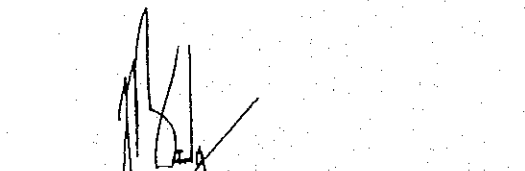
The Team held discussions with the concerned officials of the Government of the Solomon Islands, and conducted a field survey at the Project site.

As a result of the discussions and field survey, both parties confirmed the main items described on the attached sheets.

Honiara, April 20, 1995



Mr. Kanji Kitazawa
Leader
Basic Design Study Team
Japan International Cooperation Agency



Mr. John Ba'ura
Permanent Secretary
Ministry of Culture, Tourism and Aviation
Government of the Solomon Islands

ATTACHMENT

1 OBJECTIVE

The objective of the Project is to construct a terminal building and associated facilities that will adequately handle the expected growth of the traffic demand for the target year 2003. This is to utilize the facilities without major expansion or alteration during at least five years period after the completion of the Project.

2 PROJECT IMPLEMENTING AGENCY

Project Implementing Agency for the Project is the Ministry of Culture, Tourism and Aviation, the Government of the Solomon Islands.

3 PROJECT SITES

The site of the Project is the Henderson International Airport in the Solomon Islands. (The site map is shown in Annex-1)

4 MAJOR ITEMS REQUESTED BY THE SOLOMON ISLANDS SIDE

As a result of a series of discussions, the items listed in Annex-2 are finally requested by the Solomon Islands side. However, the items to be covered by the Project will be finalized on the basis of further studies.

5 JAPAN'S GRANT AID SCHEME

The Solomon Islands side has understood the system of Japan's Grant Aid explained in Annex-3.

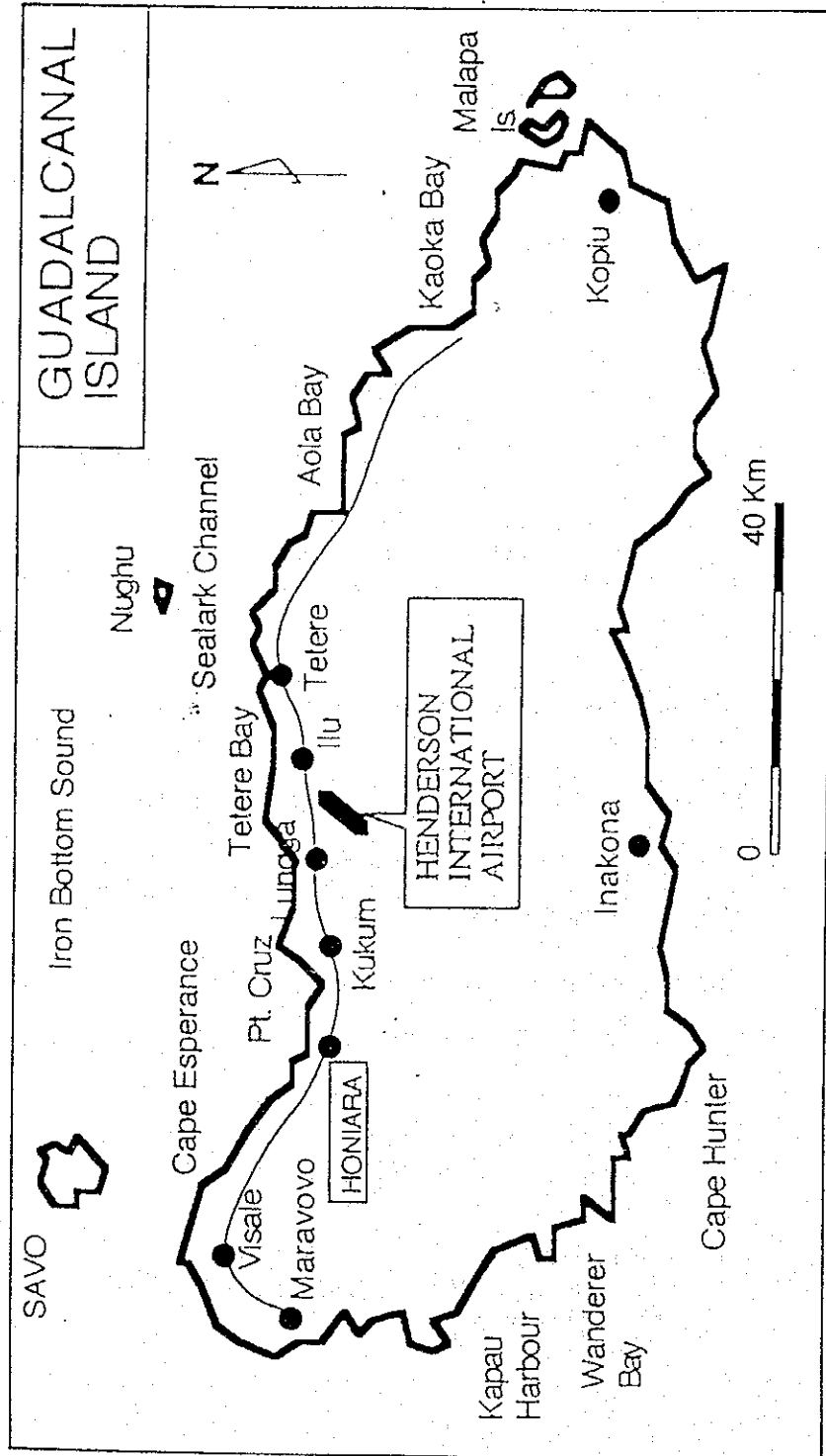
6 NECESSARY MEASURES TO BE TAKEN BY THE SOLOMON ISLANDS SIDE

The Solomon Islands side will take necessary measures described in Annex-4 for smooth implementation of the Project on condition that the Grant Aid by the Government of Japan is extended to the Project.

7 FURTHER SCHEDULE OF THE STUDY

- 1) The Team will proceed to further studies in the Solomon Islands until May 5, 1995.
- 2) Based on the results of studies, JICA will prepare a Draft Basic Design and dispatch a team in the end of August, 1995 in order to explain and confirm its contents.
- 3) Upon acceptance of the Draft Basic Design by the Solomon Islands side, JICA will complete the Basic Design Report and forward it to the Solomon Islands side by December 1995.

Annex-1 LOCATION MAP OF PROJECT SITE



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Annex-2.1 MAJOR ITEMS REQUESTED

The facility layout shown in Annex-2.2 has been basically agreed by both sides as the basic concept for the terminal area development. Based on this concept, following major items of the Project have been requested by the Solomon Islands side.

The items are also indicated by the respective numbers in the facility layout shown in Annex-2.2.

1 PASSENGER TERMINAL BUILDING (1)

- Construction of an international passenger terminal building
(The size of the international passenger terminal building is to be determined based on the further study carried out by the Team.)

2 PASSENGER TERMINAL APRON AND TAXIWAY (2)

- Construction of a new passenger terminal apron.
(The size of the new passenger terminal apron is to be determined based on the further study carried out by the Team.)
- Construction of a new taxiway between the existing runway and the new apron

3 TAXIWAY AND APRON LIGHTING (3)

- Construction of a lighting system for a new taxiway and a new passenger terminal apron

4 ACCESS ROAD, TERMINAL ROAD, AND CAR PARKING (4)

- Construction of access road covered by the Project is limited to the sections from the new terminal area to the junction with the new Henderson Road which is planned by the Solomon Islands side.
- Construction of new car parking.
(Capacity of the car parking is to be determined based on the further study carried out by the Team.)
- A temporary road will be constructed under the Project to provide a detour for the passing traffic.

5 DRAINAGE AND FENCING (5)

- Construction of surface water drainage in the Project site
- Construction of security fence on the boundary between the restricted area and the unrestricted area in the new terminal area.

6 FIRE STATION, POWER HOUSE AND POWER SUPPLY (6)

- Construction of a fire station, a power house and related power supply lines in the Project site.

7 OTHERS

1) METEOROLOGICAL OBSERVATION SENSORS

New facilities of meteorological observation sensors will be installed at the suitable site under the Project.

2) PAPI

Existing PAPI will be improved, if needed.

3) WATER SUPPLY

Water supply system in the new terminal area.

