Outline of Terms of Reference (TOR)

Note: Detail TOR will be finalized before issuing RFP based on the technicalities of the proposed bridges and actual requirement.

A. Economic Feasibility Study.

1.1 Background of the Project

Bangladesh is an agricultural country and about 70% of the total population lives in rural areas. Extreme population pressure on limited cultivable land and its skewed distribution are creating landlessness problem in the rural areas. Apart from the limited non-farm employment opportunities is causing widespread poverty. According to the Household Income and Expenditure Survey 2010, surveyed by Bangladesh Bureau of Statistics (BBS) based on average per capita calorie intake it shows that the absolute poor is 31.22% of national, 33.09% of rural, and 27.19% of urban population as poor. But the rural infrastructures are creating employment opportunities decreasing rural poverty recently.

An established fact that as the majority of the population live in the rural areas, the overall development of the country depends on the development of the rural economy. Rural development is aiming at improving standard of living of the rural poor. Government of Bangladesh has emphasized on efficient rural transportation network for easy movement of commodities that will ensure reasonable price of agricultural products and raise purchasing power of the rural poor. Consequently it will improve their living standard and change in rural economy. For these reasons the Seventh Five Year Plan stresses on the development and maintenance of transport infrastructures in Bangladesh. In the case of the rural infrastructures, there are specific objectives in Seventh Five Year Plan. Improvement and maintenance of rural infrastructures, Create direct employment opportunities for the rural poor and the destitute women through improvement and maintenance rural infrastructures, Create indirect employment opportunity in road transport, trading and other farm and non-farm sectors, Improve utilization of health and education services facilities.

Participation of community people in development work and promote good governance, and Contribute towards poverty reduction at the local level which will consequently ensure gender equality and empower women through generation of employment. Because the road network development including construction of Bridges/culverts, rural market development and rural electrification are being considered as the most important elements to reduce poverty through generating labor employment scope. So Rural Development Project is playing a pivotal role in this respect. The efficiency of Production, Exchange, Distribution and Consumption of different products depend on the smooth road network communication.

Sometimes Construction of road structures creates social and environmental hazards instead of social and environmental benefit. So rural infrastructure development project is essentially required for study before finally formulating the project to avoid the loss of investment. Importance of rivers has been recognized since time immemorial and rivers have occupied a very prominent place in every stage of human development. With the incoming of modernization and mechanization of human life, water and hence, rivers are becoming more and more important. They provide us water for industrial use and are a source of cheap energy. Rivers have always been satisfying our domestic, municipal, irrigation, and other demands and that is why most of our cities were established in the vicinity of the natural rivers. In the primitive times, there was absolutely no control on these natural rivers and hence they used to cause tremendous devastations and troubles to human beings. But with the development of science and technology, man has devised and is devising means and ways to control these mighty rivers.

On the other hand, different phases of economic activities like Production, Exchange, Distribution and consumption in solving Economic Problems in Bangladesh dependent on the smooth road network communication. But Sometimes Construction of road structures create social and environmental hazards instead of social and environmental benefit. So the bridges are required to study for social, economic, environmental and technical aspect to foresee whether there is any adverse effect on the rural socio-economic development flow and finally we have to examine through study whether the bridges will affect the environment after construction.

Development of uninterrupted communication of the road is necessary for socio-economic changes of an area. A Bridge construction provides easy access within the Upazilla and its adjoining areas, ensure marketing facilities for agricultural products, accelerate farm and non-farm activities and thus creates employment opportunities for the working class population which in turn will reduce poverty. As such, whether the proposed project will fulfill the objectives of the Government's National Plan and Sectorial objective of the Sustainable Development Goal or not need to be studied. The importance of the rural infrastructures on rural roads have various influence on the socio-economic changes in the life of rural poor people. Also rural infrastructures have negative impact, so a formal Economic Feasibility Study should be carried out before starting the construction of the bridges.

2.1 Overall objectives of the Assignment

The main objective of the assignment is to conduct a detailed Economic Feasibility Study and prepare report for each bridge separately showing whether the bridges are economically viable.

2.1 The specific objectives of the study.

- To identify the parameters to improve quality of transport and market services,
- To identify the parameters to improve quality of life in newly built habitat(s)
- To identify the possibility to create employment opportunities for the poor.
- To identify the parameters to assure safe accessibility to market and ghat, economic opportunities,

Research Questions:

- Does the program improve local's accessibility to market, job/business opportunities, farm/non-firm production and increase household income?
- Does the program improve education and health status of local people?
- Does the program increase women's income and social status? (e.g. labor force participation, change in men's attitude towards women)
- Does the bridges ensure economic viability for the area.
- Does the bridges will make socio-economic changes in the area and contribute to the national economy.

3. Brief Outline and Scope of Works

3.1 General Requirement

The Consultant's services shall be provided by experienced professionals utilizing sound socioeconomic knowledge and practices. The Consultant shall perform all necessary economic studies, field surveys including those described below to attain the stated objectives. While the accuracy of data on costs rests with the Client, the responsibility for the accuracy of the other data and its analysis and for all findings and conclusions shall rest with the Consultants. The detailed consultant's assignment included in the final Terms of reference (ToR) shall be carried out as per methodology enclosed herewith, to be modified and approved by the Client after presentation of the same for the finalization of inception report. However, if any conflict arises in the ToR and enclosed methodology regarding any task, the ToR shall govern.

3.2. Economic Feasibility Study

The draft feasibility report will contain necessary household surveys, traffic surveys, PAP census, etc. as required. Pertinent breakup of data and analysis of economic and financial aspects of the proposed bridge will be included in the report. The financial and economic merits and demerits of each of the alternatives proposed in the technical feasibility study will be focused in the report. The report will present recommendations for the best suited alignment, layout and structural form of the bridge in view of the financial and economic aspects.

The draft feasibility report will contain resettlement action plan of the proposed bridge. The preliminary data will be adequate to justify a thorough comparison of the alternatives as well as to form the basis for detailed design and construction. The Consultant shall closely liaise with the Project Director or the LGED higher authority for consideration of various issues in the Feasibility Study. The final recommendation on structural type will be justified by consideration of financial and economic aspects. In the context of Feasibility study, the report shall be prepared and submitted including but not limited to the following tasks.

- Traffic survey and projection as per future development plan of the area.
- Report on EIRR, FIRR, NPV and Benefit-Cost ratio (BCR).

During the feasibility study the Consultant shall carry out but not necessarily be limited to the tasks mentioned below:

3.3. Types of Survey and Indicators

To get the underlying development objective of each research questions the project will carry out the following types of survey in the impact zone: A) Resettlement survey, B) Traffic survey by O-D method, C) Business survey, D) Key respondent interviews; and E) Focus group discussions. These data are necessary to measure the impact of bridge along with ghats / jetties.

The evaluation will follow a mixed method approach in data collection and analysis. Different level of quantitative and qualitative data will be collected during the survey. The survey(s) will include various categories of beneficiaries of the project. The categories of beneficiaries include but not limited to transport owners and workers, traders, passengers, boatmen, project affected persons, etc.

- **a.** Household Survey: The PAP household survey shall cover but not be limited to the items as follows:
- Socio-economic status of a household: Does the project improve income and other socioeconomic status of a household?
- Agricultural activities of a household (crop farming): Does the project improve crop farming of a household?
- Non-farm activities of a household: Does the project improve non-farm activities of a household?
- Market access: Does the project improve household's access to market?
- Access to health services: Does the project improve household's access to health services?
- Education: Does the project improve household's access to education?
- Accessibility to key services: Does the project improve household's access to key services?
- Food security/Consumption pattern: Does the project improve household's food security?
- Migration/Social composition: Does the project changes the composition of households?
- Gender issues/Women empowerment: Does the project impacts in the gender issue of a household?
- b. Resettlement Need Assessment: The consultant shall carryout the following.
- Initial Resettlement Action Alan (RAP).
- Resettlement cost and gives best suggestion of resettlement.
- Shop No.
- House Hold
- Affected house.

c. Traffic Survey and Projection

The Consultant shall carry out detailed traffic survey to find out traffic characteristics, volume, type and direction of traffic flow etc. For this a zone of influence shall be determined and the survey planned accordingly. Road traffic data will have to be obtained by vehicle enumeration, origin-destination survey and an axle load survey conducted on a representative sample of heavy vehicles. Traffic survey will be conducted at suitable points and will record time variation of traffic volume. The traffic study shall cover but not be limited to the items as follows:

- Study of Traffic volume in the area and relevant areas and future traffic generation due to construction of the proposed bridge.
- Study for routing traffic to identify best suitable route after construction of the bridge in the area.
- Study for future traffic forecasting/generation after construction of the bridge,
- Study for traffic management and diversion during peak traffic hour based on projected traffic generation.
- Frequency/number of transportation available to the community, effect on travel time of passenger, Effect on fare of passenger, Effect on fare of goods, Extent of integration of road with water way transport, Shift in modality of transport
- Identify the special traffic volume operated by Comilla Economic Zone and its wheel load including skectch of the axle arrangement of the trucks of the Economic Zone.

The data derived from the surveys above shall be analyzed to forecast demand for the proposed infrastructure. The Consultant shall establish possible traffic growth rates in respect of all categories of vehicles, taking into account the past trends, annual population and real per capita growth rates, elasticity of transport demand in relation to income and estimated annual increase. Other aspects including socio-economic development plans and land use patterns of the area and cross elasticity shall have to be taken into consideration.

d. Business Survey:

A business survey will conducted in the shop/business corner in the areas affected by the bridge. The business survey shall cover but not be limited to the items as follows:

- Type of business center/shops
- Size of the shop/business center
- Type of products sold
- · Number of customer handled daily
- Number service persons
- Turn-over of the shop/business center
- Amount of profit/year.

3.4 Economic Analysis

The Consultant shall carry out an economic analysis for the proposed bridge. The Consultant shall undertake a detailed economic evaluation of the scheme with necessary parameters. Benefits accruing from the generated traffic shall also be considered; economic investment and maintenance cost shall be estimated. The Consultant will perform economic feasibility study by both of two distinct analysis methods; viz. Multi-criteria Decision Analysis (MCDA) and Cost-benefit Analysis (CBA). Comparative economic evaluation of various alternative options including the 'Do nothing' option shall be performed.

In the MCDA appropriate objectives shall be identified both in costs and benefits streams. Appropriate number of criteria shall be selected for the objectives and elaborate scoring and weighting of different criteria and objectives shall be performed to obtain overall scores for each of the alternatives. Decision will be taken from this analysis regarding the most cost-effective solution. Sensitivity analyses shall be carried out to understand if preferences or weights other than the selected ones affect determination of the best option. Sensitivity of the overall scores should be studied with equal weights and equal scores for all the criteria, and also changed weights of different criteria under objective Benefit with criteria for Cost remaining unchanged.

The elements of CBA shall be grouped into an appropriate number of categories. Financial costs of various elements shall be measured at existing market price. Financial cost estimates shall be converted into economic cost using shadow price factors taken from authentic sources. The economic viability and justification of the proposed investment compared to other alternatives shall be analyzed

in terms of parameters such as Net Present Value (NPV), Benefit-cost Ratio (BCR), and Internal Rate of Return (IRR). Both Economic Internal Rate of Return (EIRR) and Financial Internal Rate of Return (FIRR) shall be calculated. The following shall be identified:

- Economic Internal Rate of Return (EIRR);
- Net Present Value (NPV);
- Benefit Cost Ratio (BCR);
- Financial Internal Rate of Return (FIRR).

Sensitivity analyses shall be performed for the CBA by applying a reasonable percentage of discount rate for cost and benefit streams, and also by applying a reasonable percentage of benefit reduction simultaneously with a reasonable percentage of cost overrun. The financial and economic evaluations shall culminate in recommendations regarding viability of the project, and if viable, the most feasible development option.

4. List of Reports, Schedule of Deliverables and Period of Performance

All reports and submissions shall be in English and presented and illustrated in a clear and concise professional manner. Each report and other deliverables shall be submitted in specified number of hard copies along with CD containing soft copy of the report in pdf and normal format. All reports require approval of the client. All hard copies of reports shall be presented in the form of bound/spirally bound books.

4.1 Inception Report

The Consultant shall submit Inception Report in 2 (Two) copies to the client within one (one) month of commencement of the service. The report will include the Consultant's realistic detailed work methodology and program, staffing schedule for tasks (including methodology and details of investigations proposed. This will also focus on the record of consultant's mobilization, site visit and discussion with the local stakeholders, authority of the PM office including any suggestion, arrangement of survey and investigation including their methodology, manpower etc. The inception report also includes the necessary arrangement for maintaining the quality assurance of consultant's works in every stage of assignments. The comments and suggestion from the presentation shall be incorporated on the inception report prior to finalize and approved by the Client.

4.2 Draft Feasibility Report

The Draft Feasibility Report shall be prepared incorporating all the requirements of Economic Feasibility study specified above. The Consultant shall submit Draft Feasibility report in 2 (Two) copies for each bridge separately to the client within the stipulated time of commencement of the service. The report shall contain pertinent breakup data and analysis of economic and financial aspects of the proposed each bridge individually. The report shall recommend the type of structure best suited to the site from financial and economic viewpoints. The following survey, investigation must be done and included in the draft feasibility report.

- Traffic survey and projection
- Resettlement action plan
- Socioeconomic Analysis
- Traffic loading pattern of the

Detail presentation on the draft feasibility report shall be carried out in LGED in presences of LGED officials and other participants. The comments and suggestion from the presentation shall be incorporated on the draft report prior to finalize and approved by the Client.

4.3 Final Feasibility Report

The draft feasibility report submitted by the Consultant will be examined by the Client for approval. The Consultant shall incorporate comments and suggestions of appropriate authority of the Client and prepare the Final Feasibility Report. Final feasibility report shall be submitted after receiving comments of the client on the draft in 5 (five) copies. The final feasibility report shall include the following final study report including all comments and suggestion of the client.

- Traffic survey and Projection
- Land Acquisition and Resettlement Action Plan
- Socioeconomic Analysis

5. Period of Performance

The Duration for the services will be **30 (Thirty) months** from the commencement date. The breakdown of the period shall be as follows:

Report Type	Duration
Inception Report:	within 1 month of commencement
Draft Feasibility Report	Within 2 months of commencement
Final Feasibility Report	Within 3 months of commencement.

6. Key Professionals

Sl. No.	Designation of Resource Personnel	Number	Month	Man-Month
1	Team Leader/Transport Economist	1	6	6
2	LAP and RAP Specialist	2	4	8
3	Economist	2	4	8
4	Transport Economist	1	4	4
5	Survey Specialist	2	4	8
6	Data Analyst	2	4	8
	Total	11	26	42

566

The qualification and experience are as specified in the Technical proposal.

6.1 Team Leader/Transport Economist: He / She should have Minimum master degree in Economics from any recognized university with minimum 20 (Twenty) years of general working experience and 15 (Fifteen) years of experience in Transport Survey of road infrastructure intervention.

Tasks

- Take full responsibility of collection of social and economic data and analyze them;
- Inventory of present economic situation;
- Analyze the field data and calculate the possible economic viability of large bridge;
- Miscellaneous task as and when required.

6.2 Land Acquisition Plan (LAP) and Resettlement Action Plan Specialist (RAP) specialist: He / She should have minimum master degree in Economics/Sociology/Development Studies from any recognized university with minimum 15 (Fifteen) years of general working experience and 10 (Ten) years of experience in Socio-economic analysis of large bridge

Tasks

- Take responsibility of collection of land acquisition and resettlement data and analyze them;
- Analyze the field data and calculate the possible compensation costs of large bridge;
- Miscellaneous task as and when required.
- **6.3 Economist:** They should have minimum Master degree in Economics/Development studies from any recognized university with minimum 15 (Fifteen) years of general working experience and 10 (ten) years of experience in Socio-economic analysis of large bridge

Tasks

- Take responsibility of collection of social data and analyze them;
- Analyze the field data and calculate the possible social and economic viability of large bridge;
- Miscellaneous task as required.

6.4 Transport Economist: He / She should have minimum Master degree in Economics/Statistics or Bachelor degree in Civil Engieering from any recognized university with minimum 15 (Fifteen) years of general working experience and 10 (Ten) years of experience in traffic dara analysis of large bridge projects.

