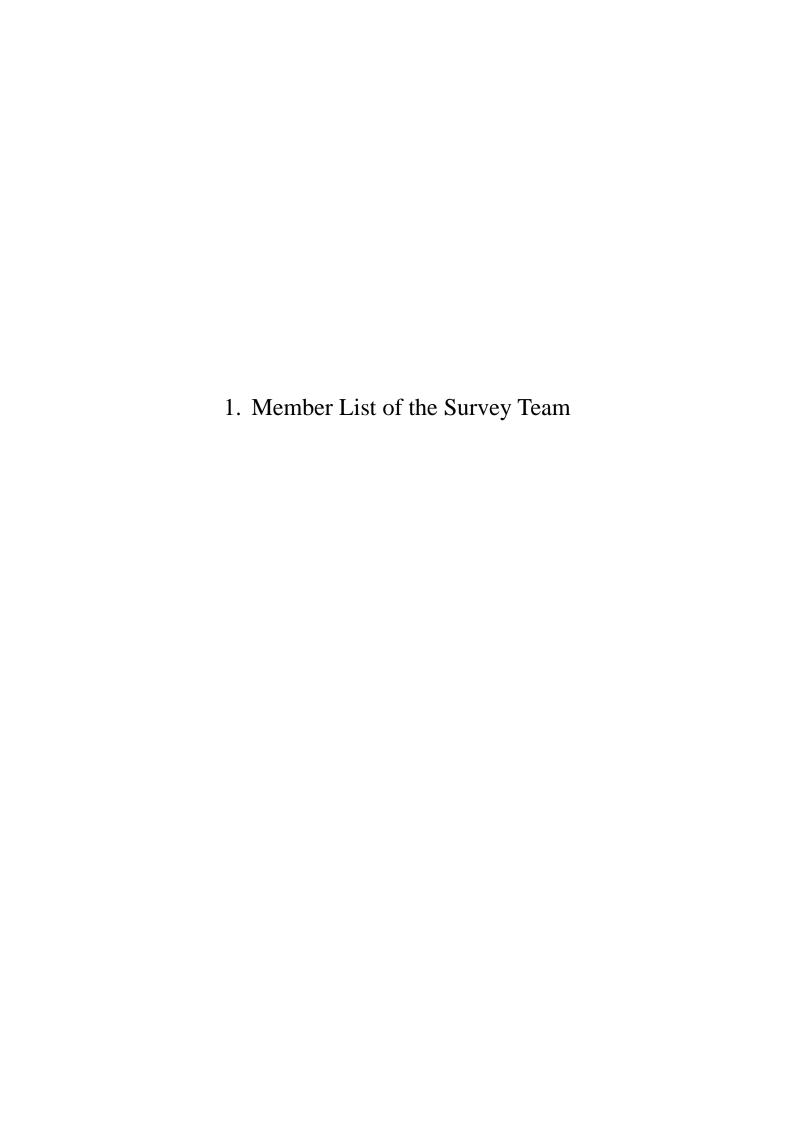
[Appendices]

- 1. Member List of the Survey Team
- 2. Survey Schedule
- 3. List of Parties Concerned in Zambia
- 4. Minutes of Discussion
- 5. Design Data



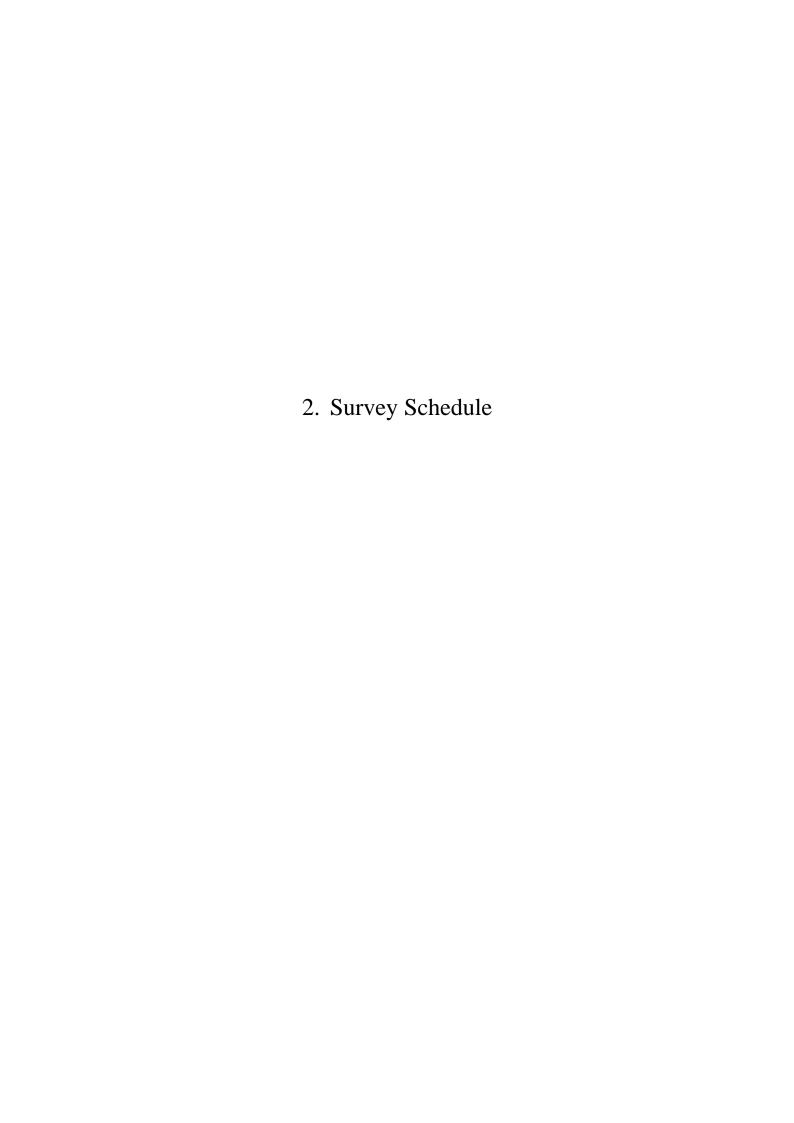
1. Member List of the Survey Team

(1) Preparatory Survey $(26/07/2010 \sim 21/09/2010)$

Mr. Hiroshi Itoyama	Team Leader	Transportation and ICT Group Economic Infrastructure Department, JICA Tokyo
Mr. Tomohiko Nakamura	Project Manager/ Transportation Plan	Katahira & Engineers International
Mr. Soemu Oshita	Road Design I	Katahira & Engineers International
Mr. Hidekatsu Fujiwara	Road Design II	Katahira & Engineers International
Mr. Yoshiteru Kubonoya	Natural Condition Survey I	Katahira & Engineers International
Mr. Kunihiko Harada	Environment & Social Consideration	Katahira & Engineers International
Mr. Yasushi Aoki	Civil Work Plan & Procurement/ Estimation I	Katahira & Engineers International
Mr. Hiroshi Watanabe	Civil Work Plan & Procurement/ Estimation II	Katahira & Engineers International
Mr. Yoshimasa Oshiro	Natural Condition Survey II	Katahira & Engineers International

(2) Explanation of Draft Report (16/2/2011 ~25/2/2011)

Mr. Hiroshi Itoyama	Team Leader	Transportation and ICT Group Economic
		Infrastructure Department, JICA Tokyo
Mr. Tomohiko Nakamura	Project Manager/	Katahira & Engineers International
	Transportation Plan	
Mr. Soemu Oshita	Road Design I	Katahira & Engineers International



