第 4 章

プロジェクト実施により期待される効果

4. プロジェクトの妥当性の検証

4-1 プロジェクトの効果

本調査によって得られた社会・経済・交通調査および技術調査から判断される効果は以下のように考えられる。

直接効果

現状と問題点	本プロジェクトでの対策	プロジェクトの効果・改善の程度
整備対象交差点近傍やその道路沿線上の交通事故が増加している。	信号システムの導入とともに交差点内の道路横断構成を歩車道の完全分離構造とした。これに加え、歩行者の道路横断箇所の集約化や道路標識、路面標示を設置した。	交通流が整流化され、安全性が向上する。
近年のカンパラ市内の急激な交通量の伸びや人口の都市集中化で都市内交通が混雑している。	交通制御可能容量をオーバーしたラウンドアバウトの信号機設置等による交通制御方式の改善や幾何構造の改良工事を行う。	エンテベ道路を起点にジンジャ道路までの4.7kmの所要時間38分が短縮する。

間接効果

期待される間接効果	その内容
土地利用の高度化による都市経済の活性化	本道路整備により対象道路沿線での商業機能や業務機能の向上により、都市型の土地利用が促進され、投資効果の拡大による新規事業への展開が活性化する。
交通安全意識の向上	本道路整備で導入される信号交差点、歩道、歩車道分離施設、交通安全に係わる道路標識、路面標示により、交通事故の予防効果が高まるばかりでなく、交通安全に対する啓蒙活動などによって市民の交通安全意識が向上する。
公共交通サービスの改善	交通の整流化と公共バス停車場の設置により、カンパラ市民の唯一の移動手段である小型バスによる公共交通サービスが改善される。カンパラ市内外の多くの市民が利用していることから、その社会的インパクトは大きい。

裨益を受ける対象の範囲およびその規模

裨益対象範囲 ： カンパラ市全域
裨益対象人口 ： 120.8万人

4-2 課題・提言

農業人口や農業収入は減少傾向にあるが、商業活動が増大傾向にあり、社会インフラ整備の重要性は次第に高まってきている。世銀やEUを始めとする外国援助に頼らない健全財政を整えるためには税制改革と、税収を増すための政策実行の基盤としてのインフラ整備は必須である。同時に市内の渋滞解消は、道路改善だけでは困難であり、税制面からの車輌増加に対する抑制、交通規制および公共交通の整備が望まれる。

また、我が国の無償資金協力の基本方針である自助努力と持続性に対しての配慮が払われることが強く望まれ、「ウ」国側に要望される具体策を以下に示す。

1) 道路インベントリーの整備（道路価値推定、維持管理実施記録を含む）
2) 品質管理の重要性の認識と実践
3) 計画的な維持管理予算の実行と確保

また、維持管理能力向上への強化策としては以下のようなものがあげられる。

1) メンテナンスセンター・モータープール・試験所等の整備

2) 各プロジュクトを通じたオン・ザ・ジョブ・トレーニングの実施
3) 大学を含む研究機関の整備
4) 製品別、業種別協会活動の活性化
5) 技術者・技能者の資格制度の導入

4-3 プロジェクトの妥当性

カンパラ市内の公共施設は「ウ」国の独立(1962年)以前に構築されたものが今なお使われており、特に道路はその重要性が高くなっている。国家計画では、整備すべき最優先事項として交通インフラ整備が掲げられているが、独力でこれを達成するには財政的に難しい状況にある。これら、使用限界に達した道路構造物を修復することは、カンパラ市の発展、住民約120.8万人の民生の安定に大きく貢献するものであり、緊急の課題でもある。また、「ウ」国政府の要請にもあるように、都市部の交通混雑緩和対策や幹線道路の整備は、長期展望としてのマクロ経済の安定を図るために、重要かつ必要な交通・運輸部門における課題でもある。

カンパラ市の交差点や幹線道路等の都市機能が崩壊した場合、国家的損失を考えると本無償資金協力事業で改善する重要性は高く、首都圏幹線道路整備プロジェクト全体の進捗に大きく貢献するものである。

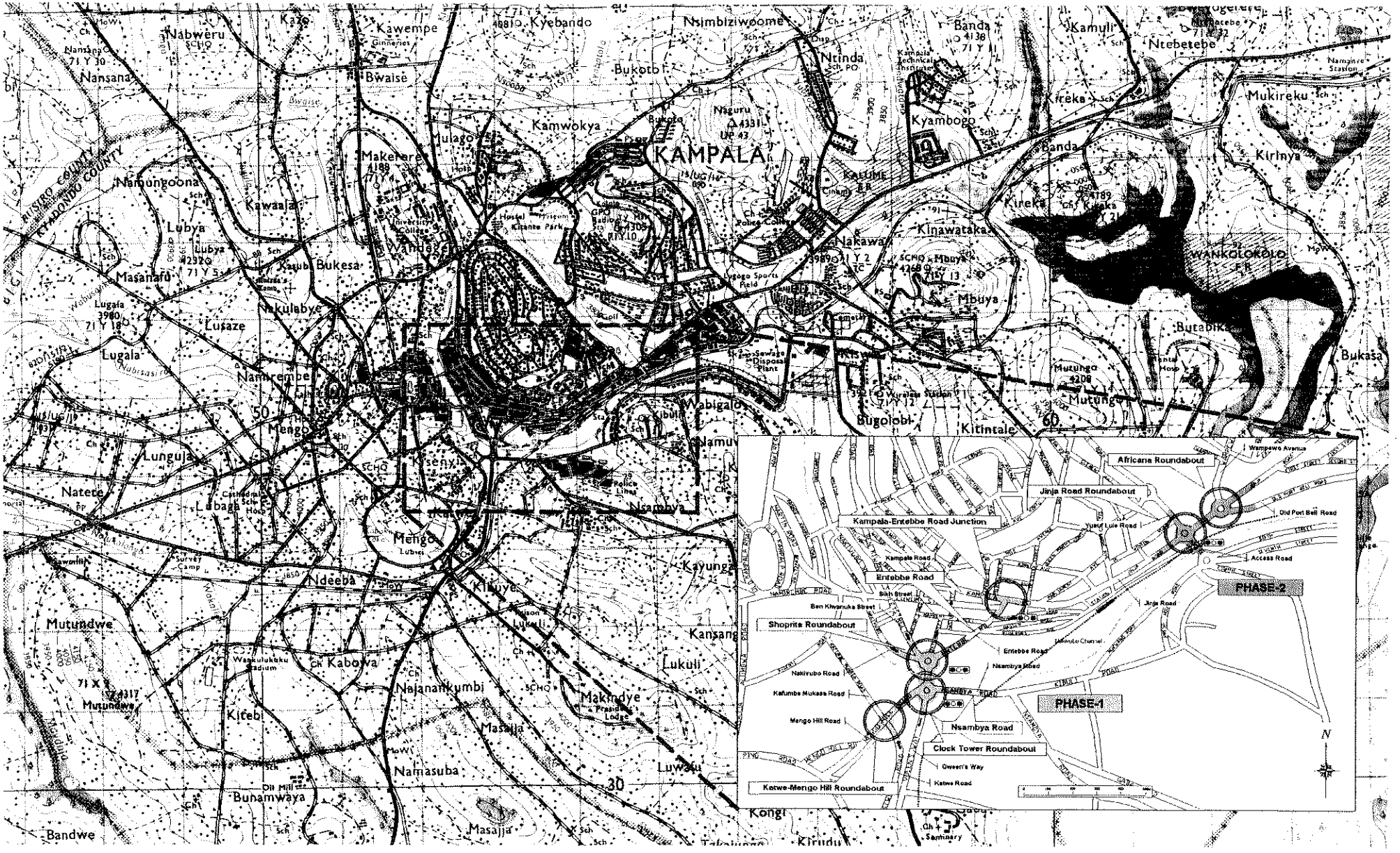
4-4 結論

本計画は、前述のように多大な効果が期待されると同時に、本計画が広く住民のBHNの向上に寄与するものである。よって、首都圏のライフラインである交差点や幹線道路が物理的飽和状態にあること、増加する交通量に対して道路機能が追いつかず、交通渋滞が商業活動の妨げになっていることや、交通事故で人命が失われているという事実から、緊急性の高い本計画を我が国の無償資金協力で実施する意義は高いと考えられる。

さらに、本プロジェクトの運営・維持管理についても、相手国側体制の実績は不足しているものの、本協力対象事業と並行して「ウ」国政府側の維持管理対策が改善されれば、本プロジェクトはより円滑かつ効果的に実施されると考えられる。

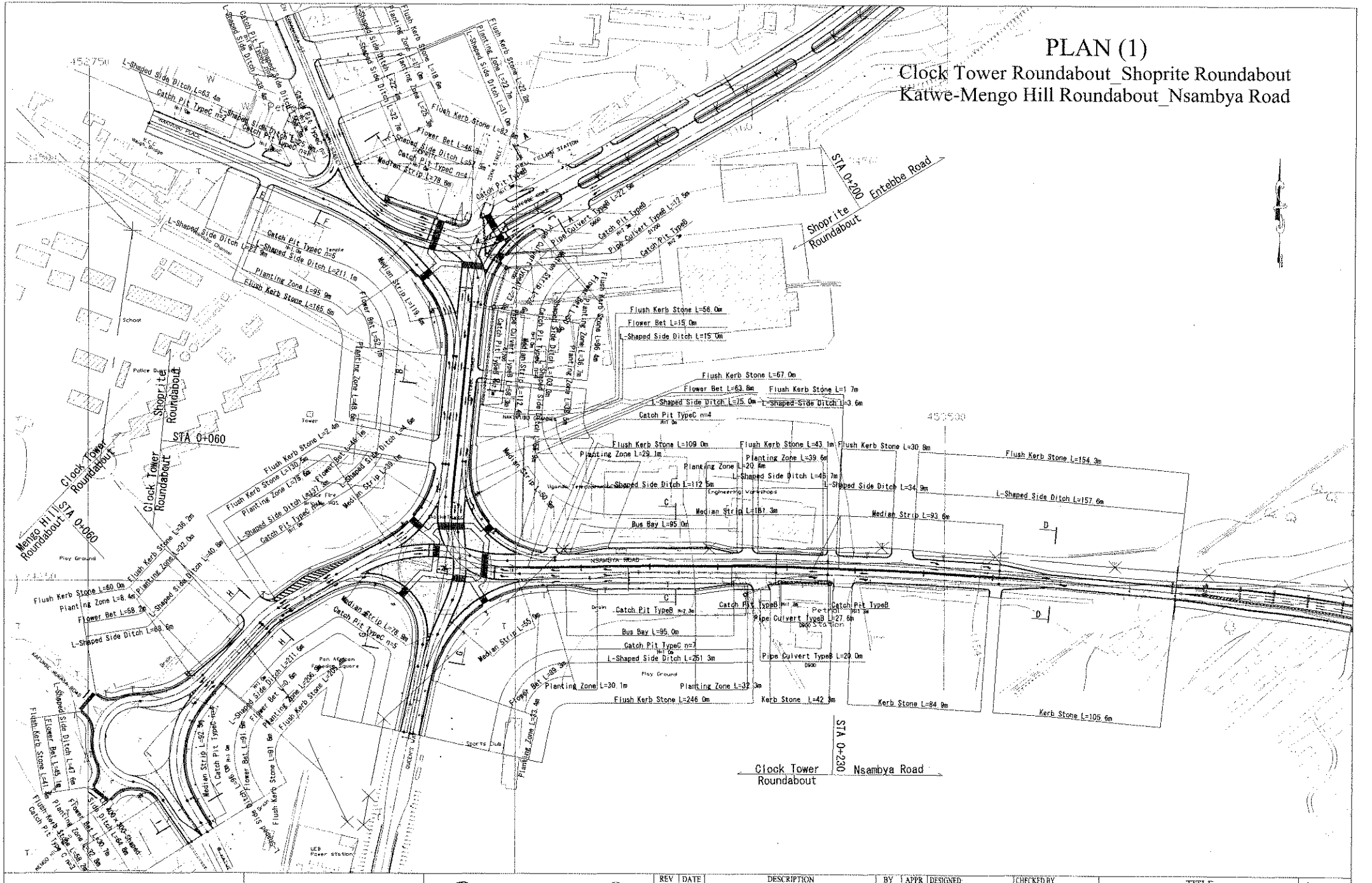
基 本 設 計 図

LOCATION MAP



PLAN (1)

Clock Tower Roundabout_Shoprite Roundabout
Katwe-Mengo Hill Roundabout_Nsambya Road



