

Appendix

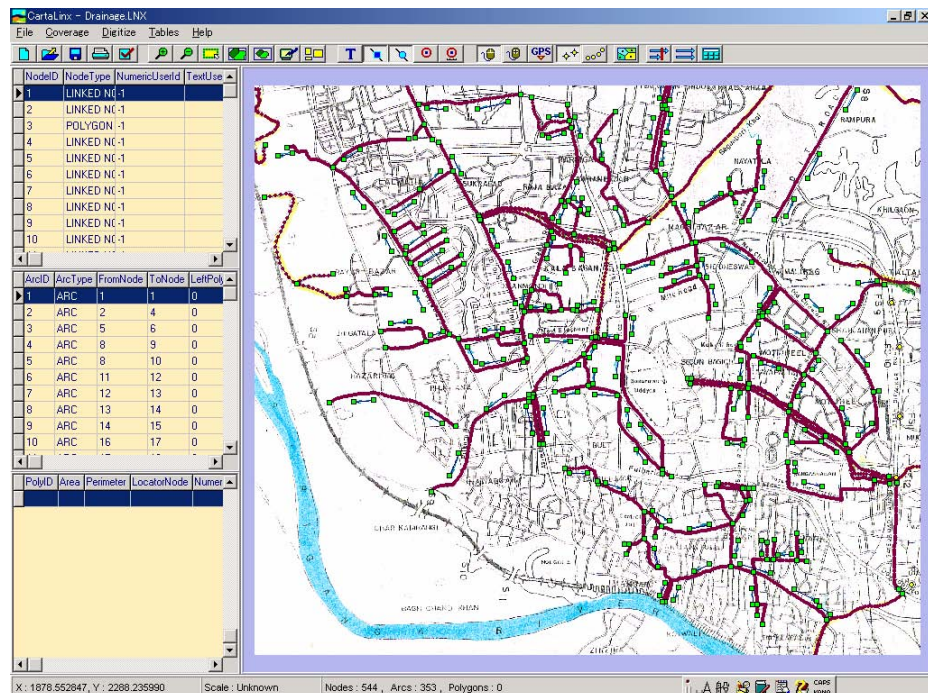
Thematic map of drainage

The drainage in Dhaka is important about the flood control due to the river flooding and the drainage management of rainwater. In the rainy season, a road is flooded in everywhere in the city, there are urban problems caused to the traffic congestion and the traffic means.

In the Dhaka, it is an important point for maintenance consisting of the drainage management of the river flooding control of riparian work and the disposal of the rainwater. In the layout planning of the drainage, it is the information about topographic longitudinal as well as that of sewerage. The distribution of the drainage in Dhaka city was compiled in the base map as a thematic map

It is insufficient as well as the drain facilities, and maintenance is a pressing need development subject in the present conditions.

A large-scale map is expected the advantage use of the geographic information as well as the management of the sewerage and the rehabilitation.



Appendix

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Appendix 1 ***Scope of Work for The Study on Urban Information
Management for Greater Dhaka City***

SCOPE OF WORK

FOR

THE STUDY ON URBAN INFORMATION MANAGEMENT
FOR GREATER DHAKA CITY

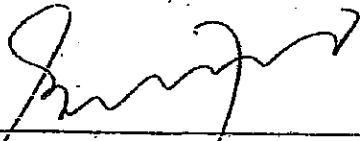
AGREED UPON BETWEEN

THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF
BANGLADESH


AND

THE JAPAN INTERNATIONAL COOPERATION AGENCY

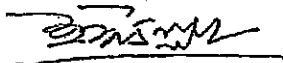
DHAKA, AUGUST 28, 2002



Mr. Iqbal Mahmood
Deputy Secretary,
Economic Relations Division,
MINISTRY OF FINANCE



Mr. Masanori KOIDE
Leader, Preparatory Study Team,
JAPAN INTERNATIONAL
COOPERATION AGENCY (JICA)



Brig. Gen. A.H.M. Shahidullah
Surveyor General of Bangladesh,
SURVEY OF BANGLADESH

I. INTRODUCTION

In response to the request of the Government of the People's Republic of Bangladesh (hereinafter referred to as "GOB"), the Government of Japan has decided to conduct the "The Study on Urban Information Management for Greater Dhaka City" (hereinafter referred to as "the Study") in accordance with the relevant laws and regulations in force in Japan.

Accordingly, the Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the technical cooperation programs of the Government of Japan, will undertake the Study in close cooperation with the authorities concerned of GOB.

The present document sets forth scope of work with regard to the Study.

II. OBJECTIVES OF THE STUDY

The objectives of the Study are:

- 1) to prepare digital topographic maps covering a part of the Greater Dhaka City (581 km²) at the scale of 1/5,000 that will assist develop various plans and programs; and
- 2) to transfer related technology to Bangladesh counterpart organization.

III. STUDY AREA

The 1/5,000 scale map shall cover an area of about 581 km² in the Greater Dhaka City. (Shown in Appendix I)

IV. SCOPE OF THE STUDY

In order to achieve the objectives mentioned above, the Study shall cover following items.

1) Review of Existing Conditions

Existing conditions relevant to the Study including organizational set-up, mapping system, facilities management and control points shall be reviewed.

2) Aerial Photography

1/20,000 black and white aerial photographs covering 960 km² including the Study area shall be taken.





3) Control Point Survey, Levelling and Pricking

Control Point Survey, Levelling and pricking shall be carried out.

4) Aerial Triangulation

Aerial triangulation shall be carried out to establish photo control points.

5) Field Identification

Topographic information shall be identified mainly using the aerial photographs. The field identification shall be conducted in case that the information on the aerial photographs is difficult to be interpreted.

6) Digital Plotting

Digital topographic data shall be plotted

7) Structurization digital topographic data

The digital topographic data shall be structurized for the use of GIS.

8) Editing and symbolization

The digital topographic data shall be edited and symbolized to print topographic line maps at the scale of 1/5,000.

9) Field Completion

Field Completion shall be carried out.

10) CD-ROM production

The digital topographic data shall be compiled into CD-ROM.

11) Printing of Maps

The digital topographic data shall be printed at the scale of 1/5,000.

12) Technology Transfer

In order to facilitate technology transfer to the counterpart personnel, part of the above-mentioned items shall be undertaken by the counterpart personnel under the technical supervision of the Study team in Bangladesh.

13) Dissemination of the Final Products

Recommendations for the wide and effective use of the geographic database produced under the Study shall be prepared.

V. STUDY SCHEDULE

The Study shall be implemented in accordance with the tentative Study schedule shown in Appendix II. The schedule, including report submission dates stated in the next

clause (VI), is tentative and subject to be modified when both parties agree upon and any necessity that arises during the course of the Study.

VI. REPORTS AND FINAL PRODUCTS

JICA shall prepare and submit the following reports in English and the final products of topographic mapping works to the GOB.

