# APPENDICES

# Appendix 1:
# Member List of the Survey Team

**Member List of the Survey Team**

| Name | Position / In Charge | Organization |
|---|---|---|
| Yoshio FUKUDA | Team Leader | JICA |
| Ryohei WATANABE | Chief Consultant / Road Planning 1 | CTII |
| Junichiro OGAWA | Deputy Chief Consultant / Road Planning 2 / Road Maintenance | CTII |
| Robinson SHRESTHA | Road and Pavement Design | CTII |
| Hideki TAKAHASHI | Road Drainage Planning / Road Structure and Ancillary Design | CTII |
| Ali CHAVOSHIAN | Hydrology / Hydraulics Analysis | CTII |
| Masaki OCHI | Bridge Inspection | CTII |
| Takashi ONUMA | Environmental and Social Consideration | CTII |
| Suguru IWAMA | Natural Condition / Utility / Axle Load Survey | CTII |
| Hiromitsu OGATA | Procurement, Planning and Cost Estimation | CTII |

# Appendix 2: Survey Schedule

# Survey Schedule

| Schedule | | | Team Leader | Chief Consultant / Road Planning 1 | Deputy Chief Consultant / Road Planning 2 / Maintenance Planning | Road and Pavement Design | Road Drainage Planning / Road Structure and Ancillary Design | Hydrogic / Hydraulic Analysis | Bridge Inspection | Environmental and Social Consideration | Natural Condition / Utility / Axle Load Survey | Procurement, Planning and Cost Estimation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DATE | DAY | **Mr.Fukuda** | **Mr. Watanabe** | **Mr. Ogawa** | **Mr. Shrestha** | **Mr. Takahashi** | **Mr. Ali** | **Mr. Ochi** | **Mr. Onuma** | **Mr. Iwama** | **Mr. Ogata** |
| 1 | 7-Oct | Mon | | | Narita → Singapore → | | | | | | | Narita → Singapore → |
| 2 | 8-Oct | Tue | | | Brisbane → Honiara | | | | | | | Brisbane → Honiara |
| 3 | 9-Oct | Wed | | | Courtesy Call (JICA) | | | | | | | Courtesy Call (JICA) |
| 4 | 10-Oct | Thu | | | Courtesy Call (MID),Meeting with SIPA | | | | | | | Courtesy Call (MID),Meeting with SIPA |
| 5 | 11-Oct | Fri | | | Site Survey | | | | | | | Site Survey |
| 6 | 12-Oct | Sat | | | Site Survey | | | | | | | Site Survey |
| 7 | 13-Oct | Sun | | | No Activety | | | | | | | No Activety |
| 8 | 14-Oct | Mon | | | Site Survey | | | | | | | Site Survey |
| 9 | 15-Oct | Tue | | | Axle Load Survey、Site Survey | | | | | | | Site Survey |
| 10 | 16-Oct | Wed | | | Axle Load Survey、Site Survey | | | | | | | Site Survey |
| 11 | 17-Oct | Thu | | | Axle Load Survey、Site Survey | | | | | | | Site Survey |
| 12 | 18-Oct | Fri | | | Axle Load Survey、Site Survey | | | | | | | Site Survey |
| 13 | 19-Oct | Sat | | | Site Survey | | | | | | | Site Survey |
| 14 | 20-Oct | Sun | | Narita → | No Activety | Narita → | Narita → | Narita → | | | | No Activety |
| 15 | 21-Oct | Mon | | → Brisbane → Honiara | Axle Load Survey、Site Survey | → Brisbane → Honiara | → Brisbane → Honiara | → Brisbane → Honiara | | | | Axle Load Survey、Site Survey |
| 16 | 22-Oct | Tue | | Site Survey | Axle Load Survey、Site Survey | Site Survey | Site Survey | Site Survey | | | | Axle Load Survey、Site Survey |
| 17 | 23-Oct | Wed | | Site Survey | Axle Load Survey、Site Survey | Site Survey | Site Survey | Site Survey | | | | Axle Load Survey、Site Survey |
| 18 | 24-Oct | Thu | | Site Survey | Axle Load Survey、Site Survey | Site Survey | Site Survey | Site Survey | | | | Axle Load Survey、Site Survey |
| 19 | 25-Oct | Fri | Port Moresby→ Honiara Courtesy Call(JICA MID EOJ) | Site Survey | Axle Load Survey、Site Survey | Site Survey | Site Survey | Site Survey | | | | Axle Load Survey、Site Survey |
| 20 | 26-Oct | Sat | Site Survey | Site Survey | Site Survey | Site Survey | Site Survey | Site Survey | | | | Site Survey |
| 21 | 27-Oct | Sun | No Activety | | | No Activety | | | | | | No Activety |
| 22 | 28-Oct | Mon | Explanation and Discussion on M/D with MID | Site Survey | Site Survey | Site Survey | Site Survey | Site Survey | | | | Site Survey |
| 23 | 29-Oct | Tue | Signing of M/D Honiara→Port Moresby | Documentation of the survey result | Site Survey | Site Survey | Site Survey | Site Survey | | | | Site Survey |

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| Schedule | | | Team Leader | Chief Consultant / Road Planning 1 | Deputy Chief Consultant / Road Planning 2 / Maintenance Planning | Road and Pavement Design | Road Drainage Planning / Road Structure and Ancillary Design | Hydrogic / Hydraulic Analysis | Bridge Inspection | Environmental and Social Consideration | Natural Condition / Utility / Axle Load Survey | Procurement, Planning and Cost Estimation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DATE | DAY | **Mr.Fukuda** | **Mr. Watanabe** | **Mr. Ogawa** | **Mr. Shrestha** | **Mr. Takahashi** | **Mr. Ali** | **Mr. Ochi** | **Mr. Onuma** | **Mr. Iwama** | **Mr. Ogata** |
| 24 | 30-Oct | Wed | Port Moresby → Narita | Documentation of the survey result | Site Survey | Site Survey | Site Survey | Site Survey | | | | Site Survey |
| 25 | 31-Oct | Thu | | Documentation of the survey result | Site Survey | Site Survey | Site Survey | Site Survey | | | | Axle Load Survey、Site Survey |
| 26 | 1-Nov | Fri | | Meeting with MID | Meeting with MID | Site Survey | Site Survey | Site Survey | | | | Site Survey |
| 27 | 2-Nov | Sat | | Project team meeting | Project team meeting | Project team meeting | Site Survey<br>Project team meeting | Project team meeting | | | | Site Survey<br>Project team meeting |
| 28 | 3-Nov | Sun | | No Activety | | | | | | | | No Activety |
| 29 | 4-Nov | Mon | | Documentation of the survey result | Site Survey | Documentation of the survey result | Site Survey | Site Survey | | | | Axle Load Survey、Site Survey |
| 30 | 5-Nov | Tue | | Documentation of the survey result | Site Survey | Documentation of the survey result | Site Survey | Site Survey | | | | Axle Load Survey、Site Survey |
| 31 | 6-Nov | Wed | | Documentation of the survey result | Site Survey | Documentation of the survey result | Site Survey | Site Survey | | | | Axle Load Survey、Site Survey |
| 32 | 7-Nov | Thu | | Documentation of the survey result | Site Survey | Documentation of the survey result | Site Survey | Site Survey | | | Narita → | Axle Load Survey、Site Survey |
| 33 | 8-Nov | Fri | | Documentation of the survey result | Site Survey | Documentation of the survey result | Site Survey | Site Survey | | | → Brisbane → Honiara | Axle Load Survey、Site Survey |
| 34 | 9-Nov | Sat | | Project team meeting | | | | | | | Project team meeting | |
| 35 | 10-Nov | Sun | | No Activety | | | | | | | No Activety | |
| 36 | 11-Nov | Mon | | Joint Technical meeting in MID | | | | | | | Joint Technical meeting in MID | |
| 37 | 12-Nov | Tue | | Documentation of the survey result | Documentation of the survey result | Honiara → Brisbane | Documentation of the survey result | Documentation of the survey result | | Narita → | Documentation of the survey result | Documentation of the survey result |
| 38 | 13-Nov | Wed | | Documentation of the survey result | Documentation of the survey result | Brisbane → Narita | Documentation of the survey result | Documentation of the survey result | | → Brisbane → Honiara | Documentation of the survey result | Documentation of the survey result |
| 39 | 14-Nov | Thu | | Documentation of the survey result | Site Survey | | Documentation of the survey result | Documentation of the survey result | | Site Survey | Site Survey | Pedestrian Cross Road Suevey, Site Survey |
| 40 | 15-Nov | Fri | | Meeting with ADB | Meeting with ADB | | Documentation of the survey result | Meeting with Water resource manegement devision | | Meeting with MID | Site Survey | Pedestrian Cross Road Suevey, Meeting with Police |
| 41 | 16-Nov | Sat | | Documentation of the survey result, Project team meeting | Documentation of the survey result, Project team meeting | | Site Survey、Project team meeting | Site Survey、Project team meeting | | Preparing for Environmental Survey, Project team meeting | Project team meeting | Site Survey、Project team meeting |
| 42 | 17-Nov | Sun | | No Activety | | | No Activety | Honiara → Brisbane | | No Activety | | |
| 43 | 18-Nov | Mon | | Meeting with JICA Solomon Office | Meeting with JICA Solomon Office | | Site Survey | Brisbane → Narita | | Meeting with JICA Solomon Office | Documentation of the survey result | Site Survey |
| 44 | 19-Nov | Tue | | Documentation of the survey result | Honiara → Brisbane | | Site Survey | | Narita → | Site Survey | Documentation of the survey result | Site Survey |
| 45 | 20-Nov | Wed | | Documentation of the survey result | Brisbane → Haneda | | Site Survey | | → Brisbane → Honiara | Preparing for SHM | Documentation of the survey result | Site Survey |
| 46 | 21-Nov | Thu | | Documentation of the survey result | | | Site Survey | | Site Survey | Preparing for SHM | Site Survey | Site Survey |
| 47 | 22-Nov | Fri | | Documentation of the survey result | | | Site Survey | | Meeting with NCA and Disaster Management | Preparing for Environmental Survey | Site Survey | Site Survey |

| Schedule | | | Team Leader | Chief Consultant / Road Planning 1 | Deputy Chief Consultant / Road Planning 2 / Maintenance Planning | Road and Pavement Design | Road Drainage Planning / Road Structure and Ancillary Design | Hydrogic / Hydraulic Analysis | Bridge Inspection | Environmental and Social Consideration | Natural Condition / Utility / Axle Load Survey | Procurement, Planning and Cost Estimation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DATE | DAY | **Mr.Fukuda** | **Mr. Watanabe** | **Mr. Ogawa** | **Mr. Shrestha** | **Mr. Takahashi** | **Mr. Ali** | **Mr. Ochi** | **Mr. Onuma** | **Mr. Iwama** | **Mr. Ogata** |
| 48 | 23-Nov | Sat | | No Activety | | | No Activety | | No Activety | | | |
| 49 | 24-Nov | Sun | | Documentation of the survey result | | | Site Survey | | Documentation of the survey result | Documentation of the survey result | Documentation of the survey result | Documentation of the survey result |
| 50 | 25-Nov | Mon | | MID協議 | | | Site Survey | | Documentation of the survey result | 環境調査打合せ | Documentation of the survey result | Site Survey |
| 51 | 26-Nov | Tue | | Site Survey | | | Site Survey | | Documentation of the survey result | Documentation of the survey result | Site Survey | Site Survey、Documentation of the survey result |
| 52 | 27-Nov | Wed | | Meeting with subcontractor. | | | Documentation of the survey result | | Site Survey | Site Survey | Documentation of the survey result | Documentation of the survey result |
| 53 | 28-Nov | Thu | | Documentation of the survey result | | | Site Survey | | Site Survey | Documentation of the survey result | Documentation of the survey result | Documentation of the survey result |
| 54 | 29-Nov | Fri | | Discusson of T/N with MID | | | Site Survey | | Site Survey | Discusson of T/N with MID | Site Survey | Discusson of T/N with MID |
| 55 | 30-Nov | Sat | | Site Survey | | | Site Survey | | Documentation of the survey result | Documentation of the survey result | Documentation of the survey result | Documentation of the survey result |
| 56 | 1-Dec | Sun | | No Activety | | | No Activety | | No Activety | | | |
| 57 | 2-Dec | Mon | | Documentation of the survey result | | | Documentation of the survey result | | Documentation of the survey result | Documentation of the survey result | Documentation of the survey result | Documentation of the survey result |
| 58 | 3-Dec | Tue | | SHM、PCM | | | SHM、PCM | | Site Survey | SHM、PCM | Documentation of the survey result | SHM、PCM |
| 59 | 4-Dec | Wed | | Documentation of the survey result | | | Documentation of the survey result | | Site Survey | PCM | Documentation of the survey result | PCM |
| 60 | 5-Dec | Thu | | Meeting with subcontractor. | | | Documentation of the survey result | | Site Survey | Meeting with subcontractor. | Site Survey | Meeting with subcontractor. |
| 61 | 6-Dec | Fri | | Report of Survey with JICA Solomon Office | | | Report of Survey at JICA Solomon Office | | Report of Survey at JICA Solomon Office | Report of Survey at JICA Solomon Office | Report of Survey at JICA Solomon Office | Report of Survey at JICA Solomon Office |
| 62 | 7-Dec | Sat | | Honiara → Brisbane | | | Honiara → Brisbane | | Documentation of the survey result | Honiara → Brisbane | Honiara → Brisbane | Documentation of the survey result |
| 63 | 8-Dec | Sun | | Brisbane → Narita | | | Brisbane → Narita | | No Activety | Brisbane → Narita | Brisbane → Narita | No Activety |
| 64 | 9-Dec | Mon | | | | | | | Site Survey | | | Documentation of the survey result |
| 65 | 10-Dec | Tue | | | | | | | Site Survey | | | Documentation of the survey result |
| 66 | 11-Dec | Wed | | | | | | | Site Survey | | | Site Survey |
| 67 | 12-Dec | Thu | | | | | | | Honiara → Brisbane | | | Honiara → Brisbane |
| 68 | 13-Dec | Fri | | | | | | | Brisbane → Narita | | | Brisbane → Narita |

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# Appendix 3: Lists of Parties Concerned in the Recipient Country

## Lists of Parties Concerned in the Recipient Country

| **Embassy of Japan in Solomon** | |
|---|---|
| Mr. Shigeru Toyama | Ambassador |
| Mr. Yoshiki Narita | Special Researcher |
| **JICA Solomon Islands Office** | |
| Mr. Motoyuki Uegaki | Resident Representative |
| Mr. Hiroki Tazawa | Project Formulation Advisor |

| **ADB** | |
|---|---|
| Ms. Elma Morsheda | Infrastructure Specialist, Solomon Islands Pacific Country Office |
| **Australian High Commission** | |
| Ms. Louise Scott | First Secretary - Economic |
| Mr. Erik Scholte | Second Secretary - Economic Diplomacy & Trade |
| **Ministry of Infrastructure Development (MID)** | |
| Mr. Stephen W. Maesiola | Permanent Secreteary |
| Mr. Jimmy Nuake | Undersecretary Technical |
| Mr. Mike Qarara | Director |
| Mr. Ishmael Alulu | Engineer |
| Mr. Jerome Tamis | Engineer |
| Mr. Calvin Qwana | Engineer |
| Mr. Moffat Hoawe | Senior Asset Engineer Asset Management Unit |
| Mr. Steve Sae | Chief Safeguards officer |
| Mr. Joshua Kera | Principal Environmental Safeguard officer |
| **National Hosting Authority (NHA)** | |
| Mr. Christian Nieng | Deputy Secretary to Prime Minister |
| Mr. John Fegan | Project Manager |
| **Honiara City Council (HCC)** | |
| Mr. Fred Warereau | Deputy City Clerk |
| **Ministry of Finance (MOF)** | |
| Mr. Gibson Sanau | Manager Advisor |
| Mr. Willie Honimae | Taxpayer Education Team |
| **Ministry of Environment, Climate change, Disaster management, Meteorology (MECDM)** | |
| Mr. Lloyd Tahani | Deputy Director |
| **Ministry of Mines, Energy and Rural Electrification (MMERE)** | |
| Mr. Michael Maehaka | Director of the Water Resources Division |
| **Ministry of lands, housing and Surveying (MLHS)** | |
| Mr. Rowlyn Wanega | Director |

| | |
|---|---|
| **Civil Aviation Authority Office (CAA)** | |
| Ms. Alice Meke | ANS/PEL Officer |
| **Solomon Islands National University (SINU)** | |
| Mr. Kenneth Bo'o | Property Manager Planning |
| **Solomon Telecom (ST)** | |
| Mr. Simon Walegerea | Project Engineer |
| **Solomon Water (SW)** | |
| Mr. Adam Searancke | Project Manager |
| Mr. Noel Orudiana | Technical Engineer |
| **Solomon Power (SP)** | |
| Mr. Jeremy Maneipuri | Manager Planning |
| **Traffic Police** | |
| Mr. Fred Satu | Director of Traffic |

# Appendix 4: Minutes of Discussions (October 2019)

# Minutes of Discussions
# on
# the Preparatory Survey
# on
# the Project
# for
# Upgrading of the Kukum Highway, Phase 2

Based on the several preliminary discussions between the Government of Solomon Islands (hereinafter referred to as "SIG") , Embassy of Japan and Japan International Cooperation Agency (hereinafter referred to as "JICA" ) Solomon Islands Office, JICA dispatched the Preparatory Survey Team for the Outline Design (hereinafter referred to as "the Team" ) of the Project for Upgrading of the Kukum Highway phase 2 (hereinafter referred to as "the Project" ) to Solomon Islands. The Team held a series of discussions with the officials of the SIG and conducted a field survey. In the course of the discussions, both sides have confirmed the main items described in the attached sheets.

Honiara, October 28, 2019

| | |
|---|---|
| Mr. Yoshio Fukuda | Mr. Stephen W. Maesiola |
| Leader | Permanent Secretary |
| Preparatory Survey Team | Ministry of Infrastructure Development |
| Japan International Cooperation Agency | Solomon Islands Government |

## ATTACHMENT

1. Objective of the Project

The objective of the Project is to upgrading of the Kukum Highway for the purpose to continuingly ensure function and resilience of the trunk road in the greater Honiara area, thereby contributing to the sustainable economic development of Solomon Islands.

2. Title of the Preparatory Survey

Both sides confirmed the title of the Preparatory Survey as "the Preparatory Survey on the Project for Upgrading of the Kukum Highway, Phase 2".

3. Project Site

Both sides confirmed the site of the Project shown in Annex 1.

4. Responsible authorities for the Project

Both sides confirmed the responsible and executing authorities as follows:

4-1. The responsible and the executing authority is the Ministry of Infrastructure Development (MID).

4-2. The organization chart of MID is shown in Annex 2.

5. Item requested by the SIG

As a result of discussions, both sides confirmed that the item requested by the SIG is upgrading of section between Ministry of Fisheries and Marine Resources to Honiara International Airport of the Kukum Highway

5-1. JICA will assess the appropriateness of the above requested item through the survey and will report findings to the Government of Japan. The final components of the Project would be decided by the Government of Japan.

5-2. The SIG shall submit an official request to the Government of Japan through a diplomatic channel before the appraisal of the Project, which is scheduled in June, 2020.

6. Procedures and Basic Principles of Japanese Grant

6-1. The SIG side agreed that the procedures and basic principles of Japanese Grant (hereinafter referred to as "the Grant") as described in Annex 3 shall be applied to the Project.

6-2. The SIG side agreed to take the necessary measures, as to be described in Annex 6 for smooth implementation of the Project. The contents of the Annex 6 will be elaborated during the Preparatory Survey and be agreed in the mission dispatched for explanation of the Draft Preparatory Survey Report.

The contents of Annex 6 will be updated as the Preparatory Survey progresses, and eventually, will be used as an attachment to the Grant Agreement.

7. Schedule of the Survey

7-1. The Team will proceed with further survey in Solomon Islands until December 14.

7-2. An official request to the Government of Japan will be submitted before June, 2020.

7-3. JICA will prepare a draft Preparatory Survey Report in English and dispatch a mission to Solomon Islands in order to explain its contents around June, 2020.

7-4 If the contents of the draft Preparatory Survey Report is accepted and the undertakings for the Project are fully agreed by the SIG side, JICA will finalize the Preparatory Survey Report and send it to SIG around November 2020.

7-5. The above schedule is tentative and subject to change.

8. Environmental and Social Considerations

8-1. The Solomon side confirmed to give due environmental and social considerations during implementation, and after completion of the Project, in accordance with the JICA Guidelines for Environmental and Social Considerations (April, 2010).

8-2. The Project is categorized as "Category B," from the following considerations: the Project is not considered to be large-scale road project, is not located in a sensitive area, and has none of the sensitive characteristics under the JICA guidelines for environmental and social considerations (April 2010), it is not likely to have significant adverse impact on the environment.

The Solomon side confirmed to conduct the necessary procedures concerning the environmental assessment (including stakeholder meetings, Initial Environmental Examination (IEE) and information disclosure, etc.) and prepare Public Environmental Report (PER) of the Project utilizing the IEE report prepared by the Team. The Solomon side shall obtain approval of the PER from the responsible authorities and submitted to JICA by the date to be notified later.

8-3. For projects that will result in involuntary resettlement, the Solomon side confirmed to prepare a Resettlement Action Plan (RAP)/Abbreviated Resettlement Action Plan (ARAP) and make it available to the public. In addition, the Solomon side confirmed to provide the affected people with sufficient compensation and/or support in accordance with RAP/ARAP, which is based on JICA guidelines for

environmental and social considerations (April 2010), in a timely manner.

9. Other Relevant Issues

9-1. Operation and Maintenance

9-1-1. The SIG side explained that the maintenance works on the target road would be conducted by the MID. The SIG side will take every necessary action including securing enough budget and personnel for the operation and maintenance of the facilities implemented by the Project.

9-1-2. The Team explained to the SIG side that overloaded trucks that exceed designed axle loads would accelerate deterioration thus shorten the lifespan of the road. The Team also explained to the SIG side that proper asset management will impact greatly on maintenance cost and lifespan.

9-2. Disclosure of Information

Both sides confirmed that the survey results excluding the project cost will be disclosed to the public after the completion of the Preparatory Survey. All the result including the project cost will be disclosed to the public after the verification of all contracts for the Project by JICA are concluded.

9-3.Safety Measures

9-3-1. To avoid accidents on site during the implementation of the Project, the SIG side agreed to cause the consultant and the contractor to enforce safety measures such as setting safety assurance to the site, providing information for security control to public, and deploying adequate security personnel, based on "The Guidance for the Management of Safety for Construction Works in Japanese ODA Projects" which has been published on JICA's URL below.
http://www.jica.go.jp/activities/schemes/oda_safety/ku57pq00001nz4eu-att/guidance_en.pdf

9-3-2. The Team recommended to the SIG side to explain to the residents about the Project (necessity and significance, construction period, sites, impact etc.), so that consensus and support can be obtained from them for the smooth implementation of the Project.

9-4. Provision of Survey Data

The SIG side requested all survey data to be got in the survey like result of topographic survey, natural condition survey, and etc., JICA replied all data will be transferred to the SIG side.

9-5. Provision of Conveniences to the Team by the SIG side

The SIG side shall, at its own expenses, provide the Team with the items mentioned in Chapter 5 of the Inception Report in collaboration with other organizations concerned to the Project.

9-6. Works entrusted to local company

Some works in the survey as topographic survey, geological survey and etc., will be entrusted to local company. These works are very important for implementation of the Survey, also from the point of survey schedule. The SIG side promised to support the team when necessary.

9-7. Questionnaire

The MID shall answer to the Questionnaire submitted by the Team in English with relevant documents by the end of November 2019.

9-8. Relocation of the Existing Utilities

The SIG side shall relocate the existing utilities to the adequate location where no obstruction to the construction by the Japanese side.

9-9. Temporary yard and quarry yard

The SIG side shall secure the temporary yard and quarry yard during construction stage to be the precondition of E/N and G/A. Candidate location shall be discussed with the Team during the field survey.

