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## 1. 調査団員氏名・所属

### (1) 基本設計現地調査 (2007年2月18日～2007年3月28日)

氏名	担当	所属
林 宏之	総括	独立行政法人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
戸田 利則	業務主任／道路交通計画	株式会社片平エンジニアリングインターナショナル
大下 副武	道路設計Ⅰ（本体工）	株式会社片平エンジニアリングインターナショナル
井澤 徹郎	道路設計Ⅱ（付帯工）	日本技術開発株式会社
矢代 修一	道路設計Ⅲ（付帯工）／業務調整	株式会社片平エンジニアリングインターナショナル
桑田 幸	自然条件調査（地形・地質・水文）	日本技術開発株式会社（補強）
佐藤 正	施工計画／積算	株式会社片平エンジニアリングインターナショナル（補強）

### (2) 基本設計概要説明 (2007年8月31日～2007年9月9日)

氏名	担当	所属
乾 英二	総括	独立行政法人国際協力機構ザンビア共和国 事務所所長
戸田 利則	業務主任／道路交通計画	(株)片平エンジニアリングインターナショナル
大下 副武	道路設計Ⅰ（本体工）	(株)片平エンジニアリングインターナショナル

## 2. 調査工程

### (1) 基本設計現地調査 (2007年2月17日～2007年3月28日)

日順	月	日	曜日	林	戸田	大下	井澤	矢代	桑田	佐藤
1	2月	18日	月	成田 17:45 → 香港 21:50 (JL735) / 香港(23:50) → ヨハネスブルグ (7:10) (SA287)				成田 17:45 → 香港 21:50 (JL735) / 香港(23:50) → ヨハネスブルグ (7:10) (SA287)		
2		19日	日	ヨハネスブルグ 11:35 → ルサカ 13:35 (SA64) / 日本大使館表敬及びJICAサンビエ事務所訪問				ヨハネスブルグ 11:35 → ルサカ 13:35 (SA64) / 日本大使館表敬及びJICAサンビエ事務所訪問		
3		20日	火	地方自治・住宅省 (MLGH) 次官表敬訪問/MLGH技術協議				地方自治・住宅省 (MLGH) / MLGH技術協議		
4		21日	水	ンドラ市議会市長表敬/技術協議、NDM Ndola Regional Officeと会議				ンドラ市議会市長表敬/技術協議、NDM Ndola Regional Officeと会議		
5		22日	木	キトウェールサカ移動				キトウェールサカ移動		
6		23日	金	資料整理				資料整理		
7		24日	土	MLGHミニッツ協議、資料整理				MLGHミニッツ協議、資料整理		
8		25日	日	現地再委託契約準備、MLGH会議				現地再委託契約準備、MLGH会議		
9		26日	月	ルサカ7:40 → ヨハネスブルグ 9:45 (SA69) / ヨハネスブルグ 13:50 → グラエムサムラム 18:30 (SM7167)				ルサカ7:40 → ヨハネスブルグ 9:45 (SA69) / ヨハネスブルグ 13:50 → グラエムサムラム 18:30 (SM7167)		
10		27日	火	現地再委託契約準備、MLGH会議				現地再委託契約準備、MLGH会議		
11		28日	水	現地再委託契約準備				現地再委託契約準備		
12	3月	1日	木	現地再委託契約準備、JICA訪問				現地再委託契約準備、JICA訪問		
13		2日	金	ルサカキーウェ移動、国内会議				ルサカキーウェ移動、国内会議		
14		3日	土	現地調査				現地再委託調査準備		
15		4日	日	↓				現地再委託調査準備		
16		5日	月	NCCと週間会議、資料整理、国内会議				NCCと週間会議、資料整理、国内会議		
17		6日	火	KCCと週間会議、現地調査				KCCと週間会議、現地調査		
18		7日	水	情報収集、資料整理				交通調査監督		
19		8日	木	↓				↓		
20		9日	金	↓				↓		
21		10日	土	↓				↓		
22		11日	日	↓				資料整理		
23		12日	月	資料整理				資料整理		
24		13日	火	↓				↓		
25		14日	水	情報収集、資料整理				↓		
26		15日	木	↓				↓		
27		16日	金	↓				↓		
28		17日	土	韓国報告書作成				↓		
29		18日	日	↓				資料整理		
30		19日	月	韓国報告書作成、ユーエアイアライ調査				↓		
31		20日	火	↓				交通安全施設調査		
32		21日	水	↓				↓		
33		22日	木	キトウェールサカ移動				交通安全施設調査		
34		23日	金	MLGHと会議、関係諸機関ヒアリング、大使館→BD調査の報告				交通安全施設調査		
35		24日	土	韓国報告書作成				↓		
36		25日	日	↓				↓		
37		26日	月	JICA→BD調査報告、資料整理、RD会議				JICA→BD調査報告、資料整理、RD会議		
38		27日	火	ルサカ7:50 → ヨハネスブルグ 10:00 (SA69) / ヨハネスブルグ 16:35 → 香港 12:05 (SA286)				ルサカ7:50 → ヨハネスブルグ 10:00 (SA69) / ヨハネスブルグ 16:35 → 香港 12:05 (SA286)		
39		28日	水	香港 14:50 → 成田 20:00 (JL732)				香港 14:50 → 成田 20:00 (JL732)		

(2) 基本設計概要説明(2007年8月31日～2007年9月9日)

日数	日付	曜日	JICA	コンサルタント	
			総括	戸田	大下
1	8月31日	金		成田17:45 (JL735) → 香港21:50/23:50 (SA287) → ヨハネスブルグ7:10	
2	9月1日	土		ヨハネスブルグ11:35 (SA64) → ルサカ13:35	
			JICAザンビア事務所表敬・調査団内打合せ		
3	9月2日	日		ルサカ → キトウェ移動	
4	9月3日	月	日本大使館表敬、ザンビア国地方自治・住宅省(MLGH)表敬・協議	KCCへBD説明	
5	9月4日	火		(午前)ルサカ → ンドラ 移動 (午後)NCCと協議	(午前)NCCへBD説明 (午後)NCCと協議
6	9月5日	水		KCCと協議	
7	9月6日	木		(午前)キトウェ→ルサカ移動 (午後)MLGHと協議	
8	9月7日	金	(午前)MLGHとM/Dサイン (午後)日本大使館及びJICAザンビア事務所報告		
9	9月8日	土		ルサカ7:50(SA69) → ヨハネスブルグ10:00/16:35(SA286) → 香港 12:05	
10	9月9日	日		香港14:50(JL732) → 成田20:00	

### 3. 関係者(面会者)リスト

地方自治・住宅省 (Ministry of Local government and Housing: MLGH)	
Mr. Maswabi M. Maimbolwa	Permanent Secretary
Mr. Peter Lubambo	Director
Mr. Davies C. Zulu	Assistant Director
Mr. Richard Kangwa	Senior Engineer
Mr. Nkumbu Siame	Senior Engineer
道路開発公社 (Road Development Agency: RDA)	
Mr. Watson Ng'ambi	Director & CEO
Mr. Muliya Mushimbei	Environmentalist
Mr. Charles Mushota	HEAD Procurement
Mr. Erasmus M. Chilundika	Manager Planning & Design
Mr. Jan Tore Odd	Technical Advisor
Mr. Sean Canavan	Technical Assistant (Consultant)
Mr. Misheck Lungu, Regional Engineer	Copperbelt Regional Office
Mr. Phillimon Goma	Executive Engineer, Copperbelt Regional Office
Mr. Richard Kasongo	Sr. Road Engineer, Copperbelt Regional Office
ンドラ市役所 (Ndola City Council:NCC)	
Ms. Charity Nanda Mpande	Town Clerk
Mr. Evervisto Makungo	Director of Housing
Mr. Gilvert Sendama	Director of Engineering Service
Mr. Joseph Zulu	Assistant Director, Engineering
Ms. Katai Kambogi	Sr. Road Engineer
キトウェ市役所 (Kitwe City Council:KCC)	
Mr. Ali D. Simwinga	Town Clerk
Mr. Ireen T. Mundia	Director of Legal Service
Mr. John Kaliminwa	Director of Engineering Service
Mr. John Ngwata	Deputy Director of Engineering Service
Mr. Webster Musukwa	Assistant Director, Engineering Service
Mr. Mr. Reynolds Muluka	Civil Engineer
国家道路資金庁 (National Road Fund Agency)	
Mr. Raphael Mabenga	Director
Mr. Stephen N. Mwale	Account-Road Fund
National Council for Construction (NCC)	
Dr. M.S. Mashamba	Executive Director
ンドラ警察 (Ndola Police)	
Mr. Simfukwe	Assist. Superintendent
Mr. Syinjelesyo	Inspector

