

DHAKA TRANSPORT COORDINATION AUTHORITY (DTCA)

PREPARATION OF COMPREHENSIVE TRANSPORT MASTER PLAN WITH PRE-FEASIBILITY STUDY OF MASS TRANSIT NETWORK & CONCEPTUAL DESIGN OF MULTIMODAL HUB FOR NARAYANGANJ CITY CORPORATION

REQUEST FOR QUOTATION FOR TRAFFIC SURVEY (PACKAGE 3) IN PROJECT STUDY AREA



Request for Quotation (RFQ) No: 7060613-NCTMP-TRA-TOR-003

Issue Date: 13 November 2023

Quotation Submission Letter

[Use Letter-head Pad]

To

Team Leader

Consultancy Services for Preparation of Comprehensive Transport Master Plan with Pre-Feasibility Study of Mass Transit Network & Conceptual Design of Multimodal Hub for Narayanganj City Corporation Project

ACE Consultants Ltd., Bangladesh in Joint Venture with BCL Associates Ltd., SMEC International Pty. Ltd., and YOOSHIN Engineering Corporation

House-27 (4th Floor), Sohrawardy Avenue, Baridhara, Dhaka-1212, Bangladesh

Email: MdMahabubul.Bari@smec.com

Re: Request for Quotation (RFQ) No: 7060613-NCTMP-TRA-TOR-003

We, the undersigned, offer to execute in conformity with the 'Conditions of Contract' for execution of the work named Request for Quotation for Traffic Survey works required for the Preparation of Comprehensive Transport Master Plan with Pre-Feasibility Study of Mass Transit Network & Conceptual Design of Multimodal Hub for Narayanganj City Corporation Project under the Dhaka Transportation Coordination Authority, Bangladesh (Package 3).

Have examined the above-mentioned Request for Quotation (RFQ), inspected the site and being familiar with all supporting information, we offer to execute the contract for the work described in this RFQ using the 'Contract Agreement' included in the RFQ.

The total Price of our Quotation including applicable Tax and VAT is **insert amount both in figure and words**.

Our Quotation shall remain valid for a period of 60 days from the date of submission and it shall remain binding upon us and, may be accepted at any time prior to its expiry date.

We declare that we have the legal capacity to enter a contract with you and have not been declared ineligible by the Government of Bangladesh on charges of engaging in corrupt, fraudulent, collusive or coercive practices.

We are not submitting more than one quotation in this RFQ process in our own name or other name or in different names. We understand that your written invitation to sign the contract shall become binding upon us, until a formal contract is signed.

We have examined and have no reservations to the RFQ document issued by you on 13 November 2023.

We understand that you reserve the right to reject all the quotations or annul the procurement proceedings without incurring any liability to us.

Signature of the Bidder

Seal

Date

INTRODUCTION

Narayanganj, a city in Bangladesh, is forked by the Shitalakshya River. A bustling river port due to its convenient location and good transport connections through road, rail, and waterways, Narayanganj is still a thriving business place for thousands of businesses. For the capital Dhaka, Narayanganj serves as a gateway to the Sylhet and Chattogram Region. In the recent past (2011), the Narayanganj Municipality was upgraded to Narayanganj City Corporation (NCC) coining Narayanganj, Siddhirganj, and Kadamrasul Municipality on the opposite bank of the Sitalakshya River to ensure a better living place.

However, due to unregulated development, unplanned urbanization, and an influx of people from nearby districts seeking job opportunities, NCC has become a congested and disorderly place with heavy traffic. The city, covering an area of 72.43 square kms, has a population of approximately two million people. Despite its challenges, Narayanganj remains an important commercial and industrial hub in Bangladesh. Narayanganj has been identified as one of the ten poorest districts of Bangladesh.

DTCA has undertaken a project to develop a comprehensive transport master plan (CTMP) for the Narayanganj City Corporation (NCC) area. The executing agency, DTCA, has appointed the joint venture consisting of ACE Consultant Ltd. (lead firm), BCL Associates Ltd., SMEC International Pty Ltd., and YOOSHIN Engineering Corporation to provide consultancy services for "Package No S1: Preparation of Comprehensive Transport Master Plan with Pre-Feasibility Study of Mass Transit Network and Conceptual Design of Multimodal Hub for Narayanganj City Corporation." This assignment is part of the "Preparation of Comprehensive Transport Master for Narayanganj and Gazipur City Corporation Project," which is funded by the Government of the People's Republic of Bangladesh (GoB).