1. Inception Report
Twenty (20) copies At the beginning of the Study
2. Progress Reports
Twenty (20) copies At the end of the Sixth Month
3. Interim Reports
Twenty (20) copies At the end of first year
4. Draft Final Report
Twenty (20) copies At the end of the second year
Bangladesh side shall submit its written comments to JICA on the draft final report within four (4) weeks after receipt of the draft final report.
5. Final Report
Fifty (50) copies At the end of the Study
Fifty (50) copies within two (2) month after receipt of the written comments on the draft final report form Bangladesh side.
6. Final products of topographic mapping
 - (1) Negative films of aerial photographs 1 set
 - (2) Contact prints of aerial photographs 1 set
 - (3) Results of ground control point survey 1 set
 - (4) Results of aerial triangulation 1 set
 - (5) 1/5,000 scale topographic maps
- films for printing 1 set
-Printed maps 500copies
 - (6) 1/5,000 scale digital topographic data (for Line Map data & for use of GIS)
- digital data for Line Map(e.g. CD-ROM) 2 sets
- digital data for use of GIS(e.g. CD-ROM) 100 sets

VII. UNDERTAKING OF THE GOVERNMENT OF BANGLADESH

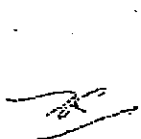
The Government of Bangladesh will accord privileges, exemption and other benefits to Japanese Study Team (hereinafter to as "the Team")

1. To facilitate the smooth conduct of the Study, the GOB shall take the following necessary measures:

- (1) to permit the members of the Team to enter, leave and sojourn in Bangladesh for the duration of their assignment therein and exempt them from foreign registration requirements consular fees;
- (2) to exempt the members of the Team from taxes, duties and any other charges on equipment, machinery and other materials brought into and out of Bangladesh for the implementation of the Study;
- (3) to exempt the members of the Team from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Team for their services in connection with the implementation of the Study;
- (4) to provide necessary facilities to the Team for remittance as well as utilization of the funds introduced into Bangladesh from Japan in connection with the implementation of the Study;
- (5) to secure permission for the Team to take all data (including topographic maps, flight index map and contact prints, positive films and digital data of aerial photographs after carrying out dubbing of Key Point Installation) related to the Study out of Bangladesh to Japan for analysis and will be returned before completion of closing Project, and
- (6) to secure necessary permission for aerial photography by foreign registered aircraft for the implementation of the Study.

2. The GOB shall bear claims, if any arises against the members of the Team resulting from, occurring in the course of, or otherwise connected with the discharge of their duties in the implementation of the Study, except when such claims arise from gross negligence or willful misconduct on the part of the members of the Team.

3. Survey of Bangladesh (hereinafter referred to as "SOB") of the GOB shall act as the counterpart agency to the Team and also as the coordinating body in relation with other



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governmental and non-governmental organizations concerned for the smooth implementation of the Study.

4. SOB shall at its own expense, provide the Team with the following, in cooperation with other organizations concerned:

- (1) security-related information on as well as measures to ensure the safety of the Team;
- (2) information on as well as support in obtaining medical service;
- (3) available data and information related to the Study;
- (4) counterpart personnel;
- (5) suitable office space with necessary equipment in Dhaka;
- (6) credentials or identification cards, and
- (7) vehicles with drivers.

VIII. OTHERS

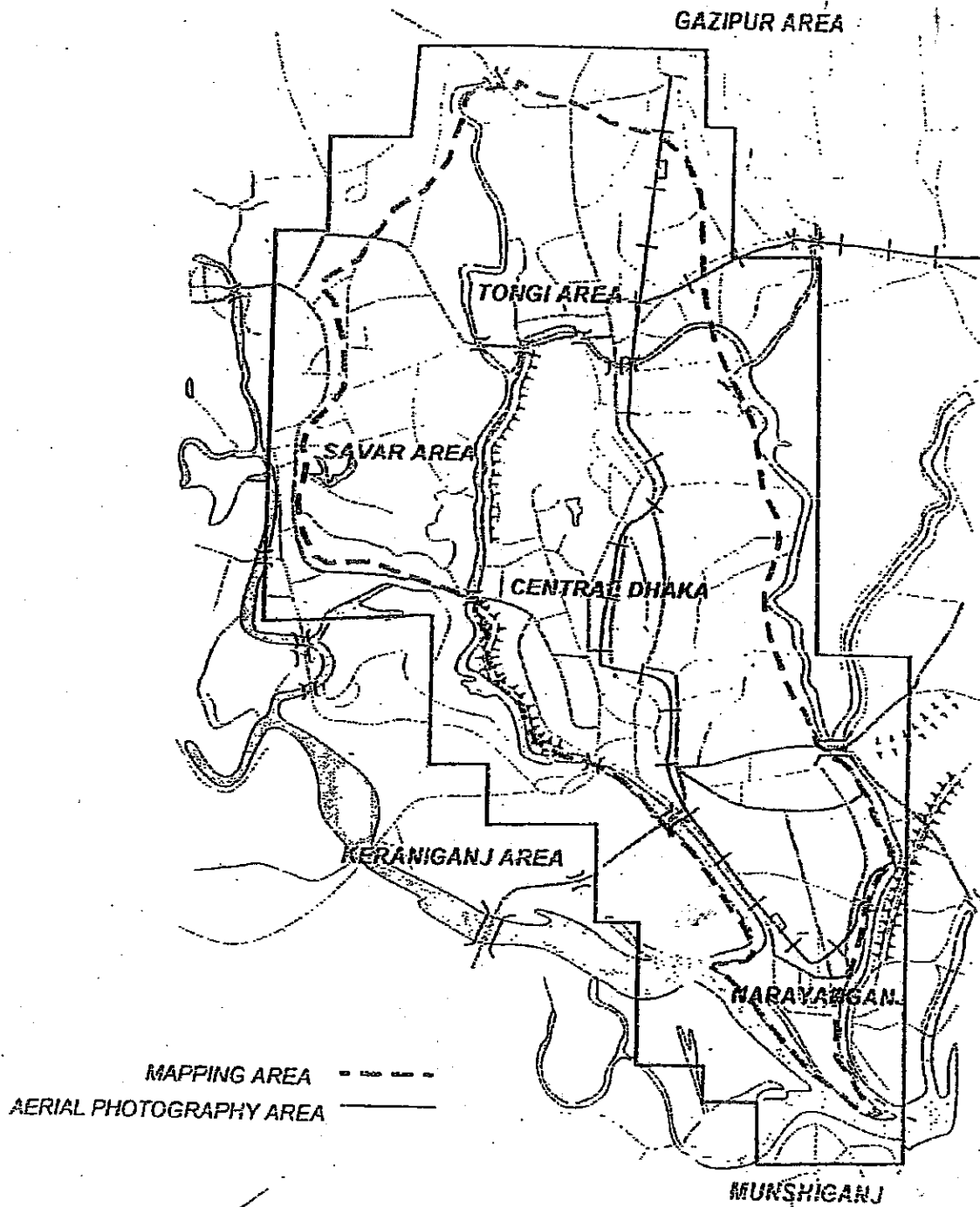
(1) JICA and SOB shall consult with each other in respect of any matter that may arise from or in connection with the Study.

(2) SOB is responsible for proper and effective use of the final products in accordance with the objective of the Study.



