

## Letter of Tender – Financial Part

***INSTRUCTIONS TO TENDERERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT***

*The Tenderer must prepare this Letter of Tender on stationery with its letterhead clearly showing the Tenderer's complete name and business address.*

*Note: All italicized text is to help Tenderers in preparing this form.*

**Date of this Tender submission:** *[insert date (as day, month and year) of Tender submission]*

**Tender No.:** *[insert tender reference number]*

**Alternative No.:** *[insert reference number if this is a Tender for an alternative]*

**To:** *[insert complete name of Employer]*

We, the undersigned, hereby submit the second part of our Tender, the Tender Price and Price Schedule. This accompanies the Letter of Tender – Technical Part.

In submitting our Tender, we declare that:

- (a) **Tender Validity Period:** Our Tender shall be valid for the period specified in TDS 18.1 (as amended, if applicable) from the date fixed for the Tender submission deadline specified in TDS 22.1 (as amended, if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (b) **\*\*Tender Price:** The total price of our Tender including Provisional Sum is: *[insert the total price of the Tender in words and figures in INR];*
- (c) **Commissions, Gratuities, Fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the Tendering process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*

Name of Recipient	Address	Reason	Amount

*(If none has been paid or is to be paid, indicate "none.")*

**Name of the Tenderer:** *[insert complete name of the Tenderer]*

**Name of the person duly authorized to sign the Tender on behalf of the Tenderer:** *\*[insert complete name of person duly authorized to sign the Tender]*

**Title of the person signing the Tender:** *[insert complete title of the person signing the Tender]*

**Signature of the person named above:** *[insert signature of person whose name and capacity are shown above]*

**Date signed** *[insert date of signing]* **day of** *[insert month]*, *[insert year]*

\*: Person signing the Tender shall have the power of attorney given by the Tenderer. The power of attorney shall be attached with the Letter of Tender.

\*\* The total price of Tender including Provisional Sums quoted in this Letter of Tender-Financial Part shall be same as given in Worksheet BOQ3 (Price Schedule –Summary Sheet) of MS-Excel File which includes cost of Schedule ‘A’ plus Schedule ‘B’ plus Schedule ‘C’ plus Schedule ‘D’ and plus Provisional Sum.

## Appendix A to Financial Part: Schedule of Adjustment Data

### 1. Price adjustment

- 1.1 The amounts payable to the Contractor for Works shall be adjusted in accordance with the provisions of this Clause 1.0, Sub-Clause 13.7 of GCC and Sub-Clause 13.7, Specific Provision, Part B, Section IX-PCC.
- 1.2 The Contract Price shall be adjusted for increase or decrease in rates and prices of labour, materials, fuel and lubricants, equipment, Machinery, Plant and other Materials or inputs in accordance with the principles, procedures and formulae specified below:
- a) Base month for the purpose of Price Adjustment shall be the month in which the Tender is opened for Civil Works and General Electrical Services Works. The 1st Quarter will start from Base month;
  - b) For Schedule-A, Price adjustment shall be applied on completion of the specified stage of the respective item of work.
  - c) Adjustment for each item of work/stage shall be made separately;
  - d) The following expressions and meanings are assigned to the value of the work done for Civil works:

EW = Value of work done for the completion of a stage under the Cost Centre 'CE' of Price Schedule 'A' ;

BR = Value of work done for the completion of a stage under the Cost Centre 'CB' of Price Schedule 'A' ;

STN = Value of work done for the completion of a stage under Cost Centre CS of Price Schedule 'A' ;

CW = Value of work done under Price Schedule 'B' ;

MISC = Value of work done under Price Schedule 'D' ;

The following expressions and meanings are assigned to the Cost Centre of Price Schedule 'A' :

Cost Centre	Description of Cost Centre
1	2
CE	Earthwork and blanketing
CB	Bridges
CS	Station

- e) Price adjustment for change in costs of civil works shall be paid in accordance with the following formula:
  - i)  $VEW = 0.85 EW \times [PLB \times (LBi - LBo)/LBo + PF \times (Fi - Fo)/Fo + PMACH \times (MACHi - MACHo)/MACHo + POTH \times (OTHi - OTHo)/OTHo]$ ;

- ii)  $VBR = 0.85 BR \times [PLB \times (LBi - LBo)/LBo + PC \times (Ci - Co)/Co + PS \times (Si - So)/So + PF \times (Fi - Fo)/Fo + PMACH \times (MACHI - MACHo)/MACHo + POTH \times (OTHi - OTHo)/OTHo]$ ;
- iii)  $VSTN = 0.85 STN \times [PLB \times (LBi - LBo)/LBo + PC \times (Ci - Co)/Co + PS \times (Si - So)/So + PF \times (Fi - Fo)/Fo + PMACH \times ((MACHI - MACHo)/MACHo + POTH \times (OTHi - OTHo)/OTHo)]$ ;
- iv)  $VCW = 0.85 RW \times [PLB \times (LBi - LBo)/LBo + PC \times (Ci - Co)/Co + PS \times (Si - So)/So + PF \times (Fi - Fo)/Fo + PMACH \times (MACHI - MACHo)/MACHo + POTH \times (OTHi - OTHo)/OTHo]$ ;
- v)  $VMISC = 0.85 MISC \times [PLB \times (LBi - LBo)/LBo + PF \times (Fi - Fo)/Fo + PMACH \times (MACHI - MACHo)/MACHo + POTH \times (OTHi - OTHo)/OTHo]$ ;

Where

VEW = Increase or decrease in the cost under the Cost Centre 'CE' of Price Schedule 'A' during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (f);

VBR = Increase or decrease in the cost of Cost Centre 'CB' of Price Schedule 'A' during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (f);

VSTN = Increase or decrease in the cost of Cost Centre 'CS' of Price Schedule 'A' during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (f);

VCW = Increase or decrease in the cost of work done under Price Schedule 'B' during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (f);

VMISC = Increase or decrease in the cost of work done under Price Schedule 'C' during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (f);

PC, PF, PLB, PMACH, POTH and PS are the percentages of cement, fuel and lubricants, labour, Plant Machinery and tools, other materials, and steel/ steel components (including strands and steel cables), respectively for the relevant item as specified in sub-paragraph (f);

Co = The wholesale price index as published by the Ministry of Commerce and Industry, Government of India (hereinafter called "WPI") for sub-group Cement, Lime & Plaster for the Base Month;

Ci = The WPI for sub-group Cement, Lime & Plaster for the average price index of the 3 months of the quarter under consideration;

Fo = The wholesale price index as published by the Ministry of Commerce and Industry, Government of India (hereinafter called "WPI") for group Fuel & Power for the Base Month;

Fi = The WPI for group Fuel & Power for the average price index of the 3 months of the quarter under consideration

LBo = The consumer price index for industrial workers – All India, published by Labour Bureau, Ministry of Labour, Government of India, (hereinafter called “CPI”) for the Base Month;

LBi = The CPI for industrial workers – All India for the average price index of the 3 months of the quarter under consideration;

MACHo = The wholesale price index as published by the Ministry of Commerce and Industry, Government of India (hereinafter called “WPI”) for category- k “Manufacturing of Machinery for Mining, quarrying and construction’ under (R) Manufacturing of Machinery and Equipment for the Base Month;

MACHi = The WPI for category- k “Manufacturing of Machinery for Mining, quarrying and construction’ under (R) Manufacturing of Machinery and Equipment for the average price index of the 3 months of the quarter under consideration;

OTHo = The wholesale price index as published by the Ministry of Commerce and Industry, Government of India (hereinafter called “WPI”) for all commodities for the Base Month;

OTHi = The WPI for all commodities for the average price index of the 3 months of the quarter under consideration;

So = Average Rate of RINL for Rebar 8 mm (coil) as published for Ludhiana Branch on their website for the Base Month;

Si = Average rate of RINL for Rebar 8 mm (coil) as published for Ludhiana Branch on their website for the 3 months of the quarter under consideration;

If only one rate is published for the 3 months of the quarter under consideration, the published rate for that quarter shall be considered for the quarter under consideration.

If no rate is published by RINL for Rebar 8mm (coil) for the 3 months of the quarter under consideration, the value of Si and So will be taken as under:

“So”: Wholesale Price Index for ‘MS Bright Bars’ individual commodity of group item (d) Mild Steel- Long products under (N) MANUFACTURE OF BASIC METALS, published by Office of Economic Adviser, Government of India, Ministry of Commerce & Industry Department of Industrial Policy & Promotion (DIIP) for the Base Month;

“Si”: Average Wholesale Price Index for ‘MS Bright Bars’ individual commodity of group item (d) Mild Steel- Long products under (N) MANUFACTURE OF BASIC METAL, published by Office of Economic Adviser, Government of India, Ministry of Commerce & Industry Department of Industrial Policy & Promotion (DIIP) for the 3 months of the quarter under consideration;

- f) The following percentages shall govern the price adjustment of the Contract Price for costs of civil works:

<b>Component</b>	<b>EW (Cost Centre CE of Price Schedule 'A')</b>	<b>BR (Cost Centre CB of Price Schedule 'A')</b>	<b>STN (Cost Centre CS of Price Schedule 'A')</b>	<b>CW (Price Schedule 'B')</b>	<b>MISC (Price Schedule 'D')</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
<b>Cement (PC)</b>	-	20%	15%	20%	-
<b>Fuel and lubricants (PF)</b>	30%	20%	15%	20%	30%
<b>Labour (PLB)</b>	20%	10%	25%	10%	20%
<b>Machinery and Plants (PMACH)</b>	40%	15%	05%	15%	40%
<b>Other Materials (POTH)</b>	10%	10%	20%	10%	10%
<b>Steel(PS)</b>	-	25%	20%	25%	-
<b>Total</b>	100%	100%	100%	100%	100%

- g) The following expressions and meanings are assigned to the value of the work done for Various General Electrical Services works:

i) **ELEGWK** = Value of work done for General Electrical Services under Price Schedule 'C';

- h) Price adjustment for changes in cost for various General Electrical Services works shall be paid in accordance with the following formula:

i) **VELEGWK** =  $0.85 \text{ ELEGWK} \times [\text{PLB} \times (\text{LBi} - \text{LBo})/\text{LBo} + \text{POTH} \times (\text{OTH}_i - \text{OTH}_o)/\text{OTH}_o]$

**Where: -**

**VELEGWK** = Increase or decrease in the cost of work done under Price Schedule 'C' of 'General Electrical Services works' with complete accessories during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (i);

PLB and POTH are the percentages of Labor and, All Other Commodities respectively for the relevant item as specified in sub-paragraph (i);

**LBo** = The consumer price index for industrial workers – All India, published by Labour Bureau, Ministry of Labour, Government of India, (hereinafter called “CPI”) for the Base month;

**LBi** = The CPI for industrial workers – All India for the average price index of the 3 months of the quarter under consideration

**OTHo** = The wholesale price index as published by the Ministry of Commerce and Industry, Government of India (hereinafter called “WPI”) for “All commodities” for the Base month;

**OTHi** = The WPI for all commodities for the average price index of the 3 months of the quarter under consideration;

- i) **The following percentages shall govern the price adjustment of the Contract Price for Various General Electrical Services works:**

<b>Component</b>	<b>General Electrical</b>
<b>Labour (PLB)</b>	20%
<b>All other commodities (POTH)</b>	80 %
<b>Total</b>	100.00%

**Table A. Foreign Currency (FC)**

Not applicable as Tenderers are required to quote rates and prices only in INR.



### Table B. Summary of Payment Currencies

For ..... [insert name of Works]

Name of Payment Currency	A	B	C	D
	Amount of Currency	Rate of Exchange (local currency per unit of foreign)	Local Currency Equivalent $C = A \times B$	Percentage of Net Tender Price (NTP) $\frac{100 \times C}{NTP}$
<b>For Schedule 'A'</b>				
<b>Local currency (INR)</b>		<b>1.00</b>		
<b>USD (\$)</b>				
<b>EUR (€)</b>				
<b>JPY (¥)</b>				
<b>Schedule 'B'</b>		<b>1.00</b>		
<b>Schedule 'C'</b>		<b>1.00</b>		
<b>Schedule 'D'</b>		<b>1.00</b>		
<b>Net Tender Price</b>				<b>100.00</b>
<b>Provisional Sums Expressed in Local Currency (INR) in million</b>	100,000,000.00	<b>1.00</b>	100,000,000.00	<b>Not Applicable</b>
<b>TOTAL TENDER PRICE (including provisional sum)</b>				

*Note: The Tenderer is required to propose and submit the schedules given in tables above as part of the Tender. The rates of exchange shall be the reference rate twenty-eight (28) days prior to the deadline for submission of Tenders published by the Reserve Bank of India (RBI) on its website <https://www.rbi.org.in>. In case the exchange rate of particular currency on given date is not available on RBI web site, it will be as per the web site <https://www.fbil.org.in> of Financial Benchmark India Private Limited (FBIL).*

## Appendix B to Financial Part: Price Schedules

### 1 Preamble

- 1.1. The Price Schedules shall be read in conjunction with the Instructions to Tenderers, the General Conditions, the Particular Conditions and the Employer's Requirements (General Specifications, Design Requirements Criteria, Technical Specifications, Drawings) and the Addenda (if any).
- 1.2. **Schedule 'A'** comprises scope of work to be executed under lump sum contract as detailed in Part 2- Employers' Requirements of Tender Document. The Tenderer has to quote a single lump sum amount against Schedule 'A'. Payment to the Contractor will be made in accordance with payment stages/Milestones defined for each Cost Centre detailed in Clause 5.0 below unless otherwise specified in the Contract.
- 1.3. **Schedule 'B'** comprises of percentage rate for "Retaining Wall, Bridges and other civil works". The work has to be carried out as per the description of items given in Schedule 'B' and as per the directions of the Engineer. The Tenderer has to quote the percentage Excess (+) or Less (-) over the basic amount given in the Schedule 'B'. The payment against this Schedule 'B' will be made on the basis of quantities executed, measured and certified. Under this Schedule, the Contractor is required to carry out all works of retaining walls, bridges and other civil works, which are not covered in Schedule 'A', as per site requirements and as per the direction of the Engineer.
- 1.4. **Schedule 'C'** comprises of percentage rate for "General Electrical Services works". The work has to be carried out as per the description of items given in Schedule 'C' and as per the directions of the Engineer. The Tenderer has to quote the percentage Excess (+) or Less (-) over the basic amount given in the Schedule 'C'. The payment against this Schedule 'C' will be made on the basis of quantities executed, measured and certified. Under this Schedule, the Contractor is required to carry out all works of General Electrical Services works, which are not covered in Schedule 'A' or Schedule 'B', as per site requirements and as per the direction of the Engineer.
- 1.5. **Schedule 'D'** comprises "Item rates for miscellaneous works". Under this Schedule, the Contractor has to undertake items or works not covered in Schedule 'A' or Schedule 'B' or Schedule 'C'. Execution of items under this Schedule shall be carried out only after specific instructions of the Engineer. This Schedule consists of items for Civil works. The work has to be carried out as per Schedule of items given in this Schedule 'D'. This Schedule contains only Rate and Unit of items of the works. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rates and prices quoted in the Price Schedules. The Tenderer has to quote the percentage (%) Excess (+) or Less (-) over the basic amount given in Schedule 'D' for items to be executed against this head.
- 1.6. The Schedules may not generally give a full description of the works to be performed and the

plant or equipment to be supplied under each item. Tenderers shall be deemed to have read the Employer's Requirements and the other sections of the Tender Documents and reviewed the Drawings to ascertain the full scope of the requirements included in each item prior to filling the rates and prices.

- 1.7. The price quoted in the Price Schedules for Schedule 'A', Schedule 'B' Schedule 'C' and Schedule 'D' are for complete and finished items of the work in all respects. The Price quoted in the Price Schedules shall, except otherwise specifically provided, shall include all design, include all necessary survey work, plants, tools, machinery, Contractor's equipment, labour, compliance of labour laws, supervision, materials, transportation, handling, loading & unloading, storage, sampling, testing, fuel, oil, consumables, electric power, water, all leads & lifts, dewatering, all temporary works including temporary accesses, staging, form works and false works, stacking, provision and maintenance of all temporary works area, construction of temporary store and buildings, fencing, barricading, lighting, drainage arrangements, erection & maintenance of inspection facilities above and below ground such as brick, concrete and steel etc., reinstatement, remedy of any defects during the Defects Notification Period, safety measures for workmen and road users, preparation of design and drawings pertaining to permanent and temporary works, & traffic diversion works, mobilisation and demobilisation, establishment and overhead charges, labour camps, insurance cost for labour and works, contractor's profit, all taxes including Goods and Service Tax (GST), insurance, royalties, duties, cess, octroi, other levies and other charges together with all general risks, liabilities and obligations set out or implied in the Contract.

