

**SUMMARY OF PRICES &  
SCHEDULE OF PRICES & TOTAL PRICES**

**Name of work:** Consultancy Services for verification of final Location Survey (FLS), Preparation of GAD; Preparation of Detailed Drawings and Designs for Foundation, Sub-structure & Super-Structure of Obligatory Spans, Viaduct Spans, Approaches in retaining wall and filled-up soils including bridges on canals/rivers and road crossings etc. in approaches and all allied structures; Conducting Geotechnical and Hydrological Investigations for Construction of two numbers Rail Flyover (RFO) near Sasaram and Pt. Deen Dayal Upadhyay (DDU) Stations in connection with construction of Eastern Dedicated Freight Corridor.

## SUMMARY OF PRICES

**Name of work:** Consultancy Services for verification of final Location Survey (FLS), Preparation of GAD; Preparation of Detailed Drawings and Designs for Foundation, Sub-structure & Super-Structure of Obligatory Spans, Viaduct Spans, Approaches in retaining wall and filled-up soils including bridges on canals/ rivers and road crossings etc. in approaches and all allied structures; Conducting Geotechnical and Hydrological Investigations for Construction of two numbers Rail Flyover (RFO) near Sasaram and Pt. Deen Dayal Upadhyay (DDU) Stations in connection with construction of Eastern Dedicated Freight Corridor.

| SN | Description item | Amount (Rs)       | Rate quoted by bidder            |          | Remarks |
|----|------------------|-------------------|----------------------------------|----------|---------|
|    |                  |                   | In figure (% above/below/at par) | In words |         |
| 1  | Schedule - A-I   | 1,258,380         |                                  |          |         |
| 2  | Schedule - A-II  | 43,826,400        |                                  |          |         |
| 3  | Schedule - A-III | 8,613,000         |                                  |          |         |
|    | Total            | <b>53,697,780</b> |                                  |          |         |

Note:-

- i) All designs and drawings will have to be approved by the office of GM/Co/DFCCIL/DDU(Mughalsarai) or PMC of the project. Payment will be made after approval of design and drawing.
- ii) All drawings will have to be prepared on AUTO CAD PLATFORM. Paper prints of the GAD each will be sent by consultant to GM/Co/DFCCIL/DDU(Mughalsarai) and to Dy. CE/Design simultaneously. GM/Co/DDU office will return one copy after checking field details to the consultant. Simultaneously, the consultant will attend Dy. CE/design within a week for discussion on GAD. Designer will submit final GAD on tracing paper (1 copy), with six (06) paper prints complying observations of GM/Co/DFCCIL/DDU(Mughalsarai) and Dy. CE//Design for approval.
- iii) Structural design/drawing for various components of the bridges will be submitted to GM/Co/DFCCIL/DDU(Mughalsarai) only; finally in tracing paper (1 copy), with six (06) paper prints after complying observations of proof consultants/PMC designer.
- iv) After approval of GAD and structural drawings, CD containing all design and drawings in soft copies will also be submitted by the agency to GM/Co/DFCCIL/DDU(Mughalsarai) in good quality storage media, as acceptable to DFCCIL for reference & record.
- v) The design and drawing will be property of DFCCIL and it cannot be reproduced in any form or used by it in any way after completion of the work except with written permission of DFCCIL
- vi) The rate shall be inclusive of all taxes and levies except GST. GST will be payable extra on reimbursible basis. The rates are firm rates and will not be subject to any increase except applicable Price Variation as provided in Contract

A-1

## SCHEDULE OF PRICES & TOTAL PRICES

**Name of work:** Consultancy Services for verification of final Location Survey (FLS), Preparation of GAD; Preparation of Detailed Drawings and Designs for Foundation, Sub-structure & Super-Structure of Obligatory Spans, Viaduct Spans, Approaches in retaining wall and filled-up soils including bridges on canals/rivers and road crossings etc. in approaches and all allied structures; Conducting Geotechnical and Hydrological Investigations for Construction of two numbers Rail Flyover (RFO) near Sasaram and Pt. Deen Dayal Upadhyay (DDU) Stations in connection with construction of Eastern Dedicated Freight Corridor.