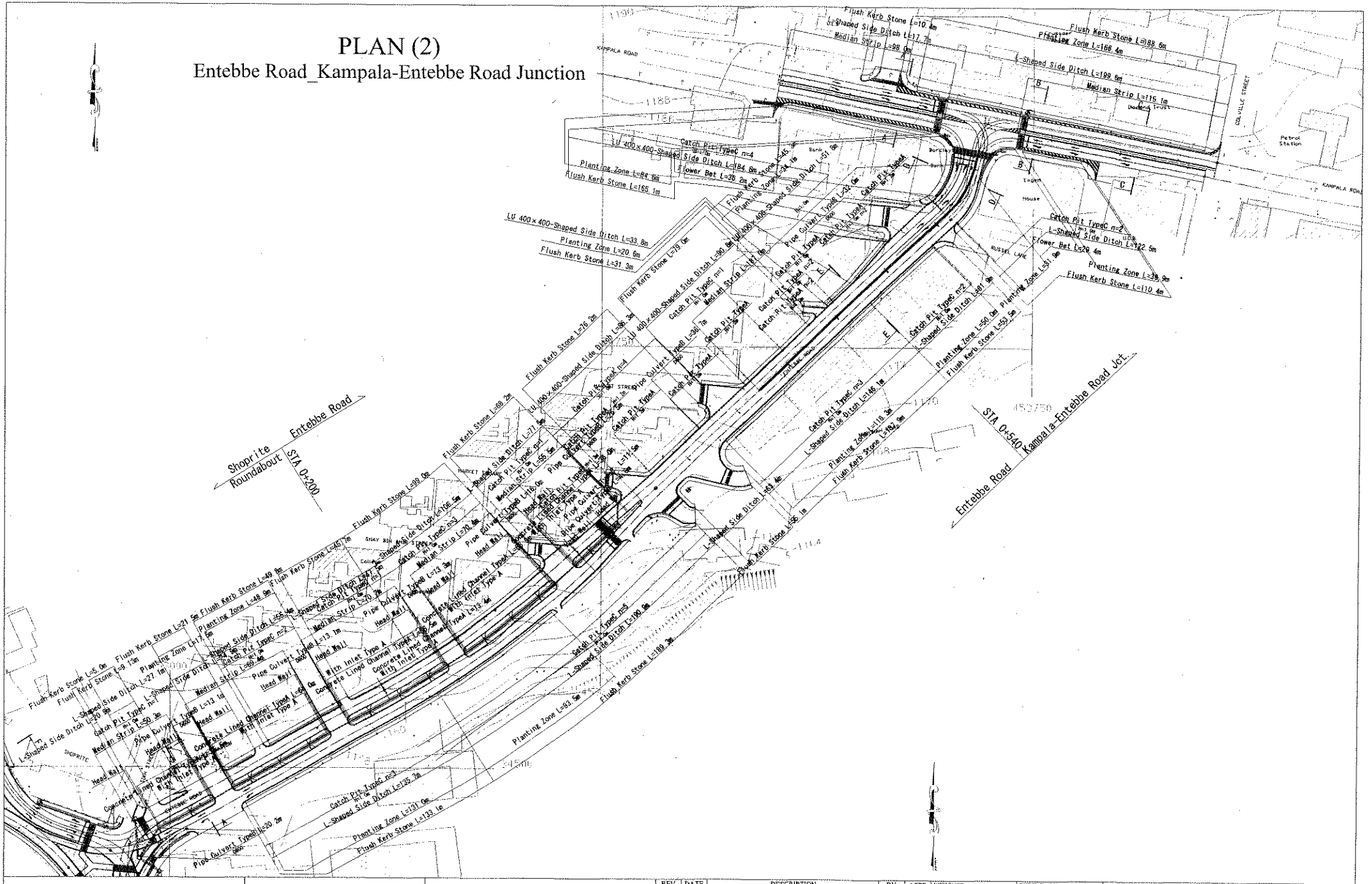
JICA JAPAN INTERNATIONAL COOPERATION AGENCY	THE PROJECT FOR IMPROVEMENT OF TRAFFIC FLOW IN KAMPALA CITY	NIPPON KOEI CO.,LTD. AND JAPAN ENGINEERING CONSULTANTS CO.,LTD.	REV	DATE	DESCRIPTION	BY	APPR	DESIGNED: DATE ** Feb 05	CHECKED BY: DATE ** Feb 05
								DRAWN: DATE ** Feb 05	APPROVAL BY: DATE:
								SCALE 1 : 1,000	

TITLE: PLAN (1) Clock Tower Roundabout_Shoprite Roundabout Katwe-Mengo Hill Roundabout_Nsambya Road

SHEET NO: B - 1

PLAN (2)

Entebbe Road_Kampala-Entebbe Road Junction



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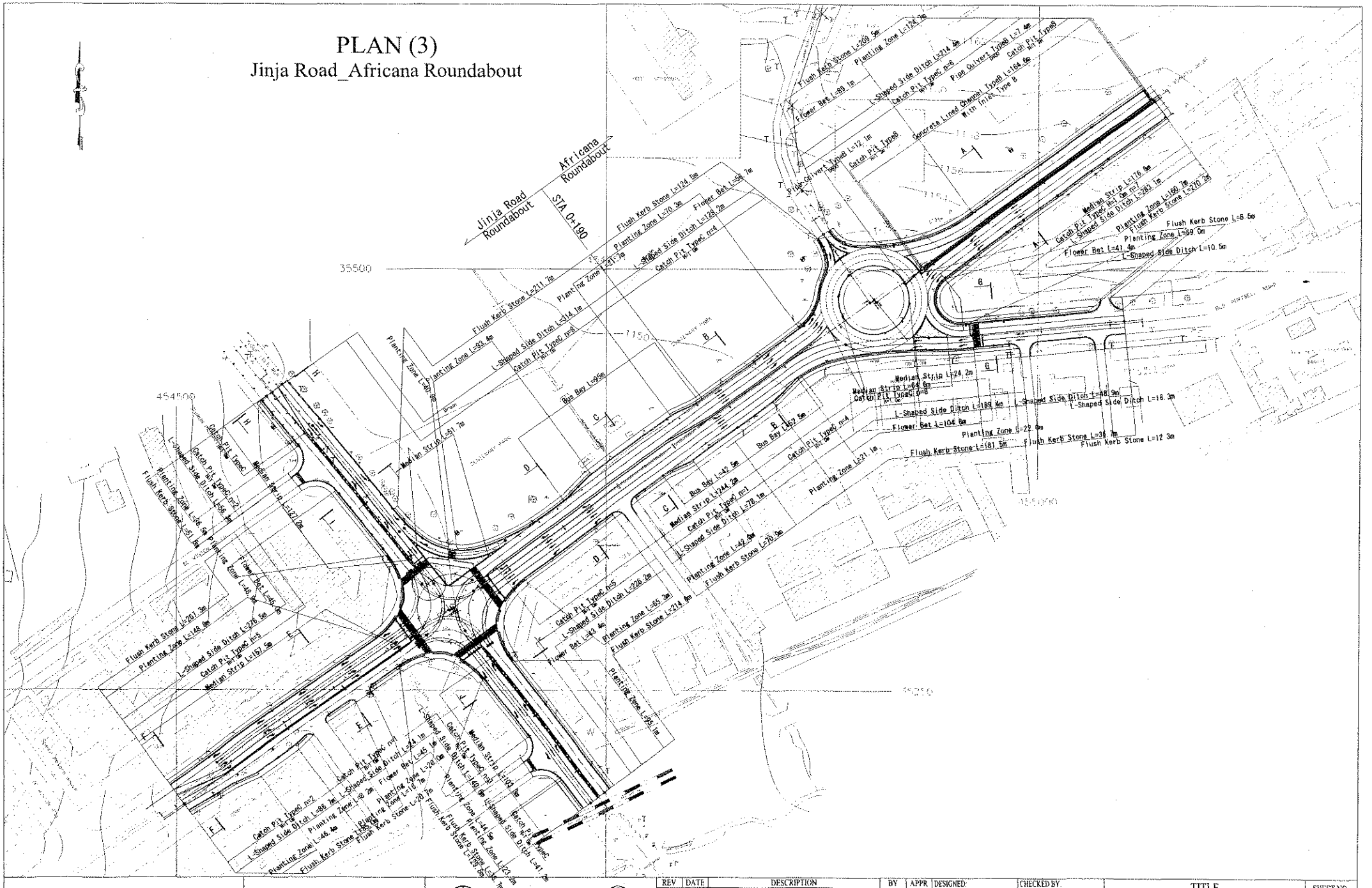
								DRAWN: DATE: ** . Feb . 05	APPROVAL BY: DATE:		
								SCALE: 1 : 1,000			

PLAN (3)
Jinja Road_Africana Roundabout

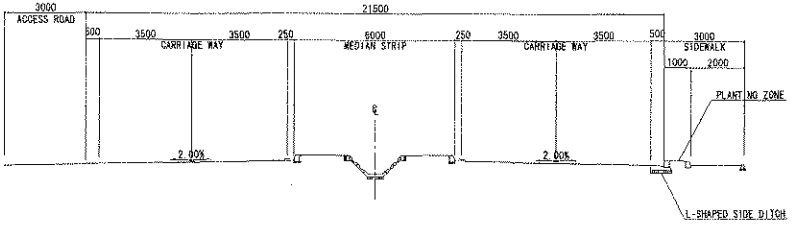


JICA JAPAN INTERNATIONAL COOPERATION AGENCY	THE PROJECT FOR IMPROVEMENT OF TRAFFIC FLOW IN KAMPALA CITY	NIPPON KOEI CO.,LTD. AND JAPAN ENGINEERING CONSULTANTS CO.,LTD.	REV	DATE	DESCRIPTION	BY	APPR	DESIGNED: DATE: ** Feb 05	CHECKED BY: DATE: ** Feb 05	TITLE: PLAN (3) Jinja Road_Africana Roundabout
								DRAWN: DATE: ** Feb 05	APPROVAL BY: DATE:	SHEET NO.: B - 3
								SCALE: 1 : 1,000		

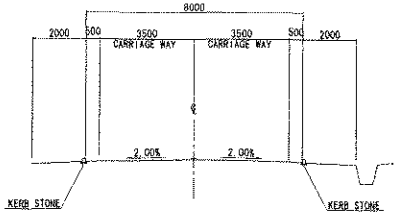
TYPICAL CROSS SECTION (1)

Clock Tower Roundabout_Shoprite Roundabout_Katwe-Mengo Hill Roundabout_Nsambya Road

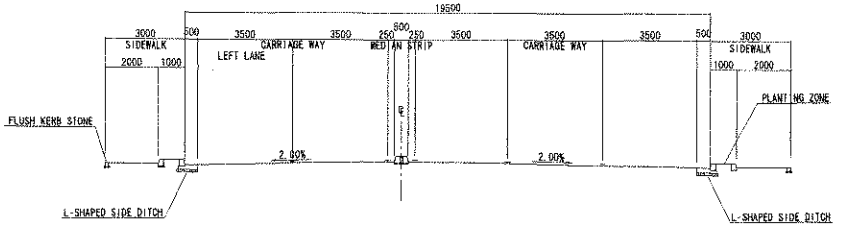
A-A
E2 Sta. 0+048



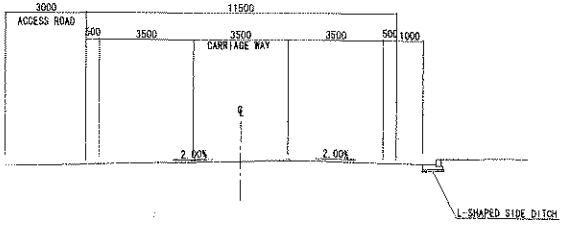
D-D
N Sta. 0+220



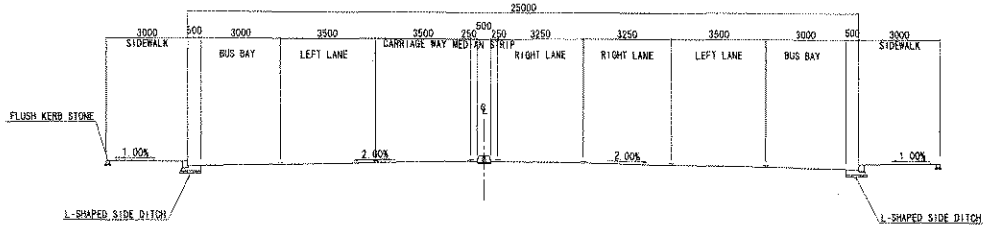
B-B
E1 Sta. 0+088



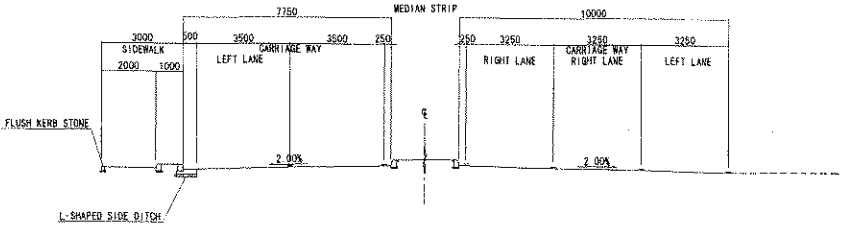
E-E



C-C
N Sta. 0+135



F-F

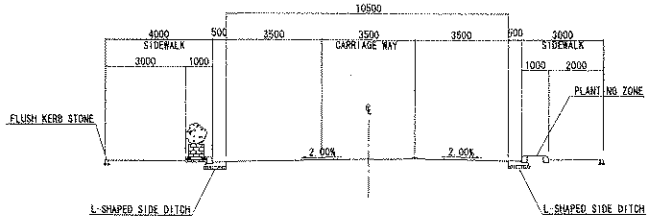


JICA JAPAN INTERNATIONAL COOPERATION AGENCY	THE PROJECT FOR IMPROVEMENT OF TRAFFIC FLOW IN KAMPALA CITY	NIPPON KOEI CO.,LTD. AND JAPAN ENGINEERING CONSULTANTS CO.,LTD.	REV / DATE / DESCRIPTION / BY / APPR	DESIGNED DATE ** Feb. 05	CHECKED BY DATE ** Feb. 05	TITLE	SHEET NO
				DRAWN DATE ** Feb. 05	APPROVAL BY DATE	TYPICAL CROSS SECTION (1) Clock Tower Roundabout_Shoprite Roundabout Katwe-Mengo Hill Roundabout_Nsambya Road	C - 1
				SCALE 1 : 100			

