

**Construction Of A Multi-Storey Building (Lower basement + Upper basement +Ground floor to sixth floor) including civil, plumbing, Electrical and Other Services (Green Building With Gold Rating in Leed /Griha) For State Bank Of India At Final Plot No.116, T.P. Scheme No. 3, Bhayali, Vasna-Bhayali Road Vadodara (Gujarat)**

**Summary Sheet**

<b>Sr. no.</b>	<b>Description</b>	<b>Total Amount</b>
A	Civil work, External Development, Plumbing work - Internal & External, Sanitary Vessals & Fittings	
B	Electrical Internal & External work, DG set, Panels, HT/LT cables etc.	
C	Fire Fighting work, Fire Alarm, PA System.	
	<b>Total Amount (A+B+C)</b>	
	<b>DISCOUNT IF ANY</b>	
	<b>NET AMOUNT AFTER DISCOUNT</b>	

**Net Amount in Words:-**

**GST (as applicable) shall be paid extra by the Bank**

**For, Mamta Shah & Associates, Vadodara.**

**Construction Of A Multi-Storey Building (Lower basement + Upper basement +Ground floor to sixth floor)  
including civil, plumbing, Electrical and Other Services (Green Building With Gold Rating in Leed /Griha)  
For State Bank Of India At Final Plot No.116, T.P. Scheme No. 3, Bhayali, Vasna-Bhayali Road Vadodara  
(Gujarat)**

**Summary Sheet**

<b>Sr. no.</b>	<b>Description</b>	<b>Total Amount</b>
<b>A</b>	<b>Civil work, External Development, Plumbing work - Internal &amp; External, Sanitary Vessals &amp; Fittings</b>	
1	CIVIL	
2	SANITARY VESSALS & FITTINGS	
3	INTERNAL PLUMBING	
4	EXTERNAL PLUMBING	
5	EXTERNAL DEVELOPMENT	
	<b>Sub Total 1</b>	
<b>B</b>	<b>Electrical Internal &amp; External work, DG set, Panels, HT/LT cables etc.</b>	
6	ELECTRICAL WORK	
	<b>Sub Total 2</b>	
<b>C</b>	<b>Fire Fighting work, Fire Alarm, PA System.</b>	
7	FIRE FIGHTING WORK	
	<b>Sub Total 3</b>	
	<b>Grand Total Amount (1+2+3)</b>	

**Construction Of A Multi-Storey Building (Lower basement + Upper basement +Ground floor to sixth floor) including civil, plumbing, Electrical and Other Services (Green Building With Gold Rating in Leed /Griha) For State Bank Of India At Final Plot No.116, T.P. Scheme No. 3, Bhayali, Vasna-Bhayali Road Vadodara (Gujarat)**

**Price Bid**

Sr. No.	Item Description	Qty	Unit	Rate	Amount
	<b>Preamble</b>				
	<b>Rate shall be inclusive of following :</b>				
i	The serviceable and unserviceable materials shall be stacked separately and properly in the designated place and to be Stacked/Stored at designated till the disposal / reuse of the same. The debris, excess materials is to be carted outside the premises and disposed off at the Municipal Corporation designated place up to any lead, lift and level by the Contractor at his own cost.				
ii	All the civil work has to be carried with 53 grade OPC cement to be use for concreting and in plastering & waterproofing works PPC cement can use. cement and VSI, grade crush sand, of required fineness, which must be free from silt and other impurities				
iii	All the civil work , whether new or repair, must be cured for at least 7 days preferable by ponding, using gunny bags etc.				
iv	For all work, water to be use must be fresh, potable and pure without any salinity and turbidity.				
v	The rates quoted for all the items of the BOQ shall include the following specifications: -				
a	All the works are to be carried out at all heights and locations i.e. from foundation level, Ground Floor of the building up to the Over Head Water Tank roof slab or Mumty roof slab, as applicable.				
b	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to any height (entire height) of the building structure made out of 40 mm dia. M.S. tubes, 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding including the working platform etc. and maintaining it in a serviceable condition for the entire required duration as approved and directed by the Client/EIC & removing it thereafter.				
c	The scaffolding system shall be stiffened with bracings, runners, connection with the building fascia etc. wherever required & including providing vertical supports which shall be sound and strong, tied together with horizontal steel / metal support pieces over which scaffolding planks shall be fixed properly & secured at required locations including the essential safety features for the workmen etc. complete as per directions and approval of Client/EIC. Note: - The scaffolding shall not be removed without prior approval of Client/EIC.				
d	Providing & fixing temporary support arrangements such as Steel Props (Up to any number whenever and wherever as directed by the SBI/APMC) to support the structure provisionally during the project duration for all trades of work, etc. and maintaining the props in position till required & as directed by the consultant including other safety elements such as bracings, steel angles, working platforms, plates etc., which shall be provided & considered in the quoted rates for the areas in the vicinity in adequate numbers as directed. All trades of works indicated herein under shall include all leads & lifts & working up to any heights, depths & levels.				
e	Providing & fixing safety net around the work so that loose plaster/ concrete does not cause damage to the property or any human being, if necessary and removing the same after completion of work.				

Sr. No.	Item Description	Qty	Unit	Rate	Amount
f	Providing all type of PEE ( Personal protective Equipment) to the workforce such as safety shoes, safety helmets, reflective safety jacket, full body safety harness, goggles, gloves, etc. complete for all types of workforce engaged on site for execution of the work.				
g	The quoted rate should include cost of necessary scaffolding, staging, centring, shuttering etc. as required for execution of the job at any height and location including removal of same. The scaffolding should be erected and anchored into the concrete members with help of expandable bolts, which are to be cut as the scaffolding is removed, no wall is to be punctured, at no extra cost to the Bank.				
h	Rates shall be inclusive of all enabling works like tower cranes all safety measures, aerial lift, man & material lift, Temporary lift, scaffolding, Cup lock system, labour camp, storages, godowns, all required permissions from local governing respective authorities to carry out the works, all insurances, all licenses, administration, all S.H.E. (Safety, Health, Environment) related measures, security , watch and ward measures, barricades other than specified, traffic management, tree protection, property damage repairs, water, electricity, DG as per requirement, all tools, machineries, vehicles, etc. Complete.				
i	Before starting of Excavation NGL levels shall be got verified and approved by Client/EIC and RL levels to be at the top of different layer and based on the difference levels excavation qty shall be calculated. Area for excavation shall be arrived by adding max 0.6m on each from RCC side working space around Foundation/Raft as per direction from Client/EIC.				
j	All rates should be inclusive all loading, unloading, shifting,all leads, lifts, sorting, transportation, labours, tools, plants, machinery,etc. Complete				
k	All the above-mentioned points including the requisite elements & items as mentioned shall be considered included within the quoted rates of the line items of the BOQ and nothing extra would be paid on this account.				
l	Though Locations of execution are mentioned for specific items, Contractor have to execute those all items at all required/necessary locations at no extra cost as per direction from Client/EIC.				
m	Contractors to be fully equipped with regulations/guidelines available at their site and guidelines/rules are to be followed by contractor till the completion of the project.				
<b>1</b>	<b>Earth work</b>				
	<b>Excavation in all kinds of soil, including soft murum, hard murum, soft rock :</b> Earthwork in Excavation, manually or by mechanical means, for foundation of walls, column footings, pile caps, raft, foundations, plinth beams, steps, water tanks, cess pits, etc., in all kinds of soil, including soft murum, hard murum, soft rock, boulders (upto 0.10 cum) shoring the sides wherever necessary, bailing/pumping out sub-soil /rain water and keeping the foundation trenches and pits dry including carting away surplus materials to the places approved by Municipal authorities all complete as directed. Rate to include necessary cost towards transportation of remaining material rendered surplus out side the Bank's premises/site and disposing the same to approved municipal yard with all lead and lift including labour for loading, unloading surplus excavated earth complete as directed by the Bank. Excavation as per drawing or actual excavation at site, whichever is less shall be considered for payment.				
1.01	a) Excavation Up to 1.5 Mtr Depth below natural Ground Level.	2250.00	Cu.mt		
1.02	b) Excavation depth 1.50 mtrs to 3.00 mtrs. below natural Ground Level	2250.00	Cu.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
1.03	c) Excavation depth 3.00 mtrs. To 6.00 mtrs. depth from natural Ground Level.	4499.00	Cu.mt		
1.04	d) Excavation depth 6.00 mtrs. and above from natural Ground Level.	3308.00	Cu.mt		
1.05	<b>Earth Filling With Surplus Excavated Approved Quality Soil :</b> Filling approved quality available excavated surplus earth (excluding rock) in plinth protection, under floors, etc. in layers not exceeding 20cm in depth including spreading the earth, consolidating each deposited layer by ramming and watering including all lead, lift and transportation within the site/plot/premises as directed by Engineer-in-charge.	2191.00	Cu.mt		
1.06	<b>Sand Filling :</b> Supplying and filling approved quality Narmada sand in plinth, trenches, under floors etc., in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming (mechanically or manually), watering, ramming, consolidating and dressing etc. complete. a) Using approved quality silt free natural River Sand.	102.00	Cu.mt		
1.07	<b>Rubble Soling :</b> Providing and laying 230mm thick dry rubble soling using locally available approved quality stones, hand laid, well rammed, watered and consolidated, including filling the gaps/interstices/voids using quarry spalls and/or hand broken metal or shingle and blinding the same with stone grit murum, etc., compaction with mechanical/vibratory roller etc. complete as directed by the Engineer-in-charge. Note : Rates are including preparing the sub-grade to the required level and working to the required level, gradient, watering etc.	431.00	Cu.mt		
	<b>Total</b>				
<b>2</b>	<b>ANTI TERMITE TREATMENT</b>				
2.01	<b>Pre-Construction Treatment :</b> Carrying out pre-construction Anti-termite treatment using approved Chemical at various stages of construction as per IS 6313:2013 and as recommended by the chemical manufacturer to safeguard the building against termite including execution and submission of guarantee for a period of 10 years (On non judicial stamp paper of required value as per format approved by Architect/EIC) against any subterranean pests infestation. The work should be got executed through specialised agencies approved by the Architect/EIC. 1st stage: Treatment to soil below foundation PCC. 2nd stage: Treatment to soil below grade slab / plinth level slab. 3rd stage: Treatment of soil along external perimeter of building including Plinth protection. Mode of Measurements: Only Plan area of Lower basement shall be measured for payment. Approved Agencies: Pidilite/Bayer/ Ultratech/ PCI / Godrej HI-CARE	1112.00	Sq.mt		
	<b>Total</b>				

Sr. No.	Item Description	Qty	Unit	Rate	Amount
<b>3</b>	<b>CONCRETE WORK</b>				
	<b>PREAMBLE:</b>				
	Contractor to ensure the following while quoting their rates for all Concrete/RCC work:				
	Including all shuttering material used for concreting / RCC Work should be of good quality using waterproof ply/Steel plates etc. to ensure smooth finish.				
	The scope of work under the items includes execution of work at all heights and location including all shapes, curved walls, cambered beam etc. complete.				
	In case there is bulging / minor honey combing is noticed after removal of shuttering, the contractor will have to rectify the work at his own cost. The decision as to what constitute minor honey combing is left to the Engineer in charge.				
	The Contractor will be responsible for arranging "design of concrete mix" through approved Institute at their own cost within the quoted rates only and will submit the report to Bank/Architect for approval. No extra payment shall be eligible on this account.				
	Unless otherwise specified, only River Sand should be used. If the silt content is more than permissible limits, contractor will arrange washing of sand in rotary screw type washing machines within quoted rates and no extra payment shall be eligible for the same.				
	The flooring, raft & slab curing is to be done by ponding method only.				
	Checking of top level of slab should be done at every floor & it should be within IS tolerance limit / client requirement.				
	Testing should be done with material on site by third party agencies as per mentioned frequency.				
	Frequency of testing for all materials like sand, aggregates, cement, steel, concrete should be as per IS standard.				
	The use of admixture, fly ash & crush sand should be as per concrete mix design.				
	Unless otherwise specified the cement to be used shall be Ordinary Portland Cement (OPC-53) of Ultratech, ACC, Lafarge or an equivalent make as approved by bank along with proportions of fly ash.				
3.01	<b>Plain Cement Concrete (PCC: Volumetric Machine Mix) : a) PCC 1:3:6 using 20 mm and downgrade metal (Coarse Aggregate).</b> Providing and laying in position machine mix PCC (plain cement concrete) under foundation, plinth protection, floor slabs, grade slabs, coping, sill concrete etc. including transporting, laying, compacting, finishing the surface in line, level and plumb as per requirement and curing etc. complete. The Rate to include necessary formwork, centring, shuttering, complete in all respects and execution of work at all heights and location with required leads and lifts complete as directed by Engineer in charge. a) PCC 1:3:6 using 20 mm and downgrade metal (Coarse Aggregate).	1.00	Cu.mt		
3.02	<b>Plain Cement Concrete (PCC: Volumetric Machine Mix) : b) PCC 1:2:4 using 20 mm and downgrade metal (Coarse Aggregate).</b> Other specification same as above for complete work. For Levelling Course PCC Under Column Footing, Foundations etc.	216.00	Cu.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
	<b>READY MIXED CONCRETE</b>				
	<b>Ready Mixed concrete : (Design Mix)</b> Providing and laying in position (M35, M45) Ready mixed Reinforced Cement Concrete for various RCC structural elements in any shape and design as per structural drawings and as directed in Foundation, Plinth and Superstructure including Columns footings, Stub Columns, Raft, foundation, Plinth Beams, Floor Slabs etc. with cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer having continuous agitation, including pumping of R.M.C. from transit mixer to site of laying, spreading, compacting, finishing in line and level as per site requirements, including all level, lead, lift and cost of curing etc. complete.				
	The Rate to include necessary formwork, centring, shuttering, including cost of admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability complete in all respects and execution of work at all heights and location with required leads and lifts etc. as directed by Engineer-in-charge. (Rate Excluding cost of reinforcement).				
	RMC : Ultratech/J K Cement/Birla/Godrej/Lafarge /ACC				
	M : 35 : Cement content considered in this items is @ 365 kg/cum. Excess/less cement used as per approved design Mix is payable/ recoverable separately M : 45 : Cement content considered in this items is @ 450 kg/cum. Excess/less cement used as per approved design Mix is payable/ recoverable separately				
3.03	M-35 grade Ready Mixed concrete: a.) Footing/Raft or any other type of RCC Foundation	1714.00	Cu.mt		
3.04	M-35 grade Ready Mixed concrete: b) RCC wall at basement, Lift & UGT	381.00	Cu.mt		
3.05	M-35 grade Ready Mixed concrete: c) Ground Beam, Slab Beam, coping beam, Lintel beam & all type of beam etc.	1201.00	Cu.mt		
3.06	M-35 grade Ready Mixed concrete: d) Slab, Staircase, OH Tank etc.	996.00	Cu.mt		
3.07	M-45 grade Ready Mixed concrete: a.) Column	424.00	Cu.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
3.08	<p>READY MIXED REINFORCED CEMENT CONCRETE (RMC) FOR DIAPHRAGM WALL:</p> <p>Constructing cast-in situ RCC diaphragm wall by providing and laying machine batched, machine mixed, self compacting, ready mix reinforced cement concrete (RMC), tramie controlled, of M30 grade using minimum 400 kg. cement per cum of concrete including providing and mixing required admixtures in recommended proportions as per IS : 9103, as approved by the Engineer-in-charge, for achieving 150- 200mm slump, for diaphragm wall having thickness as per approved structural design not exceeding 600 mm, in pannels of required depth and lengths as per approved drawing, including constructing necessary guide walls as required and as specified including boring in all kinds of soils and rocks, at all levels, including working in or under water and / or liquid mud, in foul conditions and pumping or bailing out of water and removing slush, including disposal of earth/ rock / slush etc. for all leads and all lifts, cost of labours, including preparing, providing and re-circulating bentonite slurry in the trench as and when required for all depths, including agitating bentonite slurry during trenching etc., providing and fixing stop ends or form tubes, upto the required depth of diaphragm wall including extracting the same after casting, including chipping off the bentonite adulterated concrete or unsound concrete up to the cut off level for obtaining the sound concrete, dressing undulations on the exposed face of diaphragm wall after excavation by chipping / chiseling etc. including filling the depression/ cavities with sound concrete etc. complete and as directed by the Engineer-in-charge, including providing recess for bearing plates and fixing insert boxes for inclined rock anchors etc. complete as per the specifications and approved design and as directed by the Engineer-in-charge, but excluding the cost of reinforcement steel. All complete as per specification or as directed.</p> <p>The Rate to include necessary formwork, centring, shuttering, including cost of admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability complete in all respects and execution of work at all heights and location with required leads and lifts etc. as directed by Engineer-in-charge. (Rate Excluding cost of reinforcement).</p>	332.00	Cum		
<b>Total</b>					
<b>4</b>	<b>REINFORCEMENT STEEL</b>				
4.01	<p><b>TMT Bars (Thermo-Mechanically Treated bars):</b> Providing, straightening, cutting, bending, binding and laying in position of TMT FE 500/500D or more grade steel reinforcement conforming to IS 1786 : 1990 or latest code, to correct all shape and size as per detailed drawings, specifications for all RCC work, piles etc, at all levels and all heights with necessary chairs and laps; with correct size CC cover blocks or approved quality concrete cover blocks of same grade of concrete and binding wire of 18 gauge etc. complete with test certificate of the steel bars from manufactures as well as approved laboratory test certificates directed by Engineer in charge, etc. complete. Rate shall be inclusive of cost of binding wire, chairs , hooks, Lap, welding , required labours, tools etc., complete for proper completion of work at all levels. Work shall complete up to any levels, all floor &amp; as per the instruction of EIC. Make : SAIL/TISCON/JSW/RINL.</p>	565454.00	Kg		
<b>Total</b>					