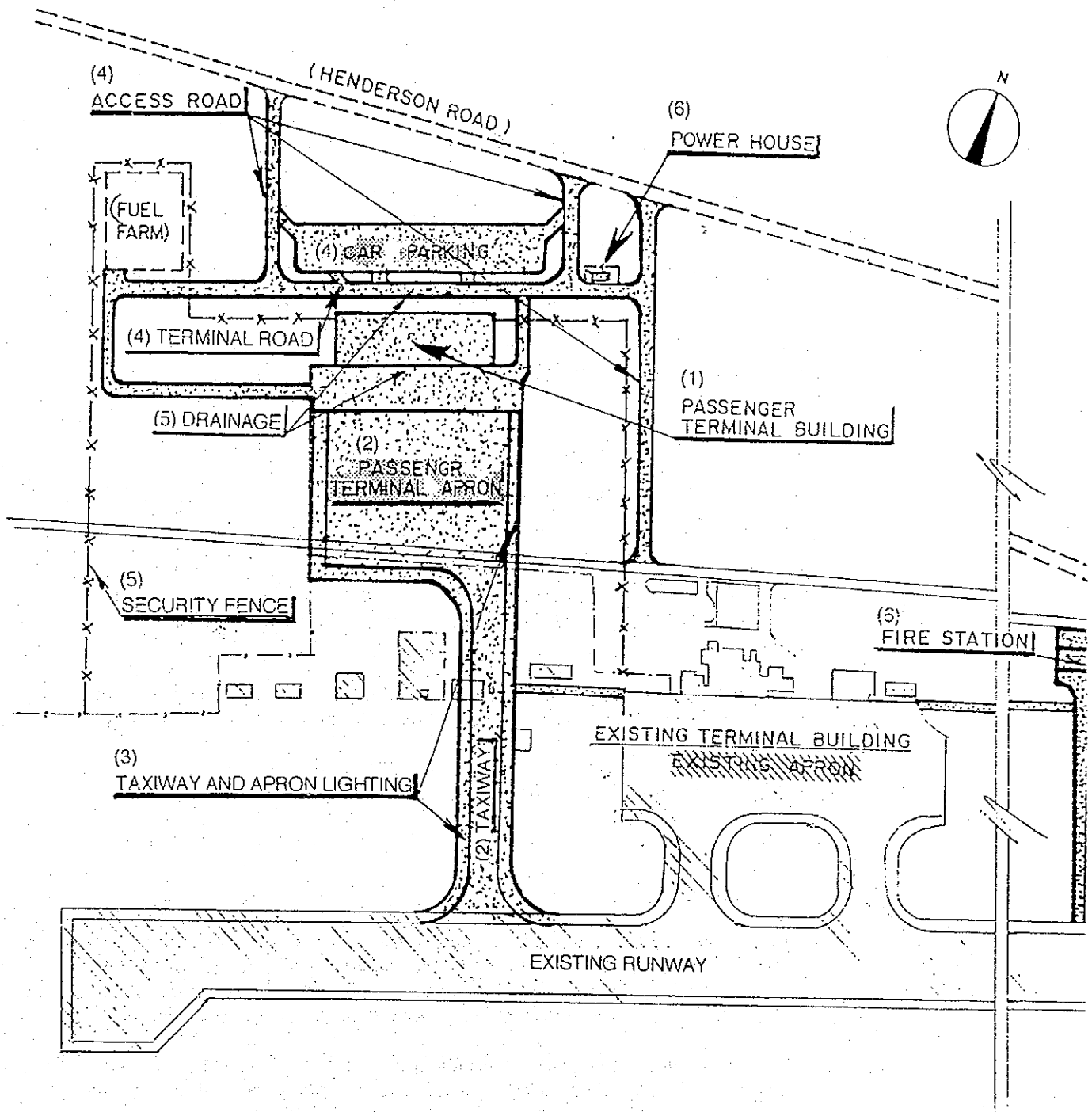
4) SEWERAGE SYSTEM

Sewerage system in the new terminal area.

5) TELEPHONE LINE

Telephone system in the new terminal area.

Annex-2.2 LAYOUT OF THE FACILITIES COVERED BY THE PROJECT



Note: Details are subject to further studies.

Not to scale

Japan's Grant Aid Scheme

1 Grant Aid Procedures

1) Japan's Grant Aid Program is executed through the following procedures.

Application (Request made by a recipient country)

Study (Basic Design Study conducted by JICA)

Appraisal & Approval (Appraisal by the Government of Japan and Approval by Cabinet)

Determination of Implementation (The Notes exchanged between the Government of Japan and the recipient country)

2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study), using (a) Japanese consulting firm (s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Program, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes signed by Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

2. Basic Design Study

1) Contents of the Study

The aim of the Basic Design Study (hereinafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Japanese Government. The contents of the Study are as follows :

- a) Confirmation of the background, objectives, and benefits of the requested project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation.
- b) Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.

- c) Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- d) Preparation of a basic design of the Project
- e) Estimation of costs of the Project

The contents of the original request are not necessary approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

2) Selection of Consultants

For smooth implementation of the Study, JICA uses (a) registered consultant firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA.

The consulting firm(s) used for the Study is (are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency and also to avoid any undue delay in implementation should the selection process be repeated.

3. Japan's Grant Aid Scheme

1) What is Grant Aid?

The Grant Aid Program provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. Grant Aid is not supplied through the donation of materials as such.

2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

3) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and final payment to team must be completed.

However in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

- 4) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However the prime contractors, namely, consulting, constructing and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

- 5) Necessity of "Verification"

The Government of recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

- 6) Undertakings required of the Government of the Recipient Country

In the implementation of the Grant Aid project, the recipient country is required to undertake such necessary measures as the following :

- (1) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction.
- (2) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites.
- (3) To secure buildings prior to the procurement in case the installation of the equipment.
- (4) To ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid.
- (5) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts.
- (6) To accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.
- (7) "Proper Use"

The recipient country is required to maintain and use the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than covered by the Grant Aid.

(8) "Re-export"

The products purchased under the Grant Aid should not be re-exported from the recipient country.

(9) Banking Arrangements (B/A)

- a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in an authorized foreign exchange bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.
- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an authorization to pay issued by the Government of the recipient country or its designated authority.



Annex 4

NECESSARY MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE SOLOMON ISLANDS

The following necessary measures should be taken by the Government of the Solomon Islands on condition that the Grant Aid by the Government of Japan is extended to the Project :

- (1) To dispose unexploded bombs and shells in the Project site.
- (2) To secure land necessary for the sites of the Project and to clear and level the land prior to the commencement of the construction.
- (3) To provide facilities for the distribution of electricity, water supply, telephone line and drainage and other incidental facilities to the Project site.
- (4) To install the fuel hydrant system in the new passenger terminal apron.
- (5) To demolish the existing fire station, administration building, fuel farm, meteorological observation sensors and Western Pacific offices and hangars. (Necessity of demolition of the catering facilities is to be further studied by the Team and will be informed to the Solomon Islands side.)
- (6) To relocate the existing electricity line, the existing water main, and the existing telephone line along the existing Henderson Road so as not to hinder the construction works for the Project.
- (7) To ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid.
- (8) To exempt Japanese nationals from custom duties, internal taxes and other fiscal levies which be imposed by the Government of the Solomon Islands with respect to the supply of the products and services under the contracts verified by the Government of Japan in accordance with the Exchange of Notes (hereinafter referred to as "the Verified Contracts").
- (9) To accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contracts, such facilities as may be necessary for their entry into the Solomon Islands and stay therein for the performance of their work.
- (10) "Proper Use"

The Government of the Solomon Islands is required to operate and maintain the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for such operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

- (11) "Re-export"

The products purchased under the Grant Aid should not be re-exported from the Solomon Islands.

(12) Banking Arrangements (B/A)

The Government of the Solomon Islands or its designated authority should conclude Banking Arrangements with an authorized foreign exchange bank in Japan (hereinafter referred to as "the Bank") in accordance with the Exchange of Notes.

(13) Authorization to Pay (A/P)

The Government of the Solomon Islands or its designated authority should issue an Authorization to Pay to the Bank after verification of the contracts by the Government of Japan in order that it may make payments request to the Government of Japan, because the payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay issued by the Government of the Solomon Islands or its designated authority .

Henderson International Airport Development

Minutes of Discussion

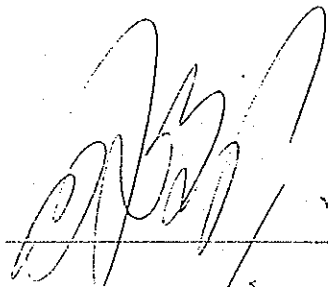
The joint meeting on proposed terminal layout plan was held between Solomon Side, representatives of several sections which are concerned the new international terminal as users, and JICA Basic Study Team on Tuesday May 2, 1995 at Meeting Room of Mendana Hotel. Attendants list is attached as Attachment I.

Japanese Side explained the summary of the studies carried out since April 10, 1995 and the tentative layout plan and service facilities of new international terminal building. (the layout plan - Attachment II)

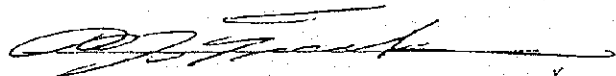
Solomon Side gave comments on the above mentioned tentative layout plan. (Attachment III)

Japanese Side rearranged the tentative layout plan taking in consideration the comments arisen from Solomon Side, and Solomon Side considered the rearranged layout plan acceptable. (the rearranged layout plan - Attachment IV)

Honiara, May 4, 1995



Mr. Micheal Anita
Director,
Civil Aviation,
Government of Solomon Islands.



Mr. Makoto Tanaka,
Chief Consultant,
Basic Design Team,
Japan International Cooperation Agency

