

APPENDICES

1. *Member List of the Study Team*

1. Member List of the Study Team

➤ Field Survey From November 24, 2006 to December 21, 2006

Name	Position	Organization
Yoshio FUKUDA	Leader	Japan International Cooperation Agency Deputy Resident Representative, Nepal Office
Yoshimoto KOYANAGI	Project Coordinator	Japan International Cooperation Agency Senior Project Administration Officer, Project Management Group I, Grant Aid Management Department
Katsufumi MATSUZAWA	Chief Consultant/Road Planner	Nippon Koei Co., Ltd.
Naresh STHAPIT	Road Designer	Nippon Koei Co., Ltd.
Takashi CHUJO	Bridge Planner	Nippon Koei Co., Ltd.
Shigeru SAI	Environmental/Social Impact Assessment Specialist	Nippon Koei Co., Ltd.
Tomonori KAWABE	Topographical/Geotechnical Engineer	Nippon Koei Co., Ltd.
Takuya FUNAHARA	Construction Planner/Cost Estimator	Nippon Koei Co., Ltd.

➤ Draft Report Explanation From May 14, 2007 to May 18, 2007

Name	Position	Organization
Yoshio FUKUDA	Leader	Japan International Cooperation Agency Deputy Resident Representative, Nepal Office
Yoshimoto KOYANAGI	Project Coordinator	Japan International Cooperation Agency Senior Project Administration Officer, Project Management Group I, Grant Aid Management Department
Katsufumi MATSUZAWA	Chief Consultant/Road Planner	Nippon Koei Co., Ltd.
Naresh STHAPIT	Road Designer	Nippon Koei Co., Ltd.

2. *Study Schedule*

2. Study Schedule

➤ Field Survey

No.	Date	Day	Leader Mr. Fukuda	Coordinator Mr. Koyanagi	Chief Consultant Mr. Matsuzawa	Road Designer Mr. Sthapit	Bridge Designer Mr. Chujo	E & S Impact Assess. Specialist Mr. Sai	Topographical /Geotechnical Surveyor Mr. Kawabe	Construction Planner/Cost Estimator Mr. Funahara
			JICA	JICA	NK	NK	NK	NK	NK	NK
1	23-Nov	Thu			Narita - Bangkok					
					Bangkok - Kathmandu					
2	24-Nov	Fri	Discussion with EOJ & JICA and courtesy call on DOR		Discussion with EOJ and JICA Office set-up activities Courtesy call on DOR					
3	25-Nov	Sat			Data collection (DOR's Master Plan)	Preparatory work for traffic survey	Identification of mechanical boring location	Preparatory work for environmental and social impact assessment	Document preparation for subletting works	Document preparation of questionnaire and quotation
4	26-Nov	Sun			Site appreciation survey with DOR.					
5	27-Nov	Mon	Discussion with MOPPW & DOR		Explanation of Inception Report and discussion			Environmental study and social impact study	Document preparation for subletting works	Survey on quarry site, construction plant, etc.
6	28-Nov	Thu			Data collection	Site survey	Site survey		Topographic survey and geotechnic survey	Construction condition survey
7	29-Nov	Wed			Site visit on bridges, intersections, bus stops	Survey on bus stops, intersections, etc.	Structural soundness test on the existing bridges			
8	30-Nov	Thu			Travel time survey	Travel time survey				Procurement survey
9	1-Dec	Fri			Highway planning	Road facility design	Bridge engineering study			
10	2-Dec	Sat			Study on design requirement		Site appreciation survey and inspection on field surveys			
11	3-Dec	Sun			Travel time survey					
12	4-Dec	Mon			Identification of undertakings by the	Location study on Manohara and	Bridge design	Environmental study and social impact study	Topographic survey and geotechnic survey	Price analysis
13	5-Dec	Thu			Survey on existing road facilities					Identification of undertakings by the Nepalese
14	6-Dec	Wed			Concept design on road facilities					Procurement survey
15	7-Dec	Thu								
16	8-Dec	Fri			Study on necessity and urgency of the	Road design				
17	9-Dec	Sat		Narita-Bangkok						
18	10-Dec	Sun		Bangkok- Kathmandu, Site survey	Site survey	Site survey	Preparation of Field Survey Report	Site survey		
19	11-Dec	Mon			Discussion with EOJ & JICA, courtesy call on MOPPW & DOR					
20	12-Dec	Thu			Discussion with DOR					Construction planning
21	13-Dec	Wed			Preparation of Minutes of Discussions with DOR Site survey			Kathmandu- Bangkok	Topographic survey and geotechnic survey	
22	14-Dec	Thu			Signing of Minutes of Discussions Report to EOJ & JICA					OM programming
23	15-Dec	Fri			Site survey	Study on project effects	Road design	Bridge design		Cost estimation
24	16-Dec	Sat		Kathmandu- Bangkok- - Narita						
25	17-Dec	Sun			Site survey				Site survey	
26	18-Dec	Mon			Preparation of Field Survey Report				Preparation of Field Survey Report	
27	19-Dec	Thu								
28	20-Dec	Wed								
29	21-Dec	Thu			Kathmandu -Bangkok -				Kathmandu -Bangkok -	
30	22-Dec	Fri			- Narita				- Narita	

➤ Draft Report Explanation

No.	Date	Day	Leader Mr. Y. Fukuda JICA	Coordinator Mr. Y.Koyanagi JICA	Consult.Chief Mr.K.Matsuzawa NK	Road Designer Naresh Sthapit NK
1	May 13	Sun		Narita - Bangkok		
2	May 14	Mon		Bangkok - Kathmandu		Design review
Discussion with EOJ and JICA Nepal Office						
3	May 15	Tue	Explanation of Draft Report to MOPPW & DOR Discussion with DOR			
4	May 16	Wed	Preparation of Minutes of Discussions Site survey			
5	May 17	Thu	Signing of Minutes of Discussions Report to EOJ and JICA Nepal Office			
7	May 18	Fri		Site survey	Kathmandu – Bangkok -	Design review
7	May 19	Sat		Kathmandu – Bangkok -	- Narita	Design review
8	May 20	Sun		- Narita		

3. *List of Parties Concerned in the Recipient Country*

3. List of Parties Concerned in the Recipient Country

- MOPPW: Ministry of Physical Planning and Works
 - Mr. Narayan P. Silwal, Secretary
 - Mr. Purna Kadariya, Acting Secretary
 - Mr. Dinker Sharma, Joint Secretary
 - Mr. Kamal Raj Pande, Joint Secretary, Foreign Cooperation Branch

