Date:26th November 2026

Corrigendum 1 - CC27SVP023

The Tata Power Company Limited Invites Bids on behalf of SEUPPTCL (South East U.P Power Transmission Company Limited) from interested and eligible Vendors for the following tender package (Two-part Bidding) in **Uttar Pradesh (UP)**

Summary of the tendered packages:

Sr. No.	Description	Tender Reference no.	Bid Guarantee Fee / EMD(Rs.)	Tender Fee (Rs.)
1.	Construction of storage facilities and miscellaneous civil works at SEUPPTCL substations – Gonda sub-station, Mainpuri sub-station and Rewa sub-station.	CC27SVP023	2,00,000 /-	2,000 /-

Please note, above is Corrigendum 1 to the Tender CC27SVP023 advertised on 14th November 2026. The bidder who has already participated in the Tender shall be retained as "participant" & they shall not be required to participate again by submitting the Tender Fee of INR 2,000 /.

Note –

Last date & time for Payment of Tender Participation Fee is being extended up to 2nd December 2026, wednesday up to 15:00 Hrs

Interested bidder is strongly advised not to wait by above time and purchase the tender immediately to get the link for bid submission. This will enable them to communicate/raise queries against the subject tender in time.

For additional technical details and Pre-qualification criteria for the subject works please refersection C below.

For above tender, bidders can participate in one or more lots. Bid evaluation (i.e., Technical, Safety and Financial) and award of tender shall be done on lot basis.

For additional technical details and Pre-qualification criteria for the subject works please refersection C below.

A. Guidelines for Participating:

Interested and eligible vendors can participate by submitting the following up to 1500 hours on **Wednesday– 2nd December 2026.**

Payment of non-refundable Tender Fee, as indicated in table above to be paid by directdeposit in following bank account

Beneficiary Name - South East U.P. Power Transmission Company Ltd

Bank Name – State Bank of India

Branch Name – CAG Branch

3rd Floor, Nevile House

J.N.Heredia Marg, Balard Estate,

Fort, Mumbai - 400001

Account No – 4129 6193 021

Account type – TRA/Current

IFSC Code (RTGS & NEFT) – SBIN0009995

MICR Code - 400002133

Submission of duly signed and stamped Authorization Letter indicating name of authorized person, contact number and e-mail id (mandatory) on Vendor's letterhead. The letter shallalso mandatorily include payment details of Tender fee and Tender Reference no **CC27SVP023.**

Authorization Letter along with proof of submission of tender fee should be e-mail to **Ms.Sujata Vishnu Patil** (sujatavishnu.patil@tatapower.com) and copy to **Mr. Vivek Mittal** (vivek.mittal@tatapower.com) and **Mr. Anubhav Anand** (anubhav.anand@tatapower.com)

Note: - Once the above-mentioned documents are received, detailed RFP shall be issued through our e-tender system.

3. It is clarified that Bid Guarantee/EMD as mentioned in section "A" above, is not requiredto be submitted at this stage, and it will be required to be submitted in the form of Bank guarantee at the time of Bid Submission.

C. Pre-qualification Requirement Criteria:

Sr No	Parameter	Tata Power Requirement	Documents to be submitted by vendor to ascertain meeting of Pre-Qualification Requirement
1	2	3	4
(A)	**Experience**	a) Bidder should have minimum 05 years of experience in Civil, Structural, Roadwork, Fabrication, RCC works including experience in the working in switchyard areas and similar nature of work. b) Bidder must have successfully executed the following quantum of works on cumulative basis during the last 05 calendar years.	Bidder to submit credentials/work completion certificate for supporting the noted criteria. Owner has the right to reject the bid in case it is observed that the Bidder does not meet the relevant experience for the subject works

		i) Excavation: 2000 M3. ii) RCC Work: 6000 M3 iii) Reinforcement steel works: 150 Tonnes iv) Structural Steel Work : 200 Tonnes In case the bidder has a previous association with any of Tata Power Group companies for similar products and services, the performance feedback of the bidder by the Tata Power Group companies shall only be considered for evaluation purpose, irrespective of performance certificates issued by any third organization.	
(B)	Safety	The said package being high risk service job .The Bidder will have to go through requirement Tata Power Skilled Development Institute (TPSDI) training for workmen, Certifications etc. 100% workmen shall be L1 & L2 and supervisor should be L3 trained & certified by Tata Power Skill Development Institute (TPSDI). Bidder should possess ISO-9001, ISO-14001 and OHSAS-18001 / ISO-45001 Certification or they should provide an undertaking that they will obtain these certifications for their organization if the work is awarded to them within 2 months of qualification for the work.	Bidder to submit credentials for supporting the noted criteria. Owner has the right to reject the bid in case it is observed that the Bidder does not meet the relevant experience for the subject works. List of TPSDI trained workmen OR undertaking for completion of training.
(c)	Commercial Capability	Average annual turnover of the Vendor for last three financial years shall not be less than INR 3 Crore.	CA Audited Profit & Loss statement along with UDIN No. to be attached.

Note:

1) Please note that the PQR is for information only and the documentary evidence to ascertain meeting of the requirement has to be submitted along with the bid and not along with the tender fee.

2) Tata Power reserves the right to review and approve / reject the Bidder based on Document Submission.

3) The Prequalification Criteria published along with the tender “In Section C.1 Pre-Qualification Criteria" is the total & complete pre-qualification requirement for the tender and shall prevail over any other/additional pre-qualification requirement mentioned elsewhere in the tender.

4) Apart from the above PQR bidder must also qualify in Safety evaluation. Details will be shared along with tender documents.

D. Bill of Quantities (BOQ):

i) **LOT 1 -** Gonda Sub-station

Price Bid Format_CC27SVP023_Lot 1 - Construction of storage facilities and miscellaneous civil works at SEUPPTCL substations – Gonda sub-station.			
Sl. no.	Description of work	*Unit*	*Qty.*
A. Earthwork			
1	Site clearing, tree cutting / grubbing where authorized and providing approved earth / murrum filling for raising the formation level of open storage yard, internal road and associated areas, including removal of vegetation, roots, rubbish, debris and unsuitable material; procurement from approved source including royalty, loading, transportation, unloading, spreading in 200–250 mm loose layers, breaking clods, watering / moisture conditioning and compaction of each layer using suitable vibratory roller / mechanical compactor. Work shall include final trimming, grading and subgrade preparation to required line, level and slope, removal / replacement of soft pockets, field-density testing and all machinery, manpower, tools, tackles, fuel and consumables complete as per approved layout, IS 2720 series and instruction of Engineer-in-Charge. Average filling depth shall be as indicated in the site quantity basis / approved survey levels.Average compacted filling depth shall be 0.30 m unless otherwise indicated in the approved drawings/survey levels.	Cu.m	1500.00
2	Excavation of earth for foundations, equipment / machine foundations, trenches, pipe lines, storm-water drains, plinth and similar works, including setting out, clearing and grubbing, removal of debris, dewatering where required, strutting / shoring where required (sheet piling excluded unless separately specified), dressing sides, levelling to grade and ramming the bottom, stacking / disposal of surplus excavated material within an initial lead of 1 km radial distance including respective lifts, loading, transporting, unloading and spreading, with all machinery, manpower, tools and tackles, fuel and consumables complete as per drawings, specifications and instruction of Engineer-in-Charge.	Cu.m	790.31
3	Excavation of earth for foundations, equipment / machine foundations, trenches, pipe lines, storm-water drains, plinth and similar works, including setting out, clearing and grubbing, removal of debris, dewatering where required, strutting / shoring where required (sheet piling excluded unless separately specified), dressing sides, levelling to grade and ramming the bottom, stacking / disposal of surplus excavated material within an initial lead of 1 km radial distance including respective lifts, loading, transporting, unloading and spreading, with all	Cu.m	0.00

	machinery, manpower, tools and tackles, fuel and consumables complete as per drawings, specifications and instruction of Engineer-in-Charge.		
4	Transportation of excavated earth beyond the initial lead of 1.0 km, for every additional 0.50 km lead, including loading where applicable, transportation, unloading and spreading at the approved disposal / filling location. All other excavation-related activities shall be deemed covered under the respective excavation items.	Cu.m	489.12
5	Backfilling / filling around foundations, equipment and machine foundations, trenches, pipe lines, storm-water drains, plinth and similar works, including dewatering where required, using selected earth / soil / useful approved cut-spoil stacked within a lead of 1.0 km radial distance or as directed by Engineer-in-Charge; including loading, unloading, transportation, watering and ramming / mechanical compaction in layers not exceeding 300 mm compacted thickness to achieve minimum specified density, generally not less than 85% Standard Proctor maximum dry density unless otherwise specified, levelling and dressing complete with all machinery, manpower, tools and tackles, fuel and consumables as per drawings and specifications. Backfilling arising from unauthorized over-excavation shall not be measured.	Cu.m	240.21
6A	Providing and laying approved hard stone rubble / hand-broken hard metal soling below floor construction of Security Cabin and Security Toilet, laid in approximately 150 mm compacted thickness, hand packed with broad face down, voids filled with smaller stone chips / sand, watered and thoroughly compacted to obtain a firm and uniform base, including supply, transportation, spreading, dressing, compaction, labour, machinery, tools, tackles and all incidental works complete as per approved drawings and direction of Engineer-in-Charge.	Cu.m	40.00
6B	Providing and laying approved hard stone rubble / hand-broken hard metal soling below PCC levelling course of RCC heavy-vehicle crossover culverts, laid in approximately 250 mm compacted thickness, including preparation of formation, hand packing, filling interstices with smaller stones / stone chips, watering, compaction and dressing to required line and level, including all materials, transportation, labour, machinery, tools, tackles and incidental works complete as per approved structural drawings and direction of Engineer-in-Charge.	Cu.m	42.00
7	Providing and applying / injecting chemical emulsion for pre-construction anti-termite treatment in accordance with IS 6313 Part II, latest applicable edition, to form a continuous chemical barrier under and around column pits, wall trenches, foundations / basement excavation, top surface of plinth filling, wall-floor junctions, external perimeter including plinth protection, expansion joints and around pipes / conduits, complete. Approved legally permitted termiticide shall be used at the specified concentration and application rate. Work shall be	Sq.m	729.13

	executed by an approved specialist agency, and the contractor shall furnish the specified performance guarantee, generally 10 years where required. Ground-floor plinth area only shall be measured unless otherwise stated.		
8	Providing, supplying, transporting, unloading, spreading and filling approved graded crushed stone aggregate (metal) of size 20 mm to 40 mm in the 400 kV Switchyard area, including all materials, labour, tools, tackles, plants, equipment, handling, cartage, loading, unloading, stacking, spreading, dressing and all incidental works complete in accordance with the specifications and as directed by the Engineer-in-Charge. The aggregate layer shall comprise 75 mm thick compacted layer of 20 mm nominal size crushed stone aggregate as the bottom course and 75 mm thick compacted layer of 40 mm nominal size crushed stone aggregate as the top course, resulting in a total compacted thickness of 150 mm. The work shall include levelling, grading, compaction and finishing to the required lines, levels and slopes, complete in all respects as per approved drawings, technical specifications and instructions of the Engineer-in-Charge.	Sq.m	1250.00
9	Providing, supplying, transporting, loading, unloading, placing and filling approved graded crushed stone aggregate (metal) of size 40 mm to 65 mm in Reactor Foundation, Oil Cooler Foundation (Shajanpur Line Reactor), soak pits and other designated locations, including all materials, labour, tools, tackles, plants, machinery, equipment, handling, cartage and all incidental works complete in accordance with the specifications and as directed by the Engineer-in-Charge. The work shall include spreading, dressing, levelling and compacting the stone aggregate to the required thickness, lines, grades and levels, complete in all respects as per approved drawings and technical specifications. The rate shall include supply of all materials, transportation from approved sources, loading, unloading, stacking, placing, compaction and finishing, including all leads and lifts, and all necessary operations required for satisfactory completion of the work as instructed by the Engineer-in-Charge.	Sq.m	200.00
B. ROAD WORK – BITUMINOUS ROAD (5.0 m CARRIAGEWAY + 0.50 m SHOULDER EACH SIDE)			
10	Preparation of well-compacted road subgrade for bituminous road including setting out, clearing loose / unsuitable material, scarifying where required, trimming, watering / moisture conditioning, grading and mechanical compaction using suitable vibratory roller to achieve the specified field density and a firm, non-yielding formation. The finished subgrade shall be brought to the required line, level, camber and cross fall over the full road formation width comprising 5.0 m carriageway plus 0.50 m shoulder on each side. Soft pockets shall be excavated and	Sq.m	925.00

	replaced with approved material and field-density tests shall be carried out as directed, complete as per approved road drawing, applicable MoRTH requirements and Engineer-in-Charge instructions.		
11	Providing, laying, spreading, watering, grading and compacting approved Granular Sub-Base (GSB) to 270 mm total compacted thickness over the approved road subgrade, including procurement, loading, transportation, unloading, spreading in suitable layers, moisture conditioning and rolling with minimum 3-tonne or suitable higher-capacity vibratory roller to achieve specified density. Finished GSB shall be true to line, level, camber and cross fall and shall be accepted by field-density and level checks before placement of the base course. All machinery, manpower, testing, leads, lifts and incidental works are included, complete in accordance with applicable MoRTH specifications and approved road drawing.	Cu.m	249.75
12	Providing and laying approved granular / graded-aggregate base course of 225 mm total compacted thickness over completed GSB, consolidated in three separate layers of 75 mm compacted thickness each, including supply, loading, transportation, unloading, spreading, grading, watering / moisture conditioning and compaction of each layer with suitable vibratory roller. Each 75 mm layer shall be checked and approved for density, line, level and camber before placement of the next layer. The completed base course shall provide a dense, stable and even surface ready to receive bituminous surfacing, complete as per approved road section, applicable MoRTH requirements and direction of Engineer-in-Charge.	Cu.m	208.13
13	Providing and laying top bituminous premix carpet / bituminous premix surfacing of 200 mm total thickness as instructed, over the approved base course for the 5.0 m wide carriageway, including surface cleaning and preparation, approved prime / tack coat where specified, supply and heating of approved bituminous binder and aggregates, plant mixing, transportation in covered vehicles, laying by approved paver / mechanical means in suitable lifts as required by the approved methodology, rolling with appropriate rollers to achieve required compaction, finished level, camber and smooth riding surface, treatment of longitudinal / transverse joints, edge finishing and protection until opening to traffic. Materials, mix, temperatures, compaction and workmanship shall conform to approved MoRTH / project specifications. Thickness is retained as 200 mm in accordance with the present BOQ instruction.	Sq.m	925.00
14	Providing and forming 0.50 m wide shoulder on each side of the 5.0 m carriageway, including preparation of shoulder subgrade, supply / reuse of approved shoulder material as shown on the approved road drawing, spreading, watering, grading and mechanical compaction to required density, level and cross fall, edge dressing and proper tie-in with the bituminous carriageway and adjacent ground / drainage. Shoulder shall be firm, stable	Sq.m	185.00