キトウェ警察 (Kitwe Ploice)	
Mr. Simmohza	Chief Inspector, Department of Traffic
在ザンビア国日本大使館(Embassy of Japan in Zambia)	
宮下 正明 特命全権大使	
鈴木光太郎 公使参事官	
平田 二等書記官	
JICA ザンビア事務所(JICA Zambia Office)	
乾 英二 所長	
柳 竜也 次長	
佐藤 次長	

4. 討議議事録(M/D)

基本設計現地調査 (2007年2月26日)

**Minutes of Discussions  
on the Basic Design Study  
on the Project for Improvement and Maintenance of Ndola and Kitwe City Roads  
in the Republic of Zambia**

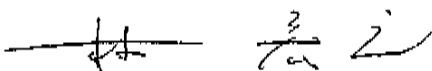
In response to a request from the Government of the Republic of Zambia (hereinafter referred to as "GRZ"), the Government of Japan decided to conduct a Basic Design Study on the Project for Improvement and Maintenance of Ndola and Kitwe City Roads (hereinafter referred to as "the Project") and entrusted 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. Hayashi Hiroyuki, 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 February 19 to March 27, 2007.

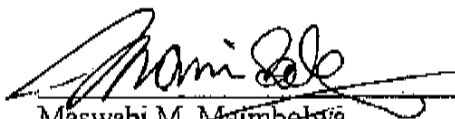
The Team held discussions with the officials concerned of GRZ and conducted a field survey at the study area.

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

Lusaka, February 26, 2007



Hayashi Hiroyuki  
Leader  
Basic Design Study Team  
Japan International Cooperation Agency



Maswabi M. Maimbetwa  
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 and maintain the roads and related structures in the cities of Ndola and Kitwe.

### 2. Project Sites

The sites of the Project are located in the cities of Ndola and Kitwe, as shown in Annex-1.

### 3. Responsible and Implementing Organization

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 organizations are the Ndola City Council (NCC) and the Kitwe City Council (KCC).

The organization charts of the both City Councils are shown in Annex-2-2 and Annex-2-3.

### 4. Items Requested by the GRZ

After discussions with the Team, the items described in Annex-3 were confirmed and requested by the Zambian side. JICA will 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 Japan's Grant Aid Scheme for General Project explained by the Team, as described in Annex-4, which was attached as Annex-4 of the Minutes of Discussions signed on August 2, 2006 (hereinafter referred to as "the previous M/D").

5-2. The Zambian side will take the necessary measures, as described in Annex-5, which was attached as Annex-6 of the previous M/D, for smooth implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

### 6. Schedule of the Study

6-1. The Team will proceed with the study in Zambia until March 27, 2007.

6-2. JICA will prepare the draft report in English and dispatch a team to Zambia in order to explain its contents around the beginning of September 2007.

6-3. 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 October 2007.

### 7. Other Relevant Issues

7-1. The Team explained to the Zambian side that the Project will be divided into two (2) phases, and the tentative implementation schedule is shown as below;

1) Phase-1 will be commenced in Japanese Fiscal Year (JFY) 2007, subjected to obtaining the Japanese Cabinet's approval and signing of the Exchange of Notes (E/N) by the Government of Japan and Zambia.

2) Phase-2 will be commenced in JFY 2008, subjected to obtaining the Japanese Cabinet's approval and signing of the E/N by the Government of Japan and Zambia.

The Team will inform the Zambian side of the tentative implementation plan for each phase by the end of May, 2007.



The Team will inform the Zambian side of the tentative implementation plan for each phase by the end of May, 2007.

7-2. The Zambian side should conduct the public information campaign and the stakeholder meetings for effective public participation with the Project Affected Persons (PAPs) including illegal occupant(s) (squatters), local communities, related NGOs, etc., to inform them about the outline of the Project including positive and negative impacts as agreed in the previous M/D by end of August, 2007.

7-3. The Zambian side should obtain the approval and/or confirmation in writing regarding the environmental and social considerations necessary for the Project from the Environmental Council of Zambia by the end of middle of September, 2007.

7-4. The Zambian side should obtain agreements from the PAPs for conditions and contents of the land acquisitions and/or involuntary resettlements (if any) for the Project by the end of August, 2007 for Phase-1 and by the end of December, 2007 for Phase-2. The Team will provide the drawings and data necessary for identifying the affected area by the end of May, 2007. The Zambian side should complete all procedures regarding land acquisitions and/or involuntary resettlements before the commencement of each construction.

7-5. 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. The Team will provide the drawings and data necessary for identifying ROW and/or COI by the end of May, 2007.

7-6. The Zambian side should provide necessary number(s) of counterpart personnel to the Team during the period of the studies in Zambia.

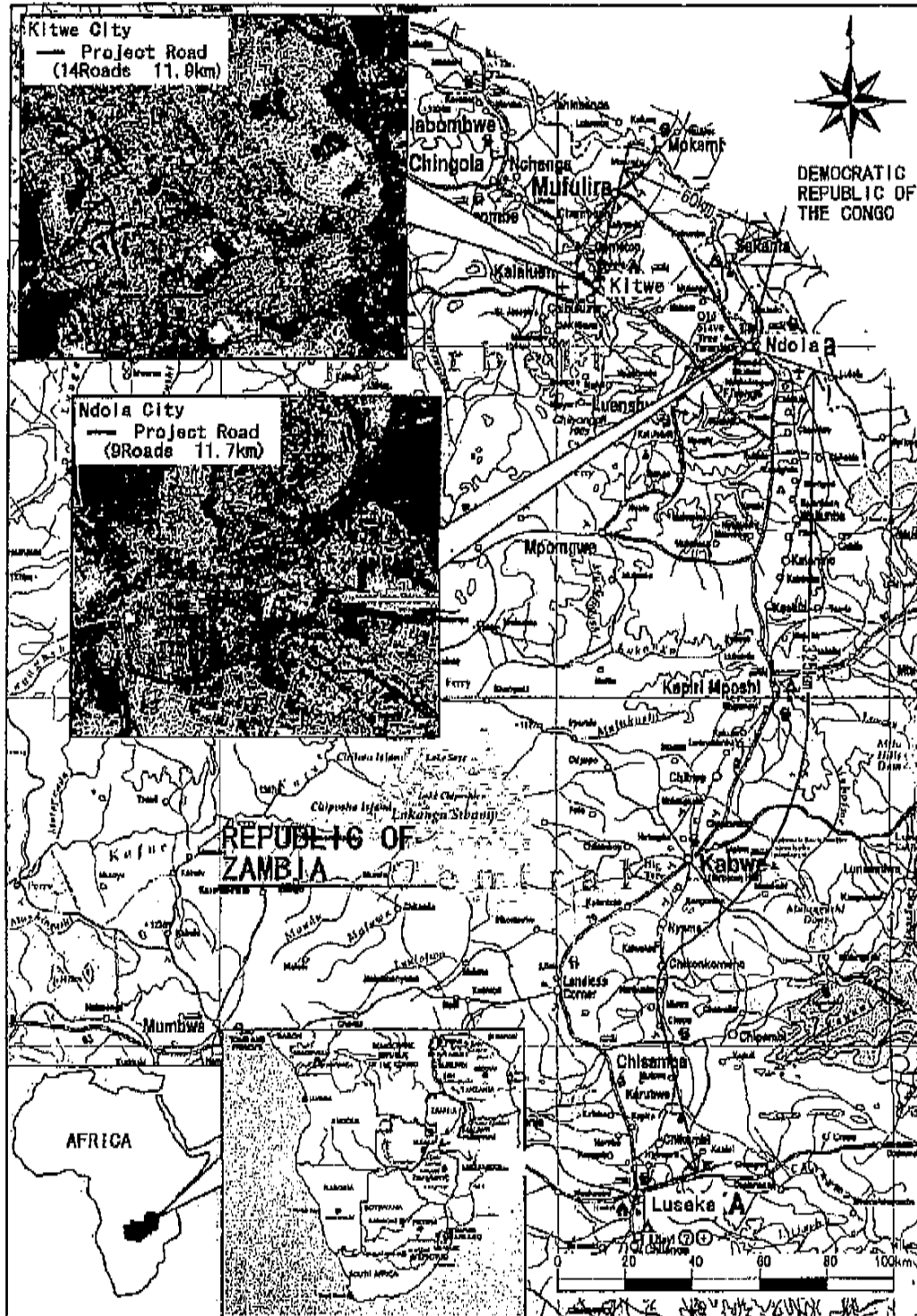
7-7. The Zambian side should submit answers in English to the Questionnaire with relevant documents, which the Team handed to the Zambian side, by March 15, 2007.