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THE STUDY ON URBAN INFORMATION MANAGEMENT FOR GREATER DHAKA CITY



Tentative Study Schedule

Month																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Work in Bangladesh																					
Work in Japan																					
Reports																					

[Legend]
 IC/R Inception Report P/R Progress Rep/IT/R Interim Report
 DF/1 Draft Final Report F/R Final Report F/P Final Products of Digital Phortriophoto Mapping

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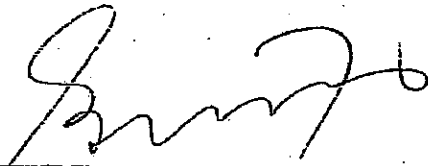
Appendix 2 ***Minutes of Meeting on Scope of Work for The Study on***
Urban Information Management for Greater Dhaka City

MINUTES OF MEETING
ON
SCOPE OF WORK
FOR
THE STUDY ON URBAN INFORMATION MANAGEMENT
FOR
GREATER DHAKA CITY

AGREED UPON BETWEEN

THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
AND
THE JAPAN INTERNATIONAL COOPERATION AGENCY

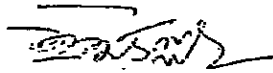
DHAKA, AUGUST 28, 2002



Mr. Iqbal Mahmood
Deputy Secretary,
Economic Relations Division,
MINISTRY OF FINANCE



Mr. Masanori KOIDE
Leader, Preparatory Team,
JAPAN INTERNATIONAL
COOPERATION AGENCY (JICA)



Brig. Gen. A.H.M. Shahidullah
Surveyor General of Bangladesh,
SURVEY OF BANGLADESHI



In response to the request of the Government of the People's Republic of Bangladesh (hereinafter referred to as "GOB"), the Government of Japan (hereinafter referred to as "GOJ") dispatched the Preparatory Study Team (hereinafter referred to as "the Pre-Study Team"), headed by Mr. Masanori KOIDE through the Japan International Cooperation Agency (hereinafter referred to as "JICA"), to discuss technical cooperation on "The Study on Urban Information Management for Greater Dhaka City" (hereinafter referred to as "the Study") from August 19 to August 30, 2002.

The Pre-Study Team where field surveys were carried out and a series of discussions were held in connection to the Scope of Work with authorities of the Survey of Bangladesh (hereinafter referred to as "SOB") and the other organizations concerned.

This document sets forth the main issues discussed and/or agreed upon in the course of the preparation of S/W, and shall supplement S/W.

The list of attendants is shown in Appendix 1.

The main points confirmed between both sides are as follows:

1. Title of the Study

Both sides agreed that the title of the Study should be "The Study on Urban Information Management for Greater Dhaka City".

2. Objective of the Study

Both sides agreed that the Study shall prepare digital topographic maps covering a part of the Greater Dhaka City (581km²) at the scale of 1/5,000.

3. Duration of Study

Both sides agreed that the duration of the Study is about twenty (20) months.

4. Study Area

Both sides agreed that it was confirmed that the 1/5,000 scale map shall cover an area of about 581km² in the Greater Dhaka City. (Shown in the Scope of Work's Appendix 1)

5. Technical Transfer

Both sides recognized the necessity of technical transfer to staff of SOB so that SOB builds up the capability to produce and revise large scale topographic maps by themselves.

SOB requested technical transfer especially of Digital Plotting. The Pre-Study Team promised to convey the request to JICA Headquarters.

Based on the recognition, SOB proposed to provide two (2) counterparts with its own expense in the course of the Study.

6. Permission of Aircraft flying

SOB shall take the responsibility to conduct the process of fly the aircraft for aerial photography to the study.

Both side agreed, in case aerial photography is not completed, in terms of area coverage and quality which will be designated in the contract to local contractors, or on account of the unseasonable weather, to extend the duration of aerial photography within the limits of one (1) year, and SOB shall take the responsibility to take necessary action for aerial photography.

Both side also agreed to consult with each other in respect of changing the method of the Study, in case the aerial photography is not completed due to above reason, or suspending the Study when SOB fails to take the responsibility.

7. Equipment of the Study

Both sides agreed that SOB shall be act as consignee of the equipment, and shall pay all necessary expenses for import procedures for the equipment.

Both sides also agreed that the equipment thus imported shall be used exclusively for the implementation of the Study under the supervision of the Study team, the management and utilization right shall be transferred to SOB in order to promote the effective technology transfer upon approval of JICA Headquarters after the completion of the Study, and, in transferring the equipment, a memorandum shall be exchanged.

8. Reports & Product


Both sides agreed to finalize the form of the final report and final products in the course of the study, and SOB's printing facility will utilized to printing maps.

9. Office Spaces with Necessary Equipment

The Bangladesh side confirmed that an office space with necessary equipment suitable for about ten (10) persons would be provided by SOB, and SOB explain the difficulty in provide the vehicles with drivers and communication facility for the Study Team.

The Pre-Study Team promised to convey the request to JICA Headquarters.







List of Attendants

Bangladesh side

ERD (Economic Relations Division, Ministry of Finance)

Mr. Iqbal Mahmood

SOB (Survey of Bangladesh)

Brig. Gen. A.H.M Shahidullah

Mr. Khandaker Aftab Hossain

Maj. Md. Shahinur Hasnat Islam

Maj. Md. Nurul Amin Chowdhury

Mr. Nazmul Ahasan Choudhury

Surveyor General of Bangladesh

Director, Development Survey

Assistant Surveyor General

Project Officer

Drawing, Printing and coordination officer

Japanese side

JICA Preparatory Study Team

Mr. Masanori KOIDE

Mr. Masao UETAKE

Ms. Kiyoko ITO

Mr. Yoshimitsu YOSHIMURA

Mr. Kosei OTOI

Team Leader

Member

Member

Member

Member

JICA Expert

Mr. Takashi SAITO

JICA Expert Survey of Bangladesh

JICA Bangladesh Office

Mr. Takuya OTSUKA

Mr. Zulfiker ALI

Deputy Resident Representative

Deputy Director

Appendix 3 ***Minutes of Meeting on Inception Report for The***
Study on Urban Information Management

**MINUTES OF MEETING
ON
INCEPTION REPORT
FOR
THE STUDY
ON
URBAN INFORMATION MANAGEMENT
FOR
GREATER DHAKA CITY**

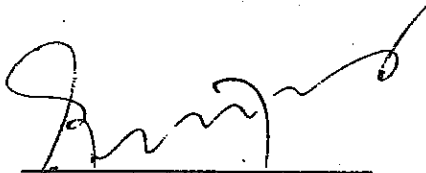
AGREED UPON BETWEEN

**THE GOVERNMENT OF THE PEOPLE'S REPUBLIC
OF
BANGLADESH**

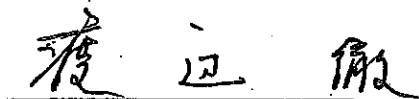
AND

THE JAPAN INTERNATIONAL COOPERATION AGENCY

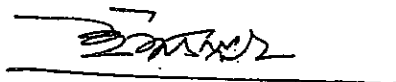
Dhaka, December 14, 2002



**Mr. Iqbal Mahmood
Deputy Secretary
Economic Relation Division,
Ministry of Finance**



**Mr. Toru Watanabe
Leader of the JICA Study Team**



**Brig. Gen. A.H.M. Shahidullah
Surveyor General
Survey of Bangladesh**

The Team for the Study On Urban Information Management For Greater Dhaka City (hereinafter referred to as "The Study" and "The Study Team" organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") arrived at Dhaka, The People's Republic of Bangladesh on 29th of November 2002 for the first work in Bangladesh.

