सेंट्रल कोल्फ़ील्ड्स लिमिटेड

(कोल इंडिया की अनुषांगी, एक मिनी रत्न कम्पनी ((भारत सरकार का उपक्रम)

असैनिक विभाग

पंजीकृत कार्यालय : दरभंगा हाउस, राँची-झारखंड -834029

वेबसाइट:http://www.centralcoalfields.in

CIN No: U10200JH1956G0I000581 ईमेल- : gmcivilcclranchi@gmail.com : gmcivil.ccl@coalindia.in







CENTRAL COALFIELDS LIMITED

(A Miniratna Subsidiary Company of Coal India Limited) (Govt. of India Undertaking)

Civil Engineering Department

Reg. Office: Darbhanga House, Ranchi

Jharkhand -834029,

Website http://www.centralcoalfields.in CIN No: U10200JH1956GOI000581 E-mail: gmcivilcclranchi@gmail.com : gmcivil.ccl@coalindia.in

Date:07/11/2025

No.: CCL/GM(C)/Tender/2025-26/506(H)

निविदा सूचना Notice Inviting Tender No 02 of 2025-26

1. Limited Tender Enquiry is invited from five Railway's CPSEs i.e. M/s IPRCL, M/s RITES, M/s IRCON, M/s **RVNL & M/s KRCL for the following work:**

Description of work	Location	DPR Cost i.e. Total Project Cost	EMD	Period of Completion (In Days)
"DETAILED ENGINEERING & PROJECT MANAGEMENT CONSULTANCY (PMC) FOR THE WORK OF CONSTRUCTION OF NEW LINE/MODIFICATION BY COMPLETE TRACK RENEWAL OF EXISTING RAIL LINES OF WHARF WALL LOADING PLATFORM OF GIDDI-A RAILWAY SIDING".	Argada Area, CCL.	₹3623.43 lakhs	NIL	450 days

(ii) For Site visit of location of work, the prospective bidder(s) may contact Staff Officer (Civil), Mob. No. 9771919385.

Tender inviting authority	Contact Person(s)/Tender Dealing Officer(s)
GM(Civil)/HoD, 7004605049	Senior Manager (Civil), 9433031209

2. Time Schedule of Tender:

SN	Particulars	Date	Time
a.	Start date for downloading/collecting tender document	11.11.2025	18.50 Hours
b.	Last date for downloading/collecting tender document	27.11.2025	17.00 Hours
C.	Bid Submission start date	12.11.2025	10.00 Hours
d.	Bid submission end date	27.11.2025	17.00 Hours
e.	Date of Opening of Bids	28.11.2025	11.00 Hours

वितरण :-

- 1. तकनीकी निदेशक (ऑपरेशन), तकनीकी निदेशक (यो एवं परि), निदेशक (वित्त), निदेशक (कार्मिक), सीसीएल, रांची
- 2. अध्यक्ष सह प्रबंध निदेशक के तकनीकी सचिव, सीसीएल, रांची
- 3. महाप्रबंधक (यो एवं परि), सीसीएल, रांची
- 4. महाप्रबंधक अरगदा क्षेत्र
- 5. महाप्रबंधक (सिस्टम), कॉर्पोरेट नोडल अधिकारी, सीसीएल, रांची
- 6. महाप्रबंधक (वित्त) (एफपीसी), सीसीएल, रांची
- 7. महाप्रबंधक (सी) / कल्याण एवम सेवाये, सीसीएल, रांची
- 8. सभी महाप्रबंधक (सिविल)
- 9. मुख्य सतर्कता अधिकारी के तकनीकी सचिव, सीसीएल, रांची
- 10. सभी स्टाफ ऑफिसर (सिविल)
- 11. मुख्य प्रबंधक (वित्त) यो एवं परि, सीसीएल, रांची
- 12. क्षेत्र वित्त प्रबंधक, अरगदा क्षेत्र
- 13. खान और भूविज्ञान सचिव, झारखंड सरकार, नेपाल हाउस, दोरंडा, रांची 834002
- 14. झारखंड वाणिज्य एवं उद्योग मंडल, चेंबर भवन, चैंबर पथ, मेन रोड, रांची 834001
- 15. नोटिस बोर्ड

सेंट्रल कोल्फ़ील्ड्स लिमिटेड

(कोल इंडिया की अनुषांगी, एक मिनी रत्न कम्पनी ((भारत सरकार का उपक्रम)

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The tender documents can be downloaded from the CCL website. The tender documents can also be collected during working hours from the office of GM(Civil)/IC, Civil Department, Alakhnanda Building, Darbhanga House, Ranchi – 834001.

3. Background: -

Giddi is located in the South Karanpura Coalfield of Central Coalfields Limited (CCL), Argada Area. It is in Hazaribagh District of Jharkhand.

Giddi Railway Siding of Central Coalfields Limited (CCL) had been earlier commissioned to cater the requirements of transportation of washed coal /coal from Giddi Washery with full rake capacity and Wharf wall loading platform with take-off from Patratu Railway station on Barkakana-Garhwa Road section of East Central Railway. The siding is not in use since 2018.

Now, it has been planned by CCL for construction of new rail line / modification of the existing rail line and upgradation of the wharf wall loading platform to load 8.10 MTPA of outward coal in a phased manner. In the 1st Phase there will be 3.60MTPA of outward Coal (Giddi-A: 1.0MTPA + Giddi-C: 0.6MTPA + Religara: 2.0MTPA) and later on it will be enhanced to 8.10MTPA (Giddi-A: 1.0MTPA, Religara: 2.0MTPA, Giddi-C: 0.6MTPA Asnagarha: 3.0MTPA & Hesalong 1.5MTPA).

Detailed Project Report (DPR) and Engineering Scale Plan (ESP) for construction of new line/modification by complete track renewal of existing rail lines of wharf wall loading platform of Giddi – A Siding was approved by East Central Railway vide letter no. PL / Giddi / 238105 dated: 22.01.2025 under FMC circular no. 11 of 2016.

Based on the approved DPR and ESP, construction of new line/modification by complete track renewal of existing rail lines of wharf wall loading platform of Giddi – A Siding is to be taken up through PMC.

The Salient features of the railway siding project is summarized as below:

S. No.	PARTICULARS	PARAMETERS
1.	Name of the Project	Construction of new line/modification by complete track renewal of existing rail lines of wharf wall loading platform of Giddi-A railway siding
2.	Name of Client	Central Coalfields Limited
3.	Name of Zonal Railway	East Central Railway
4.	Name of the Division	Dhanbad Division
5.	Serving Station	Patratu Station
6.	Traffic to be Handled	Outward Coal
7.	Quantity of Outward Traffic (Coal)	3.6 MTPA (Giddi-A:1.0 MTPA, Giddi-C:0.6 MTPA, Religara: 2.0 MTPA)
8.	No. of Trains per day for inward traffic	03 Rakes per day (Empty)
9.	No. of Trains per day for outward traffic	03 Rakes per day (Outward Coal)
10.	No. of Coal Loading RLS	Nil
11.	No. of Wharf Wall Platform Line	1 (One)
12.	Take-off Point for proposed Work	TP-1 CH 7788.537 M F/PTRU
13.	Route Length of Proposed Construction of rail line	1.431 KM

	·	5
14.	Track Length of Proposed Construction of rail line	2.814 KM
15.	Maximum height of Bank	2.957m
16.	Maximum depth of cutting	0.765m
17.	Gauge	B.G.1676mm
18.	Speed potential	30 kmph
19.	Land	Existing siding is on CCL Land boundary.
20.	Steepest Gradient in existing Railway line approach of yard	1in 100
21.	Proposed Gradient in Yard Portion	1 in 1200
22.	Sharpest Curve	Radius 875.00 m (2 degree)
23.	Nos. of Turnouts	04
24.	No. of DS	03
25.	Minimum Track center	6.5M
26.	Sleeper density	1660-60KG PSC Sleepers per KM
27.	Ballast Cushion	300mm
28.	Rail Type	60Kg/ R-260 Grade Prime Rail
29.	No. of Bridges	NIL
30.	No. of Road crossing	NIL
31.	Basic cost of the Project	Rs. 28,57,70,180.82

4. **Estimated Basic Project Cost (As per DPR):** The Anticipated cost of the project has been worked out on the basis of prevalent cost of men & materials. The detail of cost estimate (Head wise) is as under.

Sl. No.	Type of works	Cost (In Rs)
1.	Civil Engineering	16,40,98,699.66
2.	Signal & Telecommunication	8,03,53,721.44
3.	Electrical Engineering (TRD)	2,09,54,086.76
4.	Electrical Engineering (General)	2,03,63,672.96
	Total	28,57,70,180.82

5. Scope of work:- Project Management Consultant (PMC) will work for and on behalf of Central Coalfields Limited (CCL) of all the works entrusted in connection with rail infrastructure and allied Civil, OHE, S&T, General Electrification works etc. for this Railway Siding project of "Detailed Engineering & Project Management Consultancy (PMC) for Construction of new line/modification by complete track renewal of existing Rail lines of wharf wall loading platform of Giddi-A Railway Siding".

Consultancy Services for Detail Engineering (DE) & Project Management Consultancy (PMC) of Civil Engineering works, Signaling & Telecommunication (S&T) works, Over Head Electrification (OHE) works and General Electrification (GE) works mainly include Survey, Planning, Soil Investigation, Design, Drawing, Co-ordination, Contract Management, Material Management, Execution & Supervision, Quality Control, Budgetary Control, Certification of Agency's / Contractor's bills, subsequent release of payments in favour of the Agencies / Contractors and Commissioning of the Railway Siding Project for and on behalf of CCL.

Detailed scope of works for various activities under Detailed Engineering (DE), Project Management Consultancy (PMC) Services & Commissioning will be as per **Annexure-III.**

Further following documents attached as Annexures shall form part of the tender document.

SN	Annexures	Description
1	Annexure-IV	Detailed Project Report
2	Annexure-V	Approved ESP Y-11-2025 (Sheet-1)
3	Annexure-VI	Approved ESP Y-11-2025 (Sheet-2)
4	Annexure-VII	Signed L-section
5	Annexure-VIII	EC Rail letter of Approval of DPR
6	Annexure-IX	Estimated Project Cost
7	Annexure-X	Integrity Pact

6. TIMELINE for BID Submission: refer clause 02 above.

the Authorized signatory.

- 7. **SITE VISIT:** The Bidder, at the Bidder's own responsibility, cost and risk, is encouraged to visit and examine the site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for execution of the Works. The costs of visiting the site shall be at the Bidder's own expense. It shall be deemed that the Bidder has visited the site/area and got fully acquainted with the working conditions and other prevalent conditions and fluctuations thereto whether he actually visits the site/area or not and has taken all the factors into account while quoting his rates.
- 8. ELIGIBILITY CRITERIA: Bidding is applicable for five Railway's CPSEs i.e. M/s IPRCL, M/s RITES, M/s IRCON, M/s RVNL & M/s KRCL.
- 9. **BIDDING PROCESS:** The Bidder will submit their bid offline in a single closed envelope containing two envelopes as mentioned below, at the office of GM(Civil)/IC, Civil Department, Alakhnanda Building, Darbhanga House, Ranchi 834001 as per provisions of Bid Document:
 - a) One envelope would consist of filled Letter of Bid (Annexure I) along with signed copy of complete tender document & Power of attorney to the authorized signatory.
 - b) Second envelope would include the quoted Price Bid (Annexure II).

 Both these Envelopes would be sealed & placed inside a single closed Envelope. Quoted rate by bidder shall be in percentage (%) of the Basic Cost as per the enclosed format of the Price Bid provided with the Bid Document (Annexure-II). The bidder is required to submit the filled up Price bid on the letter head of the bidder signed by
- 10. **BID VALIDITY:** Bid shall remain valid for a period not less than 120 days after deadline for bid submission. In exceptional circumstances, prior to expiry of the original time limit, the CIL/CCL may request that the Bidders may extend the period of validity for a specified additional period. The request and the Bidder's responses shall be made in writing. A Bidder may refuse the request. A Bidder agreeing to the request will not be required or permitted to modify the bid. Reasons for seeking extension of bid validity should be recorded by the Bid Inviting Authority.
- 11. **AWARD CRITERIA:** The bidder quoting the lowest total percent shall be declared as the L-1 bidder as per price bid. The approval for award of work to L-1 Bidder will be accorded by the Competent Authority as per Delegation of Power.

GENERAL TERMS & CONDITIONS:

- **A.** The work is for Project Management Consultancy (PMC), in connection with the Construction/ up-gradation/ renovation as per approved DPR and PMC Consultant shall obtain the relevant acceptance/approval from Railways, which are mandatory for expeditious implementation of Projects for the entrusted works.
- **B.** On award of work, a formal agreement shall be entered into between the two parties on work-to-work basis for setting out the detailed scope of work and methodology of working as per consultancy fees (indicated below), terms & conditions as may be considered mutually acceptable and necessary by CCL and PMC Consultant for successful execution of the works.
- C. The Contractors (executing agencies) for various jobs will be engaged by PMC Consultant through open tender procedures by following the prevailing tender guidelines of PMC Consultant and execution cost of the works shall be payable to the contractors (executing agencies) after due checking and certification by PMC Consultant, directly for & on behalf of CCL.
- **D.** PMC Consultant shall defend, indemnify and hold CCL from any and all claims, injuries, damages, losses or suits including legal costs, arising out of or resulting from the acts, errors or omissions of the PMC Consultant and agreements entered for this work.
- **E.** The Projects may be entrusted by CCL to PMC Consultant with activity wise timeline as per the "Guidelines of CIL for award of work of Rail Infrastructure" with the following fee structures:
- 1. Stage-III: Maximum allowable Consultancy fees on Project Management Consultancy (Execution of Work/ Services) is 5.75% (Five Point Seven Five Percent) of Construction value.

Table 4: Deliverables and Consultancy Fee Break up for Stage-III

S. No.	Deliverables	Consultancy Fees on PMC of Construction value.			
	A. Project Management Consultancy- (Execution of Work/Services of Construction)				
i.	Detailed Engineering and Tender Documents consisting of detailing &design of bridges, curves, followed by Geo-Technical Investigation.	10% of Quoted consultancy fee			
ii.	Calling of Tenders, Evaluation and award of contract.	10% of Quoted consultancy fee			
iii.	Project Supervision including certification of bill and quality control, monitoring of contract.	70% of Quoted consultancy fee			
iv.	On completion of work including	10% of Quoted consultancy fee			

S. No.	Deliverables	Consultancy Fees on PMC of Construction value.
	obtaining track fitness certificate, EIG approval, commercial notification and any other approval required from railways for final commissioning of the Project. Closing of Construction Contracts.	

Note No. 1: Any other element in deliverable that deemed fit may be added/deleted by CCL.

Note No. 2: GST (Goods and Service Tax / Cess, if any), as applicable during the currency of the contract shall be payable extra in addition to the above consultancy fees /cost of works by CCL.

Note No. 3: Consultancy fee bills shall be submitted by PMC Consultant to CCL on quarterly basis along with a Statement showing progress of Project, both in physical and financial terms as per the originally agreed work plan.

2. Responsibility Matrix

The Description of "Responsibility" viz a viz "Whose Responsibility" and Clarification thereof, is shown in "remarks" column as below:

S. No.	Job Responsibility	By Whom	Remarks
i.	Completion of Detailed design and drawing for all civil works, rail tracks structures etc. and obtaining approval as applicable.	PMC Consultant	ESP/GAD and other drawing, if required by Railway or any statutory authorities will be signed by Nominated/Designated Officer of CCL.
ii.	Submission of detailed specification, BoQ and cost estimate for all works.	PMC Consultant	Cost estimate to be prepared based on current DSR/prevalent SOR of PMC Consultant / USSOR of railway rates /market rate analysis in case of non- scheduled items with suitable remark about justification of rate.
iii.	Preparation of detailed tender document including NIT / e-Tender.	PMC Consultant	

S. No.	Job Responsibility	By Whom	Remarks
iv.	Approval of Sl. No. 1, 2 & 3.	PMC	Under intimation to CCL.
		Consultant	
v.	Notification of NIT in	PMC	
	Newspapers / e-tender.	Consultant	
vi.	Receipt of Tenders / e- tenders.	PMC	
		Consultant	
vii.	Evaluation including preparation	PMC	
	of Briefing notes.	Consultant	
viii.	TC recommendation	PMC	
		Consultant	
ix.	Acceptance/ Approval of tender	PMC	
	evaluation statement &	Consultant	
	Recommendation.		
х.	Preparation of draft LOI/LOA on	PMC	
	contractor.	Consultant	
xi.	Placement of LOI on contractor.	PMC	
		Consultant	
xii.	Preparation of Draft Agreement.	PMC	
		Consultant	
xiii.	Issuance of Form 3 etc. for applying Labour License.	CCL	
xiv.	Signing of Agreement with	PMC	
	Contractor.	Consultant	
XV.	Project supervision and quality	PMC	
	control monitoring of contract, Certification of bill.	Consultant	
xvi.	Acceptance of Bill & Payment to	PMC	PMC Consultant will pay the
	contractors.	Consultant	bill to contractor after duly
			checked and certified and a
			copy of the same to be
			submitted to CCL with
			utilization certificate.
xvii.	On completion of work including	PMC	
	obtaining track fitness certificate,	Consultant	
	EIG approval, commercial		
	notification and any other		
	approval required from railways		
	for final commissioning of the		
xviii	Project. Closing of Contract	PMC	PMC Consultant will initiate
XVIII	Closing of Contract	Consultant	proposal for closure of
		Consultant	contract with all relevant
			documents and submit the
			proposal for CCL.
	1	<u> </u>	proposar for CCL.

S. No.	Job Responsibility	By Whom	Remarks
	Arbitration, dispute, if any with	PMC	
	the contractors	Consultant	
xix			

5. Time Schedule:

The project shall be completed within a period of 15 (Fifteen) months from the date of issuance of work order. The description of activity wise timeline is mentioned below:

S. No.	Activity	Maximum Timeline
	Stage-III	
1.	 Detailed Engineering and Tender Documents consisting of detailing &design of bridges, curves, followed by Geo-Technical investigation. Calling of Tenders, Evaluation and award of contract. 	3 Months
2.	 Completion of all Construction Works (Including Civil/P-Way/OHE/S&T) Project Supervision including certification of bill and quality control, monitoring of contract. 	9 Months
3.	 On completion of work including obtaining track fitness certificate, EIG approval, commercial notification and any other approval required from railways for final commissioning of the Project. Closing of Construction contracts. 	3 Months

6. Compensation for Delay:

- **6.1** There will be a Liquidated Damage clause in case of delay on the part of PMC Consultant.
- **6.2** CCL shall recover liquidated damages from PMC Consultant at a rate of a sum equal to 0.5% of Consultancy Fee for the part of work of each stage so delayed per week of delay or part thereof. The total liability to PMC Consultant under this clause shall be subjected to maximum of 10% of the Consultancy Fee.
- **6.3** The reasons for delay to be recorded on occurrence and jointly signed in a "Hindrance

- Register". The decision of Nominated/Designated Officer of CCL on the hindrances so recorded shall be final and binding on the both the parties.
- **6.4** However, if PMC Consultant deducts penalty or damages from the contractor more than penalty or damages payable to CCL under this clause, the extra deduction made from the contractor on this account of penalty or damages is to be reimbursed to CCL.

7. FORCE MAJEURE:

- **7.1** "Force Majeure" means an event beyond the control of PMC Consultant and not involving the PMC Consultant fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of Government of India/State Government including change of law, wars or revolutions, fires, floods, epidemics, quarantine restrictions, freight embargoes, natural calamities.
- **7.2** The Party shall not be liable for liquidated damages or termination for default, if and to the extent that its delays in performance or other failure to perform its obligations is the result of an event of Force Majeure.

8. FUND REGULATION:

- **8.1** CCL will release an imprest amount of 20% (Twenty percent) in a Project specific Corporate Liquid Term Deposit (CLTD) Bank Account of any scheduled Bank, of the contract award value against submission of Indemnity Bond of appropriate amount, to discharge the expenditure towards carrying out the works of the Project by the contractors/subcontractors/vendors engaged by PMC Consultant for and on behalf of CCL for the Projects and interest accrued thereof to such funds in the Specified CLTD Bank Account shall be credited to CCL and get adjusted proportionately as herein after provided. The interest accrued shall be credited on quarterly basis to the account of CCL and a statement with amount and details of Project shall be submitted for the accounting purpose. PMC Consultant's PMC fees shall also be adjusted from the imprest advance.
- 8.2 The expenditure incurred thereafter towards carrying out the works of the Project shall be adjusted from the initial imprest. When 80% of the initial imprest is utilized, PMC Consultant shall submit the utilization certificate. On acceptance of the utilization certificate by Nominated/Designated Officer of CCL, further imprest as per utilization certificate will be paid/ released to PMC Consultant to make the total imprest 20% of the contract award value. This procedure of release of fund shall be repeated whenever 80% of the total advance paid to PMC Consultant is utilized and utilization certificate submitted by PMC Consultant and accepted by Nominated/Designated Officer of CCL, till the approved contract value is reached. The utilization certificates should be supported by authenticated documents including statement of priced quantities executed and payments made to the various Suppliers/ Parties including contractors/sub-contractors/ agencies/ vendors engaged by PMC Consultant for the Project.
- **8.3** The release of Payment should commensurate with the actual physical progress as per the Bill of Quantity (BoQ) mutually accepted. A payment Schedule covering entire construction period may be prepared for this purpose.
- **8.4** PMC Consultant shall submit quarterly expenditure report showing the details of expenditure as per payments made to the contractors/sub- contractors/ agencies/ vendors from advances

received from CCL.

- **8.5** On the completion of Project, PMC Consultant shall submit final expenditure statement showing the details of final payment made to the contractors/sub-contractors/ agencies/ vendors engaged by PMC Consultant for the Project and supported by authenticated documents i.e. copy of final bill etc.
- **8.6** PMC Consultant will be responsible for audit observation, CTE observation, Contractor's Claim and Settlement of disputes, if any.

9. Project Documentation:

A "Site Order Book" shall be maintained for all Projects. The "Site Order Book" shall be centralized repository of all discussions, instructions, decisions and actions taken during the execution of the Project. All minutes of meeting including discussions and decisions including any change in the scope of Project, any deficiencies or defect found, site instructions related to safety, quality and environmental management should be recorded in site order book by PMC Consultant. The actions taken should also be recorded by PMC Consultant.

10. Quality Assurance:

PMC Consultant shall implement a "Quality Management System", which should outline the procedures and processes to be followed to ensure that the Project meets the required quality standards. A qualified "Quality Inspection Engineer" shall be deployed to ensure that the construction works are being done or meeting the requisite quality standards as prescribed by Railways and quality tests shall be conducted through accredited testing agencies such as IITs, NITs, CSIR Labs etc.

11. Code of Integrity for Public Procurement (CIPP):

Integrity pact shall be signed by PMC Consultant at the time of signing of agreement. (Copy enclosed in **Annexure X**)

12. Progress Review:

PMC Consultant Shall furnish within 30 days from the date of issue of Letter of Award by CCL, a monthly progress report to Nominated/Designated Officer of CIL/Subsidiary in the form of Bar Chart /PERT Network identifying various milestones w.r.t. completion schedule, to the CCL by 7th day of every month for the monthly review at CCL level.

Drone-based surveys to be done on quarterly basis to capture physical progress of work and site hindrances, if any and submitted to CCL.

13. Project Risk Management:

Project risk management framework to be implemented for Project specified risks towards identification, analysis, prioritization, responses, monitoring and control over the life cycle of the Project. A "Risk Register" with risk matrix to be maintained by PMC Consultant for proper mitigation of risks towards meeting the Project's timeline/schedule, physical progress and financial aspects of the Project. PMC Consultant shall submit the potential risks associated with the Project with its impact on Project's timeline and mitigation plan to CCL on quarterly basis.

14. Taxes and Duties:

- 14.1 PMC Consultant will ensure that all taxes & levies (including GST, surcharge and Cess there on as applicable) and surcharge on taxes, duties & levies, insurance charges, license fees etc., including statutory variations during the currency of the contract applicable on transactions between PMC Consultant and contractors appointed by PMC Consultant, if any, shall be payable directly by PMC Consultant or Contractors appointed by PMC Consultant and CCL will not have any liability what so ever on this account.
- 14.2 In case of contract execution works, associated / enabling works etc. the Contractor will raise the bill(s) to PMC Consultant as per the tender terms. On passing the contractors bill, PMC Consultant shall raise the Tax invoice (GST invoice) to CCL for the basic amount of the bill and GST thereon with GSTIN of CCL. This shall be entitled for GST Input Tax Credit (ITC) availing by CCL. Also, PMC Consultant shall charge its PMC fees on the basic amount and charge GST on it which is also eligible for availing Input Tax Credit (ITC) by CCL.
- **14.3** In case, GST Invoice raised by M/s PMC Consultant is not reflected in GSTR 2 B of CCL, the same shall not be adjusted from the imprest amount. The same shall be adjusted once the same is reflected in GSTR 2 B of CCL in subsequent month.
- **14.4** All the GST compliances for contractor side shall be taken care by PMC Consultant. PMC Consultant shall deposit / pay taxes as per rules. CCL shall get the GST input credit on PMC Consultant's tax invoice.
- **14.5** Clauses regarding GST & Other Taxes:
 - **a.** In case of change in tax liability due to any statutory change the same shall accrue to CCL.
 - **b.** PMC Consultant shall be responsible for the statutory compliances made by the contractors appointed by PMC Consultant Any demand/observation raised by the statutory authorities, due to any non-compliance/error on the part of the PMC Consultant, shall be made good by the PMC Consultant to CCL.

15. Defect Liability:

15.1 The defect liability period is 12 (Twelve) months i.e. from date of final commissioning of the Project by PMC Consultant, which shall include material replacement/repair, as required in all defective structural components/equipments etc. of Civil/P-Way/OHE/S&T at free of cost.

16. Settlement of Dispute:

Any dispute or difference whatsoever arising among the Parties shall be amicably settled between the Parties to the extent possible. If no amicable settlement is reached then such dispute or difference shall be settled by the procedure as provided in Clause 17.

17. Dispute Resolution:

17.1 In the event of any dispute or difference arising between the Parties, such dispute or difference shall be taken up by other Party for resolution through AMRCD as mentioned in DPE OM No.

05/0003/2019-FTS-10937 dated 14.12.2022 or its amendment.

17.2 Notwithstanding the existence of any dispute or difference and/or reference of such dispute to AMRCD, the parties shall proceed with and continue without hindrance with the performance of the work with due diligence, expeditiously and in a professional manner and the payment due to PMC Consultant shall not be withheld by CCL on account of such difference or AMRCD proceedings unless such payment is subject matter of AMRCD proceedings.

ANNEXURE-I

PROFORMA FOR LETTER OF BID TO BE ACCEPTED UNCONDITIONALLY BY BIDDER DURING SUBMISSION OF BID OFFLINE:

FORMAT OF "Letter of Bid"

To,
The Tender Inviting Authority,
Central Coalfields Limited.

Sub: Letter of Bid for the work "Detailed Engineering & Project Management Consultancy (PMC) for the work of Construction of New Line/Modification by Complete Track Renewal of Existing Rail Lines of Wharf Wall Loading Platform of Giddi-A Railway Siding."

Ref: 1. NIT No. 02 of 2025-26

2. CCL Mail dated: 11:11:2025.

Dear Sir,

This has reference to above referred bid. We have read and examined the conditions of contract, Scope of Work, technical specifications as per Detailed Project Report (DPR), Engineering Scale Plan (ESP) and other documents carefully.

We are pleased to submit our bid for the above work. We hereby unconditionally accept the bid conditions and bid documents as received vide above mail from your office, in its entirety for the above work and agree to abide by and fulfill all terms and conditions and specifications as contained in the bid document.

We here by submit all the documents as required to meet the eligibility criteria as per provision of the bid notice/document.

We hereby confirm that this bid complies with the Bid validity and other documents as required by the Bidding documents.

If any information furnished by us towards eligibility criteria of this bid is found to be incorrect at any time, penal action as deemed fit may be taken against us for which We shall have no claim against CCL.

Until a formal agreement is prepared and executed, this bid and your subsequent Letter of Acceptance/Work Order shall constitute a binding contract between us and Central Coalfields Ltd.

Should this bid be accepted, we agree to commence the work within stipulated date. In case of our failure to abide by the said provision Central Coalfields Ltd. shall, without prejudice to any other right or remedy, be at liberty to cancel the letter of acceptance/ award.

PRICE BID FORMAT

(The bidder is required to submit the Price bid on the letter head of the bidder signed by the Authorized signatory)

Subject: Offer for PMC work of "Detailed Engineering & Project Management Consultancy (PMC) for the work of Construction of New Line/Modification by Complete Track Renewal of Existing Rail Lines of Wharf Wall Loading Platform of Giddi-A Railway Siding."

Sl. No.	Description	Maximum allowable Consultancy fees (In % of Construction value.)	Quoted Consultancy fees by Bidder (In % of Construction value.) (To be filled by bidder)	
			in %	in word
Stage-III	Execution of Works/Services (Construction)	5.75 %	%	%

NOTE:

- 1. Bidder quoting the lowest 'total percentage' shall be declared as L-1 bidder.
- 2. If there are more than one lowest bidder and since splitting up of subject work is not feasible, L-1 may be decided as under: -
 - All L-1 bidders may be advised to submit the reduced price offline & final L-1 may be decided on the basis of revised (reduced) Price.
- **3.** In the current work, Stage I & Stage II have already been completed. Bidder has to quote the rate for Stage III i.e. Execution of Works/Services (Construction only)
- **4.** CCL reserves the right to postpone the date of receipt and opening of tenders or to cancel the tender at any stage without assigning any reasons, whatsoever.

Authorized signatory of Bidder

ANNEXURE-III

Detailed scope of works for various activities under DE, PMC Services & Commissioning will consist of the following:

1. DETAILED ENGINEERING SERVICES:

- i. Detailed Engineering as per the Detailed Project Report (DPR) and survey, if any.
- ii. Geo-Technical Investigation services including field & laboratory testing and preparation of Soil Test Reports as required, is to be done by PMC Consultant.
- iii. Detailed Design and Drawing for all Civil, S&T and OHE works etc.
- iv. Finalization of various procurement & execution packages as per suitability and necessities of works. Preparation of detailed Schedule of Quantities and Cost Estimates for all Civil, S&T, OHE, Weigh Bridge and other related works for inviting tenders by PMC Consultant.
- v. Preparation of all "Construction Drawings" related to works and obtaining approval from CCL / Railways, wherever necessary.

2. PMC SERVICES:

a. TENDERING SERVICES:

- i. Formulation of packages for procurement & execution under various stages of construction of Civil engineering works, S&T, OHE works & General Electrical works.
- ii. Preparation of Package-wise Cost Estimate, Technical Specification (TS), Bill of Quantities (BOQ)
- iii. Preparation of Tender Documents, following stipulated guidelines of PMC Consultant and comprising of:
 - a) Detailed Scope of work.
 - b) Technical specification for earth work, Bridge work & concreting works for Civil Engineering, Track linking work, S&T and OHE work conforming to Indian Railway (IR) standards practices.
 - c) Tender drawings.
 - d) Schedule of quantities (SOQ).
 - e) Special condition of contract.
 - f) Notice Inviting Tender (NIT).
 - g) Other relevant documents for technical & commercial bid.
 - h) Integrity pact
- iv. Notification / Publication of NIT in News Papers and website(s), following stipulated guidelines of PMC Consultant.
- v. Opening of Tenders, Evaluation of offers, Recommendation and acceptance of offer / offers, Placement of LOI / LOA / Work Order on successful Bidder / Bidders, following stipulated terms & conditions of the tender document and PMC Consultant / CVC guidelines.
- vi. Execution of Contract Agreement in between PMC Consultant and the selected executing agency / agencies concerned.

b. CONSTRUCTION MANAGEMENT/ MATERIAL PROCUREMENT SERVICES:

- i. Procurement of P. Way Materials like Rail, PSC Sleeper, Points & X-ings, Fittings & Fixtures, Track Ballast etc. as per IRS / RDSO Standard & Specification including transportation etc.
- ii. Procurement and installation of S&T and OHE materials as per IRS / RDSO Standard & Specification.

c. EXECUTION & SUPERVISION SERVICES BY PMC Consultant:

- i. Identifying and establishing bench marks, centre line pillars, curve pillars and other requisite control points, at site etc.
- ii. Recording initial cross section levels of original ground level for the alignment at suitable interval for assessment of quantity and other quantities for construction of different activities.
- iii. Issue of approved drawing to the executing agency for commencement of work.
- iv. Monitoring execution & supervision of Railway Formation & Bridge works as per IRS / RDSO standard and specifications.
- v. Inspection of P. Way materials at regular basis conforming to IRS / RDSO specification.
- vi. Monitoring execution & supervision of P. Way Linking works conforming to IRPWM.
- vii. Developing details / data of cross drainage works, nallah diversion etc. and issuance of necessary construction drawings.
- viii. Monitoring execution & supervision of S&T and OHE works as per IRS / RDSO standard and specification.
 - ix. Coordinating works of all contractors / agencies and rendering timely technical guidance.
 - x. Liaison with concerned Railway and other statutory body / authorities as and when required for approval 'in connection with commissioning and completion of the projects.
- xi. Preparing, maintaining, certifying measurement of works and verifying and release of progressive payments based on physical progress / accomplishment of works.
- xii. Quality Control on works and maintaining of proper records as per stipulated frequency.
- xiii. Conducting periodical progress review meeting to evaluate the target achievement as per the agreed Bar Chart and to find out the corrective measures for recovery in case of necessities and to appraise CCL.
- xiv. Closing of contracts on completion of the work under intimation to CCL.
- xv. Layout of bridges for construction and establishment of reference pillar at site.
- xvi. Obtaining other relevant data as may be required.
- xvii. Setting up Store Room for small fittings & material in consultation with CCL officials.
- xviii. Setting up open store within the premises of CCL for Rail, PSC sleepers, Points & crossings or Setting up site office at the nominated locations of CCL which would be advantageous for execution of the work as well as time to time interaction with the CCL officials nominated for the work
 - xix. Setting out the centre line of alignment.
 - xx. Quality Check / Assurance shall be followed by the all executing agencies.
 - xxi. Preparation of construction completion schedule and monitoring the same through Project Planning Tools.
- xxii. Monitoring contractor's procurement schedule and suggesting corrective measures for timely completion of work.
- xxiii. Day to day supervision of works and site management by deploying technically qualified Engineers and supervisors.
- xxiv. Maintenance of field data records and verification of construction materials as per specification to be used for construction work.
- xxv. Measurement of works and recording the same in the 'PMC Consultant Measurement Book' and certification of 'Running on A/C bills & Final Bill of contractor's for releasing payment.
- xxvi. Revision/ Modification of drawing as and when necessary, from technical point of view and TDC.
- xxvii. Conducting routine laboratory tests as per specifications.
- xxviii. Competent Authority of PMC Consultant will approve any deviation/Substitution/unforeseen item/non-schedule item, which may be warranted during the execution of Civil, Electrical, S&T or such other works within the overall project cost approved by CCL. The Deviation Estimate /

- Revised Estimate will be submitted to CCL for approval as and when required.
- xxix. Preparation of final bill, as built' Drawing and all records on completion of construction works as well as Material Reconciliation statement for P-Way, S&T & OHE to be submitted to CCL for closing of contract.
- xxx. Co-ordination with all executing agencies and rendering technical guidance.
- xxxi. Holding progress review meeting at site level as well as HQ level with all the executing agencies along with CCL authority to achieve the completion schedule of the projects
- xxxii. Review of progress of work and highlight slippages if any, in the project and initiating immediate remedial measures for recovery plan.
- xxxiii. Monitoring of time schedules and actual progress including updating of schedules as required.
- xxxiv. PMC Consultant will keep CCL informed and submit a monthly progress report on the status of Work in progress vis-à-vis project schedule.
- xxxv. Introduction of Management Information System for the purpose of identifying critical activities, laying down priorities and setting targets, in consultation with CCL.

d. COMMISSIONING SERVICES:

- i. Arranging for conducting necessary testing, obtaining of certificates / approval / sanction etc. as may be required for commissioning of the railway infrastructures.
- ii. Preparation & Submission of final in-built drawings / plans to CCL and Railways.
- iii. Obtaining of necessary approval from Railway authorities concern at appropriate time and for any phase wise commissioning purposes of the project.
- iv. Handing over of all balance / unused materials to CCL with proper reconciliation records.

3. RESPONSIBILITIES OF PMC Consultant:

- i. PMC Consultant shall prepare bar chart showing different activities to be undertaken and its time schedule.
- ii. PMC Consultant shall ensure that the time schedule as mentioned for the completion of various activities is strictly adhered to. This bar chart will also indicate the salient features and monthly physical & financial progress of work. Slippage, if any, shall be recorded by PMC Consultant giving period of delay and reason thereof.
- iii. PMC Consultant shall be responsible for measurement of all items of works concerned under their scope of work, shall coordinate with all agencies involved in execution of the same and shall be responsible for achieving the scheduled completion as per target date. Extension of completion time to agencies if required, due to unavoidable reasons, shall be granted with recorded reasons by PMC Consultant.
- iv. PMC Consultant shall be responsible for monitoring the progress of work as per requirement of the CCL. Monthly Physical and Financial progress report and other progress reports as per proforma approved by the CCL shall be submitted by PMC Consultant regularly to Engineer-in-Charge and GM(Civil).
- v. PMC Consultant shall depute adequately qualified and experienced staff / executive well versed in similar type of work for site supervision including preparation of design and specifications to ensure quality of construction and timely completion of work.
- vi. PMC Consultant will be responsible for audit observation, CTE observation, contractor's Claim and settlement of disputes, if any.
- vii. The guarding of rails, sleepers and other fittings (P. Way materials), OHE and S&T materials thorough watch & ward shall be arranged by PMC Consultant /its agencies.
- viii. PMC Consultant will ensure that the safety rules & regulations are implemented during execution of work for safety of men & materials.

- ix. Hindrance register shall be maintained at site to record the various hindrances encountered during the course of execution. Hindrance Register will be signed by both the parties. Causes of hindrances will be intimated to CCL.
- x. PMC Consultant will ensure that the wages of workmen is paid as per law and also see that other rules and regulations of labour laws related with this work are being followed.

PRE-CONTRACT INTEGRITY PACT

General

WHEREAS the BUYER proposes to "Detailed Engineering & Project Management Consultancy (PMC) For Construction of New Line/Modification by Complete Track Renewal of Existing Rail Lines of Wharf Wall Loading Platform of Giddi-A Railway Siding" (Name of the Work/Stores/Equipment/Item) and the BIDDER/Seller is willing to offer/has offered the stores and

WHEREAS the BIDDER is a private company/public company/Government undertaking/partnership/registered export agency, constituted in accordance with the relevant law in the matter and the BUYER is a Central Public Sector Unit.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to: -

Enabling the BUYER to obtain the desired said work/stores/equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDERs to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the BUYER will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

Section 1 – Commitments of the Principal

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -
- a) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand; take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

- b) The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- c) Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/ PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s)/ Contractor(s)

- (1) The Bidder(s) / Contractor(s) commit themselves to take all measures necessary to prevent corruption. The Bidder(s) / Contractor(s) commit themselves to observe the following principles during participation in the tender process and during the contract execution.
- a. The Bidder(s) / Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- b. The Bidder(s) / Contractor(s) will not enter with other Bidders info any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, CCL contracts, submission or non- submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.
- c. The Bidder(s) / Contractor(s) will not commit any offence under the relevant IPC/ PC Act; further the Bidder(s) / Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d. The Bidder(s) / Contractors(s) of foreign origin shall disclose the name and address of the Agents/ representatives in India , if any, Similarly the Bidder(s) /Contractors(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s) / Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/ representative have to be in Indian Rupees only.
- e. The Bidder(s) / Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- f. Bidder(s) / Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter.

(2) The Bidder(s) / Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder, before contract award, has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.

- (1) If the Bidder / Contractor / Supplier has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is also entitled to exclude the Bidder / Contractor / Supplier from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case. In particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.
- (2) A transgression is considered to have occurred if the Principal, after due consideration of available facts and evidences within his / her knowledge concludes that there is a reasonable ground to suspect violation of any commitment listed under Section 2 i.e. "Commitments of Bidder(s) / Contractor(s).
- (3) The Bidder accepts and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.
- (4) If the Bidder / Contractor / Supplier can prove that he has restored / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely."

Section 4 - Compensation for Damages

- (1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value excluding GST or the amount equivalent to Performance Bank Guarantee.

Section 5 - Previous transgression

(1) The Bidder declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti-corruption approach or with any Public Sector Enterprise in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Debarment of firms from Bidding."

Section 6 - Equal treatment of all Bidders / Contractors / Subcontractors

- (1) In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor.
- (2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.
- (3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 - Criminal charges against violating Bidder(s) / Contractor(s) / Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8 - Independent External Monitor

- (1) The Principal appoints competent and credible Independent External Monitor for this Pact after approval by Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- (2) The Monitor is not subject to instructions by the representatives of the parties and performs his/ her functions neutrally and independently. The Monitor would have access to all Contract documents, whenever required. It will be obligatory for him / her to treat the information and documents of the Bidders/Contractors as confidential.

He/ she reports to the Chairman, Coal India Limited / CMD, CCL

- (3) The Bidder(s) / Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to Sub-contractors.
- (4) The Monitor is under contractual obligation to treat the information and documents of the Bidder(s) / Contractor(s) / Sub-contractor(s) with confidentiality. The Monitor has also signed declarations on 'Non-Disclosure of Confidential Information ' and of 'Absence of Conflict of Interest'. In case of any conflict of interest arising at a later date, the IEM shall inform Chairman, Coal India Limited / CMD, CCL and recuse himself / herself from that case.
- (5) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

- (6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he/ she will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- (7) The Monitor will submit a written report to the Chairman, Coal India Limited / CMD, CCL within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- (8) If the Monitor has reported to the Chairman, Coal India Limited / CMD, CCL, a substantiated suspicion of an offence under relevant IPC/PC Act, and the Chairman, Coal India Limited / CMD, CCL has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- (9) The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by Chairman Coal India Limited / CMD, CCL.

Section 10 - Other provisions

- (1) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (2) If the Contractor is a partnership or a <u>Joint Venture</u>, this agreement must be signed by all partners or JV members.
- (3) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- (4) Issues like Warranty / Guarantee etc. shall be outside the purview of IEMs.
- (5) In the event of any contradiction between the Integrity Pact and its Annexure, the Clause in the Integrity Pact will prevail.

Section 11- Facilitation of Investigation

In case of any allegation of violation of any provisions of this Pact or payment of commission, the BUYER or its agencies shall be entitled to examine all the documents including the Books

of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

Section 12- Law and Place of Jurisdiction

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the BUYER.

Section 13 - Other Legal Actions.

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

(For & On behalf of the Principal)	(For & On behalf of Bidder/Contractor)
(Office Seal)	(Office Seal)
Place Date	Place Date
Witness 1: (Name & Address)	Witness 2: (Name & Address)

Independent External Monitor (IEM)

Name, address and contact No. of the Independent External Monitor (IEM) nominated for this tender:

SI. No.	Name	email ld
1	Shri Sanjiv Garg, IRTS (Retired)	sanjivgarg.iem@gmail.com
2	Shri Rohit Choudhary, IPS (Retd.)	aol.rohit@gmail.com

ANNEXURE- A

Guidelines for Indian Agents for Foreign supplier (Part of Integrity Pact)

1. Authorized Indian Agent of a foreign manufacturer or indigenous manufacturer is also eligible to quote on behalf of its principal against the tender, in case manufacturer as a matter of corporate policy does not quote directly. However, in such case, authorized Indian Agent shall have to upload scanned copy of tender specific Manufacturer's Authorization, signed and stamped by the manufacturer to quote against the CIL Tender, indicating the Tender Reference No. and date along with the offer. The authorized Indian Agent is to upload scanned copies of details in respect of its organization along with the copies of document like certificate of incorporation / registration etc. along with the offer. The firm (Indian Agent) should be in existence for 3 years on the date of tender opening, irrespective of date of appointment as Indian Agent.

In case an Indian Agent is participating in a tender on behalf of one manufacturer, it is not allowed to participate / quote on behalf of another manufacturer in this tender or in a parallel tender for the same item. Further, in a tender, either manufacturer can quote or its authorized Indian Agent can quote but both are not allowed to participate/ quote in the same tender. Also, one manufacturer can authorise only one agent to quote in the same tender. All the bids, not quoted as per the above guidelines, will be rejected.

2. The Foreign manufacturer must indicate the name & address of its agent in India. It should

also indicate the commission payable to them and the specific services rendered by them. The Indian Agency commission will be payable only on FOB prices of goods and it should be quoted as a percentage of the FOB price. In case, the foreign manufacturer does not have any Indian Agent, it should be clearly mentioned in the bid. In terms of Integrity Pact, the Bidder has also to disclose all payments to agents, brokers or any other intermediaries. The amount of agency commission payable to Indian Agent should not exceed 5% or what is specified in agency agreement, whichever is lower.

- 3. In addition to above A certificate that no commission is payable by the principal supplier to any agent, broker or any other intermediary against this contract other than percentage as indicated in BOQ (not exciding 5% of FOB) of FOB value of the contract to Indian Agent. This certificate forms a part of letter of credit.
- 4. The payment of Indian Agency Commission, if any, involved, may be considered in case of necessity, subject to compliance of the Government of India guidelines issued from time to time. The name of the Indian Agent with their full address and the quantum of Agency commission if any, payable shall have to be mentioned in the offer by the foreign manufacturer.

The following documents shall be submitted by the Bidder in case of contract with foreign principals involving Indian agents:

- a. Foreign principal's pro-forma invoice or any other authentic document indicating the commission payable to the Indian agent, nature of after sales service to be rendered by the Indian Agent and the precise relationship between the Principal and the Agent and their mutual interest
- b. Copy of the agency agreement if any with the foreign principal stating the precise relationship between them and their mutual interest in the business.

However, if all the details given in Para – (i) are complied with, the requirement of submission of document mentioned at Para – (ii) may be waived.

5. Agency commission, if any, shall be paid in equivalent Indian Rupees.

Code of Integrity for Public Procurement (CIPP):

1. Introduction

Public procurement is perceived to be prone to corruption and ethical risks. To mitigate this, the officials of Procuring Entities involved in procurement and the bidders/ contractors must abide by the following Code of Integrity for Public Procurement (CIPP). All Procuring Officials shall give an undertaking to abide by the Code of Integrity of Public Procurement (CIPP) in ERP while processing PR in SAP ERP. The undertaking shall be put in format of PR itself in ERP. However, if estimate is processed outside ERP then separate undertaking in this regard shall be given by all procuring officials. The bidders/ contractors should be asked to sign a declaration about abiding by a Code of Integrity for Public Procurement (including subcontractors engaged by them) during submission of bid, with a warning that, in case of any transgression of this code, it would be liable for punitive actions such as cancellation of contracts, banning and blacklisting or action in Competition Commission of India, and so on.

2. Code of Integrity for Public Procurement

Procuring authorities as well as bidders, contractors and consultants should observe the highest standard of ethics and should not indulge in the following prohibited practices, either directly or indirectly, at any stage during the procurement process or during execution of resultant contracts:

- i) "Corrupt practice": making offers, solicitation or acceptance of bribe, rewards or gifts or any material benefit, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process or contract execution;
- ii) "Fraudulent practice": any omission or misrepresentation that may mislead or attempt to mislead so that financial or other benefits may be obtained or an obligation avoided. This includes making false declaration or providing false information for participation in a tender process or to secure a contract or in execution of the contract;
- iii) "Anti-competitive practice": any collusion, bid rigging or anti-competitive arrangement, or any other practice coming under the purview of The Competition Act, 2002, between two or more bidders, with or without the knowledge of the procuring entity, that may impair the transparency, fairness and the progress of the procurement process or to establish bid prices at artificial, non-competitive levels;
- iv) "Coercive practice": harming or threatening to harm, persons or their property to influence their participation in the procurement process or affect the execution of a contract;
- v) "Conflict of interest": Participation by a bidding firm or any of its affiliates that are either involved in the consultancy contract to which this procurement is linked; or if they are part of more than one bid in this procurement; or if the bidding firm or their personnel have relationships or financial or business transactions with any official of procuring entity who are directly related to tender or execution process of contract; or improper use of information obtained by the (prospective) bidder from the procuring entity with an intent to gain unfair advantage in the procurement process or for personal gain.
- vi) "Obstructive practice": materially impede the procuring entity's investigation into allegations of one or more of the above mentioned prohibited practices either by deliberately destroying, falsifying, altering; or by concealing of evidence material to the investigation; or by making false statements to investigators and/ or by threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or by impeding the procuring entity's rights of audit or access to information;

3. Obligations for Proactive Disclosures

- i. Procuring authorities as well as bidders, contractors and consultants, are obliged under Code of Integrity for Public Procurement to suo-moto proactively declares any conflicts of interest (coming under the definition mentioned above pre-existing or as and as soon as these arise at any stage) in any procurement process or execution of contract. Failure to do so would amount to violation of this code of integrity; and
- ii. Any bidder must declare, whether asked or not in a bid document, any previous transgressions of such a code of integrity with any entity in any country during the last three years or of being debarred by any other procuring entity. Failure to do so would amount to

- violation of this code of integrity.
- iii. To encourage voluntary disclosures, such declarations would not mean automatic disqualification for the bidder making such declarations. The declared conflict of interest may be evaluated and mitigation steps, if possible, may be taken by the procuring entity. Similarly, voluntary reporting of previous transgressions of Code of Integrity elsewhere may be evaluated and barring cases of various grades of debarment, an alert watch may be kept on the bidder's actions in the tender and subsequent contract.

4. Punitive Provisions

Without prejudice to and in addition to the rights of the procuring entity to other penal provisions as per the bid documents or contract, if the procuring entity comes to a conclusion that a (prospective) bidder/ contractor directly or through an agent, has violated this code of integrity in competing for the contract or in executing a contract, the procuring entity may take appropriate measures including one or more of the following:

- i) If his bids are under consideration in any procurement
 - a) Forfeiture or encashment of bid security;
 - b) calling off of any pre-contract negotiations; and
 - c) rejection and exclusion of the bidder from the procurement process
- ii) If a contract has already been awarded
 - a) Cancellation of the relevant contract and recovery of compensation for loss incurred by the procuring entity;
 - b) Forfeiture or encashment of any other security or bond relating to the procurement;
 - c) Recovery of payments including advance payments, if any, made by the procuring entity along with interest thereon at the prevailing rate;
- iii) Provisions in addition to above:
 - a) banning/ debarment of the bidder from participation in future procurements of the procuring entity for a period not less than one year;
 - b) In case of anti-competitive practices, information for further processing may be filed under a signature of concerned Director of CIL/CCL, with the Competition Commission of India.

Initiation of suitable disciplinary or criminal proceedings against any individual or staff found responsible.

Central Coalfields Limited

(A Mini-Ratna Company)
A Subsidiary of Coal India Limited



DETAILED PROJECT REPORT

FOR CONSTRUCTION OF NEW RAIL LINE WITH PROVISIONING OF WHARF WALL LOADING PLATFORM

GIDDI RAILWAY SIDING



January - 2024



Indian Port Rail & Ropeway Corporation Limited

(AJV Company under Ministry of Ports, Shipping & Waterways, Govt. of India)



Detailed Project Report of Giddi Railway Siding



PROJECT AT A GLANCE

Sl. No.	PARTICULARS	PARAMETERS
1.	Name of the Project	Detailed Project Report (DPR) for construction of New Rail line with provisioning of Wharf wall loading platform at Giddi-A Railway Siding under CCL.
2.	Name of Client	Central Coalfields Limited
3.	Name of Zonal Railway	East Central Railway
4.	Name of the Division	Dhanbad Division
5.	Serving Station	Patratu Station on Patratu – Saunda (PD) section
6.	Traffic to be Handled	Outward Coal
7.	Quantity of Outward Traffic (Coal)	3.6 MTPA (Giddi-A: 1.0 MTPA, Giddi-C: 0.6 MTPA, Railigada: 2.0 MTPA)
8.	No. of Trains per day for inward traffic	03 Rakes per day (Empty)
9.	No. of Trains per day for outward traffic	03 Rakes per day (Outward Coal)
10.	No. of Coal Loading RLS	Nil
11.	No. of Wharf Wall Platform Line	1 (One)
12.	Take-off point of the Existing Siding	Existing DS CH 1998.5m F/CSB of Patratu stn.
13.	Take-off Point for proposed Work	TP-1 CH 7788.537 M F/PTRU
14.	Route Length of Proposed Construction of new line	1.431 KM
	Track Length of Proposed Construction of new line	2.814 KM
16.	Maximum height of Bank	2.957m
1 <mark>7</mark> .	Maximum depth of cutting	0.765m
18.	Gauge	B.G.1676mm
19.	Speed potential	30kmph
20.	Land	Existing siding is on CCL Land boundary.
21.	Steepest Gradient in existing Railway line approach of yard	1in 100
22.	Proposed Gradient in Yard Portion	1 in 1200
23.	Sharpest Curve	Radius 875.00 m (2 degree)
24.	Nos. of Turnouts	04
25.	No. of DS	03
26.	Minimum Track center	6.5M
27.	Sleeper density	1660-60KG PSC Sleepers per KM
28.	Ballast Cushion	300mm
29.	Rail Type	60Kg/ R-260 Grade Prime Rail
30.	No. of Bridges	NIL
31.	No. of Road crossing	NIL
32.	Execution basic cost of the Project	Rs. 28,57,70,180.82

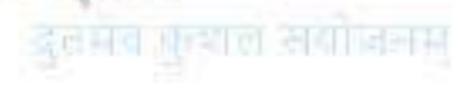


Detailed Project Report of Giddi Railway Siding



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Chapter-1

Introduction & Concept of the study



Detailed Project Report of Giddi Railway Siding



Chapter-1

Introduction and Concept of the study:

1.0 Introduction: -

- 1.0.1 Central Coalfields Limited (CCL) is a subsidiary of Coal India Limited (CIL), an undertaking of the Government of India. CCL was established in 1956 as 'National Coal Development Corporation Limited' and is a Category-I Mini Ratna company since October 2007. CCL manages the nationalized coal mines of the Coal Mines Authority, Central division. CCL is headquartered at Darbhanga House, Ranchi, Jharkhand.
- 1.0.2 During 2022-2023, the company has achieved raw coal production of 76.09MT. Washery coal production for both coking and non-coking coal from seven (07) Coal washeries also have considerable contribution during last financial year.
- 1.0.3 At present, CCL is managed by 14 administrative areas; i.e. (1) Argada, (2) Barka Sayal, (3) Bokaro & Kargali, (4) Dhori, (5) Giridih, (6) Hazaribagh, (7) Kathara, (8) Kuju, (9) Magadh-Sanghamitra (10) Amrapali-Chandragupta (11) North Karanpura, (12) Piparwar, (13) Rajrappa, & (14) Rajhara with 62 operative mines out of which 22 underground and 40 opencasts. Out of 07 washeries, 05 (Kathara, Kargali, Rajrappa, Kedla & Sawang) Coking coal and 02 (Piparwar & Gidi) Non-coking coal. East Bokaro, West Bokaro, North Karanpura, South Karanpura, Ramgarh, Giridih & Hutar are the 07 coalfields under CCL. Out of the vast resources, only a small corner of these coalfields has yet been exploited, keeping the mining from the major portion being untouched.



Detailed Project Report of Giddi Railway Siding

- at South Karanpura Coalfield. Giddi 'A' Colliery is located at South Karanpura Coalfields in Hazaribagh District of Jharkhand. The Damodar River, which forms the western and southern boundaries of the Giddi block 'A' has taken a 'Z' bend here. The Gomoh Dehri-on-Sone branch of Eastern Railway runs within 4.80 kms of the Giddi 'A' block, on the south. Ranchi Road Railway Station and Barkakana Railway Station on Eastern Railway are at a distance of about 24 kms and 20 kms from Giddi Washery respectively. The Washery is accessible by good metaled road from Ranchi via Ramgarh and is about 70 kms from Ranchi by road.
- 1.0.5 The Giddi railway siding of Central Coalfields Limited (CCL) with full rake capacity and Wharf wall loading platform with take-off arrangement from Patratu Railway station on Barkakana-Garwa Road section of East Central Railway has been commissioned since long to cater the requirements of transportation of washed coal / coal from Giddi Washery. The siding is not in use since 2018. Now, it has been planned forconstruction of new rail line of the existing siding and upgradation of the Wharf wall loading Platform to load 8.10MTPA of outward coal in a phased manner. In the 1st Phase there will be 3.60MTPA of outward Coal (Giddi-A: 1.0MTPA + Giddi-C: 0.6MTPA + Railigada: 2.0MTPA) and later on it will be enhanced to 8.10MTPA 1.0MTPA, Railigada: 2.0MTPA, (Giddi-A: Giddi-C: Ashnagarha: 3.0MTPA & Heshalong 1.5MTPA). For dispatch of 8.10MTPA of outward coal from Giddi (i.e, full capacity), CCL may require to develop RLS in the existing Giddi Railway Siding. Decision in this regard is to be taken accordingly.
- 1.0.6 Presently CCL has 26 Railway Sidings from which coal is dispatched to various destinations located all over India. Giddi is one among these sidings taking-off Patratu station on Patratu Saunda section of Dhanbad Division in East Central Railway.





