Terms of Reference (ToR)

Transaction Advisory Services for "Construction of Multi-modal Transport Hub at Dhaka Railway Station" at Kamalapur.

Background

The project for development of a Multi-modal Transport Hub (hereafter "MmTH") at Dhaka Railway Station area at Kamalapur (hereafter Dhaka Railway Station) proposed by Bangladesh Railway (hereafter "BR") was in-principle by the Cabinet Committee on Economic Affairs (CCEA) on 17 October 2018. Later on, this project has been considered under the G2G PPP program with Japan in accordance with the "Policy for Implementing PPP Projects through Government to Government (G2G) Partnership, 2017".

Based on the signed "Memorandum of Cooperation" (hereafter "MoC") on 15 June 2017 between Public Private Partnership Authority, Prime Minister's Office, Government of the People's Republic of Bangladesh (hereafter "PPPA") and Ministry of Land, Infrastructure, Transport and Tourism, Japan (hereafter "MLIT") under this Policy, upon recommendation by MLIT, Government of Japanese investor(s) may take ~~a~~ part in potential PPP projects preferably (without any tendering process).

Following MoC, the project is presented at the 1st "Bangladesh-Japan Joint PPP Platform Meeting" held in Dhaka on 6 December 2017. At the Second "Bangladesh-Japan Joint PPP Platform Meeting" held in Tokyo during 7-9 June 2018, MLIT recommended a Sub-working Group (hereafter "SWG") led by Kajima Corporation as the potential Private Partner for developing the project. The SWG presented proposed "Conceptual Proposal" in the 3rd "Bangladesh-Japan Joint PPP Platform Meeting" held in Dhaka on 21 March 2019 and the "Conceptual Proposal" has been approved.

Project Description

The Construction of Dhaka Railway Station at Kamalapur (hereafter Dhaka Railway Station) was completed in 1969, and the station facilities are not sufficient enough to cater to current passengers' requirement. Rail tracks, supporting facilities, waiting spaces and workshops for trains are located on the middle and east part of the station, and only a narrow pedestrian deck provides a walking access between the east and west side of the station. Existing Inland Container Depot (hereafter "Kamalapur ICD") occupies estimated 40.6 acres of land in the southern part.

Taking advantage of the relocation of existing Kamalapur ICD to near Dhirasram station (currently planned to be relocated by 2024 as another PPP project), Dhaka Railway Station MmTH Project aims to redevelop the existing station area and the vacant land after the relocation of the ICD. The development shall be toward development of an integrated "MmTH" which shall provide efficient connections among various transport modes, together with commercial developments to financially support BR's operations and maintenance by their cash-flow (hereafter "Project A"). The project scope also includes redevelopment of BR's staff housing site on the northern side of the station (hereafter "Project B") (estimated 98.6 acres), excluding Railway Hospital.

At present, 4 MRT Lines (MRT Line 1, 2, 4, 6) are planned or considered by Dhaka Mass Transit Company Limited (DMTCL) to be directly connected with (or set close with) the MmTH, and BR is preparing a plan to construct High-speed Railways (hereafter "HSR") from Chattogram and other major cities in Bangladesh. Dhaka Elevated Expressway (hereafter "DEE"), under construction by Italian-Thai Development (i.e., PPP developer for Bangladesh Bridge Authority [hereafter "BBA"]), is designed along the Atish Dipankor Road, eastern border of the project site, and BBA is also conducting Feasibility Study of "Subway" program which also assumes underground connection(s) with the MmTH.

Map and Project Location Information

Objective of the Consulting Assignment

The objective of this assignment is to procure transaction related services:

a) To assess technical, commercial, financial, environmental, legal and social viability for Construction of Multi-modal Transport Hub at Dhaka Railway Station, Kamalapur.

   Subject to a positive confirmation of the viability of the project based on outputs above and ministerial confirmation for launching procurement-

b) To assist the Government in delivering, designing and implementing the project on the basis of a PPP structure.

c) To structure the project, develop a commercial model, prepare bid and contract document, assist in evaluating bid documents and award of the project in a manner which ensures:
   - Engagement of best private sector investor which offer best value for money (VfM) to the contracting authority,
   - Financing of the capital cost by the concessionaire and required funding to recoup the cost,
   - Optimizing the revenue potential of the project.

Project Delivery Role

The PPP Authority is procuring the Transaction Advisor to support the Contracting Authority (BR) and Line Ministry (Ministry of Railways, hereafter "MoR"), to successfully deliver the Project based on the outcome of a series of discussions and agreements with the SWG. Therefore, the Transaction Advisor will be requested to provide a set of required technical services, carry out commercial feasibility, prepare bidding documents including PPP contract and provide procurement support in close coordination with the SWG. PPP Authority shall maintain an oversight role throughout the various phases of the project development. Payment shall be based on successful delivery of deliverables set out in the Scope of the Services subject to approval from BR.

Scope of the Services

The assignment is divided in 3 phases as following:
Phase 1: Technical Study
Phase 2: Detailed Feasibility Study
Phase 3: Preparation of Bid documents, Procurement and Implementation

Phase 1: Technical Study

1. <u>Topographic Survey and Land Use Survey (Introductory)</u>

A. Topographic Survey

i] Existing maps and GIS data collection (including "Measure Map")
ii] "Plane Survey"
- Exact boundaries and coordinates of the BR Land
- Exact location and size of facilities located in the BR land, such as railway facilities

B. Land Use Survey

i] General
- Land history
- Current Use of Lands (residential, commercial, roads, parks, ~~etc~~ and others.)

ii] BR-owned lands [present]
- Confirmation of boundary for each land use and current status
- Current status of each housing unit ~~and~~ residents and others.
- Key information on non-residential buildings and facilities

2. <u>Completion of Topographic Survey and Land Use Survey</u>

(The list below contains surveys to be conducted in Phase 1)

1. Topographic Survey

i] Existing maps and GIS data collection (including "Measure Map")
ii] "Plane Survey"
- Exact boundaries and coordinates of the BR Land
- Cadastral information
- Exact location and size of facilities located in the BR land, such as railway facilities
- Ortho-image of the BR land and surroundings
- 3D images of the topography and buildings

iii] "Cross-section Survey" *(optional)*

Annex 1 sets out the detailed specifications and deliverables of the Topographic survey.