	and free draining and shall be maintained during construction until final handover.		
15	Providing and laying precast cement-concrete kerb stones, average width approximately 140 mm and 500 mm high or as shown, in M25 grade concrete for road works, complete including necessary excavation, preparation of bedding / foundation, casting-yard arrangement where required, formwork, reinforcement where specified, watering, curing, transportation, stacking, laying to line and level, haunching / jointing and all leads and lifts, machinery, manpower, tools and tackles, fuel and consumables complete as per approved drawings, technical specifications, MoRTH Clause 408 and instruction of Engineer-in-Charge.	Rmt	370.00
16	Providing and laying pavement markings using approved hot-applied thermoplastic road-marking material conforming to the specified standard over bituminous surface for lane / centre line, edge line, transverse markings, chevrons, pedestrian crossings and other markings shown on approved drawings, using fully / semi-automatic pavement-marking machine. The work shall include surface cleaning, primer where required, approved reflective glass beads, all materials, machinery, manpower, tools and tackles, fuel and consumables complete as per approved drawings, technical specifications and applicable MoRTH Clause 803. Measurement shall be by actual marked area excluding gaps.	Sq.m	55.50
17	Road widening by conversion of existing shoulder into carriageway, including removal of existing shoulder gravel/metal, preparation and compaction of subgrade, providing GSB, WBM and bituminous surfacing matching the existing pavement, jointing with existing road, and all materials, labour, transportation, tools, plants and incidental works complete. Existing drain walls shall remain undisturbed.	Sq.m	0.00
C. OPEN STORAGE YARD / CONCRETE PAVEMENT			
18	Providing, laying, spreading, watering, grading and compacting approved Granular Sub-Base below the open storage yard / concrete-paved areas to 200 mm compacted thickness, including supply, transportation, spreading in suitable layers and compaction using suitable vibratory roller to achieve specified field density, required line, level and drainage slope, complete as per approved yard layout and applicable MoRTH / project specifications.	Cu.m	1000.00
19	Providing and laying 200 mm thick M30 grade design-mix cement-concrete pavement in the open storage yard / concrete-paved non-road areas over approved GSB, including approved materials, batching / RMC, transportation, placing, mechanical vibration, screeding, finishing, curing, construction joints, expansion / isolation joints, saw-cut contraction joints, approved joint filler / sealant, surface finishing and protection, complete to required line, level and slope suitable for storage and medium	Cu.m	1000.00

	vehicle movement as per IS 456, approved project specification and drawings.		
20	Providing, casting, curing, handling and placing precast RCC sleeper / support blocks of size 1000 × 300 × 200 mm for stacking transmission-line / substation materials, using minimum M25 grade design-mix concrete and Fe500D reinforcement, including moulds / shuttering, reinforcement cutting, bending and fixing, concrete mixing / placing, mechanical vibration, curing, lifting provisions where required, handling, transportation within site and placing at designated locations on firm level ground. Finished blocks shall be true to size, free from honeycombing and cracks and shall have smooth / approved finish, all complete as per approved drawing and direction of Engineer-in-Charge.	Nos	300.00
D. BUILDING WORK AND OTHER WORK			
21	Providing and placing concrete work including cost of machinery & equipment, manpower, materials and consumables, staging & scaffolding, handling & transportation, batching, mixing, transportation of concrete, placing, vibrating to achieve compaction and curing at all elevations, complete as per drawings, specifications and as directed by the engineer-in-charge. the relevant items shall be deemed to include the cost of staging & scaffolding required for safe and proper execution. Bidder shall procure coarse and fine aggregates from approved sources. the bidder shall identify and arrange approval of sources and shall obtain prior written approval for any alternate source. all costs involved in source approval shall be deemed included in the respective rates. Bidder shall arrange approval of concrete design mix from an NABL-accredited laboratory where design-mix concrete IS specified. cost of design mix, trial mixes and execution as per approved mix shall be deemed included in the quoted rates. Providing and laying Plain Cement Concrete (PCC) as levelling course / fill around foundations, pipes, floors on grade, water-retaining structures, equipment foundations, under foundations and flooring under-bed, including formwork where required, scaffolding / staging, materials, manpower, tools and tackles and consumables complete as per specification, drawings and direction of Engineer-in-Charge. M7.5 grade PCC.	Cu.m	74.41
22	Providing and laying M25 grade reinforced cement concrete below finished ground level, conforming to IS 456, including approved materials, batching / RMC, transportation, placing, vibrating, finishing, curing, plasticizer / superplasticizer where required, testing, machinery, manpower, tools, tackles and consumables complete as per approved drawings and Engineer-	Cu.m	300.52

	in-Charge instructions. Formwork, shuttering, supporting staging and props shall be measured and paid separately under the respective formwork BOQ item. M25 Concrete below F.G.L.		
23	Providing and laying M25 grade reinforced cement concrete above finished ground level at all levels, conforming to IS 456, including approved materials, batching / RMC, transportation, placing, vibrating, finishing, curing, plasticizer / superplasticizer where required, testing, machinery, manpower, tools, tackles and consumables complete as per approved drawings and Engineer-in-Charge instructions. Formwork, shuttering, supporting staging and props shall be measured and paid separately under the respective formwork BOQ item M25 Concrete above F.G.L. up to all levels.	Cu.m	28.44
24	Providing Fe500 high-yield-strength deformed reinforcement bars conforming to IS 1786, including unloading, straightening, cutting, bending, placing and fixing in position at all levels, tying with 18 / 20 SWG annealed iron binding wire including supply of binding wire, providing approved cover blocks, chairs / spacers where required, transportation and all materials, manpower, tools, tackles and consumables complete as per drawings, BBS, specifications and direction of Engineer-in-Charge. Only authorized laps, chairs and separators specifically permitted for measurement shall be paid under this item.	MT	31.54
25	Providing, fixing, supporting and removing formwork at all elevations including all materials, labour, equipment, consumables, scaffolding, staging, pockets, block-outs, chamfers and related temporary works complete as per specifications, drawings and as directed / approved by Engineer-in-Charge, using approved plywood / steel formwork below finished ground level for all types of foundations, footings, bases of columns, walls, columns, pilasters, beams, mass-concrete trenches and similar works, including haunches and chamfers.	Sq.m	866.01
26	Providing, fixing, supporting and removing formwork at all elevations including all materials, labour, equipment, consumables, scaffolding, staging, pockets, block-outs, chamfers and related temporary works complete as per specifications, drawings and as directed / approved by Engineer-in-Charge, using approved plywood / steel formwork above finished ground level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, domes, arches, walls and similar works at all heights, including haunches and chamfers.	Sq.m	306.09
27	Providing and laying plinth protection 100 mm thick in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate) using 20 mm nominal-size aggregate over 75 mm bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including preparation of base, required slope away from building, formwork to edges where	Sq.m	24.00

	required, finishing the top smooth, curing and making good complete as per drawings and instruction of Engineer-in-Charge.		
28	Providing and fixing 25 mm thick pre-moulded bituminous expansion / isolation joint filler board of approved make at locations shown on drawings, including cutting to required width and profile, fixing firmly in position, maintaining correct joint width and alignment, temporary supports and all labour, materials, tools and incidental works complete. Joint sealing compound at the exposed face shall be measured separately under Item 29.	Sq.m	0.00
29	Providing and filling approved two-component polysulphide sealing compound conforming to IS 12118 in the exposed groove of expansion / isolation / construction joints, including cleaning and drying of joint faces, application of approved primer, providing bond breaker / backing material where required, mixing, placing, tooling and finishing the sealant to the specified width and depth and protection until cured, complete as per manufacturer's recommendations and approved drawings. Pre-moulded expansion-joint filler board shall be measured separately under Item 28.	Rmt	0.00
30	Block masonry / stone masonry including supply of materials, manpower, staging & scaffolding, mixing of mortar, curing and all incidental works complete as per specifications, drawings and direction of project manager. For all items involving use of cement and reinforcing steel, the quoted rate shall be inclusive of these materials unless specifically stated otherwise. Supplying and laying concrete block masonry of designation D as specified in IS 2185, minimum compressive strength 5 MPa, at various elevations, using approved concrete blocks in cement-sand mortar 1:4, including wetting where required, mixing mortar, laying true to line / level / plumb, raking joints, curing, cutting, closing around embedded items and all materials / labour complete. Cement required for manufacture of concrete blocks shall be in Bidder's scope.	Cu.m	60.44
31	Cement plaster including making drip moulds / grooves where required at all levels, with all materials, labour, staging & scaffolding, surface preparation and curing complete as per specifications, drawings and direction of engineer / project manager. Providing 12 mm thick internal plaster in single layer in cement mortar 1:6 (1 cement : 6 sand) on building walls, finished smooth, including 150 mm wide chicken mesh at junctions of masonry and RCC work, over electrical conduiting and wherever required, hacking / preparing the background, scaffolding and curing complete.	Sq.m	262.80

32	Cement plaster including making drip moulds / grooves where required at all levels, with all materials, labour, staging & scaffolding, surface preparation and curing complete as per specifications, drawings and direction of engineer / project manager. Providing 18 mm thick external sand-faced plaster in two layers, first layer 12 mm thick in CM 1:6 and second layer 6 mm thick in CM 1:4, on exposed building faces, finished to approved texture / smoothness, including 150 mm wide chicken mesh at RCC-masonry junctions, over electrical conduiting and wherever required, hacking / preparing surfaces, forming grooves / drips, scaffolding and curing complete.	Sq.m	262.80
33	Cement plaster including making drip moulds / grooves where required at all levels, with all materials, labour, staging & scaffolding, surface preparation and curing complete as per specifications, drawings and direction of engineer / project manager. Providing 6 mm thick plaster on ceilings, underside of beams, lintels and other concrete surfaces in cement mortar 1:4, finished smooth, including hacking / preparing RCC surface, scaffolding and curing complete.	Sq.m	18.00
34	Providing screed plaster in drains, pits, trenches and similar locations in cement-sand mortar 1:4, average 25 mm thickness, including surface preparation / hacking, forming required slope and smooth finish, staging / scaffolding where required, curing and all materials / labour complete as per drawings, specifications and direction of Project Manager.	Sq.m	0.00
35	Providing and applying premium-grade acrylic emulsion paint of approved make such as Asian / Berger / Nerolac / AkzoNobel / Jotun or equivalent on internal walls, comprising surface cleaning / sanding, crack filling, two coats of approved white wall putty where specified, one coat water-based primer and minimum two coats acrylic emulsion of approved shade, applied to achieve uniform finish. Work shall include scaffolding / ladders, masking and protection of floor / adjacent surfaces, roller / brush application, cleaning of splashes and all leads and lifts at all levels, complete as directed by Engineer-in-Charge.	Sq.m	262.80
36	Providing and applying two or more coats of approved oil-bound washable distemper to ceilings / toilet walls using approved make such as Asian / Berger / Nerolac / AkzoNobel / Jotun or equivalent, including one coat approved white putty where required, one coat water-based cement primer, surface preparation, crack filling, scaffolding, ladders, all leads and lifts and complete finishing in approved shade / colour as directed by Project Manager.	Sq.m	18.00
37	Providing and applying two or more coats of approved waterproof cement / exterior weather-resistant paint to external walls in approved shade and make, such as Asian / Berger / Nerolac /	Sq.m	262.80

	AkzoNobel / Jotun or equivalent, including preparation of surface, removal of loose coating, crack filling, primer where required, scaffolding and all leads and lifts complete as directed by Project Manager.		
38	Providing and laying approved vitrified floor tiles, generally 600 × 600 mm, of approved make, colour and finish in security cabin / dry internal areas, laid to approved pattern over approximately 20 mm thick cement mortar 1:4 bedding or approved tile adhesive as specified, including cement slurry where applicable, cutting, fitting around openings, paper-thin uniform joints, matching colour grout, skirting / borders where shown, curing, cleaning and protection until handover, complete. Tiles shall be Kajaria / Somany / Johnson / Asian Granito or approved equivalent.	Sq.m	9.00
39	Providing and laying approved anti-skid ceramic floor tiles in wet / utility / external covered areas wherever shown on drawings, laid to required slope over approved cement-mortar bedding / tile adhesive, including surface preparation, cutting, fitting, spacers, matching colour grout, curing, cleaning and all accessories complete. Tiles shall be of approved make, colour and size and shall have suitable anti-skid characteristics for the intended area.	Sq.m	9.00
40	Flooring, skirting & dado including base layer and all materials, labour, curing, polishing / cleaning etc. complete in all respects as shown on drawings, described in specifications and as directed by project manager. For tile flooring, supply and laying rate break-up shall be furnished where required. Employer reserves the option to supply tiles. Prior approval shall be obtained before procurement. Providing and laying ceramic-tile dado to toilets, kitchen / utility / common basin areas using approved tiles of approved make, shade and size, generally 300 × 450 mm or approved equivalent, laid to approved pattern over 6–10 mm thick approved tile adhesive such as BAL / MYK Laticrete or equivalent; including PVC edge beading to corners where required, cutting, spacers, pointing / grouting with matching colour grout, acid washing and all borders / pencil borders where shown, at all levels complete. Approved makes: Kajaria / Somany / Johnson / Asian Granito or equivalent.	Sq.m	4.50
41	Providing and laying approximately 12 mm thick cast-in-situ cement-concrete floor finish with approved non-metallic floor hardener over 38 mm thick cement-concrete under-bed, including preparation of base, placing / compaction, application of non-metallic hardener at specified dosage, generally 5 kg/Sq.m for medium-duty floors, trowel finishing, curing, protection and all materials / labour complete. The 38 mm under-bed concrete shall be deemed included in this item.	Sq.m	0.00