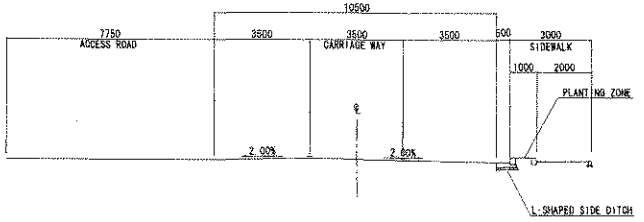
TYPICAL CROSS SECTION (2)

Clock Tower Roundabout_Shoprite Roundabout_Katwe-Mengo Hill Roundabout_Nsambya Road

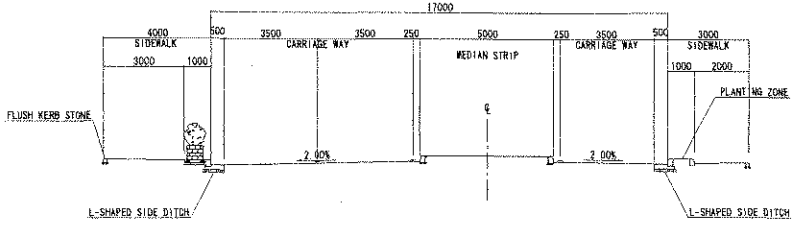
G-G
Q Sta. 0+054



H-H
M Sta. 0+108



I-I
KA Sta. 0+045



JICA JAPAN INTERNATIONAL COOPERATION AGENCY	THE PROJECT FOR IMPROVEMENT OF TRAFFIC FLOW IN KAMPALA CITY	NIPPON KOEI CO.,LTD. AND JAPAN ENGINEERING CONSULTANTS CO.,LTD.	TITLE: TYPICAL CROSS SECTION (2) Clock Tower Roundabout_Shoprite Roundabout Katwe-Mengo Hill Roundabout_Nsambya Road

REV	DATE	DESCRIPTION	BY	APPR

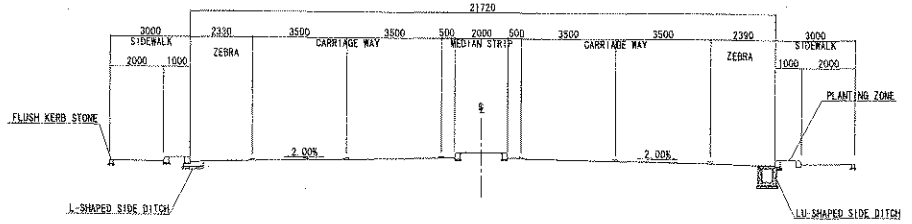
DESIGNED: DATE ** Feb 05
DRAWN: DATE ** Feb 05
SCALE: 1 : 100
CHECKED BY: DATE ** Feb 05
APPROVAL BY: DATE

SHEET NO: C - 2

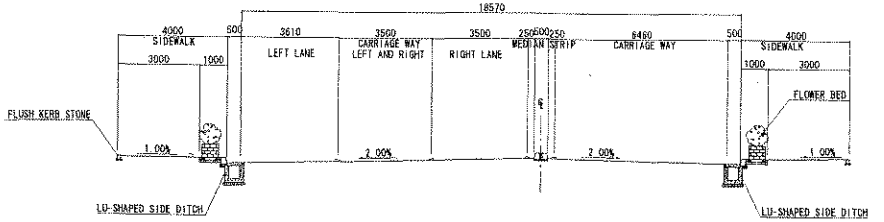
TYPICAL CROSS SECTION (3)

Entebbe Road_Kampala-Entebbe Road Junction

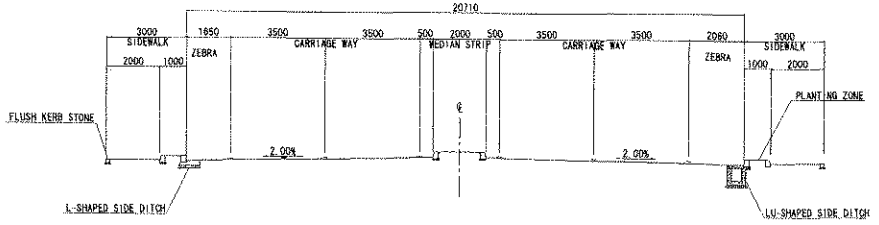
A-A
K1 Sta. 0+049



D-D
E2 Sta. 0+632



B-B
K2 Sta. 0+031



E-E
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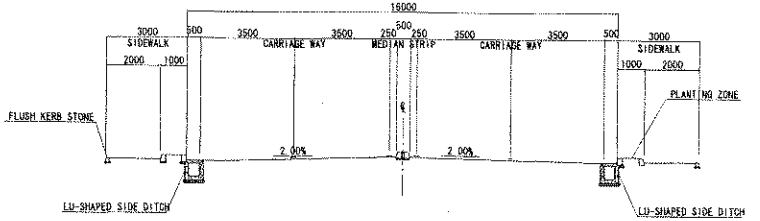
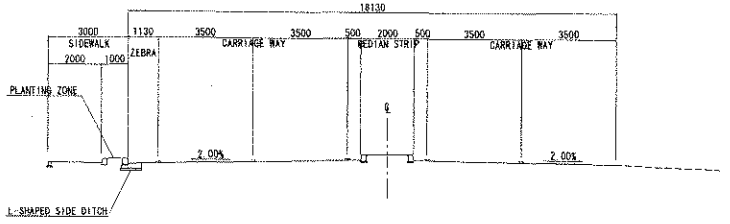


C-C
K2 Sta. 0+091



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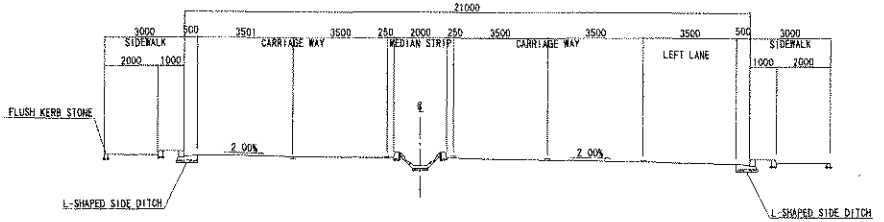
				DRAWN: DATE: ** . Feb . 05	APPROVAL BY: DATE:		
				SCALE: 1 : 100			

TYPICAL CROSS SECTION (4)

Jinja Road_Africana Roundabout

A-A
J3 Sta. 0+100



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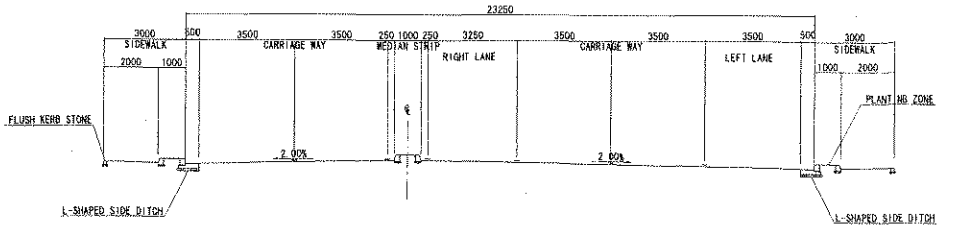
J2 Sta. 0+090



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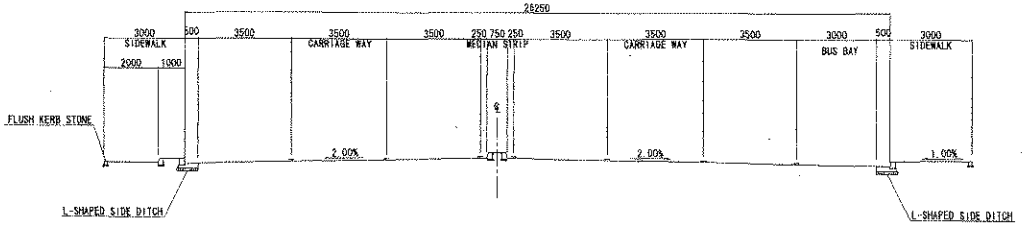
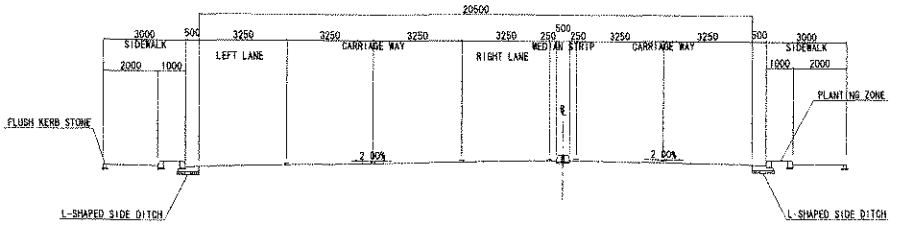
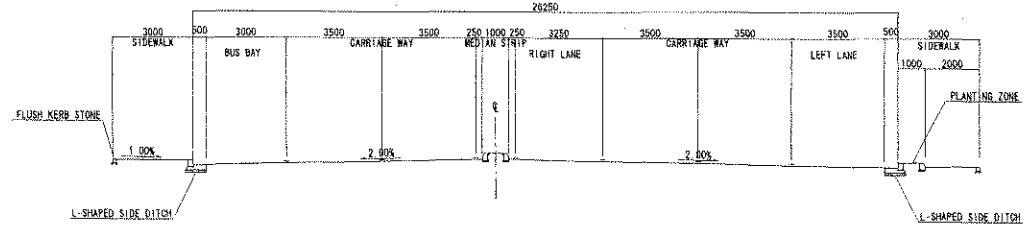
J2 Sta. 0+220



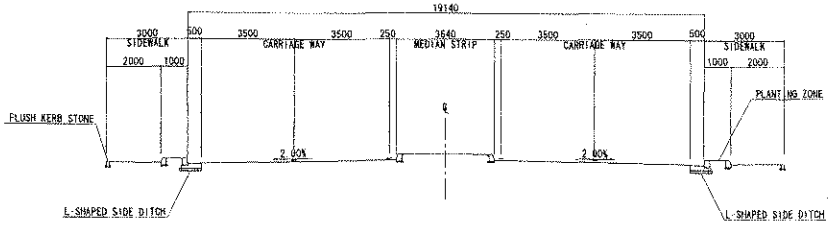
E-E
J1 Sta. 0+080



C-C
J2 Sta. 0+140



F-F
J1 Sta. 0+185



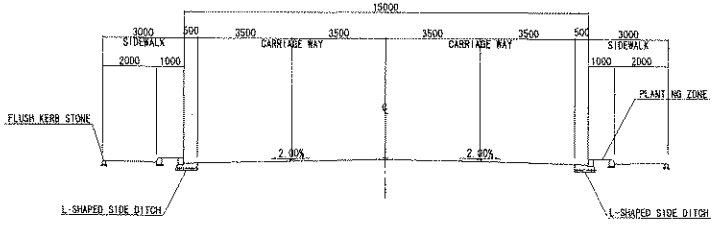
JICA JAPAN INTERNATIONAL COOPERATION AGENCY	THE PROJECT FOR IMPROVEMENT OF TRAFFIC FLOW IN KAMPALA CITY	NIPPON KOEI CO.,LTD. AND JAPAN ENGINEERING CONSULTANTS CO.,LTD.	REV	DATE	DESCRIPTION	BY	APPR	DESIGNED: DATE: ** . Feb . 05 DRAWN: DATE: ** . Feb . 05 SCALE: 1 : 100	CHECKED BY: DATE: ** . Feb . 05 APPROVAL BY: DATE:	TITLE: TYPICAL CROSS SECTION (4) Jinja Road_Africana Roundabout	SHEET NO: C - 4

TYPICAL CROSS SECTION (5)

Jinja Road_Africana Roundabout

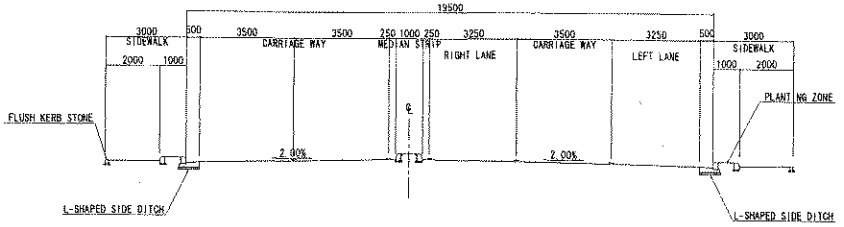
G-G

0 Sta. 0+013



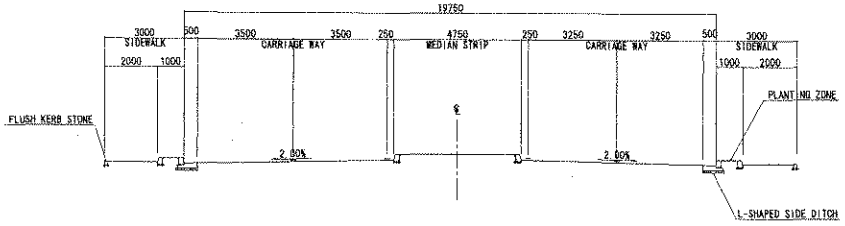
J-J

A Sta. 0+050



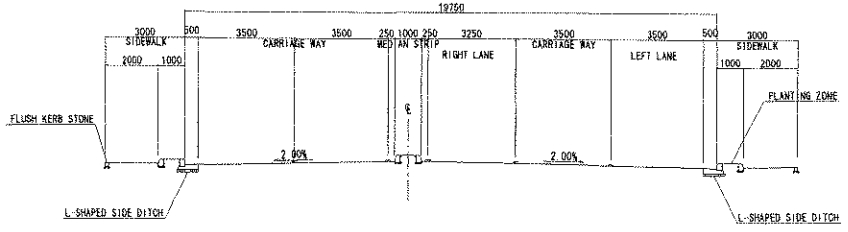
H-H

Y Sta. 0+165



I-I

Y Sta. 0+089



JICA JAPAN INTERNATIONAL COOPERATION AGENCY	THE PROJECT FOR IMPROVEMENT OF TRAFFIC FLOW IN KAMPALA CITY	NIPPON KOEI CO.,LTD. AND JAPAN ENGINEERING CONSULTANTS CO.,LTD.	REV / DATE / DESCRIPTION / BY / APPR	DESIGNED: DATE: ** Feb. 05 DRAWN: DATE: ** Feb. 05 SCALE: 1 : 100	CHECKED BY: DATE: ** Feb. 05 APPROVAL BY: DATE:	TITLE: TYPICAL CROSS SECTION (5) Jinja Road_Africana Roundabout	SHEET NO.: C - 5