2. Land Use Survey

i] General
- Land history
- Confirmation of land boundaries in terms of "ownership" and "users" [+ existence of agreements between neighboring landowners]
- Use of Lands (residential, roads, parks, etc.)
- Location, configuration and size of buildings/structures and land fixtures

ii] BR-owned lands [present]
- Confirmation of boundary for each land use and current status
- Current status of each housing unit and residents
- Key information on non-residential buildings/structures and facilities
- Survey on non-BR occupants
- Car ownership ratio, parking locations

iii] BR-owned lands [future]
- Special Requests or issues to be considered regarding allocation of housing units
- Issues, requests, and/or challenges for an improvement

- Demands and requests for the staff housings

iv] Khilgaon Bazar
- Brief history
- Number of shops and/or sub-divided shops
- Status of legal rights for each shop (forms of agreement)
- Type of shops, area, structure, age of each building and facility
- Relation(s) between shop "owners" and legal titleholder of each shop
- Living area and transportation modes of customers, "owners" and staff
- Propose suggestion/options for relocation/rehabilitation plan of Bazar area to reoccupy the land within the framework of BR land policy.

v] Other Non-BR Owned Lands
- Confirmation of land boundaries in terms of "ownership"
- Current status of land use (structure of building, number of floors, area, age of each building etc.)
- Name and address of each legal titleholder [of land and/or lease] and relation between the current occupant
- Type of titles owned by legal titleholders for each land and building (Ownership, lease, rental…)

vi] Schools
- Description of each school (land size, number of students and classrooms, students' grades, managed/operated by etc.)
- Living area and transportation modes of students, teachers, and staff (+ percentage /number of students from outside of the BR housing site)

vii] Graveyard
- Landowner and/or type of legal title
- Identifying organization(s) or people, who control and manage the grave yard
- Visits, religious events and other activities held in the yard
- Number of the buried and their religion(s)
- Special issues to be considered (if any)

viii] Non-legal Occupiers (residents, shops, rickshaw workshops, parking spaces, etc.)
- Identifying non-legal occupiers ([estimated] number, gender, age, occupation, history of living etc.)
- Status of land and living facilities
- Expropriation law in Bangladesh
- Practices in Bangladesh adopted for relocation of illegal residents, shops etc.

3. Infrastructures and Utilities

i] Available data collection
- Water
- Sewerage
- Gas
- Electricity
- Telecommunications
- Others

4. Traffic Survey
- **Collect and analysis of traffic survey data of the connecting projects (MRTs, FDEE, Sub-ways etc.)**
- **Conduct traffic survey in Kamalapur Railway Station area**

Phase 1 Deliverables:

1. Inception Report for Phase-1

The Transaction Advisor shall prepare and submit the Inception Report within **15(Fifteen) days** of commencement of Phase 1.

2. Preliminary Findings Report

The Transaction Advisor shall prepare and submit the Preliminary Findings Report by the end of February 2020 and within **2 (two) months** of commencement of Phase 1. This **Preliminary Findings Report** is regarded as an Interim Report of the whole Topographic Survey and Land-use Survey to be completed by the end of Phase 1. The Preliminary Findings Report shall include all the items listed in **Point 1 (**Topographic Survey and Land Use Survey**)**, with the original field data and computation data.

3. Draft Final Report for Phase 1:

Within **5 (five) months** of commencement of Phase 1 the Transaction Advisor shall submit the draft final Report for phase 1, which covers all the items listed in the scope of services above, including all original field data and computation data of Topographic Survey and Topographic maps, i.e., 2 (Completion of Topographic Survey and Land Use Survey) and 3 (Infrastructure) of the above.

4. Final Report for Phase 1:

Within **6 (six) months** of commencement of Phase 1 (subject to receipt of comments on Draft Final Report from the relevant authority), the Transaction Advisor shall submit the final Report for Phase 1 (including 1, 2 and 3).

Phase 2: Detailed Feasibility Study

The Transaction Advisor of this project will carry out the detailed feasibility study for "Construction of Multi-modal Transport Hub at Dhaka Railway Station" on PPP basis taking into account the issues relating to the technical, financial, commercial, social, economic, legal, environmental and other relevant factors.

Phase 2 shall also be carried out taking into account local and national issues, applicable laws, regulations, standards, specifications and other relevant considerations. Prior to completion and final submission of the deliverables under Phase 2, the Transaction Advisor shall present the draft findings and recommendations to the key stakeholders in a presentation format and take into account feedback (if any) in the final Detailed Feasibility Study.

The Detailed Feasibility Study report will specifically include (but not be limited to) the following:

1. **Confirmation of General Rules and Regulations for Development**
   - i] Zoning for land use control
   - ii] Floor Area Ratio (FAR)
   - iii] Height Control
   - iv] Others

2. **Analyses of Urban Context of Kamalapur and Dhaka from following perspectives:**
   - i] Culture
   - ii] History
   - iii] Economics

3. **Detailed data collection:**
   - i] Water
   - ii] Sewerage

iii] Gas
iv] Electricity
v] Telecommunications
vi] Others

4. Block Planning (BR Staff Housing Zone)

i] Roads
- Road width plan
  - Traffic load estimation
  - Road layout
- Standard sectional plan
  - Number of lanes
  - Width of sidewalks
  - Center planting belt
- Landscape

ii] Parks
- Layout Plan
- Size plan
- Landscape

iii] Other infrastructures (under roads)
- Water
- Sewerage
- Electricity
- Gas
- Telecommunications
- Others

iv] Blocks
- Layout
- Size
- Use
- Floor Area Ratio (FAR)
- Height control

5. Linked Project Assessment

i] Identify key Linked Projects and supporting facilities that are required to enable the delivery of the Project and the relevant government agencies who will have responsibilities for implementing the Linked Projects.

ii] Identify and highlight critical issues with resolving suggestions for implementing Linked Projects.

iii] Carry out detailed financial analysis for implementing Linked Projects.

iv] Identify key 'Railway Linked/Shifting Projects and supporting facilities with cost estimation' are required to implement prior to the KMmTH Project. The existing Railway System Master Plan and future development possibility have to be considered.