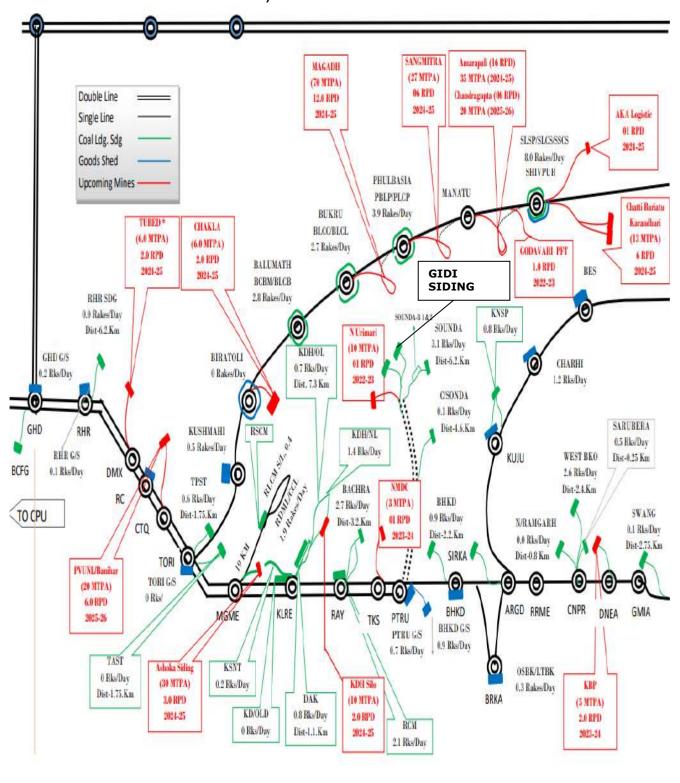
- 1.0.7 The liberalization of steel and power sector by Government of India has generated wide spread interest for private and public sector investment, power generation, and steel production. This has resulted in a sharp increase in demand of power grade and washery grade coal in CCL.
- 1.0.8 In order to meet the challenge posed by both private & public sector, Coal India Limited (CIL) is, now, developing 21 new railway sidings at an estimated investment of Rs 3,370 crore in four of its subsidiaries, an effort towards strengthening its rail infrastructure. These railway sidings would be commissioned by FY' 2024. South Eastern Coalfields Ltd (SECL) accounts for 10 of the proposed 21 sidings followed by Central Coalfields Ltd (CCL) with six, Eastern Coalfields Ltd (ECL) three and Bharat Coking Coal Ltd (BCCL) two.
- 1.0.9 Apart from investing in new sidings, CIL is refurnishing old sidings, strengthening rail connectivity between the sidings and the main rail lines. The sidings will add fillip to CIL's First Mile Connectivity efforts, acting as effective coal evacuation outlets. CIL is aiming to move about 555 MT of coal per year through mechanized means by FY'2024. With CIL aspiring for one billion tone output, the nudge is to transport bulk of the coal through rail mode. In this backdrop, CIL is ramping up its rail evacuation facilities. A pollution free environment in coal transportation has also placed increased impetus on rail evacuation. Reduced road transportation of coal would depress the dust pollution and save on the diesel costs.
- 1.0.10As Giddi Railway siding is not operative since 2018.Accordingly, Central Coalfield Limited has now taken up the work to commence New Giddi Railway siding with New proposed layout this is in addition to develop 06 new sidings to increase rail mode transportation.





1.1 Location of the Project

1.1.1 Existing Railway Siding is situated near to the existing railway station Patratu in Patratu –Saunda section under Dhanbad Division of East Central Railway.







1.2 SCOPE OF WORKS:

1.2.1 The subject work is being undertaken in two stages as follows:

(A) Detailed Project Report and its approval:

Final Location Survey:

- (i) Carry out Final Location Survey of the approved alignment using survey methodology approved by Indian Railways.
- (ii) Taking detailed longitudinal and transverse levels along the proposed alignment.
- (iii) Fixing of permanent Central Line Pillars of Straight & curve alignments.
- (iv) Fixing of leveling pillars, benchmarks, etc. with reference to GTS and /or railway benchmark, if required.
- (v) Soil investigation at the locations of major bridges and other important structures.

Preparation and submission of ESP and DPR:

- (II) Preparation of Engineering Scale Plan (ESP) in scale 1:2000 horizontal and 1:500 vertical or any other suitable scale required as per railway standard for the proposed rail infrastructure.
- (III) Preparation of Longitudinal section for the proposed rail infrastructure.
 - (IV) To evaluate system of train working for movement between the terminal and serving station.
 - (V) Preparation of Detailed Project Report (DPR) including detailed estimate covering all components of the railway siding, viz. Civil engineering, S&T, OHE and General Electrification considering the standard of construction, Curves, Bridges, ROBs, Gradients, etc.
 - (VI) Submission of Draft DPR to CCL for their approval.





- (VII) Submission of Draft Detailed Project Report to ECR after incorporating the comments of the client, if any along with Engineering Scale Plans, L-section and mini SIP.
- (VIII) Obtaining In–principle approval of the DPR followed by the Engineering Scale Plan (ESP) and L- section from the Divisional office and Zonal office.

Preparation & Approval of Detailed Drawings:

- (I) On getting approval of ESP, L-section and GADs of Major & Minor bridges and other structures will be prepared and will be got approved from ECR. RDSO's Standard design for superstructure shall be used as per 25T loading standards.
- (II) Preparation of Signal & Interlocking Plan (SIP) and approval from ECR.
- (III) Preparation and approval of OHE drawings; i.e. LOP and sectioning Diagram from ECR.

1.3 Traffic Projection & Rail Transport Clearance: -

Current production plan of Giddi expansion project is **3.60 MTPA** (Giddi-A 1.0MTPA, Giddi-C 0.6MTPA & Railigada-2.0MTPA); i.e., **03 rakes** per day will be loaded from the siding in accordance to the proposed production plan of Giddi expansion project. The quantum of traffic and direction of movement is the criteria for planning for justified Rail-infrastructure. The details of traffic projection, quantity and its destination should be there for better appraisal regarding movement of coal rakes.





According to Railway Board's latest policy guidelines on 'Rail Transport Clearance' issued vide letter No. 2001/TT-1/10/RTC/Review/14 dated 18.03.2015, the practice of issuing Rail Transport Clearance (RTC) is discontinued and there will be no requirement of RTC henceforth. Zonal Railways may examine such proposals, in consultation with other Zonal Railways in case of inter-Railway traffic flows, and approve the same on merit. In this case, if any additional coal traffic is planned, the particulars of all traffic, commodity and quantity wise, indicating the origin & destination need to be indicated by CCL for appraisal and consideration of East Central Railway.

1.3 Concept of the study:

- 1.3.1 Central Coal Field Ltd. (CCL) has a wharf wall loading arrangement at Giddi-A siding but this siding is not in operation since 2018 as such CCL authority has planned for development of New Giddi-A Railway siding with new layout to enhance loading and dispatch of coal.
- 1.3.2 In conformity to the MoU dated 05.03.2020 signed between CIL & IPRCL, CCL authority requested IPRCL to submit the budgetary offer vide letter No. GM (A) / Secy./2022/18/313, dated 19.01.2023 (Shown as Annexure AL1) to undertake the DPR studies and to obtain necessary approval from East Central Railway. Accordingly, IPRCL submitted a budgetary offer for preparation of DPR for the above mentioned project vide IPRCL letter No. IPRCL/Ranchi/CCL-Giddi-A/24/566, dated 03.02.2023 and revised budgetary offer letter No. IPRCL/Ranchi/CCL-Giddi-A/24/578, dated 22.02.2023 (Shown as Annexure AL2). Subsequently Work order against budgetary offer had been issued by CCL authority vide letter No.





- GM (Civil) / IC / W.O. / 2023 / 1043, dated 04/06.03.2023 for the work. (Shown as Annexure **AL3**)
- 1.3.3 On receipt of the above said work order, necessary field Survey was conducted by IPRCL. During the field survey, location & topography of the coal mines and the existing Giddi siding, existing wharf wall loading arrangement at the siding, requirements of lines in the siding to handle the proposed traffic, etc. were taken into consideration for preparation of the DPR. Accordingly, a draft Detailed Project Report has been prepared with two siding lines; one for loading and one for engine reversal. Provision of a Brakevan loop, a Shunting Neck and one Electronic In-motion Weigh Bridge has been kept in the siding.
- 1.3.4 A draft Detailed Project Report showing two-yard line proposal was submitted to CCL on 13.06.2023. (Shown as Annexure AL4) A meeting was held on 17.06.2023 between concerned officials of CCL & CMPDIL and IPRCL on the said Draft DPR. As per instruction of Competent Authority of CCL, a joint field visit was conducted on 19.06.2023. Based on the observations & discussions held during the field visit, required corrections/alterations were made and the draft DPR was resubmitted on 03.07.2023. (Shown as Annexure **AL5**) Further meeting has been held with CCL/HQ on 05.07.2023 & 06.07.2023 and the observations on the Draft DPR received from CCL via email dated 05.07.2023. (Shown as Annexure **AL6**) Accordingly, necessary corrections has done in Draft DPR. Further meeting has been held with CCL/HQ on 13.07.2023 & 14.07.2023. As per discussion one two storied service building and approach road with manned LC gate to be provided. Accordingly Draft DPR was updated & submitted to CCL on 19.07.2023(Shown as Annexure **AL7**). Further a meeting regarding Draft DPR was held between CCL, CMPDIL & IPRCL officials on 19.07.2023 at CCL HQ,





Ranchi. Based on the comments/observations during the meeting, CCL vide and MoM received from reference No. GM(C)/IC/2023/1129 dated 21.07.2023 (Shown as Annexure **AL8**) and DPR along with ESP was submitted to CCL vide letter No. IPRCL/Ranchi/CCL-Giddi-A/24/782, 27.07.2023(Shown as Annexure **AL9**). Observations was received from CCL via email dated 01.08.2023(Shown as Annexure **AL10**). In compliance observations DPR along with signed ESP was submitted to ECR vide letter No. IPRCL/Ranchi/CCL-Giddi-A/24/788, 03.08.2023(Shown as Annexure AL11).

- 1.3.5 Communication received from Sr.DOM, Dhanbad Division mentioning "Modification of existing siding may be governed by FM Circular No. 11 of 2016 and its amendment" and also requested for "processing of this proposed project with FSR and application fee" vide letter No. PL/Giddi/04082023, dated 08.08.2023(Shown as Annexure AL12).
- 1.3.6 Subsequently, FSR along with registration fee was submitted to ECR on 24.08.2023 vide letter No. IPRCL/Ranchi/CCL-Giddi-A/24/817, dated 24.08.2023(Shown as Annexure **AL13**).
- 1.3.7 A meeting, discussion and presentation was held with DRM and other concerned officials of Dhanbad Division, ECR on 03.11.2023. Some points were deliberated by DPR. Incompliance the points ware communicated to CCL vide letter No. IPRCL/Ranchi/CCL-Giddi-A/24/883, dated 04.11.2023(Shown as Annexure Accordingly a meeting and discussion was held with GM and other concerned officials of Argada Area & HQ, CCL on 06.11.2023. The compliance received from CCL vide letter GM(A)/Secty./2023/18/230, dated 06.11.2023(Shown as Annexure AL15). Subsequently, compliance of observation of meeting dated 03.11.2023 submitted **ECR** vide was to letter No.





IPRCL/Ranchi/ECR/18/CCL/Giddi/884, 09.11.2023(Shown as Annexure **AL16**).

- 1.3.8 Sr.DOM, Dhanbad Division, ECR communicated for deposition of Codal fee of 1% for issuance of IPA and observations incorporated DPR via email dated 20.11.2023 vide in letter No PL/Giddi/04082023, dated 14.11.2023(Shown as Annexure **AL17**). Same was communicated to CCL vide letter No. IPRCL/Ranchi/CCL-Giddi-A/24/888, 21.11.2023(Shown as Annexure **AL18**). The Codal fee was submitted to Dhanbad Division, ECR vide letter No. IPRCL/Ranchi/ECR/Giddi-A/18/926, dated 26.12.2023(Shown as Annexure AL19).
- 1.3.9 In-Principal Approval (IPA) communicated by Sr. DOM, Dhanbad Division, ECR vide letter No. PL/Giddi/04082023, dated 02.01.2024(Shown as Annexure AL20).

 Incorporating the compliance of observations, this DPR has been prepared.

1.4 Proposed Alignment:

The siding alignment has been developed in consideration with CCL's requirement of Rail link between Patratu station of Dhanbad division under E.C. Railway and loading yard for loading of coal from Giddi-A siding and dispatch of rakes through Railway network for different destinations.

- 1.4.1 The proposed siding has taken-off from Patratu Railway Station in Barkakana – Garhwa Road section of Dhanbad Division under East Central Railway.
- 1.4.2 Existing Giddi-A siding has five lines. Two lines have merged in and rest three lines are terminated with three separate Dead Ends at the terminating end.
- 1.4.3 Existing Giddi-A siding has a wharf wall loading arrangement for loading of Coal beside Line No. 1.





- 1.4.4 The codal life of the tracks and their fastenings have already been expired as well as outdated and the lines are not suitable for movement of traffic. It requires complete track renewal with replacement of rails, sleepers & ballast with correction in formation along with providing suitable gradient of the yard as per SOD.
- 1.4.5 In order to resume the loading of outward Coal traffic from the siding, it has been decided to construct two new rail lines in the existing siding; one loading line and one engine reversal line after dismantling all the existing old lines.
- 1.4.6 As such, under proposed yard, all the existing lines will be dismantled and the siding will be developed with two lines only; one for serving the wharf wall loading and another for Engine escape/reversal. A Brake-van siding and a Shunting Neck is proposed keeping in view the quantum of traffic to be handled in the siding.
- 1.4.7 Provision of one Electronic In-Motion Weighbridge is kept for weighment of outward Coal as per the guidelines of the railway.
- 1.4.8 Existing Wharf Wall of 729m X 30m available and provision of additional 263m X30m loading platform will be kept for stacking & loading of coal by Pay-Loader or other mechanical means.
- 1.4.9 Particulars of existing lines:

Srl. No.	Line No.	CAL/CSL	Basis of Calculation	Description
1	Line No.1	700.00	FM to FM	Loading Line
2	Line No.2	700.00	FM to FM	Engine Reversal Line
3	Line No.3	720.00	FM to FM	Holding Line
4	Line No.4	720.00	FM to FM	Holding Line
5	Line No.5	850.00	PT to PT	Holding Line
6	Rail Level Loading Platform beside L. No. 1			

1.4.10 Engineering Scale Plan showing yard remodeling of existing Patratu Station and entire proposed alignment with loading siding and longitudinal section is shown as **Annexure-A5**





1.6 Signal & Telecommunication:

- 1.6.1 At present, there is no Signalling arrangement in the siding for reception & dispatch of trains from/to the siding including shunting operations.
- 1.6.2 For easy and safe movement of trains one EI Cabin at the loading yard has been proposed and to be equipped with Shunt signals for placement & drawn out of rakes in the siding including shunting activities like, engine reversal, brake van marshalling, etc.
- 1.6.3 Necessary alteration of interlocking at existing Patratu station yard will also be required for easy and safe movement of trains.
- 1.6.4 Working of trains will be done through proper signaling under absolute block system and details of Signal and Interlocking are described in the Signal Engineering portion of this report.

1.7 **Electrical Engineering:**

- 1.7.1 The proposed siding will be electrified by 25 KV AC traction matching with electrification of the adjoining sections with suitable arrangement of OHE isolation (Double Pole Isolators with earthing heels).
- 1.7.2 The details of electrification and the procedure for loading are elaborated in the Electric chapter.

1.8 Commercial Formalities:

1.8.1 The siding will be commissioned and operational in terms of Railway Board's Fright Marketing Circular No. 11of 2016 and modified as 06 of 2020. The policy of 'Engine-on-Load' (EOL) scheme as incorporated in Freight Marketing Circular No. 5 of 2013 dated 07.03.2013 shall be followed. The loading will be done within the specified free time for various types of block rakes as stipulated therein. Commercial formalities for working of trains on account of coal loading including





manning of weighbridge at the in-plant yard may be finalized after discussion with the Commercial department of Dhanbad division of E.C. Railway.

1.8.2 Necessary FOIS & TMS arrangement for issue of "Railway Receipt" (RR) for the outgoing coal rakes and suitable rest room facilities for the train crews will be provided near the loading yard.

1.9 Carriage & Wagon Requirements:

- 1.9.1 As per latest instructions from IR, intensively examined empty rakes are to be supplied for loading by IR and train should run on round-trip BPC. Hence, there will be no need for any maintenance facilities within the siding premises.
- 1.9.2 However, the cost of re-railing/restoration work, in case of any accident or derailment occurred owing to the fault of siding holder, will usually be borne by the siding holder.

1.10 Cost Estimate:

1.10.1 The Anticipated cost of the project (Excluding cost of land licensing) has been worked out on the basis of prevalent cost of men & materials. Summary of cost, departmental wise is shown in the table below. The detail of cost estimate is shown in Annex – A14 toA16.

SI. No.	Type of works	Cost [In Rs]
1.	Civil Engineering	16,40,98,699.66
2.	Signal & Telecommunication	8,03,53,721.44
3.	Electrical Engineering (TRD)	2,09,54,086.76
4. Electrical Engineering (General)		2,03,63,672.96
	Total	28,57,70,180.82





1.10.2 In addition to above, Codal fee of 2% to ECR as per FM Circular No. 11 of 2016 and its amendment, labour welfare cess @ 1%, environmental cess @1% and GST @ 18% as applicable, are to be borne by the CCL authority.

1.11 Project Execution:

1.11.1 On approval of the project by East Central Railway, the construction works shall be undertaken.













2.0 Traffic Projection:

2.1 Proposed Traffic of Giddi-A Railway Siding:

2.1.1 This chapter briefs the traffic proposed to be handled at the Railway siding and is mentioned in the table below.

Commodity		No. of Wagons			Tonnes Per Annum	Rakes Per Year	Rakes per Day (330 working days in a year as per Railway)	Bunching Factor (25%)	With 25% Bunching Factor
COAL	BOXN	59	67	3953	36,00,000	910.70	2.75	0.3	3.05

- 2.1.2 From the above it can be seen that the total Outward traffic will be 3.05 Say, 3 rakes per day.
- 2.1.3 BOXN wagons are to be used for transportation of Coal from Giddi to different destinations (Thermal Power Stations & Industrial Houses) of Central Coalfield Limited.

2.2 System of Working:

The siding is proposed to handle 3.6 MTPA of outward Coal traffic. According to traffic projection, on an average 3 rakes of outward Coal will be loaded and dispatched daily form Giddi-A siding. Empty rakes will be received from Patratu station and loaded rakes will also be dispatched through Patratu station.

2.2.1 Working of trains from Patratu station to Giddi-A siding and vice versa has been planned keeping in view the diversion of train movement as furnished below.





2.2.2 Reception of Empties at the Siding from Patratu Station:

- (i) Empty rakes meant for Giddi siding may be admitted on one of the clear lines except L/1 to L/4 at Patratu Station. Rakes received from Barkakana end will involve engine reversal at Patratu for dispatching the rake into Giddi siding. However, rakes received from Garhwa Road end will be dispatched directly to Gidi siding. No engine reversal is required.
- (ii) Before arrival of the train at Patratu station, prior information to the siding authority is to be given by SM-on-duty at Patratu for placement of rake in the siding with the details of the incoming rake.
- (iii) The movement of trains from station to in-plant siding and vice versa will be signal movement guided by signals. In case of failure of signals, trains will be worked on a written authority as per extant rule after setting the facing & trailing points, clamping and padlocking the concerned points of the nominated line.
- (iv) The SM-on-duty of Patratu shall advise the Station Master/Siding Supervisor about the train to be dispatched to the siding. He will take line clear from siding supervisor under exchange of Private Number.
- (v) SM-on-duty/Siding Supervisor at Giddi siding, before granting 'Line Clear' to SM-on-duty at Patratu, will ensure clearance of the loading line for admission of the said train. He will grant 'Line Clear', if the loading line is clear for admission of the empty rake.
- (vi) On getting 'Line Clear' from SM-on-duty/Siding Supervisor at Giddi-A siding, SM-on-duty at Patratu will take-off the concerned departure signal/signals at his station to dispatch the rake for Giddi-A siding and inform the departure of the train to SM-on-duty/Siding Supervisor at Giddi-A siding.





- (vii) After departure of the empty rake from Patratu station, SM-onduty/Siding Supervisor at Giddi-A siding will take-off the Home signal for admission of the said rake on the loading line.
- (viii) The train, received in the siding shall stop at the stop board/shunt signals provided for each line inside the siding clearing fouling mark.
 - (ix) On arrival of the rake on the loading line, engine is to be detached and reversed through engine reversal line and attached on the rake at Patratu end.
 - (x) Loco Pilot will lower the Panto and engine is to be shut down to allow loading activities.
 - (xi) Double Pole Isolators with earthing heels are provided at both the ends of the loading line. Before allowing loading activities to start, both the Isolators are to be opened to cut off the power supply to the OHE. Siding Supervisor will personally ensure that the Isolators are opened before allowing loading activities.
 - (xii) In the event of failure of signals, the Loco pilot and guard will be issued a written authority in the prescribed format and will be Piloted-out or Piloted-in as the case may be. Acknowledgement of the Loco Pilot & Guard on the concerned column of the written authority is to be obtained and necessary foils are to be handed over to the Loco Pilot after compliance of the above.
- (xiii) It is the entire responsibility of Siding Supervisor/SM regarding proper setting, clamping and padlocking of all the concerned points (both facing and trailing) in the siding during failure of signals and he will be held responsible, if any point is not properly set, clamped and padlocked.
- (xiv) Guard & Loco Pilot of the train will be vigilant and cautious while passing over the points at the siding and they should establish communication with each other through walkie-talkie sets and start the train into Giddi siding observing speed restrictions





during non-interlocked working. If walkie-talkie set is not available with Loco Pilot & Guard or communication between them is not established over walkie-talkie, they will exchange the hand signal and enter into the in-plant siding whistling frequently. The speed shall not exceed 30 KMPH.

(xv) Siding authority is responsible for securing vehicles inside plant siding once engine is detached after placing the vehicles. On arrival of the train on the loading/unloading line, adequate safety measures are to be taken for securing & protection of wagons of the rake by siding Supervisor to prevent the rake from rolling down.

2.2.3Clearance/Dispatch of Loaded Rakes from Siding to Patratu station:

- (i) After completion of loading of the rake in Giddi siding, Siding Supervisor/SM has to give clearance memo to Goods Clerk. Prior to giving such clearance memo, Siding Supervisor/SM has to personally ensure that the rake is ready in all respects for clearance. After checking the ground reality, Goods Clerk will repeat the message to the SM on duty/Patratu who will record this in a separate register maintained for this purpose. SM on duty will repeat the message to the Section Controller.
- (ii) MT of the train is to be marshalled as per the direction of traffic and engine will be attached at Patratu end for dispatching the train.
- (iii)Siding Supervisor/SM of siding has to ensure personally that the appliances used for securing the vehicles are removed and see that train is not detained due to track jammed during loading and there is no obstruction to track in any form.
- (iv) On duty Siding Supervisor/SM of Gidi siding shall advise the Station Master/Patratu about the train to be dispatched. He will take line clear under exchange of Private Number and take of the





concerned departure signal.

- (v) Outgoing rake is to be worked out after necessary GDR check at siding.
- (vi) Loco Pilot and Guard have to check the train thoroughly and ensure that continuity of pressure is maintained. They will work the train as per JPO circulated from time to time for clearance of loads.
- (vii) On readiness of the train and after getting line clear from Patratu Station, the train will be dispatched from Giddi siding to Patratu.
- (viii) Siding Supervisor/SM will inform the on-duty-SM at Patratu about departure of the train, who will nominate a clear line and take-off concerned reception signals for admission of the train.











Chapter-3

Civil Engineering

3.0 Introduction:-

3.0.1 Central Coal Field Ltd. (CCL) is in the process of developing six new sidings and to revive the existing sidings by constructing new rail line with provisioning of wharf wall loading platform in the sidings to enhance loading and dispatch of coal. Revival of existing Gidi siding taking-off Patratu station located on Barkakana – Garhwa Road section of Dhanbad Division of ECR through complete yard remodeling keeping the Wharf loading system in operation has been taken up by CCL. CCL has entrusted IPRCL Ltd. for survey work and subsequent submission of Draft Project Report and approval of Detailed Project Report from East Central Railway.

3.1 Serving Railway Station:-

3.1.1 The siding is taking-off Patratu station on Patratu-Saunda branching BARKAKANA – Garhwa Road section of Dhanbad Division of East Central Railway (ECR). Patratu is a 'B' class crossing station on a double line, electrified BG section. Centre Line of the Station building.

3.2 DESCRIPTION OF ALLIGNMENT:

3.1.2 Loading yard equipped with 2 lines; one loading line and one engine reversal line in addition to a break van siding is, now proposed as per Alternative-I.

Srl. No.	Line No.	Description of Line	CAL/CSL
1.	Line. No. 1	Loading Line	1027.044 M (FM to FM)
2.	Line. No. 2	Engine Reversal Line	764.492M (FM to PT)
3.	B/V Loop	Brake Van Siding	80.514 M (DS to DS)

3.1.4 **Route Length:** Total route length of the siding is 1.431 Km and the total track length is 2.814 Km Approximately.





- 3.1.5 **Gradient:** Gradient list is attached as **Annexure A8**. The steepest gradient of existing Rail line on approach to yard 1 in 100. Proposed Gradient in yard is 1 in 1200.
- 3.1.6 **Curves:** In the proposed siding there are Two (2) nos. of curves with radius varying from 875m to 380m. The list of curve is shown as **Annexure A9**.
- 3.1.7 **Wharf Wall:** Existing wharf wall is retained and Extend by 263 m.

3.2 **Dismantling of existing Structures:**

Existing tracks will be required to be dismantled under this proposal. Released P-way materials will be handed over to CCL. Structures coming along the proposed alignment are to be dismantled. Scrap materials to be handed over to CCL.

3.3 **SURVEY METHODOLGY**:

- 3.3.1 Based on earlier approved Brief survey report (in discussion Plan), Mine reference plan and Topo sheets had been collected and field survey had been carried out. Pursuing to the terms and conditions, as enumerated in the scope of work section, the survey for feasibility study had been conducted at the site using state of the art technologies like UAV (Unmanned Aerial Vehicle). Total Station, GPS, Digital Level have been used for Survey and data had been downloaded in AUTOCAD to arrive at the existing features of the alignment corridor. Final location survey has been conducted at site with the help of precise and latest survey instruments, with adoption of modern survey methodology. Survey data downloaded in AUTOCAD format to arrive at the latest existing features of the indent corridor. Detailed layout of alignment has been marked at the site
- 3.3.2 Engineering Plan along with Longitudinal Section has been prepared with AUTOCAD and other modern survey software. Original ground





levels have been taken at suitable intervals (@20m interval) of the proposed route alignment and the proposed alignment along with ot her facilities have been incorporated in the layout plan.

3.3.3 Horizontal Control Points have been fixed along the laid-out alignment with respect to fixed reference points. Vertical control points have been fixed at suitable locations and the levels have been connected with the mother Bench Mark.

3.4 ENGINEERING PARAMETERS:-

- 3.4.1 **Gauge:** The gauge adopted for the proposed Railway siding is Broad Gauge (1676mm); i.e., the standard serving gauge of the serving Railway system from which the siding is proposed to be taking-off.
- 3.4.2 **Fixed Point**: The proposed line will be connected to Patratu Railway station of East Central Railway. Centre Line of Station Building (New) has been considered as Fixed Point.
- 3.4.3 **Level**: All the levels have been taken for this survey are based on plinth level of new Patratu station building. A list of Bench mark is shown as Annexure-A7.

3.4.4 Speed Potential:

The track structure of the proposed siding will be made suitable for movement of fully loaded rakes (considering 25-ton loading 2008 conditions). The maximum permissible speed is 50Kmph. However, speed restriction over turnouts and crossovers is the main criterion for loading yard hence it is considered as 30 kmph.

3.4.5 Length:

Total route length of the project is 1.431 Km and the total track length is 2.814 Km approximately.

3.4.6 Formation:

Formation of the proposed alignment will require cutting on existing ground for provide adequate gradient of the yard. A layer of minimum 300 mm thickness in cutting zone, a compacted layer of





blanketing material of approved quality granular / stone dust is designed to be provided over the compacted earthwork in formation in filling / cutting, conforming to RDSO guide line. Side slope of the embankment is designed to be grass turfed with approved quality and thickness. A cross slope of 1 in 30 on top of formation, both in filling and cutting zone is designed to be provided.

Minimum 6.5 mtrs track centre is proposed in between two tracks unless otherwise mentioned in the Engineering Plan.

3.4.7 Track Structure:

The proposed railway track is to be designed with 60 kg/R260, IRS T-12 (first quality) rails, laid on PSC Mono Block sleepers in straight and in curved alignment of radius less than 5°. Sleeper density is proposed to be 1660 nos. per Kilo metre over a layer of 300mm thick hard stone machine-crushed ballast cushion.

Points and crossings will be of 60kg rails with CMS crossings etc. on PSC sleepers with fan shaped layout. It is proposed for 1 in 8.5/12 Points and Crossings with curve switches throughout the Track Structure including Brake Van Siding at Loading Yard.

- 3.4.8 **Fixed structure:** All the fixed structures are to be designed in with the fixed structure as indicated in the Schedule of order to comply Dimension for Broad Gauge of Indian Railways.
- 3.4.9 **Land**: The proposed siding will be constructed within the land already acquired by CCL. The Civil Engineering Plan & L/Section drawing is placed at Annex-A5.
- 3.5 **Weighment Facility:** One 140T In-motion electronic weighbridge is proposed to be installed at CH-8298.501m with Control Room and TMS Room respectively for the purpose of weighing of empty as well as loaded wagons. Described in para 5.2 in this report.
- 3.6 **Cabin / Buildings:** There will be one EI Cabin Building at loading yard including other service buildings. Necessary, Crew Rest Room





will be provided at suitable location inside the loading yard. One two storied Service building also provided in suitable location in unused existing Wharf wall portion.

3.7 **Civil Engineering Cost Estimate**:

The estimated cost of civil engineering works has been calculated on the basis of up dated cost of men & materials and has been estimated to **Rs.16,40,98,699.66** without GST and other charges. The breakup of cost estimate has been shown in Annex-**A13.**

4.0 Compliances of observations

The para wise compliances of the observations communicated by Sr.DOM/DHN/ECR, vide his letter No. PL/Giddi/04082023, dated 14.11.2023 on FSR are furnished below-

Comments from HQ Engg./EC Rly.

Sl.No.	COMMENTS	COMPLIANCES
1	The chainage of the take off point from where the proposed siding starts should be mentioned in the FSR and also to be indicated on the plan, the wording "Take off point" for another Take off at ch.7788.537 M need be mentioned at all places and drawings of the FSR.	Noted & complied accordingly
2	As per index plan (Annexure A5) of the FSR, some of points and crossing are planned/proposed in 1 in 8.5 which need be reviewed and be planned in 1 in 12 fan shaped.	Due to land constrained we have to constrained 1 in 8.5 point and crossing.
3	The details under the gradient statement as shown in Annexure-A8 of the FSR should match with the parameters shown in the longitudinal section given at Annexure A4 & Annexure A5. The gradient between the respective chainage should appear in the longitudinal section & the chainages should be correctly mentioned as per the gradient statement.	Noted & corrected.
4	As per para 3.1.5 in the FSR, the steepest gradient of existing rail line on approach to yard is 1 in 100. Proposed gradient in yard is 1 in 1000. It may be noted that for existing works, maximum permissible gradient in station yards is 1 in 400 for new works & alterations to existing works, the recommended gradient is 1in 1200. For gradients steeperthan the recommended and up to 1 in 400, approval of competent authority may be required. This aspect may be reviewed.	Noted & kept 1200 gradient.





Sl.No.	COMMENTS	COMPLIANCES
5	Details of each curve should be mentioned on the enclosed Index plan (longitudinal section).	Noted &complied accordingly.
6	As per Para 3.1.6 in the FSR, maximum degree of one of the curves is proposed as 4.6 degree (380 m radius). This should be reviewed. Feasibility to bring the degree of curvature to 4 degree or below may be explored.	Noted & complied.
7	An electronic weigh bridge is proposed to be provided in this arrangement outside the railway boundary /premises in the siding line. The capacity, chainage at which located level on either side of track to be mentioned on the index plan and FSR. It may be noted that new weighbridges should be 120 Tonne capacity as per prevalent railway Board Rates Circular.	Noted & 140T capacity IMWB at Ch: 8345.006 shown accordingly.
8	Provision, installation and functioning of weigh bridges shall strictly be governed by prevailing Rates master Circular along with its amendments issued by Railway Board from time to time.	Noted & agreed.
9	Minimum of 100 m level tangent rail track length shall be made available on either side of the In–motion weigh bridge.	As per Para 2.1.11 of RB's letter No. WD-29-MISC-19, "A minimum of 100m straight rail track length shall be made available with a gradient of not more than 1:400 on either side of EIMRWB.
10	Details of formation should be decided based on RDSO 'Guidelines for cuttings /fillings in Railway formation No. GE: G-2' should be followed for better appreciation and other railway's prescribed standards.	Noted &complied.
11	The thickness of blanketing material should be decided based on RDSO 'Guidelines and Specifications for design of formation for heavy axle load report no. RDSO/2007/GE: 0014'and 'Guidelines no. GE: G-1'.	Noted &complied.
12	Railway land boundary should apparently be depicted on the enclosed plan to differentiate between CCL's land and Railway land.	All land is under CCL and plan is updated accordingly





Comments from Sr DEN III/Dhanbad Division/EC Rly.

SI.No.	COMMENTS	COMPLIANCES
1.	Proposed ESP should be prepared with checklist	Noted & complied.
	of yard plan.	
2.	Curve Details for proposed tracks should be	Noted &complied.
	shown with following details: curve no.	
	deflection angle, degree of curve, tangent	
	length, and curve length, length of transition	
	curve, super elevation & speed potential to	
	each curve should be mentioned.	
3.	Railway land boundary to be mentioned in both	Noted &complied.
	directions.	
4.	Line isolation should be provided before take-	One DS is provided at
	off points off Giddisiding.	CH 7779.093M F/CSB
		for isolation of siding.
5.	North direction to be shown in tentative ESP	Noted &complied.
	Annexure A4 sheet 1 of 1.	
6.	Gradient infringement table to be shown in ESP.	No infringement.
7.	Grade post to be shown properly.	Noted &complied.
8.	Private siding FSR & DPR to be submitted by	Noted & complied.
0.	RDSO approved agency.	Noted & complica:
9.	Private siding ESP should be prepared based on	Noted &complied.
J.	model of approved ESP drawing.	Noted acomplica:
10.	PT, STR, FM, DE should be mentioned with	Noted &complied.
10.	chainage& proper symbol.	Trocca acomplicar
11.	Proper legend should also to be incorporated.	Noted &complied.
12.	Angles of turnout &chainage should be properly	Noted & shown in the
	mentioned.	drawing.
13.	Calculation of curve should be submitted.	Noted &complied
		accordingly.
14.	C/C distance to be shown between existing line	All existing lines are
	& proposed line of Giddi siding.	to be dismantled.
15.	In Annexure A5 sheet, formation level at	It is calculated from
	chainage 7906.294 M should be mentioned	CSB of PTRU.
	clearly that how it has been calculated. It	
	should be calculated from CSB PTRU.	
16.	In Annexure A5 drawing sheet, first level	No LC is required.
	crossing has been shown. It should be deleted	
	and replaced it with LHS/ROB as per Railway	





Sl.No.	COMMENTS	COMPLIANCES
	Guideline.	
17.	Annexure A4 & A5 Drawing sheet should be	Complied
	Drawn with connection from PTRU CSB.	
18.	Annexure A4 & A11 sheet, Drawing not	Redrawn &
	readable.	submitted.
19	In Annexure A4 & A5 Level not matched. It	Noted &complied
	should match properly.	accordingly.
20.	In annexure A5 loading line 1 CAL 1054.032	Noted &corrected
	(FM-FM)	accordingly.
	Whereas in Annexure A12 loading line no. 1	
	CAL 960.404 (PT-FM). Same as engine reversal	
	line CAL 803.061 (FM- PT) where as in	
	Annexure A12 engine scape line CAL 710.00	
	(FM-PT). It should be corrected.	







Chapter-4

SIGNAL & TELECOMMUNICATION





Chapter-4

SIGNAL & TELECOMMUNICATION

4.0 Introduction:

4.0.1 Central Coalfields Limited (CCL) have planned to revive the existing Giddi siding taking-off Patratu station on Patratu-Saunda section through complete yard remodeling. The proposed siding has been taken off from Patratu station between Barkakana – Garhwa Road section of East Central Railway under Dhanbad Division. The total track length of the proposed siding is 2.814 km approximately.

4.1 Engineering Layout:

- 4.1.1 The existing take-off point of the Siding is at Chainage 1998.5 from CSB of Patratu Station.
- 4.1.2 There will be two full length lines; one loading line with loading platform and one engine reversal line with one Brake-van loop & S.Neck.
- 4.1.3 Provision of one In-Motion Weigh Bridge has been kept for weighment of outward coal rakes.

4.2 Proposed Signalling Arrangement:

4.2.1 A new Siding Cabin is proposed to be provided at a suitable location at the loading yard for provision of Electronic Interlocking with Hot Standby. Control Cum Indication Panel with VDU is proposed to be provided in the SM's room for uninterrupted operations of traffic. All the points and Signals of the siding will be centrally controlled from the new Domino type Route setting Panel.





- 4.2.2 Full complements of Multi Aspect Colour Light Signals for reception & dispatch of trains are proposed to be provided. All the Signals will be LED lit for better visibility.
- 4.2.3 All the points over this yard will be operated electrically by non-trailable Rotary type Electric Point Machines. Crank Handles are proposed to be provided for operation of the Point Machine manually in case motor operated point fails to operate by the route setting panel.
- 4.2.4 Multi Axle Digital Counters (MSDAC) are proposed to be provided in lieu of conventional DC Track Circuits for reliability and safety in train operations.
- 4.2.5 SMPS based Integrated Power Supply (IPS) system is proposed to be provided for uninterrupted power supply.
- 4.2.6 Data Logger is proposed to be provided which automatically monitor and record environmental parameters over time for fault diagnosis, generating early warning of impending failures/ unhealthy systems.
- 4.2.7 A Lump Sum provision has been kept in the cost estimate for interslotting arrangement between Patratu station and new Siding cabin.

4.3 Cost Estimate:

The Abstract cost of the proposed Signalling arrangements work out to Rs. 8,03,53,721.44 excluding GST, and other charges and placed at Annexure A15.

4.4 Sketch Plan

The Sketch Plan for the Signalling arrangements is placed at **Annexure A11** for appreciation.

4.5 Execution time: S & T work will be executed within one year from the date of issue of work order subject to the approval of SIP and other documentations.





5.0 Compliances of observations

The para wise compliances of the observations communicated by Sr.DOM/DHN/ECR, vide his letter No. PL/Giddi/04082023, dated 14.11.2023 on FSR are furnished below-

Comments from HQ S&T/EC Rly.

SI.No.	COMMENTS	COMPLIANCES
1	Upgradation in signaling system will require upgradation in Saunda Cabin, Urimari and Patratu yard (upgrade after RVNL and works unit completion).	Noted
2	Cost of upgradation should be calculated as per latest yard layout approved in connection with works and RVNL work.	Noted
3	Proper communication between Patratu and its associated cabin should be developed.	Noted
4	Observation raised by divisional unit should be complied.	Noted

Comments from Sr.DETE (C)/Dhanbad Division/EC Rly.

SI.No.	COMMENTS	COMPLIANCES
1.	Inter distance between Giddi siding and Patratu station should be mentioned (Adjacent station and its km has not been shown).	siding and Patratu station is
2.	Signals position needs to be corrected in the tentative SIP.	Noted &corrected.
3.	Inter slotting system need to be provided for movements of train between PTRU to Giddi siding.	
4.	Agreed with the tentative Estimate cost of signaling system for Giddi siding for Rs.7,95,88,677.00 (seven crore ninty-five lakh eighty-eight thousand six hundred seventy-seven.) excluding GST & other charges.	Noted.
5.	For actual assessment of proposed work, copy of approved ESP is to be made available.	• •











<u>Chapter-4</u> Electrical Engineering

5.0 Introduction

- 5.0.1 Central Coalfields Limited (CCL) has planned for revival of existing Giddi Wharf Wall siding with rail connectivity from Patratu Railway Station for loading and onward transportation of coal from Argada Area.
- 5.0.2 Tentative traffic in a tune of 3 rakes per day to be handled has been firmed up for production plan of mines of 3.6 MTPA. 2-line loading yard for Wharf Wall loading has been envisaged at Gidi Siding.
- 5.0.3 The alignment is proposed to be laid in straight mostly with short stretches of curves of varying radius.

5.1 Mode of Traction

- 5.1.1 The section Gomoh Chandrapura Jarangdih Barkakana Garhwa Road under Dhanbad Division of East Central Railway was already electrified. Accordingly, the existing siding was also electrified to maintain uniformity of traction from operational point of view as well as to reap benefit of E.O.L. system. However, during survey, it was noticed that catenary wire for a length of 500.0m was missing along the track line approaching to new proposed siding, which has been included in the estimate. Survey of OHE condition from take off point, i.e Patratu has not been assessed.
- 5.1.2 All the lines proposed under this scheme shall be wired in full. The OHE work of the yard portion has been taken in the estimate. Total 2.808 Kms TKM is new OHE works to be done.

5.2 Description of OHE system

- 5.2.1 Conventional all copper regulated OHE matching with the OHE installed on Gomoh Barkakana Garhwa Road section shall be provided.
- 5.2.2 A minimum implantation of 2.90 m with standard masts/foundations to suit loading and insulators of 1050 mm CD shall be provided.





5.3 Power Supply Arrangement

- 5.3.1 Traffic being marginal, no augmentation of existing Patratu TSSs feeding the section is proposed.
- 5.3.2 As Patratu Railway Station is under a double line section, a 2-Interruper and 1-Circuit Breaker will be provided for extension of existing Patratu SSP. Switching post with common bus at extended Patratu SSP is proposed to electrify the siding section for Giddi Siding. The circuit breaker shall have bi-pass isolator. This Switching Post is proposed to be SCADA controlled from Barkakana RCC.

5.4 Isolation Arrangement

- 5.4.1 Section Insulator with/without Isolator shall be provided at suitable points for isolation.
- 5.4.2 The loading line shall be equipped with section insulator type short neutral section at either end of installation and shall be equipped with double pole (DP)/ single pole (SP) isolator with earthing heel at either end of short neutral section as required.
- 5.4.3 Wiring cum Tentative Power Supply diagram is placed under Annex-A-

5.5 Provision of AT

AT is proposed to be provided as an alternate source of supply to the siding cabin.

5.6 Power line crossing

There is no power line crossing comes within the vicinity of alignment.

Part B: General Services

5.7 Electrification of Service Buildings

Electrification of In-plant Cabin, Crew rest room, Console room, DG room, FOIS-TMS Room & Switch panel room has been considered.





5.8 Ilumination of Loading yard & GDR Check Pathway.

Illumination of Loading Yard through 7 mtr octagonal pole by 90W LED flood light and 30 mtr long high mast by 400W LED flood light luminaries (8 No poles for loading Yard), GDR Check Pathway by low height Poles & LED type Street light fittings are proposed. Now LED has been extensively used to minimize the power consumption.

5.9 D.G. Set

3 Nos D.G. set of adequate capacity (2 no for console room etc and 1 for Siding Yard and allied unit) to feed essential loads including console room is proposed to meet exigency.

5.10 Power Supply

It is considered that HT supply to the tune of 11 KV grade shall be arranged by siding owner up to switch panel room wherefrom feed to various load points will be distributed for considering the load caters about 100KVA under siding premises.

5.11 Modification of Power Line

Now there is no power line crossing comes within the vicinity of the alignment. In case any crossing comes up over the proposed alignment and does not conform to crossing regulations, the same need also to be incorporated. All works are to be carried out as per drawings approved by Railway.

Part C: General

5.12 Agency for execution of work

It is considered that the entire work will be carried out by siding owner through Consultant like IPRCL, with approval of Railway. Cost has been worked out accordingly.

5.13 Cost of work

In terms of extant orders, cost of electrification work is to be borne by siding owner.





5.14 Cost of work is based on the rates offered by various Vendors/Tenderers in the recent past and escalated.

The overall project cost is **Rs. 4,13,17,759.72 (including General Electrical)** without GST and other charges. The breakup of cost estimate has been shown in **Annexure – A14**.

6.0 Compliances of observations

The para wise compliances of the observations communicated by Sr.DOM/DHN/ECR, vide his letter No. PL/Giddi/04082023, dated 14.11.2023 on FSR are furnished below-

Comments from HQ TRD and Sr DEE/Dhanbad Division/EC Rly.













Chapter-6

Commercial

6.0 Introduction:

CCL is reviving the existing loading siding with Wharf Wall loading for existing Giddi-A Coal Mines and Giddi-A Coal Washery. The coal traffic with projection of 3.6 MTPA is planned to be transported from the proposed coal loading siding to various destinations by Rail through existing Railway station Patratu in Barkakana – Garhwa Road section under Dhanbad Division.

6.1 Engine-on-Load Scheme

- 6.1.1 The siding will work on EOL scheme as per Freight Marketing Circular No.5 of 2013 circulated vide Railway Board's letter No. 2012/TC(FM)/18/21 dated 07.03.2013. Trains will be worked on the policy of 'Engine on Load' scheme' and the party should develop facilities for loading and unloading on "Engine-On-Load" concept and design the yard layouts to facilitate the same. Engine-On-Load" would mean loading or unloading in such manner and within such time as would permit clearance of the same rake by same engine. Under this scheme, the train engine will remain available during loading operation in the siding and wait on Railway's account so as to work the loaded train immediately after completion of loading.
- 6.1.2 The siding holder will be required to opt for the EOL operations under an agreement with the Zonal Railway administration as per the terms & conditions of the "EOL" operations. Permissible free time under EOL scheme for various types of wagons used for coal loading, according to Para 5.3 of the said circular, is indicated below,





Type of wagon	EOL free time
Open wagons (BOXN etc.)	3:00 hrs.
Hopper wagons (BOBRN etc.)	3:00 hrs.

6.2 Weighbridge and TMS Facilities:

- 6.2.1 As per requirement 01 No of 140 Ton with two alternate load cell Electronic in-Motion Weigh Bridge at Ch: 8345.006 m from CSB of Patratu station has been proposed as shown on the plan. Standard tyre load for a specific wagon will be deducted automatically during generation of R.R(Railway receipt) through FOIS monitored by CRISS.
- The loading arrangement will be linked with FOIS

 Terminal for which a separate office with necessary furniture will be provided at the cost of siding owner.

 TMS equipment including room, furniture, electricity, hardware peripheral, and connectivity telephone for observance of various commercial network formalities at the siding should be arranged by the siding owner. However, necessary software will be supplied by Railways for issue of computerized Railway Receipt (RR). The Weighbridge should conform to the schedule of technical requirements as per RDSO's latest specifications as regard to installation of weigh bridge. The siding owner should arrange calibration testing and certification from the manufacturer or authorized service provider.
- 6.2.3 The commercial formalities for loading of coal rakes including manning of Weighbridge at the loading





terminal may be finalized after interaction and discussion with the Commercial Department of Dhanbad Division as well as HQs of East Central Railway.

6.3 Execution of Private Siding Agreement:

6.3.1.1 The private Siding Agreement on the prescribed format shall be executed between Railways and Central Coalfields Limited. The siding owner shall sign the agreement as soon as the agreement documents are served to them by the East Central Railway.

6.4 Pollution Control:

6.4.1.1 CCL has to obtain necessary clearance from the Union Ministry of Environment & Forests (MOEF) for commissioning agreement at the siding and status to be informed to the Railways.

6.5 Compliances of observations

The para wise compliances of the observations communicated by Sr.DOM/DHN/ECR, vide his letter No. PL/Giddi/04082023, dated 14.11.2023 on FSR are furnished below.

Comments from HQ Commarcial/EC Rly.

SI.No.	COMMENTS	COMPLIANCES
8	CCL has pendency of huge amount of railway dues. Therefore, clearance of old railway dues also needs to be linked with the issue of IPA for FSR for reviving the work of existing Giddi siding of CCL.	

Comments from Coal Area Manager/Dhanbad Division/EC Rly.

SL NO.	COMMENTS	COMPLIANCES
1.	As per Railway Board's letter no. TC-1/2019/108/1, dtd. 11.07.19, all loading points should be covered by weighbridge. Siding owner should provide the Weighbridge at his own cost and the cost of manpower to operate the weighbridge.	of 140T capacity is proposed at CH: 8345.006M F/CSB.





SL NO.	COMMENTS	COMPLIANCES
2.	The cost of procurement (inclusive of the requisite warranty and a post-warranty, five-year comprehensive AMC), installation, maintenance (even after the expiry of the initial warranty and the five-year comprehensive AMC) and replacement of these EIMWB would be borne by the siding owner.	Agreed.
3.	Such weighbridges are to be integrated with FOIS and the cost of integration shall be borne by the siding owner.	Agreed.
4.	TMS (POIS) terminal shall be installed at the siding and all cost related to installation should be borne by siding owner. The siding owner shall also provide all facilities like room, furniture, electricity, network connectivity etc for issuing of Railway Receipt (RR).	Agreed.
5.	Siding owner shall sign a Siding Agreement as mentioned in Para 18 of Rly Board's Master Circular on Gati Shakti Multi Modal Cargo terminal (GCT)-2021 No. 2021/TC(FM)/18/23, dtd 15.12.2021 before Commissioning of the siding and before issuance of Commercial Notification of the siding.	Agreed.
6.	The siding will work on "Engine on load" scheme. Siding owner should develop facilities for loading and unloading on "Engine on load" concept and design the yard layout in such manner that the loading of same rake by same engine under free time of 3 hrs. The siding owner will be required to opt for the Engine on load operation under agreement.	Agreed.
7.	Siding owner should also take environment clearance by Union Ministry of Environment and Forest for the Construction of the proposed project.	Agreed.
8.	Joint Survey by a team comprising of officials/representatives from 'Railway' & 'Siding owner' would be conducted by Railway side for feasibility study of the	Agreed.





SL NO.	COMMENTS	COMPLIANCES
	proposed site & Joint Survey report should include 'gradient', 'centre to centre distance', 'turn out', length of siding from siding to serving station and also shunting is required for placement and drawn-out rakes.	
9.	Siding Owner shall agree with all the terms & conditions on private siding of Freight Marketing Circular No 11 of 2016 (modified circular dtd. 23.06.20) and Rly Board's Master Circular on Gati Shakti Multi Modal Cargo terminal (GCT)- 2021 No. 2021/TC(FM)/18/23, dtd 15.12.2021 &other extant circulars from time to time.	Agreed.









CHAPTER-6 Mechanical Engineering

7.0 General:

7.0.1 CCL is reviving the existing Giddi private railway siding for loading of Coal from Giddi-A coal Mine and Giddi Coal Washery. The coal traffic with projection to 3.6 MTPA is planned to be transported from the proposed coal loading siding to various destinations by Rail through existing Railway station Patratu in Barkakana-Garhwa Road section under Dhanbad Division of ECR.

7.1 Carriage & Wagon requirements

- 7.1.1 As per latest policy instructions from IR, intensively examined empty rakes are to be supplied by IR for loading of coal and train should run on 'Round-Trip BPC'. Hence, no C&W maintenance facilities within the siding premises are necessary. Running repair of wagons and staff cost, thereof, in all cases, should be borne by Railways as per existing rules. The siding will come up with EOL concept and the train engine will remain available during loading or unloading operations in the siding on Railway's account. The siding owner may, therefore, not be required to maintain a captive engine at his cost under the 'EOL' operations.
- 7.1.2 For damage and deficiency to wagons inside the siding premises owing to negligence of siding owner, regular damage and deficiency bills will be raised on the siding owner on the basis of joint sample check to be done in every six month or as fixed by East Central Railway. However, for severely damaged wagons, this will be done on case to case basis. Railway's discretion for charging damage/deficiency bills on case to case basis shall be final.
- 7.1.3 As per existing policy, the costs of re-railing/restoration work, in case any accident or derailment occurred owing to the fault of siding holder, will be borne by the Siding holder. In terms of the "JPO on





wagon damages", circulated vide letter no. EDTT/S-RB's letter 2010/TT-IV/0/1,dated 18.09.2015, a joint committee of Railway consisting of Sr.DOM, Sr.DME and Sr.DCM of the concerned Division along with the representative of the siding owner may inspect the loading arrangement once in three months to identify whether the extant wagon loading procedure/arrangement is causing or likely to cause damage to the wagons. Penalties for damages, if any, should be imposed as per procedure laid down in the above noted JPO regarding punitive action and also to recover the cost of damage of wagons.

7.2 Provision of Weighment Facilities

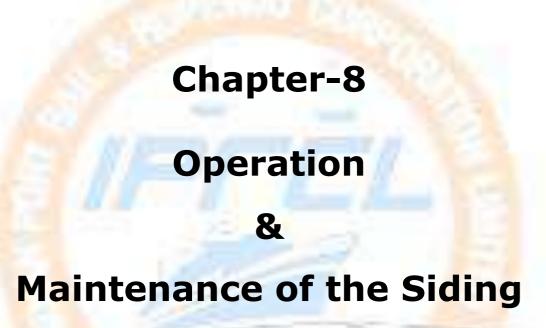
7.2.1 In the loading yard one 140 Ton with one additional alternate load cell arragement Electronic in-Motion Weigh Bridge at Ch: 8298.501 m has been proposed to be installed for weighment of empty as well as outward loaded wagons. Calibration and testing of the weigh bridge will be done by the siding owner in consultation with the concerned railway officials of Dhanbad Division. Railway Test van, required for calibration and testing of weighbridges, for which necessary higher charges for Test van will be charged by Railway as per latest Rates Circular.

7.3 Miscellaneous

One rest room with toilet facilities for the train crew shall be near the loading point. Necessary concrete pathway with suitable/proper illumination is required to be provided for GDR checking of outgoing rakes.











<u>Chapter-8</u> <u>Operation & Maintenance of the Siding</u>

8.0 General

The siding will be worked on EOL concept and the policies on 'Liberalization of Siding Rules' as communicated vide FM Circular No.11 of 2016 as circulated vide Railway Board's letter No. 99/TC/(FM)/26/1/Pt.II dated 22.08.2016 and FM Circular for 2020 should be followed regarding maintenance of the siding.

8.1 Civil Engineering

Civil Engineering maintenance shall be done by the siding owner at his own cost and Railways should not claim for any inspection charges. The siding may be maintained by engaging approved Agency.

8.2 Electrical

- 8.2.1 OHE maintenance cost for the siding including for the portion of Retractable OHE shall be borne by Siding owner. The portion of Retractable OHE including allied machineries shall be maintained by the siding owner by awarding AMC to the supplier of the system.
- 8.2.2 The cost for maintenance of Electrical (General) assets within the Siding holder's premises will obviously be incurred by the siding holder.

8.3 Carriage & Wagons:

As regards to C&W maintenance, no C&W facility is required to be developed inside the siding premises. Running repairs of rolling stocks including materials and staff cost in all cases shall be borne by the Railway. However, the cost of re-alignment including repairing cost of Railway stock owing to any derailment or accident occurred due to the negligence of siding owner shall be borne by the siding owner.





8.4 Signal Engineering & Telecommunication

It is proposed to commission one E.I Cabin inside the Loading yard premises. For maintenance and up keeping of the signalling assets, CCL may provide the following staff, preferably from the retired Railway employees.

SI No	Description of staff	Nos
1	S&T Supervisor	1
2	S&T Maintainer including LR &RG	3
3	S&T Helper including LR &RG	3
	Total	7

8.16 Operating staff

For smooth operation of the Loading yard cabin (E.I) and to conduct shunting operation of Brake van and engine following operating staff, may be provided preferably from retired Railway employees, as assessed for round the clock working for train operation:

SI No	Description of staff	Nos
1	Supervisor (Traffic)	1
2	Panel Operator including RG & LR	4
3	Traffic Assistant including RG & LR	4
4	Shunting Supervisor including RG& LR	2
5	Shunt man including RG& LR	4
	Total	15





9.0 Compliances of observations

The para wise compliances of the observations communicated by Sr.DOM/DHN/ECR, vide his letter No. PL/Giddi/04082023, dated 14.11.2023 on FSR are furnished below,

Comments from Divisional OPTG & DRM/ Dhanbad/EC Rly.

Sl. No.	COMMENTS	COMPLIANCES
OPTG:		
1.	Connectivity from PTRU to proposed siding should be shown with take-off point.	Noted &complied.
2.	Speed between PTRU to proposed Giddi siding should be increased from 15 KMPH to 30 KMPH (total distance up to DE of siding 9.2 km).	Noted &complied.
3.	There is no information about LC gate. Details of LC gate with elimination plan is required in concern Para of DPR.	There will be no LC in the siding.
DRM/DI	HN:	
1.	Payment of codal charges as well as outstanding should be submitted before processing and submission of ESP.	Noted and it will be complied.
2.	DPR should include weighment procedure as well as unloading of excess weight procedure.	One EIMWB of 140T is proposed at CH 8345.006M F/CSB on the loading line. In case of excess loading detected in the EIMWB, the same will be unloaded & adjusted in the siding.





Comments on IPA communicated by Sr.DOM/ Dhanbad/EC Rly.