Attendants list

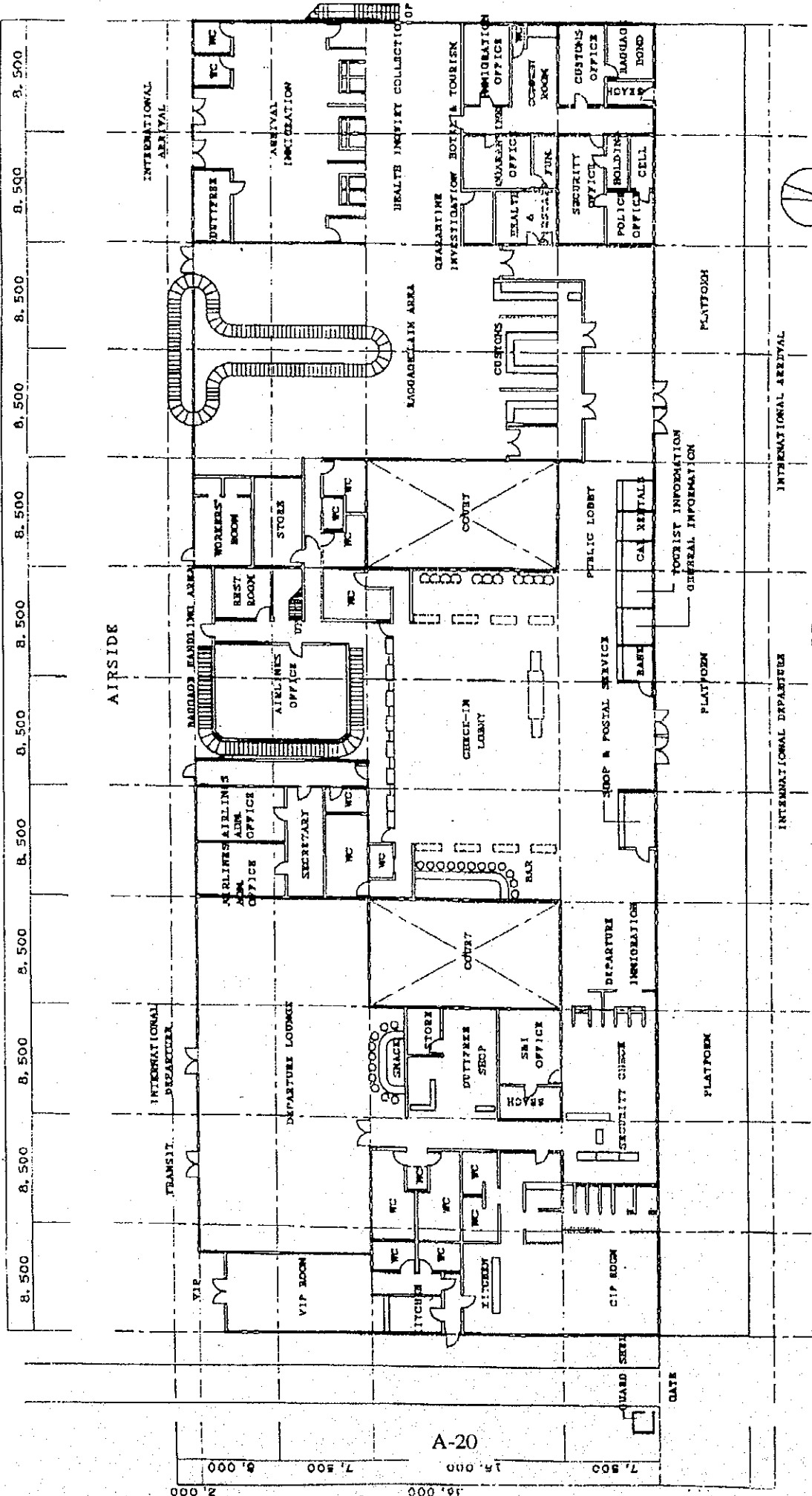
• Solomon Side

Michael Anita	Director, Civil Aviation.
Garnett Babaua	Deputy Director, Civil Aviation.
Alson Nave	Principal Security Officer, Civil Aviation.
Cameron R. Eta	Director, Quarantine.
Patteson Akihi	Senior Agriculture Quarantine Officer.
Isaac Inoketosika	Assistant Comptroller, Customs.
George Oli	Principal Immigration Officer.
Wilson Maelaua	General Manager, Solomon Islands Tourist Authority.
Floyd Royd Smith	Manager, Commercial Services, Solomon Airlines.
Gary Clifford	Managing Director, Pacific Air Express Ltd.
Christopher Cavilla	General Manager/Chief Pilot, Western Pacific Airlines.
Leni Len Palmer	Air Transport.

• Japanese Side

Makoto Tanaka	Chief Consultant, Basic Study Team, JICA.
Isao Fukuwatari	Building Designer, Basic Study Team, JICA.
Shinichi Skabe	Civil Facilities Designer, Basic Study Team, JICA.
Sumio Hayakawa	Facilities Designer, Basic Study Team, JICA.
Yoshihiro Urabe	Equipment Planner, Basic Study Team, JICA.

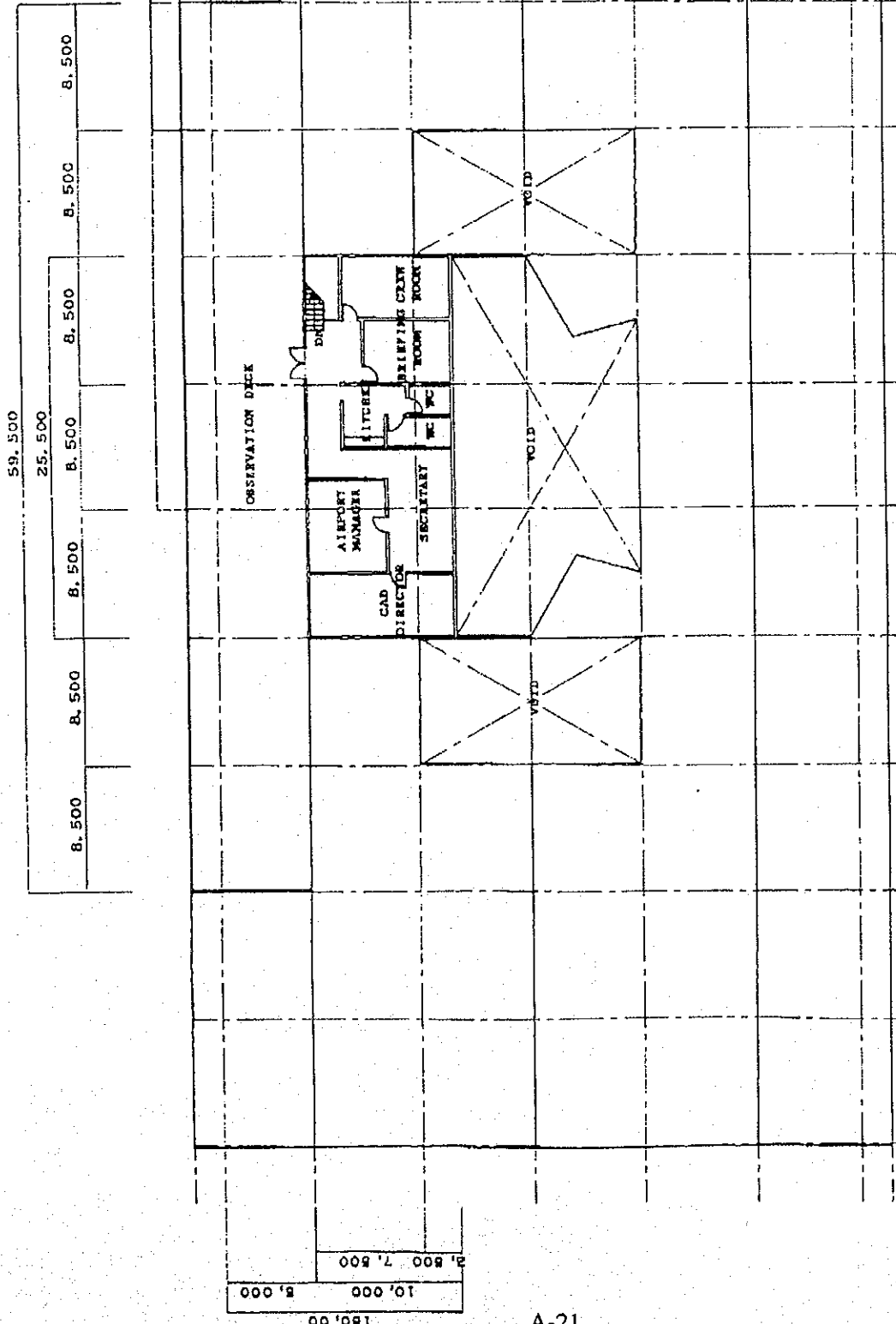
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GROUND FLOOR PLAN

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FIRST FLOOR PLAN

Comments arisen from Solomon Side

- "Briefing room" and "Crew room" must be on ground floor.

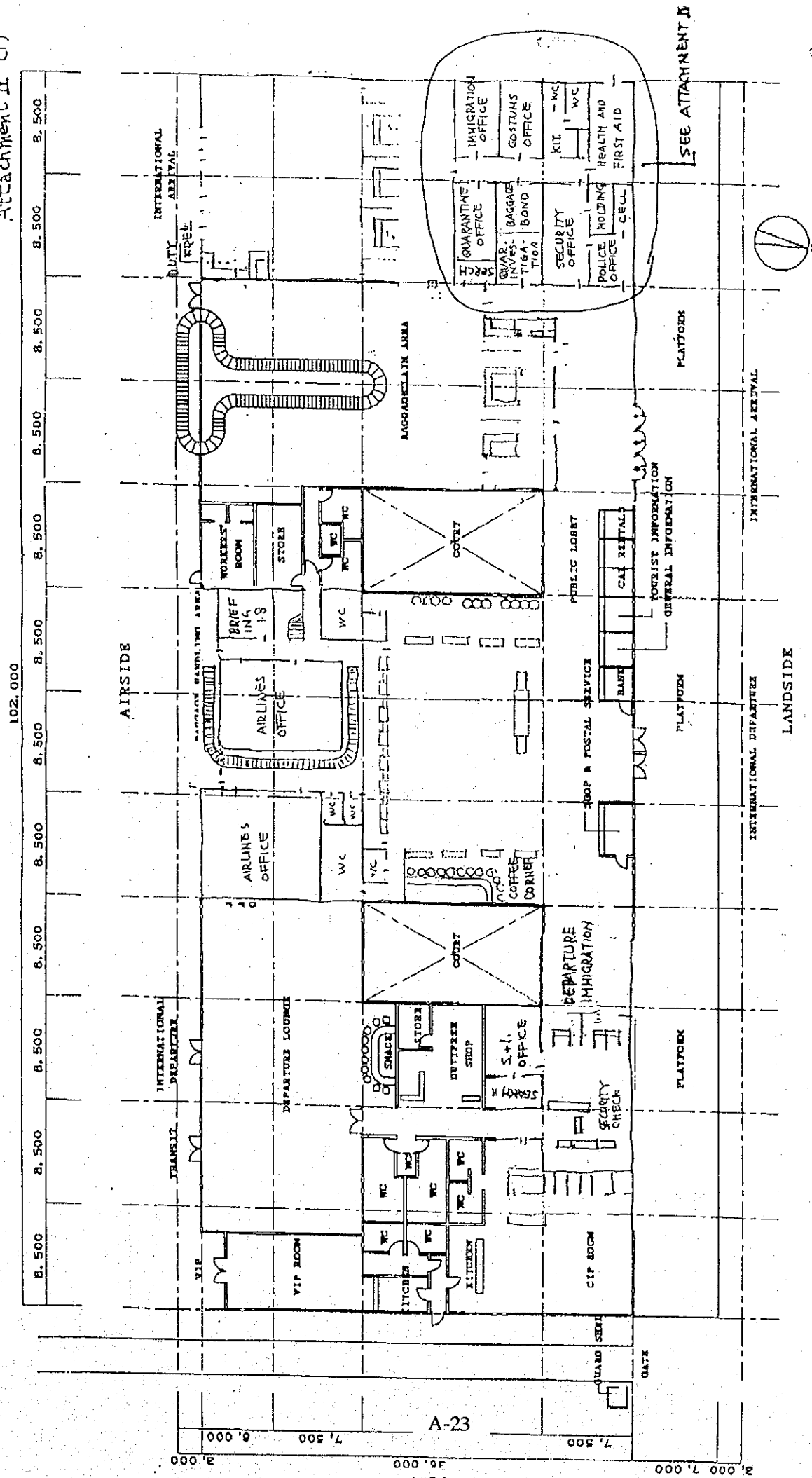
- A good ventilation is necessary in the room where electronic equipment is to be installed, for example "Immigration counters" and "Check-In counters" will be computerized. X-ray machine in existing terminal was broken because of high humidity.