6. Project Scoping

i] Identify Project Requirements / services for the government as well as the private developer along with phasing – with list of activities, along with area coverage for each activity.

ii] Prepare broad output specification and define key performance indicators (KPIs) (as applicable) for the private developer.

iii] Identify responsibilities of / services to be provided by BR.

7. Environment and Social Impact Assessment

i] Carry out assessment of environment and social impact in relation to the Project.

ii] Recommendations report for safeguarding environment and social impacts (Environmental/Social Management Plan).

8. Demand assessment and market study

i] Conduct a market analysis to understand sector structure, demand drivers and dynamics, expected growth and level of competition, assess the extent to which there is a supply gap, and prepare a pricing analysis based on a market survey to identify, the output will feed into the Project Scope above;
ii] Identify critical market risks, and possible mitigation strategies;
iii] Assessment of local and international market capability (including developer, contractors, sub-contractors and financiers) to deliver this Project.
iv] Prepare a tariff analysis and other charges alongside different facilities offered by similar terminals based on benchmarking (both international and local) and market survey to identify willingness and ability to pay
v] Determine a tariff band for various categories (i.e. rate for cargo handling including loading and un-loading, warehousing, stacking, waiting charges, other charges etc.) that realistically captures the value proposition and optimizes the net returns from the project.
vi] Take into account market feedback in relation to the Project scope and preliminary design of the concession contract with the private sector.
vii] Recommendations in relation to potential market interest and how to engage with the market to maximize competition.

9. Financial analysis

i] Detailing the capital and operational costs of delivering the Project, including direct and indirect costs, that will be incurred over the whole of the Project.
ii] Conduct socio-economic analysis and determine economic returns from the Project.
iii] Detail the revenue stream and possible alternatives for revenue maximization and preparation of revenue model for the Project.
iv] Development of a Financial Model (including all assumptions made) with functionality to carry out sensitivity analysis on variables such as lease rent/sell rate, provision of viability gap funding etc.
v] Listing of all assumptions made in relation to assessing the cost and revenue of the Project, including inflation rate, discount rate, depreciation, forecast demand etc.
vi] Advising on tax –related issues arising out of structuring the Project.

10. Legal Review and Stakeholder Consultations

i] Conduct a legal review to confirm that the private sector can provide the proposed outputs, and use the associated assets, identify potential regulatory restrictions, identify permits and licensing requirements, determine the status of land ownership and any potential encumbrances that may restrict usage by the private sector, identify costs and time required to resolve these issues, and prepare an implementation plan;
ii] Conduct public consultation with the close stakeholders including government agencies, potential sponsors etc.
iii] Consult with key stakeholders to confirm the findings of the market and technical analyses and identify critical risks.

11. PPP Transaction Structuring

i] Assessing the commercial viability of the Project if structured with or without any direct additional government support.
ii] Options assessment of alternative ways of structuring the Project to be delivered as a PPP or a non-PPP model
iii] Recommendations on the proposed structuring option for delivering the Project as a PPP.
iv] Advising on any Fiscal or Special Incentives (permissible within Bangladesh PPP policy) that can be considered for the Project and assessing the financial implications of these incentives on the Project.

v] Assessing what additional options exist to make the commercial viability of the Project more attractive while taking into account the additional financial impact and burden that may fall to the public sector.
vi] Recommendation on the optimum structuring approach for delivering this Project as PPP.
vii] Generate options for bidding parameter and recommend optimal bidding parameter
viii] Advising on tax –related issues arising out of structuring the Project.
ix] Conduct Value for Money (VfM) analysis and prepare Public Sector Comparator with showing detail methodology of conducting VfM.
x] Conduct debt sustainability analysis and competitiveness analysis with showing detail methodology of conducting those analyses.

12. Project Risk Assessment

i] Development of risk matrix to identify and assess scale of potential Projects development and implementation risk and allocation of risk against stakeholders.
ii] Propose mitigation measures to address risk.
iii] Preparation of a consolidated list of approvals/consents/clearances required from government instrumentalities.

13. Heads of Terms for Concession Agreement

i] Set out the key commercial terms and conditions that need to be reflected in the Concession Agreement
ii] Roles and responsibilities of the private sector partner
iii] Roles and responsibilities of the Contracting Authority and other government bodies (where applicable)

14. Consultation and Additional Data Provision for the SWG

The Transaction Advisor will be requested to provide necessary consultations, advices, and additional data to the SWG, in order to support SWG's Block Planning of project A.

15. Model Making and/or CG Modeling

Making of model(s) and/or CG(s) to explain basic idea of MmTH to the Honorable Prime Minster and other high officials. CG modeling is to show the block plan of Kamalapur MmTH (including size, location of each building and facility), and moving lines of passengers and visitors. Employment of designated specialist for CG modeling is to be considered.

Annex 2 sets out the detailed specifications of model making.

Phase 2 Deliverables:

Inception Report under Phase 2:

On commencement of Phase 2, the Transaction Advisor shall prepare and submit an Inception Report within **1** (one) month. The Inception Report shall be a further elaboration of the Transaction Advisor's submission towards understanding of the RFP, the methodology to be followed, the proposed work plan, the key interim and final delivery milestones, the schedule of delivery of the various components of the Detailed Feasibility Study etc.

Draft Detailed Feasibility Report under Phase 2:

Within **4** (four) months of commencement of Phase 2, the Transaction Advisor shall submit the draft Phase 2 Report, which covers all the items listed in Phase 2 above.

Final Detailed Feasibility Report under Phase 2:

Within **6** (six) months of commencement of Phase 2 (subject to receipt of comments from the relevant authority), the Transaction Advisor shall submit the final Phase 2 Report.

Model or CG Modeling:
The Transaction Advisor shall submit the Model by the end of Phase 2.

Note: After completion of Phase 2, further contributions including consultations and provisions of advices and additional data are expected to successfully deliver the project.