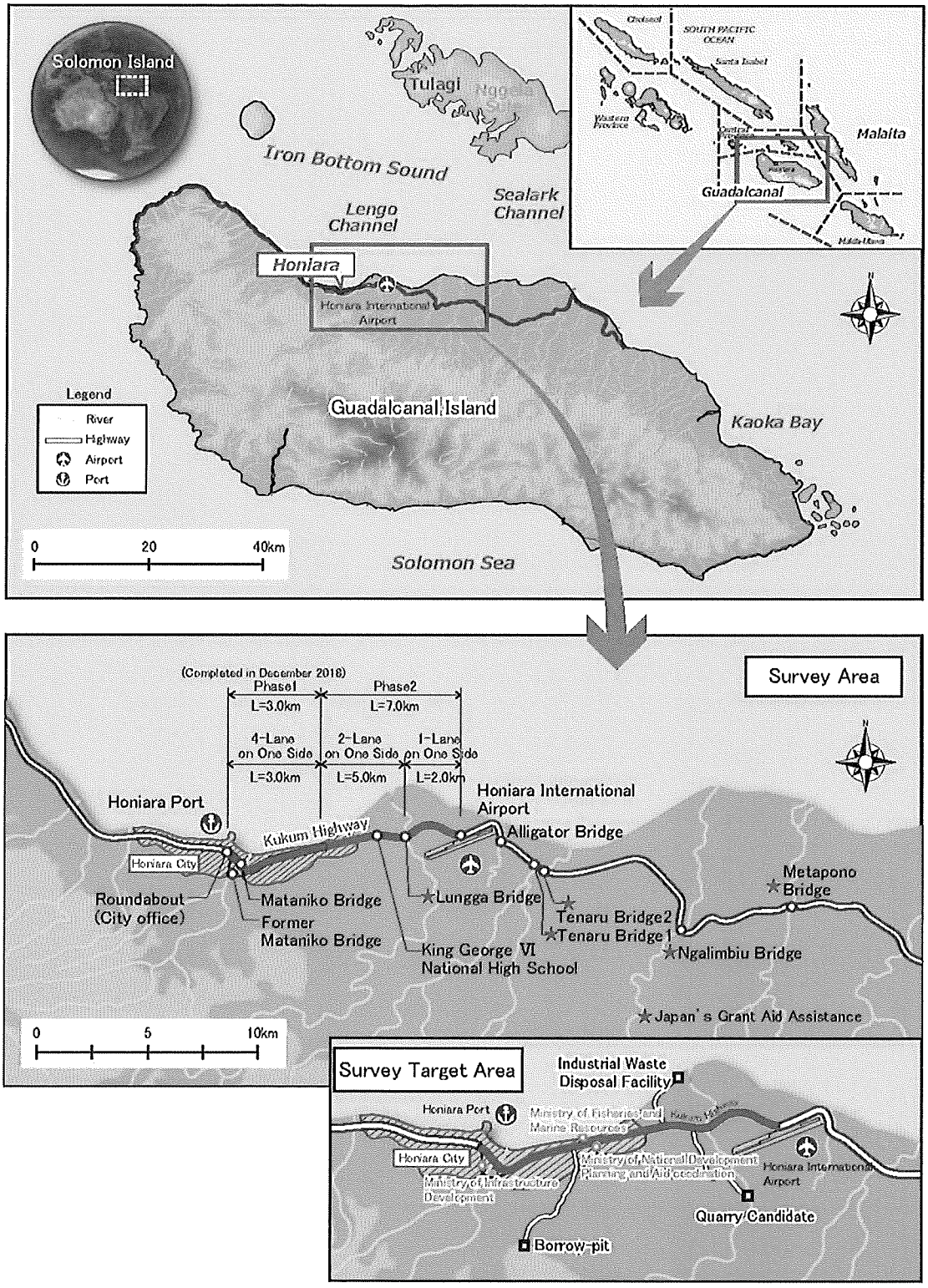
9-10. Coordination with other relevant project

The SIG side shall coordinate with other relevant Project for Study Team. Necessary data shall be also provided to the Team based on request from Study Team.

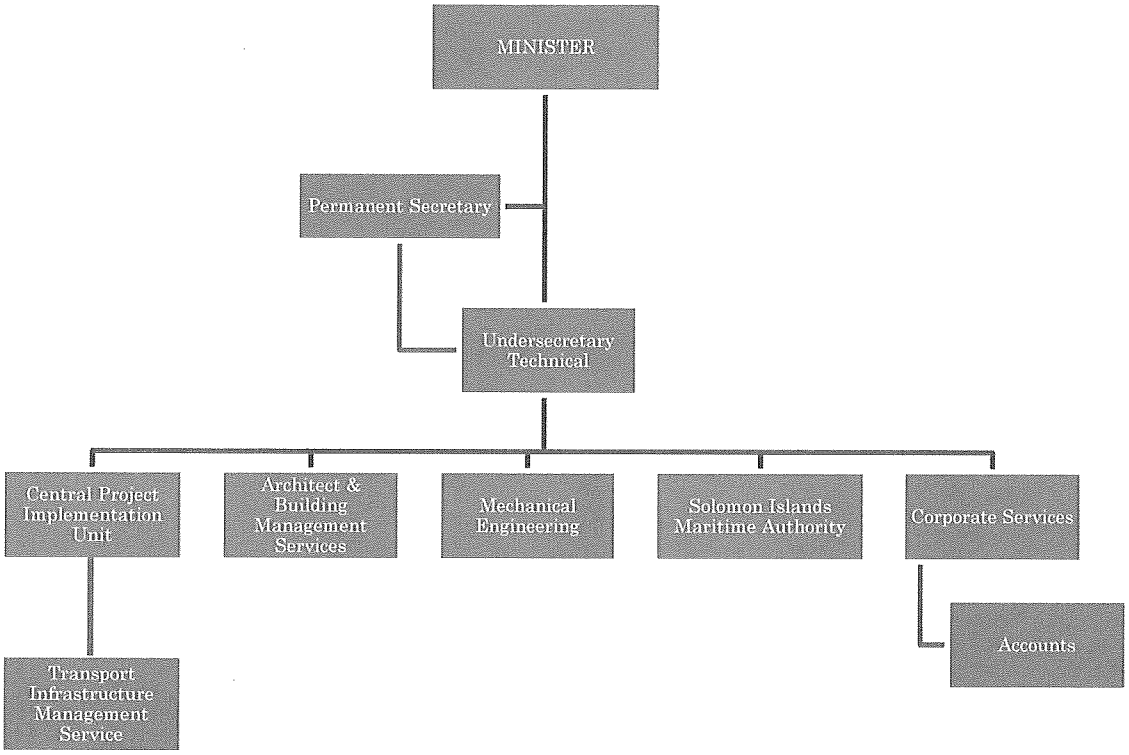
Annex 1 Project Site
Annex 2 Organization Chart
Annex 3 Japanese Grant
Annex 4 Procedures of Japanese Grant
Annex 5 Financial Flow of Japanese Grant
Annex 6 Example Form of Major Undertakings to be taken by the Government of Solomon Islands

Annex 1

# Location Map of the Project



Annex 2




Organization Chart : Ministry of Infrastructure Development

**JAPANESE GRANT**

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as "the Recipient") to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as "Project Grants").

**1. Procedures of Project Grants**

Project Grants are conducted through following procedures (See "PROCEDURES OF JAPANESE GRANT" for details):

(1)Preparation

- The Preparatory Survey (hereinafter referred to as "the Survey") conducted by JICA

(2)Appraisal

-Appraisal by the government of Japan (hereinafter referred to as "GOJ") and JICA, and Approval by the Japanese Cabinet

(3)Implementation

Exchange of Notes

-The Notes exchanged between the GOJ and the government of the Recipient

Grant Agreement (hereinafter referred to as "the G/A")

-Agreement concluded between JICA and the Recipient

Banking Arrangement (hereinafter referred to as "the B/A")

-Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as "the Bank") to receive the grant

Construction works/procurement

-Implementation of the project (hereinafter referred to as "the Project") on the basis of the G/A

(4)Ex-post Monitoring and Evaluation

-Monitoring and evaluation at post-implementation stage

**2. Preparatory Survey**

(1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of relevant agencies of the Recipient necessary for the implementation of the Project.
- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a

technical, financial, social and economic point of view.

- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve 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 executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

**3. Basic Principles of Project Grants**

(1) Implementation Stage

1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as "the E/N") will be singed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the "General Terms and Conditions for Japanese Grant (January 2016)."

2) Banking Arrangements (B/A) (See "Financial Flow of Japanese Grant (A/P Type)" for details)

a)The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.

b)The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA

under an Authorization to Pay (A/P) issued by the Recipient.

3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", in principle.

6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICA in order to be verified as eligible for using the Japanese Grant.

7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as followings:

a)Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.

b)Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

1) After the project completion, JICA will continue to keep in close contact with the Recipient in order

to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.

2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

4) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.

# PROCEDURES OF JAPANESE GRANT

| Stage | Procedures | Remarks | Recipient Government | Japanese Government | JICA | Consultants | Contractors | Agent Bank |
|---|---|---|---|---|---|---|---|---|
| Official Request | Request for grants through diplomatic channel | Request shall be submitted before appraisal stage. | x | x | | | | |
| 1. Preparation | (1) Preparatory Survey<br>Preparation of outline design and cost estimate | | x | | x | x | | |
| 2. Appraisal | (2)Preparatory Survey<br>Explanation of draft outline design, including cost estimate, undertakings, etc. | | x | | x | x | | |
| | (3)Agreement on conditions for implementation | Conditions will be explained with the draft notes (E/N) and Grant Agreement (G/A) which will be signed before approval by Japanese government. | x | x<br>(E/N) | x<br>(G/A) | | | |
| | (4) Approval by the Japanese cabinet | | | x | | | | |
| 3. Implementation | (5) Exchange of Notes (E/N) | | x | x | | | | |
| | (6) Signing of Grant Agreement (G/A) | | x | | x | | | |
| | (7) Banking Arrangement (B/A) | Need to be informed to JICA | x | | | | | x |
| | (8) Contracting with consultant and issuance of Authorization to Pay (A/P) | Concurrence by JICA is required | x | | | x | | x |
| | (9) Detail design (D/D) | | x | | | x | | |
| | (10) Preparation of bidding documents | Concurrence by JICA is required | x | | | x | | |
| | (11) Bidding | Concurrence by JICA is required | x | | | x | x | |
| | (12) Contracting with contractor/supplier and issuance of A/P | Concurrence by JICA is required | x | | | | x | x |
| | (13) Construction works/procurement | Concurrence by JICA is required for major modification of design and amendment of contracts. | x | | | x | x | |
| | (14) Completion certificate | | x | | | x | x | |
| 4. Ex-post monitoring & evaluation | (15) Ex-post monitoring | To be implemented generally after 1, 3, 10 years of completion, subject to change | x | | x | | | |
| | (16) Ex-post evaluation | To be implemented basically after 3 years of completion | x | | x | | | |

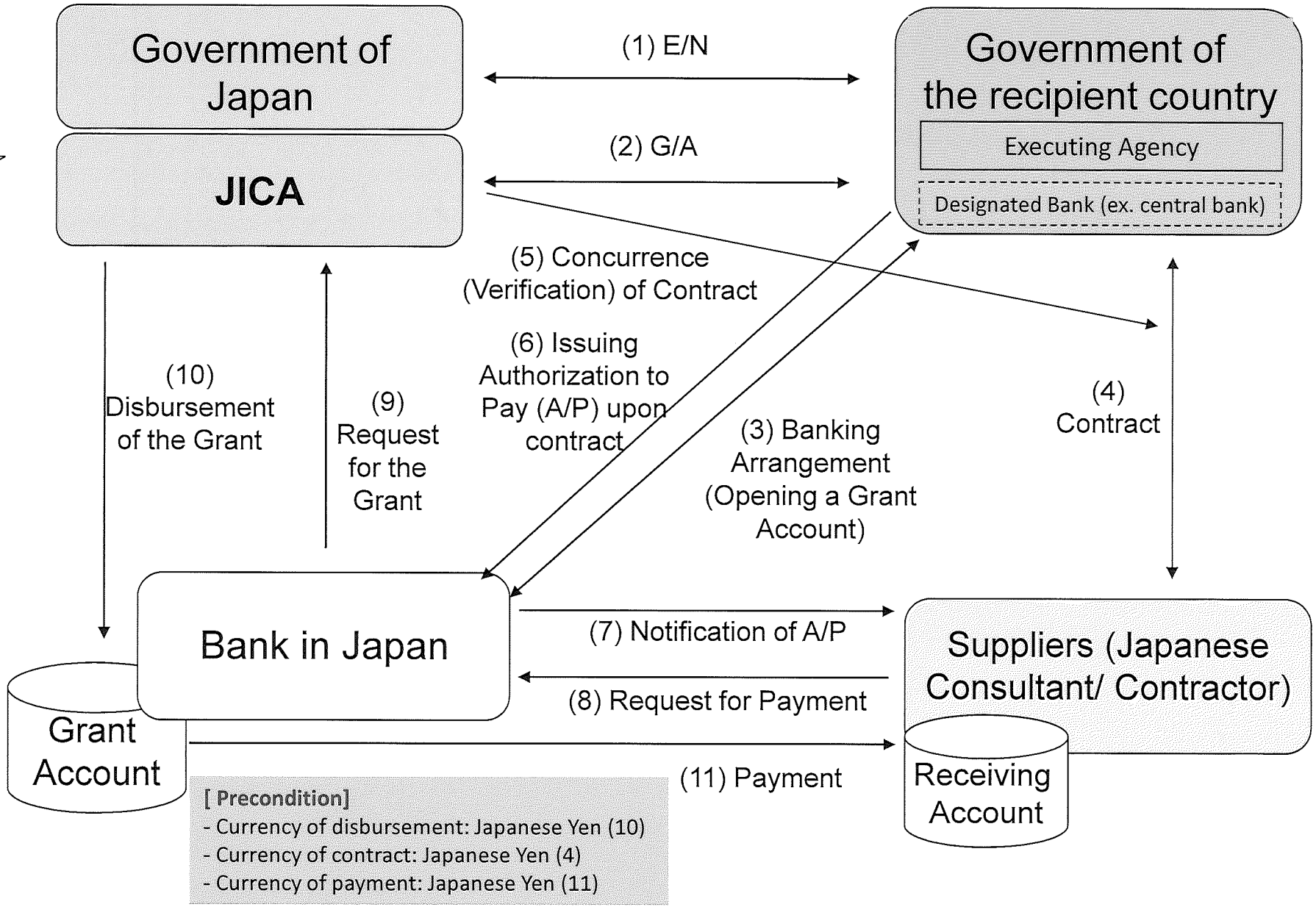
notes:

1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.

2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.

Annex 5

# Financial Flow of Japanese Grant (A/P Type)



Annex 6

(Example)
Major Undertakings to be taken by the Government of Solomon Islands

## 1. Specific obligations of the Government of Solomon Island which will not be funded with the Grant

(1) Before the Tender

| NO | Items | Deadline | In charge | Estimated Cost | Ref. |
|---|---|---|---|---|---|
| 1 | To open bank account (Banking Arrangement: B/A) | within 1 month after the signing of the G/A | | | |
| 2 | To issue A/P to a bank in Japan (the Agent Bank) for the payment to the consultant | within 1 month after the signing of the contract | | | |
| 3 | To approve EIA(Conditions of approval should be fulfilled, if any) and secure the necessary budget for implementation. | within 1 month after the signing of the G/A | | | |
| 4 | To secure Project site and temporary yard and quarry yard. | before start of the construction | | | |
| 5 | To remove and relocate the following facilities.<br>1) Removal of existing facilities<br>2) Relocation of underground/overhead utilities<br>3) Relocatio or removal of other obstacles affected to Project<br>4) Cutting trees at the project site | before start of the construction | | | |
| 6 | To submit Project Monitoring Report (with the result of Detail Design) | before preparation of bidding documents | | | |

(B/A: Banking Arrangement, A/P: Authorization to pay, N/A: Not Applicable)

(2) During the Project Implementation

| NO | Items | Deadline | In charge | Estimated Cost | Ref. |
|---|---|---|---|---|---|
| 1 | To issue A/P to a bank in Japan (the Agent Bank) for the payment to the Supplier(s) | within 1 month after the signing of the contract(s) | | | |
| 2 | To bear the following commissions to a bank in Japan for the banking services based upon the B/A | | | | |
| | 1) Advising commission of A/P | within 1 month after the signing of the contract(s) | | | |
| | 2) Payment commission for A/P | every payment | | | |
| 3 | to ensure prompt unloading and customs clearance at ports of disembarkation in recipient country and to assist the Supplier(s) with internal transportation therein | during the Project | | | |
| 4 | To accord Japanese nationals and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work | during the Project | | | |
| 5 | To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted/ be borne by its designated authority without using the Grant | during the Project | | | |
| 6 | To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project | during the Project | | | |
| 7 | To submit Project Monitoring Report | every month | | | |
| | 1) To submit Project Monitoring Report (final) | within one month after signing of Certificate of Completion for the works under the contract(s) | | | |
| 8 | To submit a report concerning completion of the Project | within six months after completion of the Project | | | |
| 9 | To construct access roads<br>1) Outside the site | 3 months before completion of the construction | | | |
| 10 | To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Project outside the site(s) | | | | |
| | 1) Electricity<br>The distributing line to the site | before start of the construction | | | |
| | 2) Water Supply<br>The city water distribution main to the site | 6 months before completion of the construction | | | |
| | 3) Drainage<br>The city drainage main ( for storm, sewer and others ) to the site | 6 months before completion of the construction | | | |

| | | | | | |
|---|---|---|---|---|---|
| | 4) Furniture and Equipment<br>General furniture | 1 month before completion of the construction | | | |
| 11 | To take necessary measure for safety construction<br>- traffic control<br>- rope off | during the construction | | | |
| 12 | To implement Environmental Management Plan (EMP) and Environmental Monitoring Plan (EMoP) | during the construction | | | |
| 13 | To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report | during the construction | | | |
| 14 | To implement Resettlement Action Plan (RAP) (livelihood restoration program, if needed) | for a period based on livelihood restoration program | | | |
| 15 | To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report<br>- Period of the monitoring may be extended if affected persons' livelihoods are not sufficiently restored. Extension of the monitoring will be decided based on agreement between ____ and JICA. | - until the end of livelihood restoration program (In case that livelihood restoration program is provided)<br>*- for two years after land acquisition and resettlement complete (In case that livelihood restoration program is not provided)* | | | |

(3) After the Project

| NO | Items | Deadline | In charge | Estimated Cost | Ref. |
|---|---|---|---|---|---|
| 1 | To implement EMP and EMoP | for a period based on EMP and EMoP | | | |
| 2 | To submit results of environmental monitoring to JICA, by using the monitoring form, semiannually<br>- The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between _____ and JICA. | for three years after the Project | | | |
| 3 | To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid<br>1) Allocation of maintenance cost<br>2) Operation and maintenance structure<br>3) Routine check/Periodic inspection | After completion of the construction | | | |

2. Other obligations of the SIG funded with the Grant

| NO | Items | Deadline | Amount (Million Japanese Yen)* |
|---|---|---|---|
| 1 | To upgrade road | | |
| 2 | To implement detailed design, bidding support and construction supervision (Consulting Service) | | |
| 3 | Contingencies | | |
| | Total | | XXX |

*The Amount is provisional. This is subject to the approval of the Government of Japan.

# Appendix 5: Technical Notes (T/N)

**TECHNICAL NOTES**

**ON THE PREPARATORY SURVEY**

**FOR THE PROJECT**

**FOR UPGRADING OF THE KUKUM HIGHWAY - PHASE 2**

**IN THE SOLOMON ISLANDS**

The Preparatory Survey Team commissioned to undertake the Outline Design (hereinafter referred to as "The Team"), under Japan International Cooperation Agency (JICA) held discussions with the implementing agency and other relevant agencies on the scope, basic policies and other technical aspects of "The Project for Upgrading of the Kukum Highway - Phase 2".

This note is signed between The Team and Ministry of Infrastructure Development (hereinafter referred to as "MID") to share mutual understandings and agreement on the contents mentioned in Appendix-1.

Honiara, 5th December 2019

**Mr. Jimmy Nuake.**
Undersecretary Technical
Ministry of Infrastructure Development
Solomon Islands

**Mr. Ryohei Watanabe**
Chief Consultant
Preparatory Survey Team
Japan International Cooperation Agency (JICA)

# 1. General Items

## 1.1 Inception Report

The Team explained and MID understood and agreed on the contents of the Inception Report submitted by The Team on October 23, 2019.

## 1.2 Consistency with Phase-1 Project

The design concept of this project will ensure, to the possible extent, consistency with the Phase 1 project.

## 1.3 Objective Section and upgrading policy

The objective section of this survey/project will be between the end point of Phase 1 section and the intersection with the entrance to the domestic terminal of Henderson Airport. However, end point will be finally fixed after verification based on the prioritization mentioned in Item 2.16

Upgrading policy SIG requested that 4-lane upgrading from the beginning point to Lungga Bridge, 2-lane upgrading beyond Lungga Bridge, and transition between 4-lane and 2-lane before the Lungga Bridge.

# 2. Technical Items

## 2.1 Basic Policy on Outline Design

The Team explained to MID and stakeholders, and MID agreed on the basic policies to be applied to the Outline Design for project scheme. Profile and typical cross sections and drawings of related structures mentioned in below have also been accepted by MID. Comments and recommendations to the Outline Design from the stakeholders are summarized in the minutes of the meeting held on 11 November 2019 between the Team and the stakeholders. The Team will check on the comments and recommendations are reflected it in the design necessarily.

## 2.2 Standard and Guidelines to be Applied

Following standards/guidelines as summarized in Table 1 will be applied for planning/design of roads, structures and road ancillaries.

**Table 1 Applied Design Standard**

| Category | Applied Design Standard |
|---|---|
| Road Geometry | Road Structure Ordinance (Japan, 2015) |
| Intersection | Road Structure Ordinance (Japan, 2015) |
| Pavement | ASSHTO Guide for Design of Pavement Structures (USA, 1993) and Pavement Design and Construction Guideline (Japan, 2006) |
| Structures | Culvert Structure Guideline (Japan, 2009) |
| Drainage | Drainage Planning Guideline, (Japan, 2009) |
| Others | Japanese Standards or Equivalent |

## 2.3 Target Year

The design target year is basically set to year 2033 (10 years after completion of the project).



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ad

## 2.4 Geometric Condition

Parameters of geometric conditions to be applied in the design are shown in Table 2.

**Table 2 Geometric Condition**

| Category | | Applied Value |
|---|---|---|
| Design speed | | 50 km/h |
| Maximum vertical grade | | 4.00 % |
| Vertical clearance | | 5.5 m |
| Crossfall | | 2.50 % |
| Carriageway width | | 3.50 m |
| Outer shoulder | | 0.50 m |
| Median | | 3.00 m |
| Inner shoulder | | 0.50m |
| Footpath | | 2.00 m |
| Height of kerb stone | Median | 0.2 m |
| | Footpath | 0.2 m |

## 2.5 Typical Cross Section

Typical cross section for 4-lane section are shown in Figure-1 and Figure 2and for 2-lane section it is shown in Figure 3. Cross section essentially follow the geometric condition mentioned in Table 2 Geometric Condition. However, road plan will vary depending on the final road alignment and control points such as width of road reserve, existing facilities or private plots.

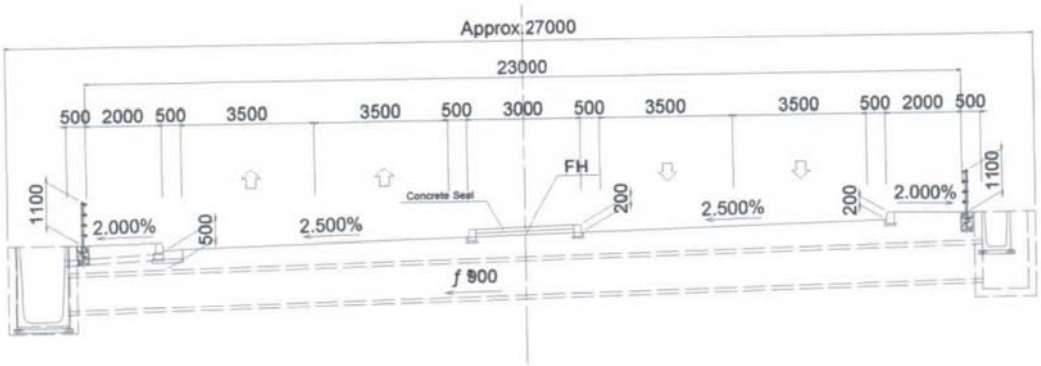



**Figure-1 Typical Cross Section① (4 Lane Section)**

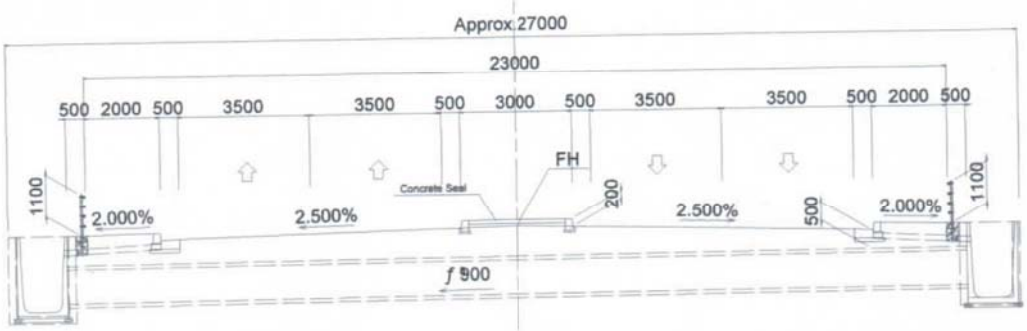



**Figure 2 Typical Cross Section② (4 Lane Section)**

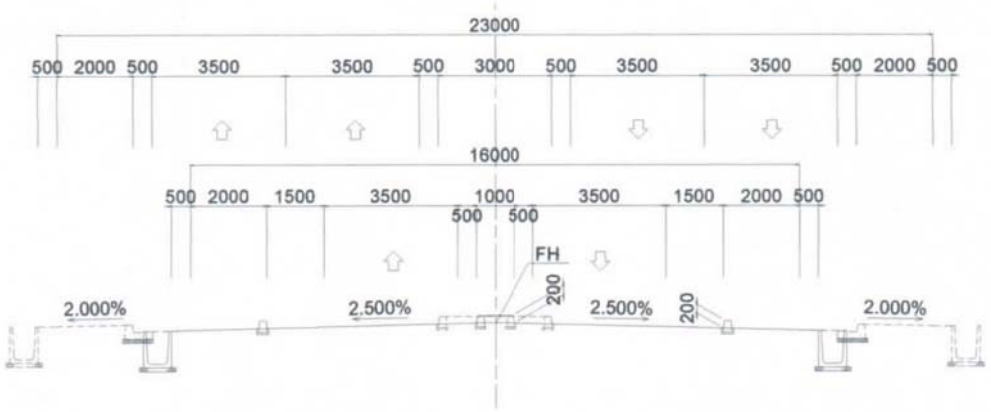



**Figure 3 Typical Cross Section (2 Lane Section)**

## 2.6 Alignment

Horizontal and vertical alignment will be planned in accordance with the geometric conditions to be applied. Horizontal alignment will be set looking toward the future 4-lane scenario for 2-lane section. Planning of the vertical alignment will take into consideration the drainage system and minimization of environmental and social adverse impact.

