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資料 1. 調査団員・氏名

## 資料 1. 調査団員・氏名

### (1) 第一次現地調査(BD1)時

担 当	氏 名	所 属
総 括	宮田 克二	国際協力機構無償資金協力部業務第一グループ 運輸交通・電力チーム 主任
無 償 資 金 協 力	田北 多絵	外務省国際協力局 無償資金・技術協力課
業務主任/道路交通計画	増井 徹美	(株) 建設企画コンサルタント
道路設計 I (本体工)	香野 拓司	(株) 建設企画コンサルタント
道路設計 II (付帯工)	清水 伸晴	(株) 建設企画コンサルタント

### (2) 第二次現地調査(BD2)時

担 当	氏 名	所 属
総 括	鍋屋 史郎	国際協力機構ザンビア事務所所長
業務主任/道路交通計画	増井 徹美	(株) 建設企画コンサルタント
道路設計 I (本体工)	香野 拓司	(株) 建設企画コンサルタント
道路設計 II (付帯工)	清水 伸晴	(株) 建設企画コンサルタント
自然条件調査 (地形・地質)/積算 II	広瀬 末雄	(株) 建設企画コンサルタント
施工計画 / 積算 I	小野田 進	(株) 建設企画コンサルタント

### (3) 基本設計概要説明時

担 当	氏 名	所 属
総 括	宮田 克二	国際協力機構無償資金協力部業務第一グループ 運輸交通・電力チーム 主査
業務主任/道路交通計画	増井 徹美	(株) 建設企画コンサルタント
道路設計 I (本体工)	香野 拓司	(株) 建設企画コンサルタント
業 務 調 整	井上 尚三	(株) 建設企画コンサルタント

## 資料 2. 調査行程

## 資料 2. 調査行程

### (1) 第一次現地調査(BD1)時

日順	月日	曜日	官団員		コンサルタント団員		
			総括 (宮田 克二)	無償資金協力 (田北 多絵)	業務主任/ 道路交通計画 (増井 徹美)	道路設計 I (香野 拓司)	道路設計 II (清水 伸晴)
1	9月26日	水	・移動(成田→香港→ヨハネスブルグ)		・移動(成田→香港→ヨハネスブルグ)		
2	9月27日	木	・移動(ヨハネスブルグ→ルサカ) ・JICA 事務所表敬/打合せ		・移動(ヨハネスブルグ→ルサカ) ・JICA 事務所表敬・打合せ		
3	9月28日	金	・日本国大使館表敬・打合せ ・地方自治・住宅省(MLGH)表敬/打合せ		・大使館表敬・打合せ ・地方自治・住宅省(MLGH)表敬/打合せ		・現地再委託業者調査 ・調査資料整理
4	9月29日	土	・移動(ルサカ→リビングストン) ・リビングストン市表敬/打合せ ・現地調査	・移動(成田→シンガポール→ヨハネスブルグ)	・移動(ルサカ→リビングストン) ・リビングストン市表敬/打合せ ・現地調査		
5	9月30日	日	・現地調査	・移動(ヨハネスブルグ→リビングストン) ・現地調査	・現地調査		
6	10月1日	月	・リビングストン市打合せ ・現地調査		・リビングストン市打合せ ・現地調査		
7	10月2日	火	・現地調査、ミニッツ協議(リビングストン市)				
8	10月3日	水	・移動(リビングストン→ルサカ)、ミニッツ協議(MLGH)				
9	10月4日	木	・ミニッツ協議及び署名、日本国大使館報告、JICA 事務所報告・打合せ				
10	10月5日	金	・移動(ルサカ→ヨハネスブルグ→シンガポール)		・移動(ルサカ→リビングストン)		
11	10月6日	土	・移動(シンガポール→成田)	・関連機関との打合せ/協議、資料収集 ・収集資料整理	・現地調査(21 路線)	・現地調査(21 路線)	
12	10月7日	日					
13	10月8日	月					
14	10月9日	火					
15	10月10日	水					
16	10月11日	木					・JICA 事務所報告 ・調査結果の整理
17	10月12日	金					・移動(ルサカ→ヨハネスブルグ→香港)
18	10月13日	土					・移動(香港→成田)
19	10月14日	日					
20	10月15日	月					・移動(リビングストン→ルサカ)
21	10月16日	火		・移動(ルサカ→ヨハネスブルグ→香港)			
22	10月17日	水		・移動(香港→成田)			
23	10月18日	木					
24	10月19日	金					
25	10月20日	土					
26	10月21日	日					
27	10月22日	月					
28	10月23日	火			・移動(リビングストン→ルサカ) ・JICA 事務所報告		
29	10月24日	水			・移動(ルサカ→ヨハネスブルグ→香港)		
30	10月25日	木			・移動(香港→成田)		

(2) 第二次現地調査(BD2)時

日順	月日	曜日	官団員		コンサルタント団員				
			総括 (鍋屋 史朗)	業務主任/ 道路交通計画 (増井 徹美)	道路設計 I (香野拓司)	道路設計 II (清水 伸晴)	自然条件調査 (廣瀬 末雄)	施工計画/積算 (小野田 進)	
1	11月3日	土					・移動(成田→香港)		
2	11月4日	日					・移動(香港→ヨハネスブルグ→ルサカ)		
3	11月5日	月					・現地再委託業者・ネゴ/契約(ルサカ)		
4	11月6日	火							
5	11月7日	水							
6	11月8日	木					・移動(ルサカ→リビングストン)		
7	11月9日	金							
8	11月10日	土		・移動(成田→シンガポール)			・移動(バンコクヨハネスブルグ)	・移動(成田→シンガポール)	
9	11月11日	日		・移動(シンガポール→ヨハネスブルグ→ルサカ)			・移動(ヨハネスブルグ→ルサカ)	・移動(シンガポール→ヨハネスブルグ→ルサカ)	
10	11月12日	月		・日本国大使館表敬、JICA 事務所打合せ、MLGH 表敬/打合せ			・大使館表敬、JICA 事務所打合せ、MLGH 表敬/打合せ		
11	11月13日	火		・MLGH 打合せ、協議(RDA 同席)			・移動(ルサカ→リビングストン)		
12	11月14日	水		・MLGH 打合せ/協議					
13	11月15日	木							
14	11月16日	金		・移動(ルサカ→リビングストン) ・LCC 表敬					
15	11月17日	土		・現地調査					
16	11月18日	日		・移動(リビングストン→ルサカ)					
17	11月19日	月		・MLGH 打合せ、ミニッツ説明・協議(RDA 同席)					
18	11月20日	火							
19	11月21日	水		・ミニッツ署名、大使館報告、JICA 事務所打合せ					
20	11月22日	木		・MLGH 打合せ/協議		・移動(ルサカ→リビングストン)			・移動(ルサカ→リビングストン)
21	11月23日	金		・RDA 打合せ/協議					
22	11月24日	土		・関連機関との打合せ					
23	11月25日	日		・資料収集					
24	11月26日	月							
25	11月27日	火							
26	11月28日	水		・移動(ルサカ→リビングストン)	・現地調査				
27	11月29日	木		・移動(リビングストン→ルサカ)			・移動(リビングストン→ルサカ)		
28	11月30日	金					・現地再委託先打合せ		
29	12月1日	土		・MLGH 打合せ/協議		・移動(リビングストン→ルサカ)	・移動(ルサカ→ヨハネスブルグ→香港)		
30	12月2日	日		・関連機関との打合せ			・移動(香港→成田)		
31	12月3日	月		・資料収集					
32	12月4日	火		・収集資料整理		・移動(ルサカ→リビングストン)			
33	12月5日	水				・現地調査			
34	12月6日	木				・移動(リビングストン→ルサカ)			・移動(リビングストン→ルサカ)
35	12月7日	金		・JICA 事務所報告、大使館報告			・現地再委託先打合せ	・積算関連調査(ルサカ)	
36	12月8日	土		・移動(ルサカ→ヨハネスブルグ→シンガポール)			・移動(ルサカ→ヨハネスブルグ→バンコク)	・移動(ルサカ→ヨハネスブルグ→シンガポール)	
37	12月9日	日		・移動(シンガポール→成田)			・移動(バンコク→成田)	・移動(シンガポール→成田)	