Phase 3: Preparation of Bid documents, Procurement and Implementation

The launch of Phase 3 will be subject to:

a. Successful completion of Phase 2,
b. Confirmation in the detailed feasibility study that a commercially viable PPP structure that meets the strategic objectives of the Line Ministry and the Contracting Authority can be delivered; and
c. Notification by the Contracting Authority in writing of its decision to proceed with the Phase 3 of the project.

It is the Contracting Authority's discretion as to whether or not it intends to proceed to Phase 3 of the project.

Once Phase 3 has been launched the Transaction Advisor is required to work together with the Contracting Authority to develop, manage and support the procurement process for securing contracts with a competent organization under a PPP arrangement in accordance with the standards set out for PPPs in relevant laws, regulations, rules and policy.

The Transaction Advisor must prepare a complete set of procurement documents including PPP Contract complying with relevant procurement law, policies and/or guidelines. The documentation must be consistent with the results of the feasibility study. The Transaction Advisor must provide full support to the Contracting Authority in carrying out drafting, communications, project management and administrative support necessary for the procurement process to be conducted in accordance with law and policy and to the highest standards of transparency, efficiency, quality and integrity.

The scope of work under Phase 3 include (but is not limited to the following):

1. Procurement Plan

- Developing a detailed plan for developing and executing the procurement process of the Project.
- Setting out a detailed timeline for delivery of the Project.
- Propose the structure in the Contracting Authority for a project implementation monitoring unit to deliver the project and propose a governance arrangement for ensuring Project oversight and delivery.
- Development of an outline structure for the Project Information Memorandum, RFQ and RFP document.
- Develop Proposals on how transfer of knowledge can be embedded through tour and training under Phase 2.

2. Preparation of procurement documents:

- Prepare a Project Information Memorandum about the project.
- Prepare the advertisements and notices required for the launch of a procurement process.
- Prepare Qualification criteria for prospective bidder in the form of request for qualification (RFQ) document to communicate the scope of the project to bidders.
- Prepare Request for Proposals (RFP) document to communicate the details of the scope of services that are required from bidders, to guide bidders in relation to their submission of proposal and to select a bidder to initiate negotiations for the awarding of the contract to deliver the project.

- Provide input into the draft PPP contract in accordance with applicable Bangladeshi laws, taking in to account the PPP policies, guidelines and the available draft PPP model contracts.
- Prepare a strategy paper on the proposed payment mechanism and the calibration of the performance deduction regime that embeds the risk allocation proposal set out in the Detailed Feasibility Studies and demonstrates the impact of different risk scenarios including the impact of performance deductions.
- Prepare a tender evaluation strategy paper that sets out the bid evaluation system and criteria, designs a suitable bid process that maximizes competition, addresses how variant bids (if any) will be addressed.
- Prepare a Service Requirements document that sets out the output specifications incorporating the key performance indicators and the thresholds that apply to each.
- Liaise and co-ordinate with other advisors, such as the legal advisor, appointed by the Contracting Authority/PPP Authority to support the implementation of the project.
- Prepare the environmental and social elements of the Information Memorandum, answer questions related to environmental and social issue raised by investors/financing intuitions during their due diligence.

Phase 3 Item 1and 2 Deliverables:

- ✓ Project Information Memorandum
- ✓ Procurement launch notices and advertisements
- ✓ Request for Qualification
- ✓ Request for Proposals
- ✓ Commercial Heads of Terms
- ✓ Provision of input into the Draft PPP contract
- ✓ Payment Mechanism Strategy
- ✓ Tender Evaluation Strategy
- ✓ Service Requirements and Performance Standards Specification
- ✓ Procurement Plan

3. Engagement with Market (if necessary)

Support the Contracting Authority to:

- Market the project among reputed private investors/operators including assistance in shaping advertisements for local, regional and international media, organizing meetings, visits and presentations to reputed international operators to enable a sufficient level of interest in bidding for the project.
- Launch the RFQ process by arranging and conducting Bidders' Conferences to discuss the RFQ requirements and set out the project context.
- Respond to requests for clarification from bidders on the RFQ. RFP and other documents including addendum if any required.
- Carry out detailed consultations and meetings with potential bidders at the RFQ and the RFP stages to discuss the project, bidding documents and other relevant issues in addition to regular bidder conferences.

Phase 3 Item 3 Deliverables (if necessary):

- ✓ Bidders Conference(s)
- ✓ Presentation Material for Bidders Meetings
- ✓ Reports on outcome from Bidders Meetings

4. Procurement Support

To assist the Contracting Authority in carrying out the following activities:

- Prepare a virtual data room containing key documents and information, including the draft contract and RFP, to assist pre-qualified bidders in preparing bids.

- Prepare a virtual data room to enable members of the Contracting Authority's project team and key stakeholders to securely access, share and store project documents.
- Developing mechanisms to evaluate responses to the RFQ, drafting an evaluation report and recommending the list of pre-qualified bidders for the concession contract.
- Respond to requests for clarification from pre-qualified bidders on the draft Contract, RFP and other documents and information included in the virtual data room.
- Arrange and conducting one or more bidders Conferences to discuss the draft contract and RFP with the pre-qualified bidders.
- Provision of commercial, financial and technical input in drafting the contract and schedules, drawing the upon the deliverables of Phase 1 of the Project and including all specific requirements of the project to be provided by the prospective concessionaire.
- Finalize the PPP contract and RFP to take into account comments and requests for clarification received from the pre-qualified bidders.
- Issuance of the PPP contract and RFP to the pre-qualified bidders.
- Receipt and developing mechanisms to evaluate responses to the RFP from the pre-qualified bidders in accordance with the process set out in the final RFP.
- Drafting of evaluation report setting out the conclusions of the evaluation process.
- Recommendation of the selected bidder for the PPP contract.
- Award the contract to the selected bidder.
- Finalize the PPP contract with the selected bidder to enable signing of the contract.