**The price and rates quoted by Tenderer shall be deemed to have included GST at the rate of 18% as notified by 47<sup>th</sup> GST Council on 29<sup>th</sup> June 2022.**

- 1.8. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the Price Schedules, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of the Work.
- 1.9. To the extent acceptable to the Employer for the purpose of making payments or partial payments, valuing variations or evaluating claims, or for such other purposes as the Engineer may reasonably require, the Contractor may provide the Engineer with a breakdown of any composite or lump sum items included in the Schedules.
- 1.10. The Provisional Sums included and so designated in the Price Schedules shall be expended in whole or in part at the direction and discretion of the Engineer. The Provisional Sum shall be used to cover the Employer's share of the DAAB members' fees and expenses, in accordance with Clause 21. No prior instruction of the Engineer shall be required with respect to the work of the DAAB in accordance with Sub-Clause 13.4 of Part B-Specific Provisions - Particular Conditions of Contract. The Contractor shall submit the DAAB members' invoices and satisfactory evidence of having paid 100% of such invoices as part of the substantiation of those statements submitted under Sub-Clause 14.3. in accordance with Sub-Clauses 13.4 of the General Conditions.

- 1.11. The prices shall be quoted against Schedule 'A', Schedule 'B', Schedule 'C' and Schedule 'D' in the Price Schedule (Excel Workbook) uploaded on the e-Procurement portal.
- 1.12. The prices quoted shall be comprehensive and must include for complying in all respects with the Price Schedules, Instruction to Tenderers, the General Conditions, the Particular Conditions, Employer's Requirements, Specifications and Drawings and for all matters and things necessary for the proper construction, completion, and making good of any defect in part or of the whole of the Works.
- 1.13. No claims for additional payment shall be allowed for any error or misunderstanding by the Contractor of the work involved.

## **2 Variations in Price Schedule 'A', Schedule 'B' Schedule 'C' and Schedule 'D'**

- 2.1 Variations in Price Schedules shall be dealt in accordance with Sub Clause 13.3.1 of Part B-Specific Provisions, Section IX- Particular Conditions of Contract.
- 2.2 The through Chainages mentioned in the Scope of the Works/Tender Drawings can undergo some minor corrections, without any impact on the overall length/Scope of the Works.

## **3 Measurement and Payment**

- 3.1 The measurement shall be made as per Price Schedules i.e. Schedule 'A'. Schedule 'B' Schedule 'C' and Schedule 'D' and other relevant provisions of the Contract such as Employer's Requirements and the Drawings.
- 3.2 If during execution of the Contract, it is decided by the Employer/Engineer that one or more items of Work/Milestone of a Cost Centre in a particular Price Schedule is not required to be executed, the proportionate amount against that particular Item of Work/Milestones shall not be paid. The Engineer's decision in this regard shall be final.
- 3.3 The Payment shall be made as per Clause 14 [Contract Price and Payment] of the General Conditions and Particular Conditions.
- 3.4 The Employer shall make interim payments to the Contractor in accordance with the provisions of Sub-Clause 14.6 [Issue of Interim Payment Certificates] of the General Conditions and Particular Conditions, as certified by the Engineer on the basis of the progress achieved for the items of works/stages/Milestones of the works.
- 3.5 The Contractor shall base its claim for interim payment in accordance with Sub-Clause 14.3 [Application for Interim Payment] of the General Conditions and Particular Conditions for each stage for various items of work on the basis of actual progress of work executed (i.e. Milestones achieved) till the end of the month for which the payment is claimed in relation to the Contractor's total executed quantity, supported with documents and updated programme in accordance with the Employer's Requirements.
- 3.6 The Employer may carry out necessary tests, either directly or through an independent agency, of the Works done by the Contractor for which payment has been accepted and certified by

the Engineer. The payment shall depend upon the outcome of such tests.

- 3.7 Format for the Contractor's application for payment shall be agreed between the Engineer and the Contractor.
- 3.8 All necessary supplementary details to support progress claims, including all certified Request for Inspection in hard bound copy, shall be included with application for payment. Sketches, drawings, approvals, calculations, test reports etc. shall accompany an application for payment to be substantiated and certified by the Engineer and submitted to the Employer.
- 3.9 Even if no work is executed during the month, or the Contractor does not choose to issue an application for payment, a 'NIL' application shall be submitted.
- 3.10 For the purposes of payment, the Contractor shall submit to the Engineer a detailed Price Schedule indicating a further breakdown for each stage of payment contained in the Price Schedules within forty-two (42) days after the receipt of the Letter of Acceptance. Such cost breakdowns shall be subject to approval of the Engineer who shall review and evaluate with comments and/or issue approval within twenty-eight (28) days of receipt of same. The Contractor shall resubmit the cost breakdown structure corresponding to the Engineer's comments for review, if required.
- 3.11 The Engineer is not obliged to issue an Interim Payment Certificate until such breakdown structure of payment schedule has been submitted and accepted by the Engineer.

#### **4 Methodology for Claiming Payment**

- 4.1 The Contractor shall prepare his monthly application for payment in the agreed format in two hard copies and one soft copy. This shall be accompanied by supplementary details in accordance with Sub-Clause 14.3 [Application for Interim Payment Certificates] of the General Conditions. All hard copies shall bear the original signatures of the Contractor's Representative and be submitted to the Engineer.
- 4.2 If these are found in order, in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates] of the General Conditions, then the Engineer shall forward two certified copies of the application along with certified supplementary details to the Employer, with his recommendation for payment; otherwise, all documents shall be returned to the Contractor for rectification and resubmission.

#### **5 Price Schedule**

- 5.1 Schedule "A"- Breakup of Lump Sum cost of Works under various Sub-Heads shall be as follows:

<b>Sub-Head</b>	<b>Description</b>	<b>Percentage of the quoted lump sum cost of Schedule 'A'</b>	<b>No. of Cost Centre</b>	<b>Total Cost of each Sub-Head</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
C	Civil works	100	4	C= 1xLS*

\*LS = Total lump sum accepted cost of Works for Schedule 'A'

## 5.2 Apportionment of Contract Price for payments under various Cost Centre for Sub-Head 'C'- Civil Works

Cost Centre	Description of Cost Centre	Percentage of Cost Centre 'C'	Total Cost of Cost Centre	Total Cost of Sub-Head 'C'
1	2	3	4	5
CD	Design and As Built Drawing & Documents	03.00%	CD= 0.03x 'C'	100% of SCH 'A'
CE	Earthwork and blanketing	46.5%	CE=0.465x 'C'	
CB	Bridges	42.5%	CE=0.425x 'C'	
CS	Station	08.0%	CE=0.08x 'C'	
Total		100%		

Note: Value of 'C' shall be as defined in Sub-Clause 5.1 above.

The percentage figures as filled in column (3) for the apportionment of the Contract Price for completion of the Works corresponding to the various Sub-Heads and Cost Centres are fixed and payment will be released for different Cost centre as per above percentage break-up of Contract Price.

### 5.2.1 Stages of Payment i.e. Milestones of Cost Centre 'CD'- Design and As Built Drawing & Documents

Cost Centre	Sub Cost Centre	Item of Work		Milestone	Weight age (X)	Weightage of Cost Centre 'CD' (Y)
		No.	Description			
1	2	3	4	5	6	7
CD- Design and As Built Drawing & Documents	CD1- Design	CD1.1	Preliminary design	Preliminary Design	7%	3%
		CD1.2	Formation	Definitive design & Good for Construction Drawings (GFC)	7%	
		CD1.3	Minor Bridges			
		CD1.3.1		Preparation & approval of GADs	10%	
		CD1.3.2		Definitive Design	8%	

Cost Centre	Sub Cost Centre	Item of Work		Milestone	Weight age (X)	Weightage of Cost Centre 'CD' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CD1.3.3		Good For Construction (GFC) Drawings	10%	
		<b>CD1.4</b>	<b>Major Bridge (substructure &amp; bearings)</b>			
		CD1.4.1		Preparation & approval of GADs	6%	
		CD1.4.2		Definitive Design	7%	
		CD1.4.3		Good For Construction (GFC) Drawings	8%	
		<b>CD1.5</b>	<b>Retaining Wall</b>			
		CD1.5.1		Definitive Design	3.5%	
		CD1.5.2		Good For Construction (GFC) Drawings	3.5%	
		<b>CD1.6</b>	<b>Station</b>			
		CD1.6.1		Preparation & approval of Architectural Drawings	4%	
		CD1.6.2		Definitive Design	3%	
		CD1.6.3		Combined Services Drawings & MEP Drawings	5%	
		CD1.6.4		Design and drawings for circulating area, passenger amenities, water supply, drainage, rainwater harvesting systems from platform surface and landscaping	3%	

Cost Centre	Sub Cost Centre	Item of Work		Milestone	Weight age (X)	Weightage of Cost Centre 'CD' (Y)
		No.	Description			
1	2	3	4	5	6	7
	<b>CD2- As Built Drawing &amp; Documents</b>	CD 2.1	As Built Drawings	On submission of As Built Drawings	10%	
		CD 2.2	As Built Documents	On submission of As Built Documents	5%	
					<b>Total</b>	<b>100%</b>

**Note:**

1. The value of each Milestones will be 100 % of total Lumpsum cost of Works under Schedule 'A' multiplied by X \* Y. For example, for CD 1.3.2, Value will be equal to Lump sum quoted price of Sch A\*X\*Y=1x 0.08 x 0.03 of lump sum quoted price of Schedule 'A'.
2. Adjustment to Contract Price pursuant to GCC 13.7 shall **NOT** be applicable to the payments of Works executed under this Cost Centre.
3. All minor bridge shall have equal weightage. Payment of each stage/Milestones shall be made on pro rata basis on completion of a stage for a bridge.
4. All major bridge shall have equal weightage. Payment of each stage/Milestones shall be made on pro rata basis on completion of a stage for a bridge.
5. All stations shall have equal weightage. Payment of each stage/Milestones shall be made on pro rata basis on completion of a stage for a station.
6. Payment will be made on Completion of each Milestones as per weightage given in this Cost Centre



**5.2.2 Stages of Payment i.e. Milestones of Cost Centre ‘CE’- Earthwork and Blanketing**

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weight age (X)	Weightage of Cost Centre ‘CE’ (Y)
		No.	Description			
1	2	3	4	5	6	7
CE- Earthwork and Blanketing	CE.1- Earthwork	CE.1.1	Earthwork in formation from Ch 55600 to 56000 for double main line track.			46.5%
		CE.1.1.1		Earthwork in embankment / cutting including compaction.	2.16%	
		CE.1.1.2		On cutting of extra width & dressing of slopes in profile, compaction, turving using coir netting & drainage arrangement complete in all respects.	0.3%	
		CE.1.1.3		On completion of maintenance period of 12 months for turving, if the turving is properly rooted.	0.1%	
		CE.1.2	Earthwork in formation from Ch 56000 to 57000 for double main line track.			
		CE.1.2.1		Earthwork in embankment/ cutting including compaction.	7.0%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CE.1.2.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.7%	
		CE.1.2.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.18%	
		CE.1.3	Earthwork in formation from Ch 57000 to 58000 for main line, loop line, connecting lines & platform area in New Patli station yard.			
		CE.1.3.1		Earthwork in embankment / cutting including compaction.	6.14%	
		CE.1.3.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage	0.4%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				arrangement complete in all respects.		
		CE.1.3.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.2%	
		CE.1.4	Earthwork in formation from Ch 58000 to 58700 in New Patli yard for main, loop & connecting lines and platform area			
		CE.1.4.1		Earthwork in embankment / cutting including compaction.	5.05%	
		CE.1.4.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.3%	
		CE.1.4.3		On completion of maintenance period of 12 months for turfing, if the	0.15%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				turfing is properly rooted.		
		CE.1.5	Earthwork in formation from Ch 58700 to 60000 for double main line & connecting line track.			
		CE.1.5.1		Earthwork in embankment / cutting including compaction.	4.21%	
		CE.1.5.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.3%	
		CE.1.5.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.15%	
		CE.1.6	Earthwork in formation from Ch 60000 to 61000 for double main line track.			

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CE.1.6.1		Earthwork in embankment / cutting including compaction.	3.21%	
		CE.1.6.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.3%	
		CE.1.6.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	
		CE.1.7	Earthwork in formation from Ch 61000 to 61500 for doble main line track.			
		CE.1.7.1		Earthwork in embankment / cutting including compaction.	1.67%	
		CE.1.7.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage	0.25%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				arrangement complete in all respects.		
		CE.1.7.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	
		CE.1.8	Earthwork in formation from Ch 29600 to 30000 for double main line track.			
		CE.1.8.1		Earthwork in embankment / cutting including compaction.	0.5%	
		CE.1.8.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement including catch water, berm drain, chutes, sumps & side drains complete in all respects.	0.36%	
		CE.1.8.3		On completion of maintenance period of 12	0.09%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				months for turfing, if the turfing is properly rooted.		
		CE.1.9	Earthwork in formation from Ch 30000 to 31000 for double main line track.			
		CE.1.9.1		Earthwork in embankment / cutting including compaction.	0.4%	
		CE.1.9.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement including catch water, berm drain, chutes, sumps & side drains complete in all respects.	0.65%	
		CE.1.9.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.13%	
		CE.1.10	Earthwork in formation from Ch 31000 to 32000 for			

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
			double main line track.			
		CE.1.10.1		Earthwork in embankment / cutting including compaction.	0.04%	
		CE.1.10.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0%	
		CE.1.10.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0%	
		CE.1.11	Earthwork in formation from Ch 32000 to 33000 for main line, loop lines, including platform area in Dhulawat station yard.			
		CE.1.11.1		Earthwork in embankment / cutting including compaction.	0.9%	



Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CE.1.11.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.05%	
		CE.1.11.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	
		CE.1.12	Earthwork in formation from Ch 33000 to 34000 for main line, loop lines, including platform area in Dhulawat station yard.			
		CE.1.12.1		Earthwork in embankment / cutting including compaction.	1.62%	
		CE.1.12.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement	0.2%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weight age (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				complete in all respects.		
		CE.1.12.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	
		CE.1.13	Earthwork in formation from Ch 34000 to 35000 for main line track.			
		CE.1.13.1		Earthwork in embankment / cutting including compaction.	1.16%	
		CE.1.13.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.15%	
		CE.1.13.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	
		CE.1.14	Earthwork in formation from Ch 35000 to			

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
			36000 for main line track.			
		CE.1.14.1		Earthwork in embankment / cutting including compaction.	0.75%	
		CE.1.14.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.1%	
		CE.1.14.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	
		CE.1.15	Earthwork in formation from Ch 36000 to 37000 for main line track.			
		CE.1.15.1		Earthwork in embankment / cutting including compaction.	1.36%	
		CE.1.15.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using	0.15%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				coir netting & drainage arrangement complete in all respects.		
		CE.1.15.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	
		CE.1.16	Earthwork in formation from Ch 37000 to 38000 for main line track.			
		CE.1.16.1		Earthwork in embankment / cutting including compaction.	1.39%	
		CE.1.16.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.15%	
		CE.1.16.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CE.1.17	Earthwork in formation from Ch 38000 to 39000 for main line track.			
		CE.1.17.1		Earthwork in embankment / cutting including compaction.	1.2%	
		CE.1.17.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.14	
		CE.1.17.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	
		CE.1.18	Earthwork in formation from Ch 39000 to 40000 for main line track.			
		CE.1.18.1		Earthwork in embankment / cutting including compaction.	0.87%	
		CE.1.18.2		On cutting of extra width & dressing of slopes in profile,	0.1	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				compaction, turfing using coir netting & drainage arrangement complete in all respects.		
		CE.1.18.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	
		CE.1.19	Earthwork in formation from Ch 40000 to 41000 for main line track.			
		CE.1.19.1		Earthwork in embankment / cutting including compaction.	0.92%	
		CE.1.19.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.1	
		CE.1.19.3		On completion of maintenance period of 12 months for turfing, if the	0.1%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				turfing is properly rooted.		
		CE.1.20	Earthwork in formation from Ch 41000 to 42000 for main line track.			
		CE.1.20.1		Earthwork in embankment / cutting including compaction.	1.24%	
		CE.1.20.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.15%	
		CE.1.20.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	
		CE.1.21	Earthwork in formation from Ch 42000 to 43000 for main line including platform area in Chandla Dungerwas station.			