The Study Team submitted twenty (20) copies of Inception Report (Draft) to Survey of Bangladesh (hereinafter referred to "SOB").

A series of meetings on Inception Report was held from 10th to 11th of December 2002 between The Study Team and SOB. A list of participants is attached in Annex. 1

Inception Report was basically accepted by the Bangladesh side. During the meeting, the following points were confirmed among the parties.

1. Both parties agreed that the boundaries of aerial photography and 1:5,000 scale digital topographic mapping area shown on the Scope of Work are tentative. Also, both parties agreed that the exact boundaries will be decided through the discussion based on actual requirement.
2. SOB requests JICA to arrange to supply the necessary equipment for technology transfer in Bangladesh before starting technical transfer (August 2003) for smooth implementation. Furthermore, at the time of the selection of necessary equipment, SOB requests JICA to consider the issue of maintenance of equipment in Bangladesh. The Study Team promises to convey SOB's request to JICA HQ Office.
3. SOB expressed the needs of technology transfer not only in Bangladesh, but also in Japan, especially, the items those are not included in the technology transfer programme in Bangladesh such as aerial triangulation, photogrammetry and GIS. Also, SOB requests that the number of trainees in Japan should be a reasonable one. The Study Team promised to convey SOB's request to JICA HQ Office.
4. Both parties agreed that the concrete monument would be established on the new horizontal control point. The Study Team would provide the necessary materials for concrete monument and SOB would establish the concrete monuments.
5. SOB requests The Study Team to provide the necessary consumables such as ink, paper, chemical and other reproduction materials for printing at third year. The Study Team promised to convey SOB's request to JICA HQ Office.
6. Both parties agreed that the data and information to be collected for field identification would exclude the restricted data and information. Because final products would be prepared for this Study will be used not only by SOB, but also by other authorized relevant organization and so on.
7. The Study Team requested SOB to provide one telephone line to the office space temporarily and SOB agreed it. The Study Team shall bear the expenses.

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List of Participants

Bangladesh side

Economic Relation Division, Ministry of Finance

Mr. Iqbal Mahmood

Deputy Secretary

Survey of Bangladesh

Brig. Gen. A.H.M. Shahidullah

Mr. Khandaker Aftab Hossain

Surveyor General of Bangladesh
Director, Development Survey

Japanese side

The Study Team

Mr. Toru Watanabe

Mr. Hideto Hosoda

Mr. Ichiro Nonaka

Team leader

Aerial photography specialist

Coordinator

JICA Tokyo Office

Ms. Kiyoko Ito

First Development Study Division, Social
Development Study Department

JICA Dhaka Office

Mr. Hajime Mabeta

Mr. Zulfiker Ali

Deputy Resident Representative
Deputy Director, Program Division

JICA Expert

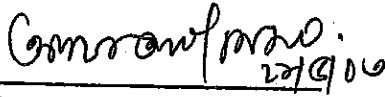
Mr. Takashi Saito

JICA Expert, Survey of Bangladesh

Appendix 4 ***Minutes of Meeting on Progress Report for The Study on
Urban Information Management for Greater Dhaka City***

**MINUTES OF MEETING
ON
PROGRESS REPORT
FOR
THE STUDY
ON
URBAN INFORMATION MANAGEMENT
FOR
GREATER DHAKA CITY
AGREED UPON BETWEEN
SURVEY OF BANGLADESH
AND
THE JAPAN INTERNATIONAL COOPERATION AGENCY**

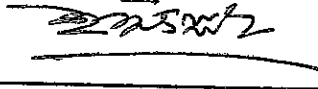
Dhaka, May 21, 2003



Maj. Khandaker Aftab Hossain
Chief Counterpart of the Project



Mr. Toru Watanabe
Leader of the JICA Study Team



Brig. Gen. A.H.M. Shahidullah
Surveyor General
Survey of Bangladesh

The Team for the Study On Urban Information Management For Greater Dhaka City (hereinafter referred to as "The Study" and "The Study Team" organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") arrived at Dhaka, The People's Republic of Bangladesh on 11th of May 2003 for the second year's work.

The Study Team submitted twenty (20) copies of Progress Report summarizing the results of first year's work and plan of second year's work to Survey of Bangladesh (hereinafter referred to "SOB").

A meeting on Progress Report was held on 20th of May 2003 between the Study Team and SOB. A list of participants is attached in Annex.

Progress Report was basically accepted by SOB. During the meeting, the following points were confirmed between the both parties.

1. The Study Team requested SOB to prepare the necessary space with electricity and air condition for the equipment that will be required in the Study. SOB explained that SOB is already considering the room space and related facilities such as air conditioner, power supply system and so on for the equipment. In this respect, TAPP has been prepared and forwarded to the Ministry for approval.
2. SOB expressed that the printing of 122 sheets topographic maps of 1:5,000 scale of the Study will take long time due to the reason of normal printing work and printing works for other projects of SOB. Therefore, it is considered that the printing of 122 sheets topographic maps will not be completed by July 2004 as the printing of large number of sheets will take 6 to 8 months time in normal working schedule. The Study Team promised to convey SOB's anxiety to JICA HQ Office.
3. The Study Team requested SOB to collect the necessary data of administrative boundaries and to draw the administrative boundaries on the manuscript of 1:5,000 topographic plotted out map at the 3rd field work in Bangladesh and SOB agreed it.
4. In respect of technology transfer, SOB requested JICA to supply cartographic and photogrammetric equipments or software compatible to the existing equipments SOB is presently using. The Study Team agreed to convey the request of SOB to JICA HQ Office.

List of Participants

Survey of Bangladesh

Brig. Gen. A.H.M. Shahidullah

Maj. Khandaker Aftab Hossain

Surveyor General of Bangladesh

Director, Development Survey

Japanese side

The Study Team

Mr. Toru Watanabe

Mr. Takashi Harada

Mr. Yoshiaki Hirota

Ms. Michi Hayashi

Team leader

Field identification/completion

Digital compilation

Administration support

JICA Expert

Mr. Takashi Saito

Appendix 5 ***Minutes of Meeting on Interim Report for The Study on***
Urban Information Management for Greater Dhaka City

**MINUTES OF MEETING
ON
INTERIM REPORT
FOR
THE STUDY
ON
URBAN INFORMATION MANAGEMENT
FOR
GREATER DHAKA CITY
AGREED UPON BETWEEN
SURVEY OF BANGLADESH
AND
THE JAPAN INTERNATIONAL COOPERATION AGENCY**

Dhaka, October 8, 2003

*Amro@mpw.
8/10/03*

Maj. Khandaker Aftab Hossain
Chief Counterpart of the Project

渡辺 徹

Mr. Toru Watanabe
Leader of the JICA Study Team

*মুহাম্মদ শাফিকুল ইসলাম
08/10/03*

Brig Gen Muhammad Shafiqul Islam
Surveyor General
Survey of Bangladesh

The Team for the Study On Urban Information Management For Greater Dhaka City (hereinafter referred to as "The Study" and "The Study Team" organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") arrived at Dhaka, the People's Republic of Bangladesh on 5th of October 2003 for the Second Year's Study (Phase 2).