7-8. The Zambian side requested the Team to carry out the training in Japan to the staff of NCC and/or KCC on advanced road maintenance technique as technical cooperation by JICA. The Zambian side should submit the official request regarding training with concrete contents of training through the Embassy of Japan/JICA Zambia Office.

7-9. The Team explained to the Zambian side that the "Japan's Grant Aid Scheme for Community Empowerment" might be applied to 3 roads (total length: about 5.1 km) and 3 markets and other related equipment and facilities in the both cities. The Ministry of Foreign Affairs of Japan continues to examine/assess the feasibility to proceed the above-mentioned new scheme.

7-10. Both sides agreed that the Zambian side provides office space for the Team during study period.

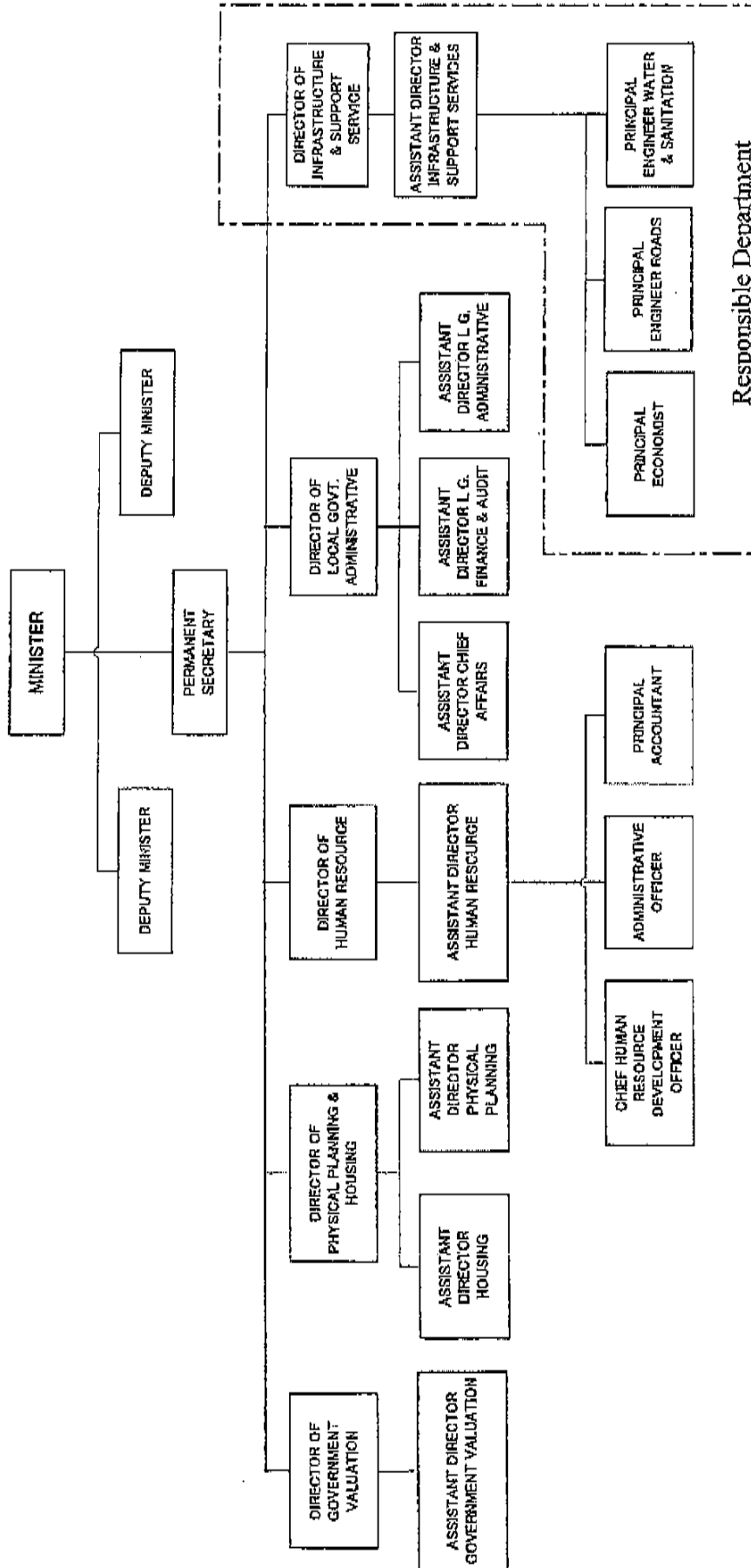
7-11. Both NCC and KCC re-requested the Team to include provision of street lights for traffic safety measure and provision of crane mounted truck, tower wagon truck and other equipment shown in the Technical Notes signed on August 5, 2006 between the Preliminary Study Team (the P/S Team) and NCC, and signed on August 14, 2006 between the P/S Team and KCC for proper maintenance of roads and street lights.



LOCATION MAP

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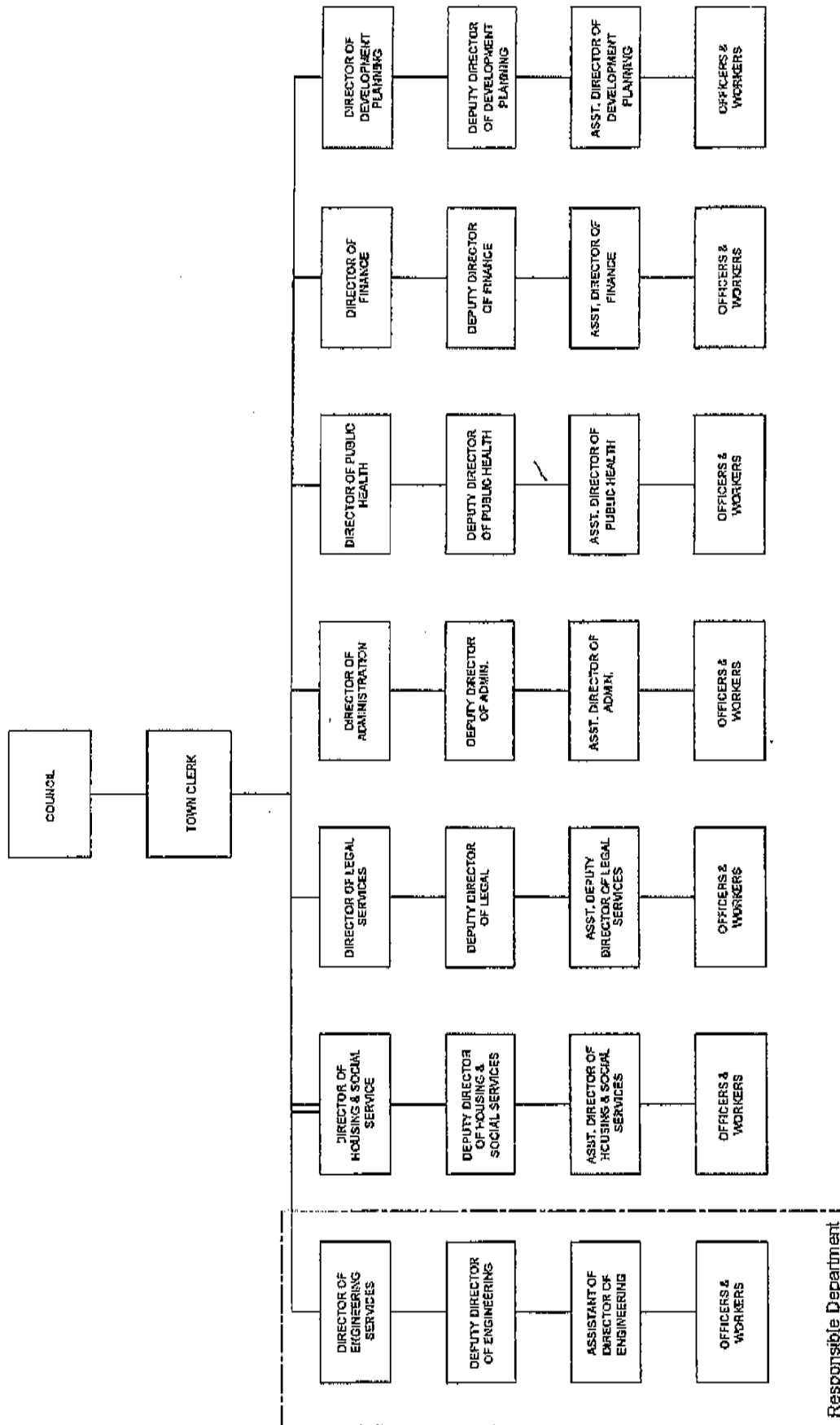
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MINISTRY OF LOCAL GOVERNMENT AND HOUSING