資　　料

１．調査団員･氏名

２．調査行程

３．関係者(面会者)リスト

４．討議議事録（M/D）

５．事業事前計画表(基本設計時）

６．参考資料/入手資料リスト

７．その他の資料･情報

1. 調査団員･氏名

資料1. 調査団員･氏名

1-1 現地調査 （2004 年 9 月 4 日～2004 年 10 月 8 日）

江尻 幸彦	総括	国際協力機構 無償資金協力部調査役
宮田 克二	計画管理	国際協力機構 無償資金協力部審査室 審査チーム
藤澤 博	業務主任/道路交通計画/ 環境社会配慮	日本工営株式会社
犬塚 功	道路設計/自然条件調査	日本工営株式会社
保坂 正利	信号機システム計画	日本技術開発株式会社
井澤 徹郎	施工･調達計画/積算	日本技術開発株式会社

1-2 現地説明･協議、追加現地調査 （2004 年 12 月 11 日～2004 年 12 月 30 日）

稲村 次郎	総括	国際協力機構 ケニア事務所次長
宮田 克二	計画管理	国際協力機構 無償資金協力部審査室 審査チーム
藤澤 博	業務主任/道路交通計画/ 環境社会配慮	日本工営株式会社
犬塚 功	道路設計/自然条件調査	日本工営株式会社
井澤 徹郎	施工･調達計画/積算	日本技術開発株式会社

1-3 基本設計調査成果概要書の現地説明･協議 （2005 年 2 月 19 日～2005 年 3 月 5 日）

狩野 良昭	総括	国際協力機構 ケニア事務所長
藤澤 博	業務主任/道路交通計画/ 環境社会配慮	日本工営株式会社
犬塚 功	道路設計/自然条件調査	日本工営株式会社

2. 調査行程

資料 2. 調査工程

2-1 現地調査 （2004年9月4日～2004年10月8日）

日順	月日	曜日	団員移動内容	宿泊地	調査内容
1	9/4	土	藤澤,犬塚,保坂団員日本発、関空経由・ドバイ着	機内	
2	9/5	日	藤澤,犬塚,保坂団員ドバイ発、エンテベ着	カンパラ	
3	9/6	月	藤澤,犬塚,保坂 犬塚	カンパラ	公共事業省(MOWHC)にインセプション・レポート配布・説明 MOWHCへに現地再委託会社推薦依頼
4	9/7	火	江尻総括,宮田計画管理成田発、ロンドン経由 藤澤,犬塚 保坂	機内 カンパラ	 MOWHCとインセプション・レポートにつき説明 資料収集
5	9/8	水	江尻総括,宮田計画管理エンテベ着 井澤団員タンザニア発エンテベ着 江尻総括,宮田計画管理,藤澤,犬塚,保坂 江尻総括,宮田計画管理,藤澤,犬塚,保坂,井澤	カンパラ	 JOCV、日本大使館、MOWHC、MOFPED表敬訪問 MOWHCにインセプション・レポートを説明
6	9/9	木	江尻総括,宮田計画管理,藤澤,犬塚,保坂,井澤 江尻総括,宮田計画管理,藤澤,犬塚 保坂,井澤	カンパラ	現地踏査(本調査対象交差点・道路) MOWHCにてインセプショレポートの協議・打合せ 資料収集
7	9/10	金	江尻総括,宮田計画管理,藤澤,犬塚,保坂,井澤 江尻総括,宮田計画管理,藤澤,犬塚 保坂,井澤	カンパラ	現地踏査(カンパラ1期、2期工事交差点・道路) MOWHCにてM/Dドラフト・環境ガイドライン説明 資料収集
8	9/11	土	藤澤,犬塚,保坂,井澤	カンパラ	資料整理・解析、報告書作成
9	9/12	日	藤澤,犬塚,保坂,井澤	カンパラ	資料整理
10	9/13	月	江尻総括,宮田計画管理,藤澤,犬塚 江尻総括,宮田計画管理,藤澤,犬塚 保坂,井澤	カンパラ	ドナー会議(WB, EU) 大臣/MOWHC表敬訪問、M/Dドラフト協議 現地調査、資料収集
11	9/14	火	江尻総括,宮田計画管理,藤澤 犬塚,保坂,井澤		日本大使館報告 現地調査、資料収集
12	9/15	水	江尻総括,宮田計画管理エンテベ発、ケニア着 藤澤 犬塚 保坂,井澤	 カンパラ	JICAケニア事務所報告 交通量調査、現地調査 現地再委託(地形測量、地質調査)打合せ 現地調査、資料収集
13	9/16	木	藤澤 犬塚 保坂,井澤	カンパラ	交通量調査、現地調査 現地再委託(地質調査)契約 現地調査、資料収集
14	9/17	金	藤澤,犬塚,保坂,井澤 犬塚	カンパラ	現地調査、資料収集、再委託会社との打合せ 現地再委託(測量調査)契約
15	9/18	土	藤澤,犬塚,保坂,井澤	カンパラ	資料整理・解析、報告書作成
16	9/19	日	藤澤,犬塚,保坂,井澤	カンパラ	報告書作成
17	9/20	月	藤澤,犬塚,保坂,井澤	カンパラ	現地調査、資料収集・整理・解析、報告書作成
18	9/21	火	藤澤,犬塚,保坂,井澤	カンパラ	現地調査、資料収集・整理・解析、報告書作成
19	9/22	水	藤澤 犬塚,保坂,井澤	カンパラ	交通量調査、現地調査 現地調査、資料収集・整理・解析、報告書作成
20	9/23	木	藤澤 犬塚,保坂,井澤	カンパラ	交通量調査、現地調査 現地調査、資料収集・整理・解析、報告書作成
21	9/24	金	藤澤,犬塚,保坂,井澤	カンパラ	現地調査、資料整理・解析、報告書作成
22	9/25	土	藤澤,犬塚,保坂,井澤	カンパラ	現地調査、資料整理・解析、報告書作成
23	9/26	日	藤澤,犬塚,保坂,井澤	カンパラ	報告書作成
24	9/27	月	藤澤,犬塚,保坂,井澤	カンパラ	現地調査、資料収集(交通事故)・整理、報告書作成
25	9/28	火	藤澤,犬塚,保坂,井澤	カンパラ	現地調査、資料整理・解析、報告書作成
26	9/29	水	藤澤,犬塚,保坂,井澤	カンパラ	現地調査、資料整理・解析、報告書作成
27	9/30	木	藤澤,犬塚,保坂,井澤	カンパラ	走行速度調査、資料収集(気象関連)、報告書作成
28	10/1	金	藤澤,犬塚,保坂,井澤 藤澤,犬塚	カンパラ	走行速度調査、資料収集(車輌登録)、報告書作成 他ドナー(WB)との打合せ
29	10/2	土	藤澤,犬塚,井澤 保坂団員エンテベ発、ドバイ経由日本行き	カンパラ 機内	現地調査、資料整理・解析、報告書作成
30	10/3	日	藤澤,犬塚,井澤 保坂団員日本着	カンパラ 日本	現地調査、報告書作成
31	10/4	月	藤澤,犬塚,井澤 藤澤,犬塚	カンパラ	測量結果に基づく現地調査、報告書作成 他ドナー(DANIDA)との打合せ
32	10/5	火	藤澤,犬塚,井澤 藤澤,犬塚	カンパラ	現地調査、報告書作成 MOWHCとのM/Mの協議・確認
33	10/6	水	藤澤,犬塚,井澤 藤澤,犬塚,井澤	カンパラ	報告書作成 日本大使館報告
34	10/7	木	藤澤,犬塚,井澤団員エンテベ出発、ケニア着 井澤団員ケニア発、タンザニア着 藤澤,犬塚 藤澤,犬塚団員ケニア発、ドバイ経由日本行き	 タンザニア 機中	 JICAケニア事務所報告
35	10/8	金	藤澤,犬塚団員日本着	日本	

2-2　現地説明・協議、追加現地調査 （2004 年 12 月 11 日～2004 年 12 月 30 日）

日順	月日	曜日	団員移動内容	宿泊地	調査内容
1	12/11	土	藤澤,犬塚,井澤団員日本発、関空経由・ドバイ着	機内	
2	12/12	日	藤澤,犬塚,井澤団員ドバイ発、エンテベ着	カンパラ	
3	12/13	月	藤澤,犬塚,井澤	カンパラ	公共事業住宅通信省（MOWHC）にDBD配布 日本大使館・JOCV挨拶、基本設計概要書（DBD）配布、説明
4	12/14	火	藤澤,犬塚,井澤	カンパラ	MOWHCとDBDにつき説明・協議
5	12/15	水	藤澤,犬塚,井澤 藤澤,犬塚,井澤	カンパラ	MOWHC環境専門係との打合せ カンパラ市役所（KCC）とDBDにつき説明・協議
6	12/16	木	藤澤,犬塚,井澤 藤澤,犬塚,井澤	カンパラ	北部バイパス(EU)設計コンサルタントとの協議 MOWHC, KCCとDBDの協議・打合せ
7	12/17	金	稲村総括ナイロビ発エンテベ着 藤澤,犬塚,井澤 藤澤,犬塚,井澤	カンパラ	 現地踏査 MOWHC, KCCとDBDの協議・打合せ
8	12/18	土	藤澤,犬塚,井澤	カンパラ	資料整理・解析
9	12/19	日	宮田計画管理エンテベ着 稲村総括,宮田計画管理,藤澤,犬塚,井澤	カンパラ	 団内打合せ
10	12/20	月	稲村総括,宮田計画管理,藤澤,犬塚,井澤	カンパラ	M/DおよびDBDに関する協議
11	12/21	火	稲村総括,宮田計画管理,藤澤,犬塚,井澤 稲村総括,宮田計画管理,藤澤	カンパラ	現地踏査 M/Dの最終協議、調印
12	12/22	水	稲村総括,宮田計画管理,藤澤 稲村総括,宮田計画管理エンテベ発、ケニア着 宮田計画管理ケニア発日本行き 藤澤,犬塚,井澤	カンパラ	日本大使館報告 現地調査
13	12/23	木	藤澤,犬塚,井澤	カンパラ	MOWHCとの合同現地調査
14	12/24	金	藤澤,犬塚,井澤	カンパラ	MOWHCとの支障物調査、報告書整理
15	12/25	土	藤澤,犬塚,井澤	カンパラ	帰国報告資料準備
16	12/26	日	藤澤,犬塚,井澤	カンパラ	団内打合せ
17	12/27	月	藤澤,犬塚,井澤	カンパラ	MOWHCとの排水・支障物調査
18	12/28	火	藤澤,犬塚,井澤	カンパラ	資料収集・検討
19	12/29	水	藤澤,犬塚,井澤団員エンテベ出発 藤澤,犬塚,井澤団員ナイロビ・ドバイ経由	機中	
20	12/30	木	藤澤,犬塚,井澤団員ドバイ・関西空港軽油 藤澤,犬塚,井澤団員日本着	日本	

2-3　基本設計調査成果概要書の現地説明･協議 （2005 年 2 月 19 日～2005 年 3 月 5 日）

日順	月日	曜日	団員移動内容	宿泊地	調査内容
1	2/19	土	藤澤,犬塚団員日本発、関空経由･ドバイ着	機内	
2	2/20	日	藤澤,犬塚団員ドバイ発、エンテベ着	カンパラ	
3	2/21	月	藤澤,犬塚 藤澤,犬塚	カンパラ	公共事業省(MOWHC)に成果概要書(DFR)配 日本大使館、JOCV訪問DFR説明
4	2/22	火	藤澤,犬塚 藤澤,犬塚	カンパラ	現地踏査 MOWHCとDFR, M/Dにつき説明･協議
5	2/23	水	藤澤,犬塚 藤澤,犬塚	カンパラ	資料整理 MOWHC, KCCとDFR、M/Dの協議･打合せ
6	2/24	木	藤澤,犬塚 藤澤,犬塚	カンパラ	資料整理 MOWHC, KCCとM/Dの協議･打合せ
7	2/25	金	藤澤,犬塚 藤澤,犬塚	カンパラ	MOWHCとのM/Dの協議･打合せ 資料整理
8	2/26	土	藤澤,犬塚 狩野総括ナイロビ発、エンテベ着	カンパラ	報告書作成
9	2/27	日	狩野総括,藤澤,犬塚	カンパラ	団内打合せ
10	2/28	月	狩野総括 藤澤,犬塚	カンパラ	視察 報告書作成
11	3/1	火	狩野総括,藤澤,犬塚 狩野総括,藤澤,犬塚 狩野総括,藤澤,犬塚	カンパラ	MOWHC, KCC M/D最終協議、調印 現場視察 日本大使館報告
12	3/2	水	狩野総括,藤澤,犬塚 狩野総括エンテベ発、ナイロビ着 藤澤,犬塚	 ケニア カンパラ	現場視察 報告書作成
13	3/3	木	藤澤,犬塚	カンパラ	KCC打合せ、報告書作成
14	3/4	金	藤澤,犬塚 藤澤,犬塚団員エンテベ出発、ケニア経由	 機中	MOWHC打合せ
15	3/5	土	藤澤,犬塚団員ドバイ･関西空港軽油 藤澤,犬塚団員日本着	 日本	

