



इरकॉन इन्टरनेशनल लिमिटेड

नवरत्न कम्पनी
(भारत सरकार का उपक्रम)

IRCON INTERNATIONAL LIMITED

NAVRATNA COMPANY
(A Govt. of India Undertaking)



SIVOK - RANGPO NEW BG RAIL LINE PROJECT

Project Office : Block - C, 2nd Floor, P.C. Mittal Bus Terminus, P.O. Sevoke Road, Siliguri - 734001
Dist. Darjeeling (W.B.), Tel. No. 0353-2999659, E-mail : 2046.nfr-srrp@ircon.org

(Letter of Acceptance)

NO. IRCON/2046/NFR-SRRP/CIVIL/261/Vol-06/1061

Date: 21/06/2025

To,

M/s Narayan Kumar Infrastructure Pvt. Ltd.,

1, Crooked Lane, Room No. 205,

2nd Floor, Kolkata-700069

E-mail: tenders@nkinfrastructure.in

Mobile No. +91 9830378285

Sub: Construction of one Integrated Sub Station 132KVA, Office building, Water supply arrangements include Intake well, pump house, Water rising main, Water treatment plant, Clear water reservoir, Overhead reservoirs at Rangpo, 2nos. Electrical Substations (11/0.440KV) at T-14 portals P1 & P2 and Pump stations at Tunnel Portals T-9, T-11, T-13, T-14 and other ancillary works in connection with Sivok Rangpo Rail Line Project- **Letter of Acceptance**

Ref: 01. IRCON/2046/NFR-SRRP/ISS etc_Water Supply/261_ dated 11.03.2025

02. Corrigendum No. 01 dated 29.03.2025

03. Corrigendum No. 02 dated 08.04.2025

04. Corrigendum No. 03 dated 11.04.2025

05. Your Technical bid opened on dated 01.05.2025 and financial bid opened on dated 19.06.2025

06. Your forwarding letter no. NKIPL/2025-26/IRCON/14042025/01 dated 14.04.2025

With reference to above, this is to inform you that your offer for the subject work for "Construction of one Integrated Sub Station 132KVA, Office building, Water supply arrangements include Intake well, pump house, Water rising main, Water treatment plant, Clear water reservoir, Overhead reservoirs at Rangpo, 2nos. Electrical Substations (11/0.440KV) at T-14 portals P1 & P2 and Pump stations at Tunnel Portals T-9, T-11, T-13, T-14 and other ancillary works in connection with Sivok Rangpo Rail Line Project" has been accepted by Competent Authority at a total cost of Rs. **51,80,11,056.28/-** including GST @ 18%. The summary of BOQ accepted by the competent authority is enclosed herewith at Annexure-A



1. SCOPE OF WORK:

The scope of work shall be read as mentioned under Clause No. 1.3.6 of Special Conditions of Contract.

2. PAYMENT TERMS:

The payment will be released as per clause no. 61 of Special Condition of Contract.

3. QUANTITY VARIATION

The quantities of items shown in the Bill of Quantities are approximate and liable to vary during the actual execution of the work. The Contractor shall be bound to carry out and complete the stipulated work, irrespective of the variations in individual items, specified in the Bill of Quantities. Such variations in quantities shall be paid for in the manner laid down under clause no. 46A of Indian Railway GCC April 2022 updated with correction slips issued up to date of Inviting tender.

4. Taxes and duties:

The quoted rates shall include all the taxes, duties etc. income tax and Trade Tax on works contract shall be deducted from the payments to the contractors as per prevailing tariff for which necessary TDS Certificate shall be issued. The taxes and duties shall be dealt under clause no. 61.12 of Special Condition of Contract.

5. Completion Period

The work is required to be completed within a continuous period of **14 months** including monsoon period from the date of issue of letter of acceptance. The work has to be executed in co-ordination with other agencies working on or near the project.

6. Defect liability period:

Defect liability Period shall be dealt as per clause no. 74 of Special Condition of Contract. You have to maintain, rectify and make good at his own cost any defect / deficiencies, which may develop in the work or as notified by the Engineer during Defect Liability Period of **12 months** from the certified date of completion. However, maintenance during Defect Liability Period shall not include day to day upkeep, cleaning, custody and security of the work. Any defect arising due to defective construction / material / workmanship in any structure(s) during the period(s) specified above and due to causes enumerated above, the contractor shall rectify the same at no extra cost.

7. Insurance:

As per the clause no. 06 of Special Condition of Contract, the agency has to obtain contractors All Risk policy for the works in the joint name of IRCON & agency and other policies to be obtained by the agency as stipulated in tender document.

8. Performance Security & Retention money:

Performance Security & Retention money shall be dealt as per clause no. 5.1 and 5.3 of Special Condition of Contract respectively.

As per sub-clause no. 5.1(ii) of Special Condition of Contract, **Performance Security of Rs. 2,59,00,600/- (Rupees Two Crore fifty nine Lakh Six Hundred Only) [@ 5% of Contract value i.e. Rs. 51,80,11,056.28/-]** is to be submitted within 21 days from date of issue of Letter of Acceptance as per Clause-5.1(v) of Special Condition of Contract.

9. Contract Agreement:

In terms of clause no. 13 of Special Condition of Contract, you will enter into and execute the contract agreement within 28 days from the date of issue of this letter.

10. All the terms & conditions will remain same as per tender document. This letter of acceptance along with your submitted offer shall constitute a legal and binding contract between **IRCON International Limited** and **M/s Narayan Kumar Infrastructure Pvt. Ltd.**, till such time the formal contract agreement is signed.

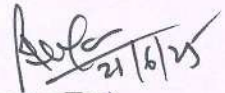
11. Conditions mentioned above in this LOA are a brief reference of the terms of Tender document. Detailed Terms & conditions other than above shall also be as per NIT / Tender document & corrigendum, which shall be an integral part of this contract and shall be binding on you.

This letter of acceptance is being sent in duplicate. One copy may please be signed, stamped and returned to this office as a token of your unconditional acceptance.

Thanking You,

Encl: Bill of Quantity- Annexure-A

For & on behalf of
IRCON International Limited


(Renya Ete)

Chief General Manager/PH/Pr. Co-Ordinator

Copy to:

1. ED/Projects - for kind information please.
2. AGM/PH/Sivok-I - for kind information please.
3. CGM/Fin/SRRP - for kind information please.

मुख्य महाप्रबंधक / Chief General Manager
इरकॉन इंटरनेशनल लिमिटेड
IRCON INTERNATIONAL LTD.
सेवक रेंगपो नई बड़ी रेल लाइन परियोजना
Sivok Rangpo New BG Rail Line Project

WATER SUPPLY SYSTEM, WATER TREATMENT PLANT			
Sr. No.	SOR/Non SOR	BOQ Schedule no	Amount
1	SOR	Schedule 'A' Earth work	2,82,97,264.63
2	Non SOR	Schedule-A1 Earth work	1,13,28,880.00
3	SOR	Schedule-B "Concrete Work"	9,05,20,829.98
4	SOR	Schedule-C "Masonry and Cladding Work"	1,95,72,022.72
5	SOR	Schedule-D "Door and Window Works"	1,32,74,863.98
6	SOR	Schedule-E "Steel Work"	1,12,77,956.43
7	Non SOR	Schedule-E1 "Reinforcement Steel Work"	6,11,41,151.20
8	SOR	Schedule-F "Flooring Work "	1,29,49,253.89
9	SOR	Schedule-G "Roofing Work"	33,18,420.06
10	SOR	Schedule-H "Finishing Work"	1,19,03,819.37
11	SOR	Schedule-I "Road Work"	6,87,18,064.84
12	Non SOR	Schedule-J "Slope Protection works and other civil works"	2,08,01,171.52
13	SOR	Schedule-K "Water supply and Sanitary Work"	1,62,82,691.85
14	SOR	Schedule-L "Electrification Works"	1,13,95,652.24
15	Non SOR	Schedule-M "Other Electrification Work"	1,13,53,817.16
16	SOR	Schedule-N "Miscellaneous E&M Works"	1,38,84,066.38
17	Non SOR	Schedule-O "Miscellaneous E&M Works"	2,47,49,700.22
18	Non SOR	Schedule-P "PLC, SCADA MONITORING SYSTEM & INSTRUMENTATION"	1,08,14,589.09
19	SOR	Schedule-Q "Unforeseen Items Schedule"	2,10,00,000.00
		Total of all Sch.(i)	46,25,84,215.56
		Add Rate quoted by agency, (-)5.10%(below)(ii)	-2,35,91,794.99
		Total after add rate quoted by agency(i+ii)	43,89,92,420.57
		Add 18% GST (iii)	7,90,18,635.71
		Total of all Schedules A to Q (i+ii+iii)	51,80,11,056.28

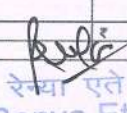

रेन्या एते
Renya Ete
 मुख्य महाप्रबंधक / Chief General Manager(PH-Rangpo)
 इरकॉन इंटरनेशनल लिमिटेड
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 Sivok Rangpo New BG Rail Line Project

BILL OF QUANTITIES

Construction of ISS Building, Water supply & ancillary works
Sivok-Rangpo New BG Rail Line Project

Financial Bid
Bill of Quantity

Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
Sch. A	Earth Work (SOR)					
A.1	DSR 2023 2.6	Earth work in excavation by mechanical means (Hydraulic excavator/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in charge.				
A.1.1	DSR 2023, 2.6.1	All kinds of soil	cum	25,731	127.85	32,89,708.35
A.2	DSR 2023, 2.7	Earth work in excavation by mechanical means (Hydraulic excavator/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in charge.				
A.2.1	DSR-2023 2.7.1	Ordinary Rock	cum	16,414	359.36	58,98,391.30
A.2.2	DSR-2023 2.7.3	Hard Rock	cum	8,422	1181.62	99,52,076.29
A.3		Earth work in excavation by mechanical means (Hydraulic excavator/manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, for all lift, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
A.3.1	DSR-2023 2.8.1	All kinds of soil.	cum	840	187.50	1,57,500.00
A.4	DSR-2023 2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and for all lift.	cum	11,420	141.18	16,12,275.60
A.5	DSR-2023 2.26	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.				
A.5.1	DSR-2023 2.26.1	All kind of soil.	cum	18,250	91.33	16,66,772.50
A.6	DSR-2023 2.27	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	cum	646	1529.73	9,88,358.55
A.7	DSR-2023 2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	sqm	1,320	12.67	16,724.40
A.8	DSR 2023, 2.34.1	Supplying chemical emulsion in sealed containers including delivery as specified. Chlorpyrifos emulsifiable concentrate of 20%	Lit	3,025	193.58	585579.50
A.9	DSR 2023, 2.35.3.1	Diluting and injecting chemical emulsion for pre-constructional anti-termite treatment (excluding the cost of chemical emulsion) :Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 : 2 (1 cement : 2 Coarse sand) to match the existing floor :With Chlorpyrifos/Lindane B.C. 20% with 1% concentration.	cum	1,210	255.67	309360.70
A.10	DSR 2023, 2.16.3	Close timbering in trenches including strutting, shoring and packing cavities (wherever required) complete. (Measurements to be taken of the face area timbered). Depth exceeding 3 m but not exceeding 4.5 m	Sqm	1,200	156.39	187668.00
A.11	DSR-2023 2.10	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :				
A.11.1	DSR-23 2.10.1	All kinds of soil				
A.11.1.1	DSR-23 2.10.1.2	Pipes, cables etc. exceeding 80 mm dia, but not exceeding 300 mm dia	m	266	290.39	77,243.74
A.12	DSR-2023 2.13	Excavating trenches of required width for pipes, cables, etc, including excavation for sockets, depth up to 1.5 m, including getting out the excavated materials, returning the soil as required in layers not exceeding 20 cm in depth, including consolidating each deposited layers by ramming, watering etc., stacking serviceable material for measurements and disposal of unserviceable material as directed, within a lead of 50m :				
A.12.1	DSR-2023 2.13.1	Ordinary rock				
A.12.1.1	DSR-2023 2.13.1.2	Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia.	m	3,970	823.49	32,69,255.30
A.13	DSR-2023 2.35	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 : 2 (1 cement : 2 Coarse sand) to match the existing floor :				
A.13.1	DSR-2023 2.35.3.1	With Chlorpyrifos/Lindane B.C. 20% with 1% concentration.	cum	1,120	255.67	2,86,350.40
Sub Total of Schedule-A (SOR)						₹ 2,82,97,264.63
Schedule-A1	Non Schedule (Earthwork)					
A1-1	Non SOR	Extra for Lead of earth work above initial lead of 50m, in all kinds of soils and rocks:				
A1-1.1	Non SOR	For every 50m or part thereof- lead over 50m and upto 150m	cum	1,41,000	16.73	23,58,930.00
A1-1.2	Non SOR	For every 50m or part thereof- lead over 150m and upto 500m	cum	1,41,000	13.15	18,54,150.00
A1-1.3	Non SOR	Extra-over for transportation of soil from excavation in open areas for distances from point of excavation to the center of gravity of muck deposits in excess of 500m single(one way distance). Measurement and payment will be per cum per km(cumxkm). Volumes in cum shall be determined for materials in their original solid states. Example: Distance from point of excavation to center of gravity of muck deposit is 6.0km. The quantity excavated is 100 cubic meters. Payment under this item is therefore for 6.0 km-0.50 km=5.5 times of 100 cum. Extra payment would be for 550 cum Km	cum/km	2,35,000	30.28	71,15,800.00
Sub Total of Schedule-A1 (Non SOR)						₹ 1,13,28,880.00
Schedule-B	Concrete Work					


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 Sivok Rangpo New BG Rail Line Project

Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
B.1	DSR-2023 4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
B.1.1	DSR-2023 4.1.2	1:1½:3 (1 cement : 1½ coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	cum	32	6007.86	1,92,251.52
B.1.2	DSR-2023 4.1.3	1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	cum	409	5674.83	23,21,005.47
B.1.3	DSR-2023 4.1.6	1:3:6 (1 cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 40 mm nominal size derived from natural sources)	cum	486	5170.81	25,13,013.66
B.2	DSR-2023 4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 12.5mm nominal size derived from natural sources)	sqm	590	295.93	1,74,598.70
B.3	DSR-2023 4.12	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification	per bag of 50 kg cement	1,100	13.08	14,388.00
B.4	DSR-2023 5.9	Centering and shuttering including strutting, propping etc. and removal of form for				
B.4.1	DSR-2023 5.9.1	Foundations, footings, bases of columns, etc. for mass concrete	sqm	4,996	282.46	14,11,170.16
B.4.2	DSR-2023 5.9.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	sqm	5,299	606.85	32,15,443.27
B.4.3	DSR-2023 5.9.3	Suspended floors, roofs, landings, balconies and access platform	sqm	7,470	667.90	49,89,413.37
B.4.4	DSR-2023 5.9.5	Lintels, beams, plinth beams, girders, bressomers and cantilevers	sqm	8,650	530.42	45,88,154.22
B.4.5	DSR-2023 5.9.6	Columns, Piers, Abutments, Posts and Struts	sqm	6,561	692.41	45,42,645.82
B.4.6	DSR-2023 5.9.7	Stairs, (excluding landings) except spiral-staircases	sqm	406	550.99	2,23,773.57
B.4.7	DSR-2023 5.9.16	Edges of slabs and breaks in floors and walls				
B.4.7.1	DSR-2023 5.9.16.1	Under 20 cm wide	sqm	310	150.22	46,568.20
B.5	DSR-2023 5.9.19	Weather shade, Chajjas, corbels etc., including edges	sqm	130	685.07	89,059.10
B.6	DSR-2023 5.9.8	Spiral staircases (including landing)	sqm	300	658.32	1,97,496.00
B.7	DSR-2023 5.9.9	Arches, domes, vaults up to 6 m span	sqm	840	1776.49	14,92,251.60
B.8	DSR-2023 5.9.10	Extra for arches, domes, vaults exceeding 6 m span	sqm	450	501.48	2,25,666.00
B.9	DSR-2023 5.11.1	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and dewatering at all levels, over a height of 3.5m, for every additional height of 1m or part thereof (Plan area to be measured) : suspended floors, roofs, landings, beams and balconies (Plan area to be measured)	sqm	400	276.81	1,10,724.00
B.10	DSR-2023 5.16	Providing, hoisting and fixing above plinth level up to floor five level precast reinforced cement concrete in shelves, including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering, shuttering and finishing with neat cement punning on exposed surfaces but, excluding the cost of reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size):	cum	30	14662.15	4,39,864.50
B.11	DSR-2023 5.18	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 6mm nominal size), reinforced with 16 mm dia mild steel wire, including centering and shuttering, roughening, cleaning, fixing and finishing in cement mortar 1:3 (1 cement : 3 fine sand) etc. complete, excluding plastering of the jambs, sills and soffits.				
B.11.1	DSR-2023 5.18.1	50 mm thick	sqm	20	1359.12	27,182.40
B.12	DSR-2023 5.33	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland / Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all loads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge, for the following grades of concrete : Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.				
B.12.1	DSR-2023 5.33.1	All works upto plinth level:				
B.12.1.1	DSR-2023 5.33.1.1	Concrete of M25 grade with minimum cement content of 330 kg/cum	cum	1,347	6846.21	92,21,844.87
B.12.1.2	DSR-2023 5.33.1.2	Concrete of M30 grade with minimum cement content of 350 kg/cum	cum	1,516	6954.94	1,05,43,689.04
B.12.1.3	DSR-2023 5.33.2	All works above plinth level upto floor V level:				
B.12.1.4	DSR-2023 5.33.2.1	Concrete of M25 grade with minimum cement content of 330 kg/cum	cum	3,049	7102.38	2,16,55,156.62
B.12.1.5	DSR-2023 5.33.2.2	Concrete of M30 grade with minimum cement content of 350 kg/cum	cum	2,934	7211.11	2,11,57,396.74
B.13	DSR-2023 4.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor, etc., up to floor five level, excluding the cost of centering, shuttering and finishing :				
B.13.1	DSR-2023 4.2.2	1:1½:3 (1 cement : 1½ coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	cum	10	8540.90	85,409.00
B.14	DSR-2023 5.38	Extra for R.C.C./B.M.C./R.M.C. work above floor V level for each four floors or part thereof	Cum	540	256.17	1,38,331.80
B.15	DSR-2023 5.35	Add for using extra cement in the items of design mix over and above the specified cement content therein	quintal	1,388	528.34	7,33,388.75
B.16	DSR 2023, 4.13	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with piece of cloth lightly soaked in kerosene oil.	Sqm	675	120.52	81,351.00

Renya Ete

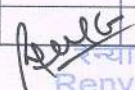
मुख्य महाप्रबंधक / Chief General Manager/PH-Rangpo
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Sivok Rangpo New BG Rail Line Project

Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
B.17	DSR-2023, 4.17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth	Sqm	145	617.88	89,592.60
Sub Total of Schedule-B (SOR)						₹ 9,05,20,829.98
Schedule-C (Schedule Item)	Masonry and Cladding Work					
C.1	DSR-2023 6.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
C.1.1	DSR-2023 6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	134	5137.32	6,88,400.88
C.2	DSR-2023 6.32	Brick work with clay flyash F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor five level in:				
C.2.1	DSR-2023 6.32.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	877	6551.11	57,45,323.47
C.3	DSR-2023 6.13	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				
C.3.1	DSR-2023 6.13.2	Cement mortar 1:4 (1 cement : 4 coarse sand)	sqm	8,060	926.69	74,69,121.40
C.4	DSR-2023 7.1	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) upto plinth level with:				
C.4.1	DSR-2023 7.1.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	186	5266.24	9,79,520.64
C.5	DSR-2023 7.2	Random rubble masonry with hard stone in superstructure above plinth level and upto floor five level, including leveling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) at window sills, ceiling level and the like				
C.5.1	DSR-2023 7.2.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	230	6681.04	15,36,639.20
C.6	DSR-2023 8.2	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.				
C.6.1	DSR-2023 8.2.2	Granite stone slab of colour black, Cherry/Ruby red				
C.6.1.1	DSR-2023 8.2.2.1	Area of slab upto 0.50 sqm	sqm	8	3899.31	31,194.48
C.6.1.2	DSR-2023 8.2.2.2	Area of slab over 0.50 sqm	sqm	41	3699.65	1,51,685.65
C.7	DSR-2023 8.3	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge				
C.7.1	DSR-2023 8.3.2	Granite work	metre	20	368.03	7,360.60
C.8	DSR-2023 8.4	Extra for fixing marble /granite stone, over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive, including cleaning etc. complete	metre	20	409.52	8,190.40
C.9	DSR-2023 8.5	Extra for providing opening of required size & shape for wash basin/kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	metre	4	704.95	2,819.80
C.10	DSR-2023 8.31	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	sqm	1,250	913.30	11,41,625.00
C.11	DSR-2023, 11.1	Brick on edge flooring with bricks of class designation 7.5 on a bed of 12 mm cement mortar, including filling the joints with same mortar, with common burnt clay non modular bricks:				
C.11.1	DSR-2023, 11.1.1	1:4 (1 cement : 4 coarse sand)	Sqm	2,180	830.34	18,10,141.20
Sub Total of Schedule-C(SOR)						₹ 1,95,72,022.72
Schedule-D	Door and Window Works					
D.1	DSR-2023 9.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately)				
D.1.1	DSR-2023 9.1.1	Second class teak wood	cum	3	102965.56	2,88,303.57
D.2	DSR-2023 10.30	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with:				
D.2.1	DSR-2023 10.30.1	4.0 mm thick glass panes	sqm	70	766.86	53,680.20
D.3	DSR-2023 9.21	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non- decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneer in vertical grains or cross bands and face veneers on both faces of shutters:				
D.3.1	DSR-2023 9.21.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sqm	38	1723.41	65,489.58
D.4	DSR-2023 9.47	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated bracket				
D.4.1	DSR-2023 9.47.1	20 mm dia (heavy type)	meter	20	126.05	2,521.00
D.5	DSR-2023 9.48	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.				
D.5.1	DSR-2023 9.48.2	Fired to openings /wooden frames with rawl plugs screws etc.	kg	7,620	171.68	13,08,201.60

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Bivok Rangpo New BG Rail Line Project

Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
D.6	DSR-2023 9.63	Providing and fixing ISI marked oxidised M.S. tower bolt black finish,(Barrel type) with necessary screws etc. complete (Copper oxidised as per IS 1378):				
D.6.1	DSR-2023 9.63.1	250x10 mm	each	32	60.43	1,933.76
D.7	DSR-2023 9.97	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. Complete:				
D.7.1	DSR-2023 9.97.3	200x10 mm	each	196	71.81	14,074.76
D.7.2	DSR-2023 9.97.4	150x10 mm	each	80	59.46	4,756.80
D.7.3	DSR-2023 9.97.5	100x10 mm	each	30	46.60	1,398.00
D.8	DSR-2023 9.96	Providing & fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade A C 10 as per IS: 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete :				
D.8.1	DSR-2023 9.96.2	250mmx16mm	each	42	187.71	7,883.82
D.9	DSR-2023 9.1	Providing and fixing aluminium handles, ISI marked, anodised (anodiccoating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. Complete:				
D.9.1	DSR-2023 9.100.1	125 mm	each	158	47.72	7,539.76
D.10	DSR-2023 9.101	Providing and fixing aluminium hanging floor door stopper, ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade with necessary screws etc. complete				
D.10.1	DSR-2023 9.101.1	Single Rubber stopper	each	123	28.52	3,507.96
D.11	DSR-2023 9.118	Providing and fixing to existing door frames.				
D.11.1	DSR-2023 9.118.1	24 mm thick factory made PVC door shutters made of styles and rails of a uPVC hollow section of size 59x24 mm and wall thickness 2 mm (± 0.2 mm) with built edging on both sides. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 20x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x24 mm and 2 mm (± 0.2 mm) wall thickness, fixed to the shutter styles by means of plastic/galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge. (For W.C. and bathroom door shutter)	sqm	2934	2138.73	62,75,033.82
D.12	DSR-2023 21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
D.12.1	DSR-2023 21.1.1.1	For fixed portion				
D.12.1.1	DSR-2023 21.1.1.1.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	kg	2,180	356.58	7,77,344.40
D.12.2	DSR-2023 21.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately):				
D.12.2.1	DSR-2023 21.1.2.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC-15)	kg	2,150	431.17	9,27,015.50
D.13	DSR-2023 21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / 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):				
D.13.1	DSR-2023 21.3.2	With float glass panes of 5 mm thickness (weight not less than 12.5 kg/sqm)	sqm	406	1084.22	4,40,193.32
D.14	DSR-2023 9.20	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters :				
D.14.1	DSR-2023 9.20.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screw	sqm	178	2864.56	5,09,891.68
D.15	DSR-2023 10.5	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.				
D.15.1	DSR-2023 10.5.2	Using flats 30x6mm for diagonal braces and central cross piece	sqm	27	4,587.90	1,23,873.30
D.16	DSR-2023 13.85	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content.				
D.16.1	DSR-2023 13.85.1	With ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ litre	sqm	15	58.01	870.15
D.17	DSR-2023 13.53	Painting on G.S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :				


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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
D.17.1	DSR-2023 13.53.1	New work (two or more coats) including a coat of approved steel primer but excluding a coat of mordant solution.	sqm	120	149.13	17,895.60
D.18	DSR 2023, 26.86	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid door/ window/ Ceosetory windows & other Frames/ Chowkhat comprising of virgin PVC polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed SS screws having minimum frame density of 750 kg/cum, screw withdrawal strength of 2200 N (Face) & 1100 N (Edge), minimum compressive strength of 58 N/mm2, modulus of elasticity 900 N/mm2 and resistance to spread of flame of Class A category with property of being termite/ borer proof, water/ moisture proof and fire retardant and fixed in position with M.S hold fast/ lugs/ SS dash fasteners of required dia and length complete as per direction of Engineer-In-Charge (M.S hold fast/ lugs or SS dash fasteners shall be paid for separately). Note: For WPC solid door/ window frames, minus 5mm tolerance in dimensions i.e depth and width of profile shall be acceptable. Variation in profile dimensions on plus side shall be acceptable but no extra payment on this account shall be made.				
D.18.1	DSR 2023, 26.86.7	Frame size 65 x 150 mm	Rm	395	1,350.42	5,33,415.90
D.19	DSR 2023, 9.9	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws.				
D.19.1	DSR 2023, 9.9.1	Kiln seasoned and chemically treated hollow wood				
D.19.1.1	DSR 2023, 9.9.2.1	35 mm thick	Sqm	600	2,906.61	17,43,966.00
D.20	DSR 2023, 9.11	Extra for providing heavy sheet float glass panes instead of ordinary float glass in glazed doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured)				
D.20.1	DSR 2023, 9.11.1	5.0 mm thick (weight not less than 12.50 kg per sqm) instead of 4 mm thick (weight not less than 10 kg per sqm)	Sqm	490	244.00	1,19,560.00
D.21	DSR 2023, 9.76	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.	Each	66	704.75	46,513.50
Sub Total of Schedule-D (SOR)						₹ 1,32,74,863.98
Schedule-E Steel work						
E.1	DSR-2023 10.1	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	kg	10,772	84.53	9,10,514.90
E.2	DSR-2023 10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	kg	26,150	96.30	25,18,245.00
E.3	DSR-2023 10.3	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2 mm and braced with flat iron diagonals 20x5 mm size, with top and bottom rail of T-iron 40x40x6 mm, with 40 mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer	Sqm	45	8239.87	3,70,794.15
E.4	DSR-2023 10.6	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters				
E.4.1	DSR-2023 10.6.1	80x1.25 mm M.S. laths with 1.25 mm thick top cover	sqm	220	2631.38	5,78,903.60
E.4.2	DSR-2023 10.7	providing and fixing ball bearing for rolling shutters	each	64	354.63	22,696.32
E.5	DSR-2023 10.16	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc. including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete				
E.5.1	DSR-2023 10.16.1	Hot finished welded type tubes	kg	11,320	140.02	15,85,026.40
E.6	DSR-2023 10.17	Providing and fixing M.S. fan clamp type I or II of 16 mm dia M.S. bar, bent to shape with hooked ends in R.C.C. slabs or beams during laying, including painting the exposed portion of loop, all as per standard design complete.	each	8	162.79	1,302.32
E.7	DSR-2023 10.18	Providing and fixing circular/ Hexagonal cast iron or M.S. sheet box for ceiling fan clamp, of internal dia 140 mm, 73 mm height, top lid of 1.5 mm thick M.S. sheet with its top surface hacked for proper bonding, top lid shall be screwed into the cast iron/ M.S. sheet box by means of 3.3 mm dia round headed screws, one lock at the corners. Clamp shall be made of 12 mm dia M.S. bar bent to shape as per standard drawing	each	8	158.93	1,271.44
E.8	DSR-2023 10.19	Providing and fixing mild steel round holding down bolts with nuts and washer plates complete.	kg	40	70.01	2,800.40
E.9	DSR-2023 10.2	Providing and fixing bolts including nuts and washers complete	kg	20	114.78	2,295.60
E.10	DSR-2023 10.25	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required				
E.10.1	DSR-2023 10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	kg	6,608	124.33	8,21,572.64
E.10.2	DSR-2023 10.25.1	In stringers, trends, landings etc. of stair cases, including use of chequered plate wherever required, all complete.	kg	4,340	101.92	4,42,332.80

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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
E.11	DSR-2023 10.28	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	kg	5,494	556.36	30,56,641.84
E.12	DSR-2023 10.15	Providing and fixing M.S. Tubular frames for doors, windows, ventilators and cupboard with rectangular/ L-Type sections, made of 1.60 mm thick M.S. Sheet, joints mitred, welded and grinded finish, with profiles of required size, including fixing of necessary butt hinges and crews and applying a priming coat of approved steel primer.				
E.12.1	DSR-2023 10.15.1	Fixing with 15x3 mm hags 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	kg	950	140.60	1,33,570.00
E.13	DSR-2023 10.11	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators, side /top /centre hung, with beading and all members such as F7D,F4B, K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, priming coat of approved steel primer, but excluding the cost of other fittings, glass panes complete all as per approved design, (sectional weight of only steel members shall be measured for payment).				
E.13.1	DSR-2023 10.11.1	Fixing with 15x3 mm hags 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	kg	3,462	108.06	3,74,103.72
E.14	DSR 2023, 10.4	Providing and fixing 1 mm thick M.S. sheet sliding-shutters, with frame and diagonal braces of 40x40x6 mm angle iron, 3 mm M.S. gusset plates at the junctions and corners, 25 mm dia pulley, 40x40x6 mm angle and T-iron guide at the top and bottom respectively, including applying a priming coat of approved steel primer.	sqm	50	5414.53	2,70,726.50
E.14	DSR 2023, 10.8	Extra for providing mechanical device chain and crank operation for operating rolling shutters				
E.14.1	DSR 2023, 10.8.2	Exceeding 16.80 sqm in area.	Sqm	190	974.52	1,85,158.80
Sub Total of Schedule-E (SOR)						₹ 1,12,77,956.43
Schedule-EI(Non Schedule)	Reinforcement Steel Work					
E1.1	NON-SOR	Supply of steel reinforcement of various diameters and grade i.e. Thermo-Mechanically Treated bars of grade Fe-500D or more at sites including all transportation and freight charges and all taxes, duties etc. with contractors men, material, tools & plants, equipments, machineries, testing, all lead & lifts, loading, unloading as per special conditions of contract and as directed by Engineer-in-Charge etc. Complete. Note:- Payment for supply of reinforcement steel shall be paid as per approved drawings and rates are inclusive all wastages.	kg	7,87,090	59.71	4,69,97,143.90
E1.2	NON-SOR	Cutting, straightening, hooking, bending, placing and binding in position reinforcement steel for all RCC works or for any other reinforcement steel works including supply and fixing of cover blocks whenever required as per approved drawings & specifications and as directed by Engineer-in-charge with contractors men, material, consumables, tools & plants, equipments, machineries, all lead & lifts, loading, unloading etc complete. The rate shall include cost of galvanised steel binding wire, handling, wastage etc.	kg	787090	17.97	1,41,44,007.30
Sub Total of Schedule-EI (Non SOR)						₹ 6,11,41,151.20
Schedule-F	Flooring Work					
F.1	DSR-2023 11.3	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.				
F.1.1	DSR-2023 11.3.1	40 mm thick with 20 mm nominal size stone aggregate	sqm	890	442.40	3,53,920.00
F.2	DSR-2023 11.4	52 mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, cost of nosing of steps etc. complete.	sqm	1,260	704.77	8,88,010.20
F.3	DSR-2023 11.7	Cement concrete pavement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), complete	cum	48	6191.03	2,97,169.44
F.4	DSR-2023 11.21	Providing and fixing 10 mm thick acid and/or alkali resistant tiles 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 as per the direction of Engineer-in-Charge.				
F.4.1	DSR-2023 11.21.1.1	In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand): Acid and alkali resistant tile	sqm	20	1251.98	25,039.60
F.4.2	DSR-2023 11.21.2.1	In dado/skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand): Acid and alkali resistant tile	sqm	20	1357.68	27,153.60
F.5	DSR-2023 11.23	Marble stone flooring with 18 mm thick marble stone, as per sample of marble approved by Engineer-in-charge, over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry, including rubbing and polishing complete with :				
F.5.1	DSR-2023 11.23.2	Raj Nagar plain	Sqm	18	1690.39	30,427.02

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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
F.6	DSR-2023 11.39	Providing and laying rectified Glazed Ceramic floor tiles of size 300x300 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in colours White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement: 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/sqm including grouting the joints with white cement and matching pigments etc., complete.	sqm	40	957.99	38,319.60
F.7	DSR-2023 11.41	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete.				
F.7.1	DSR-2023 11.41.2	Size of Tile 600x600 mm	sqm	2,800	1118.94	31,33,032.00
F.9	DSR-2023 11.46	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer) with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make in all colours & shade in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1cement: 3 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joint with white cement & matching pigments etc. complete.				
F.9.1	DSR-2023 11.46.2	Size of Tile 600x600 mm	sqm	200	1,338.38	2,67,676.00
F.10	DSR-2023 16.90	Providing and laying tactile tile (for vision impaired persons as per standards) of size 300x300x9.8mm having water absorption less than 0.5% and conforming to IS: 15622, of approved make in all colours and shades in outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1 cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	sqm	55	1,663.73	91,505.15
F.11	DSR-2023 11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :				
F.11.1	DSR-2023 11.26.1	25 mm thick.	sqm	2,590	1,606.54	41,60,938.60
F.12	DSR-2023 11.27	Kota Stone slab 20mm (average) thick in risers of steps , skirting, dado and pillars laid on 12mm (average) thick cement mortar 1:3 (1 cement:3 sand) and jointed with grey cement slurry mixed with pigment to match the shade including rubbing and polishing complete.	Sqm	70	1,941.71	1,35,919.70
F.13	DSR-2023 11.48	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge.				
F.13.1	DSR-2023 11.48.2	Size of Tile 600x600 mm	Sqm	1,500	254.84	3,82,260.00
F.14	DSR-2023 11.54	Providing and Fixing removable raised / false access flooring with system and its components of approved make for different plenum height with possible height adjustment upto 50mm , comprising of modular load bearing floor panels , supported on G.I rectangular stringer frame work and G.I Pedestal etc all complete , as per the architectural drawings , as specified and as directed by Engineer-in-charge consisting of A) Providing at required spacing to form modular framework, pedestals made out of GI tube of thickness minimum 2mm and 25mm outer diameter, fully welded on to the G.I Base plate of Size 100mm X 100mm X 3mm at the bottom of the pedestal tube , G.I pedestal head of size 75mmX75mmX3.5mm welded with GI fully threaded stud 16mm outer diameter with two GI Check nuts screwed on the stud for level adjustment upto 50mm looking nad stabilizing the pedestal head in position at the right required level. The Pedestal shall be tied to the subfloor (Base) Through base plate using epoxy based adhesive of approved make or the machine screw with rawl plug. B) Stringers system in all steel constructions hot dipped galvanised of rectangular size 570x20x30x.80 mm thick having holes at both ends for securing the stringers on the pedestal head using fully threaded screws ensuring maximum lateral stability in all directions , the grid formed by the pedestal and stringer assembly shall receive the floor panel, this system shall providev adequate solid, rigid support for access floor panel,the system shall provide a minimum clear uninterrupted clearance between the bottom of the floor for electrical conduits and wiring etc all complete as per the architectural drawings as specified and as directed by the Engineer-in-charge. C) Providing and fixing access floor panel 600x600x32mm medium grade filled steel anti static high pressure lamination of 80UH grade (F3800H). Access floor panel shall be steel welded construction with an enclosed bottom pan with uniform pattern of 64 hemispherical cones. The top and bottom plate3s of Steel Gauges, top 0.6mm and bottom 0.7mm fused spot welded together (minimum 64 welds in each dome and 20 welds along each flange). The Panel should be corrosionresist epoxy coated for lifetime rust protection and the cavityb formed by the bottom and top plate is filled with pyrogrip noncombustible Portland cementitious core mixed with light weight forming compound. The access floor shall be factory finished with Anti Static High Pressure laminate with Non warp technology upto 1mm thickness for superior adhesion and surface flatness within 0.75mm. The panel is to withstand a Concentrated load of 363kgs applied on area 25mm X25mm without collapse in the center of the panel which is placed on four steel blocks. The panels will withstand and uniformly distribute load (UDL) minimum 1250 kg/sqm and on impact load of 50Kgs all complete as per the approved manufactures specification and as per the direction of Engineer-in-charge. All Specificationj must be printed on the side ofb the panel to ensure the quality of the product.				