2. Survey Schedule

(1) Preparatory Survey $(26/07/2010 \sim 21/09/2010)$

			JICA		Consultant						
	Date		Mr. Itoyama Team Leader	Mr. Nakamura Project Manager/ Transportation Plan	Mr. Oshita Road Design I	Mr. Fujiwara Road Design II	Mr. Kubonoya Natuaral Condition Survey I	Mr. Harada Environment & Social Consideration	Mr. Aoki Civil Work Plan and Procurement/Esti mation I		Mr. Oshiro Natuaral Condition Survey II
1	7/27/10	Tue		12:50 Arrival at Lusaka							
2	7/28/10	Wed		AM Courtesy Call on J Courtesy Call on E	Meeting with JICA Zambia Office AM Courtesy Call on JICA Zambia Office Courtesy Call on EOJ PM Courtesy Call on MiGH, LCC, Others						
3	7/29/10	Thu		Site Survey with LCC, k			f Emvironmantal P	rocedure)			
4	7/30/10	Fri		Site Survey	Site Survey	Site Survey	Site Survey	Site Survey	Site Survey	Airport	Site Survey
5	7/31/10	Sat		Site Survey	Site Survey	Site Survey	Site Survey	Site Survey	Site Survey	Site Survey	Site Survey
6	8/1/10	Sun									
7	8/2/10	Mon		Site Survey	Site Survey	Meeting with	Site Survey	Site Survey	Site Survey	Site Survey	Site Survey
8	8/3/10	Tue		Site Survey	Site Survey	Site Survey	Site Survey	Meeting with JICA, LCC, RDA	Site Survey	Site Survey	Site Survey
9	8/4/10	Wed		Site Survey	Site Survey	Meeting with RSZ	Site Survey	Data Collection	Site Survey	Meeting with RSZ	Site Survey
10	8/5/10	Thu		Site Survey with JICA	Site Survey with JICA	Meeting with Zamtel, RSZ	Site Survey	Site Survey with JICA	Site Survey	Meeting with Zamtel, RSZ	Site Survey
11	8/6/10	Fri		Meeting with MLGH, LCC/ Site Survey with ZESCO	Meeting with MLGH, LCC/ Site Survey with ZESCO	Site Survey with Zamtel, ZESCO	Site Survey	Site Survey	Meeting with MLGH, LCC/ Site Survey with ZESCO	Site Survey with Zamtel, ZESCO	Site Survey
12	8/7/10	Sat		Site Survey	Site Survey	Study of typical cross section	Site Survey		Site Survey	Site Survey	Site Survey
13	8/8/10	Sun									
14	8/9/10	Mon		Site Survey	Site Survey	Meeting with	Site Survey	Data Collection	Site Survey	Meeting with	Site Survey
15	8/10/10	Tue		Meeting with LCC, ZDA, Zesco	Meeting with LCC, ZDA, Zesco	Study of Inner Ring Road	Site Survey	Meeting with LCC	Site Survey	Study of Inner Ring Road	Site Survey
16	8/11/10	Wed		Meeting with JICA, LCC	Meeting with JICA, LCC	Site Survey	Site Survey	Meeting with JICA, LCC	Site Survey	Meeting with ZAMTEL	Site Survey
17	8/12/10	Thu		Site Survey Meeting with LCC	Site Survey Meeting with LCC	Site Survey	Site Survey	Site Survey Meeting with LCC	Site Survey	Meeting with LWCC	Site Survey
18	8/13/10	Fri		Meeting with JICA, MLGH Site Survey	Meeting with JICA, MLGH Site Survey	Study of Inner Ring Road	Site Survey	Meeting with JICA, MLGH Site Survey	Site Survey	Site Survey with LWCC	Site Survey
19	8/14/10	Sat		Site Survey	Site Survey	Study of Inner Ring Road	Site Survey	Site Survey	Site Survey	Site Survey	Site Survey
20	8/15/10	Sun									
21	8/16/10	Mon		Site Survey	Site Survey	Site Survey	Site Survey	Site Survey Meeting with	Site Survey	Site Survey	Site Survey
22	8/17/10	Tue		Meeting with EOJ, JICA, MLGH	Meeting with EOJ, JICA, MLGH	Study of Mini Bypass	Making Drawing	Meeting with EOJ, JICA, MLGH	Site Survey	Site Survey	Making Drawing
23	8/18/10	Wed		Meeting with LCC	Data Collection	Study of Mini Bypass	Site Survey	Meeting with LCC	Site Survey	Site Survey	Site Survey
24	8/19/10	Thu		JICA TV conference	JICA TV conference	Study of Mini Bypass	Site Survey	JICA TV conference	Site Survey	Site Survey	Site Survey
25	8/20/10	Fri		Site Survey with LCC, MLGH	Site Survey with LCC, MLGH	Preparation of T/N	Site Survey	LCC, MLGH	Site Survey	Site Survey	Site Survey
	8/21/10	Sat		Site Survey	Site Survey	Site Survey	Site Survey	Site Survey	Site Survey	Site Survey	Site Survey
27	8/22/10	Sun									
28	8/23/10	Mon		Site Survey	Site Survey	Preparation of T/N	Site Survey	LCC, Site	Site Survey	Site Survey	Site Survey
29	8/24/10	Tue		Meeting with RDA	Meeting with RDA	Preparation of T/N Preparation of	Site Survey	LCC, ECZ	Site Survey	Site Survey	Site Survey
30	8/25/10	Wed		Site Survey	Site Survey	T/N	Site Survey	LCC	Site Survey	Site Survey	Site Survey
31	8/26/10	Thu		Meeting with LCC	Reporting	Preparation of T/N	Making Drawing	Meeting with MLGH, LCC, ECZ, RDA	Site Survey	Meeting with ZAMTEL	Making Drawing
32	8/27/10	Fri		Meeting with LCC	Reporting	Preparation of T/N	Site Survey	Meeting with LCC, ECZ	Site Survey	Site Survey	Site Survey
33	8/28/10	Sat		Site Survey	Site Survey	Preparation of T/N	Site Survey	Data Collection	Site Survey	Site Survey	Site Survey
34	8/29/10	Sun			Site Survey						
35	8/30/10	Mon	12:50 Arrival at Lusaka (Flight by SA062)	Meeting with JICA, LCC	Meeting with JICA, LCC	Meeting of T/N with LCC	Site Survey	Meeting with JICA	Site Survey	Site Survey	Site Survey
36	8/31/10	Tue	Courtesy Call to MLGH, Site Survey, Meeting with JICA Zambia Office	Courtesy Call to MLGH, Site Survey, Meeting with JICA Zambia Office	Meeting with MLGH, JICA	Site Survey	Site Survey	MLGH, ECZ	Site Survey	Site Survey	Site Survey