３．　関係者(面会者)リスト

資料3. 関係者(面会者)リスト

所　属	氏　名	役　職
在ウガンダ日本国大使館	北澤　吉隆	参事官
	森原　克樹	二等書記官
JICA ウガンダ JOCV 調整員事務所	古川　寛	調整員
	中村　展子	企画調整員
JICA ケニア事務所	狩野　良和	所長
	稲村　次郎	次長
	石塚　賢	所員
Ministry of Works, Housing and Communications (MOWHC)	Hon. J. Nasasera	Minister
	Hon. A. Awuzu	State Minister for Transport
	Mr. C. Muganzi	Permanent Secretary
	Mr. Samson Bagonza	EIC/DE　Commissioner Quality Assurance
	Mr. S. Ibanda	Commissioner Housing
	Mr. B. Kasimbazi	Under Secretary Finance and Administration
	Mr. W. E. Musunba	ACE (ED)
	Mr. A. O. Mugisa	ACE (ED)
	Mr. Balamu-Bisuti	AC/Road Maintenance
	Mr. K. Kagina	AC/DUR
	Mr. J. Bigabawa	AC (QM)
	Mr. G Wandera	Chief Planner
	Mr. Alex Onen	PXE (ED)
	Mr. R. N. Kira	PXE (T)
	Mr. Opio Olanya	SEX/ED
	Mr. Nelson Omagor	Principal Environmental Officer
	Mr. Arne Poulsen	Road Sector Adviser, RAFU
	Mr. G Magala	CE (ED)-(Secretary)
	Mr. J. Kakeeto	PSS
	Mr. J. Matovu	Public Relations Officer
	Mr. Ben Ssebugga - Kimeze	Assistant Commissioner Quality Assurance
	Mr. Joseph B. Mutabaei	Civil Technical Engineer
	Mr. O. Ssambwa	Project Engineer, RAFU
	Mr. S. Mulondo	Senior Material Engineer, Central Lab.
	Mr. B. Ssebbugga	Assistant Commissioner, Central Lab.
Kampala City Council (KCC)	Mr. Abraham. J. Byandala	City Engineer & Surveyor
	Mr. Stephen Kinyera	Deputy City Engineer & Surveyor
	Mr. Waiswa Naluwairo	Electrical Engineer
Ministry of Finance, Planning and Economic Development	Mr. C. M. Kassami	Permanent Secretary
	Mr. P. Ocailap	Commissioner Aid Coordinator
	Mr. E. Katwe	Japan's Grant Aid Coordinator
	Mr. P. Akidi	Senior Financial Officer
	Mr. J. Mwedde	Advisor
Ministry of Internal Affairs	Mr. G Tibayuugwa	Regi Road traffic Officer, Traffic Police, Kampala
Ministry of Water, Lands and Environment	Mr. Rulusa Rukanyangyira	Senior Meteologist

所　属	氏　名	役　職
European Union	Mr. Guy Rijcken	First Counsellor
	Mr. Nigel Curtin	Team Leader, Kampara Northern Bypass Project (French Engineering Consultants)
World Bank	Mr. Richard Olowo	Procurement Specialist
	Mr. Labite Victoria Ocaya	Highway Engineer
Royal Danish Embassy	Mr. Jan Kildebogaard	Counsellor
	Mr. Stephan Ajalu	Programme Officer

4.　討議議事録(M/D)

4-1　討議議事録　2004 年 9 月 14 日

4-2　討議議事録　2004 年 12 月 21 日

4-3　討議議事録　2005 年 3 月 1 日

Minutes of Discussions
on the Basic Design Study
on the Project for Improvement of Traffic Flow in Kampala City
in the Republic of Uganda

In response to the request from the Government of the Republic of Uganda (hereinafter referred to as "Uganda"), the Government of Japan decided to conduct a Basic Design Study on the Project for Improvement of Traffic Flow in Kampala City (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Uganda the Basic Design Study Team (hereinafter referred to as "the Team"), headed by Mr. Yukihiko Ejiri, Senior Assistant to the Director General, Grant Aid Management Department, JICA, and is scheduled to stay in the country from September 5 to October 7, 2004.

The Team held discussions with the concerned officials of the Government of Uganda.

In the course of the discussions, both sides have confirmed the main items described in the attached sheets. The Team will proceed to further works and prepare the Basic Design Study Report.

Entebbe, September 14, 2004

Yukihiko Ejiri
Leader
Basic Design Study Team
Japan International Cooperation Agency

Charles Muganzi
Permanent Secretary
Ministry of Works, Housing and Communications
Republic of Uganda

Witness;

Abraham James Byandala
City Engineer and Surveyor
Kampala City Council
Republic of Uganda

ATTACHMENT

1. Objective of the Project

The objective of the Project is to secure a smooth traffic flow by the improvement of Six(6) Junctions in Kampala City.

2. Project Site

The sites of the Project are shown in Annex-1.

3. Responsible and Implementing Organizations

The responsible and implementing organization is the Ministry of Works, Housing and Communications (MOWHC).

The organization chart of MOWHC is shown in Annex-2.

4. Items Requested by the Government of Uganda

After discussions with the Team, the following items were finally requested by the Ugandan side. The Team will assess the appropriateness of each component and the final components of the Project will be decided by the Japanese side after further studies in Japan.

(1) Clock Tower Roundabout Improvement including a section joining Kibuli Junction and Clock Tower Roundabout
Earth Works, Drainage, Pavement, Road Furniture, Signal

(2) Shop-rite Roundabout Improvement
Earth Works, Drainage, Pavement, Road Furniture, Signal

(3) Jinja Road Roundabout Improvement
Earth Works, Drainage, Pavement, Road Furniture, Signal

(4) Katwe-Mengo Hill Roundabout Improvement
Earth Works, Drainage, Pavement, Road Furniture

(5) Africana Roundabout Improvement
Earth Works, Drainage, Pavement, Road Furniture

(6) Kampala Road - Entebbe Road Junction Improvement including Entebbe Road section approx. 500m
Earth Works, Drainage, Pavement, Road Furniture, Signal

5. Japan's Grant Aid Scheme

(1) The Ugandan side understands the Japan's Grant Aid scheme explained by the Team as described in Annex-3.

(2) The Ugandan side promised to take necessary measures, as described in Annex-4, for smooth implementation of the Project as a condition for the Japan's Grant Aid to be implemented.

6. Schedule of the study

(1) The consultants will proceed with further studies in Uganda until October 7, 2004.

(2) The Study consists of two phases; Phase I and II. In Phase I, JICA will prepare the draft report which includes a basic concept of the Project and its basic design. In Phase II, JICA will prepare the draft final report which includes the engineering design on the basis of the study results of Phase I. The final report will be completed by JICA through integration of the study results of both Phases I and II.

(3)JICA will prepare the draft report in English and dispatch a mission to Uganda to explain its contents around the middle of December 2004.

(4) Based on the results of discussions of the draft report, JICA will proceed with further examination of the study results in Japan by the middle of February 2005.

(5) JICA will prepare the draft final report in English and dispatch a mission to explain its contents around the middle of February 2005.

7. Other Relevant Issues

(1) The Ugandan side shall allocate the budget for its undertakings to be done in a timely manner by the Ugandan side, which are shown in Annex-4.

(2) The Ugandan side shall remove the existing structures and other facilities falling within the construction corridor before the works commence.

(3) The Ugandan side strongly requested installation of back-up power systems for signal and understood that the most appropriate power supply system in case of an emergency will be determined based on the results of further study.

(4) The Ugandan side strongly requested that all traffic signals to be installed should be sourced from Japan. The Team will consider this matter.

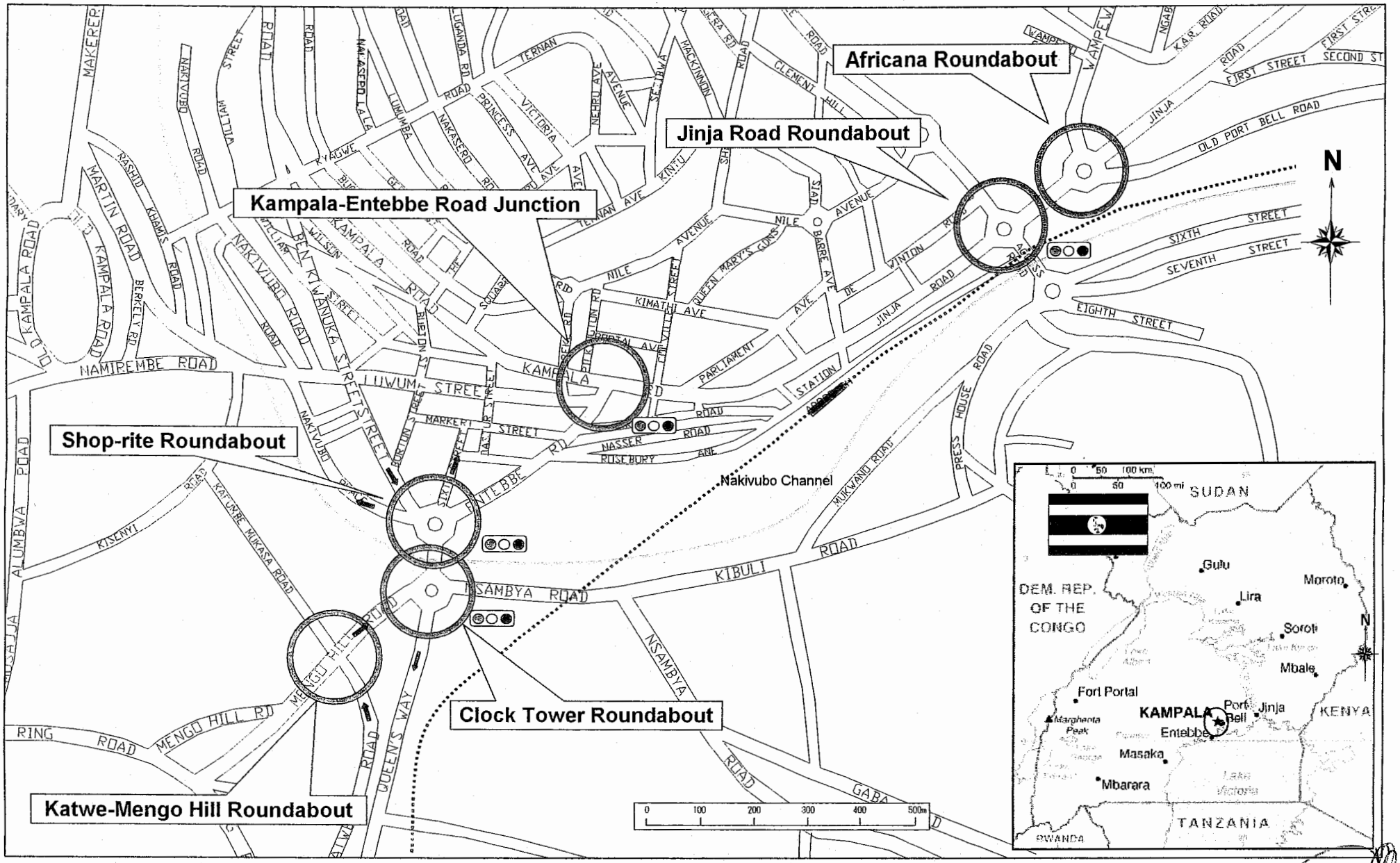
(5) The Ugandan side shall submit answers to the Questionnaire, which the Team handed to the Ugandan side, by September 30, 2004.

(6) The Ugandan side shall provide necessary number(s) of counterpart personnel to the Team during the period of their studies in Uganda.

(7) The Ugandan side requested counterpart training in Japan.

(8) MOWHC shall review all tender documents and drawings prepared during the Study. Contracts shall be signed between the Government of Uganda represented by MOWHC and Japanese firms. MOWHC will be responsible for the implementation of the project and its outputs.

