

NOTICE INVITING TENDER

The Tata Power Company Limited Invites Tenders (Two-Part Bidding Process), from interested and eligible Vendors for the following Works required for its Transmission Receiving Stations.

A. Summary of the tendered packages:

Sr. No.	Description	Tender Reference no.	Bid Guarantee Fee / EMD(Rs.)	Tender Fee (Rs.)
1.	Civil works for GIS building at Tata Power Badalapur Receiving Station.	CC26SVP049	11,00,000 /-	2,000 /-

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 refer section C below.

B. Guidelines for Participating:

Interested and eligible vendors can participate by submitting the following up to 1500 hours on **Monday – 23rd March 2026.**

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

Beneficiary Name – The Tata Power Co.

Ltd. Bank Name – HDFC Bank Ltd.

Branch Name – Fort Branch, Mumbai

Address – Maneckji Wadia Building, Nanik Motwani Marg, Fort, Mumbai

400023. Branch Code – 60

Bank & Branch Code –

400240015 Account No –

00600110000763

Account type – CC

IFSC Code – HDFC0000060

2. 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 shall also mandatorily include payment details of Tender fee and Tender Reference no **CC26SVP049**.

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)

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 required to 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	<p>a) Bidder should have successfully completed supply, construction and commission of projects involving Civil, structural and Architectural works for RCC building, Transformer foundation, firewall and underground & above ground tanks, roads drains etc. in the past 5 calendar years.</p> <p>b) The Bidder must have successfully executed the following quantum of works (including supply of all materials) on cumulative basis during the past 5 (Five) calendar years :</p> <p>Excavation - 10000 Cubic meter RCC - 6000 cubic meters Reinforcement works – 1000 Tons Structural steel works - 25 Tons</p> <p>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.</p>	<p>Work completion certificate / PO.</p> <p>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</p>

(B)	Safety	<p>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).</p> <p>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.</p>	<p>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.</p> <p>List of TPSDI trained workmen OR undertaking for completion of training.</p>
(C)	Commercial Capability	<p>Average Annual Turnover of the bidder for last three financial years shall not be less than INR 15 Crore.</p>	<p>Audited Profit & Loss statement along with UDIN No. to be attached.</p>

Note: Above Pre-qualification details need not be submitted at this stage. These shall be required to be submitted along with bid submission. At this stage, Interested Vendors who fulfill above criteria need to participate in tender by paying tender fee and submitting

C. Estimated Quantity: (BOQ)

A. Civil & Structural:

Sr. No.	Description	Quantity	UOM
I	EARTHWORK		
1	Excavation below existing Ground Level in for foundations, drains, compound wall and underground tanks or any other structure within the OWNER's Premises in ordinary earth, soft/weathered rock, which includes rock/boulders/slag/slate/laterite and gravel/ clay/ murrum of all kinds, rubble, concrete debris, scrap steel, clearing away vegetation trees of all girth, bushes, underground roots, stumps etc.,Includes all safety provisions all safety provisions by providing shoring and strutting, providing adequate slopes using hard barricading as per OWNER's standards including careful handling of underground utilities etc., including backfilling as directed by the Owner, stacking and multiple handling of earth within the OWNER's Premises and disposal of surplus earth beyond plot boundary in MCGM approved area etc. as directed by Engineer-in-charge, including dewatering, preparing the bed for foundation etc. Payment for earth works shall be on net plan area of PCC. No payment will be made for side slopes, working area etc. The rate shall be inclusive of taking permission from Collector/MCGM or any other authorities beyond MCGM limit for the dumping place in consultation with the Municipal and/or other Local Authorities & Debris Management Cell. Contractor should ensure that this disposal cause no nuisance to the residents of town. Disposal is at the risk and cost of the Contractor.		
(i)	From existing ground level to a depth of 3 m	5800	M3
(ii)	Deeper than 3.0 m to a depth of 6 m	450	M3

2	<p>Excavation below existing Ground Level for foundations, drains, compound wall and underground tanks or any other structure within the OWNER's Premises in hard rock by mechanical chiseling by pneumatic/hydraulic rock breaker; clearing away vegetation trees of all girth, bushes, underground roots, stumps etc., including all safety provisions by providing shoring and strutting, providing adequate slopes using hard barricading as per OWNER's standards including careful handling of underground utilities etc., including backfilling as directed by the Owner, stacking and multiple handling of earth within the OWNER's Premises and disposal of surplus earth beyond plot boundary in MCGM approved area etc. as directed by Engineer-in-charge, including dewatering, preparing the bed for foundation etc. Payment for earth works shall be on net plan area of PCC. No payment will be made for side slopes, working area etc.. The rate shall be inclusive of taking permission from Collector/MCGM or any other authorities beyond MCGM limit for the dumping place in consultation with the Municipal and/or other Local Authorities & Debris Management Cell. Contractor should ensure that this disposal cause no nuisance to the residents of town. Disposal is at the risk and cost of the Contractor.</p>		
(i)	From existing ground level to a depth of 3 m	200	M3
(ii)	Deeper than 3.0 m to a depth of 6 m	70	M3
3	<p>Providing and filling in plinth and floors with good quality of murrum brought by the Contractor from outside in 15 to 20 cm thick layers including watering and consolidating so as to achieve compaction upto 95% of Standard Proctor Density, etc. complete in all aspects as directed by the Engineer-in-Charge.</p>	400	M3
4	<p>Providing & laying dry trap granite/quartzite/gneiss/rubble stone soling with maximum 230mm size hard stone set in regular lines, hand packed and interstices thoroughly filled with small chips including filling in with good quality murum and compacted with 8 to 10 tonne rollers and spreading 12mm thick layer of grit on top, etc. complete in all aspects as directed by the Engineer-in-Charge.</p>	1440	M3

5	<p>Supplying and Providing pre-constructional anti-termite treatment, and creating a chemical barrier, under and on sides of trenches, wall footings, top surface of plinth filling, including junction of wall and floor along the perimeter of building, with approved emulsifiable insecticides at the rates and concentrations as per IS.6313 (Part-II) and as directed by Engineer. (Treated plinth area of the building at ground floor only shall be measured)</p> <p>(Contractor to submit guarantee on Rs. 1000 stamp paper, guaranteeing against termite attack for a period of 5 years.)</p>	1530	M2
6	<p>Dismantling and disposal of brick masonry at all levels and listing the scrap material as directed by the Engineer-in-Charge with all leads and lifts, etc. complete in all aspects as described and as directed by the Engineer-in-Charge. The rate quoted shall be inclusive of factors like MCGM disposal, Royalty & Collector's permission, stacking, spreading and backfilling, etc.</p> <p>(Contractor to take permission from Collector/MCGM or any other authorities beyond MCGM limit for the dumping place in consultation with the Municipal and/or other Local Authorities & Debris Management Cell. Contractor should ensure that this disposal cause no nuisance to the residents of town. Disposal is at the risk and cost of the Contractor.)</p>	20	M3
7	<p>Dismantling and disposal of plain concrete at all levels and listing the scrap material as directed by the Engineer-in-Charge with all leads and lifts, etc. complete in all aspects as described and as directed by the Engineer-in-Charge. The rate quoted shall be inclusive of factors like MCGM disposal, Royalty & Collector's permission, stacking, spreading and backfilling, etc.</p> <p>(Contractor to take permission from Collector/MCGM/concern authorities for the dumping place in consultation with the Municipal and/or other Local Authorities & Debris Management Cell. Contractor should ensure that this disposal cause no nuisance to the residents of town. Disposal is at the risk and cost of the Contractor.)</p>	20	M3

8	<p>Dismantling and disposal of reinforced cement concrete including reinforcement at all levels, listing the scrap material and returning the reinforcement steel to Owner's store at Dharavi/Tata Power store as directed by the Engineer-in-Charge with all leads and lifts, etc. complete in all aspects as described and as directed by the Engineer-in-Charge. The rate quoted shall be inclusive of factors like MCGM disposal, Royalty & Collector's permission, stacking, spreading and backfilling, etc. (Contractor to take permission from Collector/MCGM/concern authorities for the dumping place in consultation with the Municipal and/or other Local Authorities & Debris Management Cell. Contractor should ensure that this disposal cause no nuisance to the residents of town. Disposal is at the risk and cost of the Contractor.)</p>	20	M3
9	<p>Dismantling and disposal of structural steel, listing the scrap material and returning the structural steel to Owner's store at Dharavi/Tata Power store/Tata Power store as directed by the Engineer-in-Charge with all leads and lifts, etc. complete in all aspects as described and as directed by the Engineer-in-Charge. The rate quoted shall be inclusive of factors like MCGM disposal, Royalty & Collector's permission, stacking, etc. (Contractor to take permission from Collector/MCGM or any other authorities beyond MCGM limit for the dumping place in consultation with the Municipal and/or other Local Authorities & Debris Management Cell. Contractor should ensure that this disposal cause no nuisance to the residents of town. Disposal is at the risk and cost of the Contractor.)</p>	5	MT
10	<p>Dismantling and disposal of rubble masonry above ground and listing the scrap material as and returning to Owner's store at Dharavi/Tata Power store as directed by the Engineer-in-Charge with all leads and lifts, etc. complete in all aspects as described and as directed by the Engineer-in-Charge. The rate quoted shall be inclusive of factors like MCGM disposal, Royalty & Collector's permission, stacking, etc. (Contractor to take permission from Collector/MCGM or any other authorities beyond MCGM limit for the dumping place in consultation with the Municipal and/or other Local Authorities & Debris Management Cell. Contractor should ensure that this disposal cause no nuisance to the residents of town. Disposal is at the risk and cost of the Contractor.)</p>	10	M3