JB

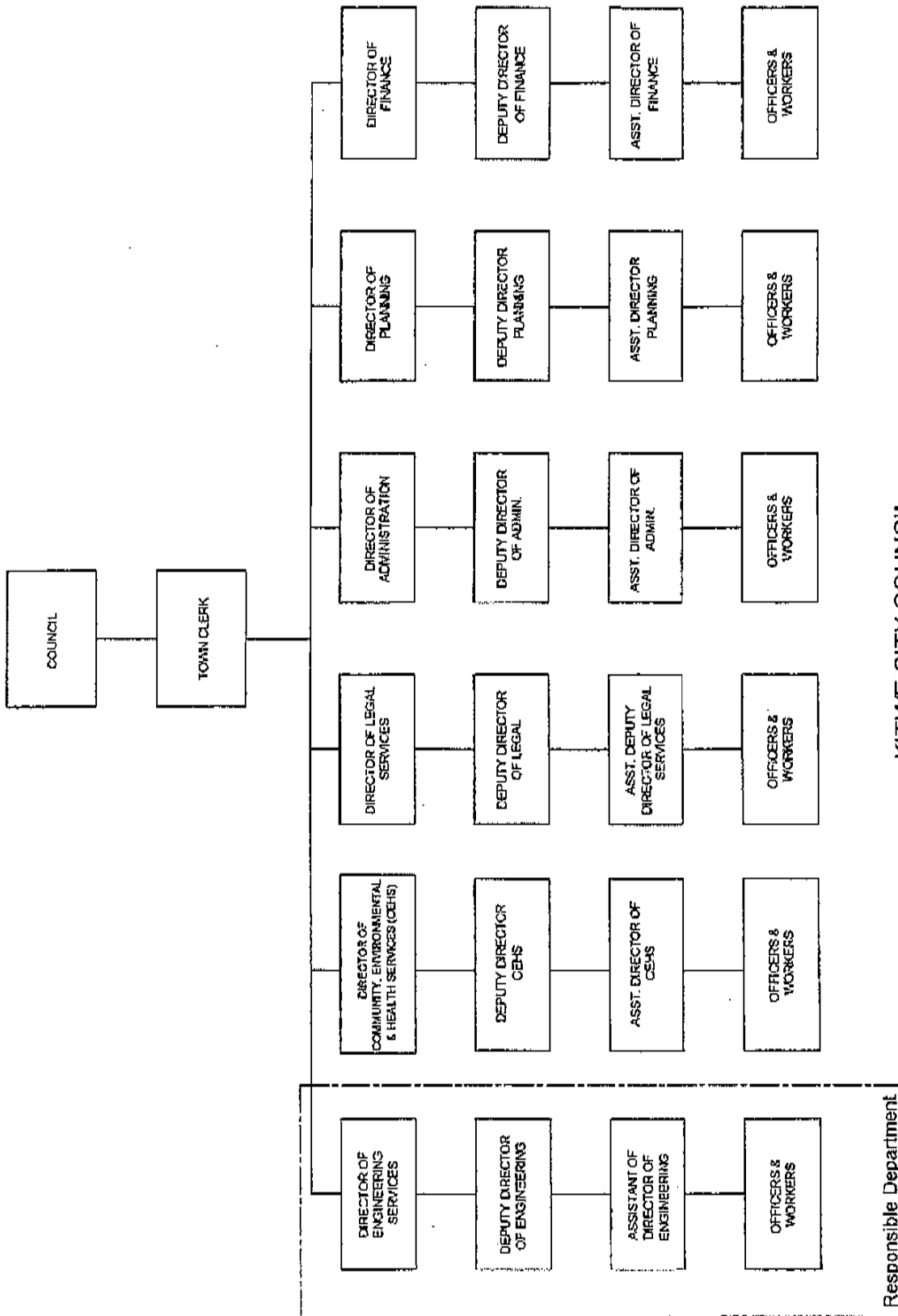
AM



NDOLA CITY COUNCIL

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KITWE CITY COUNCIL

AS

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## Items Requested by GRZ

Ndola City			Kitwe City		
No.	Road Name	Length (Km)	No.	Road Name	Length (Km)
1.	Vitanda Street	0.8	1.	Dr. Aggrey Avenue (South)	1.0
2.	Kaunda Drive	0.3	2.	Euclid Road	0.6
3.	Makoli Avenue	0.9	3.	Zomba Road	0.4
4.	Independence Way	1.7	4.	Blantyre Road	0.6
5.	Zambia Road	2.1	5.	Eshowe Road	0.4
6.	Matelo Road	0.4	6.	Matuka Avenue	0.4
7.	Lukasu Road (Including Siemens Road)	1.2	7.	Kantanta Street	2.4
8.	Chambeshi Road (Including Lubuto Avenue)	3.9	8.	Natwange Road	0.9
9.	Livingstone Road	0.4	9.	Mutentemuko Road	1.1
			10.	Miseshi Street	0.9
			11.	Kanongesha Road	0.7
			12.	Mulilakwenda Road	0.8
			13.	Lilogwe Road	0.6
			14.	Independence Service Lane	1.1
		11.7			11.9
	Total			23.6	

## 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	(Appraisal by the Government of Japan and Approval by Cabinet)
Determination of	(The Notes exchanged between the Governments of Japan
Implementation	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:

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

- a) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the Project,
- b) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,
- c) To secure buildings prior to the procurement in case the installation of the equipment,



- d) 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,
- e) 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,
- f) 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)

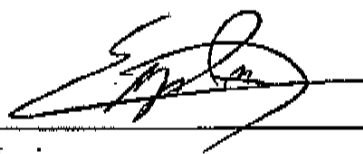
**Minutes of Discussions  
on the Basic Design Study  
on the Project for Improvement and Maintenance of Ndola and Kitwe City Roads  
in the Republic of Zambia  
(Explanation on Draft Report)**

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

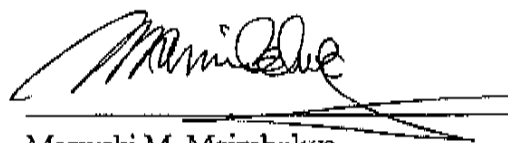
In order to explain and to consult with officials concerned of the Government of Zambia on the components of the draft report, JICA sent to Zambia the Draft Report Explanation Team (hereinafter referred to as "the Team"), which was headed by Mr. Eiji Inui, Resident Representative, JICA Zambia Office, from September 1 to September 8, 2007.

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

Lusaka, September 7, 2007



Eiji Inui  
Leader  
Draft Report Explanation Team  
Japan International Cooperation Agency



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

## ATTACHMENT

### 1. Components of the Draft Report

The Government of Zambia agreed and accepted in principle the components of the draft final report explained by the Team. The main components are shown in Annex-1.

### 2. Schedule of the Study

JICA will complete the final report and send it to the Government of Zambia in October 2007.

### 3. Other Relevant Issues

3-1. The Team explained to the Zambian side that the Project will be divided into two (2) phases as shown in the draft report.