Tasks:

- Assist team leader in coordinating the study;
- Analyze primary and secondary relevant data for the bridge.
- Miscellaneous task as and when required.
- **6.5 Survey specialist:** They should have minimum Master degree in Economics/Statistics/Development Studies from any recognized university with minimum 10 (Ten) years of general working experience and 8 (Eight) years of experience in the survey and data collection, processing of scio-economic and traffic data of large bridge project

Tasks

- Take full responsibility of collection of socio-economic data.
- Miscellaneous task as and when required.
- **6.6 Data Analyst:** They should have minimum bachelor degree in Economics/Statistics/ Civil Engineering from any recognized university with minimum 10 (Ten) years of general working experience and 8 (Eight) years of experience in data analysis of large bridge projects.

Tasks:

- Assist team leader in coordinating the study;
- Analyze primary and secondary relevant data for the bridge.
- Miscellaneous task as and when required.

7. Services and Facilities provided by the Client

The consultants shall work under the direct supervision of the Project Director. He will facilitate the Consultant's team as required. During field survey and data collection work, the Upazila Engineer, and the Executive Engineer, LGED, will facilitate the consultant's team. The LGED will help the consultant to carry out the data collection works as stipulated in the scope of services.

8. Ownership and Discretion of Data /Information:

All documents, project designs, drawings, data and information shall be treated as confidential and shall not without the written approval of LGED be made available to any third party. In addition, the Consultant(s) formally undertake not to disclose any parts of the confidential information and shall not, without the written approval of LGED be made available to any third party. The utilization of the report is solely at the decision and discretion of the LGED. All the documents containing both raw data/materials provided by LGED and final report, both soft and hard copies are to be returned to LGED upon completion of the assignment. All documents and reports written as, as a result of research or otherwise related to it shall remain the property of LGED. No part of the report shall be reproduced with the prior, expressed and specific written permission of LGED.

9. Time frame of the assignment

The survey is expected to be conducted in May 2020 to 30 April 2020. The firm will get 28 months working time for completion of all tasks in the assignment including the final report. The consultant will be expected to work closely with the LGED HQ., XEN, District and Upazilla Engineer, Upazilla.

B. Hydrological and Morphological study.

1. Background of the Project

We know Bangladesh is a country of rivers and its intensive river network has provided us complex hydro-morphological environment where any intervention through bridge construction can disturb existing setting of different natural features to more difficult situation. So, it needs a deep integrated study of the location prior to construction of the bridges. A package of comprehensive independent studies on several components like hydrological and morphological characteristics including relevant environmental issues and scope of river training works is prerequisite particularly for a large bridge construction project. This Terms of Reference (ToR) intends a detail Hydrological and Morphological investigation of the rivers (on which bridges will be constructed) and other adjacent tributariesdistributaries to obtain necessary information for providing the hydraulic design of the proposed bridge. The proposed study will focus on the detailed hydrological, hydraulic and morphological conditions of these rivers in determining a suitable location for the bridges, bridge openings, hydraulic design variables of the bridge piers, abutment/guide bund. In addition, this study should also enquire the threat of bank failure adjacent to the proposed road bridges and thus suggest suitable type and properly aligned river training works, if required. Along with the determination of the necessity of river training works, (RTW) proposed study would provide the hydraulic design variables for protective work. This study will be conducted under "Feasibility Study Project for Large Bridge Construction on Rural Roads."

2. Objectives of the Study

The overall objective of the study is to conduct detailed hydrological, Hydraulic and Morphological study for the proposed bridge for determining suitable bridge location, opening and hydraulic design variables of the bridge piers, abutment and associated river training works. The Study will also include all the required relevant environmental issues.

3.Scope of work

The scope of the study will be as follows.

- 3.1 Identifying suitable location of bridge with the main focus on the Integrated Road Network
- 3.2 Hydraulic and Hydrologic Design of Bridge shall cover but not limited to the following:
- To identify a suitable location of the proposed bridge;
- To determine clear opening and length of proposed bridge;
- To Determine horizontal and vertical clearance of proposed bridge in accordance with guidelines of BIWTA / BWDB and others;
- To identify maximum scour levels around abutments and piers of the proposed bridge;
- To determine alignment of approach road of the proposed bridge;
- To determine formation level of approach road at proposed bridge abutments and access roads;
- To identify hydraulic design parameters.
- · To Collect and analyze Satellite Images and findings.
- To Develop two dimensional morphological model of the rivers covering the bridge sites and model calibration:
- To determine Morphological Parameters.
- To Study various options for selection of bridge sites and type of River Training Works (RTW)
 applying calibrated morphological model;
- To assess the risk of vulnerable river bank erosion at and around the bridges' vicinity;
- To Determine design parameters for the bridges and the river training works;
- To Prepare hydraulic designs of the bridges including length of bridge, height of bridge and scour levels at bridge piers and abutments;
- To assess of future bank movement with and without bridge condition applying calibrated morphological model;

- To forecast on potential morphological changes in the vicinity of the proposed bridge sites before and after construction of the bridges applying calibrated morphological model;
- To conduct an environmental assessment of the area for Initial Environmental Examination (IEE) which will determine a way-out of further detail Environmental Impact Assessment for the bridge.
- The consultant will also cover all possible study not mentioned in the above scope of works.
- The consultant will conduct navigational study including river characteristics, waterflow, shifting of sand bar, aerial view of underwater or invisible sand bar.
- The consultant will conduct bathymetry survey for the topography.

3.3 Design of River Training Works (RTW) of the Bridge shall cover but not limited to the following::

- To determine present erosion and deposition trend at the upstream and downstream of proposed bridge:
- To identify future river bank movement at river bends of the proposed bridge;
- To identify erosion prone areas that need protective measures both upstream and downstream of proposed bridge;
- To identify location and extent of required RTW for proposed bridge.
- To determine type of RTWs such as revetment, spurs, guide bund etc. for proposed bridge;
- To determine maximum depth of scour and flow velocity at or along the river training work;
- The consultant will also cover all possible study not mentioned in the above scope of works.

4.0 List of Reports, Schedule of Deliverables and Period of Performance.

All reports and submissions shall be in English and presented and illustrated in a clear and concise professional manner. Each report and other deliverables shall be submitted in specified number of hard copies along with CD containing soft copy of the report in pdf and normal format. All reports require approval of the client. All hard copies of reports shall be presented in the form of bound/spirally bound books.

4.1 Inception Report

The Consultant shall submit Inception Report in 2 (Two) copies to the client within one (one) month of commencement of the service. The report will include the Consultant's realistic detailed work methodology and program, staffing schedule for tasks (including methodology and details of investigations proposed. This will also focus on the record of consultant's mobilization, site visit and discussion with the local stakeholders, authority of the PM office including any suggestion, arrangement of survey and investigation including their methodology, manpower etc. The inception report also includes the necessary arrangement for maintaining the quality assurance of consultant's works in every stage of assignments. The comments and suggestion from the presentation shall be incorporated on the inception report prior to finalize and approved by the Client.

4.2 Draft Feasibility Report

The Draft Feasibility Report shall be prepared incorporating all the requirements of Hydro-Morphology study specified above. The Consultant shall submit Draft Feasibility report in 2 (Two) copies for each bridge separately to the client within the stipulated time of commencement of the service. The report shall contain pertinent breakup data and analysis.

Detail presentation on the draft report shall be carried out in LGED in presences of LGED officials and other participants. The comments and suggestion from the presentation shall be incorporated on the draft report prior to finalize and approved by the Client.

4.3 Final Feasibility Report

The Final Report submitted by the Consultant will be examined by the Client for approval. The Consultant shall incorporate comments and suggestions of appropriate authority of the Client and prepare the Final Feasibility Report. Final feasibility report shall be submitted after receiving comments of the client on the draft in 5 (Five) copies. The Final Feasibility report shall include the following final study report including all comments and suggestion of the client.

5.Reporting

The Duration for the services will be 4 (Four) months from the commencement date. The breakdown of the period shall be as follows:

Report Type	Duration
Inception Report:	Within 1 month of commencement
Draft Feasibility Report	Within 2 months of commencement
Final Feasibility Report	Within 4 months of commencement

8. Key Professionals: The following key professionals are expected to perform the assignment.

SI.	Designation of Resource Personnel	Number	Month	Man-
No.				Month
1	Team Leader/Hydraulic Modeler.	1	2	2
2	Co-Team Leader/Senior Hydrologist.	0	0	0
3	River Engineering Specialist	1	2	2
4	Hydrologist	1	2	2
5	Morphologist/ Hydraulic Engineering Specialist/ Hydraulic Modeler	1	2	2
6	Design Specialist	1	2	2
7	RS/GIS & Climate Change Specialist	1	2	2
	Total	6	2	12

Or the key professionals may be proposed by the consultant.

The minimum required qualification and experience of professional staff are as follows:

8.1 Team Leader/Hydraulic Modeler: The Team Leader should have minimum master degree in Civil / Water Resources Engineering from any recognized university with minimum 20 (twenty) years of general working experience and 18 (Eighteen) years of experience in Hydrology, river Hydraulics and river Morphological study.

Tasks:

- Take full responsibility for all aspects of planning, liaison and reporting:
- Guide and supervise the study team in carrying out the hydrological, hydraulic, morphological, social and design related activities;
- Coordinate the study activities;
- Arrange and attend field visits to potential bridge sites;
- Analyze and interpret the historical data as well surveyed data for the river;
- Carry out hydrodynamic modeling to establish hydraulic parameters for bridge design;
- Guide preparation of hydraulic design of the bridge including length, height, and scour levels at bridge piers and abutments;
- Select best suited location for the bridge and alignment of approach road by investigating potential options for the bridge.
- Attend meeting as and when required by the designated representative of LGED;
- Prepare reports and submit to LGED;
- Take care of comments of LGED in the technical reports, etc.
- **8.2 Co-Team Leader/Senior Hydrologist:** He / She should have minimum master degree in Civil/ Water Resources Engineering from any recognized university with minimum 20 (Twenty) years of general working experience and 18 (Eighteen) years of experience in water resource Engineering and hydrology of large bridge.

Tasks:

- Share the responsibility of planning, liaison and reporting with the Team Leader;
- Guide and supervise the study team in carrying out the hydrological, hydraulic, morphological, social, environmental and design related activities;
- · In-house coordination of study activities;

- Establish baseline hydrological condition in the project area;
- Identify hydrological factors that may influence the hydrology and hydraulics in the bridge area;
- Establish likely hydrological scenarios;
- Establish design water level and discharge by employing frequency analysis;
- Attend interaction meeting with LGED;
- Compilation and review of different reports of the proposed study;
- Miscellaneous task as and when required.
- **8.3 River Engineering Specialist:** He / She should have minimum master degree in Water Resources Engineering from any recognized university with minimum 20 (Twenty) years of general working experience and 18 (Eighteen) years of experience in river Engineering or Morphology study.

Tasks:

- Analyze and interpret historical data as well as surveyed data of the river;
- Analyze the results and establish morphological characteristics of the river and identification of erosion vulnerable area;
- Assess the need of river training work;
- Planning and designing of river training works;
- Attend field visits to the proposed bridge sites;
- Contribute in preparing reports and submitting to the LGED authority;
- Attend meeting as and when required by the designated representative of LGED;
- Assist team leader in coordinating the study;
- Miscellaneous task as and when required.
- **8.4 Hydrologist:** He / She should have minimum master degree in Civil/ Water Resources Engineering from any recognized university with minimum 20 (Twenty) years of general working experience and 18 (Eighteen) years of experience in water resource Engineering and hydrology of large bridge.

Tasks:

- Establish baseline hydrological condition in the project area;
- Identify hydrological factors that may influence the hydrology and hydraulics in the bridge area;
- Establish likely hydrological scenarios;
- Establish design water level and discharge by employing frequency analysis;
- Attend interaction meeting with LGED;
- Preparation of different reports as required for the proposed study;
- Miscellaneous task as and when required.
- **8.5 Morphologist / Hydraulic Engineering Specialist/ Hydraulic Modeler:** He / She should have minimum master degree in Civil/ Water Resources Engineering from any recognized university with minimum 15 (fifteen) years of general working experience and 12 (Twelve) years of experience in water resource Engineering and hydrology of large bridge.

Tasks:

- Assess future bank movement with and without bridge condition applying calibrated morphological model.
- Identify adverse effects like erosion, deposition, over flooding at U/S and D/S of the proposed bridge due to bridge construction and suggest mitigation measures.
- Calculate scour depth, discharge, velocity, etc.
- Forecast on potential morphological changes in the vicinity of the proposed bridge before and after construction of the bridge with calibrated morphological model.
- Preparation of different reports as required for the proposed study;
- Miscellaneous task as and when required.

8.6 Design Specialist: He / She should have minimum master degree in Civil / Water Resources Engineering from any recognized university with minimum 20 (Twenty) years of general working experience and 18 (Eighteen) years of experience in river Engineering, Hydraulics and river Morphological study of large bridge.

Tasks:

- Establish baseline hydrological condition in the project area;
- Identify hydrological factors that may influence the hydrology and hydraulics in the project area;
- Conduct navigational survey;
- Analyze and interpret the historical data as well surveyed data for the river;
- Determine horizontal and vertical clearance of the proposed bridge;
- Select best suited locations for the bridge and alignment of approach road by investigating potential options for the bridge;
- Prepare hydraulic design of the bridge including length, height, and scour levels & bridge piers and abutments;
- · Attend interaction meeting with LGED;
- Preparation of different reports as required for the proposed study;
- Miscellaneous task as and when required.
- **8.7 RS/GIS & Climate Change Specialist:** He / She should have minimum master degree in Civil / Water Resource Engineering from any recognized university with minimum 15 (Fifteen) years of general working experience and 12 (Twelve) years of experience in RS/ GIS application on large bridge projects.

Tasks:

- Processing satellite images
- Identification of bank-line shifting and platform change using satellite images
- GIS analysis of riverbank locations;
- Preparation of different reports as required for the proposed study;
- Miscellaneous task as and when required.

6. Services and Facilities provided by the Client

The consultants shall work under the direct supervision of the Project Director. Digital Topographical and Sub-Soil Investigation Data will be provided to the Consultant for the study. During field survey and data collection work, the Upazila Engineer of the upazilla concerned and the Executive Engineer, LGED of the district concerned will help the consultant's team.

The consultants shall have regular meetings with the LGED professional staff to discuss technical and project management issues. LGED shall provide or make available data, services and facilities to consultants, if available, on payment of usual cost by the consultant: The digital topographical survey data conducted by separate contarct will be supplied to the consultant.

Any other services, available with LGED, to help the consultants to carry out the data collection and bridge design and supervision works as stipulated in the scope of services.

c. Environmental Impact Assessment (EIA).

1.1 Background of the Project

Bangladesh is an agricultural country and about 70% of the total population lives in rural areas. Extreme population pressure on limited cultivable land and its skewed distribution are creating landlessness problem in the rural areas. Apart from the limited non-farm employment opportunities is causing widespread poverty. According to the Household Income and Expenditure Survey 2010, surveyed by Bangladesh Bureau of Statistics (BBS) based on average per capita calorie intake it shows that the absolute poor is 31.22% of national, 33.09% of rural, and 27.19% of urban population as poor. But the rural infrastructures are creating employment opportunities decreasing rural poverty recently.

An established fact that as the majority of the population live in the rural areas, the overall development of the country depends on the development of the rural economy. Rural development is aiming at improving standard of living of the rural poor. Government of Bangladesh has emphasized on efficient rural transportation network for easy movement of commodities that will ensure reasonable price of agricultural products and raise purchasing power of the rural poor. Consequently it will improve their living standard and change in rural economy. For these reasons the Seventh Five Year Plan stresses on the development and maintenance of transport infrastructures in Bangladesh.

Participation of community people in development work and promote good governance, and Contribute towards poverty reduction at the local level which will consequently ensure gender equality and empower women through generation of employment. Because the road network development including construction of Bridges/culverts, rural market development and rural electrification are being considered as the most important elements to reduce poverty through generating labor employment scope.

Sometimes construction of road structures create environmental hazards. So rural infrastructure development project is essentially required for environmental Impact Assessment study before finally formulating the project to avoid the loss of investment.

1.2 Objective of the EIA

The overall objective of the study is to conduct detailed Environmental Impact Assessment for the proposed bridges as mentioned in the list for determining the study report as prescribed in TOR required by the Department of Environment (DOE).

2.0 Brief Outline and Scope of Works

2.1 General Requirement

The Consultant's services are to be provided by experienced professionals utilizing sound Environmental knowledge and practices. The Consultant shall perform all necessary environmental studies, field surveys Environmental Baseline Survey such as air Quality, surface water quality, Ground water quality, Noise level, Sediment quality, Soil quality, Perform Ecological survey, Terrestrial survey, Aquatic survey, Social Baseline survey such as HH survey, FGD survey, Kll Survey, Stakeholder consultation, sub-surface investigation, laboratory testing and related works including those described below to attain the stated objectives. The responsibility for the accuracy of the data and its analysis and for all findings and conclusions shall rest with the Consultants.