The Study Team submitted twenty (20) copies of Interim Report summarizing the results of First Year's Study and the Second Year's Study (Phase 1) and plan of Second Year's Study (Phase 2) to Survey of Bangladesh (hereinafter referred to "SOB").

A meeting on Interim Report was held on 7th of October 2003 between the Study Team and SOB. A list of participants is attached in Annex.

Interim Report was basically accepted by SOB. During the meeting, the following points were confirmed between the both parties.

1. SOB requested Study Team to deliver the proof prints of 1:5,000 scale topographic maps for checking by SOB before preparing PS plate and SOB explained that it would take about one month for checking by SOB.

The Study Team explained SOB that it will be difficult to execute this checking by SOB from the viewpoint of the Study Schedule agreed by SOB and JICA on Scope of Work. Therefore, the Study Team requested SOB that checking by SOB will be executed by using the plotted out manuscript prepared by the Study Team for field identification (3) and SOB agreed on it.

2. SOB made a comment that equipment to be procured by JICA, will be purchased from the local companies in Bangladesh from the viewpoint of maintenance and spare parts of the equipment.

The Study Team explained that Digital Plotting System (Socet Set) would be procured from U.S.A. directly due to the termination of sales agreement between maker of Socet Set and sales agent. Therefore, it is impossible to procure through the local companies in Bangladesh and other equipment will be procured through the local companies in Bangladesh. SOB accepted the explanation by the Study Team.

3. SOB explained that it would take a long time for printing of 1:5,000 scale topographic maps by SOB due to the reason of volume of printing work of the Study and also the ordinary works and SOB will not be able to complete the printing by the end of the Study.

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The Study Team understood the situation of SOB concerning the printing by SOB. However the Study Team requested SOB to execute printing work as fast as possible.

4. Concerning the coordinates to be printed on the border of the 1:5,000 scale topographic maps requested by SOB, SOB and the Study Team agreed to put the Longitude and Latitude on the border of the 1:5,000 scale topographic maps instead of metric coordinates from the view point of public use of the final products of the Study.
5. Concerning the copyright of 1:5,000 scale topographic maps, JICA Study Team explained the comment of JICA Head Office as follows:
 - 1) The copyright of the final products of the Study will be kept by both SOB and JICA.
 - 2) JICA agrees to put the copyright sentence as mentioned on Interim Report on 1:5,000 scale topographic maps to be prepared by the Study.
 - 3) In case JICA wants to use the final products of the Study for Japanese ODA (Official Development Assistance) programmes, SOB will agree that the JICA and/or JICA Study Team can use the final products with prior notice to SOB from JICA for the execution of the program without any charge.
 - 4) In case SOB wants to revise the contents of the final products of the Study, SOB can revise without a notice to JICA.
 - 5) An agreement concerning copyright will be made between SOB and JICA before completion of the Study.

SOB explained that SOB is not in a position to decide this matter. SOB also explained that this matter will be discussed with the Government of Bangladesh and the official answer will be informed to JICA Study Team after the discussion with the Government.

JICA Study Team understood the explanation of SOB.

Cor

P₂

Appendix 6 ***Minutes of Meeting on Draft Final Report for The Study on
Urban Information Management for Greater Dhaka City***

**MINUTES OF MEETING
ON
DRAFT FINAL REPORT
FOR
THE STUDY
ON
URBAN INFORMATION MANAGEMENT
FOR
GREATER DHAKA CITY**

**AGREED UPON BETWEEN
THE GOVERNMENT OF THE PEOPLE'S REPUBLIC
OF
BANGLADESH
AND
THE JAPAN INTERNATIONAL COOPERATION AGENCY**

Dhaka, July 2004

Common/1000/29/07/04

Maj. Khandaker Aftab Hossain
Chief Counterpart of the Project

渡辺 徹 29/07/04

Mr. Toru Watanabe
Leader of the JICA Study Team

Muhammad Shafiqul Islam 29/7/04

Brig. Gen. Muhammad Shafiqul Islam
Surveyor General
Survey of Bangladesh

The Team for the Study On Urban Information Management For Greater Dhaka City (hereinafter referred to as "The Study") arrived at Dhaka, the People's Republic of Bangladesh on 27th June 2004 for the Third Year's Study.

The Study Team submitted the Draft Final Report summarizing the whole work of the Study to Survey of Bangladesh (hereinafter referred to as "SOB") and several meetings on the activities of the third year's Study and Draft Final Report were held between the Study Team and SOB.

At the end of the Study, The Study Team expressed the gratitude for the cooperation and assistance provided by SOB for the execution of the Study and SOB also express the appreciation for the devotion of the Study Team to the successful implementation of the Study.

Draft Final Report was basically accepted by SOB. Some minor correction on Draft Final Report were pointed out by SOB and the Study Team agreed to correct them at the time of the preparation of Final Report.

Also, the Study Team submitted the final products of the Study except Final Report to SOB at the end of the field survey in Bangladesh.

List of Participants

Survey of Bangladesh

Brig. Gen. Muhammad Shafiqul Islam

Surveyor General

Maj. Khandaker Aftab Hossain

Director, Development Survey

Japanese Side

The Study Team

Mr. Toru Watanabe

Team leader

Mr. Shigeru Ono

GIS for solid waste management

Mr. Kazumi Suwabe

GIS

Mr. Yoshiaki Hirota

Digital compilation

Mr. Nobuhiro Sata

Digital Mapping

Ms. Michi Hayashi

Administrative support

JICA Expert

Mr. Shinji Takazawa

Appendix 7 Memorandum

MEMORANDUM

Based on the Minutes of Meeting on Inception Report for "The Study on Urban Information Management for Greater Dhaka City", The Study Team and Survey of Bangladesh held the several meetings to decide the 1:20,000 scale aerial photography area and 1:5,000 scale digital mapping area and so.

Concerning above-mentioned items, The Study Team and Survey of Bangladesh agreed as follows.

1. The area shown on the attached figure was agreed as 1:20,000 scale aerial photography area by both parties. Total aerial photography area is not changed (960 km²).
2. The area shown on the attached figure was agreed as 1:5,000 scale digital topographic mapping area by both parties. Total mapping area is not changed (581 km²).
3. Both parties agreed that numbering system of 1:5,000 topographic map sheets shall be No.1, No.2, ... from left top sheet to down as shown on the attached figure.