(3) 基本設計概要説明時

日順	月日	曜日	官団員	コンサルタント団員		
			総括 (宮田 克二)	業務主任/ 道路交通計画 (増井 徹美)	道路設計 I (香野 拓司)	業務調整 (井上 尚三)
1	3月15日	土	・移動(成田→香港→ヨハネスブルグ)			
2	3月16日	日	・移動(ヨハネスブルグ→ルサカ)			・移動(ダルエスサラーム→ルサカ)
3	3月17日	月	・JICA 事務所打合せ、地方自治・住宅省(MLGH)表敬・打合せ/協議、日本国大使館表敬			
4	3月18日	火	・道路開発公社(RDA)表敬・打合せ/協議 ・移動(ルサカ→リビングストン) ・リビングストン市議会(KCC)表敬・打合せ協議			・関連機関打合せ/協議 ・資料収集
5	3月19日	水	・リビングストン市議会打合せ/協議、現地調査 ・移動(リビングストン→ルサカ) ・地方自治・住宅省(MLGH)打合せ/協議			
6	3月20日	木	・ミニッツ署名、日本国大使館報告、JICA 事務所報告			
7	3月21日	金	・資料収集/整理			
8	3月22日	土	・移動(ルサカ→ヨハネスブルグ→香港)			・移動(ルサカ→ダルエスサラーム)
9	3月23日	日	・移動(香港→成田)			

### 資料 3. 関係者(面会者)リスト



資料 3. 関係者(面会者)リスト

<b>Ministry of Local Government and Housing (MLGH)</b> 地方自治・住宅省		
Mr. Maswabi M.Maimbolwa	Permanent Secretary	事務次官 (2007年10月まで)
Mr. Joel M Ngo	Permanent Secretary	事務次官 (2007年11月以降)
Mr. Coillard C Chibbonta	Acting Permanent Secretary	事務次官代理
Mr. Peter Lubambo	Director of Department of Infrastructure and Support Services	社会基盤整備局長
Mr. Davies C. Zulu	Assistant Director of Department of Infrastructure and Support Services	社会基盤整備局副局長
Mr. Richrd M. Kangwa	Senior Engineer of Department of Infrastructure and Support Services (Urban road )	シニアエンジニア(同上局、都市道路担当)
Mr. Nkumbu Siame	Senior Engineer of Department of Infrastructure and Support Services (Rural road )	シニアエンジニア(同上局、地方道路担当)
<b>Livingstone City Council (LCC)</b> リビングストーン市役所		
Mr. D. Musesa	Acting Mayor, (Councillor)	市長代理
Mr. George Kalenga	Town Clerk of Livingstone City Council	助役
Mr. Clement Mutale Chisanga	Director of City Planning	都市計画局長
Mr. Mwiya Felix	Acting Director of Planning	都市計画局長代理
Mr. Geoffney Simywibulula	Director of Engineering Service	技術サービス局長
Mr.Charles Sichzya	Deputy Director of Engineering Service	技術サービス副局長
<b>Road Development Agency (RDA)</b> 道路開発公社		
Mr. Erasmus M. Chlundika	Acting Director & Chief Executive Officer	総裁代理
Mr. Daniel Mulonga	Acting Manager, Planning & Design	計画・設計部長代理
Mr. Stephen M. Malubila	Manager, Construction and Maintenance	建設・維持管理部長
Mr. Aalon Mwila	Principal Engineer of HMS-Trunk & Main Roads	主席エンジニア
Mr. Elias Mwape	Chief Engineer, Design	設計部チーフエンジニア
Mr. Tom M. Thomsen	Technical Advisor : Planning	技術アドバイザー (EU 派遣専門家)
Mr. Mubuyaeta Kapinda	Regional Engineer, Southern Province (Livingstone city)	南部州代表エンジニア
Mr. Lazarous Nyawali	Regional Engineer, Southern Province (Livingstone city)	南部州代表エンジニア
Mr. Gershom Mwangomba	Senior Engineer of Southern Province	南部州シニアエンジニア