11	Dismantling and disposal of rubble soiling/ wall/ foundation below ground and listing the scrap material as and returning to Owner's store at Dharavi/Tata Power store as directed by the Engineer-in-Charge with all leads and lifts, etc. complete in all aspects as described and as directed by the Engineer-in-Charge. The rate quoted shall be inclusive of factors like MCGM disposal, Royalty & Collector's permission, stacking, etc. (Contractor to take permission from Collector/MCGM or any other authorities beyond MCGM limit for the dumping place in consultation with the Municipal and/or other Local Authorities & Debris Management Cell. Contractor should ensure that this disposal cause no nuisance to the residents of town. Disposal is at the risk and cost of the Contractor.)	10	M3
12	Dismantling and disposal of Chainlink fencing with concertina and listing the scrap material and returning to Owner's store at Dharavi/Tata Power store as directed by the Engineer-in-Charge with all leads and lifts, etc. complete in all aspects as described and as directed by the Engineer-in-Charge.	2	MT
13	Providing and laying Ready Mix Concrete of M15 Grade using 20 mm downgraded aggregates above ground for coping to plinth or parapet, transomes and mullions, for protection of dowel bars of slabs, beams, columns, etc. moulded or chamfered as per drawing or as directed by the Engineer-in-Charge including shuttering, formwork, vibrating, compacting, curing, etc. complete for all lifts and levels.	350	M3
14	Providing and laying Ready Mix Concrete, M15 Grade using 20 mm downgraded aggregates below ground for blinding layer under R.C. foundation and bedding, bottom of pits, sumps, chambers, trenches, anchor blocks, rubble masonry and brick walls etc. as per drawing or as directed by the Engineer-in-Charge including vibrating, compacting, curing, shuttering if required, etc. complete.	150	M3
15	Providing and placing in position Ready Mix Concrete of M40 grade for all shapes, at all levels above or below ground including admixtures if any, centering, shuttering, scaffolding, vibrating, compacting, curing, dewatering, levelling, cutouts, openings, finishing, removal of formwork, etc. complete, for all lead and lifts, to obtain class F1 finish with leak proof concrete as per specifications/drawings and as directed by the Engineer- in-Charge for the following items (excluding reinforcement and structural steel):		
(i)	All foundations including Raft, bottom slabs of trenches, Underground tanks, pile caps, grade slabs, etc.	1800	M3
(ii)	RCC columns, pedestals, brackets, walls	500	M3

(iii)	RCC slabs, staircase steps, waist slabs, beams, lintels, chajjas, etc.	450	M3
(iv)	RCC sunshades, Architectural features like fins, pardi etc.	150	M3
16	Providing and placing in position Machine Mix Concrete of M40 grade using digital weight batching for all shapes, at all levels above or below ground including admixtures if any, centering, shuttering, scaffolding, vibrating, compacting, curing, dewatering, levelling, cutouts, openings, finishing, removal of formwork, etc. complete, for all lead and lifts, to obtain class F1 finish with leak proof concrete as per specifications/drawings and as directed by the Engineer-in-Charge for the following items (excluding reinforcement and structural steel):		
(i)	All foundations including bottom slabs of tunnels, trenches, Underground tanks, pile caps, grade slabs, etc.	10	M3
(ii)	Base raft	10	M3
(iii)	RCC columns, pedestals, brackets, walls	10	M3
(iv)	RCC slabs, staircase steps, waist slabs, beams, lintels, chajjas, etc.	10	M3
(v)	RCC sunshades, Architectural features like fins, pardi etc.	10	M3
17	Providing and placing in position Ready Mix Concrete of M25 grade for all shapes, at all levels above or below ground including admixtures if any, centering, shuttering, scaffolding, vibrating, compacting, curing, dewatering, levelling, cutouts, openings, finishing, removal of formwork, etc. complete, for all lead and lifts, to obtain class F1 finish with leak proof concrete as per specifications/drawings and as directed by the Engineer-in-Charge for the following items (excluding reinforcement and structural steel):		
(i)	All foundations including bottom slabs of tunnels, trenches, Underground tanks, pile caps, grade slabs, etc.	235	M3
(ii)	RCC columns, pedestals, brackets, walls	10	M3
(iii)	RCC slabs, staircase steps, waist slabs, beams, lintels, chajjas, etc.	10	M3
(iv)	RCC sunshades, Architectural features like fins, pardi etc.	10	M3
18	Supplying, Providing and erecting in position pre-cast concrete trench cover units of specified sizes and thickness using reinforced cement concrete of grade M25 with 20 mm down graded coarse aggregates and peripheral flats of 3mm thick including form-work to give fair and smooth finish, casting, vibrating using surface vibrators, curing, storing, providing lifting arrangement, loading/ unloading, transporting, load testing etc. Complete as per specification and as directed by the Engineer.	54	M3

19	Providing and fixing in position 25mm thick specifically extruded high performance polymer based sheet of supreme make in expansion joint, of minimum density 28 Kg/m ³ , using double sided adhesive of 2 mm x 25 mm x 25 mm at four places per m ² to the casted surface including applying & filling polysulphide based sealant with primer etc. complete, as per specifications/drawings and as directed by the Engineer-in-Charge.	125	RM
20	P/L Micro concrete Providing and laying of micro concrete, approved brand in proportion 1:1 with metal no.1 including mixing, waterproof shuttering, pouring, consolidating, scaffolding, curing as per MFG specifications, transportation at site, identification of leakage source, including dewatering of pits whenever required till completion of job etc complete as directed. (Measurement will be taken on consumption of micro concrete only, metal/aggregate will not be measured separately.)	500	KG
21	Supplying all materials, applying crystalline water proofing system for concrete works applicable for bottom of RCC raft slabs, side walls of basement, cable trenches, tunnels, underground tanks, over head tanks, roof slabs, etc. including leakproof treatment by injection grouting in concrete members at 1.0m center to center distance in both directions and also at all construction joints. Contractor to provide a leak proof warranty for a period of minimum 10 years for all the concrete waterproofing works covered under this item.	300	M ²
22	Providing and applying 20mm thick (in two layers of 14mm and 6mm thick) smooth finished water proof plaster/bedding for the flooring and walls, in cement mortar 1:3 with waterproof admixture of approved quality and quantity to the internal/external surface of basement, cable trench, tunnels, underground tank, etc. including back trowelling as specified, providing chamfered corners (watas) for smooth finish of base plaster with plaster of vertical plaster, preparing the surface to receive the plaster, etc. complete on horizontal and vertical surfaces as directed by the Engineer-in-Charge. This entire area shall be leak proof and shall be guaranteed for a minimum period of 10 years.	50	M ²
23	Making holes/openings in brick wall (depth of hole not exceeding 450 mm) and finishing the same with plaster in CM 1:4 as directed by Engineer and at all locations and levels.		
(i)	Greater than 100 mm dia. But less than 300 mm dia. Or equivalent in area (with fire proofing brick).	20	No

(ii)	Greater than 300 mm dia. But less than 750 mm dia. Or equivalent in area (with fire proofing brick).	20	No
24	Drilling and/or making holes/ openings in reinforced concrete of any grade (depth of hole not exceeding 500 mm) and finishing the same with plaster in CM 1:4 in slabs, beams, columns, foundations, etc. Of existing/ already cast structures as directed by Engineer at all locations and levels.		
(i)	Greater than 50 mm dia. But less than 100 mm dia.	10	No
(ii)	Greater than 100 mm dia. But less than 300 mm dia.	10	No
25	Grouting of the bases of equipment / stanchions including anchor bolt pocket/ pipe sleeves etc. With premixed free flowing non-shrinking grout of the following strengths as per the manufacturer's instructions.		
(i)	Grout having a minimum strength of 30 N / mm ²	5	m ³
(ii)	Grout having a minimum strength of 45 N / mm ²	5	m ³
26	Providing and placing in position plum concrete of required thickness, at all depths with 33% boulders of size 150mm to 230mm and 67% Ready Mix Concrete of M15 grade including shuttering, vibrating, compacting, curing, dewatering, levelling, finishing, removal of formwork, etc. complete as per specifications/drawings and as directed by the Engineer-in-Charge.	100	m ³
27	STEEL WORKS "Supply, Cleaning, cutting, bending, as per drawings and placing in position High yield strength deformed reinforcement bars conforming to IS: 1786 at all locations and levels including binding with soft annealed 18G black wire, etc. Complete as shown on drawings and as directed by the Engineer (No payment will be made for staper bar, layer pin, chair, tie rods and other supports, binding wires, laps) a) For HYSD bars conforming to grade Fe 500D of IS 1786"	500	MT
28	Providing structural steel work in rolled / builtup sections fixed with connecting plates or angles, gussets, cleats, channels as per drawings including cutting, fabricating, hoisting, erecting at all levels and locations, fixing in position, making welded/bolted connections and with two coats of zinc phosphate primer (One shop coat and one site coat & Paint DFT as per FQP) and painting with finishing coats of synthetic enamel paint to get desired finish, including scaffolding, preparation of surfaces, transporting, loading, unloading etc. complete as directed by the Engineer-in-Charge.	20	MT

29	Supplying, cutting, fabricating and erecting M.S. anchor bolts, pipe sleeves, channels, angles, plates, rails, beams and all other types of inserts in concrete members and placing them in position as specified on drawings at all locations and at all levels, etc. including two coats of approved oil paint over one coat of zinc phosphate primer with finishing coats of synthetic enamel paint to get desired finish over exposed surfaces, including scaffolding, preparation of surfaces, transporting, loading, unloading etc. complete as directed by the Engineer-in-Charge.	4	MT
30	Same as Item No. 31 but for GI Class -C pipe inserts.	2	MT
31	Providing and applying, 2 hrs Fire rated protection of specified thickness as per BS 5950-8:2003, using vermiculite or intumescent paint including necessary surface preparation, scaffolding, etc., complete as per specifications and as directed by the Engineer-in-Charge.	150	M2
32	Supplying, fabricating, delivering to site, loading, unloading, etc. and erecting chequered plate of diamond shape pattern including all operations but not limiting to such as straightening, cutting, drilling, grinding, welding (weight not included), making holes for lifting, cleaning and preparing surface by power tools and wire brushing and applying on the soffit of chequered plate one shop coat of zinc phosphate primer after fabrication and one coat of the same after erection and finishing coats of synthetic enamel paint of approved shade to get desired finish, etc. complete as per specifications and as directed by the Engineer-in-Charge.	6	MT
33	Providing and fixing the rebars of RE 500 of Hilti at required locations and levels including drilling the hole, etc. complete as directed by the Engineer-in-Charge.'		
(i)	16 dia	20	Nos
(ii)	20 dia	20	Nos
(iii)	25 dia	20	Nos
34	Supplying, laying and fixing of 0.55mm thick coloured galvolum sheeting system for roofing including all accessories such as ridge pieces, eaves, barge boards, expansion joint pieces, corner pieces, apron pieces, gutter, etc. with galvanised steel fasteners/bolts (of self-tapping type), seam, bolts and nuts, 8 mm dia. GI Limpet washers and bitumen washers, etc. complete including cutting to shape and size required including necessary sealants, taping, flashing, etc. complete as per design and specifications & colour as approved by Engineer-in-Charge, as specified on drawings at all locations and at all levels including scaffolding, preparation of surfaces, transporting, loading, unloading etc. complete as directed by the Engineer-in-	5	M2