Sr. No.	Item Description	Qty	Unit	Rate	Amount
5	<b>WATERPROOFING</b>				
	<p><b>PREAMBLE : Make : Pidilite Industries Ltd. / Sika / Fosroc as approved by Architect/EIC</b></p> <p><b>All the waterproofing items shall be carried out by the reputed agency duly approved by the Architect/EIC</b></p> <p><b>The treatments shall be tested for water tightness and shall be guaranteed for water tightness in bone dry conditions for at least 10 years period. During this period, if any leakage is observed, the same shall be rectified by contractor through said agency to the satisfaction of bank without any extra cost.</b></p> <p><b>The Gaurantee shall be furnished on Rs. 500/- non-Judicial stamp paper to cover all the above conditions. The gaurantee shall be furnished by the contractor in prescribed format jointly signed by authorized and approved agency to this effect.</b></p>				
5.01	<p><b>Brick bat coba with China mosaic :</b></p> <p>Providing and laying in-position integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, terraces etc consisting of following operations:</p> <p>a) Applying neat cement slurry using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by the Bank over RCC slab including adjoining walls up to 300 mm height including cleaning the RCC surface neatly, removing mortar lumps, mortar splashings etc., if any, complete before treatment.</p> <p>b) Providing and laying maximum 20 mm thick cement mortar 1:4 (1cement : 4 coarse sand) admixed with water proofing compound (conforming to IS : 2645) at the rate of 1 kg/bag of cement or as per manufacturers' specifications, including laying in required position in flooring including curing the surface and testing the same for 7 days for water tightness.</p> <p>c) Laying brick bats in cement mortar using broken bricks/brick bats of 25 mm to 115 mm size with 50% of cement mortar 1:4 admixed with approved water proofing compound conforming to IS : 2645 followed by 20 mm thick layer of cement mortar 1:4 admixed with water proofing compound to required slope and treating adjoining walls up to 300 mm height and including rounding/vata at junctions of walls and slabs by following same process.</p> <p>d) After curing the surface by ponding for 5-7 days, finishing the surface with 20 mm thick cement mortar of mix 1:4 admixed with water proofing compound (conforming to IS : 2645) at the rate of 1 Kg per bag, Including providing and laying approved quality broken China Mosaic (broken pieces of China Chips) in approved colour, pattern and design in neat cement float, giving proper slopes, compaction, curing, finishing prepaing bell mouth and through cleaning of finished china mosaic surface etc. as per sample approved by Architect/EIC. Rate includes similar finish and treatment to half round Watta at junction of roof / slab to parapet wall / coloumn etc. Mode of Measurement : Plan area inside parapet wall shall be measured for payment.</p> <p>e) The whole terrace so finished shall be flooded with water uptill height of rounded portion for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-charge.</p>	551.00	Sq.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
5.02	<p><b>Waterproofing Treatment to Toilet Sunken and other Internal Wet Areas</b>  Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying :</p> <p>(a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours.</p> <p>(b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours.</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> <p>Mode of Measurment : The area of the floor and sides of the sunken portion treated shall be consider for payment purpose.</p>	833.00	Sq.mt		
5.03	<p><b>Waterproofing Treatment Raft Slab :</b>  Treatment to be carried out by Pidilite, Fosroc, Sikka as per approved Trained Installation team &amp; Installation should be carried out as per recommended procedure. Refer Technical data sheet for detailed specification for complete work.</p> <p>Supplying and laying composite 1.2 mm thick, pre-applied, fully bonded HDPE membrane Prebond E over P.C.C. conforming to BS 8102 &amp; IS 16471:2017, requirements of UG waterproofing structures.</p> <p>Starter Joint / Construction Joint:Providing and applying – Hydrophillic swellable bar of size 20 mm x 10 mm at starter &amp; construction joints. Water bar to be fixed at centre of construction joint by keeping minimum concrete cover of 80 mm using FEVISEAL HY 300 – Hybrid sealant &amp; adhesive or corrosion free nailing.Treatment of Pressure Release Pipes(PRP): treatment to be carried out by Trained Installation team &amp; Installation should be carried out as per recommended procedure.</p> <p>The plan area shall be measured for payment purpose for Raft Slab.</p>	1428.00	Sq.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
5.04	<p><b>Water Proofing Treatment to External Surface of Retaining Walls :</b>  Supplying, Installing and testing of 1.6 mm thick, self adhesive, cold applied, flexible SBS waterproofing membrane with self-adhesive bitumen compound laminated onto an impervious, non-perforated, cross laminated HDPE film / Veleron Film applied to the external surface of retaining wall post construction as under:-</p> <ol style="list-style-type: none"> <li>1.) Cleaning the external RCC surface of retaining wall with wire brush, so as to remove the dust, dirt etc.</li> <li>2.) Any sharp protrusions shall be chopped off by hacking / chipping and all defective concrete surfaces and tie rod holes shall be repaired sealing with non-shrink, polymer modified cementitious mortar.</li> <li>3.) Providing and applying one coat of Bituminous primer with brush and allow to dry and then applying self-adhesive mebrane to the surface with 50mm overlaps at joints and ensure uniform surface removing air bubble if any by prssing the membrane and its joints using appropraite hand roller. The mebrane should be applied upto 300mm height above G.L. and tuck the same into a groove cut into the concrete surface and seal the groove with an approved liquid sealant / PU sealant.</li> <li>4.) Providing and fixing 8 mm thk Dimpled Drain board / 6 mm thick expanded polyethylene / 25 mm thk expanded polystyrene protection board, over the waterproofing membrane for vertical surface stuck to the membrane by spot bonding method, using synthetic adhesive with butt joints etc. complete.</li> <li>5.) Back filling after 2-3 days time, progressively, after installation of the membrane and protection board, to avoid damage to the waterproofing treatment.</li> </ol> <p>Mode of measurment :- The surface area of membrane shall be measured. No extra payments for overlapping and other concealed areas shall be considered.</p>	1285.00	Sq.mt		
5.05	<p><b>UG Sump Well and OH Water Storage Tanks Waterproofing</b>  Providing and laying waterproofing and protective tank lining system through approved specialized agencies for U/G &amp; O/H storage tank internally consisting of:</p> <ol style="list-style-type: none"> <li>a. Cleaning the surface of the internal concrete surface of the floor as well as walls thoroughly by wire brushing and washing with high pressure water jet, to remove any loose laitance as well as contaminates, thereafter inspecting the concrete surface to identify any honeycombs, crack, voids or defects in the concrete such as cracks, construction joints etc., and sealing all such locations with solvent free epoxy mortar, using epoxy resin and hardener.</li> <li>b. Thereafter, providing and applying containment membrane lining system consisting of combination of epoxy and polysulphide formulation Epoxy Polysulphide formulation membrane lining cures to produce a tough, flexible coating system with excellent abrasion and chemical resistance and waterproof properties and consists of 2 component, which shall be applied in 2 coats by way of spray or roller to provide a minimum wet film thickness of 0.25 mm per coat with material consumption of approx. 0.3 Kg per Sqm per coat, all as per manufacturers recommendation etc. complete.</li> <li>c. Treatment used should be non toxic system, to be used in drinking water and potable water tanks, tested to BS 6920.</li> </ol>	204.00	Sq.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
5.06	<b>Light Weight Filling in the Sunken Portion:</b> Providing and filling the cavity of sunken portion of toilets (after application of principal waterproofing treatment to surface of sunk RCC slab) with brick bats broken AAC blocks of 25 mm to 115 mm in size with 50% of cement mortar 1:4 admixed with approved water proofing compound conforming to IS : 2645 complet as directed by the Engineer-in-charge.	188.00	Cu.mt		
<b>Total</b>					
<b>6</b>	<b>MASONARY</b>				
6.01	<b>AAC Block Masonry : below plinth</b> Providing and laying Autoclaved Aerated Cement (AAC) blocks masonry in Foundation and Plinth using 150mm/ 230mm/ 300 mm thick AAC blocks including providing 100 mm thick RCC band with 4 nos. 8 mm dia TMT bars and 8 mm dia TMT links at 300 c/c in cement concrete mix 1:2:4 at every 1.20 meterl with approved block laying polymer modified adhesive mortar including raking out joints, curing, scaffolding etc at all levels below plinth all complete as per direction of Engineer in-Charge. Make: lolite, Siporex, Aerocon, Billtech, Ecolite, Ascolite Ultratech, Eco green, Brixo	12.00	Cu.mt		
6.02	<b>AAC Block Masonry : Superstructure</b> Providing and laying Autoclaved Aerated Cement (AAC) blocks masonry in Superstructure using 150mm/ 230mm/ 300 mm thick AAC blocks including providing 100 mm thick RCC band with 4 nos. 8 mm dia TMT bars and 8 mm dia TMT links at 300 c/c in cement concrete mix 1:2:4 at sill level and lintel level with approved block laying polymer modified adhesive mortar including raking out joints, curing, scaffolding etc complete as per direction of Engineer in-Charge. Rate should be quoted considering execution of work above plinth level upto and inclusive Floor Six & Terrace level). Make: lolite, Siporex, Aerocon, Billtech, Ecolite, Ascolite Ultratech, Eco green, Brixo	418.00	Cu.mt		
6.03	<b>Brick Masonry (Using Class Designation 75 Bricks) : Superstructure</b> Providing and constructing Brick masonry walls in Superstructure using locally available approved quality Class designation 75 Bricks, well (Kiln/Chimney) burnt, uniform size and colour having average crushing strength not less than 75 kg/cm2 in CM 1:5 for walls, shaft walls, parapets, drains, manholes, trenches etc. in proper line, level and plumb including striking out / raking out joints, curing, necessary scaffolding, etc. complete at all heights and levels as per the approved drawing and as per instructions of the Architect / Engineer-in-charge. Rate should be quoted considering execution of work above plinth level upto and inclusive Floor Six+ terrace level).	207.00	Cu.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
6.04	<p><b>Half Brick Masonry (Using Class Designation 75 Bricks) : Superstructure</b></p> <p>Providing and constructing Half-brick masonry partition walls in Superstructure using locally available approved quality Class designation 75 Bricks, well (Kiln/Chimney) burnt, uniform size and colour having average crushing strength not less than 75 kg/cm<sup>2</sup>. In Cement Mortar 1:4 . Rate includes providing RCC patli beam 100mm thick including providing with 4 nos. 8 mm dia TMT bars and 8 mm dia TMT links at 300 c/c in cement concrete of mix M 20 at mid-height, lintel level etc. (height between two patli not exceeding 1.20m), required formwork etc. in proper line, levels and plumb including raking out joints, curing, necessary scaffolding, etc. complete at any floor height and levels as per the approved drawing and as per instructions of Architect /EIC. Rate should be quoted considering execution of work above plinth level upto and inclusive Floor Six+ terrace level).</p>	107.00	Sq.mt		
<b>Total</b>					
<b>7</b>	<b>PLASTER</b>				
	<p><b>Note: The joints of all Masonry and RCC surfaces shall be treated with 16x24 Chicken mesh nailed with M.S. nails with atleast 75mm width on either side of surfaces making the total width of 150mm prior to take up plastering works. Cost of chicken mesh netting to be included in rates quoted for plaster works, at all joints of brick and concrete surfaces, with a minimum overlap of 100 mm in all directions and curing complete. No extra payment shall be made for additional thickness if required to achieve perfect line and level. Rate includes all material, labour, tools, scaffolding (single/ double), machenaries etc., required for proper completion of work at all levels.</b></p> <p><b>Note:- All plaster works Measurements shall be considered only as Surface Areas of application and no extra/separate payment for dhar, kani, groove, strips, bands etc.</b></p> <p><b>Only MS Scaffolds shall be used for the all Plastering , painting Works.</b></p> <p><b>Rate shall inclusive of all heights, Sub structure, Superstructure, lift &amp; leads, curing etc. Complete.</b></p>				
7.01	<p><b>Internal 12mm thick Gypsum Light Weight Plaster : Basement to 6th floor + Terrace lvl</b></p> <p>Providing and applying in position single coat <b>12 mm thick (average) premixed formulated one coat gypsum lightweight plaster</b> having additives and light weight aggregates as vermiculite / perlite respectively conforming to IS: 2547 (Part - 1 &amp; II) 1976, applied on hacked / uneven background such as bare brick / block / RCC work in walls &amp; on ceiling at all floors and locations, finished smooth in proper line and level including watering, scaffolding, hacking etc. complete as per the instructions by the Architect /EIC.</p> <p>The rate should include providing &amp; fixing fibre-mesh / chicken mesh at joints of brickwork and concrete to avoid thermal expansion cracks.</p> <p>Make: Gyproc or equivalent approved by the Bank</p>	4168.00	Sq.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
7.02	<b>Rough Cast Plaster : Ground floor to 6th floor + Terrace lvl</b> Providing and applying Rough cast plaster at all height above ground level with a mixture of sand and gravel or crushed stone from 6 mm to 10 mm nominal size, dashed over and including the fresh plaster in two layers, under layer 12mm cement plaster 1:4 (1 cement: 4 coarse sand) and top layer 10 mm cement plaster 1:3 (1 cement: 3 fine sand) mixed with 10% finely grounded hydrated lime by volume of cement including necessary scaffolding, curing etc. complete as directed by the Engineer-in-charge. Work including mixing of water proofing material in cement plaster work in proportion @1 Kg per Bag of Cement or as recommended by the manufacturers.	747.00	Sq.mt		
7.03	<b>External Plaster (Sand Face) : Elevation facade</b> Providing and laying in position external Sand Face Cement Plaster, average 18 mm thk, in two coats, at all heights with first coat of av. 12 mm thk in Cement Mortar 1:5 using natural silt free fine sand, and second coat of average 6 mm thickness in C.M. 1:4, including necessary staggging, scaffolding, curing, roughening the first coat to recieve second coat of plaster etc, providing approved water proofing compound @1 kg per bag of cement or as specified by the manufacturer and adding polyproplyne fibre of approved make as per manufacturers specifications to prevent shrinkage cracks, complete as directed by the Engineer-in-charge.	2075.00	Sq.mt		
	<b>Total</b>				
<b>8</b>	<b>PAINT</b>				
	<b>PAINTING WORKS</b> <b>Note:- All works Measurements shall be considered only as Surface Areas of application and no extra/separate payment for dhar, kani, groove, strips, bands etc.</b> <b>Only MS Scaffolds shall be used for the all painting Works.</b> <b>Rate shall inclusive of all heights, Sub structure, Superstructure, lift &amp; leads, curing etc. Complete.</b> <b>Painting works to be done by authorised applicator only. Certificate / registration of the same to be submit to SBI before starting of the work.</b>				
8.01	<b>Acrylic Emulsion Paint on new surface ( Interior Paint) : Ground floor to 6th floor + Terrace lvl</b> Providing and applying 2 or more coats of approved Acrylic Emulsion paint with roller finish over a coat of primer on internal walls including necessary scaffolding etc. complete as per manufacturers' specifications. Make:- Asian / Nerolac / Berger / Dulex Providing and applying 2 or more coats of Birla putty on internal walls of average thickness of 3 to 4 mm in line & level including its rubbing with sand paper to ensure smooth & even surface including necessary scaffolding etc. complete. Make :- Birla/Jk/Asain/Jotun/ Nerolac or approved equivalent make	4168.00	Sq.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
8.02	<p><b>External Painting With Higher Graded Elastomeric Paint on new surface : Elevation Facade</b></p> <p>Providing and applying Elastomeric Paint to external walls on new surface as under:</p> <p>a) Providing applying 2 or more coats of External grade Birla putty on external walls in line &amp; level including its rubbing with sand paper to ensure smooth &amp; even surface</p> <p>b) Providing and applying one coat of water based Acrylic anti fungal Primer of approved quality and make as per sample approved.</p> <p>c) Providing and applying one coat of fibre reinforced membrane paint water proofing Coat of "Protek Basecoat" of Asian / "Weather coat long life Roof Guard" of Berger / "Aqua Touch" of ICI or equivalent approved by the Architect/EIC having crack bridging ability up to 2.00 mm, superior anti-carbonation &amp; water proofing property.</p> <p>d) Providing and applying 2 or more coats of approved quality External Acrylic Emulsion paint, Exterior grade having anti fungal property, resistance to dust &amp; dirt accumulation, resistance to fading of colours etc. of approved colour and shade Apex Ultima (Asian) / Weather coat All Guard (Berger) / Weather Shield Max (ICI) or equivalent approved by the Architect/EIC.</p> <p>Note: Rates to include cleaning afterwards, necessary scaffolding / Cradle, debris safety netting, labour etc complete.</p> <p>Make: Asian Paints Ultima Protek / Berger Weather coat Long Life / Jotun / Nerolac or approved equivalent.</p>	211.00	Sq.mt		
8.03	<p><b>Interior Paint : Oil bound distemper : Upper &amp; Lower Basement area</b></p> <p>Providing and applying 2 or more coats of Oil bound distemper with low VOC content paint as per approved make &amp; Shade of Asian / Nerolac / Berger / Dulex or equivalent as approved by Architect/EIC.</p> <ul style="list-style-type: none"> <li>• Preparing of surface by scraping, rubbing with sand paper, applying two coats of Birla white putty, wherever required, to level the surface, and its rubbing with sand paper, to ensure smooth surface, suitable to receive paint</li> <li>• and then applying 2 or more coats of approved colour and shade of Oil bound distemper with low VOC content over a coat of approved primer complete as per manufacturers' specifications to internal walls/ceiling including necessary scaffolding etc. complete.</li> <li>• Make:-Asian / Nerolac / Berger / Dulex or approved equivalent make.</li> </ul>	5807.00	Sq.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
8.04	<p><b>Texture Paint : Exposed RCC look texture(Archi concrete) : Elevation facade</b></p> <p>Providing and applying 2 coats of Exposed RCC look texture(Archi concrete) or similar texture paint of of Asian, Luxture,Jotun or equivalent approved make by Architect/EIC.</p> <p>Application method :</p> <ul style="list-style-type: none"> <li>• The substrate must be sound, clean, dry, free from dust, oil, grease and laitance etc.</li> <li>All traces of release agents must be removed. On chalky and dusty surfaces, all loose material must be removed by stiff bristle brushing.</li> <li>• one coat exterior primer then apply two coat Archi concrete texture then apply two coat tile guard for color shades. with all labour and material thoroughly brushing the surface free from mortar droppings and other foreign matter and sand prepared smooth etc. complete.</li> <li>• Texture work should be done by specialized agency as approved by the Architect/ EIC. Work shall complete includes all type of tools, tackles, all level &amp; Height, scaffolding, labour etc complete as per the detailed drawing and instruction of EIC.</li> <li>• Note: Rates to include cleaning afterwards, necessary scaffolding / Cradle, debris safety netting, labour etc complete.</li> </ul>	1657.00	Sq.mt		
	<b>Total</b>				
<b>9</b>	<b>FLOORING</b>				
	<p><b>Note : Flooring is to be done as per the Finish floor level (FFL), and as per the instruction by the Enginner-in-charge. Bedding should be as per the thickness required to maintain the FFL. No extra cost shall be payable for extra thickness of bedding to maintain FFL. Rate includes cost of bedding material, labour, tools etc., complete for proper completion of work at all levels.</b></p> <p><b>The rate shall be inclusive of protecting the flooring by plaster of Paris applying and after completion of work remove or 4 mm thick protection sheet of Supreme make EPE+HM Blue.</b></p> <p><b>All basic rates are excluding GST.</b></p> <p><b>The bidder shall submit samples for Architect/EIC for approval</b></p> <p><b>For any equivalent make, the bidder shall take approval from Architect/EIC</b></p> <p><b>The Architect/Client shall have right to select or reject any make .</b></p> <p><b>Equivalent makes shall be approved by Architect/EIC before procurement.</b></p>				



Sr. No.	Item Description	Qty	Unit	Rate	Amount
9.01	<p><b>Italian Marble Flooring : Ground floor area</b>  Providing and fixing in position 18 mm ±2mm thick Pre-polished Italian marble flooring using of uniform and homogeneous colour, shade and texture as per approved pattern and design including Inlay pattern as per Architectural drawings and sample approved by the Bank with machine cut edges, laid over average 20 to 25 mm thick CM 1:6 (1 cement : 6 coarse sand) bedding fixed with matching neat white cement slurry or approved tile adhesive of Roff/Bal Endura/Fevimate approved by the Bank laid to level as required, curing etc. complete. The rate includes cost of CM bedding/ adhesive, machine polishing of floor in mirror finished as per sample approved by the Architect and as directed by the Engineer-in-charge.  Basic Rate of Italian Marble : Rs.325-350/ Sq.ft  In Flooring using Italian Marble slabs not less than 1.50 Sqm in plan area (except on edges/ends).</p>	201.00	Sq.mt		
9.02	<p><b>Italian Marble Skirting : Ground floor area</b>  100 - 150 mm high Skirting/ Riser (using not less than 0.50m long pieces and in one piece as otherwise advised by Architect/ EIC)  Other details and specifications same as above item for proper completion of work. Basic Rate of Italian Marble : Rs.325-350/ Sq.ft</p>	13.00	Sq.mt		
9.03	<p><b>Italian Marble cladding : All Floor levels ( Lift wall cladding)</b>  Providing &amp; Fixing in position 18mm thick ± 2mm tolerance, machine cut, Mirror finish Pre-polished Italian Marble slabs in cladding laid in perfect line and level as per approved design and pattern on rough finished 1:4 cement mortar backing plaster of average thickness 20 mm. marble to be fixed to walls using approved tile adhesive of Roff/Bal Endura/Fevimate including all free edges should be pre chamfered before fixing and filling the joints with epoxy based joint filling compound of matching shade, curing, rubbing the joints etc. complete as directed by the EIC. Rate includes cost of CM 1:4 backing plaster with waterproofing compound, chamfering of tiles at corners and execution of work at all heights and locations including necessary scaffolding etc. complete.. Basic Rate of Italian Marble : Rs.325-350/ Sq.ft</p>	141.00	Sq.mt		
9.04	<p><b>Double Charged Vitrified Tiles Flooring, size 800 x 1600 mm : All Floor levels</b>  Providing &amp; laying in-position 9 mm thick Double Charged Glazed Vitrified Matt finish tiles 800 x 1600 mm in floor and skirting of approved make and colour uniformly in line, level and in approved design, including laying avg. 40 to 50 mm thick bed of CM 1:6 (1 cement : 6 coarse sand) and filling the joints with epoxy based joint filling compound of matching shade, curing the joints etc complete.  Rates to include cost of CM bedding, providing &amp; fixing 100 mm high skirting as per drawing flushed with finished surface of wall in line and level and 6 mm wide groove to be made in wall at the junction of skirting and finished surface of wall etc. complete matching to flooring as per direction of Architect/EIC.  Make: Simpolo, Kajaria, Somany, Varmora , Nitco, Sunheart</p>	3470.00	Sq.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
9.05	<p>Toilet Flooring : Size : 600 x 600 mm Double Charged : Ground floor to Sixth floor            Providing &amp; laying in-position 8.5-9.00 mm thck 600 x 600 mm Double Charged Glazed Vitrified tiles Anti-skid Matt finish in floor as per approved make and colour uniformly in line, level and in approved design, including laying avg. 20 to 25 mm thick bed of CM 1:6 (1 cement : 6 coarse sand) and filling the joints with epoxy based joint filling compound of matching shade, curing the joints etc complete at all levels.Work shall includes cost of CM bedding, all type of tools, tackles, all level &amp; Height, labour etc complete as per the detailed drawing and instruction of EIC. Tiles shall be free of any variation in colour or texture. in all aspects as specified and directed by the Engineer/Architect.            Make: AGL, Simpolo, Kajaria, Somany, Varmora , Nitco, Sunheart</p>	209.00	Sq.mt		
9.06	<p>Vitrified Wall Tiles/Dedo : Size ; 600 x 1200 mm Double Charged : Ground floor to Sixth floor            Providing and laying in position approved qulaity and shade Glossy/matt finish joint free 8.5 mm - 9 mm thick 600 x 1200 mm Double Charged Glazed Vitrified tiles in Dado, above Kitchen Platform etc. using approved colour and shade as per sample approved by the Engineer-in-Charge fixed over 15mm thick rough finished backing plaster in CM 1:4 fixed with approved quality tile adhesive of Bal Endura /Roff or equivalent approved make including filling joints using white cement/epoxy based joint filling compound with matching pigment including acid cleaning of tiles complete in all respect and at all heights, levels and locations.            Rate includes chamfering of tiles at corners and execution of work all heights and locations including necessary scaffolding etc. complete..            Make: Somany, AGL, Simpolo, Kajaria, Varmora , Nitco,Sunheart</p>	970.00	Sq.mt		
9.07	<p><b>Kotah Stone Flooring : Electrical room, Kitchen, Machine room</b>            Providing and laying in position average 25mm thick hand chiesel cut and machine polished mirror finish Kotah Stone flooring laid over avg. 20 to 25 mm thick cement mortar 1:6 (1 cement: 6 coarse sand) bedding fixed with neat cement slurry in proper line, level, slope as required including filling joints with approved matching shade epoxy based joint filling compound. Rate includes cost of CM bedding, mirror polishing of Kotah stone flooring as per sample approved by the Architect/ EIC. including making neccesary cutouts for Electrical/Data/Telephone cables etc., cleaning of floor and skirting complete in all aspects, as specified in drawings and directed by the Engineer/Architect.            a) In Flooring using Kotah Stone slabs : Size : 600 x 600 mm</p>	134.00	Sq.mt		
9.08	<p><b>Kotah Stone Skirting : Electrical room, Kitchen, Machine room</b>            100 mm high Skirting (using not less than 0.50m long pieces.) Other details same as per above specifications for complete work.</p>	64.00	Rmt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
	<p><b>Granite Stone Flooring (Machine Polished / Flame Burnt etc.) : All floor levels</b>            Providing and laying in position 18mm ± 2mm thick machine cut pre-polished First quality Classic Grey Granite stone flooring and skirting in approved colour, shade, design and patterns as per architectural drawings laid over 20 mm (average) thick cement mortar 1:6 (1 cement : 6 coarse sand) bedding fixed and jointed with neat cement cement slurry and filling joints using white cement slurry admixed with pigment of matching shade or epoxy based joint filling compound of approved make including grinding, mirror polishing, curing, nosing, making grooves etc. complete as specified in the Architectural drawings and as directed by the Engineer-in-Charge.</p>				
9.09	<p><b>In flooring</b> using approved quality and shade Granite stone slabs of size as advised by the Architect/ EIC. Basic rate of stone is Rs.150-200 / Sq.ft</p>	104.00	Sq.mt		
9.10	<p><b>Staircase :</b>            In Staircase steps and risers, in single piece slabs of required size, moulding, bull nosing, chamfer with polishing ,Anti skid Groove , complete as per Architectural drawing and as directed by the Engineer-in-charge. Basic rate of stone is Rs.150-200 / Sq.ft</p>	228.00	Sq.mt		
9.11	<p><b>Granite Stripped Flooring for Ramps :</b>            Providing and laying 20mm thick sand blasted/Flame burnt Granite stripped flooring for Ramp using single piece of 100mm wide overlapping on consecutive strip with an overlap of 25 mm giving 75mm finished interval on ramp including laying 20mm thk bed of 1:4 cement mortar (1 cement : 4 coarse sand) with float / slurry of white cement mortar 1:2 (1 white cement : 2 granite dust / powder) with an admixture of pigment to match the granite shade. joints should be grouted with white cement mixed with colour pigment to match with granite shade in proper line and level of two granites including tin oxide polishing, curing, cleaning, engravings, etc. complete as per the detailed drawings and as directed by Engineer-in-charge. Basic rate of stone is Rs.100-150 / Sq.ft            Note : Rates are inclusive of overlapping and finished plan area shall be measured for payment.</p>	14.00	Sq.mt		
9.12	<p><b>Granite Threshold : All floor Levels</b>            Providing &amp; fixing in position 18mm thick ±2mm tolerance, machine cut, approved colour and shade pre-polished mirror finish First quality Classic Grey Granite granite stone threshold of desired length and width for the complete opening of the doors/windows and fixing the same using cement mortar 1:3 including full round /chamfered moulding on both the edges complete as per sample approved by the Architect/EIC. Rate includes cost of CM 1:4 backing plaster with waterproofing compound, chamfering of corners and execution of work all heights and locations including necessary scaffolding etc. complete. Basic rate of stone is Rs.150-200 / Sq.ft</p>	2183.00	Rmt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
9.13	Ceramic Tiles in UG Water Tanks, OHT: Providing and laying in position 9 mm thick Ceramic tiles of size 300mm x 300 mm of approved make and shade in proper slope, line, level with neat Cement slurry on inside walls and floors of Under Ground and Over Head Water Tanks etc. complete. Make: Kajaria, Sunheart ,Somany, Simpolo, Varmora , Nitco, AGL	204.00	Sq.mt		
9.14	<b>Cement Concrete Pavement : Lower &amp; Upper Basement</b> Providing and laying in position C.C. Pavement (Tremix - Vacuum dewatered) average 150 / 200 mm thick in design mix cement concrete of M-30 grade (cement content considered @ 340kg/cum) having low w/c ratio, in roads, using coarse sand and graded stone aggregate of 20 mm nominal size in appropriate proportions and mixing surface hardener @ 3kg/sqm as per approved & specified design criteria. Rate includes providing dowel bars with sleeve / tie bars wherever required, laying at site, spreading and compacting, mechanically by using needle and surface vibrators, vacuum dewatering, levelling to required slope / camber, finishing, brooming with wire brush before the top becomes hard, including steel formwork with sturdy M.S. channel sections, curing by putting hessian cloth and ponding. Scope of work includes making provision for expansion, contraction and construction joints by groove cutting of size 10mm wide and having depth up to 1/3rd of the thickness of the Tremix concrete pavement or as directed by Architect / Engineer to form bays of required size using heavy duty cutting machine with diamond cutting wheel and filling the grooves with backer rod and appropriate silicone sealant for expansion joints, complete all as per direction of Engineer-in-charge.(Item of reinforcement to be paid separately).	2326.00	Sqmt		
9.15	Providing and fixing <b>Speed breakers / bumpers</b> for the driveways and ramps. Black and Yellow color high intensity Rubber speed bumps marked with reflective tapes, having linear middle section of size L500xW300xH50mm and rounded end caps of size L175xW350xH50mm shall be fixed as per required length. The speed breakers shall be installed at adequate spacing, with the help of mounting hardware, pre-drilled holes, butyl tapes, spike bolts, etc., inclusive of all labours and materials.	30.00	Rmt		
9.16	Providing & fixing 24mm wide <b>Anti-Skid Tape/Strips</b> of approved make 3M (620-B series) or equivalent on the edge of treads as per required length. The tape shall consist of a tough polymer backing and should have highly durable slip-resistant surface. The reverse surface shall be provided with rubber-based pressure sensitive adhesive, which shall be covered by a removable protective liner. Location : Treads of all staircases	353.00	Rmt		
<b>Total</b>					

Sr. No.	Item Description	Qty	Unit	Rate	Amount
<b>10</b>	<b>BASIN COUNTER / PANTRY COUNTER</b>				
10.01	<b>Basin Counter for toilet: Ground floor to Sixth floor Levels</b> Providing & fixing two layers of wash basin counter, first layer using 25mm thick Kotastone of approved shade and second layer using approved shade and sample of 18mm thick First quality Classic Grey Mirror finish Granite, joined together with 1:4 Cement mortar bedding/ approved tile adhesive, to true plane & level or to slopes, or close jointed with cement slurry with pigment of matching shade and colour and finishing with the same, including dedo 1'6", cutting stone as per required shape & size to fit Wash basin & 4" fascia with moulding, nosing, chamfered front edges, fixing, disposal of debris etc. finished as per design in detail drawing and instruction of Architect/EIC. sample mock shall be approved from Architect/EIC. The granite shall be fixed at end of counters where counter is not resting on wall suppoort. The edges of end support, fascia patti etc shall be moulded, polished as directed and complete in all aspects as per detail drawings.Centre line length of the counter shall be measured for payment purpose. Basic rate of stone is Rs.100-150 / Sq.ft	51.00	Rmt		
10.02	<b>Kitchen / Pantry Platform : Ground floor to Sixth floor Levels</b> Providing & fixing in position Kitchen platform/Vanity Counters with mimum 600mm width made as under: Vertical supports: Made out of 18 mm thick white marble slabs sandwich supports (two slabs joined together using Araldite adhesive to full surfae area) placed at specified spacing as per detailed drawing and suitable to house modular kitchen under the counter Trolleys. Rate includes providing vertical garnite band to vertical supports with moulded/polished edges. Kitchen Counter Top : Finished with 18+/-2mm approved first qulaity, Colour, shade and textutre mirror polished classic grey Granite slab (minimum length of slab shall not be less than 1.80 Meter for Kitchen counter etc.) resting on 18mm thick white marble base support slab (in one piece) and fixed with CM 1:2 or approved tile adhessive as directed at site. Front Facia: 50 to 75mm wide Granite band in one piece not less than 1.80 RM in length for kitchen counter with mirror polish champhered edges complete as per Architectural working drawing.Making hole/sleeves for Gas pipe as per drawing. Rate should include chasing walls, floors to embed vertical supports and counter top using CM 1:2 including making cutout for for kitchen sink, core cutting for pillar cock, bottle trap etc. complete as per directions & instructions of the Architect. Basic rate of stone is Rs.100-150 / Sq.ft	18.00	Rmt		
	<b>Total</b>				