Mr. Jairo Mhango	Manager Axle Load Control (Lusaka)	車軸負荷管理部長 (ルサカ)
<b>National Road Fund Agency (NRFA)</b> 国家道路資金庁		
Mr. Emmanuel Kaunda	Monitoring and Evaluation Manager	モニタリング、評価部長
<b>Ministry of Works &amp; Supply (MWS)</b> 公共事業・供給省		
Mr. Kelly M.Kapinga	Acting Assistant Director (Economics) of Planning and Monitoring Department	副局長代理 (経済担当)
<b>Environmental Council of Zambia (ECZ)</b> ザンビア環境評議会		
Mr. Felix Chabala	Principal Inspector-Environmental impact Assessment	検査長(EIA 担当)
Mr. Humphrey K. Mwale	Senior Inspector-Environmental impact Assessment	シニア検査官(EIA 担当)
Ms.Nancy Muslofa	Senior Inspector-Environmental impact Assessment	シニア検査官(EIA 担当)
Mr. Fredric Muyano	Senior Inspector (Livingstone city)	シニア検査官 (リビングストーン駐在))
<b>Zambia Wildlife Authority ( ZAWA)</b> 野生動物公社		
Mr. Fred Sakabry	Resident Engineer	駐在エンジニア
<b>National Heritage Conservation Commission (NHCC)</b> 国家遺産保護委員会		
Mr. Isaae Kangwu	Manager Information and Public Relations	情報・広報部長
<b>Ministry of Home Affaire (MOHA)</b> 内務省		
Mr. Anderson S. Phiri	Acting Deputy Chief Immigration Officer (Adomistration)	入国管理所長代理
<b>Road Transport &amp; Safty Agency (RTSA)</b> 道路輸送・安全公社		
Mr. Martin S. Mbangu	Deputy Director -Safety	副局長 (安全局)
<b>Zambia National Tourist Board (ZNTB)</b> ザンビア国家観光局		
Mr. Peter Zulu	Statistician of ZNTB	統計学者
<b>Zambia Railways Limited</b> ザンビア国営鉄道会社		
Mr. Richard Bwalya	The Technical Manager	技術部長
<b>Railway Systems of Zambia Ltd.</b> ザンビア鉄道システム会社		
Mr. Charlles David Phiri	Executive Manager Corporate Affaires	取締役
<b>World Bank in Zambia</b> 世界銀行 ザンビア事務所		
Mr. Davies Makasa	Team Leader	業務主任

<b>European Union (Delegation of the European Commission of Zambia)</b> 欧州連合 ザンビア事務所		
Mr. Jurgen Kettner	Second Secretary, Head of Infrastructure Section	二等書記官、社会基盤部門長
Mr. Liso Matanga Simbeleko	Programme Officer - Infrastructure	プログラムオフィサー、社会基盤担当
<b>Embassy of Japan</b> 在ザンビア国日本国大使館		
Mr. Mitamura Hideto 三田村 秀人	Ambassador Extraordinary and Plenipotentiary of Japan to the Republic of Zambia	特命全権大使
Mr. Suzuki Kotaro 鈴木 光太郎	Minister-Counsellor	公使参事官
Mr. Hirata Yuichi 平田 裕一	Second Secretary (Economic-Cooperation)	二等書記官(経済協力担当)
<b>JICA Zambia Office</b> JICA ザンビア事務所		
Mr. Nabeya Shiro 鍋屋 史朗	Resident Representative	所長
Mr. Miyasaka Minoru 宮坂 実	Deputy Resident Representative	次長
Mr. Sato Wataru 佐藤 渉	Assistant Resident Representative	所員
Ms. Elizabeth Phiri	Economic development Advisor	経済開発アドバイザー

#### 資料 4. 討議議事録 (M/D)

(1) 第一次現地調査時

**Minutes of Discussions**  
**on the Basic Design Study**  
**on the Project for Improvement of Livingstone City Roads**  
**in the Republic of Zambia**

In response to a request from the Government of the Republic of Zambia (hereinafter referred to as "GRZ"), the Government of Japan decided to conduct a Basic Design Study on the Project for Improvement of Livingstone City Roads (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 Basic Design Study Team (hereinafter referred to as "the Team"), headed by Mr. Miyata Katsuji, Senior Project Administration Officer, Transportation and Electric Power Team, Project Management Group I of the Grant Management Department, JICA, and is scheduled to stay in the country from September 27 to October 24, 2007.

The Team held discussions with the concerned officials of GRZ and conducted a field survey at the study area.

In the course of discussions and field survey, both sides confirmed the main items described in the attached sheets.

Lusaka, October 4, 2007



Miyata Katsuji  
Leader  
Basic Design Study Team  
Japan International Cooperation Agency



Maswabi M. Maimbolwa  
Permanent Secretary  
Ministry of Local Government and Housing  
The Republic of Zambia





## ATTACHMENT

### 1. Objective of the Project

The objective of the Project is to rehabilitate the roads and related structures in the City of Livingstone.

### 2. Project Site

The sites of the Project are located in the City of Livingstone, as shown in Annex-1.

However, the final sites of the Project are subject to further studies in Japan.

### 3. Responsible and Implementing Organizations

3-1. The responsible Ministry is the Ministry of Local Government and Housing (MLGH).

The organization chart of the MLGH is shown in Annex-2-1.

3-2. The implementing organization is the Livingstone City Council (LCC).

The organization chart of the LCC is shown in Annex-2-2.

### 4. Items Requested by the GRZ

After discussions with the Team, the Zambian side finally requested the items described in Annex-3.

JICA will further assess the appropriateness of the request and will report the findings to the Government of Japan.

### 5. Japan's Grant Aid Scheme

5-1. The Zambian side understands the Japan's Grant Aid scheme explained by the Team as described in Annex-4.

5-2. The Zambian side will take necessary measures, as described in Annex-5, for smooth implementation of the Project, as a condition for the Japan's Grant Aid to be implemented.

### 6. Schedule of the study

6-1. The Team will proceed with further studies in Zambia until October 24, 2007.

6-2. JICA will dispatch a mission for the second field survey around the middle of November, 2007.

6-3. Based on the first and second field survey, JICA will prepare the draft report in English and dispatch a mission to Zambia in order to explain its contents around the middle of March, 2008.