Phase 3 Item 4 Deliverables:

- ✓ Establishment of Virtual Data Rooms
- ✓ Response to queries from Tenderers
- ✓ Updating of Procurement Plan for RFQ and RFP stage
- ✓ RFQ Evaluation Report
- ✓ RFP Evaluation Report
- ✓ Completion of the commercial, financial and technical parts and providing input into other aspects of the PPP Contract and Schedules as may be required

5. Commercial and Financial Support

To assist the Line Ministry/Contracting Authority in the development and implementation of the project and the PPP Contract by providing the following support:

- Assess and advise on optimizing financing and funding strategies and identifying flexibility, opportunities and risks.
- Updates the Project Financial Model developed as part of the Detailed Feasibility Study and review and scrutinize financial models submitted by bidders (as applicable). This will include:
  - Review and refinement of the key financial inputs, project capital cost, operation and maintenance costs, and other costs that were identified in the Detailed Feasibility Study;
  - Identification of the potential sources and cost of capital and terms and conditions of loans to determine the debt payment schedule;
  - Determination of the revenue projection, income statement projection, balance sheets, and cash flow statements over the life of the project;
  - Prepare projections of working capital requirement;
  - Calculation of various metrics used for assessment of feasibility, including NPV, IRR, debt service coverage ratio, cash and discounted break-even, financial ratios etc;
  - Conduct sensitivity analysis on the major parameters including capital cost, O&M cost, inflation rate revenue to explore its sustainability under different scenario.
- Financial assessment of the
  - need for any additional support (e.g. Viability Gap Financing) that may be required to make the project commercially viable;
  - the commercial implications of the linked projects;

- the fiscal incentives and waivers as may be required for the project.
- Value for money analysis, debt sustainability analysis and competitiveness analysis
- Development of a Project Risk Report to identify the risks in relation to the project, advise on the balance of risk transfer and evaluate the commercial and financial implications of the risks allocation.
- Provide expert commercial and financial advice and input in the development of the procurement documents and during the procurement process.

Phase 3 Item 5 Deliverables:

- ✓ Development of a Financial Model
- ✓ Appraisal Report of Tenderer's Financial Model
- ✓ Development of a Project Risk Report
- ✓ Financial Assessment Report

6. Project Management and Governance Arrangements

- Support the Contracting Authority in putting together proposals for a governance structure to monitor and implement the project.
- Provide project management and administrative support to the Contracting Authority for delivering the project.
- Provision of support to the Contracting Authority in the preparation of presentations and documents to report on project progress and issues.
- Working together with other advisors and managing other advisory inputs to support the Authority in developing a consolidated view in delivering the project.
- Monitoring and providing advice on performance of bidder against any conditions precedent to financial close.
- Prepare governance and operational report for contracting authority to be followed during the implementation period of the PPP project.
- Prepare project management, relationship management and risk management reports including risk mitigations measures for the contracting authority to be useful during the implementation period of the PPP project.

Phase 3 Item 6 Deliverables:

- ✓ **Project Governance Strategy and Operational Plan** detailing the governance, monitoring and reporting arrangements that will apply from the financial close and launch of operations.
- ✓ **Project Management, relationship management and Risk management report**

7. Training and Transfer of Knowledge

- The Transaction Advisor shall arrange a short offshore Study Tour for up to 1 week for 3 (three) government officials, each from line Ministry/Contracting/PPP Authority) to showcase similar Projects that have been delivered in other countries or regions;
- Throughout the period of the assignment the Transaction Advisor shall on request deliver periodic seminars/training sessions (2 or 3 sessions in any one calendar year) on the delivery of PPP Projects to relevant stakeholders from the contracting, Line Ministry and linked public sector authorities.

Phase 3, Item 7 Deliverables:

- ✓ Project Related Off-shore Study Tour for three (3) government officials;
- ✓ Periodic seminars/training session on the delivery of PPP Projects.

8. Early Operations Support

Support the Line Ministry/Contracting Authority to:

- Support line ministry and contracting authority in operationalizing the contract

- Prepare a presentation to identify the roles and responsibilities of the public sector in managing the contract.
- Prepare a presentation to highlight the key commercial issues and risk that need to be managed during the period of operations of the contract.

Phase 3 Item 8 Deliverables:

- ✓ Presentation of Governance strategy and Operational Plan
- ✓ Presentation on Roles and Responsibility based governance and operational plan
- ✓ Presentation on relationship management and Risks management

In carrying out the activities and deliverables set out above the Transaction Advisor shall take particular care in ensuring that the following conditions and criteria are met:

- The transaction structures proposed are suitable taking into account the particular legal, regulatory and financial conditions that exist in Bangladesh.
- The process is structured to ensure that it is meets the requirements for openness, transparency and accountability.
- The service provision standards and targets are well defined.
- (Where applicable) There is a structured plan for smooth transition of the labor force.
- The project is structured so as to ensure appropriate risk distribution between the private and public sectors, facilitating the future mobilization of financing and ensuring that the relevant contractual provisions are attractive to potential investors while optimizing sustainable long-term benefits to the consumers and economy.
- Relevant data available with the PPP Authority and the Contracting Authority will be given to the Transaction Advisor. However, the Transaction Advisor will need to carry out their own due diligence on this data and obtain any additional data that they may need at their own responsibility and cost.

Annex 1 TECHNICAL SPECIFICATION FOR TOPOGRAPHIC SURVEY

GENERAL

This Technical Specifications shall be applied to the Topographic Survey (hereinafter referred to as "Works") consisting of cross-section survey and plane survey for the Project of "Construction of Multi-Modal Transport Hub at Dhaka Railway Station Kamalapur"

SCOPE OF WORK

The Topographic Survey work (hereafter referred to as "Surveyor") shall be executed in accordance with the terms, conditions, the requirements of the Contract and the Technical Specifications under the joint supervision of BR (Bangladesh Railway) and Public Private Partnership Authority, Bangladesh.

The Works contain all works such as mobilization, setting up to temporary bench marks, cross-section and plane survey, and all the drawings and the reporting.

Name Site	Area of Plane Survey
Dhaka Railway Station at Kamalapur	Approx. 2.5 sq. km. (1 km x 2.5 km)

WORK PLAN

The work plan including the list of survey equipment will be submitted to the Executing Agency within 7 (seven) days from the commencement. The Works shall be executed in accordance with the approved time schedule.

LOCATION OF SURVEY AREA

The location of survey area is shown in the attached map.