2.2 Environmental Examination and Impact Assessment

The Consultant for the Environmental Impact Assessment study will carry out but not necessarily limited to the following tasks:

- Review existing Environmental Code of Practice.
- Carry out the preliminary environmental screening to assess direct and induced impacts due to the project;
- Assess the baseline condition;
- Assess potential positive and negative significant impacts and identify cost effective mitigation measures:
- Analyse alternatives incorporating environmental concerns and the associated costs in the economic analysis;
- Give special attention to environmental enhancement measures in the project for the cultural properties, landscape, water bodies et cetera;
- Prepare reports and necessary presentation as may be required to get the project approval form DoE:
- Develop Environmental Management Plans (EMP).
- Ensure that the mitigation measures identified are incorporated in the project design so that they are carried out during construction, operation and maintenance;
- Suggest a suitable monitoring network with regard to air, water and noise pollution.
- The Consultant shall follow Department of Environment (DoE) methodology to make the final report of Environment.

2.3 Environmental Impact Assessment Report:

The project authority shall have to submit a comprehensive Environmental Impact Assessment (EIA) report to the respective Office of the Department of Environment for the Project for having the clearance from DOE. So The Environmental Examination and Impact Assessment Report will contain the following components / items as required by the Department of Environment but not necessarily limited to the following tasks:

- 1 Executive Summary
- 2. Introduction: (Background, Brief Description, Scope of Study, Methodology, Limitation, EIA Team, References)
- 3. Legislative, Regulation and Policy Consideration (Covering the Potential Legal, Administrative, Planning and Policy Framework within which the EIA will be prepared)
- 4a. Project Activities : A list of the main project activities to be undertaken during site clearing, construction as well as operation.
- 4b. Project Schedule : The Phase and Timing for Development of the Project.
- 4c. Resources and utilities demand: Resources required to develop the project, such as Soil and Construction Material and Demand for Utilities (Water, Electricity, Sewerage, Waste Disposal and Others) as well as Infrastructure (Road, Drains and Others) to support the Project.
- 4d. Map and Survey Information

Location Map, Cadastral Map Showing Land Plots (Project and Adjacent Area), Geological Map showing Geological Units, Fault Zone and other Natural Features.

- 5. Baseline Environmental Condition should include inter alia, following:
 - Physical Environment : Geology, Topology, Geomorphology, Soils,

Meteorology and Hydrology

• Biological Environment : Habitats, Aquatic Life and Fisheries,

Terrestrial Habitats and Flora and Fauna

Environment Quality : Air, Water, Soil and Sediment Quality

- 6. Socio-economic Environment should include, inter alia, following:
 - Population: Demographic Profile and Ethnic Composition
 - Settlement and Housing
 - Traffic and Transport
 - Public Utilities: Water Supply, Sanitation and Solid Waste
 - Economy and Employment: Employment Structure and Cultural issues in Employment
 - Fisheries: Fishing Activities, Fishing Communities, Commercial Important Species, Fishing Resources, Commercial Factors.
- 7. Identification, Prediction and Evaluation of Potential Impacts (Identification, Prediction and Assessment of Positive and Negative Impacts likely to result from the Proposal Project).

In identification and analysis of Potential Impacts'- the 'Analysis' part shall include the analysis of relevant spatial and non-spatial date. The outcome of the analysis shall be presented with the scenarios, maps, graphics etc. for the cases of anticipated impacts on baseline. Description of the impacts of the Project on Air, Water, Land, Hydrology, Vegetation-man maid or natural, Wildlife, Socio-economic aspect shall be incorporated in detail.

8. Management Plan/Procedures:

For each significant major impact, proposed mitigation measures will be set out for incorporation into project design or procedures, impacts, which are not capable of mitigation, will be identified as residual impacts Both Technical and Financial Plans shall be incorporated for proposed mitigation measures.

An outline of the Environmental Management Plan shall be developed for the project.

In Environmental Monitoring Plan, a detail technical and financial proposal shall be included for developing an in-house environmental monitoring system to be operated by the proponent's own resources (equipment and expertise).

9. Consultation with Stakeholders/Public Consultation (ensures that consultation with interested parties and the general public will take place and their views taken into account in the planning and execution of the project).:

Beneficial Impacts (summarize the benefits of the project to the Bangladesh nation, people and local community and the enhancement potentials).

- 10. Conclusion and Recommendations.
- 11. Without approval of EIA report by the Department of Environment, the Project authority shall not be able to open L/C in favor of importable machineries.
- 12. Without obtaining Environmental Clearance, the project authority shall not be able to start the physical activity of the project.
- 13. The Project Authority shall submit the EIA report on the basis of this approved TOR, NOC from forest department (if it is required in case of cutting any forested plant, private or public) and NOCs from other relevant agencies for operational activity etc. to the concerned Office of DOE with a copy to the Head Office of DOE in Dhaka.
- 14. The area of the overall assignment of the consultant will be subject to the approval of the Department of Environment and its final written clearance through issuing of DOE clearance certificate..

5.Reporting

The Duration for the services will be **3 (Three)** months from the commencement date. The breakdown of the period shall be as follows:

Report Type	Duration
Inception Report:	within 1 month of commencement
Draft Feasibility Report	Within 2 months of commencement
Final Feasibility Report	Within 3 months of commencement

6. Key Professionals

SI.	Designation of Resource Personnel	Number	Month	Man-Month
No.				
1	Team Leader / EIA Expert.	1	2	2
2	Environmental Engineer	2	2	2
3	Sociologist	2	2	2
4	Ecologist	1	2	2
5	Field Enumerator	3	2	2
	Total	9	2	18

6.1 Qualifications and experiences of Key Professionals:

6.1.1 Team Leader / EIA Expert: She / he should have a degree of PhD/Master Degree in Civil Engineering/ Environmental Science/Environmental Engineering from any recognized university with minimum 20 (Twenty) years of general working experience and 15 (Fifteen) years of experience in Environmental Impact Assessment of large bridge.

Tasks:

- Take full responsibility for all aspects of planning, liaison and reporting;
- Guide and supervise the study team in carrying out the Environmental, social and related activities:
- · Coordinate the study activities;
- Analyze and interpret the historical data as well surveyed data for the river.
- Select best suited approach and options for carrying out the EIA.
- Attend meeting as and when required by the designated representative of LGED;
- Incorporate comments on final report etc.

6.1.2 Environmental Engineer: They should have a degree a minimum master degree in Civil Engineering / Environmental Science/Environmental Engineering from any recognized university with minimum 20 (Twenty) years of general working experience and 15 (Fifteen) years of experience in Environmental Impact Assessment of large bridge.

Tasks:

- Inventory of present environmental situation:
- Carry out Initial Environmental Examination (IEE);
- Preparation of Environmental Management Plan (EMP), if necessary;
- Preparation of different TOR for the proposed study;
- Miscellaneous task as and when required.

Also he will be responsible for Environmental Impact Assessment, Environmental screening and time bound mitigation measures, Preparation of Environmental management plan, environmental management implementation work schedule.

6.1.3 Sociologist: They should have a degree a minimum Bachelor Degree in Social Science /Political science / economics from any recognized university with minimum 15 (Fifteen) years of

general working experience and 10 (Ten) years of experience in Social Impact Assessment of large bridge.

Tasks:

- Collect information related to the project from all possible secondary sources and conduct field survey to collect primary data regarding existing physical, ecological and socio-economic conditions.
- Miscellaneous task as and when required.

6.1.4 Ecologist: They should have a degree a minimum Bachelor Degree in Civil Engineering / Environmental Science/Environmental Engineering/Geology/ Geography from any recognized university with minimum 15 (Fifteen) years of general working experience and 10 (Ten) years of experience in Environmental Impact Assessment of large bridge.

Tasks:

- Collect ecological data from different sources and analyze.
- Preparation of Environmental Management Plan (EMP), if necessary;
- Miscellaneous task as and when required.

6.1.5 Field Enumerator: They should have a degree a minimum Bachelor Degree in any discipline from any recognized university with minimum 10 (Ten) years of general working experience and 5 (Five) years of experience in data collection of Environmental Impact Assessment of large bridge.

Tasks:

- Collect ecological data from different sources and analyze.
- Preparation of Environmental Management Plan (EMP), if necessary;
- · Miscellaneous task as and when required.

Or the consultant will propose key professional.

10. Services and Facilities provided by the Client

The consultants shall work under the direct supervision of the Project Director. During field survey and data collection work, the Upazila Engineer of the upazilla concerned and the Executive Engineer, LGED of the district concerned will help the consultant's team. The consultants shall have regular meetings with the LGED professional staff to discuss technical and project management issues. LGED shall provide or make available the relevant data, services and facilities to consultants, if available, on payment of usual cost by the consultant:

d. TOR for Sub-Soil Investigation

1. Introduction:

Feasibility Study for large bridge construction is a mandatory part of the total planning process. Feasibility can only tell whether the investment of construction of bridges are safe and reliable. It also provides information about the efficient use of resources and can pave the way to achieve Sustainable Development Goal. As a result, nowadays feasibility study project is being adopted by the policy makers to a large scale. Sub-Soil Investigation is an integral part of the feasibility study. It provides the idea about the Sub-Soil profile and other parameters to be used for preparing structural design of bridges. So Sub-Soil Investigation is an important part of feasibility study.

2. Objectives of the Assignment.

The main objective of the assignment is to investigate sub-soil profile and parameters for preparing structural design to be prepared by the executing agency by preparing Detailed Sub-soil investigation report. The Investigation should include sub soil sample collection, field and laboratory testing and analysis, and preparing final report. Specific objectives of the present assignment shall be to carry out but not limited to the following tasks.

3. Scope of work.

- 1. Prepare a work plan showing the time schedule for conducting sub-soil investigation and submit the same to the Procuring Entity through the Executive Engineer, LGED, District concerned.
- 2. Mobilize and start sub-soil investigation work with prior written information to the Project Director/ Executive Engineer, LGED / Upazilla Engineer.
- 3. The sub-soil investigation equipment shall be checked by Laboratory Technician of LGED HQ or Executive Engineer's Laboratory Technician as specified by the Project Director, LGED. [Dimension of SPT Spoon, Cutter Drilling Road, Shelby tubes & Auto release hammer etc]. They will also check the Liquid Limit of Bentonite Powder (LL>350) & its mix ratio (4%-6%) with water for preparation of Slurry.
- 4. The borehole layout plan and R.L of Borehole top should be shown with respect to SOB/PWD BM.
- 5. Sub-soil investigation work will have to be conducted by using **Wash Boring** or **Rotary drilling** method. The diameter of exploratory boring should be minimum of 100mm.
- 6. For each bridge 2 Bore holes should be made on the ground surface (abutment location) and 3 Bore holes should be made under water (Pier location) or as specified by the Project Director.
- 7. Take at least 3 (Three) digital Photo graph of each Boring operation in presence of LGED's representatives and the firm's Engineer.
- 8. The boring shall be continued up to the depth as specified in the **Activity Schedule.** If anyone of the six consecutive SPTs within the specified depth (Beyond 30m) is less than 10 and average SPT is less than 20, the boring depth shall be extended until the condition satisfies (SPT≥10 and Average SPT≥20).
- 9. SPT shall be taken @1.5m interval along with collection of disturbed and undisturbed soil sample.
- 10. If clayey soil encountered at any depth during boring, undisturbed soil samples must be collected with the help of shelby tubes.
- 11. Following laboratory test must be carried out:
 - i) One Unconfined compression test for each cohesive soil (C) layer.
 - ii) One Direct shear (Ø) test for each Non-cohesive soil layer.
 - iii) Three Grain size analysis, Natural Moisture Content for each boring.
 - iv) One Liquid Limit, and Plastic Limit test for each clay layer for each boring.

- 12. For each bridge submit draft Soil Test Report (2 copies) with all necessary data, information, bore log, photograph, analysis, comments with result mentioning soil bearing capacity. Bore log shall Contain N-Value, soil type, Water table Level (RL). EGL (SOB/PWD BM) of Borehole top and Date & time of commencement & completion of each borehole shall be mentioned clearly.
- 13. A power point presentation by the firm may be held at LGED HQ for review and comment.
- 14. For each bridge final soil test report (4 copies) including the comments from LGED authority shall be submitted within 10(ten) days after comments on draft report.
- 15. Lowest Ground Water Table (GWT) should be measured at each abutment location and mentioned in the Draft and Final Report
- 16. All the boring operation must be conducted in presence of the representative of Executive Engineer of LGED of the concerned district and all the field records of boring will be signed by the representative of XEN, LGED.

4. List of Reports, Schedule of Deliverables and Period of Performance

All reports and submissions shall be in English and illustrated in a clear and concise professional manner. Each report and other deliverables shall be submitted in specified number of hard copies along with CD containing soft copy of the report in pdf and normal format. All reports require approval of the client. All hard copies of reports shall be presented in the form of bound/spirally bound books.

4.1 Inception Report

The firm shall submit an inception report in **01 (One)** copies to the client within **1 month** of commencement of the survey. The report will include the firm's realistic detailed work methodology and program, staffing schedule for tasks (including methodology) and details of investigations proposed. This will also focus on the record of firm's mobilization, site visit and discussion with the local stakeholders, authority of the LGED office including any suggestion, arrangement of survey and investigation including their methodology, manpower etc. The inception report also includes the necessary arrangement for maintaining the quality assurance of firm's works in every stage of assignments. The comments and suggestion from the presentation shall be incorporated on the inception report prior to finalize and approved by the Client.

4.2 Draft Report

The Sub-Soil Investigation Report shall be prepared incorporating all the requirements of in the TOR and suggestion in the inception report. The firm shall submit Draft Sub-Soil Investigation report in 2 (Two) copies for each bridge separately to the client within the stipulated time of commencement of the Sub-Soil Investigation. The Report shall contain pertinent breakup data of each bridge individually. The following data should be included in the report.

4.3 Final Report

The Final Sub-Soil Investigation Report submitted by the firm will be examined by the Client for approval. The firm shall incorporate comments and suggestions of appropriate authority of the Client and prepare the Final Report. Final Report shall be submitted after receiving comments of the client on the draft.

4.4 Period of Performance

The Duration for the services will be **3(Three) months** from the commencement date. The breakdown of the period shall be as follows:

Report Type	Duration
Inception Report:	Within 1 Month of commencement
Draft Report	Within 02 month of commencement
Final Report	Within 03 months of commencement

e. Digital Topographical Survey

1. Introduction:

Feasibility Study for large bridge construction is a mandatory part of the total planning process. Feasibility can only tell whether the investment of construction of bridges are safe and reliable. It also provides information about the efficient use of resources and can pave the way to achieve Sustainable Development Goal. As a result, nowadays feasibility study project is being adopted by the policy makers to a large scale. Digital topographical survey is an integral part of the feasibility study. It provides the idea about the land area to be used by the bridges, river cross sections, embankment height, land contours, and many other data and information that helps to take decision of preparing structural design of bridges. So Digital Topographical Survey is an important part of feasibility study.

2. Objectives of the Assignment.

The main objective of the assignment is to provide a topographical Map of the area, river Cross-sections at different location of river, approach road alignment survey, land contours etc. and prepare Digital Map of the area.

3. Scope of work.

The detailed survey to be carried out using high precision instrument i.e. Total station, Auto Level, eco sounder, GPS etc.

Survey report shall include following information:

- 3.1 A north direction shall be prominently shown.
- 3.2 All the physical features, such as ponds, permanent structures, drains, hills, wells shall be shown at their exact locations.
- (a) One river/ channel/ khal cross section to be exclusively taken along the center line of the proposed bridge alignment and other sections at distances of 0.5, 1, 2 and 4 times channel widths at upstream and at distances of 0.5, 1 and 2 times channel widths at downstream. Spot levels on river cross section to be taken at 3.0m intervals or as necessary.
 - (b) The length of each cross section should cover the full channel width plus same length of left & right banks.
- 3.4 Road cross sections to be taken along approach road at both ends of the proposed bridge. Four road sections at each end of the bridge @25m interval shall be taken. Spot levels on road cross sections to be preferably taken at 1.0m interval.
- 3.5 Bank line survey of the channel shall be conducted by the following manner:
 - 3.5.1 For less than 100m bridges, bank line survey of both sides shall be carried out minimum 300m towards upstream and downstream of the river course way.
 - 3.5.2 For bridges of the proposed length 100-300m, the bank line survey of both side shall be carried out minimum 500m towards upstream and downstream of the river course way.
 - 3.5.3 For bridges of the proposed length more than 300m, the bank line survey of both sides shall be carried out minimum 1km or as required towards upstream and downstream of the river course way.