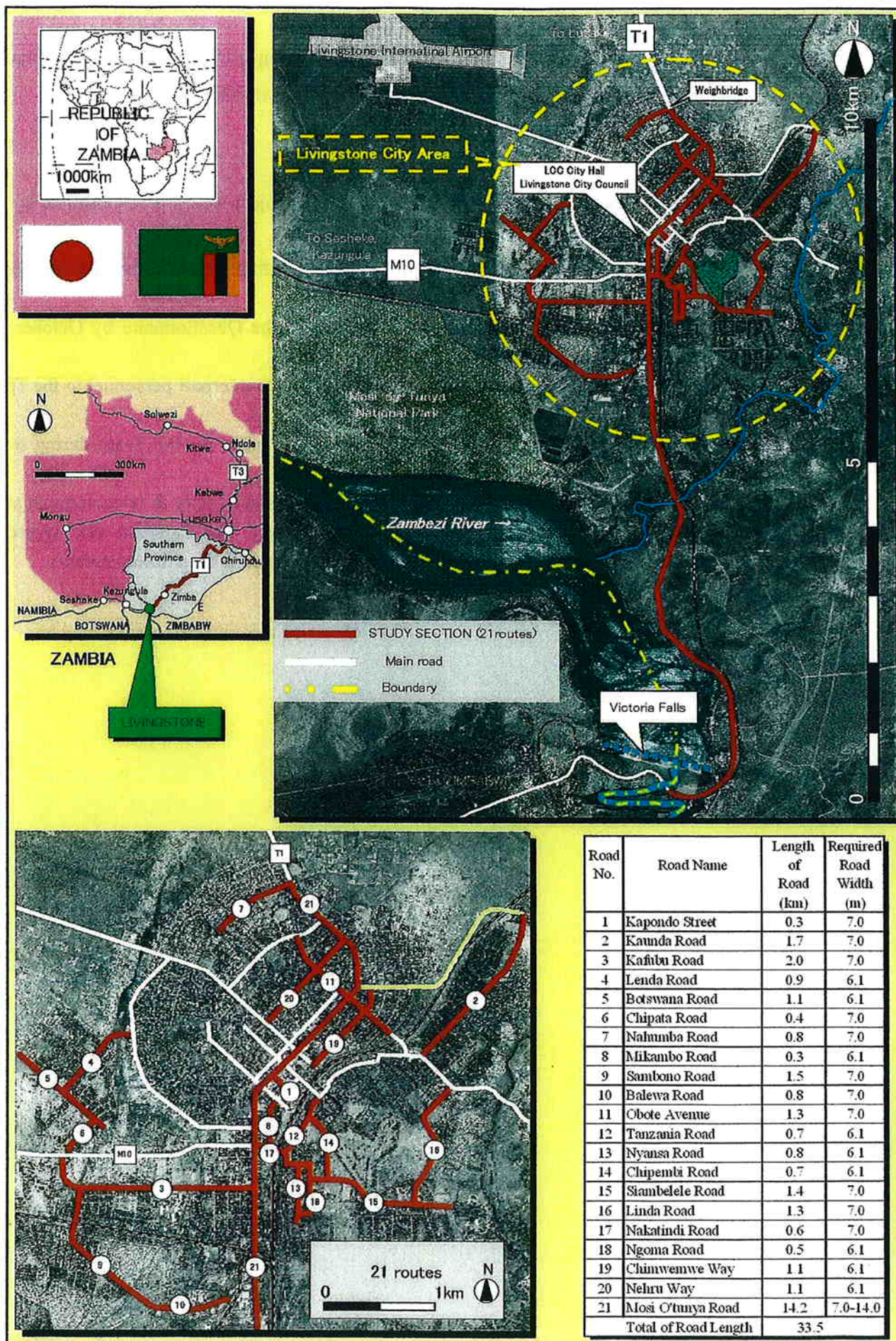
6-4. When the contents of the draft report are accepted in principle by GRZ, JICA will complete the final report and send it to GRZ around the middle of May 2008.

#### 7. Other Relevant Issues

- 7-1. Both sides confirmed that the final components of the Project would be determined by the Japanese side after further studies in Japan.
- 7-2. The Zambian side agreed to complete all procedures regarding the environmental and social considerations necessary for the Project.
- 7-3. The Zambian side should submit answers in English to the Questionnaire by October 10, 2007, with relevant documents.
- 7-4. The Zambian side should provide necessary number(s) of counterpart personnel to the Team during the period of the studies in Zambia.
- 7-5. Both sides agreed that the Zambian side provides office space for the Team during study period.
- 7-6. The Zambian side shall relocate the public utilities, such as electricity & telecommunication lines, water and sewerage pipes, necessary for the Project. The Zambian side agreed to secure and allocate necessary budget for undertakings to be done on a timely manner.