REPORTING OF WEEKLY PROGRESS

The weekly progress report including the work plan of next week at the end of each week, have to be submitted to the Implementing Authority (IA). The supervision will be done of and in accordance with a set of written instructions of the IA.

SURVEY METHOD

The Surveyor shall propose the appropriate method for this survey such as plane survey, aerial photographic survey, UAV (Unmanned aerial vehicle) survey and others.

6.1 Coordinates and Elevation

All surveys will be tied into the National Grid with permanent beacons and bench marks established in each survey area.

6.2 Installation of Control Points

Prior to commencement of the Works, the Surveyor shall install control point(s) at each site and connects them with the nearest existing control points.

6.3 Cross-section Survey (Option)

Cross-section survey shall be measured using total station/automatic level. Each cross-section station shall be established by the instruction of the BBS and the coordinates and elevation shall be measured from the nearest control point(s). Observation shall be conducted along the section-line at every 5m, every topographically changing points and artificial structures.

The cross-section scale shall be as follows:

- Drawing Scale : Vertical 1:500
  Horizontal 1:500

6.4 Plane Survey

Plane survey shall be carried out to measure elevation and distance of various spots using total station or equivalent equipment such as GPS. The location and position of cross-section lines and bench marks with number or name shall be plotted on the topographic maps.

The topographic maps by plane survey shall be drawn as follows:

- Draw Scale : 1:500
- Contour Interval : 1 m

The Surveyor shall collect the following geographic futures and information, and cooperate with project team to identify the outcome of the topographic survey with legally registered titles of land, buildings, facilities, and land borders with neighboring land owners including public roads.

a Exact boundaries and coordinates of the BR Land
b Cadastral information
c Facilities (Exact location and size of facilities located in the BR land, such as railway facilities)
d Infrastructure including Underground Utilities
e Ortho-image of the BR land and surroundings
f 3D images of the topography and buildings

6.5 Accuracy of Survey

Before commencement of the cross-section survey and plane survey, the Topographic Surveyor shall check and calibrate his instruments to make sure not to exceed the following tolerance:

(1) Horizontal control survey

Horizontal control survey shall be carried out in order to measure the positions (coordinates) of the control points and cross section posts for respective cross sections. These horizontal positioning shall be connected to existing control points as reference points.

Before commencement of the field survey, iron pegs or its substitute items will be installed in proper positions as well as on stable place for cross section posts.

The tolerances of check calculation shall be indicated in the followings.

a) Each component of a base line vector: 45mm √N (N: Number of sides)
b) Discrepancy of each component of overlapping base line vectors: 45mm

The tolerances of three-dimensional net adjustment computation shall be indicated in the followings.

a) Standard deviation of the horizontal location of a new point: 10cm
b) Standard deviation of the elevation of a new point: 20cm

(2) Vertical control survey

Vertical control survey shall be carried out to measure the elevation of control points, cross section posts. The heights shall be connected to existing benchmark or existing control points. The following principal specifications shall be applied for leveling;

a) Measuring route: double-run or single-run
b) Allowance of closing error: 20mm√s (s=km)
c) Reading unit: 1mm unit

(3) Cross-section survey

Cross-section survey shall be carried out and applied in accordance with the following limits of closing error.

a) Distance: 1:200
b) Elevation: 2 cm + 5 mm √s (s=meter unit)

7. COMPLETION OF THE WORKS

The Topographic Survey Team shall start the Works by DD MM YYYY and complete the Works by February 28, 2020.

8. DELIVERABLES

The Topographic Survey Team shall submit to the BBS the following final products on or before February 28, 2020.

All the deliverables' data format shall be DXF/DWG (AutoCAD), and SHP (GIS).

1) All original field data and computation data - 1 set
2) Topographic maps - 1 set
3) Survey report - 1 set

9. FINAL INSPECTION

(1) The Project Team shall inspect all the documents to be submitted by the Topographic Surveyor with a support from the Site Representative. In case that the Project Team finds defect in them, the Project Team shall require the Topographic Surveyor to re-survey at site.

(2) The Project Team shall issue the inspection certificate for the document to be submitted by the Topographic Surveyor after the inspection.