42	Cutting and cleaning approximately 15 mm × 20 mm grooves at construction / control joints in flooring, removing all dust and impurities and filling the grooves with approved bitumen-sand mix 1:4 or specified sealant, finishing the top surface flush and neat complete as directed by Project Engineer. Unless otherwise shown, grooves for non-metallic floor-hardener areas shall generally be provided in approximately 5 m × 5 m grid.	Rmt	0.00
43	Providing and fixing approved colour-anodized / powder-coated aluminium sliding, partly sliding, partly fixed or fixed windows / ventilators / louvers using approved extruded sections of Hindalco / Jindal or equivalent, including anodized aluminium fixtures and fasteners, snap-fit beading, concealed screws, handles and locking hardware, glazing / louvers and sealants as shown. Aluminium sections shall be smooth, straight, mitred and mechanically jointed where required; average aluminium-section weight shall be approximately as specified. Item includes frames, all hardware, accessories, fixing at all elevations, making good and complete installation as per drawings, specifications and direction of Engineer-in-Charge.	Sq.m	4.30
44	Providing and fixing rolling shutter using hot-rolled double-dipped galvanized steel lath sections of minimum 18 SWG and specified galvanizing, conforming to IS 6248, with interlocking laths at approximately 75 mm centres, end locks, specially designed pipe shaft / barrel, brackets, side guides, inside / outside locking arrangement, push-pull / geared / electrically operated mechanism as specified, wire springs, hood / top cover and all fittings complete. Bottom lath shall be connected to approved lock plate fabricated from minimum 3 mm thick steel plate with stiffening angles. Include primer / touch-up and two finish coats where specified, all fixing, erection and testing for smooth operation. Measurement shall be based on clear opening area only.	Sq.m	36.00
45	Supplying and erecting best-quality approximately 40 mm thick flush steel doors, double plated with pressed steel frames conforming to the applicable IS standards, from approved manufacturer, including fabrication, one shop coat red-oxide zinc-chrome primer, all fittings and fixtures such as aldrop, tower bolts, holdfasts, floor ties, weather bar and hinges, packing, carting, transportation, freight / insurance, assembling, fitting and fixing at all elevations, mastic caulking / grouting with CC 1:2:4 where required, one touch-up primer coat and two coats approved synthetic enamel paint, unloading, stacking and all accessories complete as per drawings, specifications and direction of Project Manager.	Sq.m	3.18

46	Waterproofing works shall be executed by an approved specialist agency and shall follow the approved methodology / specification. contractor shall provide the specified material and performance guarantee, generally minimum 10 years where required.All surfaces shall be sound, clean and properly prepared. Loose material, laitance, oil, grease, moss / lichen and contaminants shall be removed. Cracks, honeycombs, construction joints, pipe / outlet penetrations and other defects shall be repaired / grouted before waterproofing. Treatment shall include approved watta / coving at wall-floor junctions, proper termination at edges and treatment around pipes / spouts.Provide approved two-component acrylic polymer-modified cementitious waterproof coating such as Tapecrete P151 / equivalent approved make, applied in specified coats after base preparation, with approved geo-fabric / fibre-glass reinforcement where specified and required overlaps. Treatment shall extend up adjoining walls to minimum specified height, generally 300 mm in wet areas, unless shown otherwise. Pipe penetrations shall be sealed with approved epoxy / polymer grout. Testing by ponding / flooding shall be carried out as specified after completion and defects rectified before handover.	Sq.m	20.00
47	Structural steel shall be entirely in the Contractor's scope. The quoted rate shall include supply of approved structural steel, fabrication, transportation to site, unloading, storage, handling, erection, alignment and fixing in position at all levels, complete as per approved drawings and specifications. Supply, fabrication and erection of structural steel conforming to IS 2062, designed, detailed and fabricated in accordance with IS 800 and approved drawings. The scope shall include cutting, straightening, drilling, machining, fitting, welding, bolting, erection, temporary supports, staging, lifting, alignment, plumbing, final tightening and all activities required for complete installation.The item shall include all structural members and components such as columns, beams, rafters, purlins, girts, bracings, sag rods, cleats, stiffeners, gusset plates, connection plates, base plates, splice plates and all other structural accessories required for completion of the work.The quoted rate shall also include all erection bolts, nuts, washers, anchor fasteners, welding electrodes, welding consumables, shop and field welding, connection accessories, tools and tackles, cranes, machinery, manpower, testing, inspection and all incidental materials required for satisfactory completion of the work.The item shall further include complete surface preparation, cleaning, approved primer coats and the full protective painting system, including all materials, labour, equipment and application works, as specified in the project specifications and approved drawings.Miscellaneous steelwork such as chequered plates, ladders, stairs, platforms, gratings, handrails and similar structural components not measured separately shall be deemed	MT	55.15

	included in this item.The rate shall be deemed to include supply, fabrication, transportation, erection, erection bolts, nuts, washers, welding, purlins, bracing, base plates, connection plates, surface preparation and complete painting system, all complete.		
48	Anchor bolts including required hexagonal nuts, plain / taper / spring washers, templates, sleeves and anchorage arrangement as shown, complete. Material supply including steel shall be in Contractor's scope and shall be procured from approved sources such as SAIL / RINL / Tata Steel or approved equivalent. Rate shall include cutting, threading, fabrication, template assembly, setting to correct line / level / projection / PCD, temporary support during concreting, protection of threads, all tools, tackles and consumables complete as per approved structural / vendor drawing.	MT	0.76
48a	Providing and installing chemical anchor assemblies for connecting structural steel framing to existing RCC, using an approved Hilti or equivalent adhesive anchoring system, including compatible threaded rods, nuts and washers; reinforcement scanning, marking, drilling, thorough hole cleaning, resin injection, insertion and positioning of anchor rods, curing and tightening, complete in accordance with manufacturer's instructions and approved connection details. Anchor diameter, embedment, spacing and edge distances shall be finalised during detailed design. Required inspection and testing shall be carried out as specified by the Employer/Consultant.	Nos	32.00
49	Providing, supplying and fixing 0.50 mm thick colour coated GI/PPGI profile sheet roofing/cladding of approved make and colour, fixed on existing steel structure with self-drilling/self-tapping screws, EPDM washers, hooks, bolts, nuts, bitumen washers, sealants, side laps, end laps, flashing, trims, ridge pieces, closures and all necessary accessories complete.The rate shall include cutting, lifting, aligning, fixing, overlapping, sealing, wastage, labour, tools & tackles, scaffolding, transportation, loading/unloading and all materials required for complete installation as per drawings, specifications and instructions of Engineer-in-Charge.Purlins and girts are excluded from this item and shall be measured under Item 45 – Structural Steel.	SQM	1407.00
50	Providing and fixing 12.5 mm thick plain gypsum-board false ceiling of approved make, such as India Gypsum or equivalent, in horizontal / vertical planes as shown, including approved aluminium / GI grid and metal suspension system, perimeter channels, anchor fasteners, adjustable hangers, jointing tape / compound, cut-outs and framing around light fixtures / services, all fittings and accessories, finishing of joints and applying two or more coats acrylic emulsion paint of approved colour to achieve smooth uniform finish, complete as per specification, drawings and direction of Engineer.	Sq.m	0.00

51	Providing and laying at below-ground level 600 mm diameter precast RCC Hume pipes conforming to the specified standard, complete with collars, approved bedding, laying to line and invert level, jointing collars with cement mortar 1:1 or approved jointing system, testing of joints, alignment and all handling / lowering operations complete as directed by Engineer. Excavation and RCC encasing, where required, shall be measured separately under the respective BOQ items unless otherwise stated.	Rmt	6.00
52	yard fencing: Supplying, Providing and installing PVC coated steel chain link fencing (mesh size 50 mm nominal dia of wire 3.15) of 2400 high including all connected works such as but not limited to supply of all connectors for fixing the fencing on to angle iron posts (ISA 65x65x6) or equivalent spaced at 2.5 m intervals and reinforced with 2 struts (ISA 65x65x6) or equivalent at every fifth post and at all change in directions including a horizontal member of ISA 50x50x6 at top and bottom of the fencing connected between the vertical posts etc., complete including two coats of red oxide zinc chromate primer and two finish coats of synthetic enamel all of DFT 25 microns each on the angle irons. GI barbed wire anti climbing arrangement confirming to code, at top of chain link fencing shall be provided with 4 strands of height of 600 mm including all accessories as per specification all complete. Rate quoted shall be for running metre of fence all inclusive of soil excavation, concrete items for posts.	Rmt	379.00
53	Providing, fabricating, supplying, transporting and erecting double-leaf mild steel vehicular gate of 6.0 m clear opening and approximately 2.0 m height, fabricated from approved MS hollow sections, pipes, flats and structural members complete with vertical/horizontal stiffeners, bracings, locking arrangement, stopper, hinges, guide plates, holdfasts and all necessary hardware. The item shall include excavation, PCC, RCC foundation/pedestal, reinforcement, formwork, anchor fasteners, gate posts, grouting, alignment, erection and commissioning complete. Steel surfaces shall be cleaned, provided with one coat epoxy/zinc-rich primer and two coats synthetic enamel/polyurethane finish paint of approved shade. Rate shall include all materials, labour, machinery, transportation, welding consumables, bolts, nuts, washers, testing, leads and lifts complete as per approved drawings and direction of Engineer-in-Charge.	Nos	2.00
54	Supply, erection, testing and commissioning of 9 m galvanized high mast/pole complete with 4 Nos. LED flood lights of approximately 400 W each, luminaire mounting arrangement, weatherproof control panel, internal wiring, armoured cabling, earthing and all accessories.RCC foundation, reinforcement and cast-in anchor bolts shall be measured separately under the respective civil BOQ items	Nos	2.00

55	Providing and placing approved ready-mix non-shrink cementitious grout of minimum M45 grade (minimum compressive strength 45 MPa at 28 days) such as MasterFlow, Conbextra GP2, Fosroc, SikaGrout or equivalent approved make below base plates, equipment foundations, structural steel columns, anchor bolts and other locations shown on approved drawings.The scope shall include surface preparation, cleaning, formwork wherever required, mixing with potable water, placing by pouring/pumping, finishing, curing, testing and all labour, materials, tools, tackles, consumables and incidental works complete as per manufacturer's specifications and directions of the Engineer-in-Charge.	Cu.m	1.12
E. PRECAST COVER & GRATING COVER			
56	Providing, fabricating, supplying and fixing removable hot-dip galvanized MS grating cover complete with supporting MS frame for 300 mm clear-width storm-water drain, fabricated from approved load-bearing flats and cross bars of adequate size and spacing, including peripheral frame, stiffeners, cleats, hold-down clamps / locking arrangement, cutting, welding, drilling, galvanizing, transportation, handling, placing, alignment, anchoring and fixing complete as per approved structural drawing and direction of Engineer-in-Charge.	RMT	180.00
57	Providing, fabricating, supplying and fixing removable hot-dip galvanized MS grating cover complete with supporting MS frame for 450 mm clear-width storm-water drain, fabricated from approved load-bearing flats and cross bars of adequate size and spacing, including peripheral frame, stiffeners, cleats, hold-down clamps / locking arrangement, cutting, welding, drilling, galvanizing, transportation, handling, placing, alignment, anchoring and fixing complete as per approved structural drawing and direction of Engineer-in-Charge.	RMT	100.00
58	Providing, casting, supplying and placing precast RCC storm-water drain cover slabs for 750 mm clear-width drain, of size 750 mm × 750 mm × 50 mm or as per approved drawing, using minimum M25 grade concrete reinforced with Fe500D steel reinforcement, including formwork, reinforcement cutting, bending and fixing, concrete placing, vibration, curing, lifting hooks, handling, transportation, unloading, placement, alignment and all labour, materials, machinery, tools and incidental works complete as per approved drawings and instructions of the Engineer-in-Charge.	Nos	150.00
F. REPAIR OF EXIXITING DRAIN			
59	Repairing existing surface drains in switchyard / guest-house area, including removal of loose, damaged and deteriorated brickwork / plaster, cleaning of drain, making good the bed and sides, rebuilding damaged portions in approved brick masonry in cement mortar, providing 20 mm thick cement plaster to internal drain surfaces, necessary pointing / finishing, restoring line, level and slope for free flow of storm water, curing, disposal of debris,		

	all labour, materials, tools, tackles and incidental works complete as per approved drawing and direction of Engineer-in-Charge.		
59a	Repair of existing brick masonry surface drain, approximately 1.25 m deep × 0.50 m wide, including brickwork and 20 mm plaster, complete as specified under Item 15.	Rmt	150.00
59b	Repair of existing brick masonry surface drain, approximately 1.15 m deep × 0.45 m wide, including brickwork and 20 mm plaster, complete as specified under Item 59.	Rmt	0.00
59c	Repair of existing brick masonry surface drain, approximately 0.90 m deep × 0.35 m wide, including brickwork and 20 mm plaster, complete as specified under Item 59.	Rmt	50.00
59d	Repair of existing brick masonry surface drain, approximately 0.45 m deep × 0.25 m wide, including brickwork and 20 mm plaster, complete as specified under Item 59	Rmt	50.00
G. RCC Hume pipes			
60	Providing, supplying and laying RCC NP2 class Hume pipes with collar joints, including loading, transportation, unloading, handling, lowering, laying to required line, level and gradient, jointing and filleting in cement mortar 1:4, curing, temporary plugging of pipe ends where required, making good around joints and all labour, materials, tools, tackles, leads and lifts complete as per approved drawings and direction of Engineer-in-Charge. Pipes shall conform to relevant IS requirements. Contractor shall arrange testing of pipes at his own cost in accordance with the applicable IS standard and in the presence of Engineer-in-Charge. Laying shall be carried out as per applicable IS requirements. Excavation, bedding, encasement and backfilling shall be measured separately unless specifically included in the approved drawing / specification.		
60a	Providing and laying 150 mm dia RCC NP2 class Hume pipe complete with collar joints as specified under Item 60.	Rmt	80.00
60b	Providing and laying 250 mm dia RCC NP2 class Hume pipe complete with collar joints as specified under Item 60.	Rmt	80.00
H. MISCELLANEOUS			
61	Providing, supplying, laying, aligning, jointing and testing 160 mm OD HDPE pipe, approved make, conforming to Series II of IS 4984, suitable for working pressure of 6 kg/cm^2, including all required readymade / fabricated fittings, bends, tees, reducers, couplers and specials, jointing by approved butt-fusion welding, cutting, handling, transportation, lowering, alignment and testing complete as per approved drawings and direction of Engineer-in-Charge. Excavation, bedding and backfilling shall be measured separately under the respective BOQ items.	Rmt	80.00
62	Repair and rehabilitation of existing non-treated earth pit for LA, CVT, isolator and other equipment locations, including excavation, dismantling / removal of damaged portions, preparation of base, providing RCC raft / base slab as required, 230 mm thick brick masonry, 20 mm thick cement plaster to internal / exposed faces, reinforcement, formwork where required, repair / replacement of earth-pit cover and frame,	Nos	8.00