		JICA			Consultant						
	Date		Mr. Itoyama Team Leader	Mr. Nakamura Project Manager/ Transportation Plan	Mr. Oshita Road Design I	Mr. Fujiwara Road Design II	Mr. Kubonoya Natuaral Condition Survey I	Mr. Harada Environment & Social Consideration	Mr. Aoki Civil Work Plan and Procurement/Esti mation I	Mr. Watanabe Civil Work Plan and Procurement/Esti mation II	Mr. Oshiro Natuaral Condition Survey II
37	9/1/10		Internal Meeting for Stakeholder Meeting, Stakeholder Meeting	Internal Meeting for Stakeholder Meeting, Stakeholder Meeting	Meeting with MLGH	Preparation of T/N	Site Survey	Meeting with MLGH, ECZ	Site Survey	Site Survey	Site Survey
38	9/2/10	Thu	Site Survey (LS-MFEZ), Stakeholder Meeting	Site Survey (LS-MFEZ), Stakeholder Meeting	Meeting with LCC, MLGH, RDA	Study of Road Alignment	Site Survey	Meeting with LCC, Kaizen	Site Survey	Site Survey	Site Survey
39	9/3/10		Signing of the Minites, Report to JICA Zambia Office, EOJ	Signing of the Minites, Report to JICA Zambia Office, EOJ	Technical Discussion with LCC, RDA	Study of Road Alignment	Site Survey	Meeting with JICA, MLGH Site Survey	Site Survey	Site Survey	Site Survey
40	9/4/10	Sat	07:15 Departure from Lusaka (Flight by SA067)	Site Survey	Site Survey	Site Survey	Site Survey	Site Survey	Site Survey	Site Survey	Site Survey
41	9/5/10	Sun									
42	9/6/10	Mon		Meeting w/ LCC, MLGH, RDA Report to JICA	Meeting w/ LCC, MLGH, RDA Report to JICA	Study of Road Alignment Report to JICA	Making Drawing Report to JICA	Site Survey Report to JICA	Site Survey Report to JICA	Site Survey Report to JICA	Making Drawing Report to JICA
43	9/7/10	Tue		07:15 Departure from Lusaka (Flight by SA067) Site Su			Site Survey	07:15 Departure	from Lusaka (Fligh	nt by SA067)	Site Survey
44	9/8/10	Wed					Site Survey				Site Survey
45	9/9/10	Thu					Site Survey				Site Survey
46	9/10/10	Fri					Site Survey				Site Survey
47	9/11/10	Sat					Site Survey				Site Survey
48	9/12/10	Sun									
49	9/13/10	Mon					Site Survey				Site Survey
50	9/14/10	Tue					Site Survey				Site Survey
51	9/15/10	Wed					Site Survey				Site Survey
52	9/16/10	Thu					Site Survey				Site Survey
53	9/17/10	Fri					Site Survey				Site Survey
54	9/18/10	Sat					Site Survey				Site Survey
55	9/19/10	Sun									
56	9/20/10	Mon					07:15 Departure from Lusaka (Flight by SA067)				07:15 Departure from Lusaka (Flight by SA067)
			MLGH: Ministry of Loca	Government and Hous	ing		ECZ: Environmen	tal Council of Zam	ıbia	`	si .

MLGH: Ministry of Local Government and Housing LCC: Lusaka City Council EOJ: Embassy of Japan

T/N: Technical Note

(2) Explanation of Draft Report (16/2/2011 ~25/2/2011)

			JICA	Consultant				
	Date		Mr. Itoyama Team Leader	Mr. Nakamura Project Manager/ Transportation Plan	Mr. Oshita Road Design I			
1	2/17/11	Thu		12:30 Arrival at Lusaka 15:30 Meeting with JIC				
2	2/18/11	Fri		9:00 Meeting with JIC Explanation of	A Zambia Office Draft Final Report			
3	2/19/11	Sat		Site Survey				
4	2/20/11	Sun	10:05 Arrival at Lusaka (Flight by KQ724) Internal Meeting					
5	2/21/11	Mon	8:00 Meeting with JICA Zambia Office 10:30 Mitutes Discussion with MLGH and LCC					
6	2/22/11	Tue	9:00 Mitutes Discussion with MLGH and LCC 14:30 Discussion with LCC					
7	2/23/11	Wed	10:20 Signing on Minutes of Discussion 14:30 Report to EOJ 17:00 Report to JICA Office					
8	2/24/11	Thu	11:05 Departure from Lusaka (Flight by KQ724)	7:20 Departure from SA067)	Lusaka (Flight by			

MLGH: Ministry of Local Government and Housing

LCC: Lusaka City Council EOJ: Embassy of Japan

3. List of parties Concerned in Zambia

3. List of Parties Concerned in Zambia

(1) Preparatory Survey $(26/07/2010 \sim 21/09/2010)$

Ministry of Local Government and Housing: MLGH

Mr. Peter Lubambo (Acting Permanent Secretary, Director of Dep. of Housing &

Infrastructure Development)

Mr. Richard Kangwa (Senior Engineer of Dep. of Housing & Infrastructure

Develoment)

Mr. Nkumbu Siame (Principal Engineer of Dep. of Housing & Infrastructure Development)

Mr. Maxwell Zulu (Provincial Planner of Dep. of Physical Planning and

Housing)

Ministry of Commerce, Trade and Industry

Mr. Chibwe Chisala (Senior Economist)

Lusaka Province

Mr. Maxwell Zule (Provincial Planner)

Lusaka City Council: LCC

Mr. Bornwell L. Luanga (Acting Town Clerk)

Mr.Joseph M. Mukupa (Director of City Planning)

Mr. Musonda Silungwe (Land Surveyor)

Ms. Concepta Musonda (Ass. Director of HSSD)

Mr. Anna B. Phiri (Town Planner of City Planning)

Mr. Trophis Kufanga (Environmental Planner of City Planning)

Mr. Simasik Malumo (Director of Engineering, ESD)

Ms. Mainza Simoonga (Asst. Director of Engineering, ESD)

Mr. Zulu Joseph Makadani (Acting Deputy Director)

Mr. Amos M. Musonda (Public Health Department Director)

National Road Fund Agency: NRFA

Mr. Wallace Mumba (Roads Engineer)

Mr. Emmanuel Kaundh (Manager)

Road Development Agency: RDA

Mr. Daniel Mulonga (Manager)

Mr. Ronald Nyangu (Civil Eng. MSc. REng.)
Mr. Richard M.Kasongo (Principal Engineer)
Mr. Joseph Mwinga (Principal Engineer)
Mr. Stephan Petwe (Principal Engineer)
Mr. Alinani Msisya (Principal Engineer)

Zambia Development Agency: ZDA

Mr. Robert Buzz Banda (Manager – Multi Facility Economic Zones (MFEZ)

National Housing Authority: NHA

Mr. Caine Mweemba (CEO Executive Assistant)

Mr. Maurice Cihtonso (Chief Architect)

Mr. Balbwin Mbuzi (Director of Projects / Authority Advisor)

Zambia Electricity Supply Company: ZESCO

Mr. Christopher Yatsha Phiri (Regional Manager – Lusaka South)

Mr. V. B. Mapani (Divisional Manager-Lusaka Distribution & Supply)

Railway Systems of Zambia LTD: RSZ

Mr. Chembe Vincent Sandamuka (Chief Engineer Infrastructure)

Tembo J. L. (Track Manager)

Lusaka Water and Sewerage Company Limited: LWSC

Mr. Wilson Shane (Director of Engineering)

Mr. Evaristo Simusokwe (Senior Engineer – Mapping & GIS)

Zambia Telecommunication Company: ZAMTEL

Mr. Weston Chikunji (External Planning Senior Engineer)

(2) Explanation of Draft Report (16/2/2011 ~25/2/2011)

Ministry of Local Government and Housing :MLGH

Mr. Davies C. Zule (Assistant Director, Director of Dep. of Housing &

Infrastructure Development)