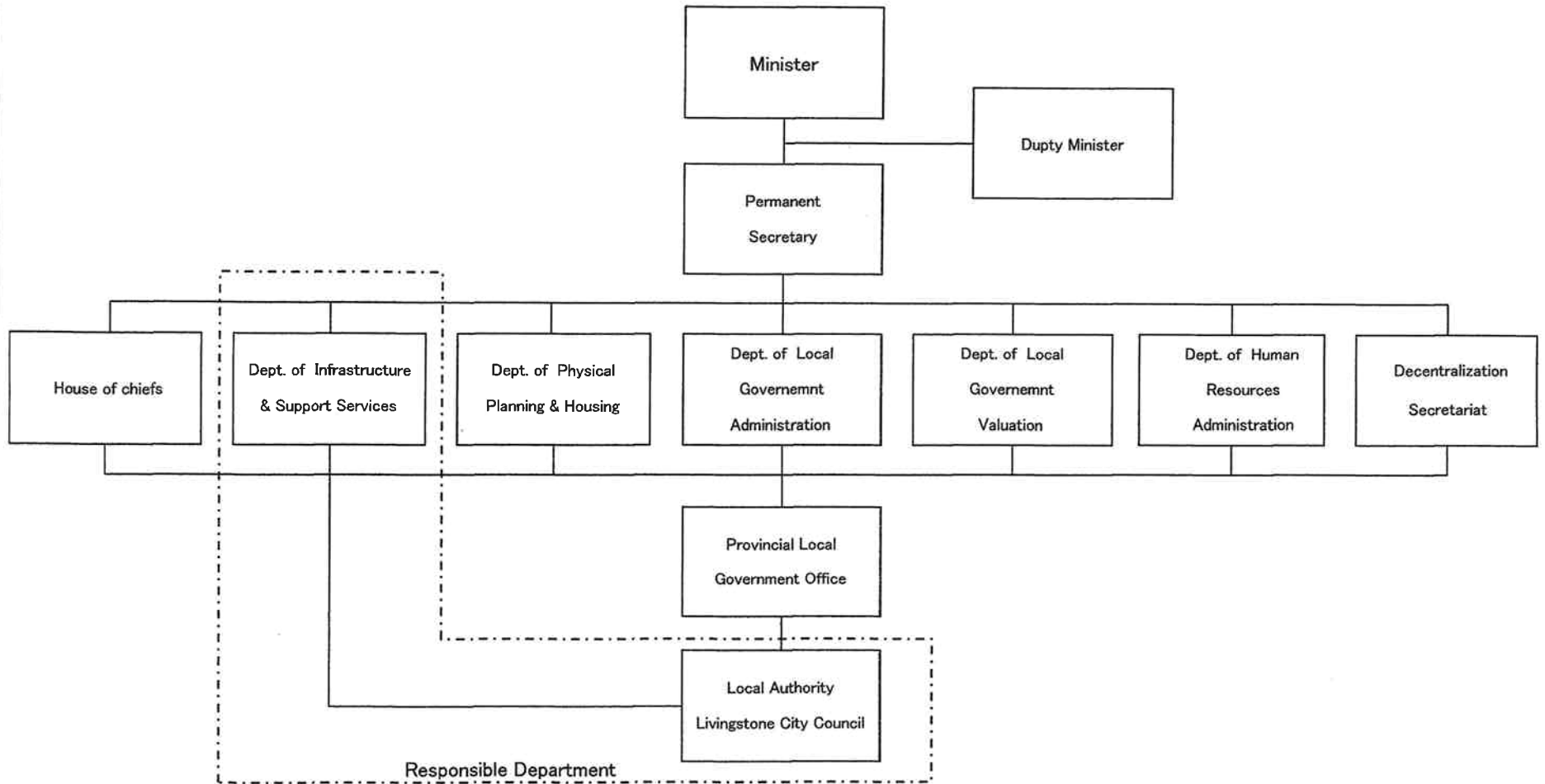


LOCATION MAP

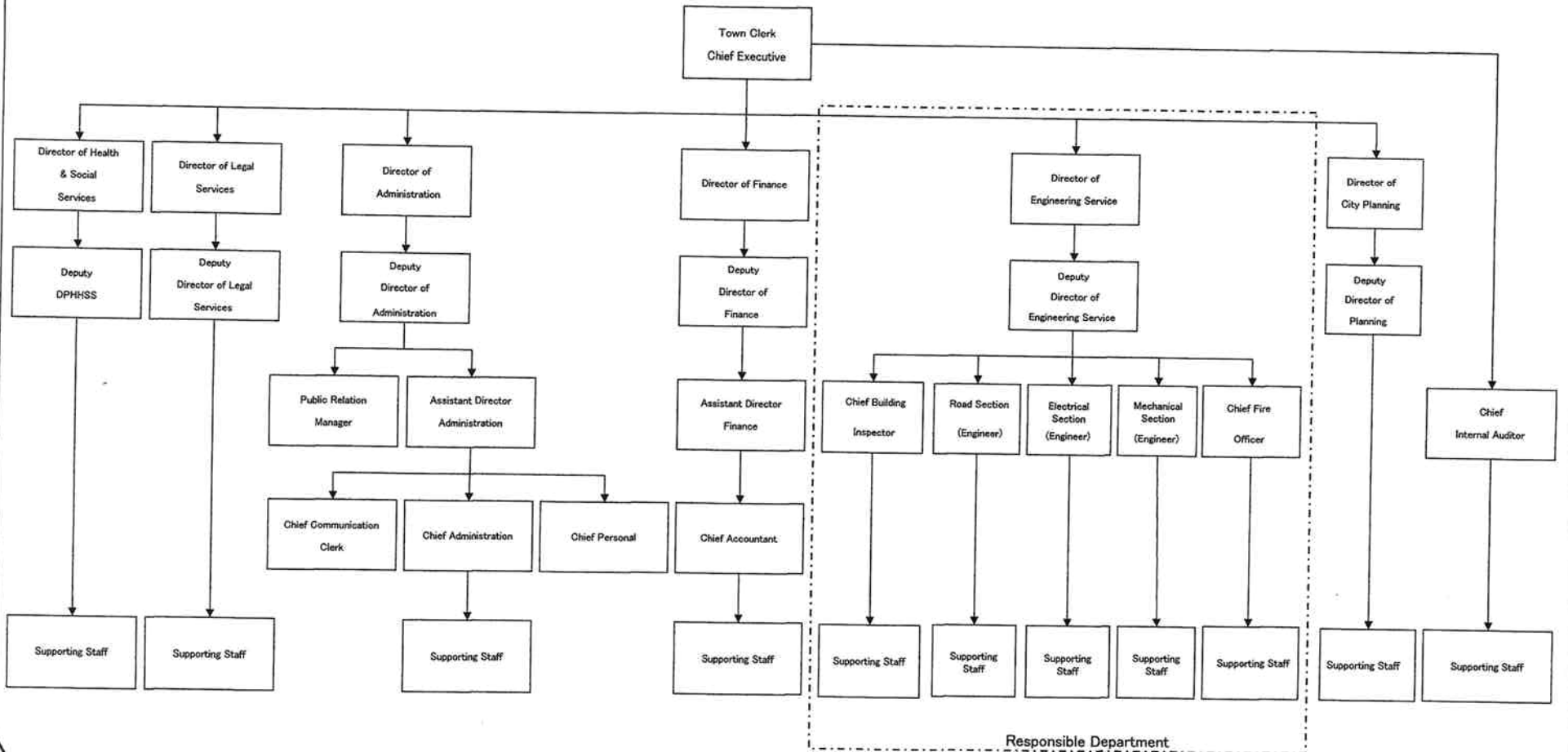
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Organization Chart of Ministry of Local Government and Housing (MLGH)



Organization Chart of Livingstone City Council (LCC)



**Annex-3**

Road No.	Road Name	Length of Road (km)	Required Road Width (m)
1	Kapondo Street	0.3	7.0
2	Kaunda Road	1.7	7.0
3	Kafubu Road	2.0	7.0
4	Lenda Road	0.9	6.1
5	Botswana Road	1.1	6.1
6	Chipata Road	0.4	7.0
7	Nahumba Road	0.8	7.0
8	Mikambo Road	0.3	6.1
9	Sambono Road	1.5	7.0
10	Balewa Road	0.8	7.0
11	Obote Avenue	1.3	7.0
12	Tanzania Road	0.7	6.1
13	Nyansa Road	0.8	6.1
14	Chipembi Road	0.7	6.1
15	Siambelele Road	1.4	7.0
16	Linda Road	1.3	7.0
17	Nakatindi Road	0.6	7.0
18	Ngoma Road	0.5	6.1
19	Chimwemwe Way	1.1	6.1
20	Nehru Way	1.1	6.1
21	Mosi O'tunya Road	14.2	7.0-14.0
Total of Road Length		33.5	



## Japan's Grant Aid Scheme for General Project

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

### 1. Grant Aid Procedures

Japan's Grant Aid Scheme is executed through the following procedures.

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

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

Secondly, JICA conducts the study (Basic Design Study), using Japanese consulting firms.

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

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

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

### 2. Basic Design Study

#### 1) Contents of the Study

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

- 3- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the

Project's implementation.

- 4- Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view;
- 5- Confirmation of items agreed upon by both parties concerning the basic concept of the Project.
- 6- Preparation of a basic design of the Project.
- 7- Estimation of cost of the Project.

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

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even through they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project.

Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

## 2) Selection of Consultants

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

The consulting firms used for the Study are recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency.

## 3. Japan's Grant Aid Scheme

### 1) Exchange of Notes (E/N)

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

- 2) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the project for. Within the fiscal year, all procedure such as exchanging of the Notes, concluding contracts with consulting firms and contractors and final payment to them must be completed.

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

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

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



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

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 the Government of Japan. This "Verification" is deemed necessary to secure accountability of Japanese taxpayers.

5) Undertakings required to the Government of the recipient country

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

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

6) "Proper Use"


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

7) "Re-export"

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

8) Banking Arrangement (B/A)

- a) The Government of the recipient country or its designated authority should open an



account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the verified contracts.

b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay (A/P) issued by the Government of 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 to the Bank.