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CE.1.21.1		Earthwork in embankment / cutting including compaction.	1.95%	
		CE.1.21.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.4%	
		CE.1.21.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	
		CE.1.22	Earthwork in formation from Ch 43000 to 44000 for main line track.			
		CE.1.22.1		Earthwork in embankment / cutting including compaction.	2.15%	
		CE.1.22.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement	0.4%	



Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				complete in all respects.		
		CE.1.22.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.15%	
		CE.1.23	Earthwork in formation from Ch 44000 to 45000 for main line track.			
		CE.1.23.1		Earthwork in embankment / cutting including compaction.	4.94%	
		CE.1.23.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.4%	
		CE.1.23.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.15%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weight age (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CE.1.24	Earthwork in formation from Ch 45000 to 46000 for main line track.			
		CE.1.24.1		Earthwork in embankment / cutting including compaction.	1.6%	
		CE.1.24.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.3	
		CE.1.24.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	
		CE.1.25	Earthwork in formation from Ch 46000 to 47000 for main line including platform area in Panchgaon station.			
		CE.1.25.1		Earthwork in embankment / cutting including compaction.	6.42%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CE.1.25.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.55%	
		CE.1.25.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.2%	
		CE.1.26	Earthwork in formation from Ch 47000 to 48000 for main line track.			
		CE.1.26.1		Earthwork in embankment / cutting including compaction.	4.31%	
		CE.1.26.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.45%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CE.1.26.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.15%	
		CE.1.27	Earthwork in formation from Ch 48000 to 49000 for main line track.			
		CE.1.27.1		Earthwork in embankment / cutting including compaction.	1.47%	
		CE.1.27.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.2%	
		CE.1.27.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	
		CE.1.28	Earthwork in formation from Ch 49000 to 49700 for main line track.			

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CE.1.28.1		Earthwork in embankment / cutting including compaction.	0.2%	
		CE.1.28.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.04%	
		CE.1.28.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.03%	
		CE.1.29	Earthwork in formation from Ch 0614 to 1000 for New Patli - Patli connecting line			
		CE.1.29.1		Earthwork in embankment / cutting including compaction.	0.34%	
		CE.1.29.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage	0.15%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				arrangement complete in all respects.		
		CE.1.29.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.05%	
		CE.1.30	Earthwork in formation from Ch 1000 to 2000 for New Patli - Patli connecting line.			
		CE.1.30.1		Earthwork in embankment / cutting including compaction.	1.15%	
		CE.1.30.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.2%	
		CE.1.30.3		On completion of maintenance period of 12 months for turfing, if the	0.1%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				turfing is properly rooted.		
		CE.1.31	Earthwork in formation from Ch 2000 to Ch 2700 for New Patli-Patli connecting line			
		CE.1.31.1		Earthwork in embankment / cutting including compaction.	0.15%	
		CE.1.31.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.02%	
		CE.1.31.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.0%	
		CE.1.32	Earthwork in formation from Ch 0703 to 2000 for New Patli-Sultanpur connecting line			
		CE.1.32.1		Earthwork in embankment /	1.52%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				cutting including compaction.		
		CE.1.32.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement complete in all respects.	0.2%	
		CE.1.32.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	
		CE.1.33	Earthwork in formation from Ch 2000 to 3000 for New Patli-Sultanpur connecting line			
		CE.1.33.1		Earthwork in embankment / cutting including compaction.	0.98%	
		CE.1.33.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage arrangement	0.1%	



Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weight age (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				complete in all respects.		
		CE.1.33.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.1%	
		CE.1.34	Earthwork in formation from Ch 3000 to 4190 for New Patli-Sultanpur connecting line and Sultanpur station yard (Km 0861 towards Garhi Harsaru side & Km 0530 towards Badsa side & Km 0689 towards Farukhnagar side)			
		CE.1.34.1		Earthwork in embankment / cutting including compaction.	0.3%	
		CE.1.34.2		On cutting of extra width & dressing of slopes in profile, compaction, turfing using coir netting & drainage	0.06%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weight age (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				arrangement complete in all respects.		
		CE.1.34.3		On completion of maintenance period of 12 months for turfing, if the turfing is properly rooted.	0.06%	
	<b>CE.2-Blanketing</b>	<b>CE.2.1</b>	Blanketing from Ch 55600 to 56000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.27%	
		CE.2.2	Blanketing from Ch 56000 to 57000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.57%	
		CE.2.3	Blanketing from Ch 57000 to 58000 for main line, loop lines & connecting lines in New Patli station yard.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	1.03%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CE.2.4	Blanketing from Ch 58000 to 58700 for main line, loop lines & connecting lines in New Patli station yard.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.88%	
		CE.2.5	Blanketing from Ch 58700 to 60000 for main line & connecting line.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	1.2%	
		CE.2.6	Blanketing from Ch 60000 to 61000 for double main line track	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.56%	
		CE.2.7	Blanketing from Ch 61000 to 61500 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.29%	
		CE.2.8	Blanketing from Ch 29600 to 30000 for	Blanketing on subgrade/ prepared subgrade as per	0.27%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
			double main line track.	design profile including compaction complete in all respects.		
		CE.2.9	Blanketing from Ch 30000 to 31000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.56%	
		CE.2.10	Blanketing from Ch 31000 to 32000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.6%	
		CE.2.11	Blanketing from Ch 32000 to 33000 for main line & loop lines in Dhulawat station yard.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.81%	
		CE.2.12	Blanketing from Ch 33000 to 34000 for main line & loop lines in Dhulawat station yard.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction	0.69%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				complete in all respects.		
		CE.2.13	Blanketing from Ch 34000 to 35000 for main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.58%	
		CE.2.14	Blanketing from Ch 35000 to 36000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.56%	
		CE.2.15	Blanketing from Ch 36000 to 37000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.56%	
		CE.2.16	Blanketing from Ch 37000 to 38000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.56%	
		CE.2.17	Blanketing from Ch 38000	Blanketing on subgrade/	0.56%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weight age (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
			to 39000 for double main line track.	prepared subgrade as per design profile including compaction complete in all respects.		
		CE.2.18	Blanketing from Ch 39000 to 40000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.57%	
		CE.2.19	Blanketing from Ch 40000 to 41000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.57%	
		CE.2.20	Blanketing from Ch 41000 to 42000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.56%	
		CE.2.21	Blanketing from Ch 42000 to 43000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including	0.48%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
				compaction complete in all respects.		
		CE.2.22	Blanketing from Ch 43000 to 4400 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.57%	
		CE.2.23	Blanketing from Ch 44000 to 45000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.57%	
		CE.2.24	Blanketing from Ch 45000 to 46000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.62%	
		CE.2.25	Blanketing from Ch 46000 to 47000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.49%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CE.2.26	Blanketing from Ch 47000 to 48000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.57%	
		CE.2.27	Blanketing from Ch 48000 to 49000 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.51%	
		CE.2.28	Blanketing from Ch 49000 to 49700 for double main line track.	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.45%	
		CE.2.29	Blanketing from Ch 0614 to 1000 for New Patli - Patli connecting line	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.06%	
		CE.2.30	Blanketing from Ch 1000 to 2000 for New Patli -	Blanketing on subgrade/ prepared subgrade as per	0.36%	



Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
			Patli connecting line.	design profile including compaction complete in all respects.		
		CE.2.31	Blanketing from Ch 2000 to Ch 2700 for New Patli-Patli connecting line	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.24%	
		CE.2.32	Blanketing from Ch 0703 to 2000 for New Patli-Sultanpur connecting line	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.3%	
		CE.2.33	Blanketing from Ch 2000 to 3000 for New Patli-Sultanpur connecting line	Blanketing on subgrade/ prepared subgrade as per design profile including compaction complete in all respects.	0.35%	
		CE.2.34	Blanketing from Ch 3000 to 4119 for New Patli-Sultanpur connecting line and in	Blanketing on subgrade/ prepared subgrade as per design profile including compaction	1.00%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weight age (X)	Weightage of Cost Centre 'CE' (Y)
		No.	Description			
1	2	3	4	5	6	7
			Sultanpur Station yard (Km 0861 towards Garhi Harsaru side & Km 0530 towards Badsa side & Km 0689 towards Farukhnagar side)	complete in all respects.		
				<b>Total</b>	<b>100%</b>	

**Note:**

1. The value of each Milestones will be 100 % of total Lumpsum cost of Works under Schedule 'A' multiplied by X \* Y. For example, for CE1.1.1, Value will be equal to Lump sum quoted price of Sch A \* X \* Y = 1 x 0.0216 x 0.465 of lump sum quoted price of Schedule 'A'.
2. Adjustment to Contract Price pursuant to GCC 13.7 shall be applicable to the payments of Works executed under this Sub Heads / Price Schedule.
3. Payment will be made on Completion of each Milestones as per weightage given in this schedule.

## 5.2.3 Milestones of Cost Centre 'CB'- for Bridges

Cost Centre	Sub-cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Sub-Cost Centre 'CB' (Y)	
		No.	Description				
1	2	3	4	5	6	7	
<b>CB-Bridges</b>	<b>CB1-Minor Bridges</b>	CB1.1	Construction of minor bridge No. Nil between Ch 55600 to 56000 for main line track.		0%	42.5%	
		CB1.2	Construction of minor bridge Nos. 137,138, 139 & 140 between Ch 56000 to 57000 for main line track.	On completion of RCC box bridge including *	6.48%		
		*wing wall, return wall, drop wall, curtain wall, flooring, backfill, protection works, inspection steps, bridge number plaque, painting of HFL, height gauge, drainage arrangement, road works in RUBs and other balance works complete as per approved drawings & TS.					
		CB1.3	Construction of minor bridge No. 141, 142, 143 & 144 between Ch 57000 to 58000 for main line and New Patli - Patli connecting line.	On completion of RCC box bridge including *	9.66%		
		CB1.4	Construction of minor bridge No. 145 & 146 between ch 58000 to 58700 in New Patli yard.	On completion of RCC box bridge including *	2.36%		
		CB1.5	Construction of minor bridge No. 148 between ch 58700 to 60000 for main & New Patli-Sultanpur connecting lines.	On completion of RCC box bridge including *	1.09%		

Cost Centre	Sub-cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Sub-Cost Centre 'CB' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CB.1.6	Construction of minor bridge No. 149 between Ch 60000 to 61000 for main line.	On completion of RCC box bridge including *	1.23%	
		CB1.7	Construction of minor bridge No. 154 between Ch 61000 to 61500 for main line track.	On completion of RCC box bridge including *	0.33%	
		CB1.8	Construction of minor bridge No. Nil between ch 29.600 to 30.000 for main line track.		0%	
		CB1.9	Construction of minor bridge No. 71 between Ch 30000 to 31000 for main line track.	On completion of RCC box bridge including *	7.39%	
		CB1.10	Construction of minor bridge No. 75 between Ch 31000 to 32000 for main line track.	On completion of RCC box bridge including *	1.5%	
		CB1.11	Construction of minor bridge No. 76 between Ch 32000 to 33000 for main line, loop line & platform.	On completion of RCC box bridge including *	0.3%	
		CB1.12	Construction of minor bridge No. 77, 78, 79 & 80 between ch 33000 to 34000 for main line, loop line & platform.	On completion of RCC box bridge including *	2.06%	
		CB1.13	Construction of minor bridge No. Nil		0%	

Cost Centre	Sub-cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Sub-Cost Centre 'CB' (Y)
		No.	Description			
1	2	3	4	5	6	7
			between Ch 34000 to 35000 for main line track.			
		CB1.14	Construction of minor bridge No. 83 & 84 between Ch 35000 to 36000 for main line track.	On completion of RCC box bridge including *	2.95%	
		CB1.15	Construction of minor bridge No. Nil between Ch 36000 to 37000 for main line track.		0%	
		CB1.16	Construction of minor bridge No. 86 & 87 between Ch 37000 to 38000 for main line track.	On completion of RCC box bridge including *	0.9%	
		CB1.17	Construction of minor bridge No. Nil between Ch 38000 to 39000 for main line track.		0%	
		CB1.18	Construction of minor bridge No. 89 between Ch 39000 to 40000 for main line track.	On completion of RCC box bridge including *	0.62%	
		CB1.19	Construction of minor bridge No. 91 & 92 between Ch 40000 to 41000 for main line track.	On completion of RCC box bridge including *	0.5%	
		CB1.20	Construction of minor bridge No. 93, 94 & 95 between Ch 41000 to 42000 for main line track.	On completion of RCC box bridge including *	0.85%	

Cost Centre	Sub-cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Sub-Cost Centre 'CB' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CB1.21	Construction of minor bridge No. 97 & 98 between Ch 42000 to 43000 for main line track.	On completion of RCC box bridge including *	0.73%	
		CB1.22	Construction of minor bridge No. 100 between ch 43000 to 44000 for main line track.	On completion of RCC box bridge including *	0.57%	
		CB1.23	Construction of minor bridge No. 102, 103 & 104 between Ch 44000 to 45000 for main line track.	On completion of RCC box bridge including *	1.23%	
		CB1.24	Construction of minor bridge No. Nil between Ch 45000 to 46000 for main line track.		0%	
		CB1.25	Construction of minor bridge No. 107, 108, 109 & 110 between Ch 46000 to 47000 for main line track.	On completion of RCC box bridge including *	2.87%	
		CB1.26	Construction of minor bridge No. 111, 112 & 113 between Ch 47000 to 48000 for main line track.	On completion of RCC box bridge including *	0.71%	
		CB1.27	Construction of minor bridge No. 114, 115, 116 & 118 between Ch 48000 to 49000 for main line track.	On completion of RCC box bridge including *	1.85%	

Cost Centre	Sub-cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Sub-Cost Centre 'CB' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CB1.28	Construction of minor bridge No. 119 & 120 between Ch 49000 to 49700 for main line track.	On completion of RCC box bridge including *	2.78%	
		CB1.29	Construction of minor bridge No. Nil between Ch 0614 to 1000 for New Patli to Patli connecting line.		0%	
		CB1.30	Construction of minor bridge No. 1, 2 & 3 between Ch 1000 to 2000 for New Patli to Patli connecting line.	On completion of RCC box bridge including *	1.49%	
		CB1.31	Construction of minor bridge No. 4 & 5 between Ch 2000 to 2700 for New Patli to Patli connecting line	On completion of RCC box bridge including *	1.49%	
		CB1.32	Construction of minor bridge No. 2 between Ch 0703 to 2000 for New Patli to Sultanpur connecting line	On completion of RCC box bridge including *	0.19%	
		CB1.33	Construction of minor bridge Nos. 4 & 5 between Ch 2000 to 3000 for New Patli to Sultanpur connecting line	On completion of RCC box bridge including *	0.77%	
		CB1.34	Construction of minor bridge No. Nil between Ch 3000 to		0%	

Cost Centre	Sub-cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Sub-Cost Centre 'CB' (Y)
		No.	Description			
1	2	3	4	5	6	7
			4119 for New Patli-Sultanpur connecting line and in Sultanpur Station yard (Km 0861 towards Garhi Harsaru side & Km 0530 towards Badsa side & Km 0689 towards Farukhnagar side)			
	<b>CB.2-Major Bridges</b>	CB.2.1	Foundation	On completion of the foundation work including pile caps/ well caps and foundations for wing and return walls, and testing.	13.3%	
		CB.2.2	Substructure	On Completion of Abutment/Piers including Abutment/Pier Cap without bearings.		
		CB.2.2.1		Pier/Abutment	2.8%	
		CB.2.2.2		Pier/Abutment cap	1%	
		CB.2.2.3		Completion of the wing walls, return walls in all respects	4%	
		CB.2.3	Superstructure			
		CB.2.3.1		On completion of superstructure including	16%	



Cost Centre	Sub-cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Sub-Cost Centre 'CB' (Y)
		No.	Description			
1	2	3	4	5	6	7
				launching in position.		
		CB.2.3.2		On fixing of bearings in position true to line & level and placement of superstructure on bearings including grouting of holding down bolts complete.	1.5%	
		CB.2.4	Installation of Track on OWG	On completion of installation of track on H-beam sleepers including fixing of guard rails, gang pathway complete.	1.0 %	
		CB.2.5	Miscellaneous works			
		CB.2.5.1		On completion of Trolley refuge, Pathway on the sides, Inspection arrangement including access ladder etc.as per approved drawings and Employer's requirement,	2%	
		CB.2.5.2		On completion of balance works as per drawing like-Protection works including Toe wall, Pitching, inspection steps,	5.50%	

Cost Centre	Sub-cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Sub-Cost Centre 'CB' (Y)
		No.	Description			
1	2	3	4	5	6	7
				Bridge plaque, Bridge board, painting of HFL, Height Gauge, drainage arrangement in RUBs, and Testing on completion, if any, complete in all respect and fit for use.		
				<b>Total</b>	<b>100%</b>	