Mr. Richard Kangwa (Senior Engineer of Dep. of Housing & Infrastructure

Develoment)

Mr. Nkumbu Siame (Principal Engineer of Dep. of Housing & Infrastructure Development)

Mr. David Thompson Tembo (Principal Engineer of Dep. of Housing & Infrastructure

Develoment)

Lusaka City Council: LCC

Ms. Grace Imasiku Ushibantu (Director of Finance)

Ms. Concepta Musonda (Ass. Director of HSSD)

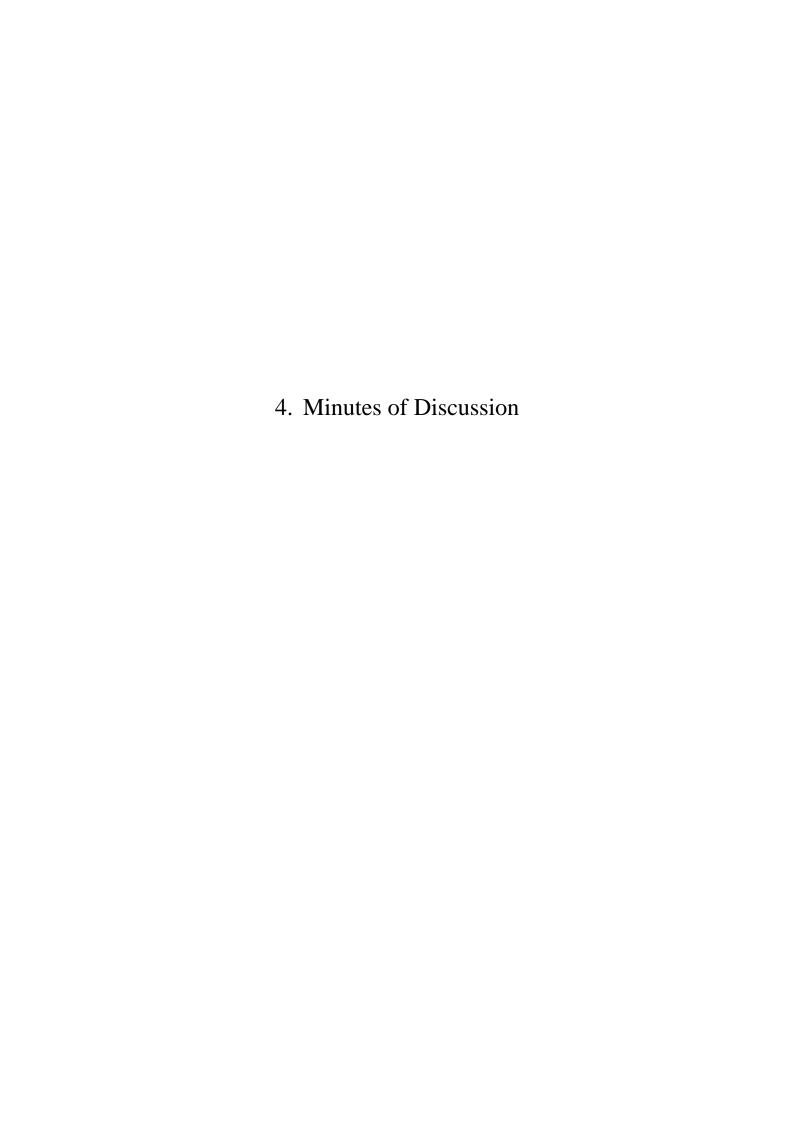
Mr. Trophis Kufanga (Environmental Planner of City Planning)

Mr. Simasik Malumo (Director of Engineering, ESD)

Ms. Mainza Simoonga (Asst. Director of Engineering, ESD)

Road Development Agency: RDA

Mr. Ronald Nyangu (Civil Eng. MSc. REng.)



4. Minutes of Discussions

(1) Preparatory Survey $(26/07/2010 \sim 21/09/2010)$

Minutes of Discussions

on

the Preparatory Survey

on

The Project for the Improvement of the Living Environment in the Southern Area of Lusaka

in the Republic of Zambia

The Government of Japan decided to conduct a Preparatory Survey for Outline Design on the Project for the Improvement of the Living Environment in the Southern Area of Lusaka (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Zambia the Preparatory Survey team for Outline Design (hereinafter referred to as "the Team") which is headed by Mr. Hiroshi ITOYAMA, Assistant Director of Economic Infrastructure Department, JICA, and is scheduled to stay in the country from July 27th to September 20th, 2010.

The Team held discussions with the concerned officials of the Government of the Republic of Zambia (hereinafter referred to as "GRZ"). In the course of the discussions, both sides have confirmed the main items of described in the attached sheets. The Team will proceed to further works and prepare the Preparatory Survey Report.

Lusaka, September 3, 2010

Hiroshi ITOYAMA

Leader

Preparatory Survey Team

Japan International Cooperation Agency

Japan

Peter LUBAMBO

Acting Permanent Secretary

Ministry of Local Government and Housing

The Government of the Republic of Zambia

Bornwell L. Luanga Acting Town Clerk

Acting Town Clerk
Lusaka City Council

ATTACHMENT

1. Objective of the Project

The objective of the Project is to meet the increasing transportation demand and contribute to the reduction of traffic congestion in the southern part of Lusaka in the Republic of Zambia, through the construction of roads.

2. Project Site

The site of the Project is shown in Annex-1.

3. Responsible and Implementing Organizations

- 3-1. The responsible organization is Ministry of Local Government and Housing (MLGH).
- 3-2. The implementing organization is Lusaka City Council (LCC).
- 3-3. The organization chart of MLGH is as shown in Annex-2.
- 3-4. The organization chart of LCC is as shown in Annex-3.

4. Items Requested by GRZ

After discussions with the Team, the items described below were requested by GRZ.

Construction of the following roads; (approximately 19.6 km)

Inner Ring Road (Rail line - Kasama Rd) (as shown in C1 of Annex-1)

Mosi-Oa-Tunya Jct. - LS-MFEZ (as shown in d10 of Annex-1)

Kasama Rd - Mosi-Oa-Tunya Jet. (as shown in d11 of Annex-1)

Mini Bypass Link (as shown in e3 of Annex-1)

Chibwa Rd (Chilimbulu Jct. - Inner Ring Road) (as shown in e5 of Annex-1)

Nationalist Rd (Chilimbulu Jct. - Inner Ring Road) (as shown in e7 of Annex-1)

Yotam Muleya Rd (Chilimbulu Jet. - Inner Ring Road) (as shown in e9 of Annex-1)

Mulalila Road Link (as shown in 10 of Annex-1)

Shantumbu Rd (Pemba Rd Jct. - Chilimbulu Rd) (as shown in 11 of Annex-1)

Ben Bella Extension Link (as shown in 12 of Annex-1)

Improvement of the following intersections;

Lumumba Rd / Kalambo Rd Jct. (as shown in J1 of Annex-1)

Church Rd / Makishi Rd Jet. (as shown in J2 of Annex-1)

Nationalist Rd / Burma Rd Jct. (as shown in J3 of Annex-1)

Nangwenya Rd / Thabo Mbeki Rd Jct. (as shown in J4 of Annex-1)

Thabo Mbeki Rd / Alick Nkhata Rd Jet. (as shown in J5 of Annex-1)

Chilimbulu Rd / Kasama Rd Jct. (as shown in J6 of Annex-1)

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Alick Nkhata Rd / Kamloops Rd Jct. (as shown in J7 of Annex-1)

JICA will assess the appropriateness of the request and will report its findings to the Government of Japan. Approval of the Project will be decided by the Government of Japan.