## Major Undertakings to be taken by Each Government

No.	Items	To be covered by Grant Aid	To be covered by Recipient Party
1	To secure land		●
2	To clear, level and reclaim the site when needed		●
3	To construct gates and fences in and around the site	( ● )	( ● )
4	To construct roads		
	1) Within the site	●	
	2) Outside the site when needed	N/A	N/A
5	To bear the following commission to the Japanese bank for the banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
6	To ensure prompt unloading and customs clearance at port of disembarkation in recipient country		
	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	●	
7	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 Zambia and stay therein for the performance of their works		●
8	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in Zambia with respect to the supply of the products and services under the verified contracts		●
9	To maintain and use properly and effectively the facilities constructed and equipment provided under the Japan's Grant		●
10	To bear all the expenses, other than those to be borne by the Japan's Grant, necessary for construction of the facilities		●

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




(2) 第二次現地調査時

**Minutes of Discussions**  
**on the Basic Design Study**  
**on the Project for Improvement of Livingstone City Roads**  
**in the Republic of Zambia**  
**(Second Field Survey)**

In October 2007, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Basic Design Study Team (First Field Survey) on the Project for Improvement of Livingstone City Roads (hereinafter referred to as "the Project") to Zambia.

JICA sent to Zambia the Basic Design Study Team (Second Field Survey) (hereinafter referred to as "the Team"), headed by Mr. Shiro Nabeya, Resident Representative, JICA Zambia Office, from November 4 to December 8, 2007.

The Team held discussions with the concerned officials of the Government of the Republic of Zambia (hereinafter referred to as "GRZ") and conducted a field survey at the study area.

In the course of discussions and field survey, both sides confirmed the main items described in the attached sheets.

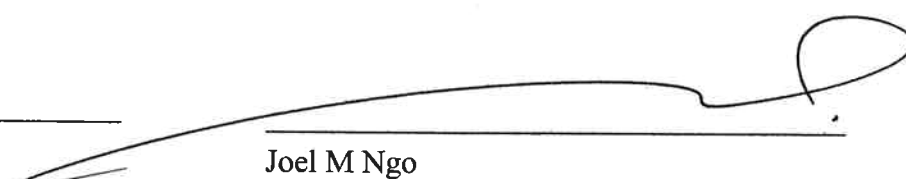
Lusaka, November 21, 2007

Signed by;

Signed by;



Shiro Nabeya  
Leader  
Basic Design Study Team  
Japan International Cooperation Agency



Joel M Ngo  
Permanent Secretary  
Ministry of Local Government and Housing  
The Republic of Zambia

Witnessed by;



Erasmus M. Chilundika  
Acting Director & CEO  
Road Development Agency (RDA)  
The Republic of Zambia

## ATTACHMENT

### 1. Items Requested by the GRZ

Based on the result of the analysis by the Team, both sides had discussions on the components of the Project. The Team explained to the Zambian side that the list of 20 roads originally requested did not qualify. It was then proposed to include only Mosi O'Tunya Road because of its economic and tourist importance. The Zambian side understood the components of the Project explained by the Team and finally requested the items described below.

To improve Mosi O'Tunya Road (13.22km) including the following items;

- To improve the pavement (including sidewalk),
- To improve the road drainage system along the road,
- To provide the traffic safety and service facilities (road markings, signs, bus stops, and parking area).

JICA would further assess the appropriateness of the request and report the findings to the Government of Japan.

### 2. Japan's Grant Aid Scheme

The Zambian side understood the Japan's Grant Aid scheme and the necessary measures to be taken by the Zambian side as explained by the Team and described in Annex-4 and Annex-5 of the Minutes of Discussions signed by both sides on October 4, 2007.

### 3. Schedule of the study

- 3-1. The Team would proceed with further studies in Zambia until December 8, 2007.
- 3-2. Based on the studies both in Zambia and Japan, JICA would prepare the draft report in English and dispatch a team to Zambia in order to explain its contents around the middle of March, 2008.
- 3-3. Following acceptance in principle of the draft report by GRZ, JICA would complete the final report and send it to GRZ around the end of May 2008.

### 4. Other Relevant Issues

- 4-1. The Zambian side should obtain the approval and/or confirmation in writing regarding the environmental and social considerations necessary for the Project from the concerned authorities such as the Environmental Council of Zambia by the end of February, 2008.
- 4-2. The Zambian side should relocate the public utilities, such as electricity & telecommunication lines, water and sewerage pipes, within the Right of Way (ROW) and/or Corridor of Impact (COI) of the roads before the commencement of the Project.
- 4-3. The Zambian side should provide necessary number(s) of counterpart personnel to the Team during the period of the studies in Zambia.
- 4-4. Both sides agreed that the Zambian side would provide office space for the Team during the study period.
- 4-5. The Zambian side strongly requested the Team to include street lights, benches, a cycling track and especially traffic lights. Both sides confirmed that the final components of the Project would be examined by the Japanese side based on the results of further study.
- 4-6. The Zambian side requested the Team to make a priority among the 20 roads for future project consideration.



(3) 基本設計概要説明時

**Minutes of Discussions  
on the Basic Design Study  
on the Project for Improvement of Livingstone City Roads in the Republic of Zambia  
(Explanation on Draft Report)**

In November 2007, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Basic Design Study Team (Second Field Survey) on the Project for Improvement of Livingstone City Roads (hereinafter referred to as "the Project") to Zambia, and through discussions, field survey, and technical examination of the results in Japan, JICA prepared a draft report of the study.

In order to explain and to consult with the concerned officials of the Government of Zambia on the components of the draft report, JICA sent to Zambia the Draft Report Explanation Team (hereinafter referred to as "the Team"), which is headed by Mr. Katsuji Miyata, Chief, Transportation and Electric Power Team, Project Management Group I of the Grant Management Department, JICA, from March 16 to March 22, 2008.

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

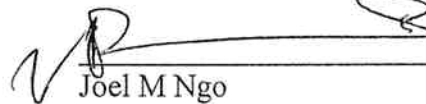
Lusaka, March 20, 2008

Signed by;



Katsuji Miyata  
Leader  
Draft Report Explanation Team  
Japan International Cooperation Agency

Signed by;



Joel M Ngo  
Permanent Secretary  
Ministry of Local Government and Housing  
The Republic of Zambia



Witnessed by;



Erasmus M. Chilundika  
Acting Director & CEO  
Road Development Agency ( RDA )  
The Republic of Zambia



## ATTACHMENT

### 1. Components of the Draft Report

The Zambian side agreed and accepted in principle the components of the draft report explained by the Team.

### 2. Cost Estimation

Both sides agreed that the Project Cost Estimation, as attached in Annex-1, should never be duplicated or released to any third parties before the signing of all the Contracts for the Project.