5th March 2003; Dhaka

Comran Hossain
5/3/2003

Major Khandaaker Aftab Hossain

Director

Development Survey Directorate

Survey of Bangladesh

渡辺 徹

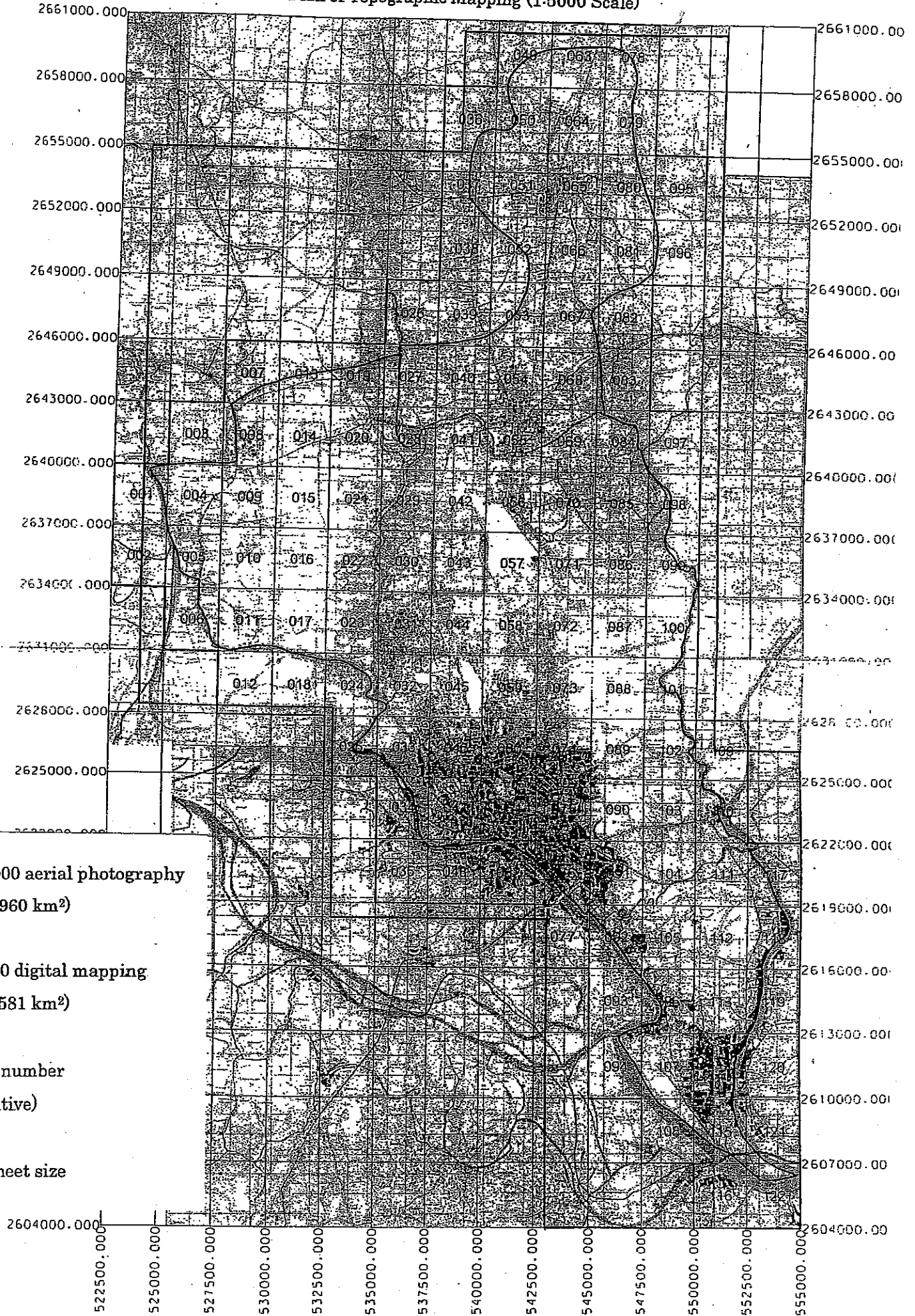
Mr. Toru Watanabe

Leader

JICA Study Team

THE STUDY ON URBAN INFORMATION MANAGEMENT FOR GREATER DHAKA

Plan of Topographic Mapping (1:5000 Scale)



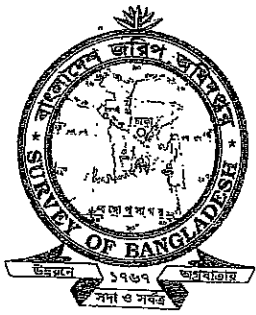
1:20,000 aerial photography
area (960 km²)

1:5,000 digital mapping
area (581 km²)

Sheet number
(Tentative)

One sheet size

Appendix 8 Comments on Layout of Map Style and Map Symbols



SURVEY OF BANGLADESH
OFFICE OF THE SURVEYOR GENERAL
JARIP BHABAN
TEJGAON INDUSTRIAL AREA
DHAKA-1208
Telephone : 811992

No. P-2384/11-G-A-JICA(Urban Info)

Date: 30 June 2003.

To

Mr Toru Watanabe
Team Leader
JICA study team.

Comments on layout of map style and map symbol

From time to time discussion between JICA study team and SOB about map style and map symbol following two points were raised by the JICA study team. The points are

- (1) Whether the copyright reserve should be given in the map layout or not.
- (2) Whether U.T.M coordinates to be shown on the each corner of the map or not.

The comments of SOB on these two points are :-

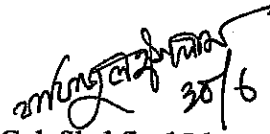
(a) Copyright is the right given to the originator to resist unauthorized copying or publication of same product. This gives the originator the legal right to sue if any deviation is made by copying or alteration of the original product. SOB being the national map making organization has the right to restrict any unauthorized copying, deviation, alteration, and addition of the map. To restrict the unauthorized copying, this copyright note must be placed in the map produced by SOB and JICA.

(b) According to the objectives of the study in scope of works the maps at the scale of 1/5000 will be used by various organization for developing various plans and programmes and SOB will be responsible for proper and effective use of the final products. So to keep the objectives maps will be open to all and will not have any security classification. As per Bangladesh Government rule all new maps or reissue of old maps of Bangladesh on scale 1/4 inch to one mile or 1:250,000 are treated as restricted which are mainly gridded and has the coordinate value. As the maps will be for public use, unrestricted and open, the maps should not have any U.T.M. coordinates instead there will be spherical values of latitude and longitude.