5. Japan's Grant Aid Scheme

- 5-1. The Zambian side understands Japan's Grant Aid scheme (for General Project) explained by the Team, as described in Annex-4.
- 5-2. The Zambian side will take the necessary measures, as described in Annex-4, for smooth implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

6. Environmental and Social Considerations

- 6-1. The Japanese side explained to GRZ that "Japan International Cooperation Agency Guidelines for Environmental and Social Considerations (April 2004)" will be applied to the Project. Both sides agreed to implement the project in accordance with the Guidelines.
- 6-2. Both sides agreed that GRZ should conduct the necessary procedure concerning the environmental impact assessment (including stakeholder meetings for effective public participation about the outline of the Project, the EIA survey etc.) based on the domestic law of Zambia by the end of November, 2010. The schedule of preparing EIA and RAP are attached in Annex 5.
- 6-3. Both sides agreed that GRZ shall secure the land necessary for the Project with its own expenses by the commencement of the construction.
- 6-4. The Zambian side agreed that project affected people(PAPs) will be sufficiently compensated and supported to improve their standard of living, income opportunities and production levels, or at least to restore them to pre-project levels.

7. Schedule of the study

- 7-1. The consultants will proceed to further study in Zambia until September 20th, 2010.
- 7-2. JICA will prepare the draft report in English and dispatch a mission to Zambia in order to explain its contents around February, 2011.
- 7-3. Once the contents of the report are accepted in principle by GRZ, JICA will complete the final report and submit to the Government of Japan for consideration by March, 2011. An English copy will be prepared and submitted to GRZ by March, 2011.

8. Other Relevant Issues

8-1. Both sides agreed that GRZ will provide funding and facilitate the following;

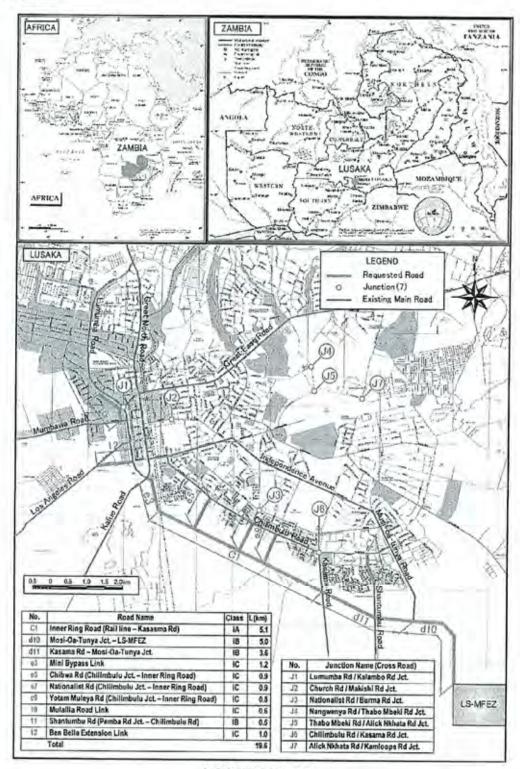


- Relocation of existing utilities (power, telecommunication lines, water lines, etc.).
- Tax exemption,
- Securing and clearance of the temporary yard,
- Securing of site for disposal of waste, and
- Maintaining the security at the sites and yards for the Project.
- 8-2. The Zambian side shall secure enough budget and personnel necessary for the operation and maintenance of the facilities implemented by the Project, including the periodic maintenance work after the completion of the Project.
- 8-3. Both sides agreed that Kasama Rd (Chilimbulu Jct. Inner Ring Road), Shantumbu Rd (Pemba Rd Jct. Inner Ring Road) and Mosi-Oa-Tunya Rd to Zesco Way Leave Jct., whose improvements are being undertaken by GRZ, will not form part of the component of the Project.
- 8-4. Both sides agreed that GRZ shall vary the contracts to exclude sections, Chibwa Rd (Chilimbulu Jet. Inner Ring Road), Nationalist Rd (Chilimbulu Jet. Inner Ring Road) and Yotam Muleya Rd (Chilimbulu Jet. Inner Ring Road), that will be undertaking by the Project. The Zambian side shall submit the records of the variation to JICA Zambia office by end of November, 2010, otherwise these roads might be excluded from the component of the project.
- 8-5. Both sides agreed that Ben Bella Extension Link would be excluded from the component of the Project in terms of emergency needs of the Project, if the number of PAPs negatively affected the procedure of the Project.

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Annex-1

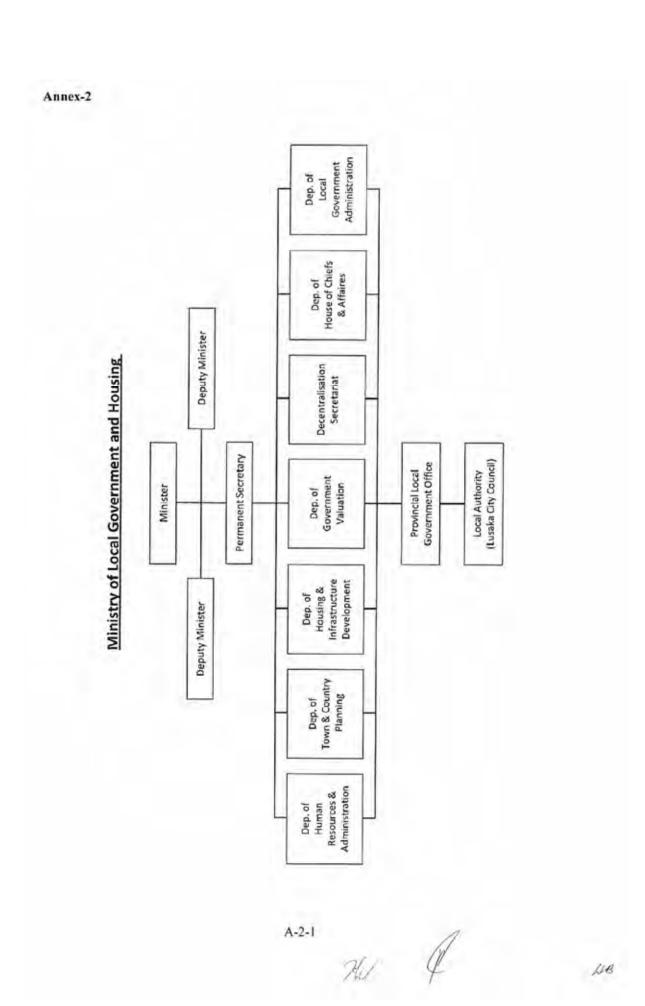


LOCATION MAP

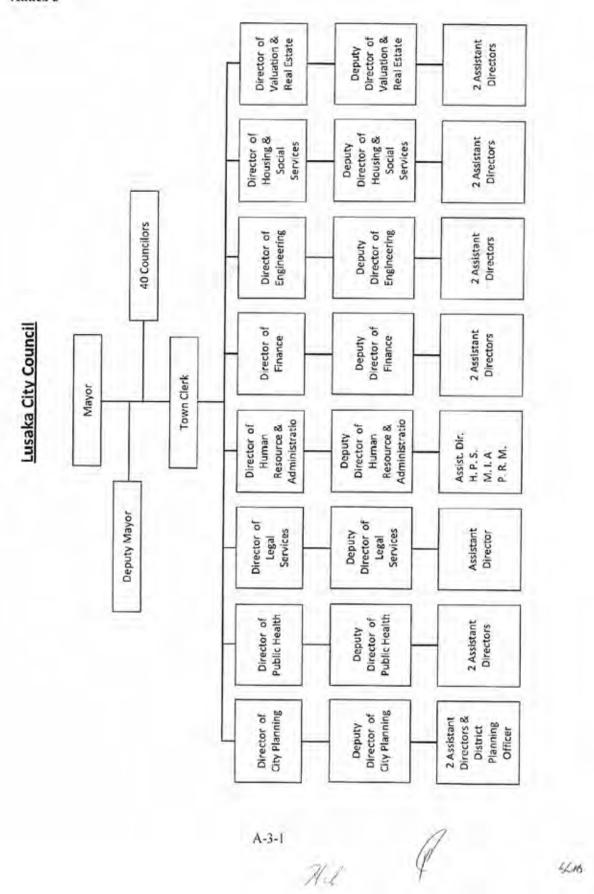
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JAPAN'S GRANT AID