## Note:

1. The value of each Milestones will be 100% of total Lumpsum cost of Works under Schedule 'A' multiplied by X \* Y. For example, for CB1.2, Value will be = 100% of Lump sum quoted price of Sch AxXxY= 1x 0.0648 x 0.425 of lump sum quoted price of Schedule 'A'.
2. Adjustment to Contract Price pursuant to GCC 13.7 shall be applicable to the payments of Works executed under this Sub Head / Price Schedule.
3. Payment will be made on Completion of each Milestones as per weightage given in this schedule.
4. CB2.2-Major Bridges:
  - (i) For the purpose of stage payment/Milestones, cost of a bridge shall be taken in proportion to its linear length measured along the alignment to the total linear length of all major bridges.
  - (ii) Payment of each stage/Milestones for a bridge will be made on completion of the relevant stage as per the weightage given in this schedule in proportion to the cost of the bridge.
5. Stages CB.2.1 to CB.2.2 will further be subdivided into the number of piers + 2 abutments, as applicable as per approved drawing by the Engineer, and Milestones for completed work for each pier and abutment shall be made as per the requirement of the stages stated above.
6. For steel Open Web Girder (OWG) and Composite girders payment against Cost centre CB.2.3.1 shall be released as per following schedule-
  - (i) Receipt of material at approved location: 40%

(ii) Fabrication of girder and transportation to site: 25%

(iii)Erection/launching and completion of all other balance works: 35%,

and for PSC girder/slabs payment against sub cost centre 2.3.1 shall be released as per following schedule-

(i) On casting of PSC girder/slabs: 50%

(ii) On first stage prestressing: 20%

(iii) On completion in all respect: 30%

## 5.2.4 Stages of Payment i.e. Milestones of Cost Centre 'CS'- Stations

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CS' (Y)
		No.	Description			
1	2	3	4	5	6	7
CS-Station	CS.1-Sultanpur Station	<b>CS.1.1</b>	<b>Station building</b>	Construction of railway station buildings and service buildings complete in all respects including fixing doors, windows, sanitary, watersupply works and all other specified and incidental works.	2.15%	8%
		<b>CS.1.2</b>	<b>Platform</b>			
		CS.1.2.1		Construction of platforms including earthwork in filling above formation level, platform wall but excluding items mentioned in item no. 1.2.2 and 1.2.3 as shown in tender drawings & Employer's Requirements.	4.0%	
		CS.1.2.2		Surfacing of platforms.	2.0%	
		CS.1.2.3		Provision of passenger amenities including shelters.	1.3%	
		<b>CS.1.3</b>	<b>Drainage works of station</b>	On completion of drainage works of station yard & platform as shown in drawings & Employer's Requirement.	1%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CS' (Y)
		No.	Description			
1	2	3	4	5	6	7
		<b>CS.1.4</b>	<b>Misc. works</b>	On completion of water supply works including bore well, pump house, storage tank, sanitary works, pathway for passengers across tracks, station name board, signages, rain water harvesting, approach road to station and other incidental works in railway station area.	0.9%	
	<b>CS.2 New Patli Station</b>	<b>CS.2.1</b>	<b>Station building</b>			
		CS.2.1.1		Construction of railway station buildings and service buildings complete in all respects including fixing doors, windows, sanitary, watersupply works and all other specified and incidental works.	4.75%	
		CS.2.1.2		On completion of stairs & ramp connected to station building.	1.0%	
		<b>CS.2.2</b>	<b>Platform</b>			
		CS.2.2.1		Construction of platforms including earthwork in	3.7%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CS' (Y)
		No.	Description			
1	2	3	4	5	6	7
				filling above formation level platform fencing /Wall but excluding items mentioned in item no 2.2.2 and 2.2.3 as shown in tender drawings & the Employer's requirements.		
		CS.2.2.2		Surfacing of platform in the full length.	3.8%	
		CS.2.2.3		Provision of passenger amenities including platform shelters.	3.0%	
		<b>CS2.3</b>	<b>Subway</b>			
		CS2.3.1		On completion of barrel of RCC box.	5%	
		CS2.3.2		On completion stairs to platform including shed, lift well & provision for escalator.	1%	
		CS2.3.3		On completion of subway in all respect including flooring, wall cladding, drainage, railing etc. complete.	1.25%	
		<b>CS.2.4</b>	<b>Circulating Area</b>	On completion of retaining wall along the track, U-turn & along	4.6%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CS' (Y)
		No.	Description			
1	2	3	4	5	6	7
				station building near subway entrance, earth filling, VDC surface, medians, footpath, Portico compete in all respects as shown in tender drawings and the Employer's requirement.		
		<b>CS2.5</b>	<b>Approach Road</b>	On completion of station approach road including construction of retaining wall complete in all respects as shown in tender drawing & the Employer's requirements.	6.5%	
		<b>CS.2.6</b>	<b>Drainage works of station</b>	On completion of drainage works of station yard & platform as shown in tender drawings & the Employer's requirements.	2.65%	
		<b>CS.2.7</b>	<b>Misc. works</b>	On completion of water supply works including bore well, pump house, storage tank, sanitary and plumbing works, pathway for passengers across tracks, station name board,	2.3%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CS' (Y)
		No.	Description			
1	2	3	4	5	6	7
				signages, rain water harvesting and other incidental works in railway station area.		
	<b>CS.3- Panchgaon Station</b>	<b>CS.3.1</b>	Station building	Construction of railway station buildings complete in all respects including fixing of doors, windows, sanitary, water supply, shed and all other specified and incidental works.	0.2%	
		<b>CS.3.2</b>	<b>Platform</b>			
		CS.3.2.1		Construction of platforms including earthwork in filling above formation level, platform wall but excluding items mentioned in item no. 3.2.2 and 3.2.3 as shown in tender drawings & Employer's Requirements.	2%	
		CS.3.2.2		Surfacing of platforms.	1.8%	
		CS.3.2.3		Provision of passenger amenities including shelters.	0.9%	



Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CS' (Y)
		No.	Description			
1	2	3	4	5	6	7
		<b>CS.3.3</b>	<b>Drainage works of station</b>	On completion of drainage works of station yard & platform as shown in tender drawings & Employer's Requirements.	1%	
		<b>CS.3.4</b>	<b>Sub-Way, stairs &amp; lift well</b>			
		CS.3.4.1		On completion of barrel of RCC box.	1.75%	
		CS.3.4.2		On completion stairs & ramps to platforms including shed.	1.75%	
		CS.3.4.3		On completion of subway in all respect including flooring, wall cladding, drainage, railing etc. complete.	1%	
		<b>CS.3.5</b>	<b>Approach FOB along with stairs and ramp</b>	On completion of FOB including stairs, ramp, shed, flooring etc. complete.	2.65%	
		<b>CS.3.6</b>	<b>Misc. works</b>	On completion of water supply works including bore well, pump house, storage tank, sanitary works, station name board, signages, rain water harvesting,	0.91%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CS' (Y)
		No.	Description			
1	2	3	4	5	6	7
				approach road to station and other incidental works in railway station area.		
	<b>CS.4 Chandla Dungerwas station</b>	<b>CS.4.1</b>	<b>Station building</b>	Construction of railway station buildings complete in all respects including fixing of doors, windows, sanitary, water supply, shed and all other specified and incidental works.	0.15%	
		<b>CS.4.2</b>	<b>Platform</b>			
		CS.4.2.1		Construction of platforms including earthwork in filling above formation level, platform wall but excluding items mentioned in item no. 4.2.2 and 4.2.3 as shown in tender drawings & Employer's Requirements.	1.9%	
		CS.4.2.2		Surfacing of platforms.	1.85%	
		CS.4.2.3		Provision of passenger amenities including shelters.	1.0%	
		<b>CS.4.3</b>	<b>Drainage works of station</b>	On completion of drainage works of station yard & platform as shown	1%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CS' (Y)
		No.	Description			
1	2	3	4	5	6	7
				in drawings & Employer's Requirement.		
		<b>CS.4.4</b>	<b>Sub-Way, stairs &amp; ramps</b>			
			CS.4.4.1	On completion of barrel of RCC box.	1.8%	
			CS.4.4.2	On completion stairs & ramps to platforms including shed.	1.7%	
			CS.4.4.3	On completion of subway in all respect including flooring, wall cladding, drainage, SS railing in circulating area and ramp complete in all respect.	1%	
		<b>CS.4.5</b>	<b>Circulating area and ramp at entrance</b>	On completion of circulating area including retaining walls, earth filling, VDC flooring, SS railing along the boundary of circulating area and in ramp, shed complete in all respects as shown in drawings & Employer's Requirements.	1.9%	
		<b>CS.4.6</b>	<b>Misc. works</b>	On completion of water supply works including bore well, pump	0.84%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CS' (Y)
		No.	Description			
1	2	3	4	5	6	7
				house, storage tank, sanitary works, station name board, signages, rain water harvesting, approach road to station and other incidental works in railway station area.		
	<b>CS.5 Dhulawat station</b>	<b>CS.5.1</b>	<b>Station building</b>	Construction of railway station buildings, service buildings complete in all respects including fixing of doors, windows, sanitary, water supply, shed and all other specified and incidental works.	4.15%	
		<b>CS.5.2</b>	<b>Platform</b>			
		CS.5.2.1		Construction of platforms including earthwork in filling above formation level, platform wall but excluding items mentioned in item no. 5.2.2 and 5.2.3 as shown in tender drawings & the Employer's requirements.	2.9%	
		CS.5.2.2		Surfacing of platforms.	2.8%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CS' (Y)
		No.	Description			
1	2	3	4	5	6	7
		CS.5.2.3		Provision of passenger amenities including shelters.	2.45%	
		<b>CS.5.3</b>	<b>Drainage works of station</b>	On completion of drainage works of station yard & platform as shown in tender drawings & the Employer's requirements.	2%	
		<b>CS.5.4</b>	<b>Sub-Way, stairs &amp; lift well</b>			
			CS.5.4.1	On completion of barrel of RCC box.	2.4%	
			CS.5.4.2	On completion stairs to platform including shed, lift well.	1%	
			CS.5.4.3	On completion of subway in all respect including flooring, wall cladding, drainage, railing etc. complete.	1%	
		<b>CS.5.5</b>	<b>Circulating area, approach road &amp; shed at entrance</b>	On completion of circulating area including retaining walls, earth filling, VDC surfacing, SS railing along the boundary of circulating area, approach road, portico etc. complete in all respects as shown	1.9%	

Cost Centre	Sub-Cost Centre	Item of Work		Milestone	Weightage (X)	Weightage of Cost Centre 'CS' (Y)
		No.	Description			
1	2	3	4	5	6	7
				in tender drawings and the Employer's requirements.		
		<b>CS.5.6</b>	<b>Misc. works</b>	On completion of water supply works including bore well, pump house, storage tank, sanitary works, station name board, signages, rain water harvesting, approach road to station and other incidental works in railway station area.	1.4%	
				<b>Total</b>	<b>100%</b>	

Note:

- The value of each Milestones will be 100% of total Lumpsum cost of Works under Schedule 'A' multiplied by X \* Y. For example, for CS1.1, Value will be = 100% of Lump sum quoted price of Sch A x X x Y = 1 x 0.0215 x 0.08 of lump sum quoted price of Schedule 'A'.
- Adjustment to Contract Price pursuant to GCC 13.7 shall be applicable to the payments of Works executed under this Sub Head / Price Schedule.
- CS1.1 and CS2.1 Station Building- Unit of measurement is plinth area in square meters. For the buildings having more than one storey, the total area shall be found out by adding the area of each storey. Unit cost shall be determined on pro rata basis with respect to the total area of all stations and service buildings.
  - 50% Payment shall be paid after completion of structural works i.e beam, columns & slab in case of framed structure or walls & slabs in case of other buildings and
  - 30% Payment shall be paid after completion of finishing and
  - 20% Payment on final completion of works in all respects ready for use.
- CS 1.2 and CS 2.2 Platform- Unit of measurement is *area measured in square meter*. Unit cost shall be determined on pro rata basis with respect to the total area of all *platforms at the station*.

5. CS 2.4 Retaining Wall- Unit of measurement is linear length. Payment shall be made on pro rata completion of a stage. *Retaining wall* along the loop line and approach road in New Patli station area is part of lump sum Schedule “A” and shall not be paid under Schedule “B”.
6. Payment will be made on Completion of each Milestones as per weightage given in this schedule.
7. Variation in ‘Station *building*’:  
In case of variation in the floor area of any station *and service building* on either side i.e. increase or decrease with respect to the area shown in the Tender Drawings, the total value of station as mentioned in Sub-Cost Centre CS1.1 and CS2.1 as applicable will get modified accordingly on pro rata basis of floor area.

## 6 Schedule 'B': Retaining Wall, Bridges &amp; other civil works

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
<b>Schedule B1:- NWR-USSOR 2019 BASED ITEMS</b>							
1	013130	Shoring with 'Z' section MS sheet piles side by side in all kinds of soil mechanically or manually as per approved drawing with contractor's own arrangement complete in all respects and removal of sheet piles after completion of the work as directed by engineer in-charge. {Note - Payment will be made as per actual driven length of pile}	210.000	Sqm	₹ 868.29	13.02%	₹ 2,06,077.20
2	022010	Earthwork in excavation by mechanical means (Hydraulic Excavator)/Manual Means for foundations and floors of the bridges, retaining walls etc. including setting out, dressing of sides, ramming of bottom, getting out the excavated material, back filling in layers with approved material and consolidation of the layers by ramming and watering etc. including all lift, disposal of surplus soil upto a lead of 300m, all types of shoring and strutting with all labour and material complete as per drawing and technical specification as directed by Engineer. <b>Note:</b> This item will be used for excavation work in connection with other miscellaneous works also like side drains, foundation for OHE masts and other miscellaneous structures in connection with Gauge Conversion, Doubling, New lines.					



<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
i	<b>022011</b>	All kinds of soils	57355.000	Cum	₹ 195.57	13.02%	₹ 1,26,77,175.65
3	<b>022040</b>	Providing and laying in position machine batched, machine mixed and machine vibrated Design Mix Cement Concrete of specified grade ( <b>M-20</b> Cast in-Situ) using 20mm graded crushed stone aggregate and coarse sand of approved quality in RCC raft foundation & Pile cap including finishing, using Admixtures in approved proportions (as per IS:9103), to modify workability & other properties without impairing strength and durability complete as per specifications and direction of the Engineer in charge. Payment for cement, reinforcement and shuttering shall be paid extra. <b>Note</b> -Cement concrete in drainage and other miscellaneous works shall be paid under this item.	9520.000	Cum	₹ 2,840.33	13.02%	₹ 3,05,59,771.20
4	<b>022100</b>	Providing, fabricating and installing permanent casing pipe for bored piles for all diameters with specified thickness of steel plate including all labour, materials, pumping and bailing out water wherever required, complete as per technical specifications as directed by Engineer in charge. This will include the weight of plate only and no cognizance will be given for the fittings, i.e. rivets and welding etc	54.000	MT	₹ 86,647.55	13.02%	₹ 52,88,038.02

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
<b>S. No</b>	<b>Item No.</b>	<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated amount in INR</b>
5	<b>022120</b>	Conducting load testing of a single pile upto following capacity in accordance with IS:2911 (Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. with all labour, material, tool & plants, equipment, machinery, etc. complete as per drawing and specification, as directed by the Engineer					
i	<b>022123</b>	Initial load test above 100 ton capacity upto 250 ton capacity pile	2.000	Each	₹ 92,300.97	13.02%	₹ 2,08,631.94
ii	<b>022124</b>	Extra for every increase of 50 ton in pile capacity or part thereof over 250 ton	53.000	Each	₹ 9,087.94	13.02%	₹ 5,44,359.82
iii	<b>022127</b>	Routine Load Test above 100 ton capacity upto 250 ton capacity pile	8.000	Each	₹ 62,036.82	13.02%	₹ 5,60,898.24
6	<b>022130</b>	Lateral load testing of single pile in accordance with "IS Code of practice IS:2911 (Part-IV) for determining safe allowable lateral load of pile" with all labour, material, tool & plants, equipment, machinery, etc complete as per drawing and specification as directed by the Engineer					
i	<b>022131</b>	Piles with lateral load capacity of upto 50 ton	8.000	Each	₹ 23,066.05	13.02%	₹ 2,08,548.80
7	<b>022140</b>	Pulse Echo Test (PET) for integrity testing of piles with contractor's men, materials and machines. The rate includes cost of Inspection of site, preparation of pile head and any other unforeseen cost required for the test, submission of reports in triplicate as per satisfaction of the Engineer in Charge at site.	101.000	Each	₹ 3,291.33	13.02%	₹ 3,75,696.77