SI. No.	Observation	Compliance
1	All observations made vide reference letter no. (ii) must be complied and taken into consideration while preparing DPR & ESP	Noted & Complied
2	DPR to be submitted (Six copies) in hard copy and soft copy (single PDF).	Noted
3	ESP with miniature schematic plan to be submitted at division with soft copy and hard copy for onward approval with approval of DPR.	Noted & Complied
4	The siding holder has to be abiding by the Railways terms and conditions according to extant rule of Railways regarding staff cost, maintenance charge of track OHE, Signaling etc. as applicable from time to time.	Noted
5	Railways reserve the right to incorporate any kind of change, if fee necessary in view be binding on the siding holder.	
6	Siding will be strictly guided by existing FM Circular no. 11 of 2016 issued by Railway Board bide letter No. 99/TC(FM)/26/1/ptII dated-22.08.2016 & FM circular no. 06 of 2020 and correction slips/circulars/amendments issued by Railway time to time in this regard.	Noted

CHAPTER-9 Anticipated Cost of Railway Infrastructure





Chapter-9

Estimated Cost of Railway Infrastructure

9.1 Civil Engineering Cost

The Civil Engineering cost has been computed taking into consideration of present-day cost of earthwork, Permanent Way, Track, Ballast, Track Fittings, Bridges, etc. for the Railway infrastructure as planned in this Report. The project shall be constructed on the Rly. land which is under lease by CCL. As such, the cost of land is not included in the estimate. The anticipated cost of Civil Engineering works amounts to **Rs. 16,40,98,699.66**

The cost estimate is shown at Annex. -A13

9.2 Signal Engineering & Telecommunication Cost

The anticipated cost without GST & other charges for the Signal & Telecommunication arrangements for the related works of the proposed Loading yard, E.I.Cabin, estimated at Rs. 8,03,53,721.44. The details of the cost estimate are furnished at Annex. –A15.

9.3 Electrical Engineering Cost

The siding is under the electrified section. Hence, electrification of the siding is to be done in conformity with the serving station & serving section to avail the benefit of EOL operation. The cost of general electrical works for illumination of loading yard has been included in the cost estimate also.

Anticipated Cost of work Rs. 4,13,17,672.96 (Including General Electrical)without GST & other charges stands at Rs. and is placed at Annex- A14.





9.4 Total Capital Cost

9.4.1 Cost Estimate:

The Estimated cost of the project (Excluding cost of land licensing) has been worked out on the basis of prevalent cost of men & materials. Summary of cost, departmental wise is shown in the table below.

Department wise cost estimate is shown in **Annex – A13 to A15.**

9.4.2 Abstract Cost Estimate

SI. No.	Type of works	Anticipated cost [in Rs]
1	Civil Engineering	<mark>16,40,98,</mark> 699.66
2	Signal & Telecommunication	8, <mark>03,</mark> 53, <mark>72</mark> 1.44
3	Electrical Engineering (TRD)	2,0 <mark>9,54,086</mark> .76
4	General Electrical	2,0 <mark>3,6</mark> 3,6 <mark>72</mark> .96
	Total	28,5 <mark>7,70,18</mark> 0.82





	Departmental charges and stages of payment			
SI N o	Agenc y	Total charge s	Stages of payment	Departmental charges*
1	Railway	121/2%	Approval of undertaking survey Conveying approval to survey / plan & estimate Before commencement of execution of work Applying for final approval of completed work	1% of AC 2% of EC - 1% of AC 8½% of EC 12½% of EC -
2	Party	61/4%	Approval of undertaking survey Conveying approval to survey / plan & estimate Before commencement of execution of work	AC
3	Approv ed Consult ant	4% (all works except OHE & S&T) 61/4% (for OHE	Approval of undertaking survey Conveying approval to survey / plan & estimate Before commencement of execution of work Applying for final approval of completed work Approval of undertaking survey Conveying approval to survey /	AC Nil 4% of EC – 1% of EC 2% of EC – 1% of
		&S&T works)	plan & estimate Before commencement of execution of work Applying for final approval of completed work	

*AC: Anticipated Cost i.e., cost as per Feasibility Study Report;

EC: Estimated Cost i.e., as per Detailed Project Report;

CC: Completion Cost i.e., Cost calculated on the basis of actual payment

made for the Project.





List of Annexure

SI. No.	Subject	Annex No.
1	CCL authority requested IPRCL to submit the budgetary offer dated 19.01.2023	AL-1
2	IPRCL submitted budgetary offer dated 22.02.2023	AL-2
3	Work Order issued by CCL authority to IPRCL dated 06.03.2023	AL-3
4	Draft DPR submission to CCL Dated 13.06.2023	AL-4
5	Draft DPR submission to CCL Dated 03.07.2023	AL-5
6	Observations via email by CCL dated 05.07.2023	AL -6
7	Draft DPR submission to CCL Dated 19.07.2023	AL -7
8	MoM dated 19.07.2023	AL-8
9	DPR submission to CCL Dated 27.07.2023	AL-9
10	Observations via email by CCL dated 01.08.2023	AL-10
11	DPR submission to ECR Dated 03.08.2023	AL-11
12	Sr. DOM letter dated 08.08.2023	AL-12
13	FSR submission to ECR letter dated 24.08.2023	AL-13
14	Intimation of observation of meeting at DRM Office dated 04.11.2023	AL-14
15	CCL reply on observation of ECR dated 06.11.2023	AL-15
16	Compliance of observation submitted dated 09.11.2023	AL-16
17	Sr. DOM letter for Codal fee & observations dated 14.11.2023	AL-17
18	IPRCL requested for Codal fee deposition dated 21.11.2023	AL-18
19	Submission of Codal fee to ECR dated 26.12.2023	AL-19





SI. No.	Subject	Annex No.
20	Sr. DOM letter for IPA dated 02.01.2024	AL-20
21	Location of the site in Google Map	A1
22	Location of the site in Railway Section Map	A2
23	Key Plan / Schematic Plan	А3
24	Index Plan& Section on Topo-Sheet	A4
25	Engineering Plan & L- Section drawing	A5
26	Google Earth Map	A6
27	List of Bench Mark	A7
28	List of Gradient & Gradient Abstract	A8
29	List of Curve & Curve Abstract	A9
30	Typical Profile of Proposed Siding	A10
31	Schematic Signalling Plan	A11
32	Wiring cum Power Supply Drawing	A12
33	Civil Engineering Cost Estimate	A13
34	Electrical Cost Estimate	A14
35	Signalling Cost Estimate	A15
36	List of Point of Crossing & DS	A16
37	Engineering Scale Plan	A17

सेंट्रल कोल्फ़ील्ड्स लिमिटेड

(भारत सरकार का उपक्रम) एक मिनी रत्न कम्पनी

महाप्रबंधक कार्यालय, अरगड़ा क्षेत्र

पोस्ट: अरगड़ा, जिला: हजारीबाग

झारखण्ड -829101

ई-मेल : cgma.cclarg@gmail.com

वेबसाइट:http://www.centralcoalfields.in



CENTRAL COALFIELDS LIMITED

(A Government of India Undertaking), A Miniratna Company

CIN No: - U10200JH1956GOI000581

Office of the General Manager, Argada Area

PO: Argada, Dist. Hazaribagh Jharkhand - 829101

Email: cgma.cclarg@gmail.com Website: http://www.centralcoalfields.in

Date: 19.01.2023

Ref. No.GM (A)/Secy./2022-23/18/313

To

The Chief General Manager (Projects) IPRCL, Ranchi

Subject: Submission of Budgetary offer for "Route alignment survey/Detailed Engineering Survey and for preparation of Feasibility Study Report (FSR) and Detailed project report (DPR) & obtaining its approval from Railway for the construction of new line/modification of existing Rail lines for provisioning of RLS at Giddi A & for Wharf wall siding at Giddi no.5 under existing MoU between CIL & IPRCL."

Dear Sir,

Your budgetary offer IPRCL/Ranchi/CCL-Giddi-A/24/516 dated 01.12.2022 for Giddi A siding was discussed with higher authorities at CCL HQ. Accordingly, it has been decided to seek fresh budgetary offer in context of the aforesaid discussion.

You are hereby requested to send revised budgetary offer for "Route alignment survey/Detailed Engineering Survey and for preparation of Feasibility Study Report (FSR) and Detailed project report (DPR) & obtaining its approval from Railway for the construction of new line/modification of existing Rail lines for provisioning of RLS at Giddi A & for Wharf wall siding at Giddi no.5 under existing MoU between CIL & IPRCL".

Yours faithfully

General Manager Argada area

Copy for kind information to:

1. DT (P&P), CCL, Ranchi

2. GM(Civil)/IC, CCL, Ranchi



इंडियनपोटीरलएंडरोपवेकॉपोरिशनलिमिटेड

(पत्तन,पोतपरिवहनऔर जलमार्ग मंत्रालय, भारतसरकारकेअधीनसंयुक्तउद्यम)

Indian Port Rail & Ropeway Corporation Ltd.

(A JV Company under Ministry of Ports , Shipping&Waterways, Government of India) CIN No: U60300DL2015PLC282703



21.02.2023

No. IPRCL/Ranchi/CCL-Giddi-A/24/578

To.

The General Manager,

Argada Area, Central Coalfields Limited,

Iharkhand

Dear Sir

Submission of revised Budgetary offer for "Detailed Project Report (DPR) & obtaining its approval from Railway for the Construction of new line/modification by complete track renewal of existing Rail lines of Wharf wall loading platform of Giddi A Railway Siding under existing MoU between CIL & IPRCL.

- Ref: 1. GM(Civil)/HoD, HQ CCL lr. No. GM(c)/IC/2023/1025, dt. 08.02.2023
 - 2. GM(Civil)/IC, HQ CCL email dated 04.02.2023 & 07.02.2023
 - IPRCL Ir. No. IPRCL/Ranchi/CCL-Giddi-A/24/566, dt.03.02.2023

Revised Budgetary offer for the above mentioned work has been prepared adopting GST Clause under clause 8.0 Taxes, as communicated by CCL vide letter under ref (1). The revised Budgetary offer is submitted herewith.

This is for information and necessary action please

Thanking you.

Encl. As above.

Yours faithfully,

Chief General Manger (Projects)

IPRCL, Ranchi

Copy to,

GM(Civil)/IC/CCL, HQ, Ranchi-keeping in view urgency expressed, Budgetary offer is submitted with provision of GST clause as communicated by CCL. For other PMC works for Track maintenance of different sidings under CCL, will be submitted after competent approval of IPRCL.









CENTRAL COALFIELDS LIMITED

A Mintralva Company

(Govt. of India Undertaking) INDUSTRIAL CONSTRUCTION DEPARTMENT Reg. Office: Darbhanga House, Ranchi Jharkhand - 834 029

> Phone: (0651)-23601597, 2360606 Fax: (0651) 2360129 Website : http://centralcoalfieldslimited.in

CIN NO: U10200JH1956GOI000581 E-mail: Shashank.jha@coalindia.in

General Manager (P&BD), M/s IPRCL Limited, Ranchi

No. GM(C)/IC/W.O./2023/1043 Date: 04-03 - 2023

WORK ORDER

Sub: Preparation of " Detailed Project Report (DPR) & obtaining its approval from Railway for the construction of new line / modification by complete track renewal of existing Rail lines of Wharf wall loading platform of Giddi A Railway Siding under existing MoU between CIL & IPRCL"

Ref:

- 1. CCL letter No. GM(A)/Secy./2022/18/260 dated 16.11.2022
- 2. MoM convened by DT(P&P), CCL ref No. DTPP/CCL/2023/29 dated 21.01.2023
- 3.IPRCL initial Budgetary offer via Letter no IPRCL /Ranchi / CCL- Giddi-A/24/566 dated 03.02.2023
- 4.Email from CCL to IPRCL dated 04.02.2023 & 07.02.2023 & IPRCL Email dtd 07.02.2023.
- 5. CCL letter No. GM(C)/IC/2023/1025 dated 08.02.2023
- 6.IPRCL revised Budgetary offer via Letter no IPRCL /Ranchi / CCL- Giddi-A/24/578 dated 21/22.02.2023
- 7. CIL-IPRCL MoU dated 05.03.2020 and revision of IPRCL fees as per IPRCL letter dated 30.06.2020.

Dear Sir.

With reference to above, CCL is pleased to award the subject work in your favour for undertaking the subject work of Detailed Project Report (DPR) & obtaining its approval from Railway for the construction of new line / modification by complete track renewal of existing Rail lines of Wharf wall loading platform of Giddi A Railway Siding under existing MoU between CIL & IPRCL" at a total IPRCL fee of Rs. 29,24,325.54 (Twenty nine lakhs twenty four thousand three hundred and twenty five Rupees and fifty four paise) only, inclusive of GST on IPRCL fee @18% as under:



SUMMARY OF COST				
Stage	IPRCL Fee	Amount Rs. 24,78,241.98		
Stage – II	1.0% of anticipated project cost of Rs. 24,78,24,198.29 (For DPR) as per the provisions of CIL – IPRCL MoU dated 05.03.2020 and revision of IPRCL fees as per IPRCL letter dated 30.06.2020			
	IPRCL fee	Rs. 24,78,241.98		
	GST@18% of IPRCL Fee	Rs. 4,46,083.55		
	Total IPRCL fee including GST @ 18% up to DPR Stage	Rs. 29,24,325.54		

Note: -

- 1. As the new Railway Circular No. 2021/TC(FM)/18/23 has been issued on dated 06.12.2022 in place of earlier FM circular No.11 of 2016, therefore M/s IPRCL should take action for DPR according to provisions contained in new Railway circular for construction of new private siding.
- 2. The above fees to IPRCL has been calculated based upon Tentative Estimated Project Cost submitted by M/s IPRCL Ltd in the Budgetary Offer, which may vary and payment is to be made in line with the CIL IPRCL MoU dated 05.03.2020 and revision of IPRCL fees as per IPRCL letter dated 30.06.2020.
- 3. GST as legally leviable during the currency of contract shall be payable extra in addition to IPRCL Fees.

Engineer-in-Charge: – Shri. Gaurav Kumar Tiwary, Staff Officer (Civil), Argada Area will be the Engineer-in-Charge to supervise the execution of the subject work by M/s IPRCL Ltd. The Engineer-in-Charge shall act on behalf of the company for all matters pertaining to the work under this Work Order and shall be authorised to supervise the work to inspect, examine and approve any part of the work, the workmanship employed and the materials to be used for the same at any stage for the execution of the work as per Railway standard.

Paying authority: - Area Finance Manager (AFM), Argada Area, will be the payment authority.

The detail scope of work, remuneration and Terms & Conditions for execution of the work are furnished below: –

1.0 BACKGROUND: -

CCL has planned for the construction of new line / modification by complete track renewal of existing Rail lines of Wharf wall loading platform of Giddi A Railway Siding under existing MoU between CIL & IPRCL. For making provisioning of suitable Rail infrastructure and for planning of RLS loading arrangements etc., Detailed Engineering Survey/ Route Alignment Survey is required to be carried out for preparation of Detailed Study Report (DRP) & ESP etc. and for obtaining its approval from Railway .

2.0 SCOPE OF WORK

- 2.1 Detailed Project Report and its approval:
- 2.2.1 Final Location Survey:



- Carry out Final Location Survey of the approved alignment using survey methodology approved by Indian Railways.
- Taking detailed longitudinal and transverse levels along the proposed alignment.
- Fixing of Permanent Centre Line Pillars of Straight & curve alignments.
- Fixing of levelling pillars, benchmarks etc. with reference to GTS and/or railway benchmark, if required.

2.2.2 Preparation and Submission of ESP and DPR:

- Preparation of Engineering Scale plan (ESP) in scale 1:2000 horizontal and 1:500 vertical or any other suitable scale required as per railway standard for the proposed rail infrastructure.
- Preparation of Longitudinal section for the proposed Rail infrastructure.
- To evaluate system of train working for movement between the terminal and serving station.
- Preparation of Detailed Project Report (DPR) including detailed estimate covering all components of the railway siding viz. Civil engineering, S&T,OHE and General Electrification considering the standard of construction, Curves, Bridges, ROBs, Gradient etc.
- Submission of Draft Detailed Project Report to CCL for their approval.
- Submission of Draft DPR to ECR after incorporating the comments of the client, if any along with Engineering Scale Plans, L-Section and mini SIP.
- Obtaining approval from Railway for start of construction of the siding work as per GCT policy along with the approval of Engineering Scale Plan(ESP) and L-Section from ECR.
- Marking of land boundary of the Rail corridor IPRCL shall assist CCL in preparation
 of land plans and land schedule on Mouza Map for land acquisition purposes with
 details of land ownership (forest, revenue or private), Khasra details and collection
 of authenticated signed documents from revenue and forest and concerned
 authorities and in preparation of Forest Management Plan. IPRCL shall provide,
 the data related to route alignment and survey data in soft copy in proper format
 also.

2.2.3 Preparation & Approval of Detailed Drawings:

 On getting approval, ESP, L-Section and GADs of Major & Minor bridges and other structures will be prepared and approved from ECR. RDSO's Standard design for superstructure shall be used as per 25T loading standards.



- Preparation of Signal & Interlocking Plan (SIP) and approval thereto from ECR, if required.
- Preparation and approval of OHE drawings i.e. LOP and Sectioning Diagram from FCR.

3.0 TIME FRAME AND DELIVERABLES: 06 Months

Part- II: Detailed	Detailed Project Report (DPR)	4 Months after receiving Work Order	
Project Report	Approval of DPR and Drawings	2 Months after submission of Draft DPR to CCL & ECR	

Note:- After implementation of GCT Policy-2022 (wef 06.12.2022) approval of DPR involves preparation and approval of drawings like ESP.

- 3.1 CCL shall give views/decisions/approvals on issues as may be required within reasonable time as not to delay or disrupt the schedule of completion of works by IPRCL.
- 3.2 Applicable registration fee and Security deposit shall be deposited promptly by CCL to Railways within reasonable time after getting letter from IPRCL/Railways if approval from Railways is mandatory.

3.3 Deliverables:

The following shall be submitted during deliverables:

a) Draft Detailed Project Report

: 5 copies to CCL

b) Detailed Project Report

: 6 copies to CCL and 2 copies to Railway or

as per requirement of Railway

c) Final Detailed Project Report

: 6 copies to CCL and 2 copies to Railway or

as per requirement of Railway

4.0 PROJECT INDICATIVE COST & IPRCL'S FEE

4.1 Based on the data available, the approx. project cost for construction of the rail siding will be as follows.

Calcu	lation of indicative cost (In Rs	.)
Lead line& Yard line (Civil & OHE and S&T)	2.52 Km new track work, platform, dismantling of existing track & other steel structures	Rs. 24,78,24,198.29
Indicat	ive Cost	Rs. 24,78,24,198.29



As per the MoU dated 05.03.2020 and revision of PMC fees dated 30.06.2020, IPRCL's fees will be 1.00% of the estimated cost of the project for DPR. Accordingly, the stages of payment shall be as under:

4.1.1 Detailed Project Report:

SN	Activity Content	Remuneration
2	PART-II: Final Location Survey and Detailed Project Report (DPR)	Fee: 1.00% of Estimated cost of the project.
a)	Final Location survey and center line pegging of proposed alignment and submission of draft DPR to CCL incorporating the Observations received on FSR from CCL& Railways	30% of 1.00% of Est. project cost.
b)	On receipt of approval of the draft DPR from CCL and preparation of DPR & submission to CCL & Railway.	50% of 1.00% of Est. project cost.
c)	On receipt of Approval of DPR from Railways and Submission of Final/Revised DPR, if sought by Railways, incorporating the comments/observations.	Balance fee to complete 1.00% of approved DPR cost.

Note: IPRCL fee for Detailed Project Report: 1.0% (One Percent) of Est. Project cost.

This shall be based on estimate prepared by IPRCL as detailed in CIL-IPRCL MOU & its subsequent addendum.

- 4.2 The above fee is exclusive of 18% GST and will be claimed at the time of each billing. Further, any statutory charges and other taxes to be paid to any authority will have to be borne by the client (CCL).
- 4.3 CCL is liable to recover from fees due to IPRCL a sum equal to 0.5% of consultancy fee for the part of work so delayed per week of delay or part thereof towards the failure of IPRCL's performance. The total liability of IPRCL under this clause shall be subjected to maximum of 10% of the fee for the portion of work so delayed.
- 4.4 Clearance from Forest Department/Pollution Control Board etc., if required, shall be obtained by CCL.
- 4.5 The Abstract Project cost for Railway siding of Gidi-A will be:

All figures in Crores unless specified

SL	Description	Amount	GST Charges		Total Amount
			%	Amount	
1	Capital cost	24,78,24,198.29	-	-	24,78,24,198.29
2	Cost for preparation DPR and its approval.	24,78,241.98	18%	4,46,083.55	29,24,325.54



Railway	10,00,000.00	10,00,000.00
Security		, ,
Deposit		
Α	bstract cost of the project	
		25,17,48,523.83
	Security Deposit	Security

Note: (i) The abstract cost is tentative only.

(ii) Security Deposit of Rs. 10.00Lakhs is as per Para 10, Schedule-1 of 'Master Circular on Gati Shakti Multi-Model Cargo Terminal (GCT) issued by Railway Board letter No. 2021/TC(FM)/18/23, dated 06.12.2022. This Security Deposit shall be refunded on the date of Commercial Notification of the GCT. In case of non-fulfilment of certain conditions, necessary adjustment shall be made from the Security Deposit (if required), and the remaining amount shall be refunded.

5.0 ASSISTANCE REQUIRED FROM CCL

The scope of the study involves geographic expanse and fieldwork. Successful execution of the project would be possible only with the active cooperation of CCL and other related government and non-government authorities. It is not possible at this stage to draw up in definite terms the comprehensive list of assistance that would be required. However, some of the basic support and assistance solicited at this stage are:

- **5.1** Appointment of one Coordinator from CCL is required for the project for single window clearance system.
- 5.2 A general letter of introduction indicating that IPRCL has been nominated to carry out the above study on behalf of CCL addressed to various concerned offices of CCL and other government agencies concerned authorizing IPRCL to source information connected with the work.
- **5.3** Right of access to IPRCL to source all such documents, resource papers, decisions, communications, plans, drawings etc. related for the study.
- 5.4 On-line exchange of information on any interim developments on the project that is considered relevant for the study.
- 5.5 CCL shall co-ordinate the activities of IPRCL vis-à-vis other agencies working in the project premises to avoid interference to IPRCL.
- 5.6 In addition, IPRCL will of course solicit the support of CCL as and when the need arises.

6.0 TAXES

IPRCL will ensure that all taxes & levies (including Goods and Service Tax, surcharge and Cess thereon as applicable) and surcharge on taxes, duties & levies, insurance



charges, license fees etc., including statutory variations during the currency of the contract applicable on transactions between IPRCL and contractors appointed by IPRCL, if any, shall be payable directly by IPRCL or contractor appointed by IPRCL and CCL will not have any liability whatsoever on this account. However, IPRCL will use the TAN /TIN/ PAN etc. of CCL wherever necessary to deposit statutory liability and forward the paid challan to CCL for accountal.

Clauses regarding GST

- a) In case of imposition of penalty like Liquidated Damages, applicable GST will be charged additional on the amount of Penalty.
- b) IPRCL must ensure that the Tax Invoice raised by the contractor must be in compliance of relevant GST Acts, rules & notifications made there under and should bear the GSTIN of Coal India Limited / Subsidiary. The rate and amount of CGST, SGST, IGST and GST (Compensation to state) cess, shall be shown separately in tax invoice.
- c) The CGST & SGST, IGST and GST (Compensation to state tax), as applicable at the time of supply, should be paid against submission of proper Tax invoice, as referred above, so that the CIL / Subsidiary could be able to avail Input tax credit of such CGST, GST, IGST, GST (Compensation to State) Cess reflected in the invoice.
- d) If the ITC claimed is disallowed due to failure on the part of supplier in incorporating the tax invoice issued to CIL / Subsidiary in its relevant returns under GST, payment of CGST & SGST or IGST, GST (Compensation to State) Cess shown in tax invoice to the tax authorities, issue of proper tax invoice or any other reason whatsoever, the applicable taxes & cess paid based on such Tax invoice shall be recovered by the CIL / Subsidiary.
- e) In the event of any additional tax liability accruing on the contractor due to any error on part of contractor, the liability of CIL / subsidiary shall be restricted to the amount of GST charged on the original tax invoice issued by the supplier. However, in case of change in tax liability due to any statutory change the same shall accrue to CIL/subsidiary.

7.0 LANGUAGE AND MEASUREMENT

The English language shall be used in all written communications between CCL and the Consultant (IPRCL) with respect to the services to be performed under this agreement and with respect to all documents produced or prepared by the IPRCL in connection with the project. The metric system of measurement shall be used exclusively.

8.0 FORCE MAJEURE

a) Neither CCL nor the IPRCL shall be considered in default in performance of the obligations under the agreement, if such performance is prevented or delayed by events such as but not limited to war, hostilities, revolutions, riots, civil commotion, strikes, epidemics, accidents, fire, wind, flood, droughts, earthquakes, or because of any laws, orders, proclamations, regulations, ordinance, of any



government, or because of act of god or for any other cause beyond the reasonable control of IPRCL/CCL. Notice under this clause to be served in writing within 30 days from the happening of the event and in case it is not possible to serve the notice within the said 30 days period, then within the shortest period without delays.

- b) As soon as the cause of force majeure is removed, IPRCL shall notify CCL of such cessation of the acute delay incurred in affected activity. From the date of occurrence in case of force majeure, obligation of IPRCL shall be suspended during the continuance of any inability resulting there from have been removed and agreed time of completion of the respective obligation under this agreement shall stand extended by a period equal to the period of delay occasioned by such events.
- c) Should one or both parties be prevented from fulfilling the contractual obligations by a state of force majeure lasting for a period of six months or more, the two parties shall consult each other and decide regarding future execution of this agreement.

9.0 ARBITRATION

In the event of any dispute or difference arising between the Parties in connection with this work, such dispute or difference shall be taken up by either Party for resolution through Administrative Mechanism for Resolution of CPSEs Disputes (AMRCD) as mentioned in DPE OM No. 4(I)/2013- DPE(GMyFTS-1835 dated 22.05.2018 or its amendment.

Notwithstanding the existence of any dispute or difference and /or reference for the arbitration, IPRCL shall proceed with and continue without hindrance with the performance of the work with due diligence, expeditiously and in a professional manner and the payment due to IPRCL shall not be withheld by CCL on account of such difference or arbitration proceeding unless such payment is subject matter of the arbitration.

10.0 CONFIDENTIALITY

Both IPRCL and CCL shall agree to treat as confidential and trade secret all documents and other information and negotiations concerning technical, economic and marketing information of the other party in connection with this project and shall not disclose or make public any such information unless prior consent and approval of the other party is obtained in order to disclose the same. However, these restrictions shall not be applicable in respect of any publicly available information.

A Formal agreement shall be entered into between two parties for this work. For execution of contract agreement, please submit non-judicial stamp paper of Rs 1000.00 and other relevant documents for this work.



It is requested to make all necessary arrangements immediately for starting the work in consultation with GM, Argada Area, so that subject work is started at the earliest. It is also requested to take all necessary arrangements in coordination with concerned Railway, so that subject work is completed in time.

Please return the enclosed duplicate copy for this work order duly signed by you on each page as a token of acceptance.

Thanking you,

Yours faithfully

General Manager (Civil)/HoD

Copy for kind information to: -

- 1. Director (Tech)(P&P), CCL, Ranchi
- 2. Director (Finance), CCL, Ranchi
- 3. CVO, CCL, Ranchi
- 4. TS to CMD, CCL, Ranchi
- 5. GM(P&P), CCL, Ranchi.
- 6. GM(Civil)/IC CCL, Ranchi
- 6. GM, Argada Area
- 7. SO(Civil), Argada Area
- 8. AFM, Argada Area
- 9. Chief Manager (F) (P&P), CCL, Ranchi.....in ref. to Budget provision in CB 2023-24, under head 5.4 under head Railway Siding at Sl.no. 14 for this subject work.



इंडियनपोर्टरेलएंडरोपवेकॉपोरेशनलिमिटेड (पत्तन,पोतपरिवहनऔर जलमार्ग मंत्रालय, भारतसरकारकेअधीनसंयुक्तउद्यम) Indian Port Rail & Ropeway Corporation Ltd.

(A JV Company under Ministry of Ports, Shipping & Waterways, Government of India)



CIN No: U60300DL2015PLC282703 (An ISO 9001, 14001 & 45001 Certified Company)

No. IPRCL/Ranchi/CCL-Giddi-A/24/ 695

Date: 13.06.2023

To.

The General Manager Argada Area, Central Coalfields Limited, Jharkhand

Dear Sir

Sub:

Submission of Draft Detailed Project Report (Draft DPR) for "Detailed Project Report (DPR) & obtaining its approval from Railway for the Construction of new line/modification by complete track renewal of existing Rail lines of Wharf wall loading platform of Giddi A Railway Siding under existing MoU between CIL & IPRCL.

Ref: 1. CCL Work Oder No. GM(C)/IC/W.O./2023/1043, dtd. 06.03.2023

In reference to the letter under ref.(1), after survey data compilation the 'Draft Detailed Project Report (Draft DPR) of above subject work has been prepared.

Draft DPR of Giddi-A railway Siding is submitted for your perusal and observation, if any.

This is for information and necessary action please

Thanking you.

Encl. As above.

Yours faithfully,

Chief General Manger (Projects)

IPRCL, Ranchi

Copy to,

GM(Civil)/IC/CCL, HQ, Ranchi for information please.

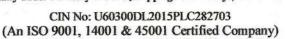






इंडियन पोर्ट रेल एंड रोपवे कॉर्पोरेशन लिमिटेड (पत्तन,पोतपरिवहनऔर जलमार्ग मंत्रालय, भारतसरकारकेअधीनसंयुक्तउद्यम) Indian Port Rail & Ropeway Corporation Ltd.

(A JV Company under Ministry of Ports, Shipping & Waterways, Government of India)





Date: 03.07.2023

No. IPRCL/Ranchi/CCL-Giddi-A/24/ 733

To,
The General Manager
Argada Area, Central Coalfields Limited,
Iharkhand

Dear Sir

Sub: Submission of Detailed Project Report (DPR) for "Detailed Project Report (DPR) & obtaining its approval from Railway for the Construction of new line/modification by complete track renewal of existing Rail lines of Wharf wall loading platform of Giddi A Railway Siding under existing MoU between CIL & IPRCL.

1. IPRCL Lr. No. IPRCL/Ranchi/CCL-Giddi-A/24/695, dt.13.06.2023

CCL Work Oder No. GM(C)/IC/W.O./2023/1043, dtd. 06.03.2023

In reference to the letter under ref. (1) 'Draft Detailed Project Report (Draft DPR)' of above subject work was submitted to CCL. A meeting, discussion on draft DPR was held on 17.06.2023. Subsequently, a joint field inspection has been held at site on 19.06.2023. As per the site discussion and incorporating field observations, 'Detailed Project Report(DPR) has been prepared.

DPR of Giddi-A railway Siding is submitted for your perusal and observation, if any.

This is for information and necessary action please

Thanking you.

Encl. As above.

Yours faithfully,

Chief General Manger (Projects)

IPRCL, Ranchi

Copy to,

GM(Civil)/IC/CCL, HQ, Ranchi for information please.



G2 Carlos



Draft DPR submitted by M/s IPRCL for MODIFICATION / RENOVATION OF RAIL INFRASTRUCTURE AT GIDDI RAILWAY SIDING

1 message

IC CIVIL <iccivilranchi@gmail.com>

5 July 2023 at 18:41

To: Uday Kumar Singh <uksingh.iprcl@gmail.com>, Binod Prasad <binod.prasad@iprcl.in>
Cc: Sudhanshu Kumar Pandey <gmarg.ccl@coalindia.in>, civilarg ccl <civilarg.ccl@gmail.com>, JAYANT
CHAKRAVARTY <rdri3.cmpdi@coalindia.in>, ALOK KUMAR <tstodtpp.ccl@coalindia.in>, gmgs.ccl@coalindia.in, Vipan Kumar Sofat <gmcivilcclranchi@gmail.com>, "GM(CIVIL)" <gmcivil.ccl@coalindia.in>, gmenm.ccl@coalindia.in

Dear Sir,

In reference to the Draft DPR submitted by M/s IPRCL related to modification of rail infrastructure at Giddi railway siding, a meeting was held on 05.07.2023 at CCL HQ and various points/ features envisaged in the Draft DPR was deliberated.

There were various observations w.r.t to Route Length, proposed modification in Track KM, BOQs, length of additional loading platform, applicability of Gati-Shakti Circular/ FMC Circular, proposed dismantling of Wharf Wall, completion time, proposed gradient related issues, building items based on CPWD SOR 2021, annexures listed incorrectly, proposed works (but items not included in Draft DPR) to be done on the part – where maintenance is done by Railway etc. It seems that prior to submission of this Draft DPR to CCL the above points have been overlooked.

Being the PMC Consultant, IPRCL is hereby once again requested to go through each and every point apart from above and incorporate required corrections. Subsequently, a revised Draft DPR should be submitted at the earliest for having a detailed presentation/deliberations before all stakeholders. The matter is already getting delayed.

Matter is most important.

With Regards, HOD(IC/Rail Infra) CCL, Ranchi



इंडियन पोर्ट रेल एंड रोपवे कॉर्पोरेशन लिमिटेड

(पत्तन, पोत परिवहन एवं जलमार्ग मंत्रालय, भारत सरकार के अधीन संयुक्त उद्यम)

Indian Port Rail & Ropeway Corporation Ltd.

(A JV Company under Ministry of Port, Shipping & Waterways, Government of India) CIN No: U60300DL2015PLC282703 (An ISO 9001, 14001 & 45001 Certified Company)



Date: 19.07.2023

No. IPRCL/Ranchi/CCL-Giddi-A/24/7/67

To, The General Manager Argada Area, Central Coalfields Limited, Iharkhand

Dear Sir

Sub: Submission of updated Draft Detailed Project Report (Draft DPR) for "Detailed Project Report (DPR) & obtaining its approval from Railway for the Construction of new line/modification by complete track renewal of existing Rail lines of Wharf wall loading platform of Giddi A Railway Siding under existing MoU between CIL & IPRCL.

Ref: 1. CCL mail dated 05.07.2023

- 2. IPRCL Lr.No. IPRCL/Ranchi/CCL-Giddi-A/24/733 dtd. 03.07.2023
- 3. IPRCL Lr.No. IPRCL/Ranchi/CCL-Giddi-A/24/695 dtd. 13.06.2023
- 4. CCL Work Oder No. GM(C)/IC/W.O./2023/1043, dtd. 06.03.2023

Complying the observations/remarks, updated draft DPR has been prepared and is submitted herewith.

This is for information and necessary action please.

Thanking you.

Encl. As above.

Yours faithfully,

Chief General Manger (Projects) IPRCL, Ranchi

Copy to,

GM(Civil)/IC/CCL, HQ, Ranchi for information please.





Minutes of Meeting on 19.07.2023 for detailed deliberation / decision on Updated Draft DPR submitted by M/s IPRCL for Modification work of Giddi A Railway Siding.

The following were present:

SL	CCL	IPRCL	CMPDI (RI-III)
1	Sri B. Sairam, D(T/P&P)	Sri U.K. Singh, CGM(P)	Sri P.S.Naidu, Sr. Mgr(E&M)
2	Sri S.K. Pandey, GM / Argada Area	Sri Binod Prasad, JGM	Sri U.K. Sarkar, Mgr (E&M)
3	Sri V.K. Shukla, GM / Logistics	Sri Santu Kumar Samanta, Dy. Mgr.	Sri Shivchand P. Kodate, Dy Mgr, CMPDI
4	Sri S.S. Jha, HOD (IC / Rail Infra)	Sri Yasin Akram, SSE	
5	Sri Rajesh, CM (M)	Sri Abhay Kumar Singh	
6	Sri Raghu Raj Ratnam, Dy. Mgr (E&M), HQ		
7	PO, Giddi OCP (via Web link)		
8	SO(Civil), Argada (via Web link)		

A presentation was made by M/s IPRCL on the draft DPR submitted by them for the subject rail infrastructure work. The following were discussed at length and the decisions taken are as under:

- 1. IPRCL mentioned that it has been proposed to submit the DPR under GCT Scheme of Railways as it involves complete modification of alignment & new tracks / sleepers are to be laid for Giddi A Railway Siding.
- 2. During deliberation on provisioning of In-Motion Weigh Bridge (IMWB), it was advised to IPRCL to keep its cost provision & Weigh-Bridge room etc. in DPR so that IPRCL can execute these work parallelly with track linking work which will lead to timely completion of work.
- 3. IPRCL proposed for loading platform with PCC & RCC provision in the extended portion. After deliberations, it was advised to IPRCL for keeping provision of PCC layer only in the entire platform area.
- 4. In the draft DPR at clause 3.4.9, additional land licensing of railway land (approx. 550 m) along the main line has been proposed. It has been requested to IPRCL to review this in the light of GCT provisions. The corrections required in Draft DPR if any, may be done accordingly.
- 5. IPRCL was conveyed that in the Draft DPR the width of the loading platform has been written 25 m at some place and 30 m at various other places. This needs to be corrected to 30m. Also, at several places in the drawing Route Length has been mentioned as 1431.919 m in place of 1385 m & track length has been mentioned as 2906.458 m in place of 2808 m. These needs to be reviewed & corrected.
- 6. As regarding estimation of Civil Engineering Works, IPRCL has been requested to review the following:
- a) The section of proposed Drain needs to be reviewed & corrected, since the proposed size is large & accordingly, cost of PCC Drains can be assessed / incorporated.
- b) The rate / cost taken in respect of Service building (on Lump sum basis in Draft DPR) may be reviewed & corrected and break-up of cost should be included.
- c) In many of the items in BOQ, for e.g. Item no. 4002, 4004, 4006, 4007, 4022, 4023 etc. neither the quantity nor the rate has been taken. Requirement of these items may be reviewed & corrected in the BOQ.
- d) The break-up of cost / BOQ for approach road is missing in the Draft DPR, the same may be annexed.
- e) 2 different estimates amounting to Rs 17.79 lakhs & Rs 6.83 lakhs has been taken in Draft DPR for building construction while in the abstract Rs 17.79 lakhs has been considered. Also, the rate column is missing in the Annex-A13/6. This is to be reviewed & corrected.



- 7. In Annex-A13/5a, Rail Level PF has been incorrectly mentioned, this may be reviewed & corrected. Also, at Page no. 69, Jhingurda Siding has been incorrectly mentioned, this should be corrected.
- 8. Keeping in view of above observations, M/s IPRCL is requested to review the Draft DPR with a view to avoid any other discrepancies.

In light of above deliberations and decisions made, IPRCL was advised to proceed keeping in view of above decisions and finalize the Final DPR after compliance of all the observations at the earliest. IPRCL mentioned that Final DPR will be finalized & submitted by 24.07.2023.

The meeting ended with thanks to all stake holders.

HOD (IC / Rail Infra)

Copy to:

- 1. DT(P&P), CCL, Ranchi.... for kind information.
- 2. GM(Civil)/HOD, CCL, Ranchi
- 3. GM(E&M)/HOD, CCL Ranchi
- 5. GM, Argada Area
- 6. PO, Giddi OCP
- 7. SO(C), Argada Area

CMPDI:

- 1. RD, RI-3, CMPDI
- 2. GM(E&M)/ RI-3, CMPDI

IPRCL:

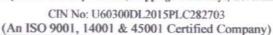
CGM(P), IPRCL



इंडियनपोर्टरेलएंडरोपवेकॉर्पोरेशनलिमिटेड (पत्तन,पोतपरिवहनऔर जलमार्ग मंत्रालय, भारतसरकारकेअधीनसंयुक्तउद्यम)

Indian Port Rail & Ropeway Corporation Ltd.

(A JV Company under Ministry of Ports , Shipping & Waterways, Government of India)



No. IPRCL/Ranchi/CCL-Giddi-A/24/ 7 82

SAGARMALA

Date: 27.07.2023

To, The General Manager Argada Area, Central Coalfields Limited, Jharkhand

Dear Sir

Sub:

Submission of Detailed Project Report (DPR) with **Engineering Scale Plan (ESP)** for "Detailed Project Report (DPR) & obtaining its approval from Railway for the Construction of new line/modification by complete track renewal of existing Rail lines of Wharf wall loading platform of Giddi A Railway Siding under existing MoU between CIL & IPRCL.

Ref:

- MoM No.GM(C)/IC/2023/1129, dt.21.07.2023.
- 2. IPRCL/Ranchi/CCL-Giddi-A/24/767, dt.19.07.2023
- 3.CCL Work Oder No. GM(C)/IC/W.O./2023/1043, dtd. 06.03.2023

In reference to the meeting held on 19.07.2023 and MoM received mentioned under ref.(1), incorporating the observation of CCL, 'Detailed Project Report (DPR) & Engineering Scale Plan (ESP) of above subject work has been prepared.

DPR of Giddi-A railway Siding is submitted for your perusal and Engineering Scale Plan (ESP) is submitted for your signature for further submission to Sr. DOM, Dhanbad Division, ECR.

This is for information and necessary action please

Thanking you.

Encl. As above.

Yours faithfully,

Chief General Manger (Projects)
IPRCL, Ranchi

Copy to,

GM (Civil)/IC/CCL, HQ, Ranchi for information please.



G2



Fwd: Submission of DPR & ESP of Giddi-A Railway Siding, CCL.

2 messages

IC CIVIL <iccivilranchi@gmail.com>

28 July 2023 at 16:40

To: Sudhanshu Kumar Pandey <gmarg.ccl@coalindia.in>, civilarg ccl <civilarg.ccl@gmail.com>, gmgs.ccl@coalindia.in, JAYANT CHAKRAVARTY <rdri3.cmpdi@coalindia.in>, jaychy@rediffmail.com, ps.naidu@coalindia.in, uk.sarkar@coalindia.in, rr.ratnam@coalindia.in, gmenm.ccl@coalindia.in, raj5coal@rediffmail.com
Cc: Uday Kumar Singh <uksingh.iprcl@gmail.com>

Dear Sir,

PFA a copy of the Final DPR in respect of subject work, as received from M/s IPRCL. Needful comments,if any, may please be provided at the earliest and positively by Monday i.e. 31st July 2023 so that M/s IPRCL can be advised for its incorporation in Final DPR to be submitted to E.C. Railway for obtaining approval.

With Regards, HOD(IC/Rail Infra) CCL, Ranchi

----- Forwarded message ------

From: Uday Kumar Singh <uday.singh@iprcl.in>

Date: Thu, Jul 27, 2023 at 5:37 PM

Subject: Submission of DPR & ESP of Giddi-A Railway Siding, CCL.

To: Sudhanshu Kumar Pandey <gmarg.ccl@coalindia.in>, IC CIVIL <iccivilranchi@gmail.com>

Dear Sir,

DPR & ESP of Giddi-A Railway Siding is attached herewith this mail. Submitted for information & necessary please.

Thanking you.

With best regards,

U.K.Singh
CGM/Projects/Ranchi
Indian Port Rail & Ropeway Corporation Ltd.
(A JV Company under Ministry of Ports, Shipping & Waterways, Govt. of India)

Ph: 9425541869, Email: uday.singh@iprcl.in

Office Address: IPRCL Ranchi Office Flat No-404, 4th Floor, Shree Ram Krishna Enclave, Adalhatu Road, Morabadi, Ranchi-834008, Jharkhand.

3 attachments



Giddi DPR 27.07.2023.pdf 19617K

Lr to GM Argada CCL-Submission of DPR & ESP 27.07.2023.pdf 951K

To: Uday Kumar Singh <uksingh.iprcl@gmail.com>

Cc: gk.tiwary@coalindia.in, "GM(CIVIL)" <gmcivil.ccl@coalindia.in>, Vipan Kumar Sofat <gmcivilcclranchi@gmail.com>, Sudhanshu Kumar Pandey <gmarg.ccl@coalindia.in>

Dear Sir,

The observations as received from the Argada area are being forwarded for review and its incorporation. In case of any clarifications, concerned officials may be contacted. You are therefore requested for taking further needful action towards submission of Final DPR to the Railway along with ESP etc.

With Regards, HOD(IC/Rail Infra) CCL, Ranchi

----- Forwarded message ------

From: GAURAVKUMAR TIWARY <gk.tiwary@coalindia.in>

Date: Tue, Aug 1, 2023 at 12:46 PM

Subject: Fwd: Submission of DPR & ESP of Giddi-A Railway Siding, CCL.

To: <iccivilranchi@gmail.com>

Cc: Sudhanshu Kumar Pandey <gmarg.ccl@coalindia.in>, UMA SANKAR <u.sankar@coalindia.in>, SUJIT KUMAR

<sujit.kr0921@coalindia.in>

Dear Sir,

DPR & ESP of Giddi-A Railway Siding has been studied and few corrections may be suggested to IPRCL in the ESP and DPR which are listed below:

- 1. Dimension of Existing loading platform is written as (1017.132x25)m at one place which may be reviewed.
- 2. Alignment of existing loading platform and its proposed its proposed extension are different in the ESP Plan which may be reviewed.
- 3. Language in some points such as 3.2 (Dismantling of Civil Structures) may be reviewed and may please be more specific with respect to roles and responsibilities.

Thanking You

Yours faithfully

Staff Officer(Civil) Argada Area, CCL

From: "Sudhanshu Kumar Pandey" <gmarg.ccl@coalindia.in>

To: "SUJIT KUMAR" <sujit.kr0921@coalindia.in>, "DILIP KUMAR SINGH" <dk.singh0408@coalindia.in>, "ANUP DUNGDUNG" <anup.dungdung@coalindia.in>, "UMA SANKAR" <u.sankar@coalindia.in>, "GAURAVKUMAR TIMARY" <dk.tinary@coalindia.in>

TIWARY" <gk.tiwary@coalindia.in>
Sent: Friday, July 28, 2023 11:15:49 AM

Subject: Fwd: Submission of DPR & ESP of Giddi-A Railway Siding, CCL.

From: "Uday Kumar Singh" <uday.singh@iprcl.in>

To: "Sudhanshu Kumar Pandey" <gmarg.ccl@coalindia.in>, iccivilranchi@gmail.com

Sent: Thursday, July 27, 2023 5:23:03 PM

Subject: Submission of DPR & ESP of Giddi-A Railway Siding, CCL.

[Quoted text hidden]

--

General Manager Argada Area

Mb. No. 8987785133

3 attachments



Giddi DPR 27.07.2023.pdf 19617K

Lr to GM Argada CCL-Submission of DPR & ESP 27.07.2023.pdf 951K



इंडियनपोर्टरेलएंडरोपवेकॉपोरेशनलिमिटेड

(पत्तन,पोतपरिवहनएवं जलमार्गमंत्रालय, भारतसरकारकेअधीनसंयुक्तउद्यम)

Indian Port Rail & Ropeway Corporation Ltd.

(An ISO 9001, 14001 & 45001 Certified Company)

(A JV Company under Ministry of Port, Shipping & Waterways, Government of India) CIN No: U60300DL2015PLC282703



No. IPRCL/Ranchi/ECR/CCL-Giddi/18/ 7 8 &

Date: 03.08.2023

To. The Sr. Divisional Operations Manager Dhanbad Division, East Central Railway. **Iharkhand**

Dear Sir

Sub:

Submission of Detailed Project Report (DPR) with Engineering Scale Plan (ESP) for the work of "Detailed Project Report (DPR) & obtaining its approval from Railway for the Construction of new line/modification by complete track renewal of existing Rail lines of Wharf wall loading platform of Giddi A Railway Siding under existing MoU between CIL & IPRCL.

Ref:

- 1. IPRCL/Ranchi/CCL-Giddi-A/24/782, dt.27.07.2023
- 2. MoM of CCL No. GM(C)/IC/2023/1129, dt.21.07.2023.
- 3. Draft DPR to CCL lr. No. IPRCL/Ranchi/CCL-Giddi-A/24/767, dt.19.07.2023
- 4. CCL Work Oder No. GM(C)/IC/W.O./2023/1043, dtd. 06.03.2023

Central Coalfields Limited (CCL) was awarded the above subjected work to IPRCL. After incorporating the observation of CCL, 'Detailed Project Report (DPR) & Engineering Scale Plan (ESP) of above subject work has been prepared.

Detailed Project Report (DPR) & Engineering Scale Plan (ESP) of Giddi-A Railway Siding is submitted for your perusal and approval.

This is for information and necessary action please.

Thanking you.

Encl. As above.

मुख्य महाप्रबंधक (परियोजना) आईपीआरसीएल, रांची





EAST CENTRAL RAILWAY

No. PL/Giddi /04082023

Date: 08.08.2023

General Manager (P), IPRCL, RANCHI

Sub: Proper processing for construction of new line/ modification of existing rail lines of wharf wall loading of Giddi "A" siding.

Ref: Your office letter No. IPRCL/Ranchi/ECR/CCL- Giddi/18 /788 dated 03.08.2023

In reference to above, Giddi "A" siding is existing siding under ownership of CCL. Modification of existing siding may be governed by FM circular no. 11 of 2016 and its amendment, if not migrated under Gati Shakti circular 2022.

Hence, proper processing of this proposed project with FSR and application fee is essentially required.

Necessary action may please be taken accordingly.

Sr. Divisional Operations Manager East Central Railway, Dhanbad

Copy to:

(i) COS (G)/DHN for kind information to DRM/DHN, please.

(ii) GM (Civil)/CCL for kind info. and necessary action, please.



इंडियनपोर्टरेलएंडरोपवेकॉपोरेशनलिमिटेड

(पत्तन, पोतपरिवहनएवं जलमार्गमंत्रालय, भारतसरकारके अधीनसंयुक्तउद्यम)

Indian Port Rail & Ropeway Corporation Ltd.

(A JV Company under Ministry of Port, Shipping & Waterways, Government of India)
CIN No: U60300DL2015PLC282703
(An ISO 9001, 14001 & 45001 Certified Company)



Date: 24.08.2023

No. IPRCL/Ranchi/ECR/CCL-Giddi-A/18/817

To,

Sr. Divisional Operations Manager

Dhanbad Division, East Central Railway,

Dhanbad

Sub: Submission of Feasibility Study Report (FSR) along with Registration fee for obtaining its IPA from Railway for the Construction of new line/modification by complete renewal of existing Rail lines of Wharf wall loading platform of Giddi-A Railway siding under existing MoU between CIL & IPRCL.

CCL work order No. GM(C)/IC/W.O./2023/1043, dtd.06.03.2023

Ref: 1. Sr.DOM Dhanbad Division ECR Letter No. PL/Giddi/04082023 dated 08.08.2023

Dear Sir,

CCL awarded the above mentioned work to IPRCL vide work order GM(C)/IC/W.O./2023/1043, dtd.06.03.2023.

Sr.DOM, Dhanbad Division has communicated vide letter mentioned under ref(1) regarding governing of this project under FM circular no. 11 of 2016. As such for processing further FSR and application fee is essentially required.

CCL has handed over a Demand Draft No.506352 dt 23.08.2023 issued by SBI, Sirka for Rs.23,600 (Registration fee Rs.20,000 + Rs.3600 for GST @ 18%) in favour of FA & CO,E.C.Railway. The same D.D is submitted herewith.

1.	Registration Fee	Rs. 20,000
2.	GST @18%	Rs. 3600
3.	Total	Rs.23,600

Kindly ensure that Tax invoice raised by Railway for input credit to CCL GSTIN 20AAACC7476RHZT and communicate IPRCL for collection of Original Tax invoice against this deposition.

FSR has been prepared and same is submitted herewith(06 hard copies and soft copy in PDF form)





You are requested to kindly communicate the In-Principal Approval of FSR for development of Giddi -A Railway siding.

Thanking You

Encl:- (i) 06 Copies of FSR + Soft copy of FSR

(ii) Demand Draft in Original

Chief General Manager (P)
IPRCL, Ranchi

Copy to:GM/(Civil/IC),HQ, CCL - For information please.
GM, Argada Area, CCL - For information please
SO(Civil), Argada Area, CCL - For information please.







इंडियनपोटरेलएंडरोपवेकॉपोरेशनलिमिटेड

(पत्तन,पोतपरिवहनएवं जलमार्गमंत्रालय, भारतसरकारके अधीनसंयुक्तउद्यम)

Indian Port Rail & Ropeway Corporation Ltd.

(A JV Company under Ministry of Port, Shipping & Waterways, Government of India)
CIN No: U60300DL2015PLC282703
(An ISO 9001, 14001 & 45001 Certified Company)



Date:04.11.2023

No. IPRCL/Ranchi/CCL-Giddi-A/24/223

To,
The General Manager
Argada Area,
Central Coalfields Limited,
Jharkhand

Sub: Summary of meeting& discussion for In-Principal approval of FSR of Giddi-A siding of CCL with DRM and other concerned officials of Dhanbad Division, ECR on 03.11.2023

Work: "Detailed Project Report (DPR) & obtaining its approval from Railway for the Construction of new line/modification by complete renewal of existing Rail lines of Wharf wall loading platform of Giddi-A Railway siding under existing MoU between CIL & IPRCL.

Ref.:1. FSR submission lr. No.IPRCL/Ranchi/ECR/CCL-Giddi-A/18/817 dated 24.08.2023

2. CCL work order No. GM(C)/IC/W.O./2023/1043, dtd.06.03.2023

Dear Sir,

In reference of FSR submitted to ECR by IPRCL, DRM, Dhanbad Division, ECR raised some queries and asked to attend a meeting with a presentation. Accordingly a meeting & discussion has been held between IPRCL &DRMalong with other concerned officials of Dhanbad Division, ECR on 03.11.2023 at DRM office, Dhanbad.

Following points were deliberated by DRM after presentation,

- Two (2) Nos In-Motion Weigh Bridge (IMWB) is to be incorporated in single line with standard specified distance for alternative use instead of single or incorporate of alternate set of load cells in the proposed IMWB.
- 2. Land leasing agreement of Railway land at take-off point i.e,at Patratu Station.
- 3. Siding will be on EOL (Engine on Load) system.





- 4. Abandoned/dismantled materials should be disposed outside the yard. No stacking should be done inside the yard.
- Track centre between proposed adjacent lines should be increasedso that space is created between two lines. This space may be used for Coal stacking if required.
- 6. Fencing of the siding on the road side to be provided to avoid trespassing& theft. This will also meet requirement of surrounding environment protection from air born dust.

Compliance report is to be submitted to ECR and it is to be included in DPR also.

This is for your information and necessary action.

Thanking you.

Encl: As above

Chief General Manager (P IPRCL, Ranchi

Copy to :-

1. GM/(Civil/IC),HQ, CCL - For information please.

2. SO(Civil), Argada Area, CCL - For information please.





सेंट्रल कोल्फ़ील्ड्स लिमिटेड

(भारत सरकार का उपक्रम) एक मिनी रत्न कम्पनी

महाप्रबंधक कार्यालय,अरगड़ा क्षेत्र

पोस्ट: अरगड़ा, जिला: हजारीबाग

झारखण्ड -829101

CIN No. U10200JH1956G0I000581

Phone No. +91 8987785145

ई-मेल : gmarg.ccl@coalindia.in

वेबसाइट:http://www.centralcoalfields.in



CENTRAL COALFIELDS LIMITED

(A Government of India Undertaking), A Miniratna Company CIN No. U10200JH1956GOI000581 Office of the General Manager, Argada Area

PO: Argada, Dist. Hazaribagh Jharkhand – 829101 CIN No. U10200JH1956G0I000581 Phone No. +91 8987785145

Email: gmarg.ccl@coalindia.in

Website: http://www.centralcoalfields.in

Ref. No.GM (A)/Secty./2023/ 18/230

Date: 06.11.2023

To The Chief General Manager(P) IPRCL.Ranchi

Sub: Detailed Project Report (DPR) & obtaining its approval from Railway for the Construction of new line/modification by complete renewal of existing Rail lines of wharf wall loading platform of Giddi-A Railway siding under existing MOU between CIL & IPRCL.

Ref: Your letter no. IPRCL/Ranchi/CCL-Giddi-A/24/883 dated04.11.2023

Dear Sir,

In reference to the above referred letter and discussions held between IPRCL and DRM, Dhanbad Division, ECR as mentioned in the letter, compliances in respect of deliberations of the DRM. Dhanbad Division, ECR are furnished below:

- One In-motion weigh bridge may be incorporated and alternate arrangement of additional 04 load cells will be made.
- 2. The entire land for proposed construction/modification at Gidi-A siding is in possession of Gidi-A.
- 3. Agreed. Siding will be on Engine on Load system.
- 4. Agreed. Abandoned/dismantled materials will be disposed outside the yard.
- 5.Technically and statutorily, coal stacking between two lines is not feasible.
- 6.This will be taken up by Argada Area, CCL and provision of fencing and wind screen barriers will be made along the road side of siding to avoid tress passing, theft and will also meet the requirement of surrounding environment protection from air born dust. In addition, bamboo plantation will be done to further reduce the environmental impact due to coal dust in the nearby public road.

This is for kind information and further needful action please.

Yours Sincerely,

General Manager Argada area,CCL

Copy to:

- 1. GM(Civil/IC),CCL HQ --- for information please.
- 2. SO(Civil), Argada Area, CCL --- For information please.



इंडियनपोर्टरलएंडरोपवेकॉपोरेशनलिमिटेड

(पत्तन,पोतपरिवहनऔर जलमार्ग मंत्रालय, भारतसरकारकेअधीनसंयुक्तउद्यम) Indian Port Rail & Ropeway Corporation Ltd.