- DOR: Department of Roads
 - Mr. Durga Prasad K.C., Director General
 - Mr. Talasi Prasad Sitaula, Deputy Director General (Director General from May 2007)
 - Mr. Dhruva Raj Regmi, Deputy Director General of Foreign Cooperation Branch
 - Mr. Ramesh Raj Bista, Deputy Director General of Planning & Design Branch
 - Mr. Ram Kuma Lamsal, Deputy Director General of Maintenance Branch
 - Mr. Narendra Paloabanh, Deputy Director General of Mechanics Branch
 - Mr. Bindu S. Rana, Project Manager for Sindhuli Road cum Project Coordinator for Kathmandu-Bakhtapur Road Improvement
 - Mr. Saroj Kumar Pradhan, Unit Chief, Road Design Unit
 - Mr. Bed Kantha Yogol, Senior Divisional Engineer
 - Mr. Dileep Kumar Pokharel, Senior Divisional Engineer
 - Mr. Ram Pr. Pathak, Superintending Engineer, GESU
 - Mr. M.L. Shrestha, Superintending Engineer
 - Mr. Badri Prasad Sharma, Engineer
 - Mr. Shiva Raj Adhikari, Engineer
 - Mr. Hariom Srivastev, RD, CRRD
 - Mr. Akira Tajima, JICA Expert to DOR

- Manohara Land Pooling Project
 - Mr. Tulshi Ram Shresta, Civil Engineer

➤ Embassy of Japan

- Mr. Makoto Yoshino, Second Secretary

➤ JICA Nepal Office

- Mr. Shinji Yoshiura, Resident Representative
- Mr. Yoshio Fukuda, Deputy Resident Representative
- Ms. Sayako Tokuda, Assistant Resident Representative
- Mr. Sourab Rana, Program Officer

4. Minutes of Discussions

Field Survey (December 14, 2006)

4. Minutes of Discussions (M/D)

4-1 Field Survey (December 14, 2006)

**Minutes of Discussions
on the Basic Design Study
on the Project for Improvement of Kathmandu – Bhaktapur Road
in Nepal**

Based on the results of the Preliminary Study, the Government of Japan decided to conduct a Basic Design Study on the Project for Improvement of Kathmandu – Bhaktapur Road (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Nepal the Basic Design Study Team (hereinafter referred to as "the Team"), which is headed by Mr. Yoshio Fukuda, Deputy Resident Representative, JICA Nepal Office, and is scheduled to stay in the country from November 24 to December 21, 2006.

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

In the course of discussions and field survey, 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.

Kathmandu, December 14, 2006

福白義夫

Yoshio Fukuda
Leader
Basic Design Study Team
Japan International Cooperation Agency



Durga Prasad K.C.
DIRECTOR GENERAL

Durga Prasad K.C.
Director General
Department of Roads
Ministry of Physical Planning & Works Nepal

ATTACHMENT

1. Objective of the Project

The objective of the Project is to improve the traffic flow condition between Kathmandu and Bhaktapur.

2. Project Site

The Project site is shown in Annex-1.

3. Responsible and Implementing Organizations

- (1) The responsible organization for executing the Project is the Ministry of Physical Planning & Works (MOPPW).
- (2) The implementing agency is the Department of Roads (DOR).
The organization charts of MOPPW and DOR are shown in Annex-2-1 and 2-2 respectively.

4. Items requested by the Government of Nepal

After discussions with the Team, the items described below were finally requested by the Nepalese side.

- Widening of existing road between Kathmandu (Tinkune Intersection) and Bhaktapur (Suryabinayak Intersection)
- Construction of new Manohara Bridge and new Hanumante Bridge
- Improvement of intersections at Jadhuti, Ghataghar, Thimi, Sallaghari and Suryabinayak including signalization at Thimi and Suryabinayak
- Provision of lay-by for bus stops

Regarding the Service Road which the Nepalese side requested, both sides agreed that it may not be included in the Project from the standpoint of traffic volume and importance of the self-help efforts by the Nepalese side. The items to be covered by the Project will be examined in the further study in Japan.

5. Japan's Grant Aid Scheme

- (1) The Nepalese side understands the Japan's Grant Aid scheme and the necessary measures to be taken by the Government of Nepal explained by the Team as described in Annex-3.
- (2) The Nepalese side agreed 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) JICA will prepare the draft report and dispatch a mission to Nepal in order to explain its contents around the middle of May 2007.
- (2) When the contents of the report are accepted in principle by the Government of Nepal, JICA will complete the final report and send it to the Government of Nepal by August 2007.

✍

✍

7. Environmental and Social Considerations

- (1) The Nepalese side explained that the Initial Environmental Examination (IEE) report was approved by the Ministry of Physical Planning and Works on July 3, 2006 (see Annex 5). The team confirmed its contents appropriate and acceptable through the discussion with the Nepalese side with regard to IEE report including records of stakeholder meeting.
- (2) The Nepalese side will compensate the PAPs (Persons Affected by the Project) within the Right of Way from Tinkune Intersection to Suryabinayak Intersection appropriately based on their own resettlement regulations/policies including information disclosure to them. The Nepalese side shall make basic agreements with the all PAPs by the end of May 2007 and complete the site clearing activities by the end of November 2007. The sample format of the agreement is as per Annex 6 and a tentative time schedule is as per Annex 7 respectively.