## 2.7 Intersection

For the current traffic volume of Kukum Highway provision of roundabouts at locations other than existing intersections is expected to result into significant traffic congestion. Therefore, roundabouts will be planned only at following major intersections and at existing roundabouts mentioned below. The roundabouts to be provided will be larger than the existing roundabout at Sta. 1+600 and will be based on the recommended size and shape in the American Guideline "Roundabouts: An Informational Guide Second Edition (NCHRP Report 672, FHWA)". Geometric condition of a roundabout is shown in Table 3.

1) sta. 1+600 (existing roundabout), 2) Sta. 2+800 (King George intersection), 3. Sta. 5+100 (Cross road intersection)

**Table 3 Geometric Condition of Roundabout**

| Category | Applied |
|---|---|
| Circulatory roadway lanes | 2<br>(large vehicles will require use of dual lanes to maneuver) |
| Circulatory roadway lane width | Inner lane: 5.0 m<br>Outer lane: 3.5 m |
| Central island diameter | 27.0 m |
| Footpath | 2.0 m |

## 2.8 U-turn Vehicle

U-turn vehicle to be considered for the design will be as follows.

- At roundabouts: All types of vehicle
- At U-Turn Lane: Vehicle Length is up to 9.0m (Passenger car, Minibus and Micro bus)

※Design criteria is shown in Table-4

## 2.9 Design Vehicle

Vehicle to be considered for roundabout design except U-turn lane will be WB-19 as defined by AASHTO (**Figure** 4). This vehicle type covers the biggest vehicle in the Solomon Islands.

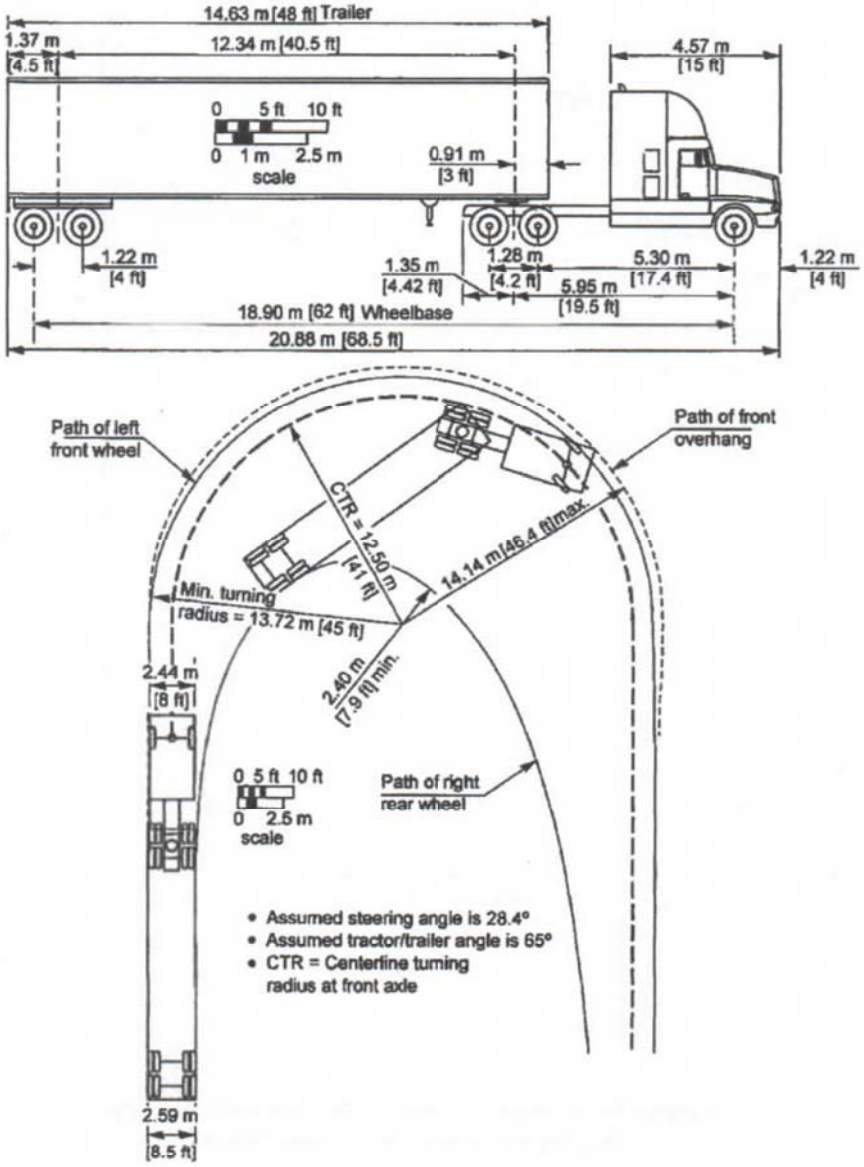



**Figure 4 Design Vehicle (WB-19 defined by AASHTO)**

## 2.10 Bus Stop and Terminal

Bus stop will be installed at/near the current location. Bus terminal currently located after Lungga bridge will be utilized under one-operation by providing barrier. MID agreed to secure initial capacity of the terminal by taking necessary measures by the completion of the project.



R.W

The bus stop opposite the bus terminal will be tentatively planned. MID agreed to discuss with the owner of the shopping mall under construction about the right of way and acquire space (at least 4m wide) in front of the shopping mall for use as bus stop.


**Figure 5 Outline of One-way Operation**

### 2.11 Level of Service

For an urban road like the project objective section of Kukum Highway, the level of service (LOS) is governed mainly by the traffic volume/classification and number of lanes. The scope of this project is to upgrade the road and does not include widening of the carriageways (increasing number of lanes).

Although the LOS is expected to get better after the improvement works, it will be ephemeral as the traffic volume is expected to see rapid and steady increase. Therefore, the Team explained and MID agreed that the allowable LOS of the improved section within the design period will be up to one level lower than the existing LOS of the said section.

## 2.12 Hydrological/Drainage Design Conditions

(1) Return Period

Return periods for calculation of design discharge at box culvert and road surface drainage will be as follows;

(i) Design discharge for box culvert: 10 years

(ii) Road surface drainage: 3 years or more

(2) Design Capacity of drainage facilities

The drainage facilities (including box culverts) are designed to be able to discharge at 80% of its full capacity against the designed discharge volume.

(3) Road Surface Drainage Design

Road drainage design will be carried out on the basis of runoff analysis result. Surface drainages will be transported and discharged at existing drainage facilities or rivers/canals/sea. MID shall obtain permission for draining water from road, if necessary.

(4) Drainage System in Burns Creek

Drainage system in the direction from right side (South side) to left side (North side) of the highway will be planned in the Burns Creek section in KM 03+940. The team will consider feasibility study of diversion of Burns Creek to Lungga River. However, the team has no obligation for detailed study, design and implementation of such a potential diversion. [There are no interventions in wetland and swamp areas outside of typical cross section (4 lines and 2 lines) that is shown in Figure 1 to Figure-3.]

(5) Drainage at Toe of Embankment Slope

High embankments will not be planned for the Kukum Highway Phase 2, therefore no special considerations are required.

(6) Irrigation Facility

There are no irrigation facilities crossing the Kukum Highway, therefore no special considerations are required.

(7) Road Runoff Collection Point

Basically runoff collection point will be planned to Utilized existing runoff collection point. MID agreed on road runoff collection points as shown in Figure 6.


**Figure 6 Road Runoff Collection Point**

## 2.13 Type of Pavement

- Asphalt pavement will be applied for carriageway and footpath.
- Concrete pavement or modified asphalt pavement will be applied for U-turn lanes and roundabouts.
- Performance period of asphalt pavement and concrete pavement is designed basically 10 years

## 2.14 Road Ancillaries

(1) Footpath

Existing footpaths in good condition may be utilized wherever possible. The standard width for footpaths will be 2.0 m. However, where the ROW is limited and/or where traffic signs will be installed and securing 2m is physically difficult, the width will be less than 2.0 m.

(2) U-Turn Lane

MID agreed to provide U-turn lanes (exclusive lane) for allowing vehicles to take a U-turn at two (2) locations within the 4-lane stretch. Design criteria for U-turn lanes are shown in Table 4.

**Table 4 Design Criteria for U-Turn Lane**

| Item | Applied |
|---|---|
| Design Vehicle (Small Vehicle) | L=9.0 m |
| U-Turn Lane width (Median Opening) | W=15.0 m |
| Shoulder | W=1.0m |

(3) Traffic Signs

Traffic signs to be used in the project will be in accordance with Standard of National Transport Board or relevant standards.

(4) Street Lights

Planning policy subject to installation will be determined after verification in Japan based on result mentioned in connection with 2.13. In addition, existing street lights may be re-used.

(5) Pedestrian Guardrail

Guardrail will be provided where embankment height is 3.0m or more.

(6) Traffic Safety Facilities for Pedestrian

Traffic safety facilities such as pedestrian handrails, pedestrian crossing with appropriate sign board or fences will be considered.

**2.15 Longitudinal Gradient of Side Roads and Access Roads**

Maximum vertical gradient to be applied at side roads and access roads will be as follows;

(i) Secondary roads: 7 % (Connecting to the project road)

(ii) Access roads: 10 % (Access from community, residents/shops, farmland etc.)

**2.16 Prioritization of Scopes**

The scopes proposed need to be technically as well as economically viable for the Survey to proceed to the project stage (detailed design and construction). For this purpose, prioritization of project scopes is very important. MID confirmed the priority order of the scopes as listed below. *Text in parenthesis [ ] is an expected alternative.

(1) Upgrading of the stretch from end point of Phase 1 (in front of Ministry of Fisheries and marine resources) to the connecting road of (entrance to) Henderson Airport [to Lungga River].
(2) Installation of street lights at selected locations (public facilities, bus terminals, major intersections) [provision of foundation or delineator (reflective rubber poles)] ,
(3) Provision of bus shelters [the space for bus bays will be provided],
(4) Surface treatment of median strip [Soil]

**2.17 Coordination with Relevant Authorities**

There are various service lines and utilities along the roads belonging to different authorities, some of which are buried. And also, preparation for Pacific Games 2023 is underway and facilities related to the games will be constructed along the project road. Close coordination with these stakeholders is inevitable for relocation of the utilities, land acquisition that may require and adjustment of the time frame with relevant events for upgrading of the objective area. MID assured it will coordinate with these authorities to ensure consistency with this project.

The Survey Team requested to/through MID for provision of information/data of other developmental projects that may possibly influence this Project. The Team has been furnished with some data, particularly from the projects intended for the Pacific Games, but was only of the conceptual designs. MID assured to provide detailed information/data of such relevant projects by the end of December 2019. The Team explained and MID agreed that the Team will proceed with the design with the

information obtained by the stipulated time. MID assured that the Team is not obligated to reflect the information beyond this stipulated time and other developmental projects will instead secure consistency with (not adversely impact) the Project.

## 3. Environmental and Social Consideration

MID agreed to take initiative in managing environmental and social issues related to the project. MID will take actions for obtaining necessary permissions timely. The Team takes consideration to minimize the extent of affected area and MID shall sincerely take care of the issues of the land acquisition and resettlement.

Second, stake holder meeting is going to be held in June 2020. MID should arrange and coordinate it in accordance with request from the Team.

## 4. Procurement and Construction Plan

### 4.1 Expected Disposal Site

Both the Honiara City Council and MID agreed Ranadi Land Fill Site, which lies in the jurisdiction of HCC as the candidate disposal site for the Project.

### 4.2 Expected Quarry Site, Borrow Pit and Temporary Yard

Candidate borrow pit, quarry site, and temporary yard for the Project have been agreed at locations indicated in the map in Figure 7. However this land is currently used upgrading airport project, if NCA will not be able to secure enough space for our project, hireling of DALGRO's property shown below Figure or another suitable space may be required as obligation of MID.

MID agreed that the material cost to be taken at the quarry site and the borrow pit will be free of charge, and for the cost of Japanese side will be estimated from these excavation cost.

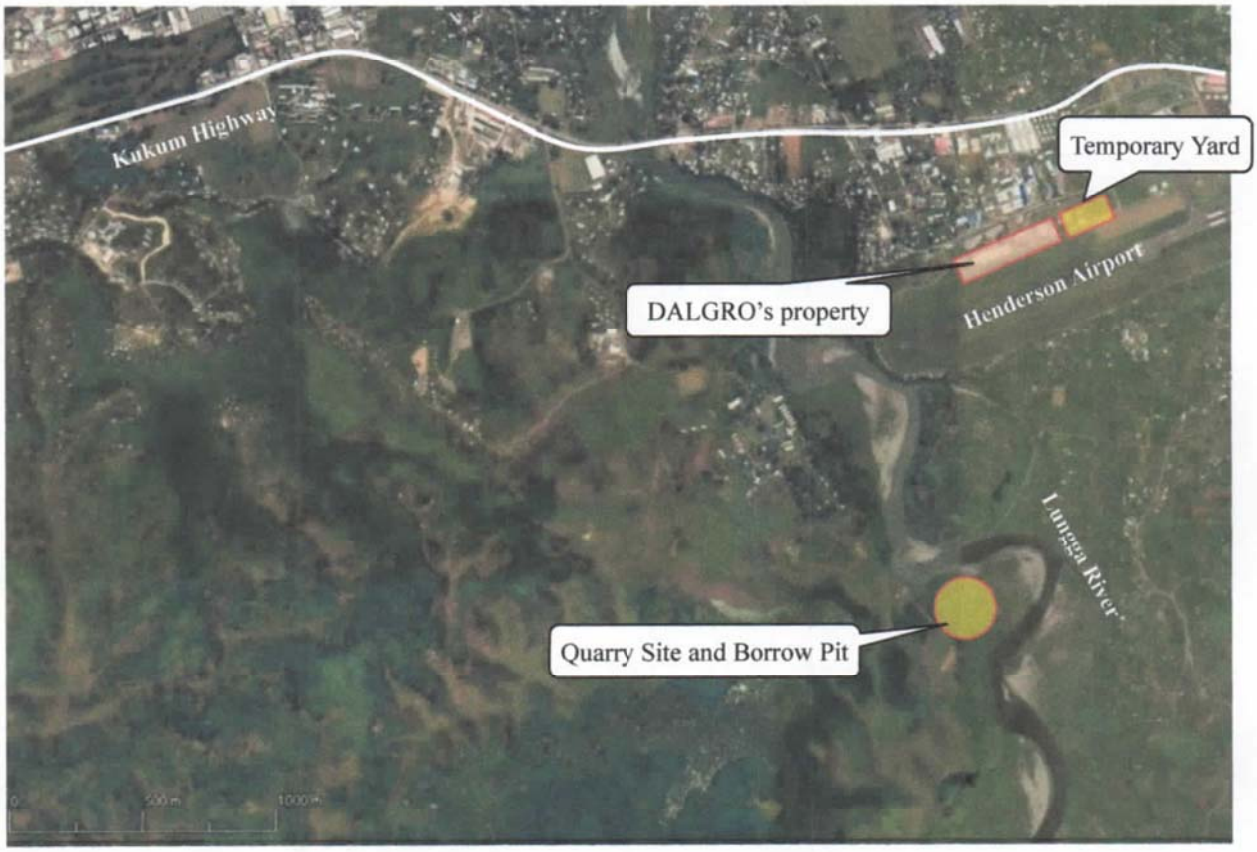



**Figure 7 Location of Expected Temporary Yard and Quarry Site**

### 4.3 Traffic Management

(1) Heavy Vehicle Control

Axle load survey result is shown in Figure 8. The results indicate significant number of heavy vehicles exceeding 40 tons plying along the objective road. The Teams explained to MID that these vehicles can be detrimental to the pavement and urged MID to take necessary measures to control/manage such traffics in the near future.

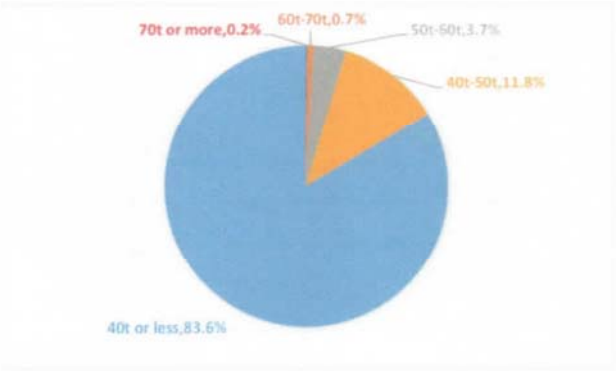



**Figure 8 Ratio of Heavy Vehicle by Load**

### 4.4 Road Management during Construction

During construction stage, there will in principle be no road closures and basically at least three (3) traffic lanes will be secured at all time under the following conditions.

(i) MID will assist the Contractor during construction period for traffic safety assurance, in cooperation with traffic police.

(ii) Restricted speed shall be 30 km/h or more.

### 4.5 Securing of Necessary Budget for Major Undertakings to be Taken by Solomon Islands Side

As agreed in the Minutes of Discussion between MID and JICA dated 28th of October 2019, MID will secure the necessary budget for major undertakings that will be scheduled to commence in 2020 after E/N and G/A are signed. Approximate cost to be funded by SIG side will be informed by the Team during the period of a draft preparatory survey report around early June 2019. The excerpt of the Minutes of Discussion is attached in Attachment-3.

The expected major items for the undertakings are as follows;

(1) Land Acquisitions and related resettlements,
(2) Temporary land lease for road diversions,
(3) Relocation of existing utilities,
The basic policy for relocation of underground utilities is as follows;
1.To relocate the buried utilities outside of the future carriageway.
2.To leave buried utilities under future footpath portion.
In addition, if the reinforcement or repair of buried utilities is carried out before the implementation of this project, SIG must be restored to the same strength as the existing road (CBR value).
(4) Demolition of obstacles such as trees, advertisement boards and overhead lines etc.
(5) Support for a contractor of provision of water and electricity necessary for construction site management, and
(6) Removal of Existing structures within ROW, such as monuments, billboards or trees.

## 5. Relevant Documents

Minutes of meetings conducted with relevant authorities are attached hereunder.

Attachment-1: Minutes of Joint Technical Meeting

Attachment-2: Minutes of Meeting with Guadalcanal Province

Attachment-3: Minutes of Discussion

# THE PROJECT FOR UPGRADING OF KUKUM HIGHWAY PHASE 2

Summary of the Minutes of the Joint Technical Meeting No. 3 and was held on 11th November 2019 at 10:00 a.m. at the Ministry of Infrastructure Development (MID) Conference Room.

## 1. Introduction and Opening Remarks

The Chief Consultant of JICA Survey Team, who presides over the meeting, thanked the Director of MID and all other stakeholder members who attended the meeting. Then, the meeting was called to order.

## 2. Attendees

| No | Name | Organization | Position | Phone | E-mail address |
|---|---|---|---|---|---|
| 1 | [redacted] | Solomon Telekom | | | |
| 2 | [redacted] | MID | | | |
| 3 | [redacted] | Solomon Power | | | |
| 4 | [redacted] | SINU | | | |
| 5 | [redacted] | Police Traffic | | | |
| 6 | [redacted] | MLH&S | | | |
| 7 | [redacted] | NHA | | | |
| 8 | [redacted] | MID | | | |
| 9 | [redacted] | MID | | | |
| 10 | [redacted] | Solomon Water | | | |
| 11 | [redacted] | Solomon Water | | | |
| 12 | [redacted] | HCC | | | |
| 13 | [redacted] | MID | | | |
| 14 | Ryohei Watanabe | CTI | | | |
| 15 | Ogata Hiromitsu | CTI | | | |
| 16 | Ogawa Junichiro | CTI | | | |
| 17 | Iwama Suguru | CTI | | | |
| 18 | Hideki Takahashi | CTI | | | |
| 19 | Ali Chavoshian | CTI | | | |
| 20 | Robinson Shrestha | CTI | | | |
| 21 | Hiroki Tazawa | JICA | | | |
| 22 | Malachi Hoasirao | CTI (local staff) | | | |

## 3. Objectives & Outlines of the Meeting

i. Project Outline and Japan Grant Aid Scheme
ii. Design Standard
iii. Road Geometric Condition
iv. Road Alignment Layout 1
    - Proposed typical cross-section (Type-4A)
    - Proposed typical cross-section (Type-4B)
v. Road Alignment Layout 2
    - Proposed Typical cross-section (Type-4C)
    - Proposed typical cross-section (Type-2A)
    - Completion Image (For type-2A Section)
vi. Road Plan (3)
    - Proposed Typical Cross Section (Type-2B)
vii. Transition Section from 4 to 2 lane
viii. Section After Lungga Bridge
ix. Traffic Condition, Cause & Measures
x. Proposed Roundabout & U-turn lane layout
xi. Bus Terminal Operation
xii. Items to be Confirmed

The above outline was presented and explained accordingly by the JICA Survey Team (The Team) and has stretched some very important points and issue to consider and to make comments. Then the meeting was openly set for the questioner, comments, and discussion.

## 4. Summary of Comments and Discussion

a. Remarks & comment (MID).
    - The director of MID thanks The Team for the brilliant presentation of the above subject. Also, he was comment that the Team if they could consider the access to Schools at the bus terminal location after lungga Bridge.

b. Respond (The Team)
    - The Team confirmed to MID and all stakeholders that they would take it for consideration after the completion of a preparatory survey. These stage will take place by the next year after the analysis of all the collected data and see what would be the best suitable design for the bus terminal.

c. Request (SW)
    - Solomon water has requested the Team to consider some access connected to the Kukum Highway road, if they could also consider at least 20m in paved for the up to joint section.
    - Another requested for Team to consider is their underground utility lines, as most of their lines were submerged at certain depth near the existing footpath.

d. Respond (The Team)
   - The Team confirmed that they would take it for consideration at the next stage after the completion of this preparatory survey i.e. analysis of data collected and designing shall eventually happen in Japan.
   - Regarding the utility lines as mention, we would suggest that our proposed design for the new road alignment will same as the existing road alignment, but for any relocation plan for the utilities, we would really be appreciated if SW would provide any related information.

e. Comment (NHA)
   - The National Hosting Authority comments over the proposed overview of Project especially the section of the road from SINU campus to KG-Sixth School. He mention that from these two sections of the road we requested the Team to consider the suitable access to their building facilities site.

f. Respond (The Team)
   - In response, the Team confirmed that at the moment we are doing Preparatory Survey as we need to collected more information as much as possible. Therefore regarding your request, we would really appreciate if your committee could provide us any proposed design plan for the facilities site. These could be helpful and important for us to made decision over it after the completion of the preparatory survey and we would be came up with the best design in our next stages.

g. Comments (SINU)
   - The SINU was an emphasis on the Team to consider the safety measures for students taking public buses, as high numbers SINU students were not staying on the campus. Therefore our concern for the team to consider any proposed pedestrian crossing for students crosses the road.
   - Also regarding the presentation, the Team mention that most median opening will be closed as they have provision for Roundabout and U-turn. But SINU assures the team that they have their own plans for Kukum Campus and to allow their parcel of land to be used for sifting recent bus stop right into the campus.

h. Respond (The Team)
   - Regarding the safety measures for student's crosses of the road the Team suggested they will take it for consideration, but at this stage will still doing a preparatory survey which means we have no final proposed design. Therefore after completion of the Preparatory survey, the team will analyze all the collected data and information and would come up with our final designing.
   - The team have understand the SINU comments and replied that the Japan side has budget constraint so they have to comply with allocate budget from JICA.

i. Comment (ST)
   - The Solomon Telekom was asked the Team why this upgrading of Kukum highway phase (2) proposed road design has to Transition from 4-lane to 2-lane carriageway.

j. Respond (MID)
   - MID and the Team replied to Solomon Telekom that this proposed plan was According to the Grand Aid Project budget between JICA and Solomon Island Government. Additionally, regarding the fixed-term land and, MID suggested to the Team if they shall contact the ministry of land Survey & Housing for any related land matters.

k. Comments (Police)
   - The police has raised very vital issues for the Team to be considered, especially the location for the bus bay. For instance, in the previous project, two bus bay location was caused obstruction at junction, which is at high risk for a traffic accident.

l. Respond (The Team)
   - In response, the Team confirmed that they shall highly consider at the design stage after the preparatory survey has successfully completed. These design stage shall be transpired as of next year in Japan whilst all relevant information have collected.

m. Comments (NHA)
   - The NHA Engineer asked the Team if they could include Traffic lights for Pedestrian crossing at SINU (Panatina Campus) to their proposed design plan. Further, he explains that the safety of the pedestrian was the most important thing to consider as many people would use there at the event.

n. Respond (The Team)
   - The Team confirmed to NHA that their request was highly considered but at this moment we are doing a preparatory survey to collect more information and data. These mean at this stage of work we are just showing design policy and proposals but not our final design for the Phase 2 road project. The stages will eventually start by next year in Japan after preparatory survey work is completed.