In view of the above SOB gives the following comments

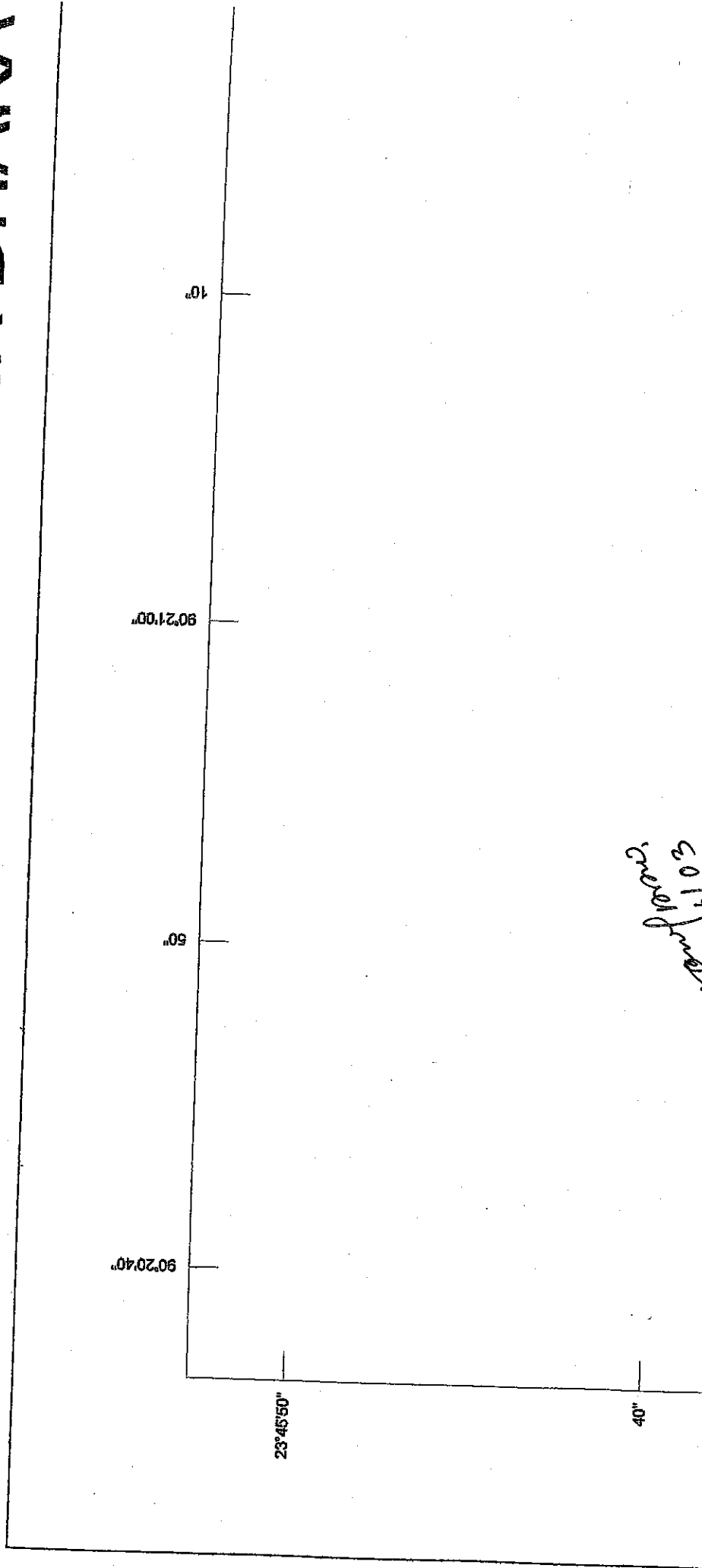
- (i) To keep copyright reserve in the map layout.
- (ii) Not to place U.T.M. coordinates on the border of the map.

This is for your kind consideration and necessary action please.


30/6
Col. Shahfiquel Islam
Surveyor General of Bangladesh
Tejgaon, Dhaka-1208

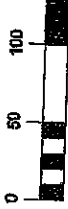
DHAKA, NARAYANGANJ,
GAZIPUR DISTRICT

GREATER DHAKA



*Contract No. 100/03
01/06/03*

This map was prepared jointly by the Japan International Cooperation Agency (JICA) under the Japanese Government Technical Cooperation Program and the Government of the People's Republic of Bangladesh (SOB).



Refer to this map as: 1:5,000 Sheet No.33 1st Edition 2003
 Ellipsoid: Everest 1830

Projection: Bangladesh Universal Transverse Mercator Projection (BUTM)
 Reference point for horizontal coordinates: Datum point at Gulshan

Reference point for elevation: MSL at Bay of Bengal

Contour interval: 2.0m
 Date of aerial photography: January, 2003
 Date of ground control survey: January - February, 2003
 Date of field identification: February - November, 2003
 Date of digital photogrammetric mapping: May, 2003 - January, 2004
 Date of printing: June, 2004

1st Edition 2003
 Published by Survey Of Bangladesh

Handwritten signature and date: 16/6/2004

LINE SYMBOLS	
CONTOUR LINES	
— 10	Index contour
—	Intermediate contour
—	Supplementary contour
ROADS	
—	Highway
—	Superior road
—	Unmetalled road
—	Foot path
—	Road inside compound
—	Road under construction
	Embankment (large)
+++++	Embankment (small)
—	Road, underpass
—	Over bridge, road
—	Distance marker / Road divider
—	Bridge
—	Foot bridge
VEGETATION	
—	Vegetation boundary
—	Cultivation limit

Index to Sheets

1	4	9	14	20	28	41	55	69	84	97
2	5	10	15	21	29	42	56	70	85	98
3	6	11	16	22	30	43	57	71	86	99
	7	12	17	23	31	44	58	72	87	100
		18	24	32	45	59	73	88	101	
			25	33	46	60	74	89	102	109
				34	47	61	75	80	103	110
				35	48	62	76	91	104	111
							77	92	105	112
								93	106	113
								94	107	114
									108	115
										116
										117
										118
										119
										120
										121
										122

GOVERNMENT OF BANGLADESH
COPYRIGHT RESERVED

It is an offence under the Copyright Act to make and issue any copy or copies of this map or any part of this map, with or without alteration and additions, unless the prior written permission of the Surveyor General of Bangladesh has been obtained.

*Common property
01/26/2013*

1000m

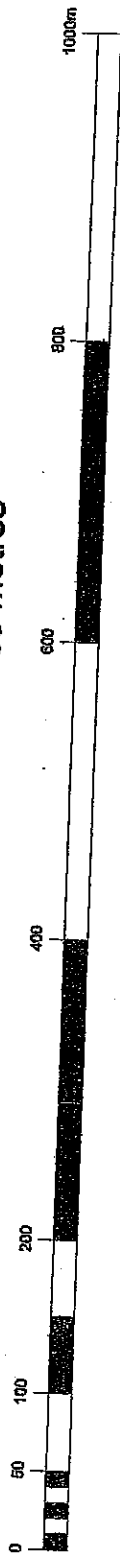


	Tower and antenna		Cultivated land
	Monument		Plantation
	Bus terminal		Coconut tree
	Airport/airfield		Other trees
	Helipoint		Palm tree
	Anchorage		Bush and scrub
	Light house		Bamboo
	Flow direction		Grass
	12.5 GPS point		
	12.56 Benchmark		
	12.3 Spot height		
	Depression		