- "Duty Free" in "Arrival Hall" is to be rearranged.

- "Baggage bond store" is to be closer to "costums check counters".

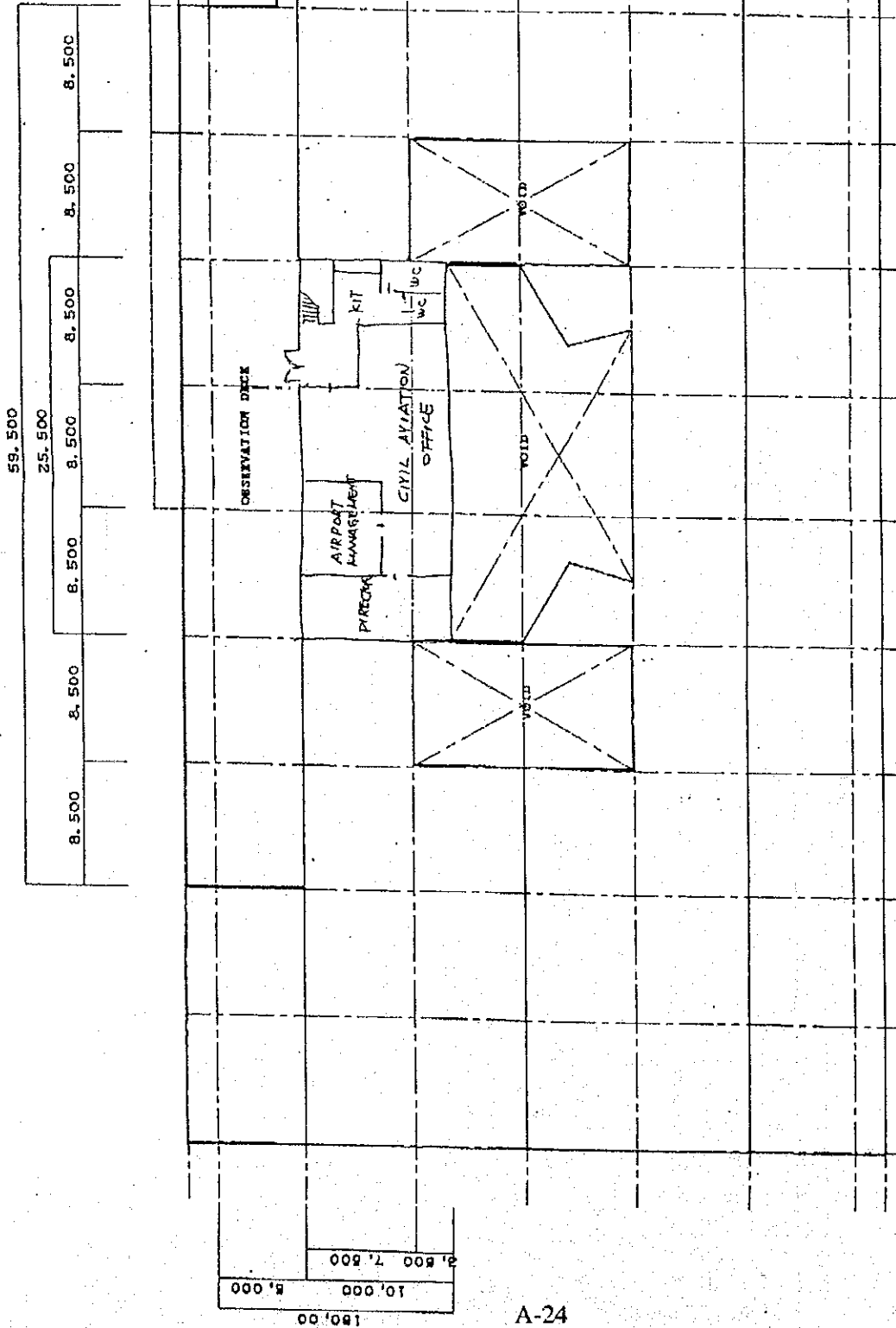
- "Quarantine Inspection Room" in to be close to "Quarantine check desk".

- Function of "Bar" is to be clarified.



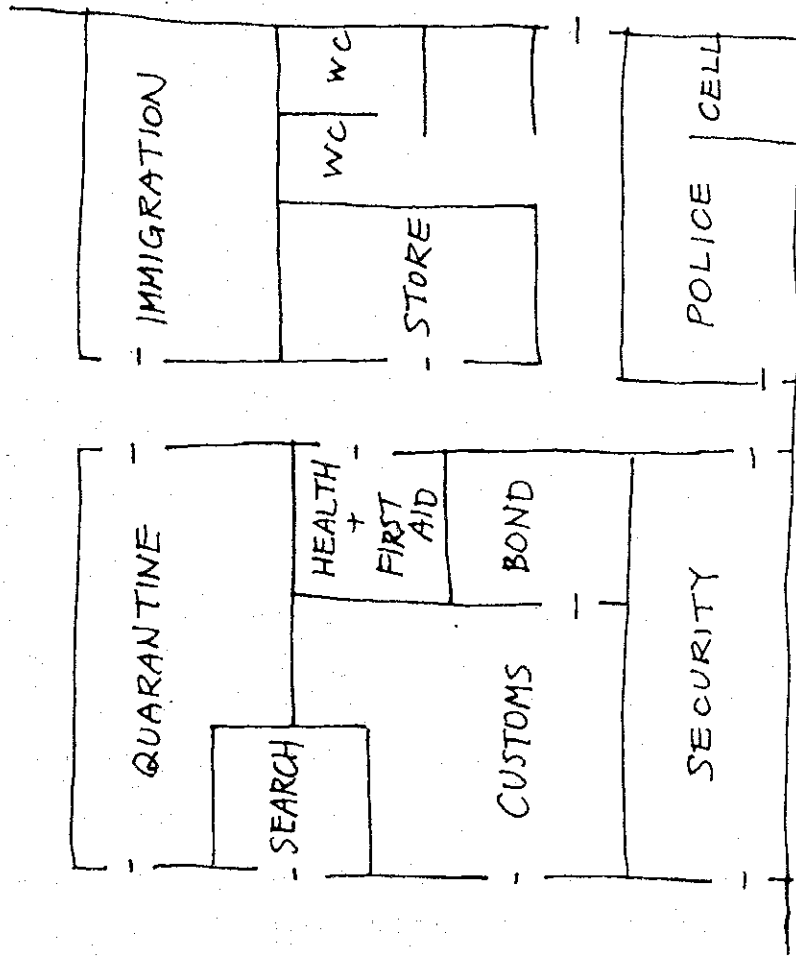
GROUND FLOOR PLAN

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FIRST FLOOR PLAN



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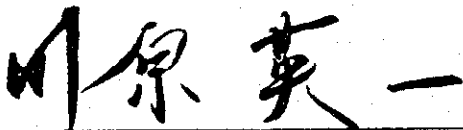
Minutes of Discussions
on
Basic Design Study
on
The Project for Henderson International Airport Development
in
the Solomon Islands
(Explanation on Draft Basic Design)

In April 1995, the Japan International Cooperation Agency (JICA) dispatched the Basic Design Study Team on the Project for Henderson International Airport Development (hereinafter referred to as "the Project") to the Solomon Islands. Through discussions, field survey, and technical examination of the survey results in Japan, JICA has prepared the Draft Basic Design of the study.

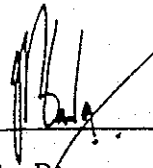
In order to explain and consult the Solomon Islands on the components of the Draft Basic Design, JICA sent to the Solomon Islands a study team, headed by Mr. Eiichi KAWAHARA, Assistant Director, Grant Aid Division, Economic Cooperation Bureau, Ministry of Foreign Affairs, which is scheduled to stay in the country from August 21 to 29, 1995.

As a result of a discussions, both parties agreed to recommend the main items described in the attached sheets to the respective governments.