The Government of Japan (hereinafter referred to as "the GOJ") is implementing the organizational reforms to improve the quality of ODA operations, and as a part of this realignment, a new JICA law was entered into effect on October 1, 2008. Based on this law and the decision of the GOJ, JICA has become the executing agency of the Grant Aid for General Projects, for Fisheries and for Cultural Cooperation, etc.

The Grant Aid is non-reimbursable fund provided to a recipient country to procure the facilities, equipment and 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. The Grant Aid is not supplied through the donation of materials as such.

1. Grant Aid Procedures

The Japanese Grant Aid is supplied through following procedures:

- · Preparatory Survey
 - The Survey conducted by JICA
- · Appraisal & Approval
 - Appraisal by the GOJ and JICA, and Approval by the Japanese Cabinet
- · Authority for Determining Implementation
 - The Notes exchanged between the GOJ and a recipient country
- Grant Agreement (hereinafter referred to as "the G/A")
 - Agreement concluded between JICA and a recipient country
- Implementation
 - Implementation of the Project on the basis of the G/A

2. Preparatory Survey

(1) Contents of the Survey

The aim of the Preparatory Survey is to provide a basic document necessary for the appraisal of 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 country necessary for the implementation of the Project.
- Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme 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.

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The contents of the original request by the recipient country are not necessarily approved in their initial form as the contents of the Grant Aid project. The Outline Design of the Project is confirmed based on the guidelines of the Japan's Grant Aid scheme.

JICA requests the Government of the recipient country to take whatever 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 organization of the recipient country which actually implements the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA employs (a) registered 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 appropriateness of the Project.

3. Japan's Grant Aid Scheme

(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 country to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Government of the recipient country to define the necessary articles to implement the Project, such as payment conditions, responsibilities of the Government of the recipient country, and procurement conditions.

(2) 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 country to continue to work on the Project's implementation after the E/N and G/A.

(3) Eligible source country

Under the Japanese Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased. When JICA and the Government of the recipient country or its designated authority deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm are limited to "Japanese nationals".

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(4) Necessity of "Verification"

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

(5) Major undertakings to be taken by the Government of the Recipient Country

In the implementation of the Grant Aid Project, the recipient country is required to undertake such necessary measures as Annex.

(6) "Proper Use"

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

(7) "Export and Re-export"

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

(8) Banking Arrangements (B/A)

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

(9) Authorization to Pay (A/P)

The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions paid to the Bank.

(10) Social and Environmental Considerations

A recipient country must carefully consider social and environmental impacts by the Project and must comply with the environmental regulations of the recipient country and JICA socio-environmental guidelines.

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FLOW CHART OF JAPAN'S GRANT AID PROCEDURES

Stage		Flow & Works	Recipient	Japanese Government	JICA	Consultant	Contract	Others
Application		Request (T/R : Terms of Reference) V Screening of Project Project Identification Survey*						
Project Formulation & Preparation	Preparatory Survey	Preliminary Field Survey Home Office Work Reporting Selection & Contracting of Consultant by Proposal Explanation of Drag Final Report Final Report						
Appraisal & Approval		Appraisal of Project W Inter Ministerial Consultation W Presentation of Draft Notes Approval by the Cabinet						
Implementation Follow up		E/N and G/A (E/N: Exchange of Notes) (G/A: Grant Agreement) (A/P: Authorization to Pay) (A/P: Authorization to Pay) (Consultant Contract (Contract (A/P)						
		Tendering & Evaluation Verification Construction Construction						
		Study Ex-post Evaluation Follow up						

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Major Undertakings to be taken by Each Government

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
T	to secure lots of land necessary for the implementation of the Project and to clear the sites		
2	To ensure prompt customs clearance of the products and to assist internal transportation of the products in the recipient country	1000	
	1) Marine (Air) transportation of the Products from Japan to the recipient country	•	-
	2) Tax exemption and custom clearance of the Products at the port of disembarkation		
	3) Internal transportation from the port of disembarkation to the project site	(•)	(0)
3	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the purchase of the products and the services be exempted.		
4	To accord Japanese nationals 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 recipient country and stay therein for the performance of their work		•
5	To ensure that the facilities be maintained and used properly and effectively for the implementation of the Project		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project		•
7	To bear the following commissions paid to the Japanese bank for banking services based upon the B/A		11.11
	1) Advising commission of A/P		
	2) Payment commission		
8	To give due environmental and social consideration in the implementation of the Project.		

(B/A: Banking Arrangement, A/P: Authorization to pay)

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Time schedule of EIA procedures

/					Year 2010				
		September			October			November	
	Beginning	Middle	End	Beginning	Middle	End	Beginning	Middle	End
Preparing EIA/RAP									
Stake Holder Meeting*									
Submission of EIS Report									
t of									- 11 11
Negotiation with PAPs									
Agreement from PAPs							1		
Approval of FIS Report from FGZ	7								

** Advertisement of EIS Report at ECZ, LCC and on the Website for 60 to 90 days to get comments from stake holders. Stake holder meetings will be held along Inner Ring Road, Musi-O-Tunya Road Ext. and BenBella Ext. Link.

Environmental Project Brief for Chibwa Ext., Nationalist Ext., Yotamu Muleya Ext., Lulalila Road Link and a part of Shantubu Road Approval of EPB from ECZ Preparing document Submission of EPB

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(2) Explanation of Draft Report (16/2/2011 ~25/2/2011)

Minutes of Discussions

on

the Preparatory Survey

The Project for the Improvement of the Living Environment in the Southern Area of Lusaka in the Republic of Zambia

(Explanation on Draft Report)

In August 2010, Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Preparatory Study Team on the Project for the Improvement of the Living Environment in the Southern Area of Lusaka (hereinafter referred to as "the Project") to the Republic of Zambia (hereinafter referred to as "Zambia"), and through discussion, field survey as well as after technical examination of the results in Japan, JICA prepared a draft report of the study.

In order to explain and consult with the officials of the Government of Zambia on the components of the draft report, JICA sent to Zambia the Outline Design Explanation Team (hereinafter referred to as "the Team") which is headed by Hiroshi ITOYAMA, Deputy Director of Transportation and ICT Division 2, Economic Infrastructure Department, JICA from February 17 to February 24, 2011.