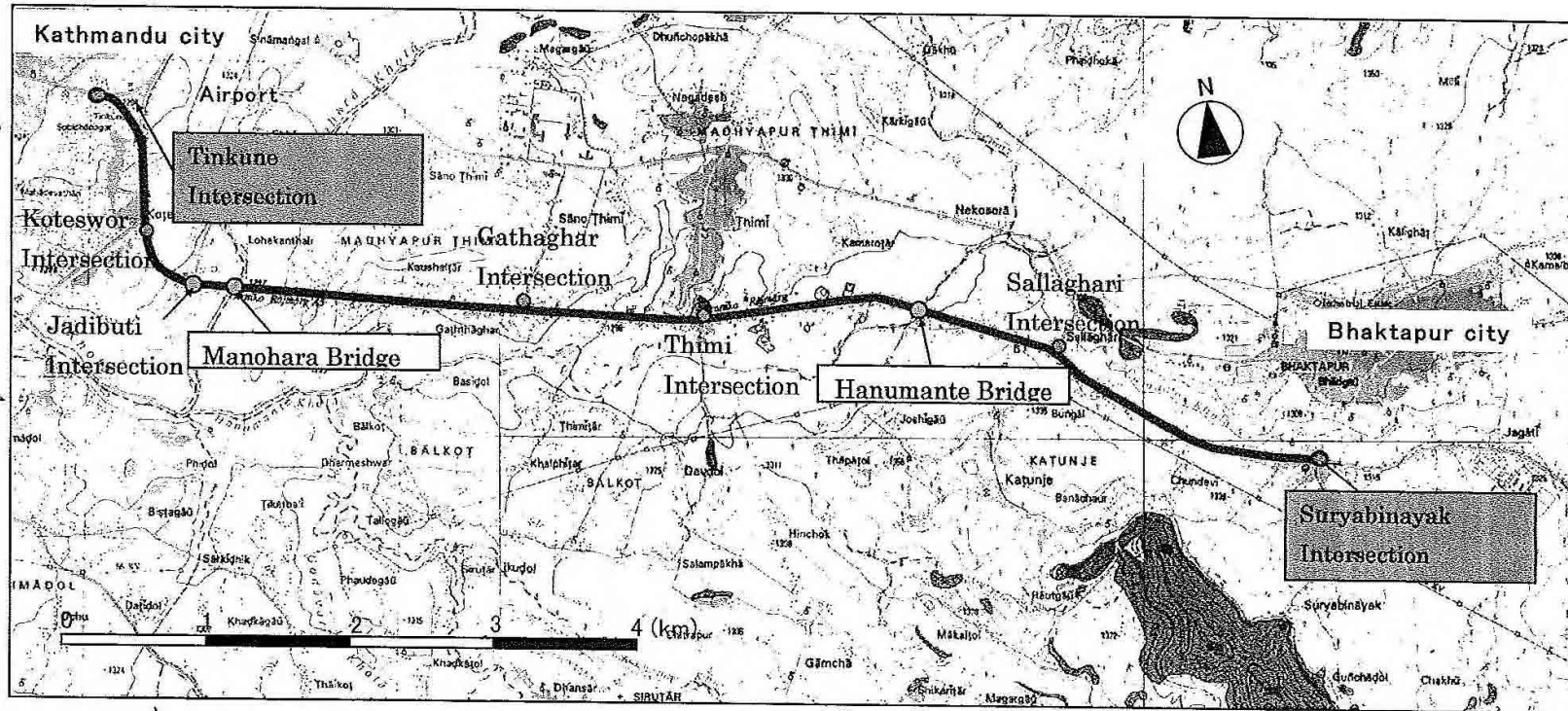
8. Other relevant issues

- (1) The Nepalese side shall submit answers in English to the Questionnaire, which the Team handed to the Nepalese side, by December 20, 2006.
- (2) The Nepalese side shall take full responsibility for coordination with the related ministries/agencies as below;
 - Relocation of the trolley bus poles including utility lines and the utility poles with electric distribution lines and telephone lines by March 2008
 - Relocation of the underground utilities (water pipes, communication cables) by March 2008
 - Restoration of the land within the ROW occupied by Civil Aviation Authority, wherever required, by November 2007
 - Relocation of the temples and shrines within the ROW by November 2007
 - Relocation of the water stands within the ROW by November 2007All the activities mentioned above shall be completed according to the time schedule as shown in Annex 7.
- (3) The typical cross sections of normal road, bus lay-by and bridge sections along with indicative locations of the public utilities, which show the facilities of the Japan's grant aid portion and those of the Nepalese government portion, are as shown in Annex 8-1 to 8-3. The both sides agreed that the design would be conducted, in principle, based on the Asian Highway Design Standard. The design will be examined in the further study.
- (4) Provision of lay-by for the bus stops and pedestrian crossings will be considered at appropriate locations.
- (5) The Nepalese side shall conduct the traffic safety awareness campaign for passengers and drivers at the bus stations in collaboration with the concerned entities in order to use properly the road facilities being constructed by the Project. The Nepalese side requested the technical support in this regard.