Honiara, August 25, 1995



Mr. Eiichi KAWAHARA
Leader
Draft Final Study Team
Ministry of Foreign Affairs



Mr. John Baura
Permanent Secretary
Ministry of Culture, Tourism and Aviation
Government of the Solomon Islands

ATTACHMENT

1 OBJECTIVE

The objective of the Project is to construct a terminal building and associated facilities that adequately handle the expected growth of the traffic demand for the target year 2003. This is to utilize the facilities without major expansion or alteration during at least five years period after the completion of the Project.

2 PROJECT IMPLEMENTING AGENCY

Project Implementing Agency for the Project is the Ministry of Culture, Tourism and Aviation, the Government of the Solomon Islands.

3 DRAFT BASIC DESIGN

The Solomon Islands side has in principal agreed to the components of the Draft Basic Design as shown in Annex-1.

4 JAPAN'S GRANT AID SCHEME

The Solomon Islands side has understood the system of Japan's Grant Aid as explained in Annex-2.

5 NECESSARY MEASURES TO BE TAKEN BY THE SOLOMON ISLANDS SIDE

The Solomon Islands side will take necessary measures described in Annex-3 for smooth implementation of the Project on condition that the Grant Aid by the Government of Japan is extended to the Project. In addition, the Solomon Islands side will secure the approximatery 24,000 cubic meter soil materials to be utilized for the Project from the site located at Sun Valley.

6 CONSTRUCTION OF THE NEW HENDERSON ROAD

The construction of the New Henderson Road will be completed by the Solomon side during the Project construction period (roughly the end of 1997) to make the good use of the airport facilities provided under the Grant Aid upon the Airport opening.

7 CONSTRUCTION OF THE DRAINAGE SYSTEM

The Solomon Islands side has understood the importance of the development of drainage system surrounding the Project area. Both sides agreed that the drainage system at the north of airport to be properly designed and constructed by the Solomon Islands side and integrated into the airport drainage system provided under the Grant Aid.

8 FURTHER SCHEDULE OF THE STUDY

JICA will complete the Basic Design Report and forward it to the Solomon Islands side by December 1995.

Basic Concept of the Project

1 Aim of the Project

In response to a request by the Government of the Solomon Islands, the Government of Japan conducted a field survey for the Basic Design Study, from April to May 1995. As a result, it was confirmed that the passenger terminal area including the international passenger terminal building was in need of immediate improvement. The following request items were confirmed:

(1) New International Passenger Terminal Building

The terminal building should be able to cope with the estimated demands of the target year and be capable of enlargement in the future.

(2) Passenger Terminal Apron and Taxiway

An apron will be constructed to cope with the new passenger terminal building. The apron should be built so that future increase in berths and the handling of large planes should be possible. A taxiway will also be built between the new apron and runway.

(3) Apron and Taxiway Lighting

Necessary lighting for the apron and taxiway will be installed.

(4) Access Road, Terminal Road and Car Parking

An access road connecting the new terminal building site and the new Henderson Road will be constructed. Furthermore, a detour for the present Henderson Road, terminal roads connecting the various facilities in the new terminal building site, and car parking for airport users and staff will be constructed.

(5) Drainage and Fencing

Necessary facilities for surface water drainage will be constructed in the Project site. A security fence on the boundary between the airside (apron side) and the curbside (road/parking side) will be constructed in the new terminal area.

(6) Fire Station, Power House and Power Supply

Due to the construction of the new taxiway, a new fire station will be constructed. A power house will be constructed and power supply lines will be installed to provide power to the new terminal area.

(7) Others

Water supply system, sewerage and telephone systems will be provided in the new terminal area.

Japan's Grant Aid Scheme

1 Grant Aid Procedures

1) Japan's Grant Aid Program is executed through the following procedures.

Application	(Request made by a recipient country)
Study	(Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by Cabinet)
Determination of Implementation	(The Notes exchanged between the Government of Japan and the recipient country)

2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study), using (a) Japanese consulting firm (s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Program, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes signed by Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

2. Basic Design Study

1) Contents of the Study

The aim of the Basic Design Study (hereinafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Japanese Government. The contents of the Study are as follows :

- a) Confirmation of the background, objectives, and benefits of the requested project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation.
- b) Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.

- c) Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- d) Preparation of a basic design of the Project
- e) Estimation of costs of the Project

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

2) Selection of Consultants

For smooth implementation of the Study, JICA uses (a) registered consultant firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA.

The consulting firm(s) used for the Study is (are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency and also to avoid any undue delay in implementation should the selection process be repeated.

3. Japan's Grant Aid Scheme

1) What is Grant Aid?

The Grant Aid Program provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. Grant Aid is not supplied through the donation of materials as such.

2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

3) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and final payment to team must be completed.

However in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

- 4) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However the prime contractors, namely, consulting, constructing and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

- 5) Necessity of "Verification"

The Government of recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

- 6) Undertakings required of the Government of the Recipient Country

In the implementation of the Grant Aid project, the recipient country is required to undertake such necessary measures as the following :

- (1) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction.
- (2) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites.
- (3) To secure buildings prior to the procurement in case the installation of the equipment.
- (4) To ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid.
- (5) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts.
- (6) To accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

- (7) "Proper Use"

The recipient country is required to maintain and use the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than covered by the Grant Aid.

- (8) "Re-export"

The products purchased under the Grant Aid should not be re-exported from the recipient country.

(9) Banking Arrangements (B/A)

- a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in an authorized foreign exchange bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.
- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an authorization to pay issued by the Government of the recipient country or its designated authority.



NECESSARY MEASURES TO BE TAKEN BY THE GOVERNMENT
OF THE SOLOMON ISLANDS

The following necessary measures should be taken by the Government of the Solomon Islands on condition that the Grant Aid by the Government of Japan is extended to the Project :

- (1) To dispose unexploded bombs and shells in the Project site.
- (2) To secure land necessary for the sites of the Project and to clear and level the land prior to the commencement of the construction.
- (3) To provide facilities for the distribution of electricity, water supply, telephone line and drainage and other incidental facilities to the Project site.
- (4) To install the fuel hydrant system in the new passenger terminal apron.
- (5) To demolish the existing fire station, administration building, fuel farm and Western Pacific offices and hangars.
- (6) To relocate the existing electricity line, the existing water main, and the existing telephone line along the existing Henderson Road so as not to hinder the construction works for the Project.
- (7) To ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid.
- (8) To exempt Japanese nationals from custom duties, internal taxes and other fiscal levies which be imposed by the Government of the Solomon Islands with respect to the supply of the products and services under the contracts verified by the Government of Japan in accordance with the Exchange of Notes (hereinafter referred to as "the Verified Contracts").
- (9) To accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contracts, such facilities as may be necessary for their entry into the Solomon Islands and stay therein for the performance of their work.
- (10) "Proper Use"

The Government of the Solomon Islands is required to operate and maintain the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for such operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

- (11) "Re-export"

The products purchased under the Grant Aid should not be re-exported from the Solomon Islands.

(12) Banking Arrangements (B/A)

The Government of the Solomon Islands or its designated authority should conclude Banking Arrangements with an authorized foreign exchange bank in Japan (hereinafter referred to as "the Bank") in accordance with the Exchange of Notes.

(13) Authorization to Pay (A/P)

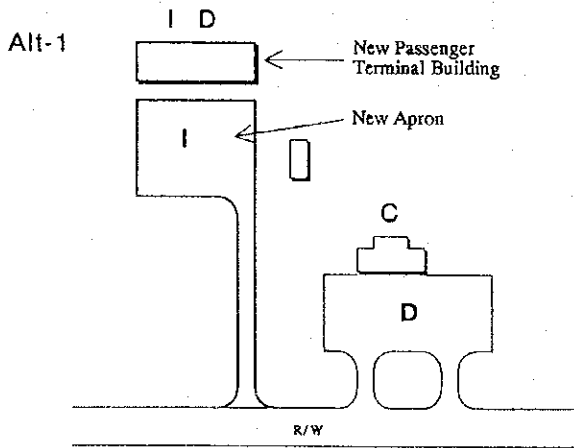
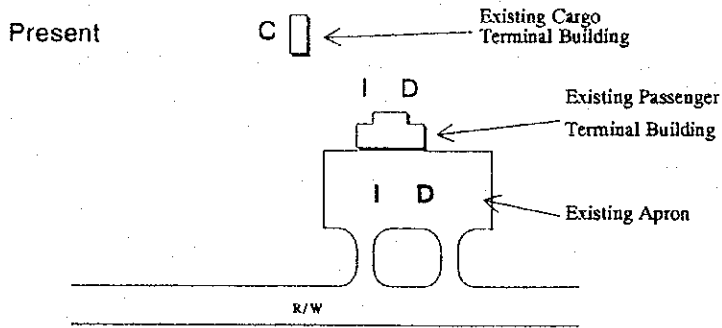
The Government of the Solomon Islands or its designated authority should issue an Authorization to Pay to the Bank after verification of the contracts by the Government of Japan in order that it may make payments request to the Government of Japan, because the payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay issued by the Government of the Solomon Islands or its designated authority .