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Renya Ete
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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
F.14.1	DSR-2023 11.54.1	300mm Finished Floor Height.	Sqm	372	4,637.54	17,25,164.88
F.15	DSR-2023 11.55	Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.				
F.15.1	DSR-2023 11.55.1	Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	Sqm	530	2,627.77	13,92,718.10
Sub Total Schedule F (SOR)						₹ 1,29,49,253.89
Schedule-G	Roofing Work					
G.1	DSR-2023 12.41	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion,(i) Single socketed pipes.				
G.1.2	DSR-2023 12.41.2	110 mm diameter	metre	650	271.84	1,76,696.00
G.2	DSR-2023 12.42	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 10 mm gap for thermal expansion.				
G.2.1	DSR-2023 12.42.2	Single pushfit Coupler				
G.2.1.2	DSR-2023 12.42.2.2	110 mm	each	110	91.91	10,110.10
G.2.2	DSR-2023 12.42.3	Single tee with door				
G.2.2.2	DSR-2023 12.42.3.2	110x110x10 mm	each	104	168.66	17,540.64
G.2.3	DSR-2023 12.42.5	Bend 87.5°				
G.2.3.2	DSR-2023 12.42.5.2	110 mm bend	each	126	108.30	13,645.80
G.2.4	DSR-2023 12.42.6	Shoe (plain)				
G.2.4.2	DSR-2023 12.42.6.2	110 mm shoe	each	156	94.97	14,815.32
G.3	DSR-2023 12.5	Providing and fixing pre-coated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-Charge) of total coated thickness 0.50 mm (base metal of minimum 0.45 mm thickness with total coating thickness of 0.05mm) with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling/ self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	sqm	1,190	532.05	6,33,139.50
G.4	DSR-2023 12.51	Providing and fixing pre-coated galvanised steel sheet roofing accessories of total coated thickness 0.50 mm (base metal of minimum 0.45 mm thickness with total coating thickness of 0.05 mm) with Zinc coating 120 gram per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete:				
G.4.1	DSR-2023 12.51.1	Ridges plain (500-600mm)	metre	180	383.45	69,021.00
G.4.2	DSR-2023 12.51.6	Gutter (600 mm over all girth)	metre	330	946.25	3,12,262.50
G.5	DSR-2023 12.52	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x 1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.				
G.5.1	DSR-2023 12.52.1	GI Metal Ceiling Lay in plain Tegular edge Global white color tiles of size 595x595 mm, and 0.5 mm thick with 8 mm drop, made of G I sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending.	Sqm	480	1,569.18	7,53,206.40

Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
G.6	DSR-2023 12.6	Providing and fixing thermal insulation of ceiling (Under Deck Insulation) with Resin Bonded Rockwool conforming to IS:8183, density 48kg/m ³ 50mm thick, wrapped in 200G Virgin Polythene bags fixed to ceiling with metallic cleats (50x50x3mm) @60 cm wire mesh of 12.5mmx24gaige wire mesh for top most ceiling of building	Sqm	530	707.14	3,74,784.20
G.7	DSR-2023 12.53	Providing and fixing 15mm Thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture of size 595 X595mm in true horizontal level suspended on interlocking metal grid of hot dipped galvanised steel sections (galvanising at 120/sqm including at both sides consisting of main 'T' runner suitably spaced at joints to get required length and of size 24X38mm made from 0.3mm thick (minimum) sheet spaced, 1200mm center to center and cross 'T' of size 24X28mm made out of 0.33mm (Minimum) sheet spaced 1200mm spaced between main 'T' at 600 mm center to center to form a grid of 1200X600mm and secondary cross 'T' of length 600mm and size 24X28mm made of 0.33mm thick (Minimum) sheet to be interlocked at middle of the 1200X600mm panel to form grid of size 600x600mm, resting on periphery walls/partitions on a perimeter wall angle pre coated steel of size (24x24x3000mm made of 0.40mm Thick (minimum) sheet with the help of rawl plugs at 450mm center to center with 25mm long dry wall screws @230mm interval and laying 15mm thick densified edges calcium silicate ceiling tiles of approved texture in grid, including cutting/making, opening for services like diffusers, grills, light, fittings, fixtures smoke detectors etc. wherever required. Main 'T' runners to be suspended from ceiling using G.I slotted cleats of size 25x35x16mm fixed to the ceiling with 12.5mm dia and 50mm long dash fasteners, 4mm G.I adjustable rods with galvanised steel level clips of size 80x30x0.8mm spaced at 1200mm center to center along main 'T' bottom exposed with 24mm of all T-sections shall be pre-painted with polyster based paint for all heights as per specifications, drawings and as per directed by the Engineer-in-charge. Note:- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be exposed frames opening (cutouts) having area less than 0.30sqm. The calcium silicate ceiling tile shall have NRC value of 0.50mm (Minimum) light reflection > 85% non-combustible as per B.S 476 part IV, 100% humidity resistance and also having thermal conductivity <0.043 w/mK.	Sqm	530.00	1,779.62	9,43,198.60
Sub Total Schedule G (SOR)						33,18,420.06
Schedule-H (SOR) Finishing Work						
H.1	DSR-2023 13.1	12 mm cement plaster of mix :				
H.1.1	DSR-2023 13.1.1	1.4 (1 cement : 4 fine sand)	sqm	4,225	249.98	10,56,165.50
H.2	DSR-2023 13.4	12 mm cement plaster of mix :				
H.2.1	DSR-2023 13.4.1	1.4 (1 cement : 4 coarse sand)	sqm	935	257.39	2,40,659.65
H.3	DSR-2023 13.5	15 mm cement plaster on the rough side of single or half brick wall of mix				
H.3.1	DSR-2023 13.5.2	1.6 (1 cement : 6 coarse sand)	sqm	3,150	284.77	8,97,025.50
H.3.2	DSR-2023 13.2.1	1.4 (1 cement : 4 fine sand)	sqm	3,970	329.39	13,07,678.30
H.4	DSR-2023 13.16	6 mm cement plaster of mix :				
H.4.1	DSR-2023 13.16.1	1.3 (1 cement : 3 fine sand)	sqm	3,200	247.75	7,92,800.00
H.4.2	DSR-2023 13.18	Neat cement punning	sqm	90	57.59	5,183.10
H.5	DSR-2023 13.41	Distemper with oil bound washable distemper of approved brand and manufacture to give an even shade:				
H.5.1	DSR-2023 13.41.1	new work (Two or more coats) over and including water thinnable priming coat with cement primer	sqm	5,340	133.72	7,14,064.80
H.6	DSR-2023 13.44.1	Finishing walls with water proofing cement paint of required shade New work (Two or more coats applied @ 3.84 kg/10 sqm)	sqm	12,922	84.21	10,88,161.62
H.7	DSR-2023 13.46	Finishing walls with Acrylic Smooth exterior paint of required shade:				
H.7.1	DSR-2023 13.46.1	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 0.90kg/10 sqm)	sqm	2,400	115.68	2,77,632.00
H.8	DSR-2023 13.48	Finishing with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications				
H.8.1	DSR-2023 13.48.1	Two or more coats applied on walls @ 1.25 ltr/10 sqm over and including one coat of special primer applied @0.75 Ltr/10 Sqm.	sqm	7,260	139.52	10,12,915.20
H.8.2	DSR-2023 13.48.2	Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @0.75 ltr/10 sqm of approved brand and manufacture	sqm	35	126.95	4,443.25
H.8.3	DSR-2023 13.48.3	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/10 sqm of approved brand and manufacture.	sqm	1,115	122.95	1,37,089.25
H.9	DSR-2023 13.50	Applying Priming Coat:				
H.9.1	DSR-2023 13.50.3	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron / steel works	sqm	450	48.55	21,847.50
H.10	DSR-2023 13.8	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	sqm	4,200	112.40	4,72,080.00


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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
H.11	DSR-2023 22.23	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI212.3R-2010 i.e. by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage.				
H.11.1	DSR-2023 22.23.1	For vertical surface two coats @ 0.70 kg per sqm	sqm	200	340.63	68,126.00
H.11.2	DSR-2023 22.23.2	For horizontal surface one coat @ 1.10 kg per sqm	sqm	400	261.32	1,04,528.00
H.12	DSR-2023 13.9	Cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement.				
H.12.1	DSR-2023 13.9.1	12 mm cement plaster	sqm	487	370.70	1,80,530.90
H.13	DSR-2023 22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations (a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. (b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs. (c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. (d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement : 4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. (e) The whole terrace so finished shall be flooded with water for minimum period of two weeks for curing and for final test. "Allabove operations to be done in order and as directed and specified by the Engineer-in-Charge :				
H.13.1	DSR-2023 22.7.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	Sqm	2,000	1389.13	27,78,260.00
H.14	DSR-2023 13.45	Finishing walls with textured exterior paint of required shade :				
H.14.1	DSR-2023 13.45.1	New work (Two or more coats applied @ 3.28 lit/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10	Sqm	3,500	184.38	6,45,330.00
H.15	DSR-2023 13.58	Providing and applying two coats of fire retardant paint on cleaned wood / ply surface @ 3.5 sqm per litre per coat including preparation of base surface as per recommendations of manufacturer to make the surface fire retardant.	Sqm	360	275.83	99,298.80
Sub Total Schedule- H (SOR)						₹ 1,19,03,819.37
Schedule-I	Road Work					
I.1	DSR-2023 16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earthwith lead upto 50 metres	sqm	5,000	157.68	7,88,400.00
I.2	DSR-2023 16.2	Extra for compaction of earth work in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (proctor density).	cum	340	17.90	6,086.00
I.3	DSR-2023 16.3	Supplying and stacking at site.				
I.3.1	DSR-2023 16.3.1	90 mm to 45 mm size stone aggregate	cum	210	1511.46	3,16,802.02
I.3.2	DSR-2023 16.3.2	63 mm to 45 mm size stone aggregate	cum	877	1178.44	10,33,727.57
I.3.3	DSR-2023 16.3.3	53 mm to 22.4 mm size stone aggregate	cum	187	1326.99	2,48,412.53
I.3.4	DSR-2023 16.3.6	Stone screening 13.2 mm nominal size (Type A)	cum	60	1465.33	87,919.80
I.3.5	DSR-2023 16.3.7	Stone screening 11.2 mm nominal size (Type B)	cum	60	1619.04	97,142.40
I.4	DSR-2023 16.4	Laying, spreading and compacting stone aggregate of specified sizes to WBM specifications in uniform thickness, hand picking, rolling with 3 wheeled road/vibratory roller 8-10 tonne capacity in stages to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate, watering and compacting to the required density	cum	1,079	754.11	8,13,684.69
I.5	DSR-2023 16.30	Providing and applying tack coat using hot straight run bitumen of grade VG - 10, including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications :				
I.5.1	DSR-2023 16.30.1	On W.B.M. @ 0.75 Kg / sqm	sqm	4,680	43.58	2,03,954.40
I.5.2	DSR-2023 16.30.2	On Bituminous surface @0.50 kg/sqm	sqm	3,080	34.72	1,06,937.60

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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
I.6	DSR-2023 16.53	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4 m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately)	metre	200	270.69	54,138.00
I.7	DSR-2023 16.70	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.				
I.7.1	DSR-2023 16.70.1	Made of G.I. wire of dia 4 mm	Sqm	1,350	733.11	9,89,698.50
I.8	DSR-2023 16.78	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge				
I.8.1	DSR-2023 16.78.1	With material conforming to Grade-I (size range 75 mm to 0.075 mm) having CBR Value-30	cum	500	2005.29	10,02,645.00
I.8.2	DSR-2023 16.78.2	With material conforming to Grade-II (Size range 53 mm to 0.075 mm) having CBR Value-25	cum	780	2411.85	18,81,243.00
I.9	DSR-2023 16.91	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand, complete all as per direction of Engineer-in-Charge.				
I.9.1	DSR-2023 16.91.2	80 mm thick C.C. paver block of M-30 grade with approved color design and pattern	sqm	4,120	786.20	32,39,144.00
I.10	DSR-2023 16.94	Providing & making Gabion structure with Mechanically Woven Double Twisted Hexagonal Shaped Wire mesh Gabion Boxes as per IS 16014:2012, MORTH Clause 2500, of required size, Mesh Type 10x12 (D=100 mm with tolerance of ± 2%) Zinc coated, Mesh wire diameter 3.0 mm, mechanically edged/selvedged with partitions at every 1m interval and shall have minimum 10 numbers of openings per meter of mesh perpendicular to twist, tying with lacing wire of diameter 2.2mm, supplied @ 3% by weight of Gabion boxes, filled with boulders with least dimension of 200 mm, as per drawing, all complete as per direction of Engineer-in-charge	cum	860	3009.38	25,88,066.80
I.11	DSR-2023 16.72	Supplying and stacking of hard stone (for stone pitching) 22.5 cm thick at site.	cum	240	821.18	1,97,083.20
I.12	DSR-2023 16.73	Dry stone pitching 22.5 cm thick laid in courses and required profile with hammer dressed stones having no side less than 15 cm, with minimum depth of 20 cm including preparing the bedding surface etc. all complete. (Payment for Stone to be made separately).	cum	300	543.46	1,63,038.00
I.13	DSR-2023 16.4	Providing and laying seal coat of premixed fine aggregate (passing 2.36 mm and retained on 180 micron sieve) with bitumen using 128 kg of bitumen of grade VG - 10 bitumen per cum of fine aggregate and 0.60 cum of fine aggregate per 100 sqm of road surface, including rolling and finishing with road roller all complete.	sqm	1,800	63.78	1,14,809.35
I.14	DSR-2023 16.11	Dry stone pitching 22.5 cm thick including supply of stones and preparing surface complete	sqm	200	636.13	1,27,225.28
I.15	DSR-2023 16.54	Providing and laying Dense Graded Bituminous Macadam using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specifications and directions of Engineer-in-Charge.				
I.15.1	DSR-2023 16.54.1	50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity	Cum	2,490	9177.50	2,28,51,975.00
I.16	DSR-2023 16.57	Providing and laying Bituminous concrete using crushed stone aggregates of specified grading premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge.				
I.16.1	DSR-2023 16.57.1	40/50mm compacted thickness with bitumen of grade VG-30 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Batch type Hot Mix Plant of 100-120 TPH capacity.	Cum	2,470	9999.34	2,46,98,369.80
I.17	DSR-2023 16.28	Surface dressing one coat on new surface with bitumen of specified grade at a rate of 1.95 kg/sqm. of surface area with 1.5 cum. of stone chippings 13.2mm nominal size per 100 sqm. of road surface including consolidation with road roller of 6 to 8 tonne capacity, etc. complete.				
I.17.1	DSR-2023 16.28.1	Using bitumen emulsion (minimum 50% bitumen content - RS grade conforming to IS - 8887)	Sqm	1,000	163.64	1,63,640.00

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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
I.18	DSR-2023 16.47	Painting runway/taxi track/apron marking with adequate nos of coats to give uniform finish with road marking paint of superior make as approved by the Engineer-in-charge, i/c cleaning the surface of all dirt, scales, oil, grease and other foreign material etc. and lining out complete.				
I.18.1	DSR-2023 16.47.1	New work (Two or more coats)	Sqm	2,950	155.19	4,57,810.50
I.19	DSR-2023 16.59	Manufacturing, supplying and fixing retro reflective sign boards made up of 2 mm thick aluminium sheet, face to be fully covered with high intensity encapsulated type heat activated retro reflective sheeting conforming to type - IV of ASTM-D 4956-01 in blue and silver white or other colour combination including subject matter, message (bi-lingual), symbols and borders etc. as per IRC : 67-2001, pasted on substrate by an adhesive backing which shall be activated by applying heat and pressure conforming to class -2 of ASTM-D-4956-01 and fixing the same with suitable sized aluminium alloy rivets @ 20 cm c/c to back support frame of M.S. angle iron of size 25x25x3 mm along with theft resistant measures, mounted and fixed with 2 Nos. M.S. angles of size 35x35x5 mm to a vertical post made up to M.S. Tee section ISMT 50x50x5 mm welded with base plate of size 100x100x5 mm at the bottom end and including making holes in pipes, angles flats, providing & fixing M.S. message plate of required size, steel work to be painted with two or more coats of synthetic enamel paint of required shade and of approved brand & manufacture over priming coat of zinc chromate yellow primer (vertical MS-Tee support to be painted in black and white colours). Backside of aluminium sheet to be painted with two or more coats of epoxy paint over and including appropriate priming coat including all leads and lifts etc complete as per drawing, specification and direction of Engineer-in-charge.				
I.19.1	DSR-2023 16.59.1	Mandatory/ Regulatory sign boards of 900 mm diameter with support length of 3750 mm	No.	50	5923.44	2,96,172.00
I.19.2	DSR-2023 16.59.2	Cautionary /warning sign boards of equilateral triangular shape having each side of 900 mm with support length of 3650 mm	No.	50	4584.60	2,29,230.00
I.20	DSR-2023 16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment) (Precast C.C. kerb stone shall be approved by Engineer-in-charge)	Cum	15	8343.04	1,25,145.60
I.21	DSR-2023 16.75	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator, vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in-charge. (The panel shuttering work shall be paid for separately). (Note: Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/ recoverable separately).	cum	600	8100.77	48,60,462.00
I.22	DSR-2023 16.13	Cutting road and making good the same including supply of extra quantities of materials i.e. aggregate, moorum screening, red bajri and labour required.				
I.22.1	DSR-2023 16.13.1	Bituminous portion	cum	50	4149.62	2,07,481.00
I.23	DSR-2023 16.71	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 25x25 mm made of G.I. wire of dia 3 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.	Sqm	810	947.68	7,67,620.80
Sub Total Schedule-I (SOR)						₹ 6,87,18,064.84
Schedule-J (Non Schedule)		Slope Protection works and other civil works				
J.1	NON-SOR	M30 RCC for Chadding Wall. Design mix cement concrete including machine mixed, machine batched, machine vibrated with contractor's men, material, consumables (including additives), tools & plants, equipments, machineries, all lead & lifts, loading, unloading, wastages etc complete. The rate includes cost of form work, shuttering, centering, scaffolding, fixing and removing thereof, levelling, finishing of exposed surfaces, curing etc.	Cum	420	12017.46	50,47,333.20
J.2	NON-SOR	Supply, drilling, installation, grouting and testing of 32 mm dia Self Drilling Rock bolts of 6 m length, 200kN minimum breaking load as per design drawings, technical specifications or as directed by engineer. Drilling with grout flushing is mandatory. This item includes couplings, sacrificial drilling bits and grouting. Measurement and payment shall be per piece tested and accepted installed rock bolt (for exact payment details, see specifications). Note: any change in length of Rockbolts, amount shall be added or reduced as per equivalent length calculated upon.	Each	100	12098.89	12,09,889.00
J.3	NON-SOR	Permanent anchorage using prestressed bar anchors D32mm, fp 0.1k/tpk = 950/1050 N/mm ² , with length upto 12 m including drilling, installation, grouting and prestress really installed of 200 KN as per approved drawings & specifications or as directed by Engineer. The rate shall include costs of all materials, labour, equipments, etc. required for the complete job as per drawings, specifications or as directed by the Engineer- in- Charge. Measurement and payment will be for actual length of anchorage at site.	Rm	900	9811.08	88,29,972.00
J.4	NON-SOR	Supply and fixing of SS sliding door bolt 250 mm of approved brand including all fittings	Each	38	476.06	18,090.28
J.5	NON-SOR	Supply and fixing of SS tower bolt 200 mm of approved brand including all fittings	Each	50	340.67	17,033.50
J.6	NON-SOR	Supply and fixing of SS tower bolt 150 mm of approved brand including all fittings	Each	30	327.13	9,813.90
J.7	NON-SOR	Supply and fixing of SS tower bolt 100 mm including all fittings	Each	30	192.17	5,765.10

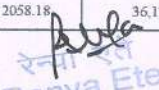
Ranya Ete

मुख्य महाप्रबंधक / Chief General Manager P.H. Rangpo
इरकॉन इंटरनेशनल लिमिटेड
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Sivok Rangpo New BG Rail Line Project

Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
J.8	NON-SOR	Supply and fixing of SS door handles 150 or 200 mm of approved brand including all fittings	Each	66	310.09	20,465.94
J.9	NON-SOR	Providing and placing in position 100 mm thick factory made machine batched & machine mixed Precast RCC Rectangular Covers on drains inside tunnel of size approx. 1045mmx 400mm of M-30 grade cement concrete for RCC work, including cost of centering, shuttering, neat cement punning on finished surface, properly encased on all edges with 1.6 mm thick, filling of grease in V shape groove, cost of cartage, all leads & lift, handling at site etc. all complete as per direction of Engineer-in-Charge. Note: Reinforcement and Steel Bar for hooks shall be provided as per approved drawing. The cost of reinforcement shall be paid as per relevant item.	Sqm	4,530	1225.62	55,52,058.60
J.10	NON-SOR	Providing, supplying and fixing of hot dip galvanized rectangular frames made up with angle 50x50x5mm and MS sheet thickness 3.15mm thk over existing chambers in tunnel including making surface clean, properly encased on all edges with rich concrete nominal mix (1:1.5:3) etc. including cost of hot dip galvanized frames each not less than 14Kg weight filling of grease in groove, cartage, all leads & lift, handling at site etc. making walls good, all complete as per direction of Engineer-in-Charge.	Kg	600	151.25	90,750.00
Sub Total Schedule J (Non SOR)						₹ 2,08,01,171.52
Schedule-K	Water supply and Sanitary Work					
K.1	DSR-2023 17.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required.				
K.1.1	DSR-2023 17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	each	4	4874.51	19,498.04
K.2	DSR-2023 17.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required.				
K.2.1	DSR-2023 17.2.1	W.C. pan with ISI marked white solid plastic seat and lid	each	2	4693.11	9,386.22
K.3	DSR-2023 17.4.1	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required: One urinal basin with 5 litre white P.V.C. automatic flushing cistern	each	2	4508.13	9,016.26
K.4	DSR-2023 17.7	Providing and fixing wash basin with C.I. brackets, 15 C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fitting and brackets, cutting and making good the walls wherever required.				
K.4.1	DSR-2023 17.7.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	each	37	1907.95	70,594.15
K.4.2	DSR-2023 17.7.3	White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps	each	2	1657.94	3,315.88
K.5	DSR-2023 17.10	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required.				
K.5.1	DSR-2023 17.10.2	Kitchen sink without drain board				
K.5.1.1	DSR-2023 17.10.2.1	610x510 mm bowl depth 200 mm	each	7	3558.82	24,911.74
K.6	DSR-2023 17.16A	Providing and fixing 8 mm dia C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to European type W.C. of quality and make as approved by Engineer - in - charge.	each	30	251.49	7,544.68
K.7	DSR-2023 17.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
K.7.1	DSR-2023 17.28.1.1	Semi rigid pipe 32mm dia	each	8	74.84	598.72
K.7.2	DSR-2023 17.28.2	Flexible pipe				
K.7.2.1	DSR-2023 17.28.2.1	32 mm dia	Each	33	98.58	3,253.14
K.7.2.2	DSR-2023 17.28.2.2	40 mm dia	Each	2	98.58	197.16
K.8	DSR-2023 17.31	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	each	7	1158.20	8,107.40
K.9	DSR-2023 17.33	providing and fixing 600mmx120mmx5mm glass shelf with edges rounds and supported on anodized aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40mm long screws, rawl plugs etc. complete	each	4	780.44	3,121.76
K.10	DSR-2023 17.73.2	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour. : 600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms.	each	47	510.65	24,000.55


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 Sivok Rangpo New BG Rail Line Project

Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
K.11	DSR-2023 18.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings and fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc.				
K.11.1	DSR-2023 18.8.1	15 mm nominal outer dia Pipes	metre	195	410.49	80,045.55
K.11.2	DSR-2023 18.8.2	20 mm nominal outer dia Pipes	metre	140	387.23	54,212.20
K.11.3	DSR-2023 18.8.3	25 mm nominal outer dia Pipes	metre	150	451.80	67,770.00
K.12	DSR-2023 18.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. External work				
K.12.1	DSR-2023 18.9.2	20 mm nominal outer dia Pipes	metre	50	197.58	9,879.00
K.12.2	DSR-2023 18.9.3	25 mm nominal outer dia Pipes	metre	80	256.00	20,480.00
K.12.3	DSR-2023 18.9.4	32 mm nominal outer dia Pipes	metre	250	361.68	90,420.00
K.12.4	DSR-2023 18.9.5	40 mm nominal outer dia Pipes	metre	340	464.30	1,57,862.00
K.12.5	DSR-2023 18.9.6	50 mm nominal outer dia Pipes	metre	370	654.95	2,42,331.50
K.13	DSR-2023 18.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work				
K.13.1	DSR-2023 18.12.3	25 mm dia nominal bore	metre	800	336.92	2,69,536.00
K.13.2	DSR-2023 18.12.4	32 mm dia nominal bore	metre	200	389.17	77,834.00
K.13.3	DSR-2023 18.12.6	50 mm dia nominal bore	metre	500	548.97	2,74,485.00
K.14	DSR-2023 18.13	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete:				
K.14.1	DSR-2023 18.13.1	25 to 40 mm nominal bore	each	10	656.84	6,568.40
K.14.2	DSR-2023 18.13.2	50 to 80 mm nominal bore	each	5	1285.98	6,429.90
K.15	DSR-2023 18.32	Constructing masonry Chamber 30x30x50 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for stop cock, with C.I. surface bore 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick, finished with a floating coat of neat cement complete as per standard design				
K.15.1	DSR-2023 18.32.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	each	28	1435.26	40,187.28
K.16	DSR-2023 18.48	Providing and placing on terrace (at all floor levels) 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	per litre	31,000	7.92	2,45,520.00
K.17	DSR-2023 18.15	Providing and fixing brass bib cock of approved quality				
K.17.1	DSR-2023 18.15.2	20 mm nominal bore	each	52	273.13	14,202.76
K.18	DSR-2023 18.51	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.				
K.18.1	DSR-2023 18.51.1	15 mm nominal bore	each	33	575.48	18,990.84
K.19	DSR-2023 18.16	Providing and fixing brass stop cock of approved quality				
K.19.1	DSR-2023 18.16.2	20 mm nominal bore	each	52	273.13	14,202.76
K.20	DSR-2023 18.53	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS 8931				
K.20.1	DSR-2023 18.53.1	15mm nominal bore	each	81	413.66	33,506.46
K.21	DSR-2023 19.6	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :				
K.21.1	DSR-2023 19.6.2	150 mm dia. R.C.C. pipe	metre	110	400.81	44,089.10
K.21.2	DSR-2023 19.6.3	250 mm dia. R.C.C. pipe	metre	150	648.12	97,218.00
K.22	DSR-2023 19.35	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C. pipes including collars/ spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete				
K.22.1	19.35.1	450 mm dia RCC pipes	metre	250	2207.10	5,51,775.00
K.23	DSR-2023 19.36	Providing and laying Non Pressure NP-4 class (Heavy duty) R.C.C. pipes including collars/spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete				
K.23.1	DSR-2023 19.36.2	600 mm dia RCC pipes	metre	46	2834.18	1,30,372.28
K.24	DSR-2023 18.30	Providing flanged joints to double flanged C.I./D.I. pipes and specials including testing of joints:				
K.24.1	DSR-2023 18.30.2	100 mm diameter pipe	each	244	239.14	58,350.16
K.25	DSR-2023 18.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately) :				
K.25.1	DSR-2023 18.31.1.2	100 mm diameter Class II	each	5	3591.27	17,956.35
K.25.2	DSR-2023 18.31.3.2	150 mm - Class II	each	4	6029.85	24,119.40
K.25.3	DSR-2023 18.31.4.2	200mm - Class II	each	3	12058.18	36,174.54


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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
K.25.4	DSR-2023 18.31.5.2	250mm - Class II	each	1	20304.69	20,304.69
K.25.5	DSR-2023 18.31.6.2	300mm - Class II	each	1	24905.58	24,905.58
K.26	DSR-2023 18.66	Providing and laying S&S C.I. Standard specials such as tees, bends, collars, tapers and caps etc, suitable for flanged jointing as per IS : 1538 :				
K.26.1	DSR-2023 18.66.2	Up to 300 mm dia	quintal	5	7316.71	36,583.55
K.27	DSR-2023 17.22A	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.	Each	30	853.30	25,599.00
K.28	DSR-2023 17.22B	Providing and fixing CP Brass Single lever telephonic wall mixer of quality & make as approved by Engineer in charge.				
K.28.1		(a) 15 mm nominal dia	Each	37	5723.39	2,11,765.43
K.29	DSR-2023 17.29	Providing and fixing 100 mm sand cast iron grating for gully trap.	Each	9	43.91	395.19
K.30	DSR-2023 17.3	Providing and fixing in position 25 mm diameter mosquito proof coupling of approved municipal design.	Each	5	45.89	229.45
K.31	DSR-2023 17.34	Providing and fixing toilet paper holder :				
K.31.1	DSR-2023 17.34.1	C.P. brass	Each	28	662.74	18,556.72
K.32	DSR-2023 18.49	Providing and fixing C.P. brass bib cock of approved quality conforming to IS 8931 :				
K.32.1	DSR-2023 18.49.1	15 mm nominal bore	Each	34	417.91	14,208.94
K.33	DSR-2023 18.50	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.				
K.33.1	DSR-2023 18.50.1	15 mm nominal bore	Each	7	676.75	4,737.25
K.34	DSR-2023 19.1	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :				
K.34.1	DSR-2023 19.1.1	100 mm diameter	meter	495	365.80	1,81,071.00
K.34.2	DSR-2023 19.1.2	150 mm diameter	meter	1,060	573.76	6,08,185.60
K.35	DSR-2023 19.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design :				
K.35.1	DSR-2023 19.2.1	100 mm diameter S.W. pipe	meter	495	795.54	3,93,792.30
K.35.2	DSR-2023 19.2.2	150 mm diameter S.W. pipe	meter	1,060	972.91	10,31,284.60
K.36	DSR-2023 19.4	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design.				
K.36.1	DSR-2023 19.4.1	100x100 mm size P type				
K.36.1.1	DSR-2023 19.4.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	14	2232.75	31,258.50
K.36.2	DSR-2023 19.4.2	150 x 100 mm size P type				
K.36.2.1	DSR-2023 19.4.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	14	2254.64	31,564.96
K.37	DSR-2023 19.7	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :				
K.37.1	DSR-2023 19.7.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :				
K.37.1.1	DSR-2023 19.7.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	4	10530.68	42,122.72
K.38	DSR-2023 19.20	Supplying and fixing C.I. cover 300x300 mm without frame for gully trap (standard pattern) the weight of cover to be not less than 4.5 kg	Each	41	648.97	26,607.77
K.39	DSR-2023 19.27	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :				
K.39.1	DSR-2023 19.27.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	16	4912.92	78,606.72
K.40	DSR-2023 19.16	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910, on 12 mm dia steel bar conforming to IS. 1786, having minimum cross section as 23 mmx25 mm and over all minimum length 263 mm and width as 165 mm with minimum 12 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	No.	8	456.58	3,652.64
K.41	DSR-2023 19.19	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality				
K.41.1	DSR-2023 19.19.4	EHD - 35				
K.41.1.1	DSR-2023 19.19.4.1	Circular shape 560 mm internal dia	No.	4	1,751.30	7,005.20
K.42	DSR-2023 18.69	Providing and laying D.I. Specials of Class K - 12 suitable for mechanical jointing as per IS : 9523 :				
K.42.1	DSR-2023 18.69.1	Up to 600 mm dia	quintal	35	17,555.95	6,14,458.25
K.43	DSR-2023 18.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes Conforming to IS : 8329				
K.43.1	DSR-2023 18.72.1	160mm DI-K7	Rmt	474	1,037.19	4,91,628.06
K.43.2	DSR-2023 18.72.2	150mm DI-K7	Rmt	1,137	1,475.72	16,77,893.64
K.43.3	DSR-2023 18.72.3	200mm DI-K7	Rmt	615	1,919.81	11,80,683.15
K.43.4	DSR-2023 18.72.5	300mm DI-K7	Rmt	205	2,901.17	5,94,739.85

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Sivok Rangpo New BG Rail Line Project

Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
K.44	DSR-2023 18.73	Providing and laying Double Flanged (Screwed/ Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K - 9 conforming to IS: 8329 :				
K.44.1	DSR-2023 18.73.1	100 mm dia Ductile Iron Double Flanged	meter	320	1,502.06	4,80,659.20
K.44.2	DSR-2023 18.73.2	150 mm dia Ductile Iron Double Flanged	meter	40	2,150.16	86,006.40
K.44.3	DSR-2023 18.73.3	200 mm dia Ductile Iron Double Flanged	meter	40	2,771.34	1,10,853.60
K.44.4	DSR-2023 18.73.4	250 mm dia Ductile Iron Double Flanged	meter	30	3,872.47	1,16,174.10
K.44.5	DSR-2023 18.73.5	300 mm dia Ductile Iron Double Flanged	meter	109	4,861.63	5,29,917.67
K.44.6	DSR-2023 18.73.6	350 mm dia Ductile Iron Double Flanged	meter	40	6,226.15	2,49,046.00
K.45	DSR-2023 18.72A	Providing, laying, jointing and testing S&S Centrifugally Cast Ductile Iron double chamber Class K-9 pressure pipes conforming to IS 8329:2000 with restrained Joints (bolt less), all complete.				
K.45.1	DSR-2023 18.72A.3	200mm DI-K9	m	537	2,688.67	14,43,815.79
K.45.2	DSR-2023 18.72A.4	250mm DI-K9	m	323	3,593.30	11,60,635.90
K.45.3	DSR-2023 18.72A.5	300mm DI-K9	m	143	4,496.54	6,43,005.22
K.46	DSR-2023 18.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and the cost of rubber gasket :				
K.46.1	DSR-2023 18.70.3	200 mm dia pipes	joint	98	231.59	22,695.82
K.46.2	DSR-2023 18.70.4	250 mm dia pipes	joint	59	280.65	16,558.35
K.46.3	DSR-2023 18.70.5	300 mm dia pipes	joint	21	359.07	7,540.47
K.47	DSR-2023 18.59	Providing and fixing C.I. double acting air valve of approved quality with bolts, nuts, rubber insertions etc. complete (The tail pieces, tapers etc if required will be paid separately) :				
K.47.1	DSR-2023 18.59.1	50 mm dia	Each	1	4,740.50	4,740.50
K.47.2	DSR-2023 18.59.2	80 mm dia	Each	3	5,766.97	17,300.91
K.48	DSR-2023 18.33	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design:				
K.48.1	DSR-2023 18.33.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	Each	52	8,957.20	4,65,774.40
K.49	DSR-2023 18.34	Constructing masonry Chamber 90x90x100cm inside, in brick work in cement mortar 1 (1 cement 4 coarse sand) for sluice valve with C.I. surface box 100 run. top diameter, 160 mm bottom diameter and 180 mm deep chained lid and RCC top slab 1:1.5:3 mix (1 cement : 1 coarse sand: 3 graded stone aggregate 20 non. normal size), including necessary excavation foundation concrete 1 : 5 : 10 (1 cement 5 fine sand 10 graded stone aggregate 40 mm. nominal size) and inside plastering with cement mortar 1: 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design with common burnt clay (non-modular) bricks of class designation 7.5				
K.49.1	DSR-2023 18.34.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	Each	7	15,582.34	1,09,076.38
K.50	DSR-2023 18.35	Constructing masonry Chamber 120x120x100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design:				
K.50.1	DSR-2023 18.35.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	Each	13	21,574.50	2,80,468.50
K.51	DSR-2023 18.37	Constructing masonry Chamber 60x45x50 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for water meter complete with C.I. double flap surface box 400x200x200 mm (inside) with locking arrangement and RCC top slab 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :				
K.51.1	DSR-2023 18.37.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	Each	7	7,997.48	55,982.36
K.52	DSR-2023 18.60	Providing and fixing enclosed type water meter (bulk type) conforming to IS : 2373 and tested by Municipal Board complete with bolts, nuts, rubber insertions etc. (The tail pieces if required will be paid separately) :				
K.52.1	DSR-2023 18.60.2	100mm dia nominal bore	Each	3	4,509.24	13,527.72
K.52.2	DSR-2023 18.60.3	150mm dia nominal bore	Each	1	6,933.95	6,933.95
K.52.3	DSR-2023 18.60.4	200 mm dia nominal bore	Each	4	7,457.16	29,828.64
K.53	DSR-2023 18.61	Providing and fixing C.I. dirt box strainer for bulk type water meter with nuts, bolts, rubber insertions etc. complete conforming to IS : 2373 :				
K.53.1	DSR-2023 18.61.2	100mm dia	Each	3	6,151.56	18,454.68
K.53.2	DSR-2023 18.61.3	150mm dia	Each	1	7,778.59	7,778.59
K.53.3	DSR-2023 18.61.4	200 mm dia	Each	4	10,659.77	42,639.08
K.54	DSR-2023 DSR-202	Providing and fixing Polyethylene- Aluminium- Polyethylene (PE-AL- PE) Composite Pressure Pipes conforming to IS - 15450, U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80°C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g elbows, tees, reducers, couplers & connectors etc. with trenching, refilling and testing of joints complete as per direction of the engineer in charge : External work				
K.54.1	DSR-2023 18.3.5	3240 (40 mm OD) pipe.	Rmt	7	449.04	3,143.28
K.55	DSR-2023 18.10	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc. : Internal work - Exposed on wall.				