To undertake the study, the Consultant intends to undertake the following traffic survey. **For Traffic survey work of NCC CTMP is divided into three packages which are shown in the table below.**

Package one	Package two	Package three
1. Classified Traffic Count (CTC); (Location: 14)	1. Classified Traffic Count (CTC); (Location: 15)	1. Axle Load Survey
2. Roadside Interview (RSI) Survey; (Location: 14)	2. Roadside Interview (RSI) Survey; (Location: 15)	
3. Pedestrian Count and Interview (PCI); (Location: 16)	3. Pedestrian Count and Interview (PCI); (Location: 17)	
4. Stated Preference Survey (SPS)	4. Travel Time Survey (TT)	
5. Bus Operator Survey (BOS)	5. Household Interview Survey (HIS)	
6. Bording Alighting Survey (BAS)	6. Establishment Survey	
7. On-board Passenger Survey	7. Tour Dairy Survey	
8. Terminal Passenger Survey and Count		

This TOR is under package 3 which will cover the following survey

Survey for Package three	Purpose
1. Axle Load Survey	Estimate the load distribution on road

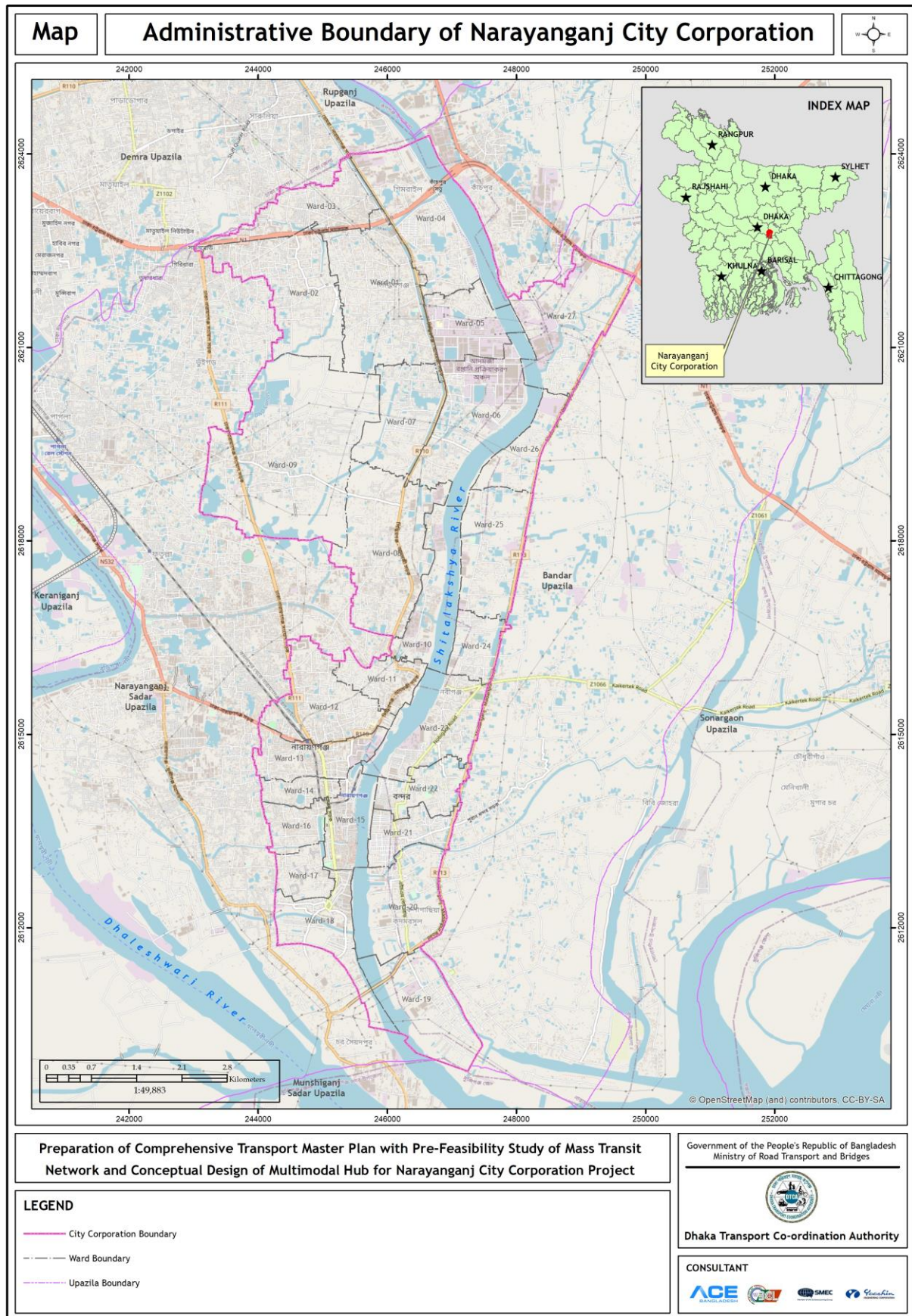


Figure 1: Study Area of Narayanganj City Corporation

INSTRUCTION TO BIDDERS

SUBMISSION AND OPENING OF THE QUOTATION AND OTHER CONDITIONS

Bidders shall submit their 'Quotations' consisting of 'Technical Proposal' and 'Financial Proposal' for the survey. The Sub Consultant is advised to inspect the project area before submitting the proposal. The Technical Proposal shall include but not limited to,

- **'Method Statement'** to be followed to carry out the field survey and other relevant works.
- Detailed **'Work Programme'** showing the tasks to be undertaken and the duration of each individual task to be completed within the stipulated time period.
- Separate **'Safe Work Method Statement (SWMS)'** identifying hazards associated with individual tasks and control measures to be adopted in order to minimize the risk.
- **'Company Profile'** focusing on relevant information concerning previous similar Work Records in relevant Survey works within the past five years with their **project completion certificates or work order from their clients.**
- **Signed** (with Ballpoint Pen by Key Persons) and **Updated CVs** for key personnel such as Team Leader/Project Manager, Project Coordinator, Sr. Field Supervisor and Field Supervisor need to be assigned for the work and these need to be authenticated by the bidder.
- **Equipment's workability** and availability evidence/documents should be submitted.
- **Updated Trade License or Article of Association or Incorporation** (as appropriate).
- **Updated Income Tax and VAT Certificates.**
- **Bidders are highly encouraged to submit a checklist as a summary of documents included.**
- **Bidders are highly encouraged to submit their documents in black and white rather than using colour printer.**