3-2. Both the Ndola City Council (NCC) and the Kitwe City Council (KCC) agreed and accepted that their additional requests, such as installation of street lights, procurement of road maintenance equipment, etc. are excluded from the Project.

3-3. The Zambian side submitted a letter of committal regarding environmental and social considerations necessary for the Project from the Environmental Council of Zambia (ECZ) as per Annex-2. The Zambian side should submit the approval in writing regarding environmental and social considerations necessary for the Project from the Environmental Council of Zambia (ECZ) as soon as possible by the end of September 2007. The Team indicated that in case the submission of the approval was delayed, the appraisal by the Government of Japan would be delayed consequently and not be able to proceed the further step.

3-4. The Zambian side shall relocate the public utilities, such as electricity & telecommunication lines, water and sewerage pipes, necessary for the Project based on the contents of the draft report. The tentative schedule for these activities is shown in Annex-3.

3-5. The Zambian side agreed to secure and allocate the necessary budget for undertakings to be done in a timely manner, based on the provisional amount shown in the draft report in fiscal year 2008 to 2010.

3-6. Both sides confirmed that it is necessary to control over-loaded vehicles in order to sustain the investment and accordingly both sides reconfirmed that the Zambian side should establish suitable measures for traffic safety and control, especially overloading traffic, which are essential for appropriate operation and maintenance of the roads improved by the Project.



3-7. Both sides agreed that the Project Cost estimate, as attached in Annex-4, should never be duplicated or released to any outside parties before the award and signing of all Contracts for the Project.

3-8. The Zambian side requested the Team to arrange counterpart training in Japan on Road Management and Maintenance under technical cooperation by JICA. The Zambian side understands that an official request for the counterpart training is necessary to be submitted to the Japanese side through the Embassy of Japan/JICA Zambia Office.



## Components of the Project

Ndola City			Kitwe City		
No.	Road Name	Length (Km)	No.	Road Name	Length (Km)
1.	Vitanda Street	0.859	1.	Dr. Aggrey Avenue (South)	0.993
2.	Kaunda Drive	0.295	2.	Euclid Road	0.587
3.	Makoli Avenue	0.881	3.	Zomba Road	0.370
4.	Independence Way	1.726	4.	Blantyre Road	0.449
5.	Zambia Road	2.537	5.	Eshowe Road	0.485
6.	Matelo Road	0.383	6.	Matuka Avenue	0.363
7.	Lukasu Road (Including Siemens Road)	1.000	7.	Kantanta Street	2.371
8.	Chambeshi Road (Including Lubuto Avenue)	4.674	8.	Natwange Road	0.904
9.	Livingstone Road	0.375	9.	Mutentemuko Road	1.075
			10.	Miseshi Street	0.913
			11.	Kanongesha Road	0.724
			12.	Mulilakwenda Road	0.705
			13.	Lilogwe Road	0.623
			14.	Independence Service Lane	1.068
		12.73			11.63
Total			24.36		

DISS/02/16/C

24 July 2007

The Director  
Environmental Council of Zambia  
**LUSAKA**

Dear Sir,

**ENVIRONMENTAL PROJECT BRIEF FOR THE PROJECT FOR THE  
REHABILITATION AND MAINTENANCE OF NDOLA CITY AND KITWE  
CITY ROADS**

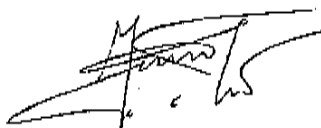
Please be informed that the Japanese Government through the Japan International Cooperation Agency has continued to give support to the Government of Zambia in the improvement of Lusaka City Roads.

The civil works for the project are expected to commence towards the end of 2007. This will cover 11.7 km of urban roads in Ndola and 11.9 km of urban roads in Kitwe.

In view of the above, we would like to submit six (6) copies each of the Environmental Project Brief for the Project of the Rehabilitation and Improvement of Ndola City and Kitwe City Roads for your consideration.

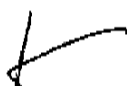
Your usual cooperation will be highly appreciated.

Yours Faithfully,



Davies C. Zulu  
Acting Director - DISS  
For/Permanent Secretary  
**MINISTRY OF LOCAL GOVERNMENT AND HOUSING**

c.c. The Town Clerk - Ndola City Council  
c.c. The Town Clerk - Kitwe City Council



MLGH/101/34/14

7<sup>th</sup> September 2007

The Chairman  
Environmental Council of Zambia  
**LUSAKA**

Dear Sir

**RE: ENVIRONMENTAL PROJECT BRIEF FOR THE PROJECT FOR  
IMPROVEMENT AND MAINTENANCE OF NDOLA AND KITWE  
CITY ROADS**

The Government of Zambia has received a grant from the Government of Japan to rehabilitate selected urban roads in Ndola and Kitwe.

On the 27<sup>th</sup> July 2007, my Ministry submitted the Project Brief to the Environmental Council. It is one of the conditionalities of the project that the project is approved by the Council to ensure compliance with the Environmental Protection and Pollution Control Act of the Laws of Zambia.

It has now come to my attention that the Government of Japan will be considering the Zambian Projects on 25<sup>th</sup> September, 2007 and that we stand to lose out if the necessary approvals are not presented together with the design documents.

I therefore, wish to appeal to ECZ to urgently consider the Ministry's application, preferably before the 15<sup>th</sup> September so that we may communicate the approval to the Japanese Government in time.

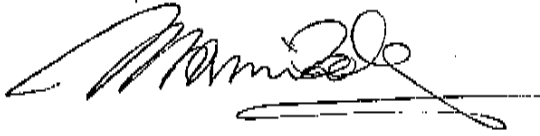
I need not emphasise the importance of this project to the Government and the people of Zambia.



I have also resubmitted six (6) copies of the Environmental Project Brief for Kitwe City and Ndola City Councils.

Your usual cooperation will be appreciated.

Yours faithfully



Maswabi M. Maimbolwa  
PERMANENT SECRETARY  
**MINISTRY OF LOCAL GOVERNMENT AND HOUSING**







# ENVIRONMENTAL COUNCIL OF ZAMBIA

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Tel/Fax: 260-32-321297

**Chirundu Border Office**  
Lusaka Road  
P. O. Box CRU31  
Chirundu, Zambia  
Tel/Fax: 260-1-315261

ECZ/101/4/1

September 7, 2007

*In reply please quote*

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

No.....

**Attention: Mr. P Lubambo**

Dear Sir,

**RE: ENVIRONMENTAL PROJECT BRIEF FOR THE PROJECT FOR THE IMPROVEMENT AND MAINTENANCE OF NDOLA AND KITWE CITY ROADS**

We make reference to the above captioned subject and your letter dated September 7<sup>th</sup> 2007 in which you submitted to the Environmental of Zambia 2 x 6 copies of the Environmental Project Briefs (EPBs) for road improvement and maintenance for Ndola and Kitwe City roads respectively.

We have taken note of the importance of the projects submitted. To this end, we would like to inform you that we have in accordance with the Environmental Protection and Pollution Control (Environmental Impact Assessment) Regulations Statutory Instrument No. 28 of 1997 commenced the EIA approval process for the said EPBs.

We would like to assure you that we shall work on the documents and shall subsequently notify you of the outcome of the approval process by the end of September.

We thank you in anticipation of your usual cooperation.

Yours faithfully,

Chibesa Chibesakunda  
Acting Director

**ENVIRONMENTAL COUNCIL OF ZAMBIA**



**Project Cost Estimate**

The total project cost necessary to implement this Project is estimated at 2,210 Million Yen. The costs to be borne by both Governments, Japan and the Republic of Zambia based on the scope of works for both Governments as described in the draft report of the Basic Design Study and respective details are estimated as follows on the conditions shown in (3) below. However, this cost estimate is provisional and would be further examined by the Government of Japan for the approval of the Grant.

**(1) Cost borne by the Government of Japan**

Total Cost : approximately 2,175 Million Yen

Improvement of urban roads of approximately 24.3km in total consisting of 12.7km (9 Roads) in Ndola City and 11.6km (14 Roads) in Kitwe City.