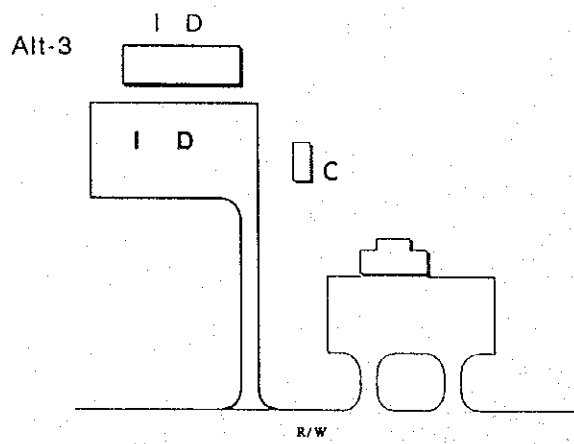
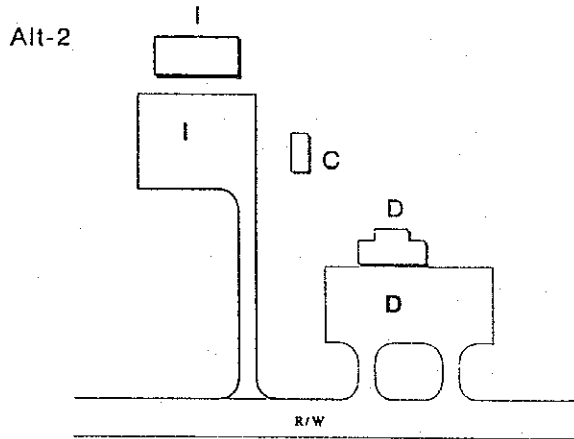
Appendix 5 Cost Estimation Borne by the Recipient Country

- | | |
|--|------------------------------|
| 1. Demolition of the existing buildings: | 72 Thousand Solomon Dollars |
| (CAD office, Fire station, Office in the fuel yard, Hangar and office of Western Pacific, and Hangar of Heli Solomons) | |
| 2. Power supply relocation and distribution to the site: | 250 Thousand Solomon Dollars |
| 3. Telephone line relocation and distribution to the site: | 74 Thousand Solomon Dollars |
| 4. Water supply relocation and distribution to the site: | 10 Thousand Solomon Dollars |

Appendix 6 Other Relevant Data
 Alternative Concepts for Terminal Area Layout



I: Intenational
 D: Domestic
 C: Cargo



Comparison of Alternative Terminal Area Layout

A Good
B Fair
C Poor

		Alt.1	Alt.2	Alt.3
Concept		- New terminal building for international/ domestic use. - New apron for international use. (Adopted concept in JICA F/S)	- New terminal building for international use. - New apron for international use.	- New terminal building for international/ domestic use. - New apron for international/ domestic use.
1 Convenience for users	a. Convenience for departing/ arriving passengers	B Bus transportation is required for domestic passengers since the apron is 300 m away from the terminal building.	A	A
	b. Convenience for transit passengers between international and domestic	A	C It is necessary to move between new international terminal and existing domestic terminal.	A
	c. Convenience for airlines	C Bus transportation is required for domestic passengers between aircraft and terminal building. Ground handling is slightly inconvenient due to the separated two aprons.	B Ground handling is slightly inconvenient due to the separated two aprons.	A
	d. Convenience for airport administrator	A	A	C Although an apron will be moved to the new terminal area, the control tower will remain at the existing location until a new control tower will be constructed.
2 Effective use of existing facilities	a. Existing passenger terminal building	A	A	B Only some part may be used for offices.
	b. Existing cargo terminal building	C Not utilized	A	A
	c. Existing apron and taxiway	A	A	C The existing apron will not be used.
3 Construction cost		B	A Lowest in the three alternatives	C Highest in the three alternatives
Overall Evaluation		B There is some inconvenience for domestic passengers since domestic apron is far from the terminal building. Existing cargo terminal will not be used.	A Existing passenger terminal building and apron will be fully utilized. The cargo terminal building completed some years ago will be used continuously. Construction cost is lowest due to small work volume among three alternatives.	C Convenience for air passengers and airport administrator is most desirable in the three alternatives. However, existing terminal building and apron will not be used, and construction cost is highest in the three alternatives.
		Alt.2 is most appropriate due to maximum utilization of existing facilities and the lowest construction cost. (Since the number of transit passengers seems to be small, inconvenience for transit passengers is not a big problem.)		

Comparative Table of Floor Areas of Facilities

		Existing PTB		Projected PTB	
		m2	Remarks	m2	Remarks
ARRIVAL	Arrival Hall	48		225	
	Immigration Check	16	4 counters	99	4 counters
	Health Inquiry	16		30	
	Baggage Claim	128	Conveyor 15m	312	Conveyor 32m
	Customs Check	92	4 counters	156	4 counters
	Toilets	12		38	
	Others	-		60	
	Sub total	312		920	
DEPARTURE	Check-in Lobby	-	3 counters	80	6 counters
	I. & S. Check	31	1 counter	141	2 counters
	Departure Lounge	79		324	
	Toilets	12		49	
	CIP Room	-		146	
	VIP Room	111		116	
	Sub total	233		857	
CONCESSION	Bank	8		7	
	Rent-a-Car	10	3 booths	18	3 booths
	Airlines Information	-		4	1 booth
	Coffee Shop	16		27	
	Duty Free Shop	19		70	
	Storage (Duty Free)	-		9	
	Snack Bar	13		22	
	Sub total	66		156	
COMMON	Public Lobby	239		443	2 ticket counters
	Tourism Information	-		6	1 booth
	Toilets/Corridor	8		56	
	Sub total	248		508	
OFFICE	Immigration Office	-		32	
	Quarantine Office	18		29	
	Customs Office	-		46	
	Search Room	-		8	
	Baggage Bond	6		16	
	Health & First Aid	-		11	
	CIQ Toilets/Kitchen	-		73	incl. Corridor
	Security Office	12		28	
	Police	-		18	
	Cell	-		9	
	Immigration Office	-		23	
	Search Room	-		15	
	Airlines Office	80	+113 (Operation House)	221	
	Workers Room	-		38	
	Briefing Room	13		25	
	Airlines storage	12		16	
	Airlines toilets	-	+ 15 (Operation House)	21	
	Corridor	-	+ 14		
	CAD Storage	-		39	
	CAD Directors Office	-	+ 23(Adminiatra- tion House)	33	on 1st floor
Airport Managers Office	12	+ 14	25	"	
CAD Offices	-	+136	104	"	
CAD Storage	-	+ 9	6	"	
CAD WC/kitchen/Corridor	12	+ 91	84	"	
Sub total	193	+415	992		
Grand total	1052	+415	3431		
Peak Hour Passenger design		180pax/hour		180pax/hour	

Required Area Capacity Calculation

Following Calculations Are Based on Capacity Calculation Formulae, Airport Development Reference Manual
8th Edition, IATA .

Assumptions

Peak hour number of terminating and originating passengers $130 \times 2 \times 0.7 = 180$ (pax)
130 . . . number of seats of B 7 3 7
2 . . . peak hour number of planes
0.7 . . . Load Factor based on the survey

- Visitors are excluded from Check-in Lobby
- The check-in system is Joint-controlled by Solomon Airlines as a sole agent.
- ● . . . Number assumed by IATA reference manual
- Pages to be refereed are that of above mentioned "Reference Manual".

1. Public Area

Departures Concourse (Refer to P.26 1.6.5.2)

$$A_1 = s \times y / 60 \times 3 / 2 \times a \{ (1 + o) + b \} \text{ m}^2$$
$$A_1 = 284 \text{ m}^2$$

A_1 : Required Area (m²)

s : Space Required Per Person (s = 1.5 m²) ●

b : Number Of Transfer Passenger Not Processed Airside (b = 0 : Survey)

y : Average Occupancy Time Per Passenger/Visitor (w = 20 min.) ●

a : Peak Hour Number Of Originating Passengers (a = 180 pax)

o : Number Of Visitors Per Passenger (o = 1.1 persons : Survey)

Arrival Concourse Waiting Area (Refer to p.41 1.6.5.17)

$$A_2 = s (w d / 60 + z d / 60)$$
$$A_2 = 216 \text{ m}^2$$

A_2 : Area Required (m²)

s : Space Required Per Person s = 1.5 m²) ●

b : Number Of Transfer Passenger Not Processed Airside (b = 0 : Survey)

w : Average Occupancy Time Per Passenger/Visitor (w = 20 min.) ●

d : Peak Hour Number Of Terminating Passengers (d = 180 pax)

z : Number Of Visitors Per Passenger (z = 1.1 persons : Survey)

$$A = A_1 + A_2 = 500 \text{ m}^2$$

2. Queuing Area (Check-in Lobby) (Refer to P.27 1.6.5.3)

$$A = s \times 20 / 60 \times \{ 3 / 2 (a + b) - (a + b) \} (+10 \%)$$

A : Area Required (m²)

a : Peak Hour Number Of Originating Passengers (a = 180 pax)

b : Number Of Transfer Passenger Not Processed Airside (b = 0 : Survey)

s : Space Required Per Person (s = 1.9 × 0.8 = 1.5 m²)

(-50% of Peak hour number of passengers Arrive Within The First 20 minutes)

$$A = 49.5 \text{ m}^2$$

or, Assumption of 6 Check-in Counters (Refer to 3.)

$$n = 180 \times (50\%) / 6 - 20 \times 60 / t$$

$$L = n \times a$$

n : Number Of Queuing Passengers

L : Length of Queue

t : Average Processing Time per Passengers (t = 110 min. ; Survey)

a : Length Required per Passengers (a = 0.8 m) ●

$$n = 4.09 \rightarrow 5 \text{ (pax)}$$

$$L = n \times a = 5 \times 0.8 = 4.0 \text{ m}$$

8 m Including Aisle(1.2 m) and X-ray Unit(2.8 m)

3. Check-in desks (Centralized) (Refer to P.28 1.6.5.4)

$$N = (a + b) t_1 / 60 (+10\%)$$

N : Number of Counters Required (Positions)

t₁ : Average Processing Time Per Passenger (t₁ = 1.8 min. ; Survey)

a : Peak Hour Number Of Originating Passengers (a = 180 pax)

b : Number Of Transfer Passenger Not Processed Airside (b = 0 ; Survey)

$$N = 5.94 \rightarrow 6 \text{ desks}$$

Total Length Required Is About 10.2 m Including Counter Width(1.2 m) And Space Between Counters(0.6 m)