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
<b>S. No</b>	<b>Item No.</b>	<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated amount in INR</b>
8	<b>025020</b>	Providing and applying two coats of coal tar or bitumen conforming to IS:3117– latest version on the top and sides of RCC box/slabs @ 1.70 kg/sqm after cleaning the surface with all labour and materials complete job as directed by the Engineer	22349.000	Sqm	₹ 155.67	13.02%	₹ 39,31,859.57
9	<b>025030</b>	centering and shuttering including strutting, propping etc. and removal of form for :					
i	<b>025031</b>	All types of bridge sub-structures, e.g. pier, abutment, wing wall, retaining wall, RCC box type foundations, Abutment cap, Pier Cap, Inspection Platform & Pedestal over Pier cap, Fender wall, Diaphragm wall etc. upto 5m above ground level	118349.000	Sqm	₹ 671.94	13.02%	₹ 8,98,75,414.09
ii	<b>025032</b>	All types of bridge super-structures, e.g. slabs, I-girders, T-girders, Box girders etc. upto 5m above ground level	8400.000	Sqm	₹ 874.49	13.02%	₹ 83,01,888.00
iii	<b>025033</b>	Extra for additional height over item no. 025031 & 025032 wherever required with adequate bracing, propping etc. over initial height of 5 metres for every additional height of 1 metre or part thereof	8159.000	Sqm	₹ 110.17	13.02%	₹ 10,15,877.09
10	<b>031020</b>	Providing and laying in position machine batched, machine mixed and machine vibrated Design Mix Cement Concrete of specified grade using 20mm graded crushed stone aggregate and coarse sand of approved quality for the Precast Prestressed (Post tensioned) concrete girder/Box (spans upto 30.5m) in contractor's casting yard, including finishing, using Admixtures in approved proportions (as per IS:9103),	37.000	Cum	₹ 2,840.33	13.02%	₹ 1,18,772.22

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		to modify workability & other properties without impairing strength and durability, complete as per drawings, specifications and direction of the Engineer. Payment for Shuttering, Cement, reinforcement, HTS cables, anchorage cones, stressing of cables and grouting of the ducts will be done extra. Launching of girder/slab in position is not included in this item.					
10a	<b>031021</b>	Deduct from 0310220 for casting of Slab in place of Girder/Box	37.000	Cum	₹ 42.48	13.02%	(-) ₹ 1,776.37
11	<b>031040</b>	Providing, fabricating & fixing in position to exact design profiles, prestressing H.T.S. cables of all classification made from Low Relaxation strands conforming to IS:14268– latest version in Prestressed (Post tensioned) Concrete girders/slabs etc. including supplying, cutting, making into cables with necessary spacers, colour coding, protecting with water soluble oil at all time, anchoring of cables, supplying and placing spiral corrugated type galvanized metal steel ducts sheathing made up of Cold Rolled Cold Annealed (CRCA) mild steel conforming to IS:513 of required diameter/ thickness, vent pipe, placing, bending, routing, fixing, stressing & grouting of cable ducts with cement grout, Anchorage sets in required number with provision for future prestressing if any including all lead and lift with contractor's own materials, labour, equipments etc. complete as per	2.000	MT	₹ 1,79,099.63	13.02%	₹ 4,04,826.78

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		drawings & specifications. Rate also includes covering anchorage pads with epoxy mortar of approved quality to avoid corrosion. Cement for grouting to be paid separately. Payment shall be made in terms of weight of HTS cables as per drawing.					
12	<b>031090</b>	Design, manufacturing, supplying and fixing in position elastomeric bearing true to line and level conforming to IS:3400, IS:226, BS-5400 under prestressed concrete girders/ Steel Girders, for Precast as well as cast-in-situ girders as per approved drawing. The rate shall include cost of load test of one no. bearing from Railway approved firms and all fixing materials, equipments, machineries, labour, taxes, loading, unloading, leading, lifting etc. complete. Rates include getting the drawing approved from Railway and cost of inspection during manufacturing from railway approved organization. (Note : 1. The rate is for finished item complete and paid only after fixing in position below the girder. 2. The volume shall be given in the drawing and no deduction shall be made for inserted	3777833.000	Cu.Cm.	₹ 1.61	13.02%	₹ 68,75,656.06
13	<b>031140</b>	Providing and fixing in position GI Drainage Spouts of required length with Grating in RCC slab and filling bitumen along kerb as shown in drawing with contractor's pipes, bitumen, tools, equipment, lead,					

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		lifts etc. complete as per specifications and as directed by Engineer in-charge					
i	<b>031142</b>	100mm dia. Drainage Spouts	887.000	Metre	₹ 1,202.50	13.02%	₹ 12,05,459.61
14	<b>041010</b>	<p>Supplying, fabrication, assembling of all types of steel girders of specified spans with structural steel conforming to Quality "B0" Grade Designation E250 conforming to IS:2062, erection / slewing / end launching of steel girders with cranes or any other approved launching methods as per site conditions (not requiring traffic block) on sub-structure including provision of trolley refuges etc., complete as per approved QAP and drawings conforming to IRS-B1-2001 and other relevant codes and specifications.</p> <p>Note:</p> <ol style="list-style-type: none"> <li>Detailed fabrication and erection drawings &amp; launching methodology will be prepared by the contractor and got approved from Railway.</li> <li>The item includes fabrication of all types of battens, bracings, ties, stiffeners, packing, diaphragms, shop rivets / welding, T&amp;F bolts, drifts, SAW, templates, jigs, fixtures, accessories, transporting various components from fabrication shop to site including loading &amp; unloading, assembly of girders with drifts/bolts, field riveting /welding /HSFG Bolting, assembling of temporary support for</li> </ol>					

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		side slewing, raising of girders to the bed block level, providing sliding arrangements and slewing the girder in position, lowering of girder on bearings and bed plates with all temporary arrangements or any other method of launching complete. 3. The bearing sets to be provided with the girders will be paid separately as per relevant item. 4. Payment for addition in weight for rivets / welds shall be made as per clause 45 of IRS B-1-2001 5. In case of composite work (welding and HSFG bolts), addition in weight shall be 1% for					
i	<b>041013</b>	Open Web Girder above 45.7m clear Span	1602.000	MT	₹ 1,68,004.82	13.02%	₹ 30,41,78,692.68

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
15	041020	<p>Supplying, fabrication, assembling of all types of steel Composite girders of specified spans with structural steel conforming to Quality "B0" Grade Designation E250 conforming to IS:2062, erection / slewing / end launching of steel girders with cranes or any other approved launching methods as per site conditions on sub-structure including provision of stud bolts / shear connectors, complete as per approved QAP and drawings conforming to IRS-B1-2001 and other relevant codes and specifications.</p> <p><b>Note:</b></p> <p>1. Detailed fabrication and erection drawings &amp; launching methodology will be prepared by the contractor and got approved from Railway.</p> <p>2. Rate includes fabrication of all types of battens, bracings, ties, stiffeners, packing, diaphragms, shop rivets / welding, T&amp;F bolts, drifts, SAW, templates, jigs, fixtures, accessories, transporting various components from fabrication shop to site including loading &amp; unloading, assembly of girders with drifts/bolts, field riveting /welding /HSFG Bolting, assembling of temporary support for side slewing, raising of girders to the bed block level, providing sliding arrangements and slewing the girder in position, lowering of girder on bearings and bed plates with all temporary arrangements or any other method of launching complete.</p>					



<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		3. The bearing sets to be provided with the girders will be paid separately as per relevant item. 4. Payment for addition in weight for rivets / welds shall be made as per clause 45 of IRS B-1- 2001. 5. In case of composite work (welding and HSFG bolts), addition in weight shall be 1% for					
i	<b>041021</b>	Composite steel girder of span length up to 36.0m	1372.000	MT	₹ 1,23,733.20	13.02%	₹ 19,18,60,205.60
16	<b>041030</b>	Supplying and fixing HSFG bolts of any dia and any length with suitable nuts including DTI washers conforming to IRS-B1-2001 for bridges and steel structures with contractors labour, tools and plants and lead and lift etc., complete.	62463.000	Kg	₹ 305.32	13.02%	₹ 2,15,53,482.78

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
17	<b>041050</b>	<p>Metalizing of steel work of girders with sprayed aluminium after surface preparation by Sand/grit blasting, followed by one coat of etch primer (IS:5666) &amp; one coat of Zinc Chrome primer (IS:104) and two coats of aluminium paint (IS:2339) with all labour, T&amp;P and material as a complete job duly conforming to all relevant specifications and process given under Clause 39 of IRS-B1-2001</p> <p>Note: Nominal Thickness of Aluminium coating shall be 150 microns. DFT of Zinc chrome primer shall be 25-30 microns and DFT of each coat of Aluminium paint shall be 12-14 microns.</p>	28092.000	Sqm	₹ 905.43	13.02%	₹ 2,87,46,262.68
18	<b>041060</b>	<p>Providing and fixing railing used in rows for footpath or anti-crash barrier railing with B class G.I. pipe 65/50 mm nominal dia including cost of M.S. angle and channels in vertical posts, welding / bolting, priming painting with one coat ready mix Zinc Chromate conforming to IS:104 with DFT of 25-30 Microns, followed by one coat of Zinc Chrome red oxide conforming to IS:2074 with DFT of 25 Microns with all material, labour, T&amp;P as a complete job.</p>	40320.000	Kg	₹ 96.09	13.02%	₹ 43,78,752.00
19	<b>041080</b>	<p>Providing and fixing various size HTS holding down bolts conforming to IS:1364 in concrete column or in other structures with proper nuts, bolts, washers/plates, grouting of holes with all material, labour, T&amp;P as a complete job.</p>	336.000	Kg	₹ 149.66	13.02%	₹ 56,831.04

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		Note: Cement used in grouting will be paid separately under relevant item.					
20	<b>041180</b>	Design, supply and fixing 300MT capacity Spherical Bearing in position true to line and level consisting of set of concave and convex mating steel backing plate with a low friction sliding interface, flat sliding elements ,guides and restraining rings; with all components conforming to approved drawing and technical specifications & Bridge Code including grouting of holes for anchor bolts and underside of baseplate with approved non-shrink epoxy grout with all material, labour, T&P as a complete job. Note: Sliding surface with PTFE or UHMWPE low friction thermoplastic material and steel for backing plate of Mild steel in accordance to IS:2062 grade-B. Cast steel in accordance with IS 1030 Grade 280-520W. Stain less steel in accordance with AISI 304/316.Low friction thermo -plastic sliding PTFE material either pure polytetrafluroethalyne (PTFE) Or Ultra High Molecular weight Polythylene (UHMWPE). Austanitic steel is of stainless steel for the sliding interface shall be in accordance with AISI 316L or O2 Cr17 NI12 of IS-6911. The thickness of the stain less steel sheet shall be 3mm minimum. The stainless steel sheet shall be attached to its backing					

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		plate either by screwing/riveting or by continuous fillet weld. Hard chromium plated surface shall be entire curved surface of the convex steel plate mating with hard chromium plated concave sliding surface. The thickness of the hard chromium plating shall be at least 100 microns and the final surface roughness of the plated surface shall not exceed 3 microns. Bearing manufacturer shall give the guarantee for satisfactory performance of bearing for period specified					
i	<b>041181</b>	Spherical Fixed Bearing	4.000	Each	₹ 1,16,994.18	13.02%	₹ 5,28,894.20
ii	<b>041182</b>	Spherical Free Float Bearing	4.000	Each	₹ 1,27,739.32	13.02%	₹ 5,77,469.60
iii	<b>041183</b>	Spherical Slide Guide (L) Bearing	4.000	Each	₹ 1,28,212.55	13.02%	₹ 5,79,608.92
iv	<b>041184</b>	Spherical Slide Guide (T) Bearing	4.000	Each	₹ 1,27,962.01	13.02%	₹ 5,78,476.32
21	<b>041330</b>	Launching & fixing in specified Bridge location all types of Steel Plate girders / PSC girders / Slabs including loading/unloading and transport to the site of launching with a lead of five kilometres & lifting to any height as per site requirement, provision of approaches for leading, cleaning of bed block and minor repairs to bed block with epoxy if required, as directed by Engineer in charge with all labour, tools and plant, equipment etc., complete					

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
<b>S. No</b>	<b>Item No.</b>	<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated amount in INR</b>
i	<b>041331</b>	PSC girders / slabs	95.000	MT	₹ 6,346.14	13.02%	₹ 6,81,361.85
22	<b>041390</b>	Supplying fabricating and erecting welded and/or bolted and/or riveted steel work in built up sections, trusses and framed work, staging, racks etc. for Steel Structures other than bridge girders, using RSJ, tees, angles and channels/flats, plates, gussets, round or square bars, cleats, bolts etc., with contractors own steel including cutting, bending, straightening, drilling, riveting, hoisting, fixing, erecting, welding, bolting etc., with Providing stiffeners wherever required as per approved drawing including applying a priming coat of a approved steel primer with all contractor's materials, labour, tools & plants, lead & lift including crossing of tracks if required etc., complete as per specification and as directed by Engineer-in-charge.	404.000	MT	₹ 86,019.71	13.02%	₹ 3,92,75,696.28
23	<b>051120</b>	Stenciling of Girders with black / blue lettering over yellow background with ready mix paint w.r.t. details of executed inspection, greasing and painting, other details as directed by Engineer in charge	3570.000	Each	₹ 41.09	13.02%	₹ 1,65,790.80
24	<b>052220</b>	Painting the HFL mark and Danger level mark, year of HFL on bridge abutments and piers with ready mixed paint as per standard in two coats over one coat of primer with all materials, labour, tools, scaffolding, all lead and lift etc. including writing complete	3570.000	Each	₹ 283.91	13.02%	₹ 11,45,505.90

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
<b>S. No</b>	<b>Item No.</b>	<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated amount in INR</b>
25	052230	Providing cast in situ bridge number plaques as per Railway drawing in cement concrete 1:2:4 mix using 20mm hard stone aggregate embedded in 30mm notch in Bridge parapet coping duly engraving the letter and figures and an arrow indicating the direction of flow and finishing the top exposed surface with cement mortar 1:3, painting letters and figures with two coats of black enamel paint on two coats of white background with all labour, tools, cement, paint etc. with all leads and lifts.	4.000	Each	₹ 801.69	13.02%	₹ 3,624.20
26	052240	Providing cast in-situ plaques for bridge foundations details of size 45cmx45cmx5cm in cement concrete 1:2:4 mix using 20mm hard stone aggregate embedded in 30mm deep notch over abutment & piers, engraving the letters & figures with CM 1:3 and finished smooth including painting letters and figures with 2 coats of black enamel and plaque with white enamel with all labour, tools, cement, paint, curing etc. as a complete job.	21.000	Each	₹ 1,049.88	13.02%	₹ 24,917.34
27	052250	Providing & laying non pressure NP-4 Class RCC pipe with collars, jointing with 1:2 cement and ordinary sand mortar including testing of joints, but excluding earthwork with all labour and material as a complete job. Cement for mortar will be paid separately. (Pipes of 600mm dia and above will be laid using crane/hydra).					
i	052252	450mm dia.	231.000	Metre	₹ 2,609.92	13.02%	₹ 6,81,371.46

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
28	<b>052260</b>	Supplying, spreading and filling coarse sand (no cohesive materials to be used) of approved quality including watering and ramming in foundation, plinth, behind the abutment, wing wall, retaining wall in layers not exceeding 150mm thick including its compaction as per direction of Engineer-in-charge. The rate includes all lead, lift, ascent, descent, crossing of Railway line etc. complete with contractor's labour, materials, tools and plant.	2610.000	Cum	₹ 2,194.63	13.02%	₹ 64,73,609.10
29	<b>191310</b>	Fabrication, supplying and fixing 600mm x 450mm Bridge Board made from 16 SWG MS Sheet duly welded or riveted to back support of two 600mm long horizontal angles of size 25mm x 25mm x 3mm & two 2.5 metre long vertical support of MS Angle of size 50mm x 50mm x 5mm, welded /riveted to board. Vertical supports shall have split ends for proper fixing in ground. Vertical supports of board shall be embedded in ground in M 20 Cement Concrete blocks of size 300mm x300mm x 300mm, complete job including painting & writing of subject matter on bridge board, as directed by Engineer – In-charge {Note : Excavation & concrete work will be paid separately}	2.000	Each	₹ 2,571.26	13.02%	₹ 5,811.94
<b>Schedule B2:- DSR-2021 BASED ITEMS</b>							
30	<b>3.8</b>	1:3 (1 Cement : 3 coarse sand (zone-III)) cement sand levelling mortar. Note:- cost of cement is included in this item.	197.000	Cum	₹ 5,024.15	9.53%	₹ 10,84,067.36