Sr. No.	Item Description	Qty	Unit	Rate	Amount
11	<b>DOOR / ROLLING SHUTTER</b>				
11.01	<p><b>Entrance Door : Double leaf Thin Profile Glass Door: Ground floor</b>  Providing &amp; Fixing of STL45 Double Leaf thin profile Glass Door System of Sonic , Kubik, Dorma, Saint Gobain, Ozone or equivalent as per approved make by Architect/EIC.  Work inclusive with 6063-T6 grade duly Anodized / Powder coated Aluminium Sections having sizes of 45x55x1.5mm thick, 10 mm Toughened Glass of Saint Gobain, Modi guard , Aasahi Float.  Fixing of approved Quality SS 304 grade Door Closure, Hinges, SS Handle (H Type 450mm), SS Bottom Lock, Thermoplastic Gaskets &amp; Screw Caps etc. Item includes all necessary fitting/ fixing, fixtures of approved make complete as per specification, drawing, approval and instructions of the Architect/EIC. Rate shall be inclusive of all material loading unloading at all height and all floors. Sample mock shall be approved from Architect/EIC.</p>	5.00	Sq.mt		
11.02	<p><b>Single Leaf Flush Door finish with laminate with view panel wherever required: Basement - Ground floor to Terrace floor Lvl</b>  Providing and fixing factory made solid core Single shutter flush door 40 mm thick of Greenply, Century, Nippon, Merino as approved make by Architect/ EIC.  finished with both side 1 mm thick laminate as approved sample.  Hardware: SS 316 grade Dorma, Geze, Haffle, Enox, Kitch make as per sample approved by the Architect/EIC.</p> <ul style="list-style-type: none"> <li>• Surface Mount Door Closer 80 KG weight capacity.</li> <li>• Ball Bearing Butt Hinge : 4 Nos. 125mm x 3mm SS Butt Hinges fixed with SS Screw</li> <li>• Mortaise Handle with Lock</li> <li>• Euro profile</li> <li>• Wall Mounted Door Stop : 1 no, 90 mm SS Door Stopper fixed with SS Screw</li> </ul> <p>work complete including all type of hardware, fittings, fixtures as per instruction of Architect/EIC etc complete as per detailed drawings and specifications. sample mock shall be approved from Architect/EIC. Equivalent to VNR Series Laminate.</p>	92.00	Sq.mt		
11.03	<p><b>Single leaf Thin Profile Glass Door: Entrance of E lobby : Ground floor</b>  Providing &amp; Fixing of STL45 Single Leaf thin profile Glass Door System of Sonic , Kubik, Dorma, Saint Gobain, Ozone or equivalent as per approved make by Architect/EIC.  Work inclusive with 6063-T6 grade duly Anodized / Powder coated Aluminium Sections having sizes of 45x55x1.5mm thick, 10 mm Toughened Glass of Saint Gobain, Modi guard , Aasahi Float.  Fixing of approved Quality SS 304 grade Door Closure, Hinges, SS Handle (H Type 450mm), SS Bottom Lock, Thermoplastic Gaskets &amp; Screw Caps etc. Item includes all necessary fitting/ fixing, fixtures of approved make complete as per specification, drawing, approval and instructions of the Architect/EIC. Rate shall be inclusive of all material loading unloading at all height and all floors. Sample mock shall be approved from Architect/EIC.</p>	3.00	Sq.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
11.04	<p><b>Cash room Door : Ground floor</b>  Providing &amp; Fixing in position MS door of size having overall width 1200mm and height 2235mm. Other details as under:  (i) frame made of 50 mm x 50 mm x 6 mm MS angle fixed to wall / RCC with 4 nos of hold fasts on each side.  (ii) Door shutter frame made of 40 mm x 40 mm x 6 mm MS angle on perimeter with 20 gauge MS sheet fixed all-over on outer side  (iii) Providing and fixing 16mm round MS bar @ 75 mm c/c vertically and 4 nos. 32 mm x 6mm, MS flat horizontally on door back side.  (iv) shutter will have 1 nos. Aldrops 400 mm long x 25 mm dia MS Rod  (v) Approved make concealed Kadaka lock with bars 8 mm dia , 2 nos for top and bottom locking.  (vi) item include applying premium red oxide and semi gloss enamel, paint to all surfaces.</p>	2.00	Sq.mt		
11.05	<p><b>Mechanically Operated Rolling Shutter : Ground floor : Entry , Exit , E lobby entrance</b>  Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters. 80x1.25 mm M.S. laths with 1.25 mm thick top cover including providing and fixing ball bearing for rolling shutters, providing mechanical device chain and crank operation for operating rolling shutters etc. complete in all aspects.  The rate to include applying a priming coat of approved steel primer with two 2 or more coat of synthetic enamel paint.  (Outer dimensions including hood will be measured for payment purpose.)</p>	38.00	Sq.mt		
<b>Total</b>					
<b>12</b>	<b>WINDOW / VENTILATION</b>				
12.01	<p><b>Window type 01 : 6 shutter window with Mosquito net ( 4 shutter fixed + 2 shutter sliding glass ) : SGU glass</b>  Supply &amp; Fixing of Sliding window with powder coated of JINDAL/VITCO/Hindalco/BANCO make as per approved Architect/EIC.  Section series : Domal 27 mm series  Frame &amp; Track section : ART- 2007873 3 track, ART-1007983, ART-1007871, ART - 1008093  Glass : 6mm thick toughened ET-125 glass standard compay of Saint Gobain/Aasahi Float/Modi Guard  Mosquito Net : 18x24 fly proof stainless steel grade 304 wire gauge jali  27 mm series Domal Aluminium sliding window section standard company with powder coating 55microne, EPDM gasket(neoprene rubber), s.s mosquito net, 6mm thick toughened ET-125 series glass, wethering strips(track woolen), vergin pvc polymer of roller(bearing) company of aries, consil lock aries, other necessary fixtures and fastenings as per drawing and specification.  including concealed lock, albose, other necessary fixtures and fastening, PVDF rollers, EPDN gasket, silicon sealent etc. complete as per detailed drawings.Work shall complete includes all type of tools,tackles, all level &amp; Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC.</p>	86.00	Sqmt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
12.02	<b>Fixed Glass :</b> Same as per above specification but for fixed glass for complete work .	18.00	Sqmt		
12.03	<b>Window type 02 : 4 track window with Mosquito net ( 2 track fixed + 2 track sliding ) : SGU glass</b> Supply & Fixing of Sliding window with powder coated of JINDAL/VITCO/Hindalco/BANCO make as per approved Architect/EIC. Section series : Domal 27 mm series Frame & Track section : ART- 2007873, ART-1007870, ART-1007871, ART - 1008093 Glass : 6mm SGU fix thick ET-125 glass standard compay of Saint Gobain/ Aasahi Float/ Modi Guard Mosquito Net : 18x24 fly proof stainless steel grade 304 wire gauge jali or as per approved by architect/EIC. 27 mm series Domal Aluminium sliding window section standard company of BANCO or equivalent with powder coating 55microne, EPDM gasket(neoprene rubber), s.s mosquito net, 6mm SGU fix thick ET-125 glass standard compay of saint-gobain, wethering strips(track woolen), vergin pvc polymer of roller(bearing) company of aries, consil lock aries, other necessary fixtures and fastenings as per drawing and specification, including concealed lock, albose, other necessary fixtures and fastening, PVDF rollers, EPDN gasket, silicon sealent etc. complete as per detailed drawings.Work shall complete includes all type of tools,tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC., including concealed lock, albose, other necessary fixtures and fastening, PVDF rollers, EPDN gasket, silicon sealent etc. complete as per detailed drawings. Work shall complete includes all type of tools, tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC.	65.00	Sqmt		
12.04	<b>Window type 03 : 2 track sliding window with Mosquito net : SGU glass</b> Supply & Fixing of Sliding window with powder coated of JINDAL/VITCO/Hindalco/BANCO make as per approved architect/EIC. Section series : Domal 27 mm series Frame & Track section :- ART- 2007873, ART- 1007870, ART-1007871, ART - 1008093 Glass : 6mm SGU fix thick ET-125 glass standard compay of Saint Gobain/Aasahi Float/ Modi Guard Mosquito Net : 18x24 fly proof stainless steel grade 304 wire gauge jali or as per approved by architect/EIC. 27 mm series Domal Aluminium sliding window section standard company with powder coating 55microne, EPDM gasket(neoprene rubber), s.s mosquito net, 6mm thick toughened ET-125 series glass, wethering strips(track woolen), vergin pvc polymer of roller(bearing) company of aries, consil lock aries, other necessary fixtures and fastenings as per drawing and specification. including concealed lock, albose, other necessary fixtures and fastening, PVDF rollers, EPDN gasket, silicon sealent etc. complete as per detailed drawings.Work shall complete includes all type of tools,tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC.	52.00	Sqmt		



Sr. No.	Item Description	Qty	Unit	Rate	Amount
12.05	<p><b>Window type 04 : Vertical sliding (2 Fixed + 2 openable ) : SGU glass</b>  Supply &amp; Fixing of Sliding window with powder coated of JINDAL/Banco/BANCO make as per approved architect/EIC.  Section series : Domal 45 mm series  Frame &amp; Track section : ART- 2007873, ART- 1007870, ART-1007871, ART - 1008093  Glass : 6mm Toughened glass thick ET-125 glass standard compay of Saint Gobain/Aasahi Float/ Modi Guard  45MM Aluminium Heavy PARTLY FIX GLASS AND PARTLY OPENBLE WINDOW section standard company of BANCO with powder coating 55microne, EPDM gasket (neoprene rubber), 6mm Toughened glass thick ET-125 glass standard compay of saint-gobaint, other necessary fixtures and fastenings as per drawing and specification, including concealed lock, albose, other necessary fixtures and fastening, PVDF rollers, EPDN gasket, silicon sealent etc. complete as per detailed drawings.Work shall complete includes all type of tools,tackles, all level &amp; Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC.</p>	37.00	Sqmt		
12.06	<p><b>Window type 05 : 2 track sliding window with Mosquito net : SGU glass</b>  Supply &amp; Fixing of Sliding window with powder coated of JINDAL/VITCO/Hindalco/BANCO make as per approved architect/EIC.  Section series : Domal 27 mm series  Frame &amp; Track section :ART- 2007873, ART- 1007870, ART-1007871, ART - 1008093  Glass : 6mm SGU fix thick ET-125 glass standard compay of Saint Gobain/Aasahi Float/Modi Guard  Mosquito Net : 18x24 fly proof stainless steel grade 304 wire gauge jali  27 mm series Domal Aluminium sliding window section with powder coating 55microne, EPDM gasket(neoprene rubber), s.s mosquito net, 6mm SGU fix thick ET-125 glass, wethering strips(track woolen), vergin pvc polymer of roller(bearing) company of aries, consil lock aries, other necessary fixtures and fastenings as per drawing and specification, including concealed lock, albose, other necessary fixtures and fastening, PVDF rollers, EPDN gasket, silicon sealent etc. complete as per detailed drawings.Work shall complete includes all type of tools,tackles, all level &amp; Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC.</p>	46.00	Sqmt		
12.07	<p><b>Toilet ventilator</b> : Providing and fixing standard extruded of Alluminium section of size 63mm x 38.10mm x 1.2mm (Jindal Section :2434, @ Wt. 0.643 Kg/mt) anodised with Powder Coated alluminium frame for ventilation with 5 mm thick frosted glass for louvers &amp; fix part as details etc complete as per detailed drawing with provision of exhaust fan. for Ventilation. Work shall complete includes all type of tools,tackles, all level &amp; Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. Make: JINDAL/VITCO/Hindalco/BANCO</p>	21.00	Sq.mt		
<b>Total</b>					

Sr. No.	Item Description	Qty	Unit	Rate	Amount
<b>13</b>	<b>RAILING</b>				
13.01	<p><b>Staircase Railing : All Floor Lvl:</b>  Providing and fixing stainless steel (Grade 316 - Matt finish) knock down railing system comprising of 50mm dia handrail, fixed on 50 mm dia round baluster placed at maximum 1200mm c/c along with 3 Nos. of 16 mm dia parallel mid rails connected at the side of baluster with fixtures.  The balustrade would be fixed onto floor with base plate (SS 316 grade) of minimum 6-8 mm thickness anchored down on slab with Hilti fasteners. Base plate shall be concealed with suitable S.S. cover cap so that the mounting anchor fasteners are not visible after installation.  Wall thickness of all pipes shall be taken as 1.5mm along with all visible components developed in High Grade S.S. and whenever required, joints to be filled with bushings for extra strength. Railing height to be taken at 1000mm from floor level.  Rates should be inclusive of welding, grinding, buffing, polishing and making curvature (wherever required) fixing the railing with necessary accessories &amp; stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer/Architect.  Work shall complete includes all type of tools, tackles, all level &amp; Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. Note : For payment purpose, length of handrails will be taken (between two outer balusters) excluding the length of railing beyond balustrades.  (i) Using Stainless Steel Grade 316 Sections.</p>	63.00	Rmt		
13.02	<p><b>Staircase Wall side Railing : All Floor Levels:</b>  Providing and fixing knock down wall mounted handrail system comprising 50mm dia.  Stainless steel pipe handrail (SS 316 - Matt Finish) mounted on the wall through wall brackets &amp; anchor fasteners which will be placed at maximum 1200mm c/c distance and as per site requirement.  Wall thickness of all Pipes shall be taken as 1.5mm along with all visible components developed in High Grade S.S. and whenever required, joints to be filled with bushings for extra strength.  Wall Handrail height to be taken at 1000mm from floor level.  Rates should be inclusive of welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, including fixing the railing with necessary accessories &amp; stainless steel dash fasteners, stainless steel bolts etc., of required size, on the side of waist slab/wall with suitable arrangement as per approval of Engineer / Architect.  Work shall complete includes all type of tools, tackles, all level &amp; Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC.  Note :Handrail Length will be measured from Starting to End  (i) Using Stainless Steel Grade 316 Sections.</p>	120.00	Rmt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
13.03	<p><b>SS 316 grade railing : Entrance Ramp</b></p> <p>Providing and fixing stainless steel (Grade 316 - Matt Finish) knock down railing system comprising of 50mm dia handrail, fixed on 50 x 50 mm S.S. Plain Square baluster placed at maximum 1200mm c/c with fixtures.</p> <p>The balustrade would be fixed onto floor with casted base plate of (SS316 grade) of minimum 6-8 mm thickness anchored down on slab with Hilti fasteners.</p> <p>Base plate shall be concealed with suitable S.S. cover cap so that the mounting anchor fasteners are not visible after installation.</p> <p>Wall thickness of all pipes shall be taken as 1.5mm along with all visible components developed in High Grade S.S. and whenever required, joints to be filled with bushings for extra strength.</p> <p>Rates should be inclusive of welding, grinding, buffing, polishing and making curvature (wherever required) fixing the railing with necessary accessories &amp; stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer/Architect.</p> <p>Work shall complete includes all type of tools,tackles, all level &amp; Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. Ht : 300 mm</p> <p>Note :Handrail Length will be measured from Starting to End (i) Using Stainless Steel Grade 316 Sections.</p>	8.00	Rmt		
13.04	<p><b>Alluminium profile glass railing : OTS cutout : First floor &amp; Sixth floor</b></p> <p>Providing and fixing of Aluminum Hand railing system of Kitch, Olive , Remson as per approved make by Architect /EIC.</p> <p>Railing comprising Ø 50mm Powder Coating Silver Finish Handrail fixed on 77x78mm Aluminum Block . Block will be conceal by Aluminum Powder Coating Silver Finish Cover.</p> <p>Block will be Fixed by Hilti GI M10x80mm Anchor.</p> <p>12mm Thick Toughened Glass will be used and Glass height will be upto 865mm.</p> <p>Railing height to be taken @ 915mm from floor level.</p> <p>Handrail Length will be measured from Starting to End.</p> <p>Rate should be inclusive of making glass with necessary drill counter with polished edge finish, top bracket to hold handrail, welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, fixing the railing with necessary accessories &amp; stainless steel dash fasteners, stainless steel bolts etc., of required size, on the side of waist slab/wall with suitable arrangement as per approval of Architect/Engineer.</p> <p>Work shall complete includes all type of tools,tackles, all level &amp; Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC.</p>	39.00	Rmt		
	<b>Total</b>				

Sr. No.	Item Description	Qty	Unit	Rate	Amount
14	ELEVATION FACADE				
	<p>NOTES</p> <p>A) The rates shall be inclusive of all materials, labours, transportation, hardware, tools- tackels, applicable as per statutory rules &amp; regulations etc.</p> <p>B) The rates shall be inclusive of Testing of all materials such as aluminium section, glass panels, silicon sealant etc and site tests.</p> <p>C) The rates shall be inclusive of working at all levels.</p> <p>D) The rates shall be inclusive of straight &amp; curved surfaces, Glass shall be plain &amp; straight. Only exposed external surfaces shall be measured &amp; paid (linear measurement)</p> <p>E) The rates shall be inclusive of well designed tubular framing, scaffolding, working platform etc. at all levels.</p> <p>F) The rate shall be inclusive of preparing shop drawings, design &amp; engineering drawings, approval of shop drawings from architects/Engineer. No additional cost will be paid if Architect makes changes in structural sections etc</p> <p>G) The said system shall also include engineering for including the LED Light fixtures within the said facade, whereas the item for said lighting is part of Electrical BOQ.</p> <p>H)Contractor shall submitt Shop drawing for all items for approval of Architect/ EIC.</p> <p>I) Guarantee for a minimum period of 10 years on non judicial stamp paper of required value as per format approved by Architect is to be submitted by the contractor.</p>				

Sr. No.	Item Description	Qty	Unit	Rate	Amount
14.01	<p><b>Double glazing unit : (DGU) : All floor levels</b></p> <p>Design, Supply, fabricating &amp; erection of Aluminium Frame Work for semi unitized (four side) structural glazing system to withstand the design wind pressure of 150 Kg/sqm conforming to IS-875 Part III (the system must pass the proof test at 1.5 times design wind pressure i.e. 225 kg/sqm) System incorporating aluminium mullion and transom section, Aluminium extrusions, Trims etc shall be duly anodised to minimum 20 micron, of approved shade with all necessary fittings, fixtures, S.S. screws, S.S anchor bolts, fastener (304) S.S. nut bolt, M.S. 'L' type bracket with hot dip galvanised 80 micron thick spacer tape, 15 mm dia backer rod with weather silicon DC-789/995, Gasket and hardware along with silicon sealant i.e. Dow Corning shall be used to ensure Stability and water tightness of the structure including necessary fine stoppage, EPDM gasket, clamping system, 6mm X 12mm spacer tape with silicon DC995. The system shall be designed to accommodate double glass unit / provision for the openable shutter wherever required / provision single unit glass / provision for insulated panel &amp; ACP cladding, including sub frame work / Sash frame section for glass unit etc complete &amp; as directed by Architect/Engineer.</p> <p>NOTE : Minimum size of sections - Mullion 100x60x2.5mm, Transom 100x60x2mm, Aluminium profile of required size . All other sections if required shall be of minimum 2mm thickness. All aluminium extrusions shall be of 6063 TS 5/6 alloy confirming to ASTN B 221.</p> <p>Providing and fixing advanced solar control double glass unit 6 mm thick and vacuum sealed, 6mm soft coat low e (heat strengthened ) of Gray colour + 12mm air gap + 6 mm clear heat strengthened glass unit with primary seal, secondary seal / spacer frame / spacer profile / spacer tape / dow corning sealant etc, structurally glazed on frame work. etc Complete. Approved make Saint Gobain - SGG Neutral EQUINOX N (Reflective toughened) or equivalent, compliant with LEED Green Building norms all as duly approved by Architect/ Engineer. work shall complete includes all type of tools, tackles, all level &amp; Height, labour, scaffolding, shop drawing mock sample etc complete as per the detailed drawing and instruction of EIC.</p>	295.00	Sq.mt		
14.02	<p><b>Opening in DGU : All Floor levels</b></p> <p>Extra for openable side / top hung vision glass panels (IGUs) including providing and supplying at site all accessories and hardwares for the openable panels as specified and of the approved make such as heavy duty stainless steel friction hinges, min 4 -point cremone locking sets with stainless steel plates, handles, buffers etc. including necessary stainless steel screws/ fasteners, nuts, bolts, washers etc. all complete as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer. The payment for the DGU glass shall be paid in a separate item as mentioned above and rate should be quoted only for framework of openable portion and its required fixtures as mentioned above. Work shall complete includes all type of tools, tackles, all level &amp; Height, labour, scaffolding, shop drawing mock sample etc complete as per the detailed drawing and instruction of EIC.</p>	141.00	Sq.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
14.03	<p><b>Spandrel panel shadow box : All Floor levels</b></p> <p>Extra as per item for providing and fixing the spandrel panel with the Glass wool insulation of 50 mm thick 48 kg/m<sup>3</sup> density slab with built in black/grey veil of 0.5 mm, firmly held on the GI tray of 1 mm thk. The assembly is kept atleast 50mm away from the Glass surface. DC 789 Sealant for sealing the GI tray with Aluminium system.Spandrel Glass (Coloured Glass,shade shall be as per Architect approval) 6mm Thk. H.S. Glass.all complete as per the approved shop drawings, as specified and as directed by the Engineerin- Charge. Shop drawing shall be provided by Contractor. Work shall complete includes all type of tools, tackles, all level &amp; Height, labour, scaffolding, shop drawing mock sample etc complete as per the detailed drawing and instruction of EIC.</p>	37.00	Sq.mt		
14.04	<p><b>Single glazing unit : (SGU) : All Floor levels</b></p> <p>Design, Supply, fabricating &amp; erection of Aluminium Frame Work for semi unitized (four side) structural glazing system to withstand the design wind pressure of 150 Kg/sqm conforming to IS-875 Part III (the system must pass the proof test at 1.5 times design wind pressure i.e. 225 kg/sqm) System incorporating aluminium mullion and transom section, Aluminium extrusions, Trims etc shall be duly anodised to minimum 20 micron, of approved shade with all necessary fittings, fixtures, S.S. screws, S.S anchor bolts, fastener (304) S.S. nut bolt, M.S. 'L' type bracket with hot dip galvanised 80 micron thick spacer tape, 15 mm dia backer rod with weather silicon DC-789/995, Gasket and hardware along with silicon sealant</p> <p>i.e. Dow Corning shall be used to ensure Stability and water tightness of the structure including necessary fine stoppage, EPDM gasket, clamping system, 6mm X 12mm spacer tape with silicon DC995.The system shall be designed to accommodate single glass unit/ provision for the openable shutter wherever required/ provision for insulated panel &amp; ACP cladding, including sub frame work / Sash frame section for glass unit etc complete &amp; as directed by Architect/Engineer. NOTE : Minimum size of sections- Mullion 100x60x2.5mm, Transom 100x60x2mm, Aluminium profile of required size. All other sections if required shall be of minimum 2mm thickness. All aluminium extrusions shall be of 6063 TS 5/6 alloy confirming to ASTN B 221.</p> <p>Providing and fixing advanced solar control Single glass unit 6 mm thick and vaccum sealed, 6mm Reflective toughened SGU glass with primary seal, secondary seal / spacer frame / spacer profile / spacer tape / dow corning sealant etc, structurally glazed on frame work. etc Complete. Approved make Saint Gobain - SGG Neutral EQUINOX N ( Reflective toughened SGU glass) or equivalent, compliant with LEED Green Building/IGBC norms all as duly approved by Architect / Engineer. Work shall complete includes all type of tools, tackles, all level &amp; Height, labour, scaffolding, shop drawing mock sample etc complete as per the detailed drawing and instruction of EIC.</p>	745.00	Sq.mt		
14.05	Opening in SGU: Same as per above It no. 14.02 Specification for Complete work	355.00	Sq.mt		
14.06	Sprandral in SGU: Same as per above It no. 14.03 Specification for Complete work	83.00	Sq.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
14.07	<p><b>Fixed Glazing (Spider fittings):</b>  Design, supply &amp; installation of suspended Spider Glazing system designed to withstand the wind pressure as per IS 875 (Part-III). The Suspended System held with Spider Fittings of SS-316 Grade Steel of approved manufacturer with glass panel having 12 mm thick clear toughened glass held together with SS- 316 Grade Stainless steel Spider &amp; bolt assembly with laminated glass fins 21 mm thick. The Glass fins and glass panel assembly shall be connected to Slab/beams by means of SS- 316 Grade stainless steel brackets &amp; Anchor bolts and at the bottom using SS channel of 50x25x2mm using fastener &amp; anchor bolts, non staining weather sealants of approved make, Teflon/ nylon bushes and separators to prevent bi-metallic contacts, all complete to perform as per specification and approved drawings. The complete system to be designed to accommodate thermal expansion &amp; seismic movements etc. The joints between glass panels (6 to 8 mm) and gaps at the perimeter &amp; in U channel of the assembly to be filled with non staining transparent weather sealant, so as to make the entire system fully water proof &amp; dust proof. The rate shall include all design, Engineering and shop drawing including approval from structural designer, labour, T&amp;P, scaffolding, other incidental charges including wastage, enabling temporary services all fitting fixers nut bolts, washer, Buffer plates, fastener, anchors, SS channel laminated glass etc. all complete.  Work shall complete includes all type of tools, tackles, all level &amp; Height, labour, scaffolding, shop drawing, mock sample etc complete as per the drawing and instruction of EIC.</p>	56.00	Sq.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
14.08	<p><b>ACP Cladding : ( 4 mm : 0.50mm + 3 mm + 0.50 mm ) :</b>            Designing, framing testing, installing and fixing in position Aluminium Composite Panel Cladding of blue colour, of Aludecor/ Alstone/Eurobond/Viva as per approved make by Architect / EIC with open grooves for linear as well as curvilinear portions of the building, for all heights and all levels etc. including</p> <p>a) Structural analysis &amp; design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design.</p> <p>b) Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in colour of approved shades made out of 4mm thick aluminium composite panel material consisting of 4mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated, with Kynar 500 based PVDF / Lumiflon based fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, dowerning weather silicone sealant (789), backer rods etc.</p> <p>c) The fastening brackets of Aluminium alloy 6005 T5 / MS with Hot Dip Galvanised with serrations and serrated washers to arrest the wind load movement, fasteners, SS 316 Pins and anchor bolts of approved make in SS 316, Nylon separators to prevent bi-metallic contacts all complete required to perform as per specification and drawing. The item includes cost of all material &amp; labour component, the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests aluminium composite panel cladding, cleaning and protection of the aluminium composite panel cladding till the handing over of the building for occupation.</p> <p>The Contractor shall provide aluminium composite panel cladding, having all the performance characteristics all complete, as per the drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Architect /Engineer. However, for the purpose of payment, only the actual area on the external face ( L x d ) of the Aluminum Composite Panel Cladding (including width of groove) shall be measured in sqm. up to two decimal places. Base aluminium / MS framing for ACP cladding is inclusive item as mentioned above. The rate shall be for complete item inclusive of all material, labour, wastages, necessary tools &amp; tackles, scaffolding , adhesives consumable hardware &amp; required accessories, grooves etc of approved make for all floors, all heights, all levels and all places within campus. Contractor shall do all the needful and shall fulfill Architects design intent. No additional claims will be entertained for this.</p>	68.00	Sq.mt		
14.09	<p><b>ACP Cladding : Rugged Brown FR B1 ( 4 mm : 0.50mm + 3 mm + 0.50 mm )</b>            " -----Do-----" as per above specification for complete work.</p>	404.00	Sq.mt		



Sr. No.	Item Description	Qty	Unit	Rate	Amount
14.10	<p><b>Exterior Louvers : U Shaped Screen P25 Series Exterior Louvers System</b></p> <p>Suppling and installing of U Shaped Screen P25 Series Exterior Louvre System of Metalium, Supersil, Hunterdouglas as per approved make by Architect/EIC.</p> <p>Work comprising 100mm deep flanged panels are 0.50 mm TCT Galvanized Steel as per IS-513. Panel length is up to approx. 3 mtr. Panel shall be Rustic finish 65 micron thick powder coated on external surface only. P-25 Carrier shall be 20mm wide with cutouts to hold the panel in a module of 75mm centre to centre to maintain space between two panels, carrier shall be roll formed out of 0.61 mm Galvanized steel and cut to a standard length of 2.4 mtr. with maintaining the module of Panels. at a distance of 1 mtr. Carrier and suitable structure shall be powder/ coil coated on exterior face to enhance properties of Fadedness and corrosion resistivity. GS black L Clit shall be fixed on vertical columns with dash fasteners at distance not more than 1 mtr. Centre to centre on which GS Tubular sections will be laid with corrosion proof screws and on this rigid structure carrier shall be fixed vertically/ horizontally at distance of 1 mtr. Centre to centre. Panel shall be clipped to U shaped carriers.</p> <p>Work shall complete includes all type of tools, tackles, all level &amp; Height, labour, scaffolding, shop drawing mock sample etc complete as per the detailed drawing and instruction of EIC.</p>	416.00	Sq.mt		
<b>Total</b>					
<b>15</b>	<b>CANOPY / ROOF</b>				
15.01	<p><b>SPIDER CANOPY WITH TRUSS FITTINGS : Entrance canopy : Ground floor</b></p> <p>Designing providing, erecting, hoisting &amp; placing in position laminated glass canopy on stainless steel spider system suspended designed as per I.S code, considering wind pressure 150 kg/sqmt (design wind pressure 150 x1.5=225 kg/sqmt) including approved weather sealant, SS spider system grade 316 with articulated bolt assembly in SS of 316 grade fasteners and anchor bolts of 304 grade of approved make.Teflon/nylon bushes and seperators to prevent bi metallic contacts SS 1mm flashing at wall side and sealing with approved sealant, drainage gutter at canopy junction &amp; including design, glass panel of 17.52 mm thick clear laminated in combination of 10mm thick 1.52 mm PVB plus 6mm Clear float glass (tampered) with necessary drill counter with polished edge finish complete in all aspects and as directed by Architect / Engineer.</p> <p>NOTE: Mode of measurement-Top plan area (Length x Width).Rate shall include cost of SS cables- 304 grade having high tensile strength for support.Work shall complete includes all type of tools, tackles, all level &amp; Height, labour, scaffolding, shop drawing mock sample etc complete as per the detailed drawing and instruction of EIC.</p>	28.00	Sq.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
15.02	<p><b>Polycarbonate sheet roof :Terrace floor</b></p> <p>Polycarbonate Roofing Sheet as per final approved drawing on M.S. Structure as per design submitted. Fabrication, Erection and Paint on M.S. Structure as per design finalized. Supply &amp; Installation of Standing Seam.</p> <p>Polycarbonate Roofing Sheet Specification:</p> <p>Type of Roofing Sheet: Standing Seam Multiwall Modular Panel Sheet</p> <p>Make: Coxwell Domes, Lexan, Sebic</p> <p>Thickness: 10mm, UV Coating: Both Side</p> <p>Paint Specification: 1 Coat epoxy coating and 2 Coat Enamel Paint of Make Asian, Burger</p> <p>M.S. Pipe Make: SAIL ,TATA, Jindal, Apollo/ Asian</p> <p>Including cost of all type of tools, tackles, scaffolding, all labour, materials, transportation, Finishing, all type of fabrication &amp; steel work with paint, accessories, silicon sealent,. Work complete for at all floor, all level, all depth, all Height, all lead and lift etc. work complete as per the Detailed specification, shop drawing, approved sample, instruction of Architect/EIC. Sample mock shall be approved from Architect/EIC. Top Plan area shall be measured for payment.</p>	61.00	Sq.mt		
	<b>Total</b>				