## 5. Other Matters

- The Team was requesting the SW if they have any proposed plan for their utility line by the near future.
- SW confirmed that from the beginning point up to endpoint, they have upgrade plan to put along the road alignment. Therefore suggested liaising together during the construction.
- The Team requested to MID if they could confirm which site best for the Quarry, borrow bit and waste management site so that the Team can carry all necessary measures that need for its respective location.
- Also, the Team suggested to MID if they could provide them the information regards to the SIG topography map with the resident map.

## 6. Closing Remarks

- In his closing remarks, the Team representatives really appreciated and thanked MID Director and all stakeholders for availed their time to attend this technical meeting. Also, mention that we are looking forward to more support and cooperation from MID and all respective stakeholder towards this Preparatory survey work. Then the meeting was closed at 15:00 pm

# THE PROJECT FOR UPGRADING OF KUKUM HIGHWAY PHASE 2

Summary of the Minutes of the Joint Technical Meeting No. 3 and was held on 13th November 2019 at 10:20 a.m. at the Guadalcanal Provincial Head Quarter Conference Room.

## 1. Introduction and Opening Remarks

The Chief Consultant of JICA Survey Team, who presides over the meeting, thanked the Deputy Premier and his staff colleagues of the Guadalcanal Provincial Government for attending the meeting. Then, the meeting was called to order.

## 2. Attendees

| No | Name | Organization | Position | Phone | E-mail address |
|---|---|---|---|---|---|
| 1 | [redacted] | Guadalcanal Province | | | |
| 2 | [redacted] | Guadalcanal Province | | | |
| 3 | [redacted] | Guadalcanal Province | | | |
| 4 | [redacted] | Guadalcanal Province | | | |
| 5 | Ogawa Junichiro | CTI | | | |
| 6 | Ryohei Watanabe | CTI | | | |
| 7 | Malachi Hoasirao | CTI (local staff) | | | |

## 3. Objectives & Outlines of the Meeting

i. Project Outline and Japan Grant Aid Scheme
ii. Design Standard
iii. Road Geometric Condition
iv. Road Alignment Layout 1
   - Proposed typical cross-section (Type-4A)
   - Proposed typical cross-section (Type-4B)
v. Road Alignment Layout 2
   - Proposed Typical cross-section (Type-4C)
   - Proposed typical cross-section (Type-2A)
   - Completion Image (For type-2A Section)
vi. Road Plan (3)
   - Proposed Typical Cross Section (Type-2B)
vii. Transition Section from 4 to 2 lane
viii. Section After Lungga Bridge
ix. Traffic Condition, Cause & Measures
x. Proposed Roundabout & U-turn lane layout
xi. Bus Terminal Operation
xii. Items to be Confirmed

The above outline hard copy was presented and explained accordingly by the JICA Survey Team (The Team) and has stretched some very important points and issue to consider and to make comments. Then the meeting was openly set for the questioner, comments, and discussion.

## 4. Summary of Comments and Discussion

a. Remarks (GP).

- The Deputy Premier of Guadalcanal Province thanks The Team to take an initiative to make appoint with us to have a short meeting relate to Upgrading of Kukum highway road project phase (2).
- Also Regarding the proposed bus terminal location for the recent Market area where just near Lungga Bridge, we have no comments and issues on that proposal design.

b. Confirmation (GP)

- The Guadalcanal Province asked the Team where would the actual endpoint of the Preparatory survey work is for Upgrading of Kukum Highway road project Phase (2).

c. Respond (The Team)

- In response, the Team confirmed that the actual endpoint shall be at junction road to Henderson's domestic terminal. But at the moment we are doing a Preparatory survey which mean we were collecting information for the next stage. This next stage of work, our team will return to Japan and analysis of the collected data and preparing the final design stage with reports.

d. Request (The Team)

- The Team was requested to the GP if they could attend the last Stakeholder meeting which will be held by the first week of December.
  The main reason for hosting the last stakeholder meeting is to invite all the stakeholders members who might be affect by the new set alignment of this road project.

e. Comments (GP)

- The GP has comments on the types of Curbs stones i.e. precast concrete which they shall use for the footpath. In comparison to the previous project most precast curbs used were very high for small vehicles to park on the footpath. Therefor GP asked the Team if they could use small types of curbs to protect the carriageway from the footpath, since 2-lane shall be start from Lungga Bridge to Henderson.

f. Respond (The Team)

- The Team responds and view the comments of GP regarding the types of Curbs stones to be used and was confirmed to them that they will take it for consideration. At the moment we are conducting Preparatory survey for (2) months and after completion of this stage of work our team will return to Japan for actual data analysis with preparation for the design stage

## 5. Closing Remarks

- In his closing remarks, the Team representatives really appreciated and thanked the Deputy premier of Guadalcanal province and his staff for availed their time to attend this technical meeting. Also, mention that we are looking forward to more support and cooperation from the GP side towards this Preparatory survey work. Then the meeting was closed at 10: am

# Minutes of Discussions
# on
# the Preparatory Survey
# on
# the Project
# for
# Upgrading of the Kukum Highway, Phase 2

Based on the several preliminary discussions between the Government of Solomon Islands (hereinafter referred to as "SIG") , Embassy of Japan and Japan International Cooperation Agency (hereinafter referred to as "JICA") Solomon Islands Office, JICA dispatched the Preparatory Survey Team for the Outline Design (hereinafter referred to as "the Team") of the Project for Upgrading of the Kukum Highway phase 2 (hereinafter referred to as "the Project") to Solomon Islands. The Team held a series of discussions with the officials of the SIG and conducted a field survey. In the course of the discussions, both sides have confirmed the main items described in the attached sheets.

Honiara, October 28, 2019

福田義夫

Mr. Yoshio Fukuda
Leader
Preparatory Survey Team
Japan International Cooperation Agency

Mr. Stephen W. Maesiola
Permanent Secretary
Ministry of Infrastructure Development
Solomon Islands Government

## ATTACHMENT

1. Objective of the Project

The objective of the Project is to upgrading of the Kukum Highway for the purpose to continuingly ensure function and resilience of the trunk road in the greater Honiara area, thereby contributing to the sustainable economic development of Solomon Islands.

2. Title of the Preparatory Survey

Both sides confirmed the title of the Preparatory Survey as "the Preparatory Survey on the Project for Upgrading of the Kukum Highway, Phase 2".

3. Project Site

Both sides confirmed the site of the Project shown in Annex 1.

4. Responsible authorities for the Project

Both sides confirmed the responsible and executing authorities as follows:

4-1. The responsible and the executing authority is the Ministry of Infrastructure Development (MID).

4-2. The organization chart of MID is shown in Annex 2.

5. Item requested by the SIG

As a result of discussions, both sides confirmed that the item requested by the SIG is upgrading of section between Ministry of Fisheries and Marine Resources to Honiara International Airport of the Kukum Highway

5-1. JICA will assess the appropriateness of the above requested item through the survey and will report findings to the Government of Japan. The final components of the Project would be decided by the Government of Japan.

5-2. The SIG shall submit an official request to the Government of Japan through a diplomatic channel before the appraisal of the Project, which is scheduled in June, 2020.

6. Procedures and Basic Principles of Japanese Grant

6-1. The SIG side agreed that the procedures and basic principles of Japanese Grant (hereinafter referred to as "the Grant") as described in Annex 3 shall be applied to the Project.

6-2. The SIG side agreed to take the necessary measures, as to be described in Annex 6 for smooth implementation of the Project. The contents of the Annex 6 will be elaborated during the Preparatory Survey and be agreed in the mission dispatched for explanation of the Draft Preparatory Survey Report.
The contents of Annex 6 will be updated as the Preparatory Survey progresses, and eventually, will be used as an attachment to the Grant Agreement.

7. Schedule of the Survey

7-1. The Team will proceed with further survey in Solomon Islands until December 14.

7-2. An official request to the Government of Japan will be submitted before June, 2020.

7-3. JICA will prepare a draft Preparatory Survey Report in English and dispatch a mission to Solomon Islands in order to explain its contents around June, 2020.

7-4 If the contents of the draft Preparatory Survey Report is accepted and the undertakings for the Project are fully agreed by the SIG side, JICA will finalize the Preparatory Survey Report and send it to SIG around November 2020.

7-5. The above schedule is tentative and subject to change.

8. Environmental and Social Considerations

8-1. The Solomon side confirmed to give due environmental and social considerations during implementation, and after completion of the Project, in accordance with the JICA Guidelines for Environmental and Social Considerations (April, 2010).

8-2. The Project is categorized as "Category B," from the following considerations: the Project is not considered to be large-scale road project, is not located in a sensitive area, and has none of the sensitive characteristics under the JICA guidelines for environmental and social considerations (April 2010), it is not likely to have significant adverse impact on the environment.
The Solomon side confirmed to conduct the necessary procedures concerning the environmental assessment (including stakeholder meetings, Initial Environmental Examination (IEE) and information disclosure, etc.) and prepare Public Environmental Report (PER) of the Project utilizing the IEE report prepared by the Team. The Solomon side shall obtain approval of the PER from the responsible authorities and submitted to JICA by the date to be notified later.

8-3. For projects that will result in involuntary resettlement, the Solomon side confirmed to prepare a Resettlement Action Plan (RAP)/Abbreviated Resettlement Action Plan (ARAP) and make it available to the public. In addition, the Solomon side confirmed to provide the affected people with sufficient compensation and/or support in accordance with RAP/ARAP, which is based on JICA guidelines for

environmental and social considerations (April 2010), in a timely manner.

9. Other Relevant Issues

9-1. Operation and Maintenance

9-1-1. The SIG side explained that the maintenance works on the target road would be conducted by the MID. The SIG side will take every necessary action including securing enough budget and personnel for the operation and maintenance of the facilities implemented by the Project.

9-1-2. The Team explained to the SIG side that overloaded trucks that exceed designed axle loads would accelerate deterioration thus shorten the lifespan of the road. The Team also explained to the SIG side that proper asset management will impact greatly on maintenance cost and lifespan.

9-2. Disclosure of Information

Both sides confirmed that the survey results excluding the project cost will be disclosed to the public after the completion of the Preparatory Survey. All the result including the project cost will be disclosed to the public after the verification of all contracts for the Project by JICA are concluded.

9-3.Safety Measures

9-3-1. To avoid accidents on site during the implementation of the Project, the SIG side agreed to cause the consultant and the contractor to enforce safety measures such as setting safety assurance to the site, providing information for security control to public, and deploying adequate security personnel, based on "The Guidance for the Management of Safety for Construction Works in Japanese ODA Projects" which has been published on JICA's URL below.
http://www.jica.go.jp/activities/schemes/oda_safety/ku57pq00001nz4eu-att/guidance_en.pdf

9-3-2. The Team recommended to the SIG side to explain to the residents about the Project (necessity and significance, construction period, sites, impact etc.), so that consensus and support can be obtained from them for the smooth implementation of the Project.

9-4. Provision of Survey Data

The SIG side requested all survey data to be got in the survey like result of topographic survey, natural condition survey, and etc., JICA replied all data will be transferred to the SIG side.

9-5. Provision of Conveniences to the Team by the SIG side

The SIG side shall, at its own expenses, provide the Team with the items mentioned in Chapter 5 of the Inception Report in collaboration with other organizations concerned to the Project.

9-6. Works entrusted to local company

Some works in the survey as topographic survey, geological survey and etc., will be entrusted to local company. These works are very important for implementation of the Survey, also from the point of survey schedule. The SIG side promised to support the team when necessary.

9-7. Questionnaire

The MID shall answer to the Questionnaire submitted by the Team in English with relevant documents by the end of November 2019.

9-8. Relocation of the Existing Utilities

The SIG side shall relocate the existing utilities to the adequate location where no obstruction to the construction by the Japanese side.

9-9. Temporary yard and quarry yard

The SIG side shall secure the temporary yard and quarry yard during construction stage to be the precondition of E/N and G/A. Candidate location shall be discussed with the Team during the field survey.

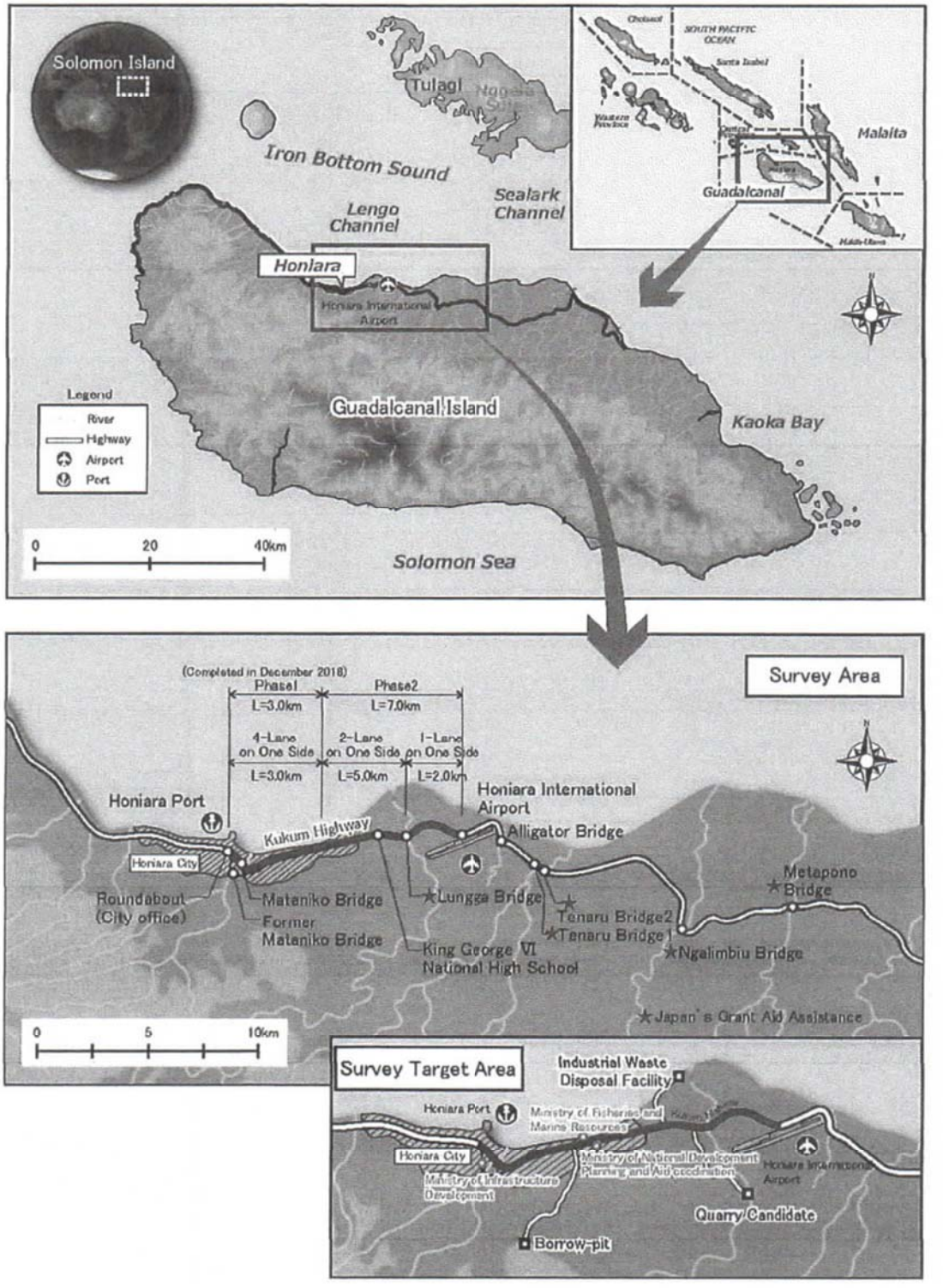
9-10. Coordination with other relevant project

The SIG side shall coordinate with other relevant Project for Study Team. Necessary data shall be also provided to the Team based on request from Study Team.

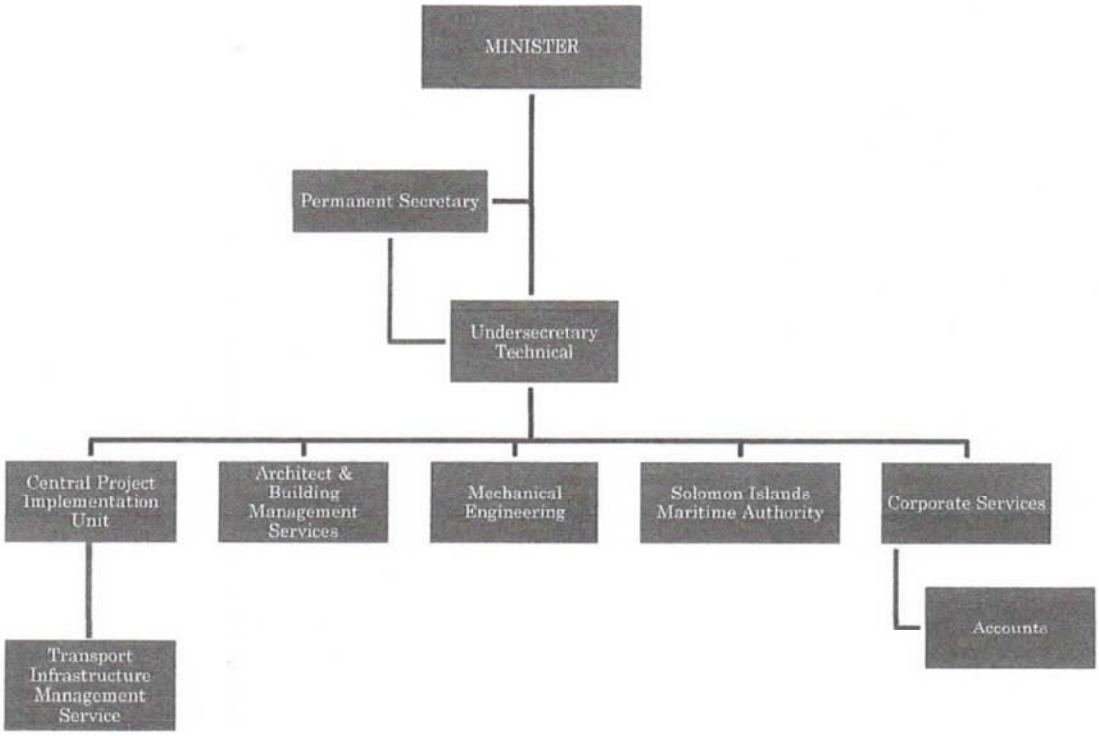
Annex 1 Project Site
Annex 2 Organization Chart
Annex 3 Japanese Grant
Annex 4 Procedures of Japanese Grant
Annex 5 Financial Flow of Japanese Grant
Annex 6 Example Form of Major Undertakings to be taken by the Government of Solomon Islands

Annex 1

# Location Map of the Project



Annex 2




Organization Chart : Ministry of Infrastructure Development

## JAPANESE GRANT

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as "the Recipient") to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as "Project Grants").

### 1. Procedures of Project Grants

Project Grants are conducted through following procedures (See "PROCEDURES OF JAPANESE GRANT" for details):

(1)Preparation

- The Preparatory Survey (hereinafter referred to as "the Survey") conducted by JICA

(2)Appraisal

-Appraisal by the government of Japan (hereinafter referred to as "GOJ") and JICA, and Approval by the Japanese Cabinet

(3)Implementation

Exchange of Notes

-The Notes exchanged between the GOJ and the government of the Recipient

Grant Agreement (hereinafter referred to as "the G/A")

-Agreement concluded between JICA and the Recipient

Banking Arrangement (hereinafter referred to as "the B/A")

-Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as "the Bank") to receive the grant

Construction works/procurement

-Implementation of the project (hereinafter referred to as "the Project") on the basis of the G/A

(4)Ex-post Monitoring and Evaluation

-Monitoring and evaluation at post-implementation stage

### 2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of relevant agencies of the Recipient necessary for the implementation of the Project.
- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a

technical, financial, social and economic point of view.

- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve 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 executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

**3. Basic Principles of Project Grants**

(1) Implementation Stage

1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as "the E/N") will be singed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the "General Terms and Conditions for Japanese Grant (January 2016)."

2) Banking Arrangements (B/A) (See "Financial Flow of Japanese Grant (A/P Type)" for details)

a)The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.

b)The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA

under an Authorization to Pay (A/P) issued by the Recipient.

3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", in principle.

6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICA in order to be verified as eligible for using the Japanese Grant.

7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as followings:

a)Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.

b)Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

1) After the project completion, JICA will continue to keep in close contact with the Recipient in order

to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.

2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

4) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.

Annex 4

## PROCEDURES OF JAPANESE GRANT

| Stage | Procedures | Remarks | Recipient Government | Japanese Government | JICA | Consultants | Contractors | Agent Bank |
|---|---|---|---|---|---|---|---|---|
| Official Request | Request for grants through diplomatic channel | Request shall be submitted before appraisal stage. | x | x | | | | |
| 1. Preparation | (1) Preparatory Survey<br>Preparation of outline design and cost estimate | | x | | x | x | | |
| 2. Appraisal | (2)Preparatory Survey<br>Explanation of draft outline design, including cost estimate, undertakings, etc. | | x | | x | x | | |
| | (3)Agreement on conditions for implementation | Conditions will be explained with the draft notes (E/N) and Grant Agreement (G/A) which will be signed before approval by Japanese government. | x | x<br>(E/N) | x<br>(G/A) | | | |
| | (4) Approval by the Japanese cabinet | | | x | | | | |
| 3. Implementation | (5) Exchange of Notes (E/N) | | x | x | | | | |
| | (6) Signing of Grant Agreement (G/A) | | x | | x | | | |
| | (7) Banking Arrangement (B/A) | Need to be informed to JICA | x | | | | | x |
| | (8) Contracting with consultant and issuance of Authorization to Pay (A/P) | Concurrence by JICA is required | x | | | x | | x |
| | (9) Detail design (D/D) | | x | | | x | | |
| | (10) Preparation of bidding documents | Concurrence by JICA is required | x | | | x | | |
| | (11) Bidding | Concurrence by JICA is required | x | | | x | x | |
| | (12) Contracting with contractor/supplier and issuance of A/P | Concurrence by JICA is required | x | | | | x | x |
| | (13) Construction works/procurement | Concurrence by JICA is required for major modification of design and amendment of contracts. | x | | | x | x | |
| | (14) Completion certificate | | x | | | x | x | |
| 4. Ex-post monitoring & evaluation | (15) Ex-post monitoring | To be implemented generally after 1, 3, 10 years of completion, subject to change | x | | x | | | |
| | (16) Ex-post evaluation | To be implemented basically after 3 years of completion | x | | x | | | |

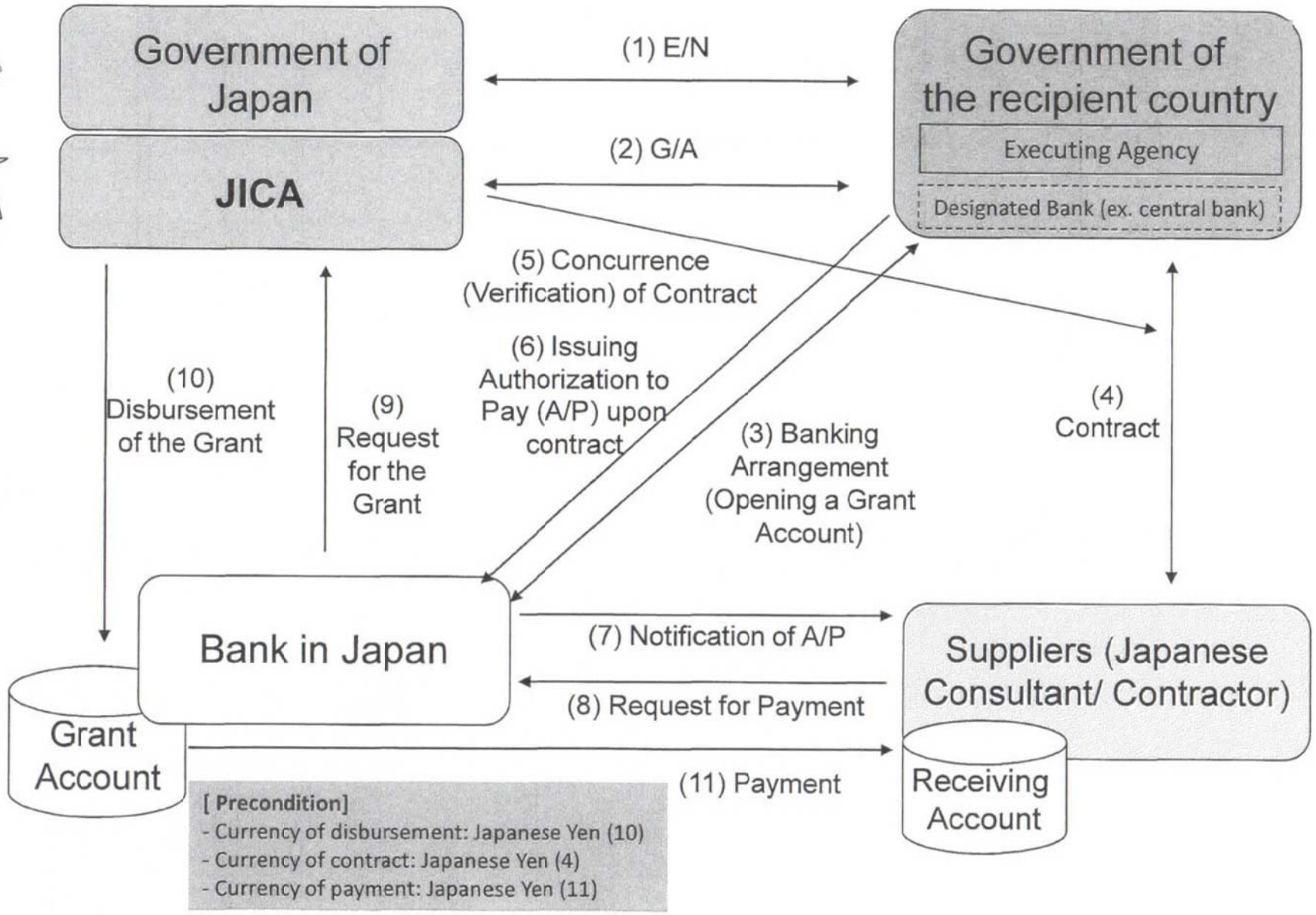
notes:

1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.