- 3.6 All details within the area as instructed by the client to be surveyed which shall show summarized information about road alignment, side slope, bridges, homesteads, government/ non-government offices, Important or historic buildings or structures, tress, electrical installations markets, community center and other public places.
- 3.7 Sufficient spot levels to be taken at the rate of one per 16sqm area i/c river bank, road edges and embankment toes.
- 3.8 HFL to be provided reference to the PWD/SOB Bench Mark (BM).
- 3.9 All RLs to be taken with respect to SOB/PWD Bench mark available near by the bridge site and location of TBM to be clearly shown on the map.
- 3.10 All survey data to be submitted in an appropriate electronic form suitable for inputting in to design software being used by the Engineer.
- 3.11 Survey data shall also be submitted in print format (with seal and signature) with suitable text in a suitable scale as required by the Engineer, showing all the topographical features surveyed, spot levels with x, y, z, such that these can be used to establish Digital Terrain model (DTL).
- 3.12 Three permanent spots near each bridge site shall be marked with Global Co-ordinates (Longitude & Latitude) and Elevation.
- 3.13 For Bridge length more than 100m, the Topographical information provided in major Hydrological and Morphological Study report shall duly be incorporated in the Digital Topo Survey Map.
- 3.14 Digital photographs of daylight condition shall be provided which shall show, Canal/River/khal/approach/access road to the site and other important features around the site.
- 3.15 Co-ordinate (longitude & latitude) of both ends of all cross section of Roads and River/Canal/khal shall be shown on Topographic Survey Map. A satellite photograph (taken from Google earth) shall be provided and these co-ordinates shall also be identified properly on it.
- 3.16 Total job shall be carried out up to the satisfaction of the Design Unit, LGED.
- 3.17 In addition to the above requirements if any other special parameters are needed for a particular project site that shall be invariably incorporated.

4.0 List of Reports, Schedule of Deliverables and Period of Performance

All reports and submissions shall be in English and illustrated in a clear and concise professional manner. Each report and other deliverables shall be submitted in specified number of hard copies along with CD containing soft copy of the report in pdf and normal format. All reports require approval of the client. All hard copies of reports shall be presented in the form of bound/spirally bound books.

4.1 Inception Report

The firm shall submit an inception report in 2 (Two) copies to the client within 1 month of commencement of the investigation. The report will include the firm's realistic detailed work methodology and program, staffing schedule for tasks (including methodology) and details of investigations proposed. This will also focus on the record of firm's mobilization, site visit and discussion with the local stakeholders, authority of the LGED office including any suggestion, arrangement of survey and investigation including their methodology, manpower etc. The inception report also includes the necessary arrangement for maintaining the quality assurance of firm's works in every stage of assignments. The comments and suggestion from the presentation shall be incorporated on the inception report prior to finalize and approved by the Client.

4.2 Draft Survey Report

The Survey Report shall be prepared incorporating all the requirements of in the TOR and suggestion in the inception report. The firm shall submit Draft survey report in 2 (Two) copies for each bridge separately to the client within the stipulated time of commencement of the survey. The Survey report shall contain pertinent breakup data of each bridge individually. The following survey data should be included in the report.

- · Hard copy of Road Pre-work Section
- Hard copy of River/Khal/Channel cross section with R.L.
- Hard copy of Map showing all the features in scope of work.

4.3 Final Survey Report

The Final Survey report submitted by the firm will be examined by the Client for approval. The firm shall incorporate comments and suggestions of appropriate authority of the Client and prepare the Final Survey Report. Final Survey report shall be submitted after receiving comments of the client on the draft. The final survey report shall include the following including all comments and suggestion of the client.

- Hard and Soft copy of Road Pre-work Section.
- Hard and soft copy of River/Khal/Channel cross section with R.L.
- Hard and soft copy of Map showing all the features in scope of work.

4.4 Period of Performance

The Duration for the services will be **2 (Two) months** from the commencement date. The breakdown of the period shall be as follows:

Report Type	Duration
Inception Report:	within 1 month of commencement
Draft Survey Report	Within 1.5 months of commencement
Final Survey Report	Within 02 (Two) months of commencement

5 Qualifications and experiences of Manpower.

5.1 Field Supervisor: She / he should have minimum qualification of Diploma in civil Engineering or Survey from any recognized institution with minimum 10 (Ten) years of general working experience and 05 (Five) years of experience in digital survey for large bridge.

Tasks:

- Take full responsibility for all aspects of survey planning, liaison and reporting;
- Guide and supervise the survey team in carrying out the survey;
- · Coordinate the survey activities;
- Analyze and interpret the survey data. .
- Select best suited approach and options for carrying out the survey.
- Attend meeting as and when required by the designated representative of LGED;
- **5.2 Surveyor:** They should have diploma degree in Civil Engineering / Survey from any recognized institutions with minimum 5 (Five) years of general working experience and 3 (Three) years of experience in digital Survey for large bridge.

Tasks:

- Take full responsibility for all aspects of survey activities and data collection;
- · Coordinate the survey activities;
- Analyze and interpret the survey data. .

5.3 Data Analyst: They should have HSC passed from any recognized institution with minimum 5 (Five) years of general working experience and 3 (Three) years of experience in digital survey work for large bridge.

Tasks:

- Analyze and interpret the survey data and draw map with AutoCAD or any other software..
- **5.4 Survey Assistant:** They should have minimum HSC passed from any recognized institution with minimum 5 (Five) years of general working experience and 3 (Three) years of experience in survey work for bridge.

Tasks:

Will be responsible for assisting data collection of surveyor.

6. Services and Facilities provided by the Client

The survey team shall work under the direct supervision / guidance of the Project Director during field survey and data collection work, Executive Engineer, LGED of the district concerned and the Upazila Engineer of the upazilla concerned will facilitate the survey team.

The Survey team shall have regular meetings with the LGED professional staff to discuss technical and survey management issues. LGED shall provide or make available the relevant data, services and facilities to survey team, if available, on payment of usual cost.

f. Estimator, AutoCAD Operator, and Consultant's estimate etc.

SI No	Item	Number	Average Monthly Salary (Tk.)	Educational Qualification	Experience (Years)	Man- Month	Method
1	Structural Engineer (Senior Consultant)	1	2,95,000 (Two lac ninety five thousand) only	Master/ Bachelor degree in civil Engineering	Min. 15 years or as per competence	24	QCBS or any other appropriate method in PPR-2008
2	Structural Engineer (Consultant)	1	2,00,000 (Two lac)) only	Master/ Bachelor degree in civil Engineering	Min. 10 years or as per competence	18	QCBS or any other appropriate method in PPR-2008
3	Structural Engineer (Junior Consultant)	1	1,00,000 (One lac) only	Master/ Bachelor degree in civil Engineering	Min. 5 years or as per competence	24	QCBS or any other appropriate method in PPR-2008
4	Estimator	3	65,000 (Sixty five thousand) each	Diploma or BSc. In Civil Engineering	Min. 05 years or as per competence	72	Do
5	AutoCAD operator	6	75,000 (Seventy Five thousand) each	Diploma in Civil Engineering Or Architect with AutoCAD degree.	Min.05 years or as per competence	144	Do
6	Socio-Economist	1	1,00,000 (One lac)	Minimum Bachelor Degree in Social science, Economics, or Development Studies	Minimum Bachelor Degree in ocial science, conomics, or Development Min.05 years or as per competence		Do
7	Environmental Specialist	1	1,50,000 (One lac fifty thousand)	Minimum Bachelor Degree in Environmental Ecience.	Min.05 years or as per competence	18	Do

g. Detail of Software used in LGED.

The Software used in Design Unit are STAAD pro, L pile, Gear, AutoCAD, and SAP.

STAAD pro: The Software is used for building design.

Lpile: The software is used only for pile design.

Gear : The software is used for design of different components of a bridge. So the software

has some limitations and bridge design is not efficient with this software.

AutoCAD: Only drafting of drawing is done with this software.

SAP: 3D analysis of a bridge is conducted with this software but not so efficient in design.

The software mentioned above have some limitations in production of output. So the above software cannot perform in design calculation efficiently. As a result, very much volume of Structural Design is not possible to deliver within short period of time. The following new software will mitigate the above inefficiency in structural design.

New Proposed Software:

MIDAS civil

: It is the software that can efficiently design the structure of any bridge. It is a very modern software that is being used in bridge design in large bridge structural design almost everywhere. For this reason, to support a big volume of bridge design in the proposed project, this software is proposed to procure.

Due to lack of software structural design of bridges take much time to deliver drawings. As the responsibility of Structural Design of all the bridges in the proposed feasibility project lies on Design Unit of LGED. So the software **MIDAS civil** will facilitate Design Unit to prepare and deliver the structural Design of proposed bridges within the specified time.

h. Study Tour plan

A study tour for acquiring knowledge on advanced Bridge Structure Design particularly about Suspension Bridge, Cable Stayed Bridge, Extra Dosed Bridge, PC Box Girder Bridge for long span and advanced construction technology for the fulfilment of navigational requirement such as easy movement of ships, cargos, and water vessels under the bridges palnned to study under Feasibility Study Project for Important Bridge Construction on Rural Roads (পল্লী সড়কে গুরুত্পূর্ণ সেতু নির্মাণের সমীক্ষা প্রকল্প). The number of study tours in the following countries will be arranged for the participants representing project related government officials of the organizations concerned. The detailed information on those study tours are provided in the following table:

Name of Countries	Number of Batches	Duration (Days)	Name of Organization	Number of Participants	Remarks
			Planning Commision (Sector	1	Place of
			Division)		Training &
China &			Implementation, Monitoring &	1	Institutes will be
Japan or			Evaluation Division (IMED)	'	finalized
any other	1	12	Programming Division	1	later on
countries			Local Government Division	2	
			Local Government Engineering	_	
			Department (LGED)	/	
Total	1	L		12	I. I

Note: The number of batch, duration and number of participants will be fibalized based on course available, and decision of the HOPE.

Terms of Reference for Individual Consulatnt

A. Structural Engineer (Senior Consultant, Consultant and Junior Consultant)

1.1 Background of the project;

The structural Design is the Engineering Design of Bridge Structure. Bridge Structure includes design of pile, pile cap, pier, deck slab with girder and protection work etc. The project includes the bridges having more than 100m in length. The responsibility of Structural Design of preparing 215 bridges with the assistance of Design Unit of LGED. It is a big job. It is not almost possible for the Structural Engineers who are working in Design Unit within the project period; 3 years. Because Design Unit provides supports to the preparation of structural design of all the running projects and vetting under LGED. Design Unit also provides to the preparation of Structural Design for Zilla Parishad, Pourashava, City Corporation and some departments under other ministries. So it is difficult to complete the Structural Design of 215 no of bridges within tree years. In this context, it will be possible if additional manpower support is provided to the Design Unit. For this reason three Structural Engineers at different skills have been proposed in the revised project.

1.2 Objectives of the assignment:

The objective of the appointment of Structural Engineers is to provide support to the Design Unit of LGED.

1.3 Scope of Services;

- 3.1.1 Prepare Structural Design and Drawings of Bridges as specified by the PD and in guidance by Design Unit.
- 3.1.2 Review the Structural Design, Drawings and design standards of LGED.
- 3.1.3 Consult with LGED officials, other stakeholders as identified by LGED and incorporate their suggestions in to the Structural Design and Drawings. While doing so the consultant should consider the alternate options so that the requirements as well as cost could be optimized.
- 3.1.4 Provide data, drawing as well as necessary support to others (Architect/ consultant/ LGED Engineer) so that they could get all relevant information from them.
- 3.1.5 The consultant will carry out his assignments timely and provide sound and diligent services. Any monetary loss incurred owing to their sub-standard services will be compensated through penalizing as per conditions of the contract.
- 3.1.6 Prepare specifications and rates for the items, which is not available in current LGED's rate schedule specifications and assist LGED in preparing Tender Documents.
- 3.1.7 He / She will visit site if necessary before finalization Structural Design of bridges.
- 3.1.8 He / She will also guide the consultants appointed under the project and ensure to complete their daily assignments (Design of 3-4 number of bridges per month).

1.4 Work plan with dates for completion of various tasks

- ✓ He / She will be responsible for carrying out structural Design of the number of bridges so that
 the structural design of all the 215 bridges are completed within the contract period of 24
 months. For this purpose he /she will need to complete Structural Design of at least 07
 bridges per month.
- ✓ He / She will travel and visit different sites of bridges before finalization of the designs if necessary.

1.5 Place of performance of different tasks

- His / her duty station will be at the Design Unit or any other place in LGED HQ as specified by PD.
- He /She will ensure his attendance and work at the official days along with in the holidays if necessaries.

1.6 Transfer of Knowledge (training) (when appropriate);

• The consultant will stay at Design Unit during Office hours and will attend any training program related to Structural Design to share knowledge with LGED officials.

1.7 List of reports, Schedule of deliveries, period of performance;

- The consultant will be responsible to complete Structural Design of Bridges as specified by Design Unit and will be responsible to deliver AutoCAD drawing within the specified time as assigned by the Design Unit.
- The consultant will be appointed for two years.
- The consultant will work as like as full time staff of LGED.

1.8 Data, personnel, facilities and local services to be provided by the Client, and

Design Unit of LGED will arrange furniture, computer, printer, AutoCAD operator, pen and Paper.

1.9 Institutional arrangements

A. AutoCAD Operator.

1.1 Background of the project;

The AutoCAD Operator is the person who finally provides the Structural Design output by preparing and printing drawing Bridge Structure prepared by Structural Engineer. It includes drawing of pile, pile cap, pier, deck slab with girder and protection work, site plan, Lay-out plan etc. The project includes 215 no of bridges having more than 100m in length. The responsibility of preparing Drawing of those 215 bridges lies on the Design Unit of LGED. It is a big job. It is not almost possible for the AutoCAD Operators who are working in Design Unit within the project period; three years. Because Design Unit provides supports to the preparation of structural design of all the running projects and vetting under LGED. Design Unit also provides to the preparation of Structural Design for Zilla Parishad, Pourashava, City Corporation and some departments under other ministries. So it is difficult to complete the Structural Drawing of 215 no of bridges within two years. In this context, it will be possible if additional manpower support is provided to the Design Unit. For this reason Six AutoCAD Operators have been proposed in the project.

1.2 Objectives of the assignment;

The objective of the appointment of AutoCAD Operators is to provide support to the Design Unit of LGED in preparing drawing of 215 no of bridges.

1.3 Scope of Services;

The Scope of work will be but not limited to the following activities.

- Prepare AutoCAD drawing in guidance of Design Unit.
- The AutoCAD operators will stay at Design Unit during Office hours.
- Share knowledge with the Design Unit.
- Responsible to complete Structural drawings within the time specified by the Design Unit.
- Will work under the disposal of Superintending Engineer, Design Unit.
- Will be responsible for attending meeting at anywhere of the country as specified by Design Unit.
- Will be responsible for correct drawing of all components of bridges.
- Any other instructions as specified by the Design Unit or any other LGED high officials.

1.4 List of reports, Schedule of deliveries, period of performance;

- The AutoCAD Operator will be responsible to complete Structural Drawing of Bridges as specified by Design Unit and will be responsible to deliver AutoCAD drawing within the specified time as assigned by the Design Unit.
- They will be appointed for two years.
- They will as like as full time staff of LGED.

1.5 Data, personnel, facilities and local services to be provided by the Client, and

Design Unit of LGED will arrange furniture, computer, printer, AutoCAD operator, pen and Paper.

1.6 Institutional arrangements

C.Estimator.

1.7 Background of the project;

The Estimator is the person who finally provides the Cost estimate of the bridges according to the Structural Design. It includes cost estimates of pile, pile cap, pier, deck slab with girder and protection work, earth work, etc. The project includes 215 no of bridges having more than 100m in length. The responsibility of preparing estimate of those 215 bridges lies on the Design Unit of LGED. It is a big job. It is not almost possible for the Estimators who are working in Design Unit within the project period; three years. Because Design Unit provides supports to the preparation or checking of cost estimate of all the running projects and under LGED. Design Unit also provides to the preparation or checking of cost estimate of Structural Design for Zilla Parishad, Pourashava, City Corporation and some departments under other ministries. So it is difficult to complete the cost estimate of 215 no of bridges within two years. In this context, it will be possible if additional manpower support is provided to the Design Unit. For this reason three estimators have been proposed in the project.

1.8 Objectives of the assignment;

The objective of the appointment of estimator is to provide support to the Design Unit of LGED in preparing cost estimate of 215 no of bridges.