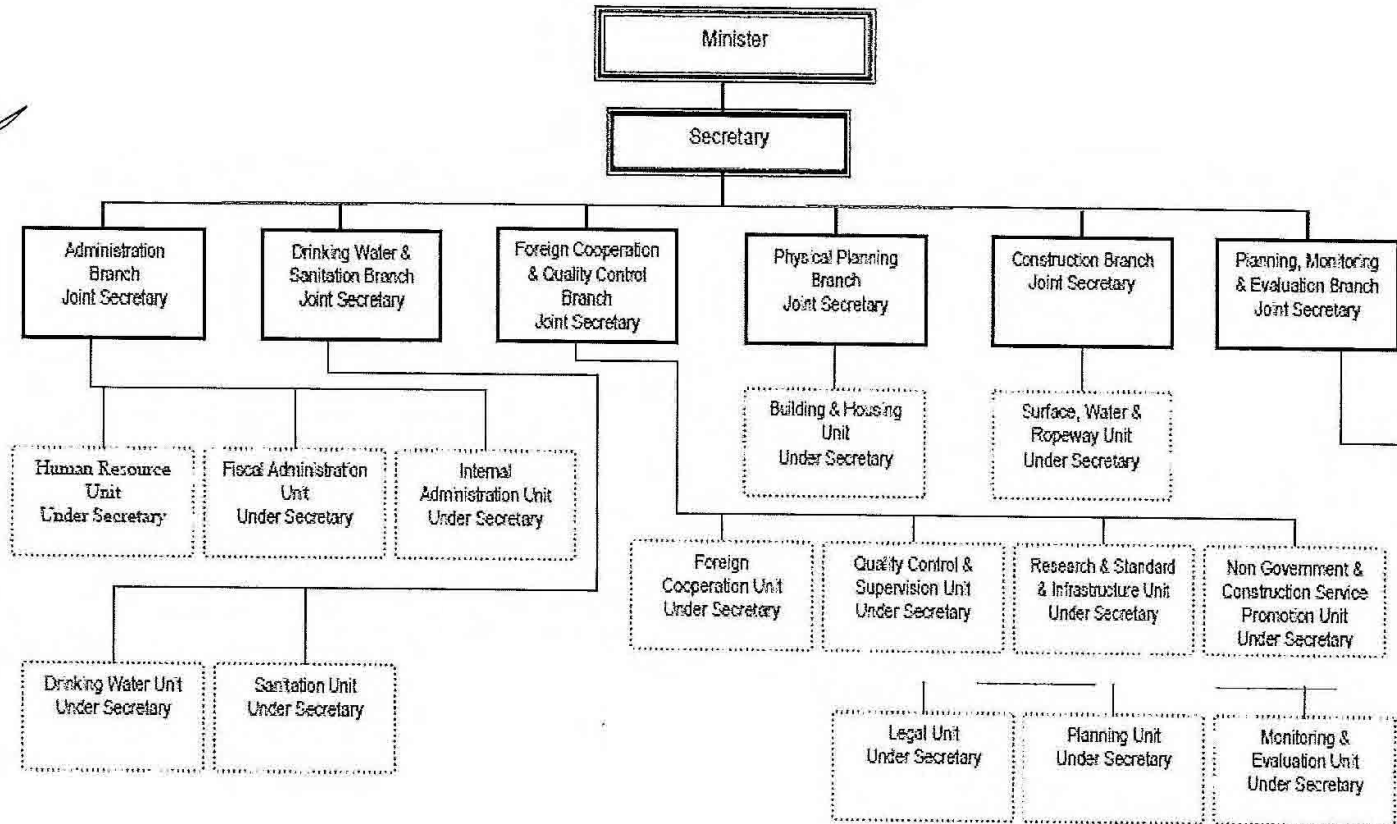
Location of Project Site



A4-5

Annex-1

**Ministry of Physical Planning & Works
Organization Chart**



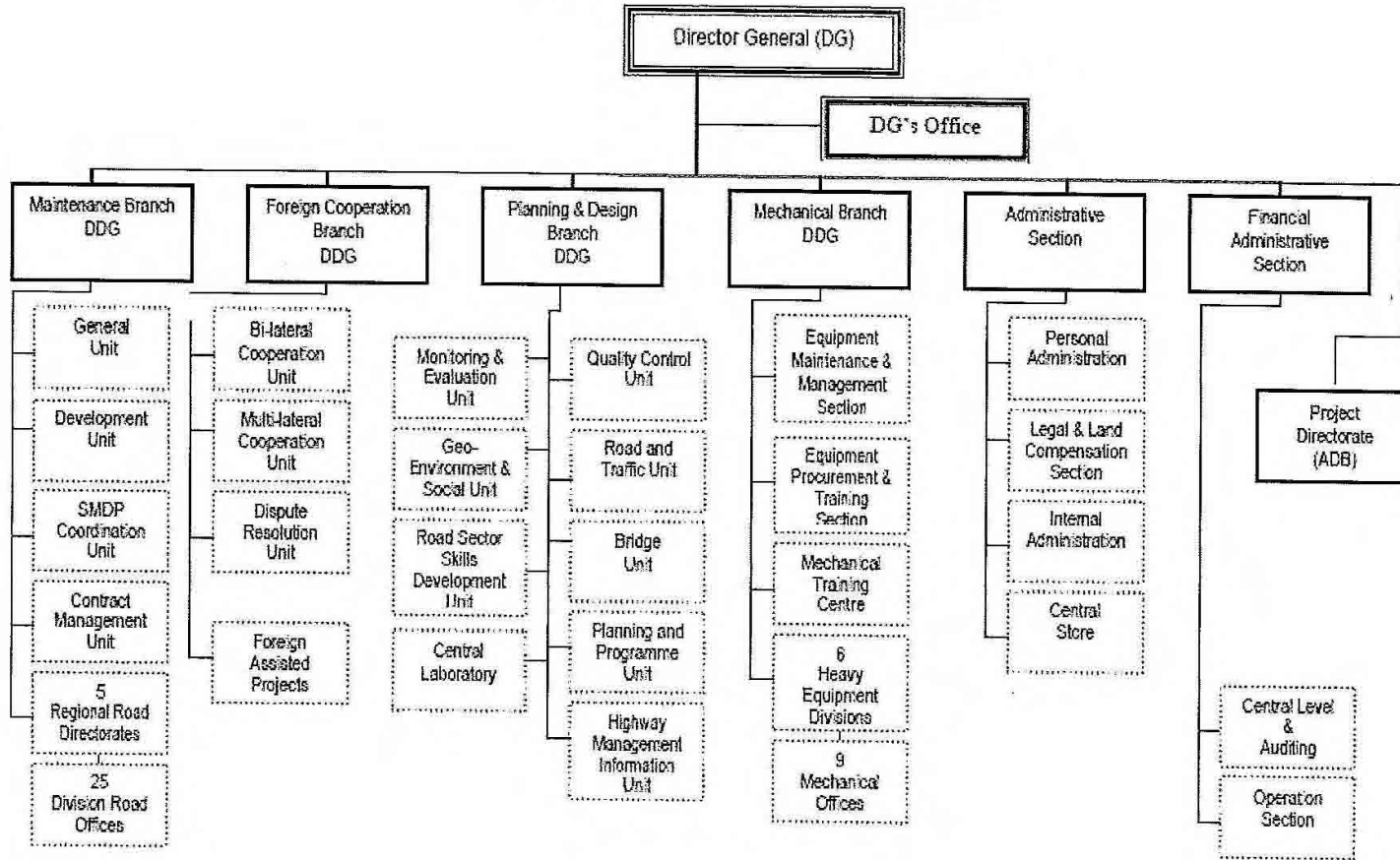
A4-6

5

8

Annex 2-1

**Department of Roads
Organization Chart including all Offices**



A4-7

6

[Handwritten signature]

Annex 2-2

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 Study	(Request made by the recipient country) (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:

α

7



- 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.)

2



(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)

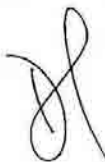
a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover 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 bear the following commissions to a bank of Japan for the banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
5	To ensure unloading and customs clearance at the port of disembarkation in recipient country		
	1) Marine (Air) transportation of the products from Japan to the recipient country	●	
	2) Tax exemption and customs clearance of the products at the port of disembarkation		●
	3) Internal transportation from the port of disembarkation to the project site	●	
6	To accord Japanese nationals whose service may be required in connection with the supply of the products and the services under the verified contract, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.		●
7	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts		●
8	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid		●
9	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)

✍



Government of Nepal
Ministry of Physical Planning and Works
Planning Section

Letter No. 2.1 YO. 062/6

Phone: 4-422693
Fax : 4-422842
Singha Durbar Kathmandu, Nepal

Date: 2063/3/19 (July 03, 2006)

Subject: **Regarding Approval to Initial Environmental Examination (IEE)**

Department of Roads
Babarmahal, Kathmandu

With reference to the captioned subject it is to inform that the initial environmental examination (IEE) for improvement of Kathmandu-Bhaktapur Road Project has been completed, therefore we would like to inform you that it has been approved through the ministerial level on 2063/3/18 (July 02, 2006)

We have attached herewith a copy of approved report.