	making good around existing earthing conductor / electrode, backfilling, curing, removal of debris and all materials, labour, tools, tackles and incidental works complete as per approved drawing and direction of Engineer-in-Charge. Existing earthing electrode / conductor shall be retained and protected unless replacement is specifically directed.		
63	Removing damaged / loose existing floor tiles in Control Room Building and switchyard kiosks and replacing with approved vitrified floor tiles of similar size, shade and quality, Kajaria / Nitco or approved equivalent, including careful dismantling, disposal of debris, preparation and levelling of base, approved tile adhesive / cement mortar bedding, cutting, fixing, joint grouting, cleaning, curing where required and making good adjoining finishes complete as directed by Engineer-in-Charge.	SQ.M	20.00
64	Surface preparation and external painting of Control Room Building, FFPH Building and kiosks using approved weather-resistant / algae-resistant exterior paint system, including scraping and removal of loose / existing paint, cleaning, crack filling, minor plaster / putty repairs, one coat approved exterior primer and minimum two coats exterior weather-resistant paint of approved make and shade, including scaffolding, tools, tackles, protection of adjacent surfaces and all incidental works complete as per approved painting specification and direction of Engineer-in-Charge.	SQ.M	1500.00
65	Surface preparation and internal painting of Control Room Building and kiosks using approved acrylic emulsion paint, including scraping and removal of loose paint, cleaning, crack filling, minor plaster / putty repairs, one coat approved primer and minimum two coats acrylic emulsion paint of approved make and shade, including ladders / scaffolding, protection of floors and fittings, cleaning and all incidental works complete as directed by Engineer-in-Charge.	SQ.M	1350.00
66	Providing and fixing complete plumbing and sanitary arrangement for Security Toilet, including approved western WC with flushing cistern, wash basin, bib cock / pillar cock, health faucet, floor trap, waste pipe, soil / waste pipe, water-supply piping, valves, bends, tees, connectors and all required CP / sanitary fittings; connection to nearest available water-supply line and nearest existing septic tank / sewer line; cutting and making good walls / floors, supports, sleeves, jointing, testing for leakage and satisfactory operation, including all materials, labour, tools, tackles and incidental works complete as directed by Engineer-in-Charge.	LS	1.00
67	Repairing damaged / deteriorated portions of roof soffit, ceiling and wall surfaces in Control Room Building and switchyard kiosks, including removal of loose plaster / unsound concrete, cleaning and preparation of exposed surface, rust removal and treatment of exposed reinforcement where encountered, bonding coat, patch repair using approved polymer-modified repair mortar / micro-concrete as required, making good damaged plaster,	SQ.M	50.00

	crack filling, finishing to match adjoining surface, curing, scaffolding, removal of debris and all labour, materials, tools and incidental works complete as directed by Engineer-in-Charge. Painting shall be measured separately under the respective painting BOQ item.		
I.Interior Work			
68	Providing & fixing monolithic gypsum board false ceiling conforming to IS 2095, at all heights including providing and fixing of framework as spelled out in Saint Gobain or equivalent manufacturer catalogue. Bidder to provide adequate steel sections (channels, L or T sections) and hanger supports to cater to the false ceiling loads.including making openings for ac grills, smoke detectors, electrical fixtures etc. The cutouts shall be provided with perimeter channel of adequate size of 0.5 mm thick.Vertical / inclined face shall be measured above 300 mm high only. Room Size : 30 x 17 ft (L x W)	SQ.M	48.00
69	Providing and fixing all pipes, joineries and all accessories required to repair/rectify the plumbing system of control room building and resedential buildings.	LS	1
70	Providing and fixing and placing in position furnitures as mentioned below for development of conference/meeting room and Maintenance Engineer's room, Control room including all other accessories required to complete the job in all respect and as directed by engineer-in-charge as mentioned below		
70a	Cubicles	Ea	2
70b	Workstations	Ea	6
70c	Office Chairs	Ea	24
70d	Conference table - 10 seater	Ea	1
70e	55 inch LED TV	Ea	1
70f	Control Desk Operator Station 2 seater	Ea	1
70g	450 depthx 1500 length X1200 highStorage Units including Planter 150mm high Planter Box	Ea	4
70h	450 depthx 750 length X1200 highStorage Units including Planter 150mm high Planter Box	Ea	4
70j	Two seater sofa for waiting	Ea	1
71	SERVICE TYPE: Providing and fixing both sided gypsum Partition walls using Gyprock soundblock board of required thickness of saint Gobain or equivalent as per approved drawings including scaffolding/access, making cut-out of required sizes and supporting framework for door opening as specified in approved drawings and manufacturer specification using metal stud frame sections ,ceiling sections , connecting clip, drywall screws, anchor bolts, backing strips, includes filling and finishing with Jointing compound, Joint Paper tape and two coats of Drywall	sqm	10

	Top Coat as specified in specification , etc.all complete as per the the approved drawings and Manufacturer specifications.		
72	Providing and fixing in position minimum 10-12 mm Thk. clear toughened glass partition of st. gobain, modiguard. Glass to be fixed with framing sections anodised black coated Aluminum Partition Frame in wall and floor including all required accessories and hardware etc. required to complete the job in all respect. All exposed edges of the glass shall be machine polished. All glass-to-glass joints to be sealed with pre-approved sillicon sealants.	sqm	10
73	P/F of single / double leaf framed glass door with minimum 12mm thk. glass toughened by horizontal process of St. gobain, modi guard make.the door shall be with frame in black powder coated in 80X50mm & incl. all necessary hardware such as using patch fittings,double action hydraulic heavy duty floor spring IS:6315, door handle on both sides incl.cost of cutting floors as required.All hardwares shall be of Godrej, Dorma. Handle size : 900mm in black powder coated finish.	sqm	4.8
74	Solid flush door Providing and fixing best quality 38mm thick single/double leaf flush door Front / External door shutter finished with approved 1.5mm thk. colour laminate of approved make from both side, with 15 to 18mm thick black granite frame around and with or without vision panel etc. complete including and all other necessary fixtures and fittings heavy duty railway type hinges etc .	sqm	4.8
75	Carpentry work in termite and water resistant commercial plywood for making cabinets, storages of depth 450 mm-600 mm depth with or without planter box and any other similar furniture in the approved layout finished with colour laminate from outside and white laminate from inside. The cost shall include all required hardware and accessories such as hinges, handles, lock and any other required to complete the job in all respect. Plywood make century, greenply or equivalent	sqm	15

ii) Lot 2 – Mainpuri Sub-station:

Price Bid Format – CC27SVP023_Lot 2 - Construction of storage facilities and miscellaneous civil works at SEUPPTCL substations – Mainpuri sub-station			
Sl. no.	Description of work	*Unit*	*Quantity*
A. Earthwork			
1	Site clearing, tree cutting / grubbing where authorized and providing approved earth / murrum filling for raising the formation level of open storage yard, internal road and associated areas, including removal of vegetation, roots, rubbish, debris and unsuitable material; procurement from approved source including royalty, loading, transportation, unloading, spreading in 200–250 mm loose layers, breaking clods, watering / moisture conditioning and compaction of each layer using suitable vibratory roller / mechanical compactor. Work shall include final trimming, grading and subgrade preparation to required line, level and slope, removal / replacement of soft pockets, field-density testing and all machinery, manpower, tools, tackles, fuel and consumables complete as per approved layout, IS 2720 series and instruction of Engineer-in-Charge. Average filling depth shall be as indicated in the site quantity basis / approved survey levels.Average compacted filling depth shall be 1.250 m unless otherwise indicated in the approved drawings/survey levels.	Cu.m	11375.00
2	Excavation of earth for foundations, equipment / machine foundations, trenches, pipe lines, storm-water drains, plinth and similar works, including setting out, clearing and grubbing, removal of debris, dewatering where required, strutting / shoring where required (sheet piling excluded unless separately specified), dressing sides, levelling to grade and ramming the bottom, stacking / disposal of surplus excavated material within an initial lead of 1 km radial distance including respective lifts, loading, transporting, unloading and spreading, with all machinery, manpower, tools and tackles, fuel and consumables complete as per drawings, specifications and instruction of Engineer-in-Charge.	Cu.m	771.64
3	Excavation of earth for foundations, equipment / machine foundations, trenches, pipe lines, storm-water drains, plinth and similar works, including setting out, clearing and grubbing, removal of debris, dewatering where required, strutting / shoring where required (sheet piling excluded unless separately specified), dressing sides, levelling to grade and ramming the bottom, stacking / disposal of surplus excavated material within an initial lead of 1 km radial distance including respective lifts, loading, transporting, unloading and spreading, with all machinery, manpower, tools and tackles, fuel and	Cu.m	0.00

	consumables complete as per drawings, specifications and instruction of Engineer-in-Charge.		
4	Transportation of excavated earth beyond the initial lead of 1.0 km, for every additional 0.50 km lead, including loading where applicable, transportation, unloading and spreading at the approved disposal / filling location. All other excavation-related activities shall be deemed covered under the respective excavation items.	Cu.m	464.31
5	Backfilling / filling around foundations, equipment and machine foundations, trenches, pipe lines, storm-water drains, plinth and similar works, including dewatering where required, using selected earth / soil / useful approved cut-spoil stacked within a lead of 1.0 km radial distance or as directed by Engineer-in-Charge; including loading, unloading, transportation, watering and ramming / mechanical compaction in layers not exceeding 300 mm compacted thickness to achieve minimum specified density, generally not less than 85% Standard Proctor maximum dry density unless otherwise specified, levelling and dressing complete with all machinery, manpower, tools and tackles, fuel and consumables as per drawings and specifications. Backfilling arising from unauthorized over-excavation shall not be measured.	Cu.m	307.34
6A	Providing and laying approved hard stone rubble / hand-broken hard metal soling below floor construction of Security Cabin and Security Toilet, laid in approximately 150 mm compacted thickness, hand packed with broad face down, voids filled with smaller stone chips / sand, watered and thoroughly compacted to obtain a firm and uniform base, including supply, transportation, spreading, dressing, compaction, labour, machinery, tools, tackles and all incidental works complete as per approved drawings and direction of Engineer-in-Charge.	Cu.m	1.35
6B	Providing and laying approved hard stone rubble / hand-broken hard metal soling below PCC levelling course of RCC heavy-vehicle crossover culverts, laid in approximately 250 mm compacted thickness, including preparation of formation, hand packing, filling interstices with smaller stones / stone chips, watering, compaction and dressing to required line and level, including all materials, transportation, labour, machinery, tools, tackles and incidental works complete as per approved structural drawings and direction of Engineer-in-Charge.	Cu.m	37.24

7	Providing and applying / injecting chemical emulsion for pre-construction anti-termite treatment in accordance with IS 6313 Part II, latest applicable edition, to form a continuous chemical barrier under and around column pits, wall trenches, foundations / basement excavation, top surface of plinth filling, wall-floor junctions, external perimeter including plinth protection, expansion joints and around pipes / conduits, complete. Approved legally permitted termiticide shall be used at the specified concentration and application rate. Work shall be executed by an approved specialist agency, and the contractor shall furnish the specified performance guarantee, generally 10 years where required. Ground-floor plinth area only shall be measured unless otherwise stated.	Sq.m	729.00
B. ROAD WORK – BITUMINOUS ROAD (5.0 m CARRIAGEWAY + 0.50 m SHOULDER EACH SIDE)			
8	Preparation of well-compacted road subgrade for bituminous road including setting out, clearing loose / unsuitable material, scarifying where required, trimming, watering / moisture conditioning, grading and mechanical compaction using suitable vibratory roller to achieve the specified field density and a firm, non-yielding formation. The finished subgrade shall be brought to the required line, level, camber and cross fall over the full road formation width comprising 5.0 m carriageway plus 0.50 m shoulder on each side. Soft pockets shall be excavated and replaced with approved material and field-density tests shall be carried out as directed, complete as per approved road drawing, applicable MoRTH requirements and Engineer-in-Charge instructions.Including modified Road.	Sq.m	622.00
9	Providing, laying, spreading, watering, grading and compacting approved Granular Sub-Base (GSB) to 270 mm total compacted thickness over the approved road subgrade, including procurement, loading, transportation, unloading, spreading in suitable layers, moisture conditioning and rolling with minimum 3-tonne or suitable higher-capacity vibratory roller to achieve specified density. Finished GSB shall be true to line, level, camber and cross fall and shall be accepted by field-density and level checks before placement of the base course. All machinery, manpower, testing, leads, lifts and incidental works are included, complete in accordance with applicable MoRTH specifications and approved road drawing.	Cu.m	138.11
10	Providing and laying approved granular / graded-aggregate base course of 225 mm total compacted thickness over completed GSB, consolidated in three separate layers of 75 mm compacted thickness each, including supply, loading, transportation, unloading,	Cu.m	115.09

	spreading, grading, watering / moisture conditioning and compaction of each layer with suitable vibratory roller. Each 75 mm layer shall be checked and approved for density, line, level and camber before placement of the next layer. The completed base course shall provide a dense, stable and even surface ready to receive bituminous surfacing, complete as per approved road section, applicable MoRTH requirements and direction of Engineer-in-Charge.		
11	Providing and laying top bituminous premix carpet / bituminous premix surfacing of 200 mm total thickness as instructed, over the approved base course for the 5.0 m wide carriageway, including surface cleaning and preparation, approved prime / tack coat where specified, supply and heating of approved bituminous binder and aggregates, plant mixing, transportation in covered vehicles, laying by approved paver / mechanical means in suitable lifts as required by the approved methodology, rolling with appropriate rollers to achieve required compaction, finished level, camber and smooth riding surface, treatment of longitudinal / transverse joints, edge finishing and protection until opening to traffic. Materials, mix, temperatures, compaction and workmanship shall conform to approved MoRTH / project specifications. Thickness is retained as 200 mm in accordance with the present BOQ instruction.	Sq.m	511.50
12	Providing and forming 0.50 m wide shoulder on each side of the 5.0 m carriageway, including preparation of shoulder subgrade, supply / reuse of approved shoulder material as shown on the approved road drawing, spreading, watering, grading and mechanical compaction to required density, level and cross fall, edge dressing and proper tie-in with the bituminous carriageway and adjacent ground / drainage. Shoulder shall be firm, stable and free draining and shall be maintained during construction until final handover.	Sq.m	110.50
13	Providing and laying precast cement-concrete kerb stones, average width approximately 140 mm and 500 mm high or as shown, in M25 grade concrete for road works, complete including necessary excavation, preparation of bedding / foundation, casting-yard arrangement where required, formwork, reinforcement where specified, watering, curing, transportation, stacking, laying to line and level, haunching / jointing and all leads and lifts, machinery, manpower, tools and tackles, fuel and consumables complete as per approved drawings, technical specifications, MoRTH Clause 408 and instruction of Engineer-in-Charge.	Rmt	241.00