(A JV Company under Ministry of Ports, Shipping & Waterways, Government of India)

CIN No: U60300DL2015PLC282703 (An ISO 9001, 14001 & 45001 Certified Company)



No. IPRCL/Ranchi/ECR/18/CCL/Glddi/884

Date: 09.11.2023

To.

The Sr. Divisional Operations Manager Dhanbad Division, East Central Railway Dhanbad-826001

Dear Sir,

Sub: In connection with compliance of Giddi-A Railway Siding, CCL.

Ref.:

(i) Meeting held on DPRs Chamber on dated 03.11.2023

(ii) FSR submission lr. No. IPRCL/Ranchi/ECR/CCL-Giddi-A/18/817, dt.24.08.2023

In reference to meeting and discussion held in DRM Office on 03.11.2023 and subsequent meeting held with GM, Aragada Area & other concerned officials of CCL, Argada Area & HQ/ CCL, compliance of observation raised is attached herewith.

It is requested to kindly communicate the In-principal Approval of FSR for Giddi-A Railway Siding at the earliest.

This for information and necessary action please.

Thanking you.

Encl. as above.

Yours faithfully,

Chief General Manager (P) IPRCL, Ranchi

Copy to,

- 1. The General Manger, Argada Area CCL Ranchi
- 2. The General Manger(Civil/IC), HQ, CCL Ranchi
- 3. Project Officer, Giddi A, Argada Area CCL Ranchi
- 4. SO/Civil, Argada Area CCL Ranchi





Name of Work: "Detailed Project Report (DPR) & obtaining its approval from Railway for the Construction of new line/modification by complete track renewal of existing Rail lines of Wharf wall loading platform of Giddi A Railway Siding under existing MoU between CIL & IPRCL.

S.No.	Observations	Compliance
1	Two (2) Nos In-Motion Weigh Bridge (IMWB) is to be incorporated in single line with standard specified distance for alternative use instead of single or alternate set of load cells are to be incorporated/provided in the proposed IMWB.	Alternate set of load cells will be provided &accordingly cost to be added in DPR estimate.
2	Land leasing agreement of Railway land at take-off point i.e, at Patratu Station.	At construction site of Giddi-A Siding entire land belongs to CCL and are in possession of CCL. However, if required Land leasing for the Railway Land at take off point i.e, Patratu Station side application will be made subsequently with land details.
3	Siding will be on EOL (Engine on Load) system.	Agreed by CCL.
4	Abandoned/dismantled materials should be disposed outside the yard. No stacking should be done inside the yard.	Agreed by CCL.
5	Track centre between proposed adjacent lines should be increased so that space is created between two lines. This space may be used for Coal stacking if required.	CCL has planned Bamboo Trees plantation to utilise the space opposite side of Wharf Wall in between of road and last track to reduce environment impact. As such increase the space between two lines is not feasible and coal stacking between two lines is technically and statutory not also feasible.
6	Fencing of the siding on the road side to be provided to avoid trespassing& theft. This will also meet requirement of surrounding environment protection from air born dust.	Agreed by CCL. Fencing barrier to be provided by CCL separately.

U.K. Singh'
Chief General Manager (P)
IPRCL., Ranchi



Danager Congri

EAST CENTRAL RAILWAY

No. PL/Giddi/04082023

General Manager (P). IPRCL/Ranchi

Sub: Deposit of codal fee in connection with approval of FSR for modification of existing Giddi-A siding.

Ref: IPRCL letter No. IPRCL/Ranchi/ECR/CCL-Giddi-A/18/817 dated: 24.08.2023.

In reference to above, 'In Principle Approval' is to be issued, under FM circular no. 11 of 2016 and its amendments, for the proposed project. Observations of concerned departments from division and HQ are attached herewith for compliance of the same in DPR and ESP.

Necessary action regarding deposit of 1% codal fee (with 18% GST) of abstract cost for the modification of existing Giddi-A siding taking off from PTRU station and compliance of Railway observations in DPR and ESP may please be taken accordingly. DD may be prepared in favour of FA & CAO/ECR payable at Dhanbad. GST number should also be submitted.

DA: 06 Pages.

Digitally Signed by Anjay
Tiwari
Date: 17-11-2023 13:20:17
Sr. Divisional Operations Manager
Reason: Approved
East Central Railway, Dhanbad

Dhanbad, Date: 14.11.2023

Copy:

- (i) COS(G)/DHN for kind information to DRM/DHN, please.
- (ii) CTPM/ECR for kind information, please.
- (iii) GM(Civil)/CCL for kind info. and necessary action, please

Divisional OPTG:

- 1. Connectivity from PTRU to proposed siding should be shown with take-off point.
- 2. Speed between PTRU- Proposed Giddi siding should be increased from 15 KMPH to 30 KMPH (total distance up to DE of siding 9.2 km).
- 3. There is no information about LC gate. Details of LC gate with elimination plan is required in concern para of DPR.

DRM/DHN:

- 1. Payment of codal charges as well as outstanding should be submitted before processing and submission of ESP.
- 2. DPR should include weighment procedure as well as unloading of excess weight procedure.

HQ Engg:

- 1. The chainage of the Takeoff point from where the proposed siding starts should be mentioned in the FSR and also to be indicated on the plan, the wording "Take off point" for another take off at Ch. 7788.537 M need be mentioned at all places and drawings of the FSR
- 2. As per Index plan (Annexure A5) of the FSR, some of points and crossing are planned/proposed in 1 in 8.5 which need be reviewed and be planned in 1 in 12 fan shaped. The details of points and crossings (detailed statement) should also be incorporated like other parameters such as gradients, curves etc in the FSR
- 3. The details under the gradient statement as shown in Annexure A8 of the FSR should match with the parameters shown in the longitudinal section given at Annexure A4 and Annexure A5. The gradient between the respective chainage should appear in the longitudinal section and the chainages should be correctly mentioned as per the gradient statement.
- 4. As per Para 3.1.5 in the FSR, the steepest gradient of existing Rail line on approach to yard is 1 in 100. Proposed Gradient in yard is 1 in 1000. It may be noted that for existing works, maximum permissible gradient in station yards is 1 in 400. For new works, & Alteration to Existing Works, the recommended gradient is 1 in 1200. For gradients steeper than the recommended and up to 1 in 400, approval of competent authority may be required. This aspect may be reviewed.
- 5. Details of each curve should be mentioned on the enclosed Index Plan (Longitudinal section).
- 6. As per para 3.1.6 in the FSR maximum degree of one of the curves is proposed as 4.6 degree (380 m radius). This should be reviewed. Feasibility to bring the degree of curvature to 4 degree or below may be explored.
- 7. An electronic weigh bridge is proposed to be provided in this arrangement outside the railway boundary/premises in the siding line. The capacity, chainage at which located level on either side of track to be mentioned on the Index plan and FSR. It may be noted that new weighbridges should be 120 tonne capacities as per prevalent Railway Board Rates Circular.
- 8. Provision, installation and functioning of weighbridges shall strictly by governed by prevailing Rates Master Circular along with its amendments issued by Railway Board From time to time.
- 9. Minimum of 100 m level tangent rail track length shall be made available on either side of the In-motion Weigh Bridge.
- 10. Details of formation should be decided based on RDSO 'Guidelines for cuttings/fillings in Railway Formation no. GE: G-2' should be followed for better appreciation and other railway's prescribed standards.
- 11. The thickness of blanketing material should be decided based on RDSO 'Guidelines and Specifications for Design of Formation for Heavy Axle load Report no. RDSO/2007/GE:0014' and 'Guidelines no. GE: G-1'.
- 12. Railway land boundary should apparently be depicted on the enclosed plan to differentiate between CCL's land and Railway land.

HQ Trd:

Same as Divisional comments.

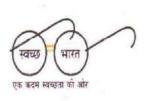
HQ S&T:

- 1. Upgradation in signalling system will require upgradation in saunda cabin, urimari and Patratu yard (Upgraded after RVNL and works unit completion).
- 2. Cost of upgradation should be calculated as per latest yard layout approve in connection with works and RVNL work.
- 3. Proper communication between Patratu and its associated cabin should be developed.
- 4. Observation raised by divisional unit should be complied.

HQ Commercial:

CCL has pendency of huge amount of railway dues. Therefore, clearance of old raily dues also needs to be linked with the issue of IPA for FSR for reviving the work of	vay
existing Giddi Siding of CCL.	
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	• • • • •

2133702/2023/O/o SR DOM/DHN/ECR





Office of the DRM (Engineering) East Central Railway Dhanbad Division

No.W.500/DRG/Pt-XII

Dhanbad dt. 11/09/2023

Sr. Divisional Operations Manager, East Central Railway, Dhanbad

Sub: Comment on FSR for construction of new rail line at Giddi siding taking off from Patratu Station.

Ref: 1) IPRCL letter No.IPRCL/Ranchi/ECR/CCL-Giddi-A/18/817

dated: 24,08,2023

2) PL/Giddi Siding/25082023

Vide letter under reference the above subject FSR has been submitted for study of feasibility report the same has been scrutinized and observation are as below:-

Proposed ESP should be prepared with checklist of yard plan.

- Curve details for proposed tracks should be shown with following details: curve no., deflection angle, degree of curve, tangent length, curve length, length of transition curve, super elevation, & speed potential to each curve should be mentioned.
- 3. Railway land boundary to be mention in both directions.
- 4. Line isolation should be provided before take off point of Giddi siding.
- 5. North direction to be shown in tentative ESP Annexure A4 sheet 1 of 1.
- 6. Gradient infringement table to be shown in ESP.
- 7. Grade post to be shown properly.
- 8. Private siding FSR & DPR to be submitted by RDSO approved agency.
- Private siding ESP should be prepared based on model of approved ESP drawing.
- 10. PT, STR, FM, DE should be mentioned with chainage & proper symbol.
- 11. Proper legend should also to be incorporated.
- 12. Angles of turnout & chainage should be properly mentioned.
- 13. Calculation of curve should be submitted.
- 14. c/c distance to be shown between existing line & proposed line of Giddi siding.
- In Annexure A5 sheet, formation level at chainage 7906.294 M should be mentioned clearly that how it has been calculated. It should be calculated from CSB PTRU
- 16. In Annexure A5 Drawing sheet, first level crossing has been shown. It should be deleted and replaced it with LHS/ROB as per Railway guideline.
- 17. Annexure A4 & A5 Drawing sheet should be drawn with connection from PTRU CSB.
- 18. Annexure A4 & A11 sheet, Drawing is not readable.
- 19. In Annexure A4 & A5 Level not matched. It should be matched properly.
- 20. In Annexure A5 Loading line1 CAL 1054.032(FM-FM) whereas in Annexure A12 Loading line no 1 CAL 960.404(PT-FM). Same as in Engine Reversal line CAL 803.061(FM-PT) whereas in Annexure A12 engine scape line CAL 710.00(FM-PT). It should be corrected.

Sr. divisional Engineer(3) East Central Railway, Dhanbad

SSE AMAYOHN,

East Central Railway

No. SG.662/8/works

Dhanbad, Date- 02/09/2023

Sr. Divl. Operations Manager East Central Railway

Dhanbad

Sub: Comments on FSR for construction of New rail line at Giddi siding taking off from Patratu station.

Ref: i) Your letter No. PL/Giddi Siding/25082023, dtd- 30.08.2023.

ii) IPRCL letter no. IPRCL/Ranchi/ECR/CCL-Giddi-A/18/817, dated: 24.08.2023.

Please find below herewith the comments pertaining to S&T department in connection with the above subject work.

- Inter distance between Giddi siding and Patratu station should be mentioned i) (Adjacent station and its Km has not been shown).
- Signals position needs to be corrected in the tentative SIP. ii)
- Inter slotting system need to be provided for movements of train between PTRU iii) to Giddi siding.
- Agreed with the Tentative Estimate Cost of signaling system for Giddi Siding for iv) Rs 79588677.00 (Seven crore Ninty five Lakh Eighty Eight Thousand Six Hundred Seventy Seven) excluding GST & other charges.
- For actual assessment of proposed work, copy of approved ESP is to be made v) available.

This is for your information and necessary action please.

GAUTAM Digitally signed by GAUTAM GUPTA GUPTA Date: 2023.09.06

Sr. DSTE (C)/ECR/DHN

File No.ECR-DHN0OPTG(PLG)/35/2023-O/OSRDOM 2132084(1)/2023/O/o SR.DEE(TRD)/DHN/ECR



Office of the,
Sr. Divl. Elect. Engineer(TRD),
DRM office, Dhanbad,
P.O. & Dist.-Dhanbad- 826001
Phone-0326-2220535, Mob.-9771426301

No. ELD/367/DPR/Siding(Giddi sdg /CCL)
Sr. Divl. Operations Manager,
Dhambad

Dhanbad, Dt.- 12/09/2023

Sub:- Comments on examination of FSR for construction of rail line at Giddi siding taking off from Patratu station.

Ref.:- Your letter No. PL/Giddi siding/25082023 dt. 30/08/23 (recd. on 04/09/23).

Reference above, it is mentioned that feasibility study report (Aug'-23) for construction of new rail line with provision of wharf wall loading platform at Giddi siding taking off from Patratu station between BRKA-GHD section has examined at this end.

From the report

Length of Siding to be electrified = (2.808 TKM)

Total Cost =2,01,04,887.43/-

It is mentioned in FSR that the existing siding was also electrified to maintain uniformity of traction from operational point of view as well as to reap benefit of E.O.L. system.

It is requested that the dismantling work of the existing electrified siding will be done by the siding owner at his own cost and he will ensure that the dismantled material is handed over to the nearest OHE depot in BRKA. As per RDSO instruction Power supply in the proposed section to be done through 25 KV Circuit Breaker along with associated switchgear due to avoid main line interruption in case of fault in sidings.

TW charges, electricity and traffic block charges and any other incidental charges may be claimed by Railways or other agencies should be included at the time of preparation of DPR.

The detailed comments will be given on submission of DPR with layout plan, sectioning diagram, wiring diagram & OHE key plan and detailed estimate of OHE, PSI, SCADA work.

The above may please be looked into and ensured before finalization of DPR.

Copy to -

PCEE/ECR/HJP- for kind information.

Sr. Divl. Elect. Engineer/TRD East Central Railway, Dhanbad

8r. Divl. Elect. Engineer/TRD East Central Railway, Dhanbad

East Central Railway

No. XG.90/Sdg/FSR/21

Office of the Coal Area Manager Dhanbad, dt.04.09.2023

Sr. Divisional Operations Manager E.C. Rly/Dhanbad.

Sub: - Comment on FSR for construction of new rail line at Giddi siding taking off from Patratu station.

Ref: - (i) Your office letter no. PL/Giddi Siding/25082023, dated 30.08.2023

In connection with your letter under reference, Comments on FSR for the proposed project mentioned under subject mentioned above is furnished below:-

- 1. As per Railway Board's letter no. TC-1/2019/108/1, dtd. 11.07.19, all loading points should be covered by weighbridge. Siding owner File Mope CReDHNOOP TG(PLG)/35/2023 0/0SRDOM the cost of manpower to operate the weighbridge.
- The cost of procurement (inclusive of the requisite warranty and a post-warranty, five-year comprehensive AMC), installation, maintenance (even after the expiry of the initial warranty and the five-year comprehensive AMC) and replacement of these EIMWB would be borne by the siding owner.
- 3. Such weighbridges are to be integrated with FOIS and the cost of integration shall be borne by the siding owner.
- 4. TMS (FOIS) terminal shall be installed at the siding and all cost related to installation should be borne by siding owner. The siding owner shall also provide all facilities like room, furniture, electricity, network connectivity etc for issuing of Railway Receipt (RR).
- 5. Siding owner shall sign a Siding Agreement as mentioned in Para 18 of Rly Board's Master Circular on Gati Shakti Multi Modal Cargo terminal (GCT)- 2021 No. 2021/TC(FM)/18/23, dtd 15.12.2021 before Commissioning of the siding and before issuance of Commercial Notification of the siding.
- 6. The siding will work on "Engine on load" scheme. Siding owner should develop facilities for loading and unloading on "Engine on load" concept and design the yard layout in such manner that the loading of same rake by same engine under free time of 3 hrs. The siding owner will be required to opt for the Engine on load operation under agreement.
- 7. Siding owner should also take environment clearance by Union Ministry of Environment and Forest for the Construction of the proposed project.
- 8. Joint Survey by a team comprising of officials/representatives from 'Railway' & 'Siding owner' would be conducted by Railway side for feasibility study of the proposed site & Joint Survey report should include 'gradient', 'centre to centre distance', 'turn out', 'length of siding from siding to serving station' and also shunting is required for placement and drawn out rakes.
- Siding Owner shall agree with all the terms & conditions on private siding of Freight Marketing Circular No 11 of 2016 (modified circular dtd. 23.06.20) and Rly Board's Master Circular on Gati Shakti Multi Modal Cargo terminal (GCT)- 2021 No. 2021/TC(FM)/18/23, dtd 15.12.2021 & other extant circulars from time to time.

This is for your information and necessary action please.

DA: Nil

Coal Area Manager E.C.Rly, Dhanbad



इंडियनपोर्टरलएंडरोपवेकॉपरिशनलिमिटेड

(पत्तन, पोतपरिवहनएवं जलमार्गमंत्रालय, भारतसरकारकेअधीनसंयुक्तउद्यम)

Indian Port Rail & Ropeway Corporation Ltd.

(A JV Company under Ministry of Port, Shipping & Waterways, Government of India) CIN No: U60300DL2015PLC282703 (An ISO 9001, 14001 & 45001 Certified Company)



No. IPRCL/Ranchi/CCL-Giddi-A/24/888

To,
The General Manager
Argada Area,
Central Coalfields Limited,
Jharkhand

Sub: Deposition of 1% codal fee to E. C. Railway in connection with approval of FSR for modification of existing Giddi-A siding.

Work: Detailed Project Report (DPR) & obtaining its approval from Railway for the Construction of new line/modification by complete renewal of existing Rail lines of Wharf wall loading platform of Giddi-A Railway siding under existing MoU between CIL & IPRCL.

Ref.: 1. Sr. DOM/ Dhanbad division, ECR lr. No.PL/Giddi/04082023 dt. 14.11.2023.

- 2. IPRCL lr. No. IPRCL/Ranchi/ECR/18/CCL/Giddi/884, dt. 09.11.2023.
- 3. Your lr. No. GM(A)/Secty./2023/18/230, dt. 06.11.2023.
- 4. FSR submission lr. No.IPRCL/Ranchi/ECR/CCL-Giddi-A/18/817 dt. 24.08.2023
- 5. CCL work order No. GM(C)/IC/W.O./2023/1043, dt.06.03.2023

Dear Sir,

FSR of the work under subject was submitted to ECR by IPRCL vide letter under ref-4. A meeting was held in the office of DRM/Dhanbad/ECR on 03.11.2023. Subsequently, for compliance of observations of ECR, a meeting was held with GM/Aragda Area/CCL on 06.11.2023. The compliances of ECR observations were submitted to ECR vide letter under ref-2.

Sr.DOM/Dhanbad/ECR vide letter under ref-1 communicated for deposition of Codal fee in the form of **Demand Draft (DD)** in **favour of FA & CAO/ECR, Payable at Dhanbad** (@ 1% of Projected cost in FSR) for issue of In-Principle Approval. In the letter ECR conveyed observations for compliance in DPR and ESP (Copy enclosed). It is also submitted that CCL GST number should be submitted to ECR.





ZI-11.25



इंडियनपोटरेलएंडरोपवेकॉर्पोरेशनलिमिटेड

(पत्तन,पोतपरिवहनएवं जलमार्गमंत्रालय, भारतसरकारकेअधीनसंयुक्तउद्यम्)

Indian Port Rail & Ropeway Corporation Ltd.

(A JV Company under Ministry of Port, Shipping & Waterways, Government of India)
CIN No: U60300DL2015PLC282703
(An ISO 9001, 14001 & 45001 Certified Company)



Calculation of 1% Codal is given below,

S.No.	Description	Amount (in Rs.)
1	Basic cost of project	27,03,07,706.98
2	1 % of basic cost as codal fee	27,03,077.07
3	18% GST on codal fee	4,86,553.87
4	Codal fee with GST	31,89,630.94

ECR GSTIN - 20AAAGM0289C1ZX

Name- Ministry of Railways

Address – Divisional Railway Manager, E. C. Railway, Dhanbad Division, Dhanbad, Jharkhand.

You are requested to make arrangement of Demand Draft (DD) as detailed above, so that the same may can be submitted to E. C. Railway Dhanbad Division.

Thanking you.

Encl: As above

(Abhishek Das) Jt. General Manager (P) IPRCL, Phusro

Copy to, GM/(Civil/IC), HQ, CCL - For information please. SO(Civil), Argada Area, CCL - For information please.







इंडियनपोर्टरलएंडरोपवेकॉपोरेशनलिमिटेड

, एल-१, पोतपरिवह-१एवं जलमार्गभत्रालयः, भारतसरकारके अधी-ग्लंयक्तउद्यमः।

Indian Port Rail & Ropeway Corporation Ltd.

(A.D. Company under Ministry of Port, Shipping & Waterways, Government of India) CIN No. U60300DL2015PLC282703

(An ISO 9001, 14001 & 45001 Certified Company)



No. IPRCL/Ranchi/ECR/GIDDI-A/18/] 2 (

Date: 26.12.2023

To

The Sr. Divisional Operations Manager **Dhanbad Division**, East Central Railway Dhanbad 826001

Dear Sir

Submission of Codal Fee in connection with IPA of FSR. Sub

*Detailed Project Report (DPR) & obtaining its approval from Railway For the construction of Work new line/modification by complete track renewal of existing Rail lines of Wharf wall loading platform of Giddi A Railway Siding under MoU between CIL & IPRCI."

= Rs

Ref Your Ir No PL/Gidd/04082023, dt. 14.11.2023.

FSR was submitted in your office vide letter No. IPRCL/Ranchi/ECR/CCL-Giddi-A/18/817, dated 24 08 2023

Anticipated Cost of the project as per FSR

= Rs. 27,03,07,706.98

1% of the anticipated cost as codal fee

27,03,077.07 = Rs.

Adding GST @18% on codal fee

4,86,553.87

Codal fee with GST

= Rs. 31,89,630.94

CCL has handed over a Demand Draft No 506455 dated 22.12.2023 issued by SBI, Branch-SIRKA for Rs. 31,89,630.94 in favour of 'FA & CAO, East Central Railway Hajipur'

In reference to your letter No. PL/Giddi/04082023, dt. 14.11.2023 the same DD is submitted herewith against 1% codal fee

GST invoice in favour of M/s Central Coalfields Limited may kindly be issued after realization of Demand Draft. GST invoice to be issued for GSTIN: 20AAACC7476RHZT.

This is for your information and is requested to communicate the IPA of FSR. Please acknowledge the receipt of Demand Draft.

Encl As above

Yours faithfully,

(Binod Prasad) Joint General Manager (P) IPRCL, Ranchi

Copy to. - for kind information

- The Divisional Railway Manager, Dhanbad, E.C.Rly.
- The General Manger(Civil/IC), CCL, HQ, Ranchi
- The General Manger, Argada Area, CCL
- 4. SO/Civil, Argada Area, CCL



Corporate Office: 4th Floor, Norman Bhavan, Mumbai Port Trust Building, M. P. Road, Mazgaon (E), Mumbai 400 010 Ph. No.: 022 - 6656 6340; Fax No.: 022 - 6656 6336; Email: md@prel.in, md intel@prel.in com website: www.iprel.in Regd Office 1" Floor, NBCC Place, Bhishma Pitamah Marg, Lodhi Road, New Delhi-1100001 Project Office Flat No. 404, 4th Floor, Shree Ram Krishna Enclave, Adalhatu Road, Morabadi, Ranchi, Jharkhand 834008, Email uday singh@iprel in



File No.ECR-DHN0OPTG(PLG)/35/2023-O/OSRDOM

EAST CENTRAL RAILWAY

No. PL/Giddi/04082023

General Manager (P) IPRCL, Ranchi.

Sub: - In principle approval of Feasibility study report for augmentation of Giddi Siding.

Ref: (i) IPRCL letter No. IPRCL/Ranchi/ECR/Giddi-A/18/926 dated: 26.12.2023. (ii) This office letter no. PL/Giddi/04082023 dated: 14.11.2023.

In reference to above, 'In Principle Approval' for augmentation of Giddi Siding of CCL taking off from PTRU is hereby granted under FM circular 11 of 2016, on deposit of 1% Codal charge (inclusive of GST) by SBI DD no. 506455, dated 22.12.2023 amount Rs 31,89,630.94/- (Thirty-one Lakh Eighty-Nine Thousand Six Hundred Thirty and Paise Ninety-Four Only), for the proposed project subject to fulfilment of the following observations:

- 1. All observations made vide reference letter no. (ii) must be complied and taken into consideration while preparing DPR & ESP.
- 2. DPR to be submitted (six copies) in hard copy and soft copy (single PDF).
- 3. ESP with miniature schematic plan to be submitted at division with soft copy and hard copy for onward approval with approval of DPR.
- 4. The siding holder has to be abiding by the Railways terms and conditions according to extant rule of Railways regarding staff cost, maintenance charge of track OHE, Signaling etc. as applicable from time to time.
- 5. Railways reserve the right to incorporate any kind of change, if feel necessary in view of operations, track laying, signaling arrangement etc. which will be binding on the siding holder.
- 6. Siding will be strictly guided by existing FM Circular no.11 of 2016 issued by Railway Board vide letter no. 99/TC (FM) /26/1/pt.-II dated-22.08.2016 & FM circular no. 06 of 2020 and correction slips/circulars/amendments issued by Railway time to time in this regard.

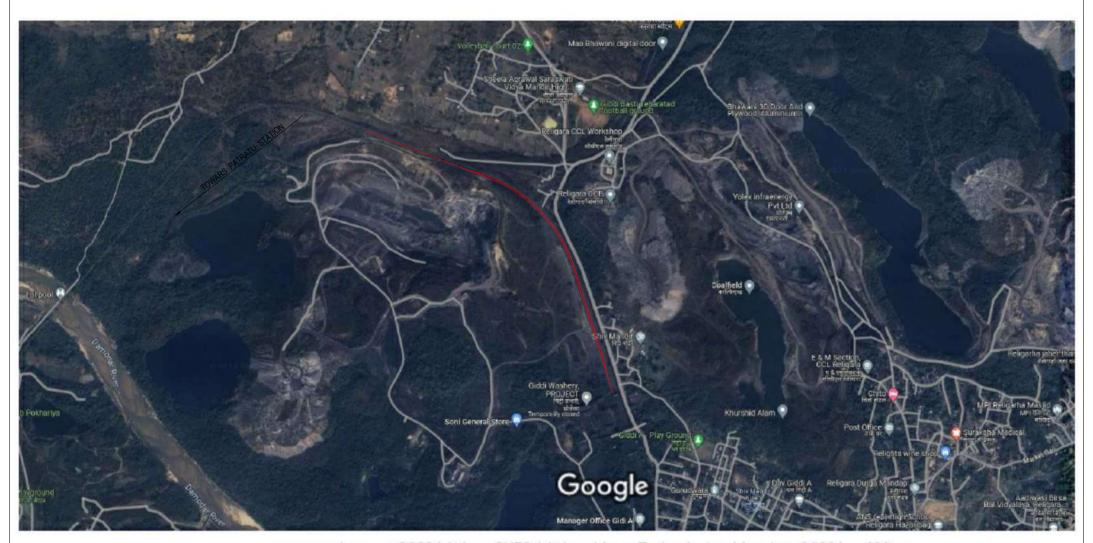
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Date: 02.01.2024

Sr. Divisional Operations Manager East Central Railway, Dhanbad,

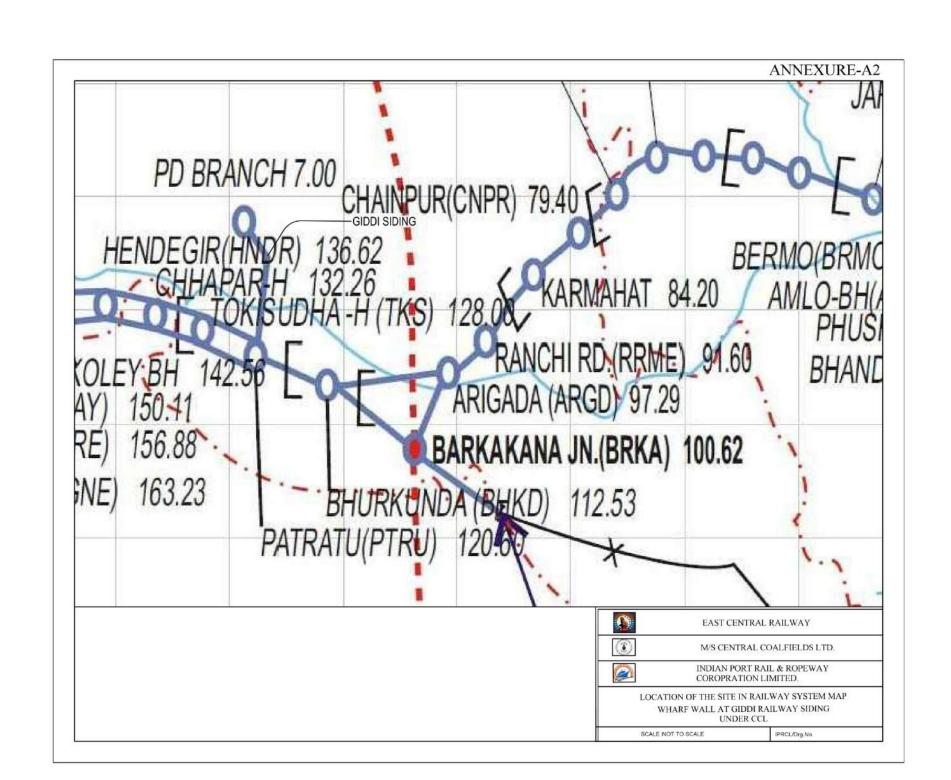
Copy to: COS (G) for kind information to DRM/DHN, please. CTPM/ECR for kind information, please. GM(Civil)/CCL for kind info. and necessary action, please. 1/3/24, 3:38 PM Google Maps

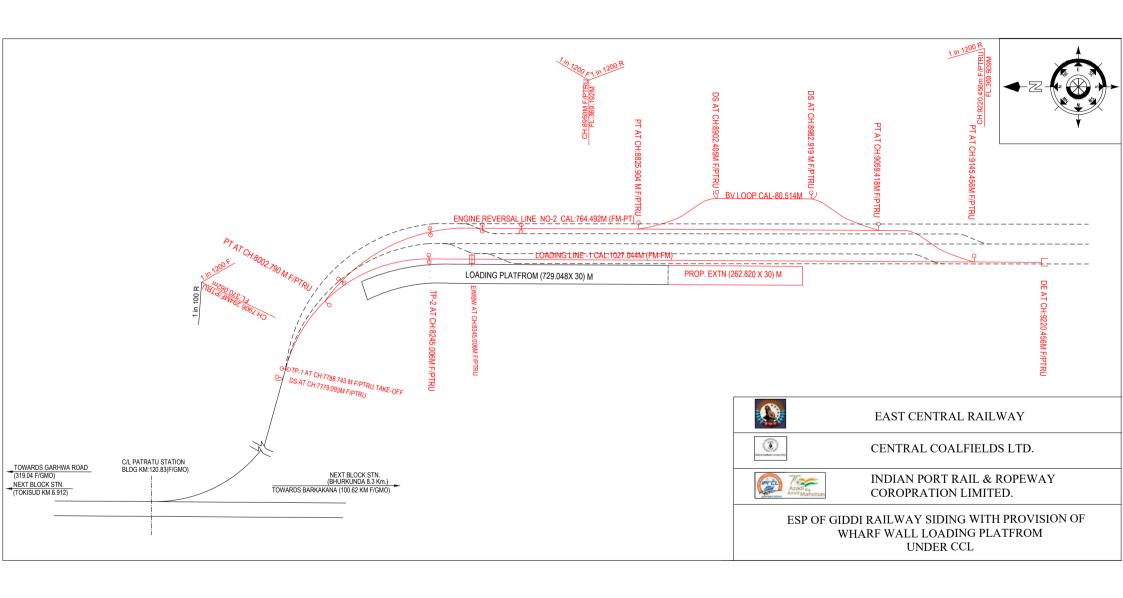


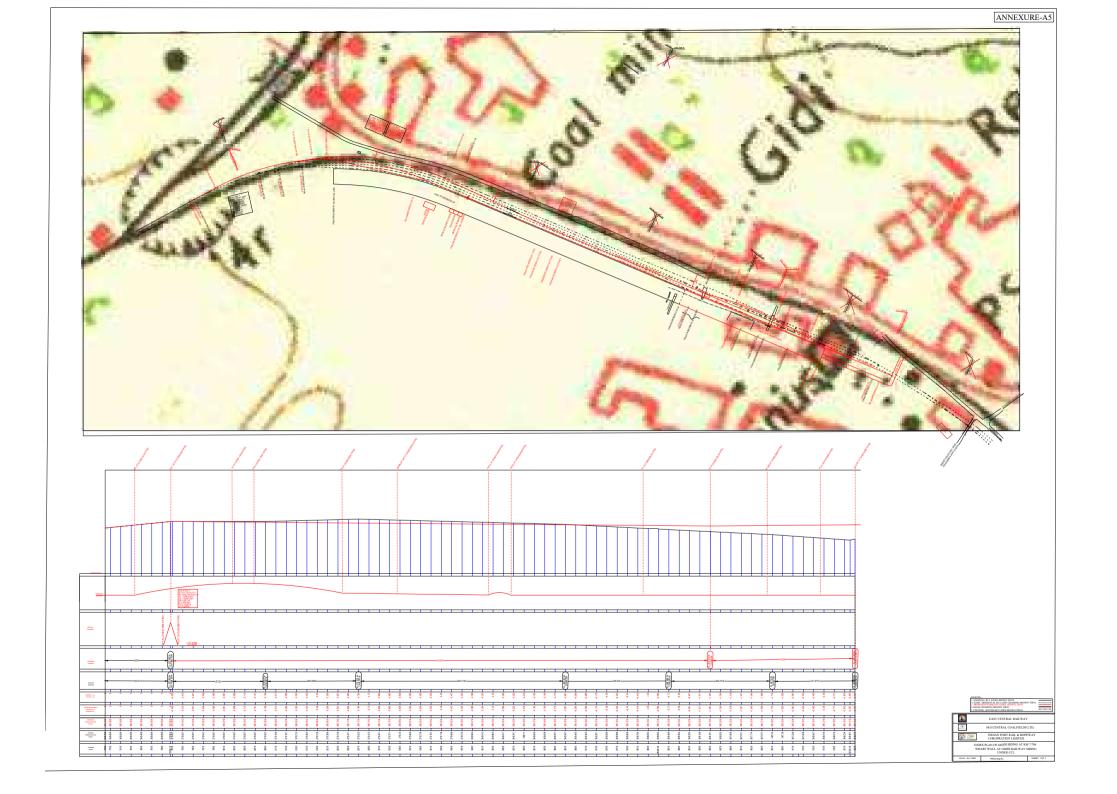


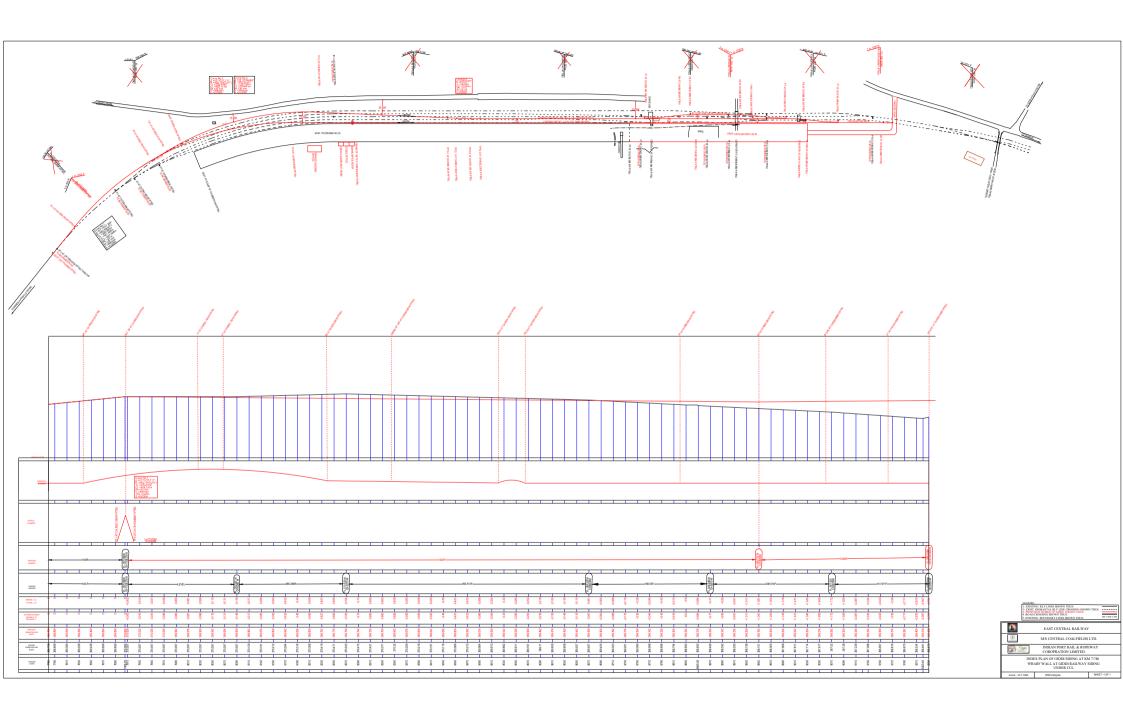
Imagery ©2024 Airbus, CNES / Airbus, Maxar Technologies, Map data ©2024 200 m















Detailed Project Report of Giddi Railway



ANNEXURE-A7

BENCH MARK LIST

	TBM list for Giddi Siding						
SI No.	Easthing	Northing	RL	Code	Remark		
1	332428.773	2621723.092	363.13	P-3	RCC Pillar (CCL Point)		
2	332811.0113	2621535.814	375.86	NP-4	RCC Pillar (CCL Point)		
3	332823.9377	2621524.122	374.73	NP-5	RCC Pillar (CCL Point)		
4	332603.3592	2621673.776	367.46	TBM-1 (DGPS Point)	Rly sleper		
5	332891.4212	2621521.18	371.61	TBM-2 (DGPS Point)	RCC Pillar top		
6	332969.7943	2621379.743	371.42	TBM-3	PF top		
7	333240.0862	2620645.002	368.46	TBM-4	Conveyor Foundation top		
8	333328.8736	2620325.588	367.61	TBM-5	Near Well parapet wall		



Detailed Project Report of Giddi Railway



ANNEXURE -A8

GRADIENT STATEMENT

Route Length of Line=1431.915 m

SL. NO.	Chainage in 'm'		Length	Grade	Remarks
	From	То	in 'm'		
01	7786.937	7906.294	117.753	1 in 100	Rise
02	7906.294	8950.000	1043.706	1 in 1200	Fall
03	8950.000	9220.456	270.456	1 in 1200	Rise

GRADIENT ABSTRACT

Route Length of Line=1431.915m

Rodde Length of Line 1131.3131					
SL. NO.	Grade	Length in 'm'	% of Length	Remarks	
01 1 in 100		119.357	8.326	Rise	
02	1 in 1000	901.191	62.866	Fall	
03	1 in 1000	412.971	28.80	Rise	
	Total	1433.519	100%		



Detailed Project Report of Giddi Railway



ANNEXURE -A9

List of Curve

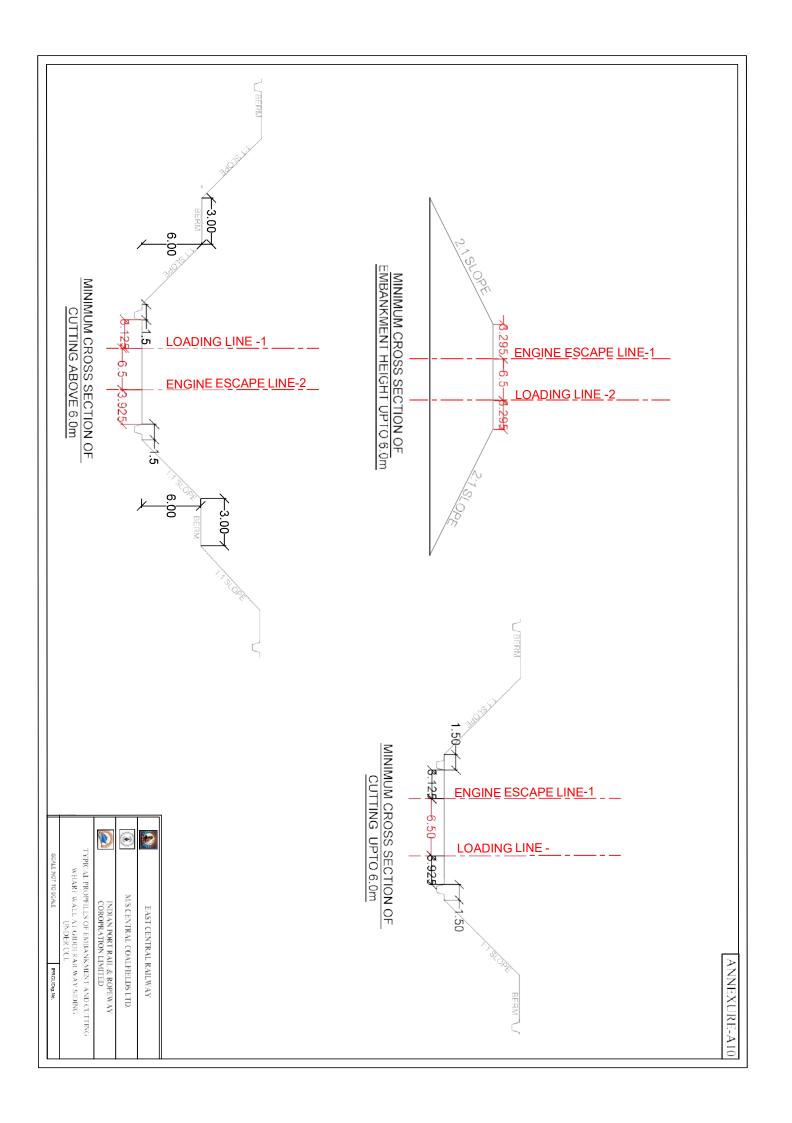
Total Route Length =1431.915m

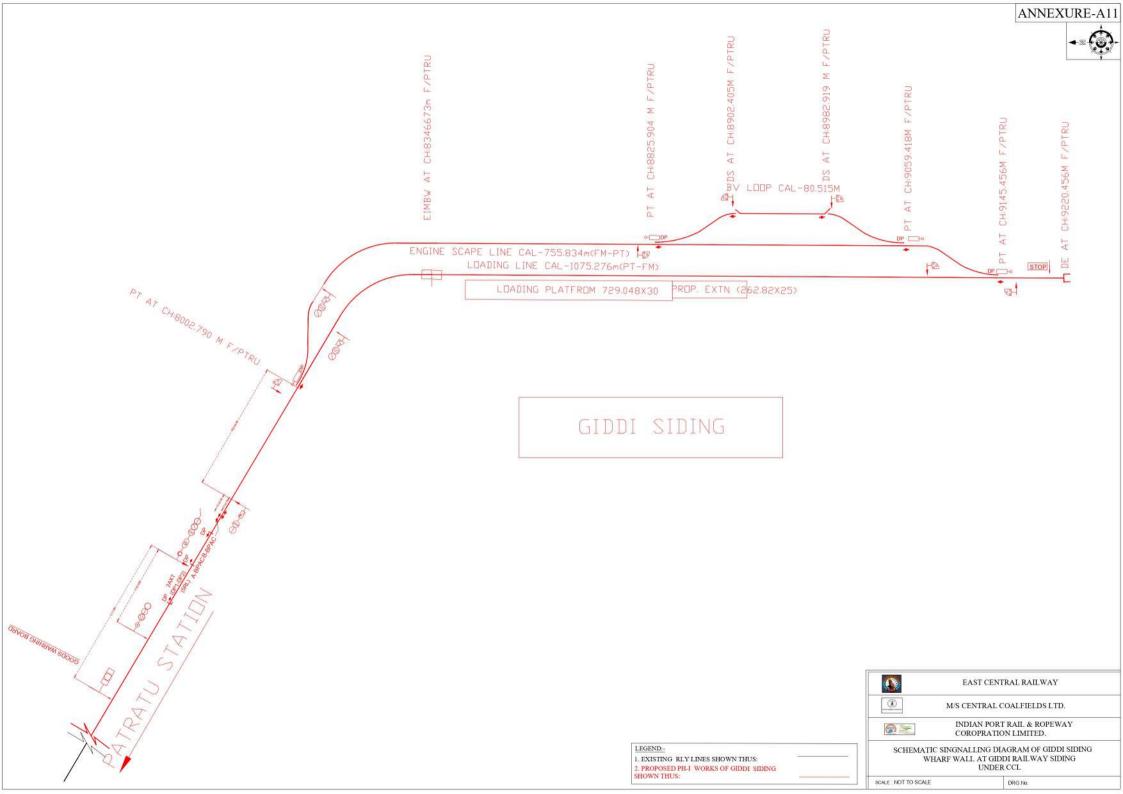
SL. NO.	Curve No.	Radius of Curve (Inm)	Chainage in 'm'		Deflection Angle	Total Length of Curve
			From	То		(Inm)
01	1	458.12	7835.292	8245.006	51010"37.711	409.758
02	2	380.00	7986.874	8190.79	32 ⁰ 47"49.862	259.901
03	3	875	8509.156	8562.220	2º 29"34.566"	53.064

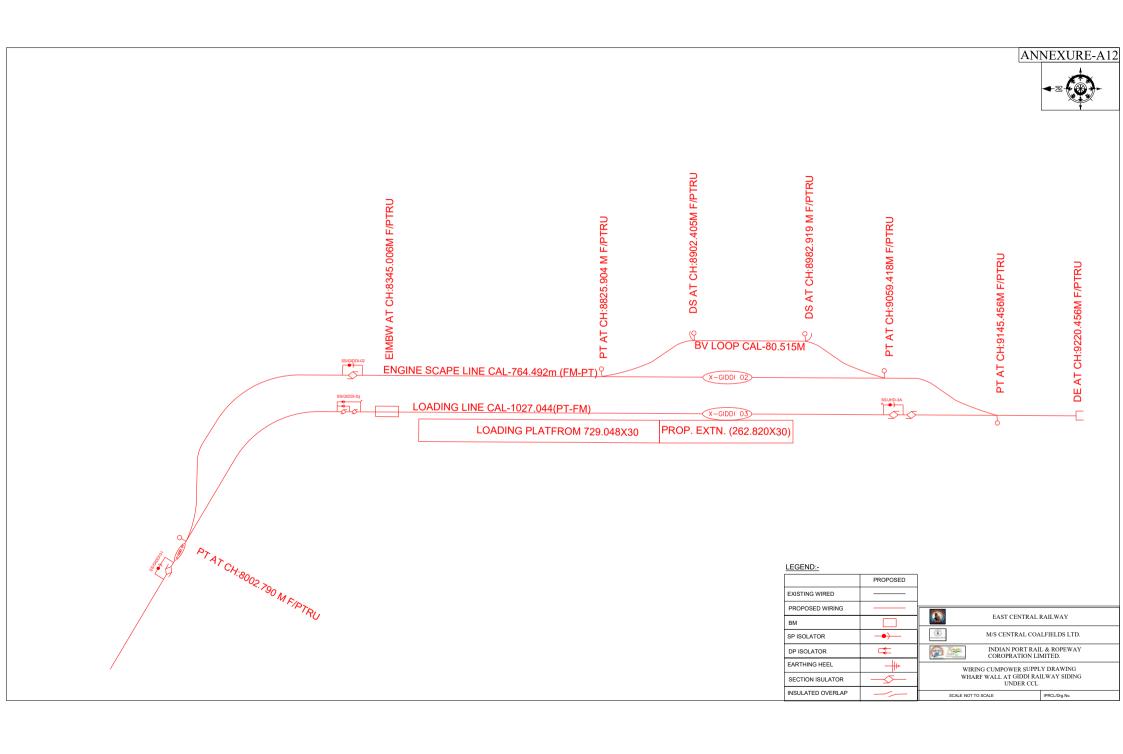
CURVE ABSTRACT

Total Route Length = 1431.915 m

SL.	Radius of	Total Length of	Total	%Of Curvatureof
NO.	Curve In m	Curve In m	Degree of	
100			Curvature	Total length
				of Line
01	458.12	409.713	3.81 ⁰	28.61%
02	437.12	259.901	4.0°	18.15%
03	875.00	53.064	2.00	3.71%
		Total		50.47%









Draft Detailed Project Report of Giddi Railway



Abstract Cost Estimate

SI. No.	Type of works	Anticipated cost [in Rs]
1	Civil Engineering	16,40,98,699.66
2	Signal & Telecommunication	8,03,53,721.44
3	Electrical Engineering	2,09,54,086.76
4	General Electrical	2,03,63,672.96
	Total	28,57,70,180.82



Detailed Project Report of Giddi Railway



ANNEXURE A-14 Civil Engineering Cost Estimate

1	Abstract of Civil Engineering Works of Giddi Railwa	y Siding
Sr. No.	Description of Schedule	Price in Rs
1	Earthwork in Formation	1,08,96,939.47
2	Ballast Supply	1,63,92,989.22
3A	P.Way Supply (Other than steel items)	2,21,57,812.62
3B	P.Way Supply (Steel Items)	3,22,27,074.53
3C	Permanent Way Linking: Installation Works	53,70,673.31
3D	Permanent Way Linking: Supply and	
	Installation Works	27,87,454.69
4	Drain	1,03,21,206.71
5	Platform(725 x 30)m	4,51,51,776.67
6	Building Works	
6A	IMWB room, Crew room etc.	12,50,419.86
6B	Service Building	61,28,469.89
7	Misc. Work Incl. Dismantling Work	35,57,968.75
8	Construction of Approach road	25,90,869.50
9	In Motion Weigh Bridge	35,00,000.00
10	Site Facilities	17,65,044.44
	TOTAL	16,40,98,699.66

	1: EARTHW	ORK	IN FOR			
S. No.	Description of Item	Unit	Qty	Rate in Rs.(Including 5% Escalation upto 2023)	Amount in Rs.	Rate Reference
1	Earthwork in filling in embankment, guide bunds, around buried type abutments, bridge gaps,trolley refuges,platforms etc, with contractors own earth conforming to soil quality class SQ1/SQ2/SQ3, after preparation of foundations as applicable benching in existing banks wherever required spreading in layers with motor grader bringing the moisture content to OMC, mechanical compaction to specified density and dressing of bank to final profile as per RDSO specifications: RDSO/2020/GE:IRS-0004 with latest correction slip .Note 1) Foundation preparation,Benching including additional earthwork on account of this wherever required shall be paid extra unde relevant schedule item for benching .2) payment for earthwork under this item shall be made based on the cross section measurements calculated (i) with original ground profile of existing bank based on initial ground levels before doing benching and (ii) final profile of the bank worked out with final levels as per prevailing guidelines					Item No-011030 USSOR - 2021 (ECR)
1.1	Using Soil Class SQ2	Cum	7218	373.54	26,96,241.52	Item No-011032 USSOR - 2021 (ECR)
2	Earthwork in cutting in formation trolley refuges, side drains, level crossing approaches, platforms, catch water drains, diversion of nallah & finishing to required dimension and slopes to obtain a neat appearance to standard profile inclusive of all labour, materials, plant & machinery leading all cut spoils either to make spoil dumps or for filling in embankment with leads within 2 km on either Side of edge of the cutting (s) including all lifts ascent descent, loading, Unloading bailng & pumping out water if required clearance of site and all other works incidentals there to for completing the work as per RDSO Specification No. RDSO/2020/GE: IRS-0004 with latest Updated correction slips and to the satisfaction of he Engineer-in -charge Note: (i)All usable earth arising from cut Spoils shall be led into bank formation and Unusable spoils shall be dumped /stacked away from too of em bankment. (ii) All hard rock /and boulders not fit for filling will be stacked by the contractor and wil be property of Railways. (iii)Cut trees shall be property of Railways and to be deposited in the godown Unless specified otherwise in the		0			Item No-012010 USSOR - 2021 (ECR)
2.1	In ail conditions and Classifications of soil except rock	Cum	3680	111	4,07,748.60	Item No-012011 USSOR - 2021 (ECR)
3	Manufacturing of blanketing material by wet mixing of naturally available suitable soil including additional blending with naturally available soil imcluding additional blending with naturally available of manufactured material as required to achieve specifoed gradation, in designed proportion in pig mill or wet mix plant to have uniform gradation including all incidental transportation laying over finished formation in uniform layer(s) with motor grader, compaction with suitable vibratory roller to specified density and finishing to correct profile complete as per RDSO specification No. RDSO/2020/GE :IRS 0004 with latst correction slips.		6324	1174	74,25,030.14	Titem No-012040 USSOR - 2021 (ECR)
4	Extra Mechanical Compaction of Earth and Blanket materials in layers of about 30 CM (or more or less) in loose state using vibratory compactor (of adequate capacity) so as to achieve compaction as per RDSO Guidelines and Specification for Design of Formation for Heavy Axle Load – Nov 2009. Minimum EV2 Criteria as mentioned in the guidelines is not applicable. Note: The payment for compaction shall be based on the computed quantity of earth work/blanket work from the cross sections. The payment, however, will be restricted only to the approved design profiles furnished by the Engineer; or the actual quantity executed whichever is less.		13542	27	3,67,919.21	Item No. 1006, RVNL 202

	3 : BALLA	ST SL	JPPLY			
S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount in Rs.	Rate Reference
3001	Supply and stacking of machine-crushed stone ballast as per RDSO specifications for track ballast: IRS-GE-1 of June, 2004 from outside railway limits stacked in specified quantities alongside the proposed alignment on either side of track, in yards and at locations as per site requirement as directed by the Engineer. Note 1: Payment will be made on actual stack measurement for gross quantities without any deduction for voids in following stages: (i) 95% on receipt at site, acceptance, measurement, account, proper storage and protection against loss, damage or deterioration; and (ii) balance 5% after training out. Note 2: i) Wherever sufficient railway land is not available, contractor will have to arrange land for supply and stacking of ballast at his own cost for which extra payment as per item no. 3001a will be admissible. ii) The rate also includes levelling, dressing of ground for stacking of ballast.	Cum	7716	2124.55	1,63,92,989.22	Average of LOA OF KARO & KONAR WORK
	Total for Bill No. 3 (Carried forward)				1,63,92,989.22	

4 : PERMANENT WAY SUPPLY 4A: P.WAY SUPPLY (Other than Steel Items)

S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount in Rs.	Rate Reference
4001	Supply of P.Way Components					
4001 a	GFN Liners to RDSO Drg. No. T-3706.	Each	19066	14	2,70,260.55	RVNL BOQ
4001 b	Combination GFN liners to RDSO Drg. No.T-3707 and T-3708.	Set	100	46	4,616.72	RVNL BOQ
4001 c	Composite Grooved Rubber Sole Plates (CGRSP) to RDSO Drg. No. T-6618	Each	9812	55	5,40,886.50	RVNL BOQ
4001d	End cut GFN liner - 60 kg Manufacture & supply of end cut 60 kg Glass filled nylon 66 insulating liner confirming to RDSO Drg. No. T-3706 with latest alterations and as per IRS Specification T-44-1995 with latest alterations. Note-End cut is to be done for glued joint as per RDSO drawing No. T-4511 with latest alteration complete.		530	22	11,686.50	RVNL BOQ
4001 f	End cut combination GFN liner Manufacture & supply of end cut combination GFN liner 60/52 kg confirming to RDSO Drg. No. T-3707a & 3708a with latest alterations and as per IRS Specification T-44-1995 with latest alterations.		100	74	7,382.81	RVNL BOQ
4002	Supply of glued insulated rail joints G3 L 6.5 M long with 10 MM thick end post on PSC sleepers. Rails will be issued free of cost by the Employer @ 6.5 M for each joint.					
4002 a	60 KG Kg rail section as per RDSO Drg No. RDSO/T-5843	Each	30	17084	5,12,514.84	RVNL BOQ
	B.G Monoblock prestressed monoblock concrete sleeper(wider) as per RDSO's Dwg. No- T-8527 with latest alteration if any, leading, loading & Unloading and stacking as per IPRWM and all along and both side of the siding alignment or as directed by the engineer in charge		4488	4128.695	1,85,29,583.16	Average of LOA OF Karo & Konar
4010	Supplying at site of work including leading, loading, unloading and stacking of Special PSC Monoblock Sleepers (pre-tensioned type) for B.G. 1 in 8½ Derailing Switch as per RDSO Drg. NoT-6068 to suite both 52/60 kg rails as per RDSO Design and IRS Specifications No. T-45-96 (2nd Edition) as amended from time to time with contractor's labour, materials, tools & Plant, equipment and machinery, transport etc complete.		3	198503	5,95,509.47	RVNL BOQ