(Bidyantath Bhattarai)
Engineer

✕

Annex 6

Public Opinion Survey for the Project for Improvement of Kathmandu - Bhaktapur Road in Nepal काठमाडौं-भक्तपुर सडक विस्तार योजनाको लागि जनघारण सर्वेक्षण

1 Interview Data अन्तर्वार्ता Date मिति :

2 Description of Settlement /बस्तीको विवरण

(1) VDC, Ward No, Village/Settlement /गा.वि.स. वडा नं.:

(2) Structure /संरचना :

3 Location स्थान (starting from KTM काठमाडौं): Right दाया Left बाया

3 Questions to Household Head /घर मूखलाई प्रश्न

(1) Name of Respondent जवाफ दिने व्यक्तिको नाम

(2) Age उमेर: Sex लिंग M/पुरुष F/महिला Occupation पेशा :

4 Right of Way Using(ROW:both side of 25m from the Centerline) सडक विमा प्रयोग (केन्द्र बिन्दुबाट २५/२५ मी दुवै तर्फबाट)

(1) Are you using the ROW or not तपाईं सडक विमा प्रयोग गर्दै हुनु हुन्छ ? Yes हो No होइन

(2) Would you be happy if the Kathmandu - Bhaktapur Road is improved काठमाडौं-भक्तपुर सडक सुधार भएमा तपाईं खुसी हुनु हुन्छ ?
Yes हुन्छ No हुन्न No Comments भन्न सक्दैन

(3) Will you agree to remove some part or fully removal (of fence/wall, cattle-shed, house and other structures), if there is any resettlement/Compensation policy from the government concerning the improvement of the Kathmandu - Bhaktapur Road काठमाडौं सडक विस्तार योजनाको लागि युन. स्थापना तथा मुआब्जा दिने गरी नेपाल सरकारले तपाईंको घर, पर्खाल, गोठ, अन्य) हटाएमा तपाईं सहमत हुनु हुन्छ ?
Agree/सहमत हुन्छु Not Agree/सहमत हुन्न No Answer भन्न सक्दैन

Name and Signature of Interviewer

अन्तर्वार्ताकर्ताको नाम र हस्ताक्षर :

Name नाम :

Witness साक्षी :

Name नाम :

Signature & Address हस्ताक्षर र ठेगाना :

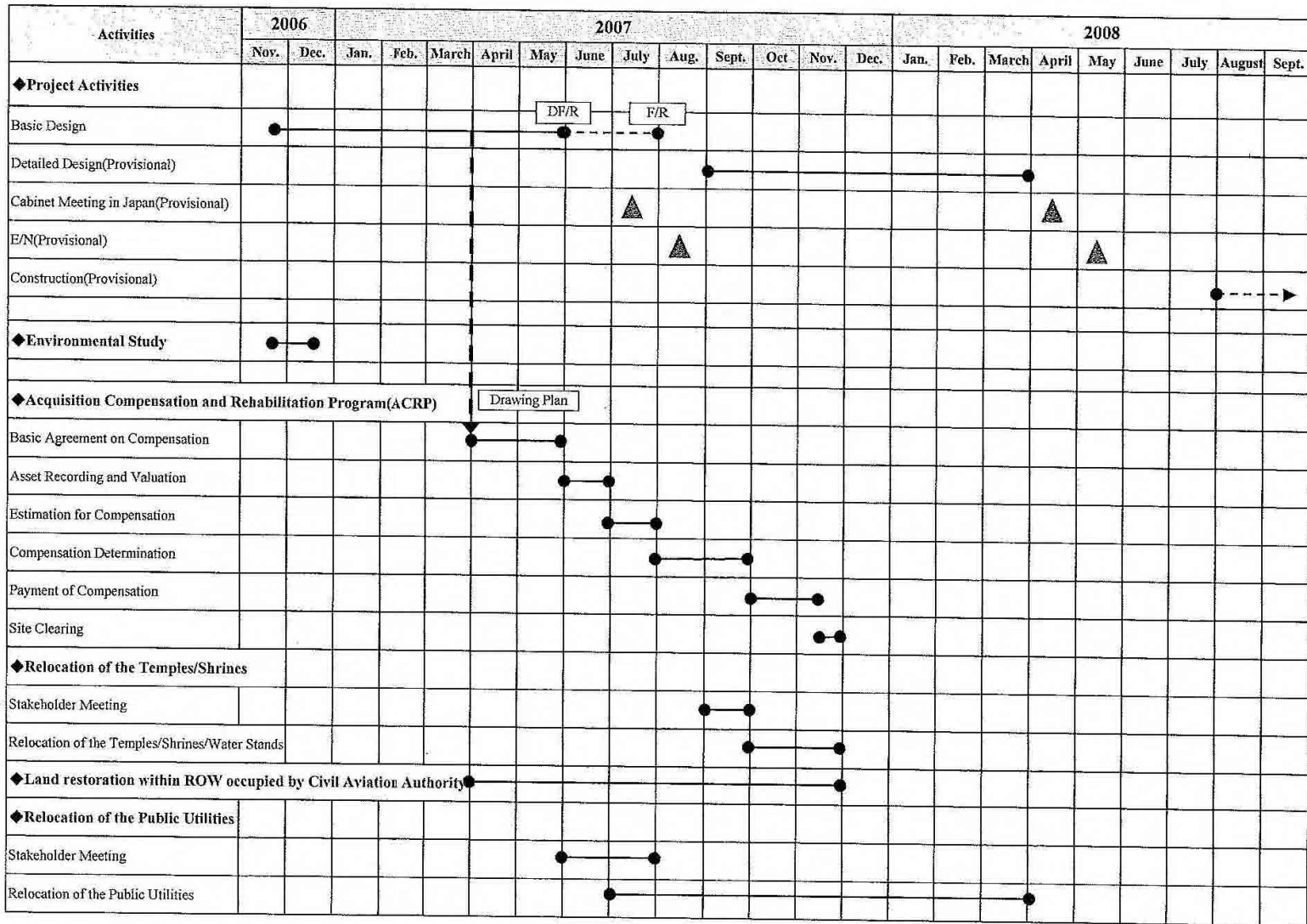


Name and Signature/Finger Prints of Interviewee

अन्तर्वार्ता दिनेको नाम, हस्ताक्षर/अङ्गठाङ्कण :