14	Providing and laying pavement markings using approved hot-applied thermoplastic road-marking material conforming to the specified standard over bituminous surface for lane / centre line, edge line, transverse markings, chevrons, pedestrian crossings and other markings shown on approved drawings, using fully / semi-automatic pavement-marking machine. The work shall include surface cleaning, primer where required, approved reflective glass beads, all materials, machinery, manpower, tools and tackles, fuel and consumables complete as per approved drawings, technical specifications and applicable MoRTH Clause 803. Measurement shall be by actual marked area excluding gaps.	Sq.m	51.30
C. OPEN STORAGE YARD / CONCRETE PAVEMENT			
15	Providing, laying, spreading, watering, grading and compacting approved Granular Sub-Base below the open storage yard / concrete-paved areas to 200 mm compacted thickness, including supply, transportation, spreading in suitable layers and compaction using suitable vibratory roller to achieve specified field density, required line, level and drainage slope, complete as per approved yard layout and applicable MoRTH / project specifications.	Cu.m	1820.00
16	Providing and laying 200 mm thick M30 grade design-mix cement-concrete pavement in the open storage yard / concrete-paved non-road areas over approved GSB, including approved materials, batching / RMC, transportation, placing, mechanical vibration, screeding, finishing, curing, construction joints, expansion / isolation joints, saw-cut contraction joints, approved joint filler / sealant, surface finishing and protection, complete to required line, level and slope suitable for storage and medium vehicle movement as per IS 456, approved project specification and drawings.	Cu.m	1820.00
17	Providing, casting, curing, handling and placing precast RCC sleeper / support blocks of size 1000 × 300 × 200 mm for stacking transmission-line / substation materials, using minimum M25 grade design-mix concrete and Fe500D reinforcement, including moulds / shuttering, reinforcement cutting, bending and fixing, concrete mixing / placing, mechanical vibration, curing, lifting provisions where required, handling, transportation within site and placing at designated locations on firm level ground. Finished blocks shall be true to size, free from honeycombing and cracks and shall have smooth / approved finish, all complete as per approved drawing and direction of Engineer-in-Charge.	Nos	600.00
D. BUILDING WORK AND OTHER WORK			

18	Providing and placing concrete work including cost of machinery & equipment, manpower, materials and consumables, staging & scaffolding, handling & transportation, batching, mixing, transportation of concrete, placing, vibrating to achieve compaction and curing at all elevations, complete as per drawings, specifications and as directed by the engineer-in-charge. the relevant items shall be deemed to include the cost of staging & scaffolding required for safe and proper execution. Bidder shall procure coarse and fine aggregates from approved sources. the bidder shall identify and arrange approval of sources and shall obtain prior written approval for any alternate source. all costs involved in source approval shall be deemed included in the respective rates. Bidder shall arrange approval of concrete design mix from an NABL-accredited laboratory where design-mix concrete IS specified. cost of design mix, trial mixes and execution as per approved mix shall be deemed included in the quoted rates. Providing and laying Plain Cement Concrete (PCC) as levelling course / fill around foundations, pipes, floors on grade, water-retaining structures, equipment foundations, under foundations and flooring under-bed, including formwork where required, scaffolding / staging, materials, manpower, tools and tackles and consumables complete as per specification, drawings and direction of Engineer-in-Charge. M7.5 grade PCC.	Cu.m	30.63
19	Providing and laying M25 grade reinforced cement concrete below finished ground level, conforming to IS 456, including approved materials, batching / RMC, transportation, placing, vibrating, finishing, curing, plasticizer / superplasticizer where required, testing, machinery, manpower, tools, tackles and consumables complete as per approved drawings and Engineer-in-Charge instructions. Formwork, shuttering, supporting staging and props shall be measured and paid separately under the respective formwork BOQ item. M25 Concrete below F.G.L.	Cu.m	128.62

20	Providing and laying M25 grade reinforced cement concrete above finished ground level at all levels, conforming to IS 456, including approved materials, batching / RMC, transportation, placing, vibrating, finishing, curing, plasticizer / superplasticizer where required, testing, machinery, manpower, tools, tackles and consumables complete as per approved drawings and Engineer-in-Charge instructions. Formwork, shuttering, supporting staging and props shall be measured and paid separately under the respective formwork BOQ item M25 Concrete above F.G.L. up to all levels.	Cu.m	17.06
21	Providing Fe500 high-yield-strength deformed reinforcement bars conforming to IS 1786, including unloading, straightening, cutting, bending, placing and fixing in position at all levels, tying with 18 / 20 SWG annealed iron binding wire including supply of binding wire, providing approved cover blocks, chairs / spacers where required, transportation and all materials, manpower, tools, tackles and consumables complete as per drawings, BBS, specifications and direction of Engineer-in-Charge. Only authorized laps, chairs and separators specifically permitted for measurement shall be paid under this item.	MT	17.02
22	Providing, fixing, supporting and removing formwork at all elevations including all materials, labour, equipment, consumables, scaffolding, staging, pockets, block-outs, chamfers and related temporary works complete as per specifications, drawings and as directed / approved by Engineer-in-Charge, using approved plywood / steel formwork below finished ground level for all types of foundations, footings, bases of columns, walls, columns, pilasters, beams, mass-concrete trenches and similar works, including haunches and chamfers.	Sq.m	457.70
23	Providing, fixing, supporting and removing formwork at all elevations including all materials, labour, equipment, consumables, scaffolding, staging, pockets, block-outs, chamfers and related temporary works complete as per specifications, drawings and as directed / approved by Engineer-in-Charge, using approved plywood / steel formwork above finished ground level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, domes, arches, walls and similar works at all heights, including haunches and chamfers.	Sq.m	183.32
24	Providing and laying plinth protection 100 mm thick in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate) using 20 mm nominal-size aggregate over 75 mm bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine	Sq.m	12.00

	sand, including preparation of base, required slope away from building, formwork to edges where required, finishing the top smooth, curing and making good complete as per drawings and instruction of Engineer-in-Charge.		
25	Providing and fixing 25 mm thick pre-moulded bituminous expansion / isolation joint filler board of approved make at locations shown on drawings, including cutting to required width and profile, fixing firmly in position, maintaining correct joint width and alignment, temporary supports and all labour, materials, tools and incidental works complete. Joint sealing compound at the exposed face shall be measured separately under Item 29.	Sq.m	0.00
26	Providing and filling approved two-component polysulphide sealing compound conforming to IS 12118 in the exposed groove of expansion / isolation / construction joints, including cleaning and drying of joint faces, application of approved primer, providing bond breaker / backing material where required, mixing, placing, tooling and finishing the sealant to the specified width and depth and protection until cured, complete as per manufacturer's recommendations and approved drawings. Pre-moulded expansion-joint filler board shall be measured separately under Item 28.	Rmt	0.00
27	Providing and constructing brick masonry in trench / drain side walls below plinth / ground level, using first-class burnt clay bricks of approved quality conforming to applicable IS requirements, laid in cement-sand mortar 1:4, including soaking of bricks, preparation and mixing of mortar, laying bricks in proper bond true to line, level and plumb, maintaining specified wall thickness, forming corners, junctions, offsets and openings where required, raking of joints for plastering, curing, scaffolding / staging where required, dewatering, handling and transportation of materials, cutting and making good around embedded items, disposal of debris and all incidental works complete as per approved drawings, specifications and directions of the Engineer-in-Charge. For the proposed trench, masonry walls shall generally be 230 mm thick on both sides of the drain, approximately 1.0 m deep, unless otherwise shown on the approved drawing. Cement and all other materials shall be in the Contractor's scope. Measurement shall be in cubic metres of finished brick masonry.	Cu.m	46.46

28	Providing and applying 20 mm thick cement-sand plaster in CM 1:4 to the internal faces of brick masonry trench / drain walls, including preparation of masonry surface, cleaning and raking of joints, wetting, application of approved bonding slurry where required, forming smooth and dense waterproof finish, rounding / finishing internal corners and junctions, maintaining required line, level and slope, curing, scaffolding / staging, dewatering where required, all materials, labour, tools and incidental works complete as per approved drawings, specifications and directions of Engineer-in-Charge. The finished surface shall be smooth, even, free from cracks and suitable for continuous drainage flow. Measurement shall be in square metres of finished plastered surface.	Cu.m	247.45
29	Block masonry / stone masonry including supply of materials, manpower, staging & scaffolding, mixing of mortar, curing and all incidental works complete as per specifications, drawings and direction of project manager. For all items involving use of cement and reinforcing steel, the quoted rate shall be inclusive of these materials unless specifically stated otherwise. Supplying and laying concrete block masonry of designation D as specified in IS 2185, minimum compressive strength 5 MPa, at various elevations, using approved concrete blocks in cement-sand mortar 1:4, including wetting where required, mixing mortar, laying true to line / level / plumb, raking joints, curing, cutting, closing around embedded items and all materials / labour complete. Cement required for manufacture of concrete blocks shall be in Bidder's scope.	Cu.m	51.84
30	Cement plaster including making drip moulds / grooves where required at all levels, with all materials, labour, staging & scaffolding, surface preparation and curing complete as per specifications, drawings and direction of engineer / project manager. Providing 12 mm thick internal plaster in single layer in cement mortar 1:6 (1 cement : 6 sand) on building walls, finished smooth, including 150 mm wide chicken mesh at junctions of masonry and RCC work, over electrical conduiting and wherever required, hacking / preparing the background, scaffolding and curing complete.	Sq.m	225.40
31	Cement plaster including making drip moulds / grooves where required at all levels, with all materials, labour, staging & scaffolding, surface preparation and curing complete as per specifications, drawings and direction of engineer / project manager.	Sq.m	225.40

	Providing 18 mm thick external sand-faced plaster in two layers, first layer 12 mm thick in CM 1:6 and second layer 6 mm thick in CM 1:4, on exposed building faces, finished to approved texture / smoothness, including 150 mm wide chicken mesh at RCC-masonry junctions, over electrical conduiting and wherever required, hacking / preparing surfaces, forming grooves / drips, scaffolding and curing complete.		
32	Cement plaster including making drip moulds / grooves where required at all levels, with all materials, labour, staging & scaffolding, surface preparation and curing complete as per specifications, drawings and direction of engineer / project manager. Providing 6 mm thick plaster on ceilings, underside of beams, lintels and other concrete surfaces in cement mortar 1:4, finished smooth, including hacking / preparing RCC surface, scaffolding and curing complete.	Sq.m	9.00
33	Providing and applying premium-grade acrylic emulsion paint of approved make such as Asian / Berger / Nerolac / AkzoNobel / Jotun or equivalent on internal walls, comprising surface cleaning / sanding, crack filling, two coats of approved white wall putty where specified, one coat water-based primer and minimum two coats acrylic emulsion of approved shade, applied to achieve uniform finish. Work shall include scaffolding / ladders, masking and protection of floor / adjacent surfaces, roller / brush application, cleaning of splashes and all leads and lifts at all levels, complete as directed by Engineer-in-Charge.	Sq.m	225.40
34	Providing and applying two or more coats of approved oil-bound washable distemper to ceilings / toilet walls using approved make such as Asian / Berger / Nerolac / AkzoNobel / Jotun or equivalent, including one coat approved white putty where required, one coat water-based cement primer, surface preparation, crack filling, scaffolding, ladders, all leads and lifts and complete finishing in approved shade / colour as directed by Project Manager.	Sq.m	9.00
35	Providing and applying two or more coats of approved waterproof cement / exterior weather-resistant paint to external walls in approved shade and make, such as Asian / Berger / Nerolac / AkzoNobel / Jotun or equivalent, including preparation of surface, removal of loose coating, crack filling, primer where required, scaffolding and all leads and lifts complete as directed by Project Manager.	Sq.m	225.40
36	Providing and laying approved vitrified floor tiles, generally 600 × 600 mm, of approved make, colour and finish in security cabin / dry internal areas, laid to approved pattern over approximately 20 mm thick cement mortar 1:4 bedding or approved tile adhesive as specified,	Sq.m	9.00

	including cement slurry where applicable, cutting, fitting around openings, paper-thin uniform joints, matching colour grout, skirting / borders where shown, curing, cleaning and protection until handover, complete. Tiles shall be Kajaria / Somany / Johnson / Asian Granito or approved equivalent.		
37	Providing and laying approved anti-skid ceramic floor tiles in wet / utility / external covered areas wherever shown on drawings, laid to required slope over approved cement-mortar bedding / tile adhesive, including surface preparation, cutting, fitting, spacers, matching colour grout, curing, cleaning and all accessories complete. Tiles shall be of approved make, colour and size and shall have suitable anti-skid characteristics for the intended area.	Sq.m	0.00
38	Flooring, skirting & dado including base layer and all materials, labour, curing, polishing / cleaning etc. complete in all respects as shown on drawings, described in specifications and as directed by project manager. For tile flooring, supply and laying rate break-up shall be furnished where required. Employer reserves the option to supply tiles. Prior approval shall be obtained before procurement. Providing and laying ceramic-tile dado to toilets, kitchen / utility / common basin areas using approved tiles of approved make, shade and size, generally 300 × 450 mm or approved equivalent, laid to approved pattern over 6–10 mm thick approved tile adhesive such as BAL / MYK Laticrete or equivalent; including PVC edge beading to corners where required, cutting, spacers, pointing / grouting with matching colour grout, acid washing and all borders / pencil borders where shown, at all levels complete. Approved makes: Kajaria / Somany / Johnson / Asian Granito or equivalent.	Sq.m	0.00
39	Providing and laying approximately 12 mm thick cast-in-situ cement-concrete floor finish with approved non-metallic floor hardener over 38 mm thick cement-concrete under-bed, including preparation of base, placing / compaction, application of non-metallic hardener at specified dosage, generally 5 kg/Sq.m for medium-duty floors, trowel finishing, curing, protection and all materials / labour complete. The 38 mm under-bed concrete shall be deemed included in this item.	Sq.m	0.00
40	Cutting and cleaning approximately 15 mm × 20 mm grooves at construction / control joints in flooring, removing all dust and impurities and filling the grooves with approved bitumen-sand mix 1:4 or specified sealant, finishing the top surface flush and neat complete as directed by Project Engineer. Unless otherwise shown,	Rmt	0.00