- **Please print both sides of a page to save the environment for both technical and financial proposals**
- **The Sub Consultant will need to seek approval from the local law enforcement authority prior to the commencement of the survey as soon as possible. DTCA, the client as well as the JV consultant will be able to help the Sub Consultant in this regard.**
- Key personnel qualifications, minimum experience and required number of CV listed in the table below need to submit in the proposal.

SL. No.	Designation	Qualification	Minimum Experience (Years)	No of Persons
1	Leader/Project Manager	BSc in Civil Engineering / Relevant field	5	1
2	Project Coordinator	BSc or Diploma in civil engineering/ relevant field	3	1
3	Sr. Field Supervisor	Diploma in civil engineering/ relevant field	2	2
4	Field Supervisor	Diploma in civil engineering/ relevant field	1	4

The Technical and Financial proposals shall be submitted separately in **sealed envelope**. **One original with two photocopies of 'Technical Proposal' in a sealed envelope** and **One original with Two Photocopies of 'Financial Proposal' in another sealed envelope.**

1. Sealed Envelope 01: With Only Technical Proposal for Technical Evaluation (One original with two photocopies).
2. Sealed Envelope 02: With Only Financial Proposal for Bid Opening and Financial Evaluation (One original with two photocopies).

After completion of Technical Evaluation with sealed envelope 01, the Consultant will undertake financial evaluation. The minimum threshold for Technical Proposal will be decided by the Technical Committee. Only technically accepted proposals will be selected for financial evaluation. After the financial evaluation, only the lowest bidder will be invited for negotiations and subsequent award. If for any reasons, the lowest bidder is unable to accept the offer, the Consultant reserves the right to reach the subsequent lowest bidders.

The Consultant's Bid Committee reserves the right to call for negotiation with recommendation of Technical Committee. In a case where two or more responsive quotations have the same evaluated price, the successful quotation shall be decided by lottery. The Sub-Contractors are requested to specify the unit cost of each type of traffic survey as requested in BOQ. In case of any amendments, the total cost of the survey will be calculated based on the unit cost.

The Consultant reserves the right to cancel or amend the full traffic survey at any time during the procurement process.

WORKS PROGRAMME/ METHODOLOGY

The Bidders shall submit a detailed methodology explaining how they propose to conduct the traffic survey as described in the TOR including the types of equipment to be used. They shall also submit a 'Work Programme' outlining the time frame.

For the detailed scope of work, please check the Terms of Reference (TOR) and specification.