S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount	Rate Reference
	2 333 1 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0	~-,		in Rs.	
4011	Supplying at site of work including leading, loading, unloading and stacking PSC turnout sleepers and approach sleepers for fanshaped layout of 60 kg 1 in 12 turnout for B.G 60 Kg. (UIC) rail/52 kg rails to RDSO Drg. No. T-4218 Alt-5 (for general layout) and drawings thereof with latest alterations if any, complete set with contractor's labour, materials, tools & Plant, equipment and machinery, transport etc complete.		0	557891	_	RVNL BOQ
4012	Supplying at site of work including leading, loading, unloading and stacking PSC turnout sleepers and approach sleepers for fanshaped layout of 60 kg 1 in 8.5 turnout for B.G 60 Kg. (UIC) rail/52 kg rails to RDSO Drg. No. T-4865 Alt-5(RT-4793 to 4844 & RT-4512) (for general layout) and drawings thereof with latest alterations if any, complete set with contractor's labour, materials, tools & Plant, equipment and machinery, transport etc complete.		4	375560	15,02,238.94	RVNL BOQ
4017	Supply of Grooved Rubber Sole Plates for 1 in 8.5 turnouts for layout Drg no. T-4865 with latest alterations if any, complete set for the turnout as per IRS specification for Grooved Rubber Sole Plate (6mm thick) for placing beneath rails SI. No. T-47-2006 with up to date corrigendum if any		4	45783	1,83,133.13	RVNL BOQ
	Total for Bill No. 4A (Carried forward)				2,21,57,812.62	

4: PERMANENT WAY SUPPLY 4 B: P.WAY SUPPLY (Steel Items)

S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount in Rs.	Rate Reference
	Supply of P.Way Components					
	Supply of 60 kg. Rails for linking of track (R240)	MT	327	80000	2,61,60,000.00	SAIL Rate
5006	Transportation of rails, switches, crossings, etc.					
	from point of issue to their final location of laying in track					
5006 a	Average lead, from the place of issue upto the middle					
	point of location of laying in each KM, upto 10 KM	MT	327	393.75	1,28,756.25	RVNL BOQ 2021
5006 b	Incremental rate for lead beyond 10 KM under item	MTKM	222360	7.97	17,72,973.56	RVNL BOQ 2021
4021 a	5006 (a) above ERC to RDSO Drg. No.T-3701	Each	19066	98.44	18,76,809.38	RVNL BOQ 2021
4021 b	ERC "J" to RDSO Drg. No.T-4158	Each	557	108.28	60,312.66	RVNL BOQ 2021
4023	Supply of Combination fish plates (4 Nos. per set) as	200	307	100.20	00,012.00	
	per Drawing No.T696 to T699 including nuts, bolts					
	and washers.					
4023 a	For 60 KG & 52 KG Rail Sections	Set	6	14623.88	87,743.25	RVNL BOQ 2021
4025	Supply of joggled fish plates (2 No. per set) with 4					
	pair clamps, 4 No. Bolts & Nuts and 8 No. special					
	washers.					
4025 a	For 60 KG as per RDSO Drawing No. T -4016/T-5849	Set	30	5083.31	1,52,499.38	RVNL BOQ 2021
4026	Supply of Fish plates one meter long as per standard					RVNL BOQ 2021
	drawing of RDSO					NVIVE BOQ 2021
4026 a	60 KG rail (As per RDSO Drg.No.T-5916/T-5851)	Each	132	2242.41	2,95,997.63	RVNL BOQ 2021
4029 a	Supply of 60 kg 1 in 8.5, 6400mm Overriding Curved Switch confirming to RDSO Drg. No. T-4966/T-5353 with latest alteration, if any complete with all parts as listed in the drawing with check rails (excluding fish plates, Fish bolts &nuts, GRSPs, Liners and ERCs). Note: Rails will be issued free of cost by the employer.	Set	4	120631.22	4,82,524.88	RVNL BOQ 2021
4034	Supply of 60 kg CMS Crossing for 1 in 8 ½ PSC Layout conforming to Drg No. T-4967 with latest alterations complete with all parts as listed in the drawing (excluding fish plates, fish bolts & nuts, GRSPs, Liners and ERCs).	Set	4	277364.39	11,09,457.56	RVNL BOQ 2021
	Miscellaneous small fitings like plate screw, bolts etc.	LS			1,00,000.00	
	Total for Bill No. 4B (Carried forward)				3,22,27,074.53	

	.5 : PERMANENT WAY LINKING 5A : P.Way Linking (Installation Work)							
S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount in Rs.	Rate Reference		
5004	Cutting of 60 KG, 52 KG, 90 R rails with contractor's Abrasive Disc Cutter complete including men, material, fuel etc. true to square.	Each	60	420	25,219.69	RVNL BOQ 2021		
5005	Drilling 26.5 MM, 32 MM diameter holes with Rail Drilling Machine in web of 60 KG, 52 KG, 90 R rails in track or on cess at correct locations including chamfering.	Each	264	101	26,767.13	RVNL BOQ 2021		
5007	Installation of BG track as per methodology specified in para 4.0 of Section 5: Specifications in the Bidding Documents or any other methodology approved by the Employer in all locations e.g. straight, curves, bridges, level crossings, yards etc. including installation of SEJ and glued joints including installation and dismantling of auxiliary track. NOTE: (i) 70% of the rate shall be paid after placement of the sleepers, rails, fastening, initial squaring and correcting sleepers spacing. (ii) Next 25% of the rate shall be paid after manual packing and bringing the track parameters within the prescribed tolerance limits and is certified so by the Engineer. (iii) Balance 5% of the rate shall be paid after getting CRS sanction. (iv) For the measurement and payment purposes, the length of track from central line of first special sleeper to central line of last special sleeper shall be multiplied by 2 in case of bridge and level crossing provided with guard/check rails and to be multiplied by 3 in case of SEJ. (v) The rate includes initial packing on 1st day, 1st through packing on 2nd day, 2nd through packing on 3rd day and Picking up of slacks, as required, from 4th	Track Meter	2814.43	701	19,72,563.63	RVNL BOQ 2021		
	Through packing of track as per procedure prescribed in latest edition of Indian Railways Permanent Way Manual		2044.42					
	For PSC sleeper Track with sleeper density of 1540 sleepers/km or more	TRM	2814.43	91	2,57,181.29	USSOR ECR 2021		
131030	First or second Through packing of track of all sleeper density including giving a general lift as desired to eliminate sag after deep screening work, lifting of track, lowering of track and major realignment of curves and formation rehabilition as per procedure prescibed in latest edition of IRWPM. Note: General lift is normally 25mm and isolated lift may be upto 25mm					USSOR ECR 2021		
131031	For PSC sleeper Track with sleeper density of 1540 sleepers/km or more	TRM	2814.43	121	3,39,685.43			

S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount in Rs.	Rate Reference
131040	Third or Subsequent Through packing of track of all sleeper density including picking of slacks as required after second through packing, subsequent to Deep Screening work as per procedure prescribed in latest edition of IRPWM. This item can also be used after lifting/regarding/realignment works also. Note: General lift is normally 25mm and isolated lift upto 50mm.			N3.		USSOR ECR 2021
131042	For PSC sleeper Track with sleeper density of 1540 sleepers/km or more	TRM	2814.43	93	2,61,281.57	USSOR ECR 2021
5008	Installation of PSC fan shape turnouts, derailing switches 60 KG / 52 KG including lead rails as per RDSO layout drawings including katcha packing with bars or off track tampers for 20 KMPH speed. Activities of rail cutting, drilling of holes, welding of joints and transportation are not included in this item and shall be paid separately under relevant items.					
5008 a	Turnouts 1 in 8-1/2	Each	4	64464	2,57,855.06	RVNL BOQ 2021
5008 c	Derailing switches	Each	3	15396	46,186.88	RVNL BOQ 2021
5014	Anticorrosive painting of 60 KG, 52 KG rails. Painting to be done prior to installation on sleepers including touching of paints in areas damaged during fixing.	Track Meter	2814.43	67	1,88,390.91	RVNL BOQ 2021
5018	Provision of Buffer stop of 60 KG, 52 KG, 90 R rail section as per plan including painting with luminous paint etc. as directed by the engineer. Note: Rail required for this item will be issued free of cost by the Employer.	Each	2	45703	91,405.13	RVNL BOQ 2021
5030	USFD testing of 60 KG, 52 KG rail welds (Flash Butt / SKV) as per RDSO Manuals and submitting reports on proforma as directed by the Engineer.	Each	300	175	52,565.63	RVNL BOQ 2021
5034	Fouling marks of size 1500x250x225 MM in M20 grade cement concrete including engraving the letters "FM", white washing with two coats and painting the letters in black enamel paint indicating the numbers of vehicles duly fixed at site.	Each	4	690	2,760.19	RVNL BOQ 2021
5041	Insertion of glued joints 52/60 kg in traffic block including transportation from depot at station to site of work cutting, removal of existing rail from track and stacking of released rail as directed by Engineer-incharge with all tools, plants & labour etc complete. Cutting of rails, drilling holes, welding of joints will be paid separately in relevant BOQ item.	Each	30	330	9,892.97	RVNL BOQ 2021
5046	First and second manual through packing of points and crossing including gauging, fittings recoupment, elimination of sag and to the required alignment as per provisions of Indian Railways Permanent Way Manual for raising the speed from 20 kmph to 45 kmph. NOTE: The rate includes 1st through packing on 2nd day after relaying on Day 1 (laying of turnout will be paid separately under relevant item of BOQ), 2nd through packing on 3rd day and Picking up of slacks, as required, from 4th to 9th day.					

S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount in Rs.	Rate Reference
а	1 in 8-1/2 Points & Crossing	Each	4	17853	71,410.50	RVNL BOQ 2021
b	1 in 12 Points & Crossing	Each	0	24326	-	RVNL BOQ 2021
d	1 in 8-1/2 Derailing Switch	Each	3	4709	14,127.75	RVNL BOQ 2021
5046 A	Third or subsequent manual through packing of points and crossing including gauging, fittings recoupment, elimination of sag and to the required alignment as per provisions of Indian Railways Permanent Way Manual for raising the speed from 45 kmph to 75 kmph. NOTE: The rate includes packing on 10th day after relaying and picking of slacks for next 10 days for raising the speed from 45 kmph to 75 kmph.					
а	1 in 8-1/2 PSC layout	Each	4	15610	62,440.88	RVNL BOQ
d	1 in 8-1/2 Derailing Switch	Each	3	4403		RVNL BOQ
	level crossing pads of approved quality and conforming to "Functional specification for Rubberized surface at level crossings" (as issued by RDSO in July 2019) at Railway track at the level crossings, by suitable clamping arrangements to make a rubberized road. The road surface of 3.5 meter width is to be prepared by using rubber pads of approved length and width along the track. Rubber pads inside the track are to be placed between two running rails and outside the running rails between the running rails and RCC edge beam. The item is inclusive of M-35 Grade RCC edge beam at the edge to retain the assembly as per approved drawing. The rates are inclusive of contractor's cement and steel. NOTE: 1 The brief scope of work is manufacturing and installation of rubberised level crossing pads of approved quality having width approx. 3.5 Mtr. conforming to specification given in the tender schedule. The rate includes all prevailing taxes and warranty etc. required to complete the work. 2 Contractor has to submit his own drawing acceptable to RVNL and all other documents in accordance with "Functional specification for Rubberized surface at level crossings" as issued by RDSO in July 2019. The order for purchase shall only be placed with prior approval of	Per Track Metre	0	158519	-	RVNL BOQ 2021

S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount in Rs.	Rate Reference
7061	Providing FOB, platform shelters, height gauge, columns, beams, trusses and other steel components of miscellaneous works duly launched in position with or without traffic block as directed by Engineer with contractors steel conforming to IS:2062-1999 including fabrication, assembly, erection, launching, riveting/welding, bolting, initial coats of zinc chromate priming conforming to relevant IS specification and three subsequent coats of aluminum paint of approved quality conforming to IS:2339 after final erection on all surfaces complete. Rate is inclusive of supply and fixing of MS holding down bolts for IRS type platform shelters and FOBs with required angles.Note: Payment under this item shall be done on the lines of schedule of stage payments for fabrication & erection of girders as specified in para 8.2 of part (h) 'Steel Works' of Chapter-3 (Bridges) of RVNL Standard Specifications for Material and Works - VolI, Engineering Works. Payment for any stage as indicated in para 8.2, if not required for the works under the item, shall be combined with next stage payment.	MT	15	111849	16,77,729.38	RVNL BOQ 2021
	Total for Bill No. 5A				53,70,673.31	

5: PERMANENT WAY LINKING 5B: P.Way Linking (Supply and Installation works)

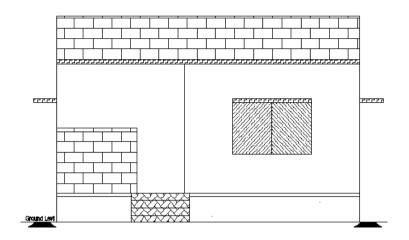
S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount in Rs.	Rate Reference
5053	Alumino thermit welding of 60kg/52 kg rail joints or					RVNL BOQ
	combination joints of 60kg/52kg rail by pre-heat (SKV)					
	welding technique using compressed air petrol/LPG for					
	preheating, three piece pre-fabricated moulds (Zircon					
	washed) single shot crucible fitted with automatic					
	tapping thimbles with all labour, materials including					
	supply of portion, tools and plants, aligning of rails,					
	placing & fixing of mould, preheating, welding, mechanised trimming, grinding with profile grinder					
	(including riser), testing, marking, painting with one					
	coat of high build epoxy paint (two pack conforming to					
	RDSO specification no. M&C/PCN-111/88) on the					
	welded area up to 10 cm on either side. The work is to					
	be completed in all respects as per IRS: T-19-2012 with					
	latest updates and in accordance with "RDSO Manual					
	for Fusion Welding of Rails by Alumino Thermic					
	Process with up to date correction Slips in free rails or					
	3/10/20 rail panels. The work to be done under					
	supervision of trained welding supervisor and carried					
	out by trained welder having valid competency					
	certificate from RDSO/TPP, Lucknow. Ultrasonic					
	testing of welded joints shall be paid separately under					
	relevant items.					
	Note:					
	1) In case only portion is supplied by the contractor					
	but welding is not done the rate shall be payable @					
	for 60kg, 72/90 UTS rails	Each	300	9292	27,87,454.69	
	Total				27,87,454.69	

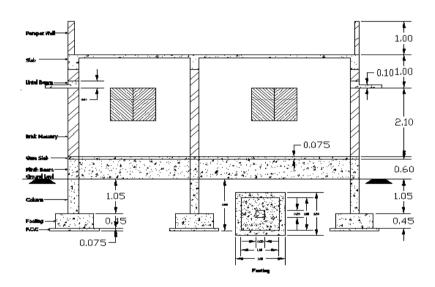
	Rate Analysis for Dra	in (13	80Mtr Length)		
Item No.	Description	Unit	Qty	Rate	Amount	Rate Ref.
1	Earthwork in cutting in formation, trolley refugees, side drains, level crossing approaches, platforms, catch water drains, diversions of nallah & finishing to required dimension and slopes to obtain a neat appearance to standard profile inclusive of all labour, materials, plant & machinery, leading all cut spoils either to make spoil dumps of for filling of embankment with leads within 2 km on either side of edge of the cutting(s) including all lifts, ascent, descent, loading, unloading, bailing & pumping out water if required clearance of site and all other works incidental thereto for completing the work as per RDSO specification No. RDSO/2020/GE:IRS-0004 with latest updated correction slips and to the satisfaction of the Engineer-in-Charge. Note-(i) All usable earth arising from cut spoils shall be led into bank formation and unsuable spoils shall be dumped /stacked away from toe of embankment.(ii) All hard rock/ and boulders not fit for filling will be stacked by the contractor and will be property of the Railways. (iii) Cut trees shall be property of Railways and to be deposited in the railway godown unless specified otherwise in the.					Item no 012010 USSOR ECR 2021
1.1	Soft rock not requiring blasting	Cum	1512	246.21	372272.355	Item no 012012 USSOR ECR 2021
2	Providig Coarse clean sand in filling in foundation trenches or in plinth including ramming and watering in layers not exceeding 150mm thick with all leads and lifts including cost of all materials, labours, royalty and taxes all complete as per building specification and direction of E/I (Mode of measurement compacted volume)	Cum	170	619.41	105298.935	Jharkhand SOR 2022 Item No. 5.1.10
3	PCC M-15 in levelling course, 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size)	Cum	170	4590.31	780352.3547	Item no 022032 USSOR ECR 2021
4	PCC M-20 Grade design mix with contractor's 20mm. graded black trap course aggregate, sand etc. including necessary , cutting, bending, placing and binding reinforcement with contractors binding wires, complete as directed.		730	4627.34	3377958.314	Item no 022040 USSOR ECR 2021
5	Centering and shuttering including strutting, propping etc. and removal of form for :					Item no 025030 USSOR ECR 2021
5.1	All types of bridge sub- structure e.g. pier, abutment, wing wall, retaining wall, RCC box type foundations, abutments cap, Pier cap, Inspection Platform & Pedestal over Pier Cap, Fender Wall, Diaphragm wall etc. upto 5m above ground level.		4000	639.80	2559217.5	Item no 025030 USSOR ECR 2021
5	Ordinary Portland Cement Grade-43 Grade	МТ	320	9769.09	3126107.25	Item no 025071 USSOR ECR 2021
			Total -		₹1,03,21,206.71	

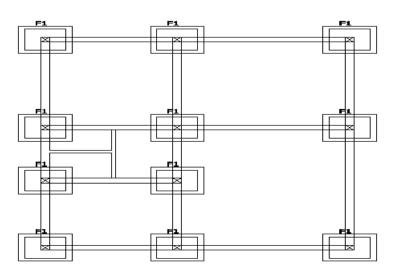
	Estimate for Platfo	orm (20	63 X 30) m			
SL NO	Description	UNIT	QTY	RATE	AMOUNT	REF
1	Earthwork in cutting in formation, trolley refugees, side drains, level crossing approaches, platforms, catch water drains, diversions of nallah & finishing to required dimension and slopes to obtain a neat appearance to standard profile inclusive of all labour, materials, plant & machinery, leading al cut spoils either to make spoil dumps of for filling of embankment with leads within 2 km on either side of edge of the cutting(s) including all lifts, ascent, descent, loading, unloading, bailing & pumping out water if required clearance of site and all other works incidental thereto for completing the work as per RDSO specification No. RDSO/2020/GE:IRS-0004 with latest updated correction slips and to the satisfaction of the Engineer-in-Charge. Note-(i) All usable earth arising from cut spoils shall be led into bank formation and unsuable spoils shall be dumped /stacked away from toe of embankment.(ii) All hard rock/ and boulders not fit for filling will be stacked by the contractor and will be property of the Railways. (iii) Cut trees shall be property of Railways and to be deposited in the railway godown unless specified otherwise in the.					Item no 012010 USSOR ECR 2021
1.1	Soft rock not requiring blasting	cum	400.00	246.21	98,484.75	Item no 012012 USSOR ECR 2021
2	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 materials, 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 - in charge. Note: This item will be used for excavation work in connection with other miscellaneous works like side drains, foundation for OHE masts and other miscellaneous structure in connection with gauge conversion, Doubling, new lines.					Item no 022010 USSOR ECR 2021
2.2	Soft rock (not requiring blasting)	Cum	4700.00	388.24	18,24,716.25	Item No-022012 USSOR 2021 (ECR)
3	PCC M-15 in levelling course, 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size)	Cum	35.00	4590.31	1,60,660.78	Item no 022032 USSOR ECR 2021
4	Providig Coarse clean sand in filling in foundation trenches or in plinth including ramming and watering in layers not exceeding 150mm thick with all leads and lifts including cost of all materials, labours, royalty and taxes all complete as per building specification and direction of E/I (Mode of measurement compacted volume)	Cum	35.00	619.41	21,679.19	Jharkhand SOR 2022 Item No. 5.1.10

	Estimate for Platform (263 X 30) m										
SL NO	Description	UNIT	QTY	RATE	AMOUNT	REF					
5	PCC M-20 in levelling course, 1:1.5:3 (1 cement : 1.5 sand : 3 graded stone aggregate 20 mm nominal size)	Cum	4500.00	4483.00	2,01,73,500.00	Item no 022031 USSOR ECR 2021					
6	RCC M-25 Grade design mix with contractor's 20mm. graded black trap course aggregate, sand etc. including necessary , cutting, bending, placing and binding reinforcement with contractors binding wires, complete as directed.	Cum	350.00	4627.34	16,19,569.05	Item no 022040 USSOR ECR 2021					
7	Thermo-Mechanically Treated bars of grade Fe-500D or more of approved brands/makes.	kg	28000.00	111.91	31,33,580.63	Item no 025082USSOR ECR 2021					
8	Centering and shuttering including strutting, propping etc. and removal of form for :					Item no 025030 USSOR ECR 2021					
8.1	All types of bridge sub structure e.g. pier, abutment,wing wall,retaining wall,RCC box type foundation, Abutment cap, pier cap,Inspection Platform & Pedestal over pier cap, Fender wall, Diaphragm wall etc.upto 5m above ground level	SQM	1600.00	639.80	10,23,687.00	Item no 025031 USSOR ECR 2021					
9	Ordinary Portland Cement Grade-43 Grade	MT	1750	9769.09	1,70,95,899.02	Item no 025071 USSOR ECR 2021					
	Total Amount				4,51,51,776.67						

Sr. No. Item Description		Bu Construction of Crew guard rest		Estimation bridge room &		cabin room	
Touristation:	Sr. No.	Item Description	Unit	Quantity	Rate	Amount is Rate	Rate Ref
Pooling (Em x 1m)	1						
Southing Citics		Footing (1m x 1m)	cum	120.00	169.313	20,317.50	RVNL BOQ
Second S	2		cum	4.00	4600.86	19 420 44	LISSOR 2021 No. 022060
Sased (m x 1m)	3		Cum	4.00	4009.80	18,439.44	USSUR-2021 NO022060
Column Cum Cum Cum Cum Cum Cum Cum		Base(1m x 1m)	cum	8.00		1	DSR2021
Column Cum 4.00 6403.98 25,615.92 Finish Beam RCC Cum 5.00 6403.98 32,019.90 Finish Beam RCC Cum 5.00 6403.98 32,019.90 Finish Beam RCC Cum 5.00 6403.98 32,019.90 Finish Beam RCC Cum 6403.98 32,019.90 Finish Beam RCC Cum 7.00 6403.98 7.70 6403.98 6403.98 7.70 6403.98 7.70 6403.98 7.70 6403.98 6403.98 7.70 6403.98 7.70 6403.	4	Column up to Plinth Level RCC					
Cum 5.00 6403.98 32,019.99		Column	cum	4.00	6403.98	25,615.92	Karo/LOA/784 (shedule-6 item no 6a)dt.31.07.2023 & IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
Sear Section	5	Plinth Beam RCC					
Fig.		Ream (230 mm x 600 mm)	cum	5.00	6403.98	32,019.90	Karo/LOA/784 (shedule-6 item no 6a)dt.31.07.2023 & IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
Plinth area out to out	6						
Column cum 6 6403.98 38.423.88 Average of LOA no.IPRCL/Ranch/CCL/Ranch/Ranch/CCL/Ranch/Ranch/CCL/Ranch/Ranch/CCL/Ranch/Ranch/CCL/Ranch/Ranch/CCL/Ranch/Ranch/CCL/Ranch			cum	28.00	6403.98	1,79,311.44	Karo/LOA/784 (shedule-6 item no 6a)dt.31.07.2023 & IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
Column cum 6 6403.98 38,423.88 [Acayloo, 17.202 8 km no. 6ajdt 31.07.202 8 km no. 6ajdt 31.07.2	7	Column Up to Slab Level RCC					
230 mm thick wall Brick Masonry		Column	cum	6	6403.98	38,423.88	Karo/LOA/784 (shedule-6 item no 6a)dt.31.07.2023 & IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
Sq.m 400.00 140 56,000.00 582021 no.7009	8		am	20.40	1 00 000 10		DCD2024 C 4
10	9		Cum	28.49	0882	1,96,068.18	DSR2021 NO.6.1
Sq.m 300.00 140 42,000.00 DSR2021 no.7009			Sq.m	400.00	140 56,000.00		DSR2021 no.7009
11 Celling Plaster	10	Out Side Plaster	Sa m	300.00	140	42 000 00	DSR2021 no 7009
12 Slab RCC	11	Ceiling Plaster	34	300.00	110	12,000.00	
Slab Area Cum 20 6403.98 1,28,079.60	12	Clab DCC	Sq.m	200.00	140	28,000.00	DSR2021 no.7009
Sq.m 400.00 97.43 38,972.00			cum	20	6403.98	1,28,079.60	Karo/LOA/784 (shedule-6 item no 6a)dt.31.07.2023 & IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
14 Out Side Paint Sq.m 400.00 97.43 38,972.00 15 Skin Reinforcement(Fe-500 grade) kg 5000 81.64 4,08,200.00 RVNL BOQ	13	In Side Paint					
Sq.m 400.00 97.43 38,972.00 15 Skin Reinforcement(Fe-500 grade) kg 5000 81.64 4,08,200.00 RVNL BOQ	14	Out Side Paint	Sq.m	400.00	97.43	38,972.00	USSOR-2021 No041263
15 Skin Reinforcement(Fe-500 grade) kg 5000 81.64 4,08,200.00 RVNL BOQ	14	Sat Side Faint	Sq.m	400.00	97.43	38,972.00	5555.1. 2021 NO. 041203
	15	Skin Reinforcement(Fe-500 grade)		5000 TOTAL =	81.64	4,08,200.00 12,50,419.86	RVNL BOQ







	Service Building BUILDING WORKS									
S. No.	Description of Item	Unit	Qty	Rates in Rs.	Amount in Rs.	Remarks				
1	Earth work in excavation as per approved drawings and dumping at embankment site or spoil heap, within railway land, including 50m lead and 1.5m lift, the lead to be measured from the centre of gravity of excavation to centre of gravity of spoil heap; the lift to be measured from natural ground level and paid for in layers of 1.5m each including incidental work, as per specifications - All kinds of soils	Cum	85	144.99	12,324	ECR USSOR 2012 item no. 011011 with escalation @ 5% per year				
2	Extra for every additional lift of 1.5m or part thereof after the initial 1.5m for earth work in all soils.	Cum	15	12.56	188	ECR USSOR 2012 item no. 011070 with escalation @ 5% per year				
3	Excavating, supplying and filling of local earth (including royalty) by mechanical trasport up to a lead of 5Km also including ramming and watering of the earth in layers not exceeding 20cm in trenches, plinth, sides of foundation etc. complete	Cum	180	247.01	44,462	Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 3)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 3)dated 22.12.2023 with escalation @ 59 per year				
4	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth, consolidating each deposited layers by ramming and watering, lead up to 50m and lift up to 1.5m.	Cum	20	167.51	3,350	Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 4)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 4)dated 22.12.2023 with escalation @ 5% per year				
5	Providing and laying in position cement concrete of specified proportion excluding cost of cement,									
5 (a)	centering and shuttering - All works upto plinth level : 1:3:6 (1 cement : 3 sand : 6 graded stone aggregate 20mm nominal size)	Cum	40	4361.08	1,74,443	ECR USSOR 2012 item no. 031011 with				
6	Providing and laying in position machine mixed, machine vibrated and machine batched Design Mix Cement Concrete M-25 grade (Cast in-Situ) for reinforced cement concrete, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcment, including admixtures in recommended proportion (as per IS:9103) to accelerate, retard setting of concrete, improve workability without impairing strength and durability, but excluding cost of cement and steel reinforcement as per approved plan & as per direction of the Engineer incharge - All works up to plinth level (Note - Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/recoverable seperately).									
6 (a)	All works up to Plinth Level	Cum	50	6099.02	3,04,951	Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 6a)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 6a)dated 22.12.2023 with escalation @ 5% per year				
6 (b)	All works above Plinth Level up to Floor/Roof level.	Cum	120	7169.40	8,60,328	Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 6b)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 6b)dated 22.12.2023 with escalation @ 5% per year				
7	Centring and shuttering including strutting, propping etc. and removal of form for :									
7 (a)	Foundations, footings, bases of columns etc. for mass concrete	Sqm	250	217.23	54,308	Average of LOA no.IPRCL/Ranchi/CCL-				
7 (b)	Suspended floors, roofs, landings, balconies and access platform	Sqm	450	525.89	2,36,651	Karo/LOA/784 (shedule-6 item no 7)dt.31.07.2023 & IPRCL/Ranchi/CCL-				
7 (c)	Lintel beams, plinth beams, girders, bressumers and cantilevers	Sqm	400	418.90	1,67,560	KONAR/69/LOA/ (shedule-6 item no 7)dated 22.12.2023 with escalation @ 5%				
7 (d)	Columns, Pillars, Piers, Abutments, Post and struts	Sqm	170	556.74	94,646	per year				
8	Making plinth protection 50mm thick of Cement Concrete 1:3:6 (1 cement : 3 sand : 6 graded stone aggregate 20mm nominal size) over 75mm bed of cement dry brick aggregate 40mm nominal size rammed, consolidated and grouted with fine sand including necessary excavation, levelling, dressing & finishing the top smooth	Sqm	0	468.29	0	Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 8)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 8)dated 22.12.2023 with escalation @ 5% per year				

11 Half Bri supersti cement 12 12mm (12 (a) 1:4 (1 or 12 (b) 1:6 (1 or 12 (b) 1:6 (1 or 13 (c) 1:4 (1 or 14 (a) 1:3 (1 or 15 (c) 15 (c) 16 (c) 16 (c) 17 (c) 18 (c) 18 (c) 19 (work with common burnt clay non-modular (FPS) bricks of class designation 7.5 in structure above plinth level up to floor/Roof level in all shapes and size in cement mortar 1:4 nent: 4 coarse sand) excluding cost of cement Strick masonry with common burnt clay non-modular (FPS) bricks of class designation 7.5 in structure above plinth level up to floor/roof level in all shapes and size in cement mortar 1.4 (1) and 1.4 coarse sand) excluding cost of cement 1.4 coarse sand) excluding cost of cement: 1.5 cement Plaster of mix excluding cost of cement: 1.6 coarse sand) 1.7 cement Plaster on the rough side of single or half brick wall of mix excluding cost of net: 1.8 cement: 4 coarse sand) 1.9 cement Plaster to ceiling of mix excluding cost of cement: 1.9 cement: 3 fine sand) 1.9 cement punning 1.9 ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete 1.9 ing walls with water proofing cement paint of required shade two or more coats on new	Sqm Sqm Sqm Sqm	150 0 550 0 550 360	710.85 710.6.52 106.52 123.15	0 58,584 0 0 67,731	Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 10)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 10)dated 22.12.2023 with escalation @ 5% per year Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 11)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 11)dta21.07.2023 with escalation @ 5% per year ECR USSOR 2012 item no. 111041 with escalation @ 5% per year ECR USSOR 2012 item no. 111042 with escalation @ 5% per year ECR USSOR 2012 item no. 111051 with escalation @ 5% per year
12 12mm (2 12 (a) 1:4 (1 oc 12 (b) 1:6 (1 oc 13 15mm (2 ment) 13 (a) 1:4 (1 oc 14 (a) 1:3 (1 oc 15 Neat ce 16 Providir prepare 17 Finishin work ap 18 Distemy mixed) specific commen requirect mild stee each jai absorbe surface Fixing w	the content Plaster of mix excluding cost of cement: a coarse sand) excluding cost of cement: cement: 4 coarse sand) cement Plaster of mix excluding cost of cement: cement: 6 coarse sand) cement Plaster on the rough side of single or half brick wall of mix excluding cost ont: cement: 4 coarse sand) Cement Plaster on the rough side of single or half brick wall of mix excluding cost ont: cement: 4 coarse sand) Cement Plaster to ceiling of mix excluding cost of cement: cement: 3 fine sand) cement punning ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	Sqm Sqm Sqm Sqm	550 0 550 360	106.52 106.52 123.15	0 58,584 0 0 67,731	Karo/LOA/784 (shedule-6 item no 11)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 11)dated 22.12.2023 with escalation @ 5% per year ECR USSOR 2012 item no. 111041 with escalation @ 5% per year ECR USSOR 2012 item no. 111042 with escalation @ 5% per year ECR USSOR 2012 item no. 111042 with escalation @ 5% per year
12 (a) 1:4 (1 cd 12 (b) 1:6 (1 cd 13 15mm cement 13 (a) 1:4 (1 cd 14 6mm Ce 14 (a) 1:3 (1 cd 15 Neat ce 16 Providir prepare 17 Finishin work ap 18 Distemmixed) specifics 19 Providir commer requirer mild stee each jai absorbe surface Fixing w 20 Providir board covertical	cement : 4 coarse sand) cement : 6 coarse sand) n Cement Plaster on the rough side of single or half brick wall of mix excluding cost ont: cement : 4 coarse sand) Cement Plaster to ceiling of mix excluding cost of cement: cement : 3 fine sand) cement punning ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	Sqm Sqm Sqm	550	106.52	0 0 67,731	escalation @ 5% per year ECR USSOR 2012 item no. 111042 with escalation @ 5% per year ECR USSOR 2012 item no. 111051 with
13 15mm cement 13 (a) 1:4 (1 or 14 6mm Ce 14 (a) 1:3 (1 or 15 Neat ce 16 Providir prepare 17 Finishin work ap 18 Distemy mixed) specifics 19 Providir commen requirer mild ste each jar absorbe surface Fixing w	n Cement Plaster on the rough side of single or half brick wall of mix excluding cost ont: cement: 4 coarse sand) Cement Plaster to ceiling of mix excluding cost of cement: cement: 3 fine sand) cement punning ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	Sqm Sqm Sqm	550	123.15	67,731	ECR USSOR 2012 item no. 111042 with escalation @ 5% per year ECR USSOR 2012 item no. 111051 with
13 (a) 1:4 (1 or 14 6mm Ce 14 (a) 1:3 (1 or 15 Neat ce 16 Providin prepare 17 Finishin work ap 18 Distemy mixed) specifica 19 Providin commen required mild stee each jai absorbe surface Fixing w 20 Providin board covertical	nt: cement : 4 coarse sand) Cement Plaster to ceiling of mix excluding cost of cement: cement : 3 fine sand) cement punning ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	Sqm Sqm Sqm	360		67,731	ECR USSOR 2012 item no. 111051 with
14 6mm Ce 14 (a) 1:3 (1 cc 15 Neat ce 16 Providir prepare 17 Finishin work ap 18 Distemy mixed) specifica 19 Providir commer requirer end stee each jate absorbe surface Fixing w	Cement Plaster to ceiling of mix excluding cost of cement: cement : 3 fine sand) cement punning ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	Sqm	360		0	
14 (a) 1:3 (1 cd 15 Neat ce 16 Providin prepare 17 Finishin work ap 18 Distemmixed) specifici 19 Providin commen required mild stee each jai absorbe surface Fixing w 20 Providin board covertical	cement : 3 fine sand) cement punning ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	Sqm		83.02		escalation @ 5% per year
15 Neat ce 16 Providin prepare 17 Finishin work ap 18 Distemy mixed) specifica 19 Providin commen required mild stee each jai absorbe surface Fixing with the sound convertical poard covertical	tement punning ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	Sqm				
16 Providir prepare 17 Finishin work ap 18 Distemmixed) specific: 19 Providir commer requirer mild stee each jar absorbe surface Fixing were pound or the pound of the pound of the providir surface of the pound of the providir surface of the pound of the providire provided the providire provided the providire provided the providire provided the provide	ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	<u> </u>		20.31		ECR USSOR 2012 item no. 111151 with escalation @ 5% per year ECR USSOR 2012 item no. 111180 with
17 Finishin work ap 18 Distemy mixed) specifica 19 Providir commer requirer mild ste each jar absorbe surface Fixing w	re the surface even and smooth complete	Sqm	200	144.18		escalation @ 5% per year
18 Distemy mixed) specific commer requirec mild ste each jar absorbe surface Fixing w	ing walls with water proofing cement paint of required shade two or more coats on new		200	144.16	28,830	ECR USSOR 2012 item no. 112040 with escalation @ 5% per year
nixed) specific 19 Providir commer requirer mild ste each ja absorbe surface Fixing w 20 Providir board c vertical	applied @ 3.84 kg/10 sqm	Sqm	400	63.49	25,395	ECR USSOR 2012 item no. 115110 with escalation @ 5% per year
commer required mild ste each jai absorbe surface Fixing w	mpering two or more coats on new work with 1st quality acrylic washable distemper (read i) of approved manufacturer and of required shade and colour complete as per manufacturer' ication		500	58.93	29,466	ECR USSOR 2012 item no. 115050 with escalation @ 5% per year
board c vertical	ding and fixing pressed steel door frames confirming to IS: 4351, manufactured from the recial mild steel sheet of 1.6mm thickness including hinges jamb, lock jamb, bead and it red angle threshold of mild steel angle of section 50mmx25mm, or base ties of 1.6mm pressed teel welded or rigidly fixed together by mechanical means, adjustable lugs with split end tail to jamb including steel butt hinges 25mm thick with mortar guard, lock strikeplate and shock bers as specified and applying a coat of approved steel primer after pretreatment of the tee as directed by the Engineer-in-Charge. with adjustable lugs with split end tail to each jamb.	: 	113	318.48	35,988	Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 19)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 19)dated 22.12.2023 with escalation @ 5% per year
	ding and fixing to IS:2202 Part-1 marked flush door shutter decorative type, core of block construction with frame of 1st class hard wood and well matched teak 3-ply veneering with all grains or cross bands and face veneers on both faces of shutters. In thick including ISI marked stainless steel butt hinges with necessary screws		10	3883.82	38,838	ECR USSOR 2012 item no. 072141 with escalation @ 5% per year
AC 10 a	ding and fixing aluminium handles ISI marked anodised (anodic coating not less than grade as per IS:1868) transparent or dyed to required colour or shade with necessary screws etclete: 100mm		20	91.33	1,827	ECR USSOR 2012 item no. 078062 with escalation @ 5% per year
		Each	6	141.16	847	ECR USSOR 2012 item no. 077140 with escalation @ 5% per year
than gr	ding and fixing bright finished brass hanging type door floor stopper with necessary screw- omplete		27	410.29	11,078	ECR USSOR 2012 item no. 078021 with escalation @ 5% per year
24 Providir grade A etc. con			27	121.68	3,285	ECR USSOR 2012 item no. 078033 with escalation @ 5% per year

				1		
25	Providing and fixing factory made UPVC door frame made of uPVC extruded section having an overall dimension as below (tolerance ±1mm) with wall thickness 2mm ± 0.2mm, corners of door frame to be mittered and welded of plastic, galvanized brackets and stainless steel screws. Hinge side vertical of frames reinforced by galvanized MS tube of size 19mmx19mm and 1mm ± 0.1mm wall thickness and 3 nos. stainless steel hinges fixed to frame complete as per direction of Engineer incharge: Extruded section profile size 48mmx40mm		25	359.09	8,977	ECR USSOR 2012 item no. 078281 with escalation @ 5% per year
26	Providing and fixing door frame 24mm thick factory made PVC door shutters made of styles and rails of a PVC hollow section of size 59mmx24mm with a wall thickness 2mm±0.2mm. The styles and rails mitered cut and joined at corners by means of M.S. galvanized/plastic brackets of size 75mmx220mm having wall thickness 1.0mm/solid and fix with stainless steel screws. The styles of shutter reinforced by inserting galvanized M.S. tube of size 19mm x 19mm with a wall thickness 1mm±0.1mm. The lock rail made out of 'H' section, PVC hollow section of size 100mmx24mm with a wall thickness 2mm±0.2mm, fixed to shutter styles by means of plastic/galvanized M.S. 'U' cleats. The shutter frame filled with a PVC multi- chambered panel of size 20mmx200mm with a wall thickness 1mm±0.1mm. The panels filled vertically and tie bar at two places by inserting horizontally 0.6mm galvanized M.S. rod and fastened with nuts and washers. All complete as per manufacturer's specification and direction of Engineer-In-Charge. (For W.C. and bathroom door shutter)		11	3311.05	36,422	ECR USSOR 2012 item no. 078180 with escalation @ 5% per year
27	Providing and fixing anodised aluminium work for doors, windows, ventilators and partitions with extruded built-up standard tubular and other sections of approved make conforming to IS:733 and IS:1285, anodised transparent or dyed to required shade according to IS:1868 (Minimum anodic coating of grade AC 15), fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitered and jointed mechanically wherever required including cleat angle. Aluminium snap beading for glazing/panelling, C.P. brass/stainless steel screws, all complete as per architectural drawings and directions of Engineer-in-charge. (Glazing & panelling to be paid for separately): For fixed portion		90	527.09	47,438	ECR USSOR 2012 item no. 082011 with escalation @ 5% per year
28	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item): With float/frosted glass panes of 4mm thickness (weight not less than 10.0 kg/sqm)		0	1131.48	0	ECR USSOR 2012 item no. 082031 with escalation @ 5% per year
29	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: Fixed to steel windows by welding	_	500	128.45	64,224	ECR USSOR 2012 item no. 074231 with escalation @ 5% per year
30	Providing and fixing circular/hexagonal M.S. sheet ceiling fan box with clamps of internal dia 140mm, 73mm height, 3mm thick rim, top and bottom lid of 1.5mm M.S. sheet. Lids shall be screwed into M.S. box by means of 3mm round beaded screws, clamps shall be made of 12mm dia M.S. bar bent to shape as per standard drawing with over all length as 80cm. (it includes cost of clamps also)		5	189.22	946	ECR USSOR 2012 item no. 081350 with escalation @ 5% per year
31	Diluting and injecting chemical emulsion Chlorpyriphos/ Lindane E.C. 20% with 1% concentration for post constructional anti-termite treatment (Payment for chemical emulsion to be made separately)				0	
31 (a)	Along external wall where the apron is not provided using chemical emulsion @ 7.5 litres/sqm of the vertical surface of the substructure to a depth of 300mm including excavating channel along the wall and rodding etc. and making good the same		0	13.86	0	ECR USSOR 2012 item no. 171331 with escalation @ 5% per year
32	Kota stone slab flooring of size up to 30cmx30cm over 20mm (average) thick base of 1:4 cement mortar (1 cement : 4 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing, excluding cost of cement complete : 25mm thick	Sqm	0	1554.50	0	ECR USSOR 2012 item no. 096062 with escalation @ 5% per year
33	Providing and fixing ceramic tiles conforming to IS:15622 of manufacturers approved by railway in all colours, shades, design and abrasion resistance class as approved by the Engineer-in-Charge in floors and landings over 20mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand) including pointing in white cement mixed with pigment of matching shade complete : Of Group B-II Clause 5.1 (for abrasion resistance) of IS:15622 (Ceramic Floor Tiles) of size 300mmx300mm		50	845.40	42,270	ECR USSOR 2012 item no. 095021 with escalation @ 5% per year
34	Providing and fixing Ist quality ceramic tiles conforming to Group B-III (Ceramic Wall Tiles) of IS:15622 of manufacturers approved by railway in all colours, shades, and design as approved by the Engineer-in-Charge in skirting, risers of steps and dado over 12mm thick bed of cement mortar 1:3 (1 cemen : 3 coarse sand) including pointing in white cement mixed with pigment of matching shade complete : 200x300 mm		350	953.65	3,33,779	ECR USSOR 2012 item no. 095012 with escalation @ 5% per year
35	Providing and fixing 10mm thick heavy duty acid and/or alkali resistant factory made tiles conforming to Group V-RD series of approved make and colour using acid and/or alkali resisting mortar bedding and joints filled with acid and/or alkali resisting cement as per IS:4457 complete including cost of acid/alkali resistant cement				0	
35 (a)	In flooring on a bed of 10mm thick mortar 1:4 (1 appropriate cement : 4 coarse sand)	Sqm	0	1667.92	0	ECR USSOR 2012 item no. 094071 with escalation @ 5% per year
35 (b)	In dado/skirting on 12mm thick mortar 1:4 (1 appropriate cement : 4 coarse sand)	Sqm	0	1793.13	0	ECR USSOR 2012 item no. 094072 with
		1				escalation @ 5% per year

36	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete : 40mm thick with 20mm nominal size stone aggregate	Sqm	180	249.41	44,894	ECR USSOR 2012 item no. 092012 with escalation @ 5% per year
37	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 sand : 4 stone chips 12.5mm nominal size) excluding cost of cement	Sqm	0	268.44	0	ECR USSOR 2012 item no. 032052 with escalation @ 5% per year
38	Providing and fixing white, vitreous china flat back half stall urinal of 580mmx380mmx350mm with white P.V.C. automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS:2556, C.I. trap with outlet grating and other coupling in C.P. brass including painting of fittings and cutting and making good the walls and floors, wherever required: Single half stall urinal with 5 litres P.V.C. automatic flushing cistern	Each	5	7216.18	36,081	ECR USSOR 2012 item no. 151051 with escalation @ 5% per year
39	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast iron "P' or 'S' trap, 10 litres low level white P.V.C. flushing cistern with manually controlled device (handle lever) conforming to 15:7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required: White Vitreous China Orissa pattern W.C. pan of size 580mmx440mm with integral type foot rests		5	5042.77	25,214	ECR USSOR 2012 item no. 151011 with escalation @ 5% per year
40	Providing and fixing wash basin with C.I./M.S. brackets, 15mm C.P. brass pillar taps, 32mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls, wherever required: White, vitreous china wash basin size 630mmx 450mm with a pair of 15mm C.P. brass pillar taps	Each	5	3197.84	15,989	ECR USSOR 2012 item no. 151071 with escalation @ 5% per year
41	Providing and fixing 600mmx450mm bevelled edge mirror, 5.5mm thick of float glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete	Each	5	1290.87	6,454	ECR USSOR 2012 item no. 152110 with escalation @ 5% per year
42	Providing and fixing 600mmx120mmx5mm glass shelf with edges round or supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40mm long screws, rawl plugs etc. complete	Each	5	717.71	3,589	ECR USSOR 2012 item no. 152130 with escalation @ 5% per year
43	Providing and fixing soil, waste and vent pipes: 100mm dia. sand cast iron S&S pipe as per IS:1729	Meter	50	992.14	49,607	ECR USSOR 2012 item no. 153011 with escalation @ 5% per year
44	Providing and filling the joints with spun yarn cement slurry and cement mortar 1:2 (1 cement : 2 fine sand) in S.C.I./C.I. pipes : 100mm dia. Pipe	Each	50	61.38	3,069	ECR USSOR 2012 item no. 153022 with escalation @ 5% per year
45	Providing and fixing M.S. holder-bat clamps of approved design to sand cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10cmx10cmx10cm of 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc.: For 100mm dia. pipe		50	159.12	7,956	ECR USSOR 2012 item no. 153031 with escalation @ 5% per year
46	Providing and fixing bend of required degree with access door, insertion rubber washer 3mm thick, bolts and nuts complete: 100mm dia. sand cast iron S&S as per IS-1729	Each	5	571.53	2,858	ECR USSOR 2012 item no. 153041 with escalation @ 5% per year
47	Providing and fixing Poly Tetra Methylene Terephthalate (PTMT) Waste Coupling for wash basin & sink of approved quality, colour & make : Waste coupling 31mm of 79mm length and 62mm breadth weighing not less than 45gm		5	139.24	696	ECR USSOR 2012 item no. 153281 with escalation @ 5% per year
48	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with C.P. brass screws with concealed fitting arrangement of approved quality colour and make: 600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gm	Each	5	812.65	4,063	ECR USSOR 2012 item no. 153322 with escalation @ 5% per year
49	Providing and fixing on wall face unplasticised - Rigid PVC single socketed rain water pipes conforming to IS:13592 Type-A including jointing with seal ring conforming to IS:5382 leaving 10mm gap for thermal expansion : 110mm dia.	Meter	10	361.12	3,611	ECR USSOR 2012 item no. 108162 with escalation @ 5% per year
50	Providing and fixing on wall face unplasticised - PVC moulded fittings/accessories for unplasticised - Rigid PVC rain water pipes conforming to IS:13592 Type-A including jointing with seal ring conforming to IS:5382 leaving 10mm gap for thermal expansion :				0	
50 (a)	Coupler, 110mm	Each	25	317.19	7,930	ECR USSOR 2012 item no. 108172 with
50 (b)	110mm dia. Bend	Each	25	332.41	8,310	escalation @ 5% per year ECR USSOR 2012 item no. 108182 with escalation @ 5% per year
51	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. Internal work - Exposed on wall				0	Securition & 570 pct year
51 (a)	15mm dia. nominal bore	Meter	0	214.95	0	ECR USSOR 2012 item no. 131131 with escalation @ 5% per year
51 (b)	20mm dia. nominal bore	Meter	100	310.31	31,031	ECR USSOR 2012 item no. 131132 with escalation @ 5% per year
52	Providing & fixing brass bib cock of approved quality: 15mm nominal bore	Each	5	399.06	1,995	ECR USSOR 2012 item no. 132011 with escalation @ 5% per year
53	Providing & fixing brass stop cock of approved quality: 15mm nominal bore	Each	5	396.72	1,984	ECR USSOR 2012 item no. 132021 with escalation @ 5% per year
54	Providing and fixing unplasticised PVC connection pipe with brass unions: 30cm length, 15mm nominal bore	Each	5	71.42	357	ECR USSOR 2012 item no. 132131 with escalation @ 5% per year

55	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (new work): 20mm nominal bore	Each	60	208.72	12,523	ECR USSOR 2012 item no. 136132 with escalation @ 5% per year
56	Providing and fixing PTMT pillar cock of approved quality and colour : 15mm nominal bore, 107mm long, weighing not less than 110 gm	Each	6	382.91	2,297	ECR USSOR 2012 item no. 134031 with escalation @ 5% per year
57	Making soak pit 2.5m diameter, 3m deep with 45cmx45cm dry brick honey comb shaft with bricks of class designation 7.5 and S.W. drain pipes 100mm diameter, 1.8m long complete as per standard design, including excavation complete: With F.P.S. (non modular) bricks	Each	5	20058.12	1,00,291	ECR USSOR 2012 item no. 143271 with escalation @ 5% per year
58	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with 7.5 class designation bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455mmx610mm internal dimensions, total weight of cover with frame to be not less than 38kg (weight of cover 23kg and weight of frame 15kg) R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40mm nominal size), inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. excluding cost of cement complete as per standard design				0	
58 (a)	Inside dimensions 455mmx610mm and 45cm deep for single pipe line with F.P.S. bricks	Each	5	5614.41	28,072	ECR USSOR 2012 item no. 143241 with escalation @ 5% per year
58 (b)	Inside dimensions 600mmx850mm and 45cm deep for pipe line with three or more inlets with F.P.S. bricks	Each	5	6550.20	32,751	ECR USSOR 2012 item no. 143243 with escalation @ 5% per year
59	Providing and placing on terrace/staging (at all heights) polyethylene water storage tank ISI:12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	Ltr.	2000	10.18	20,367	ECR USSOR 2012 item no. 136150 with escalation @ 5% per year
60	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. Internal work – Exposed on wall, 40mm dia. nominal bore	Meter	100	592.44	59,244	ECR USSOR 2012 item no. 131135 with escalation @ 5% per year
61	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end): 40mm nominal bore	Each	5	1906.22	9,531	ECR USSOR 2012 item no. 132033 with escalation @ 5% per year
62	Providing and fixing gun metal non-return valve of 40mm nominal bore approved quality (screwed end): Vertical	Each	5	2045.12	10,226	ECR USSOR 2012 item no. 132072 with escalation @ 5% per year
63	Supplying and fixing C.I. cover without frame for manholes: 500mm diameter C.I. cover (medium duty) the weight of cover to be not less than 58kg	Each	5	4437.24	22,186	ECR USSOR 2012 item no. 143132 with escalation @ 5% per year
64	Ordinary Portland Cement Grade-43 Grade	MT	90	9769.09	8,79,218	Item no 025071 USSOR ECR 2021
65	Skin Reinforcement(Fe-500 grade)	KG	15000	63.861	9,57,915	LOA NO IPRCL/BBS/SLT/MCL/LAJKURA/2022/01/9 21 Dated:23.06.2022
66	Providig Coarse clean sand in filling in foundation trenches or in plinth including ramming and watering in layers not exceeding 150mm thick with all leads and lifts including cost of all materials, labours, royalty and taxes all complete as per building specification and direction of E/I (Mode of measurement compacted volume)	Cum	40	619.41	24,776	Jharkhand SOR 2022 Item No. 5.1.10
	Total Amount of Schedule-'J'	61,28,470				

6: STRUCTURE DISMANTLING WORKS

			_	I	I -	_
S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount	Rate
				(Including 5%	in Rs.	Reference
				Excalation)		
				•		
1	Dismantling of existing BG track, turnouts,					
	derailing switches, dead ends, sand humps,					
	etc. of any rail section and any type of					
	sleepers of any density and transporting all					
	released material including sleepers, rails,					
	switches, crossings and fittings & fastenings					
	to the nearest station or manned level					
	crossing or road loading point as directed by					
	the Engineer.					
2	Plain track including SEJ and Glued Joints and					
	track at level crossing, bridge & bridge					
	approaches and sharp curves with check rails		5000	152	757968.75	
	- FP					RVNL BOO
						KVINL BOQ
3	Dismantling of existing Structure like	LS	1	2500000	2500000	
	Washery and others					
	B.C				200000	
4	Misc work				300000	
	Total . 6 (Carried forward)				3557968.75	

Construction of Road of length 250m										
SL NO	Description	UNIT	QTY	RATE	AMOUNT	REF				
1	Preparation and consolidation of subgrade with power road roller 8 to 12 ton capacity after excavating earth to to and average of 22.5cm depth dressing to camber and consolidating with road roller including makung good undulation etc. and re rolling the subgrade and disposal of surplus earth with lead upto 50m		1840	137.08695	2,52,239.99	LOA NO IPRCL/BBS/SLT/MCL/ LAJKURA/2022/01/9 21 Dated:23.06.2022				
2	Earthwork in cutting in formation, trolley refugees, side drains, level crossing approaches, platforms, catch water drains, diversions of nallah & finishing to required dimension and slopes to obtain a neat appearance to standard profile inclusive of all labour, materials, plant & machinery, leading al cut spoils either to make spoil dumps of for filling of embankment with leads within 2 km on either side of edge of the cutting(s) including all lifts, ascent, descent, loading, unloading, bailing & pumping out water if required clearance of site and all other works incidental thereto for completing the work as per RDSO specification No. RDSO/2020/GE:IRS-0004 with latest updated correction slips and to the satisfaction of the Engineer-in-Charge. Note-(i) All usable earth arising from cut spoils shall be led into bank formation and unsuable spoils shall be dumped /stacked away from toe of embankment.(ii) All hard rock/ and boulders not fit for filling will be stacked by the contractor and will be property of the Railways. (iii) Cut trees shall be property of Railways and to be deposited in the railway godown unless specified otherwise in the.					Item no 012010 USSOR ECR 2021				
2.1	Soft rock not requiring blasting	Cum	800	246.21	1,96,969.50					
3	For 50 MM compacted thickness using coarse aggregate of size 40-20 MM graded and key aggregate of size 12.5 MM graded.	Sqm	1840	359.296875	6,61,106.25	RVNL BOQ				
4	For 75 MM compacted thickness in two layers using stone aggregate of size 63-41 MM graded and key aggregate of size 20 MM graded.	·	1840	506.953125	9,32,793.75	RVNL BOQ				
5	Miscellaneous item like Bitumen mix, etc				8,00,000.00					
	Total				25,90,869.50					

	SI	ITE FACIL	ITIES			
SL NO	Description	UNIT	QTY	RATE	AMOUNT	REFERENCE
1	Providing site offices for Employer with Contractor's material, Labour, Tools and Plant, Equipment etc. including provision of Water Supply, Drainage, Power arrangements, office maintenance.	LS	1	600000	6,00,000.00	
2	Providing Furniture at Site Facilities for the Employer and the Engineer	LS	1	400000	4,00,000.00	
3	Providing Road Vehicle mentioned below for the use of Engineer/Employer as per the Conditions mentioned in Clause 3.4.2 & 3.4.3 of Chapter 3 (Site Facilities for the Employer and the Engineer) of Section 5 Work's Requirement) of Tender Documents. Note: The provisions of clause 12.3.1 (a) (ii) of Section 6 (GCC) of the Contract shall not be applicable for appropriateness of new rate for this item.					
а	BOLERO, SCORPIO, ERTIGA, MARAZZO or similar	Vehicle months	12	63638.86	7,63,666.31	RVNL BOQ
b	Extra for running and maintenance of every additional km over and above 4000 kms as specified in item 9003 (b)	Per Km	100	13.78125	1,378.13	RVNL BOQ
				Total	17,65,044.44	



Detailed Project Report of Giddi Railway



ANNEXURE A-15 Electrical Cost Estimate

Abstract of Electrical TRD & General Works of Giddi Railway Siding

Sr. No.	Description of Schedule	Price in Rs
1	Electrical TRD Works	2,09,54,086.76
2.1	Electrical General Works-Supply items	1,26,79,006.76
2.2	Electrical General Works	69,19,621.76
2.3	Site facility of electrical works	7,65,044.44
2	Electrical General Works	2,03,63,672.96
	TOTAL	4,13,17,759.72