	grooves for non-metallic floor-hardener areas shall generally be provided in approximately 5 m × 5 m grid.		
41	Providing and fixing approved colour-anodized / powder-coated aluminium sliding, partly sliding, partly fixed or fixed windows / ventilators / louvers using approved extruded sections of Hindalco / Jindal or equivalent, including anodized aluminium fixtures and fasteners, snap-fit beading, concealed screws, handles and locking hardware, glazing / louvers and sealants as shown. Aluminium sections shall be smooth, straight, mitred and mechanically jointed where required; average aluminium-section weight shall be approximately as specified. Item includes frames, all hardware, accessories, fixing at all elevations, making good and complete installation as per drawings, specifications and direction of Engineer-in-Charge.	Sq.m	3.60
42	Providing and fixing rolling shutter using hot-rolled double-dipped galvanized steel lath sections of minimum 18 SWG and specified galvanizing, conforming to IS 6248, with interlocking laths at approximately 75 mm centres, end locks, specially designed pipe shaft / barrel, brackets, side guides, inside / outside locking arrangement, push-pull / geared / electrically operated mechanism as specified, wire springs, hood / top cover and all fittings complete. Bottom lath shall be connected to approved lock plate fabricated from minimum 3 mm thick steel plate with stiffening angles. Include primer / touch-up and two finish coats where specified, all fixing, erection and testing for smooth operation. Measurement shall be based on clear opening area only.	Sq.m	36.00
43	Supplying and erecting best-quality approximately 40 mm thick flush steel doors, double plated with pressed steel frames conforming to the applicable IS standards, from approved manufacturer, including fabrication, one shop coat red-oxide zinc-chrome primer, all fittings and fixtures such as aldrop, tower bolts, holdfasts, floor ties, weather bar and hinges, packing, carting, transportation, freight / insurance, assembling, fitting and fixing at all elevations, mastic caulking / grouting with CC 1:2:4 where required, one touch-up primer coat and two coats approved synthetic enamel paint, unloading, stacking and all accessories complete as per drawings, specifications and direction of Project Manager.	Sq.m	1.89

44	Waterproofing works shall be executed by an approved specialist agency and shall follow the approved methodology / specification. contractor shall provide the specified material and performance guarantee, generally minimum 10 years where required.All surfaces shall be sound, clean and properly prepared. Loose material, laitance, oil, grease, moss / lichen and contaminants shall be removed. Cracks, honeycombs, construction joints, pipe / outlet penetrations and other defects shall be repaired / grouted before waterproofing. Treatment shall include approved watta / coving at wall-floor junctions, proper termination at edges and treatment around pipes / spouts. Provide approved two-component acrylic polymer-modified cementitious waterproof coating such as Tapecrete P151 / equivalent approved make, applied in specified coats after base preparation, with approved geo-fabric / fibre-glass reinforcement where specified and required overlaps. Treatment shall extend up adjoining walls to minimum specified height, generally 300 mm in wet areas, unless shown otherwise. Pipe penetrations shall be sealed with approved epoxy / polymer grout. Testing by ponding / flooding shall be carried out as specified after completion and defects rectified before handover.	Sq.m	10.00
45	Structural steel shall be entirely in the Contractor's scope. The quoted rate shall include supply of approved structural steel, fabrication, transportation to site, unloading, storage, handling, erection, alignment and fixing in position at all levels, complete as per approved drawings and specifications. Supply, fabrication and erection of structural steel conforming to IS 2062, designed, detailed and fabricated in accordance with IS 800 and approved drawings. The scope shall include cutting, straightening, drilling, machining, fitting, welding, bolting, erection, temporary supports, staging, lifting, alignment, plumbing, final tightening and all activities required for complete installation.The item shall include all structural members and components such as columns, beams, rafters, purlins, girts, bracings, sag rods, cleats, stiffeners, gusset plates, connection plates, base plates, splice plates and all other structural accessories required for completion of the work.The quoted rate shall also include all erection bolts, nuts, washers, anchor fasteners, welding electrodes, welding consumables, shop and field welding, connection accessories, tools and tackles, cranes, machinery, manpower, testing, inspection and all incidental materials required for satisfactory completion of the work.The item shall further include complete	MT	40.36

	surface preparation, cleaning, approved primer coats and the full protective painting system, including all materials, labour, equipment and application works, as specified in the project specifications and approved drawings.Miscellaneous steelwork such as chequered plates, ladders, stairs, platforms, gratings, handrails and similar structural components not measured separately shall be deemed included in this item.The rate shall be deemed to include supply, fabrication, transportation, erection, erection bolts, nuts, washers, welding, purlins, bracing, base plates, connection plates, surface preparation and complete painting system, all complete.		
46	Anchor bolts including required hexagonal nuts, plain / taper / spring washers, templates, sleeves and anchorage arrangement as shown, complete. Material supply including steel shall be in Contractor's scope and shall be procured from approved sources such as SAIL / RINL / Tata Steel or approved equivalent. Rate shall include cutting, threading, fabrication, template assembly, setting to correct line / level / projection / PCD, temporary support during concreting, protection of threads, all tools, tackles and consumables complete as per approved structural / vendor drawing.	MT	0.45
47	Providing, supplying and fixing 0.50 mm thick colour coated GI/PPGI profile sheet roofing/cladding of approved make and colour, fixed on existing steel structure with self-drilling/self-tapping screws, EPDM washers, hooks, bolts, nuts, bitumen washers, sealants, side laps, end laps, flashing, trims, ridge pieces, closures and all necessary accessories complete.The rate shall include cutting, lifting, aligning, fixing, overlapping, sealing, wastage, labour, tools & tackles, scaffolding, transportation, loading/unloading and all materials required for complete installation as per drawings, specifications and instructions of Engineer-in-Charge.Purlins and girts are excluded from this item and shall be measured under Item 45 – Structural Steel.	SQM	1071.20
48	Providing and fixing 12.5 mm thick plain gypsum-board false ceiling of approved make, such as India Gypsum or equivalent, in horizontal / vertical planes as shown, including approved aluminium / GI grid and metal suspension system, perimeter channels, anchor fasteners, adjustable hangers, jointing tape / compound, cut-outs and framing around light fixtures / services, all fittings and accessories, finishing of joints and applying two or more coats acrylic emulsion paint of approved	Sq.m	0.00

	colour to achieve smooth uniform finish, complete as per specification, drawings and direction of Engineer.		
49	Providing and laying at below-ground level 600 mm diameter precast RCC Hume pipes conforming to the specified standard, complete with collars, approved bedding, laying to line and invert level, jointing collars with cement mortar 1:1 or approved jointing system, testing of joints, alignment and all handling / lowering operations complete as directed by Engineer. Excavation and RCC encasing, where required, shall be measured separately under the respective BOQ items unless otherwise stated.	Rmt	6.00
50	yard fencing: Supplying, Providing and installing PVC coated steel chain link fencing (mesh size 50 mm nominal dia of wire 3.15) of 2400 high including all connected works such as but not limited to supply of all connectors for fixing the fencing on to angle iron posts (ISA 65x65x6) or equivalent spaced at 2.5 m intervals and reinforced with 2 struts (ISA 65x65x6) or equivalent at every fifth post and at all change in directions including a horizontal member of ISA 50x50x6 at top and bottom of the fencing connected between the vertical posts etc., complete including two coats of red oxide zinc chromate primer and two finish coats of synthetic enamel all of DFT 25 microns each on the angle irons. GI barbed wire anti climbing arrangement confirming to code, at top of chain link fencing shall be provided with 4 strands of height of 600 mm including all accessories as per specification all complete. Rate quoted shall be for running metre of fence all inclusive of soil excavation, concrete items for posts.	Rmt	350.00
51	Providing, fabricating, supplying, transporting and erecting double-leaf mild steel vehicular gate of 6.0 m clear opening and approximately 2.0 m height, fabricated from approved MS hollow sections, pipes, flats and structural members complete with vertical/horizontal stiffeners, bracings, locking arrangement, stopper, hinges, guide plates, holdfasts and all necessary hardware. The item shall include excavation, PCC, RCC foundation/pedestal, reinforcement, formwork, anchor fasteners, gate posts, grouting, alignment, erection and commissioning complete. Steel surfaces shall be cleaned, provided with one coat epoxy/zinc-rich primer and two coats synthetic enamel/polyurethane finish paint of approved shade. Rate shall include all materials, labour, machinery, transportation, welding consumables, bolts, nuts, washers, testing, leads and lifts complete as per approved drawings and direction of Engineer-in-Charge.	Nos	1.00
52	Supply, erection, testing and commissioning of 9 m galvanized high mast/pole complete with 4 Nos. LED flood	Nos	2.00

	lights of approximately 400 W each, luminaire mounting arrangement, weatherproof control panel, internal wiring, armoured cabling, earthing and all accessories.RCC foundation, reinforcement and cast-in anchor bolts shall be measured separately under the respective civil BOQ items		
53	Providing and placing approved ready-mix non-shrink cementitious grout of minimum M45 grade (minimum compressive strength 45 MPa at 28 days) such as MasterFlow, Conbextra GP2, Fosroc, SikaGrout or equivalent approved make below base plates, equipment foundations, structural steel columns, anchor bolts and other locations shown on approved drawings.The scope shall include surface preparation, cleaning, formwork wherever required, mixing with potable water, placing by pouring/pumping, finishing, curing, testing and all labour, materials, tools, tackles, consumables and incidental works complete as per manufacturer's specifications and directions of the Engineer-in-Charge.	Cu.m	0.14
H. GRATING COVER			
54	Providing, fabricating, supplying and fixing removable heavy-duty hot-dip galvanized MS grating cover of approximately 450 mm width over RCC trench, including bearing bars, cross bars, edge flats / frames, supporting MS angle frame, cutting, welding, fabrication, galvanizing, transportation, lifting, placing, fixing with clamps / hold-down arrangement where required and all labour, materials, tools, tackles and incidental works complete as per approved drawings and direction of Engineer-in-Charge. Grating shall be suitable for the specified service loading and shall be removable for maintenance access.	Rmt	70.00

iii) Lot 3 – Rewa Sub-station:

Price Bid Format_CC27SVP023_Construction of storage facilities and miscellaneous civil works at SEUPPTCL at Rewa sub-station.			
Sl. no.	Description of work	*Unit*	*Quantity*
A. Earthwork			
1	Site clearing, tree cutting / grubbing where authorized and providing approved earth / murrum filling for raising the formation level of open storage yard, internal road and associated areas, including removal of vegetation, roots, rubbish, debris and unsuitable material; procurement from approved source including royalty, loading, transportation, unloading, spreading in 200–250 mm loose layers, breaking clods, watering / moisture conditioning and compaction of each layer using suitable vibratory roller / mechanical compactor. Work shall include final trimming, grading and subgrade preparation to required line, level and slope, removal / replacement of soft pockets, field-density testing and all machinery, manpower, tools, tackles, fuel and consumables complete as per approved layout, IS 2720 series and instruction of Engineer-in-Charge. Average compacted filling depth shall be 0.50 m unless otherwise indicated in the approved drawings/survey levels.	Cu.m	3000.00
2	Excavation of earth for foundations, equipment / machine foundations, trenches, pipe lines, storm-water drains, plinth and similar works, including setting out, clearing and grubbing, removal of debris, dewatering where required, strutting / shoring where required (sheet piling excluded unless separately specified), dressing sides, levelling to grade and ramming the bottom, stacking / disposal of surplus excavated material within an initial lead of 1 km radial distance including respective lifts, loading, transporting, unloading and spreading, with all machinery, manpower, tools and tackles, fuel and consumables complete as per drawings, specifications and instruction of Engineer-in-Charge.	Cu.m	83.25
3	Excavation of earth for foundations, equipment / machine foundations, trenches, pipe lines, storm-water drains, plinth and similar works, including setting out, clearing and grubbing, removal of debris, dewatering where required, strutting / shoring where required (sheet piling excluded unless separately specified), dressing sides, levelling to grade and ramming the bottom, stacking / disposal of surplus excavated material within an initial lead of 1 km radial distance including respective lifts, loading, transporting, unloading and spreading, with all machinery, manpower, tools and tackles, fuel and consumables complete as per drawings, specifications and instruction of Engineer-in-Charge.	Cu.m	0.00