	Charge (Area measured as laid. No overlapping shall be paid. Bidder shall indicate the rate for laying and fixing).		
35	Same as item no. 36 but for Vertical and inclined side sheeting / Cladding.	5	M2
36	Providing and erecting Chain link fencing at specified locations in the plot of 2.4 meter height with galvanized iron, chain link of size 50mm x 50mm, 8 gauge thick and fixed 75mm above ground level and vertical mild steel angles of 65 x 65 x 6 mm size embedded in cement concrete block of M15 mix of size 45 x 45 x 60 cm at 2.5m center to center with iron bar of 16mm dia. as hold-fast including welding link with angle frame with 30cm center to center, with pit excavation 45 x 45x 60 cm, nuts and bolts and horizontal mild steel angles at top and bottom of 25 x 25 x 5 mm size vertical mild steel flat 35 x 5 mm and 25 x 5 mm horizontal including cross support of 40 x 40 x 6 mm angles both sides at interval of 7.5m & at every corner or bend embedded in concrete blocks of M15 mix of size 45 x 45 x 60 cm including three coats of oil paint, etc. complete.	200	RM
37	Providing and erecting Chain link fencing at specified locations above compound walls, etc of 1.2 meter height with galvanized iron chain link of size 50mm x 50mm, 8 gauge thick and fixed 75mm above compound wall and vertical mild steel angles of 65 x 65 x 6 mm size embedded in cement concrete block of M15 mix of size 45 x 45 x 60 cm at 2.5m center to center with iron bar of 16mm dia. as hold-fast including welding link with angle frame with 30cm center to center, and horizontal mild steel angles at top and bottom of 25 x 25 x 5 mm size vertical mild steel flat 35 x 5 mm and 25 x 5 mm horizontal along with 600mm diameter concertina coil at top of chain link fencing, including three coats of oil paint, etc. complete.	50	RM
38	Excavation in ordinary earth, soft & decomposed rock which include rock/boulders/slag/slate/laterite, sand/gravel/clay/murum, rubble of all kinds; including all safety provisions by providing shoring and strutting, removal of vegetation, shrubs, royalty, etc., removal and disposal of excavated material from the site, temporary stacking of selected earth and its multiple handling and spreading within the internal premises as directed by the Engineer-in-Charge, including dewatering, foundation bed preparation, backfilling and compaction, disposal of materials beyond plot boundary in MCGM approved area etc. complete in all aspects as described and as directed by the Engineer-in-Charge. (Contractor to take permission from Collector/MCGM/concern authorities for the dumping	3080	M3

	place in consultation with the Municipal and/or other Local Authorities & Debris Management Cell. Contractor should ensure that this disposal cause no nuisance to the residents of town. Disposal is at the risk and cost of the Contractor.)		
39	Providing and laying good quality murrum in embankment and or filling in layers not exceeding 25 cm in loose thickness and compacting each layer with a 10/12 tonne power roller to 95% of Standard Proctor Density including levelling , watering, etc. complete in conformity with a required grades, lines and cross sections, etc. complete as directed by Engineer-in Charge.	500	M3
40	Providing and laying RCC NP3 class Hume pipe with collar joint including jointing and filleting in 1:4 C.M, including plugging of both the ends with gunny bags, brick masonry in C.M 1:4 with plaster in C.M. 1:4 and curing, etc. complete as specified and as directed by Engineer-in-Charge. (All the pipes supplied shall confirm to relevant IS codes. The Contractor shall also arrange to get the pipes tested in accordance with tests specified in IS 3597:1985 at Contractor's cost and as directed. Testing shall be carried out in presence of Engineer-in-Charge. Laying of pipes shall be carried out as per IS 783 including all leads and lifts, etc. complete as directed by Engineer-in-Charge.		
(i)	150 mm dia	10	M
(ii)	250 mm dia	10	M
(iii)	300 mm dia	10	M
(iv)	450 mm dia	10	M
(v)	600 mm dia	10	M
(vi)	900 mm dia	10	M
41	Constructing water entrances of size 0.45 x 0.45 m (clear opening) for any depth with cast in situ coping haunches in M15 fixing of M.S. Jali in M20, etc. complete with M.S. galvanised hinged type grating (not less than 53 Kgs) including excavation, etc. complete with all lead and lifts as directed by Engineer-in-Charge.	5	NO
42	Providing, laying, spreading and compacting specified Granular Sub-Base consisting of materials like natural sand, murum, gravel, crushed stone or combination thereof in sub base course (Grade II of GSB (Table 400-1) including premixing at OMC carriage of material, spreading in uniform layers as specified in drawings or as directed by the ENGINEER, and compacting with power vibratory roller to achieve the specified density, etc complete in all respect and as per MORTH (IV R) Clause 401).	825	M3

43	Providing, laying, spreading & compacting specified graded stone aggregates to wet mix macadam specification including premixing the material at OMC in mechanical mixer (pug mill), carriage of mixed material, by tipper to site, laying in uniform layers of specified thickness in sub base / base course on a well prepared sub grade / sub base by mechanical pavers and compacting with power vibratory roller to achieve the desired density [including all materials, labour, machinery, lighting, guarding, barricading and maintenance of diversion etc. complete, in all respect as per MORTH (IV R) Clause 406.	660	M3
44	Providing and laying in position plain cement nominal mix concrete with 40 mm down graded coarse aggregates including providing side shuttering as required, placing compacting curing etc complete including expenses towards dewatering etc complete all as per specification and as directed by ENGINEER. Concrète grade M15 in paving for base course below R.C.C roads (DLC layer of 100 mm thick), plinth protection etc.	33	M3
45	Providing and laying 125 micron thick PVL layer above DLC layer and below the R.C.C wearing layer including providing 300 mm lapping etc complete.	3000	M2
46	Providing and placing in position to correct profile R.C.C. wearing course 300mm of concrete grade M35 using 20mm down graded aggregates and limiting water cement ratio to 0.45 for rigid paving for approach roads etc including provision of side shuttering vibrating, curing, including providing contraction and construction joints. (to be paid separately) etc complete in all respects.	990	M3
47	Providing construction joint in concrete roads as per detail 'A'S of IRC 15, including providing groove in concrete, soft rope back up, 5 mm thick compressive debonding strip and 15mm x 12mm polysulphide sealant and all connected works.	50	RM
48	Providing and fixing concrete pre-cast kerb stone of size as shown in drawings for verges of specified size & shape in M20 grade concrete including excavation and backfilling in all type of strata and laid over a base cement mortar and including pointing, curing, preparation of surface, painting, etc. complete as directed and as per MORTH (IV R) Clause 408.	600	RM
49	Providing, aligning and fixing in position rail section as per IRS (52kg/m) in concrete works/others area to correct lines and levels as per drawings including Anchor bolts, Base plates inserts etc complete.	5	MT

50	Providing and filling (40 - 65mm) Metal in Transformer and oil cooler foundation, soak pits with all materials, labour, tools, tackles and equipments with all carting, lifting loading, unloading etc. complete as directed and instructed by the Engineer-in-Charge.	500	M3
51	Excavating trial pits of size 1.5m x 1.5 m and 1.5 m to 2m deep at column locations with necessary shoring, dewatering as required, etc. complete alongwith backfilling of trial pits.	10	NO
52	Providing and laying Hilti fire stop material CP 636 for sealing of cable opening in basement and other location.	20	M2
53	Providing, Supplying, placing, aligning, fixing and testing in position high density polyethylene pipes of approved manufacture conforming to Series II of IS:4984 with all types of fittings (readymade or fabricated) including jointing using butt welding etc complete with a working pressure of 6 kg/cm ² for the following diameters at locations as indicated on drawings: (Excavation and backfilling shall be paid under relevant item).		
(i)	OD 110 mm	10	RM
(ii)	OD 160 mm	10	RM
(iii)	OD 200 mm	10	RM
(iv)	OD 250 mm	10	Rmt
54	Providing, supplying and laying in position GI conduits medium grade in concrete slab, beams, foundations all as per drawings and specification or as directed by Engineer.		
(i)	a) 25 mm	2	RM
(ii)	b) 32 mm	2	RM
(iii)	c) 50 mm	2	RM
(iv)	d) 63.5 mm	2	RM
(v)	e) 80 mm	2	RM
55	"Supplying & providing the concealed and buried GI pipes with protective PVC tape with 50% overlap etc., complete		
(i)	50mm	1	Nos
(ii)	75mm	260	RM
(iii)	100mm	1	Nos
56	"Providing and laying RCC NP2 class Hume pipe with collar joint including jointing and filleting in 1:4 C.M, including plugging of both the ends with gunny bags, brick masonry in C.M 1:4 with plaster in C.M. 1:4 and curing, etc. complete as specified and as directed by Engineer-in-Charge. (All the pipes supplied shall confirm to relevant IS codes. The Contractor shall also arrange to get the pipes tested in accordance with tests specified in IS 3597:1985 at Contractor's cost and as directed. Testing shall be carried out in presence of Engineer-in-Charge. Laying of pipes shall		

	be carried out as per IS 783 including all leads and lifts, etc. complete as directed by Engineer-in-Charge.		
(i)	150mm	1	Nos
(ii)	200mm	260	RM
(iii)	300mm	1	Nos
57	AQI sensor machine with Digital Display Providing & Intsllation of Air quality index system (AQI) for Monitoring the microscopic soild and liquid particles suspended in air as per guidliunes from BMC /MPCB norms for pollution Contriol.	1	Nos
58	Sheeting around Plot more than 20 feet	260	RM
59	Mist Spray Machine	1	Nos