Sr. No.	Item Description	Qty	Unit	Rate	Amount
16	<b>FABRICATION</b>				
16.01	<p><b>Fabrication : All floor Levels</b></p> <p>Designing , Supplying, fabricating, assembling, hoisting and fixing in position to alignments &amp; levels as per approved shop drawings, structural steel work in-built up for building facade etc. to detail welded (welding as specified by the structural consultant) / bolted constructions comprising R.S. joists, channels, angles, plates or any MS rolled section including necessary permanent rivets, bolts &amp; nuts, handling straightening, cutting, making holes, shop / site assembly, erection, (including preparation of template) transport to site, storing, etc., and painting with shop/site of zinc chromate primer coat prior to erection and two or more coats of first quality enamel paint of Asian make or approved equivalent and quality etc.</p> <p>Painting Procedure :</p> <p>Providing and applying enamel paint of Asian make or equivalent and desired shade, including the preparation surface (with emery paper 180 and wipe clean) by thoroughly cleaning all dust, dirt, applying epoxy coating and putty of again sand papering of (emery paper 180 and wipe clean) again applying primer again sand papering of (emery paper 320 and wipe clean) levelling rubbing the surface, to be free from undulation/ waviness, applying 1st coat of paint &amp; 2nd coat of paint ) at all heights below and above highest plinth level, scaffolding / staging, as required complete as directed. (Payment will be made on the basis of standard section weights for net weight erected in position excluding rivets, temporary bolts, etc., but payment will be made for permanent bolts, nuts and washers.)</p> <p>Contractor shall submit Shop drawing for all items for approval of Architect/ Authority.The rate shall be for complete item inclusive of all material, labour, wastages, necessary tools &amp; tackles, scaffolding ,shop drawing , stability certificate ,etc for all floors, all heights, all levels and all places within campus. Contractor shall do all the needful and shall fulfill Architect design intent. No additional claims will be entertained for this.</p>	26835.00	Kg		
	<b>Total</b>				
	<b>Grand Total Amount</b>				
	<p><b>Note: The rate of each item includes all the material, labour, tools, machenaries, transportation including labour for loading &amp; unloading, lead and lift up to all levels , required centering &amp; shuttering, tower crane, temporary arrangements for safety measures for material as well as labour for proper completion of the item and applicable for working at all levels.</b></p>				

**Construction Of A Multi-Storey Building (Lower basement + Upper basement +Ground floor to sixth floor) including civil, plumbing, Electrical and Other Services (Green Building With Gold Rating in Leed /Griha) For State Bank Of India At Final Plot No.116, T.P. Scheme No. 3, Bhayali, Vasna-Bhayali Road Vadodara (Gujarat)**

**External Development, Security Cabin, Compound wall works**

Sr. No.	Item Description	Qty	Unit	Rate	Amount
	<b>Preamble</b>				
	<b>Rate shall be inclusive of following :</b>				
i	The serviceable and unserviceable materials shall be stacked separately and properly in the designated place and to be Stacked/Stored at designated till the disposal / reuse of the same. The debris, excess materials is to be carted outside the premises and disposed off at the Municipal Corporation designated place up to any lead, lift and level by the Contractor at his own cost.				
ii	All the civil work has to be carried with 53 grade OPC cement to be use for concreting and in plastering & waterproofing works PPC cement can use. cement and VSI, grade crush sand, of required fineness, which must be free from silt and other impurities				
iii	All the civil work , whether new or repair, must be cured for at least 7 days preferable by ponding, using gunny bags etc.				
iv	For all work, water to be use must be fresh, potable and pure without any salinity and turbidity.				
v	The rates quoted for all the items of the BOQ shall include the following specifications: -				
a	All the works are to be carried out at all heights and locations i.e. from foundation level, Ground Floor of the building up to the Over Head Water Tank roof slab or Mumty roof slab, as applicable.				
b	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to any height (entire height) of the building structure made out of 40 mm dia. M.S. tubes, 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding including the working platform etc. and maintaining it in a serviceable condition for the entire required duration as approved and directed by the Client/EIC & removing it thereafter.				

Sr. No.	Item Description	Qty	Unit	Rate	Amount
c	The scaffolding system shall be stiffened with bracings, runners, connection with the building fascia etc. wherever required & including providing vertical supports which shall be sound and strong, tied together with horizontal steel / metal support pieces over which scaffolding planks shall be fixed properly & secured at required locations including the essential safety features for the workmen etc. complete as per directions and approval of Client/EIC. Note: - The scaffolding shall not be removed without prior approval of Client/EIC.				
d	Providing & fixing temporary support arrangements such as Steel Props (Up to any number whenever and wherever as directed by the SBI/APMC) to support the structure provisionally during the project duration for all trades of work, etc. and maintaining the props in position till required & as directed by the consultant including other safety elements such as bracings, steel angles, working platforms, plates etc., which shall be provided & considered in the quoted rates for the areas in the vicinity in adequate numbers as directed. All trades of works indicated herein under shall include all leads & lifts & working up to any heights, depths & levels.				
e	Providing & fixing safety net around the work so that loose plaster/ concrete does not cause damage to the property or any human being, if necessary and removing the same after completion of work.				
f	Providing all type of PEE ( Personal protective Equipment) to the workforce such as safety shoes, safety helmets, reflective safety jacket, full body safety harness, goggles, gloves, etc. complete for all types of workforce engaged on site for execution of the work.				
g	The quoted rate should include cost of necessary scaffolding, staging, centring, shuttering etc. as required for execution of the job at any height and location including removal of same. The scaffolding should be erected and anchored into the concrete members with help of expandable bolts, which are to be cut as the scaffolding is removed, no wall is to be punctured, at no extra cost to the Bank.				
h	Rates shall be inclusive of all enabling works like tower cranes all safety measures, aerial lift, man & material lift, Temporary lift, scaffolding, Cup lock system, labour camp, storages, godowns, all required permissions from local governing respective authorities to carry out the works, all insurances, all licenses, administration, all S.H.E. (Safety, Health, Environment) related measures, security , watch and ward measures, barricades other than specified, traffic management, tree protection, property damage repairs, water, electricity, DG as per requirement, all tools, machineries, vehicles, etc. Complete.				

Sr. No.	Item Description	Qty	Unit	Rate	Amount
i	Before starting of Excavation NGL levels shall be got verified and approved by Client/EIC and RL levels to be at the top of different layer and based on the difference levels excavation qty shall be calculated. Area for excavation shall be arrived by adding max 0.6m on each from RCC side working space around Foundation/Raft as per direction from Client/EIC.				
j	All rates should be inclusive all loading, unloading, shifting, all leads, lifts, sorting, transportation, labours, tools, plants, machinery, etc. Complete				
k	All the above-mentioned points including the requisite elements & items as mentioned shall be considered included within the quoted rates of the line items of the BOQ and nothing extra would be paid on this account.				
l	Though Locations of execution are mentioned for specific items, Contractor have to execute those all items at all required/necessary locations at no extra cost as per direction from Client/EIC.				
m	Contractors to be fully equipped with regulations/guidelines available at their site and guidelines/rules are to be followed by contractor till the completion of the project.				
	<b>Earth work</b>				
	Excavation in all kinds of soil, including soft murum, hard murum, soft rock : Earthwork in Excavation, manually or by mechanical means, for foundation of walls, column footings, pile caps, raft, foundations, plinth beams, steps, water tanks, cess pits, etc., in all kinds of soil, including soft murum, hard murum, soft rock, boulders (upto 0.10 cum) shoring the sides wherever necessary, bailing/pumping out sub-soil /rain water and keeping the foundation trenches and pits dry including carting away surplus materials to the places approved by Municipal authorities all complete as directed. Rate to include necessary cost towards transportation of remaining material rendered surplus out side the Bank's premises/site and disposing the same to approved municipal yard with all lead and lift including labour for loading, unloading surplus excavated earth complete as directed by the Bank. Excavation as per drawing or actual excavation at site, whichever is less shall be considered for payment.				
1	a) Excavation Up to 1.5 Mtr Depth below natural Ground Level.	117.00	Cu.mt		
2	b) Excavation depth 1.50 mtrs to 3.00 mtrs and more from natural Ground Level	20.00	Cu.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
3	<p>Earth Filling With Surplus Excavated Approved Quality Soil :</p> <p>Filling approved quality available excavated surplus earth (excluding rock) in plinth protection, under floors, etc. in layers not exceeding 20cm in depth including spreading the earth, consolidating each deposited layer by ramming and watering including all lead, lift and transportation within the site/plot/premises as directed by Engineer-in-charge.</p>	65.00	Cu.mt		
4	<p>Supplying approved quality selected earth / hard murrum brought from outside (at contractor's cost) and filling the same in plinth, plinth protection, trenches, around drains, boundary walls, low lying areas for levelling etc. including removing debris, organic matter, etc and spreading in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming (mechanically or manually), watering, dressing, de-watering, if required, to keep site dry while back filling all complete as per specifications and instructions of Engineer In Charge.</p> <p>The rates includes transportation of materials, taking permission of local authorities and paying royalty etc. complete as per the direction of Engineer-in-Charge.</p>	204.00	Cu.mt		
5	<p>Sand Filling :</p> <p>Supplying and filling approved quality Narmada sand in plinth, trenches, under floors etc., in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming (mechanically or manually), watering, ramming, consolidating and dressing etc. complete. a) Using approved quality silt free natural River Sand.</p>	60.00	Cu.mt		
6	<p>Rubble Soling :</p> <p>Providing and laying 230mm thick dry rubble soling using locally available approved quality stones, hand laid, well rammed, watered and consolidated, including filling the gaps/interstices/voids using quarry spalls and/or hand broken metal or shingle and blinding the same with stone grit murum, etc., compaction with mechanical/vibratory roller etc. complete as directed by the Engineer-in-charge.</p> <p>Note : Rates are including preparing the sub-grade to the required level and working to the required level, gradient, watering etc.</p>	119.00	Cu.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
	<b>ANTI TERMITE TREATMENT</b>				
7	<p>Pre-Construction Treatment :</p> <p>Carrying out pre-construction Anti-termite treatment using approved Chemical at various stages of construction as per IS 6313:2013 and as recommended by the chemical manufacturer to safeguard the building against termite including execution and submission of guarantee for a period of 10 years (On non judicial stamp paper of required value as per format approved by Architect/EIC) against any subterranean pests infestation. The work should be got executed through specialised agencies approved by the Architect/EIC.</p> <p>1st stage: Treatment to soil below foundation PCC.</p> <p>2nd stage: Treatment to soil below grade slab / plinth level slab.</p> <p>3rd stage: Treatment of soil along external perimeter of building including Plinth protection.</p> <p>Mode of Measurements: Only Plan area of Lower basement shall be measured for payment.</p> <p>Approved Agencies: Pidilite/Bayer/ Ultratech/ PCI / Godrej HI-CARE</p>	8.00	Sq.mt		
	<b>CONCRETE WORK</b>				
	<b>PREAMBLE:</b>				
	Contractor to ensure the following while quoting their rates for all Concrete/RCC work:				
	Including all shuttering material used for concreting / RCC Work should be of good quality using waterproof ply/Steel plates etc. to ensure smooth finish.				
	The scope of work under the items includes execution of work at all heights and location including all shapes, curved walls, cambered beam etc. complete.				
	In case there is bulging / minor honey combing is noticed after removal of shuttering, the contractor will have to rectify the work at his own cost. The decision as to what constitute minor honey combing is left to the Engineer in charge.				
	The Contractor will be responsible for arranging "design of concrete mix" through approved Institute at their own cost within the quoted rates only and will submit the report to Bank/Architect for approval. No extra payment shall be eligible on this account.				
	Unless otherwise specified, only River Sand should be used. If the silt content is more than permissible limits, contractor will arrange washing of sand in rotary screw type washing machines within quoted rates and no extra payment shall be eligible for the same.				
	The flooring, raft & slab curing is to be done by ponding method only.				



Sr. No.	Item Description	Qty	Unit	Rate	Amount
	Checking of top level of slab should be done at every floor & it should be within IS tolerance limit / client requirement.				
	Frequency of testing for all materials like sand, aggregates, cement, steel, concrete should be as per IS standard.				
	The use of admixture, fly ash & crush sand should be as per concrete mix design.				
	Unless otherwise specified the cement to be used shall be Ordinary Portland Cement (OPC-53) of Ultratech, ACC, Lafarge or an equivalent make as approved by bank along with proportions of fly ash.				
8	<p>Plain Cement Concrete (PCC: Volumetric Machine Mix) : a) PCC 1:3:6 using 20 mm and downgrade metal (Coarse Aggregate).</p> <p>Providing and laying in position machine mix PCC (plain cement concrete) under foundation, plinth protection, floor slabs, grade slabs, coping, sill concrete etc. including transporting, laying, compacting, finishing the surface in line, level and plumb as per requirement and curing etc. complete. The Rate to include necessary formwork, centring, shuttering, complete in all respects and execution of work at all heights and location with required leads and lifts complete as directed by Engineer in charge.</p> <p>a) PCC 1:3:6 using 20 mm and downgrade metal (Coarse Aggregate).</p>	82.00	Cu.mt		
	<b>READY MIXED CONCRETE</b>				
	<p>Ready Mixed concrete : (Design Mix)</p> <p>Providing and laying in position (M35, M45) Ready mixed Reinforced Cement Concrete for various RCC structural elements in any shape and design as per structural drawings and as directed in Foundation, Plinth and Superstructure including Columns footings, Stub Columns, Raft, foundation, Plinth Beams, Floor Slabs etc. with cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer having continuous agitation, including pumping of R.M.C. from transit mixer to site of laying, spreading, compacting, finishing in line and level as per site requirements, including all level, lead, lift and cost of curing etc. complete.</p>				
	The Rate to include necessary formwork, centring, shuttering, including cost of admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability complete in all respects and execution of work at all heights and location with required leads and lifts etc. as directed by Engineer-in-charge. (Rate Excluding cost of reinforcement).				

Sr. No.	Item Description	Qty	Unit	Rate	Amount
	RMC : Ultratech/J K Cement/Birla/Godrej/Lafarge /ACC				
	M : 35 : Cement content considered in this items is @ 365 kg/cum. Excess/less cement used as per approved design Mix is payable/ recoverable separately M : 45 : Cement content considered in this items is @ 450 kg/cum. Excess/less cement used as per approved design Mix is payable/ recoverable separately				
9	M-35 grade Ready Mixed concrete: a.) Footing/Raft or any other type of RCC Foundation	129.00	Cu.mt		
	<b>REINFORCEMENT STEEL</b>				
10	TMT Bars (Thermo-Mechanically Treated bars): Providing, straightening, cutting, bending, binding and laying in position of TMT FE 500/500D or more grade steel reinforcement confirming to IS 1786 : 1990 or latest code, to correct all shape and size as per detailed drawings, specifications for all RCC work, piles etc, at all levels and all heights with necessary chairs and laps; with correct size CC cover blocks or approved quality concrete cover blocks of same grade of concrete and binding wire of 18 gauge etc. complete with test certificate of the steel bars from manufactures as well as approved laboratory test certificates directed by Engineer in charge, etc. complete. Rate shall be inclusive of cost of binding wire, chairs , hooks, Lap, welding , required labours, tools etc., complete for proper completion of work at all levels. Work shall complete up to any levels, all floor & as per the instruction of EIC. Make : SAIL/TISCON/JSW/RINL.	12500.00	Kg		
	<b>WATERPROOFING</b>				
	PREAMBLE : Make : Pidilite Industries Ltd. / Sika / Fosroc as approved by Architect/EIC All the waterproofing items shall be carried out by the reputed agency duly approved by the Architect/EIC The treatments shall be tested for water tightness and shall be guaranteed for water tightness in bone dry conditions for at least 10 years period. During this period, if any leakage is observed, the same shall be rectified by contractor through said agency to the satisfaction of bank witout any extra cost. The Gaurantee shall be furnished on Rs. 500/- non-Judicial stamp paper to cover all the above conditions. The gaurantee shall be furnished by the contractor in prescribed format jointly signed by authorized and approved agency to this effect.				

Sr. No.	Item Description	Qty	Unit	Rate	Amount
11	<p>Brick bat coba with China mosaic :</p> <p>Providing and laying in-position integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, terraces etc consisting of following operations:</p> <p>a) Applying neat cement slurry using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by the Bank over RCC slab including adjoining walls up to 300 mm height including cleaning the RCC surface neatly, removing mortar lumps, mortar splashings etc., if any, complete before treatment.</p> <p>b) Providing and laying maximum 20 mm thick cement mortar 1:4 (1cement : 4 coarse sand) admixed with water proofing compound (conforming to IS : 2645) at the rate of 1 kg/bag of cement or as per manufacturers' specifications, including laying in required position in flooring including curing the surface and testing the same for 7 days for water tightness.</p> <p>c) Laying brick bats in cement mortar using broken bricks/brick bats of 25 mm to 115 mm size with 50% of cement mortar 1:4 admixed with approved water proofing compound conforming to IS : 2645 followed by 20 mm thick layer of cement mortar 1:4 admixed with water proofing compound to required slope and treating adjoining walls up to 300 mm height and including rounding/vata at junctions of walls and slabs by following same process.</p> <p>d) After curing the surface by ponding for 5-7 days, finishing the surface with 20 mm thick cement mortar of mix 1:4 admixed with water proofing compound (conforming to IS : 2645) at the rate of 1 Kg per bag, Including providing and laying approved quality broken China Mosaic (broken pieces of China Chips) in approved colour, pattern and design in neat cement float, giving proper slops, compaction, curing, finishing prepaing bell mouth and through cleaning of finished china mosaic surface etc. as per sample approved by Architect/EIC. Rate includes similar finish and treatment to half round Watta at junction of roof / slab to parapet wall / coloumn etc. Mode of Measurement : Plan area inside parapet wall shall be measured for payment.</p> <p>e) The whole terrace so finished shall be flooded with water uptill height of rounded portion for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-charge.</p>	12.00	Sq.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
12	<p>UG Sump Well and OH Water Storage Tanks Waterproofing</p> <p>Providing and laying waterproofing and protective tank lining system through approved specialized agencies for U/G &amp; O/H storage tank internally consisting of:</p> <p>a. Cleaning the surface of the internal concrete surface of the floor as well as walls thoroughly by wire brushing and washing with high pressure water jet, to remove any loose laitance as well as contaminates, thereafter inspecting the concrete surface to identify any honeycombs, crack, voids or defects in the concrete such as cracks, construction joints etc., and sealing all such locations with solvent free epoxy mortar, using epoxy resin and hardener.</p> <p>b. Thereafter, providing and applying containment membrane lining system consisting of combination of epoxy and polysulphide formulation Epoxy Polysulphide formulation membrane lining cures to produce a tough, flexible coating system with excellent abrasion and chemical resistance and waterproof properties and consists of 2 component, which shall be applied in 2 coats by way of spray or roller to provide a minimum wet film thickness of 0.25 mm per coat with material consumption of approx. 0.3 Kg per Sqm per coat, all as per manufacturers recommendation etc. complete.</p> <p>c. Treatment used should be non toxic system, to be used in drinking water and potable water tanks, tested to BS 6920.</p>	13.00	Sq.mt		
<b>Masonry</b>					
13	<p>AAC Block Masonry : below plinth</p> <p>Providing and laying Autoclaved Aerated Cement (AAC) blocks masonry in Foundation and Plinth using 150mm/ 230mm/ 300 mm thick AAC blocks including providing 100 mm thick RCC band with 4 nos. 8 mm dia TMT bars and 8 mm dia TMT links at 300 c/c in cement concrete mix 1:2:4 at every 1.20 meterl with approved block laying polymer modified adhesive mortar including raking out joints, curing, scaffolding etc at all levels below plinth all complete as per direction of Engineer in-Charge.</p> <p>Make: Iolite, Siporex, Aerocon, Billtech, Ecolite, Ascolite Ultratech, Eco green, Brixo</p>	51.00	Cu.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
14	<p>Half Brick Masonry (Using Class Designation 75 Bricks) : Superstructure            Providing and constructing Half-brick masonry partition walls in Superstructure using locally available approved quality Class designation 75 Bricks, well (Kiln/Chimney) burnt, uniform size and colour having average crushing strength not less than 75 kg/cm<sup>2</sup>. In Cement Mortar 1:4 . Rate includes providing RCC patli beam 100mm thick including providing with 4 nos. 8 mm dia TMT bars and 8 mm dia TMT links at 300 c/c in cement concrete of mix M 20 at mid-height, lintel level etc. (height between two patli not exceeding 1.20m), required formwork etc. in proper line, levels and plumb including raking out joints, curing, necessary scaffolding, etc. complete at any floor height and levels as per the approved drawing and as per instructions of Architect /EIC. Rate should be quoted considering execution of work above plinth level upto and inclusive Floor Six+ terrace level).</p>	16.00	Sq.mt		
	<b>PLASTER</b>				
	<p><b>Note: The joints of all Masonry and RCC surfaces shall be treated with 16x24 Chicken mesh nailed with M.S. nails with atleast 75mm width on either side of surfaces making the total width of 150mm prior to take up plastering works. Cost of chicken mesh netting to be included in rates quoted for plaster works, at all joints of brick and concrete surfaces, with a minimum overlap of 100 mm in all directions and curing complete. No extra payment shall be made for additional thickness if required to achieve perfect line and level. Rate includes all material, labour, tools, scaffolding (single/ double), machenaries etc., required for proper completion of work at all levels.</b></p> <p><b>Note:- All plaster works Measurements shall be considered only as Surface Areas of application and no extra/separate payment for dhar, kani, groove, strips, bands etc.</b></p> <p><b>Only MS Scaffolds shall be used for the all Plastering , painting Works.</b></p> <p><b>Rate shall inclusive of all heights, Sub structure, Superstructure, lift &amp; leads, curing etc. Complete.</b></p>				
15	<p>Internal Wall Plaster: Providing and applying in position average 12 mm thick smooth finish cement Plaster in cement mortar 1:5 to all inetrnal walls, using fine or Coarse sand and adding polypropylene fibre of approved quality in desired quantity per bag of cement as per manufacturers specifications complete. Rate includes providing chicken mesh to all joints of RCC members with Brick walls in all positions in proper line, level &amp; plumb at all levels and heights with necessary scaffolding, cleaning of surfaces, raking out joints, roughening of surfaces ,curing etc complete as directed at site. Rate includes making Flush/raised/sunk or moulded bands of any width, recesses, making grooves etc. complete as per Architectural drawings and no extra payment shall be considered for the same.</p>	58.00	Sq.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
16	<p>External Plaster (Sand Face) : Elevation facade            Providing and laying in position external Sand Face Cement Plaster, average 18 mm thk, in two coats, at all heights with first coat of av. 12 mm thk in Cement Mortar 1:5 using natural silt free fine sand, and second coat of average 6 mm thickness in C.M. 1:4, including necessary staggging, scaffolding, curing, roughening the first coat to recieve second coat of plaster etc, providing approved water proofing compound @1 kg per bag of cement or as specified by the manufacturer and adding polyproplyne fibre of approved make as per manufacturers specifications to prevent shrinkage cracks, complete as directed by the Engineer-in-charge.</p>	417.00	Sq.mt		
	<b>PAINT</b>				
	<p><b>PAINTING WORKS</b>  <b>Note:- All works Measurements shall be considered only as Surface Areas of application and no extra/separate payment for dhar, kani, groove, strips, bands etc.</b>  <b>Only MS Scaffolds shall be used for the all painting Works.</b>  <b>Rate shall inclusive of all heights, Sub structure, Superstructure, lift &amp; leads, curing etc. Complete.</b>  <b>Painting works to be done by authorised applicator only. Certificate / registration of the same to be submit to SBI before starting of the work.</b></p>				
17	<p>Acrylic Emulsion Paint on new surface ( Interior Paint) : Ground floor to 6th floor + Terrace lvl            Providing and applying 2 or more coats of approved Acrylic Emulsion paint with roller finish over a coat of primer on internal walls including necessary scaffolding etc. complete as per manufacturers' specifications. Make:- Asian / Nerolac / Berger / Dulex            Providing and applying 2 or more coats of Birla putty on internal walls of average thickness of 3 to 4 mm in line &amp; level including its rubbing with sand paper to ensure smooth &amp; even surface including necessary scaffolding etc. complete.            Make :- Birla/Jk/Asain/Jotun/ Nerolac or approved equivalent make</p>	37.00	Sq.mt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
18	<p>Texture Paint : Exposed RCC look texture(Archi concrete) : Elevation facade  Providing and applying 2 coats of Exposed RCC look texture(Archi concrete) or similar texture paint of of Asian, Luxture,Jotun or equivalent approved make by Architect/EIC.  Application method :</p> <ul style="list-style-type: none"> <li>• The substrate must be sound, clean, dry, free from dust, oil, grease and laitance etc.</li> </ul> <p>All traces of release agents must be removed. On chalky and dusty surfaces, all loose material must be removed by stiff bristle brushing.</p> <ul style="list-style-type: none"> <li>• one coat exterior primer then apply two coat Archi concrete texture then apply two coat tile guard for color shades. with all labour and material thoroughly brushing the surface free from mortar droppings and other foreign matter and sand prepared smooth etc. complete.</li> <li>• Texture work should be done by specialized agency as approved by the Architect/ EIC. Work shall complete includes all type of tools, tackles, all level &amp; Height, scaffolding, labour etc complete as per the detailed drawing and instruction of EIC.</li> <li>• Note: Rates to include cleaning afterwards, necessary scaffolding / Cradle, debris safety netting, labour etc complete.</li> </ul>	417.00	Sq.mt		
<b>FLOORING</b>					
<p><b>Note : Flooring is to be done as per the Finish floor level (FFL), and as per the instruction by the Enginner-in-charge. Bedding should be as per the thickness required to maintain the FFL. No extra cost shall be payable for extra thickness of bedding to maintain FFL. Rate includes cost of bedding material, labour, tools etc., complete for proper completion of work at all levels.</b></p> <p><b>The rate shall be inclusive of protecting the flooring by plaster of Paris applying and after completion of work remove or 4 mm thick protection sheet of Supreme make EPE+HM Blue.</b></p> <p><b>All basic rates are excluding GST.</b></p> <p><b>The bidder shall submit samples for Architect/EIC for approval</b></p> <p><b>For any equivalent make, the bidder shall take approval from Architect/EIC</b></p> <p><b>The Architect/Client shall have right to select or reject any make .</b></p> <p><b>Equivalent makes shall be approved by Architect/EIC before procurement.</b></p>					