The table below illustrates the technical evaluation details as well as the scoring for each of them. Bidders are requested to follow the evaluation scoring to prepare their proposal.

Table 0-1: Technical Evaluation Form and Scoring

Sl. No.	Description	Percentage Mark (max)	Details
01	Trade License or Articles of Association or Certificate of Incorporation (Most updated or including renewal documents)	Mandatory	Absence of the document or renewed document will disqualify the bidders from the bidding process.
02	VAT Registration Certificate (BIN)	Mandatory	Absence of the document will disqualify the bidders from the bidding process.
03	Tax Certificate (TIN Certificate)	Mandatory	Absence of the document will disqualify the bidders from the bidding process.
04	Financial Solvency Certificate	Mandatory	
05	Method Statement	20	
06	Detail Work Program	10	
07	Safe Work Method Statement (SWMS)	10	

Sl. No.	Description	Percentage Mark (max)	Details
08	Relevant Work Experience or Work Record by Company or Key Persons in the last 5 years	20	
09	Signed CV of Technical Personnel	20	
10	Equipment's workability and availability (Evidence/Documents)	15	
11	Quality of report submission	5	

Preparation of Comprehensive Transport Master Plan with Pre-Feasibility Study of Mass Transit Network & Conceptual Design of Multimodal Hub for Narayanganj City Corporation Dhaka Transport Coordination Authority



TERMS OF REFERENCE

Traffic Survey (Package-3)

13 November 2023

Document Control

Document:	Terms of Reference for Traffic Survey (Package-3)
Contract Name:	Consultancy Services for Preparation of Comprehensive Transport Master Plan with Pre-Feasibility Study of Mass Transit Network & Conceptual Design of Multimodal Hub for Narayanganj City Corporation under Dhaka Transport Coordination Authority
Document Number:	7060613-NCTMP-TRA-TOR-003
Revision Number:	R 0

Revision History

Revision No.	Date	Prepared by	Reviewed by	Approved for Issue by
R 0	13 November 2023	Faysal Ibn Rahman, NMT Expert	Md. Abul Quasem Siddique, Deputy Team Leader	Md. Mahabubul Bari, Team Leader

Issue Register

Distribution List	Date Issued	Number of Copies
Roads and Highway Department, Office of the Project Implementation Units	13 November 2023	5
ACE Consultants Ltd.	13 November 2023	1
BCL Associates Ltd.	13 November 2023	1
YOOSHIN Engineering Corporation	13 November 2023	1
SMEC International Pty. Ltd.	13 November 2023	1
Office Library (Hollywood Tower, Pragati Sarani Road, Baridhara J-block, Dhaka 1212)	13 November 2023	1

Consultant Details

Approved by:	ACE Consultants Ltd., in JV with BCL Associates Ltd., SMEC International Pty Ltd., Yooshin International Corporation		
Address:	Anabil Tower 8th Floor, Plot 03 Block NW (J), Kemal Ataturk Avenue, Gulshan 2, Dhaka.		
Signature:	Md. Mahabubul Bari		
Tel:	+8802226600568-72	Fax:	+8802226600573
Email:	Info.ace@smec.com	Website:	www.acebd.com

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ABBREVIATIONS

BOQ	Bill of Quantities
CO	Carbon Monoxide
CTMP	City Transport Master Plan
CV	Curriculum Vitae
EPZ	Export Processing Zone
GOB	Government of Bangladesh
JV	Joint Venture
MS	Micro Soft
NCC	Narayanganj City Corporation
PM	Particulate Matter
PPE	Personal Protection Equipment
RFQ	Request for Quotation
RHD	Roads and Highways
SLM	Sound Level Meter
SWMS	Safe Work Method Statement
TIN	Taxpayer Identification Number
TMP	Traffic Management Plan
TOR	Terms of Reference
VAT	Value Added Tax

1 OVERVIEW

The assigned task for the CTMP for NCC includes conducting a pre-feasibility study of a mass transit system and creating a conceptual design for a multi-modal hub. The focus of this study is to address social, economic, and environmental concerns while promoting citizen participation. The goal is to support NCC's vision of developing a planned city that is eco-friendly, clean, healthy, safe, and free from poverty. The CTMP aims to ensure that the transport system in Narayanganj is modern, efficient, sustainable, and capable of meeting the needs of its growing population.