B. Architectural Work:

Sr. No.	Description of Item	Quantity	UOM
1	Providing Brick Masonry, 230 mm thick and above , in cement mortar 1:5 (1 cement : 5 coarse sand) using best quality locally available first class kiln bricks having crushing strength of 50 Kg/sqcm and water absorption not more than 20%, at all levels in plinth and steps including dewatering, scaffolding, raking of joints, curing, etc. complete.	1	Cum
2	Providing Flyash Block Masonry 190 mm thick and above in cement mortar 1:5 (1 cement: 5 coarse sand) using best quality flyash blocks having crushing strength of 50 Kg/sqcm and water absorption not more than 10%, at all levels in foundation, plinth and steps including dewatering, scaffolding, raking of joints, curing, etc. complete. , plinth and steps	11	Cum
2	Providing Brick Masonry, 230 mm thick and above, in cement mortar 1:5 (1 cement: 5 coarse sand) using best quality locally available first class kiln bricks having crushing strength of 50 Kg/sqcm and water absorption not more than 20%, in superstructure for walls, parapets , etc., at all levels and locations, including scaffolding, curing, raking of joints, providing RCC transomes and mullions of grade M15 of 230 thk. including shuttering, etc. complete. (reinforcement and concrete for transomes and mullions shall be paid separately in respective items)	5	Cum

3	<p>Providing Flyash Block Masonry 190 mm thick and above in cement mortar 1:5 (1 cement: 5 coarse sand) using best quality locally available flyash blocks having crushing strength of 50 Kg/sqcm and water absorption not more than 10%, in superstructure for walls, parapets, etc., at all levels, including scaffolding, curing, raking of joints, providing RCC transomes and mullions of grade M15 of 190 thk. including shuttering, etc. complete. (reinforcement and concrete for transomes and mullions shall be paid separately in respective items)</p>	701	Cum
3	<p>Providing Brick Masonry 115 mm thick in cement mortar 1:4 (1 cement : 4 coarse sand) using best quality locally available first class kiln bricks having crushing strength of 50 Kg/sqcm and water absorption not more than 20%, in superstructure for walls, parapets, etc., at all levels including scaffolding, curing, raking of joints, providing RCC transoms and mullions of grade M15 of 115 thk. including shuttering, etc. complete. (reinforcement and concrete for transoms and mullions shall be paid separately in respective items)</p>	892	Sqm
4	<p>Providing Block Masonry 110 mm thick in cement mortar 1:4 (1 cement : 4 coarse sand) using best quality locally available first class kiln blocks having crushing strength of 50 Kg/sqcm and water absorption not more than 10%, in superstructure for walls, parapets, etc., at all levels including scaffolding, curing, raking of joints, providing RCC transomes and mullions of grade M15 of 115 thk. including shuttering, etc. complete. (reinforcement and concrete for transomes and mullions shall be paid separately in respective items)</p>	5	Sqm
4	<p>Providing and laying brickbat coba for roof consisting of one part of cement, 2 parts of broken brickbats varying from 12 mm to 25 mm thick and one part of lime mortar (one part of lime to two parts of sand) as specified including preparing the surface by applying and grouting a slurry coat of neat cement using 2.75 kg/m² of cement admixed with proprietary water proofing compound conforming to IS: 2645 over the RCC slab including cleaning the surface before treatment, necessary watering, ramming, etc. all complete (Rate shall include wattas, finishing, etc.) (Thk/Depth upto 250mm.). All above operations to be done in order and as directed and specified by the Engineer-in-Charge. Contractor shall give 10 years guarantee on court fee stamp paper of Rs. 1000/-.</p>	171	cum
Or			

	Providing and laying integral cement based water proofing treatment with China Mosaic finish including preparation of surface as required for treatment of roofs, balconies, terraces, RC gutters, etc. consisting of following operations.	1140	
5	(a) Applying and grouting a slurry coat of neat cement using 2.75 kg/m ² of cement admixed with proprietary water proofing compound conforming to IS: 2645 over the RCC slab including cleaning the surface before treatment.		sqm
	(b) Laying cement concrete using broken bricks/brick bats 25 mm to 100 mm size 50% of cement mortar 1:5 (1 cement:5 coarse sand) admixed with proprietary water proofing compound conforming to IS: 2645 over 20 mm thick layer of cement mortar of mix 1:5 (1 cement: 5 coarse sand) admixed with proprietary water proofing compound conforming to IS: 2645 to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.		
	(c) After two days of proper curing applying a second coat of cement slurry admixed with proprietary water proofing compound conforming to IS: 2645.		
	(d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement 4 coarse sand) admixed with proprietary water proofing compound conforming to IS: 2645 and finally finishing the surface with trowel with neat cement slurry and making of 300 mm x 300 mm square where required or preparing the surface to receive tiles on it with Drip mould in cement mortar at the junction of plaster and parapet.		
	(e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test.		
	(f) Finally finishing top with fixing assorted pieces of glazed tiles on a layer of neat cement grout 10 mm thk, properly tamping to the required grade including curing, cleaning with dilute acid, etc. complete.		
	(g) All above operations to be done in order and as directed and specified by the Engineer-in-Charge. Contractor shall give 10 years guarantee on court fee stamp paper of Rs. 1000/-.		
	(h) With average thickness of 150 mm and minimum thickness at Khurra as 75 mm.		
6	Providing and laying water proofing treatment in sunken portion of WCs, bathrooms, etc. , by applying cement slurry mixed with Armourcrete of M/s The Structural Water Proofing Company Pvt. Ltd. or Tapecrete of M/s. CICO Engg. Service or approved equivalent consisting of applying :	60	sqm

	<p>(a) First layer of slurry of cement @0.488 kg/sqm mixed with Armourcrete or Tapecrete @ 0.253 kg/sqm. This layer shall be allowed to air cure for 4 hours.</p> <p>(b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with Armourcrete or Tapecrete @ 0.126 kg/sqm. This layer shall be allowed to air cure for 4 hours followed with water curing for 48 hours.</p> <p>(c) All above operations to be done in order and as directed and specified by the Engineer-in-Charge. Contractor shall give 10 years guarantee on court fee stamp paper of Rs. 1000/-.</p> <p>The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.</p>		
7	<p>Providing and laying brickbat coba in sunken portion of WCs, bathrooms, etc., consisting of one part of cement, 2 parts of broken brickbats varying from 12 mm to 25 mm thick and one part of lime mortar (one part of lime to two parts of sand) as specified including preparing the surface by applying and grouting a slurry coat of neat cement using 2.75 kg/m² of cement admixed with proprietary water proofing compound conforming to IS: 2645 over the RCC slab including cleaning the surface before treatment, necessary watering, ramming, etc. all complete (Rate shall include wattas, finishing, etc.) (Thk/Depth upto 250mm.). All above operations to be done in order and as directed and specified by the Engineer-in-Charge. Contractor shall give 10 years guarantee on court fee stamp paper of Rs. 1000/-.</p>	12	Cum
8	<p>Providing internal cement plaster 6 mm thick to ceiling in a single coat in cement mortar 1:4 to rough/fair concrete surface, at all levels, heights and location with hacking, surface preparation, including scaffolding, curing, grooves, bands, drip moulds, etc. complete.</p>	797	Sqm
9	<p>Providing internal cement plaster 12 mm thick plain finish in single coat in cement mortar 1:4 with hacking, surface preparation, including scaffolding and curing, grooves, bands, drip moulds, at all levels, heights and location including providing and fixing chicken mesh of 22 gauge, with about 15 cm width of approved quality at the junction of reinforced cement concrete members and brick work, including fixing mesh in position by necessary drilling in concrete/ B.B masonry, etc. complete.</p>	3841	Sqm

10	<p>Providing & applying 20 mm thick external sand faced plaster in cement mortar 1:4 using addition of integral water proofing compound 100% virgin polypropylene fibrillated fibres @125 gm/bag of cement as per manufacturer's specifications waterproofing compound of approved make as per the manufacturer's specifications, in two layers (first layer of 14 mm thickness and the second layer of 6 mm thickness) including forming key to receive the finishing coat, on all types of external surfaces using coarse, clean sand including surface preparation, curing both the coats, bends, grooves, drip moulds, at all levels, heights and location including all scaffolding, curing, providing and fixing chicken mesh of 22 gauge, with about 15 cm. width of approved quality at the junction of reinforced cement concrete members and brick work, including fixing mesh in position by necessary drilling in concrete/ B.B masonry, etc. complete.</p>	3614	Sqm
11	<p>Providing and laying 50 mm thick heavy duty floor finish of 1mx1m panel size with metallic hardener topping of Ironite or equivalent. Under layer of 38 mm thick cement concrete of grade M25 and top layer of 12 mm thick metallic concrete of mix 1:2 (1 cement hardener mix : 2 stone aggregate 6 mm nominal size) by volume with metallic hardening compound of approved quality mixed as per manufacturer's recommendation including cement slurry, side shuttering, rounding off edges and glass strips of 12mm height x 5mm thick in required panels, etc. complete. glass strip</p>	2274	Sqm
12	<p>Same as above but the top 5 mm thickness shall be Heavy duty chemical and abrasion resistant epoxy resin floor screed Nito floor TF 30 topped with Nito floor FC 150, manufactured by M/S Fosroc or its approved equivalent for operating floor including all connected works as per manufacturer recommendations</p>	50	Sqm
13	<p>Providing and laying mirror polished Kota in flooring of approved quality minimum 20 mm thick in plain or diamond pattern on 1:4 cement mortar (1 cement : 4 course sand) bedding to give an overall thickness of 50 mm including cement float, filling joints with neat cement slurry mixed with pigment to match shade of kota stone, laid over underbed, pressed and tapped with wooden mallet to the proper level lifted and pressed again with cement slurry spread over surface with fine joint finish including curing, rubbing, machine polishing and cleaning complete at all levels.(Size shall not be less than 600 mm x 600 mm) in floors.</p>	50	Sqm