Sr. No.	Item Description	Qty	Unit	Rate	Amount
19	<p>Kotah Stone Flooring :</p> <p>Providing and laying in position average 25mm thick hand chiesel cut and machine polished mirror finish Kotah Stone flooring laid over avg. 20 to 25 mm thick cement mortar 1:6 (1 cement: 6 coarse sand) bedding fixed with neat cement slurry in proper line, level, slope as required including filling joints with approved matching shade epoxy based joint filling compound. Rate includes cost of CM bedding, mirror polishing of Kotah stone flooring as per sample approved by the Architect/ EIC. including making neccessary cutouts for Electrical/Data/Telephone cables etc., cleaning of floor and skirting complete in all aspects, as specified in drawings and directed by the Engineer/Architect.</p> <p>a) In Flooring using Kotah Stone slabs : Size : 600 x 600 mm</p>	9.00	Sq.mt		
20	<p>Kotah Stone Skirting :</p> <p>100 mm high Skirting (using not less than 0.50m long pieces.)</p> <p>"---Do-----" as per above specification for complete work.</p>	17.00	Rmt		
21	<p>Granite Stone Flooring (Machine Polished / Flame Burnt etc.) : All floor levels</p> <p>Providing and laying in position 18mm ± 2mm thick machine cut pre-polished First quality Classic Grey Granite stone flooring and skirting in approved colour, shade, design and patterns as per architectural drawings laid over 20 mm (average) thick cement mortar 1:6 (1 cement : 6 coarse sand) bedding fixed and jointed with neat cement cement slurry and filling joints using white cement slurry admixed with pigment of matching shade or epoxy based joint filling compound of approved make including grinding, mirror polishing, curing, nosing, making grooves etc. complete as specified in the Architectural drawings and as directed by the Engineer-in-Charge.</p>	69.00	Sq.mt		
22	<p>In steps and risers, Cladding , in single piece slabs of required size, moulding, bull nosing, chamfer with polishing ,Anti skid Groove , complete as per Architectural drawing and as direcetd by the Engineer-in-charge.</p>	6.00	Sq.mt		



Sr. No.	Item Description	Qty	Unit	Rate	Amount
23	<p>Granite Threshold : All floor Levels</p> <p>Providing &amp; fixing in position 18mm thick ±2mm tolerance, machine cut, approved colour and shade pre-polished mirror finish First quality Classic Grey Granite granite stone threshold of desired length and width for the complete opening of the doors/windows and fixing the same using cement mortar 1:3 including full round /chamfered moulding on both the edges complete as per sample approved by the Architect/EIC. Rate includes cost of CM 1:4 backing plaster with waterproofing compound, chamfering of corners and execution of work all heights and locations including necessary scaffolding etc. complete. Basic rate of stone is Rs.150-200 / Sq.ft</p>	39.00	Rmt		
	<b>DOOR</b>				
24	<p>Single Leaf Flush Door finish with laminate with view panel wherever required: Basement - Ground floor to Terrace floor Lvl</p> <p>Providing and fixing factory made solid core Single shutter flush door 40 mm thick of Greenply, Century, Nippon, Merino as approved make by Architect/ EIC.</p> <p>finished with both side 1 mm thick laminate as approved sample.</p> <p>Hardware: SS 316 grade Dorma, Geze, Haffle, Enox, Kitch make as per sample approved by the Architect/EIC.</p> <ul style="list-style-type: none"> <li>• Surface Mount Door Closer 80 KG weight capacity.</li> <li>• Ball Bearing Butt Hinge : 4 Nos. 125mm x 3mm SS Butt Hinges fixed with SS Screw</li> <li>• Mortaise Handle with Lock</li> <li>• Euro profile</li> <li>• Wall Mounted Door Stop : 1 no, 90 mm SS Door Stopper fixed with SS Screw</li> </ul> <p>work complete including all type of hardware, fittings, fixtures as per instruction of Architect/EIC etc complete as per detailed drawings and specifications. sample mock shall be approved from Architect/EIC. Equivalent to VNR Series Laminate.</p>	5.00	Sq.mt		
	<b>WINDOW</b>				

Sr. No.	Item Description	Qty	Unit	Rate	Amount
25	<p>Window type 05 : 2 track sliding window with Mosquito net : SGU glass  Supply &amp; Fixing of Sliding window with powder coated of JINDAL/VITCO/Hindalco make as per approved architect/EIC.  Section series : Domal 27 mm series  Frame &amp; Track section :ART- 2007873, ART- 1007870, ART-1007871, ART - 1008093  Glass : 6mm SGU fix thick ET-125 glass standard compay of Saint Gobain/Aasahi Float/Modi Guard  Mosquito Net : 18x24 fly proof stainless steel grade 304 wire gauge jali  27 mm series Domal Aluminium sliding window section with powder coating 55microne, EPDM gasket(neoprene rubber), s.s mosquito net, 6mm SGU fix thick ET-125 glass, wethering strips(track woolen), vergin pvc polymer of roller(bearing) company of aries, consil lock aries, other necessary fixtures and fastenings as per drawing and specification, including concealed lock, albose, other necessary fixtures and fastening, PVDF rollers, EPDN gasket, silicon sealent etc. complete as per detailed drawings.Work shall complete includes all type of tools,tackles, all level &amp; Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC.</p>	9.00	Sqmt		
<b>FABRICATION</b>					

Sr. No.	Item Description	Qty	Unit	Rate	Amount
26	<p>Fabrication : All floor Levels</p> <p>Designing , Supplying, fabricating, assembling, hoisting and fixing in position to alignments &amp; levels as per approved shop drawings, structural steel work in-built up for building facade etc. to detail welded (welding as specified by the structural consultant) / bolted constructions comprising R.S. joists, channels, angles, plates or any MS rolled section including necessary permanent rivets, bolts &amp; nuts, handling straightening, cutting, making holes, shop / site assembly, erection, (including preparation of template) transport to site, storing, etc., and painting with shop/site of zinc chromate primer coat prior to erection and two or more coats of first quality enamel paint of Asian make or approved equivalent and quality etc.</p> <p>Painting Procedure :</p> <p>Providing and applying enamel paint of Asian make or equivalent and desired shade, including the preparation surface (with emery paper 180 and wipe clean) by thoroughly cleaning all dust, dirt, applying epoxy coating and putty of again sand papering of (emery paper 180 and wipe clean) again applying primer again sand papering of (emery paper 320 and wipe clean) levelling rubbing the surface, to be free from undulation/ waviness, applying 1st coat of paint &amp; 2nd coat of paint ) at all heights below and above highest plinth level, scaffolding / staging, as required complete as directed. (Payment will be made on the basis of standard section weights for net weight erected in position excluding rivets, temporary bolts, etc., but payment will be made for permanent bolts, nuts and washers.)</p> <p>Contractor shall submit Shop drawing for all items for approval of Architect/ Authority.The rate shall be for complete item inclusive of all material, labour, wastages, necessary tools &amp; tackles, scaffolding ,shop drawing , stability certificate ,etc for all floors, all heights, all levels and all places within campus. Contractor shall do all the needful and shall fulfill Architect design intent. No additional claims will be entertained for this.</p>	1831.00	Kg		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
27	<p>Providing and laying pre-cast concrete kerb stone of gray cement based concrete block 30cm length,30cm height and 15cm thick of M25 grade concret as per approved design and including excavation for fixing in proper line and level,filling the joint with C:M 1:3 (1cement:3fine sand) etc complete.including cost of all type of tools, tackles, all labour, all type of materials, transportation, cleaning of surfaces, if required protecting, for at all level, all depth, all Height, all lead and lift etc. work complete as per the detailed drawing, approved sample, specifications and instruction of Architect/EIC.Sample mock shall be approved from Architect/ Client. Material Test certificate shall be submitted by the contractor. (Precast C.C. kerb stone shall be approved by Engineer-in-charge). (length of finished kerb edging shall be measured for payment).</p>	29.00	Rmt		
28	<p>Cobble stone 60 mm thick (150 x 150 mm/ 200 x 150 mm): Providing and laying of 60 mm thick (+10 mm)cobble stone in multi colour(Sand stone) as per approved sample by Architect/Client. Fixing with 25 mm thick cement mortar (1:4) of thickness on PCC surface as per detailed drawing. The joints of the stone shall be properly and firmly filled using properly mixed mortar and joints shall be cleaned and well pointed using cement mortar. Work Including levelling in proper line and level with using surface vibrator etc complete. including cost of all type of tools, tackles, all labour, all type of materials, transportation, cleaning of surfaces, if required protecting, for at all level, all depth, all Height, all lead and lift etc. work complete as per the detailed drawing, approved sample, specifications and instruction of Architect/EIC.Sample mock shall be approved from Architect/ Client. Material Test certificate shall be submitted by the contractor.</p>	701.00	Sqmt		
29	<p>Lawn Grass:- Excavation the area upto the depth of 15-20 cm., Removing all excavated soil and dump as and where directed as per instructions of Engineer-in-charge, Removing all unwanted material like brick-bats, grass roots stumps, stone etc, breaking the clods, Levelling the area, Providing and Mixing 20-23 cm layer of the local fertile field soil, (free from stone, grass roots etc.) and Providing and Mixing farm yard manure at the rate of 3 cu.mt. per 100 sq. mt.- mixing the same with layer of soil, Levelling, Rolling, Pre-planting, Watering etc and planting the readymade Carpet Lawn Grass in the form of approved 30 x 30 cm size slabs etc complete as per detail specification.</p>	120.00	Sqmt		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
30	Shrubs:- Providing and planting the saplings of shrubs at 60 cm dist.after excavating the pits 60 x 60 x 60 cm. size and Removing and throwing away the dug soil as directed and refilling the pits with extra fertile field soil (Yellow soil) at the rate 70% and manure at the rate of 30% of the dug soil, and providing and mixing the fertilizer, insecticide etc complete as per detail specification.	100.00	Nos		
31	Trees :- Providing and planting the saplings of trees of approved varieties after excavating the pits of 60 x 60 x 60 cm. size and Removing the excavated soil and refilling the same with 70% of extra fertile soil and 30% of well rotted farm yard manure including fertilizer, insecticide etc. complete as per detailed specification.	20.00	Nos		
32	Palm Tree:- Providing and planting the saplings of trees of approved varieties after excavating the pits of 60 x 60 x 60 cm. size and Removing the excavated soil and refilling the same with 70% of extra fertile soil and 30% of well rotted farm yard manure including fertilizer, insecticide etc. complete as per detailed specification.	20.00	Nos		
33	Raising hedges : After excavating soil upto 30 cm. depth and 30 cm width, preparing soil for planting by supplying and mixing farm yard manure at the rate of 5 cu.m. per 100 sq.mt. area providing and planting cutting of clerodendron (kadavi mendi) in two rows roughly at 18 cm. x 18 cm. distance complete. Removing the excavated soil and refilling the same with 70% of extra fertile soil and 30% of well rotted farm yard manure including fertilizer, insecticide etc. complete as per detailed specification.	50.00	Rmt		
<b>Total Estimated Amount in Rs.</b>					

**Construction Of A Multi-Storey Building (Lower basement + Upper basement +Ground floor to sixth floor) including civil, plumbing, Electrical and Other Services (Green Building With Gold Rating in Leed /Griha) For State Bank Of India At Final Plot No.116, T.P. Scheme No. 3, Bhayali, Vasna-Bhayali Road Vadodara (Gujarat)**

**SANITARY VESSALS & FITTINGS**

Sr. No.	Item Description	Qty	Unit	Rate	Amount
	<p><b>Note : All the sanitary vessels and fittings should have flow rates at least <math>\leq 25\%</math> than the baseline flow rates specified by Uniform Plumbing Code; in order to achieve IGBC Platinum Rating.</b>  <b>Make : Hindware, Jaquar, Cera</b></p>				
1	<p><b>EWC : Common Toilet</b>                      Supply, Installation, Testing and Commissioning of wall mounted wash down water closet (European type W.C. pan) as per approved make of selection &amp; shade with seat cover, P OR S Trap M.S. or G.I bracket, CP brass hinges and rubber buffers and Jointing the trap with soil pipe in cement mortar : 1:1 (1 cement : 1 fine sand) including cutting and making good the walls and floors where required with all labour and materials. All works to be carried out as per instructions and direction of EIC. Work shall complete includes all type of fittings, tools, tackles, all level &amp; Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC.<b>Model Equivalent to Hindware code no : 20109</b></p>	24.00	Nos		
2	<p><b>EWC : Cabin Toilet</b>                      Supply, Installation, Testing and Commissioning of wall mounted wash down water closet (European type W.C. pan) as per approved make of selection &amp; shade with seat cover, P OR S Trap M.S. or G.I bracket, CP brass hinges and rubber buffers and Jointing the trap with soil pipe in cement mortar : 1:1 (1 cement : 1 fine sand) including cutting and making good the walls and floors where required with all labour and materials. All works to be carried out as per instructions and direction of EIC. Work shall complete includes all type of fittings, tools, tackles, all level &amp; Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC.<b>Model Equivalent to Hindware code no : 92081</b></p>	10.00	Nos		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
3	<p><b>DA Toilet set</b>  Supply, Installation, Testing and Commissioning of Matrix set including EWC with cisten &amp; all fittings accessories, wash basin, one hindged rail 76 cm, 4 nos of Grab rail 60 cm as per approved make of selection and Jointing the trap with soil pipe in cement mortar : 1:1 (1 cement : 1 fine sand) including cutting and making good the walls and floors where required with all labour and materials. All works to be carried out as per instructions and direction of EIC. Work shall complete includes all type of fittings, tools, tackles, all level &amp; Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. Model Equivalent to Hindware code no : 70002</p>	6.00	Set		
4	<p><b>Cistern tank with flush plate :</b>  Supply, Installation, Testing and Commissioning of Consealed cistern tank with Flush plate as per approved make &amp; selection by Architect.  Work shall complete includes all type of fittings, tools, tackles, all level &amp; Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC.  <b>Model Equivalent to Hindware code no : Concealo Neo+ flush plate</b></p>	34.00	Nos		
5	<p><b>Health faucet :</b>  Supply, Installation, Testing and Commissioning of 12mm dia. Health faucet as per approved make &amp; selection by Architect with flexible pipe of 1.mt. length and holding stands complete.  Work shall complete includes all type of fittings, tools, tackles, all level &amp; Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC.  <b>Model Equivalent to Hindware code no : F160013</b></p>	40.00	Nos		
6	<p><b>Two Way Bib Tap :</b>  Supply, Installation, Testing and Commissioning of 15mm dia Bib tap as per approved make &amp; selection by Architect.  Work shall complete includes all type of fittings, tools, tackles, all level &amp; Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC.  <b>Model Equivalent to Hindware code no : F360005SCP</b></p>	40.00	Nos		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
7	<b>Wash Basin : Under counter</b> Supply, Installation, Testing and Commissioning of undercounter Wash Basin as per approved make & selection by Architect. work including west couplings, waste pipe, adhesive etc. Work shall complete includes all type of fittings, tools, tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. <b>Model Equivalent to Hindware code no : 10080</b>	34.00	Nos		
8	<b>Wash Basin :</b> Supply, Installation, Testing and Commissioning of counter top Wash Basin as per approved make & selection by Architect. work including west couplings, waste pipe, adhesive etc. Work shall complete includes all type of fittings, tools, tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. <b>Model Equivalent to Hindware code no : 91217</b>	13.00	Nos		
9	<b>Basin Spout : Common Toilet</b> Supply, Installation, Testing and Commissioning of 15mm dia Basin spout as per approved make & selection by Architect. Work shall complete includes all type of fittings, tools, tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. <b>Model Equivalent to Hindware code no : F360001SCP</b>	40.00	Nos		
10	<b>Sensor Basin Spout : Cabin Toilet</b> Supply, Installation, Testing and Commissioning of 15mm dia Basin spout as per approved make & selection by Architect. Work shall complete includes all type of fittings, tools, tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. <b>Model Equivalent to Hindware code no : F240003</b>	13.00	Nos		
11	<b>Urinal with sensor</b> Supply, Installation, Testing and Commissioning of Urinal with flush valve as per approved make & selection by Architect. work including connecting the urinal with waste pipe and all works related to this item etc complete. Work shall complete includes all type of fittings, tools, tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. <b>Model Equivalent to Hindware code no :60018</b>	21.00	Nos		



Sr. No.	Item Description	Qty	Unit	Rate	Amount
12	<b>Urinal Partition :</b> Providing and fixing Urinal partition Size of Width 400 mm x Height 900 mm comprising from 12 mm Compact Grade 1.5 mm thick laminate Board of the approved shade by Architect. Work complete including all type of fittings, hardware, accessories etc complete as per drawing.	21.00	Nos		
13	<b>Bottle Trap :</b> Supply, Installation, Testing and Commissioning of chromium plated Bottle Trap as per approved make & selection by Architect. work including necessary fittings for wash basin & sink. Work shall complete includes all type of fittings, tools, tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. <b>Model Equivalent to Hindware code no : F850015</b>	56.00	Nos		
14	<b>Soap Dispensor :</b> Supply, Installation, Testing and Commissioning of Soap Dispensor as per approved make & Selection by Architect. Work shall complete includes all type of fittings, tools, tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. <b>Model Equivalent to Hindware code no : F860059</b>	37.00	Nos		
15	<b>Toilet Paper Holder :</b> Supply, Installation, Testing and Commissioning of Toilet paper holder as per approved make & Selection by Architect. Work shall complete includes all type of fittings, tools, tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. <b>Model Equivalent to Hindware code no : F880003</b>	40.00	Nos		
16	<b>Angular cock :</b> Supply, Installation, Testing and Commissioning of Angular cock as per approved make & Selection by Architect. Work shall complete includes all type of fittings, tools, tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. <b>Model Equivalent to Hindware code no : F360006</b>	53.00	Nos		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
17	<b>Toilet Cubical :</b> Supply & Installation of T-Line, Marino Toilet Cubicles as per Architect selection. 12 mm Compact Grade laminated Board of the approved shade by Architect. Accessories for cubicles.1. Aluminum "U" Section with SS Exterior grade Finish.2. Aluminum "H" Section with SS Exterior grade Finish.3. Aluminum Top Rail with SS Exterior grade Finish.4. SS Coat Hook (SS 316 )5. SS Privacy Thumb Turn (SS 316)6. SS Door Knob (SS 316) 7.SS Hinges (SS 316)8. SS Adjustable Leg (SS 316)With Rubber lining and Screw Etc. Work complete including all type of fittings, fixtures, tools, etc complete as per manufacturer specification and drawing. Work shall complete includes all type of fittings, tools, tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC.Contractor shall submit Shop drawing for all items for approval of Architect/ EIC.	24.00	Nos		
18	Providing and fixing <b>Kitchen sink</b> as per approved make including all fitting material including Fixing of with necessary plumbing work as per detail drawing and plumbing work. Material approved by architect/EIC. Make: Nirali, Hindwaqre, Blanco : Grace Plain-510MM X 432MM	9.00	Nos		
19	Providing and fixing 15mm dia. <b>Sink Cock</b> of as per approved make of selection. Model equivalent to: F360023SCP	17.00	Nos		
20	<b>Hand Drayer :</b> Supply, Installation, Testing and Commissioning of hand dryer as approved make & selection by Architect.Work shall complete includes all type of fittings, tools, tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. Model Equivalent to Euronics : ABS handrayer EH22NW. Make: Euronics, Jaquar, Hindware	16.00	Nos		
21	<b>Hand Drayer :</b> Supply, Installation, Testing and Commissioning of hand dryer as approved make & selection by Architect.Work shall complete includes all type of fittings, tools, tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. Model Equivalent to Euronics : EH 27 NW Make: Euronics, Jaquar, Hindware	14.00	Nos		
22	<b>Towel rail:</b> Providing and fixing SS towel rail of as approved make list. Work shall complete includes all type of fittings, tools, tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC.Model Equivalent to Euronics : S.STEEL RAIL (600 MM),32MM DIA	10.00	Nos		

Sr. No.	Item Description	Qty	Unit	Rate	Amount
23	<b>Rob hook:</b> Providing and fixing rob hook of as approved make list. Work shall complete includes all type of fittings, tools, tackles, all level & Height, labour, mock sample etc complete as per the detailed drawing and instruction of EIC. Model Equivalent to Euronics : EC 02 S.STEEL COAT HOOK - DOUBLE	18.00	Nos		
24	<b>Mirror:</b> Providing and fixing Mirror with aluminium frame in which Aluminium frame with special deep colour anodise 40mm width and 1.3mm thickness and 5mm mirror fitted using high grade silicon. Work complete including all type of tools, tackles, scaffolding, safety measures, loading, unloading, transportation, at all floors, all heights, all levels etc complete as per instruction of Architect/EIC. Make: Saint Gobin, ModiGuard, Ashahi	61.00	Sq.mt		
	<b>Total Estimated Amount in Rs.</b>				

**Construction Of A Multi-Storey Building ( Lower basement + Upper basement +Ground floor to sixth floor) Including civil , plumbing Elecrical, Other Services (Green Building With Gold Rating In Leed /Griha) For State Bank Of India At Final Plot No.116, T.P. Scheme No. 3, Bhayali, Vasna-Bhayali Road Vadodara (Gujarat)**

**Internal Plumbing works**

Sr. No.	Description	Qty	Unit	Rate	Amount
	<b>Make: Astral, Supreme, Prince as approved by Client</b>				
1	<b>Internal Water Supply</b>				
1.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc.				
1.1.1	15 mm nominal bore	200	Mtr		
1.1.2	20 mm nominal bore	100	Mtr		
1.1.3	25 mm nominal bore	100	Mtr		
1.1.4	32 mm nominal bore	50	Mtr		
	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) 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. <b>Internal work - Exposed on wall</b>				
1.1.5	40 mm nominal bore	50	Mtr		
1.1.6	50 mm nominal bore	50	Mtr		
1.2	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work				
1.2.6	50 mm nominal bore	100	Mtr		
1.2.7	65 mm nominal bore	100	Mtr		
1.3	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work( <b>Terrace ring main, Basement &amp; pump room</b> )				
1.3.1	65 mm dia nominal bore	300	Mtr		

Sr. No.	Description	Qty	Unit	Rate	Amount
1.3.2	80 mm dia nominal bore	200	Mtr		
1.3.3	100 mm dia nominal bore	200	Mtr		
1.4	Providing and fixing <b>insulation</b> for hot water pipe with 13 mm thick Closed cell nitrile rubber, class 0, insulation to hot water lines on wall with bracket support at 1m distance, as recommended by manufacturer to following pipe sizes (Outer Dia of pipe) etc. complete and the direction of engineer-in-charge. <b>(work within Kitchen &amp; pantry)</b>				
1.4.1	15 mm nominal bore	R/o	Mtr		
1.4.2	20 mm nominal bore	R/o	Mtr		
1.4.3	25 mm nominal bore	R/o	Mtr		
1.4.4	32 mm nominal bore	R/o	Mtr		
1.5	Supply, Fabrication, Installation, Testing, Balancing and Commissioning forged brass nickle plated lever operated <b>ball valve</b> of full flow with forged brass hard chrome plated ball with min. working pressure of 15 Kg/cm2. Lever should be anti rust coating, complete in all respects <b>(Shaft to toilet &amp; terrace ring main to water supply downtakes)</b>				
1.5.1	15 mm nominal bore	7	Nos.		
1.5.2	20 mm nominal bore	R/o	Nos.		
1.5.3	25 mm nominal bore	R/o	Nos.		
	Providing and fixing gun metal non- return valve of approved quality (screwed end) :				
1.5.4	32 mm nominal bore (Vertical)	R/o	Nos.		
1.5.5	40 mm nominal bore (Vertical)	7	Nos.		
1.5.6	50 mm nominal bore (Vertical)	7	Nos.		
	Make: Paani Precision / Rmco / Drp Malleables as approved by client				
1.6	Supply, Fabrication, Installation, Testing, Balancing and Commissioning in position ISI marked <b>Butterfly valves</b> of CI Body, Black Nitride Body Liner and S.S. Disc, tested to a pressure not less than PN16 on GI/UPVC lines with necessary accessories required for jointing with G. I. pipes, rubber gasket, flanges, nuts, bolts, washers, and two coats of any enamel paint etc. complete as per direction of Engineer in Charge. . <b>(OHT to Terrace ring main &amp; pump room)</b>				
1.6.1	50 mm nominal bore	4	Nos.		
1.6.2	65 mm nominal bore	4	Nos.		
1.6.3	80 mm nominal bore	2	Nos.		