1.9 Scope of Services;

The Scope of work will be but not limited to the following activities.

- Prepare cost estimate of mbridges under the project in guidance of Design Unit.
- The estimators will stay at Design Unit during Office hours.
- Share knowledge with the Design Unit.
- Responsible to complete estimates of bridges within the time specified by the Design Unit.
- Will work under the disposal of Superintending Engineer, Design Unit.
- Will be responsible for attending meeting at anywhere of the country as specified by Design Unit.
- Will be responsible for correct cost estimate of all components of bridges.
- Any other instructions as specified by the Design Unit or any other LGED high officials.

1.10 List of reports, Schedule of deliveries, period of performance;

- The estimators will be responsible to complete cost estimate of Bridges as specified by Design Unit and will be responsible to deliver cost estimate within the specified time as assigned by the Design Unit.
- They will be appointed for two years.
- They will as like as full time staff of LGED.

1.11 Data, personnel, facilities and local services to be provided by the Client, and

Design Unit of LGED will arrange furniture, computer, printer, AutoCAD operator, pen and Paper.

1.12 Institutional arrangements

D.Socio-Economist.

1.13 Background of the project;

The Socio-Economist is the person who finally provides the service for overall monitoring of Economic feasibility Study finidngs of the bridges according to the ToR. It includes site visit. The project includes about more than 215 no of bridges having more than 100m in length. The responsibility of the socio-economist will be as below. It is a big job. It is not almost possible for the Project Director and his support staffs to handle all the isuues of the study. The period of appoint of him will be minimum for 18 months. So it is difficult to verify the all the reports submitted by the consultant of the bridges within project period. In this context, it will be possible if additional manpower like a socio-economist is provided to the Project Director. For this reason one Socio-Economist has been proposed in the project.

1.14 Objectives of the assignment;

The objective of the appointment of Socio-Economist is to provide support to the Project Director in monitoring Consulant's activities and verifying the Economic feasibility Study Reports of the bridges under the Project.

1.15 Scope of Services;

The Scope of work will be but not limited to the following activities.

- Prepare all Economic feasibility Study related planning in guidance of PD.
- The Socio-Economist will stay at PD office during Office hours.
- Share knowledge with the PD and Consulatnt.
- Responsible to take all initiatives to complete the studies of all the bridges within the time specified.
- Will work under the disposal of PD.
- Will be responsible for attending meeting at anywhere of the country as specified by PD.
- Will be responsible for correction of all Draft Reports of bridges under the project submitted by the consulatnt.
- Any other instructions as specified by the PD.

1.16 List of reports, Schedule of deliveries, period of performance;

- The Socio-Economist will be responsible to complete the verification Economic Feasibility Study reports of Bridges as specified and will be responsible to deliver his/her service within the specified time as assigned by the Project Director.
- He/ She will be appointed for minimum 18 months.
- He/she will work as like as full time staff of LGED.

1.17 Data, personnel, facilities and local services to be provided by the Client.

PD will provide all seating arrangements, computers, printer, pen and Paper.

1.18 Institutional arrangements

E. Environmental Specialist.

1.19 Background of the project;

The Environmentalist is the person who finally provides the service for overall monitoring of Environemnatl Impact Assessment finidngs of the bridges according to the ToR. It includes site visit, The project includes about more than 215 no of bridges having more than 100m in length. The responsibility of the Environemtalist will be as below. It is a big job. It is not almost possible for the Project Director and his support staffs to handle all the isuues of the study. The period of appoint of him will be minimum for 18 months. So it is difficult to verify the all the reports submitted by the consultant of the bridges within project period. In this context, it will be possible if additional manpower like a Environemtalist is provided to the Project Director. For this reason one Environmentalist has been proposed in the project.

1.20 Objectives of the assignment:

The objective of the appointment of Environmentalist is to provide support to the Project Director in monitoring Consulant's activities and verifying the Environemtal Impact Assessment Study Reports of the bridges under the Project.

1.21 Scope of Services;

The Scope of work will be but not limited to the following activities.

- Prepare all Environemtal Impact Assessement Study related planning in guidance of PD.
- The Environmetalist will stay at PD office during Office hours.
- Share knowledge with the PD and Consulatnt.
- Responsible to take all initiatives to complete the studies of all the bridges within the time specified.
- Will work under the disposal of PD.
- Will be responsible for attending meeting at anywhere of the country as specified by PD.
- Will be responsible for correction of all Draft Reports of bridges under the project submitted by the consulatnt.
- Any other instructions as specified by the PD.

1.22 List of reports, Schedule of deliveries, period of performance;

- The Environmentalist will be responsible to complete the verification Environmental Impact
 Assessment Study reports of Bridges as specified and will be responsible to deliver his/her
 service within the specified time as assigned by the Project Director.
- He/ She will be appointed for minimum 18 months.
- · He/she will work as like as full time staff of LGED.

1.23 Data, personnel, facilities and local services to be provided by the Client.

PD will provide all seating arrangements, computers, printer, pen and Paper.

1.24 Institutional arrangements

বছর ভিত্তিক ব্যয় বিভাজন

(লক্ষ টাকায়)

অর্থবছর	জিওবি	সংস্থার নিজস্ব অর্থ	অন্যান্য	মোট (বৈদেশিক
	(বৈদেশিক মুদ্রা)	(বৈদেশিক মুদ্রা)		মুদ্রা)
۵	W	6	8	Œ
২০১৭-২০১৮	800.00 (0.00)	0.00	0.00	800.00 (0.00)
২০১৮-২০১৯	২০০০.০০ (০.০০)	0.00	0.00	২০০০.০০ (০.০০)
২০১৯-২০২০	\$000.00 (0.00)	0.00	0.00	\$000.00 (0.00)
২০২০-২০২১	১২৭৬.০০ (০.০০)	0.00	0.00	১২৭৬.০০ (০.০০)
মোট	৪৬৭৬.০০ (০.০০)	0.00	0.00	৪৬৭৬.০০ (০.০০)

প্রকল্প ব্যয়ের সার-সংক্ষেপ (লক্ষ টাকায়):

অর্থনৈতিকি		একক	পরিমাণ	মোট খরচ*	জিওবি	নিজস্ব অর্থায়ন	অন্যান্য	প্রকল্পের
কোড	ইকনোমিক সাব-কোড অনুযায়ী অঞ্চোর (items) বিবরণ			=(٩+৮+৯)	(বৈদেশিক মুদ্রা)	(বৈদেশিক মুদ্রা)		মোট ব্যয়ের শতাংশ (%)
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(ক) রাজস্বঃ	-	<u> </u>	I.					
৩২৪৩১০১	পেট্রোল ও লুব্রিক্যান্ট	থোক	থোক	\$৮.००	\$ b.00	-	_	০.৩৮
৩২৪৩১০২	গ্যাস এবং জ্বালানী	থোক	থোক	\$0.00	\$0.00	-	_	০.২১
৩২৫৫১০৪	স্টেশনারী, সীল, স্ট্যাম্প	থোক	থোক	\$6.00	\$6.00	-	-	০.৩২
৩২৫৫১০৫	অন্যান্য মনিহারি	থোক	থোক	¢.00	¢.00	-	-	0.50
৩২১১১২৫	বিজ্ঞাপন এবং নোটিফিকেশন	থোক	থোক	\$9.00	\$9.00	-	-	০.৩৬
৩২১১১৩০	যাতায়াত ব্যয়	থোক	থোক	5.00	5.00	-	-	0.0২
৩২৩১৩০১	বৈদেশীক প্রশিক্ষন / স্টাডী টুর	থোক	থোক	\$\$6.00	556.00	-	-	২.৪৬
৩২৫৭১০১	পরামর্শক	<u> </u>		•	l .	•		
	স্ট্রাকচারাল ইঞ্জিনিয়ার	জনমাস	8৮	४०.००	४०.००	-	-	১.৭১
	অটোক্যাভ অপারেটর	জনমাস	\$88	98.00	98.00	-	-	১.৫৮
	এস্টিমেটর	জনমাস	৭২	৩৮.০০	৩৮.০০	-	-	0.53
	সোসিও-ইকনমিষ্ট	জনমাস	১৮	Sb.00	\$ b.00	-	-	০.৩৮
	ইনভাইরনমেন্টাল স্পেশালিষ্ট	জনমাস	১৮	২০.০০	২০.০০	-	-	0.80
	ইকনমিক ফিজিবিলিটি স্টাডি	সংখ্যা	২১৫	৮৬০.০০	৮৬০.০০	-	-	১৮.৩৯
	হাইড্রো-মরফোলজী স্টাডি	সংখ্যা	২১৫	\$606.00	১৫০৫	-	-	৩২.১৯
	ইনভাইরনমেন্টাল ইমপ্যাক্ট এ্যাসেসমেন্ট (ইআইএ)	সংখ্যা	২১৫	৮৬০.০০	৮৬০.০০	-	-	১৮.৩৯
৩২৫৭১০৪	সার্ভে (মাটি পরীক্ষা ও টপো সার্ভে ইত্যাদি)	সংখ্যা	২১৫	৯১৫.০০	৯১৫.০০	-	-	১৯.৫৭
৩১১১৩৩২	সম্মানী ভাতা/ ফী/ পারিশ্রমিক	থোক	থোক	১৩.০০	১৩.০০	-	-	০.২৮
৩২২১১০৭	প্রিন্টিং এবং রিপ্রোডাকশন	থোক	থোক	8.00	8.00	-	-	0.50
৩২২১১১৬	নকশা/অবকাঠামো অনুমোদন ফি (পরিবেশ ও বিআইডাব্লিউ ছাড় পত্র)	সংখ্যা	২১৫	২৫.০০	২৫.০০	-	-	0.89
৩২৫৮১০১	মোটর যানবাহন মেরামত (খুচরা যন্ত্রাংশ সরবরাহ সহ)	থোক	থোক	২০.০০	২০.০০	-	-	০.৪৩
উপ-মোট রাজং	त्र ⁸	-	-	৪৬১৩.০০	৪৬১৩.০০	-	-	৯৮.৬৫
(খ) মূলধনঃ		<u> </u>	ı	•		•		
8220002	কম্পিউটার সক্টওয়ার	সংখ্যা	۵	೨೦.೦೦	೨೦.೦೦	-	-	0.68
8555505	কম্পিউটার ও আনুষঞ্জিক (হেভি ডিউটি ফটোকপিয়ার ও প্রিন্টার সহ)	সংখ্যা	১৫	২৩.০০	২৩.০০	-	-	০.৪৯
8555078	আসবাবপত্র সরবারাহ	থোক	থোক	\$0.00	\$0.00	-	-	০.২১
উপ-মোট মূলধ	न		-	৬৩.০০	৬৩.০০	-		১.৩৫
মোট টাকা (রাজ			-	8৬৭৬.০০	8৬৭৬.০০	-	-	

Bridges to be studied

SI No	District/ Upazila	Name of Bridge	Tentative Length (m)
1	Dhaka/ Savar	Construction of Bridge over the river Singasar Katakhal at Chainage 760m on Amin bazar UP-Morichartek bazar Road under Upazilla: Savar District: Dhaka [Road ID.326723012]	100
2	Dhaka/ Savar	Construction of Bridge over the river Turag at Chainage 3425m on Ashulia UP Office-Rustumpur bazar Road under Upazilla: Savar District: Dhaka [Road ID.326723004]	200
3	Dhaka/ Savar	Construction of Bridge over the river Bangshai at Chainage 10 m on Dhamsona - Gopalbari - Unail Road under Upazilla: Savar District: Dhaka [Road ID.326724341]	100
4	Dhaka / Nawabganj	Construction of Bridge over the river Kaliganga at Chainage 4000m on Shalla UP Office – Dattakhanda –Balukhandu bazar road via Patiljab Bazar under upazilla: Nawabganj. District: Dhaka [Road ID. 326623013]	250
5	Dhaka / Nawabganj	Construction of Bridge over the river Isamoti at Chainage 4125m on Agla U.P Office - Shailka Launch Ghat - Kailail U.P Office road under upazilla: Nawabganj. District: Dhaka. [Road ID. 326623031]	120
6	Dhaka / Nawabganj	Construction of Bridge over the river Kaliganga at Chainage 9900m on Nawabgonj-Charigram GC (Singair) via Chondrakhola , Balukhondo Road.under upazilla: Nawabganj. District: Dhaka. [Road ID. 326622009]	280
7	Dhaka / Nawabganj	Construction of Bridge over the river Kaliganga at Chainage 2100m on Sholla UP Office at Shingzor Bazar-Konda Bazar via Modonmohonpur road under upazilla: Nawabganj. District: Dhaka. [Road ID. 326623012]	250
8	Gazipur / Sreepur	Construction of Bridge over the river Shitalakkha at chainage 8040m on Sreepur-Barmi Bazar road under Upazilla: Sreepur District: Gazipur [Road ID: 333862001]	350
9	Gazipur / Kapasia	The Construction of Bridge over the river Lakkhya at Chainage 10800m on Kapasia GC (Risibari More)-Gee Ghat RHD Lakhpur Rd. via Equria Bazar Road under Upazilla: Kapasia, District: Gazipur [Road ID. 333362014]	350
10	Gazipur / Kapasia	The Construction of Bridge over the river Shitalakhya (Banar river) at Chainage 10650m on Giashpur GC to Gosinga GC Road under Upazilla: Kapasia, District: Gazipur [Road ID. 333362019]	300
11	Narayangonj / Araihazar	Construction of Bridge over the river Brahmaputra at chinage 820m on Uchitpur GC-Jangalia-Shantir Bazar-Barodi GC Road under Upazilla: Araihazar District: Narayanganj [Road ID: 367022010]	110
12	Munshiganj/ Sirajdikhan	Construction of Bridge over the branch of Dhaleswari river at chainage 6300m on Shaperchar GC (Balurchar UP)- Taltala GC via Kumarkhali road under Upazilla: Shirajdikhan, District: Munshiganj [Road ID. 359742014]	200
13	Munshiganj / Sadar	Construction of Bridge over the river Rajatrekha at chainage 10400m on Munshirhat RHD-Chitulia GC via Bagerhat Road road under Upazilla:Sadar District : Munshiganj [Road ID. 359562013]	300
14	Manikganj /Singair	Construction of Bridge over the river Dhaleswari at chainage 20m on Benga market West Vacum (Near The house Easa Molla) to East Vacum Durgapur road under Upazilla: Singair District: Manikganj [Road ID: 356824119]	120

SI	District/	Name of Bridge	Tentative Length
No	Upazila	· ·	(m)
15	Manikganj /Singair	Construction of Bridge over the river Dhaleswari at chainage 0m on Kasherchar Bazar to Suapur Bazar Via Lunguli Bazar road under Upazilla: Singair District: Manikganj [Road ID: 356824118]	100
16	Manikganj /Sadar	Construction of Bridge over the river Dhaleshawri at chinage 4815m on Krishnapur UP-Hazinagar Basudebpur via Garakul Bazar road under Upazilla: Sadar District: Manilkganj [Road ID: 356463018]	175
17	Manikganj /Ghior	Construction of Bridge over the river Kaligangga branch at chainage 4100m on PBS-Bila Nalai-Singjuri UP via Baykanthapur, Baliabdha Road (Alhaj Kazi Golam Hossain Road) road under Upazilla: Ghior District: Manikganj [Road ID: 356223008]	150
18	Narshingdi / Raipura	Construction of Bridge over the Branch of the river Meghna at Chainage 4510m on Chandpur UP Office to Baluakandi via Sadagorkandi Bazar under upazilla: Raipura District: Narshingdi [Road ID. 368643011]	180
19	Narshingdi / Raipura	Construction of Bridge over the river Arialkha at chainage 20m on Radhagonj G.CLattabo Bazar (Nayachar) Road under upazilla: Raipura District: Narshingdi [Road ID. 368643008]	126
20	Narshingdi / Raipura	Construction of Bridge over the river Meghna at chainage 1100m on Sreerampur GC-Basgari GC road under Raipura Upazilla: Raipura, District: Narshingdi. [Road ID.368642002]	850
21	Narshingdi / Monohordi	Construction of Bridge over the river Arial kha at chainage 700m on Montala Bazzar - Bairagir Char road under upazilla: Monohordi District: Narshingdi [Road ID: 368524105]	160
22	Narshingdi / Monohordi	Construction of Bridge over the river Brahmaputra at chainage 850m on Chader Bazar at Charmandaria union to Mothkhola Katiadi GC via Betal bazar road under upazilla: Monohordi District: Narshingdi [Road ID: 368525324]	120
23	Comilla/ Adarsha Sadar	Construction of Bridge over the river Gumti at chainage 13860m on Kalaker Par (RHD)-Janata Bazar-Shiber Bazar-Golabari Bazar-Gumti river ghat via Bibir Bazar road under Upazilla: Adarsha Sadar, District: Comilla. Road ID: 419672005]	225
24	Comilla/ Daudkani	Construction of Bridge over the river Gumti at chinage 1100m on Daudkandi Tolplaza-Daudkandi Uttar UP office Via Chengakandi Golaperchar Road under Upazilla: Daudkandi District: Comilla [Road ID: 419663021]	250
25	Comilla/ Muradnagar	Construction of Bridge over the river Gumti at chinage 0m on Susunda Bazar-Darora Bazar Rd. via Payab road under Upazilla: Muradnagar District: Comilla [Road ID: 419813031]	150
26	Noakhali / Companiganj	Construction of Bridge over the river Feni at chainage 7150m on Bashur hat-Moulovi Bazar Road towards Boktar munshi GCC road under Upazilla: Companiganj, District: Noakhali. [Road ID.475212004]	200
27	Noakhali / Companiganj	Construction of Bridge over the river Feni at chainage 4400m on Bashurhat-Abu Majir hat road under Upazilla: Companiganj, District: Noakhali. [Road ID.475213005]	100
28	B-Baria / Bancharampur	Construction of Bridge over the river Titas at chainage 4715m on Bancharampur H/Q – West Saifullahakandi UP road via Asadnagar and Kalainagar under Upazilla: Bancharampur, District: B-baria. [Road ID: 412042006]	235
29	B-Baria / Bancharampur	Construction of Bridge over the river Dashani at chainage 12420m on Morichakandi GC –Dashani R&H via Kanainagar, Charmorichakandi, Ichapur & Shibpur road under Upazilla: Bancharampur, District: B-baria.[Road ID.412042004]	180