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
<b>S. No</b>	<b>Item No.</b>	<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated amount in INR</b>
31	<b>9.48</b>	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.					
i	<b>9.48.2</b>	Fixed to openings /wooden frames with rawl plugs screws etc.	840.000	Kg	₹ 197.70	9.53%	₹ 1,81,893.60
32	<b>10.16</b>	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.					
i	<b>10.16.2</b>	Hot finished seamless type tubes	2100.000	Kg	₹ 168.95	9.53%	₹ 3,88,605.00
33	<b>10.25</b>	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.					
i	<b>10.25.2</b>	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	1260.000	Kg	₹ 142.30	9.53%	₹ 1,96,383.60
34	<b>11.20</b>	Chequered precast cement concrete tiles 22 mm thick in footpath & courtyard, jointed with neat cement slurry mixed with pigment to match the shade of tiles, including rubbing and cleaning etc. complete, on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand).					
i	<b>11.20.1</b>	Light shade pigment using white cement	105.000	Sqm	₹ 1,233.05	9.53%	₹ 1,41,806.70



<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
35	16.55	Providing and laying bituminous macadam using crushed stone aggregates of specified grading premixed with bituminous binder, transported to site by tippers, laid over a previously prepared surface with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specifications and directions of Engineer-in-Charge.					
i	16.55.1	50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 3.50% (percentage by weight of total mix) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	1591.000	Cum	₹ 7,756.40	9.53%	₹ 1,35,16,451.87
36	16.69	Providing and laying at or near ground level factory made <b>kerb stone</b> of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	154.000	Cum	₹ 8,613.55	9.53%	₹ 14,52,880.66

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
<b>S. No</b>	<b>Item No.</b>	<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated amount in INR</b>
37	16.75	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator, vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in-charge. (Note:- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/ recoverable separately).	116.000	Cum	₹ 8,277.55	9.53%	₹ 10,51,688.48
38	16.78	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.					
i	16.78.2	With material conforming to Grade-II (size range 53 mm to 0.075 mm) having CBR Value-25	4074.000	Cum	₹ 2,775.65	9.53%	₹ 1,23,85,611.84
39	16.79	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm ) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paver finisher in sub- base / base course	3607.000	Cum	₹ 2,803.65	9.53%	₹ 1,10,76,483.81

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.					
40	16.91	Providing and laying factory made chamfered edge Cement <b>Concrete paver blocks</b> in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge.					
i	16.91.1	60 mm thick C.C. paver block of M-30 grade with approved color design and pattern.	2363.000	Sqm	₹ 932.35	9.53%	₹ 24,13,095.60
ii	16.91.2	80 mm thick C.C. paver block of M-30 grade with approved color design and pattern.	315.000	Sqm	₹ 1,011.20	9.53%	₹ 3,48,884.55
41		Items included in Delhi Schedule of Rate-(Horticulture & Landscaping) 2020		LS			₹ 10,00,000.00
<b>Schedule B3:- NS BASED ITEMS</b>							

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
42	NS-1	Earthwork in embankment for 32.5t axle load and as per RDSO specification No. RDSO/2020/GE:004 September 2020 "Comprehensive Guidelines and Specification for Railway Formation" with contractor's own earth from borrow areas including all lead, lift, ascent, descent, royalty, taxes, cess, compensation, crossing of nallahs /stream and other obstructions including mechanical compaction in layers with watering, handling, re-handling, dressing of banks to the final profile with all labour, material, tools, plant, machinery and equipment, taxes, cess etc. as a complete job in accordance with the specification and drawings. <b>Note:</b> 10% of payment shall be withheld till the slopes are dressed to the required profile and compacted mechanically with vibratory rollers as per RDSO guidelines	105000.000	Cum	₹ 322.99	6.00%	₹ 3,59,48,850.00
43	NS-2	Supplying and laying blanketing material produced through mechanical means using crushers and pug mill for 32.5 T axle load as per RDSO specification No. RDSO/2020/GE:004 September 2020 "Comprehensive Guidelines and Specification for Railway Formation" over the top of subgrade including all lead, lift, ascent, descent, royalty, taxes, cess, crossing of nallahs /stream and other obstructions including mechanical compaction in layers not exceeding 300 mm thick with vibratory	525.000	Cum	₹ 2,340.17	6.00%	₹ 13,02,304.50

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
<b>S. No</b>	<b>Item No.</b>	<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated amount in INR</b>
		rollers, watering, handling, re-handling and dressing of formation to the final profile with all labour, material, tools, plants, machinery and equipment, taxes, cess, etc. as a complete job in accordance with the specification and drawings. <b>Note:</b> 10% of payment shall be withheld till the slopes are dressed to the required profile and compacted mechanically with vibratory rollers as per RDSO guidelines.					
44	<b>NS-3</b>	Supplying and laying in position <b>M-35 RCC</b> as per approved design mix with admixtures and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all lifts & leads, having continuous agitated mixer, pumping concrete from transit mixer to site of laying, compacting, finishing & curing, with all labour, material, tools, plants, machinery and equipment, taxes, cess etc., as a complete job ,but excluding supplying & fixing form work (centring & shuttering),in accordance with the specification and drawings. Note (i) Cost of cement is included in the above item. (ii) Cost of Reinforcement steel is not included in the above item and will be paid separately under item no..48(i)(NS-6i).					

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
<b>S. No</b>	<b>Item No.</b>	<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated amount in INR</b>
		(iii) Cost of supplying & fixing form work (centring & shuttering) is not included in the above item (except pile cap & open foundation) and will be paid separately under relevant item no. 9(i),(ii),(iii) (USSOR item No. 025030)					
i	<b>NS-3A</b>	In Pile caps, open foundation & RCC Box/Sub way, well steining, well cap	18688.000	Cum	₹ 7,856.49	6.00%	₹ 15,56,31,421.44
ii	<b>NS-3B</b>	In Piers, abutments, box	808.000	Cum	₹ 8,182.87	6.00%	₹ 70,08,462.72
iii	<b>NS-3C</b>	Abutment cap & Pier Cap, pedestals, approach slab, Deck slab	2719.000	Cum	₹ 8,509.66	6.00%	₹ 2,45,26,032.56
iv	<b>NS-3D</b>	Retaining walls, wing walls, return walls, drop walls, curtain walls, toe walls etc. of all heights	22089.000	Cum	₹ 7,970.76	6.00%	₹ 18,66,30,181.89
45	<b>NS-4</b>	Ordinary Portland Cement 53 grade	969.000	MT	₹ 8,508.98	6.00%	₹ 87,39,914.88
46	<b>NS-5</b>	Pozzolana Portland Cement	1232.000	MT	₹ 7,223.97	6.00%	₹ 94,33,929.12
47	<b>NS-6</b>	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete					
i	<b>i</b>	Thermo-Mechanically Treated bars of grade Fe-500D or more.	7043245.000	Kg	₹ 82.74	6.00%	₹ 61,76,92,586.50

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
48	NS-7	Boring 1200 mm diameter piles using Hydraulic Rig in all kinds of strata including boulder studded soil, underground structure like channel, sewer manholes, old foundation or any other obstruction, irrespective of sub-soil water level in all conditions whether dry or under water, shoe and temporary casing pipe, if required, with contractor plant, machinery & equipment for pile boring, use of bentonite slurry including all operations, cleaning of bore holes, supplying and laying in-situ with tremie pipe M-35 RCC in piles as per approved design mix with admixtures and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all lifts & leads, having continuous agitated mixer, pumping concrete from transit mixer to site of laying including supplying & fixing form work (centering & shuttering), compacting, finishing, curing, chipping off pile top to remove laitance concrete above cut off level, removal and disposal of surplus excavated earth/debris/muck outside ROW including all lead, lift, ascends, descends, loading, unloading handling, re-handling, crossing of stream, nallahs, railway track, level crossing etc. with all labour, material, tools, plants, machinery and equipment, taxes, cess etc. as a complete job in accordance with	2016.000	RMT	₹ 11,666.50	6.00%	₹ 2,49,30,843.84

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		<p>the Specification and the Drawings.</p> <p><b>Note –</b></p> <p>i. Cost of cement is included in the above item.</p> <p>ii. Cost of Reinforcement steel is not included in the above item and will be paid separately under relevant item of schedule-B.</p> <p>iii. Cost of temporary casing pipe is included in the above item. However, cost of permanent casing pipe is not included in this item and shall be paid separately under item, if required and approved by the Engineer.</p>					
49	NS-8	Providing and laying of filter media consisting of granular materials of GW, GP, SW groups as per IS:1498 (latest) in required profile behind boulder filling of abutments, wing walls / return walls etc.	110811.000	Cum	₹ 2,066.35	6.00%	₹ 24,27,12,657.63



<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
<b>S. No</b>	<b>Item No.</b>	<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated amount in INR</b>
		above bed level with all labour and material complete job as per drawing and technical specification of RDSO Guidelines.					
50	NS-9	<p>Supplying, fabrication, assembling of all types of steel Composite girders of specified spans with structural steel conforming to Quality "B0" Grade Designation E250 conforming to IS:2062, erection / slewing / end launching of steel girders with cranes or any other approved launching methods as per site conditions on sub-structure including provision of stud bolts / shear connectors, complete as per approved QAP and drawings conforming to IRS-B1-2001 and othe relevant codes and specifications.</p> <p>Note:</p> <ol style="list-style-type: none"> <li>1. Detailed fabrication and erection drawings &amp; launching methodology will be prepared by the contractor and got approved from Railway.</li> <li>2. Rate includes fabrication of all types of battens, bracings, ties, stiffeners, packing, diaphragms, shop rivets / welding, T&amp;F bolts, drifts, SAW, templates, jigs, fixtures, accessories, transporting various components from fabrication shop to site including loading &amp; unloading, assembly of girders with drifts/bolts, field riveting /welding /HSFG Bolting, assembling of temporary support for side slewing, raising of girders to the bed block level, providing sliding arrangements and slewing the</li> </ol>					

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		girder in position, lowering of girder on bearings and bed plates with all temporary arrangements or any other method of launching complete. 3. The bearing sets to be provided with the girders will be paid separately as per relevant item. 4. Payment for addition in weight for rivets / welds shall be made as per clause 45 of IRS B-1- 2001. 5. In case of composite work (welding and HSFG bolts ), addition in weight shall be 1% for					
i	1	Plate Girder/Semi Through Girder	59.000	MT	₹ 1,18,789.70	6.00%	₹ 74,29,107.72
51	NS-10	Earthwork in filling with contractor's own earth of approved quality from borrow areas including all lead all lead, lift, ascent, descent, royalty, taxes, cess, compensation, crossing of nallahs /stream and other obstructions including mechanical compaction in layers with watering to 95% of MDD (as per IS 2720 part 8), handling, re-handling, dressing to the final profile with all labour, material, tools, plant, machinery and equipment, taxes, cess etc. as a complete job in accordance with the specification and drawings.	60848.695	Cum	₹ 271.46	6.00%	₹ 1,75,09,211.99

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
52	NS- 11	Supply & installation of precoated galvanized iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50mm +/- 5% total coated thickness (TCT) thick Zinc coating 120gsm as per IS:277 in 240mpa steel grade, 5-7microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches while transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling / self tapping screws of size (5.5 x 55mm) with EPDM seal or with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead complete upto any pitch in horizontal/vertical or curved surfaces excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	7057.000	Sqm	₹ 756.52	6.00%	₹ 56,59,078.87
53	NS-12	Providing and fixing Weep Holes in Abutments, RCC Box, Wing walls and Return walls etc., of new bridges with 110mm dia UPVC pipe (IS :13592) Type A ISI marked with all contractor's men, material, transportation, all taxes as per specifications and as directed by Engineer-in-Charge.	23560.000	Rmt	₹ 266.91	6.00%	₹ 66,65,595.20

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
<b>S. No</b>	<b>Item No.</b>	<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated amount in INR</b>
54	<b>NS-13</b>	Providing and fixing stainless steel ( Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	1575.000	Kg	₹ 657.36	6.00%	₹ 10,97,460.00

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
55	NS-14	supplying, fabricating, transportation and fixing galvanized H-Beam sleepers as per RDSO drawing RDSO/B/1636/4/R & RDSO/B/1636/5 with latest alteration and specifications thereto complete with all fittings and fixtures including the cost of all steel sections, all fittings and fixtures ,elastomeric pad, galvanized bolts, nuts, washer, split pin, fish plates 1m and 0.6m long along with fish bolts and nuts for60Kg running rail and 52Kg guard rail respectively, track fittings and fastenings (Zero Toe Load Fastening) for 60 kg running rail and 52 Kg guard rail as per RDSO drg -RDSO/T-8759 to RDSO/T8765. labour, lead, lift, plants and equipments including galvanized work of full steel components complete in all respects as per approved drawing and technical specifications & as per direction of Engineer on Open Web Girder(OWG) bridges .The rate is also inclusive of the cost of supply of approved quality of epoxy/adhesive and fixing of elastomeric pads with different components of steel sleepers & girder in accordance with approved drawings. The steel to be supplied by the contractor for fabrication of steel H-Beam sleepers shall conform to IS-2062-2006, Grade B0 only. The rate is alsoinclusive of inspection charges of components of sleepers including all fixtures & fastening, galvanization etc. from the reputed	533.000	Each	₹ 27,926.38	6.00%	₹ 1,57,77,844.68

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		laboratory/organization. Elastomeric pad plate and other track fittings shall be procured from RDSO approved source.Note: Payment under this item shall be made in following manner;i. 75% of the rate shall be paid after fabrication, galvanization and transportation of H beam sleepers tothe site and submission of material test certificate of manufacturer and inspection certificate of theagency nominated by Engineer.ii. 15% of the rate shall be paid after supply of fittings to the site and submission of inspection certificateof the agency nominated by Engineer. iii. 10% of the rate will be paid after fixing H Beam sleepers to the girder in satisfactory manner. iv. In case fixing is not required, then balance payment will be released on handing over of the sleepersafter making recovery @ Rs.850/- per sleeper.					
56	<b>NS-15</b>	Supplying & fixing MS chequered plates 6 to 8mm thick between guard rails on unballasted deck bridge for gang pathway, overlapping at regular intervals of 2m to 2.5m with rail screws or bolts duly drilling holes in chequered plate, as directed	26.000	MT	₹ 86,497.61	6.00%	₹ 23,83,874.22

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		[Note : Overlapping of chequered plates shall not fall in between sleepers]					
57	NS-16	Supplying, fabrication and fixing pathway on Open Web Girder bridges with hollow steel, rolled and chequered plate including welding / bolting, priming painting with one coat ready mix Zinc Chromate conforming to IS:104 with DFT of 25-30Microns, followed by one coat of Zinc Chrome red oxide conforming to IS:2074 with DFT of 25 Microns with all material, labour, T&P as a complete job as RDSO drawing No. CBS 0045	82.000	MT	₹ 1,10,975.00	6.00%	₹ 96,45,947.00
58	NS-17	Casting, supplying and installation of Pre-cast cement concrete blocks of size <b>25X25 X20cm.</b> or of required size as directed by the Engineer for protective works at bridges & banks like pitching, toe wall, flooring, drains etc. using M20 design concrete mix with 20mm aggregate size including Contractor's shuttering, leading to bridge site from casting depot, including dressing and levelling of surface, providing gravel backing, laying & jointing blocks with cement mortar 1:3 with Contractor's labour and as directed by Engineer-in-charge (All labour and materials including cement by Contractor).	2961.000	Cum	₹ 6,407.96	6.00%	₹ 2,01,12,414.84

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		Note: i) Payment for gravel backing will be paid under item no. NS-12 of this Bill. ii) 60% Payment shall be made after casting of pre-cast concrete blocks and bringing at work site. The balance 40% will be made on completion of laying and finishing. iii) Measurement is based on quantity calculation of blocks used only (no of blocks x volume of one block).					
59	NS-18	Supplying and laying of 150mm thick well graded stones aggregate/gravel as base layer over the slopes of embankment with manual dressing with water compaction including the cost of supply of all material, labour, lead, lift, tools, plants, crossing of tracks etc. complete as per approved drawings and technical specifications.	2089.000	Cum	₹ 681.17	6.00%	₹ 15,08,341.56
60	NS-19	Providing Boulder Backing behind wing wall, return wall, retaining wall with hand packed boulders & cobbles not less than 15cm in any direction & not less than 15kg (except smaller boulders required for filling voids) including all lead, lift, labour & other incidental charges as complete work in all respect. Cost of boulder/cobbles is included in this item.	26845.000	Cum	₹ 1,409.52	6.00%	₹ 4,01,08,846.05