14	Providing and laying in required position dado or skirting or risers of polished kota of quality and colour as approved by Owner having a minimum thickness of 20 mm on 12 mm (average) thick, 1:3 cement mortar (1 cement : 3 course sand) bedding including filling joints with neat cement slurry mixed with matching colour pigment, curing, rubbing, hand polishing and cleaning complete at all levels.	70	Sqm
15	Providing and laying machine polished granite of colour as approved by Owner having a minimum thickness of 18 mm in one piece in treads of steps and staircase with rounded nosing and 3 nos. of anti skid grooves. Granite shall be laid on 1:4 cement mortar (1 cement : 4 course sand) bedding to give an overall thickness of 50 mm including filling joints with neat cement slurry mixed with pigment to match shade of granite, curing, rubbing, polishing and cleaning complete at all levels.	227	Sqm
16	Providing and laying machine polished kota of colour as approved by Owner having a minimum thickness of 20 mm in one piece in treads of steps and staircase with rounded nosing and 3 nos. of anti skid grooves. Kota shall be laid on 1:4 cement mortar (1 cement : 4 course sand) bedding to give an overall thickness of 50 mm including filling joints with neat cement slurry mixed with pigment to match shade of kota, curing, rubbing, polishing and cleaning complete at all levels.	5	Sqm
17	Providing and laying in required position dado or skirting of mirror polished granite of quality and colour as approved by Owner having a minimum thickness of 12 mm on 12 mm (average) thick, 1:3 cement mortar (1 cement : 3 course sand) bedding including filling joints with neat cement slurry mixed with matching colour pigment, curing, rubbing, hand polishing and cleaning complete at all levels.	1393	Sqm
18	Providing and fixing 12 mm thick Vitrified tiles of Nitco / Kajaria /RAK approved quality and shade in flooring , on a 20 mm thick bedding of 1:3 cement mortar and jointed with white/ matching coloured cement slurry, cutting of tiles to required size, cleaning, curing, etc. complete.		
i	for 300x300	10	Sqm
ii	for 600x600	1646	Sqm
19	Providing and fixing 12 mm thick Vitrified tiles of Nitco / Kajaria / RAK approved quality and shade in skirting , on a 20 mm thick bedding of 1:3 cement mortar and jointed with white/ matching coloured cement slurry, cutting of tiles to required size, cleaning, curing, etc. complete.	504	rmt

	Providing and fixing 10 mm thick Ceramic glossy finish tiles of Nitco / Kajaria alps blanco/ Sand Stone Blanco/ Johnson flutes jutes/ Serbia Copper/ Radiant Brown or equivalent approved quality and shade in dado on a 20 mm thick bedding of 1:3 cement mortar and jointed with white/ coloured cement slurry, cutting of tiles to required size, cleaning, curing, etc. complete.		
20	for 300x300 (Toilet)	5	Sqm
21	for 600x600 (Toilet)	180	Sqm
22	for 300x450 (kitchen)	149	Sqm
23	Providing and laying for flooring, Antiskid vitrified tiles 600 mm x 600 mm x 12 mm thick of Nitco / Kajaria / Johnson approved quality and shade in required position on 20 mm thick 1:4 cement mortar bedding including cement float, filling joints with white/ coloured cement slurry, cutting of tiles to required size, cleaning, curing, finished to line, length and slope as required, etc. complete.	52	Sqm
24	Providing and laying 10 mm thick Acid Alkali resistant Tile of Johnson Endura ivory approved by owner Ivory colour using acid resistant mortar bedding and joints filled with acid resistant cement as per IS : 4457 on mortar 1:4 (1 appropriate cement : 4 course sand) bedding to give an overall thickness of 50 mm including, curing and cleaning complete at all levels.	227	Sqm
25	Providing and laying 10 mm thick Acid Alkali resistant Tile Dado of Johnson Endura ivory make approved by owner, Ivory colour using acid resistant mortar bedding and joints filled with acid resistant cement as per IS : 4457 on 12 mm thick mortar 1:4 (1 appropriate cement : 4 course sand) bedding including, curing and cleaning complete at all levels.	194	Sqm
26	Providing and laying 60mm thick precast concrete paver blocks having compressive strength not less than 30N/mm ² of approved, make, pattern, colour, over a layer of sand with necessary compaction etc complete at the locations shown in drawings including concrete kerbing wherever required all executed as per relevant IRC specifications & IS:15658 and directions of the Engineer	50	sqm

27	<p>Providing and fixing Anti static false flooring 600 mm high with load bearing capacity of 1200 kg concentrated load and 2000 kg /sqm distributed load, of Unitile Everest or equivalent consisting of: check for fire proofing a) pedestal supports made of 25 od, 1.5 mm thk MS seamless pipe welded vertically at the centre of 100 x 100 x 3 mm thick die pressed MS base plate with hard PVC bushing on top free end.b) Jack heads made of pressure die cast, galvanised, square , 2 mm the MS sheet, with 4 Nos 2 x 10 mm die cut notches, 90 degrees apart, to hold the stringers. And with a centrally welded M16 x100 mm stud with nut for level adjustment up to +/- 25 mm.c) Stringers made out of die pressed channels 25x25x25 mm with two die pressed notches at the two ends to snap fit to the jack head.d) Truly levelled and aligned removable composite floor panels of 610 x 610 x 31 mm made of 1.5 mm thick MS die formed bottom tray, 1.5 mm thick top plate with cavity filled with specially designed light weight concrete.e) The top surface shall be finished with non combustible high pressure laminate antistatic tiles conforming to BS-2050 of 1998 table III Including making steps including treads and risers or ramp, making openings/ cutouts, levelling, cutting, drilling, cleaning, etc. complete.</p>	429	Sqm
28	<p>Providing and applying of 4 to 8 mm thick lime POP punning over all types of plasterd surfaces of walls ceiling beams columns etc. to bring surface in plumb line and level, including making surface smooth, providing required grooves on top of skirting etc. The cost shall include all labour, materilas, scaffolding, protecting adjoining surface, cleaning etc complete.</p>	3841	Sqm
29	<p>Providing and applying white cement based putty in two coats over all types of plasterd surfaces of walls ceiling beams columns etc. to bring surface in plumb line and level, including making surface smooth, providing required grooves on top of skirting etc. The cost shall include all labour, materilas, scaffolding, protecting adjoining surface, cleaning etc complete.Surface to be pre-wetted and made free of any loose particles and stains etc. The cost shall include all labour, materilas, scaffolding, protecting adjoining surface, cleaning etc complete.</p>	3841	Sqm
30	<p>Providing and applying three coats of acrylic emulsion (washable) external paint of Asian make ACE / Nerolac Suraksha / ICI Dulux Super Coat or approved equivalent with required shade over a coat of primer on all exterior surfaces including making good the damaged and rough surface, cleaning, curing, all scaffolding, etc., complete as per manufacturer's specifications and as directed by the Engineer. Rate to be applicable for all heights and levels surfaces and textures. No extra payable for extra paint consumption due to surface texture.</p>	904	Sqm

31	Providing and applying three coats of water proof cement based exterior paint Asian make Apex, weather shield from ICI or approved equivalent make and shade as per manufactureres specifications including necessary double scaffolding and surface preparation curing. Rate to be applicable for all heighta and level surface and texture. No extra payable for extra paint consumption due to surface texture.	5	Sqm
32	Providing & applying one coat of Dura life base coat/or equivalent followed by two top coats of ULTIMA PROTEK of Asian paints/or equivalent on all exterior surfaces at all levels, including Cleaning of surface with jet cleaning machine(Bio wash), Opening the Cracks in v groove shape, Filling up the cracks with Crack seal Compound, curing, all scaffolding , etc., complete as per manufacturer’s specifications and as directed by the Engineer in-charge. Vendor to submit Paints waterproofing warranty for 10 years and paint performance warranty for 10 years from Asian Paints.	3614	Sqm
33	Providing and applying two coats of first quality Acrylic Emulsion paint of interior grade having VOC containt less tha 50 gm/lit of approved colour and shade over one coat of primer, including scaffolding, preparing the surface to receive the primer and finishing coats, providing and applying primer, any additional coat required to achieve even shade and colour etc. complete.	3841	Sqm
34	Providing and applying two coats of first quality Oil Bound Distemper / synthetic distemper internal paint confirming to IS 428 of approved colour and shade over one coat of primer, including scaffolding, preparing the surface to receive the primer and finishing coats, providing and applying primer, any additional coat required to achieve even shade and colour etc. complete.	25	Sqm
35	Providing and fixing 12 mm thick polished black granite on sides of opening 20 mm thick cement mortar 1:3 including polishing to exposed edges, cement float, filling joints with neat cement slurry mixed with pigment to match shade of granite, raking and finishing the joints with silicon sealant, curing, rubbing and cleaning complete at all levels.	149	sqmt
36	Providing and fixing 12 mm thick polished black granite sill to openings in step fashion with minimum 50mm overlapping on 20 mm thick cement mortar 1:3 including polishing to exposed edges, cement float, filling joints with neat cement slurry mixed with pigment to match shade of granite, raking and finishing the joints with silicon sealant, curing, rubbing, polishing and cleaning complete at all levels. Overlapped portion shall not be considered for payment.	48	sqmt