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Sivok Rangpo New BG Rail Line Project

Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
K.55.1	DSR-2023 18.10.5	40 mm dia. nominal bore		7	669.50	4,686.50
K.56	DSR-2023 18.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):				
K.56.1	DSR-2023 18.17.3	40 mm nominal bore	Each	7	681.21	4,768.47
K.57	DSR-2023 18.46	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)				
K.57.1	DSR-2023 18.46.5	40 mm nominal bore	Each	7	520.57	3,643.99
K.58	DSR-2023 17.78	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 litre/ 6 litre (adjustable to 4 litre/ 8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc. complete.	Each	6	12,368.39	74,210.34
K.59	DSR-2023 17.80	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 610x390x370 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :	Each	6	6,579.70	39,478.20
K.60	DSR-2023 19.30	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 Fine sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm 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. complete as per standard design.				
K.60.1	DSR-2023 19.30.2	Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets :				
K.60.2	DSR-2023 19.30.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	2	6,720.95	13,441.90
Sub Total Schedule-K (SOR)						₹ 1,62,92,691.85
Schedule-L (SOR) Electrification Works						
L.1	DSR(E&M)-2022 1.10	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
L.1.1	DSR(E&M)-2022 1.10.3	Group C	Point	844	1235.92	10,43,116.48
L.2	DSR(E&M)-2022 1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	Point	134	1315.95	1,76,337.30
L.3	DSR(E&M)-2022 1.14	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
L.3.1	DSR(E&M)-2022 1.14.2	2x2.5 sq. mm + 1x2.5 sq. mm earth wire	Metre	8,880	231.68	20,57,318.40
L.3.2	DSR(E&M)-2022 1.14.3	2x4 sq. mm + 1x4 sq. mm earth wire	Metre	8,475	281.39	23,84,780.25
L.3.3	DSR(E&M)-2022 1.14.11	4x16 sq. mm + 2x6 sq. mm earth wire	Metre	1,710	1149.99	19,66,482.90
L.3.4	DSR(E&M)-2022 1.14.9	4x6 sq. mm + 2x6 sq. mm earth wire	Metre	800	727.22	5,81,776.00
L.3.5	DSR(E&M)-2022 1.14.10	4x10 sq. mm + 2x6 sq. mm earth wire	Metre	400	969.31	3,87,724.00
L.4	DSR(E&M)-2022 1.25	Supplying and fixing two module stepped type electronic fan regulator on the modular plate switch box including connections etc. as required.	Nos.	134	310.88	41,657.92
L.5	DSR(E&M)-2022 1.56	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 nos. 3 pin 5/6 A modular socket outlet and 2 nos. 5/6 A modular switch, connections etc. as required.	Nos.	34	569.51	19,363.34
L.6	DSR(E&M)-2022 1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
L.6.1	DSR(E&M)-2022 1.27.1	1 or 2 Module (75 mm x 75 mm)	Each	22	251.06	5,523.32
L.6.2	DSR(E&M)-2022 1.27.2	3 Module (100 mm x 75 mm)	Each	28	275.49	7,713.72
L.6.3	DSR(E&M)-2022 1.27.4	6 Module (200 mm x 75 mm)	Each	10	338.67	3,386.70
L.7	DSR(E&M)-2022 1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	Each	117	401.86	47,017.62
L.8	DSR(E&M)-2022 1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 A & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	Nos.	107	493.69	52,824.83
L.9	DSR(E&M)-22 1.33	Supplying and fixing 3 pin, 5 A ceiling rose on the existing junction box/ wooden block including connections etc. as required	Each	626	73.30	45,885.80

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L.10	DSR(E&M)-22 1.25	Supplying and fixing modular blanking plate on the modular plate & switch box modular plate as required.	Each	110	33.70	3,707.00
L.11	DSR(E&M)-2022 2.3	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
L.11.1	DSR(E&M)-2022 2.3.2	8 way, Double door	Each	15	2167.70	32,515.50
L.11.2	DSR(E&M)-2022 2.3.4	16 way, Double door	Each	2	2646.23	5,292.46
L.12	DSR(E&M)-2022 2.4	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 volts, on surface/recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
L.12.1	DSR(E&M)-2022 2.4.1	4 way (4 + 12), Double door	Each	6	3446.60	20,679.60
L.12.2	DSR(E&M)-2022 2.4.2	6 way (4 + 18), Double door	Each	12	4190.50	50,286.00
L.12.3	DSR(E&M)-2022 2.4.3	8 way (4 + 24), Double door	Each	5	5755.11	28,775.55
L.13	DSR(E&M)-2022 2.10	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
L.13.1	DSR(E&M)-2022 2.10.1	Single pole	Each	409	215.68	88,213.12
L.13.2	DSR(E&M)-2022 2.10.3	Double pole	Each	11	632.71	6,959.81
L.14	DSR(E&M)-2022 2.11	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	Each	236	10.95	2,584.20
L.15	DSR(E&M)-2022 1.55	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.				
L.15.1	DSR(E&M)-2022 1.55.3	Group C	Point	86	827.53	71,167.58
L.16	DSR(E&M)-2022 1.24	Supplying and fixing following modular switch/socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
L.16.1	DSR(E&M)-2022 1.24.1	5/6A switch	Each	116	99.34	11,523.44
L.16.2	DSR(E&M)-2022 1.24.3	15/16 A switch	Each	20	150.46	3,009.20
L.16.3	DSR(E&M)-2022 1.24.5	6 pin 15/16 A socket outlet	Each	45	190.00	8,550.00
L.16.4	DSR(E&M)-2022 1.24.7	TV antenna socket outlet	Each	4	142.75	571.00
L.16.5	DSR(E&M)-2022 1.24.8	Bell push	Each	16	135.03	2,160.48
L.17	DSR(E&M)-2022 1.57	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 25A modular socket outlet and 25A modular SP MCB, "C" curve including connections, painting etc. as required.	Each	16	701.18	11,218.88
L.18	DSR(E&M)-2022 7.5	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUM/ METAL pipe as required.				
L.18.11	DSR(E&M)-2022 7.5.1	Up to 35 sq. mm	Metre	500	35.68	17,840.00
L.18.12	DSR(E&M)-2022 7.5.2	Above 35 sq. mm and up to 95 sq. mm	Metre	100	54.98	5,498.00
L.18.13	DSR(E&M)-2022 7.5.3	Above 95 sq. mm and upto 185 sq. mm	Metre	3,000	74.26	2,22,780.00
L.18.14	DSR(E&M)-2022 7.5.4	Above 185 sq. mm and upto 400 sq. mm	Metre	200	129.24	25,848.00
L.19	DSR(E&M)-2022 14.15	Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting jointing etc. in the existing trench, complete as required.				
L.19.1	DSR(E&M)-2022 14.15.4	160 mm dia (OD-160 mm & ID-135 mm nominal)	Metre	3,000	348.18	10,44,540.00
L.20	DSR(E&M)-2022 7.8	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required.				
L.20.1	DSR(E&M)-2022 7.8.1	Up to 35 sq. mm (clamped with 1mm thick saddle)	Metre	100	43.41	4,341.00
L.21	DSR(E&M)-2022 9.1	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				
L.21.1	DSR(E&M)-2022 9.1.9	4x25 sq. mm (25 mm)	Each	12	265.23	3,182.76
L.21.2	DSR(E&M)-2022 9.1.13	4x95 sq. mm (38 mm)	Each	24	522.75	12,546.00

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L.21.3	DSR(E&M)-2022 9.1.16	4x185 sq. mm (57mm)	Each	24	671.74	16,121.76
L.21.4	DSR(E&M)-2022 9.1.18	4x240 sq. mm (62 mm)	Each	24	968.35	23,240.40
L.22	DSR(E&M)-2022 14.13	Providing, laying and fixing following dia G.I. pipe (medium class) in ground complete with G.I. fittings including trenching (75 cm deep) and re-filling etc as required.				
L.22.1	DSR(E&M)-2022 14.13.3	100 mm dia	Metre	250	1741.87	4,35,467.50
L.23	DSR(E&M)-2022 18.5	Supply, Installation testing & commissioning of Electrical control panel of cubical construction, floor mounted type, fabricated out of 2mm thick CRCA sheet, compartmentalised with hinged lockable doors, dust and vermin proof, powder coated of approved shade after 7 tank treatment process, cable alley, inter-connection with suitable size copper conductor cable/solid copper strip, having switchgears and accessories, mountings and internal wiring, earth terminals, numbering etc. complete in all respect, suitable for main fire pump, pressurisation pump & diesel pump set complete as per CPWD specification with following in coming and Outgoings, suitable for operation on 415V, 3 phase, 50Hz Ac Supply with enclosure protection class IP 42 as required :				
L.23.1	DSR(E&M)-2022 18.5.1	INCOMING 250A, 50kA 4 Pole MCCB, Ics=100% Icu rating Digital Voltmeter 0-500V with selector switch Digital Ammeter (0-250 A) with selector switch & CTs etc. LED type RYB phase indicating lamps, ON, OFF, trip indicating lamps Set of Copper Bus Bar 300A OUTGOING (Note : All outgoing feeders for pumps should have digital Ammeter with selector switches, and LED type ON, OFF, trip indicating lamps) Main Fire Pump 125 A, 50kA TPN MCCB, Ics=100% Icu, with fully automatic Star/Delta starter suitable for 60 HP pump with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation. Jockey Pump 63 A, 50kA TPN MCCB, Ics=100% Icu, with suitable HP fully automatic Star/Delta starter with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation. DIESEL ENGINE CONTROL Control for diesel engine comprising - Automatic/ Manual selector switch & 3 attempts starting device, timers and relays as required, push buttons, start/stop in manual mode. Indicating lamp for high/ Low Lub. Oil pressure, High Water Temp and Engine on indication. Battery charger suitable for 12V/24 V DC with boost and trickle selector switch, 0-30 V DC voltmeter, and 0-20 A DC Ammeter. All standard relays and accessories for automatic operation of diesel engine. System Controller Designing, Supply, Installation, Testing and commissioning of system controller to control operation of main electric fire pump, diesel pump, Pressurization pump, Terrace pump in sequence as per specification of main electric fire pump, diesel pump, Pressurization consisting of relays, timers, Sensors, annunciation window for fault indication, complete as per specification.	Set	1	191636.30	1,91,636.30
L.23.2	DSR(E&M)-2022 Item 18.5.2	Incomings 400A, 50kA 4 Pole MCCB, Ics=100% Icu rating Digital Voltmeter 0-500V with selector switch Ammeter (0-400 A) with selector switch & CTs etc. LED type RYB phase indicating lamps, ON, OFF, trip indicating lamps. Set of Copper Bus Bar 500A. Outgoings Note : All outgoing feeders for pumps should have digital Ammeter with selector switches, and LED type ON, OFF, trip indicating lamps) Main Fire Pump 200 A, 50kA TPN MCCB, Ics=100% Icu, with fully automatic Star/Delta starter suitable for 75 hp pump with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation. Jockey Pump 100 A, 50kA TPN MCCB, Ics=100% Icu, with suitable HP fully automatic Star/Delta starter with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation. Diesel Engine Control Control for diesel engine comprising Automatic/Manual selector switch & 3 attempt starting device, timers and relays as required, push buttons, start/stop in manual mode. Indicating lamp for high/ Low Lub. Oil pressure, High Water Temp and Engine on indication. Battery charger suitable for 12V/24 V DC with boost and trickle selector switch, 0-30 V DC voltmeter, and 0-20 A DC Ammeter. All standard relays and accessories for automatic operation of diesel engine. System Controller	Set	1	224488.12	2,24,488.12

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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
		Designing, Supply, Installation, Testing commissioning of system controller to control operation of main electric fire pump, diesel pump, Pressurization pump, Terrace pump in sequence as per specification consisting of relays, timers. Sensors, annunciation window for fault indication, complete as per specifications.				
Sub Total of Schedule- L(SOR)						₹ 1,13,95,652.24
Schedule-M (Non SOR)		Other Electrification Works				
M.1	NON-SOR	Supply, Installation, Testing and Commissioning of following fittings on the existing point with making connection with 1.5 sqmm FRLS Copper conductor single core cable i/c earthing etc. As required. Note: All LED Fixtures shall have power factor ≥0.90				
M.1.1	NON-SOR	Supply, Installation, Testing & Commissioning of 1X 12W surface mounted LED light fixtures similar to Havells Cat - LHEAHP7IL1W012 or equivalent.	Nos.	194	1161.31	2,25,294.14
M.1.2	NON-SOR	Supply, Installation, Testing & Commissioning of 1X40 W, 4ft linear surface mounted IP65 LED fixture similar to Havells Cat - MAGNUMGRANDNEOIP6640WLED857SPC	Nos.	4	3561.70	14,246.80
M.1.3	NON-SOR	Supply, Installation, Testing & Commissioning of 10W LED bulk head light similar to Havells Cat - RUGBYGENXFTS10WLED865SSYMBOPC or equivalent	Nos.	24	1602.58	38,461.92
M.1.4	NON-SOR	Supply, Installation, Testing & Commissioning of 1X20 W, 4ft surface mounted made of CRCA sheet box type LED fixture along with 1X20 W T8 LED tube similar to Havells Cat - PHOTONULTRA2.01213T8SSTL20WLED865SPC and REGALBATTENT 8UPTO1X22WSSBSWH	Nos.	234	902.49	2,11,182.66
M.1.5	NON-SOR	100 WLED Integral type Flood light in die cast aluminium housing with IP 66 protection complete with opal acrylic diffuser constant current electronic driver of 140-240V AC and high voltage, open& short circuit protection and all other accessories ,connection cable of required length.	Nos.	23	4512.45	1,03,786.35
M.1.6	NON-SOR	Supply, installation, testing & commissioning of 1x10 W, 2 ft linear mounted LED fixture suitable for mirror light application similar to Havells Cat LUMILINE+BS10WLED865SPCSS or equivalent	Nos.	64	518.13	33,160.32
M.1.7	NON-SOR	Supply, installation, testing and commissioning of 9 W LED Bulb holder with metallic strip	Nos.	58	185.51	10,759.58
M.1.8	NON-SOR	Supply, installation, testing & commissioning of 1x36 W, 2x2 recess mounted LED light fixture similar to Havells cat VENUSNEO2X2PLR36WLED857STTR or equivalent	Nos.	24	4068.70	97,648.80
M.2	NON-SOR	Supply ,Installation, testing and commissioning of 1200 mm (Five Star) ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5sq. mm FRLS PVC insulated, copper conductor, single core cable etc. as required.	Nos.	92	1565.58	1,44,033.36
M.3	NON-SOR	Supplying assembling and fixing of the Heavy duty Exhaust Fan 250/300 mm sweep 1400rpm including making the hole to suit the size of fan, making good the damage, connection, testing, commissioning etc. as required.	Nos.	64	1978.38	1,26,616.32
M.4	NON-SOR	Supply and fixing of following rating MCB/MCCB in the existing MCB DB complete with connection, testing and commissioning as required				
M.4.1	NON-SOR	40 A, 10 KA DP MCB	Nos.	2	725.69	1,451.38
M.4.2	NON-SOR	40 A, 10 KA TPN MCB	Nos.	23	1397.99	32,153.77
M.4.3	NON-SOR	63 A, 10 KA TPN MCB	Nos.	16	1432.83	22,925.28
M.5	NON-SOR	Supply erection testing and commissioning of ding dong type call bell	Nos.	24	265.55	6,373.20
M.6	NON-SOR	Supply, installation, testing and commissioning of 6 mtr high hot dip galvanized octagonal pole with 130 mm bottom A/F & 70 mm to A/F made up of 3 mm thick HT sheet along with base plate of size 200x200x12 mm thick including 4 Nos. of M16x450 long 'J' type EN 8 grade foundation bolt along with templates (without Bracket)	Nos.	31	8038.10	2,49,181.10
M.7	NON-SOR	Supply, installation, testing and commissioning of 1 mtr long hot dip galvanized single arm special bracket (Model: Type 5) cross arm made up of GI pipe suitable to mount on pole having top 70 mm AF	Nos.	46	2574.86	1,18,443.56
M.8	NON-SOR	Supply, installation, testing and commissioning of 1 mtr long hot dip galvanized double arm special bracket (Model: Type 5) cross arm made up of GI pipe suitable to mount on pole having top 70 mm AF	Nos.	8	3224.53	25,796.24
M.9	NON-SOR	supply, fitting, connection and testing of outdoor type luminaries 45 watt LED integral type street light in die cast aluminium spigot housing with IP 66 protection complete with opal acrylic diffuser constant current, electronic driver of 140-280 volt AC and high voltage, open & short circuit protection and all other accessories, connection cable of required length etc	Nos.	59	3509.69	2,07,071.71
M.10	NON-SOR	Supply & fixing of HDPE Pipe of 50/63 mm outer dia with 6 kgf/cm2 working pressure conforming to IS 4984/1995, clamped with pole/bracing by suitable size clamp (if required) as per site requirement	metre	1,800	165.97	2,98,746.00
M.11	NON-SOR	Supply & fixing of HDPE Pipe of 110 mm outer dia with 6 kgf/cm2 working pressure conforming to IS 4984/1995, clamped with pole/bracing by suitable size clamp (if required) as per site requirement	metre	1,000	521.89	5,21,890.00
M.12	NON-SOR	Supply following size of Aluminium armoured conductor XLPE insulated FLRS inner and outer sheathed, 1.1 KV power distribution cables with conforming to IS: 7098				
M.12.1	NON-SOR	2C x 10 sq. mm	metre	1,200	224.62	2,69,544.00
M.12.2	NON-SOR	4 C x 16 sq. mm	metre	2,300	340.29	7,82,667.00
M.12.3	NON-SOR	4C x 35 Sq. mm	metre	40	568.90	22,756.00
M.12.4	NON-SOR	4 C x 70 sq. mm	metre	40	950.17	38,006.80
M.12.5	NON-SOR	4 C x 120 Sq. mm	metre	20	1435.13	28,702.60
M.12.6	NON-SOR	4 C x 150 sq. mm	metre	2,400	1736.49	41,67,576.00

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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
M.12.7	NON-SOR	4 C x 185 sq. mm	metre	500	2498.86	12,49,430.00
M.12.8	NON-SOR	4 C x 240 sq. mm	Meter	300	3629.34	10,88,802.00
M.13	NON-SOR	Track Crossing by HDD Method (Rate is inclusive of Drawing approval from NFR) of boring size 300 mm	Metre	50	16275.24	8,13,762.00
M.14	NON-SOR	Supply, erection, testing and commissioning of maintenance free earth pit with 3.0 m, 50 mm dia electrode with outer part of GI pipe along with backfill compound (50 kg).	Nos	20	13296.71	2,65,934.20
M.15	NON-SOR	Supply, Installation, Testing & Commissioning of 2X22 W, 4ft surface mounted made of CRCA sheet box type LED fixture along with 2X20 W T8 LED tube similar to Havells Cat - PHOTONULTRAE2.0(213T8SSTL20WLED865SPC and REGALBATTENT 8UPTO2X22WSSBSWH- (Mali BoQ-Rate analysis based on havells price list and add discount of 25%)	Each	69	1671.03	1,15,301.07
M.16	NON-SOR	Supply of 250 mm PVC Exhaust Fan	Nos	12	1842.75	22,113.00
Sub Total (Non Schedule- M)						₹ 1,13,53,817.16
Schedule-N (Other Schedule Item)	Miscellaneous E&M Works					
N.1	CSR-2023-2024, V-5, Item no.7.7	Supplying and fixing lightening arrestor with GI strip 25mm x 3mm size including final and grounding, aluminum strip to be embedded in one of the columns in and independent GI conduit of 40mm dia. pipe suitably jointed by collars with all specials with all lead and lifts etc. complete for:				
N.1.1	CSR-2023-2024, Vol.-5, 7.7.4	For Over Head Tanks	Nos.	3	14305.67	42,917.01
N.2	CSR-2023-2024, V-5, Item no.5.30	Providing, fabricating and fixing at site various diameters of MS Flanges as per IS standards to fix sluice valves as per sketch. The rate to include cost of all materials, labour, consumables, hire charges for tools and tackles, welding equipments etc complete as per instructions of the Engineer in charge for:				
N.2.1	CSR-2023-2024, Vol.-5, Item no. 5.30.1	Flanges of 100mm dia and 10mm thick.	Each	4	711.73	2,846.92
N.2.2	CSR-2023-2024, Vol.-5, Item no. 5.30.3	Flanges of 150mm dia and 16mm thick.	Each	4	1656.24	6,624.96
N.2.3	CSR-2023-2024, Vol.-5, Item no. 5.30.9	Flanges of 300mm dia and 20mm thick.	Each	16	4305.4	68,886.40
N.2.4	CSR-2023-2024, Vol.-5, Item no.5.30.10	Flanges of 300mm dia and 16mm thick.	Each	20	3571.01	71,420.20
N.3	DJB-2022-E&M Item no. S1.95	Providing, Supplying and Fixing Mild Steel Dismantling Joints of pressure rating PN 1.6 (16 kgf/cm ²) with both side flange end suitable for installation in between flange end pipes.				
N.3.1	DJB-2022-E&M Item no. S1.95.7	300 mm nominal dia.	Each	4	30397.56	1,21,590.24
N.4	CSR-2023-2024, V-6, S.No.26	Grounding of equipment with 50 x 6 mm G.I. Flat and connecting equipment to the earthmat/ground pit. Each point of earthing with all formation works like bending, twisting, drilling of holes and connecting by welding (inclusive of all T&P and consumables) to the earthmat/ground pit/point of earth connection, all the materials supplied by the contractor	Metre	350	345.05	1,20,767.50
N.5	CSR-2023-2024, V-6, S.No.1)	Supplying and providing jelly in the station yard of uniform thickness of 100 mm including the cost of materials, labour charges, required tools and plants etc., complete. Work shall be carried out as per the instructions of Engineer- in-charge of works as per the standard procedure	Cum	15	1826.19	27,392.85
N.6	DJB-2022-E&M.4.46	Providing, Supplying, Installation, testing and commissioning of Resilient seated soft sealing Sluice Valves with body, bonnet of Ductile Iron of grade GGG50, wedge fully rubber lined with EPDM and seals of NBR . The valves shall be of vacuum tight and 100% leak proof with face dimensions as per BS S163-89/ IS 14846-2000 / DIN 3202 F4/F5 The stem sealing should be with Toroidal sealing rings (minimum 2 'O' rings). All the valves should be with electrostatic powder coating both inside and outside with pocket less body passage. The valves shall be supplied with suitable size galvanized bolts and nuts of required numbers as per relevant IS codes and direction of Engineer. SLUICE VALVE PN 1.6 (i.e. 16 kgf/cm ²) Ductile Iron				
N.6.1	DJB-2022-E&M Item no. 4.46.3	Hand wheel Ductile iron PN 1.6 Flanged (80 mm size)	Each	2	11829.6	23,659.20
N.6.2	DJB-2022-E&M Item no. 4.46.6	Hand wheel Ductile iron PN 1.6 Flanged (150 mm size)	Each	8	22872	1,82,976.00
N.6.3	DJB-2022-E&M Item no. 4.46.7	Hand wheel Ductile iron PN 1.6 Flanged (200 mm size)	Each	1	39958.8	39,958.80
N.6.4	DJB-2022-E&M Item no. 4.46.9	Hand wheel Ductile iron PN 1.6 Flanged (300 mm size)	Each	19	85767.6	16,29,584.40
N.6.5	DJB-2022-E&M Item no. 4.46.10	Hand wheel Ductile iron PN 1.6 Flanged (350 mm size)	Each	1	112383.6	1,12,383.60
N.6.6	DJB-2022-E&M Item no. 4.46.11	Hand wheel Ductile iron PN 1.6 Flanged (400 mm size)	Each	3	153787.2	4,61,361.60