### 3. Schedule of the Study

JICA will complete the final report in accordance with the confirmed items and send it to the Zambian side around June 2008.

### 4. Other Relevant Issues

4-1. Both sides confirmed that the additional requests, for benches, a cycling track and traffic lights have been excluded from the components of the Project, except for street lights.

4-2. The Zambian side submitted the approval in writing regarding environmental and social considerations necessary for the Project from the Environmental Council of Zambia (ECZ) (as per Annex-2).

4-3. The Zambian side agreed to secure and allocate the necessary budget for undertakings to be done on a timely manner, based on the provisional amount shown in the draft report. The tentative schedule and contents of the budget are shown in Annex-3.

4-4. The Zambian side shall secure enough budget and personnel necessary for operation and maintenance of the facilities improved by the Project, including the periodical maintenance work after the completion of the Project.

4-5. The Team explained the result of the prioritization of 20 roads excluded from the components of the Project to the Zambian side for the reference only.

4-6. Both sides confirmed that the title of the Project should be changed to as "The Project for Improvement of Livingstone City Road in the Republic of Zambia".

Annex-1: Project Cost to be borne by Japan's Grant Aid

Annex-2: Official letter from ECZ

Annex-3: Schedule of Undertakings of Zambian side

<b>Confidential</b>
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**Project Cost to be Borne by Japan's Grant Aid**

Items			Cost (Million Japanese Yen)	
Construction Facilities	Road Construction	Existing pavement removal Earth work Pavement work (Course, Surface Course) Sidewalk Construction	735	983
	Drainage Facility Construction	Traversing Drainage Construction Drainage Gutter Construction	158	
	Incidental Road Facilities	Roadway Marking Work Street Light Construction Parking Lot Repair Work	90	
Detailed Design and Construction Supervision			75	
Total				1,058

## Notes:

- (1) The cost estimates in the above table are provisional and will be further examined by the Government of Japan for the approval of the Grant.
- (2) The Total Cost of the Project JPY 1,058 million is equivalent to USD 8.95 million at the current exchange rate  
USD 1.0 = JPY 118.26

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# ENVIRONMENTAL COUNCIL OF ZAMBIA

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 Lusaka Road  
 P.O. Box CRU31  
 Chirundu, Zambia  
 Tel/Fax: 260-1 515261

*In reply please quote*

ECZ/INS/101/1

December 26, 2007

No

The Permanent Secretary  
 Ministry of Local Government & Housing  
 P.O. Box 50027  
 Lusaka

**Attention: Mr. P Lubambo Director -DISS**

Dear Sir,

**RE: ENVIRONMENTAL PROJECT BRIEF FOR THE IMPROVEMENT OF LIVINGSTONE CITY ROADS BY JAPAN INTERNATIONAL CO-OPERATION AGENCY (JICA)**

The above captioned subject refers.

We acknowledge receipt of your letter **MLGH/101/19/8** dated December 4<sup>th</sup> 2007 in which you submitted a copy of the Environmental Project Brief (EPB) for the above captioned project.

The Environmental Council of Zambia would like to inform you that in 2004 we reviewed and approved with conditions, an Environmental Impact Statement for the Road segment fromimba through to Zimbabwe Border at Victoria Falls.

To this end, we have **no objection** to your proposed project for improvement of Livingstone City Roads with funding from JICA since the said works fall within the segment approved earlier on.

However the no objection is granted subject to the following conditions:

1. Ministry of Local Government and Housing shall implement all the mitigation measures stipulated in the EPB;
2. The Ministry of Local Government and Housing shall comply with the requirements of the Zambia Wildlife Authority for project undertaken within the jurisdiction of National Parks;

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*an*

*8*

3. The Ministry of Local Government and Housing shall comply with the requirements of the National Heritage and Conservation Commission.
4. Ministry of Local Government and Housing must comply with the following Regulations:
  - a. The Waste Management Regulations (SI No. 71 of 1993);
  - b. The Air Pollution Control Regulations (SI. No. 141 of 1996);
  - c. The Pesticides and Toxic Substances Regulations SI No. 20 of 1994
  - d. The Water Pollution Control Regulations (SI. No. 72 of 1993);
5. In the event that borrow pits are used, Ministry of Local Government and Housing shall inform ECZ of such development and shall furnish ECZ with details relating to location and associated impacts with defined mitigation measures.
6. Bund walls with capacity 110% to that of the fuel storage facilities must be built around the fuel storage facilities at to contain any possible leakages.
7. Sensitization of communities on environmental issues should be done before the commencement of any construction activities or long before the environment is damaged in any way.
8. This approval does not exempt Ministry of Local Government and Housing from complying with other relevant pieces of legislation and regulations;
9. This approval could be withdrawn without notice should Ministry of Local Government and Housing fail to comply with these conditions.

We thank you in anticipation of your usual co-operation.

Yours faithfully,



Edward Zulu  
Director

**ENVIRONMENTAL COUNCIL OF ZAMBIA**

Cc. The Town Clerk – Livingstone City Council  
The Director – Roads Development Agency, Lusaka





資料 5. 事業事前評価表(基本設計時)

資料 5. 事業事前計画表(基本設計時)

<p>1. 案件名</p>
<p>ザンビア共和国 リビングストーン市道路網整備計画</p>
<p>2. 要請の背景(協力の必要性・位置付け)</p>
<p>ザンビア共和国(以下「ザ」国)は、これまで経験してきた経済の低迷から脱却すべく経済の立て直しを図っており、ポテンシャルの高い農業振興と観光や貿易投資促進を通じた産業の活性化に努めている。近年では、国家の最大収入源である銅の国際価格の恩恵を受け、経済成長は 5%台まで改善してきている。こうした状況の下、「ザ」国では計画的にインフラ整備を行うため、「第 5 次国家 5 ヶ年計画(2006 年～2010 年)」を策定し、道路網の整備を進めている。しかしながら、道路整備の実施は慢性的な予算不足のため、多くを外国からの援助に依存している状況にある。</p> <p>要請地域であるリビングストーン市は、首都ルサカから約 500km 離れた南部州にあり、対象道路であるモシオツンヤ(T1 道路のリビングストーン市内の名称)道路は、首都ルサカからジンバブエを経由して南アフリカを経由するルートと、ボツワナを経由し南アフリカに接続するルートの分岐点に位置しており、「ザ」国主要物流ルートの中継地点として交通の要衝となっている。</p> <p>同路線は 1964 年以降に整備されたが、1970 年代後半からは、道路セクターに向けた予算の減少により、長期間に亘って一部を除き打ち換えなどの本格的改修が行われなまま現在に至っており、近年の国際幹線道路網整備に伴う大型車両の増加による破損が激しく、また、道路付帯施設である歩道や排水施設の損傷も著しく、観光業(当該道路の終点部には、世界遺産であるビクトリア・フォールズを擁する)を主とする同市の経済発展の阻害要因となっており、改修が必要とされている。</p> <p>本プロジェクトはリビングストーン市内のモシオツンヤ道路改修を実施することにより、対象区間の安全で円滑な交通流を確保することを目的とする。</p>
<p>3. プロジェクト全体計画概要</p>
<p>(1) プロジェクト全体計画の目標 T1 路線、リビングストーン市内において円滑で安定的な交通が確保できる。 裨益対象の範囲及び規模：リビングストーン市民 10.4 万人、観光客 60 万人</p> <p>(2) プロジェクト全体計画の成果 <u>対象道路が整備される。</u></p> <p>(3) プロジェクト全体計画の主要活動 ・<u>モシオツンヤ道路の 13.01km 区間を整備する。</u> ・道路整備後の維持管理を行う。</p> <p>(4) 投入(インプット) ア <u>日本側：無償資金協力 9.86 億円</u> イ 「ザ」国側 (ア) 道路建設実施に伴う支障物件の移設・改修に係る費用 (イ) 道路建設後の補修・維持管理に係る経費</p> <p>(5) 実施体制 主管官庁：「ザ」国地方自治・住宅省(MLGH) 実施機関：リビングストーン市(LCC)</p>
<p>4. 無償資金協力案件の内容</p>
<p>(1) サイト 「ザ」国 南部州 リビングストーン市</p> <p>(2) 概要 モシオツンヤ道路 13.01km 区間の整備</p> <p>(3) 相手国側負担事項</p>