As the result of the discussion, both parties confirmed the main items described on the attached sheets hereto;

Lusaka, February 23, 2011

Hiroshi ITOYAMA

Leader

Preparatory Survey Team

Japan International Cooperation Agency

Japan

Timothy HAKUYU

Permanent Secretary

Ministry of Local Government and Housing

The Government of the Republic of Zambia

A Bornwell L. Luanga

Acting Town Clerk

Lusaka City Council

ATTACHMENT

1. Contents of the Draft Report

The Government of Zambia agreed and fully accepted the contents of the draft final report explained by the Team.

2. Japans' Grant Aid scheme

The Government of Zambia understands Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Zambia as explained by the Team and described in Annex-1, and the schedule of the measures to be taken by the Government of Zambia described in Annex-2.

3. Schedule of the Study

JICA will complete the final report in accordance with the confirmed items and send it to the Government of Zambia by April, 2011.

4. Cost Estimation

The Project Cost Estimation, as attached in Annex-3, is confidential and should never be duplicated or disclosed to any outside parties before the signing of all the contracts for the Project.

5. Other Relevant Issues

- 5-1. Monitoring for Environmental and Social considerations will be conducted by Lusaka City Council. The results of monitoring will be provided to JICA by filling in the Monitoring Form attached as Annex-4, as part of progress reports before construction, during the construction phase, at completion of the Project and two years after completion of the Project.
- 5-2. The environmental and social considerations including major impacts and mitigation measure for the Project are summarized in the Environmental Checklist attached as Annex-5
- 5-3. The Government of Zambia confirmed that it will obtain by April 2011. Environmental Impact Assessment License and Resettlement Action Plan (RAP) agreed with the Project Affected Persons (PAPs).

The Government of Zambia shall complete the land acquisition and relocations before commencement of the Construction Work.

5-4. Both governments confirmed that The Government of Zambia shall complete the implementation work for Chibwa Road, Nationalist Road and Yotam Muleya Road before the He Tunt Project has been completed, so as to maximize the benefit of the Project.

- 5-5. The Government of Zambia shall execute the maintenance of the Project's drainage including its downstream channels.
- 5-6. The Government of Zambia shall secure adequate budget and personnel necessary for operation and maintenance of the roads, bridges and relevant facilities constructed by the Project.

Annex-1: Major Undertakings to be taken by Each Government

Annex-2: Schedule of undertaking of Zambian side

Annex-3: Project Cost to be borne by Japan's Grant Aid

Annex-4: Monitoring Form

Annex-5: Environmental Checklist

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Major Undertakings to be taken by Each Government

No.	Items	To by	be covered Grant Aid	To be covered by Recipient side
1	To secure land			۰
2	To clear, level and reclaim the site when needed			0
3	Relocation, improvement and/or repair of existing utilities(power lines, telecommunication lines, water lines, etc.), if necessary			
4	To bear the following commissions to a bank of Japan for the banking services based upon the B/A			ungar suekari
	1) Advising commission of A/P		Cy Tures.	0
	2) Payment commission			0
5.	To ensure prompt unloading and customs clearance at the port of disembarkation in recipient country			
	1) Marine(Air) transportation of the products from Japan to the recipient country		0	
	Tax exemption and custom clearance of the products at the port of disembarkation			
	3) Internal transportation from the port of disembarkation to the project site		0	
6	To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work	r		0
7	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contract			۰
- 1	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid			•
	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for the transportation and installation of the equipment			۰

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This page is closed due to the confidentiality.

MONITORING FORM 1/5

	Construction
	During
onment	etion and
Natural environmen	E
Natur	- Before Const
7	

Item Ilnit	Value	Ξ_	National	WHO	Standards		R	Remarks	
	(Max.)	(Mean)	Standards	Standards	for monitoring	Detail of location	No. of monitoring	Frequency	Duration
Air Quality (Emission Gas / Ambient Ai	nission Gas / A	Ambient Air	r Quality)				points		
Before Construction					-				
TSP µ g/m³ (24 hr)			120	,	120				
PM ₁₀ μ g/m ³ (24 hr)			70	50	70	At Resident, school	2	One time	Before commencement
NO ₂ μg/m ³ (24 hr)			150	200	150				of construction
During Construction									
TSP \(\mu \text{ g/m}\) (24 hr)			120		120				
PM ₁₀ µ g/m ³ (24 hr)			70	50	70	At Resident, school	2	Found three would	Each monitoring will be conducted during
NO ₂ μg/m³ (24 hr)			150	200	150				construction period (29 months)
- Noise / Vibration	tion								
91								The second name of the second na	
Noise dB(A) Levels (24 hr) (Leq. Lens.)			70	70(conumer cial area) 55(residenc e)	70	At Resident, school along Inner Ring Rond site	22	One time	Before commencement of construction
173									
Noise dB(A) Levels (24 hr)			20	70(commer cial area)	70	00		Byery three	
Lmaxs)	(2) B. (4) (3)	The Property		c)		Road site	7	16	Consecutive hours During construction

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MONITORING FORM 2/5

	Measured	Measured National	National	WHO	Chandanda				
Item Unit	Value		Chandond	0	Standards		Re	Remarks	
	(Max.)	(Mean)	Standards	Standards	nonitoring	Detail of location	No. of monitoring	Frequency	Duration
Quality (E	-Air Quality (Emission Gas / Ambient	Ambient Air	(Air Quality)				points		
TSP µ g/m³ (24 hr)			120		120				
PM ₁₀ µ g/m ³ (24 hr)			70	50	70	At Resident, school along Inner Ring	64	once during the	For two years, after
NO ₂ μg/m ³ (24 hr)			150	200	150	Road site		once during the	
Noise / Vibration									
Noise dB(A) Levels (24hr) (Leq. Lmax.)			02	70(commer cial area) 55(residenc e)	70	At Resident, school along Inner Ring Road site	2	Two times a year, once during the dry season and once during the	For two years, after completion of work. For 12 consecutive hours

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MONITORING FORM 3/5

Social Environment
 Internal monitoring for progress of the resettlement will be implemented in accordance with the approved RAP.
 Review of the actual implementation progress against the planned time schedule and budget described in RAP.

2-1. Public C.

7-7. rupiic	iblic Consultations	SI			
No.	Date	Place	Contents of the consultation	Comments	Correspondences
1	Control of the contro				
2					

2-2 Grievance Redress

Resolved / Not yet resolved		
Correspondences	•	
Contents of the Complaints		
Date of Receipt of Complaints	and the field of the first	
No.	1	2

2-3 Progress of Land Acquisition and Resettlement (surveyed on a quarterly basis) Date of Survey:

Resettlement Activities Unit Planned Total Progress in Quantity Progress in Quantity Expected Date of Completion Progress of Compensation Payment No. of HHs No. of HHs No. of Structures Progress of Land Acquisition No. of Structures No. of Structures Progress of Relocation of People No. of HHs Image: No. of HHs							
of No. of HHs No. of Structures No. of HHs	Resettlement Activities	Unit	Planned Total	Progress in Quantity	Progress in %	Expected Date of Completion	Responsible
of No. of Structures No. of HHs	Progress of Compensation Payment	No. of HHs					LCC with support
of No. of Structures No. of HHs	Progress of I and Acquisition						or integral
of No. of Structures No. of HHs	TORIGINATE TRANSPORT	na					LCC with support
No. of Structures No. of HHs	Progress of restoration/relocation of					-	OI MILGH
No. of HHs	affected public facilities	No. of Structures					LCC with support
No. of HHs					The same of the sa		of MLGH
	Progress of Relocation of People	No. of HHs					LCC with support
A COLUMN TO THE OWNER OF THE OWNER OWNER OF THE OWNER OW							ofMLGH