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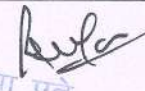
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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
N.7	DJB-2022-E&M Item no. 4.56	Providing, Supplying, Installation, Testing and commissioning of ductile iron double flanged swing check valves with slanted seat or with lever weight with straight disc, with metallic corrosion proof and wear resistant seat faces with nickel overlay micro - finished/ Integral seat with body and disc in Ductile Iron in GGG 50 shaft of stainless steel and bearings of zinc free bronze and surface protection with epoxy liquid of GSK quality. etc. all complete.				
N.7.1	DJB-2022-E&M Item no. 4.56.10	Ductile Iron DF Swing Type Check Valve/Non Return Valve of PN 1.6 (i.e. 16 kgf/cm ²) as per IS 5312 Pt-1 single door check valve (300 mm size)	Each	2	83031.6	1,66,063.20
N.8	DJB-2022-E&M 4.45	Providing, Supplying, Installation, testing and commissioning of Resilient seated soft sealing Sluice Valves with body, bonnet of Ductile Iron of grade GGG50, wedge fully rubber lined with EPDM and seals of NBR. The valves shall be of vacuum tight and 100% leak proof with face dimensions as per BS 5163-89/ IS 14846-2000 / DIN 3202 F4/F5. The stem sealing should be with Toroidal sealing rings (minimum 2 'O' rings). All the valves should be with electrostatic powder coating both inside and outside with pocket less body passage. The valves shall be supplied with suitable size galvanized bolts and nuts of required numbers as per relevant IS codes and direction of Engineer. SLUICE VALVE PN 1.0 (10 kgf/cm ²) (Ductile Iron)				
N.8.1	DJB-2022-E&M Item no. 4.45.6	Hand wheel Ductile iron PN 1.0 Flanged (150 mm size)	Each	3	21475.2	64,425.60
N.8.2	DJB-2022-E&M Item no. 4.45.7	Hand wheel Ductile iron PN 1.0 Flanged (200 mm size)	Each	3	37519.2	1,12,557.60
N.8.3	DJB-2022-E&M Item no. 4.45.9	Hand wheel Ductile iron PN 1.0 Flanged (300 mm size)	Each	6	80532	4,83,192.00
N.8.4	DJB-2022-E&M Item no. 4.45.10	Hand wheel Ductile iron PN 1.0 Flanged (350 mm size)	Each	3	105524.4	3,16,573.20
N.9	DJB-2022-E&M Item no 26.1.28	Providing, Supplying, laying and jointing of MS pipe of all sizes with painting with black anticorrosive bituminous paint of approved brand and tested to a head of 15 kg/sqm conforming to IS 3589/1981, IS 7322-1974, IS 784-1978 and relevant codes i/c cost of plate and carriage at site complete as directed by Engineer-in-Charge. (actual weight will be paid)	Kg	900	75.76	68,184.00
N.10	CSR-2023-2024, VOL 6, Item no.2.5	Supplying and drawing Flexible Multicore Cable manufactured with electrolytic grade flexible copper with low conductor containing to IS 8130-1984 and (Virgin) PVC insulation sheathed suitable for working voltage upto 1100 Volts as per IS-694:1990				
N.10.1	CSR-2023-2024, VOL 6, Item no.2.5.2.	3C X 1.5 mm ²	m	200	74.16	14,832.00
N.11	CSR-2023-2024, VOL 5, It no.5.37, Pg-71)+3%AW	Manufacturing, providing, transporting, rolling, lowering, laying, jointing & testing and commissioning of MS specials of minimum 8mm thick such as bends, tail pieces, reduces etc. conforming to IS-7322:1985 with latest amendments and including perfect linking and welding of joints to correct position including cost and conveyance of materials with all lead and lifts, cost all labour and giving satisfactory hydraulic test as per IS:3589:2001 with latest amendments for test pressure and working pressure both at factory and site etc. complete as per detailed specifications with inside lining two coat of food grade epoxy painting of approved make with each coat of 250 micron thick (after dry) over one coat of food grade epoxy primer of approved make with minimum of 50 micron thick (after dry) and outside 25mm thick coating in CM 1:3 by providing 50x50mm weld mesh including loading and unloading of the pipes for the following category to suit PSC / MS / CI / AC / DI / PVC pipes. The weight of MS shall only be considered before lining and coating for arriving at the rate. The thickness of plate will be specified by the engineer. (Contractor will make his own arrangements for procuring water for testing) for Providing and fixing 30mm dia thick MS connecting Rods for operation of intake valves - 1 Nos. Pinion, Pedestal, etc.,	Kg	257	175.1	45,000.70
N.12	CSR-2023-2024, VOL 5, It no.10.1, Pg-113)	Supplying PVC ringite pipes conforming to IS 4985:2000 with latest amendments and conveying to worksite, rolling and lowering into trenches, laying true to line and level and perfect linking at joints, testing and commissioning, including loading, unloading at both destinations and cuts of pipes wherever necessary including jointing of PVC pipes and specials (excluding cost of specials) with jointing of approved type, with all labour with all lead & lift including encasing the pipe around to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation etc. complete and giving necessary hydraulic test to the required pressure as per ISS (Contractor will make his own arrangements for procuring water for testing) etc. for:				
N.12.1	CSR-2023-2024, VOL 5, Item no.10.1.6	PVC pipes 90mm dia., 6 kg/sqcm	M	90	302.82	27,253.80
N.13	DJB-2022 E&M, ITEM Code-7.17	Design, manufacture, Supply, Installation & commissioning of 3T EOT crane, single girder lift 12 m with the Runway girders, rails, bridge etc. with the VVFD, Bus bar all complete as per direction of Engineer.				
N.13.1	DJB-2022 E&M, ITEM Code-7.17.2	3T EOT, Span 10 mtr Single Girder Lift 12 M	Each	2	1385931.80	27,71,863.60
N.14	DJB-2022 E&M, Item No.8.3.18	Providing and fixing water level indicator or depth gauge painted on TW plank 25mm/ MS plate 4mm thick float, level indicator sliding wire on standard pulleys incl. Necessary arrangements to prevent the swinging etc. Complete with calibration upto 5m height.	Nos.	1	4560	4,560.00

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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
N.15	CSR Vol. 4 2023-24 Item no. 8.36	Supplying, fixing and commissioning C.I Scour valve (sluice valve) of approved make body and seat ring of bronze PN 1.0 conforming to IS: 14845 of specified diameter and to withstand specified pressure with all accessories true to line and perfect linking with pipes on either side including loading, unloading, lifting and placing in position, cleaning ends, inserting gaskets into correct position, jointing pipes and valve to form water tight joint, cost of all jointing materials, machinery, labour and all other ancillary operations complete.				
N.15.1	CSR Vol. 4 2023-24 Item no. 8.36.1	100 mm diameter valve with accessories	Set	2	12,411.50	24,823.00
N.15.2	CSR Vol. 4 2023-24 Item no. 8.36.2	150 mm diameter valve with accessories	Set	2	19,219.80	38,439.60
N.16	(DJB-2022 E&M,11.6.6)+10% escalation @5% per annum+10% installation, testing charges	Electrical Control VFD panels 75KW/100 HP for smooth starting by torque control and reduction in starting current etc. The panels shall be equipped with the following: 1) The entire status of operation & fault should be displayed on a 7 segment 5 digit Digital display with its meaning on the front panel door. 2) 100A, 3P switch fuse unit of brand new BIS certified make - 1 No for Capacitor. 3) Motor Protection Relay MPR 300 with 3 nos of suitable rated 5P10 class CTs, terminal connectors and suitable size copper control cable-1 No. 4) Resin cast dualcore Current transformers of suitable ratio, accuracy conforming to the latest IS 2705 with 15 VA burden for metering, class 1 - 3 Nos. 5) 0.5-60 Secs pneumatic on and off delay timer for automatic change over from reduced voltage to full voltage, BCH make or any other make approved by the Board - 1 No. 6) Start - Stop push buttons, conforming to the latest ISS 6875 BCH/ C&S make or any other make approved by the Board - 1 Set. 7) Motor ON/OFF Indicating lamp of BCH/ C&S make or any other make approved by the Board - 1 No. 8) Panel mounting version digital type Ammeter of suitable CT ratio Prok devices make or any other make approved by the Board - 1 No. 9) Panel mounting version digital type Voltmeter of suitable CT ratio Prok devices make or any other make approved by the Board - 1 No. 10) C.T. operated thermal over load relay GE/Alstom/Easun C&S make or any other approved make - 1 No. 11) Single phase preventor of Mimicrel/ Proke Davy's make or any other make approved by the Board - 1 No. 12) Under/over voltage relay, of GE/ Alstom/Easun C&S make or any other make approved by the Board with built in PT's for each phase- 1 No. 13) Under/over voltage relay, of GE/ Alstom/Easun C&S make or any other make approved by the Board with built in PT's for each phase- 1 No. 14) Auxiliary contactor of suitable rating 2 NO+2 NC-8Nos. 15) Local/Remote selector switch of reputed make to control by using SCADA system-1 No 16) Indicating lamps, RED, GREEN AND AMBER LAMP of rating 230 volts AC of BCH/ C&S make or any other make approved by the Board - 1 Set. 17) Alarm bell suitable for 230V, AC, 50 HZ- 1 No. 18) MCB for control circuit 6A, 5P of make approved by the Board.-3 No 19) Control MCB 10A, DP of make approved by the Board.-1 No. 20) Reputed make Neutral link of suitable rating -1 No 21) Compression type cable glands for incoming and outgoing cables- 1 Set each. 22) Aux relay for alarm protection and cancellation- 1 No. 23) Control terminals and power terminals- 1 Set NOTE: The starter panel shall be fabricated using 16 SWG sheet, steel flats and suitable size angle iron. All copper joints shall be electrotinned. The control wiring shall be done using 1100 volts grade adequate size multicore copper cable of Finolex/ Uniflex / or equivalent make. All the control wiring shall be properly ferruled. The circuit shall be designed for close transition using KORNDORFER Principle and should ensure smooth change over from top voltage to the full voltage without any momentary interruption in power supply to the motor. The starter panel is required for installation at an altitude not exceeding 600 m above MSL and the maximum ambient air temperature of 45 degree C. The starter panel shall be complete with all other required fitting and first fillings of oil. The panel shall be designed to conform to the requirement of the latest IS 8623, factory built assembly of switch gears and control gears. The inter connections shall be done using adequate size insulated electrolytic copper strip and copper cable. The Starter shall be suitable for Six starts per hour. The Painting should be done using Seven tank process.	Each	4	336000	13,44,000.00
N.17	(DJB-2022 E&M ,Item No. 26.1.22	Providing, Supplying, laying, jointing and testing of MS pipe made out of 8 mm Thick MS plate i/c welding, cutting, painting both Approved side with black anticorrosive bituminous paint of approved brand and tested to a head of Rate 15 kg/sqm conforming to IS 3589/1981, IS 7322-1974, IS 784-1978 and relevant codes i/c cost of plate and carriage at site complete as directed by Engineer-in-Charge. (actual weight will be paid) A/R	Kgs	2,610	75.76	1,97,733.60
N.18	(DJB-2022 E&M ,26.1.23	Providing, Supplying, laying and jointing of MS special-made out of 10 mm thick-MS plate painting both sides with black anticorrosive bituminous paint of approved brand and tested to a head of 15 kg/sqm conforming to IS 3589/1981, IS 7322-1974, IS 784-1978 and relevant codes i/c cost of plate and carriage at site complete as directed by Engineer-in-Charge. (actual weight will be paid)	Kgs	2,680	77.86	2,08,664.80


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 Sivok Rangpo New BG Rail Line Project

Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
N 19	CSR-2023-2024, V-5, Item No.5.2	Manufacturing, providing, transporting, rolling, lowering, laying, jointing and commissioning of ERW (Electric Resistance Welded)/ SAW (Submerged Arc Welded) MS pipes of Outer dia (Fe-410 grade) conforming to IS 3589-2001 with latest amendments, including perfect linking and welding of joints to correct position, cost of the pipes, conveyance, lead, lift charges, cost of all labour and giving satisfactory hydraulic test as per IS 3589-2001 with latest amendments for test pressure and working pressure both at factory and site etc. complete as per detailed specifications inside with CM 1:1.5 lining of minimum 10mm thick for pipes upto 610mm OD and with minimum 12mm thick beyond 610mm OD and out side with minimum 25mm thick coating in CM 1:3 over 50 x 50mm weld mesh of 13 gauge, including loading and unloading of pipes for the following diameters and specified thickness of plate as noted below, including bailing out of water wherever necessary (Contractor will make his own arrangements for procuring water for testing). No Negative tolerance in respect of thickness is permissible.				
N 20	CSR-2023-2024, V-5, Item No. 5.2.1	Pipe of 273.1mm dia -4.8mm thick	m	1,083	4655.6	50,42,014.80
N 21	DJB 2022 Pg No.171, item No. 4.61.3	Providing, Supplying, laying, jointing and testing DI Tamper Proof Air valve of PN 1.6 (i.e. 16 kgf/cm ²) with SS 304 Ball as per AWWA C-512 with Isolating Sluice Valve (DN-80 mm size)	Each	2	20757.6	41,515.20
Sub Total of Schedule-N (SOR)						₹ 1,38,84,066.38
Schedule-O (Non Schedule)	Miscellaneous E&M Works (Non Schedule)					
O.1	Non SOR	Providing, Supplying, installation, testing and commissioning of approved make oil lubricated deepwell vertical turbine pumps conforming to IS: 1710 & IS:5120 along with 75KW, 415V/4 Pole Motor with Solid shaft. The system shall be commissioned along with the following specifications: A) Oil Lubricated Deepwell Vertical Pump: 100HP a) Duty condition: Capable of discharging 52.09 lps for each pump Turbid water containing turbidity upto 4000 PPM against a total head of 90 Mtrs. b) Speed: Duty condition should be met at 1460 RPM. c) Shut off head: Min 110% & Max 130% of the specified head. d) Material of construction: i) Impeller- CF8M ii) Line shaft bearing- Bronze iii) Impeller seal ring SS 410/SS 316(M) iv) Impeller shaft Sleeve -do-/Manufacturer standards v) Bowl - Nil resistance cast iron FG 260 vi) Discharge head assembly -do- vii) Impeller shaft - Stainless steel SS 410 viii) Head shaft -Stainless steel SS 410 ix) Line shaft -Stainless steel SS 410 x) Column pipe - ERW steel IS 1239 (Part-1) 1990 heavy series. xi) Shaft enclosing tube-Seamless Steel (MS) xii) Coupling Forged Steel xiii) Strainer - M.S. Galvanized e) Column assembly: 250 mm dia, 15.00mtr. Length including Bowl Assembly, 8 mm thick, ERW/Seamless steel epoxy coated MS suitable for flanged joints with SS line shaft of adequate size. Each bearing shall be provided with bronze sleeves and protected from water by an MS enclosing tube. Column pipe should conform to ISS 1239 (Part 1)/1990 for dia upto 150mm and it should conform to ISS 3589/1991 if the dia is more than 150mm, with column pipe of length as approved by the Engineer. f) Discharge head assembly: Close grained CI/approved by Board as per IS 210 Top portion spigotted to receive vertical solid shaft motor. g) Bowl Assembly: Required No. of close grained CI, FG-260 grade bowls fitted with enclosed semi open type CF 8M impellers, SS wearing rings A Stainless steel pump shaft should be provided with suction bowl and a wire wound cone strainer or CI strainer. h) Motor Stool: With mitchell type or antifriction thrust bearing with ratchet, pin etc., to take care of hydraulic and axial thrust. i) Manual cooler box: SS head shaft along with tube tension device and fittings for lubricating line shaft. j) Non reverse ratchet: If coupled to VSS motor, pump should be provided with non reverse ratchet. B) 75KW/100HP 4-Pole Motor: 75KW/100 HP OR suitable HP of approved make, solid shaft, TEFC, squirrel cage induction 1500 RPM motor for continuous duty conforming to IS 4691 & IS 325 for operation for 3 phase, 50 Hz, 440 volts The Motor shall be provided BDT and RTD for SCADA Monitor a) Protection: IP 23 b) Insulation: 'F' class c) Ambient temperature: 50°C d) Cushion 10% more than maximum power required by the pump and capable of providing rated output upto + or - 10% voltage variation and + or - 3% frequency variation. e) Bearing One Cylindrical roller bearing at bottom & 2 Nos. of angular at top f) Bearing housing with Lubgriynth ring seal g) Cable terminal box suitable for 3x185 sqmm. PVC/XLPE armoured 1.1 KV UG cable	Each	2	2623553.16	5247106.32
O.2	Non SOR	Supplying and fixing 90 degree V notch in SS 304 Plate of Min 10mm Thick with a	No's	1	62000.00	62,000.00
O.3	Non SOR	Supply and fixing of Board approved make suitable valves and gravity box made of	No's	1	65000.00	65,000.00
O.4	Non SOR	Filter House				