37	<p>Providing and fixing polished granite for washbasin counter consisting of 20 mm thick Granite for counter top over 40 mm thick Kadappa stone slab, 25 to 30 mm thick and 180 mm high facial patti in polished granite with nosing including making chases in walls and finishing neat with cement mortar 1:2, providing opening in granite and kadappa for washbasin, drain and taps and making moulding and edge polishing all complete as directed by Engineer-in –Charge. All exposed edges of Kadappa and Granite to be polished to the satisfaction of the Engineer as per the design (Supply and fixing of washbasin and taps shall be paid separately). All joints shall be made water tight in perfect line level and slope as desired. Only plan area shall be measured for payment. Wastage due to dimensional difference pattern and size shall be to the contractor's account. Filling and finishing of joints shall be done with cement and colour pigments. Base rate of Granite: Rs. 1000/-</p>	3	Sqm
38	<p>Providing, fixing loading unloading and transporting Electrically operated rolling steel shutters fabricated from 18 gauge x 3inch (1.10mm to 1.25mm) MS laths of convex corrugation, complete with build up 4 inchx 1 inch slide guides, build up bottom rail with angle iron at bottom and flat iron at top, brackets, door, suspension shaft, housing box at operation arrangement, lock plates, locking arrangement from inside and outside, fixing bolts, push and pull handles, hood, rolling arrangement and 2 coats of approved synthetic enamel paint over a coat of zinc primer complete. Provision of wicket gate shall be paid under seperate item, in that case area of wicket gate shall be deducted from this item for payment.</p>	36	Sqm
39	<p>Providing and fixing wicket gate in mechanically and/ or electrically operated rolling shutter (wicket gate area shall be deducted from the respective item applicable for rolling shutter for payment purpose.)</p>	3	sqm
40	<p>Providing and fixing hollow metal pressed section door shutter and frame made up of MS door frame, 150 x 65 x1.25mm thick with single rebet, MS pad plates welded at all hinge and lock locations, MS frame spacers at 600 centre to centre, base ties 2 numbers, 25 x 25 x 3 mm MS angle, MS holdfast 300 x 25 x 6 mm at maximum 600mm centre to centre (minimum 6 Nos), Neoprene bushings glued to frame with synthetic adhesive and shutter 45 mm thick flush welded fabricated with 2 outer skins of 1.25 mm thick MS sheet, 1mm thick steel sheet stiffeners at 500mm centre to centre, 6mm thick MS flat along perimeter of shutter including 150 mm long heavy duty MS hinges at maximum 600 mm center to centre (minimum 3 Nos for each shutter, iron oxidised 200 long tower bolt for each shutter, 300 long door handles- 2 Nos for each shutter, spring loaded door stopper for each shutter, concealed type lever lock with handle</p>	2	Sqm

	including one coat of red oxide primer and 2 coats of synthetic enamel paint, filling the hollows of door frame with CM 1:6, etc. complete.		
41	Providing and fixing single or double hollow steel door shutters and frame for shafts with 18 gauge M.S. sheets shutter presenting a flush surface on the outside and inside stiffened with semitubular edge and central stiffening rail which shall convey the lock including fixtures, Godrej or equivalent make mortice lock with handle on outer side, painted with one coat of red oxide primer and 2 coats of synthetic enamel paint. door frame shall be made of M.S. 150x65x1.25 mmthick with single rebate with M. S pad plated welded at all hinge and lock locations , M.S. frame spacers at 600mm c/c base ties of 2 nos. 25x25x3mm M. S angle, M.s 300x 25x 6 at maximum 600mm c/c etc all complete.	32	
42	<p>Providing & fixing factory made 2 hour rated fire doors , single & double shutter consisting of frame, shutter, infill. Fire door shall comply to BS-476 part 20 & 22, IS - 3809, IS - 3614 Part II & ISO - 834 and finished as detailed below. All doors shall be factory prepped for receiving appropriate hardware and providing necessary reinforcement for hinges locks and door closures. All doors and frames shall be finished with polyurathane alphatic grade paint of approved colour. Door and leaf frame shall pass min. 250 hrs of salt spay test. Frames shall be fixed on plastered, brick or block masonry wall openings with the help of Anchor Fasteners. Door frames must be supplied to knockdown form with butt joints for bolted assembly at site. Door Frames shall be Metal Frame of Hollow metal Pressed Steel (18 G). Frame should be rigid to receive appropriate hardware.</p> <p>Door leaves shall be 46mm thk. fully flush, double skin hollow door with Lock Seam joints at style edges. Door leaf shall be manufactured from 18G thk. galvanized steel sheet. Internal construction of shutter should be rigid reinforcement pads for receiving appropriate hardware. The Insulation shall be of High Density mineral wool core IS: 8183 or Honey Comb core. In-fill to give the required rigidity and effective acoustics & thermal insulation. Vision glass shall be provided in circular / square/ rectangular shape, of 6mm clear borosilicate fire rated of relevant rating of the door. Stainless steel ball bearing butt hinges 3mm thk. fixed flush to the frame & shutter. Mortise sash lock : OZML-DL1-SS-55 with SS lever handles :make Zone : Model OMH - 11L, Over head door closer - Model : NSK - 6825 ,mortise dead bolt, mortise latch, panic deviceetc. to be provided as required. Concealed extended lever action flush</p>	45	Sqm

bolts to be provided on top of the door to the leading style.
The rate shall include all the necessary hardware, vision glasses, adhesive tapes & silicon sealant complete as described above.
For all fire doors fire rating certificate by CBRI is necessary to be provided.
Approved makes Shakti Met-Dor / Ahura Mazda, Godrej or approved equivalent.

43	<p>S&I of fully glazed fire rated door</p> <p>Supply and installation of tested fully glazed fire rated fixed door with 120 minutes of integrity and radiation control (EW 120)with symmetrical (Bi-Directional) fire protection. The frames shall be cold rolled profiles using DX52D+Z275-M-A-O steel sheets (As per EN standard EN 10327). The frames are cold rolled from 1.5 mm steel sheet to form a profile of 50 mm x 50 mm on all sides. The system shall be tested as per EN 1364-1 in an international accredited laboratory. The glass should be 14mm clear make Saint-Gobain, 120 min bi-direction fire rated for Integrity, Radiation control (EW 120) and made in India partially insulation (EI 20) Non Wired Toughened Interlayered glass with a light transmission of 86% and a sound reduction of 38 dB and manufactured in UL & TUV audited Facility and including UL-EU Certification and compliant to class 1(B)1 category of Impact Resistance as per EN 12600. The glass shall be tested for 5000 hours of UV resistance as per EN ISO 12543-4. The glass shall be EPD (Environmental Production Declaration) verified in accordance to EN 15804 and ISO 14025 in which its life cycle assessment is performed considering Cradle to Gate system boundaries. The glass must produce a recycled content declaration committing to a pre-consumer cullet of up to 11% and post-consumer cullet less than 1%. The glass shall provide bi-directional (Symmetrical) fire protection. The glass should be held in its place with the help of 1.5 mm cold rolled steel beading and SG pyrfix light/ Kerafix 2000 ceramic tape with cross section of 4 x 15 mm as per the test evidence. The maximum glazing size shall be as per the test certification. The Partitions shall offer C4 level of wind resistance when tested as per tested for class 4 level of Mechanical strength when tested as per EN13115. The shutter should be fixed to the frame using Weld-on hinges of VDS, Dorma, Geze or equivalent of dimensions 179mm X 20mm. The profiles shall have groves to incorporate Fire Resistance gasket. The glass should be held in its place with the help of steel beading and SG pyrofix light/ Kerafix 2000 ceramic tape with cross section of 4 x 15 mm as per the test evidence. Beading should be clipped on to Stainless Steel self-tapping screws fixed at a distance of 70 mm from the edges and 150 mm c/c henceforth. The glass panes are to be supported on non-combustible 6mm Calcium Silicate setting blocks.</p>	45	Sqm
44	<p>Providing and fixing SS matt finish Panic Exit Device or Fire exit door handle of Dorma(Code : PHB 3000), Godrej(Code : 800 series), Hafele, Ebco, Enox</p>	28	nos

45	Providing and fixing of fully glazed door with minimum 12mm thick glass toughened by horizontal process of St. gobain, modi guard or equivalent make by using patch fittings, double action hydraulic heavy duty floor spring IS:6315, door handle on both sides including cost of cutting floors as required. All hardwares shall be of Godrej, Dorma or equivalent, whatever necessary and required numbers to complete the job in all respect. as per the instruction of the Architects.	18	Sqm
46	Providing and fixing solid core flush door with TW frame in Single / Double leaf 38 mm thk. Marine type of exterior grade as per detailed drawings, approved marine plywood facing on both sides without glazing and venetians, with core of block board all necessary T.W. lipping of door thickness, C.P., Brass and S.S. ball bearing Hinges minimum 4 nos per leaf, fixtures and fastenings, door handles, door locks and laminate finish to the satisfaction of Architect. Laminate shall be 1mm thick on both sides, in one piece without joints or broken edges of make Signature, Greenlam, Century or equivalent.	11	Sqm
47	Satin Chrome finish Toilet Door Lock with Vacant Engaged Indicator of : Dorma, Godrej, Enox, Hafele, Ozone or Equivalent make	6	
48	PVC - Plastic, white color Door Buffer of Dorma, Godrej, Hafele, Ebco, Enox or Equivalent make	6	Nos
49	SS Matt Door Locks of Dorma, Godrej, Hafele Ebco, Enox or Equivalent make. Series:Securing Locks Code Name: Cylinders Lock	6	Nos
50	SS matt finish, Surface Mounted Door Closer of Dorma (Code: TS 71), Godrej (Code: 9420), Hafele, Ebco, Enox or Equivalent make with Non Handed Installation, Back Check, Adjustable Closing & Latching Speed and Delayed Action.	6	Nos
51	SS matt finish concealed Door Closer of Dorma (Code: ITS 96), Godrej (Code: 3798), Hafele, Ebco, Enox or Equivalent make with Non Handed Installation, Back Check, Adjustable Closing & Latching Speed and Delayed Action.	6	Nos
52	Aluminium framed glazed windows: Providing and fixing extruded Aluminium built up standard tubular sections/ appropriate Z and other sections of Jindal, Hindalco or equivalent make conforming to IS: 733 and IS: 1285, 50 microns thk. powder coated to required shade according to IS: 1868. (Minimum coating of grade AC 15), fixed with rawl plugs and screws or with fixing clips or with expansion hold fastners including filling the gaps between opening and aluminium frame with silicon sealant or poly-sulphide sealant as directed, necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/ Neoprene felt, etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle,		