MONITORING FORM 4/5

Frequency Location Results during Report Period 2-4 Implementation of Livelihood Restoration Assistance Item

2-5 Restoration of Income and Living Standard Date of Survey:

	lems Encountered Perceived Need for Additional Assistance	
	No. of HHs with Unchanged Types of Problems Encoun Incomes	
	No. of IHHs with Decreased Incomes	No constitution of the con
	No. of HHs with Increased Incomes	
-	No. of Surveyed HHs	
	Description about Surveyed Area	
	. Š	

2-6 Resettl

		2010			2011			2012	
District April		10 11 12	1 2 3	4 5 6	7 8 9	10 11 12	- 2	0 8	
Disclosure of KAP	Scheduled					+	2	400 100	- 1
	Actual			L					
Formation of Project Implementation Committee Scheduled	tee Scheduled								
	Actual			-					
tion	Scheduled				-				
=	Actual								_
Grievance Redress Measures	Scheduled				-				\neg
	Actual								
Securing Fund	Scheduled								- 1
Signing of Contracts with NGO for Livelihood Restoration						-			_
Payment of Compensation	Scheduled								-
	Actual						_		-
Relocation of PAPs	Scheduled			-					+
	Actual	100000							-
Construction of Roads	Scheduled							Approximately 30 morths	췹-
	Actual								1
Monitoring and Evaluation	Scheduled								+
	Antonia								4

3. Reporting period to JICA
Before construction, during construction, and during operation period, LCC will implement Environmental Monitoring with support of MLGH and will submit
Monitoring Form to JICA biannually until two years after the operation period starts.

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Environmental Checklist 1/4

			CANANA
Category	Environmental		Confirmation of Environmental Considerations
1 Permits and Explanation	(1) E1A and Environmental Permits	Have EIA reports been officially completed? Have EIA reports been approved by authorities of the Zambia government? Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied? In addition to the above approvals, have other required environmental permits been obtained from the appropriate regalatory authorities of the government?	OEIS Report have not completed. EIS report will be approved in April 2011. © EIS report will be approved in February 2011. Draft EIS document for the Project have been submitted in January 2011 and the final report will be appreced in April 2011. © Not yet. ©Not applicable.
	(2) Explanation to the Public	Did implementing agency explain contents of the project and the potential impacts adequately to the public based on appropriate procedures concerning information disclosure? Did participants understand what to be explained? Are proper responses made to comments from the public and regulatory authorities?	O2 Stakeholder Meetings were held at LCC, in addition, 3 Focus Group Meetings have been held along the project area for PAPs. The purpose of meetings were to inform stakeholders about the project implementation, route alternatives, receive comments, route selection process , design results and land expropriation proceed are. Suggestions that have been received from attendeds were on the land acquisition issue and environmental mitigation measures. Focus Group Meeting was held along the Project Road which is newly proposed such as Inner Ring and Ben Bella Extension road according to the exchadule.
	(I) Air Quality	O is there any possibility that air pollutants emitted from various sources, such as vehicle traffic, may affect ambient air quality? Does ambient air quality comply with the country's ambient air quality standards? © Where inclusifial areas already exist near the route, is there a possibility that the project make air pollution werse?	① The project site is considered fair since the site does not have any major polluting source such as inclustrial areas or heavy traffic. During construction period, dust of works may effect ambient, so periodical measures such as water spray arcund work site and installing sheet cover on a truck is necessary. Pollution of ceaust from wheles such as NO₂ w.ll be within ambient air quality standards considering with ambient air quality level monitored in Lusaka city center during construction and operation period. ②No industrial area axists along the Project alignment.
2 Mitigation Measures	(2) Water Quality	Bethere any possibility that soil runoff from the bare lands resulting from landside, such as cutting and filling works, may cause water quality degradation in downstream water areas? Is there a possibility that surface runoff from roads may contaminate water sources such as groundwater? Do effluents from various facilities, such as stations and parking areas/service areas, comply with the country's effluent standards and ambient water quality standards? Is there a possibility that the effuents may cause areas that do not satisfy with the country's ambient water quality standards?	DEarth work worn be carried out during rainy season and filled soil will be protected by grouted riprap, so there is no possibility of soil runoff and water quality degradation in downstream water area. @Surface runoff water from roads during operation period will be designed to be drained as public water, and periodical cleaning on road is on menu. Influence of surface runoff water is little. Contamination of groundwater is negligible.

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Environmental Checklist 2/4

Category	Main Check frems Do noise and vibrations frem vehicle traffic satisfy with the country's standards?	Confirmation of Environmental Considerations Obaring construction period, especially land preparation and structural works (with the fall use of
(3) Noise and Vibration		neavy equipments), noise level at a nearest residence from read alignment, will exceed international standards. Low noise construction equipment should be used especially near sensitive facilities such as solbool. During operation period, noise level in the area immediate to the road will be the same as present condition of other roads existing districts. The project may cause insignificant impact of vibration to community or structures.
(1) Protected Areas	© is the project site located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project may affect the protected areas?	ÜNo. The Project site is not in protected area.
(2) Ecosystem 3 Natural Environment	 ⑤ Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., coral reefs, mangroves, or tidal flats)? ⑥ Does the project site encompass the protected habitats of endangered species designated by based on IUCN 2008. ⑥ Does the project site encompass the protected habitats of endangered species designated by based on IUCN 2008. ⑥ It significant ecological impacts are anticipated, are adequate protection measures taken to (include the impacts on the ecosystem?) ⑥ Are adequate protection measures taken to prevent impacts, such as disruption of migration of include the impacts on the ecosystem? ⑥ Are adequate protection measures taken to prevent include a disturbance of ecosystems ⑥ Is there a possibility that installation of roads will cause impacts such as destruction of exotic formative invasive) species and posts? Are adequate measures the project site is becated at underveloped areas, is there a possibility that the new development will result in excensive loss of natural environments? 	©There is no primeral, tropical forest, nor ecological valuatic habitat in the project area or nearby. ©Project site does not encompass protected area based on Law in Zambia and no species of Red Liss based on IUCN 2008. ©No significant ecological impacts are amicipated. ©Disruption of migration routes, habitat fragmentation and so on are not amicipated. The project area is located in the urban areas of the capital city. ©They are not anticipated. ©The project alinement pass through existing road for local people and housing land developement.
(3) Hydrology	(D) is there a possibility that change of topographic features and installation of sinuctures such (O) there might be no impact to surface hydrology and underground hydrology due to the road design as tunnels may adversely affect surface water and groundwater flows?	OThere might be no impact to surface hydrology and underground hydrology due to the considered drainage structures.
(4) Tepography and Geology	① Is there a soft ground on the route that may cause slope failures or landslides? Are adequate measures considered to provent slope failures or landslides if needed? Are adequate any possibility that civil works such as cutting and filling will cause slope failures or landslides? Are adequate measures considered to prevent slope failures or landslides? ③ Is there any possibility that soil runoff will result from cutting and filling areas, wasce soil disposal sites, and bernow sites? Are adequate measures taken to prevent soil runoff?	OThere is no soft ground on the route of the Project. There is no possibility of slope failure or landslides becasee project road will be desined as flat or low embankment structure. Swidequate measures will be taken to prevent soil runoif during construction. The earthwork will be carried out in dry season in principal.

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