4	Transportation of excavated earth beyond the initial lead of 1.0 km, for every additional 0.50 km lead, including loading where applicable, transportation, unloading and spreading at the approved disposal / filling location. All other excavation-related activities shall be deemed covered under the respective excavation items.	Cu.m	41.81
5	Backfilling / filling around foundations, equipment and machine foundations, trenches, pipe lines, storm-water drains, plinth and similar works, including dewatering where required, using selected earth / soil / useful approved cut-spoil stacked within a lead of 1.0 km radial distance or as directed by Engineer-in-Charge; including loading, unloading, transportation, watering and ramming / mechanical compaction in layers not exceeding 300 mm compacted thickness to achieve minimum specified density, generally not less than 85% Standard Proctor maximum dry density unless otherwise specified, levelling and dressing complete with all machinery, manpower, tools and tackles, fuel and consumables as per drawings and specifications. Backfilling arising from unauthorized over-excavation shall not be measured.	Cu.m	41.44
6	Providing and laying rubble soling using approved-quality hard rock rubble / hand-broken hard metal of sizes generally ranging from 100 mm to 230 mm below finished ground-floor level / below foundation level, laid in one layer of approximately 250 mm thickness or as shown, hand packed with broad face down, filling interstices with smaller stones and sand, watering and thoroughly compacting the layer to obtain a firm uniform bed, including all machinery, manpower, tools and tackles, fuel and consumables complete as per drawings, specifications and instruction of Engineer-in-Charge, using local stone of approved quality.	Cu.m	19.96
7	Providing and applying / injecting chemical emulsion for pre-construction anti-termite treatment in accordance with IS 6313 Part II, latest applicable edition, to form a continuous chemical barrier under and around column pits, wall trenches, foundations / basement excavation, top surface of plinth filling, wall-floor junctions, external perimeter including plinth protection, expansion joints and around pipes / conduits, complete. Approved legally permitted termiticide shall be used at the specified concentration and application rate. Work shall be executed by an approved specialist agency, and the contractor shall furnish the specified performance guarantee, generally 10 years where required. Ground-floor plinth area only shall be measured unless otherwise stated.	Sq.m	129.00
8	Providing and laying approved gravel paving in transformer areas and other designated substation	Sq.m	0.00

	areas, generally 100 mm thick at transformer locations and 75 mm thick in balance areas, including preparation / compaction of subgrade, supply, loading, transportation, unloading, spreading, grading, levelling, watering where required and compaction to the specified finished level and slope, complete as per approved drawings and instruction of Engineer-in-Charge.		
B. ROAD WORK – BITUMINOUS ROAD (5.0 m CARRIAGEWAY + 0.50 m SHOULDER EACH SIDE)-			
9	Preparation of well-compacted road subgrade for bituminous road including setting out, clearing loose / unsuitable material, scarifying where required, trimming, watering / moisture conditioning, grading and mechanical compaction using suitable vibratory roller to achieve the specified field density and a firm, non-yielding formation. The finished subgrade shall be brought to the required line, level, camber and cross fall over the full road formation width comprising 5.0 m carriageway plus 0.50 m shoulder on each side. Soft pockets shall be excavated and replaced with approved material and field-density tests shall be carried out as directed, complete as per approved road drawing, applicable MoRTH requirements and Engineer-in-Charge instructions.	Sq.m	0.00
10	Providing, laying, spreading, watering, grading and compacting approved Granular Sub-Base (GSB) to 270 mm total compacted thickness over the approved road subgrade, including procurement, loading, transportation, unloading, spreading in suitable layers, moisture conditioning and rolling with minimum 3-tonne or suitable higher-capacity vibratory roller to achieve specified density. Finished GSB shall be true to line, level, camber and cross fall and shall be accepted by field-density and level checks before placement of the base course. All machinery, manpower, testing, leads, lifts and incidental works are included, complete in accordance with applicable MoRTH specifications and approved road drawing.	Cu.m	0.00
11	Providing and laying approved granular / graded-aggregate base course of 225 mm total compacted thickness over completed GSB, consolidated in three separate layers of 75 mm compacted thickness each, including supply, loading, transportation, unloading, spreading, grading, watering / moisture conditioning and compaction of each layer with suitable vibratory roller. Each 75 mm layer shall be checked and approved for density, line, level and camber before placement of the next layer. The completed base course shall provide a dense, stable and even surface ready to receive bituminous surfacing, complete as per approved road section, applicable MoRTH requirements and direction of Engineer-in-Charge.	Cu.m	0.00

12	Providing and laying top bituminous premix carpet / bituminous premix surfacing of 200 mm total thickness as instructed, over the approved base course for the 5.0 m wide carriageway, including surface cleaning and preparation, approved prime / tack coat where specified, supply and heating of approved bituminous binder and aggregates, plant mixing, transportation in covered vehicles, laying by approved paver / mechanical means in suitable lifts as required by the approved methodology, rolling with appropriate rollers to achieve required compaction, finished level, camber and smooth riding surface, treatment of longitudinal / transverse joints, edge finishing and protection until opening to traffic. Materials, mix, temperatures, compaction and workmanship shall conform to approved MoRTH / project specifications. Thickness is retained as 200 mm in accordance with the present BOQ instruction.	Sq.m	0.00
13	Providing and forming 0.50 m wide shoulder on each side of the 5.0 m carriageway, including preparation of shoulder subgrade, supply / reuse of approved shoulder material as shown on the approved road drawing, spreading, watering, grading and mechanical compaction to required density, level and cross fall, edge dressing and proper tie-in with the bituminous carriageway and adjacent ground / drainage. Shoulder shall be firm, stable and free draining and shall be maintained during construction until final handover.	Sq.m	0.00
14	Providing and laying precast cement-concrete kerb stones, average width approximately 140 mm and 500 mm high or as shown, in M25 grade concrete for road works, complete including necessary excavation, preparation of bedding / foundation, casting-yard arrangement where required, formwork, reinforcement where specified, watering, curing, transportation, stacking, laying to line and level, haunching / jointing and all leads and lifts, machinery, manpower, tools and tackles, fuel and consumables complete as per approved drawings, technical specifications, MoRTH Clause 408 and instruction of Engineer-in-Charge.	Rmt	0.00
15	Providing and laying pavement markings using approved hot-applied thermoplastic road-marking material conforming to the specified standard over bituminous surface for lane / centre line, edge line, transverse markings, chevrons, pedestrian crossings and other markings shown on approved drawings, using fully / semi-automatic pavement-marking machine. The work shall include surface cleaning, primer where required, approved reflective glass beads, all materials, machinery, manpower, tools and tackles, fuel and consumables complete as per approved drawings, technical	Sq.m	0.00

	specifications and applicable MoRTH Clause 803. Measurement shall be by actual marked area excluding gaps.		
C. OPEN STORAGE YARD / CONCRETE PAVEMENT			
16	Providing, laying, spreading, watering, grading and compacting approved Granular Sub-Base below the open storage yard / concrete-paved areas to 200 mm compacted thickness, including supply, transportation, spreading in suitable layers and compaction using suitable vibratory roller to achieve specified field density, required line, level and drainage slope, complete as per approved yard layout and applicable MoRTH / project specifications.	Cu.m	1100.00
17	Providing and laying 200 mm thick M30 grade design-mix cement-concrete pavement in the open storage yard / concrete-paved non-road areas over approved GSB, including approved materials, batching / RMC, transportation, placing, mechanical vibration, screeding, finishing, curing, construction joints, expansion / isolation joints, saw-cut contraction joints, approved joint filler / sealant, surface finishing and protection, complete to required line, level and slope suitable for storage and medium vehicle movement as per IS 456, approved project specification and drawings.	Cu.m	1100.00
18	Providing, casting, curing, handling and placing precast RCC sleeper / support blocks of size 1000 × 300 × 200 mm for stacking transmission-line / substation materials, using minimum M25 grade design-mix concrete and Fe500D reinforcement, including moulds / shuttering, reinforcement cutting, bending and fixing, concrete mixing / placing, mechanical vibration, curing, lifting provisions where required, handling, transportation within site and placing at designated locations on firm level ground. Finished blocks shall be true to size, free from honeycombing and cracks and shall have smooth / approved finish, all complete as per approved drawing and direction of Engineer-in-Charge.	Nos	100.00
D. BUILDING WORK AND OTHER WORK			
19	Providing and placing concrete work including cost of machinery & equipment, manpower, materials and consumables, staging & scaffolding, handling & transportation, batching, mixing, transportation of concrete, placing, vibrating to achieve compaction and curing at all elevations, complete as per drawings, specifications and as directed by the engineer-in-charge. the relevant items shall be deemed to include the cost of staging & scaffolding required for safe and proper execution. Bidder shall procure coarse and fine aggregates from	Cu.m	4.12

	approved sources. the bidder shall identify and arrange approval of sources and shall obtain prior written approval for any alternate source. all costs involved in source approval shall be deemed included in the respective rates. Bidder shall arrange approval of concrete design mix from an NABL-accredited laboratory where design-mix concrete IS specified. cost of design mix, trial mixes and execution as per approved mix shall be deemed included in the quoted rates. Providing and laying Plain Cement Concrete (PCC) as levelling course / fill around foundations, pipes, floors on grade, water-retaining structures, equipment foundations, under foundations and flooring under-bed, including formwork where required, scaffolding / staging, materials, manpower, tools and tackles and consumables complete as per specification, drawings and direction of Engineer-in-Charge. M7.5 grade PCC.		
20	Providing and laying M25 grade reinforced cement concrete below finished ground level, conforming to IS 456, including approved materials, batching / RMC, transportation, placing, vibrating, finishing, curing, plasticizer / superplasticizer where required, testing, machinery, manpower, tools, tackles and consumables complete as per approved drawings and Engineer-in-Charge instructions. Formwork, shuttering, supporting staging and props shall be measured and paid separately under the respective formwork BOQ item. M25 Concrete below F.G.L.	Cu.m	38.40
21	Providing and laying M25 grade reinforced cement concrete above finished ground level at all levels, conforming to IS 456, including approved materials, batching / RMC, transportation, placing, vibrating, finishing, curing, plasticizer / superplasticizer where required, testing, machinery, manpower, tools, tackles and consumables complete as per approved drawings and Engineer-in-Charge instructions. Formwork, shuttering, supporting staging and props shall be measured and paid separately under the respective formwork BOQ item M25 Concrete above F.G.L. up to all levels.	Cu.m	86.00
22	Providing Fe500 high-yield-strength deformed reinforcement bars conforming to IS 1786, including unloading, straightening, cutting, bending, placing and fixing in position at all levels, tying with 18 / 20 SWG	MT	12.30

	annealed iron binding wire including supply of binding wire, providing approved cover blocks, chairs / spacers where required, transportation and all materials, manpower, tools, tackles and consumables complete as per drawings, BBS, specifications and direction of Engineer-in-Charge. Only authorized laps, chairs and separators specifically permitted for measurement shall be paid under this item.		
23	Providing, fixing, supporting and removing formwork at all elevations including all materials, labour, equipment, consumables, scaffolding, staging, pockets, block-outs, chamfers and related temporary works complete as per specifications, drawings and as directed / approved by Engineer-in-Charge, using approved plywood / steel formwork below finished ground level for all types of foundations, footings, bases of columns, walls, columns, pilasters, beams, mass-concrete trenches and similar works, including haunches and chamfers.	Sq.m	67.60
24	Providing, fixing, supporting and removing formwork at all elevations including all materials, labour, equipment, consumables, scaffolding, staging, pockets, block-outs, chamfers and related temporary works complete as per specifications, drawings and as directed / approved by Engineer-in-Charge, using approved plywood / steel formwork above finished ground level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, domes, arches, walls and similar works at all heights, including haunches and chamfers.	Sq.m	142.56
25	Providing and laying plinth protection 100 mm thick in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate) using 20 mm nominal-size aggregate over 75 mm bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including preparation of base, required slope away from building, formwork to edges where required, finishing the top smooth, curing and making good complete as per drawings and instruction of Engineer-in-Charge.	Sq.m	113.00
26	Providing and fixing 25 mm thick pre-moulded bituminous expansion / isolation joint filler board of approved make at locations shown on drawings, including cutting to required width and profile, fixing firmly in position, maintaining correct joint width and alignment, temporary supports and all labour, materials, tools and incidental works complete. Joint sealing compound at the exposed face shall be measured separately under Item 27.	Sq.m	0.00
27	Providing and filling approved two-component polysulphide sealing compound conforming to IS 12118 in the exposed groove of expansion / isolation /	Rmt	0.00

	construction joints, including cleaning and drying of joint faces, application of approved primer, providing bond breaker / backing material where required, mixing, placing, tooling and finishing the sealant to the specified width and depth and protection until cured, complete as per manufacturer's recommendations and approved drawings. Pre-moulded expansion-joint filler board shall be measured separately under Item 26.		
28	Block masonry / stone masonry including supply of materials, manpower, staging & scaffolding, mixing of mortar, curing and all incidental works complete as per specifications, drawings and direction of project manager. For all items involving use of cement and reinforcing steel, the quoted rate shall be inclusive of these materials unless specifically stated otherwise. Supplying and laying concrete block masonry of designation D as specified in IS 2185, minimum compressive strength 5 MPa, at various elevations, using approved concrete blocks in cement-sand mortar 1:4, including wetting where required, mixing mortar, laying true to line / level / plumb, raking joints, curing, cutting, closing around embedded items and all materials / labour complete. Cement required for manufacture of concrete blocks shall be in Bidder's scope.	Cu.m	38.15
29	Cement plaster including making drip moulds / grooves where required at all levels, with all materials, labour, staging & scaffolding, surface preparation and curing complete as per specifications, drawings and direction of engineer / project manager. Providing 12 mm thick internal plaster in single layer in cement mortar 1:6 (1 cement : 6 sand) on building walls, finished smooth, including 150 mm wide chicken mesh at junctions of masonry and RCC work, over electrical conduiting and wherever required, hacking / preparing the background, scaffolding and curing complete.	Sq.m	544.40
30	Cement plaster including making drip moulds / grooves where required at all levels, with all materials, labour, staging & scaffolding, surface preparation and curing complete as per specifications, drawings and direction of engineer / project manager. Providing 18 mm thick external sand-faced plaster in two layers, first layer 12 mm thick in CM 1:6 and second layer 6 mm thick in CM 1:4, on exposed building faces, finished to approved texture / smoothness, including 150 mm wide chicken mesh at RCC-masonry junctions, over electrical conduiting and wherever required, hacking /	Sq.m	544.40

	preparing surfaces, forming grooves / drips, scaffolding and curing complete.		
31	Cement plaster including making drip moulds / grooves where required at all levels, with all materials, labour, staging & scaffolding, surface preparation and curing complete as per specifications, drawings and direction of engineer / project manager. Providing 6 mm thick plaster on ceilings, underside of beams, lintels and other concrete surfaces in cement mortar 1:4, finished smooth, including hacking / preparing RCC surface, scaffolding and curing complete.	Sq.m	9.00
32	Providing screed plaster in drains, pits, trenches and similar locations in cement-sand mortar 1:4, average 25 mm thickness, including surface preparation / hacking, forming required slope and smooth finish, staging / scaffolding where required, curing and all materials / labour complete as per drawings, specifications and direction of Project Manager.	Sq.m	
33	Providing and applying premium-grade acrylic emulsion paint of approved make such as Asian / Berger / Nerolac / AkzoNobel / Jotun or equivalent on internal walls, comprising surface cleaning / sanding, crack filling, two coats of approved white wall putty where specified, one coat water-based primer and minimum two coats acrylic emulsion of approved shade, applied to achieve uniform finish. Work shall include scaffolding / ladders, masking and protection of floor / adjacent surfaces, roller / brush application, cleaning of splashes and all leads and lifts at all levels, complete as directed by Engineer-in-Charge.	Sq.m	569.00
34	Providing and applying two or more coats of approved oil-bound washable distemper to ceilings / toilet walls using approved make such as Asian / Berger / Nerolac / AkzoNobel / Jotun or equivalent, including one coat approved white putty where required, one coat water-based cement primer, surface preparation, crack filling, scaffolding, ladders, all leads and lifts and complete finishing in approved shade / colour as directed by Project Manager.	Sq.m	10.00
35	Providing and applying two or more coats of approved waterproof cement / exterior weather-resistant paint to external walls in approved shade and make, such as Asian / Berger / Nerolac / AkzoNobel / Jotun or equivalent, including preparation of surface, removal of loose coating, crack filling, primer where required, scaffolding and all leads and lifts complete as directed by Project Manager.	Sq.m	469.00
36	Providing and laying approved vitrified floor tiles, generally 600 × 600 mm, of approved make, colour and finish in security cabin / dry internal areas, laid to	Sq.m	9.00