Sr. No.	Description	Qty	Unit	Rate	Amount
1.6.4	100 mm nominal bore	2	Nos.		
1.6.5	150 mm nominal bore	1	Nos.		
	<b>Make: Astral, Supreme, Prince as approved by the Bank.</b>				
<b>2</b>	<b>Internal Drainage</b>				
	Providing and fixing PVC Blue Coloured Agri 6Kg/cm <sup>2</sup> and fitting for SOIL & WASTE water discharge, including all fittings with and with out inspection doors, including supports brackets as per supplier specification and distance, cutting, chases/holes in walls/floors/slab etc. (Pipes to laid in Toilets for Basin & Sink Outlet) & Rain water downtakes.				
2.1	40 mm Dia	250	Rmt		
2.2	50 mm Dia	500	Rmt		
	Providing and fixing PVC SWR Pipe conforming to IS 13592-92 TYPE A and fitting as per IS 14735-99 for Internal Toilet, Vent, Rain water, floor bed and A/C water discharge, including all fittings with and with out inspection doors, including supports brackets as per supplier specification and distance, cutting, chases/holes in walls/floors/slab etc. (Internal & Shaft Toilet )				
2.3	75 mm Dia	200	Rmt		
2.4	110 mm Dia	350	Rmt		
2.5	160 mm Dia	50	Rmt		
	Providing and fixing PVC traps of self cleansing design with water seal not less than 50mm 'with or without vent, 'including setting the 'trap in 1:2:4 cement concrete etc. complete. The 'trap shall be 'P' or 'S' 'type as required. Trap 'with 100 mm inlet and '75mm dia outlet.cement concrete etc. complete. The trap shall be 'P' or 'S' 'type as required. Trap 'with 100 mm inlet and 100mm dia outlet.-				
2.6	Trap with 75mm outlet	45	Each		
2.7	Trap with 100mm outlet	5	Each		
	<b>Total Estimated Amount</b>				

Construction Of A Multi-Storey Building ( Lower basement + Upper basement +Ground floor to sixth floor) Including civil , plumbing Elecrical, Other Services (Green Building With Gold Rating In Leed /Griha) For State Bank Of India At Final Plot No.116, T.P. Scheme No. 3, Bhayali, Vasna-Bhayali Road Vadodara (Gujarat)					
External Plumbing					
Sr. No.	Description	Qty	Unit	Rate	Amount
	<b>Make:- Jindal / TATA / Swastik / Hindustan</b>				
<b>2</b>	<b>External Water Supply</b>				
2.1	Providing, fixing, jointing and testing in position the following G.I. pipes heavy class (Class C) conforming to IS:1239 cut to required lengths including all necessary fittings (All fittings shall confirm to IS:1879 - part 1 to 10) and specials such as bends, tees, unions, reducers, flanges & plugs etc. Fixing at wall/ceiling level supported by G.I. Hi-tech clamp, Z bracket 5mm thick as per specification. Threading, jointing, and making proper connections. Cutting hole in wall / floor / slab and making good the same, Exposed pipes to be painted with anticorrosive bitumastic paint & legends with direction arrow. GI pipe sleeves suitable higher size shall be provided wherever the pipes are crossing the fire rated walls / floors slab and sealing the sleeves with glass wool in between and fire sealant compound at either end, etc... complete as per direction of Engineer in Charge. <b>(CORPORATION LINE to UGT) 100 mm nominal bore</b>	50.00	Rmt.		
2.2	Providing, fixing, jointing, Balancing and testing in position approved make ISI marked <b>Cast Iron Y-Strainer</b> , Cast Iron Body, Bonnet, Bronze / SS Drain Plug, SS Screen Screwed (mesh size 3 mm), Compressed Asbestos Fiber Gasket, tested to a pressure not less than PN16 on GI lines with necessary accessories that is rubber gasket, flanges, nuts, bolts, washers, and two coats of any enamel paint etc. complete as per direction of Engineer in Charge. <b>65 mm dia (Pump room)</b>	4.00	Nos.		
2.3	Providing, fixing, jointing, and testing in position approved make ISI marked <b>Pressure Gauge of 65 mm Ø</b> , 0-225 PSI or 0-15 kg per cm square fitted with 12/15 mm Ø. ball valve, and G.I. pipe, elbow etc. as per requirement in an approved manner with necessary accessories, etc. Complete conforming to relevant Indian standard. <b>(Pump room)</b>	2.00	Nos.		
2.4	Supply, fabrication, installation, testing, balancing & commissioning forged brass <b>air reilief valve</b> of approved quality with bolts, nuts, rubber insertion etc. complete as per IS 6912 & IS 5192. 25 mm nominal bore	2.00	Nos.		

Sr. No.	Description	Qty	Unit	Rate	Amount
2.6	Supply, Fabrication, Installation, Testing, Balancing and Commissioning 600 mm long MS hot dip galvanized <b>PUDDLE FLANGES</b> fabricated out of 6 mm thick MS plates upto 200 mm dia MS C class pipe and 8 mm for 200mm and above dia pipe of suitable size MS C class pipes properly fixed in walls & top slab of tanks. The entire fittings shall be hot dipped galvanized (180 grm/m <sup>2</sup> ) after fabrication. Length shall be minimum 600 mm or wall thickness plus 200 mm on either side (which ever is more)( <b>UGT/OHT</b> )				
2.6.1	25 mm dia X 650 mm long	2.00	Nos.		
2.6.2	50 mm dia X 650 mm long (VENT PIPE)	2.00	Nos.		
2.6.3	65 mm dia X 650 mm long	2.00	Nos.		
2.6.4	100 mm dia X 650 mm long	10.00	Nos.		
2.7	Supply, Fabrication, Installation, Testing, Balancing and Commissioning G.I. class C <b>Vent Pipe</b> for R.C.C water storage tanks comprising of 600 mm long vertical pipe above water tank, return bend 300 MM with <b>S.S. mosquito proof grating</b> with brass coupling including all associated civil work. ( <b>UGT/OHT</b> )	3.00	Nos.		
2.8	Providing, fixing, jointing, and testing in position approved make Screwed G.M. ISI marked heigh pressure <b>Float valves</b> of HBD make with copper ball cocks including effecting proper connection.( <b>UGT/OHT</b> )				
2.8.1	25 mm dia	R/o	Nos.		
2.8.2	80 mm dia	2.00	Nos.		
2.8.3	100 mm dia	R/o	Nos.		
2.9	Supply, Fabrication, Installation, Testing, Balancing and Commissioning <b>M. S. Rungs / footrest</b> of PVC coated / Cast Iron Rungs, as per IS - 5455 - 2003 etc. complete as per direction of Engineer in Charge.( <b>UGT/OHT</b> )	30.00	Nos.		
2.10	Providing, fixing , testing and commissioning <b>water meter</b> with direct reading dial in KL with all necessary fitting such as threaded pieces, unions pressure gauge, isolation cock, flanges piece for future removal, flanges / unions complete with all necessary testing charges and obtaining test certificates from municipal authorities, on following size pipe lines (1 no. strainer shall be provided at inlet and cost shall be inclusive for the same). The meter shall comply to ISO 4064 standard, feasible for class B or Class A installation.	2.00	Nos.		
	Make : Kranti / Belanto / Ascorp / Toshniwal / Konark / equivalent approved by SBI				
<b>5</b>	<b>External Drainage</b>				



Sr. No.	Description	Qty	Unit	Rate	Amount
5.1	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 fine sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design: Inside dimensions 600x 850 mm and 45 cm deep for pipe line with three or more inlets : 19.30.3.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2.00	Nos.		
5.2	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : 19.7.2 Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) : 19.7.2.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	4.00	Nos.		
5.3	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design: 19.4.3 180x150 mm size P type	2.00	Nos.		

Sr. No.	Description	Qty	Unit	Rate	Amount
5.4	Providing and Constructing in position <b>Grease trap</b> (Brick work as per IS 2212 : 1991) of size 2.0m x 0.9m x 1.2 m deep (0.45m liquid height) constructed out of 230 mm brick masonry with Stoneware Tee connection for inlet outlet & CI vent pipe, hinge type CI Manhole cover and frame (Cover size 0.9 x 0.60 mtr wide) of heavy duty, 40 mm thick Kaddappa baffel wall situated across the chamber. Trap shall be internally smooth plastered with water proofing compound & externally rough plastered Complete with 2 Nos. 0.75 m x 0.5 m x 0.15 m high SS. perforated trey's with handles on both side including all accessories mounting. complete as specified in drawing. The manhole frame & cover shall be heavy duty purpose only.	1.00	Nos.		
5.5	Providing, fixing, jointing, and testing in position <b>PVC SN 4 pipes</b> including excavation, back filling. and testing after laying of pipes etc. complete as per direction of Engineer in Charge.				
	Make: Astral, Supreme, Prince as approved by the Bank.				
5.5.1	75 mm nominal bore	10.00	Rmt.		
5.5.2	100 mm nominal bore	10.00	Rmt.		
5.5.3	150 mm nominal bore	10.00	Rmt.		
5.5.4	200 mm nominal bore	50.00	Rmt.		
5.5.5	250 mm nominal bore	50.00	Rmt.		
<b>6</b>	<b>Rain Water</b>				
6.1	Supply, Fabrication, Installation, Testing, Balancing and Commissioning of <b>UPVC SWR (type B) pipes</b> of 3.8 mm wall thickness for 75-110 mm dai pipes and 4.6 mm wall thickness for 160 mm dai pipe for Rain Water system, confirming to IS : 13592 from 75 mm dia pipe and above, and confirming to IS : 4985 (2.5kg/cm <sup>2</sup> ) for pipe upto 50 mm dia cut to required lengths including all necessary fittings and specials such as bends, junctions offsets, access pieces, Vent Cowl etc Above price including Structural support for pipes from wall , floor , ceiling using hot deep galvanized channels, angles, anchor fasteners(HILTI), supported by galvanized steel clamps & hangers etc. duly epoxy coated including necessary GI bolts nuts, washer etc. as required by the Engineer-in-charge. Welding of any kind on the galvanized support / hanger shall not be permitted. <b>150 mm nominal bore (Shaft)</b>	80.00	Rmt.		
	Make: Astral, Supreme, Prince as approved by the Bank.				
6.2	Constructing brick masonry road gully chamber 45x45x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand ) with precast R.C.C. vertical grating complete as per standard design : 19.28.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2.00	Nos.		

Sr. No.	Description	Qty	Unit	Rate	Amount
<b>7</b>	<b>Storm Water</b>				
7.1	Providing & Fixing <b>Ductile Iron Grating Channel</b> ( Medium Duty )over Gutter of following width & 600 mm long along with angle support as required along with all accessories Grating cover should be as per the interior design and should be approved by architect/Client. <b>300 mm wide (Heavy Duty)</b>	60.00	Rmt.		
7.2	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C. pipes including collars/spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete. <b>200 mm dia RCC pipes.</b>	100.00	Rmt.		
7.3	Constructing brick masonry road gully chamber 110x50x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm precast R.C.C. horizontal grating with frame and vertical grating complete as per standard design : 19.29.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	8.00	Nos.		
<b>8</b>	<b>BOREWELL</b>				
8.1	Supplying of following size of <b>HEAVY UPVC</b> column pipe with coupler and wire lock [C] 65 mm dia	100.00	Rmt		
8.2	Supply of following size of TOP & BOTTOM accessories i.e. Adaptor set (CI) long, pump guard set, starter pipe Rubber ring for submersible pump & UPVC column pipe as directed by Engineer - in - charge with necessary plumbing as desired. [E] 65 mm dia	1.00	Set		
8.3	Supplying & erecting G.I. bend for pipe connections suitable for (E) 65 mm(2.5")	1.00	Each		
8.4	Lowering of submersible motor pump set complete with required. Nos. and size of casing pipes erected by means of proper chain pulley block & pipe wrenches after checking of threads of each pipe with coupling to take the load of the pump set and pipe assembly filled up with water. (b)Above 60 mtrs. and Up to 120 mtrs.	1.00	Job		
8.5	Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer -in-charge, beyond 90 metre & upto 150 metre depth below ground level. All types of soil. 300 mm dia	100.00	Rmt		
8.6	Providing and laying in trenches galvanized mild steel tubes (Heavy grade C-Class) of the following nominal bore, and tube fitting (Earthwork in trenches to be measured and paid for separately)(E) 65mm (upto 10 ton)	30.00	Rmt		

Sr. No.	Description	Qty	Unit	Rate	Amount
8.7	Making connection of galvanized Mild steel distribution branch with galvanized mild steel main 50mm to 80mm nominal bore by providing and fixing tee including cutting and threading the pipes complete.	2.00	Each		
8.8	Providing and fixing in position of approved quality high pressure rated brass Float Valve with plastic ball float and brass rods of required length suitable for test pressure of not less than 15 Kg/sqcm of the following sizes: e) 50-80 mm dia	1.00	Each		
8.9	Providing flanged joints to double flanged C.I./ D.I. pipes and specials, including testing of joints : 100 mm diameter pipe	2.00	Each		
8.10	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 65 mm nominal bore	1.00	Each		
8.11	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep ( inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size ) , i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design : With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	1.00	Each		
8.12	Constructing Grit/ Silt chamber in brick masonry with cement mortar 1:4, waterproof cement plastering 12mm thick for inside and outside using waterproofing compound, CC 1:4:8 bedding with 1:2 smooth finishing inside with chamfering, RCC M-20 slab in M 20 using black trap, san and cement with 150mm thick RCC slab and providing and fixing medium type FRP manhole cover and farm etc. comp.Scope shall also including required gravel, sand etc. complete the job as per details drawing.(Size 2000 x 2000 x 1200mm (liquid depth) +IL.	1.00	No.		
8.13	Construction of Percolation Well with all required connections as per detailed design. 3mtr dia X 4 mtr liquid depth+ invert Level) for catch basin with FRP Heavy duty manhole cover and overflow connection to the nearest drain.	1.00	No.		
<b>Total Estimated Amount</b>					

Construction Of A Multi-Storey Building (Lower basement + Upper basement +Ground floor to sixth floor) including civil, plumbing, Electrical and Other Services (Green Building With Gold Rating in Leed /Griha) For State Bank Of India At Final Plot No.116, T.P. Scheme No. 3, Bhayali, Vasna-Bhayali Road Vadodara (Gujarat)

**ELECTRICAL WORK**

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
	<b>SUBSTATION AND HT WORKS , LT WORKS</b>				
	<b>HT CABLES</b>				
1.0	Supplying, testing & commissioning of 3 core 240 Sq mm, HV, 11 KV grade, ISI mark, Earthed, XLPE cable with stranded compact circular aluminium conductor, conductor screened with extruded semiconducting compound, XLPE insulated, insulation screened with extruded semiconducting compound in combination with copper tape(0.3 KA for 1Sec.) cores laid off, inner sheath of PVC tape, galvanised steel flat strip armoured and overall PVC sheathed cable conforming to IS:7098(Part II) with latest amendments 11 KV grade in RCC/ HUME/ STONEWARE/ METAL pipe as required.	20.00	Mtrs		
	<b>HT CABLE TERMINATIONS</b>				
2.0	supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 11 KV grade as required:				
	300 sq. mm	3.00	Each		
3.0	Supplying and making outdoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 11 KV grade as required:				
	300 sq. mm	3.00	Each		
	<b>COMPACT SUB STATION &amp; DG</b>				

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
4.0	<p>ELECTRICAL 11kV Package Substation consisting of 1 No. feeder with manually operated VCB 630A, 1 No. 11kV/433V, 750kVA DRY Type Transformer with OLTC &amp; 1 set of LT device as follows</p> <p>1) HT Switchgear 11kV, 21kA for 3 sec. Non – Extensible Compact switchgear (Type 1 CB) consisting of 1 No. Fixed manually operated 630A Vacuum Circuit Breaker in SF6 insulated stainless steel enclosure along with below mentioned items. Interconnection between HT switchgear and transformer shall be using Al. Armoured XLPE Cable. Each VCB Feeder consists Manually spring charging arrangement and manual close &amp; open push buttons, ON / OFF indication. Self powered O/C &amp; E/F relay type Manually operated 630A load breaker switch with built-in earth switch having full making capacity. Mechanical position indicator. Switch ON/OFF/EARTHED. , SF6 gas manometer, cable boots, 3 nos. CTs with Ratio -/1A, Cl: 5P10, 2.5 VA for protection Live Cable Indication Cable compartment cover interlocked with earth switch. Cable termination bushings suitable for 3 no. 1CX300mm2 XLPE cable. Cable termination cover boots (Push on type), Air Insulating Metering Panel</p> <p>2) Transformer :- 3 phase 50 Hz 750KVA Copper wound 11KV /433 V DYN11, Dry Cast resin type Transformer with tapping range +10 to -10% @ 2.5% ( with tolerance), class F , with surge restorers, Digital WTI, as per IS1171 Tappings +5% to -10% in steps of 2.5% shall be provided at line end of HV winding. Changing of taps shall be carried out by means ON load tap changing. Max. allow losses at 50% Load shall be 2.2 KW &amp; and at 100% Load shall be 6.7 KW at 75% temp., Impedance shall be 5.00 at -10 to +10 Tolerance shall be as per IS 1180 : 2014 Part-I (Level-II)</p> <p>3) LT Switchgear 433V LT Switchgear : 1250A FP 50KA EDO Type ACB Microprocessor Based release for O/L S/C E/F protection with Digital Multifunction Meter.</p> <p>4) Outdoor Enclosure Outdoor type enclosure having modular construction of Galvanised Sheet Steel in corrugated type wall design for better heat dissipation and providing robust construction. The Enclosure shall have IP54 degree of protection for HT &amp; LT switchgear compartment &amp; IP23 degree of protection for Transformer compartment.</p>	1.00	Each		

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
5.0	<p>Supplying and erecting, commissioning and testing of Diesel Generating set confirming to IS: 4722:1968 &amp; BS:5514 having continuous rating, 3 phase, 415 volts, 50 cycles A.C. supply comprising of a totally enclosed air/water cooled diesel engine with multi-cylinders developing suitable BHP not less than following capacity at 1500 RPM with 10% overload for one hour in 24 hours with standard accessories like fly wheel, lubricating oil cooler, "A" class governor, heavy duty fuel wheel and lubricating oil filter, oil bath air filler, lubricating oil pressure gauge, end exhaust manifold, standard set of tools with adjustable spanners, screw drivers, cylinder head to cover, joint cylinder head to exhaust, element lube oil filter, 12 / 24 volts electric starting equipment complete with standard heavy duty battery, dynamo, cut-outs, ammeter, necessary wiring, pressure gauge, starter etc and heavy duty Residential type exhaust silencer and vertical hot air duct both lagged with asbestos rope, save oil trays, exhaust piping of required length, standard wall/floor mounted fuel with level indicator and piping and drip proof alternator, self excited, self regulated, screen protected, with excitation system, capable of delivering the rated system output at 415 volts, 3 phase, 0.8 PF, 50 Hz, 4 wire, running at 1500 RPM, conforming to IS-4722- 1968 with voltage regulation +/- 5% of rated voltage from no load to full load. Both the engine and alternator fitted on a common fabricated steel base plate with antivibration mounting engine and alternator both connected to each other by flexible flange coupling and with floor/wall mounted control panel box comprising of voltmeter ammeter, selector switches, ACB / MCCB / MCB of adequate capacity, indicator lamps duly wired with HRC fuses. The alternator &amp; control panel shall be connected with provided suitable capacity armoured cable and complete with Acoustic enclosure (canopy) made out of 16 SWG CRCA Sheet, sound absorbing material Rockwool of 64 density &amp; 100 mm thick conforming to IS:8183 / PU Foam of 40 Density - at least 40 mm. The resin bonded rockwool covered from inside the canopy by perforated sheet with 3/4 mm holes, sound level not more than 75 dB at a distance of 1 mtr, as per PVCT norms. Erection, commissioning and satisfactory testing as per requirement with first filling of fuel, oil, etc. with guarantee / Warrantee of complete system for Two years. &amp; with obtaining all necessary certificate from Electrical Inspector. The Capacity and Ratings of DG sets are as below. (T) Continuous rating of 380 KVA ,BHP not less than 445 BHP</p>	1.00	Each		

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
6.0	<p>Providing &amp; erecting approved make AMF control panel suitable for following size of 3 phase, 415 V., 50 cycles, A.C. diesel generating set complete of scope as detailed below:</p> <p>1) Power module: A pair of electromechanically interlocked contactors (for mains &amp; generator) Overload relay for generator contactor Neutral contactor for mains and generator Power socket for connections.</p> <p>2) Control and metering module: Line voltage monitor. Generator voltage monitor Ammeter 3 items attempt start facility. Air circuit breakers/MCB/MCCB of suitable rating for auto/manual operation. Auto/manual switch. Emergency stop push buttons. Manual start push button. frequency meter. Engine hour meter. Two earthing studs.</p> <p>3) Protection module: The engine shutdown in the unlikely event of Low lube oil pressure High cylinder head temperature. V belt failure.4) Indicators with alarm Load on generator.5) Indicators Load on mains Engine fails to start . Emergency stop battery charger.The AMF Panel of following capacity (F) AMF Control Panel for 380 KVA/ 400 KVA3 phase DG Set</p>	1.00	Set		
	<b>ELETRICAL PANEL</b>				
7.0	<p>Supply, installation, assembling, connection, testing and commissioning of Panels as per Specification, Technical Data sheet, IS &amp; relevant drawings. All panels and DBs shall be manufactured CPRI approved panel manufacturer with inhouse 7-tank process and painting facility. All MCCB should be microprocessor based. ( Make: L &amp; T , Legrand , Schneider ) The unit rate for each item shall include :</p>				
	Supply of panels				
	Testing of panels as per specifications at manufacturer's works in presence of client's representative and/or consultant.				
	Delivery of the panels / DB's to site.				
	Shifting of the panels from site store to the suitable location				
	Assembly and wiring of component supplied separately.				
	Installation of panel to Electric room as Location arranged by site Engineer in charge including removing packing.				
	Earthing all components, frame etc. to a common internal earth bar.				
	M.S. parts should be painted with powder coating & all the nuts bolts, & joints exposed to the air shall be covered with suitable anti - oxidant material or as directed by the Engineer incharge.				



Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
	Supply and fixing all accessories and supporting structure.				
	Checking of Internal connection & wiring, operation of switches, MCCB, MCB etc..				
	Supply of necessary tools, hardware, testing hardware, testing equipment during testing at site.				
	Supply & fixing of 100 mm main steel [ No rolling mill material shall be allowed ] MS channels for fixing the panel, alongwith all the required civil materials required to complete the job as per the instruction of Engineer Incharge.				
	Electrical contractor shall carry out the insulation test at site and all the readings shall be submitted in duplicate to the consultant or engineer-in-charge.				
	ALL MCCB's shall be Ics = 100% Icu				
	To co-ordinate with other agencies working at site				
	To prepare submission drawing and to take approval of consultant at each stage.				
	To prepare & submit as-built drawing and handing over document to end user.				

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
7.1	<p>Supply, installation, assembly, connection, testing and commissioning of MAIN LT PANEL as per Single Line Diagram, Technical Data sheet &amp; IS - Company Manufactured-TYPE TESTED PANEL of L&amp;T, C&amp;S, Schneider Make as per Below Description. <b>Incomer</b> : 1250 FP EDO Type ACB 50KA -1nos, ( Microprocessor based O/C,S/C,E/F &amp; U/V releases - with proper ventilation system )</p> <p>630 FP EDO Type ACB 50KA -1nos( Microprocessor based O/C,S/C,E/F &amp; U/V releases - with proper ventilation system). 160A FP MCCB 50KA -1Nos,( Microprocessor based O/C,S/C,E/F &amp; U/V releases - with proper ventilation system). Electrical &amp; Mechanical Interlocking &amp; BMS COMPATIBLE RS-485. <b>Buscoupler</b> : 1250 FP EDO Type ACB-50KA-1nos, <b>Busbar</b>: 1250A FP Aluminium Busbar 50KA, <b>Outgoing</b> : 630A FP MCCB 35KA-3 Nos, ( Microprocessor based O/C,S/C,E/F- with proper ventilation system)</p> <p>400A FP MCCB 35KA-2 Nos, ( Microprocessor based O/C,S/C,E/F- with proper ventilation system )</p> <p>250A FP MCCB, 35KA - 3 Nos, ( Microprocessor based O/C,S/C,E/F- with proper ventilation system )</p> <p>200A FP MCCB, 35KA - 2 Nos, ( Microprocessor based O/C,S/C,E/F- with proper ventilation system )</p> <p>160A FP MCCB, 35KA - 10 Nos, ( Microprocessor based O/C,S/C,E/F- with proper ventilation system )</p> <p>125A FP MCCB, 35KA - 6 Nos, 100A FP MCCB, 35KA - 2 Nos, 63A FP MCB, 10KA - 6 Nos,</p> <p>BMS COMPATIBLE RS-485. <b>TERMINALS. Indication &amp; Metering</b> LED type Phase indication lamps with individual MCB control and toggle switches – 32 sets. 0 – 500V Digital Voltmeter with Selector switch – 3sets. 0 – 1250A Digital Ammeter with CTs and selector switch – 3 sets. 0 – 630A Digital Ammeter with CTs and selector switch –3 sets</p> <p>0 – 400A Digital Ammeter with CTs and selector switch –2 sets</p> <p>0 – 160A Digital Ammeter with CTs and selector switch – 1sets</p> <p>630/5A CT for APFCR – 1 sets. CT Operated Digital Load Managers – 3sets</p>	1.00	Each		

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
7.2	<p>Supply, installation, assembly, connection, testing and commissioning of 320KVAR APFCR as per Single Line Diagram, Technical Data sheet &amp; IS</p> <p><b>Incomer</b> : 630 FP EDO Type ACB 35KA -1nos ( Microprocessor based O/C,S/C,E/F &amp; U/V releases - with proper ventilation system ) BMS COMPATIBLE - RS-485</p> <p><b>Busbar</b>: 630A FP Aluminium Busbar 35KA,</p> <p><b>Outgoing</b> : 125A, TPN,MCCB with 50 KVAR 440V Delta connected APP type Capacitor Banks, 7% Reactor and thyristor control switch – 5nos</p> <p>80A,TPN,MCCB with 25 KVAR 440V Delta connected APP type Capacitor Banks, 7% Reactor and thyristor control switch – 2nos</p> <p>40A, TPN,MCB with 10 KVAR 440V Delta connected APP type Capacitor Banks, 7% Reactor and thyristor control switch – 2nos</p> <p><b>BMS COMPATIBLE Indication &amp; Metering</b></p> <p>LED type Phase indication lamps with individual MCB control and toggle switches – 15 sets</p> <p>0 – 500V Digital Voltmeter with Selector switch – 3sets</p> <p>0-630A Digital Ammeter with CTs and selector switch -3 set</p> <p>CT Operated Digital Load Managers – 3sets</p> <p><b>Relay</b> 12 Stage Automatic PF Controller Relay (Microprocessor based) with PF Meter - 1set</p> <p><b>Notes</b> All Capacitors shall be Delta connected and with ON/OFF Indication lamps, Ammeter with resin cast CTs and selector switch, Auto/ Manual Selector switch with 1set of ON/OFF Push buttons for Manual Operation.</p>	1.00	Each		

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
7.3	<p>Supply, installation, assembly, connection, testing and commissioning of UTILITY Panel as per Single Line Diagram, Technical Data sheet &amp; IS</p> <p><b>Incomer :</b> 250A FP MCCB 25KA -1Nos,( Microprocessor based O/C,S/C,E/F &amp; U/V releases ) BMS COMPATIBLE - RS-485</p> <p><b>Busbar :</b> 250A FP Aluminium Busbar 25KA,</p> <p><b>Outgoing :</b> 100A FP MCCB, 18KA - 04 Nos, 63A FP MCB, 10KA - 08 Nos, 40A FP MCB, 10KA - 4 Nos, 32A FP MCB, 10KA - 2 Nos,</p> <p><b>BMS COMPATIBLE</b> Indication &amp; Metering LED type Phase indication lamps with individual MCB control and toggle switches – 1 sets 0 – 500V Digital Voltmeter with Selector switch – 3sets 0 – 250A Digital Ammeter with CTs and selector switch – 3 sets CT Operated Digital Load Managers – 3sets</p>	1.00	Each		
7.4	<p>Supply, installation, assembly, connection, testing and commissioning of External Lighting Panel as per Single Line Diagram, Technical Data sheet &amp; IS</p> <p><b>Incomer :</b> 63A FP MCCB 18KA -1Nos</p> <p><b>Busbar :</b> 63A FP Aluminium Busbar 10KA,</p> <p><b>Outgoing :</b> 40A FP MCB, 10KA - 9 Nos,</p> <p><b>Indication &amp; Metering</b> LED type Phase indication lamps with individual MCB control and toggle switches – 1 sets 0 – 500V Digital Voltmeter with Selector switch – 3sets 0 – 250A Digital Ammeter with CTs and selector switch – 3 sets CT Operated Digital Load Managers – 3sets</p> <p><b>Timer and Contactor with Auto Manual Selector Switch - 1 sets</b></p>	1.00	Each		

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
7.5	Supply, installation, assembly, connection, testing and commissioning of Floor VTPN DB as per Single Line Diagram, Technical Data sheet & IS <b>Incomer :</b> 160A FP MCCB 25KA -1Nos <b>Busbar :</b> 160A FP Aluminium Busbar 25KA, <b>Outgoing :</b> 63A TP MCB, 10KA - 6 Nos 40A TP MCB, 10KA - 6 Nos,	8.00	Each		
	<b>LT CABLES</b>				
8.0	Supplying, testing & commissioning of below mentioned 1.1kV grade stranded AL conductor, XLPE insulated, extruded PVC sheathed, round armoured, cables in provided trench, duct, pipe, tray or on wall, as detailed in technical specifications complete with required labour, materials, meeting IE rules, regulations, standards and local supply authority requirements etc.				
	3.5C x 300 sq.mm. (Al.) XLPE Arm. Cable	500.00	Mtr		
	3.5C x 240 sq.mm. (Al.) XLPE Arm. Cable	R/o	Mtr		
	3.5C x 185 sq.mm. (Al.) XLPE Arm. Cable	50.00	Mtr		
	3.5C x 150 sq.mm. (Al.) XLPE Arm. Cable	R/o	Mtr		
	3.5C x 120 sq.mm. (Al.) XLPE Arm. Cable	R/o	Mtr		
	3.5C x 95 sq.mm. (Al.) XLPE Arm. Cable	R/o	Mtr		
	3.5C x 70 sq.mm. (Al.) XLPE Arm. Cable	R/o	Mtr		
	3.5C x 50 sq.mm. (Al.) XLPE Arm. Cable	500.00	Mtr		
	3.5C x 35 sq.mm. (Al.) XLPE Arm. Cable	100.00	Mtr		
	4C x 25 sq.mm. (Al.) XLPE Arm. Cable	50.00	Mtr		
	4C x 16 sq.mm. (Al.) XLPE Arm. Cable	600.00	Mtr		
	3C x 10 sq.mm. (CU.) XLPE Arm. Cable	R/o	Mtr		
	3C x 6 sq.mm. (CU.) XLPE Arm. Cable	30.00	Mtr		
	<b>LT CABLE TERMINATIONS</b>				
9.0	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium as required.				
	3.5C x 300 sq.mm. (Al.) XLPE Arm. Cable	22.00	No.		
	3.5C x 240 sq.mm. (Al.) XLPE Arm. Cable	R/o	No.		