1.1 Introduction

This document shall be applied to the "Traffic Survey (Package- 3) " for " Preparation of Comprehensive Transport Master Plan with Pre-Feasibility Study of Mass Transit Network and Conceptual Design of Multimodal Hub for Narayanganj City Corporation." Being carried out by the ACE-BCL-SMEC-YOOSHIN JV. Which consists of ACE Consultant Ltd. (lead firm), BCL Associates Ltd., SMEC International Pty Ltd., and YOOSHIN Engineering Corporation

To undertake the study, the Consultant intends to undertake a comprehensive traffic survey. For the Traffic survey work of NCC CTMP is divided into three packages. This document outlines the Terms of Reference (TOR) for the proposed traffic survey under package 3 as described in Table 1-1.

Table 1-1: Proposed Traffic Survey

Survey for Package three	Purpose
1. Axle Load Survey	Estimate the load distribution on road

1.2 Objective

For NCC CTMP as well as to ensure a successful pre-feasibility study of a mass transit system and creating a conceptual design for a multi-modal hub, a comprehensive traffic survey is required at specific locations.

1.3 Project area

Narayanganj City Corporation and its vicinity.

1.4 Scope of Works

The scope of the traffic survey includes, but not necessarily limited to, the following:

- Axle Load Survey
- Preparation of all relevant safety documentation (e.g., SWMS) and submission to the JV Consultant for approval prior to conducting site works. It is the responsibility of the survey company to take all necessary steps to conduct the survey work safely.

1.5 The Client and the JV Consultant

The Client is the Dhaka Transport Coordination Authority (DTCA) and the JV Consultants are ACE Consultants Ltd., in JV with BCL Associates Ltd., SMEC International Pty Ltd., Yooshin International Corporation. All survey works shall be monitored in the field by the JV Consultant and the representative of DTCA. All survey works are required to be approved by the JV Consultant.

1.6 Sub-Consultant

All survey work associated with the project will be carried out by the Sub-Consultant appointed under this agreement. The bidder before the award of the work will undergo a technical and financial evaluation (separately).

1.7 Sub-Consultant's Obligations

The Sub-Consultant shall liaise with the representative of the JV Consultant and/ or DTCA on a daily basis to discuss day-to-day activities, progress, and problems encountered. In performing their duties, the Sub-Consultant shall:

- Deploy suitably qualified and experienced staff with each survey team.
- Obtain all necessary approval/ prior permission from the relevant authority.
- Submit a detailed programme of works showing the tasks to be undertaken and the duration of each individual task.
- Submit detailed method statement of all field survey works before commencing site operations to ensure safety.
- Submit daily progress report for all field surveys to JV Consultant.
- If applicable, provide a list of all machinery, equipment, and software necessary to carry out the work along with their updated workability, calibration, and license renewal records.
- Organize necessary transport and accommodation for survey staff to perform the fieldwork.
- During the execution of the work, submit progress reports to the JV Consultant.

JV Consultant considers safety as the utmost priority in conducting any field survey work. It is obligatory for the Sub-Consultant to take all necessary steps to conduct the survey work in a safe manner. All machinery and equipment to be used in the field must be safe to use and field personnel must wear appropriate “Personal Protection Equipment” (PPE).

While surveying on/near existing roads or in a crowded area, an appropriate “Traffic Management Plan” (TMP) shall be prepared and implemented during field survey work, as required. Caution shall be exercised while surveying near an existing overhead power line or any other hazardous objects or situation. No member of the survey team should take any risks to perform survey work near live traffic.

1.8 Duration of Work

- Field survey work shall commence within seven (07) calendar days from the date of award of the contract.
- Survey duration and time details are shown in Table 1-2.

Table 1-2: Survey duration and time

Survey for Package One	Survey Duration and Time
1. Axle Load Survey	To cover at least 300 vehicles for each direction at each site, with sufficient samples for each axle class of the total traffic for 24 hours.

1.9 Transportation

All travel arrangements including transportation of the Sub-Consultant’s personnel and equipment to perform the job at site and transportation between job sites shall be provided by the Sub-Consultant.

1.10 Accommodation and Other Expenses

Accommodation for the Sub-Consultant’s personnel and storage of the equipment at the site and other expenses such as the establishment of a temporary tent, per diem, coordination fees, communication fees, first aid kit, medicine, etc., shall be provided by the Sub-Consultant.