<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
61	NS-20	Providing and fixing of 75mm dia PVC pipe for weep holes in abutments, Wing Wall, Return Wall, Face wall, retaining wall etc. at suitable intervals as directed by the Engineer-in-charge.	9188.000	Rmt	₹ 231.00	6.00%	₹ 22,49,773.68
62	NS-21	<p>Manufacturing, transportation (including loading &amp; unloading) and installation in position(including joining and grouting) M-50 or higher grade precast reinforced cement concrete segmental retaining walls of specified height (height measured from founding level) as per the directions of the Engineer. Precast reinforced retaining walls shall be factory-made and steam cured in a controlled environment with weep holes and in-built inserts for handling/transportation. Dimensional tolerances shall be as per IS: 6408 (part 2) for PC Class 6.</p> <p>Note:-1.This item includes cost of all the materials, labour , machinery, tools &amp; plant etc. complete required for manufacture of precast segments except Steel Reinforcement which shall be paid separately under item no.48(i)(NS-6i) of schedule B.</p> <p>2. Boulder Backing and backfilling of filter media behind wall shall be paid separately Item No.61 (NS-19) &amp; Item No.50 (NS-8) respectively of this schedule.</p> <p>3. Excavation of soil for foundation shall be paid separately under item no.2(USSOR item No. 022010)</p> <p>4. Levelling course of 1:3:6 concrete of 150mm thick</p>	3104.000	Cum	₹ 28,421.64	6.00%	₹ 9,35,14,021.76

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		should be provided before placing the wall segments. Payment for which shall be made Item No. 30 (DSR Item no. 3.8) 5. 60% of the rate shall be paid on receipt of the precast retaining wall segments at site and balance 40% will be paid on fixing the same in position in satisfactory condition.					
63	NS-22	Manufacturing, transportation (including loading & unloading) and installation in position(including joining and grouting) M-50 or higher grade precast reinforced cement concrete U-shaped drain with cover as per the directions of the Engineer. Precast reinforced U-shaped drain shall be factory-made and steam cured in a controlled environment with inserts for handling/transportation. Dimensional tolerances shall be as per IS: 6408 (part 2) for PC Class 6. Note:- 1.This item includes cost of all the materials, labour , machinery, tools & plant etc. complete required for <b>manufacture of precast segments</b> except Steel Reinforcement which shall be paid separately under item no.48(i)(NS-6i) of schedule B. 2. Boulder Backing and backfilling of filter media behind wall shall be paid separately Item No.61 (NS-19) & Item No.50( NS-8) respectively of this schedule. 3. Excavation of soil for foundation shall be paid	21.000	Cum	₹ 28,421.64	6.00%	₹ 6,32,665.74

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		separately under item no.2 (USSOR item No. 022010) 4. Levelling course of 1:3:6 concrete of 150mm thick should be provided before placing the wall segments. Payment for which shall be made Item No. 30(DSR Item no. 3.8) 5. 60% of the rate shall be paid on receipt of the precast retaining wall segments at site and balance 40% will be paid on fixing the same in position in satisfactory condition.					
64	NS-23	Linking of track on H- beam sleepers on Open Web Girder (OWG) bridges with 60 Kg running rail and 52 kg guard rail with track fittings/fastenings including leading of Running and guard rails from bridge approach and fixing of running rails & guard rails, bending of guard rails, notching, drilling of holes, cutting of rails etc., as directed and making track structure fit for sectional speed. (Rails will be supplied by Employer)	1218.000	RTM	₹ 1,310.04	6.00%	₹ 16,91,363.52
65	NS-24	Supplying and fixing M.S. Angles 100mmx 100mm x 10mm size conforming to IS:2062 in expansion joint of Composite girder bridges including provision of 10mm dia dowel bar & 12mm dia anchor bolts at 150 mm centre to centre, and 250mm wide GI plate over the top of angles as per relevant RDSO standard drawing with all material, labour, T&P as a complete job.	277.000	Each	₹ 6,197.00	6.00%	₹ 18,19,563.14

<b>Schedule 'B'</b> <b>Retaining Wall, Bridges &amp; other civil works</b>							
<b>S. No</b>	<b>Item No.</b>	<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated amount in INR</b>
66	<b>NS-25</b>	Supply and fixing of Metallic Guided Bearing in position true to line and level as per RDSO drawing No. RDSO/B-11754/3R2 and IRC:83 pt. III-2018 including supply & grouting of anchor bolts with approved non-shrinking epoxy grout with all material, labour, T&P as a complete job.	4.000	Each	₹ 50,000.00	6.00%	₹ 2,12,000.00
67	<b>NS-26</b>	Supply, fabrication and erection of bed plate of approved sizes as per relevant RDSO drawing No. RDSO/B-11751/4R2, B-11753/5R1, B-11754/3R2 with upto date corrections, in exact position over bed block on pier/abutments by giving full and even bearing, setting them on the layer of free flow non-shrinkable grouting compound, scrapping or chipping of bed block, if required, fabrication and fixing of HD bolts of suitable sizes along with nuts, washers etc., drilling holes of required size, grouting of holes by epoxy mortar after fixing HD bolts with all labour, material, T & P as a complete job.					
i	<b>NS-26a</b>	More than 12.2m and upto 18.3m clear span	11200.000	Kg	₹ 227.76	6.00%	₹ 27,04,016.00
ii	<b>NS-26b</b>	More than 18.3m and upto 30.5m clear span	52800.000	Kg	₹ 238.61	6.00%	₹ 1,33,54,704.00
<b>Total Estimated Amount of Schedule 'B'</b>							<b>₹ 2,36,77,24,407.50</b>

## 7 Schedule 'C': General Electrical Services

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
1	Recessed/Surface conduit wiring system- Supply of material and wiring of LP/TP/FP/Ex. Fan point with 1.5sqmm PVC single core multistranded copper wire insulated concealed in stone/brick masonry wall in 19/20 mm PVC conduit with 1.5sqmm PVC wire insulated copper for earth wire 1-way/2-way switch 5/6A as required and good quality ceiling rose including connection (with modular switch, socket & ceiling rose) and as per specifications.	880	Numbers	₹ 289.94	₹ 2,55,147.20
2	Supply and fixing 5/6A plug, modular 5-pin 230V including modular switch and with modular board and wiring with 2.5sqmm PVC CU cable as per spec.	480	Numbers	₹ 173.84	₹ 83,443.20
3	Supply and fixing 15/16A plug, modular 5-pin 230V including modular switch and with modular board and wiring with 04.0 sqmm PVC CU cable as per specifications.	200	Numbers	₹ 192.30	₹ 38,460.00
4	Supply and fixing 2 module modular switch board plate for fixing of modular switches -plug with sheet metal box of good quality and standard size, concealed fixing of MS /PVC as per Engineer.	360	Numbers	₹ 74.73	₹ 26,902.80

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
5	Supply and fixing 4 module modular switch board plate for fixing of modular switches -plug with sheet metal box of good quality and standard size, concealed fixing of MS /PVC as per the Engineer.	440	Numbers	₹ 103.29	₹ 45,447.60
6	Supply and fixing 8 module modular switch board plate for fixing of modular switches -plug with sheet metal box of good quality and standard size, concealed fixing of MS /PVC as per the Engineer and as per specifications.	250	Numbers	₹ 178.02	₹ 44,505.00
7	Supply and fixing 12 module modular switch board plate for fixing of modular switches -plug with sheet metal box of good quality and standard size, concealed fixing of MS /PVC as per the Engineer.	180	Numbers	₹ 191.46	₹ 34,462.80
8	Supply, laying, connection and commission of sub- main 2x2.5 Sqmm with PVC insulated single core copper conductor cable and same size PVC insulated copper conductor for earthing wire in 19/20 mm ISI PVC conduit in recessed/ on surface as per site requirement etc. of various size cable as below and as per specifications.	11000	Metre	₹ 58.14	₹ 6,39,540.00

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
9	Supply, laying, connection and commission of sub- main 2x4 Sqmm with PVC insulated single core copper conductor cable and same size(4 sqmm) PVC insulated copper conductor for earthing wire in 19/20 mm ISI PVC conduit in recessed/ on surface as per site requirement and as per specifications.	6000	Metre	₹ 97.16	₹ 5,82,960.00
10	Supply, laying, connection and commission of sub- main 2x6 Sqmm with PVC insulated single core copper conductor cable and same size PVC insulated copper conductor for earthing wire in 19/20 mm ISI PVC conduit in recessed/ on surface as per site requirement etc. of various size cable as below and as per specifications.	3000	Metre	₹ 98.40	₹ 2,95,200.00
11	Supply, Installation ,testing and connection of 1200/1400mm ceiling fans ISI marked 5 star rated reputed make and as per specification.	250	Numbers	₹ 1,042.98	₹ 2,60,745.00
12	Supply and fixing of ceiling fan regulator electronic type 5-step (modular type) as per specifications.	250	Numbers	₹ 282.16	₹ 70,540.00
13	Supply of 4 Core 16 Sqmm PVC/XLPE Armoured Cable with Aluminium Conductor 650/1100 V grade confirming to IS 7098 (Part-1) 1988, 1.1 KV grade LT XLPE insulated armoured, aluminium conductor cable as per specification	12000	Meters	₹ 171.59	₹ 20,59,080.00

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
14	Supply of 4 Core 35 Sqmm PVC/XLPE Armoured Cable with Aluminium Conductor 650/1100 V grade confirming to IS 7098 (Part-1)1988, 1.1 KV grade LT XLPE insulated armoured, aluminium conductor cable as per specification.	5000	Meters	₹ 295.20	₹ 14,76,000.00
15	Supply of 4 Core 50 Sqmm PVC/XLPE Armoured Cable with Aluminium Conductor 650/1100 V grade confirming to IS 7098 (Part-1)1988, 1.1 KV grade LT XLPE insulated armoured, aluminium conductor cable as per specification.	9500	Meters	₹ 393.60	₹ 37,39,200.00
16	Supply of 4 Core 70 Sqmm PVC/XLPE Armoured Cable with Aluminium Conductor 650/1100 V grade confirming to IS 7098 (Part-1) 1988, 1.1 KV grade LT XLPE insulated armoured, aluminium conductor cable as per specification.	1500	Meters	₹ 527.26	₹ 7,90,890.00
17	Supply of 4 Core 95 Sqmm PVC/XLPE Armoured Cable with Aluminium Conductor 650/1100 V grade confirming to IS 7098 (Part-1) 1988, 1.1 KV grade LT XLPE insulated armoured, aluminium conductor cable as per specification.	1500	Meters	₹ 664.20	₹ 9,96,300.00
18	Supply of 4 Core 120 Sqmm PVC/XLPE Armoured Cable with Aluminium Conductor 650/1100 V grade confirming to IS 7098 (Part-1) 1988, 1.1 KV grade LT XLPE insulated armoured, aluminium conductor cable.	3000	Meters	₹ 817.95	₹ 24,53,850.00



<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
19	Supply of 4 Core 185 Sqmm PVC/XLPE Armoured Cable with Aluminium Conductor 650/1100 V grade confirming to IS 7098 (Part-1) 1988, 1.1 KV grade LT XLPE insulated armoured, aluminium conductor cable as per specification.	1200	Meters	₹ 1,243.53	₹ 14,92,236.00
20	Supply, fixing, installation and commissioning of 25 ltrs fully automatic with auto cut off RO( Reverse osmosis) portable water purification system with inbuild storage tank similar to Aquaguard model no - AG 25 LPH RO S 8421 and as per specification.	5	Nos	₹ 22,360.58	₹ 1,11,802.90
21	Supply and laying of HDPE pipe conforming to IS 4984:1995, 75/80 mm dia wall thickness 3 mm PN-4 under the road/air. The work involves laying of HDPE pipe as per specification.	5500	Meters	₹ 71.26	₹ 3,91,930.00
22	Supply and laying of HDPE pipe conforming to IS 4984:1995, 50 mm dia wall thickness 3 mm PN-4 under the road/air. The work involves laying of HDPE pipe as per specification.	24000	Meters	₹ 72.89	₹ 17,49,360.00
23	Supply and laying of HDPE pipe, dia 160mm(OD) under road/ground/ floor/railway track or as per site requirement already excavated trench. Wall the material grade PE-80 and class of pipe should be PN-4 IS-4984/1995 thickness between 6.2mm to 7.1 mm As per specification.	2000	Meters	₹ 369.39	₹ 7,38,780.00
24	Supply and fixing of 50mm dia G.I. pipe medium B class for cable laying as per specification	200	Meters	₹ 178.57	₹ 35,714.00

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
25	Laying of LT/HT cables in Air/pipe/cable tray/trench etc. as per specification.	33700	Meters	₹ 16.24	₹ 5,47,288.00
26	Excavation & Refilling of trench of size 0.5 mtr wide x 1.2 mtr deep as per specification. trench work may be on kuchha/pucca land and all type of soil as per site requirement and without protective layer of brick. Surface of trench shall be made good in all respect and satisfaction of site engineer includes suitable protection of loop cable and as per specification.	28000	Meters	₹ 96.51	₹ 27,02,280.00
27	Supply, fixing & commissioning of 300 mm sweep ISI marked exhaust fan with louver shutter as per specification.	80	Numbers	₹ 956.87	₹ 76,549.60
28	Supply and fixing of Double Door MCB TPN DB 8 modules 4 row, neutral and earth link, with one no four pole MCB 40 amp, one no FP RCCB 40 amp 30 mA and twenty four no SP MCB 40/32/25/16/10/6amp. 'C' series. Breaking capacity not less than 10 kA. MCB, RCCB and DB should be as per tech spec. and of same make.	15	Numbers	₹ 13,403.41	₹ 2,01,051.15

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
29	Supply and fixing of Double Door MCB DB SP 12 way (10+2 module), neutral and earth link, with one no DP MCB 40amp, one no DP RCCB 40 amp 30 mA and eight no SP MCB 32/25/16/10/6 amp. 'C' series. Breaking capacity not less than 10 kA. MCB, RCCB and DB should be as per technical specification and of same make.	20	Numbers	₹ 6,099.17	₹ 1,21,983.40
30	Supply, fixing, testing and commissioning of 22 W Energy efficient LED tubular lamp four feet with its driver and Luminaire of CRCA steel sheet enclosure , IP-20 for indoor application, operating voltage (140-270)V, minimum 2000 Lumens, color temperature 6500°K, CRI>65 as per specification.	580	Numbers	₹ 501.13	₹ 2,90,655.40
31	Supply, Transportation, erection, testing, Installation & commissioning of self contained drinking water cooler with all connected standard fitting, accessories etc and 5 kVA wall mounted IC controlled electronic auto voltage corrector with time delay relay. Supply and erection of earth electrode and connection to earthing system etc as required.	10	Numbers	₹ 66,260.70	₹ 6,62,607.00

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
32	Supply & erection of 5 m high with single/ double arm model , hot dip galvanized steel octagonal pole with galvanized base plate of 200x200x12 mm, junction box with 6 Amp. MCB and stud terminals (for mounting inside the base compartment of pole), foundation bolt size 4x16mm dia. 600 mm in length including excavation and making foundation as per spec. and drawing. It shall be galvanized internally and externally by single dipping methods. The pole and foundation shall be made as per specification.	250	Numbers	₹ 8,081.77	₹ 20,20,442.50
33	Supply, fixing and commissioning of street light fitting accessories i.e GI pipe of suitable size.	50	Numbers	₹ 117.14	₹ 5,857.00
34	Supply, Erection, testing & commissioning of 40 Watt LED Energy efficient LED based street light fitting with pressure die cast aluminium housing with driver & suitable fixing arrangement, IP-65 for outdoor application, operating voltage (140-270) V, System efficacy more than 100 lm/W, color temperature 6500K, CRI>65, and as per tech specification.	300	Numbers	₹ 3,313.66	₹ 9,94,098.00
35	Supply, fixing testing and commissioning of (OFF delay) modular digital timers for operation of platforms and circulating area street light. As per specification.	12	Numbers	₹ 4,148.88	₹ 49,786.56

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
36	Supply, fixing, testing and commissioning of Supply, testing and commissioning of feeder pillar of size 900x600x300 mm and bus bar capacity 200 Amp 3 phase and neutral with box as per specification.	15	Numbers	₹ 2,940.55	₹ 44,108.25
37	Supply installation Testing & Commissioning of rechargeable batten type Emergency light 60 LED 4 watt or higher with one hour minimum backup.	50	Numbers	₹ 2,230.63	₹ 1,11,531.50
38	Supply / preparing of drawing in AutoCAD (Original + 2 copies) showing electrical installation being done through this contract for station as per specification.	5	Numbers	₹ 2,802.78	₹ 14,013.90
39	Supply, installation, testing and commissioning of Single sided LED signage board with pictogram/symbol (if any) as per specification.	480	Square Foot	₹ 1,654.99	₹ 7,94,395.20
40	Supply, installation, testing and commissioning of double sided LED signage board with symbol as per specification.	280	Square Foot	₹ 2,052.63	₹ 5,74,736.40
41	Supply and fixing of Rubber mat (ISI marked) non stick type suitable for 11 kv AC size 2000x1000x25mm & as per specification.	30	Numbers	₹ 738.00	₹ 22,140.00