	Aluminium snap beading for glazing/ panelling, C P brass/ stainless steel screws, colour glass of st gobain or equivalent all complete as per architectural drawings and the directions of Engineer glass included. Vendor shall prepare and submit shop drawings for owner's approval		
i	i) Fixed window with openable pane	372	Sqm
ii	ii) Sliding windows with min 2 tracks	5	Sqm
iii	iii) Fixed window	192	Sqm
iv	iv) Glass Louvered window (including providing 100mm wide 6mm frosted glass)	4	Sqm
53	Providing and fixing toughened glass 8mm thk. in aluminium door, window, ventilator shutters and fixed glazings etc. as per drawings and directions of engr.-in -charge, Clear glass panel to be measured for payment purposes. Glass make to be Saint Gobain, Modi Guard, AIS, HNG or equivalent.	1	Sqm
54	Providing and fixing Louvers in Plain Panel of approved colour consisting of panel 0.6mm thick with round edges panel length up to 6mtrs coil coated on a continuous paint line double baked and roll formed from enamelled corrosion Resistance Aluminium Alloy AA3005 (Al.Mg.) for higher strength and good Roll forming characteristics. Panels shall be clipped at a distance of 86 mm to baked enameled Aluminium panel stringer 33mm wide and 86mm deep x 0.95 mm thick in a standard length of 5mtrs made of double baked enameled Aluminum Alloy AA5050 (Al.Mg.) white to hold the panel in a module of 86mm centre to centre. The prongs on stringers shall be to accommodate an angle of 21.30 Degrees between two panels. stringers shall be fixed at 150 mm from panel ends and at a distance of maximum 900 mm centre to centre across the panel span. The carrier shall be fixed to a suitable structure by means of rigid fixing details. All properties and specifications shall comply with ECCA directives and more specifically EN 1396:1996	4	Sqm

55	<p>Providing and fixing 'Z' Louvers in Plain Panel of approved colour consisting of panel 0.6mm thick with round edges panel length up to 6mtrs coil coated on a continuous paint line double baked and roll formed from enamelled corrosion Resistance Aluminium Alloy AA3005 (Al.Mg.) for higher strength and good Roll forming characteristics. Panels shall be clipped at a distance of 86 mm to baked enameled Aluminium panel stringer 33mm wide and 86mm deep x 0.95 mm thick in a standard length of 5mtrs made of double baked enameled Aluminum Alloy AA5050 (Al.Mg.) white to hold the panel in a module of 86mm centre to centre. The prongs on stringers shall be to accommodate an angle of 21.30 Degrees between two panels. stringers shall be fixed at 150 mm from panel ends and at a distance of maximum 900 mm centre to centre across the panel span. The carrier shall be fixed to a suitable structure by means of rigid fixing details. All properties and specifications shall comply with ECCA directives and more specifically EN 1396:1996</p>	302	Sqm
56	<p>Providing,Fabrication,Erection,Alignment,Welding etc., stainless steel Railing for staircase/ ramp/ floors 1200 mm High with AISI 304 SATIN Polished steel comprising of 50mm dia SS pipe as main runner and 25mm dia pipe at 3 levels along the running length of the staircase and vertical supports in 35mm dia SS pipes @1200mm c/c, the pipe to be 1.5mm thick including stainless steel beading / stainless steel cleats / stainless steel fasteners, toe guard plate wherever specified; of grade SS:304,annealed ,pickled and polished to bright finish, in square / round shape, including all material, equipment, handling, transportation, cutting, bending, welding, fastening, preparation and checking of fabrication drawing, and getting the same approved, site fabrication,testing,etc.,all complete, as per specification, drawings and instruction of the Engineer. For payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts bolts, fastners.</p>	98	Rmt

57	<p>Supplying, fabricating, transporting to site, loading, unloading etc. and erecting S.S. pipe removable/fixed type 1200 mm High with AISI 304 SATIN Polished steel with 50mm dia SS pipe as main runner and 25mm dia pipe at 3 levels along the running length, ss plate as toe guard with vertical pipes at maximum spacing of @1200mm c/c, the pipe to be 1.5mm thick, including stainless steel beading / stainless steel cleats / stainless steel fasteners, toe guard plate wherever specified; of grade SS:304,annealed ,pickled and polished to bright finish, in square / round shape, including all material, equipment, handling, transportation, cutting, bending, welding, fastening, preparation and checking of fabrication drawing, and getting the same approved, site fabrication,testing,etc.,all complete, as per specification,drawings,and instruction of the Engineer. For payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts bolts, fastners.</p>	1	Rmt
58	<p>Providing, fabricating and fixing in position SS Hand Rail along walls comprising of AISI 304 SATIN Polished SS Pipe 50 mm dia and min. 1.5mm thick wall as the main runner joined to 25mm dia SS pipe and vertical bracket 2mm thick held on to walls by means of fasteners and all necessary fittings. Base plates to be @ every 1000mm c/c etc. For payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts bolts, fastners.</p>	175	Rmt
59	<p>Providing & Fixing powder coated metal ceiling system, at all heights including providing and fixing of framework as spelled out in Armstrong or equivalent manufacturer catalogue.Ceiling tiles shall be of size 600 mm x 600 mm of approved color. Bidder to provide adequate steel sections (Channels, I or T sections) and hanger supports to cater to the false ceiling loads. OWNER would check the design and adequacy and has the right to reject if found inadequate. Approved make: Armstrong or equivalent</p>	60	Sqm
60	<p>Providing all materials and 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, I or T sections) and hanger supports to cater to the false ceiling loads. OWNER would check the design and adequacy and has the right to reject if found inadequate. Nothing extra shall be paid for making openings for AC grills, smoke detectors, electrical fixtures etc. The cutouts shall be provided with peremeter channel of adequate size of 0.5 mm thk. all around and shall be supported suitably. Verticle / inclined face shall be measured above 200 mm high only. For payment purpose false ceiling shall be</p>	258	Sqm

	measured in plan only.		
61	MINERAL FIBRE grid FALSE CEILING of Saint Gobain or equivalent (600x600mm grid). Bidder to provide adequate steel sections (Channels, I or T sections) and hanger supports to cater to the false ceiling loads. Standard sections as spelled out in Saint Gobain or equivalent manufacturer catalogue to be provided. OWNER would check the design and adequacy and has the right to reject if found inadequate.	50	SQM
62	Modular cubical in 12mm compact laminate of approved color and texture with nylon Hardware as well as SS hardware comprising of door shutter, wall fixing rose, head rail, bottom rail, wall bracket, tubular holder, corner connector, coat hook cum door stopper, lock cum occupancy indicator, hinge, door knob, adjustable foot and all other necessary accessories required to complete the job in all respect. Make- Inner Space, greenlam sturdo, Matrix .	4	Nos
63	Decorative pendent Lamp - Supply and fixing in position pendent luminair as approved by owner. Base rate : Rs.2000 /-	4	nos
64	Providing and fixing of metal signages of size 5" height for toilet and pantry as per the reference image. Rate shall include cost of all required materials to fix the signage as directed and to the satisfaction of Architect/Engineer-in-charge.	20	nos

C. PHE work:

Sr No.	Description of Item	Quantity	UOM
1	Designing of scheme, preparation of drawings and seeking approval from owner for	1	Lumpsum
i	Rain water harvesing system including underground tank, pipe connections, cleaning mechanism (filtration), overflow protection mechanism etc. complete as per MCGM guidelines.		
ii	Plumbing and strom water drainage scheme		
iii	sewage and waste water scheme		
2	Providing and laying non-pressure NP3 class (heavy duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete : 150 mm dia. R.C.C. pipe	128	Rmt

3	<p>Providing and laying non-pressure NP3 class (heavy duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete : 300 mm dia. R.C.C. pipe</p>	128	Rmt
4	<p>Providing & fixing of 25mm Nominal dia Chlorinated Polyvinyl Chloride pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge , carrying out necessary Groove cutting, clamping testing etc. complete. Make: astral/prince/supreme/Oriplast.</p>	128	Rmt
5	<p>Providing & fixing of 32mm Nominal dia Chlorinated Polyvinyl Chloride pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge , carrying out necessary Groove cutting, clamping testing etc. complete. Make: astral/prince/supreme/Oriplast.</p>	128	Rmt
6	<p>Providing & fixing of 40mm Nominal dia Chlorinated Polyvinyl Chloride pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge , carrying out necessary Groove cutting, clamping testing etc. complete. Make: astral/prince/supreme/Oriplast.</p>	128	Rmt
7	<p>Providing & fixing of 50mm Nominal dia Chlorinated Polyvinyl Chloride pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge , carrying out necessary Groove cutting, clamping testing etc. complete. Make: astral/prince/supreme/Oriplast.</p>	128	Rmt

8	Providing and fixing heavy duty CPVC Ball valve of approved make and ISI mark. complete as directed. (New or Equipment) Size 25 mm dia. (Make-Supreme, Astral, Ashirvad, Finolex etc.)	32	Nos.
9	Providing and fixing heavy duty CPVC Ball valve of approved make and ISI mark. complete as directed. (New or Equipment) Size 32 mm dia. (Make-Supreme, Astral, Ashirvad, Finolex etc.)	32	Nos.
10	Providing and fixing heavy duty CPVC ball valve of approved make and ISI mark. complete as directed. (New or Equipment) Size 39 mm dia. (Make-Supreme, Astral, Ashirvad, Finolex etc.)	32	Nos.
11	Providing and fixing heavy duty CPVC Ball valve of approved make and ISI mark. complete as directed. (New or Equipment) Size 50 mm dia. (Make-Supreme, Astral, Ashirvad, Finolex etc.)	32	Nos.
12	Providing and fixing 100 x 80mm PVC deep seal Nahani Trap of insect proof type with PVC heavy grating and frame as directed	10	Nos.
13	Providing and fixing 100 x 100mm PVC deep seal Nahani Trap of insect proof type with PVC heavy grating and frame as directed	10	Nos.
14	Providing and fixing PVC gully traps with FRP grating complete with C.I. frame 300 mm x 300 mm (inside size) hinged frame and cover including 300 mm x 300 mm (inside size) brick masonry chamber with 230 mm thick wall in cement mortar 1:4 and with 20mm thick cement plaster in cement mortar 1:3 on outer faces and 12mm thick neat cement plaster in cement mortar 1:3 on inner faces, 150 mm thick concrete bedding of grade M15 and concrete for filling space between chamber walls and gully trap, excavation, backfilling etc. complete as directed by Engineer In Charge.	3	Nos.
15	Providing and fixing ready made SS Oil and Grease Trap 550W x 800L x 500D complete (inside size) hinged frame and cover including brick masonry chamber with 230 mm thick wall in cement mortar 1:4 and with 20mm thick cement plaster in cement mortar 1:3 on outer faces and 12mm thick neat cement plaster in cement mortar 1:3 on inner faces, 150 mm thick concrete bedding of grade M15 and concrete for filling space between chamber walls and Grease trap, excavation, backfilling etc. complete as directed by Engineer In Charge.	1	Nos.