1.11 Work Programme and Method Statement

The Sub-Consultant shall submit a ‘Work Programme’ outlining how they propose to execute the works within the timeframe given in the relevant clause of the TOR. The Sub-Consultant shall submit details of the technical team including CVs of all technical personnel. The Sub-Consultant shall submit details of equipment and machineries to be used in executing the works. Availability of the technical personnel, equipment and machineries will be verified by the JV Consultant. The Sub-Consultant shall submit details of his work experience in undertaking similar works completed within the last 5 years. The Sub-Consultant shall submit a ‘Method Statement’ of how he will execute the works as per the requirements of the TOR before starting his works. A separate ‘Safe Work Method

Statement' (SWMS) identifying potential hazards associated with individual tasks and control measures to be adopted in order to minimize the risk, shall be submitted.

In order to execute the survey works within the proposed timeframe, the survey team is required to be mobilised as early as possible. Specific survey locations are to be agreed by the JV Consultant. The minimum requirement of the equipment and manpower should be specified from Sub-Consultants.

1.12 Terms of Payment

Payment shall be made as follows:

- The rates will cover all costs incurred by the Sub-Consultant, and no separate payment shall be made for any other costs not included in the Bill of Quantities (BOQ).
- After mobilization for field survey work, the sub-consultant may claim 20% of the total contract value.
- After completion of the field survey work and submission of the deliverables, the sub-consultant may claim 50% of the total contract value.
- The remaining final 30% payment will be paid on acceptance of all the electronic copies and paper copies of the documents. Final payment shall be made within one (01) month of the submission of the final invoice. This shall be submitted after the acceptance of the Sub-Consultant's all deliverables (both electronic and paper versions).
- A penalty of BDT 2,500.00 per day will be imposed for any delay in the deliverables. However, the maximum amount of penalty will be 20% of the final bill amount.
- Tax and VAT will be deducted from each payment as per the rules of the Government of Bangladesh.
- **Any delay in starting the survey work mentioned in Section No. 1.8 will result in the termination of the contract.**

Invoices shall be submitted to the JV Consultant's Team Leader. Advance payment will not be allowed for this work.

2 Technical Specification for Field Work and Data Collection

This site appreciation has been prepared based on the site reconnaissance survey carried out by the Consultant's team. The Sub-consultant, after a site visit, may propose alternative locations due to unavoidable circumstances with prior discussion with the Consultant.

The consultant has undertaken site visit to familiarize with the ground conditions.

2.1 Axle Load Survey

The objective is to load distribution on load.

2.1.1 Survey Methodology and Equipment Specifications

- The Sub-consultants arrange all survey equipment.
- The survey should cover at least 300 vehicles for each direction at each site, with sufficient samples for each axle class of the total traffic. (i.e.; 600 vehicles for each location)
- The survey is recommended to carry out on a portable weigh pad (weigh-in motion) with a maximum tolerance of 5%.
- Axle load survey need to be conducted for the freight vehicles (see: Table 2-1).
- Survey needs to be conducted for one day (24 hours).
- Simultaneously, 15-minute interval directional traffic flow needs to be counted at survey location and Video cameras should be used to capture video recordings. Only freight vehicle (see: Table 2-1) need to consider for count.
- Video cameras should be equipped with night vision capabilities and wide-angle vision approved by JV Consultants.
- Video camera should be mounted above vehicle height (**approximately 6 to 10 m above**) adjacent to or in the middle (on the median) of the roadway.
- Video footage should be clear enough to identify vehicle classification.
- Availability of lights during dark.
- Due to adverse weather or for absence of electricity, an alternative power supply needs to be provided.
- In addition to the axle load, each surveyed vehicle should be photographed, and the load-carrying section should be measured for the following: width, length, height, origin-destination, commodity type, and vehicle number plate information.
- Road safety measure need to be taken from sub consultant.

Table 2-1: List of Vehicle Need to Consider for Axle Load Survey

Goods Vehicles Classification	RHD Type	RHD Description
Utility Vehicle/4-Wheel Drive/ SUV	Utility	Pick-ups, jeeps, and four wheels drive vehicles, such as Pajero's and Land Rover's.
Small Goods Vehicle/Pick-up/Covered Van	Light Truck	Small trucks up to 3 tonne payloads. The most typical example is the Jeep based conversion.
Cart	Cart	All animal and manually drawn/pushed carts.
2 Axle Truck	Medium Truck	All 2-axle rigid trucks over three tonnes payload. Typical medium trucks are the Hindustan Bedford, "English" Bedford and Hino trucks of about 10 tonnes gross vehicle weight. Agricultural tractors and trailers are also included in this category.
3 Axle Truck	Heavy Truck	Three or more axles. Includes multi-axle tandem trucks, container carriers and other articulated vehicles.
4 Axle Truck		
5 Axle Truck		
6 Axle Truck		
7 Axle Truck		
Others		Local transport such as Nasimon.