SI	District/	Name of Bridge	Tentative Length
No	Upazila	3	(m)
30	Laxmipur/ Sadar	Construction of Bridge over the river Rahamat Khali at chinage 2000 m on Tumchar-Syed Road 21 No. UP (Tumchar Jonotabazar - Jallaijer Khaya - Kalichar Madrasha - Char Matin Road under Upazilla: Sadar District: Laxmipur [Road ID:451434113]	250
31	Comilla / Adarsha Sadar	Construction of Bridge over the river Gumti at chainage 21540m on Comilla (High School) RHD - Nayanpur GC Road via Fakir Bazar, Shashidal rail Station road under Upazilla: Adarsha Sadar, District: Comilla. Road ID: 419672002]	225
32	Feni / Sonagazi	Construction of Bridge over the river Feni on Mirsharai EPZ and Feni EPZ connecting road under Upazilla: Shonagazi, District: Feni [Road ID:430944078 or 430943003]	450
33	Chandpur / Haziganj	Construction of Bridge over the river Dakatia at chinage 1700m on Ramchandarpur-Pratabpur Ferryghat Road under Upazilla: Haziganj District: Chandpur [Road ID:413494005]	130
34	Netrokona / Khaliajhuri	Construction of Bridge over the river Surma at chinage 10m on Krishbapur-Prashadpur via Amanipur Road road under Upazilla: Khaliajuri District: Netrokona [Road ID:372384010]	120
35	Chandpur / Matlab (Uttar)	Construction of Bridge over the river Meghna-Dhanagoda at chinage 18900m on RHD at Shaheb bazar-Beltoli GC road road under Upazilla: Matlab (uttar) District: Chandpur [Road ID:413762002]	1490
36	Faridpur / Sadar	Construction of Bridge over the river Kumar at Chainage 0m on Touba Madrasha to Porchim Alipur via Shoarampur UZR road under Upazilla: Sadar, District: Faridpur [Road ID 329475228]	120
37	Faridpur / Sadar	Construction of Bridge over Kumar river at chainage 50m on Adal Matubbor Dangi Mosque UNR to Arambag GPS road under upazilla: Sadar District: Faridpur [Road ID: 329475082]	100
38	Faridpur / Sadar	Construction of Bridge over Mara Padma river at chainage 1680m on Goalartila Bridge UZR to Mora Padma river road under upazilla: Sadar District: Faridpur [Road ID: 329475282]	160
39	Faridpur / Sadar	Construction of Bridge over Mara Padma river at chainage 2150m on Mominkhar Hat to Akbor Mir Malot dungi Four Star KG School UNR road under upazilla: Sadar District: Faridpur [Road ID: 3294754072]	120
40	Faridpur / Bhanga	Construction of Bridge over the Kumar river at chainage 200m on Hoglakandi-katurakandi road under upazilla: Bhanga District: Faridpur [Road ID: 329105009]	100
41	Faridpur / Nagarkanda	Construction of Bridge over the Kumar river at chainage 4043m on Solitha UZR-Rangpasha via Hiaboldi bazar road under upazilla: Nagarkanda District: Faridpur [Road ID: 329624043]	105
42	Faridpur / Sadarpur	Construction of Bridge over the Arialkha river at chainage 1100m on Baliahati GC-Char Nasirour UP Office-Arialkha Ferry Ghat Bazar via Char Manair UP Office road under upazilla: Sadarpur District: Faridpur [Road ID: 329843005]	450
43	Faridpur / Sadar	Construction of Bridge over the river Kumar at Chainage 100m on Purba Khabashpur Khea ghat to Porchim Khabashpur road under Upazilla: Sadar, District: Faridpur [Road ID 329475299]	120
44	Faridpur / Sadar	Construction of Bridge over the river Kumar at Chainage 400m on Ambikapur Shashan ghat to Uttor Bilmamudpur GPS road under Upazilla: Sadar, District: Faridpur [Road ID 329475306]	160
45	Faridpur / Sadar	Construction of Bridge over Mara Padma river at chainage 2700m on Mominkhar Hat bridge to North Cheenal H/O Arshad Bapari UNR (Nuru Mia) road under upazilla: Sadar District: Faridpur [Road ID: 3294754095]	150
46	Faridpur / Bhanga	Construction of Bridge over the river Kumar at Chainage 230m on Dhaka-Khulna Highway to Chandidashi Govt. College K.M College via Kuthibari road under upazilla: Bhanga District: Faridpur [Road	120

		ID: 329103020]	
SI No	District/ Upazila	Name of Bridge	Tentative Length (m)
47	Tangail / Kalihati	Construction of Bridge over the river Dhaleshari at chinage 800m on Jamuna Bridge-Torabgonj G.C. road under Upazilla: Kalihati, District: Tangail [Road ID: 393472014]	200
48	Rajbari / Goalundo	Construction of Bridge over the river Mora Padma at Chainage 33m on Daulotdia Ferry Ghat at NHW-Kushahata G.C road under Upazilla: Goalundo, District: Rajbari [Road ID 382292006]	110
49	Rajbari / Khalukhali	Construction of Bridge over the river Mara Padma at Chainage 2000m on Arungonj GC-Gonganandapur Hiru mollah ghat RHD road under Upazilla: Kalukhali, District: Rajbari [Road ID 382772020]	115
50	Madaripupur / Sadar	Construction of Bridge over the river Arialkha at Chainage 2500m on Sreenadi GC to Shirkhara UP(Puran Rajarhat) Via Ghunshi road under Upazilla: Sadar, District: Madaripur [Road ID 354543021]	300
51	Madaripupur / Sadar	Construction of Bridge over the river Kumar at Chainage 1100m on Hazrapur-Dudkhali Boar road under Upazilla: Sadar, District: Madaripur [Road ID 354545041]	300
52	Barisal / Agailjhara	Construction of Bridge over the river Paisarhat at Chainage 700m on Paisarhat GC to Shalta GC via Bagdha GC road under Agailjhara Upazilla District: Barisal [Road ID. 506022003]	336
53	Barisal / Uzirpur	Construction of Bridge over the river Kotcha at Chainage 0m on Otra UP (Habibpur)-Kuralia bazar via Munshirtulek Road under Upazilla: Uzirpur District: Barisal [Road ID. 506943003]	280
54	Barisal / Uzirpur	Construction of Bridge over the river Kotcha at Chainage 0m on Satla-Choumohani (Bisharkandi upto Banaripara upazila) Road under Upazilla: Uzirpur District: Barisal [Road ID. 506942007]	175
55	Barisal / Mehendiganj	Construction of Bridge over the river Lata at Chainage 3700m on Mokbulerhat-Purbo Kadirabad GPS road under Upazilla: Mehendiganj, District: Barisal [Road ID. 506625052]	170
56	Barisal / Babuganj	Construction of Bridge over the river Amtali at Chainage 5840m on Narinda-Baherchar-Faridganj Road under Upazilla: Babuganj, District: Barisal [Road ID. 506032007]	700
57	Barisal / Bakerganj	Construction of Bridge over the river Karkhana at Chainage 13730m on Bakergonj-Gobindopur Hat. [From RHD Bakerganj-Gobindopur via Rabipur, Shialguni, Kakorda, Vathshala Kalisuri Road under Upazilla: Bakerganj, District: Barisal [Road ID. 506072002]	1000
58	Barisal / Bakerganj	Construction of Bridge over the river Rangamatia at Chainage 3600m on Talukdar hat (RHD) to Kamarkhali GC via Katadia Khea ghat and Darial Mia High school Road under Upazilla: Bakerganj, District: Barisal [Road ID. 506072005]	300
59	Barisal / Bakerganj	Construction of Bridge over the river Khairabad at Chainage 5800m on Bakergonj H/Q (Aowliapur Kheya ghat) to Halta GC via Garuria UP Office road Under Upazila Bakergonj, District:Barisal [Road ID.506072007]	320
60	Barisal / Banaripara	Construction of Bridge over the river Jhanjhania at Chainage 0 m on North Bisarkandi border to Chowmohoni via Azizul Haq,H/S road under Upazilla: Banaripara District: Barisal [ID No ID 506103004]	115
61	Barisal / Gournadi	Construction of Bridge over the river Arialkha at Chainage 225m on Kayrea bazar to Kayrea khea ghat road under Upazilla: Gournadi District: Barisal [ID No ID 506324135]	102
62	Barisal / Gournadi	Construction of Bridge over the river Arialkha at Chainage 675m on Nalgora bazar to Nalgora Khea ghat road under Upazilla: Gournadi District: Barisal [ID No ID 506324133]	240

SI	District/	Name of Bridge	Tentative
No	Upazila	S .	Length
			(m)
63	Barisal / Gournadi	Construction of Bridge over the river Arialkha at Chainage 380m on Hosnabad Tempu Bus stand to Shaheber hat road under Upazilla: Gournadi District: Barisal [ID No ID 506324134]	105
64	Barisal / Muladi	Construction of Bridge over the river Joyanti at Chainage 12000m on Muladi GC- Talukder Hat - Bashtala Bazar - Mirdar Hat upto Muladi Boarder road under Upazilla: Muladi District: Barisal [ID No ID 506692001]	450
65	Barisal / Sadar	Construction of Bridge over the Tungibaria river at Chainage 1118m on Shaheber hat GC-Bukhainagar road under Upazilla: Sadar District: Barisal [ID No 506512014]	200
66	Chittagong/ Fatikchari	Construction of Bridge over the river Halda at chainage 0m on Nazirhat GC to Kazirhat GC Road. (Ramgar Road Section-1) Road under Upazilla: Fatikchari, District: Chittagong. [Road ID: 415332008]	150
67	Barguna/ Sadar	Construction of Bridge over the river Khakdon at Chainage 0m on Potkakhali R&H - Nali G.C.C Road under Upazilla: Sadar District: Barguna [Road ID.504282002]	170
68	Barisal / Babuganj	Construction of Bridge over the river Shandha river at Chainage 7124m on Babugonj Hat –Agarpur Hat Road under Upazilla: Babuganj, District: Barisal [Road ID. 506032002]	700
69	Perojpur / Bhandaria	Construction of Bridge over the river Buri-Tishta at chainage 14000m on Telikhali GC-Tushkhali GC Road (with Harinpala kotcha connected) road under Upazilla: Bhandaria, District: Perojpur. [Road ID: 579142005]	180
70	Manikganj / Saturia	Construction of Bridge over the river Dhaleswari at chainage 8900 on Daragram GC-Nagorpur G C Via Savar & Sonka bazar road under Upazilla: Saturia, District: Manikganj [Road ID: 356702009]	230
71	Patuakhali / Patuakhali-S	Construction of Bridge over the river Lawkati at Chainage 0m on Patuakhali H/Q-Muradia GC via Sree Rampur Bazer road under Upazilla: Sadar District: Patuakhali [ID No.578952009]	300
72	Patuakhali / Patuakhali-S	Construction of Bridge over the river Gulishakhali at Chainage 6500m on Patuakhali Kalapara RHD (Patukhali Bus stand) - Khasher hat GC road under Upazilla: Sadar District: Patuakhali [ID No.578952001]	200
73	Patuakhali / Baupha	Construction of Bridge over the river Algi at Chainage 5390m on Mominpur GC-Kalaiya GC road under Upazilla: Bauphal District: Patuakhali [ID No. 578382003]	150
74	Khulna / Paikgacha	Construction of Bridge over the river Shibsha at chainage 2200m on Fulbari Bazar-Deluty U.P Office-Darunmallik-Soladana bazar road under Upazilla: Paikgacha District: Khulna [Road ID: 247643008]	440
75	Khulna / Paikgacha	Construction of Bridge over the river Shibsha at chainage 17630m on Paikgacha GC- Garaikhali GC road under Upazilla: Paikgacha District: Khulna [Road ID: 247642001]	450
76	Khulna / Paikgacha	Construction of Bridge over the river Gunkhali at chainage 11700m on Kopilmuni GC-Samukputa bazer-Katamari bazer-Jamtala bazer-Baroaria G.C. (paikgacha portion) road under Upazilla: Paikgacha District: Khulna [Road ID: 247642006]	120
77	Khulna / Paikgacha	Construction of Bridge over the river Nura at chainage 14350m on Kopilmuni GC-Samukputa bazer-Katamari bazer-Jamtala bazer-Baroaria G.C. (paikgacha portion) road under Upazilla: Paikgacha District: Khulna [Road ID: 247642006]	100

SI	District/		Tentative
No	Upazila	Name of Bridge	Length
78	Khulna /	Construction of Bridge over the river Deluti at chaining 2500m on	(m) 120
	Paikgacha	Construction of Bridge over the river Deluti at chainage 3500m on Deluty kheyaghat to Darunmollik kheyaghat via jirbunia bazer road under Upazilla: Paikgacha District: Khulna [Road ID: 247644075]	
79	Khulna / Koira	Construction of Bridge over the river Koira at chainage 15750m on Upazila H.Q-Haitkhali GC-Gilabari GC Road under Upazilla: Koira District: Khulna [Road ID: 247532003]	200
80	Narail / Kalia	Construction of Bridge over the river Modhumati at chinage 2600m on Putimary hat-Paniapara road under Upazilla: Kalia, District: Narail [Road ID: 265285014]	500
81	Satkhira/ Assasuni	Construction of Bridge over the river Betna at chinage 600m on Mohesharkathi Bazar- Gabtala road under Upazilla: Assasuni, District: Satkhiral [Road ID: 287044164]	210
82	Satkhira/ Kaliganj	Construction of Bridge over the river Kak Shiali at chinage 13100m on Khanpur Baliadanga GCCR-Uzipur GC Via Gobindokati Hat road under Upazilla:Kaliganj, District: Satkhiral [Road ID: 287472004]	100
83	Naogaon / Atrai	Construction of Bridge over the river Atrai at chainage 8700m on Patisar GC-Samaspara GC (Baroshaota) road under Upazilla: Atrai District: Naogaon [Road ID: 164032009]	150
84	Naogaon / Mohadebpur	Construction of Bridge over the river Atrai at chainage 0m on Mohishbathan GC-Sherpur-Matajee GC road under Upazilla: Mohadebpur District: Naogaon [Road ID: 164502006]	190
85	Naogaon / Manda	Construction of Bridge over the river Atrai at chainage 0m on Prosadpur GC - Proshadpur UPO road under Upazilla: Manda District: Naogaon [Road ID: 164473001]	140
86	Naogaon / Manda	Construction of Bridge over the river Atrai at chainage 200m on Joka hat - Fatepur hat road under Upazilla: Manda District: Naogaon [Road ID: 164473034]	180
87	C.Nawabganj / Shibganj	Construction of Bridge over the Mora Padma river at chainage 1700m on Balutungi road end (Easin Hasking Mill) to Jogonnathpur field Hat via Babupur,Luxmipur Primary,Dovagi Primary School Durlovpur UP road under upazilla: Shibganj District: C.Nawabganj. [Road ID: 170884094]	100
88	Naogaon / Patnitala	Construction of Bridge over the river Atrai at chainage 3420m on Fahimpur RHD (Kanchon) - Kantabari River Embankment Rd vai Fahimpur Benien Tree.road under Upazilla: Patnitala District: Naogaon [Road ID: 164754069]	150
89	Naogaon / Patnitala	Construction of Bridge over the river Atrai at chainage 5400m on Gopinagar G.P.S - Saldangi - Kashipur River Ghat road under Upazilla: Patnitala District: Naogaon [Road ID: 164754071]	400
90	Naogaon / Atrai	Construction of Bridge over the river Atrai at chainage 7050m on Kashiabari GC - Smaspara GC Via Islamgati hat road under Upazilla: Atrai District: Naogaon [Road ID: 164032010]	150
91	Naogaon / Mohadebpur	Construction of Bridge over the river Atrai at chainage 14000m on Mohadebpur-Sibgonj Pathakata road under Upazilla: Mohadebpur District: Naogaon [Road ID: 164502003]	190
92	C.Nawabganj / Shibganj	Construction of Bridge over the river Pagla at chainage 1525m on Shibgang GC- Khasherhat G C. via .Monakasha hat road under upazilla: Shibganj District: C.Nawabganj. [Road ID: 170882003]	150
93	C.Nawabganj / Gomostapur	Construction of Bridge over the river Mahananda at chainage 4250 m on Bangabari U.p. to Daldoli U.P Via Foharom Ghat road under Upazilla: Gomostapur District: C.Nawabganj [Road ID: 170373017]	285
94	Natore/	Construction of Bridge over the river Baral at chainage 1270 m	200