Annex-1



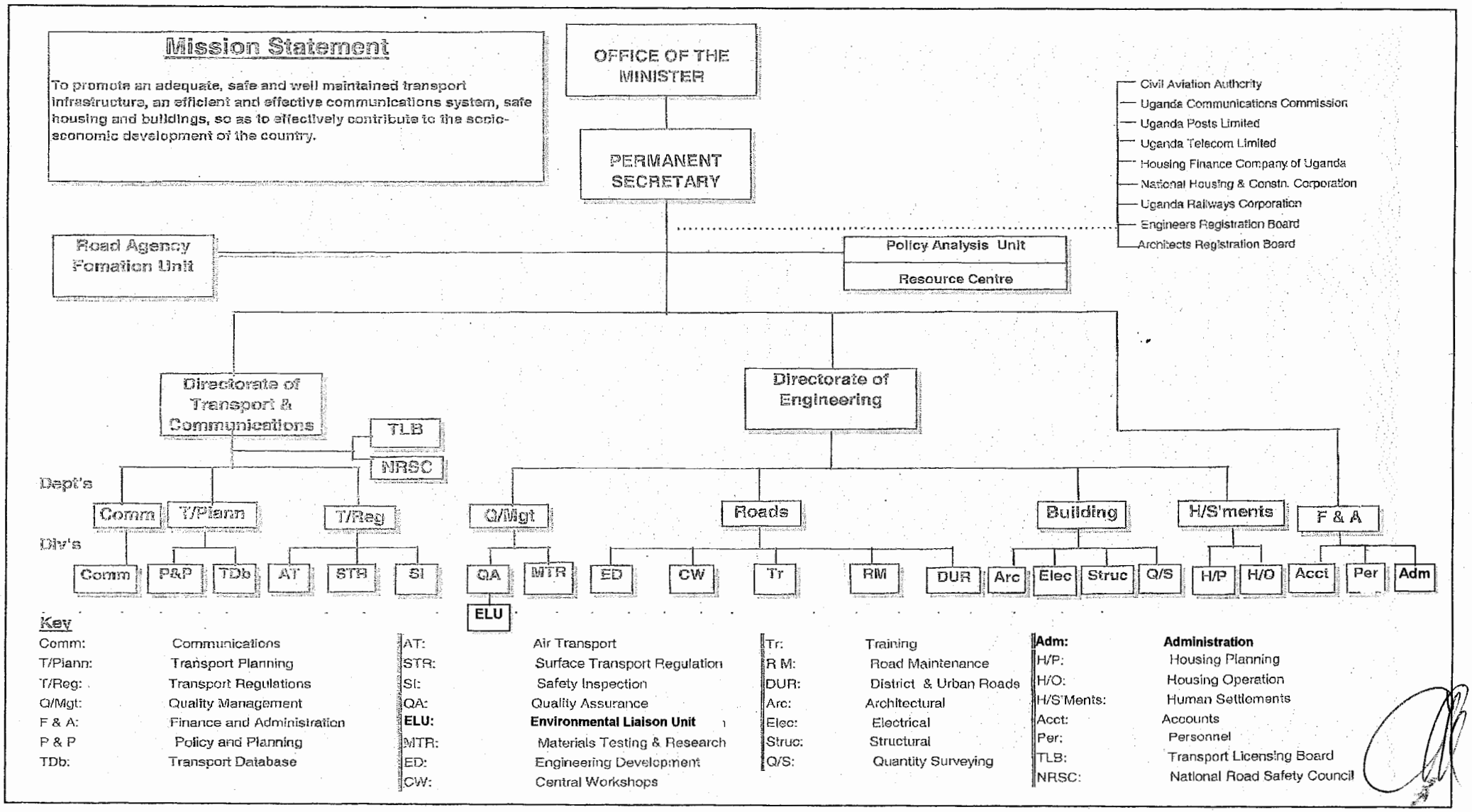
LOCATION MAP

THE PROJECT FOR IMPROVEMENT OF TRAFFIC FLOW IN KAMPALA CITY IN REPUBLIC OF UGANDA

Annex-2

ORGANIZATION CHART

THE MINISTRY OF WORKS, HOUSING AND COMMUNICATIONS (MOWHC)



JAPAN'S GRANT AID

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 the recipient country)
Study	(Basic Design Study conducted by JICA)
Appraisal &Approval	(Appraisal by the Government of Japan and Approval by the Cabinet)
Determination of Implementation	(The Note exchanged between the Governments of Japan and 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 (a) Japanese consulting firm(s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid 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 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 (hereafter referred to as "the Study") conducted by JICA on a requested project (hereafter 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 on by both parties concerning the basic concept of the Project.
- Preparation of a basic design of the Project.
- Estimation of costs of the Project.

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

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

(2) Selection of Consultants

For smooth implementation of the Study, JICA uses (a) registered consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA. The consultant firm(s) used for the Study is (are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency.

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 procedures such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and final payment to them must be completed. However, in case of delays in delivery, installation or construction due to unforeseen factors such as national 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, constructing and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

(4) Necessity of "Verification"

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

(5) Undertakings required of the Government of the Recipient Country

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

a) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction,

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 expenses and prompt excursion 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 the supply of the products and services under the Verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

(6) "Proper Use"

The recipient country is required to maintain and use the facilities constructed and the 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 Arrangements (B/A)

a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in 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 the recipient country or its designated authority.

(9) Authorization to Pay (A/P)

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

(End)

Major Undertakings to be taken by Each Government

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
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 the parking lot	●	
5	To construct temporary roads		
	1) Within the site	●	
	2) Outside the site		●
6	To construct the buildings	●	
7	To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities		
	1) Electricity		
	a. The distributing line to the site		●
	b. The drop wiring and internal wiring within the site	●	
	c. The main circuit breaker and transformer	●	
	2) Water Supply		
	a. The city water distribution main to the site		●
	b. The supply system within the site (receiving and elevated tanks)	●	
	3) Drainage		
	a. The city drainage main (for storm, sewer and others to the site) to the site		●
	b. The drainage system (for toilet sewer, ordinary waste, storm drainage and others) within the site	●	
	4) Gas Supply		
	a. The city gas main to the site		●
	b. The gas supply system within the site	●	
	5) Telephone System		
	a. The telephone trunk line to the main distribution frame/panel (MDF) of the building		●
	b. The MDF and the extension after the frame/panel	●	
	6) Furniture and Equipment		
	a. General furniture		●
	b. Project equipment	●	
8	To bear the following commissions to the Japanese bank for banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
9	To ensure 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	●	
10	To accord Japanese nationals whose service may be required in connection with the supply of the products and the services under the verified contact, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.		●
11	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts		●
12	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid		●
13	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for construction of the facilities as well as for the transportation and installation of the equipment		●

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

Minutes of Discussions
on the Basic Design Study
on the Project for Improvement of Traffic Flow in Kampala City
in the Republic of Uganda

(Explanation on Draft Report)

In September 2004, the Japan International Cooperation Agency (hereinafter referred to as "JICA") despatched the Basic Design Study Team on the Project for Improvement of Traffic Flow in Kampala City (hereinafter referred to as "the Project") to the Republic of Uganda (hereinafter referred to as "Uganda") 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 the Ugandan side on the components of the draft report, JICA sent to Uganda a Draft Report Explanation Team (hereinafter referred to as "the Team"), headed by Mr. Jiro Inamura, Deputy Resident Representative, JICA Kenya Office, from December 12 to December 29, 2004.

In the course of the discussions and field survey, both sides have confirmed the main items described in the attached sheets. The Team will proceed with further studies and prepare the Basic Design Study Report.

Entebbe, December 21, 2004

Signed by;

Jiro Inamura
Leader
Draft Report Explanation Team
Japan International Cooperation Agency

Signed by;

Charles Muganzi
Permanent Secretary
Ministry of Works, Housing and Communications
Republic of Uganda

Witnessed by;

Abraham James Byandala
City Engineer and Surveyor
Kampala City Council
Republic of Uganda

ATTACHMENT

1. Components of the Draft Report

The Ugandan side agreed and accepted in principle the components of the draft report presented by the Team. The main components are listed as follows and the contents of each component are shown in Annex-1.

(1) Improvement of the Clock Tower Roundabout, Shop-rite Roundabout, Jinja Road Roundabout, Katwe-Mengo Hill Roundabout, Africana Roundabout, and Kampala Road - Entebbe Road Junction

(2) Improvement of Nsambya Road (From the Clock Tower Roundabout to the Kibuli Junction, approx. 200m)

(3) Improvement of Entebbe Road (From the Shop-rite Roundabout to Kampala Road-Entebbe Road Junction, approx. 340m)

2. Japan's Grant Aid Scheme

The Ugandan side understands the Japan's Grant Aid scheme and the necessary measures to be taken by the Ugandan side as explained by the Team and described in Annex-3 and Annex-4 of the Minutes of Discussions signed by both sides on September 14, 2004.

3. Schedule of the study

(1) The consultants will proceed with further studies in Uganda until December 29, 2004.

(2) The consultants will proceed with further examination of the study results in Japan until the middle of February 2005.

(3) JICA will prepare the draft final report which will include the engineering design and despatch a mission to explain its contents around the end of February 2005.

(4) Based on the results of discussion of the draft final report, JICA will complete the final report and send it to the Government of Uganda by the end of April 2005.

4. Other Relevant Issues

(1) The Ugandan side agreed to secure and allocate enough budgets for compensation of properties and relocation of public utilities, which were described in Annex-4 of the Minutes of Discussions signed by both sides on September 14, 2004. The schedule and contents of the budget are shown in Annex-2.

(2) The Ugandan side shall undertake the work items listed in Annex-1 (attached herein) in addition to those listed in Annex-4 of the Minutes of Discussions signed by both sides on September 14, 2004.

(3) The Ugandan side requested the Team to arrange counterpart training in Japan on Urban Transport Management under a technical cooperation by JICA. The Ugandan side understands that an official request for the counterpart training is necessary to be submitted to the Japanese side through the Embassy of Japan.

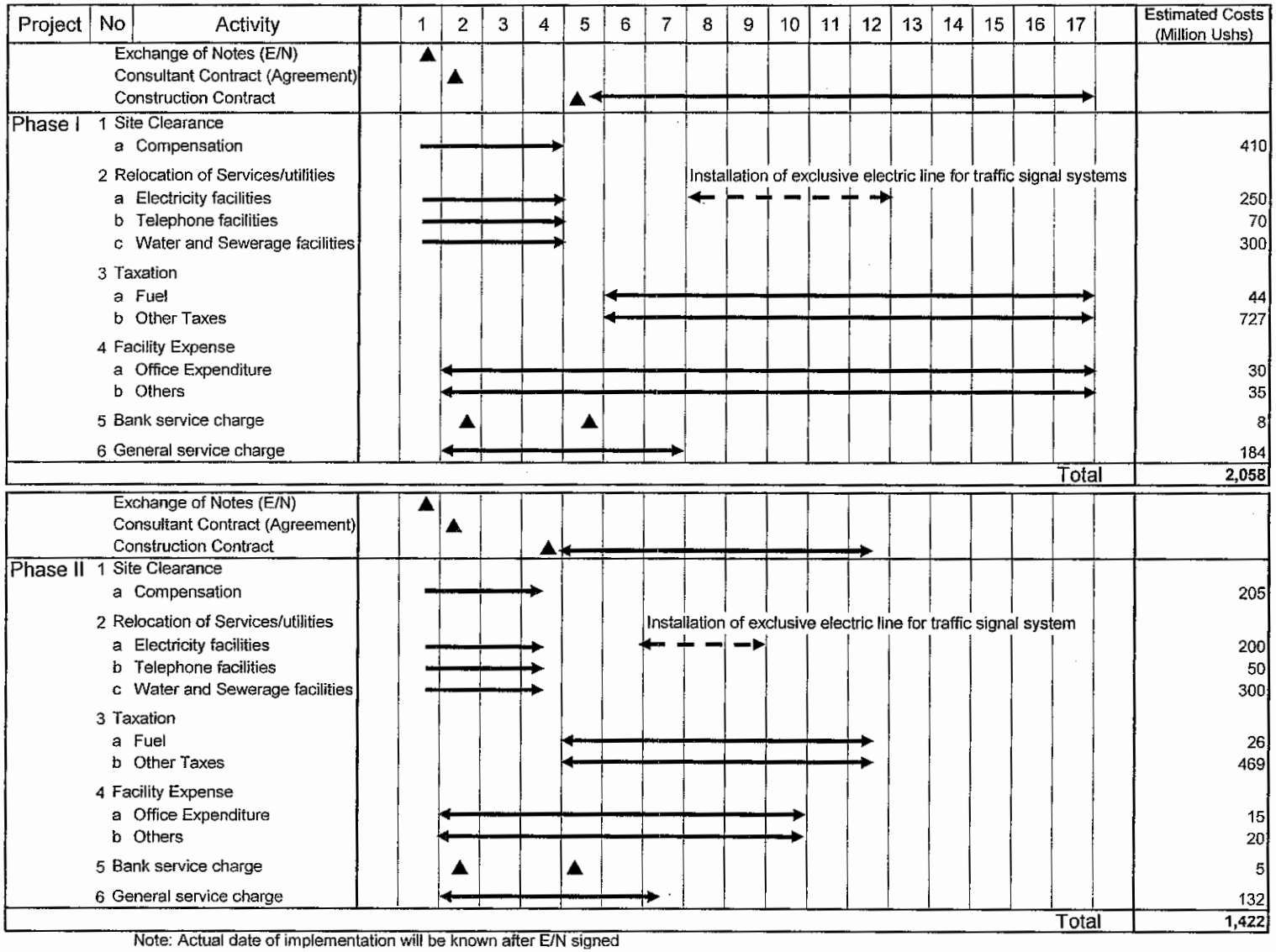
(4) The Ministry of Works, Housing and Communications (MOWHC) shall prepare and obtain the official approval of the Environmental Impact Assessment (EIA) from the National Environmental Management Authority (NEMA) by the end of April 2005.