	approved pattern over approximately 20 mm thick cement mortar 1:4 bedding or approved tile adhesive as specified, including cement slurry where applicable, cutting, fitting around openings, paper-thin uniform joints, matching colour grout, skirting / borders where shown, curing, cleaning and protection until handover, complete. Tiles shall be Kajaria / Somany / Johnson / Asian Granito or approved equivalent.		
37	Providing and laying approved anti-skid ceramic floor tiles in wet / utility / external covered areas wherever shown on drawings, laid to required slope over approved cement-mortar bedding / tile adhesive, including surface preparation, cutting, fitting, spacers, matching colour grout, curing, cleaning and all accessories complete. Tiles shall be of approved make, colour and size and shall have suitable anti-skid characteristics for the intended area.	Sq.m	0.00
38	Flooring, skirting & dado including base layer and all materials, labour, curing, polishing / cleaning etc. complete in all respects as shown on drawings, described in specifications and as directed by project manager. For tile flooring, supply and laying rate break-up shall be furnished where required. Employer reserves the option to supply tiles. Prior approval shall be obtained before procurement. Providing and laying ceramic-tile dado to toilets, kitchen / utility / common basin areas using approved tiles of approved make, shade and size, generally 300 × 450 mm or approved equivalent, laid to approved pattern over 6–10 mm thick approved tile adhesive such as BAL / MYK Laticrete or equivalent; including PVC edge beading to corners where required, cutting, spacers, pointing / grouting with matching colour grout, acid washing and all borders / pencil borders where shown, at all levels complete. Approved makes: Kajaria / Somany / Johnson / Asian Granito or equivalent.	Sq.m	0.00
39	Providing and laying approximately 12 mm thick cast-in-situ cement-concrete floor finish with approved non-metallic floor hardener over 38 mm thick cement-concrete under-bed, including preparation of base, placing / compaction, application of non-metallic hardener at specified dosage, generally 5 kg/Sq.m for medium-duty floors, trowel finishing, curing, protection and all materials / labour complete. The 38 mm under-bed concrete shall be deemed included in this item.	Sq.m	0.00
40	Cutting and cleaning approximately 15 mm × 20 mm grooves at construction / control joints in flooring, removing all dust and impurities and filling the grooves	Rmt	0.00

	with approved bitumen-sand mix 1:4 or specified sealant, finishing the top surface flush and neat complete as directed by Project Engineer. Unless otherwise shown, grooves for non-metallic floor-hardener areas shall generally be provided in approximately 5 m × 5 m grid.		
41	Providing and fixing approved colour-anodized / powder-coated aluminium sliding, partly sliding, partly fixed or fixed windows / ventilators / louvers using approved extruded sections of Hindalco / Jindal or equivalent, including anodized aluminium fixtures and fasteners, snap-fit beading, concealed screws, handles and locking hardware, glazing / louvers and sealants as shown. Aluminium sections shall be smooth, straight, mitred and mechanically jointed where required; average aluminium-section weight shall be approximately as specified. Item includes frames, all hardware, accessories, fixing at all elevations, making good and complete installation as per drawings, specifications and direction of Engineer-in-Charge.	Sq.m	18.00
42	Providing and fixing rolling shutter using hot-rolled double-dipped galvanized steel lath sections of minimum 18 SWG and specified galvanizing, conforming to IS 6248, with interlocking laths at approximately 75 mm centres, end locks, specially designed pipe shaft / barrel, brackets, side guides, inside / outside locking arrangement, push-pull / geared / electrically operated mechanism as specified, wire springs, hood / top cover and all fittings complete. Bottom lath shall be connected to approved lock plate fabricated from minimum 3 mm thick steel plate with stiffening angles. Include primer / touch-up and two finish coats where specified, all fixing, erection and testing for smooth operation. Measurement shall be based on clear opening area only.	Sq.m	36.00
43	Supplying and erecting best-quality approximately 40 mm thick flush steel doors, double plated with pressed steel frames conforming to the applicable IS standards, from approved manufacturer, including fabrication, one shop coat red-oxide zinc-chrome primer, all fittings and fixtures such as aldrop, tower bolts, holdfasts, floor ties, weather bar and hinges, packing, carting, transportation, freight / insurance, assembling, fitting and fixing at all elevations, mastic caulking / grouting with CC 1:2:4 where required, one touch-up primer coat and two coats approved synthetic enamel paint, unloading, stacking and all accessories complete as per drawings, specifications and direction of Project Manager.	Sq.m	1.89

44	Waterproofing works shall be executed by an approved specialist agency and shall follow the approved methodology / specification. contractor shall provide the specified material and performance guarantee, generally minimum 10 years where required.All surfaces shall be sound, clean and properly prepared. Loose material, laitance, oil, grease, moss / lichen and contaminants shall be removed. Cracks, honeycombs, construction joints, pipe / outlet penetrations and other defects shall be repaired / grouted before waterproofing. Treatment shall include approved watta / coving at wall-floor junctions, proper termination at edges and treatment around pipes / spouts. Provide approved two-component acrylic polymer-modified cementitious waterproof coating such as Tapecrete P151 / equivalent approved make, applied in specified coats after base preparation, with approved geo-fabric / fibre-glass reinforcement where specified and required overlaps. Treatment shall extend up adjoining walls to minimum specified height, generally 300 mm in wet areas, unless shown otherwise. Pipe penetrations shall be sealed with approved epoxy / polymer grout. Testing by ponding / flooding shall be carried out as specified after completion and defects rectified before handover.	Sq.m	10.00
45	Structural steel shall be entirely in the Contractor's scope. The quoted rate shall include supply of approved structural steel, fabrication, transportation to site, unloading, storage, handling, erection, alignment and fixing in position at all levels, complete as per approved drawings and specifications.Supply, fabrication and erection of structural steel conforming to IS 2062, designed, detailed and fabricated in accordance with IS 800 and approved drawings. The scope shall include cutting, straightening, drilling, machining, fitting, welding, bolting, erection, temporary supports, staging, lifting, alignment, plumbing, final tightening and all activities required for complete installation.The item shall include all structural members and components such as columns, beams, rafters, purlins, girts, bracings, sag rods, cleats, stiffeners, gusset plates, connection plates, base plates, splice plates and all other structural accessories required for completion of the work.The quoted rate shall also include all erection bolts, nuts, washers, anchor fasteners, welding electrodes, welding consumables, shop and field welding, connection accessories, tools and tackles, cranes, machinery, manpower, testing, inspection and all incidental materials required for satisfactory completion of the work.The item shall further include complete surface preparation, cleaning, approved	MT	18.00

	primer coats and the full protective painting system, including all materials, labour, equipment and application works, as specified in the project specifications and approved drawings.Miscellaneous steelwork such as chequered plates, ladders, stairs, platforms, gratings, handrails and similar structural components not measured separately shall be deemed included in this item.The rate shall be deemed to include supply, fabrication, transportation, erection, erection bolts, nuts, washers, welding, purlins, bracing, base plates, connection plates, surface preparation and complete painting system, all complete.		
46	Anchor bolts including required hexagonal nuts, plain / taper / spring washers, templates, sleeves and anchorage arrangement as shown, complete. Material supply including steel shall be in Contractor's scope and shall be procured from approved sources such as SAIL / RINL / Tata Steel or approved equivalent. Rate shall include cutting, threading, fabrication, template assembly, setting to correct line / level / projection / PCD, temporary support during concreting, protection of threads, all tools, tackles and consumables complete as per approved structural / vendor drawing.	MT	0.10
47	Providing, supplying and fixing 0.50 mm thick colour coated GI/PPGI profile sheet roofing/cladding of approved make and colour, fixed on existing steel structure with self-drilling/self-tapping screws, EPDM washers, hooks, bolts, nuts, bitumen washers, sealants, side laps, end laps, flashing, trims, ridge pieces, closures and all necessary accessories complete.The rate shall include cutting, lifting, aligning, fixing, overlapping, sealing, wastage, labour, tools & tackles, scaffolding, transportation, loading/unloading and all materials required for complete installation as per drawings, specifications and instructions of Engineer-in-Charge.Purlins and girts are excluded from this item and shall be measured under Item 45 – Structural Steel.	SQM	609.00
48	Providing and fixing 12.5 mm thick plain gypsum-board false ceiling of approved make, such as India Gypsum or equivalent, in horizontal / vertical planes as shown, including approved aluminium / GI grid and metal suspension system, perimeter channels, anchor fasteners, adjustable hangers, jointing tape / compound, cut-outs and framing around light fixtures / services, all fittings and accessories, finishing of joints and applying two or more coats acrylic emulsion paint of approved colour to achieve smooth uniform finish, complete as per specification, drawings and direction of Engineer.	Sq.m	0.00
49	Providing and laying at below-ground level 600 mm diameter precast RCC Hume pipes conforming to the	Rmt	0.00

	specified standard, complete with collars, approved bedding, laying to line and invert level, jointing collars with cement mortar 1:1 or approved jointing system, testing of joints, alignment and all handling / lowering operations complete as directed by Engineer. Excavation and RCC encasing, where required, shall be measured separately under the respective BOQ items unless otherwise stated.		
50	yard fencing: Supplying, Providing and installing PVC coated steel chain link fencing (mesh size 50 mm nominal dia of wire 3.15) of 2400 high including all connected works such as but not limited to supply of all connectors for fixing the fencing on to angle iron posts (ISA 65x65x6) or equivalent spaced at 2.5 m intervals and reinforced with 2 struts (ISA 65x65x6) or equivalent at every fifth post and at all change in directions including a horizontal member of ISA 50x50x6 at top and bottom of the fencing connected between the vertical posts etc., complete including two coats of red oxide zinc chromate primer and two finish coats of synthetic enamel all of DFT 25 microns each on the angle irons. GI barbed wire anti climbing arrangement confirming to code, at top of chain link fencing shall be provided with 4 strands of height of 600 mm including all accessories as per specification all complete. Rate quoted shall be for running metre of fence all inclusive of soil excavation, concrete items for posts.	Rmt	190.00
51	Providing, fabricating, supplying, transporting and erecting double-leaf mild steel vehicular gate of 6.0 m clear opening and approximately 2.0 m height, fabricated from approved MS hollow sections, pipes, flats and structural members complete with vertical/horizontal stiffeners, bracings, locking arrangement, stopper, hinges, guide plates, holdfasts and all necessary hardware. The item shall include excavation, PCC, RCC foundation/pedestal, reinforcement, formwork, anchor fasteners, gate posts, grouting, alignment, erection and commissioning complete. Steel surfaces shall be cleaned, provided with one coat epoxy/zinc-rich primer and two coats synthetic enamel/polyurethane finish paint of approved shade. Rate shall include all materials, labour, machinery, transportation, welding consumables, bolts, nuts, washers, testing, leads and lifts complete as per approved drawings and direction of Engineer-in-Charge.	Nos	3.00
52	Dismantling the complete existing structural steel roof system of the approximately 28 m x 12.5 m store, including roof trusses/rafters, purlins, sag rods, bracing, cleats, gusset/connection plates and associated steel members, including temporary supports, scaffolding, cutting/unbolting, safe lowering, segregation, stacking	MT	8.00

	and handing over/disposal of dismantled steel as directed by Engineer-in-Charge.Dismantled structural steel shall remain Employer's property and shall be stacked at the designated location unless instructed otherwise.		
53	Carefully dismantling and removing existing asbestos-cement roofing sheets from the approximately 28 m x 12.5 m existing enclosed store, including scaffolding, PPE, temporary access, safe unfastening, lowering without unnecessary breakage, segregation, stacking, loading, transportation and disposal/handing over through an approved/authorized system as directed by Engineer-in-Charge. Work shall comply with applicable statutory safety and environmental requirements for asbestos-containing material.	SQM	456.00
54	Supply, erection, testing and commissioning of 9 m galvanized high mast/pole complete with 4 Nos. LED flood lights of approximately 400 W each, luminaire mounting arrangement, weatherproof control panel, internal wiring, armoured cabling, earthing and all accessories.RCC foundation, reinforcement and cast-in anchor bolts shall be measured separately under the respective civil BOQ items	Nos	2.00
55	Providing and fixing post-installed anchor bolts using approved Hilti chemical anchoring system (Hilti HIT-RE 500 V4 / HIT-HY 200 or approved equivalent having equal or better technical approval) complete with drilling of holes in reinforced concrete, cleaning of holes by blow-brush-blow method, injection of chemical adhesive, insertion of galvanized/high tensile threaded rods, nuts and washers, curing as per manufacturer's recommendations and tightening to specified torque. The work shall include all materials, labour, tools, consumables, scaffolding, testing and complete installation as per approved drawings, manufacturer's specifications and Engineer-in-Charge instructions.	Nos	56.00
56	Providing and placing approved ready-mix non-shrink cementitious grout of minimum M45 grade (minimum compressive strength 45 MPa at 28 days) such as MasterFlow, Conbextra GP2, Fosroc, SikaGrout or equivalent approved make below base plates, equipment foundations, structural steel columns, anchor bolts and other locations shown on approved drawings.The scope shall include surface preparation, cleaning, formwork wherever required, mixing with potable water, placing by pouring/pumping, finishing, curing, testing and all labour, materials, tools, tackles, consumables and incidental works complete as per manufacturer's specifications and directions of the Engineer-in-Charge.	Cu.m	0.02

57	Dismantling existing brick masonry in cement mortar / lime mortar at all levels and locations, including necessary scaffolding, temporary supports, careful breaking and removal of masonry without damaging adjoining structures, segregation of serviceable and unserviceable materials, removal of embedded fixtures where encountered, lowering, loading, transportation, stacking of reusable bricks / materials at Employer-designated location and disposal of unserviceable debris within the specified lead, including all labour, tools, tackles, machinery, safety precautions and incidental works complete as directed by Engineer-in-Charge.	Cu.m	25.00
58	Carefully removing existing cement / lime plaster from brick masonry or RCC surfaces at all levels, including hacking, scraping and cleaning the exposed surface, removal of loose and unsound material, lowering, loading, stacking and disposal of debris within specified lead, protection of adjoining finishes and all labour, tools, tackles and scaffolding complete as directed by Engineer-in-Charge.	SQ.M	700.00

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