### Schedule-A-I

| Item No.         | Description of Item   | Unit   | Rate (Rs.) | Qty. | Amount (Rs.) |
|------------------|---|--------|------------|------|--------------|
| 1                | Verification of final Location Survey (FLS) for Construction of complete alignment of RFO as per relevant para of IR Engineering Code (1993) edition and submission of report. Work to be conducted as per Railways latest codes and as per direction of DFCCIL representative and also as per terms of reference mentioned in the tender document. | Per Km | 83,892     | 15   | 1,258,380    |
|                  | Note:- The Rate should include the following items:   |        |            |      |              |
|                  | (i) Verification of detailed survey by taking longitudinal and transverse details of the corridor, taking detail of waterways, electrical and telephone crossing, road details etc. along the route and alignment on village map, village map.  |        |            |      |              |
|                  | (ii) Verification of alignment straight and on curves at every 20m interval including setting out of curves with transition etc.  |        |            |      |              |
|                  | (iii) Conducting Hydrological survey of the catchment as per RDSO and relevant IR guideline and submission of report for minor bridge/major bridge and others.  |        |            |      |              |
|                  | (iv) Submission of report in 2 (two) copies and soft copy on digital media  |        |            |      |              |
|                  | (v) Transferring the finalized alignment on ground using total station or any other survey instrument as approved by Engineer-in-charge.  |        |            |      |              |
|                  | Note: FLS detailed report will be provided by DFCCIL. In case of inconsistency in FLS provided by DFCCIL, it may require to redo the FLS by the Consultant. If so, the cost of FLS is also included in this and nothing extra will be payable.  |        |            |      |              |
| <b>Sub-TOTAL</b> |   |        |            |      | 1,258,380    |

A-1

**Payment Schedule:**

| Schedule SN | Item   | Payment              |
|-------------|--|----------------------|
| A-I         | (i) Verification of detailed survey by taking longitudinal and transverse details of the corridor, taking detail of waterways, electrical and telephone crossing, road details etc. along the route and alignment on village map, village map. | 20% of Amount per Km |
|             | (ii) Verification of alignment straight and on curves at every 20m interval including setting out of curves with transition etc.   | 20% of Amount per Km |
|             | (iii) Conducting Hydrological survey of the catchment as per RDSO and relevant IR guideline and submission of report for minor bridge/major bridge and others.   | 20% of Amount per Km |
|             | (iv) Submission of report in 2 (two) copies and soft copy on digital media   | 10% of Amount per Km |
|             | (v) Transferring the finalized alignment on ground using total station or any other survey instrument as approved by Engineer-in-charge.   | 30% of Amount per Km |

**Note: Payment will be made as per Kilo meter (KM) of completed work for each of above payment schedule.**

## SCHEDULE OF PRICES & TOTAL PRICES

**Name of work:** Consultancy Services for verification of final Location Survey (FLS), Preparation of GAD; Preparation of Detailed Drawings and Designs for Foundation, Sub-structure & Super-Structure of Obligatory Spans, Viaduct Spans, Approaches in retaining wall and filled-up soils including bridges on canals/rivers and road crossings etc. in approaches and all allied structures; Conducting Geotechnical and Hydrological Investigations for Construction of two numbers Rail Flyover (RFO) near Sasaram and Pt. Deen Dayal Upadhyay (DDU) Stations in connection with construction of Eastern Dedicated Freight Corridor.

### Schedule-A-II

| Item No. | Description of Item   | Unit | Rate (Rs.) | Qty. | Amount (Rs.) |
|----------|---|------|------------|------|--------------|
| 1        | Preparation of GAD, Detailed design for obligatory spans and viaduct span of approaches of RFO including bridges for any water body or road crossings etc. with any typical span arrangement including Design of Reinforced Earth, Retaining Wall etc as provided in Scope of Work as per relevant IR, BIS, IRC and other codes for the option of RFO alignment/span selected by Employer:  | No   | 21,913,200 | 2    | 43,826,400   |
|          | This item includes:   |      |            |      |              |
|          | (i) <b>Integrated Key Plan</b> of entire RFO alignment covering railway portion, approaches, take-off and landing arrangements of RFO approaches with take off and merger point on existing rail tracks, bridges on existing road and water bodies crossings etc, falling in the alignment will be developed and included in GAD as per the Technical Requirement mentioned in the SCC.   |      |            |      |              |
|          | (ii) Preparation of GADs as per Check list of ECR and codal provision   |      |            |      |              |
|          | (iii) Preparation of preliminary and detailed design of foundation, substructure, superstructure, including inspection platforms, approach slab (wherever applicable), Retaining wall, Trolley refuge, OHE Mast, Foundations, Fencing, Wallway/Footpath etc. & Good For Construction drawings (GFC Drawings) and all other drawing as required for construction of RFO including approaches and all bridges on water bodies and road crossings in approaches. |      |            |      |              |
|          | (iv) Submission of proof checked detailed design and Good for all design items as in (iii) above except for standard drawings of railways if any used in the proposed scheme, Construction Drawings (GFC Drawings) for Foundation, Sub-Structure, Super-Structure (if non-RDSO span is adopted) and Retaining Wall.   |      |            |      |              |
|          | (v) Preparation and submission of Hydrological Investigation, drainage scheme/drawing for the entire corridor with recommendation and design/drawing of required drain/convert etc for effective drainage.  |      |            |      |              |
|          | (vi) Preparation and submission of track alignment design for the entire corridor with recommendation and design/drawing of construction of track as per IR/DFC standard.   |      |            |      |              |