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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
0.5	Non SOR	'V-Wire Screen under Drain System'- V-Wire Screens under drain header lateral filter	Per filter bed	3	750000.00	22,50,000.00
0.6	Non SOR	Supply and delivery of Air Blowers of Capacity 700m ³ /hr @0.35kg/cm ² for Aiding	No's	2	450000.00	9,00,000.00
0.7	Non SOR	Flow indicating meter Supplying & fixing of suitable size Rate flow indicating meter	No's	3	22000.00	66,000.00
0.8	Non SOR	Supply and fixing and commissioning of loss of head gauges with Aluminium dial and	No's	3	28000.00	84,000.00
0.9	Non SOR	Filter Media Supplying and placing in position the cleaned filter media for the filters house of suitable size as per CPHEEO manual and relevant IS specifications with all lead and lightest complete as per direction of Engineer in charge. The size of media and depth of layers to be filled should be as shown below from top to bottom etc., Complete as directed by the Engineer In charge. 1) Silica Sand - 0.45mm, 300mm thick 2) 3mm to 6mm Gravel-100mm thick 3) 6mm to 15mm Gravel-100mm thick 4) 15mm to 35mm Gravel-100mm thick 5) 35mm to 50mm Gravel-150mm thick, Total depth 0.75 mtr.	Cum	30	22000.00	6,60,000.00
0.10	Non SOR	Supply & delivery of Anthracite Coal - 1 to 2 mm filter media with 92% carbon content- 150mm thick.	Cum	10	65000.00	6,50,000.00
0.11	Non SOR	Providing pipe fittings, rate setters with indicating disc, sliding shaft and manifold RCC tees etc., Complete as directed by the Engineer In charge.	Set	3	48000.00	1,44,000.00
0.12	Non SOR	Supplying and fixing SS-304 grade 90 degree V notch at Control chambers etc., Complete as directed by the Engineer Uncharged.	Nos	3	35000.00	1,05,000.00
0.13	Non SOR	Supply, fixing and commissioning of SS control body system & SS floats etc., Complete as directed by the Engineer In charge.	No's	3	75000.00	2,25,000.00
0.14	Non SOR	Wash Water System Supplying, erection & commissioning of 5 HP / suitable HP capacity C/F Monoblock	No's	2	150000.00	3,00,000.00
0.15	Non SOR	Motor and Accessories Flash Mixer:- Supply, erection, electrification and commissioning of board approved make 0.5 HP/ Suitable HP motor with allied accessories required for Supply, erection, electrification and commissioning of board approved make suitable capacity gear box for motor and vertical paddles for alum solution tank. Supply, erection and commissioning of SS-304 grade, board approved make suitable capacity turbine paddles to the gear box (1:15) / suitable for alum solution tank etc., Complete as directed by the Engineer In charge.	Set	3	65000.00	1,95,000.00
0.16	Non SOR	Supply, erection and commissioning of board approved make control panel with sw	Job	1	60000.00	60,000.00
0.17	Non SOR	Flocculator:- Supply, erection, electrification and commissioning of board approved	No's	1	18000.00	18,000.00
0.18	Non SOR	Supply, erection, electrification and commissioning of board approved make suitable	No's	1	60000.00	60,000.00
0.19	Non SOR	Supply, erection and commissioning of SS-304 Grade, board approved make suitable	No's	1	150000.00	1,50,000.00
0.20	Non SOR	Pipes & Specials General:- Supply, erection and commissioning of board approved make CI Head Stock & Wheel as per IS specifications etc., Complete as directed by the Engineer In charge.	Set	16	22000.00	3,52,000.00
0.21	Non SOR	Lab Equipments. Providing, Supplying N Laboratory equipments as per CPHEEO Manual etc. Complete as directed by the Engineer In charge. Laboratory Equipment's are: 1. Digital pH meter Supplied with all accessories of 0-14pH with digital LED display -1 No 2. Conductivity Meter Digital LED Display with facility of temp. Compensation. Rang: 0-1000m mhos/cm -1 No 3. Hot Air Oven 14"x14"x14" with thermostatic control for temp range 5 degree to 250 degree centigrade, Inner chamber size 35x35x35 cms, 1200Watts -1 No 4. Bacteriological Incubator 14"x14"x14" 700C working temperature +50C above ambient to 65 degree, 42 Lit capacity, 400W-1No 5. Ring Water Bath 6 Holes thermostatically Controlled -1 No 6. Desiccator Vacuum 150mm Stop cock with pipe and spindle and porcelain Plate 3 Nos 7. Hot Plate Round M.S. Top With Energy Regulator (12 x18 Dia.) 2000Watts, 230 V -1Nos 8. PSM Vertical Auto Clave Double walled construction top lid of SS Working Chamber size 10" dia. X 18"-1Nos 9. 192 L 4 Star Inverter Direct Cool Single Door Refrigerator-1 No 10. Thermometer 110 Degree-4 Nos 11. Electronic Balance Single Pan 200 Gm-1 No 12. Automatic Burette (Automatic Zero with reservoir, rubber bellow, glass stopcock) 50 ML Borosilicate Glass-4 Nos 13. Fixed Volume Pipette-4 Nos 14. Clinical Centrifuge Medico with 4 x 15 ML Swing out Head & 15 ML Glass Tubes-1 No 15. Magnetic Stirrer with Hot Plate 1 Ltr capacity with Digital speed indicator-1 No 16. All Glass Filter Holder 47mm (1000ML Flask 300 ML Funnel)- 1No 17. Physical Balance with weight Box-1Nos 18. Binocular Research Microscope (COAXIAL) with 4 Optics 100 X Oil Immersions with Wooden Box-1 No 19. Muffel Furnace (50x100x50)-1 No 20. Supply of Different Size Beakers, Conical Flasks, Test tubes, required for lab usage etc., with Lab chemicals complete for Testing-1 Set 21. Distillation Apparatus wall mounted 2.5 ltr / hr free standing electrically operated -1 No.	Lot	1	700000.00	700000.00
0.22	Non SOR	Supply, erection and commissioning: Labour charge, Installation and commissioning of above all works with required size and length cable etc., Complete as directed by the Engineer In charge	Job	1	250000.00	2,50,000.00

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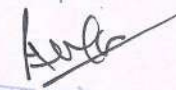
Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
0.23	Non SOR	Providing GI motor covers to flash mixer, flocculator and clarifier bridge motors with all materials lead and lift etc., complete	Job	1	10000.00	10,000.00
0.24	Non SOR	Supplying and fixing SS-304 bye pass Gate at Raw water channel of size minimum of 0.6X0.75 with frame, handle, rubber packing etc., Complete as directed by the Engineer Uncharged	Nos	2	70000.00	1,40,000.00
0.25	Non SOR	Supply and delivery of 10HP or suitable HP Starter for Air Blowers (1W+1S) and 5	Set	1	103000.00	1,03,000.00
0.26	Non SOR	Providing, Supplying, installation and commissioning of approved make W&T S10k vacuum feed chlorination system having capacity 4kgs/hour with automatic control including piping and all accessories	Set	1	450000.00	4,50,000.00
0.27	Non SOR	Providing, Supplying Chlorine leak detector for the integrated system of Water Treatment plant of 3.0 MLD capacity	Nos	1	52000.00	52,000.00
0.28	Non SOR	Providing, Supplying and commissioning of new empty chlorine gas cylinder of 928kg (tonner) capacity of approved source by the department of explosive of Govt of India for filling chlorine for (For 2 cylinders)	Nos	1	370000.00	3,70,000.00
0.29	Non SOR	Providing, Supplying and installation of Torner safety kit for preventing leakages in Chlorination chamber (set of 42 items)	Nos	1	98000.00	98,000.00
0.30	Non SOR	Providing, Supplying and installation of Safety shower for the chlorination chamber in Water treatment plant	Nos	1	22000.00	22,000.00
0.31	Non SOR	Providing, Supplying and installation of Protective clothing or the chlorination chamber in Water treatment plant	Nos	1	21000.00	21,000.00
0.32	Non SOR	Providing, Supplying of Oxygen mask of minimum 30 mm back up	Nos	1	42000.00	42,000.00
0.33	Non SOR	Providing, Supplying of Chemistar gas mask of minimum 30 mm back up	Nos	1	20000.00	20,000.00
0.34	Non SOR	Providing, Supplying and installation of of Trunimon(set) in the water treatment plant as per the direction of Engineer-In- Charge	Nos	1	18000.00	18,000.00
0.35	Non SOR	Providing, Supplying of Header line with electronic switchover system(2 ports) including auxiliary valves for tonners	Nos	1	44000.00	44,000.00
0.36	Non SOR	Providing, Supplying of Liquid chlorine for tonner (REFILLING 2 Nos)	Nos	1	96000.00	96,000.00
0.37	Non SOR	Pressure relief valves 1) Supply delivery and erection at site brand new reputed make pilot operated pressure valve of 100mm dia with maximum permissible pressure 16.00 Kg/cm² with the following specifications: a) Valve should have direct sealing dia diaphragm. b) Activated by line pressure and controlled by 2 way diaphragm operated adjustable operated adjustable pilot valve. c) Valve should be installed on a tee junction, which should modulate automatically to maintain preset inlet pressure and relieve the excess pressure out of the network. Material construction : 1. Body & Bonnet - Ductile Iron ISO 1083 Grade 450-10 2. Diaphragm - Natural rubber (N.R) (Standard) 3. Spring - SST 302. 4. Pilot valve - Brass ISO 426 5. Coating - Electrically applied, oven backed polyester. 6. End connection - flanged BS - IS NOTE : The outlet of pressure sustaining valve should be connected to sump using MS pipes and fittings. The erection work includes providing suitable size D/FM.S.Tee, anchoring with CC 1:2:4 cutting welding etc. as directed by field engineers.	Each	2	98450	196900
		Pure water HSC Pumpsets: Supply & delivery at site brand new, best efficient make horizontal mounted pure water HSC pumpsets pumps conforming relevant standards and the following. a) Duty Condition: Capable of delivering 44.81 LPS of Turbid water containing turbidity upto 100ppm against a total head of 90 m during solo operation. b) Speed: Duty condition should be met at 1500 RPM. c) Shut off head: Min 110 % & Max 130 % of the specified head d) Material of construction: Motor Casing, Oil Chamber :Cast Iron (FG 260 as per IS 210 or GG25 or EN-JL1040) Motor 's (Squirrel Cage) Rotor: Copper Bar only Mechanical Seals : Primary (Inboard) : Silicon Carbide v/s Silicon Carbide or Tungsten Carbide v/s Tungsten Carbide • Secondary (Outboard): Carbon v/s Cast Chrome Molybdenum Steel or Carbon v/s Silicon Carbide or Tungsten Carbide Elastomers: O' rings of Viton Bellows of either Viton OR Nitrile Fasteners: Stainless Steel Pump (Bowl) Casing: Cast Steel - ASTM A 216, GR WCB Impeller :Cast Austenitic Stainless Steel (SS 316 or CF 8M or 1.4406) Wearing Rings : Cast Austenitic Stainless Steel (SS 316 or CF 8M or 1.4406) Pump-Motor Shaft: Stainless Steel (SS 410 or SS 430 or 1.4021 or 1.4460) Suction Strainer: Stainless Steel 202 Portable Stand : MS (C15) Fabricated with Epoxy Coating				

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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
0.38	Non SOR	MOTOR: The submerged squirrel cage induction motor shall be Dry Air filled Totally Enclosed self frame Surface Water Cooled (TESWC) type suitable for 3 phase, 50 cycles, 415 volts AC supply suitable complete conforming to IEC60034 shall be of such capacity to provide under working site condition a power more than the maximum power required by the pump. Continuous duty with class 'F' insulation. Winding of the motor shall be impregnated by resin. Motor shall have integral cable entry port better starting torque characteristics. The enclosure for motor shall be IP-68. Each phase of the motor provided with thermic switches of Bi-metallic electro-mechanical temperature detectors. The motor shall operate satisfactorily at all operating levels wetwell. The motor shall be sealed against entry of liquid being pumped by using two mechanical seals. Motor pump should have the following in built protection connections. 1) Thermistors protection connection against over heating of motor by thermister embedded in each phase. 2) Sensor monitor connection against entry of liquid in the oil chamber by the moisture sensor provided inside the oil chamber. 3) Reverse rotation protection connection device which trips the motor in case of reverse rotation due to wrong electrical connection. 4) Bearing temperature sensor for protection from overheating of Bearings. 5) Moisture sensor for detection of leakage in stator housing. 6) Liquid level controller to facilitate auto operation and prevent dry running of pumps. The pumpset shall be supplied along with automatic coupling bend and lifting chain with shackles and guide pipes of adequate length with extra tough water proof PVC sheathed water proof HSC cable of suitable capacity copper cable. The motor shall be provided with 25 M of copper power cable of (1R x 4C x 35 mm² + 1R x 3C x 35 mm²) or suitable size cables and control cable of (1R X 10C X 1.5 mm²) of reputed make. The delivery nozzle of the pump shall be minimum 150 mm dia The cable shall be terminated/ connected to pump monitor unit using necessary cable terminations. Note:- 1) Motor offered shall be of such capacity to provide the maximum power requirement of impeller of the pump including transmission, shaft losses with a 10% margin in the capacity of the motor when only one pump is operated in the system. 2) The motor shall be suitable for required output when line voltage variation is +/- 10% and frequency variation of +/- 5% in any combination of these voltage and frequency variation. 3) The motor should be capable of providing the required output at an ambient air temperature of 45 degree centigrade. 4) The shaft head of the pump offered should be minimum 110% and maximum 130% of the specified head. The loading for low efficient pump will be done based on each excess power consumed by over a period of 15 years when compared to the best efficient pump. 5) The Board preserves the right to select any of stipulated make of pump and motor as such tenderer should be prepared to provide any of the stipulated makes pump and motor selected by the Board. 6) The motor shall be suitable for starting the pumpset with suitable starter.	Each	2	728775.66	1457551.32
0.39	Non SOR	Cost of hiring and running of commercial numbered light motor vehicles on monthly rental basis including cost of driver, all maintenance and repairing of vehicles for movement of IRCON officers/ staff. The rates are lumpsum including running of 3500 km per month per vehicle. Vehicle should be in excellent running condition, manufactured not earlier than 2014 and shall be accepted by IRCON. Make of vehicle shall be Mahindra Scorpio/ Xylo/Duster or equivalent. Beyond 2500 Km, Diesel / Petrol reimbursement shall be as under: 1(One) litre diesel/petrol per 9 (nine) Km running of vehicle in all types of roads & condition of roads. The rate of the Diesel/Petrol shall be taken as that of ordinary Diesel/Petrol. The rate of the Diesel/Petrol shall be taken as the rate prevailing on 15th of the month for which the vehicle has been used.	Vehicle month	42	48809.29	20,49,990.18
0.40	Non SOR	Supply, laying, testing and commissioning of 1C x 630 sq. mm Aluminium armoured conductor XLPE insulated FLRS inner and outer sheathed, 1.1 KV power distribution cables with conforming to IS.7098 including Cable termination and cable gland as per site requirement.	Meter	500	2433.48	12,16,740.00
0.41	Non SOR	Providing, Supplying, Installation and commissioning of 700mm dia, 700mm height SS strainer made of 10mm thk plates and 20mm thk flange & other allied accessories complete as directed by the engineer-in-charge.	Each	1	204050	2,04,050.00
0.42	Non SOR	Design, Fabrication, Supply, Installation, Testing & Commissioning of Electric Traction Type fully automatic Machine room less (MRL) Passenger Elevator having SS Enclosure (Grade 304) with AC variable voltage & variable frequency drive unit suitable for operation on 415 +/- 10 % V, 3 Phase, 50 Hz. AC supply. Power operated SS center opening type car & landing doors, electro-magnetic brake system, operating panel with luminous buttons, overload warning indicator, battery operated alarm bell, emergency light, infrared red sensing door protection for full height (min 2100mm height) & mechanical safety by pressure sensor, reverse phase relay on controller, fire man's switch at ground floor, digital car positions indicator in car with up / down direction indications, light fixtures, ventilation fan, landing sill, main beam in shaft for machine, pit ladder, provision of lighting in elevator shaft etc. complete with all accessories serving different floors in the lift shaft alongwith Automatic Rescue Device.	Each	2	1588983	3177966


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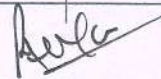
Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
		Application: Machine-room-less and Compact machine room Max Speed: 1.0 m/s Max Travel: 13.2 m Max no. of stops: Up to 5 Max Load: 544 kg Max Persons: Up to 8 Pit depth:- 1500mm				
0.43	Non SOR	Supply, installation, testing & commissioning of LT Panel made of metal enclosure of 2mm thick CRCA sheet duty powder coated with 250 A Copper bus bar with following switchgears and metering Necessary arrangement be made for termination of incoming cable and outgoing cables using cable alleys. Incomer: 200 A, 4P MCCB 50 KA with thermal magnetic release with O/L& S/C Protection - 1 No Indicating lamp-3 No. 100/5, 15VA, Class-I, CT - 1No Digital Multifunctional Meter, Class-I Spreader Link - 1 Set 6 Amps SP MCB for Control - 1 Set Outgoing 100 Amps 4P MCCB 25K with thermal magnetic release with O/L& S/C Protection - 1 Nos. 63 Amps 4P MCCB 25K with thermal magnetic release with O/L& S/C Protection - 8 Nos. 32 Amps 4P MCCB 25 KA with thermal magnetic release with O/L& S/C Protection - 8 Nos. Panel must consist of space heater, thermostat, illumination lighting and should be compatible with IP 54 Note: Manufacturing shall be taken up after accord approval from Engineer-in-Charge & Panel should be fabricated from CPRI approved vendor. Panel should have Rites/Consmee inspection.	Nos.	2	300000	600000
0.44	Non SOR	Supply, installation, Testing and commissioning of 1.5 TR Airconditioning device, inverter technology, 5 star rating complete including piping (20 mm Dia PVC drain pipe with 6 mm thick rubber, Copper pipe of suitable length) and including all fitting complete in all respect.	Each	14	60,765.00	8,50,710.00
0.45	Non SOR	Supply, installation, Testing and commissioning of 3 TR Cassette Airconditioning device, 5 star rating, inverter technology complete including piping (20 mm Dia PVC drain pipe with 6 mm thick rubber, Copper pipe of suitable length) and including all fitting complete in all respect.	Each	8	1,11,460.80	8,91,686.40
Sub Total of Schedule-O (Non SOR)						₹ 2,47,49,700.22
Schedule-P (Non SOR)	PLC, SCADA AND AUTOMATION CONTROL SYSTEM					
P.I.W		INTAKE WELL				
		PLC Control Panel with HMI at Intake well;				
P.I.W.1	Non SOR	Supplying, Installing and successful Commissioning of Required Automation Accessories for existing PLC Panel at INTAKEWELL HMI. a) PLC with Automatic operation for controlling commands with Reputed make PLC with an operating voltage of 24V DC, with required Digital inputs & Digital Outputs and analogue Inputs /Output with current 4-20 mA. b) PLC with USB port/Ethernet port for programming. Ethernet port configurable for MODBUS TCP IP, programming and PC communication, with add on card for inputs and other analog signals, RS 232 or RS 485 port with life time activated licensed Programming and application software. c) Automatic Control for Intake well Pump Motor for automatic ON/OFF Operation & Controlling of motor during ON/OFF operation also to access instruments data proposed for control system d) Electrical Panel with other switchgear Accessories	Set	1	920000	9,20,000.00
P.I.W.2	Non SOR	GSM or GPRS Wireless Communication Module: Supplying, Installing, commissioning wireless communication system for Long deployment range wireless communication system with throughput of upto 200Mbps bi-directional traffic for RTU communication with below specification. a. Frequency Range: 4910-5970Mhz Leg b. Channel Width: 5/10/20/40MHz c. Ethernet Interface: 10/100 BaseT d. Protocols Used IPv4/IPv6 (Dual Stack), UDP, TCP, ICMP, SNMPv2c, NTP, STP, IGMP, SSH e. VLAN : 802.1Q with 802.1p priority f. Transmit Power Range : -15 to +27 dBm (combined to regional EIRP limit)(1 dB interval) g. Antenna Gain : 22dBi h. Surge Suppression : 1 Joule integrated i. Power Consumption : 8 W Maximum, 5 W Typical j. Input Voltage : 12 to 30 V k. Encryption : 128-bit AES (CCMP mode) l. FCCID: Z8H80FT0031 m. CE : 5.4 GHz EN 301 893 V2.1.1 and 5.8 GHz EN 302 502 V2.1.1	Set	1	45000	45,000.00
		Pressure Sensor				