		Bill of Quantit	ies					
		Schedule 16000						
	ı	RE- General		1	1			
Item No.	SOR ITEM	Description	Unit		Rat			ount
		Preparation and submission of designs and drawings for			Supply	Erection	Supply	Erection
16001	OHE-1	Overhead Equipment, Switching Station, Sectioning diagram, Power supply diagram, Schematic diagram of Switching Stations, Traction Working Rule Diagram and Instructions etc. required for commissioning of OHE.	TKM	2.9	2,166	31,401	6,281	91,063
	OHE-2	Supply and Erection of large Span wire (130 sq.mm) including its fittings with insulators:						
16002	(a)	With Porcelain Insulators 1050mm CD.	Mtr	100	954	78	95,400	7,800
	(b)	With Composite Insulators 1050mm CD.	Mtr		901	78	-	-
	(c)	Extra on erection under Power Block .	Mtr		0	78	-	
16003	OHE-3	Supply and Erection of materials for Termination of single conductor of overhead equipment or a terminating wire:						
16003	(a)	With Porcelain Insulators 1050mm CD.	Each	4	12,767	1,171	51,068	4,684
	(b)	With Composite Insulators 1050mm CD.	Each	0	10,230	1,171	-	-
	(c)	Extra on erection under Power Block .	Each	0	0	1,171	-	
40005	OHE-5	Supply and Erection of material for Termination of copper cross feeder with gantries including cross feeder wire:						
16005	(a)	With Porcelain Insulators 1050mm CD.	Set	0	54,092	1,373	-	-
	(b)	With Composite Insulators 1050mm CD.	Set	0	49,016	1,373	-	-
	(c)	Extra on erection under Power Block.	Set	0	0	1,373	-	
16006	OHE-6	Supply and Erection of Terminal Boards in control cubicles.	Each	1	13,015	585	13,015	585
16011	OHE-10	Modification to existing Overhead Equipment.	Mtr	300	0	47	-	14,100
16011A	OHE-10(a)	Extra for modification to existing Overhead Equipment under power block.	Mtr		0	47	-	1
16014	OHE-13	Loading/Unloading, transportation and handing over of all type of materials etc. (other than contractor material).	Metric Tonne KM	500	0	82	-	41,000
	•	Schdule 19000		•				
		OHE - Ferrous other than steel structures and	ISPS					
Item No.	SOR ITEM	Description	Unit		Rat			ount
		·			Supply	Erection	Supply	Erection
19001	OHE-16	Supply and Erection of a guy rod assembly.	Each	10	9,079	1,409	90,790	14,090
	(a)	Extra on erection under Power Block. Supply and Erection of protective screen on FOBs/ROBs.	Each	2	0	1,409		2,818
19002	OHE-17	,	Sq.m	0	4,701	508	-	-
	OHE-18	Supply and Erection of bracket assembly with insulators						
19003	(a)	With Porcelain stay & bracket Insulators 1050mm CD.	Each	80	21,677	1,214	17,34,160	97,120
	(b)	With Composite stay & bracket Insulators 1050mm CD.	Each	0	19,399	1,214	-	-
	(c)	Extra on erection under Power Block.	Each	5	0	1,214		6,070
19004	OHE-19	Supply and Erection of regulating equipment (3 pulley type) with counter weight assembly for conventional OHE.	Each	6	71,538	5,251	4,29,228	31,506
	(a)	Extra on erection under Power Block.	Each	2	0	5,251	-	10,502
	OHE-20	Supply and Erection of material for termination of double Overhead Equipment conductor				-, -		- ,
19005	(a)	With Porcelain Insulators 1050mm CD.	Each	7	15,197	1,325	1,06,379	9,275
	(b)	With Composite Insulators 1050mm CD.	Each	0	12,918	1,325		
	(c)	Extra on erection under Power Block.	Each	2	0	1,325	-	2,650
	OHE-21	Supply and Erection of anti-creep with galvanized steel wire				.,520		_,000
	(a)	With Porcelain Insulators 1050mm CD.	Each	0	35,664	3,725	0	0
19006	(b)	Extra on provision of extra span in item (a).	Each	0	7,133	745	-	-
	(c)	With Composite Insulators 1050mm CD.	Each	0	31,107	3,725	-	-
	(d)	Extra on provision of extra span in item (c).	Each	0	6,222	745	-	-
	(e)	Extra on erection under Power Block.	Each	0	0	3,725	-	-
	` '	Supply and Erection of a structure bond/longitudinal bond/						

		Schedule 20000 OHE - Non Ferrous Part 'A'						
Itom No	COD ITEM		Heit		Ra	te	Am	ount
item No.	SOR ITEM	Description	Unit		Supply	Erection	Supply	Erection
20001	OHE-23(a)	Supply and Erection of Over Head Equipment i.e. contact & catenary wire (excluding cost of supply of contact & catenary wires), jumper wire, dropper wire, contact/catenary clips, fasteners and all other material required at turn out/ overlaps/ diamond crossings etc. Final checking of OHE and adjustment, inspection to be done by tower wagon for commissioning of conventional OHE.	TKM	2.9	0	62,175	-	1,80,308
	(i)	Extra on erection under Power Block.	TKM	0.5	0	31,087	-	15,544
	(ii)	Extra on manual erection for catenary/contact wire.	TKM	0	0	15,543	-	-
20002	OHE-23(b)	Supply of contact wire (HDGCC 107/150 Sq.mm) only.	MT	3	9,60,871	0	28,82,613	_
		Supply of cadmium copper catenary wire (65 Sq. mm)			, ,			
20003	OHE-23(c)	only.	MT	2.5	9,60,871	0	24,02,178	-
		Schedule 21000 OHE - Non Ferrous Part 'B'						
Ham Na	COD ITEM	Description	I I m l 4		Ra	te	Am	ount
item No.	SOR ITEM	•	Unit		Supply	Erection	Supply	Erection
	OHE-24	Supply and Erection of anti-creep with cadmium copper catenary wire.						
21001	(a)	With Porcelain Insulators 1050mm CD.	Each	4	82,419	5,892	3,29,676	23,568
	(b)	With Composite Insulators 1050mm CD.	Each	0	78,954	5,892	•	-
	(c)	Extra on erection under Power Block.	Each	0	0	5,892	-	-
	OHE-25	Supply and erection of section insulator assembly and associated fittings & fasteners for OHE with Bar Insulator:						
21002	(a)	With Porcelain Insulators 1050mm CD and Bar Insulator.	Each	6	95,759	6,295	5,74,554	5,74,554
	(b)	With Composite Insulators 1050mm CD and Porcelain Bar Insulator.	Each	0	94,027	6,295	-	-
	(c)	Extra on erection under Power Block.	Each	1	0	6,295		6,295
21003	OHE-26	Supply and Erection of PTFE type short neutral section assembly as per latest RDSO specification.	Each		11,30,077	8,152	-	-
	(a)	Extra on erection under Power Block.	Each	0	0	8,152	-	-
21004	OHE-27	DELETED						
21005	OHE-28	DELETED Supply and Erection of all types of copper jumpers.						
21006	OHE-29		Each	11	8,595	475	94,545	5,225
04007	()	Extra on erection under Power Block.	Each	2	0	475	-	950
21007	OHE-30	DELETED Supply of materials and erection of a large copper jumper (160sqmm) between aluminium/Copper busbar and OHE, cross feeder to OHE etc with all associated fittings.	Each	10	11,062	475	1,10,620	4,750
	(a)	Extra on erection under Power Block.	Each	2	0	475	-	950
21009		Supply and Erection of solid copper busbar 18 mm dia including all connectors, bus splice etc.	Mtr	40	4,280	233	-	-
	(i)	Extra on erection under Power Block.		10	0	233	-	-
21010		Supply and erection of Aluminium Bus Bar 36mmx28mm size including all connectors, bus splice etc.	Mtr	0	1,046	64		-
	(i)	Extra on erection under Power Block.		0	0	64	-	-
	OHE-34	Dismantling of traction structure, portals, TTC and associated SPS	MT	40	0	1,777	-	71,080
21011		by cutting. Extra for Dismantling of traction structure, portals,TTC and						
	OHE-34 (a)	associated SPS by cutting under Power Block.	MT	4	0	1,777	-	7,108
21012	Supply and Erection of safety items i.e. Fire extinguishers, set of fire bucket with stand and first aid box, key box with suitable key chain, locks and other misc items required for commissioning of switching station.		Set	0	16,098	2,666	-	-
21013	OHE-36	Supply and Erection of Retro-reflective type boards - 25kV AC OHE danger board/ danger board for height gauge, public, staff caution board and special boards required for commissioning of OHE/SWSs.	Each	4	451	160	1,804	640
	(-)	Extra on erection under Power Block.	Each	2	0	160	-	-
	(a)	Common Schedule of OHE/TSS						

		Schedule 30000A Galvanised Steel Strructures						
Itom No	SOR ITEM		Unit		Ra	te	Am	ount
item No.	SORTIEM	Description	Unit		Supply	Erection	Supply	Erection
30009	CS-9	Supply and Erection of all types of galvanised Steel Structures, Small Parts Steel etc.	MT	42	1,17,732	3,713	49,44,744	1,55,946
	(a)	Extra on Erection under Power Block.	MT	1	0	3,713	-	3,713
	(b)	Extra rate on Manual Erection. Schedule 30000B	MT	0	0	1,857	-	-
		Concrete for Fondation						
Item No.	SOR ITEM	Description	Unit		Ra	te	Am	ount
item ivo.	OOK II LIM	•			Supply	Erection	Supply	Erection
30006A	CS-6 (a)	Providing and laying of concrete for foundation and plinth in all types of Soils using M-10 grade concrete for main foundation and M-15 grade concrete for grouting and muffing including nominal reinforcement wherever required as per RDSO drawings.		295	5,795	1,875	17,09,525	5,53,125
30006B	CS-6 (b)	Providing and laying of concrete for foundation and plinth in all types of Soils using M-15 grade concrete for main foundation and M-20 grade concrete for grouting and muffing including nominal reinforcement wherever required as per RDSO drawings.		20	6,846	1,875	1,36,920	37,500
30006C	CS-6 (c)	Providing and laying of concrete for foundation and plinth in all types of Soils and Soft/Hard Rock using M-20 grade concrete for main foundation and M-20 grade concrete for grouting and muffing including nominal reinforcement wherever required as per RDSO drawings.		0	7,417	1,875	-	-
30007A	CS-7 (a)	100% Extra Payment over CS-6(a), (b) and (c) for foundation and plinth in Hard Rock/heavy concrete requiring chiseling/Blasting/machine breaking.		0	0	1,875	-	-
30007B	CS-7 (b)	50% Extra Payment over CS-6(a), (b) and (c) for foundation and plinth in Soft Rock/Hard soil requiring chiseling/Blasting/machine breaking and in Black Cotton Soil.		140	0	938	-	1,31,320
30007C	CS-7 (c)	Extra payment for grouting of masts/portals in yards using M-30 concrete and expansive admixture compound as per RDSO guidelines.		80	0	423	-	33,840
30008	CS-8	Providing and laying of Reinforced Concrete for Pier/Column/Pile, Cable Trench and Trench Cover and special designed foundations requiring reinforcement.	CUM	0	0	8,630	-	-
		Schedule 30000C	l		I			
		Miscellineous Common Items of OHE/TS	S					
Item No.	SOR ITEM	Description	Unit		Ra			ount
30023 A	CS-23(a)	Supply and Erection of 25kV, 1250A, Single Ploe Isolators with insulator, with/without earth contact assembly and with /without interlock.		3	Supply 65,036	3,264	Supply 1,95,108	9,792
30023B	CS-23(b)	Supply and Erection of 25kV, 1250A, Double Pole Isolator with insulator, with/without earth contact assembly and with /without interlock.		1	1,05,517	3,264	1,05,517	3,264
30023G	CS-23(g)	Extra on erection under Power block for Single Pole /Double Pole Isolators.	Each	1	0	3,264	-	3,264
30026	CS-26	Supply & Erection of 25kV Support/ Post insulators with fittings and fasteners.	Each	18	4,923	185	88,614	3,330
RVN	IL BOQ	Site Facilities	Each				7,65,044	
					TOTAL		1,68,04,683	20,72,87
						Y + ERECTION)		1,88,77,55
				OHE SE	PARES FOR MAIN			5,66,32
					DSI FO	T&P(5%) UIPMENT (3%)		943877.781
					1 31 20			

Bill of Quantities												
	C	HE ES	STIMA	TE								
S. No.	Description	Qty	Unit	Unit	Rate	Tota	l for	Amount (in Rs.)				
NO.				Supply	Erection	Material	Erection	(III KS.)				
1	Design & drawing for Augmentation of Bhalumuda SSP, feeder line including schematic drawings, SWR's etc. required for commissioning of SSP	1	Each	10000	20000	10000	20000	30000				
2	Supply & Erection of Concrete for foundation & plinth including cable trench											
2(b)	Supply and erection of foundation and plinth in other than hard soil and rock	400	Cum	5193	1681	2077286	672358	2749645				
3	Supply and erection of all types of galvanized steel structures, small parts steel etc	35	MT	103439	4022	3620373	140780	3761153				
4	Supply and Erection of 25KV CB/BM	3	nos	472319	5588	1416957	16764	1433721				
5	Supply & Erection of 42 KV lightning arrestor with surge monitor,counter and cable	3	nos	32287	662	96862	1987	98848				
6	Supply & Erection of 25 potential Transformer Type-I or Type-II	3	nos	89533	946	268600	2838	271438				
7	Supply & Erection of 25 KV Current Transformer	3	nos	94345	809	283034	2426	285460				
8	Supply and Erection of materials for Termination of all copper 25 KV feeder conductor single including feeder wire, suspension insulator etc	300	Mtr	825	165	247500	49500	297000				
9	Supply & Erection of 25 KV pedestal insulators with fittings and fasteners	24	nos	5220	312	125268	7488	132756				
11	Supply & Erection of 25 KV Double pole isolator 1600 A with rod & post insulator with/without interlock	3	nos	120920	5617	362760	16852	379612				
12	Supply & Erection of Aluminum Bus bar 36mmX28mm	60	mtr	288	43	17257	2580	19837				
13	Supply & Erection of all types of Aluminum/copper bus connectors,bus splice,tee connectors,bus terminals required for commissioning of switching stations with fasteners	24	nos	1663	21	39917	504	40421				
14	Supply and erection of all types of copper jumper	3	nos	8715	374	26144	1122	27266				
15	Supply of materials and erection of a large copper jumper (160 sq mm) between aluminum bus/OHE and cross feeder with all associated fittings	3	Each	9183	507	27548	1521	29070				
16	Supply & Erection of Earthing arrangement at switching station i.e. earth electrodes, earth bus, 8 SWG GI wire etc. to achieve IR value for energisation	4	Job	23118	10986	92470	43943	136413				
17	Supply & Erection of copper strips for equipment earthing	4	mtrs	1167	124	4666	495	5161				
18	Supply & Erection of material for termination of copper cross feeder with gantries including cross feeder with 9-ton insulators	6	Set	55186	1400	331115	8402	339517				
19	Supply & Installation of cables for SWS	50	mtrs	250	20	12485	990	13475				

Amount in Lakhs Amount in Crores											
	Amou	ınt in Lakhs						126.79			
	-	nd Total	1	1				1,26,79,007			
31	SWS complete in all respect including handing over to railways.	1	LS	1000	20000	1000 11549609	20000 1129398	21000 12679007			
30	Supply and Spreading of 20mm gravel/ballast in switch Yard Testing , Processing for EIG and commissioning of	10	cum	876	7	8763	67	8830			
29	Modification/Alternation to existing RTU at SSP including Modification/alteration to existing SCADA arrangements at Divisional Head Quarter remote control centre	ng SCADA 1 Joh 305221 50000 305221		50000	355221						
28	Supply, erection, testing, and commissioning of control and numeric relay panel suitable for Single Circuit breaker as per latest RDSO specification.	1	nos	1613559	14426	1613559	14426	1627985			
27	Electrification of Switching Station building as per specification	1	Each	0	22624	0	22624	22624			
26	Painting of equipment etc.	1	LS	5000	2000	5000	2000	7000			
25	Supply, Erection, oil filtration, testing and commissioning of 25kV/240 Volts, 10kVA LT Supply transformers oil type with DO fuse switch, anticlimbing device, insulator, copper jumper and earth electrode etc.	1	Set	81157	10678	81157	10678	91836			
24	Supply & Erection of Lead Acid batteries 40AH with Battery charges	1	Set	169946	6041	169946	6041	175987			
23	Supply & Erection of Fencing panels,uprights,gate and anti-climbing device	80	Mtr	3566	120	285296	9592	294888			
22	Supply & Erection of Shock treatment chart etc.	2	nos	225	23	450	46	496			
21	Supply & Erection of safety items i.e. Fire extinguishers,set of fire bucket with stand and first aid box,key box with suitable key chain,locks and other misc items required for commissioning of switching station	1	set	17199	2848	17199	2848	20046			
20	Reinforced Concrete for Cable trench covers	2	M2	887	264	1775	527	2302			

			CHEDU								
N.	COD ITEM			AL GEI	VER	Ra	te		Amo	unt	
item No.	SOR ITEM	•	Unit	QTY		Supply	Erection		Supply		Erection
	33003	A: ELECTRIFICATION OF GOOMTY Wiring for light/ ceiling fan/exhaust fan/call bell/light plug/ group etc. points including circuit wiring, sub main wiring with Fire Retardant (FR), PVC insulated, multistranded, copper conductor, single core cable on surface/in recessed PVC conduits, distribution boards, sub distribution boards, earthing etc. as required. Wiring shall be done as per sizes of cables, no. of points permissible in each circuit and sub mains as indicated in Explanatory Notes.	Point	12	₹	-	₹ 1,666.00	₹	-	₹	19,992.00
		Wiring for Circuit/sub main wiring along with earth wire with the following sze of FR PVC insulated copper single pole cable in surface/recessed.Medium glass PVC conduit as required									
	Α	2 x 4 Sq mm + 1 X 4 sq mm earth wire	Meter	170	₹		166.00	₹			28,220.00
		Supply of box type indoor single intigrated sleek extruded polycarbonate LED tube light fittings with 1 X 18 W lamp,intigrated driver,Holders,Acrelic made protective cover and other accessories	Set	8	₹		1,322.00	₹			10,576.00
		Supplying & fixing 4way =,double door TP & N MCB distribution bore of steel sheet for 415volt on surface/Recess complrtr with loose wire box ,terminal connectors for all incoming & outgoing circuits,duely pre wired with suitable size FRLS PVC insulated copper conducter uptio terminal box,tinned copper bus bar ,nutral link,earth bar,tin bar,diattachable gland plate ,interconnection,powder painted including earthing etc as required.(But with MCB /RCCB)	Set	1	₹		7,567.00	₹			7,567.00
		Supply and fixing 5 A to 32 A rating,240 volt,"C" curve ,MCB suitable for inductive load of single poles in the existing MCB DB complet with connections testing and commissionin etc as regired	Set	1	₹		174.00	₹			174.00
		Supply and fixing 63A rating,415 volt,"C" curve ,MCB suitable for inductive load of single poles in the existing MCB DB complet with connections testing and commissionin etc as regired	Set	2	₹		1,701.00	₹			3,402.00
		B: PROVISION OF LUMINARIES, FANS, WAT DELETED	ER								
	33006	Supply, Installation, Testing and Commissioning of light sensitive street light controller, 25 kW for street light/ High mast complete with infrared sensors, contactors and MCB, terminal board etc. for 25 kW load, Operative Voltage 185-275 V AC. Make: Bajaj Energy pack or equivalent as approved by Engineer.	No.	1	₹	49,440.00	₹ 2,149.76	₹	49,440.00	₹	2,149.76
	33008	Supply, Installation, Testing and Commissioning of 230V A. C ceiling fan 1400mm with double ball bearing and suitable capacitor complete with wiring with 1.5 sq.mm FR PVC insulated copper conductor, single/three core cable as instructed etc. as required.			₹	2,504.00	₹ 393.00				
	33008A	Supply and Erection of 1200mm BLDC fan with remote.	No.	2	₹	2,653.00	₹ 168.00	₹	5,306.00	₹	336.00
	33010 A	Supply, Installation, Testing and Commissioning of 11-15 W LED lamp as approved by Engineer.	No.	4	₹	246.00	₹ 39.00	₹	984.00	₹	156.00

				CHEDU									
	. 1	200 ITEM			AL GEI	NEK.	AL Rat	te			Amo	unt	
Item	NO.	SOR ITEM	Description	Unit	QTY		Supply		rection		Supply		Erection
		33010D	Supply, Erection, Testing and Commissioning of LED Street light fitting, pressure di-cast aluminium housing with suitable cover, suitable to work on 220-240V AC supply with system wattage as under:										
			(i) Fitting 43-48 W	No.	1	₹	6,962.00	₹	586.00	₹	6,962.00	₹	586.00
		33011A	Supply, Erection, Testing and Commissioning of exhaust fan suitable for 1- phase, 230 Volts, AC supply system complete with capacitor, louver shutters, grouting bolts with nuts, making opening/ modification in the wall to suit the size of the fan, making good the damages, connections with 1.5sq. mm FR, PVC insulated, multi stranded copper conductor, single core/ three cable as instructed, earthing etc. as required:										
		(i)	AC exhaust fan 300 mm 900 rpm with/ without louver shutters.	NO.	2	₹	3,715.00	₹	581.00	₹	7,430.00	₹	1,162.00
		SECTION -	C: L.T. SWITCH BOARDS AND FEEDER PILL Supply, installation, testing and commissioning										
		33013	of cubical type, wall mounted, dust & vermin proof, L.T. switch board of different capacities.										
		(b)	LT switch board 63 Amp comprising items indicated as under i) incoming MCCB 63A, 4 pole, 35kA, fixed type (Ics=100%Icu) - 1 No ii) Outgoing MCCB 40A, 4 pole, 25kA, fixed type (Ics=100%Icu) - 3 Nos iii) Outgoing MCB double pole, 6-32A, 10kA-16 Nos iv) Outgoing MCB Single pole,6-32A, 10kA-8Nos v)Sleeved/Epoxy coated copper bus-bar 200 A in bus bar Chamber vi) Indication lights.	No.	1	₹	93,507.00	₹	14,688.00	₹	93,507.00	₹	14,688.00
		SECTION -	F: EARTHING ARRANGEMENT										
		33032	Earthing with 3 meter long, 50mm dia, G.I. pipe class 'B' earth electrode, adding the charcoal or coke and salt, providing concrete enclosure and MS cover plate with lifting arrangement etc. including connections with 4mm G.I. wire from earth electrode to switch board / electrical equipment as required.	Job	15	₹	3,501.00	₹	550.00	₹	52,515.00	₹	8,250.00
		33033	Earthing with 600mmx600mmx6mm thick G.I earth plate, adding of charcoal or coke and salt, providing concrete enclosure and MS cover plate with lifting arrangement, watering pipe etc. as required.	Job	0	₹	3,889.00	₹	609.00				
		33034	Earthing with 600mmx600mmx3mm thick copper earth plate, adding of charcoal or coke and salt, providing concrete enclosure and MS cover plate with lifting arrangement, watering pipe etc. as required.	Job	0	₹	6,870.00	₹	1,078.00				
		33035(i)	EARTH CONNECTIONS Supply and Laying 25mm x6mm G.I. strip at not less than 0.50 meter below ground or in recess as required.		150	₹	78.00	₹	14.00	₹	11,700.00	₹	2,100.00
		33035(ii)	Supply and Laying 40mm x 6mm G.I. strip at not less than 0.50 meter below ground or in recess as required.	Meter	0	₹	128.00	₹	19.00				
		33035(iii)	Supplying and Fixing 40mm x 5mm copper strip on surface or in recess or in 50mm dia G.l. pipe as required.	Meter	0	₹	1,019.00	₹	161.00				_
		SECTION -	G : CABLING			<u> </u>				<u> </u>			

			CHEDU									
		ELEC	CTRICA	AL GEN	NER	RAL						
Itom No	SOR ITEM	Description	Unit			Ra	te			Amo	ount	
iteiii No.	30K ITEM	Description	Oilit	QTY		Supply		Erection		Supply		Erection
		Supply and Laying of 1.1 KV grade LT XLPE insulated armoured, aluminium conductor cable, making good the damages, end terminations with aluminium crimping socket/ plugs, provisions of cable route markers, testing & commissioning etc. as required as per technical specifications:										
	(vi)	4.0 Core 35 sq.mm	Meter	3500	₹	618.00	₹	25.00	₹	21,63,000.00	₹	87,500.00
	SECTION -	H : ELECTRIFICATION BY HIGH MASTS										
	33037	Supply, Erection, Testing and Commissioning of hot dipped galvanised, high mast system complete with all accessories, foundation, carriage arrangement suitable for LED luminaries symmetrically arranged & control gear boxes and lighting finial etc., twin dome aviation obstruction lights, control panel, multi core flexible copper conductor cable, connection to earthing system and fencing panel as per requirement:										
	(ii)	12 Meter high mast system, suitable for 6 to 9 nos luminaires.	Job	2	₹	2,62,390.00	₹	43,509.00	₹	5,24,780.00	₹	87,018.00
	SECTION -	O (Misc. Items)								·		
	33059	Supply, Installation, Testing & Commissioning of 15W LED Solar Street light system with 6/7 m pole GI complete with all accessories as per RDSO specifications RDSO/PE /SPEC /PS/0093-2008 (Rev.0) Amend-3 or latest.	No	60	₹	58,783.00	₹	4,218.00	₹	35,26,980.00	₹	2,53,080.00
					•	TOTAL			₹	64,42,604.00	₹	4,77,017.76
				•		TOTAL(SI	JPPI	LY + ERECTION)	₹	, ,		69,19,621.76

	SITE FACILITIES-EL	ECTRICA	L WORK	(S		
SL NO	Description	QTY	UNIT	RATE	AMOUNT	REFERENCE
1	Providing Road Vehicle mentioned below for the use of Engineer/Employer as per the Conditions mentioned in Clause 3.4.2 & 3.4.3 of Chapter 3 (Site Facilities for the Employer and the Engineer) of Section 5 Work's Requirement) of Tender Documents. Note: The provisions of clause 12.3.1 (a) (ii) of Section 6 (GCC) of the Contract shall not be applicable for appropriateness of new rate for this item.					
а	BOLERO, SCORPIO, ERTIGA, MARAZZO or similar	12	Vehicle months	63638.86	763666.31	RVNL BOQ
b	Extra for running and maintenance of every additional km over and above 4000 kms as specified in item 9003 (b)	100	Per Km	13.78125	1378.125	RVNL BOQ
				Total	765044.44	



Detailed Project Report of Giddi Railway





	Abstract of S&T Engineering Works of Giddi Railway Siding					
Sr. No.	Description of Schedule	Price in Rs				
1	S&T Works	7,95,88,677.00				
2	SITE FACILITIES	7,65,044.44				
	TOTAL	8,03,53,721.44				

	SIGNALLING & TELECOMMUN	NICATIO	N ESTIM	ATE_	
S.No	Description Schedule -A- Supply	Unit	Qty	Rate in Rs.	Amount in Rs.
1	EI-SUPPLY Supply of Electronic Interlocking system RDSO Specfn No: RDSO/SPN/192/2005	Set	1	₹ 3,80,00,000.00	₹ 3,80,00,000.00
2	Supply of Panel Processor for above Electronic Interlocking along with 5% spares, wherever required.	Nos.	1	₹ 15,00,000.00	₹ 15,00,000.00
3	Incremental rate for signaling functions in EI SYSTEM over and above 125 functions	Per function	70	₹ 1,00,000.00	₹ 70,00,000.00
4	Supply of portable work station to run along with EI configuration tools, data inputs, simulation and functional testing, diagnostics and trouble shooting and commissioning of EI system.	Nos.	1	₹ 1,50,000.00	₹ 1,50,000.00
5	Supply of 24x7 type operation VDU Professional grade of standard make for operator with the following specification: 1) Monitor size - 55" Widescreen (138.8 cm diagonal) 2) LED: Back lit LED 3) Built-in speakers.	Nos.	1	₹ 38,000.00	₹ 38,000.00
6	Supply of industrial grade embedded PC for operator VDU as per RDSO TAN No. STS/TAN/3007 Version 1.0 or latest with adequate storage memory to work in Hot standby mode.	Nos.	1	₹ 4,20,000.00	₹ 4,20,000.00
7	Supply & Installation of Single section Digital Axle Counter System.	Set	1	₹ 10,00,000.00	
11 12	AXLE COUNTER TOOL KIT Supply of High Availability Single section Digital Axle counter System complete with dual	Nos.	1	₹ 2,50,000.00	₹ 2,50,000.00
12	sensor	Set	2	₹ 9,50,000.00	₹ 19,00,000.00
13	Supply of Outdoor signaling cable - 2 core x 2.5 sq.mm	Kms.	1	₹ 1,00,000.00	
14 15	Supply of Outdoor signaling cable - 12 core x 1.5 sq.mm Supply of Outdoor signaling cable - 24 core x 1.5 sq.mm	Kms.	6 8	₹ 2,90,000.00 ₹ 3,80,000.00	
16	Supply of Outdoor signaling cable - 24 core x 1.5 sq.mm Supply of Outdoor signaling cable - 30 core x 1.5 sq.mm	Kms.	1.8	₹ 3,80,000.00 ₹ 4,50,000.00	
17	Supply of Aluminium conductor POWER Cable - 2 core x 25 sq.mm.	Kms.	6	₹ 1,20,000.00	
18	Supply of design set for circuit	Set	1	₹ 1,00,000.00	
19	Supply of Relay - QN1/QNA1	Nos.	70	₹ 5,000.00	
20	Supply of Main Cable Termination rack complete	Rack	2	₹ 60,000.00	₹ 1,20,000.00
21	Supply of Relay Rack Assembly (Q style) complete with racks, ladders, indoor jumper wire, fuse & holder, power cables etc.	Rack	2	₹ 1,78,000.00	₹ 3,56,000.00
22	Supply of Prewired crank handle cum key lock relay box	Rack	2	₹ 10,000.00	₹ 20,000.00
23	Supply of Non-deteriorating type fuse holders and fuse Links				₹ -
	a) Fuse holder 20 Amps Capacity	Nos.	6	₹ 250.00	
	b) Fuse links 10 Amps	Nos.	6	₹ 50.00	₹ 300.00
	c) Fuse links 2 Amps d) Fuse links 6 Amps	Nos.	6	₹ 40.00 ₹ 50.00	
24	Supply of Fuse Auto Changeover System (FACS)	Unit	1	₹ 30,000.00	
25	Supply of Networked Data Logger to monitor 512 digital and 32 analog inputs.	Nos.	1	₹ 5,00,000.00	i
27	Supply of Block Proving with Digital Axle Counter using UFSBI & Block Panel for Double Line operation	Set	1	₹ 15,00,000.00	₹ 15,00,000.00
28	Supply of Integrated Power (IPS) SMPS based with battery set of 300 AH, hydrometer etc suitable for El/PI/RRI.	Set	1	₹ 11,50,000.00	₹ 11,50,000.00
29	Supply of Single Phase Air Cooled, Silent DG set (CPCB compliant)of 15 KVA.	Nos.	2	₹ 5,00,000.00	₹ 10,00,000.00
30	Supply of Underground jelly filled , 0.9 mm dia, 6 Quad cable	KM	3	₹ 3,30,000.00	₹ 9,90,000.00
31	Supply of PIJF cable of size: 05 PAIR X 0.63 MM	KM	0.3	₹ 70,000.00	
32	Supply of PIJF cable of size: 10 PAIR X 0.63 MM.	KM	1	₹ 90,000.00	
33 34	Supply of PIJF cable of size: 20 PAIR X 0.63 MM.	KM	1	₹ 1,30,000.00	
35	Supply of 24 fibre armoured optic fibre cable Supply of SPLIT DWC pipe of size 200 mm outer dia & 175 mm inner dia.	KM Mtrs	3.8 70	₹ 90,000.00 ₹ 400.00	
36	Supply of Galvanized Iron pipe 100 mm dia `B' class with end clamps	Mtrs	10	₹ 1,500.00	
37	Supply and jointing of Quad cables with theromoshrinkable jointing kits	Nos.	18 7	₹ 8,000.00	
38	Supply of 2 aspect Colour light signal complete with Signal post, Cl base, ladder, platform, front staging, CLS unit 2 aspect, Anchor bolt, nut washer, Universal lock with key etc	Nos.	3	₹ 45,000.00	
39	Supply of 3/4 aspect Colour light signal complete with Signal post, CI base, ladder, platform, front staging, CLS unit 3/4 aspect,Anchor bolt, nut washer, Universal lock with key etc	Nos.	2	₹ 55,000.00	₹ 1,10,000.00
42	Supply of Dependant type Position light shunt signal unit along with OFF set bracket,Universal lock with key etc	Nos.	5	₹ 11,000.00	₹ 55,000.00
43	Supply of Calling on signal unit along with Universal lock with key etc	Nos.	1	₹ 4,500.00	₹ 4,500.00
44	Supply of LED signal unit for main signal For RED/YELLOW/GREEN aspect	Nos.	15	₹ 12,000.00	₹ 1,80,000.00
45	Supply of LED signal unit for junction type route indicator/ shunt/ calling-on.	Unit	5	₹ 8,000.00	
46	Supply of DC Track circuit Equipment including battery charger, 'B' type choke, adjustable Track Feed Resistance, QTA2 relay, QSPA1 relay, Fuse block, ND type	Set	25	₹ 55,000.00	·
	fuses, 80 AH batteries etc. Electrical point operating machine - IRS Type,143 mm throw with lock & detector slides,	N	17	₹ 1,00,000.00	₹ 17,00,000.00
47	Cable terminal box etc. with suitable ground connection	Nos.	17	1,00,000.00	
47	Cable terminal box etc. with suitable ground connection Supply of Location box -Full Case complete with E Type lock, Hylam sheet, Universal	Nos.	35	₹ 22,000.00	₹ 7,70,000.00
	Cable terminal box etc. with suitable ground connection				

	SIGNALLING & TELECOMMUN	IICATIO	N ESTIM	ATE			
S.No	Description Schedule -A- Supply	Unit	Qty		Rate in Rs.		Amount in Rs.
51	Supply of ARA Terminal block with links, 1 way,60 mm made of PBT	Nos.	10	₹	100.00	₹	1,000.0
	Supply of Office furniture set for relay room of Godrej make	Nos.	1	₹	60,000.00	₹	60,000.0
53	Supply of Electronic magneto telephone desk type	Nos.	5	₹	4,000.00	₹	20,000.0
54	Various types of markers as:-P/C/G/A/IB markers	Nos.	1	₹	1,000.00	₹	1,000.0
	Maintenance tool kit complete	Nos.	1	₹	1,00,000.00	₹	1,00,000.0
	Supply of 4 Wire way station Equipment with telephone Cable Route Locater with accessories, make RIDGID, model SR.20 or make C-Scope,	Nos.	5	₹	7,500.00	₹	37,500.0
	model CAT-XD or make 3M model - 2220M.or similar	Nos.	1	₹	2,50,000.00	₹	2,50,000.0
	Supply of Emergency socket Box with socket six pin flat	Nos.	3	₹	2,200.00	₹	6,600.0
59	Supply of Permananently lubricated HDPE pipe 40 / 33 mm dia. suitable for armoured 24 fibre OFC cable including its accessories	Kms.	5	₹	75,000.00	₹	3,75,000.0
60	Supply of FCPC To SCPC 10 meter long patch cords with o db adaptors	Nos.	18	₹	3,000.00	₹	54,000.0
	Blowing of armoured Optical Fiber Cable into duct by using blowing machine and associated works .	Kms.	1	₹	15,000.00	₹	15,000.0
	ELECTRONIC INTERLOCKING	G - EXECU	TION	-			
	Installation, Wiring, testing, Soldering of all El equipments, earthing of El Equipment, Relay Racks and Power Equipment etc. including supply power cable and Documents/Manuals etc.	EI	1	₹	7,00,000.00	₹	7,00,000.0
63	Training (at site and/or work) of Engineers/Officers	er man wee	1	₹	30,000.00	₹	30,000.0
64	Commissioning of Electronic Interlocking system	EI	1	₹	30,000.00	₹	30,000.0
65	Erection, Installation of Cable Termination Rack Assembly and Termination of cables	Rack	2	₹	10,000.00	₹	20,000.0
66	Installation of complete Relay Rack Assembly	Rack	2	₹	15,000.00	₹	30,000.00
67	Installation, Wiring ,testing and commissioning of Data loggers at station	Set	2	₹	30,000.00	₹	60,000.00
68	Installation, wiring, testing and commissioning of complete Integrated Power Supply (IPS) systems	Set	2	₹	2,30,000.00	₹	4,60,000.00
69	Installation and Commissioning of Single Phase Diesel Generator Set.	Nos.	1	₹	40,000.00	₹	40,000.0
70	Excavation of trenches at the depth of 1.0 Mtr. deep and 300 mm wide and back filling the trench after laying of cable along with supply and fixing of Cable route marker.	KM	8	₹	1,20,000.00	₹	9,60,000.00
71	Laying of signaling / power / telecom / quad/OFC cable of various sizes in trench and pipes.	KM	20	₹	7,000.00	₹	1,40,000.00
	Excavation of pit, casting & plastering of concrete foundation for C.L.Signal and for signal ladder, Erection and wiring of complete signals along with supply of Signal number plate, wiring material etc.	Nos.	8	₹	20,000.00	₹	1,60,000.00
	Excavation of pit, casting & plastering of concrete foundation for shunt signal, erection and wiring of complete signals along with supply of Signal number plate, wiring material etc.	Nos.	10	₹	5,500.00	₹	55,000.00
	Excavation of pit, casting of concrete foundations for Location Box-Single Case, erection of location box	Nos.	17	₹	12,500.00	₹	2,12,500.00
	Excavation of pit, casting of concrete foundations for Location Box-Half Case, erection of location box	Nos.	25	₹	8,500.00	₹	2,12,500.0
78	Supply and Installation of various boards like BSLB/GWB/SLB boards etc	Nos.	25	₹	20,000.00	₹	5,00,000.0
79	Supply of Earth electrode & Installation and connection of earth with equipments	Nos.	10	₹	4,000.00	₹	40,000.0
80	Installation of emergency socket box including socket on the rail post in the section	Nos.	10	₹	4,500.00	₹	45,000.0
81	Supply and installation of ELD (12 CHANNEL)	Nos.	1	₹	1,70,000.00	₹	1,70,000.0
	<u>Telecom</u>						
	FOIS Connectivity	set	1	₹	25,00,000.00	₹	25,00,000.0
	BSNL/Railway phone	Nos	5	₹	5,000.00		25,000.0
	Fax machine	Nos	1	₹	15,000.00		15,000.0
	Walkie Talkie -5 Watts -GP 328 Misellaneous	Nos LS	6	₹	20,000.00	₹	1,20,000.0
	Total	Lò	1	-	∠,00,000.00	₹	2,00,000.0 7,57,98,740. 0
	FINAL COST		1	1		_	. ,51,55,1-40.0
	Cost of Works					₹	7,57,98,740.0
	Freight & incidental charges 5%					₹	37,89,937.0
	TOTAL					₹	7,95,88,677.0
	Amount in Lakhs (Rs.)					₹	79.5
	Amount in Crores (Rs.)					₹	7.9

	SITE	FACILIT	TES			
SL NO	Description	QTY	UNIT	RATE	AMOUNT	REFERENCE
1	Providing Road Vehicle mentioned below for the use of Engineer/Employer as per the Conditions mentioned in Clause 3.4.2 & 3.4.3 of Chapter 3 (Site Facilities for the Employer and the Engineer) of Section 5 Work's Requirement) of Tender Documents. Note: The provisions of clause 12.3.1 (a) (ii) of Section 6 (GCC) of the Contract shall not be applicable for appropriateness of new rate for this item.					
а	BOLERO, SCORPIO, ERTIGA, MARAZZO or similar	12	Vehicle months	63638.86	763666.3125	RVNL BOQ
b	Extra for running and maintenance of every additional km over and above 4000 kms as specified in item 9003 (b)	100	Per Km	13.78125	1378.125	RVNL BOQ
				Total	765044.44	



Draft Detailed Project Report of Giddi Railway



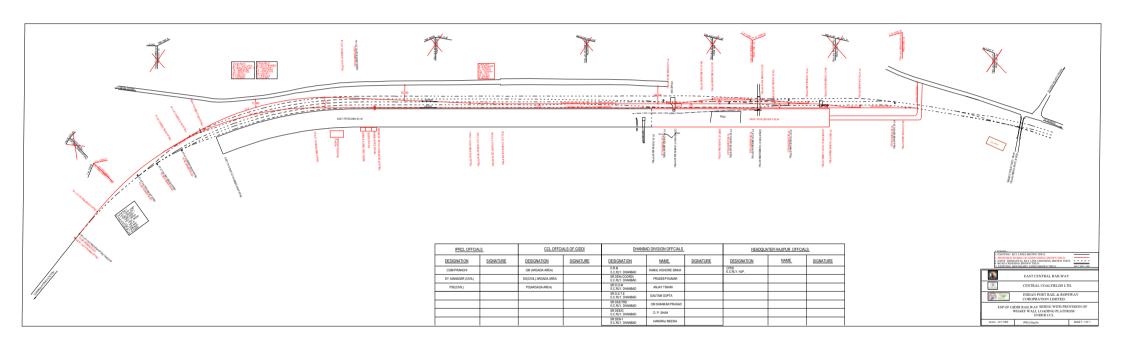
Annexure-20

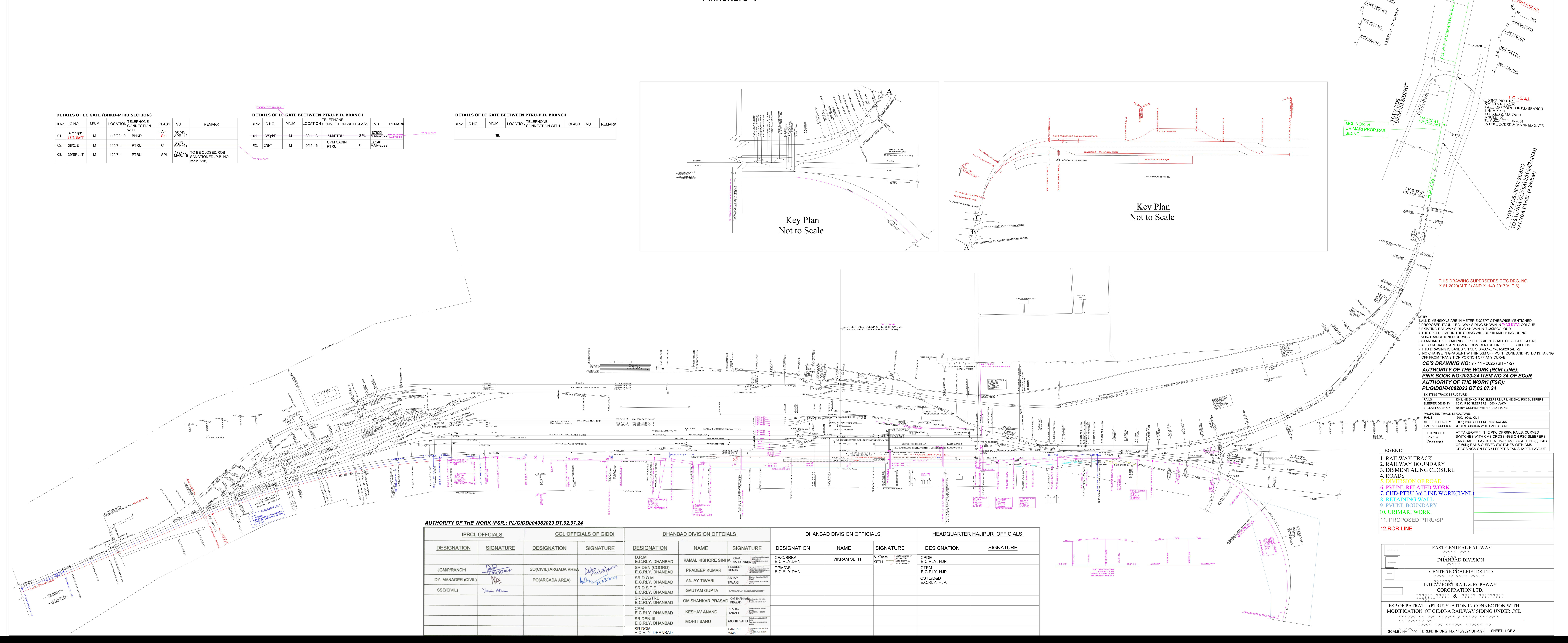
List of Point of Crossing & DS:-

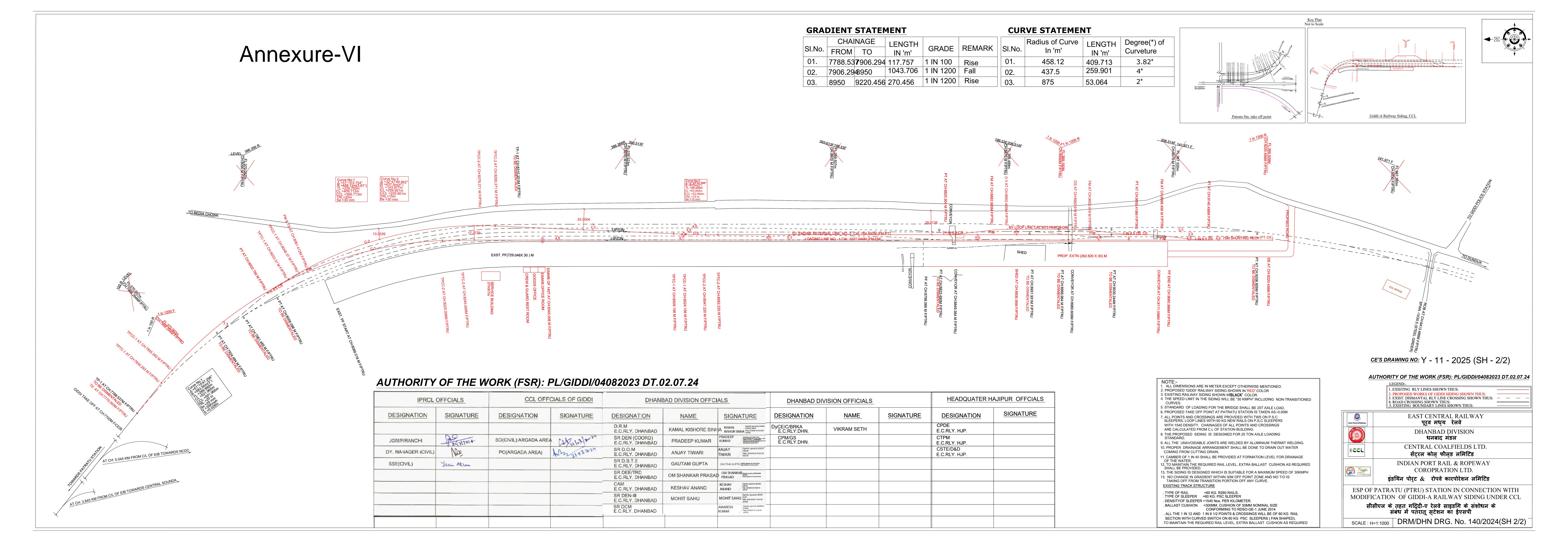
SR.NO	CHAINAGE Form CSB PTRU	ТҮРЕ
1.	8002.790	1 in 8.5
2.	8825.904	1 in 8.5
3.	9059.418	1 in 8.5
4.	9145.456	1 in 8.5

DERAILING SWITCH

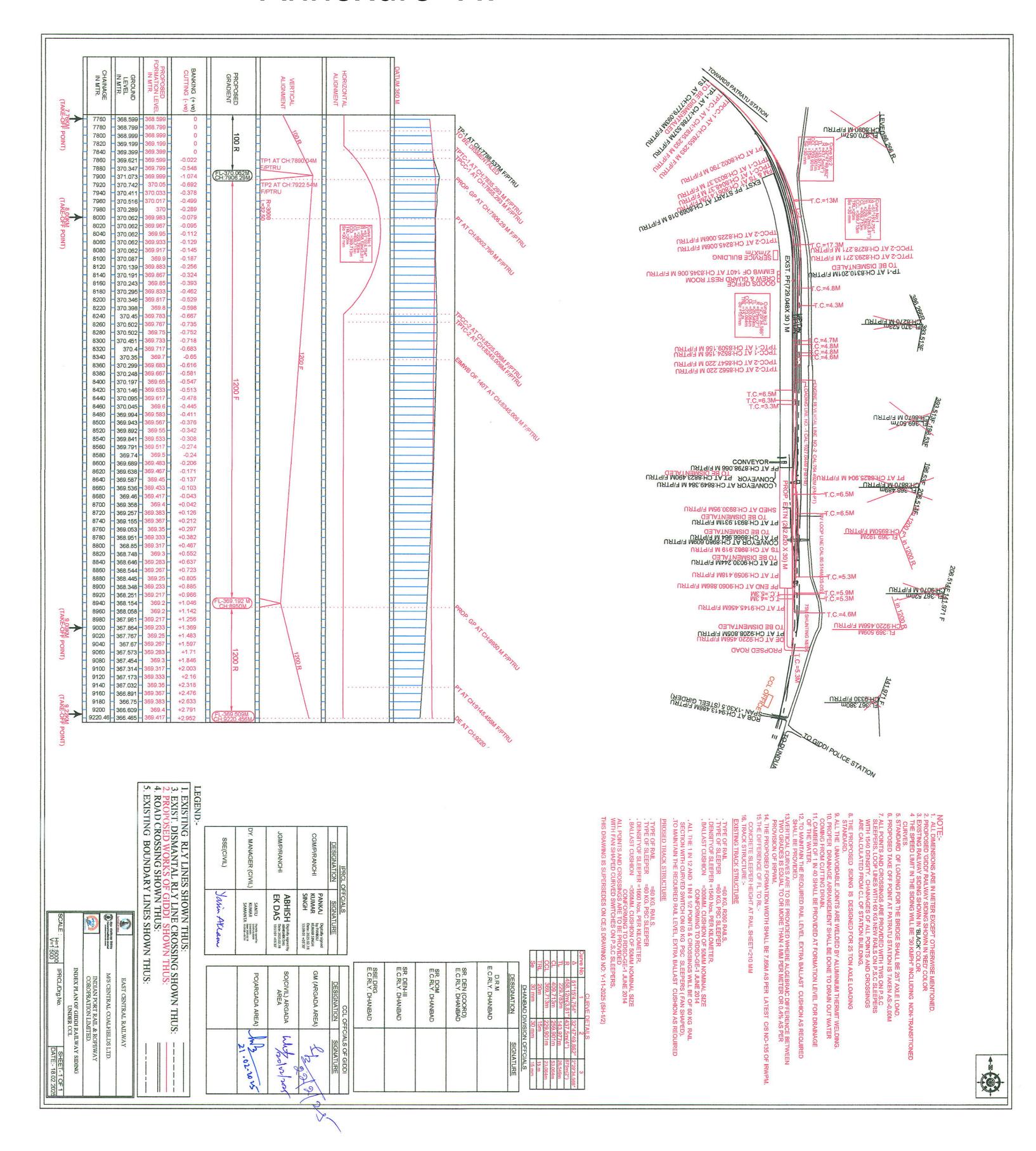
SR.NO	CHAINAGE Form CSB PTRU	TYPE
1.	7779.093	DS
2.	8902.405	DS
3.	8982.919	DS







Annexure-VII



EAST CENTRAL RAILWAY Annexure-VIII

Dhanbad, Date: 22.01.2025

No. PL/Giddi/238105

General Manager (P) IPRCL, Ranchi

Sub: Approval of DPR and ESP for augmentation of Giddi siding taking off from Patratu station.

Ref: IPRCL letter no. IPRCL/Ranchi/ECR/CCL-Giddi/18/1155 dated: 19.11.2024.

In reference to above, the Detailed Project Report and Engineering Scale Plan for augmentation of Giddi siding taking off from Patratu station is hereby **provisionally approved under FM Circular no.11 of 2016** subject to fulfilment of the following stipulations:

- 1. Construction must be as per approved ESP, C.E's DRG. No-: Y-11-2025 (02 Sheets)
- 2. Necessary technical drawings (SIP, OHE, L-section diagram etc.) should be approved from railway.
- 3. Lease/License plan of Railway Land should be approved by Railway as per applicable Railway policy.
- 4. Land license fee is to be paid in advance before commissioning of the siding.
- 5. Cost of necessary yard modification, signaling modification, OHE modification should be borne by party.
- 6. The entire cost of project has to be borne by the siding holder including modification proposed at the station yard. The Railway shall not bear any cost at any circumstance what so ever.
- 7. Incremental cost of OHE, S&T and Civil etc. will be part of estimate.
- 8. The siding holder has to be abide by the Railway terms and condition according to extant rule of Railways regarding staff cost, maintenance charge of Track, OHE, Signaling etc. as applicable from time to time.
- 9. Railway reserve the right to incorporate any kind of change if felt necessary in view of operations, track laying, signaling arrangement etc. which will be binding on the siding holder.
- 10. Commencement of construction should be started within 05 months and completed within 15 months from the date of approval, failing which Railway reserve the right to put the approval in "abeyance".
- 11. Terminal will be guided by Railway Board FM circular no. 11 of 2016 and its correction slips/ circulars/ amendments & other applicable circulars issued by Railway time to time in this regard.

ANJAY TIWARI Date: 2025.01.24 17:00:04 +05'30'

Sr. Divisional Operations Manager East Central Railway, Dhanbad

Copy to: (i) PS to CTPM for kind information to CTPM/ECR, please.

- (ii)COS (G)/DHN for kind information to DRM/DHN, please.
- (iii) Sr. DSTE/DHN for kind information and necessary action, please.
- (iv) Sr. DEE (Trd)/DHN for kind information and necessary action, please
- (v) Sr. DEN(C)/DHN for kind information and necessary action, please
- (vi) CAM/ DHN for kind information and necessary action, please
- (vii) Sr. DEN (3)/DHN for kind information and necessary action, please
- (viii) GM (Civil)/ CCL for kind information and necessary action, please

Annexure-IX

Central Coalfields Limited

(A Mini-Ratna Company)
A Subsidiary of Coal India Limited



FINAL ESTIMATED PROJECT COST OF DETAILED PROJECT REPORT

FOR CONSTRUCTION OF NEW RAIL LINE WITH PROVISIONING OF WHARF WALL LOADING PLATFORM

GIDDI RAILWAY SIDING



January - 2025



Indian Port Rail & Ropeway Corporation Limited

(AJV Company under Ministry of Ports, Shipping & Waterways, Govt. of India)



Detailed Project Report of Giddi Railway Siding



PROJECT AT A GLANCE

Sl. No.	PARTICULARS	PARAMETERS
1.	Name of the Project	Detailed Project Report (DPR) for construction of New Rail line with provisioning of Wharf wall loading platform at Giddi-A Railway Siding under CCL.
2.	Name of Client	Central Coalfields Limited
3.	Name of Zonal Railway	East Central Railway
4.	Name of the Division	Dhanbad Division
5.	Serving Station	Patratu Station on Patratu – Saunda (PD) section
6.	Traffic to be Handled	Outward Coal
7.	Quantity of Outward Traffic (Coal)	3.6 MTPA (Giddi-A: 1.0 MTPA, Giddi-C: 0.6 MTPA, Railigada: 2.0 MTPA)
8.	No. of Trains per day for inward traffic	03 Rakes per day (Empty)
9.	No. of Trains per day for outward traffic	03 Rakes per day (Outward Coal)
10.	No. of Coal Loading RLS	Nil
11.	No. of Wharf Wall Platform Line	1 (One)
12.	Take-off point of the Existing Siding	Existing DS CH 1998.5m F/CSB of Patratu stn.
13.	Take-off Point for proposed Work	TP-1 CH 7788.537 M F/PTRU
14.	Route Length of Proposed Construction of new line	1.431 KM
	Track Length of Proposed Construction of new line	2.814 KM
	Maximum height of Bank	2.957m
17.	Maximum depth of cutting	0.765m
18.	Gauge	B.G.1676mm
19.	Speed potential	30kmph
20.	Land	Existing siding is on CCL Land boundary.
21.	Steepest Gradient in existing Railway line approach of yard	1 in 100
22.	Proposed Gradient in Yard Portion	1 in 1200
23.	Sharpest Curve	Radius 875.00 m (2 degree)
24.	Nos. of Turnouts	04
25.	No. of DS	03
26.	Minimum Track center	6.5M
27.	Sleeper density	1660-60KG PSC Sleepers per KM
28.	Ballast Cushion	300mm
29.	Rail Type	60Kg/ R-260 Grade Prime Rail
30.	No. of Bridges	NIL
31.	No. of Road crossing	NIL
32.	Execution basic cost of the Project	Rs. 28,57,70,180.82

Annex we- A

DETAIL PROJECT REPORT

"Detailed Project Report (DPR) & obtaining its approval from Railway for the Construction of new line/modification by complete track renewal of existing Rail lines of Wharf wall loading platform of Giddi A Railway Siding" TOTAL COST OF THE PROJECT INCLUDING LABOUR WELFARE CESS, ENVIRONMENTAL CESS, GST & DEPARTMENTAL/CODAL

CHARGES

35,66,63,026,92	1,37,10,232.92	5,14,38,632.55	28,86,278.83	28,57,701.81	28,57,70,180.82	Grand Total	
2,64,56,629.94	13,09,630,42	37,71,735.62	2,11,636.28	2,09,540.87	2,09,54,086.76	Electrical Engineering(TRD)	4
2,52,52,990.84	8,14,546.92	36,65,461.13	2,05,673.10	2,03,636.73	2.03,63,672.96	Electrical engineering (Gen)	т
10,14,54,608.69	50,22,107.59	1,44,63,669.86	8,11,572.59	8,03,537.21	8,03,53,721.44	Signal Engineering & Telecommunication	2
20,34,98,797.44	65,63,947,99	2,95,37,765.94	16,57,396.87	16,40,987.00	16,40,98,699.66	Civil Engineering	_
F	E	D	C	В	A		
Total (A+B+C+D+E)	Departmental Charges on A @4% (Civil Engg. & Elect.GEN) & @6.25% (S&T and Elect.(TRD)	GST @18% on A	Environmental related charges @1% on (A+B)	Labour Welfare cess@ 1% on A	Basic Cost	Type of Works	Sr No





COMPLIANCE OF OBSERVATIONS IN DPR AND ESP FOR AUGMENTATION OF GIDDI SIDING TAKING OFF FROM PATRATU STATION.