Major Components of Junction Improvement Plan in the Basic Design

Category	Component	Contents	Content of works to be borne by the Government of Uganda	Remarks
Intersection Improvement	1. Clock Tower Roundabout	- to improve the geometric design structure of existing junctions. - to improve the road drainage facilities - to improve sidewalks - to install pedestrian crossings - to improve bus bays - to install traffic signs - to relocate existing street lights	- to obtain the official approval on the EIA by the end of April 2005. - to secure land necessary for the sites of the Project and remove any obstacles therein, prior to commencement of the construction. - to provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities in and around the sites. - to provide exclusive electric lines from nearest transformers to traffic signal systems. - to provide the necessary budget and assist in expediting the customs clearance for all products purchased under the Grant Aid. - KCC and MOWHC to ensure all the maintenance and repair work for the project facilities, such as pavement, road marking, drainage, traffic signal system, and pedestrian barrier.	- In principle, lane numbers and road width are planned same as the present; however, geometric design of junctions and road sections shall be reviewed based on the requirements of the traffic volume. - In principle, lane widths are 3.25m for right turn lane and 3.5m for others.
	2. Shop-rite Roundabout			
	3. Katwe-Mengo Hill Roundabout			
	4. Kampala-Entebbe Road Junction			
	5. Jinja Road Roundabout			
	6. Africana Roundabout			
Road Section Improvement	1. Nsambya Road			
	2. Entebbe Road			
Traffic Signal	1. Clock Tower Junction	- Traffic signals for vehicles and pedestrians (LED type) - Back-up power supply system (small UPS + generator with automatic starter)		- Install power backup devices in the view of unreliable power supply to the sites.
	2. Shop-rite Junction			
	3. Kampala-Entebbe Road Junction			
	4. Jinja Road Junction			

Annex-2

Implementation Plan of Preparation Works by the Government of Uganda



Note: Actual date of implementation will be known after E/N signed

Minutes of Discussions
on the Basic Design Study
on the Project for Improvement of Traffic Flow in Kampala City
in the Republic of Uganda
(Explanation on Draft Final Report)

In December 2004, the Japan International Cooperation Agency (hereinafter referred to as "JICA") despatched the Draft Report Explanation Team on the Project for Improvement of Traffic Flow in Kampala City (hereinafter referred to as "the Project") to the Republic of Uganda (hereinafter referred to as "Uganda") and through discussions, field survey, and technical examination of the results in Japan, JICA prepared a draft final report of the study.

In order to explain and to consult the Ugandan side on the components of the draft final report, JICA sent to Uganda a Draft Final Report Explanation Team (hereinafter referred to as "the Team"), headed by Mr. Yoshiaki Kano, Resident Representative, JICA Kenya Office, from February 20 to March 4, 2005.

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

Kampala, March 1, 2005

Signed by;

Yoshiaki Kano
Leader
Draft Final Report Explanation Team
Japan International Cooperation Agency

Signed by;

Charles Muganzi
Permanent Secretary
Ministry of Works, Housing and Communications
Republic of Uganda

Witnessed by;

Stephen Kinyera
Deputy City Engineer and Surveyor
Kampala City Council
Republic of Uganda

ATTACHMENT

1. Components of the Draft Final Report

The Ugandan side agreed and accepted in principle the components of the draft final report presented by the Team.

2. Schedule of the study

JICA will complete the final report and send it to the Government of Uganda by the end of April 2005.

3. Other Relevant Issues

(1) The Team handed one copy of the draft engineering design of the facilities to the Ministry of Works, Housing and Communications (MOWHC). Both sides agreed that this draft design is confidential and should not be duplicated or released to any outside parties in order to secure the fairness of the Tender concerning the Project.

(2) MOWHC may finalize the tender documents through reviewing all documents and drawings prepared as a result of the study. MOWHC shall be responsible for project implementation and the output of the project executed through contracts with Japanese firms.

(3) The Ugandan side has already allocated 2.0 billion Uganda shillings (TR 52A(0279)) in the fiscal year 2005/2006 for compensation of properties and relocation of public utilities, which were described in Annex-2 of the Minutes of Discussions signed by both sides on December 21, 2004.

(4) Ugandan side agreed to secure and allocate the necessary budgets for operation and maintenance of the facilities/equipment constructed/procured under the Project, which are described in Annex-1.

(5) MOWHC shall prepare and obtain the official approval of the Environmental Impact Assessment (EIA) from the National Environmental Management Authority (NEMA) by the end of April 2005.

Operation and Maintenance Work

Implementation Organization	Maintenance Item	Annual Frequency	Contents of Work	Estimated Cost (Million Ushs)		
				Phase-I *1 5 Junctions	Phase-II *2 2 Jcs and roads	This Project *3 6 Jcs and roads
KCC	Pavement surface	1 time/year	Repairing of ruts cracks and pot holes	10.6	38.6	38.3
	Surface cleaning	12 times/year	Cleaning	7.4	10.0	26.1
	Road Marking	1 time/2years	Repainting	7.4	12.9	46.0
	Drainage	2 times/year	Removal of sedimentation	7.1	25.7	26.1
	Traffic signal	2 times/year	Lamp cleaning and inspection of electric system	7.1	25.7	26.1
	Electricity and cost of diesel for back-up system	Every year	Running cost for traffic signal	7.1	25.7	3.5
	Safety facilities	3 times/year	Repair work of safety facilities such as flower bed and planting zone	3.5	5.0	10.4
	Total (Annual maintenance work)			**50.2**	**143.6**	**176.5**
MOWHC	Overlay	10 years after each phase	Asphalt overlay	**474.6**	**200.0**	**940.6**

Notes of the projects;

*1 Phase-I The Project for Improvement of Trunk Roads in Kampala, construction year from 2000 to 2001
Improvement of 5 Junctions (Makerere, Natete, Kibuye, Portbell and Wandegeya)

*2 Phase-II The Project for Improvement of Trunk Roads in Kampala, Phase-II, construction year from 2003 to 2005
Improvement of 2 Junctions (Kiburi and Bakuli) and 2 Roads (Natete and Gaba)

*3 This Project The Project for Improvement of Traffic Flow in Kampala City
Improvement of 6 Junctions (Clock Tower, Shoprite, Katwe-Mengo Hill, Kampala-Entebbe Road, Jinja Road and Africana) and 2 Roads (Nsambya and Entebbe)

Maintenance costs are estimated on the basis of the Basic Design Study Reports of each project.

5.　事業事前計画表(基本設計時)

資料 5.　事業事前計画表（基本設計時）

1.　案件名

ウガンダ共和国　カンパラ市内交通事情改善計画基本設計調査

2.　要請の背景

ウガンダ共和国政府は1987年以来世銀・IMFの支援を受け、構造調整政策を積極的に推進し、公務員の削減、農産物市場の自由化など具体的な政策のもとにマクロ経済の安定を図っている。この自由化経済の枠組みの中で経済活動をいかに活発化させていくかが国家経済の課題である。この目標達成のため、ウガンダ国政府は公共投資計画（Public Investment Plan：PIP、1996/97-1998/99）において開発目標を定めインフラ整備を急いでいる。

① 経済成長と貧困の撲滅
② 持続的な経済成長
③ 政府機構と公共サービスの改善・効率

上記目標達成のためには交通・運輸部門の拡充はとりわけ重要な課題と考え、公共事業住宅通信省は、道路整備10ヶ年計画（RSDP1：Ten Year Road Sector Development Programme, 1996/97～2005/06）を策定した。さらに、2000年にはその見直しを行い、翌年に5年周期計画（RSDP2, 5-years Rolling Plan, 2001/02～2010/11）を策定し、より充実した整備目標を掲げている。

他方で、ウガンダ国政府はRSDP1に基づき、首都カンパラ市内の交通混雑緩和対策として、開発調査「カンパラ主要道路改善計画調査」(1996年～1997年)を日本国政府に要請した。この調査では、市内の交通混雑の原因は、交通処理能力の小さい交差点や、降雨時の道路の冠水、これらに加え、疲労度の増した舗装の破壊が原因と結論付けられた。この調査結果に基づきウガンダ国政府は、1997年12月、日本政府に対し無償資金協力「カンパラ幹線道路改善計画」を要請し、その施設工事は2000年3月に5交差点の改善工事として完成した。同時に要請された「第二次カンパラ市幹線道路改善計画」も2005年2月に終了した。

カンパラ市の機能改善に対するウガンダ国政府の取り組みとして、2001年8月に、カンパラ市中心部に的を絞った交通混雑緩和の開発調査である「カンパラ首都圏交通網改善計画」（Kampala Urban Traffic Improvement：KUTIP）が世銀の援助を受け実施された。さらに、首都機能停滞の一方の原因である排水問題を解決するため、2001年9月「ナキブボ排水路改善計画」を実施し、2004年6月主要排水路が完成した。

これらの経緯を経て、カンパラ市内で最も混雑の激しい交差点の改善計画を、2003年12月に無償資金協力「カンパラ市内交通事情改善計画」として日本国政府に要請した。

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（裨益対象の範囲及び規模）
　カンパラ市内の対象交差点を含む道路において、交通の安全かつ円滑な交通流が確保される
　裨益対象の範囲および規模 ： 首都圏カンパラ市内住民約 120 万人

（2）プロジェクト全体計画の成果
　ア カンパラ市内の既設交差点の施設が改善・整備される
　イ カンパラ市の道路施設の運営体制が整備される

（3）プロジェクト全体計画の主要活動
　ア 交差点や道路の幾何構造を改良する
　イ 既設道路の舗装や排水溝を改善する
　ウ 信号機システムを設置する
　エ 道路維持や信号機器の運営のための人員を配置する
　オ 道路施設を維持するための資金を確保する
　カ 維持管理方法の向上を図る

(4) 投入(インプット)

ア 日本側(＝本案件)： 無償資金協力 7.69 億円

イ 相手国側：

(ア) 必要な人員

(イ) 施設の運営・維持管理に関わる経費

(5) 実施体制

実施機関 ： 公共事業住宅通信省 (運営・維持管理はカンパラ市役所が担当機関となる)

4. 無償資金協力案件の内容

(1) サイト

ウガンダ国 カンパラ市内

(2) 概要

カンパラ市内6交差点(クロックタワー、ショップライト、カトウェ・メンゴヒル、カンパラ・エンテベロード、ジンジャロード、アフリカーナ)および、2道路(ンサムビア、エンテベ)の路面舗装・拡張、排水構造物の整備、信号機の設置

(3) 相手国側負担事項

ア 環境影響評価に係わる手続きや建設許可書の取得

イ 建設用地(道路用地)の確保

ウ 信号機の受電施設への低電圧専用線の引き込み

エ 建設用地内に埋設されている公共施設(電力、通信、上下水道等)の移設

オ 仮設用地の確保や電力の供給

(4) 概算事業費

概算事業費 9.84億円 (無償資金協力7.69億円、ウガンダ国負担2.15億円)

(5) 工期

入札図書作成・入札期間を含め約23.5ヶ月を予定

(6) 貧困、ジェンダー、環境及び社会面の配慮

ア 既存の建物・施設の移設もしくは撤去を可能な限り回避する幾何構造を策定する

イ 歩行者の無秩序な横断を抑制し、交通事故を低減するよう適切な歩車道分離帯を設置する

ウ 工事中の社会経済への影響が最小限になるよう配慮する

5. 外部要因リスク

ア 交通量が極端に増加しない

イ カンパラ市内の電力事情が悪化しない

6 過去の類似案件からの教訓の活用

1998年の事業化調査時点の電力事情(需要240MW、供給160MW)から、2000年3月に供与した信号機には停電時の非常電源装置を設置した。しかし、2002年の事業化調査では、2002年7月にオーエン・フォール発電所で40MW/hrの発電機3台が設置され、発電能力が最大280MWまで増強されたことで、カンパラ市内の電力事情が改善されると判断し、無償対象としなかった。しかしながら、ウガンダ国の経済成長(2002年度のGDP4.4%)と共に、それ以上に需要電力量が増加した結果、現在も計画停電が継続されていることや、不安定な電圧の問題も改善されていないことから、これまでに導入した信号機システムにおいて不具合が発生した。これらの状況から、カンパラ市の電力供給不足による計画停電や電圧変動への対策として、信号機システムに非常電源装置および電圧調整装置を組み込む方針とした。

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

項目	現状	目標値（2007年）
走行時間の短縮	ラウンドアバウト内の交通渋滞により、エンテベ道路からジンジャ道路に至る区間（距離4.7km）の通過所用時間が長い（38分）	短縮

（2）　その他の成果指標

特になし

（3）　評価のタイミング

2007 年以降（施設完工後 1 年経過後）

６．　参考資料/入手資料リスト

資料 6. 参考資料／入手資料リスト

収 集 資 料 リ ス ト（収集資料）

2004 年 10月 6日 作成

主管部長	文書管理課長	主管課長

情報管理課長	図書資料室受付印

		プロジェクトID	ウガンダ国	調査団番号			
地 域	アフリカ	調査団	カンパラ市内交通事情改善計画基本設計調査	調査の種類	基本設計	担当部課	無償資金協力部
国 名	ウガンダ共和国	配属機関名		現地調査期間	平成16年 9月5日 ～ 平成16年 10月 7日	担当者氏名	宮田 克二