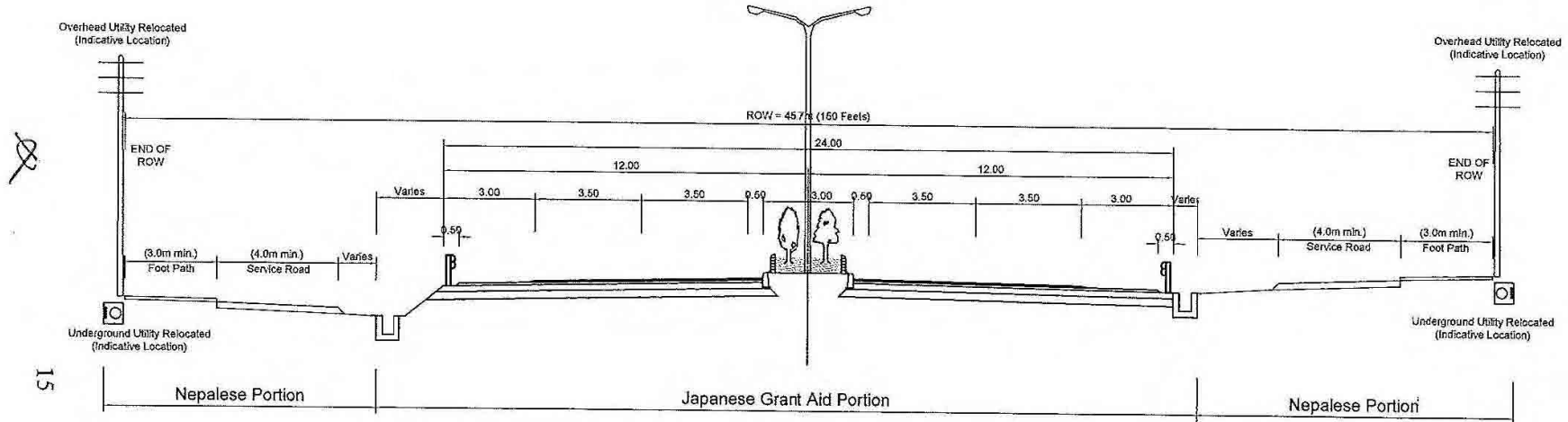
Name नाम :





TYPICAL CROSS SECTION FOR IMPROVEMENT OF KATHMANDU-BHAKTAPUR ROAD
(NORMAL SECTION)

SCALE 1:175



Note: It is subjected to change according to the study in Japan

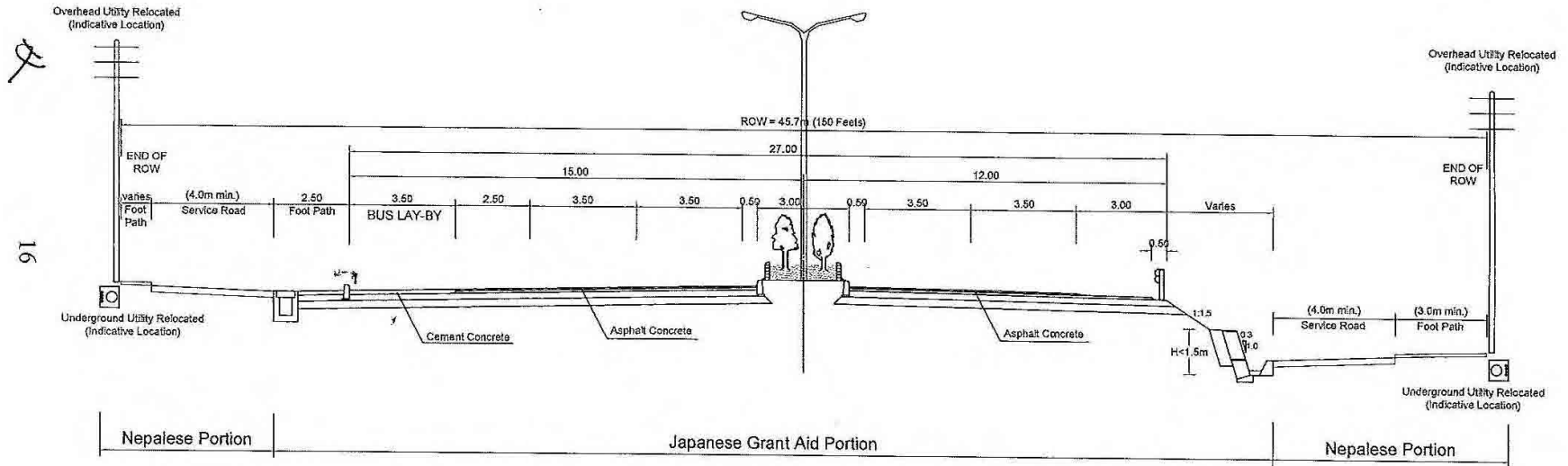
Geometric Design Standard for Improvement of Kathmandu - Bhaktapur Road
(Asian Highway Route 42)

Asian Highway Standard					Applied to the Project
Highway Classification	Class I (4 or more lanes)				Class I (4 lanes)
Terrain Classification	Level	Rolling	Mountainous	Steep	Rolling
Design Speed (km/h)	100	80	50		80 (50)
Width (m)	Right-of-Way	(40)			45.7 (150 feet)
	Lane	3.50			3.50
	Shoulder	3.0	2.5		3.0
	Median Strip	3.0	2.5		3.0
Min. Radii of Horizontal Curve (m)	350	210	80		210
Pavement Slope (%)	2				2
Shoulder Slope (%)	3-6				3-6
Type of Pavement	Asphalt/Cement Concrete				Asphalt
Max. Superelevation (%)	10				10
Max. Vertical Grade (%)	4	5	6	7	5
Structure Loading (Minimum)	HS20-44				HS20-44

Annex 8-1

TYPICAL CROSS SECTION FOR IMPROVEMENT OF KATHMANDU-BHAKTAPUR ROAD
(ARRANGEMENT FOR BUS LAY-BY)