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
42	Supply, installation, testing and commissioning of LT heat shrinkable straight through joint with required accessories complete in all respect suitable for LT XLPE 4 core cable as per site requirement and as per specification.	30	Numbers	₹ 1,597.35	₹ 47,920.50
43	Supply and erection of MS cable route marker of size not less than 200x150x3mm thick M.S. Plate. for HT / LT Elect. underground cable as per Drawing and specification.	250	Numbers	₹ 329.64	₹ 82,410.00
44	Dismantling of Rail/cable tray Pole & Over head line, EFT's, cable tray complete, As per specification.	30	Numbers	₹ 410.43	₹ 12,312.90
45	Supply, installing, testing and commissioning earth electrode complete in all respect with perforated GI pipe medium "B" class (Blue) confirming to IS 1239 part-I length of 3 mtr., bore 50mm with all accessories like nut bolt, reducer nipple, wire meshed funnel and CC finished chamber covered by CI/RCC frame etc. Digging pit and refilling it with charcoal and salt in successive layers and connection with 8 SWG GI wire and as per IS:3043 and drawing and testing of earth resistance as reqd .	220	Numbers	₹ 924.29	₹ 2,03,343.80

46	<p>Design, manufacture, Supply, testing, erection and commissioning of indoor type LT PANEL ,Medium voltage switch board front operated type will have digital ammeter, voltmeter, multifunction energy meter of reputed make on all the main and 3 phase .LED type indication lamps on all the mains, digital ammeter &amp; 3 phase flush type mounted electronic energy meter counter display in every outgoing MCCB's copper bus bar and accessories as per spec with following features. (A) incoming 2x250 amp 4 pole MCCB's with change over provision (if required) with microprocessor release having integral overload, short circuit, earth fault and neutral protection and breaking capacity 60 KA (Ics=100%Icu). (B)outgoing 2x125 amps, 2x100 amps and 2x63 amp 4 poles MCCB's with adjustable overload and adjustable short trip unit and breaking capacity 36KA (Ics=100%Icu).the panel is to be provided with over voltage protection with suitable relay. work includes formation for panel foundation and other civil work with suitable trench up to the satisfaction of the Engineer (Technical specification enclosed). Panel shall be manufactured from CPRI tested firm. all the material should be of reputed make and as per technical specification General arrangement, single line diagram and technical detail (make &amp; model no.) of the equipment and electrical accessories to be used in panel shall be supplied by the successful tenderer for approval of HRIDC OFFICERS and record before fabrication of panel. copies of test certificates for switch gears and original routines test along with factory inspection report of panel for approval and acceptance of panel.</p>	5	Numbers	₹ 1,29,429.62	₹ 6,47,148.10
----	---	---	---------	---------------	---------------

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
47	Supply, erection, testing and commissioning of phase change over distribution board (phase selector box) size 610x450x190 mm fabricated from 1.6mm thick CRCA sheet power coated with 01 no 100 Amp FP MCCB at the incomer and 01 no 100 amp SPN MCCB as outgoing and 01 no 63 amp phase selector switch with multi LED indication lamps & by pass arrangement as per specification.	5	Numbers	₹ 7,944.16	₹ 39,720.80
48	Supply and fixing of PVC cable duct 40 x 60 (w x h) slot greenish as per specification.	1000	Meters	₹ 73.82	₹ 73,820.00
49	Supply and fixing of 4 pole MCCB 200 amp. 36 kA with encloser and adjustable thermal, fix magnetic release complete. MCCB should be of reputed make and as per spec.	10	Numbers	₹ 12,778.00	₹ 1,27,780.00



<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
50	Laying of cable under the road/Railway track, recessing in platform /wall along with Railway Track. in laid HDPE /GI pipe as required 1.1 KV grade LT XLPE insulated armoured, aluminium conductor cable including making chase & plastering after laying of cable/digging of cable trench, sand cushioning, protective covering with second class bricks, provision of cable route marker as per tech. spec. including end terminations with Al. Crimping socket/lugs testing and commissioning of following sizes. NOTE:- I) All cable connection shall be made with proper size of crimping socket /grandest by the contractor at his own cost and labour ii) Road/floor where cable is to be laid shall be made good as original by the firm at his own cost and to the satisfaction of Engineer.	800	Meters	₹ 39.80	₹ 31,840.00
51	Supply and fixing of MS jali 1"x1" welded on MS angle as per specification.	1200	Kg	₹ 46.70	₹ 56,040.00
52	Supply of submersible energy efficient pump set of 10 HP (3 star & above rated), 20 Stages, 415 V, AC complete with accessories at sight. As per specification. -	10	Numbers	₹ 50,457.00	₹ 5,04,570.00
53	Supply fixing, testing and commissioning of automatic control panel with star delta starter for 10 HP three- phase pump including connections and providing cable from main board to control panel and connection for WLC in bore well as per specification.	10	Numbers	₹ 14,118.00	₹ 1,41,180.00

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
54	Lowering, testing and commissioning of submersible pump set of 10 HP with G.I. pipe, nuts, bolts, washer & rubber packing and copper flat cable & as per specification.	10	Numbers	₹ 3,435.00	₹ 34,350.00
55	SITC of mono-block submersible pump 2.0 HP complete in all respect. As per specification.	6	Numbers	₹ 10,901.79	₹ 65,410.74
56	Supply & fixing of G.I. pipe 50 MM dia B class with flanges, sockets and welding as per IS 1239 for delivery pipe as per specification.	800	Meters	₹ 167.38	₹ 1,33,904.00
57	Supply and fixing pipe fitting bends, sockets, flanges, delivery valve, Non Return valve and supporting clamps (2 set). As per specification.	10	set	₹ 2,996.86	₹ 29,968.60
58	Supply, fixing, testing, commissioning of 3 core 6.00 Sq.mm. size PVC insulated PVC sheathed multi strand flat copper cable conductor. As per specification.	2000	Metre	₹ 57.80	₹ 1,15,600.00
59	Supply of Submersible mono block pump (150 mm dia) 05 HP, 3.75KW (dia 150 mm), 20-25 mtrs. Head, discharge 11 LPS complete with all accessories and as per specification.	4	Numbers	₹ 16,290.69	₹ 65,162.76

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
60	Supply, fixing, testing and commissioning of automatic control panel with DOL starter for 5 HP three-phase pump including connections and providing cable from main board to control & as per specification.	4	Numbers	₹ 8,287.09	₹ 33,148.36
61	Lowering, testing and commissioning of horizontal monoblock submersible pump set. As per specification.	4	Numbers	₹ 1,207.25	₹ 4,829.00
62	Supply, installation, testing and commissioning of 32 Amp. SPN DP MCB, 10 kA, 'C' curve with metal enclosure as per specification.	30	Numbers	₹ 1,206.07	₹ 36,182.10
63	Supply of material and wiring of shed TP/FP with 1.5 sqmm single core multi-stranded copper wire PVC insulated in conduit 1.5mm thick 19mm size white colour shall be fixed with junction box TEE and 1.5mmsq PVC CU cable insulated multi stranded for earth wire and 5/6A, ceiling rose. The conduit shall be fixed with rawl plugs/ tied with 14 S.W.G. GI wire including connection. As per specification and satisfaction of Engineer.	450	Numbers	₹ 106.28	₹ 47,826.00

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
64	Supply, installation ,testing and commissioning of 125 KVA Capacity radiator cooled Silent DG Set with AMF panel and Complete with all accessories like- exhaust fan system, diesel engine, capable of delivering continuous power output at 3 phase 4 wire 415 Volts AC Supply with control panel, electronic energy meter, digital Ammeter, Voltmeter, Power factor meter, Digital frequency meter, clustered LED Type indication light, cable glands, earthing terminal maintenance free battery set mounted on wooden frame and plank, Anti-Vibration pad and all other accessories equipment, protective device, Exhaust fan shall be installed as per latest CPCB norms as per specification.	2	Numbers	₹ 8,85,000.00	₹ 17,70,000.00
65	Supply, installation testing and commissioning of Cu Earthing with 600mmx600mmx3mm thick copper earth plate, as per IS 3043( latest version) to achieve earth resistance less than one ohm and salt, providing concrete enclosure and MS cover plate with lifting arrangement, watering pipe etc. as required and as per specification.	10	Numbers	₹ 7,424.00	₹ 74,240.00
66	Supplying and fixing 40mm x 5mm copper strip on surface or in recess or in 50mm dia G.I. pipe as required and as per specification.	50	Meters	₹ 1,102.00	₹ 55,100.00

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
67	Supply, fixing, testing and commissioning of passenger Lift, gearless machine room less, single landing( GF & FF) Minimum load 13 persons, speed - 1 m/s to 1.5 m/s, Automatic doors with two sides opening, Microprocess based variable frequency, variable voltage drive controller with ARD etc. and all safety devices as required. (The cost excludes Civil and Electrical work) as per specification, with warranty period of 24 months from the date of commissioning of lift and 30 months from the date of supply, whichever is earlier.	4	Numbers	₹ 25,80,137.00	₹ 1,03,20,548.00
68	Supply, Fixing, testing & commissioning of 1.5 Ton heavy duty Split inverter type Air conditioner with including petty hardwares, gas charging along with the cost of refrigerant with LCD display cordless remote ,5 star rating suitable for 1 phase, 230 Volts & IC controlled electronic auto voltage corrector.	30	Numbers	₹ 46,731.80	₹ 14,01,954.00
69	Supply and fixing of Metal Clad Plug Socket 20A single phase with 32A MCB including fixing and sheet metal enclosure box with one 20A plug top (Ray roll type) to be supplied with board as per specification,	30	Numbers	₹ 750.75	₹ 22,522.50

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
70	Supply and fixing of junction box size 390x305x170mm comprising of SMP/FRP material with rubber gasket, padlock arrangement, zinc passivated earth bolt, etc. similar to Sintex model no. GSJB 3525 or similar with 4 no. aluminium busbar cap 200 Amp., suitable for 415 volt supply requirement.	100	Numbers	₹ 1,972.92	₹ 1,97,292.00
71	Supply, fixing commissioning, installation and testing of 2 Kva pure sine wave 24 volt online inverter consist of intelligent battery charging mechanism with adaptive battery charging and 150 AH tubular battery of voltage 12 volt suitable for heavy duty application. warranty of inverter is 24 months and for Battery -36 months.as per specification.	10	Numbers	₹ 32,864.78	₹ 3,28,647.80
72	Supply, fixing, commissioning and installation of Perforated Cable Tray of size 150x50 mm made out of MS sheet and hot dip galvanized (85 microns) 1.6 mm thick with suitable fixing Arrangement.	500	Meters	₹ 535.46	₹ 2,67,730.00
73	Supply, erection, testing & commissioning of control and distribution panel for colour light signalling for 10/25 kVA AT supply in 25 kV AC traction system as per RSDO technical specifications No. TI/SPC/PSI/CLS/ 0020 (12/02) With A&C slips No. 1 to 4 or latest, connections as required.	10	Numbers	₹ 77,563.80	₹ 7,75,638.00
74	Extension of load /Load Augmentation complete in all respect and as per specification.	220	KW	₹ 6,000.00	₹ 13,20,000.00

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
75	Supply, erection, testing and commissioning of 16 M high mast shaft totally hot dip galvanized and suitable for wind velocity as per IS 875 part-3. The mast shaft shall be in two finished section it shall also included all accessories for 16M high mast including head frame, steel wire rope 6mm dia (7/19 construction) double drum winch galvanized lantern carriage arrangement suitable for 8 luminaries and its control gear boxes and lightning finial. The mast shall have integral power tool installed at its base compartment. The high-powered single-phase non-reversible power tool for electrical operation of raising and lowering of lantern carriage with its supporting stand, torque limiter and fixing chain. The mast shall have only one longitudinal seam weld per section. As per specification.	4	Numbers	₹ 1,74,988.25	₹ 6,99,953.00
76	Design and casting of suitable foundation with M-20 concrete for the 16mtr high mast having the safe soil bearing capacity at site as 10T/sqmtr at 2meter depth including supply of foundation bolts manufactured from special steel along with nuts, washers and anchor plates and templates. As per specification.	4	Numbers	₹ 18,811.00	₹ 75,244.00

<b>Schedule 'C'</b> <b>General Electrical Services</b>					
<b>S. No.</b>	<b>ITEM Description</b>	<b>Item Qty</b>	<b>Qty Unit</b>	<b>Unit Rate (INR)</b>	<b>Amount in INR</b>
77	Supply, fixing, testing and commissioning of LED type flood light luminaries wattage 200 Watt made up of pressure die cast housing and heat sink in aluminium extrusion with IP- 66 protection as per CEE/NR/121-Elect/PS/2018 (Rev-03) dt 28/06/18 & CEE/NR/121- Elect/PS/2019(Rev-04) dt 04 /11/19 or latest specification and as per site requirement. Guarantee five years from date of commissioning and as per specification.	32	Numbers	₹ 9,220.00	₹ 2,95,040.00
78	Supply, installation, testing, commissioning of LED Aviation light luminaries Model no. BGAV 302 LED of Bajaj or similar as per specification.	4	Numbers	₹ 8,215.00	₹ 32,860.00
79	Supply, installation, testing and commissioning of control panel housing suitable timer contactor circuit for automatic ON & OFF of the mast lights at a pre-set time, (16M) as per specification.	4	Numbers	₹ 8,431.00	₹ 33,724.00
80	Supply, installing, testing and commissioning of 11 kV 250 kVA outdoor type CSS consisting of 2 LBS and 1 VCB at HT side (630 Amps., 20 kA), 250 kVA Dry type transformer and 400 Amps ACB at LT side including RMU and other associated item as per requirement & as per specification.	4	Numbers	₹ 18,57,800.00	₹ 74,31,200.00
81	Supply, installation, testing and commissioning of automatic power factor correction control panel (APFC panel) with 100 KVAR shunt capacitors complete in all respect and as per specification.	2	Numbers	₹ 73,731.44	₹ 1,47,462.88
<b>Total Estimated Amount of Schedule 'C'</b>				<b>G. TOTAL</b>	<b>₹ 5,54,29,644.20</b>



## 8 Schedule D: Item rate for miscellaneous works

<b>Schedule 'D'</b> <b>Item rate for miscellaneous works</b>						
<b>S. No</b>	<b>Item Reference DSR-21/ USSOR- 2019(NWR)/ NS</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated Rate in INR</b>
1	DSR-21 11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1: 4 (1 cement: 4 coarse sand) Cost of cement is included in this item.				
i	11.26.1	25 mm thick	Sqm	₹ 1,706.60	8.64%	<b>₹ 1,854.04</b>
2	DSR-2021 16.90	Providing and laying tactile tile (for vision impaired persons as per standards) of size 300x300x9.8mm having with water absorption less than 0.5% and conforming to IS:15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1 cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	Sqm	₹ 1,719.00	8.64%	<b>₹ 1,867.51</b>

<b>Schedule 'D'</b>						
<b>Item rate for miscellaneous woks</b>						
<b>S. No</b>	<b>Item Reference DSR-21/ USSOR-2019(NWR)/ NS</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated Rate in INR</b>
3	DSR-21 19.6	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete :				
i	19.6.1	100 mm dia. R.C.C. pipe	Metre	₹ 447.25	8.64%	<b>₹ 485.89</b>
ii	19.6.2	150 mm dia. R.C.C. pipe	Metre	₹ 493.10	8.64%	<b>₹ 535.70</b>
iii	19.6.3	250 mm dia. R.C.C. pipe	Metre	₹ 811.00	8.64%	<b>₹ 881.07</b>
4	DSR-21 19.35	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C. pipes including collars/spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand) including testing of joints etc. complete.				
i	19.35.1	450mm dia. RCC pipes	Metre	₹ 2,385.50	8.64%	<b>₹ 2,591.59</b>
ii	19.35.2	600 mm dia RCC pipes.	Metre	₹ 3,051.55	8.64%	<b>₹ 3,315.19</b>

<b>Schedule 'D'</b> <b>Item rate for miscellaneous woks</b>						
<b>S. No</b>	<b>Item Reference DSR-21/ USSOR-2019(NWR)/ NS</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated Rate in INR</b>
5	USSOR-2019(NWR) 031110	Load testing of one or more spans of bridge as selected by the Engineer as per approved load test procedure following relevant IS/IRC/Railway codes with contractor's labour, deflection measuring instruments, loading materials, recoding and analyzing the load testing results including all lead & lift, etc. complete as required. The rates are all inclusive and will be paid after load test is finished and girder is cleared of the kentledges/loading material etc. The load shall be 1.25 times the stipulated design load.				
i	031111	For Span design load upto 100 MT	Each	₹ 85,662.09	12.13%	<b>₹ 96,050.16</b>
ii	031112	Extra for every increase 1 MT or part thereof in the span design load capacity upto 800 MT	MT	₹ 845.81	12.13%	<b>₹ 948.38</b>

**Total Estimated cost of Schedule 'D'- INR 2.00 Crore (INR 20 million).**