2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.

Annex 5

# Financial Flow of Japanese Grant (A/P Type)



Annex 6

(Example)

Major Undertakings to be taken by the Government of Solomon Islands

## 1. Specific obligations of the Government of Solomon Island which will not be funded with the Grant

(1) Before the Tender

| NO | Items | Deadline | In charge | Estimated Cost | Ref. |
|---|---|---|---|---|---|
| 1 | To open bank account (Banking Arrangement: B/A) | within 1 month after the signing of the G/A | | | |
| 2 | To issue A/P to a bank in Japan (the Agent Bank) for the payment to the consultant | within 1 month after the signing of the contract | | | |
| 3 | To approve EIA(Conditions of approval should be fulfilled, if any) and secure the necessary budget for implementation. | within 1 month after the signing of the G/A | | | |
| 4 | To secure Project site and temporary yard and quarry yard. | before start of the construction | | | |
| 5 | To remove and relocate the following facilities.<br>1) Removal of existing facilities<br>2) Relocation of underground/overhead utilities<br>3) Relocatio or removal of other obstacles affected to Project<br>4) Cutting trees at the project site | before start of the construction | | | |
| 6 | To submit Project Monitoring Report (with the result of Detail Design) | before preparation of bidding documents | | | |

(B/A: Banking Arrangement, A/P: Authorization to pay, N/A: Not Applicable)

(2) During the Project Implementation

| NO | Items | Deadline | In charge | Estimated Cost | Ref. |
|---|---|---|---|---|---|
| 1 | To issue A/P to a bank in Japan (the Agent Bank) for the payment to the Supplier(s) | within 1 month after the signing of the contract(s) | | | |
| 2 | To bear the following commissions to a bank in Japan for the banking services based upon the B/A | | | | |
| | 1) Advising commission of A/P | within 1 month after the signing of the contract(s) | | | |
| | 2) Payment commission for A/P | every payment | | | |
| 3 | to ensure prompt unloading and customs clearance at ports of disembarkation in recipient country and to assist the Supplier(s) with internal transportation therein | during the Project | | | |
| 4 | To accord Japanese nationals and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work | during the Project | | | |
| 5 | To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted/ be borne by its designated authority without using the Grant | during the Project | | | |
| 6 | To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project | during the Project | | | |
| 7 | To submit Project Monitoring Report | every month | | | |
| | 1) To submit Project Monitoring Report (final) | within one month after signing of Certificate of Completion for the works under the contract(s) | | | |
| 8 | To submit a report concerning completion of the Project | within six months after completion of the Project | | | |
| 9 | To construct access roads<br>1) Outside the site | 3 months before completion of the construction | | | |
| 10 | To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Project outside the site(s) | | | | |
| | 1) Electricity<br>The distributing line to the site | before start of the construction | | | |
| | 2) Water Supply<br>The city water distribution main to the site | 6 months before completion of the construction | | | |
| | 3) Drainage<br>The city drainage main ( for storm, sewer and others ) to the site | 6 months before completion of the construction | | | |

| | | | | | |
|---|---|---|---|---|---|
| | 4) Furniture and Equipment<br>General furniture | 1 month before completion of the construction | | | |
| 11 | To take necessary measure for safety construction<br>- traffic control<br>- rope off | during the construction | | | |
| 12 | To implement Environmental Management Plan (EMP) and Environmental Monitoring Plan (EMoP) | during the construction | | | |
| 13 | To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report | during the construction | | | |
| 14 | To implement Resettlement Action Plan (RAP) (livelihood restoration program, if needed) | for a period based on livelihood restoration program | | | |
| 15 | To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report<br>- Period of the monitoring may be extended if affected persons' livelihoods are not sufficiently restored. Extension of the monitoring will be decided based on agreement between ____ and JICA. | - until the end of livelihood restoration program (In case that livelihood restoration program is provided)<br>*- for two years after land acquisition and resettlement complete (In case that livelihood restoration program is not provided)* | | | |

(3) After the Project

| NO | Items | Deadline | In charge | Estimated Cost | Ref. |
|---|---|---|---|---|---|
| 1 | To implement EMP and EMoP | for a period based on EMP and EMoP | | | |
| 2 | To submit results of environmental monitoring to JICA, by using the monitoring form, semiannually<br>- The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between _____ and JICA. | for three years after the Project | | | |
| 3 | To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid<br>1) Allocation of maintenance cost<br>2) Operation and maintenance structure<br>3) Routine check/Periodic inspection | After completion of the construction | | | |

2. Other obligations of the SIG funded with the Grant

| NO | Items | Deadline | Amount (Million Japanese Yen)* |
|---|---|---|---|
| 1 | To upgrade road | | |
| 2 | To implement detailed design, bidding support and construction supervision (Consulting Service) | | |
| 3 | Contingencies | | |
| | Total | | XXX |

*The Amount is provisional. This is subject to the approval of the Government of Japan.

# Appendix 6: Minutes of Discussions (September 2020)

**Minutes of Discussions**
**on the Preparatory Survey on the Project for**
**Upgrading of the Kukum Highway Phase 2**
**(Explanation on Draft Preparatory Survey Report)**

In response to the request from the Government of Solomon Islands (hereinafter referred to as "SIG ") dated on July 27, 2020 and with reference to the Minutes of Discussions signed between Ministry of Infrastructure Development (hereinafter referred to as "MID") and the Japan International Cooperation Agency (hereinafter referred to as "JICA") dated on October 28, 2019, JICA scheduled to dispatch the Preparatory Survey Team (hereinafter referred to as "the Team") for the explanation of Draft Preparatory Survey Report (hereinafter referred to as "the Draft Report") on the Project for Upgrading of the Kukum Highway Phase 2 (hereinafter referred to as "the Project"). But due to an avoidable reason, the Team couldn't be dispatched and then the discussions were held remotely.

As a result of the discussions, both sides agreed on the main items described in the attached sheets.

Honiara, September 21, 2020

Mr. UEGAKI Motoyuki
Resident Representative

JICA SolomonIslands Office
Japan International Cooperation Agency
Japan

Mr. Stephen W. Maesiola
Permanent Secretary

Ministry of Infrastructure Development

Solomon Islands

## ATTACHEMENT

1. Contents of the Draft Report
   After the explanation of the contents of the Draft Final Report by the Team, the SIG side agreed to its contents.

2. Cost estimate
   Both sides confirmed that the cost estimate including the contingency by the Team is provisional and will be examined further by the Government of Japan for its approval. The contingency would cover the additional cost against natural disaster, unexpected natural conditions, etc.

3. Confidentiality of the cost estimate and technical specifications
   Both sides confirmed that the cost estimate and technical specifications of the Project should never be disclosed to any third parties until all the contracts under the Project are concluded.

4. Japanese Grant
   Procedures and Basic Principles of Japanese Grant as described in Annex 1 shall be applied to the Project. In addition, the SIG side agreed to take necessary measures according to the procedures.
   MID shall coordinate with all the relevant authorities to ensure a smooth implementation of the Project and ensure that the undertakings for the Project shall be taken care by relevant authorities properly and on time.

5. Timeline for the project implementation
   The Team explained to the SIG side that the expected timeline for the Project implementation is as attached in Annex 2.

6. Expected outcomes and indicators
   Both sides agreed that key indicators for expected outcomes are as follows which might be changed based on further consideration in the Final Report. The SIG side will be responsible for the achievement of agreed key indicators targeted in year 2026 and shall monitor the progress based on those indicators.

   [Quantitative indicators]

| Index | Base Figure (Actual figures of 2019) | Target Figure (2026) (3 years after completion) |
|---|---|---|
| Average Speed (km/h) * | 33 | 50 |
| Suspension Hours (hour/year) | 24 | 0 |
| Annual Number of Passengers Passing through the Bridge (thousand person) | 21,500 | 30,910 |
| Annual Volume of Cargo Passing through the Bridge (t) | 658,760 | 900,000 |

* Section between Ministry of Fishery and Domestic Terminal of the Airport (about 6.3km) in fair weather

[Qualitative indicators]

(1)Improvement of disaster prevention functions by increasing drainage capacity.

(2)Economy enhancement brought from traffic congestion mitigation and reducing transportation costs by improvement of road condition.

(3)Improvement of traffic safety and accessibility for road users by providing streetlights and pedestrian crossings.

7. Undertakings of the Project

Both sides confirmed the undertakings of the Project as described in Annex 3. with regard to exemption of customs duties, internal taxes and other fiscal levies as stipulated in 1. (2) No.5 of Annex 3. And also the both sides confirmed that such customs duties, internal taxes and other fiscal levies shall be clarified in the bid documents by MID during the implementation stage of the Project.

The SIG side assured to take the necessary measures and coordination including allocation of the necessary budget which are preconditions of implementation of the Project. It is further agreed that the costs are indicative, i.e. at Outline Design level. More accurate costs will be calculated as the Detailed Design stage.

Both sides also confirmed that the Major Undertakings (Annex 3) will be as an attachment of G/A.

(1) With regard to exemption of customs duties, MID will submit the master list of imported materials and equipment prepared by the contractor to Ministry of Finance and Treasury, and receives the approval for tax exemption.

(2) With regard to VAT (Value Added Tax), MID supports to ensure that SIG Revenue and Custom Service provides tax exemption (advanced exemption system).

8. Monitoring during the implementation

The Project will be monitored by the Executing Agency and reported to JICA by using the form of Project Monitoring Report (PMR) attached as Annex 4. The timing of submission of the PMR is described in 1.(2) No.7 of Annex 3.

9. Project completion

Both sides confirmed that the project completes when all the facilities constructed by the grant are in operation. The completion of the Project will be reported to JICA promptly, but in any event not later than six months after completion of the Project.

10. Ex-Post Evaluation

JICA will conduct ex-post evaluation after three (3) years from the project completion, in principle, with respect to five evaluation criteria (Relevance, Effectiveness, Efficiency, Impact, and Sustainability). The result of the evaluation will be publicized. The SIG side is required to provide necessary support for the data collection.

11. Items and measures to be considered for the smooth implementation of the Project

For proceeding with the Project on the expected schedule, close mutual communication and cooperation and efforts are strongly required between the Japanese side and MID. Both side confirmed to facilitate the Project towards the succesful completion under this recognition.

The following items and measures are paticularly identified for the smooth implementation of the Project.

(1) Some cordination works by MID might be needed during construction period of the Project because any projects like Stadium Construction and related facilities for South Pacific Games 2023 will be proceeded along the Project site.
(2) MID will relocate ground obstacles and underground obstacles like overhead power lines, water pipe lines, telecommunication lines and etc., on due timing using past experience, because these kind of relocation works caused the construction works non-negligible delay in phase1.
(3) MID will take necessary procedures to ensure borrow pit and quarry site from each land owners.
(4) Resettlement should be proceed in good understanding with persons concerned.
(5) Land aquisition necessary for the Project should be implemented in due process by planned date.

12. Schedule of the Study

JICA will finalize the Preparatory Survey Report based on the confirmed items. The report will be sent to the SIG side around December 2020.

13. Environmental and Social Considerations

13-1 General Issues

13-1-1 Environmental Guidelines and Environmental Category

The Team explained that 'JICA Guidelines for Environmental and Social Considerations (April 2010)' (hereinafter referred to as "the Guidelines") is applicable for the Project. The Project is categorized as B because the Project is not considered as a large-scale road and bridge project, is not located in a sensitive area, and has none of the sensitive characteristics under the Guidelines, it is not likely to have significant adverse impact on the environment.

13-1-2 Environmental Checklist

The environmental and social considerations including major impacts and mitigation measures for the Project are summarized in the Environmental Checklist attached as Annex 5. Both sides confirmed that in case of major modification of the content of the Environmental Checklist, the SIG side shall submit the modified version to JICA in a timely manner.

13-2 Environmental Issues

13-2-1 Public Environmental Report(PER)

Both sides confirmed the PER report will be approved by the Department of Environment by December 2020.

13-2-2 Environmental Management Plan and Environmental Monitoring Plan

Both sides confirmed Environmental Management Plan (EMP) and Environmental Monitoring Plan (EMoP) of the Project is as Annex 6. Both side agreed that environmental mitigation measures and monitoring shall be conducted based on the EMP and the EMoP, which may be updated during the detailed design stage.

13-3 Social Issues

13-3-1 Land Acquisition and Resettlement

Both sides confirmed the 2,490 $m^2$ of land is required to acquire, and the 36,400 $m^2$ of land is necessary to be leased and 63 households needs to be relocated due to the implementation of the Project. The process for land acquisition and resettlement should forward following Resettlement Action Plan of Annex 7 which is prepared in line with the Guidelines and to

be authorized by the SIG side by signing of the Grant Agreement.

13-4 Environmental and Social Monitoring

13-4-1 Environmental Monitoring

Both sides agreed that the SIG side will submit results of environmental monitoring to JICA by using the monitoring form attached as Annex 8. The timing of submission of the monitoring form is described in 1.(2) No.13 and (3) No.2 of Annex 3.

13-4-2 Information Disclosure of Monitoring Results

Both sides confirmed that the SIG side will disclose results of environmental and social monitoring to local stakeholders through their website.

The SIG side agreed JICA will disclose results of environmental and social monitoring submitted by the SIG side as the monitoring forms attached as Annex 8 on its website.

14. Other Relevant Issues

14-1. Streetlights in the overlay section

SIG side requested to repair or reinstall exiting 7(seven) streetlights in the overlay section. JICA replied to take into consideration this request.

14-2. Disclosure of Information

Both sides confirmed that the Preparatory Survey Report from which project cost is excluded will be disclosed to the public after completion of the Preparatory Survey. The comprehensive report including the project cost will be disclosed to the public after all the contracts under the Project are concluded.

14-3. Measure against Over-loaded Vehicle

The Team repeated that overloaded trucks which exceed designed axle loads would cause early failure and shorter life and requested that the SIG side will take proper measure for this issue.

14-4. Safety Measure

To avoid accidents on site during the implementation of the Project, the SIG side agreed to cause the consultant and the contractor to enforce safety measures such as setting safety assurance to the site, providing information for security control to public, and deploying adequate security personnel, based on" "The Guidance for the Management of Safety for Construction Works in Japanese ODA Projects" which has been published on JICA's URL below.

https://www.jica.go.jp/english/our_work/types_of_assistance/c8h0vm00008zx0m8-att/guidance_en.pdf

Annex 1

**JAPANESE GRANT**

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as "the Recipient") to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as "Project Grants").

## 1. Procedures of Project Grants

Project Grants are conducted through following procedures (See "PROCEDURES OF JAPANESE GRANT" for details):

(1) Preparation

- The Preparatory Survey (hereinafter referred to as "the Survey") conducted by JICA

(2) Appraisal

-Appraisal by the government of Japan (hereinafter referred to as "GOJ") and JICA, and Approval by the Japanese Cabinet

(3) Implementation

Exchange of Notes

-The Notes exchanged between the GOJ and the government of the Recipient

Grant Agreement (hereinafter referred to as "the G/A")

-Agreement concluded between JICA and the Recipient

Banking Arrangement (hereinafter referred to as "the B/A")

-Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as "the Bank") to receive the grant

Construction works/procurement

-Implementation of the project (hereinafter referred to as "the Project") on the basis of the G/A

(4) Ex-post Monitoring and Evaluation

-Monitoring and evaluation at post-implementation stage

## 2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of

relevant agencies of the Recipient necessary for the implementation of the Project.

- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve 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 executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

**3. Basic Principles of Project Grants**

(1) Implementation Stage

1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as "the E/N") will be singed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the "General Terms and Conditions for Japanese Grant (January 2016)."

2) Banking Arrangements (B/A) (See "Financial Flow of Japanese Grant (A/P Type)" for details)

a) The Recipient shall open an account or shall cause its designated authority to open an account under the name

of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.

b) The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", in principle.

6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICA in order to be verified as eligible for using the Japanese Grant.

7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will

be composed by the Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as followings:

a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.

b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.

2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

4) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.

## PROCEDURES OF JAPANESE GRANT

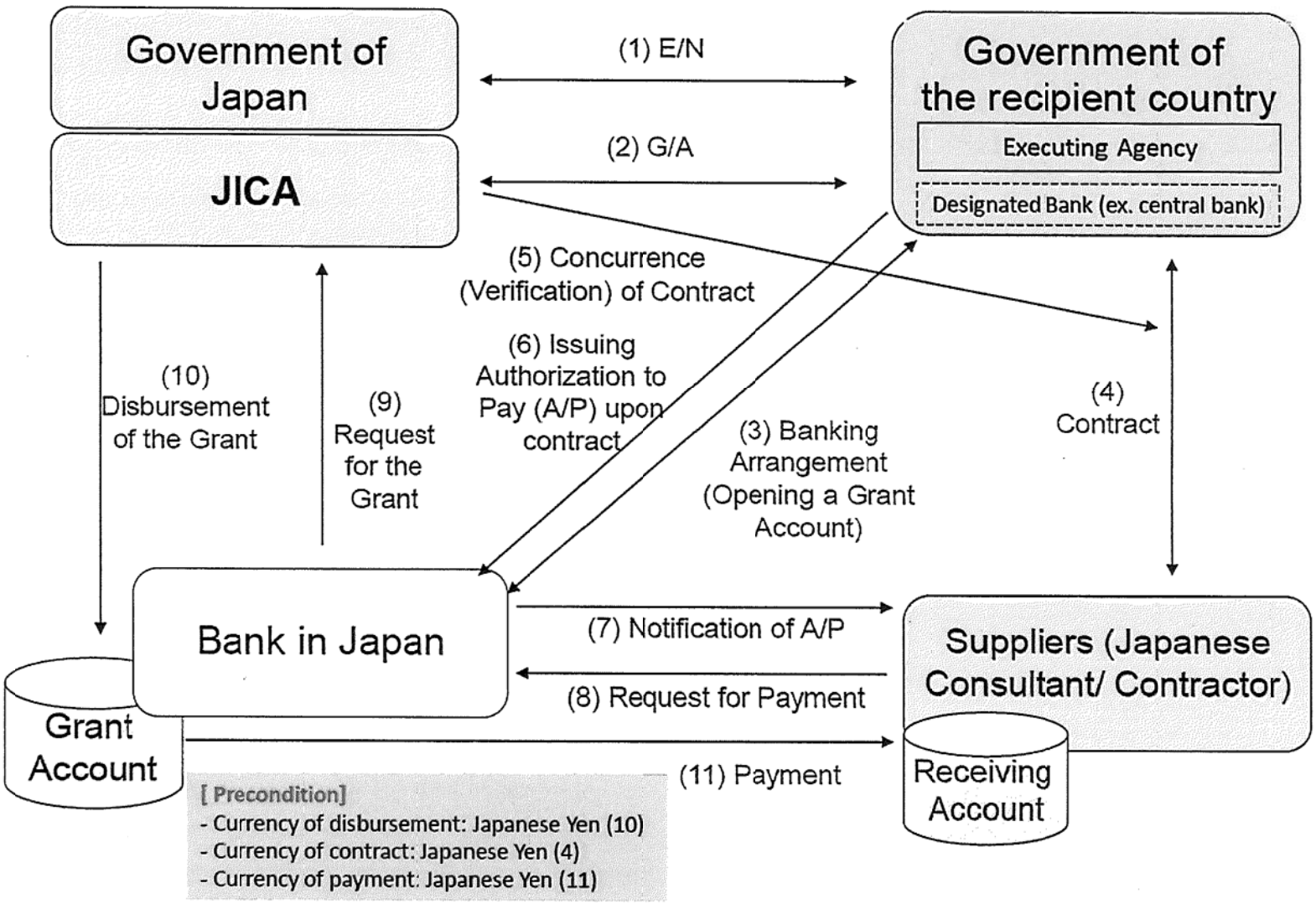
| Stage | Procedures | Remarks | Recipient Government | Japanese Government | JICA | Consultants | Contractors | Agent Bank |
|---|---|---|---|---|---|---|---|---|
| Official Request | Request for grants through diplomatic channel | Request shall be submitted before appraisal stage. | x | x | | | | |
| 1. Preparation | (1) Preparatory Survey<br>Preparation of outline design and cost estimate | | x | | x | x | | |
| 2. Appraisal | (2)Preparatory Survey<br>Explanation of draft outline design, including cost estimate, undertakings, etc. | | x | | x | x | | |
| | (3)Agreement on conditions for implementation | Conditions will be explained with the draft notes (E/N) and Grant Agreement (G/A) which will be signed before approval by Japanese government. | x | x<br>(E/N) | x<br>(G/A) | | | |
| | (4) Approval by the Japanese cabinet | | | x | | | | |
| 3. Implementation | (5) Exchange of Notes (E/N) | | x | x | | | | |
| | (6) Signing of Grant Agreement (G/A) | | x | | x | | | |
| | (7) Banking Arrangement (B/A) | Need to be informed to JICA | x | | | | | x |
| | (8) Contracting with consultant and issuance of Authorization to Pay (A/P) | Concurrence by JICA is required | x | | | x | | x |
| | (9) Detail design (D/D) | | x | | | x | | |
| | (10) Preparation of bidding documents | Concurrence by JICA is required | x | | | x | | |
| | (11) Bidding | Concurrence by JICA is required | x | | | x | x | |
| | (12) Contracting with contractor/supplier and issuance of A/P | Concurrence by JICA is required | x | | | | x | x |
| | (13) Construction works/procurement | Concurrence by JICA is required for major modification of design and amendment of contracts. | x | | | x | x | |
| | (14) Completion certificate | | x | | | x | x | |
| 4. Ex-post monitoring & evaluation | (15) Ex-post monitoring | To be implemented generally after 1, 3, 10 years of completion, subject to change | x | | x | | | |
| | (16) Ex-post evaluation | To be implemented basically after 3 years of completion | x | | x | | | |

notes:

1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.

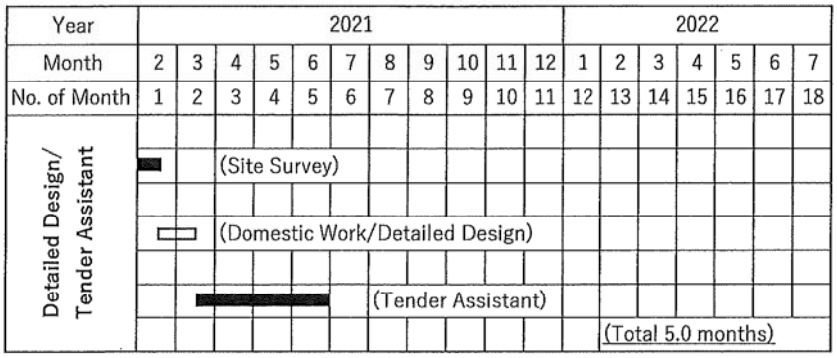
2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.