Item			Roughly Estimate Cost (Million Yen)
Facility	Road	Pavement Drainage Culvert	2,048
Detailed Design/ Construction & Supervision			127

**(2) Cost borne by the Government of the Republic of Zambia**

Total Cost:           Approximately 1,187 Million Kwacha (35 Million Yen)

- |   |                      |                                      |
|---|----------------------|--------------------------------------|
| ① | Advising Commission  | 76 Mil. Kwacha (app. 2 Mil. Yen)     |
| ② | Payment Commission   | 90 Mil. Kwacha (app. 3 Mil. Yen)     |
| ③ | Relocation Cost etc. | 1,021 Mil. Kwacha (app. 30 Mil. Yen) |

**(3) Conditions in Cost Estimate**

- ① Time of Cost Estimate: February 2007
- ② Exchange Rate : 1US Dollar=119.59Yen, 1Kwacha=0.029Yen
- ③ Construction Period: As shown in Draft BD report
- ④ Cost estimate is implemented in accordance with the guideline of Japan's Grant Aid.



5. ECZ 環境許可書



# ENVIRONMENTAL COUNCIL OF ZAMBIA

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

September 24<sup>th</sup>, 2007

**ECZ/INS/101/4/1**  
*In reply please quote*

No.....

The Director,  
Department of Infrastructure and Support Services  
Ministry of Local Government and Housing  
P.O. Box 50027  
Lusaka

Dear Sir

**RE: Proposed Rehabilitation of Nine Roads in Ndola by Ndola City Council**

Reference is made to the above captioned project submitted to the Environmental Council of Zambia (ECZ) on **11<sup>th</sup> September, 2007** for consideration in accordance with the requirements of the Environmental Protection and Pollution Control (Environmental Impact Assessment) Regulations, Statutory Instrument No. 28 of 1997.

The ECZ has since reviewed your Environmental Project Brief (EPB) and based on the information provided in the EPB, comments submitted by interested and affected parties and our site verification inspection findings, ECZ has **approved** your project proposal.

Attached to this Decision Letter are conditions of approval.

Yours faithfully,

Edward Zulu  
Director

**ENVIRONMENTAL COUNCIL OF ZAMBIA**

cc: The Town Clerk – Ndola City Council  
The Director – Road Development Agency





## ENVIRONMENTAL COUNCIL OF ZAMBIA (ECZ)

### DECISION LETTER

#### **1.0 PROJECT BACKGROUND**

##### **1.1 PROJECT TITLE**

Proposed Rehabilitation of Nine Roads in Ndola by Ndola City Council

##### **1.2 PROJECT PROPONENT**

Ministry of Local Government and Housing

##### **Contact Person:**

Town Clerk  
Ndola City Council  
P.O. Box 70197  
**Ndola**

##### **1.3 PROJECT LOCATION**

The project sites are in the heavy industrial area for 4 roads, namely, Lusaka, Chambeshi, Zambia and Livingstone. The rest are located in Ndolas' Central Business District.

##### **1.4 DATE OF SUBMISSION BY PROPONENT**

11<sup>th</sup> September, 2007.

##### **1.5 DATE OF CONSIDERATION BY COUNCIL**

24<sup>th</sup> September, 2007.





## 2.0 DETAILS OF THE PROJECT

This project will be fully financed by a Grant Aid by the Government of Japan through JICA to the Government of the Republic of Zambia through the Ministry of Local Government and Housing. The project will involve rehabilitation and maintenance of nine selected roads in Ndola. The following are the roads with their respective lengths selected for maintenance and rehabilitation:

Vitanda Street – 0.8 Km; Kaunda Drive – 0.3 Km; Makoli Avenue – 0.09 Km; Independence Way – 1.7 Km; Zambia Road – 2.1 Km; Matelo Road – 0.4 Km; Lusaka Road – 1.2 Km; Chambeshi Road – 3.9 Km; Livingstone Road – 0.4 Km

## 3.0 DECISION BY COUNCIL

3.1 The project is **approved** subject to the following conditions:

- 3.1.1 Ndola City Council shall implement the project as stated in the Environmental Project Brief (EPB).
- 3.1.2 Quarrying of gravel at Twapia and Mushili Borrow Pits shall be done systematically.
- 3.1.3 Ndola City Council shall submit a plan to the Environmental Council of Zambia for the final rehabilitation of the borrow pits within month of approval of the project.
- 3.1.4 Kitwe City Council shall comply in full with the following regulations throughout the project cycle:
  - a) Waste Management Regulations, SI No.71 of 1993;
  - b) Water Pollution Control Regulations, SI. No. 72 of 1993;
  - c) The Air Pollution Control Regulations of 1996.



- 3.1.5 Dust suppression techniques shall be employed during construction phase.
- 3.1.6 Noise levels throughout project cycle shall be maintained within acceptable levels.
- 3.1.7 Culverts should be installed at all stream crossing and the road should be fitted with effective drainage facilities that will also act as silt traps.

3.2 The Council **advises** Ndola City Council to:

- 3.2.1 Obtain any other relevant authorizations such as but not limited to the following:
  - a) The Town and Country Planning Act;
  - b) The Local Government Act;
  - c) The Water Act.
  - d) The Road Traffic Act
- 3.2.2 To give priority to local people when employing the workforce for the project.
- 3.2.3 Make available information on malaria control and HIV/AIDS to employees.
- 3.2.4 To provided all workers with personal protective equipment.

3.3 Ndola City Council should consider complying with environmental standards and/or specific limits of particular pollutants as its responsibility. Thus, compliance with ECZ recommended measures does not absolve Ndola City Council from its responsibility if such measures do not achieve compliance with environmental control standards.

3.4 Ndola City Council shall implement the project within **three years** from the date of approval. Failure to implement the project within the said period shall render this approval invalid and the developer shall resubmit the EPB.



3.5 The Council may suspend or cancel this Decision Letter **without notice** should Ndola City Council fail to comply with any of the given conditions.

.....  
Date

.....  
Edward Zulu  
Director

**Environmental Council of Zambia**





# ENVIRONMENTAL COUNCIL OF ZAMBIA

**Head Office**

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Chirundu, Zambia  
Tel/Fax: 260-1-515261

24<sup>th</sup> September 2007

*In reply please quote*  
**ECZ/INS/101/4/1**

No.....

The Director,  
Department of Infrastructure and Support Services  
Ministry of Local Government and Housing  
P.O. Box 50027  
Lusaka

Dear Sir

**RE: Proposed Rehabilitation of Fourteen Roads in Kitwe by Kitwe City Council**

We make reference to the above captioned project submitted to the Environmental Council of Zambia (ECZ) on **11<sup>th</sup> September, 2007** for consideration in accordance with the requirements of the Environmental Impact Assessment (EIA) Regulations, Statutory Instrument No. 28 of 1997.

The ECZ has since reviewed your Environmental Project Brief (EPB) and based on the information provided in the EPB, verbal and written comments submitted by interested and affected parties and our site verification inspection findings, ECZ has **approved** your project proposal.

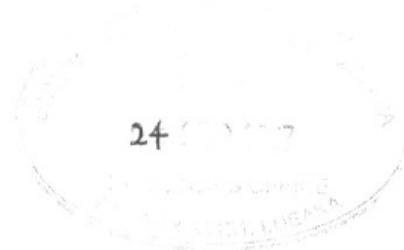
Attached to this Decision Letter are conditions of approval.

Yours faithfully,

Edward Zulu  
Director

**ENVIRONMENTAL COUNCIL OF ZAMBIA**

cc: The Town Clerk – Kitwe City Council  
The Director – Road Development Agency





## **ENVIRONMENTAL COUNCIL OF ZAMBIA (ECZ)**

### **DECISION LETTER**

#### **1.0 PROJECT BACKGROUND**

##### **1.1 PROJECT TITLE**

Proposed Rehabilitation of Fourteen Roads in Kitwe by Kitwe City Council

##### **1.2 PROJECT PROPONENTS**

Ministry of Local Government and Housing

##### **Contact Person:**

The Town Clerk  
Kitwe City Council  
P.O. Box 70197  
**KITWE**

##### **1.3 PROJECT LOCATION**

The project sites are in the heavy industrial area for 12 roads, namely, Dr. Aggrey, Zomba, Blantyre, Eshowe, Euclid, Lilongwe, Kanongesha, Independence Service Lane, Mutentemuko, Misesi, Mulilakwenda and Natwange roads. Matuka and Kantanta are located in Kitwe's Central Business District.