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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
P.IW.3	Non SOR	Supplying, Installing, commissioning of Pressure Sensor with Indicators to be fixed at Intakewell Outlet Pipe for Measuring water Pressure inside the Pipe with Following Specification; Pressure Range :- 10 Kg/Cm ²	Set	3	21186.44	63,559.32
P.IW.4	Non SOR	Power Backup (UPS):- Supplying, providing and installation of 1 KVA Online UPS with 4 Hours power backup to power Entire PC console panel and installed sensors except valves and pumps to run in absense of power and continue its operation and data accumulation in the intakewell to observe and monitor the system in absence of power.	Set	1	63559.32	63,559.32
P.IW.5	Non SOR	Electromagnetic Flowmeter :- Manufacture Supply & Delivery Assembly at site,erection, testing & Commissioning of Electromagnetic Flow Meter at Intake well outlet to measure raw water having minimum conductivity of 5uS/cm,of approved make conforming to BIS or ISI Standards. Flange Material:CS Sensor Lining: Rubber/ PTFE Measuring Tube: SS304 Coil Housing: CS Protection Class for Sensor: IP68 Power Supply: Universal Power Supply 85 to 265VAC@45 to 65 Hz Output: 4 to 20mA Communication Interface's 485 (MODBUS RTU) a) 400 MM (At Intake well Outlet)	Set	1	444745.76	4,44,745.76
P.IW.6	Non SOR	Wiring:- Intermediate Wiring at the Intake well Section for all panels of control and Power Wiring including Panel Earthing and Cable trays and other required accessories	Set	1	270000	2,70,000.00
P.WTP		WATER TREATMENT PLANT				
P.WTP.1	Non SOR	PLC Control Panel with HMI At Main WTP (Alum, Flocculator & Flash Mixer Unit) Supplying,Installing and succesfull Commissioning of Required Automation Accessories for existing PLC Panel at WTP With HMI (For Alum Dosing System (0.5 Hp, 03 Qty) & Flash Mixer Unit (1 Hp, 01 Qty) and Flocculator (1 Hp, 01 Qty) a) PLC with Automatic operation for controlling commands with Reputed make PLC with an operating voltage of 24V DC, with required Digital inputs & Digital Outputs nd analogue Inputs /Output with current 4-20 mA. b) PLC & SCADA Compatible Starters for Motors at Main WTP for Alum , Flocculator & Flash Mixer Unit. c) PLC with USB port/Ethernet port for programming, Ethernet port configurable for MODBUS TCP IP,programming and PC communication, with add on card for inputs and other analog signals,RS 232 or RS 485 port with life time activated licensed Programming and application software. d)Automatic Control for Motor for automatic ON/OFF Operation & Controlling of motor during ON/OFF operation and to access instruments data proposed for control system e) Electrical Panel with other switchgear Accessories.	Unit	1	650000	6,50,000.00
P.WTP.2	Non SOR	PLC Control Panel with HMI At WTP (Blower & Backwash Section) Supplying,Installing and succesfull Commissioning of Required Automation Accessories for existing PLC Panel at WTP With HMI (For Blower, Backwash) a) PLC with Automatic operation for controlling commands with Reputed make PLC with an operating voltage of 24V DC, with required Digital inputs & Digital Outputs nd analogue Inputs /Output with current 4-20 mA. b) PLC with USB port/Ethernet port for programming, Ethernet port configurable for MODBUS TCP IP,programming and PC communication, with add on card for inputs and other analog signals,RS 232 or RS 485 port with life time activated licensed Programming and application software. c)Automatic Control for Blower and Backwash Pump Motor for automatic ON/OFF Operation & Controlling of motor during ON/OFF operation and to access instruments data proposed for control system d) Electrical Panel with other switchgear Accessories.	Unit	1	450000.00	4,50,000.00
P.WTP.3	Non SOR	PLC Control Panel with HMI for WTP Pumphouse Supplying,Installing and succesfull Commissioning of Required Automation Accessories for existing PLC Panel at WTP With HMI (For WTP Pumphouse Section) a) PLC with Automatic operation for controlling commands with Reputed make PLC with an operating voltage of 24V DC, with required Digital inputs & Digital Outputs nd analogue Inputs /Output with current 4-20 mA. b) PLC with USB port/Ethernet port for programming, Ethernet port configurable for MODBUS TCP IP programming and PC communication, with add on card for inputs and other analog signals,RS 232 or RS 485 port with life time activated licensed Programming and application software. c)Automatic Control for Pump Motor for automatic ON/OFF Operation & Controlling of motor during ON/OFF operation and to access instruments data proposed for control system d) Electrical Panel with other switchgear Accessories.	Unit	1	920000.00	9,20,000.00
		GSM or GPRS Wireless Communication Module				

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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
P.WTP.4	Non SOR	Supplying, Installing, commissioning wireless communication system for Long deployment range wireless communication modem of Sophos (Inhand) with throughput of upto 200Mbps bi-directional traffic for RTU communication with below specification. a. Frequency Range: 4910-5970Mhz Leg b. Channel Width: 5/10/20/40MHz c. Ethernet Interface: 10/100 BaseT d. Protocols Used IPv4/IPv6 (Dual Stack, UDP,TCP,ICMP,SNMPv2c, NTP,STP,IGMP,SSH e. VLAN : 802.1Q with 802.1p priority f. Transmit Power Range : -15 to +27 dBm (combined to regional EIRP limit)(1 dB interval) g. Antenna Gain : 22dBi h. Surge Suppression : 1 Joule integrated i. Power Consumption : 8 W Maximum, 5 W Typical j. Input Voltage : 12 to 30 V k. Encryption : 128-bitAES(CCMp mode) l. FCCID: Z8H80FT0031 m. CE : 5.4 GHz EN 301 893 V2.1.1 and 5.8 GHz EN 302 502 V2.1.1	Unit	1	45000	45000
P.WTP.5	Non SOR	Electromagnetic Flowmeter Manufacture Supply & Delivery Assembly at site,erection, testing & Commissioning of Electromagnetic Flow Meter at Main WTP Inlet & outlet to measure raw water having minimum conductivity of 5uS/cm,of approved make conforming to BIS or ISI Standards Flange Material:CSSensor Lining: Rubber/ PTFE Measuring Tube: SS304 Coil Housing: CS Protection Class for Sensor: IP68 Power Supply: Universal Power Supply 85 to 265VAC/@45 to 65 Hz Output: 4 to 20mA Communication Interface's 485 (MODBUS RTU)				
P.WTP.5.1		a) 300 MM (WTP Inlet)	Nos	1	289830.51	2,89,830.51
P.WTP.5.2		b) 300 MM (WTP Pumphouse Outlet)	Nos	1	289830.51	2,89,830.51
P.WTP.6	Non SOR	Ultrasonic Level Sensors Supply & Delivery,assembly at site erection,testing,trial run & Commissioning of non contact type ultrasonic level sensors with calibration required for 2 water tanks (one at overhead backwash tank & another for Pure water sump tank) a) Minimum Range -0 to 10 meter b) 2 wire sensor with Output-4-20mA/2 Wire	Nos	2	92389.83	1,84,779.66
P.WTP.7	Non SOR	Pressure Sensor Pressure Sensor with Indicators are to be fixed at WTP Pumphouse Outlet for Measuring water Pressure inside the Pipe with Following Specification, Pressure Range :- 10 Kg/Cm ²	Nos	2	21186.44	42,372.88
P.WTP.8	Non SOR	Power Backup (UPS) Providing, Supplying, Installation and commissioning of 3 KVA Online UPS with 4-5 Hours power backup to power Entire PC console panel and installed sensors except valves and pumps to run in absence of power and continue its operation and data accumulation in the SCADA Room at WTP to observe and monitor the system in absence of power.	Unit	1	216101.69	2,16,101.69
P.WTP.9	Non SOR	SCADA System Software Design development of SCADA application software for data storage communication with all instruments,to provide Run/Stop instruction for all Motors/Actuators, Providing Automatic logical operating sequence of all systems with SCADA Runtime and Development Keyas per the instruction of the Engineer in charge	Nos	1	991758.47	9,91,758.47
P.WTP.10	Non SOR	SCADA Monitoring Screen Supply install and commissioning of reputed make brand new LED Display screen of minimum 65" (Inches) screen size with all mounting bracket arrangement and accessories for displaying realtime overview of the SCADA.	Nos	1	85000	85,000.00
P.WTP.11	Non SOR	Computer server Unit SCADA Computer Screen, Instrumentation with Computer Server and other Accessories. Reputed brand server with all licensed operating software. MS office or latest, application software necessary for SCADA software, database software my SQL etc complete, hardware configuration as intel processor latest 2/4 core, 8GB DDR2 RAM, 2 USB ports, Ethernet port, and all other accessories , atleast 27" LCD / LED display with HDMI cable, accessories likekeyboard mouse etc	Nos	1	491525.42	4,91,525.42
P.WTP.12	Non SOR	Intermediate Wiring Intermediate Wiring at the Main WTP Section for all panels of control and Power Wiring including Panel Earthing and Cable trays and other required accessories	Set	1	1200000	12,00,000.00
P.DS		SCADA MONITORING SYSTEM AT DISTRIBUTION SECTION PLC RTU Control Panel with HMI				

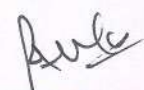

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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
P.DS.1	Non SOR	Supplying, Installing and successful Commissioning of Required Automation Accessories for existing PLC RTU Control Panel At Distribution OHT's: a) PLC RTU with Automatic operation for controlling commands with Reputed make PLC with an operating voltage of 24V DC, with required Digital inputs & Digital Outputs and analogue Inputs /Output with current 4-20 mA. b) PLC with USB port/Ethernet port for programming, Ethernet port configurable for MODBUS TCP/IP, programming and PC communication, with add on card for inputs and other analog signals, RS 232 or RS 485 port with life time activated licensed Programming and application software. c) Automatic Controlling of motorized actuated valves open/close operation at OHT Inlet also and to access instruments analogues data proposed for control system. d) Electrical Panel with other switchgear Accessories.	Unit	2	98000	1,96,000.00
P.DS.2	Non SOR	Ultrasonic Level Sensors Supply & Delivery, assembly at site erection, testing, trial run & Commissioning of non contact type ultrasonic level sensors with calibration required for OHT's. a) Minimum Range -0 to 10 meter b) 2 wire sensor with Output-4-20mA/2 Wire	Nos	2	92000	1,84,000.00
P.DS.3	Non SOR	Pressure Sensor Pressure Sensor with Indicators are to be fixed at OHT's Inlet for Measuring water Pressure inside the Pipe with Following Specification: Pressure Range :- 10 Kg/Cm ²	Nos	2	21185.44	42,372.88
P.DS.4	Non SOR	GSM or GPRS Wireless Communication Module Supplying, Installing, commissioning wireless communication system for Long deployment range wireless communication modem Inband (Sheetal Wireless) with throughput of upto 200Mbps bi-directional traffic for RTU communication with below specification. a. Frequency Range: 4910-5970Mhz Leg b. Channel Width: 5/10/20/40MHz c. Ethernet Interface: 10/100 BaseT d. Protocols Used IPv4/IPv6 (Dual Stack), UDP, TCP, ICMP, SNMPv2c, NTP, STP, IGMP, SSH e. VLAN : 802.1Q with 802.1p priority f. Transmit Power Range : -15 to +27 dBm (combined to regional EIRP limit)(1 dB interval) g. Antenna Gain : 22dBi h. Surge Suppression : 1 Joule integrated i. Power Consumption : 8 W Maximum, 5 W Typical j. Input Voltage : 12 to 30 V k. Encryption : 128-bit AES (CCMP mode) l. FCCID : Z8H80FT0031 m. CE : 5.4 GHz EN 301 893 V2.1.1 and 5.8 GHz EN 302 502 V2.1.1	Nos	2	45000	90,000.00
P.DS.5	Non SOR	Power Backup (UPS) with Enclosure Providing, supplying, installation and commissioning of 1 KVA Online UPS with 4 Hours power backup unit with Closed Enclosure panel to power Entire PC console panel and installed sensors except valves and pumps to run in absence of power and continue its operation and data accumulation in the OHT's to observe and monitor the system in absence of power.	Nos	2	118644.07	2,37,288.14
P.DS.6	Non SOR	Electromagnetic Flowmeter Manufacture Supply & Delivery Assembly at site, erection, testing & Commissioning of Electromagnetic Flow Meter at OHT's Inlet to measure clear water having minimum conductivity of 5uS/cm, of approved make conforming to BIS or ISI Standards. Flange Material: CS Sensor Lining: Rubber/ PTFE Measuring Tube: SS304 Coil Housing: CS Protection Class for Sensor: IP68 Power Supply: Universal Power Supply 85 to 265VAC @ 45 to 65 Hz Output: 4 to 20mA Communication Interface's 485 (MODBUS RTU)				
P.DS.6.1	Non SOR	a) 300MM OHT - 1 for Railway Station	Nos	1	289830.51	2,89,830.51
P.DS.6.2	Non SOR	b) 200 MM OHT - 2 for Proposed 7 Plots	Nos	1	227796.61	2,27,796.61
P.DS.7	Non SOR	Intermediate Wiring Intermediate Wiring at the Distribution OHT Section for all panels of control and Power Wiring including Panel Earthing and Cable trays and other required accessories	Unit	4	35000	1,40,000.00
P.WQI		SCADA SYSTEM FOR ONLINE WATER QUALITY INSTRUMENTS				
P.WQI.1	Non SOR	Online Turbidity Meter (At Main WTP Inlet & Outlet) Supply, install, commissioning and integration of online turbidity meter. turbidity meter shall have minimum resolution of 1 NTU and measuring range of 0- 400 NTU for Raw water and 0-100 NTU for treated water selectable by User. To be installed at (a) Raw water Inlet b) Pure water Sump/ Pump House with all cabling for communication with PLC and SCADA system	Nos	2	292372.88	5,84,745.76
P.WQI.2	Non SOR	Online pH Meter (At Main WTP Outlet) Supply install, commissioning and integration of online pH meter for monitoring at WTP. Meter shall be connected at Main Plant Inlet Pipe from Intake well to WTP & on the Outlet of WTP to monitor pH of pure water with Necessary Communication interface to integrate with PLC Panel with meter range for 0-14 pH.	Nos	1	150000	1,50,000.00

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Sl. No.	Reference of rate	Description of Item	Unit	Quantity	Rate(Rs.)	Amount (Rs.)
P.WQI.3	Non SOR	Online Chlorine Meter (At Main WTP Outlet) Supply, Install, commissioning of Online residual chlorine analyzer of measuring range 0-10 ppm to be fixed at Clear Water Sump outlet or an appropriate tapping point after chlorination for monitoring Residual chlorine content .The choline analyzer shall be of reputed make and shall be connected	Nos	1	305084.75	3,05,084.75
P.WQI.4	Non SOR	Online TDS/Conductivity Meter (At Main WTP Inlet & Outlet) Supply, Install, commissioning of Online TDS/Conductivity analyzer of measuring range 0-10 ppm to be fixed at WTP outlet or an appropriate tapping point after chlorination for monitoring Water Hardness TDS content. The choline analyzer shall be of reputed make and shall be connected	Nos	2	295000	5,90,000.00
P.MISC		1 Ø power supply to EM Flow meters and Pressure sensors at distribution line, providing SIM cards for SCADA and 2 Ton Capacity Inverter type AC				
P.MISC.1	Non SOR	Supply and laying of LG UT cable having aluminium conductor PVC insulated, sheathed, galvanized steel wire / steel tap armored cable with PVC over sheathing.	Mtr	50	440.68	22,034.00
P.MISC.2	Non SOR	Providing and commissioning SIM cards in the name of IRCON Rangpo and recharging for 12 months Internet data for Data acquisition and SCADA from different components in the Scheme. For WTP (Master PLC)-1 No For Intake -1 No For OHTs-2 Nos Rs.300/Month for 4Sim cardsX12 months	Job	4	5084.75	20,339.00
P.MISC.3	Non SOR	Supply,erection,testing and commissioning of 2.0 TR Heating cum airconditioning device,inverter technology, 5 star rating complete including pipe and all fitting and stabilizer etc. complete in all respect.	Nos	1	72033.9	72,033.90
		NOTE: PAYMENT OF ITEMS IN SCHEDULE-P shall be made for a) 70% of the payment in above items will be released upon the successful trial run of individual units, including the Intake Well, Rising Water Main and Valves, Water Treatment Plant (WTP), levated Storage Reservoirs (ESRs) and Plot service connection etc. b) The remaining 30% of the payment will be released only after the successful trial run and commissioning of the integrated SCADA Automation system, ensuring synchronization between the Intake Well, Water Treatment Plant (WTP), Elevated Storage Reservoirs (ESRs) and plot service connection for seamless monitoring and control of operations across the water supply system.				
Sub Total of Schedule-P (Non SOR)						₹ 1,08,14,589.09
Schedule-Q (SOR)	Unforeseen Items	Unforeseen items not covered in other Schedules				
Q-1	SOR Items	DSR-2023 Sub Head 15.0 (excluding multiplication factor for GST)	LS			50,00,000.00
Q-2		Unforeseen Items not in other BOQ Schedules from DSR 2023 (excluding multiplication factor for GST)	LS			1,00,00,000.00
Q-3		Unforeseen Items not in other BOQ Schedules from DSR (E&M) 2022 (excluding multiplication factor for GST)	LS			50,00,000.00
Q-4		DSR (Horticulture & Landscaping) 2020 (excluding multiplication factor for GST)	LS			10,00,000.00
Sub Total of Schedule-Q (SOR)						₹ 2,10,00,000.00
TOTAL OF SCHEDULES (A+A1+B+C+D+E+EI+F+G+H+I+J+K+L+M+N+O+P+Q)						₹ 46,25,84,215.56


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