—

2.1.2 Location and Duration of Survey

The following three locations will be considered for the axle load survey. Details of the locations are shown in Table 2-2.

1. R110 – location from Nabiganj ferry ghat to Chasara (both direction)
2. R810 – location from Pangoan (ICT) to Chasara (both direction)
3. R811 - location from Signboard to Chashara (both direction)

Table 2-2: Location of Axle Load Survey

SL. No.	Union/Ward No.	Adress	Road Type	Latitude	Longitude
1	Ward no. 12	Kanpur	Regional Road (R110)	23.627072°	90.509753°
2	Fatullah	Fatullah	Primary Road (R810)	23.643574°	90.471499°

SL. No.	Union/Ward No.	Address	Road Type	Latitude	Longitude
3	Ward no. 09	Firoj filling station	Regional Road (R811)	23.667525°	90.485655°

survey location map is shown in **Appendix A**.

Survey duration: 24 hours (one day)

2.1.3 Data Entry Sheet

Data collection form will be provided prior to field survey.

3 DATA DIGITALIZATION, ANALYSIS AND ELECTRONIC COPY

All survey work data need to be digitised, analysed, and supplied in electronic format.

The deliverables of the data will include:

- Freight traffic data needs to be converted into spreadsheets (preferably in MS Excel) for classified traffic.
- Axle load survey data needs to be converted into spreadsheets (preferably in MS Excel).

4 Deliverables

The Sub-Consultant needs to ensure the deliverables of the following.

- All video data in a portable hard disk.
- Electronic copy of all survey data (preferably in MS Excel Files).
- Electronic copy of Freight Traffic Count Survey (preferably in MS Excel Files).
- All paper copies of Axle load survey data (if any).
- All electronic copies of Axle load survey data.
- Deliverables should be supplied within **14 days** of completion of the Field Survey

5 Schedule of Field Survey Work

Tentative schedule of the field survey work is shown in the Table 5-1 It is recommended to follow the field survey schedule to comply with project duration requirement.

Table 5-1: Schedule of survey

SL. No.	DESCRIPTION	ITEMS	Month 1				Month 2
			W1	W2	W3	W4	W1
1	Contract Signing and mobilization						
2	Axle load survey	Conducting the Field survey					
		Data entry					
3	Survey Report Submission	Draft					
		Final Report					