A-11

|   |  |  |            |
|---|--|--|------------|
| (vii) Checking of design/ drawings submitted by contractor(s) for bearings, Launching schemes, Temporary Arrangement Drawing etc, if required.  |  |  |            |
| (viii) Technical support for getting approval from Railway/CRS as and when required   |  |  |            |
| (ix) Designer support during construction of RFO including site visit as per requirement of DFCCIL. This will include modification of design/drawings as and when required.   |  |  |            |
| Note: i) Out-station visits (Varanasi, Pt. Deen Dayal Upadhyay Nagar, Patna/Hajipur, District HQs, Delhi/NCR, Lucknow and other locations in DDU-SEB section) with stakeholders will be attended by Consultant team on specific advice of DFCCIL and nothing extra will be paid for visits for such meetings during currency of contract.<br>ii) Some GADs are approved and some are under approval which may get approved in due course. In case Consultant is not required to prepare GAD for any structure deduction @Rs.15,000/- per structure shall be made. |  |  |            |
| <b>Sub-TOTAL</b>  |  |  | 43,826,400 |

**Payment Schedule:**

| Schedule SN | Item   | Payment               |
|-------------|--|-----------------------|
| A-II        | On submission of preliminary GADs after validation of survey and after approval of PMC/DFCC  | 10% of Amount per RFO |
|             | On submission of foundation design with proof check and after approval of PMC/DFCC   | 15% of Amount per RFO |
|             | On submission of substructure design with proof check and after approval of PMC/DFCC   | 15% of Amount per RFO |
|             | On submission of superstructure design of Viaduct /RFO (super structure of obligatory span is RDSO girder)with proof check and after approval of PMC/DFCC  | 10% of Amount per RFO |
|             | On submission of track alignment design for the entire corridor with recommendation and design/drawing of construction of track as per IR/DFC standard.  | 5% of Amount per RFO  |
|             | On submission of miscellaneous design e.g Ballast wall/cable duct, OHE Mast (pedestal),Trolley Refuse, Battery Box, Signal Box,Wearing coat,Walk way/ Footpath, Earthing arrangements etc. with proof check and after approval of PMC/DFCC | 10% of Amount per RFO |
|             | On submission of all corrected/required drawings during construction and after approval of PMC/DFCC .  | 15% of Amount per RFO |
|             | On submission of Hydrological Investigation Report, Design Basis Report, Manual , etc.   | 10% of Amount per RFO |
|             | On submission of As Built Drawings and after approval of PMC/DFCC and completion of all other remaining activities as per above description.   | 10% of Amount per RFO |

**Note: Payment will be made as per running meter (RM) of completed work for each of above payment schedule.**

A-11

## SCHEDULE OF PRICES & TOTAL PRICES

**Name of work:** Consultancy Services for verification of final Location Survey (FLS), Preparation of GAD; Preparation of Detailed Drawings and Designs for Foundation, Sub-structure & Super-Structure of Obligatory Spans, Viaduct Spans, Approaches in retaining wall and filled-up soils including bridges on canals/ rivers and road crossings etc. in approaches and all allied structures; Conducting Geotechnical and Hydrological Investigations for Construction of two numbers Rail Flyover (RFO) near Sasaram and Pt. Deen Dayal Upadhyay (DDU) Stations in connection with construction of Eastern Dedicated Freight Corridor.

### Schedule-A-III

| Item No.         | Description of Item  | Unit        | Rate (Rs.) | Qty. | Amount (Rs.) |
|------------------|--|-------------|------------|------|--------------|
| 1                | Conduction Geotechnical Investigation as per Scope of Work, Special Conditions of Contract and relevant IS Codes for a depth of 40m complete in all respect.                 | Per Borelog | 172,260    | 50   | 8,613,000    |
|                  | The work shall include:  |             |            |      |              |
|                  | (i) Geotechnical investigation report covering full RFO length (Obligatory Spans and Complete Approches).  |             |            |      |              |
|                  | (ii) Submission of results of tests in a proper tabular form as per relevant IS codes along with detailed Report in six copies.  |             |            |      |              |
|                  | (iii) For open foundation, net allowable bearing. For pile foundations, safe design load carrying capacity and safe uplift capacity of pile foundation.                      |             |            |      |              |
|                  | (iv) Report of suitability of type of foundation will be submitted out by the Consultant. Justification for adoption of pile foundation will be part of Geotechnical report. |             |            |      |              |
|                  | Note: In case borehole is terminated at less than 40m depth, payment will be made on pro-rata basis.   |             |            |      |              |
| <b>Sub-TOTAL</b> |  |             |            |      | 8,613,000    |

**Payment Schedule:**

Minimum unit for payment will be one Borelog. The payment can be claimed by the Consultant for one or more RFO in following stage as percentage of respective item rate after submission and approvals as required in the description:

| Schedule SN | Item  | Payment                |
|-------------|---|------------------------|
| A-III.1     | On completion of bore holes                   | 70% of Rate for Item-1 |
|             | On submission of Geotechnical Report complete | 30% of Rate for Item-1 |

A-11