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
	3.5C x 185 sq.mm. (Al.) XLPE Arm. Cable	2.00	No.		
	3.5C x 150 sq.mm. (Al.) XLPE Arm. Cable	R/o	No.		
	3.5C x 120 sq.mm. (Al.) XLPE Arm. Cable	R/o	No.		
	3.5C x 95 sq.mm. (Al.) XLPE Arm. Cable	R/o	No.		
	3.5C x 70 sq.mm. (Al.) XLPE Arm. Cable	R/o	No.		
	3.5C x 50 sq.mm. (Al.) XLPE Arm. Cable	6.00	No.		
	3.5C x 35 sq.mm. (Al.) XLPE Arm. Cable	30.00	No.		
	4C x 25 sq.mm. (Al.) XLPE Arm. Cable	10.00	No.		
	4C x 16 sq.mm. (Al.) XLPE Arm. Cable	20.00	No.		
	3C x 10 sq.mm. (CU.) XLPE Arm. Cable	R/o	No.		
	3C x 6 sq.mm. (CU.) XLPE Arm. Cable	2.00	No.		
	<b>POINT WIRING</b>				
<b>10.0</b>	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required. <b>Group B</b>	200.00	Nos.		
<b>11.0</b>	Wiring for group controlled ( loped ) light point/ fan point/ exhaust fan point/ call bell point ( without independent switch etc. ) with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc. as required . <b>Group B</b>	65.00	Nos.		
	<b>MODULAR SWITCH , SOCKET , MODULAR PLATE &amp; SWITCH BOX</b>				
<b>12.0</b>	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
	5/6 amps switch	69.00	Each		
	15/16 A switch	90.00	Each		
	3 pin 5/6 A socket outlet	69.00	Each		
	6 pin 15/16 A socket outlet	90.00	Each		
<b>13.0</b>	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	179.00	Each		
<b>14.0</b>	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
	3 Module (100mmX75mm)	100.00	Each		

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
	4 Module (125mmX75mm)	50.00	Each		
	6 Module (200mmX75mm)	25.00	Each		
	8 Module (125mmX125mm)	4.00	Each		
<b>15.0</b>	Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required.				
	3 Module	100.00	Each		
	4 Module	50.00	Each		
	6 Module	25.00	Each		
	8 Module	4.00	Each		
	<b>MAINS WIRING</b>				
<b>16.0</b>	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required.				
	2 x 1.5 Sq. mm. + 1 x 1.5 Sq. mm earth wire	500.00	Mtr		
	2 x 2.5 Sq. mm. + 1 x 2.5 Sq. mm earth wire	4,500.00	Mtr		
	2 x 4 Sq. mm. + 1 x 4 Sq. mm earth wire	375.27	Mtr		
	<b>DISTRIBUTION BOARDS &amp; ISOLATOR BOXES</b>				
<b>17.0</b>	Supplying and fixing of following ways surface/recess mounting,vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer ) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
	12 way (4 + 36), Double door	R/o	Each		
<b>18.0</b>	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	6 way (4 + 18), Double door	R/o	Each		
	8 way (4 + 24), Double door	11.00	Each		
<b>19.0</b>	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
	6 way , Double door	R/o	Each		
	8 way , Double door	R/o	Each		
	12 way , Double door	R/o	Each		
<b>20.0</b>	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required				
	Single pole	198.00	Each		
<b>21.0</b>	Supplying and fixing following rating, double pole, 240 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	40 A	R/o	Each		
	63 A	R/o	Each		
<b>22.0</b>	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	40A	R/o	Each		
	63A	11.00	Each		
<b>23.0</b>	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required				
	25 A	R/o	Each		
	40 A	33.00	Each		
	63 A	R/o	Each		
<b>24.0</b>	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required				
	25 A	R/o	Each		
	40 A	R/o	Each		
	63 A	R/o	Each		
	<b>INTERNAL LIGHT FIXTURE</b>				



Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
<b>25.0</b>	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA polyester powder coated and high U.V. & corrosion resistance with diffuser and/or Polycarbonate optics with company mark/name 120 to 300 V, Power Factor more than 0.9, THD < 10 %, CCT 4000 K to 6500K, Uniformity ratio >0.7, Luminaire efficacy > 85 lumens/watt , LED driver efficiency > 85 % CREE / OSRAM / PHILIPS Lumileds / NICHIA / SEOUL/Bridgelux(U.S.A.) make LED used for luminaire. (Each fitting required LM-79 & LM-80 Certificates)				
	36W T-5 LED TUBE LIGHT Wall/Ceiling Type Led Light Fixture with integral/non integral driver complete with Mounting Accessories	84.00	NOS		
	22W Surface / Recessed Mounted Light with integral/non integral driver complete with Mounting Accessories	81.00	NOS		
	12W Surface / Recessed Mounted Light with integral/non integral driver complete with Mounting Accessories	90.00	NOS		
	36W 600x600MM Surface / Recessed Mounted Light with integral/non integral driver complete with Mounting Accessories	10.00	NOS		
	<b>CABLE TRAYS,</b>				
<b>26.0</b>	Supplying and installing following size of perforated pre-painted M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders, bends, reducers, Tees etc as required.				
	300 mm width X 50 mm depth X 2.0 mm thickness	20.00	Mtr		
	450 mm width X 50 mm depth X 2.0 mm thickness	10.00	Mtr		
	600 mm width X 50 mm depth X 2.0 mm thickness	60.00	Mtr		
	750 mm width X 75 mm depth X 2.0 mm thickness	R/o	Mtr		
	900 mm width X 75 mm depth X 2.0 mm thickness	45.00	Mtr		
<b>27.0</b>	Supplying and installing following size of perforated painted with powder coating M.S. cable trays bends with perforation not more than 17.5%, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.				
	300 mm width X 50 mm depth X 2.0 mm thickness	R/o	Each		
	450 mm width X 50 mm depth X 2.0 mm thickness	1.00	Each		
	600 mm width X 50 mm depth X 2.0 mm thickness	4.00	Each		

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
	750 mm width X 75 mm depth X 2.0 mm thickness	R/o	Each		
	900 mm width X 75 mm depth X 2.0 mm thickness	5.00	Each		
	<b>TRUNKING/ RACEWAYS</b>				
<b>28.0</b>	Supplying, installation, Testing and commissioning of GI trunking with 275 GSM coating and made of 1.6 mm thick steel sheet with a standard length of 2.5 metres. The steel sheet is pre galvanised with zinc coating and is double folded and arc welded in the joints to prevent concrete seepage. The trunking is compartmentalised for provision of data, power and voice cables and has a depth of 38 mm complete as per specifications. <b>( Make: MK M-Trak , Legrand or Obbo Betterman )</b>				
	300mm x 38mm x 1.6mm	50.00	Mtr		
	225mm x 38mm x 1.6mm	100.00	Mtr		
	150mm x 38mm x 1.6mm	200.00	Mtr		
	100mm x 38mm x 1.6mm	900.00	Mtr		
	50mm x 38mm x 1.6mm	100.00	Mtr		
<b>29.0</b>	Supplying, installation, Testing and commissioning of G.I Junction boxes, suitable for 25/38/50 mm depth GI raceways. The Junction boxes are made out of high pressure die cast zinc alloy complete with all accessories such as trap lid, strong support frame, supports, etc complete as required and as per specifications. ( Make: MK M-Trak , Legrand or Obbo Betterman )				
	350 mm x 350 mm x 60 mm - 75 mm	4.00	Nos.		
	300 mm x 300 mm x 60 mm - 75 mm	6.00	Nos.		
	250 mm x 250 mm x 60 mm - 75 mm	4.00	Nos.		
	200 mm x 200 mm x 60 mm - 75 mm	2.00	Nos.		
	150 mm x 150 mm x 60 mm - 75 mm	12.00	Nos.		
	<b>G.I. CONDUITS</b>				
<b>30.0</b>	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.				
	25 mm	3,000.00	Mtrs		
	32 mm	500.00	Mtrs		
	40 mm	80.00	Mtrs		
	<b>PVC CONDUITS</b>				

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
<b>31.0</b>	Supplying and fixing of following size of medium class PVC conduits alongwith accessories in surface/ recess including cutting the wall and making good the same running in recessed/ false ceiling/ etc.				
	25 mm	50.00	Mtrs		
	32 mm	100.00	Mtrs		
	<b>EARTHING</b>				
<b>32.0</b>	Supplying & erecting in earthpit of minimum bore dia. 225mm size approved make Safe Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 80 mm having 80-200 Micron galvanising, Inner pipe dia of 40 mm having 200-250 Micron galvanising, connection terminal dia of 14 mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover.(approved make OEM has to submit test certificate including value of earth resistane of installation. [C] For Electrical Installation covering Transformer Neutrals, Lightning arrester Earthing, A.C.Plant & Sensitive Computer System(like Automation, SCADA)i.e. independent Earthing located in other than normal soil i.e. Soft Rock, Marshy Soil etc.. -Length of Pipe : 3 Mtrs. -Back filling Compound :2 nos Bags of 25 Kg.	18.00	Set		
<b>33.0</b>	Supplying and laying 25 mm X 5 mm Copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	10.00	Mtr		
<b>34.0</b>	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	80.00	Mtr		
	Providing and fixing 25 mm X 5 mm Copper strip on surface or in recess for connections etc. as required.	20.00	Kg		
	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	300.00	Kg		
<b>35.0</b>	Supply, Installation, Testing & Commissioning of 75 x 10 G.I. Equipotential Bar with Insulation, Holes for bolting termination complete with clamping & mounting accessories to complete the job.	6.00	Ea.		

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
36.0	Providing and erecting bare copper wire 10 SWG.	50.00	Rmt		
	<b>PASSENGER LIFT</b>				
37.0	(A) GENERAL DESCRIPTION OF LIFTS.				
	<p>[1] GEAR LESS LIFT DRIVE (MRL) comprising of High Starting torque Lift 3 phase 440 V A. C. Permanent Magnet Synchronous motor of proper rating with high efficiency shall be used. [2] Micro processor based / PLC, ACVVVF, vector control drive with encoder feedback closed loop system shall be used for lift car and door operation which shall be full collective selective operation hall call demand response, UP/DOWN hall stops, Main, Up/ Down Contactor with overload and phase reversal relay and safety controls. [3] Car with M S platform with bracings of adequate size and to sustain the impact load cabin + passenger with safety factor of fire for steel and side panels of Stainless steel of sheet of grade 304 duty. Car ceiling will be S.S. finishes with aesthetic appearance with LED ceiling lights. Car flooring shall be of anti skid PVC with choice of colour of engineer in charge. Car doors shall be of stainless steel grade 304, hairline finish with centre opening / telescopic automatic doors. Car panel will also be S.S. 304 finished with emergency stop device, mechanical door safety device, facility of auto/ attended mode. All car panel buttons and all floor switches must be with brail language as per lift act. [4] All landing doors must be fire rated for 2 hour shall be fully automatic centre opening/ telescopic opening made of hairline finish steel grade of 304 with key holes and infrared curtains with Unlocking facility from outside [5] Appropriate battery operated emergency light in the car along with alarm switch shall be provided. Also, Emergency Light &amp; Fan should start immediately without any Time Delay as soon as power fails. [6] Digital scrolling indicator system for up-down arrow along with floor position indicator shall be provided inside the car and at all floors. [7] Full height infra red curtain with multiple cross / crossing light beams shall be provided.[8] Automatic Rescue Device (ARD) shall be provided accordingly of passenger capacity with Manual Rescue Operation ( Manual Cranking Facility). [9] Audio visual indication in the lift car showing over loading shall be provided such that doors kept open till excess load is removed.</p>				

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
	<p>[10] Spring buffers/PU Buffers shall be provided. [11] Car fan as per passenger capacity with automatic sleep timer shall be provided. [12] Voice annunciator with suitable music shall be provided in lift car. [13] Self diagnostics system for operational and safety parameters shall be provided in control panel. [14] Mechanical over speed governor with governor calibration as per actual site parameters and submission of calibration certificate submission, door key holes in the floor doors, fireman switch shall be provided. [15] Lift machine hoisting arrangement in the lift machine room and monkey ladder for lift pit should be provided by the lift agency, along with the other steel structure works, foundations for the machine etc... [16] In the hoist way fascia plate shall be provided without any extra cost, where ever required as / if directed by engineer in charge. [17] Permanent wiring with necessary safety devices like RCCB in all circuit, Over Voltage Under Voltage protection and THD eliminator in circuit for lift machine room and lift well with proper numbers of light points, with fixtures, exhaust fan and plug points shall be provided by the agency. Only 3 phase Power Supply shall be made available by department in lift machine room. Necessary Earthing as per Lift Act/Rules shall be arranged by Lift Agency. [18] Any civil/ electrical works for additional and alteration in lift shaft and machine room related to erection of lift shall be made by lift agency without any extra cost. (granite/marble fixing around all landing door openings are not in lift agency's scope.) [19] Agency has to provide all working drawings and documents and liaison services for obtaining all necessary permission from lift inspector and other authorities. [20] acrylic transparent licence/display A4 size holder in lift car</p>				
	<p>[20A] As per statutory requirement of Govt. Of Gujarat lift &amp; escalator act 2000, lift agency has to provide  1. Car top safety barricade  2. Push &amp; talk communication system.  3. Fireman's switch operation at Ground Floor.  4. carrying out third party lift inspection during/after lift erection and provide report by third party authorized by concern licensing authority  5. agency has to provide third party insurance upto completion of free maintenance period and submit the document for the same.  [21] Car Panel Operating Buttons with floor position indicator/buttons must be of Auto Glow type clearly visible when view from inside cabin. [22] For Physically Handicapped person Full Length Handrails of hairline finish steel grade of 304 should be provided at appropriate height on the Rear &amp; Side Wall Panels in Lift Car.</p>				

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
	<p>(B) SPECIAL FEATURES DESCRIPTION OF LIFTS for PREMIUM category</p> <p>1. Advanced control system dual 64 bit embedded microprocessor with CANBUS Serial Communication mode including Regenerative power efficient operation, on site programming facility, Anti nuisance, Pte-opening, BMS/RMS with necessary online real time monitoring system having necessary connectivity for remote monitoring &amp; other suitable supporting hardware &amp; software devices to fulfil the purpose. 2. Floor Indication LCD Display with call registration &amp; brail mark with arrival gong and hall lantern &amp; TFT Screen in the car with MP3 Voice Announcer. 3. CAR Panel should be Scratch resistive SS Moonrock finish / Hair Line / Honeycomb for car and all Doors, All landing doors must have fire rating up to 2 hours and car door must have multi-level crisscross beam door protection. 4. To &amp; fro communication system &amp; wiring (i.e. car , control room &amp; guard room ) and Each elevator are equipped with remote monitoring system. agency has to provide mobile app and user id and password for monitoring</p>				
	<p>8 Passengers, Ground plus 10 upper floors with Rated Speed of 1.5 m/sec., (B) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith. Prem. Cat.</p>	2.00	Set		
	<b>LIGHTNING PROTECTION SYSTEM</b>				
38.0	Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, G.I. tube, having single prong at top, with 85 mm dia 6 mm thick G.I. base plate including holes etc. complete as required.	5.00	Each		
39.0	Fixing of lightning conductor finial (single prong) with base plate including holes etc. complete as required.	5.00	Each		
40.0	Jointing copper / G.I. tape (with another copper/ G I tape, base of the finial or any other metallic object) by riveting / nut bolting/ sweating and soldering etc as required.	60.00	Each		
41.0	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For horizontal run)	150.00	Metre		
42.0	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For vertical run)	135.00	Metre		
43.0	Providing and fixing testing joint, made of 20 mm X 3 mm thick G.I. strip, 125 mm long, with 4 nos. of G.I. bolts, nuts, chuck nuts and spring washers etc. complete as required.	5.00	Each		
44.0	Providing and laying G.I. tape 32 mm X 6 mm from earth electrode directly in ground as required	5.00	Metre		

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
45.0	Earth Electrode Cu Bonded Steel Rod 14.2mm dia x 3000mm- (250 Microns);Eco Friendly rust proof heavy duty weather proof Polyethyl ene Earth Pit Chamber with following dimensions : 254 mm dia (top), 330 mm dia (bottom) & 260 mm (height). 14.2 / OD SS Clamp Both Side; Carbon based backfill compound - 25Kg;	5.00	Nos		
	<b>SOLAR</b>				
46.0	Supply, Installation, Testing & Commissioning of following size of Grid Tied Solar Power Plant with Solar Panels (ALMM approved): Frame Material : Anodized Aluminum alloy Frame With Twin Wall Profile, Front Cover : High Transmission Low-Iron Tempered Glass (AR Coated), High efficiency and positive power tolerance Pmax: 0/+5, Module Efficiency should be approx. 18%-21%, Normal operating temperature 45°C, Junction Box with Waterproof IP67 & MC4 Compatible and Enclosed with Bypass diodes, 100% Electroluminescence test to ensure error free Modules, Thep. temp. co-efficient of the PV module shall equal or better than -0.45%/degree C. Solar PV modules of minimum fill factor 75% to be used. Unit Production:- 4 to 5 Unit /kw /day (Actual)(1Year Avg) With 10 year Product warranty and 25 year Linear Power Warranty., Solar Inverter: MPPT Range: 80-1000 V, Max efficiency: 97.5% - 98.9%, O/p Frequency: 50/60Hz, Operating Altitude (m) ≤4000, O/p Power Factor: ~1, O/P THDi: <3%, Operating Tempreture Range: -25~60°C, Anti-islanding Protection: Integrated, Input Reverse Polarity Protection Integrated, Insulation Resistor Detection Integrated, Residual Current Monitoring Unit Integrated, Output Over Current Protection Integrated, Output Short Circuit Protection Integrated, Output Over Voltage Protection Integrated Protection Degree: IP65, User Interface LCD & APP,Datalogger & Communication: GPRS / Wi-Fi, Module Mounting Structure: Seamless Box Pipe / 'C' Channel of suitable size for rooftop solar installations with good stability agaist wind & weight load., Hot Dipped Galvanized steel coils. suitable arrangement for base plate for foundation , solar panel mounting, the structure should be suitable for carry the load of solar panel,wiring, sprinkler system etc. with necessary foundation work/wall mount, j bolt, anchor fastner etc. the nut bolt used for installtion of stucture should be (SS 304) quality. and Balane of System with necessary Swithgears (Suitabel size and protection of ACDB & DCDB), inter connecting wiring, earthing system, lightning arrester system, all liasoning work with various gov. dipartment like state nodal agency,DISCOM & CEIG is included in agency scope. (Excluding GEDA Application fees, Solar connectivity Charges, Meter connectivity Charges, Meter testing Charges.) (D) Grid Tied Solar Power System: 26 - 50 kW (3 - phase)	30.00	KWp		
	<b>MISCELLENEOUS ITEMS</b>				
47.0	Providing,laying and fixing following dia RCC pipe NP2 class (lightduty) in ground complete with RCC collars,jointing with cement mortar 1:2 (1cement:2 finesand) including trenching (75cmdeep) and refilling etc as required.				
	150 mm dia	50.00	Metre		
	300 mm dia	20.00	Metre		

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
49.0	Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS14930, Part II complete with fitting and cutting, jointing etc. direct inground (75 cm below ground level) including excavation and refilling the trench but excluding and cushioning and protective covering etc. complete as required.				
	63 mm dia (OD-63 mm & ID-51 mm nominal)	250.00	Metre		
	90 mm dia (OD-90 mm & ID-76 mm nominal)	50.00	Metre		
50.0	Excavation for cable trenches in soft soil, depth upto 1.2 m including dressing of sides lift upto 1.5 m, including getting out the excavated soil, refilling with sand and or good soil after laying of cable/ pipe etc in layers of 20 cm, ramming, watering and disposal of surplus excavated soil as directed, within a lead of 50 metres.	300.00	CUM		
	SITC of Electrical Manholes of Following Sizes :				
51.0	Providing 900 mm x 900 mm X 1000 mm deep manhole complete with 6" thick brickwall, plastering on both sides and providing water tight removal type C.I. hinged cover complete in all respect.	2.00	Each		
	<b>STREET LIGHT &amp; RELATED ACCESSORIES</b>				
52.0	<p>SITC of Street lighting pole with 1500 mm. long single/double bracket arm with Polycarbonate junction box. The pole shall be fixed on insert plates fixed on civil foundation OR shall be fixed with 4 nos. 20mm dia / 250 mm. long anchor fasteners (chemical fasteners) . Civil foundation for Pole will be provided by Civil contractor. Installation of pole shall be including complete finishing of the work to the satisfaction of Engineer- In -Charge. The scope includes following items/activities:</p> <ol style="list-style-type: none"> <li>1. SITC of poles with junction box and other accessories at site stores &amp; installation site.</li> <li>2. Fixing of junction box</li> <li>3. Wiring &amp; interconnection from junction box up to light fixture (3 X 2.5 Sq.mm. PVC insulated copper flexible wires).</li> <li>4. Fixing of anchor fasteners wherever required.</li> <li>5. Cutting and grinding of existing foundation bolts, wherever required.</li> <li>6. Supply &amp; Fixing of DWC HDPE pipe of adequate dia. for cable protection .</li> <li>7. Supply of foundation bolts / base plate for civil foundation work.</li> <li>8. Minimum 90 micron hot dip galvanization required.</li> </ol>				



Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
	SITC of single arm pole 9Mtr.GI Type with Polycarbonate junction box (Fixing with anchor fasteners & core cutting)	9.00	NOS		
	SITC of Double arm pole 9Mtr.GI Type with Polycarbonate junction box (Fixing with anchor fasteners & core cutting)	R/o	NOS		
53.0	SITC of 90W LED Street Light Fixture, with System efficacy of minimum 120 Lumens/watt complete with electronics ballast & all other accessories to mount Light Fixture on 09 Mtr. high pedestal type poles. The installation will be complete with interconnection wiring of 3C x 2.5 Sq.mm. Copper flexible cable from JB/Controlgear box up to the light fitting if required. Make & Model Number : Crompton & LSTP-90-CDL	9.00	NOS		
	Pump & Panels				
54.0	Supply, Installation, Testing And Commissioning Of Compact Self Contained Skid Mounted Hydropneumatic System As Follows: a)Vertical, In-Line, Multisage, centrifugal pumps with SS-304 casing and impeller and SS-316 shaft, CI base & head TEFC motor (with mechanical seal) b)The pump shall be selected for efficiency of pump 70% and motor efficiency 90%.. However, the pump selection shall be suitable for performance with set point @ + 20% of the rated head. c). External Pump mounted or wall mounted microprocessor PID controller and frequency inverter integrated in a single body or as separate components with pressure sensor transmitter minimum two lined LCD display, diodes to indicate pump ready, pump running and fault and capable to communicate with other controllers following MODBUS-RTU or BACNET Class-2 protocol through RS485 port. System should be capable to compensate for frictional losses at lower flows. All alarms should be displayed in the controller. System should be equipped with dry running protection. d) Complete (Skid mounted wall mounted / floor mounted) electrical control panel comprising of all accessories such as PLCs, pressure switches, pressure transducers, control wiring and any other necessary imports etc. (list to be provided by the vendor) e) Set of accessories such as pressure switches, pressure transducers, inter connecting power and control cabling etc. complete f). Accessories like pressure gauge, MS base frame (Synthetic enamel painted over a coat of primer) g). GI suction and delivery header with flanges for inlet connection, common outlet header with flanges for outlet connections as required, and inter connecting piping with flexible connections, eccentric type reducers etc. all necessary indigenous accessories as required to complete the installation. Note: Vendor Should submit the pump selection curve along with the technical bid. <b>1 working and 1 no. standby + 1 Jockey = 1 set (2 pumps)</b> <b>Duty :200 LPM at 50M head</b>	1.00	Set		