	Bagatipara	on Makupara P/School-Jamnagar Kuti Ghosepara road under Upazilla: Bagatipara District: Natore [Road ID: 169094013]	
SI No	District/ Upazila	Name of Bridge	Tentative Length (m)
95	Rajshahi/ Bagha	Construction of Bridge over the river Padma at chainage 202 m on Gorgori Up office (H/O Halim master) - Narayanpur GC via Chalk Rajapur hat road under Upazilla: Bagha District: Rajshahi[Road ID: 181103013]	600
96	Panchagarh/ Boda	Construction of Bridge over the river Karotoa chainage 14775m on Boda – Bhowlaganj GC road under Upazilla: Boda District: Panchagarh [Road ID: 177252001]	400
97	Rangpur / Mithapukur	Construction of Bridge over the river Ghaghot at chainage 2500m on Bangni UP Office to-Trimohinee ghat road under Upazilla: Mithapukur, District: Rangpur. [Road ID: 185583031]	142
98	Kurigram / Rajibpur	Construction of Bridge over the Jhijira at chainage 480m on Shandarpara mor - Beparipara Guchhagram (Boder Hat Road) road under Upazilla: Rajibpur, District: Kurigram [Road ID: 149084049]	180
99	Pabna / Pabna-S	Construction of Bridge over the river Mora Padma at Chainage 800m on Shibrampur Sluice Gate - Char Shibrampur - Kushakhali Road under Upazilla: Pabna-S, District: Pabna [Road ID 176554064]	100
100	Pabna / Shathia	Construction of Bridge over the river Isamoti Chainage 1800m on Santhia Upazila H/Q - Demra GC (Dohore jani more) Road under Upazilla: Shathia, District: Pabna[Road ID 176722003]	110
101	Pabna / Sujanagar	Construction of Bridge over the river dead Padma at Chainage 1600m on Sujanagar - Charsujanagar Road under Upazilla: Sujanagar, District: Pabna [Road ID 176834010]	200
102	Pabna / Sujanagar	Construction of Bridge over the river dead Padma at Chainage 1100m on Samgong hat GC to Badai hat via fultala Kheyaghat Road under Upazilla: Sujanagar, District: Pabna [Road ID 176834043]	105
103	Pabna / Faridpur	Construction of Bridge over the river Baral at Chainage 5250m on Banwarinagar GCM - Punguli UP Office Road under Upazilla: Faridpur, District: Pabna [Road ID 176333001]	150
104	Bogra / Sherpur	Construction of Bridge over the river Bangali at Chainage 9170m on Ulipur NHW-Dhunat UHQ Road under Upazilla: Sherpur, District: Bogra [Road ID. 110882005]	180
105	Bogra / Sherpur	Construction of Bridge over the river Bangali at Chainage 3975m on Sonka NHW-Mothurapur GC Road. under Upazilla: Sherpur, District: Bogra [Road ID. 110882008]	150
106	Bogra / Sonatala	Construction of Bridge over the river Bangali at Chainage 4000m on Charpara hat-Hatsharpur UP via koramja hat under Upazilla: Sonatala, District: Bogra [Road ID. 110953004]	300
107	Serajganj / Shahzadpur	Construction of Bridge over the river Karatoa at Chainage 3590m on Talgachi GC-Khukni GC via Norina hat, Beltali UP road under Upazilla: Shahzadpur, District: Serajganj [Road ID. 188672006]	360
108	Serajganj /Raiganj	Construction of Bridge over the river Fulzory at Chainage 7100m on Nowdasalua-Sahebgonj Road under Upazilla: Raiganj District: Serajganj [Road ID. 188614038]	200
109	Dinajpur/ Kaharol	Construction of Bridge over the river Dhepa at Chainage 2085m on Purba Sadipur ten mail RHD-Mutunihat GC Road under Upazilla: Kaharol District: Dinajpur [Road ID. 127562008]	200
110	C.Nawabganj/ Shibganj	Construction of Bridge over the river Mahananda at chainage 8250m on Chalkkirty GC- Mollicpur GC road via Lahalamari GPS road under upazilla: Shibganj District: C.Nawabganj. [Road ID: 170882006]	280

CI	District		Tentative
SI No	District/ Upazila	Name of Bridge	Length
	•		(m)
111	Nilphamari/ Jaldhaka	Construction of Bridge over the river Buriteesta at chainage 1150m on Nekbokta -Hatibandha border road under Upazilla: Jaldhaka, District: Nilphamari. [Road ID: 173365006]	225
112	Nilphamari/ Jaldhaka	Construction of Bridge over the river Dewani at chainage 1620m on Kherkati Gupto Bashi Khal-Domar Border road under Upazilla: Jaldhaka, District: Nilphamari. [Road ID: 173365036]	130
113	Magura / Sadar	Construction of Bridge over the river Fatki at Chainage 230m on Bhaban hati – Tiarkhali road under upazilla: Sadar. District: Magura. [Road ID. 255574114]	130
114	Magura / Sreepur	Construction of Bridge over the river Kumar at chainage 250m on Bakhera hat – Kadirpara UP Office to Radhanagar GC road Upazilla: Sreepur District: Magura [Road ID: 259544082]	210
115	Meherpur / Gangni	Construction of Bridge over the river Mathavanga at chainage 1900m on Kodalkathi-Kholishakundi UP road under Upazilla: Gangni District : Meherpur [Road ID: 257474036]	150
116	Meherpur / Meherpur-S	Construction of Bridge over the river Bhairab at chainage 5880m on Baradi Hat-Mohajanpur Hat road under Upazilla: Sadar District : Meherpur [Road ID: 257872003]	150
117	Meherpur / Gangni	Construction of Bridge over the river Mathavanga at chainage 750m on Mommodpur Hat - Shympur Ghat road under Upazilla: Gangni District : Meherpur [Road ID: 257474056]	180
118	Kushtia/ Daulatpur	Construction of Bridge over the Tekala Matha Vanga river at chainage 8121m on Dangmoka Bazar-Primary School-Adabaria UP office-Tekalahat road under Upazilla: Daulatpur District: Kushtia [Road ID: 250393018]	100
119	Jamalpur / Sadar	Construction of Bridge over the river Brahmaputra at chinage 50m on Narundi G.C-Chandakona G.C Road Road under Upazilla: Sadar, District: Jamalpur [Road ID: 339362011]	600
120	Jamalpur / Madarganj	Construction of Bridge over the river Jharkata at chinage 1700m on Madarganj Sharishabari (j-5)-Char vatiaani Road under Upazilla: Madarganj, District: Jamalpur [Road ID: 339584035]	180
121	Jamalpur / Madarganj	Construction of Bridge over the river Jharkata at chinage 345m on Gonaritola U.P (Start J-5 Rd.)-Gunaritala bazar Road under Upazilla: Madarganj, District: Jamalpur [Road ID: 339583009]	135
122	Jamalpur / Melandaha	Construction of Bridge over the river Goladoba at chinage 1827m on Pathanpara UNR-Ghosherpara via Milon bazar Road under Upazilla: Melandaha, District: Jamalpur [Road ID: 339684008]	210
123	Jamalpur / Melandaha	Construction of Bridge over the river Golabaria at chinage 650m on Ghoserpara UP (Beltail Bazar)-Shaguna Bazar via Amirtie Road under Upazilla: Melandaha, District: Jamalpur [Road ID: 339683008]	280
124	Jamalpur / Melandaha	Construction of Bridge over the river Goladoba at chinage 1500m on Gosherpar GPS-Aronghati Road under Upazilla: Melandaha, District: Jamalpur [Road ID: 339684139]	180
125	Jamalpur / Melandaha	Construction of Bridge over Urma Khal at chinage 6531m on Melandah Bazar-Khasimara bazar (Nalchia) Road under Upazilla: Melandaha, District: Jamalpur [Road ID: 339683002]	110
126	Jamalpur / Melandaha	Construction of Bridge over the river Jhar Kata at chinage 2350m on Mahmudpur UP (H/O Salam Dillar)- Chargabindi bazar Road under Upazilla: Melandaha, District: Jamalpur [Road ID: 339683012]	140
127	Jamalpur / Sarishabari	Construction of Bridge over the river Jhinai at chinage 2150m on Kamrabad U/P-Nandina Bazar Road under Upazilla: Sarishabari, District: Jamalpur [Road ID: 339853009]	200

01	District		Tentative
SI No	District/	Name of Bridge	Length
INO	Upazila		(m)
128	Jamalpur / Sarishabari	Construction of Bridge over the branch of Jamuna river at chinage 1520m on Aramnagor G.C - Goramara bazar road. Road under Upazilla: Sarishabari, District: Jamalpur [Road ID: 339854051]	200
129	Jamalpur / Islampur	Construction of Bridge over the river Dashani at chinage 600m on Benuarchar Bazar-Horindhara village Road under Upazilla: Islampur, District: Jamalpur [Road ID: 339294073]	120
130	Tangail / Basail	Construction of Bridge over the river Jhinai at chinage 3950m on Basail-Karatia via Vatpara Kashil Road under Upazilla: Basail, District: Tangail [Road ID: 393092007]	108
131	Tangail / Nagarpur	Construction of Bridge over the Dhaleshari branch river at chinage 5650m on Mokna UP office-Rathura bazar via Natang Road under Upazilla: Nagarpur, District: Tangail [Road ID: 393763012]	200
132	Tangail / Sadar	Construction of Bridge over the Dhaleshari river at chinage 14500m on Tangail (Tangail-Nagarpur Reg.HW At Kagmari College)-Charabari-Torapgonj G.C Shahjani G.C Road under Upazilla: Sadar, District: Tangail [Road ID: 393952003]	500
133	Tangail / Sadar	Construction of Bridge over the Dhaleshari river at chinage 1750m on Shibpur Bazar-Kashinagar kheya ghat road under Upazilla: Sadar, District: Tangail [Road ID: 393954057]	150
134	Netrokona / Netrokona-S	Construction of Bridge over the river Kangsha at chinage 2085m on Tanga Bazar-Kaliara Gabragati UP office via Muktijoddha Bazar Road under Upazilla: Netrokona-S, District: Netrokona [Road ID: 372743001]	200
135	Netrokona / Kendua	Construction of Bridge over the river Saiduli at chinage 1505m on Nowpara UP office-Barori Bazar Road via Konapara Bazar road under Upazilla: Kendua, District: Netrokona [Road ID: 372473023]	100
136	Netrokona / Atpara	Construction of Bridge over the river Aima at chinage 3500m on Avaypasha- Khagra bazar via Ayma ferri ghat Road under Upazilla: Atpara, District: Netrokona [Road ID: 371135119]	100
137	Mymensingh / Haluaghat	Construction of Bridge over the river Kongsha at chainage 120m on Taldighi – Munshirhat road under Upazilla: Haluaghat District: Mymensingh [Road ID: 361242004]	120
138	Mymensingh / Dhobaura	Construction of Bridge over the river Nitai at chainage 1160m on Ghosegoan UP (Ghosegoan Gc)-Shibgongh Gc Road Via Charuapara Bazar, Bagbar Bazar & Saddam Bazar [Charuapara Bazar] under Upazilla: Dhobaura District: Mymensingh [Road ID: 361163017]	120
139	Mymensingh / Nandail	Construction of Bridge over the river Narshunda at chainage 375m on Nandail GC – Backchanda GC road under Upazilla: Nandail, District: Mymensingh [Road ID: 361722002]	155
140	Mymensingh / Nandail	Construction of Bridge over the river Sukhaihuri at chainage 1600m on Pura Darillah To Kaligonj Road at Tangrati via Pachdarillah & Musulli Road. road under Upazilla: Nandail District: Mymensingh [Road ID: 361724081]	140
141	Mymensingh / Sadar	Construction of Bridge over the river Brammaputra at chainage 67m on Shirta UP office-Khagdahor bazar via Sirta Bazar Rd. road under Upazilla: Sadar, District: Mymensingh [Road ID: 361523017]	300
142	Kishoreganj / Austogram	Construction of Bridge over the river Kalni at chainage 9500m on Austagram-Adampur GC road under Upazilla: Austagram District: Kishoreganj [Road ID: 348022003]	200
143	Kishoreganj / Austogram	Construction of Bridge over the river Beel Khaksha at chainage 2850m on Austagram-Adampur GC road under	150

Upazilla:	Austagram	District:	Kishoreganj	[Road	ID:
348022003	3]				

SI	District/	Name of Bridge	Tentative
No	Upazila		Length (m)
144	Kishoreganj / Mithamoin	Construction of Bridge over the river Boulai at chainage 8910m on Mithamoin Kalipur to Dhaki UP office Road Via Noyahati road under Upazilla: Mithamoin District: Kishoreganj [Road ID: 348593001]	300
145	Kishoreganj / Itna	Construction of Bridge over the river Kalni at chainage 15420m on Itna-Azmiriganj GC road under Upazilla: Itna District: Kishoreganj [Road ID: 348332002]	400
146	Kishoreganj / Nikli	Construction of Bridge over the river Ghora Uttra at chainage 1650m on RHD at Dorgabari Mosque - Austagram via Chuntikhali launch ghat road under Upazilla: Nikli District: Kishoreganj [Road ID: 348762006]	400
147	Kishoreganj / Nikli	Construction of Bridge over the river Narasunda at chainage 1739m on Nikli GC-Singpur GC road under Upazilla: Nikli District: Kishoreganj [Road ID: 348762002]	130
148	Sylhet / Kanaighat	Construction of Bridge over the river Surma at Chainage 30m on Laksmi-prashad purba UP-Kotalpur (RHD)-Soroker Bazar Road under Upazilla: Kanaighat, District: Sylhet [Road ID 691593013]	250
149	Sylhet / Gowainghat	Construction of Bridge over the river Luni at Chainage 654m on Bholagong (RHD)-Doyer Bazar-Vhatri-Hadarpar G.C.Road under Upazilla: Gowainghat, District: Sylhet [Road ID 691412008]	110
150	Sunamganj/ Jagannathpur	Construction of Bridge over the river Halu Khal at chainage 1680m on Aserkandi U.PKalnirchar Bazar road under Upazilla: Jagannathpur, District: Sunamganj. [Road ID: 690473017]	170
151	Sunamganj/ Zamalganj	Construction of Bridge over the river Beheli at chainage 5950m on Sachna Bazar-Beheli GC-Taherpur road under Upazilla: Jamalganj, District: Sunamganj. [Road ID : 690502004]	150
152	Sunamganj/ Jamalganj	Construction of Bridge over the river Surma at chainage 250m on Sachna Bazar-Beheli GC-Taherpur road under Upazilla: Jamalganj, District: Sunamganj. [Road ID: 690502004]	800
153	Sunamganj/ Jamalganj	Construction of Bridge over the river Surma at chainage 12000m on Jamalganj HQ - Joynagar GC via Noagaon Bazar road under Upazilla: Jamalganj, District: Sunamganj. [Road ID: 690502001]	800
154	Sunamganj/ Derai	Construction of Bridge over the river meghna at chainage 3750m on Rajanagar-Bangla Bazar road under Upazilla: Derai, District: Sunamganj. [Road ID: 690293004]	100
155	Sunamganj/ Derai	Construction of Bridge over the river Kushyara at chainage 18734 on Derai bazar-Boalia bazar via Merculy bazar (Baniachong) Road. Under Upazilla: Derai, District: Sunamganj. [Road ID: 690292004]	800
156	Sunamganj/ Sadar	Construction of Bridge over the river Cholti at chainage 1800m on Lalpur R&H –Surma UP via Akhynagar road under Upazilla: Sadar, District: Sunamganj. [Road ID: 690293018]	110
157	Chittagong/ Chandanish	Construction of Bridge over the river Sango at chainage 5510m on Dohazari G.C-Lalutia Vhomang hat G.C road under Upazilla: Chandanish, District: Chittagong. [Road ID. 415182004]	220
158	Chittagong / Raozan	Construction of Bridge over Sharta khal at Chainage 4520m on Haladia Village road under Upazilla: Raozan District: Chittagong. [Road ID. 415743006]	110
159	Chittagong /	Construction of Bridge over the river Halda at Chainage	120