16	Providing and fixing of PVC pipe of Class-B (6 kg/cm ²) for down take for 75 mm dia. with necessary solvent, bends, sockets, elbows, shoe, holding clamps etc. complete. (Make-Supreme, Astral, Ashirvad, Finolex etc.)	150	Rmt
17	Providing and fixing of PVC pipe SCH-80 for down take for 110 mm dia.with necessary bends, sockets, elbows, shoe, holding clamps etc. complete.	150	Rmt
18	Providing and laying non-pressure NP3 class (heavy duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete : 600 mm dia. R.C.C. pipe	350	Rmt
19	Providing and fixing of PVC pipe of Class-A (4 kg/cm ²) for down take for 50 mm dia. with necessary solvent, bends, sockets, elbows, shoe, holding clamps etc. complete. (Make-Supreme, Astral, Ashirvad, Finolex etc.)	60	Rmt
20	Providing and fixing of PVC pipe of Class-A (4 kg/cm ²) for down take for 75 mm dia. with necessary solvent, bends, sockets, elbows, shoe, holding clamps etc. complete. (Make-Supreme, Astral, Ashirvad, Finolex etc.)	60	Rmt
21	Providing and fixing on wall face unplasticised - Rigid PVC rain water pipes / gutter conforming to IS: 13592 Type A including jointing with seal ring conforming to IS: 5382 leaving 10 mm gap for thermal expansion. Single socketed pipes including all fittings, clamps, spacer etc.. 150 mm dia	168	Rmt
22	Providing and fixing on wall face unplasticised - Rigid PVC rain water pipes / gutter conforming to IS: 13592 Type A including jointing with seal ring conforming to IS: 5382 leaving 10 mm gap for thermal expansion. Single socketed pipes including all fittings, clamps, spacer etc.. 200 mm dia	56	Rmt

23	<p>Providing and constructing as per detailed drawing inspection chamber of size as below in 230 mm thick flyash Concrete brick Masonry wall (conforming to IS 12894:1990 with a min crushing strength of 5 N/sq.mm.) and 12 mm thick plaster in cement mortar 1:2 on both face including minimum 150 mm thick foundation and 150 mm thk top slab in M30 concrete, plastering and cement rendering channels and sloping bottom, supply ,providing and fixing approved quality RCC cover (with or without perforations) with frame as per the duty specified below including providing and fixing PVC encapsulated rings bar placed at 300mm c/c etc complete including installation of openings for inlet and outlet pipes, dewatering if necessary (excavation and backfilling shall be paid separately under respective items) etc complete as directed by Engineer-in-Charge. (Wall thickness will increase as per the depth, for depth up to 1.5m - 230mm thk, 1.5m to 3.5m - 345mm thk and above 3.5m - 460mm thk)</p>		
a	450mm x 600 mm Masonry Chamber for Depth up to 1.0 m, with M.D. (medium duty) Covers & frames conforming to I.S. 12592 Part-I & Part-II.	2	Nos.
b	600mm x 900 mm Masonry Chamber for Depth up to 1.65 m, with M.D. (medium duty) Covers & frames conforming to I.S. 12592 Part-I & Part-II.	2	Nos.
24	<p>Providing and constructing as per detailed drawing inspection chamber of size as below in 200 mm thick M30 grade RCC wall including shuttering, deshuttering, Reinforcement including 12 mm thick plaster in cement mortar 1:2 on internal face including minimum 200 mm thick foundation and 150mm thk RCC slab at top, plastering and cement rendering channels and sloping bottom, supply ,providing and fixing approved quality of specified duty type RCC cover with frame complete including installation of PVC Encapsulated steps at 300mm c/c, openings for inlet and outlet pipes, dewatering (excavation and backfilling shall be paid separately under respective items) etc. complete as directed by Engineer-in-Charge.</p>		
a	900mm x 1200 mm RCC Chamber for Depth up to 2.3 m, with 900mm x 600mm H.D. (Heavy duty) Covers & frames conforming to I.S. 12592 Part-I & Part-II.	2	Nos.
25	Supplying and fixing sink mounted Eye Wash including all plumbing works and accessories fixtures conforming to ANSI/ISEA Z358.1-2009 (recommended make: Unicare)	1	Nos.
	OR		

	Providing and fixing Eye wash Hand/Foot operated made of GI pipes (as per IS 1239) and SS valves , bowl sprinklers, shower head made of tough Cycoloc polymer material with pop up cover guard, sprinklers fitted with flow compensator to ensure constant & even flow of water, aluminum foot plate or push handle including all plumbing works and accessories, fixtures conforming to IS 10592. It should have 3 Kgf/CM operating pressure, 5 Kgf/CM design pressure and 8 Kgf/CM hydro test pressure.		
26	Connecting the existing main storm water/drainage/drinking water connection with the HDIL building connections.	1	Nos.
27	Design, fabricate, supply, installation, protection, cleaning and handover of rain water harvesting system, including filter as per authority and owner requirements	1	Nos
28	Providing and fixing PVC water tank of 1000 litre capacity of Sintex or Equivalent make including installing in position, making water tight inlet and outlet connections, preparing base for tank, painting etc complete as per specifications and direction of Engineer.	2	Nos
29	Providing and fixing approved off white vitreous china European water closet comprising of the following for complete installation.		
29. a)	European water closet off white Wall Hung including PVC 'P' trap with seat cover CP brass hinges, rubber bushes (1 No.) [Hindware Studio 20061 or parryware Indus Walvit]		
29. b)	6 Ltrs dual type concealed type PVC flush cistern with adjustable flow rate, push button plate, flush pipe & bend all complete.Hindware concealed or Parryware Linea make.		
29. c)	15mm dia. CP heavy approved quality 2-way bib tap with wall flanges (1 No.).Jaguar florentine or allied series.		
29. d)	15mm dia. Approved quality health faucet with flexible tube & wall hook (1 No.).Jaguar or equivalent.		
29. e)	15mm dia. Approved quality angle valve (1 No.)Jaguar or equivalent.		
29. f)	Total of all with making necessary inlet/outlet connection all complete.		
30	Providing and fixing under counter wash basins of company Hindware 10065 or Parryware C0419 Colour : white, comprising of the following for complete installation.	8	Sets
30.	Oval shaped under counter type wash basin. (1 No.)		

a)			
30. b)	C.I. Bracket suitable for above (1 Pair)		
30. c)	32mm dia. CP waste coupling (1 No.) JAGUAR or equivalent		
30. d)	32mm dia. CP bottle trap with extension piece, CP wall flange complete. (1 Set) JAGUAR or equivalent		
30. e)	15mm dia. CP heavy angle, stop cock with wall flanges (2 Nos) JAGUAR or equivalent		
30. f)	15mm dia. CP heavy inlet connection pipe (2 Nos)		
30. g)	15mm dia. CP pillar tap, JAGUAR florentine FLR-5009B / allied series or equivalent		
30. h)	Total of all with making necessary inlet/outlet connection all complete.		
30. i)	Hand Towel Dispenser of company : Kimberly clark , Cat no : 02010 (White)		
31	Providing and fixing stainless steel sink of size 900 x 450 (19 gauge) single bowl , drain board including 40mm dia. Waste coupling, CP bottle trap, waste flexible pipe upto nahani trap, water tap Jaguar make with aerator and making inlet/outlet connections all complete as per specifications and directions of the Engineer-in-Charge. (For Kitchen / Pantry) [Nirali, parryware or equivalent.	2	Nos
32	Providing & fixing storage type water cooler with Aquaguard of the following capacity, I.S.I marked, stainless steel front panel, C.P. brass push cock, inlet float valve with all plumbing & electrical accessories, inlet, outlet, overflow and PVC drain out connection to F.D. complete as required. Cooling capacity 40 Lts/hr, Storage capacity 80 Lts.	2	Nos
33	Providing and fixing ultra White Vitreous China half stall wall hung standard urinals Hindware Smart Catalogue No. (60011) or Parryware New Magnum No. C0575 or equivalent including fixing the same in concealed C.I. brackets. CP spreader, CP dome shaped waste coupling, CP bottle trap with flanges flush pipe making inlet and outlet connections, including automatic urinal flushing system all complete as per the specifications and directions of the Engineer-in-Charge.	6	Nos
34	Providing and fixing frosted glass Urinal partition (815 x 385x150mm) with CP brass bolts, anchor fastners & MS clips as recommended & directed by the Engineer-in-Charge.	4	Nos

35	Providing and fixing C.P. open type toilet paper holder 200 x 150mm, including fixing the same with C.P. screws complete. Of JAGUAR Continental series or equivalent approved make.	8	Nos
36	Providing and fixing soap dispenser with inlet / outlet connection all complete. JAGUAR or equivalent approved make	4	Nos
37	Providing and fixing robe hooks (double) including fixing the same with CP screws complete. [JAGUAR-1191N]	12	Nos
38	Providing and fixing hand drier unit complete with Electrical connections of Ascon prima series or Euronics or equivalent.	4	Nos
39	Supplying, fixing SS 20mm dia 300 mm long straight grab bar with flanges, fixed with SS screws complete. [JAGUAR-1101N]	8	Nos

Note: Above Quantities are tentative. Tata Power reserves the right to curtailed / enhance the quantities before the placement of Purchase Order.

It may be noted that all future correspondence will be strictly done only with Interested Vendors who have done the above steps (As mentioned in section "B") in time with Authorized Person, and only through Tata Power E-Tender System.