4. Passport Control-Departure (Refer to P.29 1.6.5.5)

$$N = (a + b) \times t_2 / 60 (+10\%)$$

N : Required Positions (positions)

a : Peak Hour Number Of Originating Passengers (a = 180 pax)

t₂ : Average Processing Time Per Passenger (t₂ = 0.5 min; Survey)

$$N = 1.65 \rightarrow 2 \text{ positions}$$

5. Security Check-Centralized (Refer to P.30 1.6.5.6)

$$N = a \times w / y$$

N : Required X-ray Hand Baggage Unit (unit)

a : Peak Hour Number Of Originating Passengers (a = 180 pax)

w : Number of Hand baggage items per Passengers (w = 2 pcs ; Survey)

y : Capacity of Hand Baggage items per Passengers (600 pcs/hour)

$$N = 0.6 \rightarrow 1 \text{ unit}$$

6. Departure Lounge (Refer to P.31 1.6.5.7)

$$A = s \times (c \times u \times i / 60 + c \times v \times k / 60) (+10\%)$$

A : Area Required (m²)

c : Peak Hour Number Of Originating Passengers Excluding CIP passengers (a = 156 pax)

(CIP = 8 + 16 = 24 pax)

(180 - 24 = 156人)

s : Space Required Per Person (2.0 m²) ●

u : Average Occupancy Time per Long-haul Passenger

i : Proportion Of Long-Haul Passengers

v : Average Occupancy Time per Short-haul Passenger

k : Proportion Of Short-Haul Passengers
 (u × i + v × k = 50 : Survey ; Average Occupancy Time)

$$A = 286 \text{ m}^2$$

7. Queuing Area - Passport Control - Arrival (Refer to P.35 1.6.5.11)

$$A = s \times 5 / 60 \times (4 / 2 (d + b) - (d + b))$$

(-50% of Peak Hour Number of Passengers Arrive Within the First 5min. : Survey)
 A : Area Required (m²)
 s : Space Required Per Person (1 m²) ●
 d : Peak Hour Number Of Terminating Passengers (d = 180 pax)
 b : Number Of Transfer Passenger Not Processed Airside (b = 0 : Survey)

$$A = 75 \text{ m}^2$$

or, Calculation Of The Length Of The Queues At Peak Hour Of The Design Day,
 10 Minutes After The First passenger's Arrival

$$(d / N - 10 / t_3) \times l / n = 29.3 \text{ (m)}$$

15 m required to make 2 queues per counter

N : Control Positions (4 positions as calculated at 8.)
 d : Peak Hour Number Of Terminating Passengers (d = 180 pax)
 t₃ : Average Processing Time Per Passenger (1.2 min.)
 ... Survey; 1.8 min, Banuatu 0.9 min, West Samoa; 0.75 min, Average; 1.2 min)
 l : Queuing Length Required per Passenger (0.8 m) ●
 n : Assumption Of Making 2 Queues Per Counter

8. Passport Control - Arrival (Refer to P.36 1.6.5.12)

$$N = d \times t_3 / 60 (+10 \%)$$

N : Control Positions Required
 d : Peak Hour Number Of Terminating Passengers (d = 180 pax)
 t₃ : Average Processing Time Per Passenger (1.2 min.)
 ... (Survey; 1.8 Min, Banuatu; 0.9 Min, West Samoa; 0.75 min, Average; 1.2 min)
 $N = 3.96 \rightarrow 4 \text{ positions}$

9. Baggage Claim Area (Refer to P.37 1.6.5.13)

$$A = e \times w \times s / 60 (+10 \%)$$

A : Area Required (m²)
 e : Peak Hour Number Of Terminating Passengers (e = 180 pax)
 w : Average Occupancy Time Per Passenger (30 min.) ●
 s : Space Required Per Passenger (1.8 m²) ●

$$A = 178 \text{ m}^2$$

10. Number Of Baggage Claim Devices (Refer to P.38 1.6.5.14)

$$N = e r z / 60 \text{ m}$$

N : Number of Claim Devices Required
 e : Peak Hour Number Of Terminating Passengers (e = 180 pax)
 r : Proportion Of Passengers Arriving By Narrow-Body Aircraft (100%:Survey)

z : Average Claim Device Occupancy Time Per Narrow-Body Aircraft (20 min.) ●
m : Number Of Passengers Per Narrow-body Aircraft (180 pax)
Required claim length for Narrow-Body Aircraft; 30 m~40 m

N = 0.33 → 1 device

11. Queing Area - Arrivals Customs (Refer to P.39 1.6.5.15)

$$A = f \times s \times 20 / 60 (3 / 2 e - e) (+10 \%)$$

A : Area Required (m²)

f : Proportion Of Passengers To Be Customs Checked (100 %; Survey)

s : Space Required Per Passenger (1.5 m²) ●

e : Peak Hour Number Of Terminating Passengers (e = 180 pax)

A = 49.5 → 50 m²

12. Arrival Customs (Refer to P.40 1.6.5.16)

$$N = e \times f \times t_4 / 60 (+10 \%)$$

N : Number Of Customs Positions Required

f : Proportion Of Passengers To Be Customs Controlled (100 %; Survey)

t₄ : Average Processing Time Per Passenger (0.8 min)

... (Survey; 0.4 Min, Banuatu; 1 Min, West Samoa 0.9 min, Average; 0.8 min)

e : Peak Hour Number Of Terminating Passengers (e = 180 pax)

N = 2.6 → 3 positions

references : AIRPORT DEVELOPMENT REFERENCE MANUAL/8TH EDITION. APRIL 1995
BY INTERNATIONAL AIRTRANSPORT ASSOCIATION (IATA)

1 3. Length Required Of Claim Device

Refer to Banuatu Report JICA

$$L = S \times F \times a \times b \times w$$

L : Effective Length Required (m)

S : Number Of Seats Of Aircraft (130 seats)

F : Load Factor (0.7)

a : Average Number Of Baggage Per Passenger (2.1 個)

b : Proportion Of Waiting Passengers (0.5)

w : Width Required Per Passenger (0.33 m)

$$L = 31.5 \rightarrow 32 \text{ m}$$

1 4. Length of Observation Deck

$$L = z \times a \times w \times 0.5 \quad (0.5 ; \text{assanmpted visitors to be in 2 layers})$$

L : Required Length Of Deck (m)

z : Number Of Visitors Per Passenger (1.1 persons)

a : Peak Hour Number Of Terminating Passengers (a = 180 pax)

w : Required Width Per Passenger (0.8 m)

$$L = 79.2 \rightarrow 79 \text{ m}$$

1 5. Office Area Required

Standard For Floor Area Requirements Per Person For Governmental Officers Of Japanese Government

DIRECTOR GENERAL	DIRECTOR	DEPUTY DIRECTOR	CHIEF	ASSISTANT CHIEF	SENIOR OFFICER	OFFICER
40	32	24	10	7.2	7.2	4

(m²)

1. PRESENT NUMBER OF OFFICERS OF CIVIL AVIATION OFFICE

	SENIOR	OFFICER
OPERATION UNIT	2	21
TECHNICAL SECTION	1	8
SUPPORT SERVICES	0	18
AIRLINE SECTION	1	19
FLIGHT STANDARD	1	1
TOTAL	5	67

(persons)

Calculation of Required Floor Area Using The Above Mentioned Number Of Officers and Supposing The 3 Shift Roster System, The Result Is;