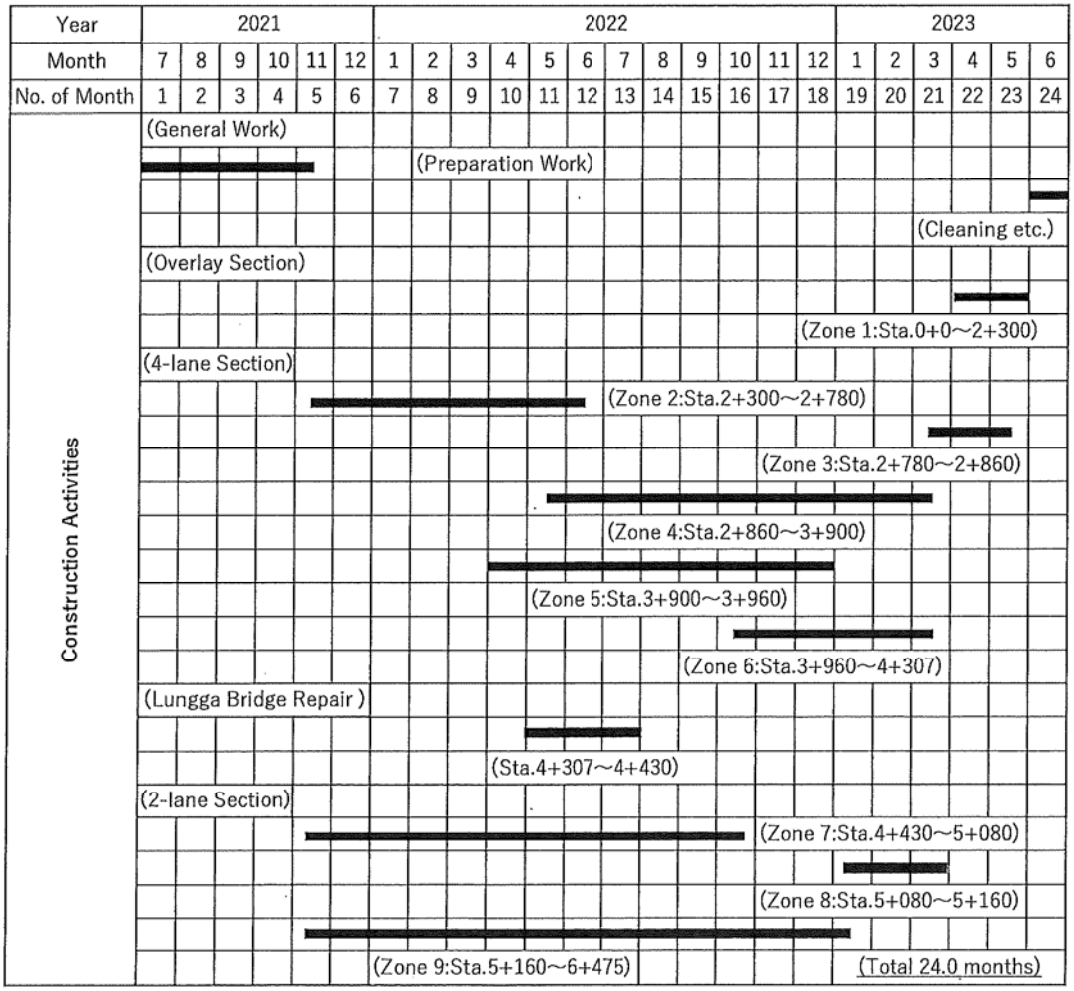
# Financial Flow of Japanese Grant (A/P Type)



Annex 2

# Expected Project Implementation Schedule



## Major Undertakings to be taken by the Solomon Islands Government

### 1. Specific obligations of the Solomon Islands Government which will not be funded with the Grant

(1) Before the Bidding

| No. | Items | Deadline | In charge | Cost (US$) | Ref. |
|---|---|---|---|---|---|
| 1 | To approve PER (Conditions of approval should be fulfilled, if any) and secure the necessary budget for implementation of countermeasures obligated in the PER. | before signing of the G/A | ECD | | |
| 2 | To open Bank Account (Banking Arrangement (B/A)) | within 1 month after signing of the G/A | MID/CBSI | | |
| 3 | To issue the Authorization to Pay (A/P) to a bank in Japan (the Agent Bank) for the payment to the Consultant | within 1 month after signing of the contract with the consultant | MID/CBSI | 3,000 | |
| 4 | To approve Abbreviated Resettlement Action Plan | before signing of the G/A | MID | | |
| 5 | To secure the necessary budget and implement land acquisition and resettlement (including preparation of resettlement sites), and compensation with full replacement cost in accordance with ARAP | before notice of the bidding document(s) | MID/MOF/ MOLHS/COL | | |
| 6 | To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report | till land acquisition and resettlement complete | MID | | |
| 7 | To secure and clear the following lands<br>1) right of way for the Project<br>2) temporary construction yard and stock yard near the Project area<br>3) diversion route for the existing road<br>4) borrow pit and disposal site near the Project area | before notice of the bidding document(s) | MID and related agencies | 62,000 | |
| 8 | To obtain the planning, zoning, building permit | before notice of the bidding document(s) | MID and related agencies | | |
| 9 | To clear, level and reclaim the sites, which will be confirmed in the draft final report (All costs for relocation of utilities and demolition of obstacles etc. are included) | before notice of the bidding document(s) | MID and related agencies | 1,754,000 | |
| 10 | To submit Project Monitoring Report (with the result of Detailed Design (DD) | before preparation of bidding document(s) | MID | | |

Note : PER: Public Environmental Report
ARAP: Abbreviated Resettlement Action Plan
MOFT: Ministry of Finance and Treasury
MOFA: Ministry of Foreign Affairs and External Trade
MOLHS: Ministry of Lands Housing & Survey
MID-Ministry of Transport
CBSI: Central Bank of Solomon Islands
IRD: Inland Revenue Division
CAC: Community Advisory Committee
COL: Commissioner of Lands
ECD: Environment & Conservation Division

(2) During the Project Implementation

| No. | Items | Deadline | In charge | Cost (US$) | Ref. |
|---|---|---|---|---|---|
| 1 | To issue A/P(s) to the Agent Bank in Japan for the payment(s) to the Supplier(s) | within 1 month after signing of the contract(s) | MID/CBSI | | |
| 2 | To bear the following commissions to the Agent Bank in Japan for the banking services based upon the B/A | during the Project | CBSI | | |
| | 1) Advising commission of A/P | within 1 month after signing of the contract(s) | CBSI | 24,000 | |
| | 2) Payment commission for A/P | every payment | CBSI | 33,000 | |
| 3 | To ensure prompt customs clearance and to assist the Supplier(s) with internal transportation in the country of the Recipient | during the Project | MID and related agencies | | |
| 4 | To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work | during the Project | MID/ MOFA | | |
| 5 | To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted | during the Project | MID / MOFT/ IRD | | |
| 6 | To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project | during the Project | MID | | |
| 7 | 1) To submit Project Monitoring Report | every month | MID | | |
| | 2) To submit Project Monitoring Report (Final) | within one month after signing of Certificate of Completion of the Work under the contract(s) | MID | | |
| 8 | To submit a report concerning completion of the Project | within six months after completion of the Project | MID | | |
| 9 | To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Project outside the site(s) | | | | |
| | 1) Electricity<br>The distributing line to the temporary site | before start of the construction | MID and related agencies | | |
| | 2) Water Supply<br>The city water distribution main to the temporary site | before start of the construction | MID and related agencies | | |
| | 3) Primary Electric Power Source<br>Primary electrical power source up to the distribution boards. (Approx. 8 sources are required) | | MID | 160,000 | |
| 10 | To take necessary measure for safety construction<br>- traffic control<br>- public notifications<br>- Securing safety for personnel involved in the Project | during the construction | MID and related agencies | | |
| 11 | To implement Environmental Management Plan (EMP) and Environmental Monitoring Plan (EMoP) | during the construction | MID/ ECD | | |
| 12 | To carry out UXO investigation | before / during the construction | MID | 99,000 | |
| 13 | To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report | during the construction | MID/ ECD | | |

| No. | Items | Deadline | In charge | Cost (US$) | Ref. |
|---|---|---|---|---|---|
| 14 | To implement ARAP (livelihood restoration program, if needed) | for a period based on livelihood restoration program | MID/ MOFT/ MOLHS | 812,000 | |
| 15 | To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report<br>- Period of the monitoring may be extended if affected persons' livelihoods are not sufficiently restored. Extension of the monitoring will be decided based on agreement between MID and JICA. | until the end of livelihood restoration program (In case that livelihood restoration program is provided) | MID | | |

(3)After the Project

| No. | Items | Deadline | In charge | Cost (US$) | Ref. |
|---|---|---|---|---|---|
| 1 | To implement EMP and EMoP | for a period based on EMP and EMoP | MID/ ECD | | |
| 2 | To submit results of environmental monitoring to JICA, by using the monitoring form, semi-annually<br>- The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between MID and JICA. | for two-years after the Project | MID | | |
| 4 | To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid<br>1) Allocation of maintenance cost<br>2) Operation and maintenance of structure<br>3) Routine check/Periodic inspection | After completion of the construction | MID/ MOF | 15,000 (Annual) | |

## 2. Other obligations of the Solomon Islands Government funded with the Grant

| No. | Items | Deadline | Amount (Million Japanese Yen)* |
|---|---|---|---|
| 1 | To construct roads<br>- Overlay from the beginning point to 2.3 km point, L=2.3 km)<br>- Upgrading (from 2.3 km point to the end point, L=4.0 km) | During the construction | The cost borne by the Japan's Grant Aid is closed due to the confidenciality. |
| 2 | To implement detailed design, bidding support and construction supervision<br>(Consulting Service) | | |
| 3 | Contingencies | | |
| | Total | | |

*The Amount is provisional. This is subject to the approval of the Government of Japan.

Template

**Project Monitoring Report**
***on***
***Project Name***
*Grant Agreement No. XXXXXXX*
20XX, Month

**Organizational Information**

| | |
|---|---|
| **Signer of the G/A**<br>(Recipient) | Person in Charge (Designation)<br>Contacts Address:<br>Phone/FAX:<br>Email: |
| **Executing Agency** | Person in Charge (Designation)<br>Contacts Address:<br>Phone/FAX:<br>Email: |
| **Line Ministry** | Person in Charge (Designation)<br>Contacts Address:<br>Phone/FAX:<br>Email: |

**General Information:**

| | |
|---|---|
| **Project Title** | |
| **E/N** | Signed date:<br>Duration: |
| **G/A** | Signed date:<br>Duration: |
| **Source of Finance** | Government of Japan: Not exceeding JPY _____ mil.<br>Government of (_____): _____ |

## 1: Project Description

### 1-1 Project Objective

### 1-2 Project Rationale

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

### 1-3 Indicators for measurement of "Effectiveness"

| Quantitative indicators to measure the attainment of project objectives | | |
|---|---|---|
| Indicators | Original (Yr ) | Target (Yr ) |
| | | |
| | | |
| | | |
| **Qualitative indicators to measure the attainment of project objectives** | | |
| | | |

## 2: Details of the Project

### 2-1 Location

| Components | Original *(proposed in the outline design)* | Actual |
|---|---|---|
| 1. | | |

### 2-2 Scope of the work

| Components | Original* *(proposed in the outline design)* | Actual* |
|---|---|---|
| 1. | | |
| | | |
| | | |
| | | |

Reasons for modification of scope (if any).

*(PMR)*

2-3 Implementation Schedule

| Items | Original | | Actual |
|---|---|---|---|
| | *(proposed in the outline design)* | *(at the time of signing the Grant Agreement)* | |
| | | | |

Reasons for any changes of the schedule, and their effects on the project (if any)

| |
|---|
| |

2-4 Obligations by the Recipient

**2-4-1 Progress of Specific Obligations**

See Attachment 2.

**2-4-2 Activities**

See Attachment 3.

**2-4-3 Report on RD**

See Attachment 11.

2-5 Project Cost

**2-5-1 Cost borne by the Grant(Confidential until the Bidding)**

| Components | | | Cost (Million Yen) | |
|---|---|---|---|---|
| | Original *(proposed in the outline design)* | Actual *(in case of any modification)* | Original[1),2)] *(proposed in the outline design)* | Actual |
| | 1. | | | |
| | | | | |
| | | | | |
| Total | | | | |

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar = Yen

### 2-5-2 Cost borne by the Recipient

| Components | | | Cost (1,000 Taka) | |
|---|---|---|---|---|
| | Original *(proposed in the outline design)* | Actual *(in case of any modification)* | Original[1),2)] *(proposed in the outline design)* | Actual |
| | 1. | | | |
| | | | | |
| | | | | |
| | | | | |

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

| |
|---|
| *(PMR)* |

### 2-6 Executing Agency

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

| |
|---|
| **Original** *(at the time of outline design)*<br><br>name:<br><br>role:<br>financial situation:<br>institutional and organizational arrangement (organogram):<br>human resources (number and ability of staff): |
| **Actual** *(PMR)* |

2-7 **Environmental and Social Impacts**

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).

- The results of social monitoring based on in Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

## 3: Operation and Maintenance (O&M)

3-1 **Physical Arrangement**

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spareparts, etc.)

| |
|---|
| **Original** *(at the time of outline design)* |
| **Actual** *(PMR)* |

3-2 **Budgetary Arrangement**

- Required O&M cost and actual budget allocation for O&M

| |
|---|
| **Original** *(at the time of outline design)* |
| **Actual** *(PMR)* |

## 4: Potential Risks and Mitigation Measures

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

**Assessment of Potential Risks** (*at the time of outline design*)

| Potential Risks | Assessment |
|---|---|
| 1. (Description of Risk) | Probability: High/Moderate/Low |
| | Impact: High/Moderate/Low |
| | Analysis of Probability and Impact: |
| | |
| | Mitigation Measures: |
| | |
| | Action required during the implementation stage: |
| | |
| | Contingency Plan (if applicable): |
| | |
| 2. (Description of Risk) | Probability: High/Moderate/Low |
| | Impact: High/Moderate/Low |
| | Analysis of Probability and Impact: |
| | |
| | Mitigation Measures: |
| | |
| | Action required during the implementation stage: |
| | |
| | Contingency Plan (if applicable): |
| | |
| 3. (Description of Risk) | Probability: High/Moderate/Low |
| | Impact: High/Moderate/Low |
| | Analysis of Probability and Impact: |
| | |
| | Mitigation Measures: |
| | |
| | Action required during the implementation stage: |
| | |
| | Contingency Plan (if applicable): |
| | |
| **Actual Situation and Countermeasures** | |
| (PMR) | |

## 5: Evaluation and Monitoring Plan (after the work completion)

### 5-1 Overall evaluation

Please describe your overall evaluation on the project.

### 5-2 Lessons Learnt and Recommendations

Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

### 5-3 Monitoring Plan of the Indicators for Post-Evaluation

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

Attachment

1. Project Location Map
2. Specific obligations of the Recipient which will not be funded with the Grant
3. Monthly Report submitted by the Consultant

Appendix - Photocopy of Contractor's Progress Report (if any)
- Consultant Member List
- Contractor's Main Staff List

4. Check list for the Contract (including Record of Amendment of the Contract/Agreement and Schedule of Payment)
5. Environmental Monitoring Form / Social Monitoring Form
6. Monitoring sheet on price of specified materials (Quarterly)
7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final )only)
8. Pictures (by JPEG style by CD-R) (PMR (final)only)
9. Equipment List (PMR (final )only)
10. Drawing (PMR (final )only)
11. Report on RD (After project)

Remark : No. 6, 7 are attached in this document for reference.

Attachment 6

Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

| | Items of Specified Materials | Initial Volume A | Initial Unit Price (¥) B | Initial total Price C=A×B | 1% of Contract Price D | Condition of payment | |
|---|---|---|---|---|---|---|---|
| | | | | | | Price (Decreased) E=C−D | Price (Increased) F=C+D |
| 1 | Item 1 | ●●t | ● | ● | ● | ● | ● |
| 2 | Item 2 | ●●t | ● | ● | ● | | |
| 3 | Item 3 | | | | | | |
| 4 | Item 4 | | | | | | |
| 5 | Item 5 | | | | | | |
| | | | | | | | |

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

| | Items of Specified Materials | 1st ●month, 2015 | 2nd ●month, 2015 | 3rd ●month, 2015 | 4th | 5th | 6th |
|---|---|---|---|---|---|---|---|
| 1 | Item 1 | | | | | | |
| 2 | Item 2 | | | | | | |
| 3 | Item 3 | | | | | | |
| 4 | Item 4 | | | | | | |
| 5 | Item 5 | | | | | | |
| | | | | | | | |

(3) Summary of Discussion with Contractor (if necessary)

-

-

Attachment 7

Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)
(Actual Expenditure by Construction and Equipment each)

| | | Domestic Procurement (Recipient Country) A | Foreign Procurement (Japan) B | Foreign Procurement (Third Countries) C | Total D |
|---|---|---|---|---|---|
| Construction Cost | | (A/D%) | (B/D%) | (C/D%) | |
| | Direct Construction Cost | (A/D%) | (B/D%) | (C/D%) | |
| | others | (A/D%) | (B/D%) | (C/D%) | |
| Equipment Cost | | (A/D%) | (B/D%) | (C/D%) | |
| Design and Supervision Cost | | (A/D%) | (B/D%) | (C/D%) | |
| Total | | (A/D%) | (B/D%) | (C/D%) | |

## Environmental Checklist

| Category | Items | Check items | Yes :Y<br>No : N | Environmental Social Consideration<br>(The reason for Yes/No, Evidence, Mitigation measures etc. ) |
|---|---|---|---|---|
| 1. Permission/ Explanation | (1) EIA and Environmental permission | (a) Environmental assessment report (EIA report) are prepared, or not<br>(b) EIA report is approved by government of Solomon, or not<br>(c) Approval for EIA reports is required with incidental conditions? If there are incidental conditions, will those conditions satisfy?<br>(d) Other permission is required or not? | (a):N<br>(b):N<br>(c):N/A<br>(d):N | (a) EIA report is necessary as Public Environment Report. The PER is under preparation at the August 2020, and it will be submitted in September 2020.<br>(b) It will be approval after submission.<br>(c) It is before submission.<br>(d) MID is required to take approval regarding quarry, construction and waste dumping. |
| | (2) Explanation to stakeholders | (a) The project contents and the impact including information disclosures is taken consensus among stakeholders or not?<br>(b) The recommendation from residences are including in this project design or not? | (a):Y<br>(b):Y | (a) The stakeholder meeting including related organization and major shop owner was held as for explain the summary of the project in December 2019. Also, public consultation meeting was held to residence along Kukum highway.<br>On August 2020, project team will plan to hold stakeholder meeting and public consultation after finalizing the project contents and construction area. Furthermore, Publish of PER is obligation under the process of EIA, the PER will notify in local Newspaper.<br>(b) The road design considering safety and drainage. |
| | (3) Consideration of alternative plan | (a) Alternative plan including of Environmental and Social impact of the project are considered or not? | (a):Y | (a) The project team considered view point of technical issues and environmental social impact, against the five alternative plans including non-implementation of the project. |
| 2. Pollution measure | (1) Air quality | (a) Are there any impact of air pollutants emitted from vehicles? Is it consistent with the environmental standards of the country?<br>(b) In the case of exceeding of air quality standard around target area already, the project will be deteriorated more the air quality or not. And is there any countermeasure for air quality will be taken? | (a):N<br>(b):Y | (a) No environmental standard in Solomon Islands. The impact to air quality will not be exceeded the environmental values compare with Japanese environmental standard or WHO guideline value.<br>(b) Project will take mitigation measure to PM (Particular Matter) such as spray an asphalt emulsion though the impact is estimated to not exceed environmental standard. |
| | (2) Water quality | (a) The water quality in the downstream area will be deteriorated due to soil runoff from exposed topsoil such as embankments and cuts or not?<br>(b) Will the drainage from the road surface pollute groundwater and other water sources?<br>(c) Is the drainage from the parking/service area, etc. consistent with effluent standards in Solomon Islands? In addition, will the discharge produce water bodies that do not apply to the environmental standards in Solomon Island? | (a):N<br>(b):N<br>(c):N | (a) Soil runoff are not expected.<br>(b) The drainage from road surface is not expected to groundwater because to the drainage will discharge to water channel and rivers immediately.<br>(c) No plans to construct parking etc. |
| | (3) Waste | (a) Will the waste from the parking/service area properly treated | (a):N | (a) No plans to construct parking etc. |

| Category | Items | Check items | Yes : Y<br>No : N | Environmental Social Consideration<br>(The reason for Yes/No, Evidence, Mitigation measures etc. ) |
|---|---|---|---|---|
| | | and disposed in accordance with the regulations of the Solomon Islands? | | |
| | (4) Nosie and Vibration | (a) Will noise and vibration from vehicles match the standards in Solomon Islands? | (a):Y | (a) No environmental standard regarding Noise and vibration in Solomon Islands, and significant impact is not expected. |
| 3. Natural Environment | (1) protected area | (a) Is the project area located in a protected area specified by the law in Solomon Islands or international treaty? Will the project affect the protected area? | (a):N | (a) In the project area is not including protected area. |
| | (2) Ecosystem | (a) Project area is including primeval forests, tropical natural forests, ecologically important habitats (coral reefs, mangrove swamps, tidal flats, etc.) or not?<br>(b) Project area is including habitats of valuable species that need protection under the laws in Solomon Islands and international treaties or not?<br>(c) If significant impacts on the ecosystem are concerned, will measures be taken any mitigation measure to reduce the impact on the ecosystem?<br>(d) Any measures will be taken for block the movement routes of wildlife and livestock, divide habitats, and traffic accidents of animals or not?<br>(e) Development of roads will be cause deforestation, poaching, desertification, and wetland drying due to development? Furthermore, is there a possibility that alien species (which did not previously live in the area), pests, etc. may be introduced and the ecosystem may be disturbed? Are there any countermeasures against them?<br>(f) In the case of constructing a road in an undeveloped area, will the natural environment be greatly damaged by new area development? | (a):N<br>(b):N<br>(c):N<br>(d):N<br>(e):N<br>(f):N | (a) No nature and ecosystem to be protected, in target area because the project is improvement work on existing road.<br>(b) No valuable species to be protected in target area because the project is improvement work on existing road.<br>(c) No significant impact to ecosystem<br>(d) No occur to block the movement routes of wildlife and livestock, divide habitats, in target area because the project is improvement work on existing road.<br>(e) No deforestation in target area because the project is improvement work on existing road.<br>(f) No plan to development of un-developed area because the project is improvement work on existing road. |
| | (3) Water environment | (a) Alteration of topography and new construction of structures such as tunnels adversely will affect surface water and groundwater flow or not? | (a):N | (a) It is not expected to significant impact to surface water and groundwater flow because the project is not planning to great alternation of topography or construction of tunnels. |
| | (4) Topography/ Geology | (a) There is a poor-geological location that could cause landslides or landslides on the route or not? If so, appropriate construction methods will be taken as countermeasures?<br>(b) Will earth collapse and landslides occur due to civil engineering work such as embankment and cutting? If so, appropriate countermeasures | (a):N<br>(b):Y<br>(c):N | (a) No poor-geological location<br>(b) Only small amount of embankment work is planning at the Lungga Bridge, then landslides are not expected.<br>(c) Soil outflow is not expected |

| Category | Items | Check items | Yes :Y<br>No : N | Environmental Social Consideration<br>(The reason for Yes/No, Evidence, Mitigation measures etc. ) |
|---|---|---|---|---|
| | | will be taken to prevent landslides and landslides?<br>(c) Will soil runoff occur on the embankment place, cuts place, dumping site, and quarry sites? If so, any appropriate countermeasures will be taken to prevent soil outflow? | | |
| 4. Social Environment | (1) Resettlement | (a) Involuntary resettlement occurs with the implementation of the project or not? If so, the project will be taken efforts to minimize the impact of relocation?<br>(b) Resettled residents can be given appropriate explanations regarding compensation and livelihood reconstruction measures before the resettlement or not?<br>(c) Resettlement plan will be prepared based on social survey on resettlement, compensation for the re-acquisition price, and livelihood re-construction measure after the resettlement?<br>(d) The compensation be paid before relocation?<br>(e) Compensation policy is formulated in a document?<br>(f) The resettlement plan care to vulnerable groups, such as women, children, the elderly, the poor, ethnic minorities, and indigenous peoples?<br>(g) Is it possible to obtain the agreement before resettlement from the target resettled residents?<br>(h) Is there system in place to properly implement resettlement? Are sufficient implementation capabilities and budgetary measures taken for resettlement?<br>(i) Monitoring activities is planned for impact by relocation?<br>(j) Has a grievance redress mechanism been established? | (a):Y<br>(b):N<br>(c):Y<br>(d):Y<br>(e):Y<br>(f):Y<br>(g):Y<br>(h):Y<br>(i):Y<br>(j):Y | (a) The project was designed to minimize impact of involuntary resettlement.<br>(b) The project will plan to explain the compensation based on draft-ARAP in August 2020<br>(c) Affected peoples were extracted and a detailed survey was conducted to determine the extent of the impact.<br>(d) Payment is made within 3 months after application in accordance with Solomon Islands regulations<br>(e) Summarized on Safeguard Manual by MID<br>(f) The measure will include in ARAP<br>(g) The public consultation in August 2020 is planned to make an agreement regarding resettlement and compensation<br>(h) MID has appropriate system and enough budget measures are taken.<br>(i) MID will conduct monitoring<br>(j) Grievance redress mechanism has been regulated in Safeguard manual |
| | (2) Livelihood | (a) In case of road is constructed by new development, will there be any impact on the existing transportation and the lives of the residents around existing road? Also, will there be occur major changes in land use, livelihoods and unemployment? The design/plan is considering the mitigation of these effects or not?<br>(b) The project will adversely affect the lives of other residents? Will impact reduction consideration be made as necessary? | (a):N<br>(b):N<br>(c):N<br>(d):N<br>(e):N<br>(f):N | (a) The project is improvement work of existing road, it is not new development.<br>(b) Although the project is improvement work of existing road, compensation is required based on ARAP to APs such as street vendors<br>(c) The risk of HIV is low in Solomon Islands<br>(d) Significant impact to traffic is not expected<br>(e) Significant impact to movement on residents is not expected<br>(f) Impact is not expected on sunlight obstruction or radio interference |