Raozan	2700m on Gohira (R&H) - Halda Ghat at Hatajari (Khan
	Bahadur Abdul Jabbar Road1) (From RHD #100)) under
	Upazilla: Raozan District: Chittagong. [Road ID. 415742006]

SI No	District/ Upazila	Name of Bridge	Tentative Length (m)
160	Chittagong / Raozan	Construction of Bridge over river Halda at Chainage 3700m on Noapara Pather Hat (R&H) Road and Chowdhuri Hat-Noapara Kachu Khain Bazar (Via Noapara UP Office). road under Upazilla: Raozan District: Chittagong. [Road ID. 415743008]	300
161	Chittagong / Raozan	Construction of Bridge over river Halda at Chainage 1780m on Gohira -Fatickchari (R&H) Road at Noajish pur UP Office to Hatajary Nangal mojra Bazar (LM) Via Ichapur (UZR) Road). (Moulana Hasanuzzamn Road) road under Upazilla: Raozan District: Chittagong. [Road ID. 415743011]	110
162	Chittagong/ Fatikchari	Construction of Bridge over the river Halda at chainage 150m on Narayanhat to Mirzarhat Road under Upazilla: Fatikchari, District: Chittagong. [Road ID: 415333003]	100
163	Chittagong / Hatazari	Construction of Bridge over the river Halda at Chainage 5000m on Sarkar Hat RHD to Guman Mardan up Road via Peshkarhat hat (Rajamiah Chowdhury Road (Sarkarhat-Peshkarhat connecting Road) road under Upazilla: Hatazari District:Chittagong [ID No ID 415372009]	120
164	Cox's Bazar / Pekua	Construction of Bridge over the river Uzantia at chainage 4500m on Katafari Sonali Bazar at RHD to Matar Bari GC (Via Uzantia Stamar Ghat) road under Upazilla: Pekua, District: Cox's Bazar. [Road ID. 422952006].	240
165	Cox's Bazar/ Chakaria	Construction of Bridge over the river Uzantia at chainage 5620m on Fashiakhali UP to Bhangar Muke via Fakira Bazar road under Upazilla: Chakaria, District: Cox's Bazar [Road ID. 422163005]	190
166	Cox's Bazar/ Chakaria	Construction of Bridge over the river Varuakhali Khal at chainage 1000m on Betua Bazar RHD - Khil Sadek Boroitoli Bibirkhil Road under Upazilla: Chakaria, District: Cox's Bazar [Road ID. 422164032]	105
167	Rangamati / Baghaichari	Construction of Bridge over the river Kachalong at Chainage 3750m on Upazila H/Q - karengatoli GC via Masterpara, Baribindu Ghat & Rupakary UPC road under Upazilla: Baghaichari. District: Rangamati [Road ID:484072007]	105
168	Rangamati / Sadar	Construction of Bridge over Vandari para Canal at Chainage 590m on Rangamati-S upazilla HQ to Vandari Para road under Upazilla: Rangamati-S District: Rangamati [Road ID:484872006]	140
169	Rangamati / Sadar	Construction of Bridge over Moricha bill Khal at Chainage 5730m on Balukhali UPC - Kengrachari UPC via Kandya Mukh Road under Upazilla: Rangamati-S District: Rangamati [Road ID:484873005]	210
170	Rangamati / Sadar	Construction of Bridge over Hazaribag Khal at Chainage 4890m on Hajari Bag Shaiswari via Modhya Adam Road under Upazilla: Rangamati-S District: Rangamati [Road ID:484873006]	250
171	Dhaka / Dhamrai	Construction of Bridge over the branch of Dhaleshari at chainage 265m on Bahutkul (Ruail UP Office) to Joymondop Bazar road via Julmat's Khaya Ghat road under Upazilla: Dhamrai District: Dhaka [Road ID: 326144064]	110
172	Gazipur / Kaliakair	Construction of Bridge over the river Turag at chainage 3750m on Namasulai-Pollymongal road under Upazilla: Kaliakoir District: Gazipur [Road ID: 333325040]	140
173	Narayanganj / Sonargaon	Construction of Bridge over the Brahmaputtra river at chainage 6720m on Mograpara G.CSabdi Bazar G.C.via	210

Hossainpur	Bazar	road	under	Upazilla:	Sonargaon	District:	
Narayangan	i [Road	ID: 3	670420	10]	_		

SI	District/		Tentative
No	Upazila	Name of Bridge	Length
174	Munshiganj /	Construction of Bridge over the brianch of Gumti river at	(m) 200
174	Gazaria	chainage 0m on Dhaka-Chittagong NH (East / South of	200
	Guzana	Daudkandi BR.)- Pobertek via Char Chashi GPS road under	
		Upazilla: Gazaria, District : Munshiganj [Road ID. 359244082]	
175	Chittagong/	Construction of Bridge over the river Halda at chainage 0m on	110
	Fatikchari	Roshangiri U.P.HQ.to Nanupur U.P.HQ. Road under Upazilla:	
		Fatikchari, District: Chittagong. [Road ID: 415333015]	
176	Dinajpur/	Construction of Bridge over the river Atrai at chainage 1700m	495
	Khanshama	on Alokjhari (Noor Alam member chatal)-Dharmapur (joyganj Dangapara) Ferryghat road under Upazilla: Khanshama	
		District: Dinajpur. [Road ID 127604009]	
177	Madaripupur /	Construction of Bridge over the river Arialkha at Chainage	350
	Sadar	4670m on Chilarchar UP-Farazir hat via Khejurtala hat road	
		under Upazilla: Sadar, District: Madaripur [Road ID	
		354543004]	
178	Patuakhali /	Construction of Bridge over the river Galachipa at Chainage	380
	Patuakhali-S	7000m on Kamlapur UPC to katua taluk bazar via shehakati	
		kheya ghat road under Upazilla: Sadar District: Patuakhali [ID	
470	Detucks all /	No.578953017]	400
179	Patuakhali / Galachipa	Construction of Bridge over the river Ronua Khal at Chainage 3500m on Lamna Baro Bazar-Ranua Bazar via Panjot Ali	120
	Galacilipa	Merda Bari road under Upazilla: Galachipa District: Patuakhali	
		[ID No.578574241]	
180	Narail / Sadar	Construction of Bridge over the river Nabaganga at Chainage	140
		7700m on Dattapara bazar -Chandibarpur UP Road road	-
		under Upazilla: Sadar District: Narail [ID No.265763002]	
181	Khulna /	Construction of Bridge over the river Kapotakhkha at chainage	105
	Paikgacha	5260m on Kopilmuni GC-Jalalpur UP office (Tala Upazila)via	
		Rahimpur bazer road under Upazilla: Paikgacha District:	
182	Jessore /	Khulna [Road ID: 247643010]	150
102	Jikargacha	Construction of Bridge over the river Kapotakhkha at chainage 0m on Sadipur-Seordah bazar road under Upazilla:	150
	Jikargacria	Jhikargacha District: Jessore [Road ID: 241233019]	
183	Sunamganj /	Construction of Bridge over Chalti river at Chainage 100m on	280
	Sadar	Balakanda Bazar-Rampur Road under Upazilla: Sunamganj	
		Sadar District: Sunamganj [Road ID:690894121]	
184	Natore /	Construction of Bridge over river Khalisha Dangai at Chainage	120
	Baraigram	1000m on Nagar UP at RHD Kalibari-Marigacha Hat via Jamaidighi road under Upazilla: Baraigram District: Natore	
		[Road ID:169153014]	
185	Thakugaon /	Construction of Bridge over river Aman Dhaman at Chainage	120
	Baliadangi	3200m on Nagarvita-Kanchir hat Via Chochpara road under	-
	_	Upazilla:Baliadangi District: Thakurgaon [Road ID:194085069]	
186	Lalmonirhat /	Construction of Bridge over river Shaniajan at Chainage 50m	110
	Patgram	on Jora bridge more to Lokkanath tari road at Kuchlibari Union	
		road under Upazilla: Patgram District: Lalmonirhat[Road ID:152705115]	
187	Serajganj /	Construction of Bridge over the river Fulzor at Chainage	290
	Kamarkhanda	1500m on Nurnagar uttarpara (RHD road) - Alipur pacca	
		road via Nurnagar GPS road under Upazilla: Kamarkhand	
		District: Serajganj [Road ID. 188444051]	
188	Serajganj /	Construction of Bridge over the river Fulzor at Chainage 50m	200
	Kamarkhanda	on Dashsika Kheyaghat RHD-Tatulia UZR via Char Dashsika	
		road under Upazilla: Kamarkhand District: Serajganj [Road ID.	

SI No	District/ Upazila	Name of Bridge	Tentative Length (m)
189	Serajganj / Sadar	Construction of Bridge over the river Ichamoti at Chainage 3650m on Bahuli GC- Konabari more NHW via Chandidasgati hat road under Upazilla: Sadar District: Serajganj [Road ID. 188782009]	150
190	Serajganj / Sadar	Construction of Bridge over Nistarini khal at Chainage 650m on Khokshabari (Hospital Bazar) DR-Khokshabari U.P Office road under Upazilla: Sadar District: Serajganj [Road ID. 188783011]	140
191	Serajganj / Kagipur	Construction of Bridge over the river Fulzory at Chainage 0m on Kumaria bari Hat- Monsur Nagor U.P complex road under Upazilla: Kagipur District: Serajganj [Road ID. 188503014]	130
192	Pabna / Faridpur	Construction of Bridge over the river Gumani at Chainage 5250m on BL bari UP Offic - Bangabaria Ghat road under Upazilla: Faridpur, District: Pabna [Road ID 176334025]	140
193	Pabna / Bhangura	Construction of Bridge over the river Gumani at Chainage 1200m on Betuan Banion tree B C road - betuan river Ghat road under Upazilla: Bhangura, District: Pabna [Road ID 176195111]	160
194	Pabna / Chatmohar	Construction of Bridge over the river Gumani at Chainage 7250m on Mirjapur GCM - Chhaikola GCM via Bardanager, Langolmora & Charnabin road under Upazilla: Chatmohar, District: Pabna [Road ID 176222006]	120
195	Pabna / Santhia	Construction of Bridge over the river Isamoti Chainage 2350m on Dhopadha UP - Nandonpur Bazar R&H Via Khanmamudpur river dyke road. under Upazilla: Santhia, District: Pabna [Road ID 176723028]	110
196	Bogra / Sherpur	Construction of Bridge over the river Bangali at Chainage 6000m on Khanpur UP-Chalkdhali Ghat-Bhubanganti hat road under Upazilla: Sherpur, District: Bogra [Road ID. 110883022]	263
197	Netrokona / Kalmakanda	Construction of Bridge over Kandapara Khal at chinage 6000m on Nazirpur GC-Fakirar bazar(GC) road under Upazilla: Kalmakanda, District: Netrokona [Road ID: 372402006]	110
198	Sylhet / Gowainghat	Construction of Bridge over the river Satvak at Chainage 4159m on Radanager Bazar GC - Haderpar Bazar GC Road under Upazilla: Gowainghat, District: Sylhet [Road ID 691412009]	120
199	Sylhet / Kanaighat	Construction of Bridge over the river Lova at Chainage 8500m on Shuraighat GC-Lubachara-Atgram GC road under Upazilla: Kanaighat, District: Sylhet [Road ID 6915912007]	350
200	Sunamganj/ Derai	Construction of Bridge over the river Kamarkhali at chainage 1000m on Nagergoan Ferryghat-Jalalpur Road via Rampur road Under Upazilla: Derai, District: Sunamganj. [Road ID: 690294051]	110
201	Sunamganj/ Chatak	Construction of Bridge over the river Marachala at chainage 2200m on Gonespur Ferrygha-Islampur Madrasha bazar via UP office road under Upazilla: Chatak, District: Sunamganj. [Road ID: 690233006]	200
202	Sunamganj/ Dharmapasha	Construction of Bridge over the river Barua at chainage 2500m on Joysree GC-Golokpur GC via Sukhair bazar road road under Upazilla: Dharmapasha, District: Sunamganj. [Road ID: 690322010]	315
203	Kishoreganj / Mithamoin	Construction of Bridge over the Dhonu river at chainage 8000m on Mithamoin Upazilla HQ to Singpur GC Road Via	400

Dubi Village(Mithamoin Par) road under Upazilla: Mithamoin
District: Kishoreganj [Road ID: 348592007]

SI No	District/ Upazila	Name of Bridge	Tentative Length (m)
204	Kishoreganj / Mithamoin	Construction of Bridge over the Dhonu river at chainage 19300m on Mithamoin UZ H.Q-Katkhal GC road under Upazilla: Mithamoin District: Kishoreganj [Road ID: 348592001]	350
205	Kishoreganj / Itna	Construction of Bridge over the Dhonu river at chainage 6990m on Itna-Silni-Elongjuri road under Upazilla: Itna District: Kishoreganj [Road ID: 348333001]	160
206	Kishoreganj / Itna	Construction of Bridge over the Dhonu river at chainage 3300m on Elongjuri UP- Bagadia Hat Road (Itna part) under Upazilla: Itna District: Kishoreganj [Road ID: 348333013]	110
207	Kishoreganj / Itna	Construction of Bridge over the Uazan Shimul river at chainage 5918m on Badla GC-Chowganga GC road under Upazilla: Itna District: Kishoreganj [Road ID: 348332005]	210
208	Kishoreganj / Itna	Construction of Bridge over the Dhanu river at chainage 2015m on Itna-Chamraghat Road (Borpolla)- Chandrapur Via Pachkahnia road under Upazilla: Itna District: Kishoreganj [Road ID: 348332007]	300
209	Kishoreganj / Itna	Construction of Bridge over the Naodory Khal at chainage 7815m on Itna - Chamraghat RHD (Bolda) -Jawar hat GC via Raituty Hizaljani Road(Itna part) road under Upazilla: Itna District: Kishoreganj [Road ID: 348332008]	120
210	Kishoreganj / Austogram	Construction of Bridge over the Kalni river at chainage 9900m on Adampur GC - Kadirkhola Mithamoin via Abdullapur road under Upazilla: Austagram District: Kishoreganj [Road ID: 348022010]	300
211	Kishoreganj / Austogram	Construction of Bridge over the Dhalar Kandi river at chainage 11420m on Austagram- Lakhai road via Ekurdia Dalarkandi road under Upazilla: Austagram District: Kishoreganj [Road ID: 348022011]	500
212	Kishoreganj / Austogram	Construction of Bridge over the Dhalar Kandi river at chainage 6120m on Austagram- Lakhai road via Ekurdia Dalarkandi road under Upazilla: Austagram District: Kishoreganj [Road ID: 348022011]	500
213	Tangail / Ghatail	Construction of Bridge over the Jhenai river at chinage 4329m on Hamidpur (R & H) - Bagundali Bazar road under Upazilla: Ghatail , District: Tangail [Road ID: 393284037]	110
214	Munshiganj / Gazaria	Construction of Bridge over the branch of Meghna river at chainage 2250m on Bausia NH road - Kali Bazar hat. (Engr. Staff College road) road under Upazilla: Gazaria, District : Munshiganj [Road ID. 359242004]	300
215	Narshingdi / Belabo	Construction of Bridge over the river Brahmaputra at chainage 2800m on Sallabad UP office - Ibrahimpur bazar road via Kalikaproshad Ferry ghat road under Upazilla: Belabo, District: Narshingdi [Road ID. 368073012]	240