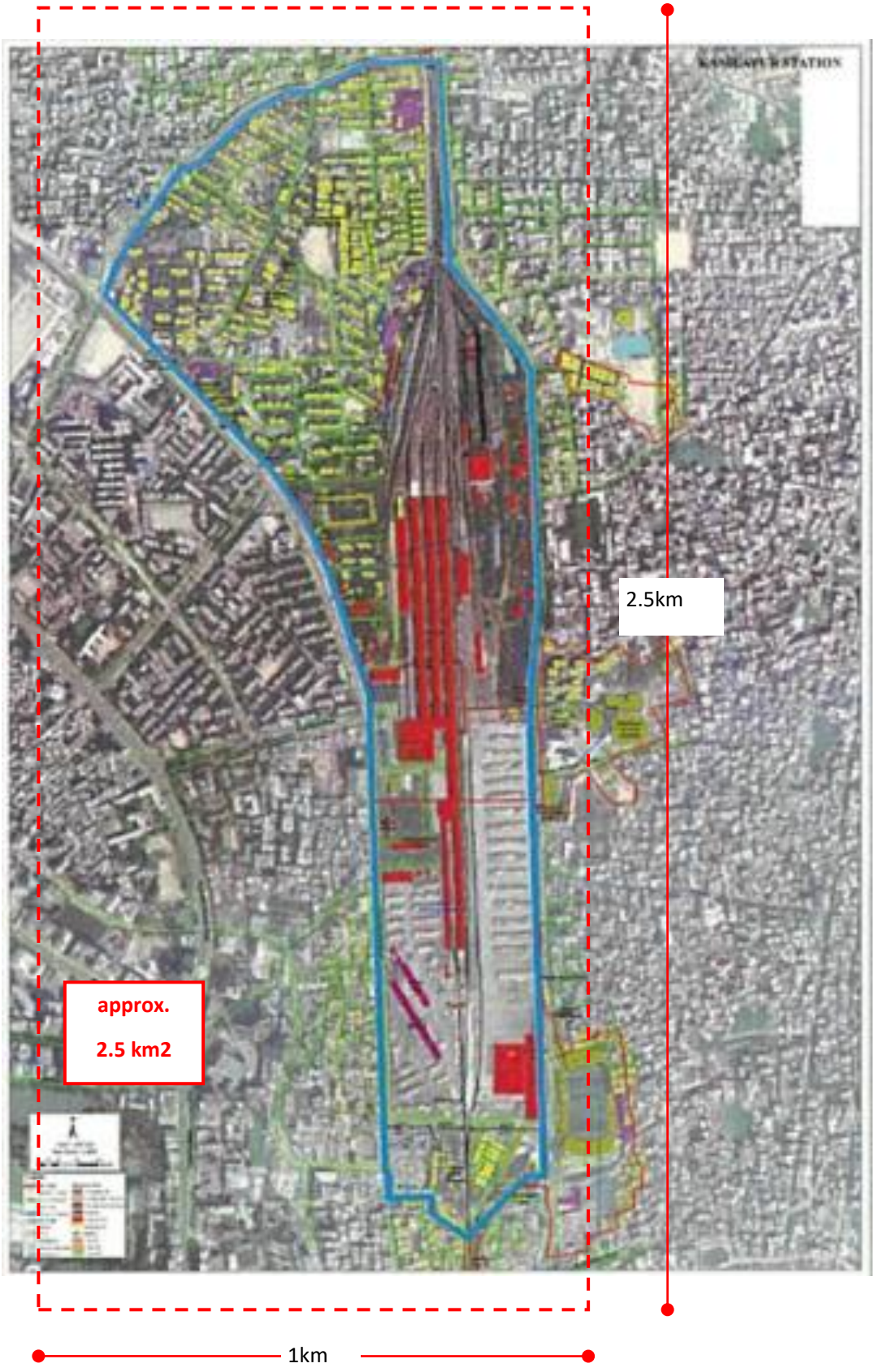
10. SAFETY CONTROL

(1) The Topographic Surveyor shall be responsible for safety measures at the survey sites.

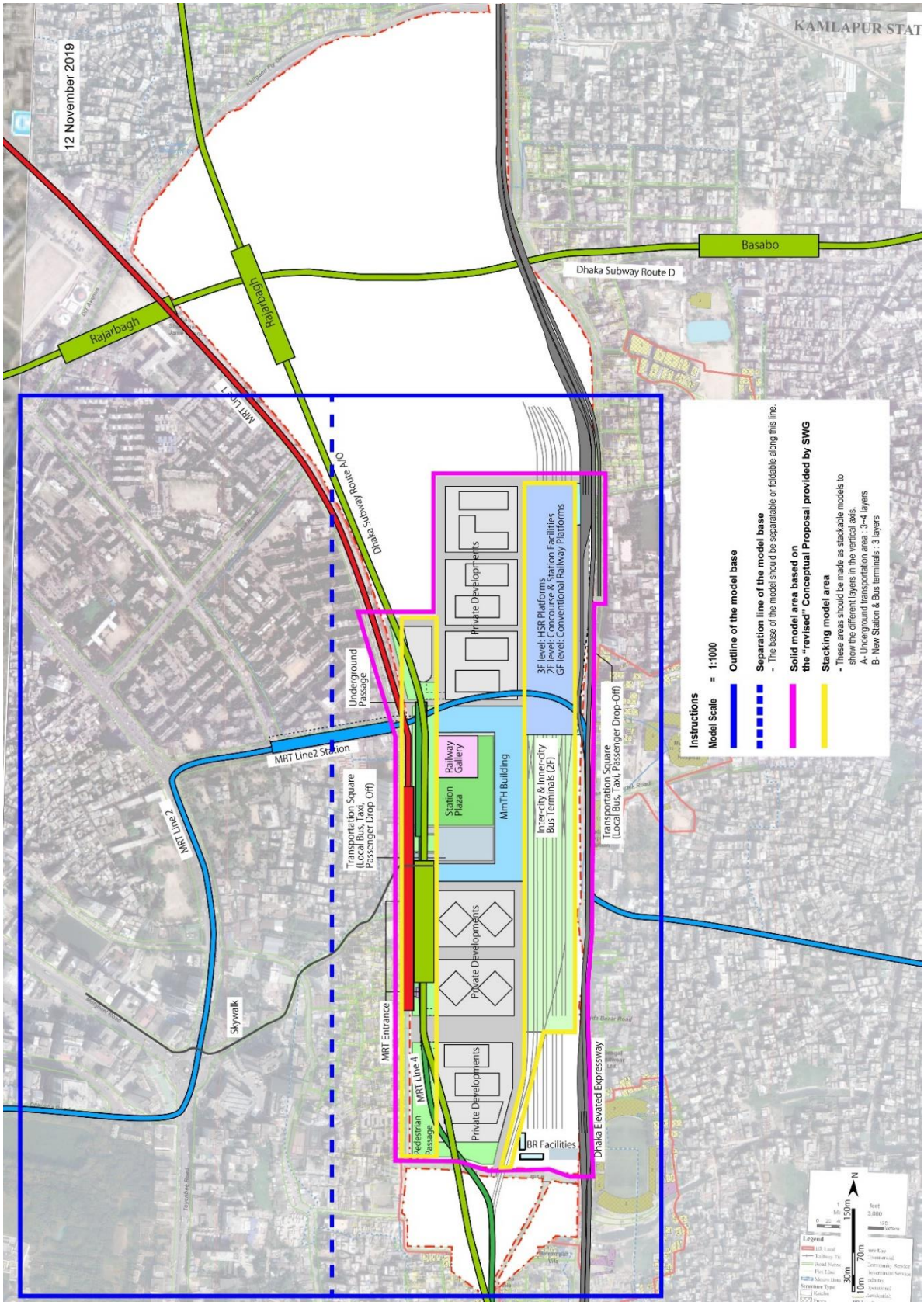
(2) The Topographic Surveyor shall make necessary arrangements including first-aid kit for treatment of accidents on the site.