##### **1.4 DATE OF SUBMISSION BY PROPONENT**

11<sup>th</sup> September, 2007.

##### **1.5 DATE OF CONSIDERATION BY COUNCIL**

24<sup>th</sup> September, 2007



## 2.0 DETAILS OF THE PROJECT:

This project will be financed by the Japanese Grant Aid through JICA to the Government of the Republic of Zambia and will involve rehabilitation and maintenance of the following fourteen selected roads in Kitwe:

Dr. Aggrey Avenue (South) – 0.993 Km; Euclid Road – 0.587 Km; Zomba Road – 0.370; Blantyre Road – 0.449 Km; Eshowe Road – 0.485Km; Matuka Avenue – 0.363 Km; Kantanta Street – 2.29 Km; Natwange Road – 0.904 Km; Mutentemuko Road – 1.075 Km; Miseshi Road – 0.913 Km; Kanongesha Road – 0.724 Km; Mulilakwenda Road – 0.705 Km; Lilongwe Road – 0.623 Km; Independence Service Lane – 1.068 Km

## 2.0 DECISION BY COUNCIL

2.1 The project is **approved** subject to the following conditions:

- 2.1.1 Kitwe City Council shall implement the project as stated in the Environmental Project Brief (EPB).
- 2.1.2 Quarrying of gravel at Mindolo Borrow Pits shall be done systematically.
- 2.1.3 Kitwe City Council shall submit a plan to the Environmental Council of Zambia for the final rehabilitation of the borrow pits within one month of approval of the project.
- 2.1.4 Kitwe City Council shall comply in full with the following regulations throughout the project cycle:
  - a) Waste Management Regulations, SI No.71 of 1993;
  - b) Water Pollution Control Regulations, SI. No. 72 of 1993;
  - c) The Air Pollution Control Regulations of 1996.
- 2.1.5 Dust suppression techniques shall be employed the during construction phase.
- 2.1.6 Noise levels throughout project cycle shall be maintained within acceptable levels.



2.1.7 Culverts should be installed at all stream crossing and the road should be fitted with effective drainage facilities that will also act as silt traps.

2.2 The Council **advises** Kitwe City Council to:

2.2.1 Obtain any other relevant authorizations such as but not limited to the following:

- a) Town and Country Planning Act;
- b) Local Government Act.
- c) Water Act.
- d) The Road Traffic Act.

2.2.2 Make available information on malaria control and HIV/AIDS to employees.

2.2.3 Provide all workers with personal protective equipment.

2.2.4 Kitwe City Council should consider complying with environmental standards and/or specific limits of particular pollutants as its responsibility. Thus, compliance with ECZ recommended measures **does not** absolve Kitwe City Council from its responsibility if such measures do not achieve compliance with environmental control standards.

2.3 Kitwe City Council shall implement the project within **three years** from the date of approval. Failure to implement the project within the said period shall render this approval invalid and the developer shall resubmit the EPB.

2.4 The Council may suspend or cancel this Decision Letter **without notice** should Kitwe City Council fail to comply with any of the given conditions.

.....  
Date

21 SEP 2017

DIRECTOR GENERAL  
EPB BOX 1000  
LUSAKA

.....  
Edward Zulu  
Director

**Environmental Council of Zambia**

## 6. 事業事前計画表(基本設計時)

<b>1. 案件名</b>
ザンビア共和国ンドラ市及びキトウェ市道路網整備計画
<b>2. 要請の背景 (協力の必要性・位置付け)</b>
<p>ザンビア共和国 (以下「ザ」国) は、第5次国家5カ年計画において、持続的な経済成長・雇用創出・貧困削減を国家開発目標として、運輸分野では輸送コストの削減を通じて、富の創出、貧困削減、経済発展のための資源の効率的活用を目標として、現存インフラの保全と経済復興、環境、及び社会サービスをささえる新規インフラ建設を施策とした。運輸分野のサブセクターである道路は、「ザ」国では国際物流を含む物資、旅客輸送の重要な役割を担っており経済発展の基盤となっている。全国の道路整備のため、「ザ」国政府は、1997年に道路分野投資計画を策定し、第1期計画を1998年から2002年の5カ年にわたり実施をし、引き続き第2期計画として2004年から2013年の10カ年にわたり実施をすることを決定した。この第2期の10カ年計画の中では、地域の経済復興・社会サービスを支える地方中核都市の経済活性化のために、都市主要道路の整備を最重要課題として位置づけており、特に「ザ」国の重要な輸出産業の中核である銅やコバルトなどの鉱業が集中しているコッパーベルト州に属する、本プロジェクトの対象地域であるンドラ市 (同州の州都) 及びキトウェ市 (工業の中心地) を地域発展及び国家経済発展のための最重要の地方中核都市と位置づけ、両市の都市道路の整備を急いでいる。</p> <p>両市の道路整備の現状は、市内道路の総延長はンドラ市で530km、キトウェ市で582kmであり、これまでに、ルサカ市(55km)、ンドラ市(35km)、キトウェ市(35km)の合計125kmの道路が最優先で改修された。その後ルサカ市ではさらに49kmの道路改修を行い、ンドラ市、キトウェ市を除くコッパーベルト州の5都市において45kmの道路改修が実施された。しかしながら、これまでに整備された道路は、両市道路総延長のそれぞれ6.6%と6.0%で、ほとんどの道路は未整備であり、円滑で安定的な都市交通の確保ができず、鉱工業、商業、社会サービスの活動に支障を来している。</p> <p>本プロジェクトは、両市の工場・商業地域の主要道路および居住区から市内へのアクセス道路のうち、改修の緊急性が高い道路を改修することにより、円滑で安全な都市交通を確保し、地域の社会経済活動を活性化することを目的とするものである。</p>