Ref: Sr. DOM, ECR, Dhanbad's letter No.-PL/giddi/238105 Dated 22.01.2025

The item wise compliances/remarks are furnished below:

Sl. No.	Observations	Compliances
1.	Construction must be as per approved ESP, C.E's DRG. No-: Y-11-2025 (02 Sheets)	Noted
2.	Necessary technical drawings (SIP, OHE, L-section diagram etc.) should be approved from railway.	Noted
3.	Lease/License plan of Railway Land should be approved by Railway as per applicable Railway policy.	Noted
4.	Land license fee is to be paid in advance before commissioning of the siding.	Noted
5.	Cost of necessary yard modification, signaling modification, OHE modification should be borne by party.	Noted
6.	The entire cost of project has to be borne by the siding holder including modification proposed at the station yard. The Railway shall not bear any cost at any circumstance what so ever.	Noted
7.	Incremental cost of OHE, S&T, Civil etc. will be part of estimate.	Noted
8.	The siding holder has to be abide by the Railway terms and condition according to extant rule of Railways regarding staff cost, maintenance charge of Track, OHE, Signaling etc. as applicable from time to time.	Noted
9.	Railway reserve the right to incorporate any kind of change if felt necessary in view of operations, track laying, signaling arrangement etc. which will be binding on the siding holder.	Noted
10.	Commencement of construction should be started within 05 months and completed within 15 months from the date of approval, failing which Railway reserve the right to put the approval in "abeyance".	Noted
11	Terminal will be guided by Railway Board FM circular no. 11 of 2016 and its correction slips/ circulars/ amendments & other applicable circulars issued by Railway time to time in this regard.	Noted

EAST CENTRAL RAILWAY

No. PL/Giddi/238105

General Manager (P) IPRCL, Ranchi

Sub: Approval of DPR and ESP for augmentation of Giddi siding taking off from Patratu station.

Dhanbad, Date: 22.01.2025

Ref: IPRCL letter no. IPRCL/Ranchi/ECR/CCL-Giddi/18/1155 dated: 19.11.2024.

In reference to above, the Detailed Project Report and Engineering Scale Plan for augmentation of Giddi siding taking off from Patratu station is hereby **provisionally approved under FM Circular no.11 of 2016** subject to fulfilment of the following stipulations:

- 1. Construction must be as per approved ESP, C.E's DRG. No-: Y-11-2025 (02 Sheets)
- 2. Necessary technical drawings (SIP, OHE, L-section diagram etc.) should be approved from railway.
- 3. Lease/License plan of Railway Land should be approved by Railway as per applicable Railway policy.
- 4. Land license fee is to be paid in advance before commissioning of the siding.
- 5. Cost of necessary yard modification, signaling modification, OHE modification should be borne by party.
- 6. The entire cost of project has to be borne by the siding holder including modification proposed at the station yard. The Railway shall not bear any cost at any circumstance what so ever.
- 7. Incremental cost of OHE, S&T and Civil etc. will be part of estimate.
- 8. The siding holder has to be abide by the Railway terms and condition according to extant rule of Railways regarding staff cost, maintenance charge of Track, OHE, Signaling etc. as applicable from time to time.
- 9. Railway reserve the right to incorporate any kind of change if felt necessary in view of operations, track laying, signaling arrangement etc. which will be binding on the siding holder.
- 10. Commencement of construction should be started within 05 months and completed within 15 months from the date of approval, failing which Railway reserve the right to put the approval in "abeyance".
- 11. Terminal will be guided by Railway Board FM circular no. 11 of 2016 and its correction slips/ circulars/ amendments & other applicable circulars issued by Railway time to time in this regard.

ANJAY TIWARI Date: 2025.01.24 17:00:04

Sr. Divisional Operations Manager East Central Railway, Dhanbad

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- (vii) Sr. DEN (3)/DHN for kind information and necessary action, please
- (viii) GM (Civil)/ CCL for kind information and necessary action, please



Detailed Project Report of Giddi Railway



Abstract Cost Estimate

SI. No.	Type of works	Anticipated cost [in Rs]
1	Civil Engineering	16,40,98,699.66
2	Signal & Telecommunication	8,03,53,721.44
3	Electrical Engineering	2,09,54,086.76
4	General Electrical	2,03,63,672.96
	Total	28,57,70,180.82



Detailed Project Report of Giddi Railway



ANNEXURE A-14 Civil Engineering Cost Estimate

1	Abstract of Civil Engineering Works of Giddi Railwa	y Siding
Sr. No.	Description of Schedule	Price in Rs
1	Earthwork in Formation	1,08,96,939.47
2	Ballast Supply	1,63,92,989.22
3A	P.Way Supply (Other than steel items)	2,21,57,812.62
3B	P.Way Supply (Steel Items)	3,22,27,074.53
3C	Permanent Way Linking: Installation Works	53,70,673.31
3D	Permanent Way Linking: Supply and	
	Installation Works	27,87,454.69
4	Drain	1,03,21,206.71
5	Platform(725 x 30)m	4,51,51,776.67
6	Building Works	
6A	IMWB room, Crew room etc.	12,50,419.86
6B	Service Building	61,28,469.89
7	Misc. Work Incl. Dismantling Work	35,57,968.75
8	Construction of Approach road	25,90,869.50
9	In Motion Weigh Bridge	35,00,000.00
10	Site Facilities	17,65,044.44
	TOTAL	16,40,98,699.66

	1: EARTHW	ORK	IN FOR	MATION		
S. No.	Description of Item	Unit	Qty	Rate in Rs.(Including 5% Escalation upto 2023)	Amount in Rs.	Rate Reference
1	Earthwork in filling in embankment, guide bunds, around buried type abutments, bridge gaps,trolley refuges,platforms etc, with contractors own earth conforming to soil quality class SQ1/SQ2/SQ3, after preparation of foundations as applicable benching in existing banks wherever required spreading in layers with motor grader bringing the moisture content to OMC, mechanical compaction to specified density and dressing of bank to final profile as per RDSO specifications: RDSO/2020/GE:IRS-0004 with latest correction slip .Note 1) Foundation preparation,Benching including additional earthwork on account of this wherever required shall be paid extra unde relevant schedule item for benching .2) payment for earthwork under this item shall be made based on the cross section measurements calculated (i) with original ground profile of existing bank based on initial ground levels before doing benching and (ii) final profile of the bank worked out with final levels as per prevailing guidelines					Item No-011030 USSOR - 2021 (ECR)
1.1	Using Soil Class SQ2	Cum	7218	373.54	26,96,241.52	Item No-011032 USSOR - 2021 (ECR)
2	Earthwork in cutting in formation trolley refuges, side drains, level crossing approaches, platforms, catch water drains, diversion of nallah & finishing to required dimension and slopes to obtain a neat appearance to standard profile inclusive of all labour, materials, plant & machinery leading all cut spoils either to make spoil dumps or for filling in embankment with leads within 2 km on either Side of edge of the cutting (s) including all lifts ascent descent, loading, Unloading bailng & pumping out water if required clearance of site and all other works incidentals there to for completing the work as per RDSO Specification No. RDSO/2020/GE: IRS-0004 with latest Updated correction slips and to the satisfaction of he Engineer-in -charge Note: (i)All usable earth arising from cut Spoils shall be led into bank formation and Unusable spoils shall be dumped /stacked away from too of em bankment. (ii) All hard rock /and boulders not fit for filling will be stacked by the contractor and wil be property of Railways. (iii)Cut trees shall be property of Railways and to be deposited in the godown Unless specified otherwise in the		0			Item No-012010 USSOR - 2021 (ECR)
2.1	In ail conditions and Classifications of soil except rock	Cum	3680	111	4,07,748.60	Item No-012011 USSOR - 2021 (ECR)
3	Manufacturing of blanketing material by wet mixing of naturally available suitable soil including additional blending with naturally available soil imcluding additional blending with naturally available of manufactured material as required to achieve specifoed gradation, in designed proportion in pig mill or wet mix plant to have uniform gradation including all incidental transportation laying over finished formation in uniform layer(s) with motor grader, compaction with suitable vibratory roller to specified density and finishing to correct profile complete as per RDSO specification No. RDSO/2020/GE :IRS 0004 with latst correction slips.		6324	1174	74,25,030.14	Titem No-012040 USSOR - 2021 (ECR)
4	Extra Mechanical Compaction of Earth and Blanket materials in layers of about 30 CM (or more or less) in loose state using vibratory compactor (of adequate capacity) so as to achieve compaction as per RDSO Guidelines and Specification for Design of Formation for Heavy Axle Load – Nov 2009. Minimum EV2 Criteria as mentioned in the guidelines is not applicable. Note: The payment for compaction shall be based on the computed quantity of earth work/blanket work from the cross sections. The payment, however, will be restricted only to the approved design profiles furnished by the Engineer; or the actual quantity executed whichever is less.		13542	27	3,67,919.21	Item No. 1006, RVNL 202

	3 : BALLAST SUPPLY								
S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount in Rs.	Rate Reference			
3001	Supply and stacking of machine-crushed stone ballast as per RDSO specifications for track ballast: IRS-GE-1 of June, 2004 from outside railway limits stacked in specified quantities alongside the proposed alignment on either side of track, in yards and at locations as per site requirement as directed by the Engineer. Note 1: Payment will be made on actual stack measurement for gross quantities without any deduction for voids in following stages: (i) 95% on receipt at site, acceptance, measurement, account, proper storage and protection against loss, damage or deterioration; and (ii) balance 5% after training out. Note 2: i) Wherever sufficient railway land is not available, contractor will have to arrange land for supply and stacking of ballast at his own cost for which extra payment as per item no. 3001a will be admissible. ii) The rate also includes levelling, dressing of ground for stacking of ballast.	Cum	7716	2124.55	1,63,92,989.22	Average of LOA OF KARO & KONAR WORK			
	Total for Bill No. 3 (Carried forward)				1,63,92,989.22				

4 : PERMANENT WAY SUPPLY 4A: P.WAY SUPPLY (Other than Steel Items)

S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount in Rs.	Rate Reference
4001	Supply of P.Way Components					
4001 a	GFN Liners to RDSO Drg. No. T-3706.	Each	19066	14	2,70,260.55	RVNL BOQ
4001 b	Combination GFN liners to RDSO Drg. No.T-3707 and T-3708.	Set	100	46	4,616.72	RVNL BOQ
4001 c	Composite Grooved Rubber Sole Plates (CGRSP) to RDSO Drg. No. T-6618	Each	9812	55	5,40,886.50	RVNL BOQ
4001d	End cut GFN liner - 60 kg Manufacture & supply of end cut 60 kg Glass filled nylon 66 insulating liner confirming to RDSO Drg. No. T-3706 with latest alterations and as per IRS Specification T-44-1995 with latest alterations. Note-End cut is to be done for glued joint as per RDSO drawing No. T-4511 with latest alteration complete.		530	22	11,686.50	RVNL BOQ
4001 f	End cut combination GFN liner Manufacture & supply of end cut combination GFN liner 60/52 kg confirming to RDSO Drg. No. T-3707a & 3708a with latest alterations and as per IRS Specification T-44-1995 with latest alterations.		100	74	7,382.81	RVNL BOQ
4002	Supply of glued insulated rail joints G3 L 6.5 M long with 10 MM thick end post on PSC sleepers. Rails will be issued free of cost by the Employer @ 6.5 M for each joint.					
4002 a	60 KG Kg rail section as per RDSO Drg No. RDSO/T-5843	Each	30	17084	5,12,514.84	RVNL BOQ
	B.G Monoblock prestressed monoblock concrete sleeper(wider) as per RDSO's Dwg. No- T-8527 with latest alteration if any, leading, loading & Unloading and stacking as per IPRWM and all along and both side of the siding alignment or as directed by the engineer in charge		4488	4128.695	1,85,29,583.16	Average of LOA OF Karo & Konar
4010	Supplying at site of work including leading, loading, unloading and stacking of Special PSC Monoblock Sleepers (pre-tensioned type) for B.G. 1 in 8½ Derailing Switch as per RDSO Drg. NoT-6068 to suite both 52/60 kg rails as per RDSO Design and IRS Specifications No. T-45-96 (2nd Edition) as amended from time to time with contractor's labour, materials, tools & Plant, equipment and machinery, transport etc complete.		3	198503	5,95,509.47	RVNL BOQ

S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount in Rs.	Rate Reference
4011	Supplying at site of work including leading, loading, unloading and stacking PSC turnout sleepers and approach sleepers for fanshaped layout of 60 kg 1 in 12 turnout for B.G 60 Kg. (UIC) rail/52 kg rails to RDSO Drg. No. T-4218 Alt-5 (for general layout) and drawings thereof with latest alterations if any, complete set with contractor's labour, materials, tools & Plant, equipment and machinery, transport etc complete.		0	557891	-	RVNL BOQ
4012	Supplying at site of work including leading, loading, unloading and stacking PSC turnout sleepers and approach sleepers for fanshaped layout of 60 kg 1 in 8.5 turnout for B.G 60 Kg. (UIC) rail/52 kg rails to RDSO Drg. No. T-4865 Alt-5(RT-4793 to 4844 & RT-4512) (for general layout) and drawings thereof with latest alterations if any, complete set with contractor's labour, materials, tools & Plant, equipment and machinery, transport etc complete.		4	375560	15,02,238.94	RVNL BOQ
4017	Supply of Grooved Rubber Sole Plates for 1 in 8.5 turnouts for layout Drg no. T-4865 with latest alterations if any, complete set for the turnout as per IRS specification for Grooved Rubber Sole Plate (6mm thick) for placing beneath rails Sl. No. T-47-2006 with up to date corrigendum if any Total for Bill No. 4A (Carried forward)		4	45783	1,83,133.13 2,21,57,812.62	RVNL BOQ

4: PERMANENT WAY SUPPLY 4 B: P.WAY SUPPLY (Steel Items)

S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount in Rs.	Rate Reference
	Supply of P.Way Components					
	Supply of 60 kg. Rails for linking of track (R240)	MT	327	80000	2,61,60,000.00	SAIL Rate
5006	Transportation of rails, switches, crossings, etc.					
	from point of issue to their final location of laying in track					
5006 a	Average lead, from the place of issue upto the middle					
	point of location of laying in each KM, upto 10 KM	MT	327	393.75	1,28,756.25	RVNL BOQ 2021
5006 b	Incremental rate for lead beyond 10 KM under item	MTKM	222360	7.97	17,72,973.56	RVNL BOQ 2021
4021 a	5006 (a) above ERC to RDSO Drg. No.T-3701	Each	19066	98.44	18,76,809.38	RVNL BOQ 2021
4021 b	ERC "J" to RDSO Drg. No.T-4158	Each	557	108.28	60,312.66	RVNL BOQ 2021
4023	Supply of Combination fish plates (4 Nos. per set) as	200	307	100.20	00,012.00	
	per Drawing No.T696 to T699 including nuts, bolts					
	and washers.					
4023 a	For 60 KG & 52 KG Rail Sections	Set	6	14623.88	87,743.25	RVNL BOQ 2021
4025	Supply of joggled fish plates (2 No. per set) with 4					
	pair clamps, 4 No. Bolts & Nuts and 8 No. special					
	washers.					
4025 a	For 60 KG as per RDSO Drawing No. T -4016/T-5849	Set	30	5083.31	1,52,499.38	RVNL BOQ 2021
4026	Supply of Fish plates one meter long as per standard					RVNL BOQ 2021
	drawing of RDSO					NVIVE BOQ 2021
4026 a	60 KG rail (As per RDSO Drg.No.T-5916/T-5851)	Each	132	2242.41	2,95,997.63	RVNL BOQ 2021
4029 a	Supply of 60 kg 1 in 8.5, 6400mm Overriding Curved Switch confirming to RDSO Drg. No. T-4966/T-5353 with latest alteration, if any complete with all parts as listed in the drawing with check rails (excluding fish plates, Fish bolts &nuts, GRSPs, Liners and ERCs). Note: Rails will be issued free of cost by the employer.	Set	4	120631.22	4,82,524.88	RVNL BOQ 2021
4034	Supply of 60 kg CMS Crossing for 1 in 8 ½ PSC Layout conforming to Drg No. T-4967 with latest alterations complete with all parts as listed in the drawing (excluding fish plates, fish bolts & nuts, GRSPs, Liners and ERCs).	Set	4	277364.39	11,09,457.56	RVNL BOQ 2021
	Miscellaneous small fitings like plate screw, bolts etc.	LS			1,00,000.00	
	Total for Bill No. 4B (Carried forward)				3,22,27,074.53	

	.5 : PERMAN 5A : P.Way Link	ENT WAY LINK	_			
S. No.	Description of Item	Unit	Qty	Rate in	Amount in Rs.	Rate Reference
	_			1131		
5004	Cutting of 60 KG, 52 KG, 90 R rails with contractor's	- 1	60	420	25 240 60	D. 4.11 D.O.O. 2024
	Abrasive Disc Cutter complete including men, material, fuel etc. true to square.	Each	60	420	25,219.69	RVNL BOQ 2021
5005	Drilling 26.5 MM, 32 MM diameter holes with Rail					
3000	Drilling Machine in web of 60 KG, 52 KG, 90 R rails in					
	track or on cess at correct locations including	Each	264	101	26,767.13	RVNL BOQ 2021
	chamfering.					
5007	Installation of BG track as per methodology specified in					
	para 4.0 of Section 5: Specifications in the Bidding					
	Documents or any other methodology approved by the					
	Employer in all locations e.g. straight, curves, bridges, level crossings, yards etc. including installation of SEJ					
	and glued joints including installation and dismantling					
	of auxiliary track.					
	NOTE:					
	(i) 70% of the rate shall be paid after placement of the					
	sleepers, rails, fastening, initial squaring and correcting					
	sleepers spacing.					
	(ii) Next 25% of the rate shall be paid after manual	Track Meter	2814.43	701	10 72 562 62	RVNL BOQ 2021
	packing and bringing the track parameters within the prescribed tolerance limits and is certified so by the	Track Meter	2014.45	701	19,72,563.63	KVINL BOQ 2021
	Engineer.					
	(iii) Balance 5% of the rate shall be paid after getting					
	CRS sanction.					
	(iv) For the measurement and payment purposes, the					
	length of track from central line of first special sleeper					
	to central line of last special sleeper shall be multiplied					
	by 2 in case of bridge and level crossing provided with guard/check rails and to be multiplied by 3 in case of					
	SEJ.					
	(v) The rate includes initial packing on 1st day, 1st					
	through packing on 2nd day, 2nd through packing on					
	3rd day and Picking up of slacks, as required, from 4th					
131010	Through packing of track as per procedure prescribed in					
	latest edition of Indian Railways Permanent Way					
131011	Manual For PSC sleeper Track with sleeper density of 1540		2814.43			
131011	sleepers/km or more	TRM	2014.43	91	2,57,181.29	USSOR ECR 2021
131030	First or second Through packing of track of all sleeper					
	density including giving a general lift as desired to					
	eliminate sag after deep screening work, lifting of track,					
	lowering of track and major realignment of curves and					USSOR ECR 2021
	formation rehabilition as per procedure prescibed in					
	latest edition of IRWPM. Note: General lift is normally 25mm and isolated lift may be upto 25mm					
	2511111 and isolated lift fliay be upto 25111111					
131031	For PSC sleeper Track with sleeper density of 1540	TDNA	2814.43	121	3,39,685.43	
	sleepers/km or more	TRM		121	3,33,063.45	

S. No.	Description of Item	Unit	Qty	Rate in	Amount in Rs.	Rate Reference
3	2330	J	۷٠,	Rs.	and an indi	Herefelie
131040	Third or Subsequent Through packing of track of all					
	sleeper density including picking of slacks as required					
	after second through packing, subsequent to Deep					
	Screening work as per procedure prescribed in latest edition of IRPWM. This item can also be used after					USSOR ECR 2021
	lifting/regarding/realignment works also. Note: General					USSUR ECR 2021
	lift is normally 25mm and isolated lift upto 50mm .					
	·					
131042	For PSC sleeper Track with sleeper density of 1540		2814.43			
	sleepers/km or more	TRM		93	2,61,281.57	USSOR ECR 2021
5008	Installation of PSC fan shape turnouts, derailing					
	switches 60 KG / 52 KG including lead rails as per RDSO					
	layout drawings including katcha packing with bars or off track tampers for 20 KMPH speed. Activities of rail					
	cutting, drilling of holes, welding of joints and					
	transportation are not included in this item and shall be					
	paid separately under relevant items.					
5008 a	Turnouts 1 in 8-1/2	Each	4	64464	2,57,855.06	RVNL BOQ 2021
	Derailing switches	Each	3	15396	46,186.88	RVNL BOQ 2021
5014	Anticorrosive painting of 60 KG, 52 KG rails. Painting to		2814.43			
	be done prior to installation on sleepers including	Track Meter		67	1,88,390.91	RVNL BOQ 2021
	touching of paints in areas damaged during fixing.					
5018	Provision of Buffer stop of 60 KG, 52 KG, 90 R					
	rail section as per plan including painting with					
	luminous paint etc. as directed by the engineer. Note: Rail required for this item will be issued free	Each	2	45703	91,405.13	RVNL BOQ 2021
	of cost by the Employer.					
F020			200			DVNI DOO 2021
5030	USFD testing of 60 KG, 52 KG rail welds (Flash Butt / SKV) as per RDSO Manuals and submitting reports on	Each	300	175	52,565.63	RVNL BOQ 2021
	proforma as directed by the Engineer.	20011		1,3	32,303.03	
5034	Fouling marks of size 1500x250x225 MM in M20 grade					
	cement concrete including engraving the letters "FM",					
	white washing with two coats and painting the letters	Each	4	690	2,760.19	RVNL BOQ 2021
	in black enamel paint indicating the numbers of				·	
	vehicles duly fixed at site.					
5041	Insertion of glued joints 52/60 kg in traffic block					
	including transportation from depot at station to site of					
	work cutting, removal of existing rail from track and stacking of released rail as directed by Engineer-in-					
	charge with all tools, plants & labour etc complete.	Each	30	330	9,892.97	RVNL BOQ 2021
	Cutting of rails, drilling holes, welding of joints will be					
	paid separately in relevant BOQ item.					
5046	First and second manual through packing of points and					
	crossing including gauging, fittings recoupment,					
	elimination of sag and to the required alignment as per					
	provisions of Indian Railways Permanent Way Manual					
	for raising the speed from 20 kmph to 45 kmph. NOTE:					
	The rate includes 1st through packing on 2nd day after					
	relaying on Day 1 (laying of turnout will be paid					
	separately under relevant item of BOQ), 2nd through					
	packing on 3rd day and Picking up of slacks, as					
	required, from 4th to 9th day.					
i	·		•	•		ı

S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount in Rs.	Rate Reference
а	1 in 8-1/2 Points & Crossing	Each	4	17853	71,410.50	RVNL BOQ 2021
b	1 in 12 Points & Crossing	Each	0	24326	-	RVNL BOQ 2021
d	1 in 8-1/2 Derailing Switch	Each	3	4709	14,127.75	RVNL BOQ 2021
5046 A	Third or subsequent manual through packing of points and crossing including gauging, fittings recoupment, elimination of sag and to the required alignment as per provisions of Indian Railways Permanent Way Manual for raising the speed from 45 kmph to 75 kmph. NOTE: The rate includes packing on 10th day after relaying and picking of slacks for next 10 days for raising the speed from 45 kmph to 75 kmph.					
а	1 in 8-1/2 PSC layout	Each	4	15610	62,440.88	RVNL BOQ
d	1 in 8-1/2 Derailing Switch	Each	3	4403		RVNL BOQ
	level crossing pads of approved quality and conforming to "Functional specification for Rubberized surface at level crossings" (as issued by RDSO in July 2019) at Railway track at the level crossings, by suitable clamping arrangements to make a rubberized road. The road surface of 3.5 meter width is to be prepared by using rubber pads of approved length and width along the track. Rubber pads inside the track are to be placed between two running rails and outside the running rails between the running rails and RCC edge beam. The item is inclusive of M-35 Grade RCC edge beam at the edge to retain the assembly as per approved drawing. The rates are inclusive of contractor's cement and steel. NOTE: 1 The brief scope of work is manufacturing and installation of rubberised level crossing pads of approved quality having width approx. 3.5 Mtr. conforming to specification given in the tender schedule. The rate includes all prevailing taxes and warranty etc. required to complete the work. 2 Contractor has to submit his own drawing acceptable to RVNL and all other documents in accordance with "Functional specification for Rubberized surface at level crossings" as issued by RDSO in July 2019. The order for purchase shall only be placed with prior approval of	Per Track Metre	0	158519	-	RVNL BOQ 2021

S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount in Rs.	Rate Reference
7061	Providing FOB, platform shelters, height gauge, columns, beams, trusses and other steel components of miscellaneous works duly launched in position with or without traffic block as directed by Engineer with contractors steel conforming to IS:2062-1999 including fabrication, assembly, erection, launching, riveting/welding, bolting, initial coats of zinc chromate priming conforming to relevant IS specification and three subsequent coats of aluminum paint of approved quality conforming to IS:2339 after final erection on all surfaces complete. Rate is inclusive of supply and fixing of MS holding down bolts for IRS type platform shelters and FOBs with required angles.Note: Payment under this item shall be done on the lines of schedule of stage payments for fabrication & erection of girders as specified in para 8.2 of part (h) 'Steel Works' of Chapter-3 (Bridges) of RVNL Standard Specifications for Material and Works - VolI, Engineering Works. Payment for any stage as indicated in para 8.2, if not required for the works under the item, shall be combined with next stage payment.	MT	15	111849	16,77,729.38	RVNL BOQ 2021
_	Total for Bill No. 5A				53,70,673.31	

5: PERMANENT WAY LINKING 5B: P.Way Linking (Supply and Installation works)

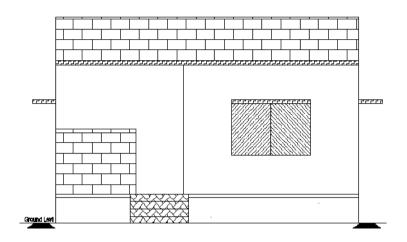
S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount in Rs.	Rate Reference
5053	Alumino thermit welding of 60kg/52 kg rail joints or					RVNL BOQ
	combination joints of 60kg/52kg rail by pre-heat (SKV)					
	welding technique using compressed air petrol/LPG for					
	preheating, three piece pre-fabricated moulds (Zircon					
	washed) single shot crucible fitted with automatic					
	tapping thimbles with all labour, materials including					
	supply of portion, tools and plants, aligning of rails,					
	placing & fixing of mould, preheating, welding,					
	mechanised trimming, grinding with profile grinder					
	(including riser), testing, marking, painting with one					
	coat of high build epoxy paint (two pack conforming to					
	RDSO specification no. M&C/PCN-111/88) on the welded area up to 10 cm on either side. The work is to					
	· ·					
	be completed in all respects as per IRS: T-19-2012 with latest updates and in accordance with "RDSO Manual					
	for Fusion Welding of Rails by Alumino Thermic					
	Process with up to date correction Slips in free rails or					
	3/10/20 rail panels. The work to be done under					
	supervision of trained welding supervisor and carried					
	out by trained welder having valid competency					
	certificate from RDSO/TPP, Lucknow. Ultrasonic					
	testing of welded joints shall be paid separately under					
	relevant items.					
	Note:					
	1) In case only portion is supplied by the contractor					
	but welding is not done the rate shall be payable @					
	for 60kg, 72/90 UTS rails	Each	300	9292	27,87,454.69	
	Total				27,87,454.69	

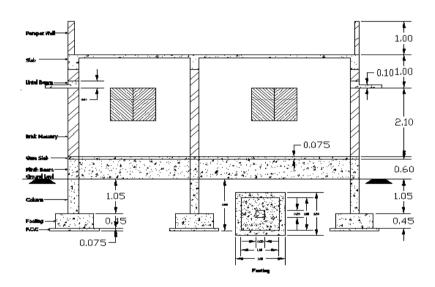
	Rate Analysis for Dra	in (13	80Mtr Length	1)		
Item No.	Description	Unit	Qty	Rate	Amount	Rate Ref.
	Earthwork in cutting in formation, trolley refugees, side drains, level crossing approaches, platforms, catch water drains, diversions of nallah & finishing to required dimension and slopes to obtain a neat appearance to standard profile inclusive of all labour, materials, plant & machinery, leading al cut spoils either to make spoil dumps of for filling of embankment with leads within 2 km on either side of edge of the cutting(s) including all lifts, ascent, descent, loading, unloading, bailing & pumping out water if required clearance of site and all other works incidental thereto for completing the work as per RDSO specification No. RDSO/2020/GE:IRS-0004 with latest updated correction slips and to the satisfaction of the Engineer-in-Charge. Note-(i) All usable earth arising from cut spoils shall be led into bank formation and unsuable spoils shall be dumped /stacked away from toe of embankment.(ii) All hard rock/ and boulders not fit for filling will be stacked by the contractor and will be property of the Railways. (iii) Cut trees shall be property of Railways and to be deposited in the railway godown unless specified otherwise in the.					Item no 012010 USSOR ECR 2021
1.1	Soft rock not requiring blasting	Cum	1512	246.21	372272.355	Item no 012012 USSOR ECR 2021
2	Providig Coarse clean sand in filling in foundation trenches or in plinth including ramming and watering in layers not exceeding 150mm thick with all leads and lifts including cost of all materials, labours, royalty and taxes all complete as per building specification and direction of E/I (Mode of measurement compacted volume)	Cum	170	619.41	105298.935	Jharkhand SOR 2022 Item No. 5.1.10
3	PCC M-15 in levelling course, 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size)	Cum	170	4590.31	780352.3547	Item no 022032 USSOR ECR 2021
	PCC M-20 Grade design mix with contractor's 20mm. graded black trap course aggregate, sand etc. including necessary , cutting, bending, placing and binding reinforcement with contractors binding wires, complete as directed.		730	4627.34	3377958.314	Item no 022040 USSOR ECR 2021
5	Centering and shuttering including strutting, propping etc. and removal of form for :	_				Item no 025030 USSOR ECR 2021
5.1	All types of bridge sub- structure e.g. pier, abutment, wing wall, retaining wall, RCC box type foundations, abutments cap, Pier cap, Inspection Platform & Pedestal over Pier Cap, Fender Wall, Diaphragm wall etc. upto 5m above ground level.		4000	639.80	2559217.5	Item no 025030 USSOR ECR 2021
5	Ordinary Portland Cement Grade-43 Grade	MT	320	9769.09	3126107.25	Item no 025071 USSOR ECR 2021
			Total -		₹ 1,03,21,206.71	

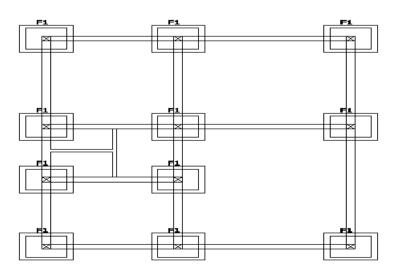
	Estimate for Platf	orm (26	63 X 30) m			
SL NO	Description	UNIT	QTY	RATE	AMOUNT	REF
1	Earthwork in cutting in formation, trolley refugees, side drains, level crossing approaches, platforms, catch water drains, diversions of nallah & finishing to required dimension and slopes to obtain a neat appearance to standard profile inclusive of all labour, materials, plant & machinery, leading al cut spoils either to make spoil dumps of for filling of embankment with leads within 2 km on either side of edge of the cutting(s) including all lifts, ascent, descent, loading, unloading, bailing & pumping out water if required clearance of site and all other works incidental thereto for completing the work as per RDSO specification No. RDSO/2020/GE:IRS-0004 with latest updated correction slips and to the satisfaction of the Engineer-in-Charge. Note-(i) All usable earth arising from cut spoils shall be led into bank formation and unsuable spoils shall be dumped /stacked away from toe of embankment.(ii) All hard rock/ and boulders not fit for filling will be stacked by the contractor and will be property of the Railways. (iii) Cut trees shall be property of Railways and to be deposited in the railway godown unless specified otherwise in the.					Item no 012010 USSOR ECR 2021
1.1	Soft rock not requiring blasting	cum	400.00	246.21	98,484.75	Item no 012012 USSOR ECR 2021
2	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 materials, 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 - in charge. Note: This item will be used for excavation work in connection with other miscellaneous works like side drains, foundation for OHE masts and other miscellaneous structure in connection with gauge conversion, Doubling, new lines.					Item no 022010 USSOR ECR 2021
2.2	Soft rock (not requiring blasting)	Cum	4700.00	388.24	18,24,716.25	Item No-022012 USSOR 2021 (ECR)
3	PCC M-15 in levelling course, 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size)	Cum	35.00	4590.31	1,60,660.78	Item no 022032 USSOR ECR 2021
4	Providig Coarse clean sand in filling in foundation trenches or in plinth including ramming and watering in layers not exceeding 150mm thick with all leads and lifts including cost of all materials, labours, royalty and taxes all complete as per building specification and direction of E/I (Mode of measurement compacted volume)	Cum	35.00	619.41	21,679.19	Jharkhand SOR 2022 Item No. 5.1.10

	Estimate for Platform (263 X 30) m							
SL NO	Description	UNIT	QTY	RATE	AMOUNT	REF		
5	PCC M-20 in levelling course, 1:1.5:3 (1 cement : 1.5 sand : 3 graded stone aggregate 20 mm nominal size)	Cum	4500.00	4483.00	2,01,73,500.00	Item no 022031 USSOR ECR 2021		
6	RCC M-25 Grade design mix with contractor's 20mm. graded black trap course aggregate, sand etc. including necessary , cutting, bending, placing and binding reinforcement with contractors binding wires, complete as directed.	Cum	350.00	4627.34	16,19,569.05	Item no 022040 USSOR ECR 2021		
7	Thermo-Mechanically Treated bars of grade Fe-500D or more of approved brands/makes.	kg	28000.00	111.91	31,33,580.63	Item no 025082USSOR ECR 2021		
8	Centering and shuttering including strutting, propping etc. and removal of form for :					Item no 025030 USSOR ECR 2021		
8.1	All types of bridge sub structure e.g. pier, abutment,wing wall,retaining wall,RCC box type foundation, Abutment cap, pier cap,Inspection Platform & Pedestal over pier cap, Fender wall, Diaphragm wall etc.upto 5m above ground level	SQM	1600.00	639.80	10,23,687.00	Item no 025031 USSOR ECR 2021		
9	Ordinary Portland Cement Grade-43 Grade	MT	1750	9769.09	1,70,95,899.02	Item no 025071 USSOR ECR 2021		
	Total Amount				4,51,51,776.67			

Column	2 3 4	Earthwork in Excavation in Foundation: Footing (1m x 1m) Footing PCC Footing (1m x 1m) Footing RCC Base(1m x 1m) Column up to Plinth Level RCC Column	cum cum	120.00 4.00 8.00	169.313 4609.86	20,317.50	RVNL BOQ USSOR-2021 No022060 DSR2021 Average of LOA no.IPRCL/Ranchi/CCL-Karo/LOA/784 (shedule-6 item no6a)dt.31.07.2023 & IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
Footing PCC	3	Foundation: Footing (1m x 1m) Footing PCC Footing (1m x 1m) Footing RCC Base(1m x 1m) Column up to Plinth Level RCC Column	cum	4.00 8.00	4609.86	18,439.44	USSOR-2021 No022060 DSR2021 Average of LOA no.IPRCL/Ranchi/CCL-Karo/LOA/784 (shedule-6 item no6a)dt.31.07.2023 & IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
Footing (Lm x lm)	3 4	Footing (1m x 1m) Footing PCC Footing (1m x 1m) Footing RCC Base(1m x 1m) Column up to Plinth Level RCC Column	cum	4.00 8.00	4609.86	18,439.44	USSOR-2021 No022060 DSR2021 Average of LOA no.IPRCL/Ranchi/CCL-Karo/LOA/784 (shedule-6 item no6a)dt.31.07.2023 & IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
Footing (Im x Im)	3	Footing (1m x 1m) Footing RCC Base(1m x 1m) Column up to Plinth Level RCC Column	cum	8.00		-	DSR2021 Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 6a)dt.31.07.2023 & IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
3 Footing RCC	4	Footing RCC Base(1m x 1m) Column up to Plinth Level RCC Column	cum	8.00		-	DSR2021 Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 6a)dt.31.07.2023 & IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
Basel m x m Column up to Plinth Level RCC	4	Base(1m x 1m) Column up to Plinth Level RCC Column			6403.98		Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 6a)dt.31.07.2023 & IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
Average of LOA no.IPRCL/F		Column	cum	4.00	6403.98	25,615.92	Karo/LOA/784 (shedule-6 item no 6a)dt.31.07.2023 & IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
Column	5		cum	4.00	6403.98	25,615.92	Karo/LOA/784 (shedule-6 item no 6a)dt.31.07.2023 & IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
Cum 5.00 6403.98 32,019.90 Average of LOA no IPRCL/F Karo/LOA/784 (shedule-6 is failst 3.107.020.38 Salph RCC Sa	5	Plinth Beam RCC					
Cum S.00 6403.98 32,019.90 PRCL/Ranch/CCL-KONAR/ (shedule-6 (sight.3.107.203.8 kg) PRCL/Ranch/CCL-KONAR/ (shedule-6 (sig							
Average of LOA no.IPRCL/F Karo/LOA/784 (shedule-6 Sejult 1.07.2023 & Recomplete from no.6-jabl 1.07.2023 &		Ream (230 mm x 600 mm)	cum	5.00	6403.98	32,019.90	IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
Plinth area out to out Cum 28.00 6403.98 1,79,311.44 Fixedule-6 (sa)st 31.07.2023 & Fixedule-6 (sa)st 31.07.2023		,					
Column cum 6 6403.98 38,423.88 PRCL/Ranchi/CCL-KONAR/ (shedule-6 fam no6a)dat 22.12.2023 with escalation year 230 mm thick wall Brick Masonry cum 28.49 6882 1,96,068.18 DSR2021 no.6.1 In Side Plaster Sq.m 400.00 140 56,000.00 DSR2021 no.7009 10 Out Side Plaster Sq.m 300.00 140 42,000.00 DSR2021 no.7009 11 Ceiling Plaster Sq.m 200.00 140 28,000.00 DSR2021 no.7009 12 Slab RCC Sq.m 200.00 140 28,000.00 DSR2021 no.7009 Sq.m 200.00 140 28,000.00 DSR2021 no.7009 12 Slab RCC Average of LOA no.IPRCL/F (Sarch/LOA/784 (shedule-6 fa))ds.107.2023 & Sq.m 200.00 Sq. 201.07.2023 & Sq			cum	28.00	6403.98	1,79,311.44	IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
Column Cum 6 6403.98 38,423.88	7	Column Up to Slab Level RCC					
230 mm thick wall Brick Masonry cum 28.49 6882 1,96,068.18 DSR2021 no.6.1 9		Column	cum	6	6403.98	38,423.88	Karo/LOA/784 (shedule-6 item no 6a)dt.31.07.2023 & IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
9 In Side Plaster	8	•	am	20.40	coop	1.00.000.10	DCD2024 C.1
10	9	,	cum	28.49	6882	1,96,068.18	DSR2021 no.b.1
Sq.m 300.00 140 42,000.00 DSR2021 no.7009			Sq.m	400.00	140	56,000.00	DSR2021 no.7009
11 Ceiling Plaster Sq.m 200.00 140 28,000.00 DSR2021 no.7009	10	Out Side Plaster	Sa m	300.00	140	42.000.00	DSR2021 no.7009
12 Slab RCC Average of LOA no.IPRCL/F Karo/LOA/784 (shedule-6 6a)dt.3.1.07.2023 & Slab Area cum 20 6403.98 1,28,079.60 1,28,079.60 1,28,079.60 (shedule-6 item no6a)dat 22.12.2023 with escalation	11	Ceiling Plaster			-	,	
Average of LOA no.IPRCL/F Karo/LOA/784 (shedule-6 6a)dt.31.07.2023 & Slab Area cum 20 6403.98 1,28,079.60 IPRCL/Ranch/ICCL-KONAR/ (shedule-6 item no6a)dal 22.12.2023 with escalation	12	Slah BCC	Sq.m	200.00	140	28,000.00	DSR2021 no.7009
			cum	20	6403.98	1,28,079.60	IPRCL/Ranchi/CCL-KONAR/69/LOA/ (shedule-6 item no6a)dated 22.12.2023 with escalation @ 5% per
13 In Side Paint	13	In Side Paint					
Sq.m 400.00 97.43 38,972.00 14 Out Side Paint USSOR-2021 No04	14	Out Side Paint	Sq.m	400.00	97.43	38,972.00	USSOR-2021 No041263
Sq.m 400.00 97.43 38,972.00			Sq.m	400.00	97.43	38,972.00	
15 Skin Reinforcement/Ee-500 grade) kg 5000 91.64 4.09.200.00 pvall goo	15	Skin Reinforcement(Fe-500 grade)	kg	5000 TOTAL =	81.64	4,08,200.00 12,50,419.86	RVNL BOQ







	Service Build					
S. No.	BUILDING WORL Description of Item	Unit	Qty	Rates in Rs.	Amount in Rs.	Remarks
	·					
1	Earth work in excavation as per approved drawings and dumping at embankment site or spoil heap, within railway land, including 50m lead and 1.5m lift, the lead to be measured from the centre of gravity of excavation to centre of gravity of spoil heap; the lift to be measured from natural ground level and paid for in layers of 1.5m each including incidental work, as per specifications - All kinds of soils	Cum	85	144.99	12,324	ECR USSOR 2012 item no. 011011 with escalation @ 5% per year
2	Extra for every additional lift of 1.5m or part thereof after the initial 1.5m for earth work in all soils.	Cum	15	12.56	188	ECR USSOR 2012 item no. 011070 with escalation @ 5% per year
3	Excavating, supplying and filling of local earth (including royalty) by mechanical trasport up to a lead of 5Km also including ramming and watering of the earth in layers not exceeding 20cm in trenches, plinth, sides of foundation etc. complete	Cum	180	247.01	44,462	Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 3)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 3)dated 22.12.2023 with escalation @ 5% per year
4	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth, consolidating each deposited layers by ramming and watering, lead up to 50m and lift up to 1.5m.	Cum	20	167.51	3,350	Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 4)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 4)dated 22.12.2023 with escalation @ 5% per year
5	Providing and laying in position cement concrete of specified proportion excluding cost of cement,					
5 (a)	centering and shuttering - All works upto plinth level : 1:3:6 (1 cement : 3 sand : 6 graded stone aggregate 20mm nominal size)	Cum	40	4361.08	1,74,443	ECR USSOR 2012 item no. 031011 with escalation @ 5% per year
6	Providing and laying in position machine mixed, machine vibrated and machine batched Design Mix Cement Concrete M-25 grade (Cast in-Situ) for reinforced cement concrete, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcment, including admixtures in recommended proportion (as per IS:9103) to accelerate, retard setting of concrete, improve workability without impairing strength and durability, but excluding cost of cement and steel reinforcement as per approved plan & as per direction of the Engineer incharge - All works up to plinth level (Note - Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/recoverable seperately).					
6 (a)	All works up to Plinth Level	Cum	50	6099.02	3,04,951	Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 6a)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 6a)dated 22.12.2023 with escalation @ 5% per year
6 (b)	All works above Plinth Level up to Floor/Roof level.	Cum	120	7169.40	8,60,328	Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 6b)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 6b)dated 22.12.2023 with escalation @ 5% per year
7	Centring and shuttering including strutting, propping etc. and removal of form for:					
7 (a)	Foundations, footings, bases of columns etc. for mass concrete	Sqm	250	217.23	54,308	Average of LOA no.IPRCL/Ranchi/CCL-
7 (b)	Suspended floors, roofs, landings, balconies and access platform	Sqm	450	525.89	2,36,651	Karo/LOA/784 (shedule-6 item no 7)dt.31.07.2023 & IPRCL/Ranchi/CCL-
7 (c)	Lintel beams, plinth beams, girders, bressumers and cantilevers	Sqm	400	418.90	1,67,560	KONAR/69/LOA/ (shedule-6 item no 7)dated 22.12.2023 with escalation @ 5%
7 (d)	Columns, Pillars, Piers, Abutments, Post and struts	Sqm	170	556.74	94,646	per year
8	Making plinth protection 50mm thick of Cement Concrete 1:3:6 (1 cement : 3 sand : 6 graded stone aggregate 20mm nominal size) over 75mm bed of cement dry brick aggregate 40mm nominal size rammed, consolidated and grouted with fine sand including necessary excavation, levelling, dressing & finishing the top smooth	Sqm	0	468.29	0	Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 8)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 8)dated 22.12.2023 with escalation @ 5% per year

11 Half Bri supersti cement 12 12mm (12 (a) 1:4 (1 or 1) 1:6 (1 or 1) 1:6 (1 or 1) 1:6 (1 or 1) 1:6 (1 or 1) 1:7 (1 or 1	work with common burnt clay non-modular (FPS) bricks of class designation 7.5 in structure above plinth level up to floor/Roof level in all shapes and size in cement mortar 1:4 nent: 4 coarse sand) excluding cost of cement Strick masonry with common burnt clay non-modular (FPS) bricks of class designation 7.5 in structure above plinth level up to floor/roof level in all shapes and size in cement mortar 1.4 (1) and 1.4 coarse sand) excluding cost of cement The cement Plaster of mix excluding cost of cement: Cement: 4 coarse sand) Cement Plaster on the rough side of single or half brick wall of mix excluding cost of net: Cement: 4 coarse sand) Cement Plaster to ceiling of mix excluding cost of cement: Cement: 3 fine sand) Cement punning String and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete Sing walls with water proofing cement paint of required shade two or more coats on new	Sqm Sqm Sqm Sqm	150 0 550 0 550 360	710.85 710.6.52 106.52 123.15	0 58,584 0 0 67,731	Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 10)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 10)dated 22.12.2023 with escalation @ 5% per year Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 11)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 11)dta21.07.2023 with escalation @ 5% per year ECR USSOR 2012 item no. 111041 with escalation @ 5% per year ECR USSOR 2012 item no. 111042 with escalation @ 5% per year ECR USSOR 2012 item no. 111051 with escalation @ 5% per year
12 12mm (2 12 (a) 1:4 (1 oc 12 (b) 1:6 (1 oc 13 15mm (2 ment) 13 (a) 1:4 (1 oc 14 (a) 1:3 (1 oc 15 Neat ce 16 Providir prepare 17 Finishin work ap 18 Distemy mixed) specific commen requirect mild stee each jai absorbe surface Fixing w	the content Plaster of mix excluding cost of cement: a coarse sand) excluding cost of cement: cement: 4 coarse sand) cement Plaster of mix excluding cost of cement: cement: 6 coarse sand) cement Plaster on the rough side of single or half brick wall of mix excluding cost ont: cement: 4 coarse sand) Cement Plaster on the rough side of single or half brick wall of mix excluding cost ont: cement: 4 coarse sand) Cement Plaster to ceiling of mix excluding cost of cement: cement: 3 fine sand) cement punning ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	Sqm Sqm Sqm Sqm	550 0 550 550	106.52 106.52 123.15	0 58,584 0 0 67,731	Karo/LOA/784 (shedule-6 item no 11)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 11)dated 22.12.2023 with escalation @ 5% per year ECR USSOR 2012 item no. 111041 with escalation @ 5% per year ECR USSOR 2012 item no. 111042 with escalation @ 5% per year
12 (a) 1:4 (1 cd 12 (b) 1:6 (1 cd 13 15mm cement 13 (a) 1:4 (1 cd 14 6mm Ce 14 (a) 1:3 (1 cd 15 Neat ce 16 Providir prepare 17 Finishin work ap 18 Distemmixed) specifics 19 Providir commer requirer mild stee each jai absorbe surface Fixing w 20 Providir board covertical	cement : 4 coarse sand) cement : 6 coarse sand) n Cement Plaster on the rough side of single or half brick wall of mix excluding cost ont: cement : 4 coarse sand) Cement Plaster to ceiling of mix excluding cost of cement: cement : 3 fine sand) cement punning ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	Sqm Sqm Sqm	550	106.52	0 0 67,731	escalation @ 5% per year ECR USSOR 2012 item no. 111042 with escalation @ 5% per year ECR USSOR 2012 item no. 111051 with
13 15mm cement 13 (a) 1:4 (1 or 14 6mm Ce 14 (a) 1:3 (1 or 15 Neat ce 16 Providir prepare 17 Finishin work ap 18 Distemy mixed) specifics 19 Providir commen requirer mild ste each jar absorbe surface Fixing w	n Cement Plaster on the rough side of single or half brick wall of mix excluding cost ont: cement: 4 coarse sand) Cement Plaster to ceiling of mix excluding cost of cement: cement: 3 fine sand) cement punning ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	Sqm Sqm Sqm	550	123.15	67,731	ECR USSOR 2012 item no. 111042 with escalation @ 5% per year ECR USSOR 2012 item no. 111051 with
13 (a) 1:4 (1 or 14 6mm Ce 14 (a) 1:3 (1 or 15 Neat ce 16 Providin prepare 17 Finishin work ap 18 Distemy mixed) specifica 19 Providin commen required mild stee each jai absorbe surface Fixing w 20 Providin board of vertical	nt: cement : 4 coarse sand) Cement Plaster to ceiling of mix excluding cost of cement: cement : 3 fine sand) cement punning ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	Sqm Sqm Sqm	360		67,731	ECR USSOR 2012 item no. 111051 with
14 6mm Ce 14 (a) 1:3 (1 cc 15 Neat ce 16 Providir prepare 17 Finishin work ap 18 Distemy mixed) specifica 19 Providir commer requirer mild ste each jai absorbe surface Fixing w	Cement Plaster to ceiling of mix excluding cost of cement: cement : 3 fine sand) cement punning ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	Sqm	360		0	
14 (a) 1:3 (1 cd 15 Neat ce 16 Providin prepare 17 Finishin work ap 18 Distemmixed) specifici 19 Providin commen required mild stee each jai absorbe surface Fixing w 20 Providin board covertical	cement : 3 fine sand) cement punning ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	Sqm		83.02		escalation @ 5% per year
15 Neat ce 16 Providin prepare 17 Finishin work ap 18 Distemy mixed) specifica 19 Providin commen required mild stee each jai absorbe surface Fixing with a specifical poard covertical covertical surface provides the surface of	tement punning ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	Sqm				
16 Providir prepare 17 Finishin work ap 18 Distemmixed) specific: 19 Providir commer requirer mild stee each jar absorbe surface Fixing were pound or the pound of the pound of the providir surface of the pound of the providir surface of the pound of the providire provided the providire provided the providire provided the providire provided the provide	ding and applying plaster of Paris putty of 2mm average thickness over plastered surface to re the surface even and smooth complete	<u> </u>		20.31		ECR USSOR 2012 item no. 111151 with escalation @ 5% per year ECR USSOR 2012 item no. 111180 with
17 Finishin work ap 18 Distemy mixed) specifica 19 Providir commer requirer mild ste each jar absorbe surface Fixing w	re the surface even and smooth complete	Sqm	200	144.18		escalation @ 5% per year
18 Distemy mixed) specific commer requirec mild ste each jar absorbe surface Fixing w	ing walls with water proofing cement paint of required shade two or more coats on new		200	144.16	28,830	ECR USSOR 2012 item no. 112040 with escalation @ 5% per year
nixed) specific 19 Providir commer requirer mild ste each ja absorbe surface Fixing w 20 Providir board c vertical	applied @ 3.84 kg/10 sqm	Sqm	400	63.49	25,395	ECR USSOR 2012 item no. 115110 with escalation @ 5% per year
commer required mild ste each jai absorbe surface Fixing w	mpering two or more coats on new work with 1st quality acrylic washable distemper (read i) of approved manufacturer and of required shade and colour complete as per manufacturer? ication		500	58.93	29,466	ECR USSOR 2012 item no. 115050 with escalation @ 5% per year
board c vertical	ding and fixing pressed steel door frames confirming to IS: 4351, manufactured from the recial mild steel sheet of 1.6mm thickness including hinges jamb, lock jamb, bead and it red angle threshold of mild steel angle of section 50mmx25mm, or base ties of 1.6mm pressed teel welded or rigidly fixed together by mechanical means, adjustable lugs with split end tail to jamb including steel butt hinges 25mm thick with mortar guard, lock strikeplate and shock bers as specified and applying a coat of approved steel primer after pretreatment of the tee as directed by the Engineer-in-Charge. with adjustable lugs with split end tail to each jamb.	: 	113	318.48	35,988	Average of LOA no.IPRCL/Ranchi/CCL- Karo/LOA/784 (shedule-6 item no 19)dt.31.07.2023 & IPRCL/Ranchi/CCL- KONAR/69/LOA/ (shedule-6 item no 19)dated 22.12.2023 with escalation @ 5% per year
	ding and fixing to IS:2202 Part-1 marked flush door shutter decorative type, core of block construction with frame of 1st class hard wood and well matched teak 3-ply veneering with all grains or cross bands and face veneers on both faces of shutters. In thick including ISI marked stainless steel butt hinges with necessary screws		10	3883.82	38,838	ECR USSOR 2012 item no. 072141 with escalation @ 5% per year
AC 10 a	ding and fixing aluminium handles ISI marked anodised (anodic coating not less than grade as per IS:1868) transparent or dyed to required colour or shade with necessary screws etclete: 100mm		20	91.33	1,827	ECR USSOR 2012 item no. 078062 with escalation @ 5% per year
		Each	6	141.16	847	ECR USSOR 2012 item no. 077140 with escalation @ 5% per year
than gr	ding and fixing bright finished brass hanging type door floor stopper with necessary screw- omplete		27	410.29	11,078	ECR USSOR 2012 item no. 078021 with escalation @ 5% per year
24 Providir grade A etc. con			27	121.68	3,285	ECR USSOR 2012 item no. 078033 with escalation @ 5% per year

				1		
25	Providing and fixing factory made UPVC door frame made of uPVC extruded section having an overall dimension as below (tolerance ±1mm) with wall thickness 2mm ± 0.2mm, corners of door frame to be mittered and welded of plastic, galvanized brackets and stainless steel screws. Hinge side vertical of frames reinforced by galvanized MS tube of size 19mmx19mm and 1mm ± 0.1mm wall thickness and 3 nos. stainless steel hinges fixed to frame complete as per direction of Engineer incharge: Extruded section profile size 48mmx40mm		25	359.09	8,977	ECR USSOR 2012 item no. 078281 with escalation @ 5% per year
26	Providing and fixing door frame 24mm thick factory made PVC door shutters made of styles and rails of a PVC hollow section of size 59mmx24mm with a wall thickness 2mm±0.2mm. The styles and rails mitered cut and joined at corners by means of M.S. galvanized/plastic brackets of size 75mmx220mm having wall thickness 1.0mm/solid and fix with stainless steel screws. The styles of shutter reinforced by inserting galvanized M.S. tube of size 19mm x 19mm with a wall thickness 1mm±0.1mm. The lock rail made out of 'H' section, PVC hollow section of size 100mmx24mm with a wall thickness 2mm±0.2mm, fixed to shutter styles by means of plastic/galvanized M.S. 'U' cleats. The shutter frame filled with a PVC multi- chambered panel of size 20mmx200mm with a wall thickness 1mm±0.1mm. The panels filled vertically and tie bar at two places by inserting horizontally 0.6mm galvanized M.S. rod and fastened with nuts and washers. All complete as per manufacturer's specification and direction of Engineer-In-Charge. (For W.C. and bathroom door shutter)		11	3311.05	36,422	ECR USSOR 2012 item no. 078180 with escalation @ 5% per year
27	Providing and fixing anodised aluminium work for doors, windows, ventilators and partitions with extruded built-up standard tubular and other sections of approved make conforming to IS:733 and IS:1285, anodised transparent or dyed to required shade according to IS:1868 (Minimum anodic coating of grade AC 15), fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitered and jointed mechanically wherever required including cleat angle. Aluminium snap beading for glazing/panelling, C.P. brass/stainless steel screws, all complete as per architectural drawings and directions of Engineer-in-charge. (Glazing & panelling to be paid for separately): For fixed portion		90	527.09	47,438	ECR USSOR 2012 item no. 082011 with escalation @ 5% per year
28	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item): With float/frosted glass panes of 4mm thickness (weight not less than 10.0 kg/sqm)		0	1131.48	0	ECR USSOR 2012 item no. 082031 with escalation @ 5% per year
29	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: Fixed to steel windows by welding	_	500	128.45	64,224	ECR USSOR 2012 item no. 074231 with escalation @ 5% per year
30	Providing and fixing circular/hexagonal M.S. sheet ceiling fan box with clamps of internal dia 140mm, 73mm height, 3mm thick rim, top and bottom lid of 1.5mm M.S. sheet. Lids shall be screwed into M.S. box by means of 3mm round beaded screws, clamps shall be made of 12mm dia M.S. bar bent to shape as per standard drawing with over all length as 80cm. (it includes cost of clamps also)		5	189.22	946	ECR USSOR 2012 item no. 081350 with escalation @ 5% per year
31	Diluting and injecting chemical emulsion Chlorpyriphos/ Lindane E.C. 20% with 1% concentration for post constructional anti-termite treatment (Payment for chemical emulsion to be made separately)				0	
31 (a)	Along external wall where the apron is not provided using chemical emulsion @ 7.5 litres/sqm of the vertical surface of the substructure to a depth of 300mm including excavating channel along the wall and rodding etc. and making good the same		0	13.86	0	ECR USSOR 2012 item no. 171331 with escalation @ 5% per year
32	Kota stone slab flooring of size up to 30cmx30cm over 20mm (average) thick base of 1:4 cement mortar (1 cement : 4 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing, excluding cost of cement complete : 25mm thick	Sqm	0	1554.50	0	ECR USSOR 2012 item no. 096062 with escalation @ 5% per year
33	Providing and fixing ceramic tiles conforming to IS:15622 of manufacturers approved by railway in all colours, shades, design and abrasion resistance class as approved by the Engineer-in-Charge in floors and landings over 20mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand) including pointing in white cement mixed with pigment of matching shade complete : Of Group B-II Clause 5.1 (for abrasion resistance) of IS:15622 (Ceramic Floor Tiles) of size 300mmx300mm		50	845.40	42,270	ECR USSOR 2012 item no. 095021 with escalation @ 5% per year
34	Providing and fixing Ist quality ceramic tiles conforming to Group B-III (Ceramic Wall Tiles) of IS:15622 of manufacturers approved by railway in all colours, shades, and design as approved by the Engineer-in-Charge in skirting, risers of steps and dado over 12mm thick bed of cement mortar 1:3 (1 cemen : 3 coarse sand) including pointing in white cement mixed with pigment of matching shade complete : 200x300 mm		350	953.65	3,33,779	ECR USSOR 2012 item no. 095012 with escalation @ 5% per year
35	Providing and fixing 10mm thick heavy duty acid and/or alkali resistant factory made tiles conforming to Group V-RD series of approved make and colour using acid and/or alkali resisting mortar bedding and joints filled with acid and/or alkali resisting cement as per IS:4457 complete including cost of acid/alkali resistant cement				0	
35 (a)	In flooring on a bed of 10mm thick mortar 1:4 (1 appropriate cement : 4 coarse sand)	Sqm	0	1667.92	0	ECR USSOR 2012 item no. 094071 with escalation @ 5% per year
35 (b)	In dado/skirting on 12mm thick mortar 1:4 (1 appropriate cement : 4 coarse sand)	Sqm	0	1793.13	0	ECR USSOR 2012 item no. 094072 with
		1				escalation @ 5% per year