番号	資 料 の 名 称	形態(図書・ビデオ・地図・写真等)	発行年	版型	ページ数	オリジナル・コピーの別	部数	収集先名称又は発行機関	寄贈・購入(価格)の別	取扱区分	利用表示	利用者所属氏名	納入 予定日	納 入 確認欄
1	The Minimum Wages Advisory Boards and Wages Counciles / Chapter 221	法規	1995	A4	9	コピー	1	Uganda Revenue Authority	コピー					
2	The Employment Act. / Chapter 219	法規	1997	A4	16	コピー	1	Uganda Revenue Authority	コピー					
3	The Trade Unions Act / Chapter 223	法規	1976	A4	45	コピー	1	Uganda Revenue Authority	コピー					
4	The Employment Regulations, 1977	法規	1997	A4	20	コピー	1	Uganda Revenue Authority	コピー					
5	Individual Income Tax Rate - Pay as You Earn (Paye) Rates of Tax (Section 117)	法規	-	A4	1	コピー	1	Uganda Revenue Authority	コピー					
6	MOWHC職員名簿	資料	2004年5月	A4	20	コピー	1	MOWHC	コピー					
7	他案件コスト集	資料	-	A4	40	コピー	1	MOWHC	コピー					
12	ウガンダ登録建設業者リスト	資料	-	A4	24	コピー	1	MOWHC	コピー					
8	KCC組織図	資料	2000年4月	A4	24	コピー	1	KCC	コピー					
9	KCC維持管理予算	資料	2004	A4	5	コピー	1	KCC	コピー					
10	KCC保有機械	資料	-	A4	1	コピー	1	KCC	コピー					
11	地形図 1:2500	地図	-	A3	7	コピー	1		コピー					
13	為替レート	資料	-	A4	15	コピー	1	Bank of Uganda	コピー					

７．　その他の資料・情報

7-1　参照資料

7-2　EIA のためのスクリーニング・フォーマット

参照資料

番号	資 料 の 名 称	和 名	形態(図書・ビデオ・地図・写真等)	発行年	版型	ページ数	オリジナル・コピーの別	部数	収集先名称又は発行機関
A1	Nakivubo Channel Rehabilitation Project (NCRP) / Kampala Drainage Master Plan Volume 1 Executive Report	ナキブボ排水路改善計画	報告書	2002年7月	A4	47	コピー	1	KCC
A2	Nakivubo Channel Rehabilitation Project (NCRP) / Kampala Drainage Master Plan Volume 2 Main Report-Part I, Institution, Environment And	ナキブボ排水路改善計画	報告書	2002年7月	A4	4.24	コピー	1	KCC
A3	Nakivubo Channel Rehabilitation Project (NCRP) / Kampala Drainage Master Plan Volume 3 Main Report-Part II Engineering & Economic Aspects	ナキブボ排水路改善計画	報告書	2002年7月	A4	10.7	コピー	1	KCC
A4	Nakivubo Channel Rehabilitation Project (NCRP) / Kampala Drainage Master Plan Volume 4 Main Report- Part III Drainage Development	ナキブボ排水路改善計画	報告書	2002年7月	A4	14.12	コピー	1	KCC
A5	Nakivubo Channel Rehabilitation Project (NCRP) / Kampala Drainage Master Plan Volume 5 Inventories	ナキブボ排水路改善計画	報告書	2002年7月	A4	7.16	コピー	1	KCC
A6	Nakivubo Channel Rehabilitation Project (NCRP) / Kampala Drainage Master Plan Volume 6 Figures & Maps	ナキブボ排水路改善計画	報告書	2002年7月	A3	62	コピー	1	KCC
A7	Nakivubo Channel Rehabilitation Project (NCRP) / Kampala Drainage Master Plan Addendum	ナキブボ排水路改善計画	報告書	2002年9月	A4	8	コピー	1	KCC
A8	Kampala Drainage Master Plan Phase 1-Improvement Prepared Under Nakivubo Channel Rehabilitation Project / Bidding Document for Upgrading of Nakivubo Secondary Channels Volume 2 Drawings		報告書	2003年10月	A3	64	コピー	1	KCC
A9	Nakivubo Channel Rehabilitation Project (NCRP) / Kampala Drainage Master Plan Short-Term Action Plan: Phase 1 Nakivubo Secondary Channels Design Report	ナキブボ排水路改善計画	報告書	2003年10月	A4	200	コピー	1	KCC
A10	Nakivubo Channel Rehabilitation Project (NCRP) / Kampala Drainage Master Plan Short-Term Action Plan: Phase 1 Nakivubo Secondary Channels Minor Systems	ナキブボ排水路改善計画	報告書	2003年10月	A4	250	コピー	1	KCC
A11	Nakivubo Channel Rehabilitation Project (NCRP) / As Built Drawings Priority Drainage "Black Spots"	ナキブボ排水路改善計画	報告書	2004年7月	A3	117	コピー	1	KCC
A12	Nakivubo Channel Rehabilitation Project (NCRP) / As Built Drawings Auxiliary Drainage Works	ナキブボ排水路改善計画	報告書	2004年7月	A3	28	コピー	1	KCC
A13	Nakivubo Channel Rehabilitation Project (NCRP) / Kampala Urban Traffic Improvement Plan (KUTIP) Final Report Volume I : Main Report	カンパラ首都圏交通網改善計画(M/P)	報告書	2003年6月	A4	400	コピー	1	KCC
A15	The Feasibility Study of Improvement of Trunk Road at Kampala Urban Interface Sectors Final Report Main Text	カンパラ主要道路改善計画調査(M/P)	報告書	1997年11月	A4	500	コピー	1	JICA
A17	Poverty Monitoring And Evaluation Strategy / Engineering & Economic Aspects		報告書	2002年6月	A4	50	コピー	1	MOFPED
A18	Report Of The Eac Roads Development Partners Consultative Meeting Held In Arusha, Tanzania 0N The 29Th & 30Th April 2003		報告書	2003年11月	A4	134	コピー	1	EAC SECRETARIAT
A19	Guidelines for Environmental Impact Assessment in Uganda		ガイドライン	1997年7月	A4	64	オリジナル	1	National Environmental Management Authority
A20	General Specifications for Road and Bridge Works Volume IIIA		マニュアル	1992年11月	A4	300	コピー	1	MOWHC
A21	Road Design Manual		マニュアル	1994年11月	A4	280	コピー	1	MOWHC
A22	Road Design Manual (Road safety revision) (Draft) Contract RDP/GN/S008		マニュアル	2004年5月	A5	153	コピー	2	MOWHC
A23	Traffic Signs Manual Volume 1 (Draft) Contract RDP/GN/S008		マニュアル	2004年5月	A4	46	コピー	1	MOWHC
A24	Traffic Signs Manual Volume 2 - Appendices (Draft) Contract RDP/GN/S008		マニュアル	2004年5月	A4	50	コピー	1	MOWHC

参照資料

番号	資 料 の 名 称	和 名	形態(図書・ビデオ・地図・写真等)	発行年	版型	ページ数	オリジナル・コピーの別	部数	収集先名称又は発行機関
A25	Safety at Roadworks A Code of Practice (Draft)		マニュアル	2004年5月	A4	21	コピー	1	MOWHC
A26	Central Materials Laboratory		マニュアル	2003年7月	A4	20	コピー	1	MOWHC
A27	Ministerial Budget Policy Statement Vote:016 Financial Year 2004/2005 Nol I		Statistics	2004年6月	A4	135	コピー	1	MOWHC
A28	Ministerial Budget Policy Statement Vote:016 Financial Year 2004/2005 Nol II		Statistics	2004年6月	A4	320	コピー	1	MOWHC
A29	Ministerial Budget Policy Statement Vote:016 Financial Year 2003/2004		Statistics	2003年6月	A4	360	コピー	1	MOWHC
A30	Ministerial Policy Statement Vote:016 Financial Year 2002/2003 Volume I		Statistics	2002年6月	A4	110	コピー	1	MOWHC
A31	Ministerial Policy Statement Vote:016 Financial Year 2002/2004 Volume I		Statistics	2002年6月	A4	70	コピー	1	MOWHC
A32	Ministerial Budget Policy Statement For The Financial Year 2000/01		Statistics	2000年6月	A4	150	コピー	1	MOWHC
A33	Ministerial Budget Policy Statement For The Financial Year 2000/02		Statistics	2001年6月	A4	140	コピー	1	MOWHC

SCREENING FORMAT

Name of a Proposed Project: **The Project for Improvement of Traffic Flow in Kampala City**

Project Executing Organization : **Ministry of Works, Housing and Communications**

Name, Post, Organization and Contact Point of a Responsible Officer

Name : **Mr. Nelson Omagor**

Post : **Principal Environmental Officer / ELU**

Tel : **077-458 903** Fax : E-Mail :

Date : **October 4, 2004**

Signature :

Mr. Nelson Omagor

CHECK ITEMS

Question 1 Address of a project site

- 5 Roundabout of Clock Tower RA, Shoprite RA, Katwe-Mengo Hill RA, Jinja Road RA and Africana RA in Kampala City
- 1 Junction of Kampala-Entebbe Road Junction in Kampala City

Question 2 Outline of the project

2-1 Does the project come under following sectors?

√ Yes O No

if yes, please mark the corresponding items.

O Mining development
O Industrial development
O Thermal power (including geothermal power)
O Hydropower, dams and reservoirs
O River. Erosion control
O Power transmission and distribution lines
√ Roads, railways and bridges
O Airports
O Posts and harbors
√ Waste supply, sewage and waste treatment **(Construction wastes is involved)**
O Agriculture involving large-scale land-cleaning or irrigation
O Forestry
O Fishery
O Tourism

2-2 Does the project include any of the following items?

O Yes √ No

if yes, please mark the corresponding items.

O Involuntary resettlement (scale: households persons)

O Groundwater pumping (scale: m3/year)

O Land reclamation, land development and land-clearing (scale: hectors)

O Logging (scale: hectors)

2-3 Description of the Project (Scale and/or Basic Information)

Proposed improvement works for 5 roundabouts and one road junction to involve: -

Improvement of traffic flow

- Increase of the junction capacity through improvement of intersection geometry and provision of additional lanes.
- Installation of traffic signals with power-saving type of power supply (at four (4) junctions of Clock Tower, Shop-rite, Jinja Road Roundabout and Kampala-Entebbe Road Junction).
- Installation of a signal power supply in case of an emergency (If necessary of back-up system for signal to be studied).
- Provision of pedestrian crossings and sidewalks and,
- Improvement of the road drainage.

2-4 Is the project consistent with the higher program/policy

√ Yes: Please describe the higher program/policy

(If meets most of the Government policies like : Poverty eradication trough better marketing by good roads)

O No

2-5 Did the proponent consider alternative before this request?

O Yes: Please describe outline of the alternative

√ No

2-6 Did the proponent have meeting with related stakeholders before this request?

√ Yes O No

if yes, please mark the corresponding stakeholders.

√ Administrative body (KCC, NEMA)

O Local residents

O NGO

√ Others (Road users, motorists, cyclists)

Question 3

Is the project a new or an on-going one? In case of an on-going one, have you received strong complaints, etc., from local residents?

√ New O On-going (there are complaints) O On-going (there are no complaints)

O Others: ( )

Question 4 Name(s) of laws or guidelines

Is Environmental Impact Assessment (EIA) including Initial Environmental Examination (IEE) required for the project according to the laws or guidelines in the host country?

√ Yes O No

if yes, please mark the corresponding items.

O Required only IEE (O Implemented, O on going, O Planning)

√ Required both IEE and EIA (O Implemented, √ on going, O Planning)

O Required only EIA (O Implemented, O on going, O Planning)

O Others: ( )

Question 5

In the case when EIA steps were taken, was the EIA approval by the relevant laws in the host country? If yes, please mark date of approval and the competent authority.

O Approved: without a supplementary condition	O Approved: with a supplementary condition	O Under appraisal

(Date of approval: Competent authority:)

√ Not yet started appraisal process

O Others: ( )

Question 6

Is the project requires a certificate pertaining to the environment and society other than the EIA, please indicate the title of that certificate.

O Already certified O Required a certificate but not yet done

Title of the certificate: ( )

O Not required

O Others: ( )

Question 7

Are any of the following areas located inside or around the project site?

O Yes √ No O Not identified

if yes, please mark the corresponding items.

O National park, protected area designated by the government (coast line, wetlands, reserved area for ethnic or indigenous people, cultural heritage), and areas being considered for national parks or protected areas

O Virgin forests, tropical forests

O Ecological important habitat areas (coral reef, mangrove wetland, tidal flats)

O Habitat of valuable species protected by domestic laws or international treaties

O Likely salts cumulus or soil erosion areas on a massive scale

O Remarkable desertification trend areas

O Archaeological, historical or cultural valuable areas

O Living areas of ethnic, indigenous people or nomads who have a traditional lifestyle or special society valuable areas

Question 8

Does the project have adverse impacts on the environment and local communities?

O Yes √ No O Not identified

Reason: ( )

Question 9

Please mark related environmental and social impacts, and describe their outlines.

√ Air pollution (from dust)
O Water pollution
O Soil pollution
√ Waste (Construction waste and human waste)
√ Noise and vibration
O Ground subsidence
√ Offensive odors (Asphalt when burned)
O Geographical features
O Bottom sediment
O Biota and ecosystem
√ Water usage (for most of the activities)
√ Accidents (arising from occupational health and safety)
O Global warming
O Involuntary resettlement
√ Local economy such as employment and livelihood etc (People will gain employment locally)
√ Land use and utilization of local resources (Land will be taken up for alignments)
O Social institutions such as social infrastructure and local decision-making institutions
√ Existing social infrastructure and services (Areas, - Fire brigade parking - Railway line)
O The poor, indigenous of ethnic people
O Misdistribution of benefit and damage
O Local conflict and damage
O Gender
O Children's rights
√ Cultural heritage (Queen's Tower, Pan African Freedom Square, Indian Temple)
O Infections diseases such as HIV/AIDS etc.
O Others: ( )

Outline of related impacts: refer to ( )

Question 10

Information disclosure and meetings with stakeholders

10-1 If environmental and social considerations are required, dose the proponent agree on information disclosure and meeting with stakeholders in accordance with JICA Guidelines for Environmental and Social Considerations?

√ Yes O No

10-2 If no, please describe reasons below.