### 3. プロジェクト全体計画概要

(1) プロジェクト全体計画の目標

ンドラ市及びキトウェ市において、円滑で安全な都市交通が確保される。

裨益対象の範囲及び規模：「ザ」国ンドラ市人口 39.4 万人、

キトウェ市人口 38.9 万人 計 78.3 万人（2000 年）

(2) プロジェクト全体計画の成果

ア ンドラ市及びキトウェ市内の道路が整備される。

(3) プロジェクト全体計画の主要活動

ア ンドラ市 9 区間 12.73 km、キトウェ市 14 区間 11.63 km の道路を整備する。

イ 道路整備後の維持管理を行う。

(4) 投入

ア 日本側： 無償資金協力 21.75 億円

イ 「ザ」国側：

(ア) 必要な人員：維持管理要員

(イ) 施設の運営・維持管理に係る経費

(5) 実施体制

・ 主管官庁：「ザ」国地方自治・住宅省

・ 実施機関：ンドラ市及びキトウェ市

### 4. 無償資金協力案件の内容

(1) サイト

「ザ」国コッパーベルト州ンドラ市及びキトウェ市

(2) 概要

ンドラ市における道路 9 区間 12.73 km、キトウェ市における道路 14 区間

11.63 km、計 23 区間 24.36 km の整備

(3) 相手国負担事項

① 地下埋設物（電話線、配電線）の移設

② 水道管の移設

③ 仮設ヤード用地の提供

(4) 概算事業費

概算事業費 22.10 億円（日本側負担 21.75 億円、「ザ」国側負担 0.35 億円）

(5) 工期

詳細設計・入札期間を含め約 24 ヶ月（予定）

(6) 貧困、ジェンダー、環境および社会面の配慮

特になし。

## 7. 参考資料／収集資料リスト

## 収集資料リスト

調査名 シンドラ市及びキトウェ市道路網整備計画基本設計調査

番号	資料の名称	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
<b>I</b>	<b>道路法規・関連法規</b>				
J	Terms of Reference for a Road Authority (including Power and Duties)	図書	コピー	RDA	2006年11月
<b>II</b>	<b>経済</b>				
J	Economic Review, October 2004 - April 2005	図書	オリジナル	Barclays Bank	2005年
<b>III</b>	<b>人口・その他社会統計</b>				
J	Zambia 1990 Census of Population, Housing and Agriculture, Demographic Projections 1990-2015	図書	コピー	Central Statistical Office	1995年11月
<b>IV</b>	<b>地理/自然条件</b>				
J	現地自然条件 (英文) 抜粋 60ページ	図書	コピー	MLGH	—
J	A Secondary geography of Zamabia, 3rd Edition	図書	オリジナル	Longman	1995年
<b>V</b>	<b>国家開発計画</b>				
J	Vision 2030	図書	コピー		2006年12月
J	Fifth National Development Plan 2006-2016 Summary	図書	コピー	Ministry of Finance and National Planning	2006年12月
<b>VI</b>	<b>道路セクター計画</b>				
J-1	Road Sector Investment Programme (ROADSIP 1997-2007), June, 1997	図書	オリジナル	MCT	1996年6月
J-2	Road Sector Investment Programme (ROADSIP), Draft bankable Document, 29 October 1999	図書	コピー	National Task Force for Roadside II	2006年11月
J-3	Road Sector Investment Programme (ROADSIP), Draft Annual Review, 1999	図書	コピー	National Road Board	1999年
J-4	Road Sector Investment Programme (ROADSIP), Quarterly Progress Report (July to September 2006), 20 Nov 2006	図書	コピー	National Road Fund Agency (JICA Zambia Office: JZO)	2006年11月
J-5	Agenda for the Committee of Permanent Secretaries on Road Maintenance Initiative (RMI) on 31 January 2007	図書	コピー	WB (JZO)	2007年1月
J-6	Agenda for Cooperating Partners Meeting, Road Transport, 12 Sept 2006	図書	コピー	Cooperating Meeting (JZO)	2006年9月
J-7	Road Rehabilitation and Maintenance Project, Mid-Term Review Mission Aide Memoire, June 26-July 14, 2006	図書	コピー	EU(JZO)	2006年7月
J-8	NDF Credit no.428, Terms of Reference on the Study of Road User and its Implementation, March 2007	図書	コピー	NRFA(JZO)	2007年3月
J-9	NRFA Notice of Disbursement Schedule, 2006, February 28, 2007	新聞	オリジナル	Times of Zambia, NRFA	2007年2月
<b>VII</b>	<b>地域・都市計画</b>				
J	City of Ndola Strategic Development Plan (2006-2010)	図書	コピー	Ndola City Stakeholders, Development Cooperation Ireland,	2005年
J	City of Ndola, District Situation Analysis (Draft for Final Discussion at DDCC), November 2006	図書	コピー	NCC	2006年11月
<b>VIII</b>	<b>実施機関/組織/予算</b>				
J-1	KCC Budget Estimates 2007	図書	コピー	KCC	2006年
J-2	Construction New	ニュースレター	コピー	National Council for Construction	2006年11月
J-3	Ndola City Council, Annual Work Plan 2007 (Draft), March 2007 (5 pages)	プリント	コピー	NCC	2007年3月
J-4	Ndola City Council, Budget Summary, Engineering Services Department, 2006, (1 pages)	プリント	コピー	NCC	2006年

番号	資料の名称	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
<b>IX</b>	<b>環境社会配慮関連資料</b>				
J-1	Environmental Management Unit, Road Department, MOWS, Initial Environmental Impact Assessment Report for the Proposed Rehabilitation of the Chingola-Kasumbaleasa Road, Copperbelt Province Zambia, March 2003 (54 pages)	図書	コピー	RDA	2003年3月
J-2	ZCCM-IH, Preparation of Phase 2 of a Consolidated Environmental Management Plan, Project Summary Report, December 2005	図書	コピー	SGAB, SWECO, THOMRO, UNZA	2005年12月
<b>X</b>	<b>道路設計基準</b>				
J	Standard Specifications for Roads and Bridges, Decemer 1973	図書	コピー	Road Department	1973年12月
<b>XI</b>	<b>設計事例・設計参考資料</b>				
J-1	Rehabilitation of Ndola Urban Roads, Funded by World Bank, Traffic Survey and economic Report, Revised Report, September 1998	図書	コピー	ASCO, NCC	1998年9月
J-2	Road Sector Investment Program, Rehabilitation of 40.19km of Priority Roads in Kitwe, Technical Report, Phase I (Results of Field Survey & Investigation)	図書	コピー	Burrow Binnie Zambia for MCT	1998年8月/12月
J-3	Report on Traffic Survey, Axle Load Survey, Vehicular Speed Survey, Roughness Survey, Drainage and Land Use Survey Environmental Project Brief for the proposed Borrow Pit Sites Along the Chingola/Kasum	図書	コピー	JICA / Zulu Burrow	2004年
J-4	Environmental Project Brief for the proposed Borrow Pit Sites Along the Chingola/Kasum	図書	コピー	RDA, Environmental Management Unit	2006年6月
<b>XII</b>	<b>交通・交通安全・公共交通</b>				
J-1	Economic Evaluation Report, Rehabilitation of 40.19km of Priority Roads in Kitwe, ROADSIP, August 1998	図書	コピー	Zulu Borrow	
J-2	Ndola City Council, Bus Route Map	地図	オリジナル	NCC	2007年3月
J-3	Kiwe City Council, Bus Route Map	地図	オリジナル	KCC	2007年3月
<b>XIII</b>	<b>施工計画・積算関連</b>				
J-1	Urban Roads in Kitwe, Lot 2,3 and 4, Final Tender Evaluation Report, November 2004	図書	コピー	Zulu Borrow	2004年11月
J-2	Contract Document & Agreement for the Accelerated Urban Roads Rehabilitation Programme (226/2007), Rehabilitation of Urban Roads in Kitwe, October 2006	図書	コピー	Roads and Paving Zambia, BICON Zambia Limited	2006年10月
J-3	Contract for the Rehabilitation of the Lunda via KTTC-MINDOLO to Chingola Road, National Roads Programme 2004. Urban Roads Maintenance - Kitwe Copperbelt Province, October 2003	図書	コピー	Turner Construction LTD	2003年10月
J-4	Contract, Lot2, Kitwe City Council, Urban Roads Maintenance, Copperbelt Province, AEP2001, Lot 2 Kitwe City Council, National Roads Programme 2000-2001, October 2002	図書	コピー	Zulu Borrow	2002年10月
J-5	Contract Document Volume 3, Drawings, Rehabilitation of 40.19KM of Priority Roads in Kitwe,	図書	コピー	Zulu Borrow	-
J-6	Progress Report No.2 Contract Document Volume 3, Drawings, Rehabilitation of 40.19KM of Priority Roads in Kitwe, August 1999	図書	コピー	Zulu Borrow	1999年8月
J-7	Progress Report No.8 Contract Document Volume 3, Drawings, Rehabilitation of 40.19KM of Priority Roads in Kitwe, February 2000	図書	コピー	Zulu Borrow	2000年2月
J-8	Ndola Lime Company LTD, Local Price List (1 page), March 2007	図書	コピー	Ndola Lime Company Ltd	2007年3月
J-9	Phenix Materials, Kitwe Crusher (1 page), March 2007	図書	コピー	Phenix Materials, Kitwe Crusher	2007年3月
J-10	Zulu Borrow, Final Report, Rehabilitation of 34KM of Priority Roads in Kitwe, September 2002	図書	コピー	MLGH	2002年9月
J-11	ASCO, Progress Report No.12 June 2000	図書	コピー	MLGH	2000年6月



番号	資料の名称	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
E	<u>その他資料</u>				
JE-1	Joint Response of the Cooperating Partners to the zero draft FNDP on chapter 8 and its respective sector financing tables, June 2006 (10 pages)	図書	コピー	JICA	2006年6月
JE-2	News Paper, "District now road authority" (1 page)	プリント	コピー	JICA	2007年3月
JE-4	Mopani Copper Mines PLC, Nkana Division, Rainfall Season 2006-2007 (1 page)	図書	コピー	KCC	2007年
JE-5	RDA Awards Council Jobs, February 24, 2007	新聞	コピー	Times of Zambia	2007年2月
JE-6	RDA Awards Council Jobs, February 24, 2007	新聞	コピー	Times of Zambia	2007年2月
JE-7	Report for the Establishment of the Kitwe Road Fund, Executive Summary (17 pages)	図書	コピー	KCC	-
JE-8	Core Road Network, Draft Work Programme, RoadSIP August 1997	図書	コピー	National Road Board	1997年8月