| Category | Items | Check items | Yes :Y<br>No : N | Environmental Social Consideration<br>(The reason for Yes/No, Evidence, Mitigation measures etc. ) |
|---|---|---|---|---|
| | | (c) Is there a risk of illness (including infectious diseases such as HIV) due to population influx from other areas? Will appropriate public health considerations be made as necessary?<br>(d) Will the project adversely affect road traffic in the surrounding area (increase of congestion and traffic accidents etc.)?<br>(e) The target roads will prevent the movement of residents?<br>(f) Does the road structure (overpass, etc.) cause sunlight obstruction or radio interference? | | |
| | (3) Cultural heritage | (a) There are a possibility that the project will damage archeologically, historically, culturally, and religiously valuable heritage sites and historical sites or not? Also, are measures taken under the law on Solomon Islands taken into consideration? | (a):N/A | (a) The impact to cultural/ historical valuable etc. are not expected |
| | (4) Landscape | (a) In the case of there is a landscape to be requires special consideration, it will be adversely affected or not? If there is impact, it will necessary measures be taken to the impact? | (a):N/A | (a) No landscape to be protected especially |
| | (5) Ethnic minority, indigenous people | (a) Considering to reducing the impact on the ethnic minorities , indigenous people's culture and lifestyle?<br>(b) The rights on land and resources for minority and indigenous people are respected? | (a):N/A<br>(b):Y | (a) No ethnic minorities in the target area<br>(b) Regulated the Customary land |
| | (6) Working environment | (a) In the project, law/ regulation regarding work environment will compliant?<br>(b) Are the safety considerations for the personnel involved in the project, such as the installation of safety equipment related to the prevention of occupational accidents, and the management of hazardous substances are considered?<br>(c) Are software measures planned and implemented for people involved in the project, such as the formulation of a safety and health plan and safety training for workers (including traffic safety and public health)?<br>(d) Will appropriate measures be taken to prevent security personnel involved in the project from violating the safety of project personnel and local residents? | (a):Y<br>(b):Y<br>(c):Y<br>(d):Y | (a) Legal compliance will be included in the contract with contractor<br>(b) Safety consideration is carried out under the responsibility of the contractor. Use of harmful substances is not expected<br>(c) Contractors will regularly provide workers with safety education including traffic safety, public health, and work in hot environments.<br>(d) Education and training for security staff is also included in (c) and supervised by the contractor. |
| 5. Others | (1) Impact on construction | (a) There are mitigation measures prepared for pollution (noise, | (a):Y<br>(b):N/A | (a) Asphalt emulsion will be sprayed as a mitigation measure against dust. |

| Category | Items | Check items | Yes :Y<br>No : N | Environmental Social Consideration<br>(The reason for Yes/No, Evidence, Mitigation measures etc. ) |
|---|---|---|---|---|
| | | vibration, muddy water, dust, exhaust gas, waste, etc.) during construction?<br>(b) Construction will negatively affect the natural environment (ecosystem)? Are mitigation measures prepared for the impacts?<br>(c) Construction will negatively affect the social environment? Are mitigation measures prepared for the impacts? | (c):N | (b) The impact to natural environment (ecosystem) is not expected.<br>(c) The impact to social environment is not expected. |
| | (2) Monitoring | (a) Monitoring activities will plan/implement by contractor for items may have an impact within the above environmental items?<br>(b) How decide the items, methods, frequencies, etc. of monitoring plan?<br>(c) Contractor's monitoring system (organization, personnel, equipment, budget, etc. and their continuity) will established?<br>(d) The method and frequency of reporting from the developer, contractor to the competent authorities is regulated? | (a):Y<br>(b):Y<br>(c):Y<br>(d):N | (a) Monitoring activities proposed in this report will be implement<br>(b) Selection of parameters and measurement frequency are set according to the degree of environmental impact<br>(c) It will be described in contract<br>(d) It will be described in PER |
| 6. Note | Referring of other environmental check list | (a) If necessary, also add the relevant check items from the forestry checklist and evaluate (for cases involving large-scale logging)<br>(b) If necessary, add the relevant check items from the checklist for transmission lines/distribution (for cases involving the construction of transmission/transformation/distribution facilities). | (a):N<br>(b):Y | (a) The project is not including large-scale logging<br>(b) The project is not expected to transformation facilities, but it is necessary relocation of communication line in advance |
| | Note on environmental check list | (a) If necessary, check the impact on transboundary or global environmental issues. (When factors related to cross-border treatment of waste, acid rain, ozone depletion, global warming, etc. are considered) | (a):N | (a) No cross boundary environmental impact is expected |

## Environmental Management Plan

| Category | No. | Impact item | Mitigation Measures | Cost (US$) |
|---|---|---|---|---|
| Pollution | 1 | Air pollution | **Construction Phase:**<br>▪ Contractor shall conduct countermeasure for dust such as splaying asphalt emulsion and watering.<br>▪ Contractor shall put in effort to reduce exhaust gases from construction machinery with appropriate maintenance and using to electric machinery.<br>▪ Contractor shall put in effort to reduce dust by maintaining clean road and controlling velocity of construction machinery.<br>▪ Contractor shall be explaining the construction plan to residence living around the site and supervising consultant in advance.<br>▪ Supervising consultant shall be reviewing the construction method with contractor referring to residence's opinions, if need. | **Construction Phase:**<br>The cost shall be including to construction contract |
| | 2 | Water pollution | **Construction Phase:**<br>· Construction work near river shall be conducted in the dry season as possible.<br>· Contractor shall cover ground by sheet etc. at the heavy raining.<br>· Contractor shall maintain proper construction machinery to avoid oil and fuel leakage.<br>· Contractor shall manage the oil and fuel properly.<br>· Cleaning machinery in river is prohibited.<br>· Supervising consultant shall consider proper drainage plan in advance.<br>· Contractor shall be plant grasses and flowers on road slopes and pit in order to prevent soil runoff.<br>· Contractor and supervising consultant shall be monitoring the occurring condition of dirty water and review the construction method, if needed. | **Construction Phase:**<br>The cost shall be included in the construction contract |
| | 3 | Waste | **Construction Phase:**<br>· Contractor shall conduct proper waste management<br>· Contractor shall prepare toilet and waste management space in construction site<br>· Contractor shall collect separately solid waste materials<br>· Contractor shall consider reuse and recycle of construction waste<br>· Contractor and supervising consultant shall be monitoring the waste treatment method and improve the treatment method, if needed. | **Construction Phase:**<br>The cost shall be included in the construction contract |
| | 4 | Noise and Vibration | **Construction Phase:**<br>· Contractor shall make construction plan to avoid concentrating many construction machineries for long near residential area<br>· Contractor shall maintain proper condition of the construction machineries to avoid abnormal noise<br>· Construction work in night is prohibited near residential area<br>· Contractor shall select the low noise machinery as possible<br>· Contractor and supervising consultant shall explain construction plan to residence around the site in advance<br>· Contractor and supervising consultant shall be monitoring the noise, vibration with residence's opinion and reviewing the construction method, if needed. | **Construction Phase:**<br>The cost shall be included in the construction contract |

| Category | No. | Impact item | Mitigation Measures | Cost (US$) |
|---|---|---|---|---|
| Natural environment | 1 | Ecosystem | **Pre-Construction Phase, Construction Phase:**<br>· ·Developer (MID) are completed felling before construction<br>· ·Developer (MID) are completed planting of same number of trees. | **Pre-Construction Phase:**<br>Estimated cost of cut of tree<br>Around 70,000 SBD |
| Social Environment | 1 | Resettlement/ Land Acquisition | **Pre-Construction Phase**<br>· Abbreviated resettlement action plan shall be prepared and implanted properly<br>**Construction Phase**<br>· The detailed design consultant will provide a temporary land lease plan with the construction schedule to the owner and related parties, and the MID will take out the borrowing according to the construction schedule. | **Pre-Construction Phase**<br>Land acquisition for construction office yard<br>Around 500,000 SBD<br><br>Resettlement cost<br>6,497,933 SBD |
| | 2 | Impoverished/Poor people | **Construction Phase:**<br>· Disclose information on construction plans and off-limits areas, etc. to ensure safety for street vendors that belong to the poverty zone<br>· Actively employ the poor who need relocation | The cost shall be included in the construction contract |
| | 3 | Local economies, such as employment, livelihood, etc. | **Pre-Construction Phase**<br>· Abbreviated resettlement action plan shall be prepared and implanted properly<br>**Construction Phase:**<br>· Contractor shall conduct fair employment when hiring local residents as a simple worker for construction work.<br>· Contractor and supervising consultant shall explain construction plan to residence around the site in advance | The cost shall be included in the ARAP and construction cost |
| | 4 | Land use and utilization of local resources | **Pre-Construction Phase**<br>· Abbreviated resettlement action plan shall be prepared and implanted properly | The cost shall be included in the ARAP and construction cost |
| | 5 | Existing social infrastructures and services | **Pre-Construction Phase**<br>· Consult with the owners of existing infrastructure facilities such as telephone poles, water pipes, and optical cables to implement with develop relocation and protection plans.<br>**Construction Phase:**<br>· Contractor shall conduct traffic control to avoid traffic jam<br>· Consultants for detail design shall consider temporary land use in construction phase by sharing the construction plan among Stakeholders and related organizations in early stage | **Pre-Construction Phase**<br>Relocation cost for infrastructures by MID<br>Around 13,720,000 SBD<br><br>**Construction Phase:**<br>The cost is included in the construction contract or miscellaneous expenses |
| | 6 | Misdistribution of benefits and damages | **Pre-Construction Phase**<br>· Abbreviated resettlement action plan shall be prepared and implanted properly<br>**Operation Phase**<br>· MID and ECD shall be monitoring living condition of affected people and shall take countermeasure, if needed | The cost is included in the resettlement budget |
| | 7 | Local conflicts of interest | **Pre-Construction Phase**<br>· Abbreviated resettlement action plan shall be prepared and implanted properly<br>**Operation Phase**<br>· MID and ECD shall be monitoring living condition of affected people and shall take countermeasure, if needed | The cost is included in the resettlement budget |

| Category | No. | Impact item | Mitigation Measures | Cost (US$) |
|---|---|---|---|---|
| | 8 | Landscape | **Construction Phase:**<br>· Supervising consultant and contractor shall consider minimizing cutting of trees under the construction plan.<br>· Contractor shall plant green grasses along the roadside and slope on road. | The cost is included in the construction contract |
| | 9 | Working conditions (including occupational safety) | **Construction Phase:**<br>· Supervising consultant and contractor shall conduct preventive countermeasures on accident before construction.<br>· Contractor shall sprinkle water as a countermeasure for dust<br>· Contractor shall prepare toilet and dumping site in construction site.<br>· The contractor shall take measures against heat stroke of workers, such as taking appropriate breaks.<br>· Contractors take measures against malaria, such as preparation of mosquito spray. | The cost is included in the construction contract |
| Others | 1 | Accidents | Construction Phase:<br>· Supervising consultant and contractor shall conduct preventive countermeasures on accident before construction.<br>· Contractor shall prepare traffic control and setting of traffic signboard for prevention accident | The cost is included in the construction contract |
| | 2 | UXO | Pre-Construction Phase:<br>· Conduct UXO survey on un-developed area | Pre-Construction Phase:<br>UXO survey (MID)<br>Around 800,000 SBD |

## Environmental Monitoring Plan

| Category | Environmental Item | Monitoring Item/ Parameter | Responsible Person and Organization | Location | Method | Frequency |
|---|---|---|---|---|---|---|
| Pollution | Air pollution | **Construction Phase:**<br>・ PM10、PM2.5 | Contractor | Construction site | Visual observation and interview of pedestrians<br><br>Instrumental analysis | Visual observation: Daily<br>Interview: Monthly or as needed<br>Instrumental analysis:<br>Pre-Construction Phase<br>1 time<br>Construction Phase: Daily<br>2 times per day during construction |
| | Water pollution | **Construction Phase:**<br>・ Turbid water and drainage conditions | Contractor | Construction site | Visual observation | During rainfall |
| | Waste | **Construction Phase:**<br>・ Disposal methods of construction and general waste | Contractor | Construction site and disposal site | Visual observation and meeting with contractor | Visual observation: Daily<br>Meeting: Monthly or as needed |
| | Noise and vibration | **Construction Phase:**<br>・ Noise level | Contractor | Construction site | Interview to local residents and pedestrians<br><br>Instrumental measurement | Interview: Monthly or as needed<br>Instrumental measurement:<br>Pre-Construction Phase<br>1 time<br>Construction Phase: Daily<br>2 times per day during construction |
| Natural environment | Ecosystem | **Pre-Construction Phase:**<br>・Confirmation of planting | Supervising Consultant | Construction area | Hearing to MID and survey | 1 time |
| Social Environment | Resettlement/ Land Acquisition | **Pre-Construction Phase:**<br>・ Progress of resettlement action plan | MID | Construction area | Site survey and meeting with PAPs | Monthly or as needed |
| | | **Operation Phase:**<br>Hearing from owner that received compensation | MID | Construction site | Hearing and Meeting | Each half year, 2 years |
| | Poor people | **Construction Phase:**<br>・ Activity conditions of street venders | Supervising Consultant | Construction site, especially KG market | Visual observation | Daily |
| | Local economies, such as employment, livelihood, etc. | **Pre-Construction Phase:**<br>・ Progress of resettlement action plan | MID | Construction site | Site survey and meeting with PAPs | Monthly or as needed |

| Category | Environmental Item | Monitoring Item/ Parameter | Responsible Person and Organization | Location | Method | Frequency |
|---|---|---|---|---|---|---|
| | | **Construction Phase:**<br>· Business activity around construction site<br>· Employment situation of unskilled labor | Supervising Consultant/ Contractor | Construction site | Site survey and interview of local people and unskilled labors | Monthly or as needed |
| | Land use and utilization of local resources | **Pre-Construction Phase:**<br>· Progress of resettlement action plan | MID | Construction site | Site survey and meeting with PAP | Monthly or as needed |
| | | **Operation Phase:**<br>· Condition of land use<br>· Condition of business activity | MID | Construction site | Site survey and interview of local people | Monthly or as needed for 2 years after completion |
| | Existing social infrastructures and services | **Pre-Construction Phase:**<br>· Relocation status of existing infrastructure facilities | MID | Construction site | Site survey and meeting with facility organization | Monthly or as needed |
| | | **Construction Phase:**<br>· Condition of traffic congestion around construction site | Supervising Consultant/ Contractor | Construction site | Visual observation | Daily |
| | | **Operation Phase:**<br>· Crossing conditions of pedestrians | MID | Construction site, especially King George VI National High School | Site survey and interview of local people | Monthly or as needed for 2 years after completion |
| | Misdistribution of benefits and damages | **Pre-Construction Phase:**<br>· Progress of resettlement action plan | MID | Construction site | Site survey and meeting with PAPs | Monthly or as needed |
| | | **Operation Phase:**<br>· Living situations of Project Affected Persons (PAPs) | MID | Construction site, especially King George VI National High School | Site survey and meeting with PAPs | Monthly or as needed for 2 years after relocation |
| | Landscape | **Construction Phase:**<br>· Status of tree felling<br>· Status of Planting works | Contractor | Construction site | Visual observation and meeting with contractor | Daily |

| Category | Environmental Item | Monitoring Item/ Parameter | Responsible Person and Organization | Location | Method | Frequency |
|---|---|---|---|---|---|---|
| | Working conditions (including occupational safety) | **Construction Phase:**<br>· Workplace situations<br>· Implementation status of accident prevention measures | Contractor | Construction site | Visual observation and meeting with contractor | Daily |
| Other | Accidents | **Construction Phase:**<br>· Implementation status of accident prevention measures | Contractor | Construction site | Visual observation and meeting with contractor | Daily |

SOLOMON ISLANDS GOVERNMENT
MINISTRY OF INFRASTRUCTURE DEVELOPMENT (MID)
CENTRAL PORJECT IMPLEMENTATION UNIT

# PROJECT FOR UPGRADING OF THE KUKUM HIGHWAY (PHASE 2)

# ABBREVIATED RESETTLEMENT ACTION PLAN (ARAP) REPORT

Prepared by CTI International Cooperation Ltd for JICA & MID

# Table of Contents

# ABBREVIATION

| Abbreviation | Original |
|---|---|
| AGO | Attorney General's Office |
| AH | Affected Household |
| APs | Affected Persons |
| CAC | Community Advisory Committee |
| ARAP | Abbreviated Resettlement Action Plan |
| CSS | Census and Socioeconomic Survey |
| CLAC | Customary Land Appeal Court |
| COL | Commissioner of Lands |
| CPIU | Central Project Implementation Unit |
| EA | Executing Agency |
| FTE | Fixed Term Estate |
| GRC | Grievance Redress Committee |
| GRM | Grievance Redress Mechanism |
| IA | Implementing Agency |
| IOL | Inventory of Losses |
| JICA | Japan International Cooperation Agency |
| LAO | Land Acquisition Officer |
| LAR | Land Acquisition and Resettlement |
| LARP | Land Acquisition and Resettlement Plan |
| LTA | Land and Titles Act |
| MID | Ministry of Infrastructure Development |
| MLHS | Ministry of Lands, Housing and Survey |
| MOA | Memorandum of Agreement |
| MOU | Memorandum of Understanding |
| PAFs | Project Affected Families |
| PAPs | Project Affected Persons |
| RAP | Resettlement Action Plan |
| RP | Resettlement Plan |
| RoW | Right of Way |
| SIG | Solomon Islands Government |
| SPM | Safeguards Procedures Manual |
| SU | Safeguards Unit |

# 1. INTRODUCTION

## 1.1 Project Background

The Government of Solomon Islands with assistance from the Japanese International Cooperation Agency (JICA), has undertaken the Project for Upgrading of the Kukum Highway, Phase 2. The project is aimed at Upgrading the road from the Ministry of Fisheries and Marine Resources (MFMR) to Lunga Bridge and from Lunga Bridge to Henderson Airport. The Ministry of Infrastructure Development (MID) as the executing agency (EA) is responsible to implement the Project through its existing Central Project Implementation Unit (CPIU) the implementing agency (IA), supported by CTI Engineering International Engineering Co. Ltd (CTII), of Japan as Consultant for the Preparatory Survey.

The MID will pay for compensations to affected households and families for lost non – land assets and through the Ministry of Lands, Housing and Survey (MLHS) will conduct land acquisition of the ROW for the road upgrade. An Official Development Assistance (ODA) loan agreement was signed by the Solomon Islands Government (SIG) and JICA.

As part of the JICA requirements when implementing an ODA project, appropriate environmental and social considerations to assess the negative and positive impact and mitigate the negative impacts for the site, based on the "JICA Guidelines for Environmental and Social Considerations (April 2010) and the Environmental Act 1998 and The Environmental regulation 2008 in Solomon Islands shall be undertaken.

The Project's preparatory survey was conducted from November to December 2019. Under the Preparatory Survey, a Resettlement Action Plan (RAP) for the project was prepared in accordance with the JICA Guidelines for the Environmental and Social Considerations.

As of June 2020, 36 No. of land parcels will be affected, 84 No of houses or structures and 102 number of fruit trees. From this, it was noted that the total No. of affected families is 103 including 156 other road side vendors.

## 1.2 Project Description

The Scope of Works under the Project comprises of the upgrade to the existing carriage way or road, pedestrian crossings, culverts, drainage, bus bays and other road necessities. The road traverse from the Honiara city and to outside of the main city to Guadalcanal Provincial jurisdiction and it is part of the main and only Highway on the island. It is approximately 8km from where the first phase ends. Which is at the MFMR head office to Lunga Bridge and from Lunga Bridge to the Henderson area.

The summary of the scope of works include:

- 4-lane road overlay of 2.3 km from the Ministry of Fisheries
- 4-lane road improvement of 2.0 km from the 2.3 km point to the Lunnga Bridge
- 2-lane road improvement of 2.0 km from the Lunnga Bridge to Honiara Airport
- Ancillaries (road furniture)
  - Drainage, Bus station, Street Lights, Traffic signboards and Pavement markings
- Proposal
  - Assessment of the Lunga Bridge and the repair plan.

**Figure 1: Sub-project Road**

## 1.3 Need for Land Acquisition and Resettlement

This ARAP defines the practical procedures by which the Implementing Agency (IA) will address the potential resettlement impacts under the Project, in line with the applicable policy and legal framework of the Government, and ensuring that the principles of the JICA Guidelines safeguard requirements on involuntary resettlement under the JICA Environmental and Social Safeguards Guidelines are complied with.

Land acquisition and resettlement is needed in order to achieve the requirements of the project technical design standard and this will trigger some resettlement impact to land and non - land assets within the project scope or area.

## 1.4 Identification of RAP Impacts

The requirements of achieving the technical design standard of the Project, will trigger some resettlement impact under the road upgrade. In order to identify the magnitude of the resettlement impact and to generate a socioeconomic baseline of the households likely to be affected by the project interventions, followed by preparation of a Resettlement Action Plan (RAP) for the Project, a combined census and socioeconomic survey was carried out between 18th November and 30th November 2019. A census survey will be conducted to determine the number of affected persons (PAs) when the design will be available to show the extent of the project. This will detail the number of persons that will be affected during the upgrade of the road. However, the effects on the affected households will be small since there will be no affected household (AH) to lose any part of its dwelling land, and no house to be demolished and no household to be physically displaced from his/her existing dwelling, and also no household (HH) is likely to be severely affected as mandated by the JICA guidelines (i.e. losing more than 10% of its income). The Project, therefore, can be classified as Category B or Tier 3 as per MID SPM.

## 1.5 Objective of the ARAP

The primary objectives of the RAP are to: (i) identify the project impact on the Project Affected Families (PAFs) in terms of loss of assets, and impact on livelihood and income; (ii) outline measures to mitigate the adverse impact; (iii) provide an estimate for budgetary allocation for compensation of loss of assets and resettlement benefits; and (iv) provide procedure for monitoring of resettlement implementation.

The impacts are documented in the ARAP corresponding to the preliminary designs of the road as of 2020. If situation demands, prior to commencement of actual implementation of physical works, this RAP will be updated based on any significant changes to the project scope or design. Or, if any additional or new impacts are exposed during the course of implementing the physical works, required Addendum(s) to the RAP will be prepared.

# 2. SCOPE OF LAND ACQUISITION AND RESETTLEMENT

## 2.1 Strategy of Resettlement

The Project has adopted the strategy to implement the upgrading works under two initiatives. Therefore, the scope of works for the Preparatory Survey has prompted the requirement of preparing a RAP. That is the first section of works will be from the MFMR Office to Lunga Bridge (Western approach), and from Lunga Bridge (Eastern Approach) to Henderson. This is subdivided according to the geological boundaries of the main Honiara City which ends at the Lunga Area and Guadalcanal Province from the same location further east.

This Resettlement Action Plan was prepared through extensive discussions with the assistance of the JICA study team. The RAP comprises of the following sections:

I. The entitlement package reflecting the resettlement site plan;
II. Implementation Schedule;
III. Institutional Arrangement;
IV. Records of Public Consultation;
V. Socio-economic Analysis of the Project Affected Families and Households.

In response to the project priority, preparation of the RP has started after the Preparatory Survey to address the adverse resettlement impacts along the project road and as a measure to safeguard the interest of the PAFs and the communities. MID supported by the Social Safeguards Specialist of the Consultant has prepared the RAP in compliance with the regulations under the Land and Titles Act of Solomon Islands Government that governs

the compulsory acquisition of land and the JICA Environmental and Social Guidelines adhering to the principles and procedures outlined in the guideline adopted by the Government for the Project.

As mentioned earlier, the Project for Upgrading of the Kukum Highway have been planned to be carried out within the available land owned by the government and utilizing the footprint of the existing structures. However, in the course of the Census and Socioeconomic Survey (CSS), it was found that the project will inevitably have some impact on private as well as communal assets, including land, structure and tree, etc. The project will acquire this land and other assets by compensating the owners for loss of their land and other properties as well as non-titled owners of the affected property, including their loss of income and employment. However, careful attention will be paid during implementation to make sure that the improvement works does not cause any major impact involving complete demolishing of any house, physical displacement of any household from his/her existing dwelling, or disruption of income and livelihoods.