(3) The Topographic Surveyor shall establish a safety organization for the outbreak of accidents, fires or other emergencies. The Topographic Surveyor should notify the Site Representative accordingly as the safety organization immediately of any accidents, fires or other emergencies

LOCATION OF SURVEY AREA



ANNEX 2: Model Making Specifications (Tentative)



Annex 3: Details of Transaction Advisor's Team Composition and Requirements

Team Composition, Level of Effort, Task Assignment and Experience Requirement

PPPA will determine the level of effort required for the assignment after finalization of the scope of work. The consultant may propose man-month as suitable to their approach and methodology. The consultant may also propose additional staff if necessary. However, such additional staff and change of man-month needs to be justified.

Team Composition and Estimated Man-Months are as follows:

Serial	Experts	Number of experts	Man-Month		
			Phase 1	Phase 2	Phase 3
1.	Team Leader	1	3	5	8
2.	Deputy Team Leader	1	1	3	5
3.	PPP Transaction Advisor	1	-	4	7
4.	PPP Analyst (Economic, Financial, Business)	1	-	3	5
5.	Infrastructure Specialist (Structural)	1	-	3	3
6.	Infrastructure Specialist (Geotechnical)	1	-	3	2
7.	Infrastructure Specialist (Railway)	1	-		3
8.	Infrastructure Specialist (Project Planning and Cost Estimation)	1	-	3	2
9.	Transport System Expert	1	1	3	3
10.	IT/Signaling Expert	1	-	2	2
11.	Survey Specialist	2	3	-	-
12.	Mapping Specialist	2	3	-	-
13.	Legal Expert	1	-	4	4
14.	Social Expert	1	1	4	2
15.	Environmental Expert	1	1	3	2
		TOTAL	13	40	48

The educational requirement and role for the team members is provided below:

Serial	Key personnel	Education (minimum)	Length of professional experience (minimum)	Role in the assignment
1.	Team Leader	Masters in any Discipline	20 years	Lead the team, review the quality of deliverables, lead the commercial and transaction structuring.
2.	Deputy Team Leader/Project Manager	Masters in any Discipline	15 years	To act as the Project manager and support the team leader. prepare and manage Project implementation, various other experts change management, coordination of preparation of PPP support documents etc.
3.	PPP Analyst (Economic, Financial, Business)	Masters in any Discipline. Preference will be given to MBA/CA/Masters in Finance/ Accounting.	10 years	Financial structuring of the Project including development of a robust financial model, Risk analysis, discuss with lenders, prepare term sheet, develop financial model of the project, identify financial costs

Serial	Key personnel	Education (minimum)	Length of professional experience (minimum)	Role in the assignment
				and benefits, lead financial analysis of the Project, demand assessment etc.
4.	PPP Transaction Advisor	Masters in any Discipline. Preference will be given to MBA/CA/Masters in Finance/ Accounting.	5 years	Project structuring, tender documentation including IM, RFQ, RFP, PPP agreements etc. Oversee Market analysis, demand assessment and benchmarking studies.
5.	Legal expert	LLB and Barrister at Law (preferred)	10 Years	Provide legal review from local perspective including bid documents, land status and other legal requirements.
6.	Infrastructure Specialist (Project Planning and Cost Estimation)	Masters in any Discipline. Preference will be given to MBA/CA/Masters in Finance/ Accounting.	10 years	Market analysis, demand assessment, conduct benchmarking etc. identify demand and supply gap if any.
7.	Transport System Expert	Graduate or equivalent in Civil Engineering (Preference will be given for relevant degree)	10 years	Prepare broad lay out design and master planning and develop required design, animation, graphical presentation etc
8.	Environmental expert	Graduate or equivalent in environmental engineering, environmental science	10 years	Assess environmental issues related to the Project and suggest mitigation measures, Prepare EIA etc.
9.	Social expert	Masters or equivalent in Social science/social welfare	10 years	Assess social issues related to the Project and suggest mitigation measures, Prepare impact assessment.
10.	IT/Signaling Expert	Graduate in IT/Civil Engineering/Transport Engineering	10 years	Responsibility includes but not limited to: - Output specification - technical specification - material identification and cost estimation
11.	Infrastructure Specialist (Structural)	Graduate in Civil Engineering	10 years	Responsibility includes but not limited to: - Prepare broad lay out design and master planning - Design of various civil structure including warehouse, stack yard and other terminal facilities etc. - All civil structural aspects of the terminal
12.	Infrastructure Specialist	Graduate in Civil Engineering,	10 years	Responsibility includes but not limited to:

Serial	Key personnel	Education (minimum)	Length of professional experience (minimum)	Role in the assignment
	(Railway)	specialization in Transport		- Prepare broad lay out design and master planning - Design of various railway civil structure including warehouse, stack yard and other terminal facilities etc. - All railway terminal civil structural aspects
13.	Mapping Specialist	Graduate in Civil Engineering	8 Years	Responsibility includes but not limited to: - analysis of various traffic projects preferably - transport modelling, demand forecast and multi-modal methodologies. - Traffic Impact Studies, Traffic Operational Analysis, Pavement Marking and Signing. - working knowledge with traffic analysis tools such as SYNCHRO, VISUM, VISSUM, VISSIM, HCS, CORSIM and other traffic engineering – modeling software.
14.	Survey Specialist	Graduate in Civil Engineering	10 years	Responsibility includes but not limited to: - design and interpret transport and travel surveys - use statistical analysis to examine travel data or accident records - use mathematical and computer simulation models to forecast the effects of road improvements, policy changes and/or public transport schemes - evaluate the benefits and costs of different strategies - assess infrastructure requirements (access, car parking, bus stops, cycle parking, etc) - liaise and negotiate with different parties, e.g. planning and highways authorities, residents' groups, developers and transport providers
15.	Infrastructure Specialist (Geotechnical)	Graduate in civil Engineering.	8 Years	Responsibility includes but not limited to: - Analysis and design of different

Serial	Key personnel	Education (minimum)	Length of professional experience (minimum)	Role in the assignment
				types of foundations & sub-structure. - Soil testing and analysis - Assessment of various field & laboratory tests of soils and others - Assessment and advice on other relevant technicalities - Provide above technical inputs in broad terminal design