TINT LEGEND

	Build-up area		Sand
	Swamp		

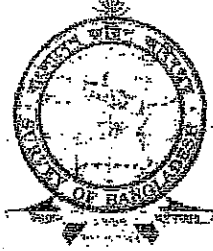
Scale 1 : 5,000 or 1cm to 50 metres



SYMBOLS	ADMINISTRATIVE BOUNDARIES	NATURAL FEATURES	POINT SYMBOLS	OTHER FEATURES
<ul style="list-style-type: none"> Major contour Secondary contour Watercourse Canal Drainage ditch Boundary limit 	<p>ADMINISTRATIVE BOUNDARIES</p> <ul style="list-style-type: none"> District boundary Thana / Upazila boundary Municipal boundary Ward boundary <p>RAILWAYS</p> <ul style="list-style-type: none"> Metre Gauge Broad Gauge Mixed Gauge Over bridge, railway Platform <p>ARTIFICIAL FEATURES</p> <ul style="list-style-type: none"> Building/House Fence Pipe line High voltage electric power transmission with tower Drainage and irrigation canal > 2.0m width Drainage and irrigation canal < 2.0m width Sluice gate Artificial rivetment 	<p>NATURAL FEATURES</p> <ul style="list-style-type: none"> River Stream Lake and pond <p>POINT SYMBOLS</p> <ul style="list-style-type: none"> Consular office Embassy Government office Police station Fire station Hospital Health centre Telephone and Telegraph office Bank Bank 24H Shopping centre Post office Primary school Community centre Mot Church Mosque Temple Idgah Pagoda Cemetery Tomb Grave Hotel Restaurant Cinema hall Factory Warehouse Petrol pump Electric power station Over head tank Water supply station 	<ul style="list-style-type: none"> Tower and antenna Monument Bus terminal Airport/airfield Helipost Anchorage Light house Flow direction GPS point Benchmark Spot height Depression <p>TINT</p> <ul style="list-style-type: none"> Build-up area Swamp 	

Handwritten note: ১১/১১/১১
১১/১১/১১

***Appendix 9 Issue of Film Positives and Topographical Maps Outside
Bangladesh for Necessary Processing in Japan***



SURVEY OF BANGLADESH
SURVEYOR GENERAL OFFICE
TEJGAON, DHAKA-1208
Phone No-8111992
FAX No-9117463

No. P- 330/11-G-A-JICA (URBAN INFO-DHAKA)

Date: 27 January 2003

From: Surveyor General of Bangladesh

To,

Team Leader
JICA Study Team

Sub: **Issue of Film positives and topographical maps outside Bangladesh for necessary processing in Japan.**

As per scope of work Survey of Bangladesh is issuing the subject mentioned materials (List attached Appendix A and Appendix B) after carrying out dubbing of key point installation for necessary processing in Japan in order to prepare large scale map. It may be mentioned here that according to the Rules for classification, custody & issue of aerial photographs and maps of Government of Bangladesh you have to abide by it as given in Appendix F as per agreement.

These materials are to be returned on or before completion of the project titled "The Study on Urban Information Management for Greater Dhaka City"

A H M Shahidullah
Brigadier General
Surveyor General of Bangladesh

Copy:

1. Ministry of Defence
Ganabhan Complex
Sher-e-Bangla Nagar
Dhaka.
2. JICA Dhaka Office
Bangladesh.

Dhaka city aerial photograph positive film list

Run No	Photo No.	Photo No.	Number
1	1	10	10
2	1	10	10
3	1	17	17
4	1	17	17
5	1	17	17
6	1	17	17
7	1	17	17
8	1	17	17
9	1	17	17
10	1	17	17
11	1	17	17
12	1	15	15
13	1	15	15
14	1	15	15
15	1	10	10
16	1	10	10
17	1	10	10
18	1	10	10
19	1	8	8
20	1	11	11
21	1	15	15
22	1	17	17
23	1	21	21
Total			330

List of Topographic Maps

1	78-L-4
2	78-L-8
3	79-I-1
4	79-I-5
5	79-I-6
6	79-I-9
7	79-I-10

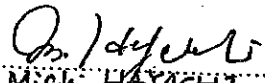
Scale: 1:50,000



AGREEMENT FOR PERMISSION FOR THE EXPORT OF AERIAL
PHOTOGRAPHS OUTSIDE BANGLADESH.

For the export of Contact Prints etc, as per list attached for use of our Head office, we agree: -

- (a) To abide by such security rules as the Government of the People's Republic of Bangladesh may frame, consistent with National Security Requirements
- (b) No Prints Enlargements, etc, of the aerial photographs will be made or supplied to any individual Agency without the specific permission of the Ministry of Defence, Government of the people's Republic of Bangladesh.
- (c) All negatives, enlargements mosaics, etc, of the aerial photographs exported will be returned to the Government of the people's Republic of Bangladesh. When no longer required or before completion of the project titled "The Study on Urban Information Management for Greater Dhaka City".

Signature..... 
Michi HAYASHI
Designation..... Coordinator
Asia Air Survey Co., Ltd.
JICA Bangladesh
Date..... 19 / 1 / 2003

No. P-307 / II-G-A-JICA (URBAN INFO-DHAKA)

Date: 26 January 2003

To,

ASIA AIR SURVEY CO. LTD
and JICA STUDY TEAM

Subject: Aerial photography for the "The Study on Urban Information Management for Greater Dhaka City" in the Peoples Republic of Bangladesh.

Ref: Your letter no. nil dated 16 January 2003.

1. As per your letter under reference we received the following items from you:

- | | | |
|----|----------------------------------|--------------------|
| a. | 1:20000 scale Negative films: | 1 set (2 Rolls) |
| b. | 1:20000 scale Diapositive films: | 1 set (330 prints) |
| c. | 1:20000 scale Contact prints: | 1 set (330 prints) |
| d. | Flight index map: | 1 set (1 sheet) |
| e. | Data of DGPS: | 1 set (1 volume) |

2. It is for your kind information that according to Survey of Bangladesh, some of the products of negative, positive films and contact prints are hazy specially those in the southern areas of Dhaka .



Maj. Khandaker Aftab Hossain
Director Development Survey
Survey of Bangladesh.

Copy to:

Surveyor General of Bangladesh

Appendix10 Letter of Returning of Positive Films

23rd February 2004

To: Major Khandaker Aftab Hossain
Director Development Survey
Survey of Bangladesh

Subject: Returning of Positive Films to SOB

The Study team would like to return the positive films that were used for 1:5,000 scale digital topographic mapping in Japan to SOB.

The list of positive films is shown on the attached list.

Thanks for you cooperation in this project.

渡 辺 徹

Toru Watanabe

Team Leader of the Study Team

Received by:

Date:

Received 330 copies of film positive in four boxes
from JAICA STUDY TEAM which were supplied to JICA
STUDY TEAM for necessary processing out side
Bangladesh (JAPAN)

Muz 4.3.04

Zhaqius 4.3.04

Received
Comanimo
4/3/04

List of Positive Films

Run No.	Photo No. (from)	Number of Sheet (to)	Number of Sheet	Box No.
1	1	10	10	Box-1
2	1	10	10	Box-1
3	1	17	17	Box-1
4	1	17	17	Box-1
5	1	17	17	Box-1
6	1	17	17	Box-1
7	1	17	17	Box-2
8	1	17	17	Box-2
9	1	17	17	Box-2
10	1	17	17	Box-2
11	1	17	17	Box-2
12	1	15	15	Box-3
13	1	15	15	Box-3
14	1	15	15	Box-3
15	1	10	10	Box-3
16	1	10	10	Box-3
17	1	10	10	Box-3
18	1	10	10	Box-3
19	1	8	8	Box-4
20	1	11	11	Box-4
21	1	15	15	Box-4
22	1	17	17	Box-4
23	1	21	21	Box-4
Total			330 Sheets	4 Boxes

Staque
4.3.04

Super
4.3.04

Received
Gomont/mmo
04/02/04