$$5 \times 7.2 + (66 / 3) \times 4 = 168 \text{ (m}^2\text{)}$$

2. AIRPORT MANAGER'S ROOM

$$24 \text{ (m}^2\text{)}$$

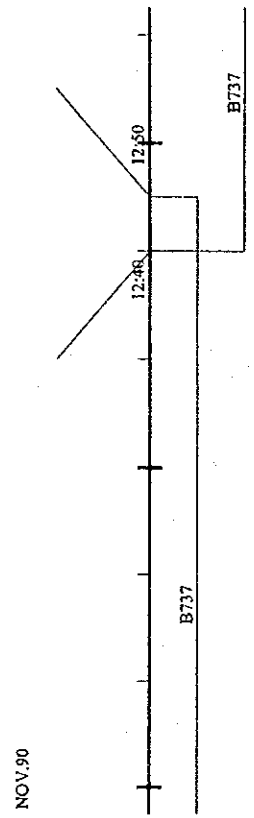
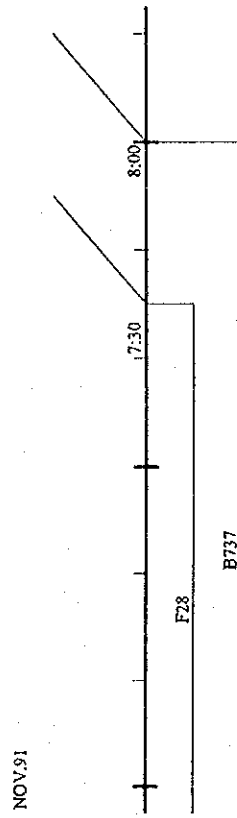
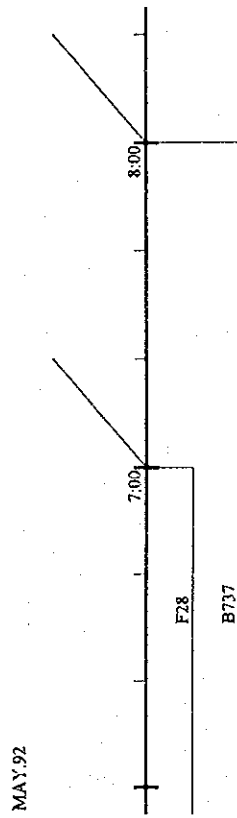
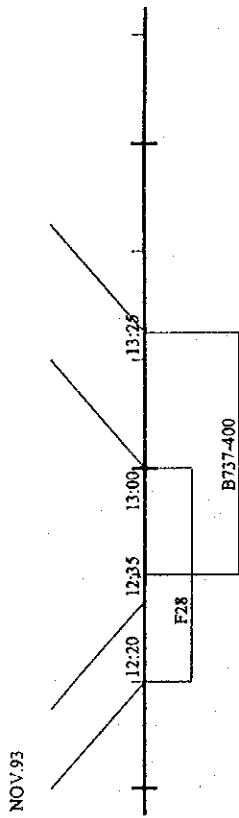
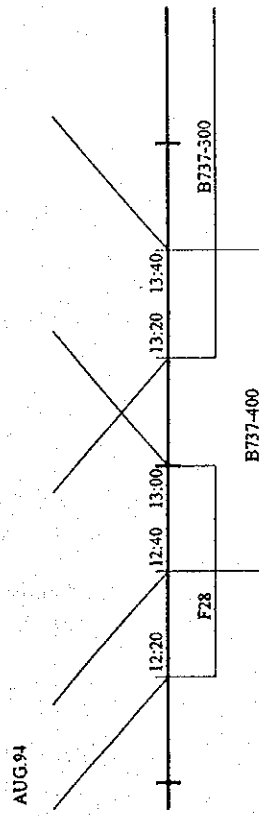
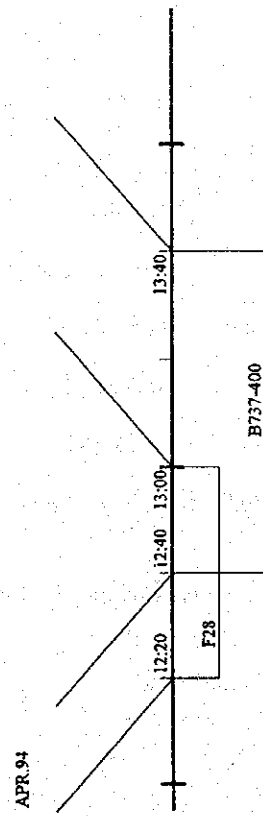
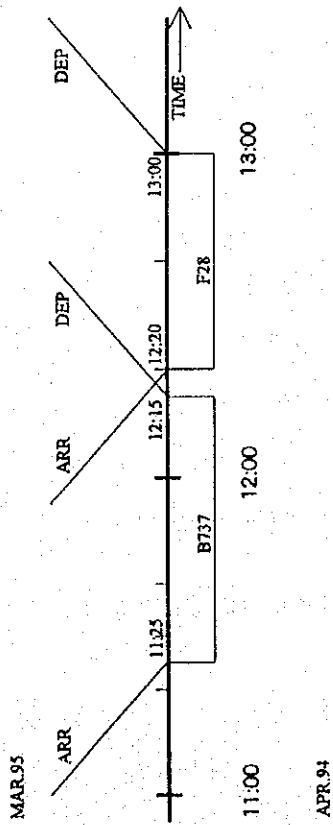
3. CIVIL AVIATION DIRECTOR'S ROOM

$$32 \text{ (m}^2\text{)}$$

4. C I Q Office

	SENIOR	OFFICER	AREA
IMMIGRATION OFFICE	1	4	2 3
CUSTOMS OFFICE	2	8	4 6
QUARANTINE OFFICE	1	5	2 7
HEALTH AND FIRST-AID	0	1	1 5*
POLICE OFFICE	0	2	8
SECURITY OFFICE	0	6	2 4

*Including Space for bed and medical equipment



Aircraft Departures and Arrivals during the Peak Hour (1990 - 1995)

Appendix 7 Reference

1)General

- Recurrent Estimates 1993, 1994, 1995
- Development Estimates 1993, 1994, 1995
- Policies, Strategies and Programme of Action 1995-1998
- Solomon Islands Telephone Directory 1995 (2 Copies)
- Organization Chart of the MTWU

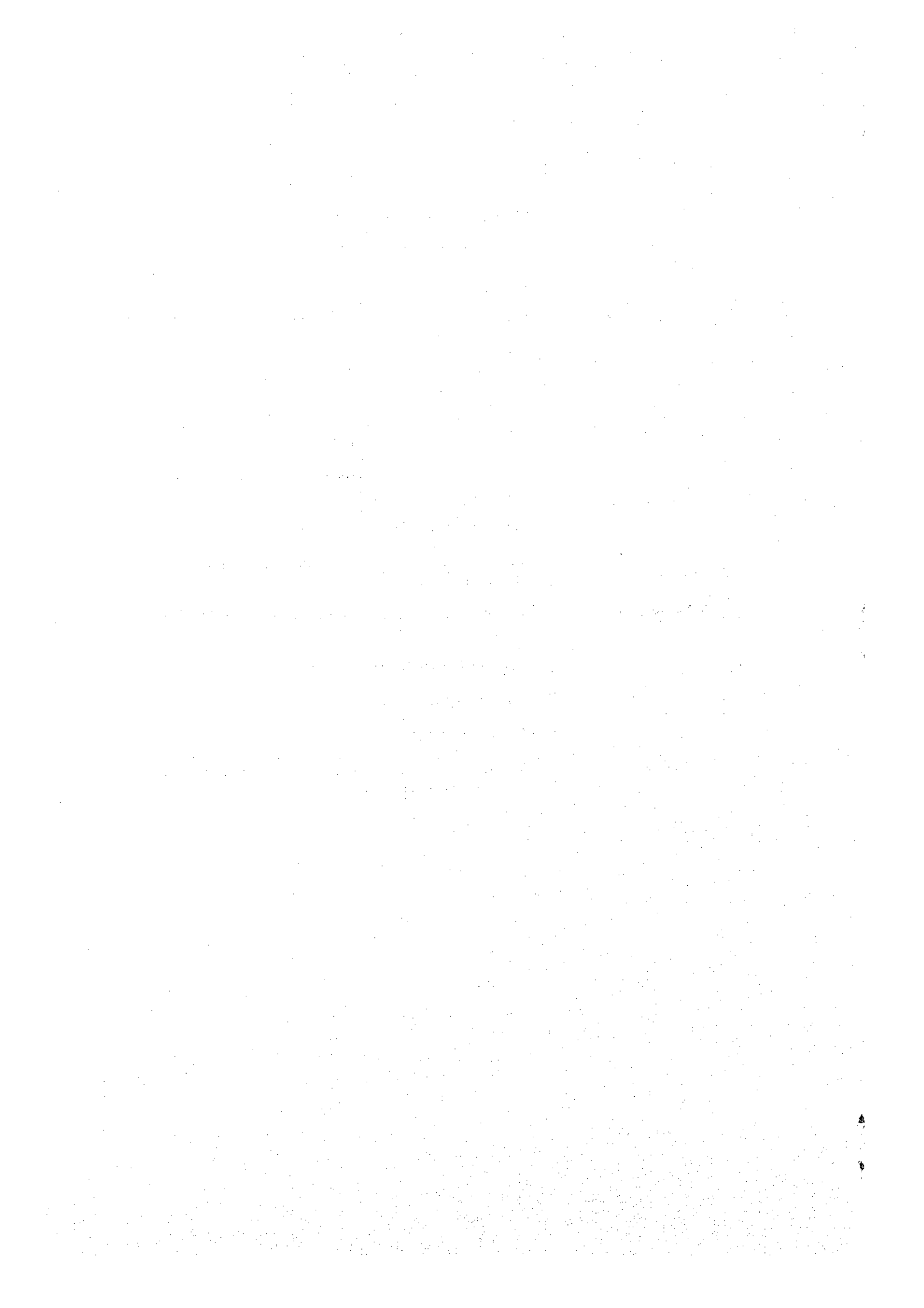
2)Architectural

- Borehole Log of Eskelly Solo's Place (near the airport Beacon)
- Large and fairly large shocks 1960-1980 (Solomon Islands + Guadalcanal)
- National Building Code
- Home Building Manual
- Specification, Drawings and Bill of Quantities for Expansion of Kiu'ufi Hospital, July 1993
- Agreement and Schedule of General Conditions of Building Contract
- Pressure Charts from Henderson Airport
- Qualities of Panatina Bores Water, Kombito Spring Water
- SIWA Wastewater Strategy Plan
- SMEC Project Description (extract)
- Major Species (2 Volumes) of the Ministry of Forest
- List of Staff of the Civil Aviation
- Shifting of Staff of the Civil Aviation
- Staffing of Operation Division of Solomon Airlines
- Samples of major species of timber locally produced

3) Cost Estimates

- New Zealand Construction Handbook 1993
- Australian Construction Handbook 1995
- Construction Cost Guide for Housing, Small Commercial and Industrial Building 3rd Edition 1995
- Cordell: Building Cost Guide Commercial Industrial, May 1995 (Queensland)
- World wide Traffic Guide by DHL

- Unit Prices of Construction Materials
 - Unit Prices of Timbers (Akwa and Vasa)
 - Unit Prices of Timbers by Pacific Timbers
 - Unit Prices of Airconditioners
 - Unit Prices of Concrete Products and Hire Rates of Equipments (April 1995 and April 1996)
 - Schedule of All in Rates of MTWU
 - Labors Wages
- 4) Statistics
- Time Table of Solomon Airlines 26 March 1995 to 28 October 1995
 - Arrival and Departure Passengers at Henderson Airport in 1993, 1995
 - International Cargo in 1994
 - Monthly Passenger of Solomon Airlines at Henderson Airport in 1993, 1994 and 1995
- 5) Civil Engineering
- Layout Plan of Existing Apron and Terminal Area of Henderson Airport
 - Aerial Photograph (1:5000, 1:16,000)
 - Unit Cost of Civil Works
 - Unit Cost of Pavement Works
- 6) Other Statistics
- Monthly Exchange Rates by Central Bank of Solomon Islands (January 1994 to April 1995)





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