- ① 作業ヤード用地の確保(作業基地、土取場、土捨場、廃材処分場)
- ② 支障物件(上下水道管・電力線の移設、マンホールの改修、既存街路灯の撤去・移設)
- ③ 新設街路灯の電力引込線工事

(4) 概算事業費

概算事業費 9.93 億円(無償資金協力 9.86 億円、相手国側負担 0.07 億円)

(5) 工期

詳細設計・入札期間を含め約 18 ヶ月(予定)

(6) 貧困、ジェンダー、環境及び社会面の配慮

特になし

5. 外部要因リスク(プロジェクト全体計画の達成に関するもの)

- ・洪水、地震など予想を超える自然災害が発生しない。

6. 過去の類似案件からの教訓の活用

特になし

7. プロジェクト全体計画の事後評価に係る提案

(1) プロジェクト全体計画の目標達成を示す成果指標

成果指標	現状(2008年)	計画後(2010年)
対象区間の安全な走行速度の改善	20~30km/h	40~50km/h
街路灯整備による夜間の安全性の向上	照明施設はあるが、機能しているのは 4~5 灯のみである。	3.1km 区間の照明施設が整備される。

(2) その他の成果指標

- ・ 特になし

(3) 評価のタイミング

2010 年完工以降(施設供用開始後)

## 資料 6. 参考資料/入手資料リスト

## 収集資料リスト

調査名： リビングストーン市道路網整備計画基本設計調査

番号	名 称	形 態 図書・ビデオ 地図・写真等	オリジナル ・コピー	発行機関	発行年
1	Annual Report 2006 (NRFA) 2006年版年間報告書（国家道路財務公社）	図書	オリジナル	National Road Fund Agency (NRFA)	2006年
2	Environment Impact Assessment Process 環境影響評価の手続き	図書	オリジナル	Environment Council Zambia (ECZ)	2006年
3	2006 Annual Report(RDA) 2006年版年間報告書（道路開発公社）	電子データ		Road development Agency (RDA)	2006年
4	SATCC 1998 南アフリカ地域道路・排水設計基準	電子データ		RDA	1998年
5	Traffic Counts ADT 全国（2006年） 全国交通量データ	電子データ		RDA	2006年
6	Traffic T1 T1道路の交通量データ	電子データ		RDA	2006年
7	Recommendation on Road design Standards Geometric Design of Rural Roads (Trunk,Urbun,Feeder,Rural) (道路設計マニュアル)	図書	コピー	Roads Department Mnistry of works and supply (MWS)	1994年
8	Annual Report 2006(MOWS) 2006年版年間報告書（公共事業・調達省）	図書	オリジナル	Mnistry of works and supply (MWS)	2006年
9	Project appraisal document Support for economic expansion and diversification(SEED) 経済拡大及び多様化プロジェクト支援計画資料	電子データ		The World Bank	2004年
10	Zambia traveller's Map 1/2200000 ザンビア国地図	地図	オリジナル	Michillan Zambia	2007年



番号	名 称	形 態 図書・ビデオ 地図・写真等	オリジナル ・コピー	発行機関	発行年
11	Road Act 2002 道路法	電子データ		RDA	2002年
12	The Road Traffic Act No.11 of 2002、 道路交通法	電子データ		RDA	2002年
13	Annal Work Plan 2007 & 2008(RDA) 2007,2008年版f業務計画書 (道路開発公社)	電子データ		RDA	2007年
14	Livingstone Structure Plan, Final Report、リビングストーン市開発計画 ・Status Quo(現状)、・Development Framework(開発の枠組)	電子データ		Livingstone City Council(LCC)	2006 年
15	Techno-Economic Studies and Detailed Engineering Design, Design Package I, Chirundu - Lusaka Road (T2) and Zimba - Livingstone Road (T1) T1,T2 道路の経済・技術調査及び詳細 入札図書(Vol-1,2,3,5)	図書	コピー	Ministry of Works and Supply (MWA)	2004 年
16	Feasibility Study of Tourist Road Network in Livingstone Area, Zambia Final Report 道路網フィジビリティ調査	電子データ		Road Department, (MWS)	2003 年
17	Standard Specifications for Roads and Bridges 道路・橋梁施工管理基準・仕様書	図書	オリジナル	Road Department, (MWS)	1994 年
18	Znabia ATLAS (ザンビア国の地理概要)	図書・地図	オリジナル	Map studio South africa	2007 年
19	Street guide (Lusaka and Livingstone) 街路案内	図書	オリジナル	National Tourist board	2007 年
20	Southern afeica (南部アフリカ地図)	地図	オリジナル	Map studio South africa	2004 年
21	The official SADD Trade,Industry and investment Review 2006 南部アフリカ開発調整議会、貿易・産業への投資へ再検討	図書	コピー	Ministry of commerce	2006 年
22	Tourism sector profile Zambia (ザンビアの観光セクター背景)	図書	コピー	CHL Consultin company Ltd Dublin, Ireland	2006 年
23	Long-Term Development Plan 2004-2007 Final Draft (長期開発計画、初稿)	電子データ		The world bank	2003 年
24	Roadsip II Bankable document (道路セクター投資計画II)	電子データ		RDA	2003 年