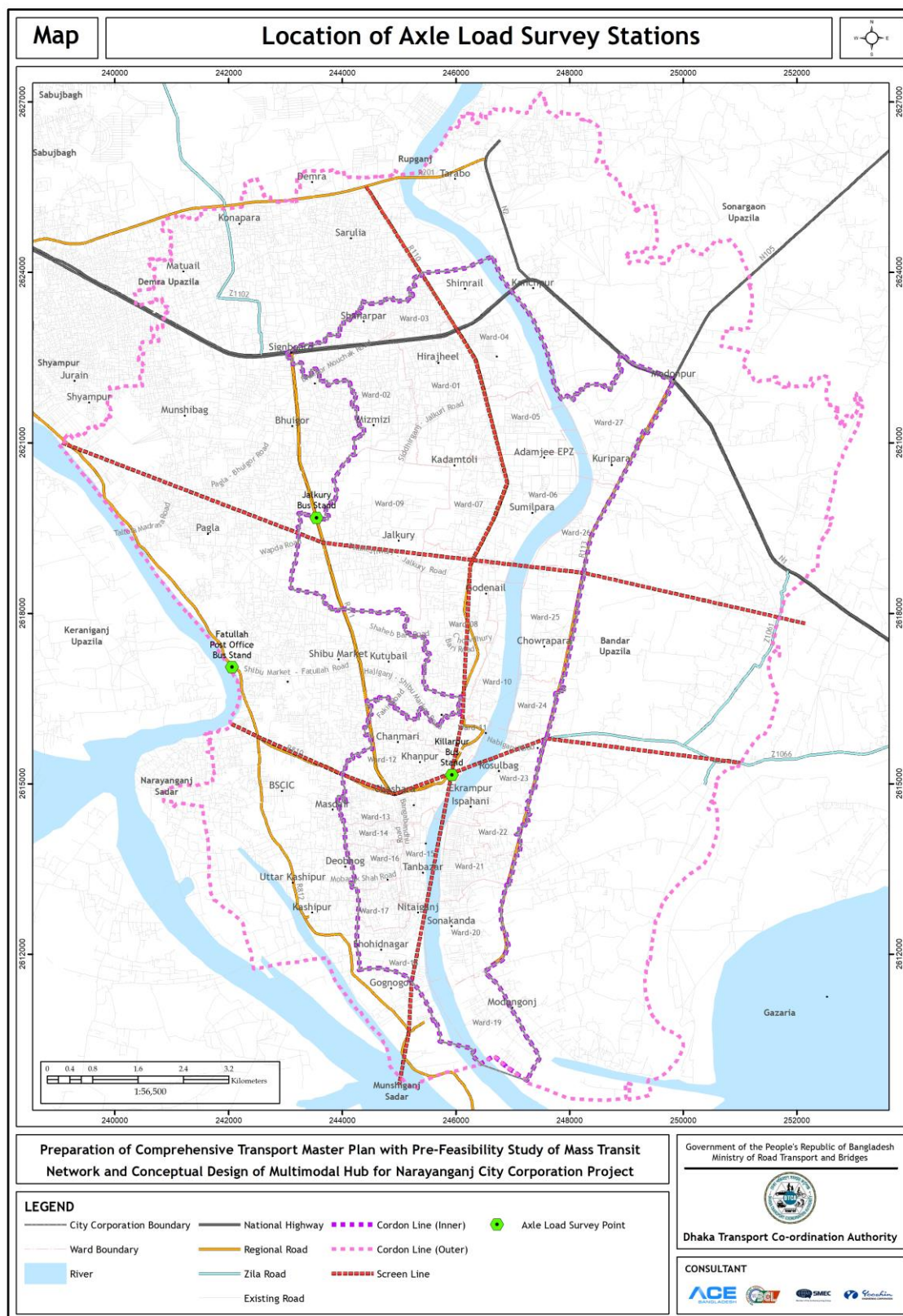
6 Bill of Quantities

The Bill of Quantities (BOQ) is specified in the table below. The quantity included in Table is indicative and subject to variation in line with the actual field condition.

Table 6-1: Templet for financial proposal

Templet for Financial Proposal (Package-3)					
Item No	Details of Survey Item	Types of Items	Quantity	Unit Rate (BDT)	Amount (BDT)
1. Axle Load Survey					
1.1	Axle Load survey	Number of Locations	3		-
9. Report					
9.1	Final Report	Copy	5		
A. Total amount excluding VAT & TAX (BDT)					-
B. $AIT=(A/0.9)*0.1$					-
C. $VAT=(A+B)*0.15$					-
Total amount including VAT & TAX (BDT)= (A+B+C)					-

Appendix A Axle Load Survey Location



Appendix B Axle Load Survey Form

Surveyor Information

Surveyor name:

Survey location: Location code:

Location direction from: to:

Duration starts from: to:

Date:

Weather: (Put a tick)

Sunny		Rainy		Cloudy		Windy		Stormy	
-------	--	-------	--	--------	--	-------	--	--------	--

SL No.	Vehicle Type	SL No.	Vehicle Type
1)	Rickshaw/ Rickshaw Van	7)	3 Axle Truck
2)	Motorized 3 - Wheeler/ CNG/ Mishuk/ Auto	8)	4 Axle Truck
3)	Utility Vehicle/4-Wheel Drive/SUV	9)	5 Axle Truck
4)	Human Haulier/ Leguna/ Tempo	10)	6 Axle Truck
5)	Small Goods Vehicle/ Pick-up/ Covered Van	11)	7 Axle Truck
6)	2 Axle Truck	12)	Other

Commodity Description:

Commodity type:

Sl. No.	Commodity Type	Please ✓ on the relevant box
1	Agricultural Product and Live Animal	
2	Food stuffs and animal fodder	
3	Solid Mineral fuel	
4	Petroleum Products	
5	Ores and Mineral waste	
6	Metal Product	
7	Crude and manufacturer building materials	
8	Fertilizer	
9	Chemical	
10	Machineries, Transport equipment, Manufactured articles, and miscellaneous articles	

Data Collection:

SL No.	Time (24hr)	Vehicle Type	Commodity Type	License Plate No.	Load Type (Empty/ Loaded)	Origin		Destination		Vehicle Height (m)	Vehicle Length (m)	1st Axle (Ton)	2nd Axle (Ton)	3rd Axle (Ton)	4th Axle (Ton)	5th Axle (Ton)	6th Axle (Ton)	7th Axle (Ton)	Gross Weight (Ton)	Remarks
						Ward/Union	Upazila	Ward/Union	Upazila											