SCALE 1:175



Note: It is subjected to change according to the study in Japan

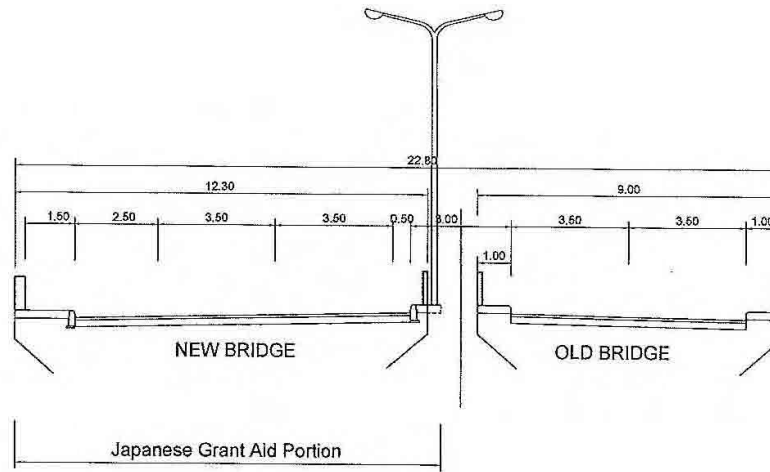
Annex 8-2

A4-17

16

TYPICAL CROSS SECTION FOR IMPROVEMENT OF KATHMANDU-BHAKTAPUR ROAD
(CONSTRUCTION OF ADDITIONAL BRIDGES)

SCALE 1:175



Note: It is subjected to change according to the study in Japan

Annex 8-3

Draft Report Explanation (May 17, 2007)

4-2 Draft Report Explanation (May 17, 2007)

**Minutes of Discussions
on the Basic Design Study
on the Project for Improvement of Kathmandu – Bhaktapur Road
in Nepal
(Explanation on the Draft Report)**

In December 2006, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Basic Design Study Team on the Project for Improvement of Kathmandu - Bhaktapur Road (hereinafter referred to as "the Project") to Nepal, and through discussions, field survey and technical examination of the results in Japan, JICA prepared a draft report of the study.

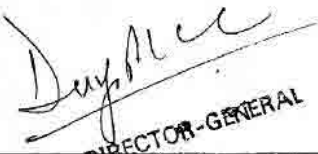
In order to explain and to consult with the officials concerned of the Government of Nepal on the components of the draft report, JICA sent to Nepal the Basic Design Explanation Team (hereinafter referred to as "the Team"), headed by Mr. Yoshio Fukuda, Deputy Resident Representative of the JICA Nepal Office, from May 14 to 18, 2007.

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

Kathmandu, May 17, 2007



Yoshio Fukuda
Leader
Basic Design Study Team
Japan International Cooperation Agency



DURGA PRASAD K.C.
Durga Prasad K.C.
Director General
Department of Roads
Ministry of Physical Planning & Works
Nepal





ATTACHMENT

1. Contents of the Draft Report

The Nepalese side agreed and accepted in principle the contents of the Draft Report explained by the Team.

2. Japan's Grant Aid Scheme

The Nepalese side reconfirmed the Japan's Grant Aid scheme and the necessary measures to be taken by the Government of Nepal explained by the Team as described in Annex-3 and Annex-4 of the Minutes of Discussions (M/D) signed by both sides on December 14, 2006.

3. Schedule of the Study

JICA will complete the Final Report in accordance with the confirmed items and send it to the Nepalese side by August 2007.

4. Cost Estimation

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

5. Other Relevant Issues

- (1) The Nepalese side explained to the Team that the undertakings to be conducted by the Nepalese side, which are described in Annex-7 of the M/D signed by both sides on December 14, 2006, are progressing on schedule. The Nepalese side also explained to the Team that the number of resettlement is about 10, and that the basic agreement regarding the resettlement with the all affected persons has been already made.
- (2) The Nepalese side shall assure the drainage outlet from the major cross drainages wherever required.
- (3) The temporary diversion road will be handed over to the Nepalese side soon after the bituminous coat being finished, and the Nepalese side shall be responsible for traffic control on the temporary diversion road.
- (4) The Nepalese side shall plant trees/flowers in the median strip before the road segment is open to the public traffic.
- (5) The Nepalese side shall consider to construct the service roads on a timely manner.
- (6) The Nepalese side shall conduct the traffic safety awareness training/campaign program for the road users in collaboration with the Traffic Police as well as other stakeholders.
- (7) The Nepalese side shall conduct the environmental monitoring according to the environmental monitoring program as attached in Annex-2, which the Team handed to the Nepalese side during the field survey on December 2006.
- (8) The Nepalese side shall establish a Project Management Office (PMO) in Kathmandu effective from July 17, 2007 (beginning of Nepalese Fiscal Year 2064/2065).



2



Project Cost to be Borne by Japan's Grant Aid

Items		Cost (Million Japanese Yen)		
Construction Facilities	4-lane Road	Total Length: 9.1km Total width: 24.0m Carriageway: 2-lane dual carriageway (2 x 2x3.5m = 14.0m) Median: 3.0m Median Clearance: 2 x 0.5=1.0m Shoulder: 3.0m on each side (2 x 3.0m = 6.0m) Surface course: 5cm thick asphalt concrete (carriageway and shoulder) Binder course: 6 cm thick asphalt concrete (carriageway only)	1,917	2,281
	Intersections	Signalized intersection: 3 places (Jadibuti, Gathaghar, Sallaghari) Non-signalized intersections: 2 places (Thimi, Suryabinayak)	105	
	Bus-stops including walkway	14 bus-stops (Koteshwore-Ring Road, Koteshwore- Amiko Highway, Jadibuti, Lokanthali, Kaushaltar, Gathaghar, TB hospital, Thimi, Srijana Nagar, Sallaghari-Tinkune, Sallaghari, Chundevi, Barahistan, Suryabinayak)	36	
	Bridges	Manohara Hanumante Whole Width: 12.5m 12.5m Br. Length : 84.0m 50.4m Superst : PC girder PC girder Foundation: Cast-in place RC pile River bank & bed protect: gabion	223	
Detailed Design and Construction Supervision			155	
Total			2,436	

Notes:

- (1) The cost estimates in the above table are provisional and will be further examined by the Government of Japan for the approval of the Grant.
- (2) The Total Cost of the Project JPY 2,436 million is equivalent to USD 20.72 million at the current exchange rate
USD 1.0 = JPY 117.55





**Environmental Monitoring Program
for
the Project for Improvement of Kathmandu – Bhaktapur Road**

1. Introduction

The environmental monitoring program for the Project consists of compliance and ambient Monitoring.

Compliance Monitoring

Monitoring on the compliance on mitigation measures, to ensure mitigation measures are implemented to meet environmental requirements and standard.