36	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete : 40mm thick with 20mm nominal size stone aggregate	Sqm	180	249.41	44,894	ECR USSOR 2012 item no. 092012 with escalation @ 5% per year
37	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 sand : 4 stone chips 12.5mm nominal size) excluding cost of cement	Sqm	0	268.44	0	ECR USSOR 2012 item no. 032052 with escalation @ 5% per year
38	Providing and fixing white, vitreous china flat back half stall urinal of 580mmx380mmx350mm with white P.V.C. automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS:2556, C.I. trap with outlet grating and other coupling in C.P. brass including painting of fittings and cutting and making good the walls and floors, wherever required: Single half stall urinal with 5 litres P.V.C. automatic flushing cistern	Each	5	7216.18	36,081	ECR USSOR 2012 item no. 151051 with escalation @ 5% per year
39	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast iron "P' or 'S' trap, 10 litres low level white P.V.C. flushing cistern with manually controlled device (handle lever) conforming to 15:7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required: White Vitreous China Orissa pattern W.C. pan of size 580mmx440mm with integral type foot rests		5	5042.77	25,214	ECR USSOR 2012 item no. 151011 with escalation @ 5% per year
40	Providing and fixing wash basin with C.I./M.S. brackets, 15mm C.P. brass pillar taps, 32mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls, wherever required: White, vitreous china wash basin size 630mmx 450mm with a pair of 15mm C.P. brass pillar taps	Each	5	3197.84	15,989	ECR USSOR 2012 item no. 151071 with escalation @ 5% per year
41	Providing and fixing 600mmx450mm bevelled edge mirror, 5.5mm thick of float glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete	Each	5	1290.87	6,454	ECR USSOR 2012 item no. 152110 with escalation @ 5% per year
42	Providing and fixing 600mmx120mmx5mm glass shelf with edges round or supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40mm long screws, rawl plugs etc. complete	Each	5	717.71	3,589	ECR USSOR 2012 item no. 152130 with escalation @ 5% per year
43	Providing and fixing soil, waste and vent pipes: 100mm dia. sand cast iron S&S pipe as per IS:1729	Meter	50	992.14	49,607	ECR USSOR 2012 item no. 153011 with escalation @ 5% per year
44	Providing and filling the joints with spun yarn cement slurry and cement mortar 1:2 (1 cement : 2 fine sand) in S.C.I./C.I. pipes : 100mm dia. Pipe	Each	50	61.38	3,069	ECR USSOR 2012 item no. 153022 with escalation @ 5% per year
45	Providing and fixing M.S. holder-bat clamps of approved design to sand cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10cmx10cmx10cm of 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc.: For 100mm dia. pipe		50	159.12	7,956	ECR USSOR 2012 item no. 153031 with escalation @ 5% per year
46	Providing and fixing bend of required degree with access door, insertion rubber washer 3mm thick, bolts and nuts complete: 100mm dia. sand cast iron S&S as per IS-1729	Each	5	571.53	2,858	ECR USSOR 2012 item no. 153041 with escalation @ 5% per year
47	Providing and fixing Poly Tetra Methylene Terephthalate (PTMT) Waste Coupling for wash basin & sink of approved quality, colour & make : Waste coupling 31mm of 79mm length and 62mm breadth weighing not less than 45gm		5	139.24	696	ECR USSOR 2012 item no. 153281 with escalation @ 5% per year
48	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with C.P. brass screws with concealed fitting arrangement of approved quality colour and make: 600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gm	Each	5	812.65	4,063	ECR USSOR 2012 item no. 153322 with escalation @ 5% per year
49	Providing and fixing on wall face unplasticised - Rigid PVC single socketed rain water pipes conforming to IS:13592 Type-A including jointing with seal ring conforming to IS:5382 leaving 10mm gap for thermal expansion : 110mm dia.	Meter	10	361.12	3,611	ECR USSOR 2012 item no. 108162 with escalation @ 5% per year
50	Providing and fixing on wall face unplasticised - PVC moulded fittings/accessories for unplasticised - Rigid PVC rain water pipes conforming to IS:13592 Type-A including jointing with seal ring conforming to IS:5382 leaving 10mm gap for thermal expansion :				0	
50 (a)	Coupler, 110mm	Each	25	317.19	7,930	ECR USSOR 2012 item no. 108172 with
50 (b)	110mm dia. Bend	Each	25	332.41	8,310	escalation @ 5% per year ECR USSOR 2012 item no. 108182 with escalation @ 5% per year
51	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. Internal work - Exposed on wall				0	Securition & 570 pct year
51 (a)	15mm dia. nominal bore	Meter	0	214.95	0	ECR USSOR 2012 item no. 131131 with escalation @ 5% per year
51 (b)	20mm dia. nominal bore	Meter	100	310.31	31,031	ECR USSOR 2012 item no. 131132 with escalation @ 5% per year
52	Providing & fixing brass bib cock of approved quality: 15mm nominal bore	Each	5	399.06	1,995	ECR USSOR 2012 item no. 132011 with escalation @ 5% per year
53	Providing & fixing brass stop cock of approved quality: 15mm nominal bore	Each	5	396.72	1,984	ECR USSOR 2012 item no. 132021 with escalation @ 5% per year
54	Providing and fixing unplasticised PVC connection pipe with brass unions: 30cm length, 15mm nominal bore	Each	5	71.42	357	ECR USSOR 2012 item no. 132131 with escalation @ 5% per year

55	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (new work): 20mm nominal bore	Each	60	208.72	12,523	ECR USSOR 2012 item no. 136132 with escalation @ 5% per year
56	Providing and fixing PTMT pillar cock of approved quality and colour : 15mm nominal bore, 107mm long, weighing not less than 110 gm	Each	6	382.91	2,297	ECR USSOR 2012 item no. 134031 with escalation @ 5% per year
57	Making soak pit 2.5m diameter, 3m deep with 45cmx45cm dry brick honey comb shaft with bricks of class designation 7.5 and S.W. drain pipes 100mm diameter, 1.8m long complete as per standard design, including excavation complete: With F.P.S. (non modular) bricks	Each	5	20058.12	1,00,291	ECR USSOR 2012 item no. 143271 with escalation @ 5% per year
58	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with 7.5 class designation bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455mmx610mm internal dimensions, total weight of cover with frame to be not less than 38kg (weight of cover 23kg and weight of frame 15kg) R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40mm nominal size), inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. excluding cost of cement complete as per standard design				0	
58 (a)	Inside dimensions 455mmx610mm and 45cm deep for single pipe line with F.P.S. bricks	Each	5	5614.41	28,072	ECR USSOR 2012 item no. 143241 with escalation @ 5% per year
58 (b)	Inside dimensions 600mmx850mm and 45cm deep for pipe line with three or more inlets with F.P.S. bricks	Each	5	6550.20	32,751	ECR USSOR 2012 item no. 143243 with escalation @ 5% per year
59	Providing and placing on terrace/staging (at all heights) polyethylene water storage tank ISI:12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	Ltr.	2000	10.18	20,367	ECR USSOR 2012 item no. 136150 with escalation @ 5% per year
60	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. Internal work – Exposed on wall, 40mm dia. nominal bore	Meter	100	592.44	59,244	ECR USSOR 2012 item no. 131135 with escalation @ 5% per year
61	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end): 40mm nominal bore	Each	5	1906.22	9,531	ECR USSOR 2012 item no. 132033 with escalation @ 5% per year
62	Providing and fixing gun metal non-return valve of 40mm nominal bore approved quality (screwed end): Vertical	Each	5	2045.12	10,226	ECR USSOR 2012 item no. 132072 with escalation @ 5% per year
63	Supplying and fixing C.I. cover without frame for manholes: 500mm diameter C.I. cover (medium duty) the weight of cover to be not less than 58kg	Each	5	4437.24	22,186	ECR USSOR 2012 item no. 143132 with escalation @ 5% per year
64	Ordinary Portland Cement Grade-43 Grade	MT	90	9769.09	8,79,218	Item no 025071 USSOR ECR 2021
65	Skin Reinforcement(Fe-500 grade)	KG	15000	63.861	9,57,915	LOA NO IPRCL/BBS/SLT/MCL/LAJKURA/2022/01/9 21 Dated:23.06.2022
66	Providig Coarse clean sand in filling in foundation trenches or in plinth including ramming and watering in layers not exceeding 150mm thick with all leads and lifts including cost of all materials, labours, royalty and taxes all complete as per building specification and direction of E/I (Mode of measurement compacted volume)	Cum	40	619.41	24,776	Jharkhand SOR 2022 Item No. 5.1.10
	Total Amount of Schedule-'J'				61,28,470	

6: STRUCTURE DISMANTLING WORKS

			_	I	I -	_
S. No.	Description of Item	Unit	Qty	Rate in Rs.	Amount	Rate
				(Including 5%	in Rs.	Reference
				Excalation)		
				•		
1	Dismantling of existing BG track, turnouts,					
	derailing switches, dead ends, sand humps,					
	etc. of any rail section and any type of					
	sleepers of any density and transporting all					
	released material including sleepers, rails,					
	switches, crossings and fittings & fastenings					
	to the nearest station or manned level					
	crossing or road loading point as directed by					
	the Engineer.					
2	Plain track including SEJ and Glued Joints and					
	track at level crossing, bridge & bridge					
	approaches and sharp curves with check rails		5000	152	757968.75	
	- FP					RVNL BOO
						KVINL BOQ
3	Dismantling of existing Structure like	LS	1	2500000	2500000	
	Washery and others					
	B.C				200000	
4	Misc work				300000	
	Total . 6 (Carried forward)				3557968.75	

	Construction	n of R	oad of	length 250)m	
SL NO	Description	UNIT	QTY	RATE	AMOUNT	REF
1	Preparation and consolidation of subgrade with power road roller 8 to 12 ton capacity after excavating earth to to and average of 22.5cm depth dressing to camber and consolidating with road roller including makung good undulation etc. and re rolling the subgrade and disposal of surplus earth with lead upto 50m		1840	137.08695	2,52,239.99	LOA NO IPRCL/BBS/SLT/MCL/ LAJKURA/2022/01/9 21 Dated:23.06.2022
2	Earthwork in cutting in formation, trolley refugees, side drains, level crossing approaches, platforms, catch water drains, diversions of nallah & finishing to required dimension and slopes to obtain a neat appearance to standard profile inclusive of all labour, materials, plant & machinery, leading al cut spoils either to make spoil dumps of for filling of embankment with leads within 2 km on either side of edge of the cutting(s) including all lifts, ascent, descent, loading, unloading, bailing & pumping out water if required clearance of site and all other works incidental thereto for completing the work as per RDSO specification No. RDSO/2020/GE:IRS-0004 with latest updated correction slips and to the satisfaction of the Engineer-in-Charge. Note-(i) All usable earth arising from cut spoils shall be led into bank formation and unsuable spoils shall be dumped /stacked away from toe of embankment.(ii) All hard rock/ and boulders not fit for filling will be stacked by the contractor and will be property of the Railways. (iii) Cut trees shall be property of Railways and to be deposited in the railway godown unless specified otherwise in the.					Item no 012010 USSOR ECR 2021
2.1	Soft rock not requiring blasting	Cum	800	246.21	1,96,969.50	
3	For 50 MM compacted thickness using coarse aggregate of size 40-20 MM graded and key aggregate of size 12.5 MM graded.	Sqm	1840	359.296875	6,61,106.25	RVNL BOQ
4	For 75 MM compacted thickness in two layers using stone aggregate of size 63-41 MM graded and key aggregate of size 20 MM graded.	·	1840	506.953125	9,32,793.75	RVNL BOQ
5	Miscellaneous item like Bitumen mix, etc				8,00,000.00	
	Total				25,90,869.50	

	SI	ITE FACIL	ITIES			
SL NO	Description	UNIT	QTY	RATE	AMOUNT	REFERENCE
1	Providing site offices for Employer with Contractor's material, Labour, Tools and Plant, Equipment etc. including provision of Water Supply, Drainage, Power arrangements, office maintenance.	LS	1	600000	6,00,000.00	
2	Providing Furniture at Site Facilities for the Employer and the Engineer	LS	1	400000	4,00,000.00	
3	Providing Road Vehicle mentioned below for the use of Engineer/Employer as per the Conditions mentioned in Clause 3.4.2 & 3.4.3 of Chapter 3 (Site Facilities for the Employer and the Engineer) of Section 5 Work's Requirement) of Tender Documents. Note: The provisions of clause 12.3.1 (a) (ii) of Section 6 (GCC) of the Contract shall not be applicable for appropriateness of new rate for this item.					
а	BOLERO, SCORPIO, ERTIGA, MARAZZO or similar	Vehicle months	12	63638.86	7,63,666.31	RVNL BOQ
b	Extra for running and maintenance of every additional km over and above 4000 kms as specified in item 9003 (b)	Per Km	100	13.78125	1,378.13	RVNL BOQ
				Total	17,65,044.44	



Detailed Project Report of Giddi Railway



ANNEXURE A-15 Electrical Cost Estimate

Abstract of Electrical TRD & General Works of Giddi Railway Siding

Sr. No.	Description of Schedule	Price in Rs
1	Electrical TRD Works	2,09,54,086.76
2.1	Electrical General Works-Supply items	1,26,79,006.76
2.2	Electrical General Works	69,19,621.76
2.3	Site facility of electrical works	7,65,044.44
2	Electrical General Works	2,03,63,672.96
	TOTAL	4,13,17,759.72

		Bill of Quantit	ies					
		Schedule 16000						
		RE- General						
tem No.	SOR ITEM	Description	Unit		Rat			ount
		·			Supply	Erection	Supply	Erection
16001	OHE-1	Preparation and submission of designs and drawings for Overhead Equipment, Switching Station, Sectioning diagram, Power supply diagram, Schematic diagram of Switching Stations, Traction Working Rule Diagram and Instructions etc. required for commissioning of OHE.	TKM	2.9	2,166	31,401	6,281	91,063
	OHE-2	Supply and Erection of large Span wire (130 sq.mm) including its fittings with insulators:						
16002	(a)	With Porcelain Insulators 1050mm CD.	Mtr	100	954	78	95,400	7,800
	(b)	With Composite Insulators 1050mm CD.	Mtr	100	901	78	-	-
	(c)	Extra on erection under Power Block .	Mtr		0	78	-	-
16003	OHE-3	Supply and Erection of materials for Termination of single conductor of overhead equipment or a terminating wire:						
16003	(a)	With Porcelain Insulators 1050mm CD.	Each	4	12,767	1,171	51,068	4,684
	(b)	With Composite Insulators 1050mm CD.	Each	0	10,230	1,171	-	-
	(c)	Extra on erection under Power Block .	Each	0	0	1,171	-	-
10005	OHE-5	Supply and Erection of material for Termination of copper cross feeder with gantries including cross feeder wire:						
16005	(a)	With Porcelain Insulators 1050mm CD.	Set	0	54,092	1,373	-	-
	(b)	With Composite Insulators 1050mm CD.	Set	0	49,016	1,373	-	-
	(c)	Extra on erection under Power Block.	Set	0	0	1,373	-	-
16006	OHE-6	Supply and Erection of Terminal Boards in control cubicles.	Each	1	13,015	585	13,015	585
16011	OHE-10	Modification to existing Overhead Equipment.	Mtr	300	0	47	-	14,100
16011A	OHE-10(a)	Extra for modification to existing Overhead Equipment under power block.	Mtr		0	47	-	-
16014	OHE-13	Loading/Unloading, transportation and handing over of all type of materials etc. (other than contractor material).	Metric Tonne KM	500	0	82	-	41,000
		Schdule 19000						
	1	OHE - Ferrous other than steel structures and	SPS		1			
tem No.	SOR ITEM	Description	Unit		Rat			ount
	OHE-16	Supply and Erection of a guy rod assembly.	Each	10	Supply 9,079	Erection 1,409	Supply 90,790	Erection 14,090
19001	(a)	Extra on erection under Power Block.	Each	2	9,079	1,409	90,790	2,818
19002	OHE-17	Supply and Erection of protective screen on FOBs/ROBs.	Sq.m	0	4,701	508	_	-
	OHE-18	Supply and Erection of bracket assembly with insulators	- '		, -			
19003	(a)	With Porcelain stay & bracket Insulators 1050mm CD.	Each	80	21,677	1,214	17,34,160	97,120
10000	(b)	With Composite stay & bracket Insulators 1050mm CD.	Each	0	19,399	1,214	-	-
	(c)	Extra on erection under Power Block.	Each	5	0	1,214		6,070
19004	OHE-19	Supply and Erection of regulating equipment (3 pulley type) with counter weight assembly for conventional OHE.	Each	6	71,538	5,251	4,29,228	31,506
	(a)	Extra on erection under Power Block.	Each	2	0	5,251	-	10,502
	OHE-20	Supply and Erection of material for termination of double Overhead Equipment conductor	Lucii	_		0,20		10,002
19005	(c)	With Percelain Inculators 1050mm CD	Ecab	-	45.407	4 005	1.06.070	0.075
	(a) (b)	With Porcelain Insulators 1050mm CD. With Composite Insulators 1050mm CD.	Each	7	15,197	1,325	1,06,379	9,275
	(c)	Extra on erection under Power Block.	Each Each	2	12,918 0	1,325 1,325	-	2,650
	OHE-21	Supply and Erection of anti-creep with galvanized steel wire	Laon		, o	1,020		2,000
	(a)	With Porcelain Insulators 1050mm CD.	Each	0	35,664	3,725	0	0
	(b)	Extra on provision of extra span in item (a).	Each	0	7,133	745	-	-
19006	(5)	With Composite Insulators 1050mm CD.	Each	0	31,107	3,725	-	-
19006	(c)	Train Composite inculators recommit CD.						
19006		Extra on provision of extra span in item (c). Extra on erection under Power Block.	Each Each	0	6,222 0	745 3,725	-	-

		Schedule 20000 OHE - Non Ferrous Part 'A'						
Item No	SOR ITEM	Description	Unit		Ra	te	Am	ount
item No.	SOR ITEM	·	Unit		Supply	Erection	Supply	Erection
20001	OHE-23(a)	Supply and Erection of Over Head Equipment i.e. contact & catenary wire (excluding cost of supply of contact & catenary wires), jumper wire, dropper wire, contact/catenary clips, fasteners and all other material required at turn out/ overlaps/ diamond crossings etc. Final checking of OHE and adjustment, inspection to be done by tower wagon for commissioning of conventional OHE.	TKM	2.9	0	62,175	-	1,80,308
	(i)	Extra on erection under Power Block.	TKM	0.5	0	31,087	13	15,544
	(ii)	Extra on manual erection for catenary/contact wire.	TKM	0	0	15,543	-	-
20002	OHE-23(b)	Supply of contact wire (HDGCC 107/150 Sq.mm) only.	MT	3	9,60,871	0	28 82 613	_
	, ,	Supply of cadmium copper catenary wire (65 Sq. mm)			, ,		, ,	
20003	OHE-23(c)	only.	MT	2.5	9,60,871	0	24,02,178	-
		Schedule 21000 OHE - Non Ferrous Part 'B'						
Itom No	SOR ITEM	Description Description	Unit		Ra	te	Am	ount
item No.	30K ITEM	•	Oill		Supply	Erection	Supply	Erection
	OHE-24	Supply and Erection of anti-creep with cadmium copper catenary wire.						
21001	(a)	With Porcelain Insulators 1050mm CD.	Each	4	82,419	5,892	3,29,676	23,568
	(b)	With Composite Insulators 1050mm CD.	Each	0	78,954	5,892	-	-
	(c)	Extra on erection under Power Block. Supply and erection of section insulator assembly and associated	Each	0	0	5,892	-	-
	OHE-25	fittings & fasteners for OHE with Bar Insulator:						
21002	(a)	With Porcelain Insulators 1050mm CD and Bar Insulator.	Each	6	95,759	6,295	5,74,554	5,74,554
	(b)	With Composite Insulators 1050mm CD and Porcelain Bar Insulator.	Each	0	94,027	6,295	-	-
	(c)	Extra on erection under Power Block.	Each	1	0	6,295	-	6,295
21003	OHE-26	Supply and Erection of PTFE type short neutral section assembly as per latest RDSO specification.	Each		11,30,077	8,152	-	-
	(a)	Extra on erection under Power Block.	Each	0	0	8,152	-	-
21004 21005	OHE-27	DELETED DELETED						
21005	OHE-28	Supply and Erection of all types of copper jumpers.			0.505		04.545	5.005
21006	OHE-29		Each	11	8,595	475	,	5,225
04007	()	Extra on erection under Power Block.	Each	2	U	475	-	950
21007	OHE-30	DELETED Supply of materials and erection of a large copper jumper (160sqmm) between aluminium/Copper busbar and OHE, cross feeder to OHE etc with all associated fittings.	Each	10	11,062	475	1,10,620	4,750
	(a)	Extra on erection under Power Block.	Each	2	0	475	-	950
21009	OHE-32 (a)	Supply and Erection of solid copper busbar 18 mm dia including all connectors, bus splice etc.	Mtr	40	4,280	233	-	-
	(i)	Extra on erection under Power Block.		10	0	233	_	_
21010		Supply and erection of Aluminium Bus Bar 36mmx28mm size including all connectors, bus splice etc.	Mtr	0	1,046	64	-	-
	(i)	Extra on erection under Power Block.		0	0	64	-	-
	OHE-34	Dismantling of traction structure, portals, TTC and associated SPS	MT	40	0	1,777	_	71,080
21011	0.12.04	by cutting. Extra for Dismantling of traction structure, portals,TTC and	****	-10		.,,,,,		. 1,000
	OHE-34 (a)	associated SPS by cutting under Power Block.	MT	4	0	1,777	-	7,108
21012	OHE-35	Supply and Erection of safety items i.e. Fire extinguishers, set of fire bucket with stand and first aid box, key box with suitable key chain, locks and other misc items required for commissioning of switching station.	Set	0	16,098	2,666	-	
21013	OHE-36	Supply and Erection of Retro-reflective type boards - 25kV AC OHE danger board/ danger board for height gauge, public, staff caution board and special boards required for commissioning of OHE/SWSs.	Each	4	451	160	1,804	640
	(a)	Extra on erection under Power Block.	Each	2	0	160	-	-
	(/							

		Schedule 30000A Galvanised Steel Strructures						
Itom No	SOR ITEM	Description	Unit		Ra	te	Am	ount
item No.	SORTIEM	'	Unit		Supply	Erection	Supply	Erection
30009	CS-9	Supply and Erection of all types of galvanised Steel Structures, Small Parts Steel etc.	MT	42	1,17,732	3,713	49,44,744	1,55,946
	(a)	Extra on Erection under Power Block.	MT	1	0	3,713	-	3,713
	(b)	Extra rate on Manual Erection. Schedule 30000B	MT	0	0	1,857	-	-
		Concrete for Fondation						
Item No.	SOR ITEM	Description	Unit		Ra	te	Am	ount
item ivo.	OOK II LIII	·			Supply	Erection	Supply	Erection
30006A	CS-6 (a)	Providing and laying of concrete for foundation and plinth in all types of Soils using M-10 grade concrete for main foundation and M-15 grade concrete for grouting and muffing including nominal reinforcement wherever required as per RDSO drawings.		295	5,795	1,875	17,09,525	5,53,125
30006B	CS-6 (b)	Providing and laying of concrete for foundation and plinth in all types of Soils using M-15 grade concrete for main foundation and M-20 grade concrete for grouting and muffing including nominal reinforcement wherever required as per RDSO drawings.		20	6,846	1,875	1,36,920	37,500
30006C	CS-6 (c)	Providing and laying of concrete for foundation and plinth in all types of Soils and Soft/Hard Rock using M-20 grade concrete for main foundation and M-20 grade concrete for grouting and muffing including nominal reinforcement wherever required as per RDSO drawings.		0	7,417	1,875	-	-
30007A	CS-7 (a)	100% Extra Payment over CS-6(a), (b) and (c) for foundation and plinth in Hard Rock/heavy concrete requiring chiseling/Blasting/machine breaking.		0	0	1,875	-	-
30007B	CS-7 (b)	50% Extra Payment over CS-6(a), (b) and (c) for foundation and plinth in Soft Rock/Hard soil requiring chiseling/Blasting/machine breaking and in Black Cotton Soil.		140	0	938	-	1,31,320
30007C	CS-7 (c)	Extra payment for grouting of masts/portals in yards using M-30 concrete and expansive admixture compound as per RDSO guidelines.		80	0	423	-	33,840
30008	CS-8	Providing and laying of Reinforced Concrete for Pier/Column/Pile, Cable Trench and Trench Cover and special designed foundations requiring reinforcement.	CUM	0	0	8,630	-	-
	l	Schedule 30000C	l		I			
		Miscellineous Common Items of OHE/TS	S					
Item No.	SOR ITEM	Description	Unit		Ra			ount
30023 A	CS-23(a)	Supply and Erection of 25kV, 1250A, Single Ploe Isolators with insulator, with/without earth contact assembly and with /without interlock.		3	Supply 65,036	3,264	Supply 1,95,108	9,792
30023B	CS-23(b)	Supply and Erection of 25kV, 1250A, Double Pole Isolator with insulator, with/without earth contact assembly and with /without interlock.		1	1,05,517	3,264	1,05,517	3,264
30023G	CS-23(g)	Extra on erection under Power block for Single Pole /Double Pole Isolators.	Each	1	0	3,264	-	3,264
30026	CS-26	Supply & Erection of 25kV Support/ Post insulators with fittings and fasteners.	Each	18	4,923	185	88,614	3,330
RVN	L BOQ	Site Facilities	Each				7,65,044	
					TOTAL		1,68,04,683	20,72,87
						Y + ERECTION)		1,88,77,55
				OHE SE	PARES FOR MAIN			5,66,32 943877.781
					PSI FO	T&P(5%) UIPMENT (3%)		566326.669
						GRAND TOTAL		2,09,54,086.75

	Bi	ll of Q	uantit	ies				
	C	HE ES	STIMA	TE				
S. No.	Description	Qty	Unit	Unit	Rate	Tota	l for	Amount (in Rs.)
NO.				Supply	Erection	Material	Erection	(III KS.)
1	Design & drawing for Augmentation of Bhalumuda SSP, feeder line including schematic drawings, SWR's etc. required for commissioning of SSP	1	Each	10000	20000	10000	20000	30000
2	Supply & Erection of Concrete for foundation & plinth including cable trench							
2(b)	Supply and erection of foundation and plinth in other than hard soil and rock	400	Cum	5193	1681	2077286	672358	2749645
3	Supply and erection of all types of galvanized steel structures, small parts steel etc	35	MT	103439	4022	3620373	140780	3761153
4	Supply and Erection of 25KV CB/BM	3	nos	472319	5588	1416957	16764	1433721
5	Supply & Erection of 42 KV lightning arrestor with surge monitor,counter and cable	3	nos	32287	662	96862	1987	98848
6	Supply & Erection of 25 potential Transformer Type-I or Type-II	3	nos	89533	946	268600	2838	271438
7	Supply & Erection of 25 KV Current Transformer	3	nos	94345	809	283034	2426	285460
8	Supply and Erection of materials for Termination of all copper 25 KV feeder conductor single including feeder wire, suspension insulator etc	300	Mtr	825	165	247500	49500	297000
9	Supply & Erection of 25 KV pedestal insulators with fittings and fasteners	24	nos	5220	312	125268	7488	132756
11	Supply & Erection of 25 KV Double pole isolator 1600 A with rod & post insulator with/without interlock	3	nos	120920	5617	362760	16852	379612
12	Supply & Erection of Aluminum Bus bar 36mmX28mm	60	mtr	288	43	17257	2580	19837
13	Supply & Erection of all types of Aluminum/copper bus connectors,bus splice,tee connectors,bus terminals required for commissioning of switching stations with fasteners	24	nos	1663	21	39917	504	40421
14	Supply and erection of all types of copper jumper	3	nos	8715	374	26144	1122	27266
15	Supply of materials and erection of a large copper jumper (160 sq mm) between aluminum bus/OHE and cross feeder with all associated fittings	3	Each	9183	507	27548	1521	29070
16	Supply & Erection of Earthing arrangement at switching station i.e. earth electrodes, earth bus, 8 SWG GI wire etc. to achieve IR value for energisation	4	Job	23118	10986	92470	43943	136413
17	Supply & Erection of copper strips for equipment earthing	4	mtrs	1167	124	4666	495	5161
18	Supply & Erection of material for termination of copper cross feeder with gantries including cross feeder with 9-ton insulators	6	Set	55186	1400	331115	8402	339517
19	Supply & Installation of cables for SWS	50	mtrs	250	20	12485	990	13475

	Атон	nt in Crores	,					1.27
	Amou	ınt in Lakhs						126.79
	-	nd Total	1	1				1,26,79,007
31	SWS complete in all respect including handing over to railways.	1	LS	1000	20000	1000 11549609	20000 1129398	21000 12679007
30	Supply and Spreading of 20mm gravel/ballast in switch Yard Testing , Processing for EIG and commissioning of	10	cum	876	7	8763	67	8830
29	Modification/Alternation to existing RTU at SSP including Modification/alteration to existing SCADA arrangements at Divisional Head Quarter remote control centre	1	Job	305221	50000	305221	50000	355221
28	Supply, erection, testing, and commissioning of control and numeric relay panel suitable for Single Circuit breaker as per latest RDSO specification.	1	nos	1613559	14426	1613559	14426	1627985
27	Electrification of Switching Station building as per specification	1	Each	0	22624	0	22624	22624
26	Painting of equipment etc.	1	LS	5000	2000	5000	2000	7000
25	Supply, Erection, oil filtration, testing and commissioning of 25kV/240 Volts, 10kVA LT Supply transformers oil type with DO fuse switch, anticlimbing device, insulator, copper jumper and earth electrode etc.	1	Set	81157	10678	81157	10678	91836
24	Supply & Erection of Lead Acid batteries 40AH with Battery charges	1	Set	169946	6041	169946	6041	175987
23	Supply & Erection of Fencing panels,uprights,gate and anti-climbing device	80	Mtr	3566	120	285296	9592	294888
22	Supply & Erection of Shock treatment chart etc.	2	nos	225	23	450	46	496
21	Supply & Erection of safety items i.e. Fire extinguishers,set of fire bucket with stand and first aid box,key box with suitable key chain,locks and other misc items required for commissioning of switching station	1	set	17199	2848	17199	2848	20046
20	Reinforced Concrete for Cable trench covers	2	M2	887	264	1775	527	2302

			CHEDU								
N	COD ITEM			AL GEI	VER	Ra	te		Amo	unt	
item No.	SOR ITEM	•	Unit	QTY		Supply	Erection		Supply		Erection
	33003	A: ELECTRIFICATION OF GOOMTY Wiring for light/ ceiling fan/exhaust fan/call bell/light plug/ group etc. points including circuit wiring, sub main wiring with Fire Retardant (FR), PVC insulated, multistranded, copper conductor, single core cable on surface/in recessed PVC conduits, distribution boards, sub distribution boards, earthing etc. as required. Wiring shall be done as per sizes of cables, no. of points permissible in each circuit and sub mains as indicated in Explanatory Notes.	Point	12	₹	-	₹ 1,666.00	₹	-	₹	19,992.00
		Wiring for Circuit/sub main wiring along with earth wire with the following sze of FR PVC insulated copper single pole cable in surface/recessed.Medium glass PVC conduit as required									
	Α	2 x 4 Sq mm + 1 X 4 sq mm earth wire	Meter	170	₹		166.00	₹			28,220.00
		Supply of box type indoor single intigrated sleek extruded polycarbonate LED tube light fittings with 1 X 18 W lamp,intigrated driver,Holders,Acrelic made protective cover and other accessories	Set	8	₹		1,322.00	₹			10,576.00
		Supplying & fixing 4way =,double door TP & N MCB distribution bore of steel sheet for 415volt on surface/Recess complrtr with loose wire box ,terminal connectors for all incoming & outgoing circuits,duely pre wired with suitable size FRLS PVC insulated copper conducter uptio terminal box,tinned copper bus bar ,nutral link,earth bar,tin bar,diattachable gland plate ,interconnection,powder painted including earthing etc as required.(But with MCB /RCCB)	Set	1	₹		7,567.00	₹			7,567.00
		Supply and fixing 5 A to 32 A rating,240 volt,"C" curve ,MCB suitable for inductive load of single poles in the existing MCB DB complet with connections testing and commissionin etc as regired	Set	1	₹		174.00	₹			174.00
		Supply and fixing 63A rating,415 volt,"C" curve ,MCB suitable for inductive load of single poles in the existing MCB DB complet with connections testing and commissionin etc as regired	Set	2	₹		1,701.00	₹			3,402.00
		B: PROVISION OF LUMINARIES, FANS, WAT DELETED	ER								
	33006	Supply, Installation, Testing and Commissioning of light sensitive street light controller, 25 kW for street light/ High mast complete with infrared sensors, contactors and MCB, terminal board etc. for 25 kW load, Operative Voltage 185-275 V AC. Make: Bajaj Energy pack or equivalent as approved by Engineer.	No.	1	₹	49,440.00	₹ 2,149.76	₹	49,440.00	₹	2,149.76
	33008	Supply, Installation, Testing and Commissioning of 230V A. C ceiling fan 1400mm with double ball bearing and suitable capacitor complete with wiring with 1.5 sq.mm FR PVC insulated copper conductor, single/three core cable as instructed etc. as required.			₹	2,504.00	₹ 393.00				
	33008A	Supply and Erection of 1200mm BLDC fan with remote.	No.	2	₹	2,653.00	₹ 168.00	₹	5,306.00	₹	336.00
	33010 A	Supply, Installation, Testing and Commissioning of 11-15 W LED lamp as approved by Engineer.	No.	4	₹	246.00	₹ 39.00	₹	984.00	₹	156.00

				CHEDU									
	. 1	000 ITEM			AL GEI	NEK.	AL Rat	te			Amo	unt	
Item	NO.	SOR ITEM	Description	Unit	QTY		Supply		rection		Supply		Erection
		33010D	Supply, Erection, Testing and Commissioning of LED Street light fitting, pressure di-cast aluminium housing with suitable cover, suitable to work on 220-240V AC supply with system wattage as under:										
			(i) Fitting 43-48 W	No.	1	₹	6,962.00	₹	586.00	₹	6,962.00	₹	586.00
		33011A	Supply, Erection, Testing and Commissioning of exhaust fan suitable for 1- phase, 230 Volts, AC supply system complete with capacitor, louver shutters, grouting bolts with nuts, making opening/ modification in the wall to suit the size of the fan, making good the damages, connections with 1.5sq. mm FR, PVC insulated, multi stranded copper conductor, single core/ three cable as instructed, earthing etc. as required:										
		(i)	AC exhaust fan 300 mm 900 rpm with/ without louver shutters.	NO.	2	₹	3,715.00	₹	581.00	₹	7,430.00	₹	1,162.00
		SECTION -	C: L.T. SWITCH BOARDS AND FEEDER PILL Supply, installation, testing and commissioning										
		33013	of cubical type, wall mounted, dust & vermin proof, L.T. switch board of different capacities.										
		(b)	LT switch board 63 Amp comprising items indicated as under i) incoming MCCB 63A, 4 pole, 35kA, fixed type (Ics=100%Icu) - 1 No ii) Outgoing MCCB 40A, 4 pole, 25kA, fixed type (Ics=100%Icu) - 3 Nos iii) Outgoing MCB double pole, 6-32A, 10kA-16 Nos iv) Outgoing MCB Single pole,6-32A, 10kA-8Nos v)Sleeved/Epoxy coated copper bus-bar 200 A in bus bar Chamber vi) Indication lights.	No.	1	₹	93,507.00	₹	14,688.00	₹	93,507.00	₹	14,688.00
		SECTION -	F: EARTHING ARRANGEMENT										
		33032	Earthing with 3 meter long, 50mm dia, G.I. pipe class 'B' earth electrode, adding the charcoal or coke and salt, providing concrete enclosure and MS cover plate with lifting arrangement etc. including connections with 4mm G.I. wire from earth electrode to switch board / electrical equipment as required.	Job	15	₹	3,501.00	₹	550.00	₹	52,515.00	₹	8,250.00
		33033	Earthing with 600mmx600mmx6mm thick G.I earth plate, adding of charcoal or coke and salt, providing concrete enclosure and MS cover plate with lifting arrangement, watering pipe etc. as required.	Job	0	₹	3,889.00	₹	609.00				
		33034	Earthing with 600mmx600mmx3mm thick copper earth plate, adding of charcoal or coke and salt, providing concrete enclosure and MS cover plate with lifting arrangement, watering pipe etc. as required.	Job	0	₹	6,870.00	₹	1,078.00				
		33035(i)	EARTH CONNECTIONS Supply and Laying 25mm x6mm G.I. strip at not less than 0.50 meter below ground or in recess as required.		150	₹	78.00	₹	14.00	₹	11,700.00	₹	2,100.00
		33035(ii)	Supply and Laying 40mm x 6mm G.I. strip at not less than 0.50 meter below ground or in recess as required.	Meter	0	₹	128.00	₹	19.00				
		33035(iii)	Supplying and Fixing 40mm x 5mm copper strip on surface or in recess or in 50mm dia G.l. pipe as required.	Meter	0	₹	1,019.00	₹	161.00				_
		SECTION -	G : CABLING			<u> </u>				<u> </u>			

			CHEDU									
		ELEC	CTRICA	AL GEN	NER	RAL						
Itom No	SOR ITEM	Description	Unit		Rate				Amount			
iteiii No.	30K ITEM	Description	Oilit	QTY		Supply		Erection		Supply		Erection
		Supply and Laying of 1.1 KV grade LT XLPE insulated armoured, aluminium conductor cable, making good the damages, end terminations with aluminium crimping socket/ plugs, provisions of cable route markers, testing & commissioning etc. as required as per technical specifications:										
	(vi)	4.0 Core 35 sq.mm	Meter	3500	₹	618.00	₹	25.00	₹	21,63,000.00	₹	87,500.00
	SECTION - H : ELECTRIFICATION BY HIGH MASTS											
	33037	Supply, Erection, Testing and Commissioning of hot dipped galvanised, high mast system complete with all accessories, foundation, carriage arrangement suitable for LED luminaries symmetrically arranged & control gear boxes and lighting finial etc., twin dome aviation obstruction lights, control panel, multi core flexible copper conductor cable, connection to earthing system and fencing panel as per requirement:										
	(ii)	12 Meter high mast system, suitable for 6 to 9 nos luminaires.	Job	2	₹	2,62,390.00	₹	43,509.00	₹	5,24,780.00	₹	87,018.00
	SECTION -	O (Misc. Items)								·		
	33059	Supply, Installation, Testing & Commissioning of 15W LED Solar Street light system with 6/7 m pole GI complete with all accessories as per RDSO specifications RDSO/PE /SPEC /PS/0093-2008 (Rev.0) Amend-3 or latest.	No	60	₹	58,783.00	₹	4,218.00	₹	35,26,980.00	₹	2,53,080.00
					•	TOTAL			₹	64,42,604.00	₹	4,77,017.76
				•		TOTAL(SI	JPPI	LY + ERECTION)	₹	, ,		69,19,621.76

	SITE FACILITIES-EL	ECTRICA	L WORK	(S		
SL NO	Description	QTY	UNIT	RATE	AMOUNT	REFERENCE
1	Providing Road Vehicle mentioned below for the use of Engineer/Employer as per the Conditions mentioned in Clause 3.4.2 & 3.4.3 of Chapter 3 (Site Facilities for the Employer and the Engineer) of Section 5 Work's Requirement) of Tender Documents. Note: The provisions of clause 12.3.1 (a) (ii) of Section 6 (GCC) of the Contract shall not be applicable for appropriateness of new rate for this item.					
а	BOLERO, SCORPIO, ERTIGA, MARAZZO or similar	12	Vehicle months	63638.86	763666.31	RVNL BOQ
b	Extra for running and maintenance of every additional km over and above 4000 kms as specified in item 9003 (b)	100	Per Km	13.78125	1378.125	RVNL BOQ
		Total	765044.44			



Detailed Project Report of Giddi Railway





	Abstract of S&T Engineering Works of Giddi Railway Siding							
Sr. No.	Description of Schedule	Price in Rs						
1	S&T Works	7,95,88,677.00						
2	SITE FACILITIES	7,65,044.44						
	TOTAL	8,03,53,721.44						

	SIGNALLING & TELECOMMUN	NICATIO	N ESTIM	ATE_	
S.No	Description Schedule -A- Supply	Unit	Qty	Rate in Rs.	Amount in Rs.
	EI-SUPPLY Supply of Electronic Interlocking system RDSO Specfn No: RDSO/SPN/192/2005	Set	1	₹ 3,80,00,000.00	₹ 3,80,00,000.00
2	Supply of Panel Processor for above Electronic Interlocking along with 5% spares, wherever required.	Nos.	1	₹ 15,00,000.00	₹ 15,00,000.00
3	Incremental rate for signaling functions in EI SYSTEM over and above 125 functions	Per function	70	₹ 1,00,000.00	₹ 70,00,000.00
	Supply of portable work station to run along with EI configuration tools, data inputs, simulation and functional testing, diagnostics and trouble shooting and commissioning of EI system.	Nos.	1	₹ 1,50,000.00	₹ 1,50,000.00
	Supply of 24x7 type operation VDU Professional grade of standard make for operator with the following specification: 1) Monitor size - 55" Widescreen (138.8 cm diagonal) 2) LED: Back lit LED 3) Built-in speakers.	Nos.	1	₹ 38,000.00	₹ 38,000.00
	Supply of industrial grade embedded PC for operator VDU as per RDSO TAN No. STS/TAN/3007 Version 1.0 or latest with adequate storage memory to work in Hot standby mode.	Nos.	1	₹ 4,20,000.00	₹ 4,20,000.00
7	Supply & Installation of Single section Digital Axle Counter System.	Set	1	₹ 10,00,000.00	
11 12	AXLE COUNTER TOOL KIT Supply of High Availability Single section Digital Axle counter System complete with dual	Nos.	1	₹ 2,50,000.00	₹ 2,50,000.00
	sensor	Set	2	₹ 9,50,000.00	
13 14	Supply of Outdoor signaling cable - 2 core x 2.5 sq.mm Supply of Outdoor signaling cable - 12 core x 1.5 sq.mm	Kms.	1	₹ 1,00,000.00	
14 15	Supply of Outdoor signaling cable - 12 core x 1.5 sq.mm Supply of Outdoor signaling cable - 24 core x 1.5 sq.mm	Kms.	6 8	₹ 2,90,000.00 ₹ 3,80,000.00	, .,
16	Supply of Outdoor signaling cable - 30 core x 1.5 sq.mm	Kms.	1.8	₹ 4,50,000.00	
17	Supply of Aluminium conductor POWER Cable - 2 core x 25 sq.mm.	Kms.	6	₹ 1,20,000.00	
18	Supply of design set for circuit	Set	1	₹ 1,00,000.00	₹ 1,00,000.00
	Supply of Relay - QN1/QNA1	Nos.	70	₹ 5,000.00	₹ 3,50,000.00
20	Supply of Main Cable Termination rack complete	Rack	2	₹ 60,000.00	₹ 1,20,000.00
21	Supply of Relay Rack Assembly (Q style) complete with racks, ladders, indoor jumper wire , fuse & holder, power cables etc.	Rack	2	₹ 1,78,000.00	
22	Supply of Prewired crank handle cum key lock relay box	Rack	2	₹ 10,000.00	₹ 20,000.00
23	Supply of Non-deteriorating type fuse holders and fuse Links a) Fuse holder 20 Amps Capacity	Nos.	6	₹ 250.00	₹ - 1,500.00
\vdash	b) Fuse links 10 Amps	Nos.	6	₹ 50.00	₹ 300.00
\Box	c) Fuse links 2 Amps	Nos.	6	₹ 40.00	
	d) Fuse links 6 Amps	Nos.	6	₹ 50.00	₹ 300.00
24	Supply of Fuse Auto Changeover System (FACS)	Unit	1	₹ 30,000.00	₹ 30,000.00
25	Supply of Networked Data Logger to monitor 512 digital and 32 analog inputs.	Nos.	1	₹ 5,00,000.00	₹ 5,00,000.00
27	Supply of Block Proving with Digital Axle Counter using UFSBI & Block Panel for Double Line operation	Set	1	₹ 15,00,000.00	₹ 15,00,000.00
28	Supply of Integrated Power (IPS) SMPS based with battery set of 300 AH, hydrometer etc suitable for EI/PI/RRI.	Set	1	₹ 11,50,000.00	₹ 11,50,000.00
29	Supply of Single Phase Air Cooled, Silent DG set (CPCB compliant) of 15 KVA.	Nos.	2	₹ 5,00,000.00	₹ 10,00,000.00
30	Supply of Underground jelly filled , 0.9 mm dia, 6 Quad cable	KM	3	₹ 3,30,000.00	
31	Supply of PIJF cable of size: 05 PAIR X 0.63 MM	KM	0.3	₹ 70,000.00	
32	Supply of PIJF cable of size: 10 PAIR X 0.63 MM.	KM	1	₹ 90,000.00	
33 34	Supply of PIJF cable of size: 20 PAIR X 0.63 MM. Supply of 24 fibre armoured optic fibre cable	KM KM	3.8	₹ 1,30,000.00 ₹ 90,000.00	
35	Supply of SPLIT DWC pipe of size 200 mm outer dia & 175 mm inner dia.	Mtrs	70	₹ 90,000.00 ₹ 400.00	
20	Construct Columnical Incoming 400 and dis 'RI along with and along				-,
36 37	Supply of Galvanized Iron pipe 100 mm dia `B' class with end clamps Supply and jointing of Quad cables with theromoshrinkable jointing kits	Mtrs Nos.	18 7	₹ 1,500.00 ₹ 8,000.00	
	Supply of 2 aspect Colour light signal complete with Signal post, Cl base, ladder, platform, front staging, CLS unit 2 aspect, Anchor bolt, nut washer, Universal lock with key etc	Nos.	3	₹ 45,000.00	
39	Supply of 3/4 aspect Colour light signal complete with Signal post, CI base, ladder, platform, front staging, CLS unit 3/4 aspect,Anchor bolt, nut washer, Universal lock with key etc	Nos.	2	₹ 55,000.00	₹ 1,10,000.00
42	Supply of Dependant type Position light shunt signal unit along with OFF set bracket,Universal lock with key etc	Nos.	5	₹ 11,000.00	₹ 55,000.00
43	Supply of Calling on signal unit along with Universal lock with key etc	Nos.	1	₹ 4,500.00	₹ 4,500.00
44	Supply of LED signal unit for main signal For RED/YELLOW/GREEN aspect	Nos.	15	₹ 12,000.00	₹ 1,80,000.00
1	0 - 1 - (150 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Unit	5	₹ 8,000.00	
45	Supply of LED signal unit for junction type route indicator/ shunt/ calling-on.		-		,
45	Supply of DC Track circuit Equipment including battery charger, `B' type choke, adjustable Track Feed Resistance, QTA2 relay, QSPA1 relay, Fuse block, ND type	Set	25	₹ 55,000.00	₹ 13,75,000.00
45 46 47	Supply of DC Track circuit Equipment including battery charger, `B' type choke,		25 17	₹ 55,000.00 ₹ 1,00,000.00	
45 46 47	Supply of DC Track circuit Equipment including battery charger, 'B' type choke, adjustable Track Feed Resistance, QTA2 relay, QSPA1 relay, Fuse block, ND type fuses, 80 AH batteries etc. Electrical point operating machine - IRS Type,143 mm throw with lock & detector slides, Cable terminal box etc. with suitable ground connection Supply of Location box -Full Case complete with E Type lock, Hylam sheet, Universal	Set			₹ 17,00,000.00
45 46 47 48	Supply of DC Track circuit Equipment including battery charger, 'B' type choke, adjustable Track Feed Resistance, QTA2 relay, QSPA1 relay, Fuse block, ND type fuses, 80 AH batteries etc. Electrical point operating machine - IRS Type,143 mm throw with lock & detector slides, Cable terminal box etc. with suitable ground connection	Set Nos.	17	₹ 1,00,000.00	₹ 17,00,000.00 ₹ 7,70,000.00

	SIGNALLING & TELECOMMUN	IICATIO	N ESTIM	ATE			
S.No	Description Schedule -A- Supply	Unit	Qty		Rate in Rs.		Amount in Rs.
51	Supply of ARA Terminal block with links, 1 way,60 mm made of PBT	Nos.	10	₹	100.00	₹	1,000.0
	Supply of Office furniture set for relay room of Godrej make	Nos.	1	₹	60,000.00	₹	60,000.0
53	Supply of Electronic magneto telephone desk type	Nos.	5	₹	4,000.00	₹	20,000.0
54	Various types of markers as:-P/C/G/A/IB markers	Nos.	1	₹	1,000.00	₹	1,000.0
	Maintenance tool kit complete	Nos.	1	₹	1,00,000.00	₹	1,00,000.0
	Supply of 4 Wire way station Equipment with telephone Cable Route Locater with accessories, make RIDGID, model SR.20 or make C-Scope,	Nos.	5	₹	7,500.00	₹	37,500.0
	model CAT-XD or make 3M model - 2220M.or similar	Nos.	1	₹	2,50,000.00	₹	2,50,000.0
	Supply of Emergency socket Box with socket six pin flat	Nos.	3	₹	2,200.00	₹	6,600.0
59	Supply of Permananently lubricated HDPE pipe 40 / 33 mm dia. suitable for armoured 24 fibre OFC cable including its accessories	Kms.	5	₹	75,000.00	₹	3,75,000.0
60	Supply of FCPC To SCPC 10 meter long patch cords with o db adaptors	Nos.	18	₹	3,000.00	₹	54,000.0
	Blowing of armoured Optical Fiber Cable into duct by using blowing machine and associated works .	Kms.	1	₹	15,000.00	₹	15,000.0
	ELECTRONIC INTERLOCKING	G - EXECU	TION	1			
	Installation, Wiring, testing, Soldering of all El equipments, earthing of El Equipment, Relay Racks and Power Equipment etc. including supply power cable and Documents/Manuals etc.	EI	1	₹	7,00,000.00	₹	7,00,000.0
63	Training (at site and/or work) of Engineers/Officers	er man wee	1	₹	30,000.00	₹	30,000.0
64	Commissioning of Electronic Interlocking system	EI	1	₹	30,000.00	₹	30,000.0
65	Erection, Installation of Cable Termination Rack Assembly and Termination of cables	Rack	2	₹	10,000.00	₹	20,000.0
66	Installation of complete Relay Rack Assembly	Rack	2	₹	15,000.00	₹	30,000.00
67	Installation, Wiring ,testing and commissioning of Data loggers at station	Set	2	₹	30,000.00	₹	60,000.00
68	Installation, wiring, testing and commissioning of complete Integrated Power Supply (IPS) systems	Set	2	₹	2,30,000.00	₹	4,60,000.00
69	Installation and Commissioning of Single Phase Diesel Generator Set.	Nos.	1	₹	40,000.00	₹	40,000.0
70	Excavation of trenches at the depth of 1.0 Mtr. deep and 300 mm wide and back filling the trench after laying of cable along with supply and fixing of Cable route marker.	KM	8	₹	1,20,000.00	₹	9,60,000.00
71	Laying of signaling / power / telecom / quad/OFC cable of various sizes in trench and pipes.	KM	20	₹	7,000.00	₹	1,40,000.00
74	Excavation of pit, casting & plastering of concrete foundation for C.L.Signal and for signal ladder, Erection and wiring of complete signals along with supply of Signal number plate, wiring material etc.	Nos.	8	₹	20,000.00	₹	1,60,000.00
	Excavation of pit, casting & plastering of concrete foundation for shunt signal, erection and wiring of complete signals along with supply of Signal number plate, wiring material etc.	Nos.	10	₹	5,500.00	₹	55,000.00
	Excavation of pit, casting of concrete foundations for Location Box-Single Case, erection of location box	Nos.	17	₹	12,500.00	₹	2,12,500.00
	Excavation of pit, casting of concrete foundations for Location Box-Half Case, erection of location box	Nos.	25	₹	8,500.00	₹	2,12,500.0
78	Supply and Installation of various boards like BSLB/GWB/SLB boards etc	Nos.	25	₹	20,000.00	₹	5,00,000.0
79	Supply of Earth electrode & Installation and connection of earth with equipments	Nos.	10	₹	4,000.00	₹	40,000.0
80	Installation of emergency socket box including socket on the rail post in the section	Nos.	10	₹	4,500.00	₹	45,000.0
81	Supply and installation of ELD (12 CHANNEL)	Nos.	1	₹	1,70,000.00	₹	1,70,000.0
	<u>Telecom</u>						
	FOIS Connectivity	set	1	₹	25,00,000.00	₹	25,00,000.0
	BSNL/Railway phone	Nos	5	₹	5,000.00	₹	25,000.0
	Fax machine	Nos	1	₹	15,000.00		15,000.0
	Walkie Talkie -5 Watts -GP 328	Nos	6	₹	20,000.00	₹	1,20,000.0
	Misellaneous Total	LS	1	₹	2,00,000.00	₹	2,00,000.0 7,57,98,740. 0
	FINAL COST			1		_	1,51,50,140.0
	Cost of Works					₹	7,57,98,740.0
	Freight & incidental charges 5%					₹	37,89,937.0
	TOTAL					₹	7,95,88,677.0
	Amount in Lakhs (Rs.)					₹	79.5
	Amount in Crores (Rs.)					₹	7.9

	SITE	FACILIT	TES			
SL NO	Description	QTY	UNIT	RATE	AMOUNT	REFERENCE
1	Providing Road Vehicle mentioned below for the use of Engineer/Employer as per the Conditions mentioned in Clause 3.4.2 & 3.4.3 of Chapter 3 (Site Facilities for the Employer and the Engineer) of Section 5 Work's Requirement) of Tender Documents. Note: The provisions of clause 12.3.1 (a) (ii) of Section 6 (GCC) of the Contract shall not be applicable for appropriateness of new rate for this item.					
а	BOLERO, SCORPIO, ERTIGA, MARAZZO or similar	12	Vehicle months	63638.86	763666.3125	RVNL BOQ
b	Extra for running and maintenance of every additional km over and above 4000 kms as specified in item 9003 (b)	100	Per Km	13.78125	1378.125	RVNL BOQ
		765044.44				

Break-up of Basic Cost & DPR Cost is as follows:

Particulars	Rs in Lakh
Civil Engineering	1,640.99
Signal Engineering & Telecommunication	803.54
Electrical Engineering (TRD + Spares)	209.54
Electrical Engineering (General Electrifications)	203.63
Total Cost of Civil, S&T & Electrical Works (Basic Cost)	2,857.70
Labour Welfare Cess (1% of Total Civil, S&T, & Electrical Works)	28.58
Total Project Cost including Labour Welfare Cess	2,886.28
Environmental Cess @1% of above cost	28.86
Total Project Cost including Labour Welfare Cess and Environment Cess	2,915.14
GST on Total Basic Cost (Civil, S&T, and Electrical Works @ 18%)	514.39
Total Project Cost including Labour Welfare Cess, and Environment Cess, and GST	3,429.53
PMC Fee @ 5.75 of Total Basic Cost	164.32
GST on PMC Fee	29.58
Total PMC Cost	193.90
Total Project Cost including Labour Welfare Cess, and Environment Cess, and GST (DPR Co	ost) 3,623.43