## 2.2 Census Survey of Affected Families

This is to reiterate that physical implementation of the Project will have unavoidable impact of loss of assets such as land, trees and structure. To ascertain the magnitude of the impacts, a census combined with socioeconomic survey was carried out between November and December 2019 to make an inventory of losses (IOL), and to develop a baseline of socioeconomic status of the households likely to suffer from project intervention. A structured questionnaire (Annex 1) was used to collect details of the APs. Immediate next to the completion of field survey, the MID with assistance from the consultants submitted a request letter to the Permanent Secretary of MID, Solomon Islands to establish 3rd December 2019 as the Cut-off Date after which eligibility for LAR compensation will not be considered for the project areas.

## 2.3 Summary of Impacts

The initial survey revealed that physical implementation of the project will have impact on individual and households or families, private land title holders, organizations, business houses, schools and even on government lands. The survey revealed three major types of impact from

the project – on land, on structure and on trees. A detailed survey was done to record the total number of PAPs that will be affected. The detailed survey had recorded the number of PAPs that own lands and structures that will be affected due to the project. In addition to these, there was also recording of the number of trees and plants of different nature that will also be affected.

## 2.4 Impacts of Land

As mentioned before, there will be impact on 3890.34m$^2$ of land owned by 4 different types of entities. Among these, 16 entities are individuals, 5 land parcels are owned by the SIG, 7 are business or organizations and 2 are owned by religious organizations. Around 32.1% of the lands to be affected are owned by private titleholders, while 21.7% are owned by the government, 5.9% by religious organizations and 40% by social organizations or businesses. Table 1 and Table 2 show the scale of impact on land and percentage of impact. Also the location of the affected lands are shown in Appendix 8 of this report.

**Table 1: Percentage (%) of impact by each entity**

| Affected Entities | Affected Area (m2) | Ratio (%) of Impacted Entities |
|---|---|---|
| SIG | 845.4 | 21.7 |
| Religious | 229.3 | 5.9 |
| Business/ Organizations | 1558.0 | 40.0 |
| Individual/ Private | 1249.7 | 32.1 |
| Total | 3890.34 | 100 |

**Table 2: Percentage (%) of Impact on land areas**

| Affected Entities | Total Land Affected Area (m2) | Total Land Area (m2) | Percentage (%) of Impact |
|---|---|---|---|
| COL/SIG | 845.4 | 2,847,981.00 | 0.03 |
| Religious | 229.3 | 2,001,527.00 | 0.01 |
| Business/ Organizations | 1558.0 | 132,219.00 | 1.18 |
| Individual/ Private | 1249.7 | 69,157.00 | 1.81 |
| Total | 3890.34 | 5,050,884.00 | 3.03 |

Among the lands to be affected, there are no cultivated lands or lands used for purposes like agricultural activities or tree bearing lands. 100% of the lands are residential, developed for business activities and are fellow lands. As the lands have different usage, including residential, industrial or commercial use there are some other stakeholders associated with the lands to be affected.

## 2.5 Impacts on Structures

From the detailed measurement survey conducted it was found that there will be impacts on 88 structures or buildings used for marketing and as canteens or small shops. These are owned by 82 individuals or families with a total of 1371.05m$^2$. The buildings are all used for marketing or selling goods and not as a permanent residence by the owners. All the structures are single story except for one at the Lunga Market area. In terms of the magnitude of impact, it was estimated that the impact will be full, i.e. the entire structure (100%) will be affected. Most of the market huts are permanent, while the others are semi-permanent structures.

It was also recorded that 2393.1m$^2$ of fences and 382.04m$^2$ of car parks belonging to a businesses or organization, individual households and the government will also be affected. The summary of affected structures is as shown in Table 3 and Table 4. The detail of affected structures and facilities are as shown in Appendix 6 and the map showing the location of these structures are shown in Appendix 9 and 10.

**Table 3: Affected buildings**

| | Canteen | Market | Residential |
|---|---|---|---|

| | No. | Area (m2) | No. | Area (m2) | No. | Area (m2) |
|---|---|---|---|---|---|---|
| SIG | | | | | | |
| Private/Individual | 22 | 570.5 | 65 | 764.6 | 1 | 36 |
| Business/ Organizations | | | | | | |
| Church | | | | | | |
| Total | 20 | 570.5 | 65 | 764.6 | 1 | 36 |

**Table 4: Affected Fence and Carpark**

| | Fence | | Carpark | |
|---|---|---|---|---|
| | No. of Entities | Area (m2) | No. | Area (m2) |
| SIG | 1 | 263.8 | 0 | 0 |
| Private/Individual | 13 | 948.4 | 5 | 310.8 |
| Business/ Organizations | 10 | 812.6 | 2 | 34.5 |
| Church | 2 | 368.4 | 1 | 36.7 |
| Total | 26 | 2393.1 | 8 | 382.04 |

## 2.6 Impacts on Trees and Plants

Substantial number of trees will also be affected for improvement of the road, estimated at about 102 No. of trees. It was recorded that the impact will only be on banana trees, a mango tree, a bread fruit tree and a coconut tree, and no other trees with commercial importance.

However, as identified during the survey there are 198 trees identified for removal which also includes other trees not commercially important and are within the legal road corridor. The location of impacts on trees can be seen in Appendix 11.

**Table 5: Affected Trees of Commercial Value**

| Affected Entities | No. of Entities | No. Of Banana Trees | No. Of Mango Trees | No. Of Bread Fruit Trees | No. Of Coconut Trees |
|---|---|---|---|---|---|
| COL/SIG | | | | | |
| Private/Individual | 3 | 72 | 1 | 1 | 1 |
| Business/ Organizations | 1 | 27 | | | |
| Church | | | | | |
| Total | 4 | 99 | 1 | 1 | 1 |

**Table 6: Other Affected trees in road side and Median strip**

| Diameter of Tree | No, |
|---|---|
| 15~30cm | 13 |
| 30~50cm | 54 |
| 50cm~1m | 17 |
| More than 1m | 12 |
| Total | 96 |

## 2.7 Other Identified Impacts

Other identified impacts include impacts on other road side vendors along this specific road section. It was noted that other vendors has mobile or non - permanent structures for marketing such as tables and umbrellas which can be carried to areas each individual has identified or preferred for marketing. From the survey it was recorded that there are more than 156 individuals using tables or temporary mobile structures for marketing, this is as shown in Appendix 7.

# 3. SOCIO – ECONOMIC PROFILE OF THE AFFECTED HOUSEHOLDS

## 3.1 Socio – Economic Survey

A socio-economic baseline survey was conducted in November 2019 using a structured questionnaire. The survey covers information of all households along the project road.

## 3.2 Methodology

The method of survey is individual household survey by questionnaire interview by the enumerators and household representatives. Specifically, this should be done with the household heads but due to availability of households heads this was done with available persons in the houses during the time of the survey.

## 3.3 Characteristics of the Household Heads

### 3.3.1 Household Heads

From the survey undertaken it was shown that 83.2% of the households are headed by males while only 16.8% are headed by females.

**Percentage (%) of Household Head by Gender**

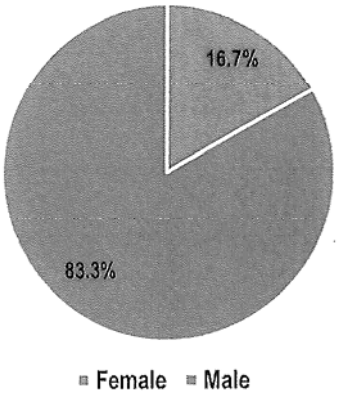



**Figure 2: Gender of Household Heads**

### 3.3.2 Age of Household Heads

The table below shows that the average age of household heads is 41 years old while the oldest household head is 87 years old and the youngest household head is 20 years old.

**Table 7: Average, Maximum and Minimum Age of household heads**

| Items | Analysis of ages on Household heads |
|---|---|
| Average Age | 41 |
| Maximum Age | 87 |
| Minimum Age | 20 |

### 3.3.3 Education attainment of household heads

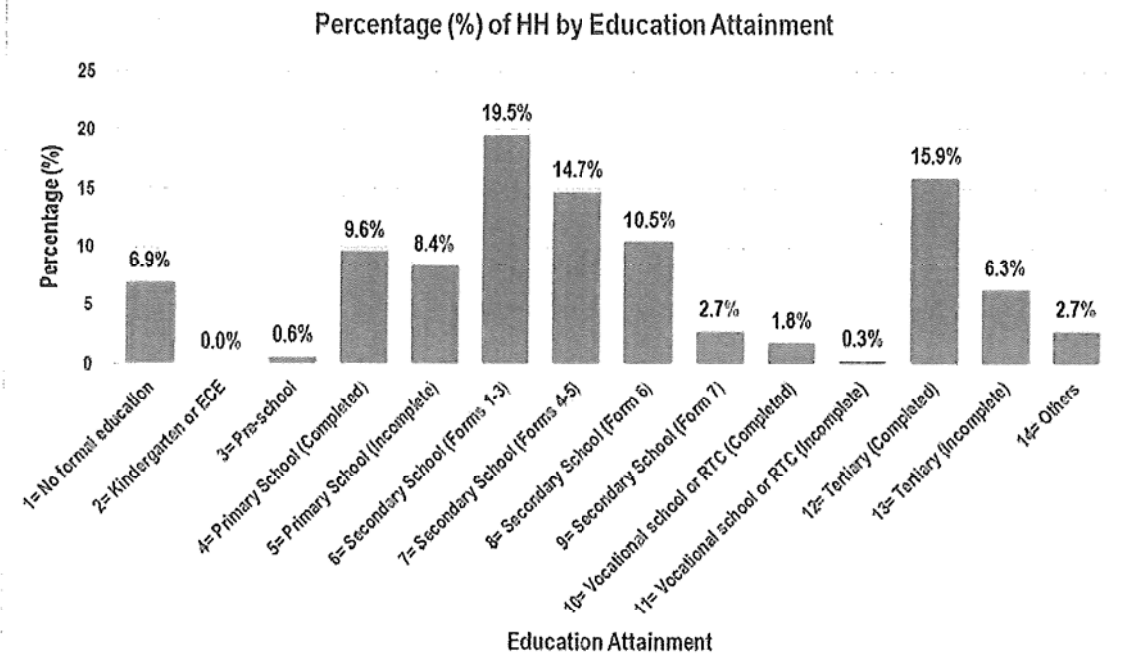



**Figure 3: Percentage (%) of Household heads by Education Attainment**

The graph above shows majority of the household heads, 19.5% have completed secondary school (Forms 1-3), 15.9% completed Tertiary education, and1.8% completed vocational training.

### 3.3.4 Primary Occupation of Household Heads

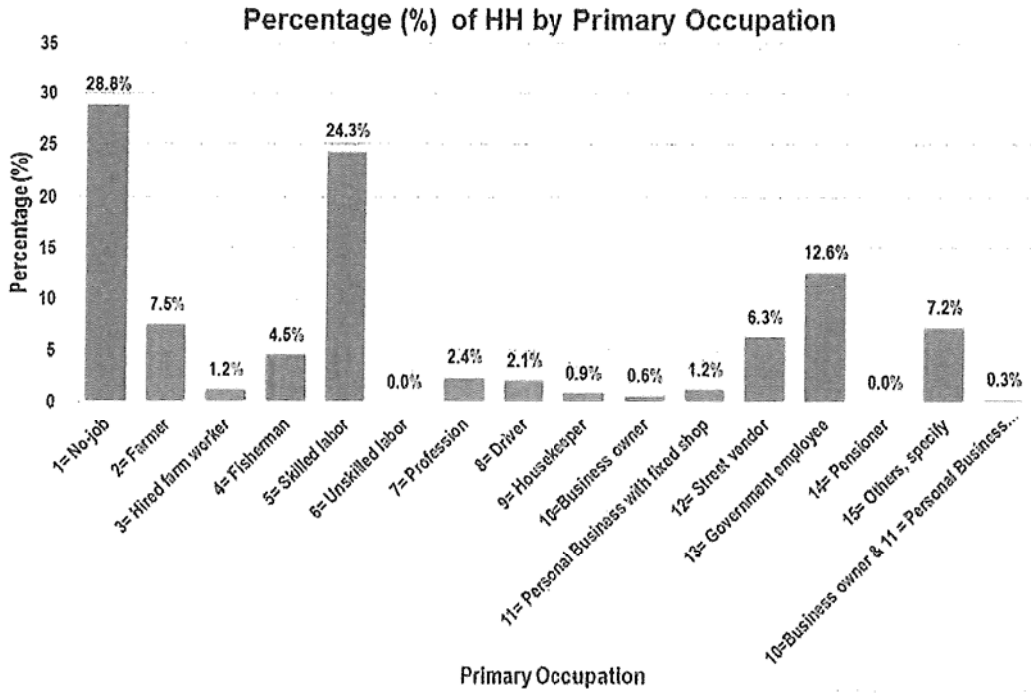



**Figure 4: Percentage (%) of Household heads by Primary occupation**

The graph above shows that most of the household heads, 28.8% of the household heads, have no job or primary occupation, 24.3% are skilled labors, 12.6% are government employees and the least of 0.3% have personal business with fixed shops.

## 3.4 Characteristics of Household Members

### 3.4.1 Age and Gender of Household Members

This table shows that the highest number of household members is between the ages of 25 to 59 years old of 39.7%. While the least members of households are over the age of 60 of 3.3%.

**Table 8: Age of Household Members**

| Age Group | No. | Percentage (%) |
|---|---|---|
| 0-14 | 521 | 28.5 |
| 15-24 | 522 | 28.51 |
| 25-59 | 727 | 39.7 |
| 60+ | 61 | 3.3 |
| **Total** | **1831** | **100** |

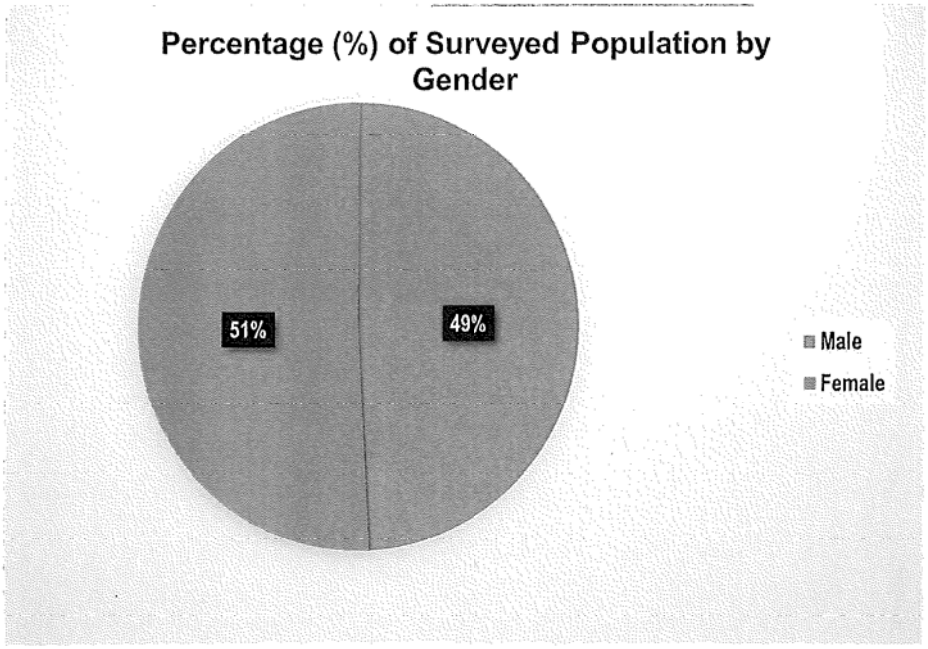



**Figure 5: Percentage of males and females**

The chart above shows that majority of the affected population are females of 51% while only 49% males.

### 3.4.2 Household Size

**Table 9: Average household size**

| Average Household Size | Average No. of Males | Average No. of Females |
|---|---|---|
| 5.6 | 2.8 | 2.9 |

The above table shows that the average size of households for residences is 5.6 persons per household and the average number of males per household is 2.8 while female is 2.9 persons per household. Please add analysis results, what important information can obtain for assess and RAP. May be, this chapter 3.4 are same condition, after these analyze, what we should care or how manage RAP, you should mention some policy.

### 3.4.3 Education Attainment

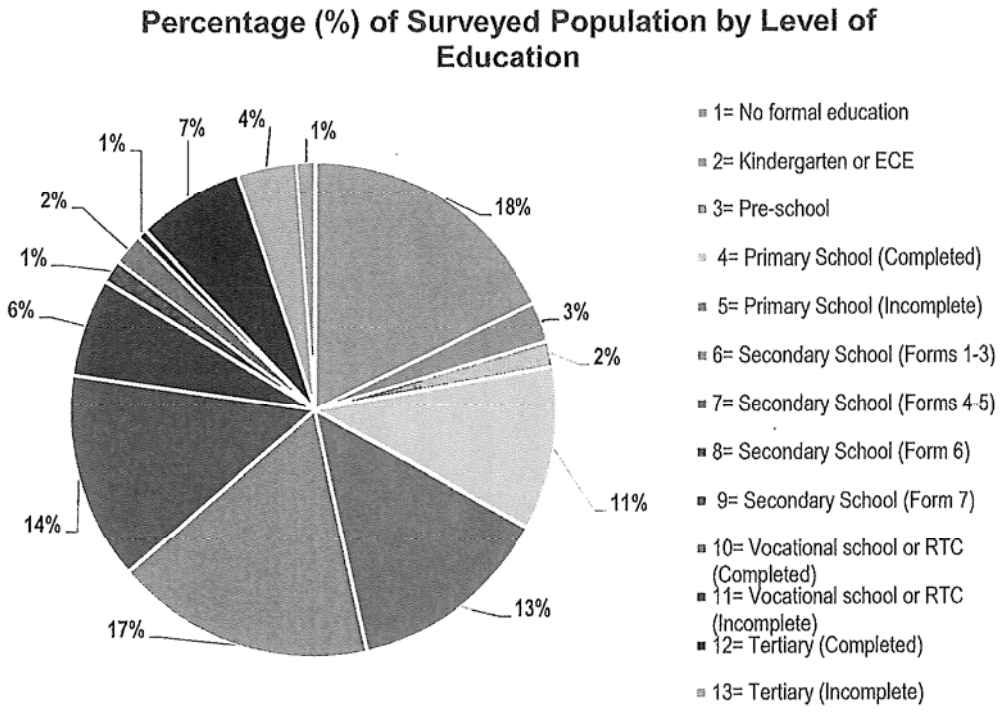



**Figure 6: Education attainment of project affected families**

The chart above shows that majority of the family members, 18%, do not have formal education, 17% completed Secondary School (Form 1-3), 14% completed Secondary School (Form 4-5) and only 7% completed tertiary level education.

### 3.4.4 Marital or Civil Status of Household Members

The graph below shows the marital status of household members over 18 years of age. This shows that 43.2% are single, 39.7% are married, 2.6% are separated, 1.3% are widowed while 13.1% have other marital status such as being divorced or engaged to be married.

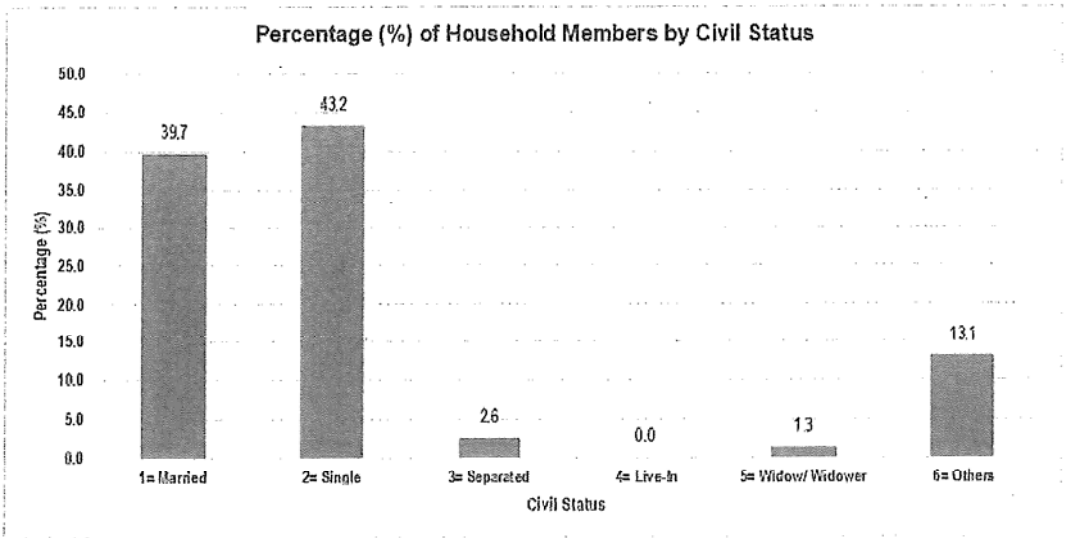



**Figure 7: Marital or civil status of Household Members**

### 3.4.5 Primary and Secondary Occupation of Household Members

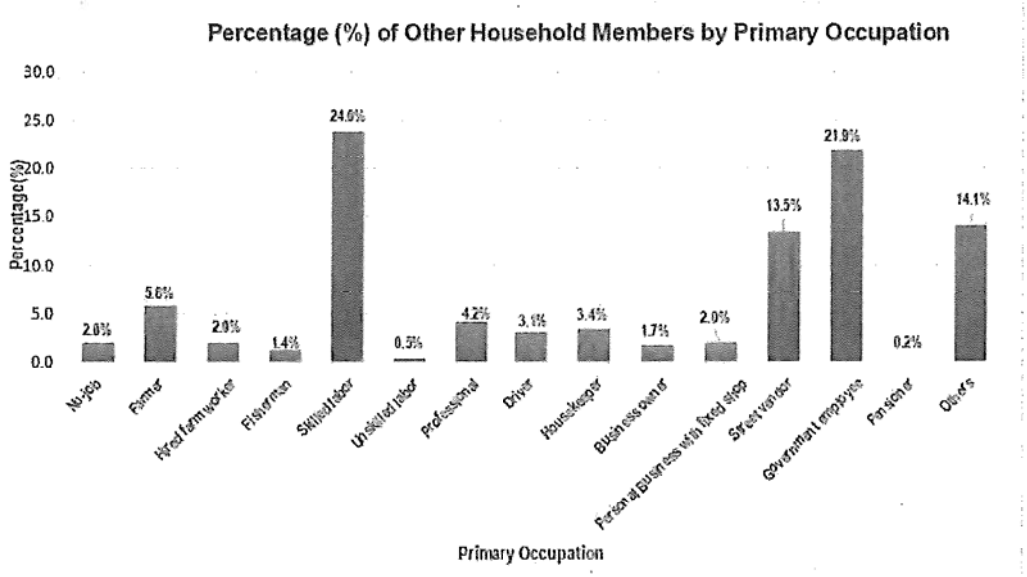



**Figure 8: Percentage (%) of Household Members by Primary Occupation**

The above graph depicts the primary occupation of household members, which shows that 24% of the household members are skilled workers, 21.9% are government workers, 14.1% are engaged in other jobs, 13.5% are street vendors and the least of 0.2% are pensioners.

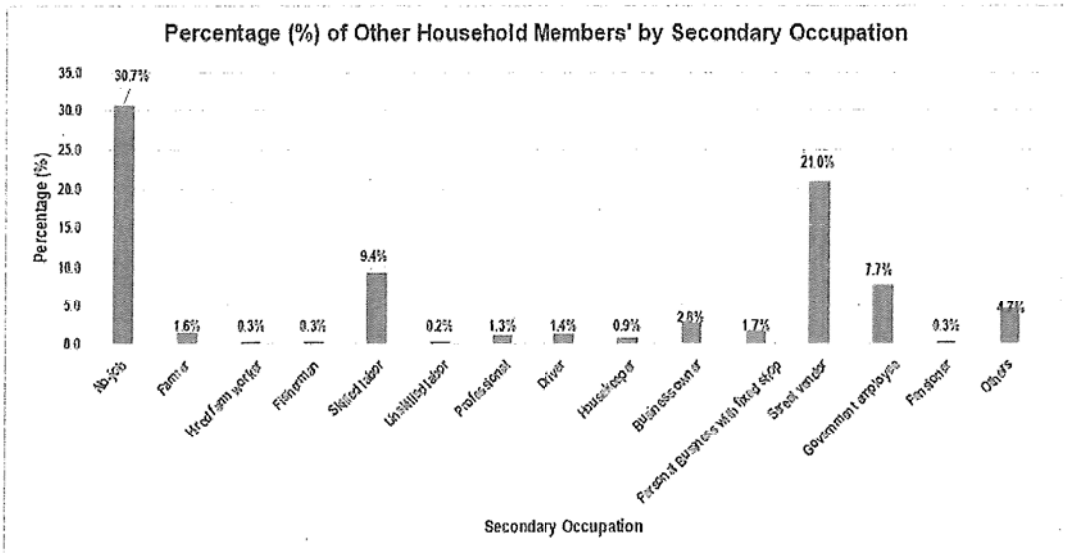



**Figure 9: Percentage (%) of Household Members by Secondary Occupation**

For secondary occupation, the graph shows that a high percentage of household members of 30.7% have no secondary occupation, 21% are street vendors, 9.4% are skilled workers, 7.7% are government employees and 4.7% have other jobs.