Ambient Monitoring:

Monitoring on the quality of ambient condition, such as air quality, noise and vibration

2. Responsibilities

The responsibilities for each monitoring activity will be decided depending on the monitoring frequency. The monitoring items having the frequency of more than once in a month will be carried out by Project Management Office (PMO) of DOR, those of once in a month to once in three months will be carried out by the Geo-Environmental Unit (GEU) of DOR and those of once in six months to once in a year will be carried out by Ministry of Physical Planning & Works (MOPPW) respectively.

3. Monitoring Items

Compliance Monitoring

Compliance Monitoring items have been determined base on the potential negative impacts identified in each project stage. Monitoring items are giving below. Monitoring activities are summarized in Table-1.

- Air, water, noise and vibration
- Slope stability/ Landscape
- Use of Quarries and Stock piling of materials
- Drainage and Cross drainage works
- Establishment of Labor Camps and Workforce.
- Acquisition of Private land and houses
- Relocation of Temples and Shrines
- Relocation of Public Water stands
- Use of outside workforce
- Economic Activities
- Health, sanitation and Social service facilities

Table-1 Compliance Monitoring Plan

No.	Monitoring Parameters(Mitigation measures)	Location	Frequency	Responsibility
	Bio-physical Environment			
	<Air, water, noise and vibration>			
1	Water spraying during sub-grade preparation and gravelling	Project site	Once a week	DOR(PMO)
2	Undertake construction activities in day time	Project site	Once a month	DOR(GEU)
3	Avoid heavy vibrating compaction near settlement	Project site	Once a month	DOR(GEU)
4	Locate bitumen plant and fuel filling station away from water source and settlement areas	Project site	1 in 3 month	DOR(GEU)
5	Enforce regulations to allow only vehicles meeting emission standards, restrict speeds	Project site	1 in 6 month	MOPPW
	<Slope stability/ Landscape>			
6	Slope protection measures	Cutting & embankment slope	1 in 3 month	DOR(EU)
	<Use of Quarries and Stock piling of materials>			
7	Proper operation of quarries	Quarry site	Twice a year	MOPPW
8	reclaiming the quarries and stockpiling yards after use	Quarry site	1 in 6 month	MOPPW
9	Avoid leakage and dispose the hazardous materials safely	Disposal site	1 in 3 month	DOR(GEU)
10	Avoid stock piling of hazardous materials near settlements	Project site	1 in 3 month	DOR(GEU)
	<Drainage and Cross drainage works>			
11	Provide sufficient cross drainage structures, check dams	Project site	During design period	DOR(PMO)
12	Protection of natural gullies with vegetation structures	Project site	During design period	DOR(PMO)
	Socio- Cultural environment			
	< Establishment of Labor Camps and Workforce>			
13	Proper occupational health and safety standards	Labor Camps	Once a year	MOPPW
14	Safe disposal of wastes and alternative fuel for cooking	Labor Camps	1 in 3 month	DOR(GEU)
15	Use of local manpower as far as possible	Project site	1 in 3 month	DOR(GEU)
	< Acquisition of Private land and houses>			
16	Provide reasonable compensation to affected people	Project site	Before construction	DOR(PMO)
	< Relocation of Temples and Shrines>			
17	Consultation with local people on how and where the relocation can be done	Project site	Before construction	DOR(PMO)
	< Relocation of Public Water stands>			
18	Provide alternative Public Water stands and washing space with consultation with local people	Project site	Before construction	DOR(PMO)

No.	Monitoring Parameters(Mitigation measures)	Location	Frequency	Responsibility
	< Use of outside workforce>			
19	Ensure maximum use of local workforce	Project site	1 in 3 month	DOR(GEU)
	< Ribbon Resettlement and urbanization along Road>			
20	Encourage planned settlement and provide access to it	Project site	Once a year	MOPPW
21	Discourage settlement along the road,	Project site	Once a year	MOPPW
22	Regulate settlement along road and compliance to ROW	Project site	Once a year	MOPPW
23	Regulate management of solid waste disposal	Project site	Once a year	MOPPW
24	Regulate wastewater disposal	Project site	Once a year	MOPPW
25	Incorporate proper traffic safety standards	Project site	Once a year	MOPPW
	< Economic Activities>			
26	Provide alternative opportunities for economic activities	Project site	Once a year	MOPPW
	< Health, sanitation and Social service facilities>			
27	Discourage concentration of people	Project site	Once a year	MOPPW
28	Use signs to warn traffic of school and hospital areas	Project site	Once a year	MOPPW
29	Provide additional drinking water facilities to labor force	Project site	Once a year	MOPPW

Handwritten mark

Handwritten mark

6

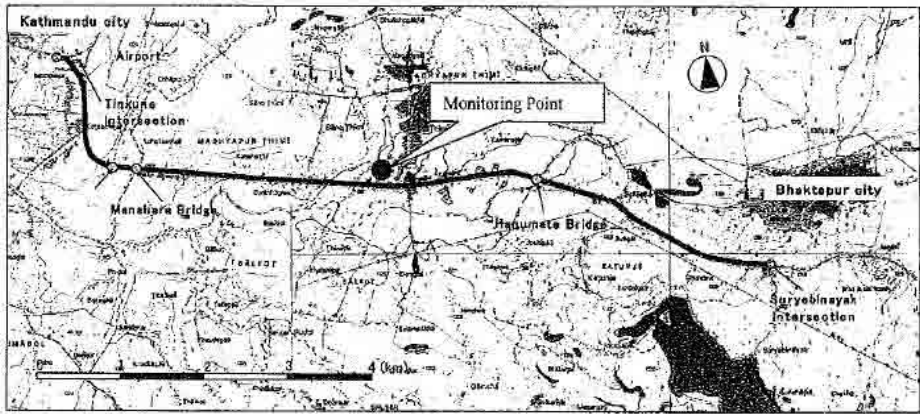
Handwritten signature

Ambient Monitoring:

- Monitoring items

Items	Parameter	Frequency	Location
Air quality	TSP, PM10,SO2,NO2,CO,Lead and Benzene	Twice/year	Nepal Tuberculosis Hospital
Noise	Sound level equivalent (Leq24 hr) and Ldn	Twice/year	Nepal Tuberculosis Hospital
Vibration	Particle peak velocity and frequency	Twice/year	Nepal Tuberculosis Hospital

- Location Map



4. Remarks

Regarding the Ambient Monitoring, the baseline data shall be obtained before the commencement of the construction work.

[Handwritten signatures]