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
55.0	<p>Providing, fixing, jointing, and testing in position approved make <b>Flushing Water Transfer Pump</b> with constant pressure water supply of average discharge pressure comprising of horizontal or vertical mounted, single/multi stage, single outlet, factory mounted on common base with electric motor with Impeller-CI/SS, Shaft-SS 316, Seal-Mechanical, Body-CI, Shutoff Head 95mtr, Pump kW 10 &amp; constant speed. efficiency of pump 70% and motor &amp; Pump efficiency 90%. The pumps to be installed in the pump room and will have positive suction. Each Pump shall be controlled with Auto level switch connected to the controlled panel. Necessary cabling (From Ele. Plumbing Panel To Pump starter Panel) for Power and control having a total length of about <b>15 Rmt</b> shall be laid along with the switches for auto control. Necessary S.S. probes shall be installed for start/stop of pumps. (The pump and motor offered shall be subject to approval of the client &amp; consultants).</p> <p><b>(For work within Pump Room)</b></p> <p><b>Note: Vendor Should submit the pump selection curve along with the technical bid.</b></p> <p><b>1 working and 1 no. standby + 1 Jockey = 1 set (2 pumps)</b></p> <p><b>Duty :200 LPM at 50M head</b></p>	1.00	Set		
56.0	<p>Supplying, fixing, testing and commissioning of <b>dewatering pumps</b> (Submersible 'type) of adequate HP, capable of giving a required discharge at suitable head to 'workon 3Ph 50Hz, 400/440V with necessary unions, flanges, with water level 'controllerwith cabling etc., complete..[ Pump room &amp; basement storm water drainage]</p> <p>Note: Vendor Should submit the pump selection curve along with the technical bid.</p> <p><b>1 working and 1 no. standby = 1 set (2 pumps)</b></p> <p><b>Duty : 150LPM at 30M head -</b></p>	1.00	Set		

Sr. No	Item Description	QTY	Unit	Rate	AMOUNT
<b>57.0</b>	Providing and fixing Pump <b>Auto Control Panel</b> with level senser & auto cyclic changeover for above Domestic & Flushing Pumps as follows. The panel shall be fabricated from 14 gauge CRCS Sheet finish with powder coating. It shall have one incomer of suitable capacity (as per pump requirement), for outgoing motor feeders of pumps. The incomer shall have switch fuse unit, SC protection, 3Ph. Indicator, dry run protection, under current protection, voltmeter and ammeter with selector switch. The motor feeders shall have MCB with DOL starter, overload cum single phase prevented relay, Auto/Off/Manual selector switch, ON/OFF Push buttons, ON/OFF trip indicating lamps, control circuits etc complete. The control circuit shall have selector switch off duty pumps, electronic toggle switch to level cut off pressure switches etc.				
<b>57.1</b>	Control Panel For Flushing water transfer pump	1.00	Nos.		
<b>57.2</b>	Control Panel For Dewatering Pump	1.00	Nos.		
<b>58.0</b>	Supplying & erecting approved make motor control cubical panel [Star delta] made from 16G CRCA sheet duly epoxy powder painted inside and outside with hinged doors and locking with suitable size of ON - OFF isolator (AC 3 / 23 duty) main fuses. Digital volt and current meter (in a single unit) with micro controller based control unit and current sensing single phasing preventer electronic overload protection, over voltage (Programmable) protection and under voltage (Programmable) protection, prod less dry run protection programming facility for setting of all parameter like overload current, high voltage limit, low voltage limit, dry run limit with digital indication on seven segment LED display for any fault like over load, high voltage, low voltage, dry running single crimped, electronic star delta timer, feather touch start / stop push buttons to be erected on angle iron frame. Grouted on wall the contactors will be of L& T, Siemens , BCH make only) (e) S/D up to 22.5 H.P.	1.00	Each		
<b>59.0</b>	Providing and erecting ISI marked PVC insulated PVC Sheathed Flat flexible Submersible copper cable approved make of following Size. (e) 3 Core x 10 Sq. mm. .	260.00	Rmt		
<b>60.0</b>	Providing Water proof straight Joint in PVC insulated flat flexible copper cable by using insulating material, water proofing material, & making the joint complete. (A) Up to 10Sq. mm	1.00	Each		
<b>61.0</b>	Supplying submersible pump set for bore of 150 mm. dia. Or more having 3 phase motor capacity about 20 H.P and discharge capacity having (b) (14 Stage) 650 to 550 LPM discharge at head 84 to 112 mtrs suitable for 65 mm dia. delivery pipe	1.00	Each		
	<b>Total Estimated Amount</b>				

**Construction Of A Multi-Storey Building (Lower basement + Upper basement +Ground floor to sixth floor) including civil, plumbing, Electrical and Other Services (Green Building With Gold Rating in Leed /Griha) For State Bank Of India At Final Plot No.116, T.P. Scheme No. 3, Bhayali, Vasna-Bhayali Road Vadodara (Gujarat)**

**FIRE FIGHTING SYSTEM**

Sr. No.	Description of Item	Qty	Unit	Rate	Amount
<b>CATEGORY-A-FIRE EXTINGUISHER</b>					
1.0	Supply installation testing and commissioning of CO2 type Fire Extinguisher of 4.5 kgs capacity made from brand new seamless drawn steel cylinder conforming to IS : 7285 with ISI mark and Chief of controller of explosives approval, fitted with wheel valve conforming to IS: 3224 with ISI mark, with discharge hose and horn and supplied complete with initial charge overall conforming to IS: 15683 with ISI mark and wall bracket. Fire Rating 21B MAKES: Kanex/ Safex/ Minimax	26.0	Each		
2.0	Supply installation testing and commissioning of Water CO2 type Fire Extinguisher of 9Kgs. capacity, fitted with discharge control valve ( squeeze grip type ) , inside co2 gas cartridge of 60gms conforming IS:4947 with ISI mark, with discharge hase and open nozzel overall conforming to IS: 15683 with ISI mark along with wall bracket and initial refilling at site . Fire Rating 3A. MAKES: Kanex/ Safex/ Minimax	30.0	Each		
3.0	Supply installation testing and commissioning of Dry Chemical Powder 6.0 kg capacity fitted with discharge control valve ( squeeze grip type ) , inside co2 gas cartridge of 120gms conforming to IS: 4947 with ISI mark and DCP powder as per IS: 14609 ( for ABC class ) with ISI mark packed in 5kgs HDPE bags, with discharge hose and open nozzel and supplied complete with initial charge overall conforming to ISI: 15683 ISI mark and wall bracket . Fire Rating 34B. MAKES: Kanex/ Safex/ Minimax	24.0	Each		
4.0	Supply installation testing and commissioning of Modular type ABC Dry Powder MAP 90% Powder ceiling Mounted type 5 Kgs. Capacity Fire Extinguishers ,Test pressure 15/35 bar, Anti-corrosive treatment ,powder coated ,height 380mm, shell diameter 230+/- 10 mm, hanging height 1.5 to 2 mtr, Bulb Temperature -30 to +60 deg Centigrade, charged weight 7.64kgs, charged pressure 15 bar, Expelling Agent Nitrogen (UHP Grade) complete with ceiling mounting stand. MAKES: Kanex/ Safex/ Minimax	6.0	Each		

Sr. No.	Description of Item	Qty	Unit	Rate	Amount
5.0	Supply & Fixing ISI Grade approved 9 Litres. Capacity galvanised round bottomed Fire Buckets, fully filled with dry yellow sand, painted Red and lettered "Fire" each with one stand with brackets to hang three buckets on each MS post as directed. (at Transformer, DG Set). MAKES: Kanex/ Safex/ Minimax	2.0	Each		
<b>CATEGORY-B-AUTOMATIC FIRE ALARM &amp; DETECTION SYSTEM</b>					
6.0	Microprocessor based Multi-loop, True Peer-to-Peer Networkable <b>Addressable Fire Alarm Control Panel - 10 Loop</b> with minimum 600 characters LCD display, 4000 event plus 1000 alarm log history events, QWERTY keypad for programming. The panel should be equipped with sufficient numbers of loops considering 20% spare capacity in each loop. Each loop shall have a capacity of minimum 300 analog addressable devices. The panel shall work in degrade mode in case of CPU failure. Four access levels, flash EPROM, 240 volts AC power supply, automatic battery charger, <b>24 volts sealed batteries sufficient for 24 hours normal working and 30 mins in alarm condition. Designed to meet UL864, 10th Edition</b> MAKES: Honeywell-Notifier, Bosch-UL, Johnson Control-IFC	1.0	Each		
7.0	<b>IP based Graphics User Interface</b> for Monitoring & Control of complete Fire, Voice Evacuation & Telephone Talkback System. The GUI based main network software shall network with other panels on True Peer-to-Peer network. It shall be capable of graphically representing each facility being monitored with floor plans and icons depicting the actual locations of the various systems, and / or sensors' locations. It shall have the facility to change the sensitivity of any detector. The software shall be capable of monitoring 200 Nodes with 100 Mbps Transmission rate on Fibre Optics Network and 12 Mbps Transmission on cable and 2,50,000 network points. The software shall be capable to Monitor & Control all the Digital Voice Evacuation as well as 2 way communication from main control room using voice signals over Fire Network along with the Fire detection signal. The Graphic workstation shall act as an independent node communicating on the peer to peer network and shall not be dependant on the Fire Panel CPU for operation. Failure of Fire Panel CPU shall not result in failure of GUI. Complete with required PC. MAKES: Honeywell-Notifier, Bosch-UL, Johnson Control-IFC	1.0	Each		
8.0	Supply and drawing of 2 C X 1.5 Sq mm multi stranded twisted unshielded FRLS Copper armoured cable. MAKES: Polycab, Avocab, R&M	3000.0	Mtr		

Sr. No.	Description of Item	Qty	Unit	Rate	Amount
9.0	Addressable <b>Multi-criteria Photo-Smoke &amp; Thermal Detector</b> with sensitivity range of 0.5 to 4.0% obs/ft.The intelligent multi criteria detection device shall include the ability to combine the signal of the thermal sensor with the signal of the photoelectric signal in an effort to react hastily in the event of a fire situation. It shall also include the inherent ability to distinguish between a fire condition and a false alarm condition by examining the characteristics of the thermal and smoke sensing chambers and comparing them to a database of actual fire and deceptive phenomena. The detector shall have twin bi-colour LED for 360 deg viewing. Addressing shall be with user friendly rotary decimal switches. <b>Designed to meet UL268, 7th Edition (Below Ceiling Detector)</b> MAKES: Honeywell-Notifier, Bosch-UL, Jonhnson Control-IFC	226.0	Each		
10.0	Addressable <b>Multi-criteria Photo-Smoke &amp; Thermal Detector</b> with sensitivity range of 0.5 to 4.0% obs/ft.The intelligent multi criteria detection device shall include the ability to combine the signal of the thermal sensor with the signal of the photoelectric signal in an effort to react hastily in the event of a fire situation. It shall also include the inherent ability to distinguish between a fire condition and a false alarm condition by examining the characteristics of the thermal and smoke sensing chambers and comparing them to a database of actual fire and deceptive phenomena. The detector shall have twin bi-colour LED for 360 deg viewing. Addressing shall be with user friendly rotary decimal switches. <b>Designed to meet UL268, 7th Edition (Above Ceiling Detector)</b> MAKES: Honeywell-Notifier, Bosch-UL, Jonhnson Control-IFC	350.0	Each		
11.0	<b>Isolator Module</b> for Isolating short / dewired / loose circuits with automatic resetting arrangement. Isolator Base can also be proposed, however in that case needs to be considered with each detector & module. The device shall have an LED which shall blink in normal state & get steady on activation to monitor the heath status of the device. Module shall be supplied with mounting plate from OEM for ease of installation & maintenance. MAKES: Honeywell-Notifier, Bosch-UL, Jonhnson Control-IFC	40.0	Each		
12.0	Supply installation testing and commissioning of <b>Response indicators</b> with all fixing accessories MAKES: Honeywell-Notifier, Bosch-UL, Jonhnson Control-IFC	350.0	Each		
13.0	Addressable <b>Manual Call Point</b> . The device shall have an LED which shall blink in normal state & get steady on activation to monitor the heath status of the device. MAKES: Honeywell-Notifier, Bosch-UL, Jonhnson Control-IFC	11.0	Each		

Sr. No.	Description of Item	Qty	Unit	Rate	Amount
14.0	<b>Sounder cum Strobe</b> rated at 80 dBA @ 3m for Audible annunciation and 115cd flashintg at 1 Hz for visual indication with control module. <b>UL Listed</b> <b>MAKES: Honeywell-Notifier, Bosch-UL, Johnson Control-IFC</b>	11.0	Each		
15.0	Addressable <b>Monitor Module</b> for Sprinklers, Panic Bars & other Third Party Inputs. The monitor module shall monitor potential free contacts. The device shall have an LED which shall blink in normal state & get steady on activation to monitor the heath status of the device. Addressing shall be with user friendly rotary decimal switches. Module shall be supplied with mounting plate from OEM for ease of installation & maintenance. <b>( to take 3rd party input integrations like fire sprinklers and hydrant, emergency doors, or any othe equipments.)</b> MAKES: Honeywell-Notifier, Bosch-UL, Johnson Control-IFC	1.0	Set		
<b>CATEGORY-C-WATER BASED FIRE FIGHTING SYSTEM</b>					
16.0	Supplying, installation, testing and commissioning of Electric driven Main Fire Pump suitable for automatic operation and consisting of following, complete in all respects, as required :(b) Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal conforming to IS 1520. (c) Suitable HP Squirrel cage induction motor, TEFC, synchronous speed 1500 RPM, suitable for operation on 415 volts, 3 phase 50 Hz, AC supply with IP 55 protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325. (d) M.S. fabricated Common base plate, coupling, coupling guard, foundation bolts etc. as required. (e) Suitable cement concrete foundation duly plastered with anti vibration pads. <b>(Note: *The head of the pump is selected in a manner so as to give a minimum 3.5kgf/cm 2 pressure at the highest/farthest point.) 2280 lpm at 70 m Head</b> MAKES: Kirloskar/ Lubi/ Wilo	2.0	Set		

Sr. No.	Description of Item	Qty	Unit	Rate	Amount
17.0	<p>Supplying, installation, testing and commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following, complete in all respects, as required : (Diesel Driven Pump). Horizontal type, multistage, centrifugal pump of cast of iron body and bronze impeller with stainless steel shaft, mechanical seal conforming to IS 1520. Suitable HP, 1500 RPM water cooled with radiator, diesel engine conforming to relevant IS standard complete with auto starting mechanism, 12 /24 volts electric starting equipment, diesel tank, exhaust pipe extended upto 10 m outside pump house duly insulated with 50 mm thick glass wool with 1.0 mm thick aluminium sheet cladding, residential silencer, instruments and protection as per standard specification, stop solenoid for auto stop in the event of fault with audio indications, painted with post office red colour etc. as required. M.S fabricated, common base plate, coupling, coupling guard, foundation bolts etc. as required. Suitable cement concrete foundation duly plastered and with anti vibration pads. <b>(Note: *The head of the pump is selected in a manner so as to give a minimum 3.5kgf/cm 2 pressure at the highest/farthest point.) 2280 lpm at 70 m Head</b>            MAKES: Kirloskar/ Lubi/ Wilo</p>	1.0	Set		
18.0	<p>Supplying, installation, testing and commissioning of electric driven pressurisation pump suitable for automatic operation and consisting of following, complete in all respects, as required : (Jockey Pump). Horizontal type, multistage, centrifugal pump of cast iron body and bronze impeller with stainless steel shaft, mechanical seal conforming to IS : 1520. Suitable HP squirell cage induction motor TEFC type suitable for operation on 415 volts, 3 phase 50 Hz AC supply with IP 55 class of protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS : 325. M.S.fabricated Common base plate, coupling, coupling guard, foundation bolts etc. as required. Suitable cement concrete foundation duly plastered and with anti vibration pads. <b>(Note: *The head of the pump is selected in a manner so as to give a minimum 3.5kgf/cm 2 pressure at the highest/farthest point.)180 lpm at 70 m Head</b>            MAKES: Kirloskar/ Lubi/ Wilo</p>	2.0	Set		



Sr. No.	Description of Item	Qty	Unit	Rate	Amount
19.0	<p>Fabrication, supply, Insallation testing &amp; commissioning of Electrical control panel of cubical construction, floor mounted type, fabricated out of 2mm thick CRCA sheet, compartmentalised with hinged lockable doors, dust and vermin proof, powder coated of approved shade after 7 tank treatment process, cable alley, inter- connection with suitable size copper conductor cable/solid copper strip, having switchgears and accessories, mountings and internal wiring, earth terminals, numbering etc. complete in all respect, suitable for main fire pump, pressurisation pump &amp; diesel pump set complete as per CPWD specification with following in coming and Outgoings, suitable for operation on 415V, 3 phase, 50Hz Ac Supply with enclosure protection class IP 42 as required : 400A, 50kA 4 Pole MCCB, Ics=100% Icu Rating, Digital Voltmeter 0-500V with selector switch, Ammeter (0-400 A) with selector swtich &amp; CTs etc., LED type RYB phase indicating lamps, ON, OFF, trip indicating lamps, Set of Copper Bus Bar 500Amps Outgoings ( Note : All outgoing feeders for pumps should have digital Ammeter with selector switches, and LED type ON, OFF, trip indicating lamps)</p> <p>Main Fire Pumps - 125 Amp, 50kA TPN MCCB, Ics=100% Icu, with fully automatic Star/Delta starter suitable for 60 hp pump with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation. - 2 sets</p> <p>Jockey Pump : 63 Amp, 50kA TPN MCCB, Ics=100% Icu, with Suitable HP fully automatic Star/Delta starter with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation. - 2 sets</p> <p>Diesel Engine Control Control for diesel engine comprising - Automatic/Manual selctor switch &amp; 3 attempts starting device, timers and relays as required, push buttons, start/stop in manual mode Indicating lamp for high/ Low Lub. Oil pressure, High Water Temp and Engine on indication Battery charger suitable for 12V/24 V DC with boost and trickle selector switch, 0-30 V DC volt meter, and 0 20 A DC Ammeter All standard relays and accessories for automatic operation of diesel engine System Controller Designing, Supply, Installation, Testing and commissioning of system controller to control operation of main electric fire pump, diesel pump, Pressurization pump, Terrace pump in sequence as per specification consisting of relays, timers. Sensors, annunciation window for fault indication, complete as per specification</p> <p>MAKES: ABB / L&amp;T / Schinder Make Panel Components</p>	1.0	Set		

Sr. No.	Description of Item	Qty	Unit	Rate	Amount
20.0	Supplying and fixing single headed <b>internal hydrant valve</b> with instantaneous Gunmetal/Stainless Steel coupling of 63 mm dia with cast iron wheel ISI marked conforming to IS 5290 (Type -A) with blank Gunmetal/Stainless Steel cap and chain as required :Single headed Gunmetal MAKES: Shah Bhogilal/ New Age/ Swati	9.0	Set		
21.0	Supplying & fixing 63 mm dia gun metal <b>short branch pipe</b> with 20 mm nominal internal diameter size nozzle conforming to IS 903 suitable for instantaneous connection to interconnect hose pipe coupling as required :Gun metal MAKES: Shah Bhogilal/ New Age/ Swati	15.0	Nos		
22.0	Supplying and fixing <b>first-aid Hose Reel</b> with MS construction spray painted in post office red, conforming to IS 884 complete with the following as required. 20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585 20 mm nominal internal dia gun metal globe valve & nozzle. Drum and brackets for fixing the equipments on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. 40 m MAKES: Shah Bhogilal/ New Age/ Swati	15.0	Set		
23.0	Supplying and fixing 63 mm dia, 15 m long RRL hose pipe with 63 mm dia male and female couplings duly bound with GI wire, rivets etc. conforming to IS 636 (type-A) as required : Gun Metal MAKES: Shah Bhogilal/ New Age/ Swati	30.0	Set		
24.0	Providing and fixing fire hose cabinet to house fire hydrant & hose, including all other related accerrories fabricated from M.S. sheet (16 Gauge) of fully welded construction having front door with locking arrangement, partially glazed with 4 mm thick glass. Cabinet shall be powder coated & painted with post office red colour of size to house 15 mtr.x 2 No. hoses & 1 no. branch pipe. 'Fire Hose box, Size:- 750 x 600 x 250 mm Depth Complete with Fabrication Stand and mounting accessories. MAKES: Shah Bhogilal/ New Age/ Swati	15.0	Set		
25.0	Supplying and fixing Single headed <b>external yard hydrant valve</b> with 1 No. 63 mm dia instantaneous FM Gunmetal/Stainless Steel coupling and cast iron wheel, ISI marked, conforming to IS 5290 (type A) with blank Gunmetal/Stainless Steel cap and chain as required :Single headed Gunmetal MAKES: Shah Bhogilal/ New Age/ Swati	6.0	Set		

Sr. No.	Description of Item	Qty	Unit	Rate	Amount
26.0	Supplying and fixing of <b>fire brigade connection</b> of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS/GI pipe connection conforming to IS 904 as required : MAKES: Shah Bhogilal/ New Age/ Swati				
26.1	2 way-100 mm dia M.S. Pipe	1.0	Set		
26.2	4 way - 150 mm dia M.S. Pipe	1.0	Set		
27.0	Providing, laying, testing & commissioning of 'B' class heavy duty G.I. pipe conforming to IS 1239 including welding, fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required in ground including welding, excavation & providing cement concrete blocks as supports, anticorrosive treatment with coaltar/asphalt tape as per IS 10221, refilling the trench etc. of following sizes complete as required. MAKES: Jindal/ Asian/ Surya Prakash				
27.1	200 mm. dia (wall thickness = 6.3 mm)	10.0	M		
27.2	150 mm. Dia	150.0	M		
28.0	Providing, laying, testing & commissioning of 'B' class heavy duty G.I. pipe conforming to IS 1239 including welding, fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required : MAKES: Jindal/ Asian/ Surya Prakash				
28.1	25 mm dia	800.0	M		
28.2	32 mm dia	100.0	M		
28.3	40 mm dia	370.0	M		
28.4	50 mm dia	300.0	M		
28.5	65 mm dia	150.0	M		
28.6	80 mm dia	100.0	M		
28.7	100 mm dia	150.0	M		
28.8	150 mm dia	200.0	M		

Sr. No.	Description of Item	Qty	Unit	Rate	Amount
<b>29.0</b>	Supplying, fixing, testing and commissioning of <b>butterfly valve</b> of PN 1.6 rating with bronze/gunmetal seat duly ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095 of following sizes as required : MAKES: Zoloto/ Kartar/ Sant				
<b>29.1</b>	80mm dia	1.0	Set		
<b>29.2</b>	100 mm dia	9.0	Set		
<b>29.3</b>	150 mm dia	1.0	Set		
<b>29.4</b>	200 mm dia	1.0	Set		
<b>30.0</b>	Supplying, fixing, testing & commissioning of <b>double flanged sluice valve</b> of rating PN 1.6 with non rising spindle, bronze/gun metal seat, ISI marked complete with nuts, bolts, washers, gaskets and conforming to IS 780 of following sizes as required : MAKES: Zoloto/ Kartar/ Sant				
<b>30.1</b>	100mm dia	2.0	Set		
<b>30.2</b>	150mm dia	3.0	Set		
<b>30.3</b>	200mm dia	1.0	Set		
<b>31.0</b>	Supplying and fixing <b>orifice plate</b> made out of 6 mm thick stainless steel (Grade 304) with orifice of required size to be fitted between flange & landing valve of external and internal hydrants to reduce pressure at the outlet to the level of 3.5 kg/cm <sup>2</sup> complete as required.	9.0	Each		
<b>32.0</b>	Providing, installation, testing and commissioning of <b>non-return valve</b> of following sizes confirming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc.as required : MAKES: Zoloto/ Kartar/ Sant				
<b>32.1</b>	80mm dia	2.0	Set		
<b>32.2</b>	100mm dia	1.0	Set		
<b>32.3</b>	150mm dia	3.0	Set		
<b>32.4</b>	200mm dia	1.0	Set		
<b>33.0</b>	Providing, installation, testing and commissioning of stainless steel <b>Y-strainer</b> fabricated out of 1.6 mm thick stainless steel, Grade 304, sheet with 3 mm dia holes with stainless steel flange. MAKES: Zoloto/ Kartar/ Sant				
<b>33.1</b>	80mm dia	2.0	Each		
<b>33.2</b>	100mm dia	1.0	Each		
<b>33.3</b>	150mm dia	3.0	Each		

Sr. No.	Description of Item	Qty	Unit	Rate	Amount
33.4	200mm dia	1.0	Each		
34.0	Providing, fixing, testing & commissioning of 15mm dia quartzoid bulb type <b>sprinklers</b> of rating 68 degree centigrade with required accessories : Pendent Sprinkler MAKES: HD/ Tyco/ Wiking	500.0	Each		
35.0	Providing, fixing, testing & commissioning of 15mm dia quartzoid bulb type <b>sprinklers</b> of rating 68 degree centigrade with required accessories : Upright Sprinkler MAKES: HD/ Tyco/ Wiking	400.0	Each		
36.0	Providing, fixing, testing & commissioning of 15mm dia quartzoid bulb type <b>sprinklers</b> of rating 68 degree centigrade with required accessories : Horizontal side wall sprinkler MAKES: HD/ Tyco/ Wiking	40.0	Each		
37.0	Providing & fixing of <b>pressure switch</b> in M.S./GI pipe line including connection etc. as required. MAKES: Switcher / Honeywell / Danfoss	5.0	Each		
38.0	Providing & fixing <b>flow switch</b> in following sizes M.S./GI pipe including connection etc as required. MAKES: Reputed Make				
38.1	100mm dia	9.0	Each		
38.2	150mm dia	1.0	Each		
39.0	Providing, fixing, testing & commissioning of <b>installation control valve</b> of cast iron body, brass/bronze working parts comprising of water motor alarm, bronze seat clapper, clapper arm and hydraulically driven mechanical gong bell to sound continuous alarm when the wet riser/sprinkler system activates, pressure gauges, emergency releases, strainer, pressure switch, cock valve complete with drain valve and bypass, test control box, ball valves, MS pipe of required size, flanges, orifice plate, gasket etc of following sizes as required : MAKES: HD/ Tyco/ New Age				
32.1	80mm dia	1.0	Set		
32.2	100mm dia	9.0	Set		
32.3	150mm dia	1.0	Set		
40.0	Supplying, installation, testing & commissioning of deluge valve (to be used for water curtains) UL listed with wet pilot basic trim assembly for DVA with test and alarm, drip and drain valve with water motor gong complete as required. MAKES: HD/ Tyco/ New Age				
	150mm dia	1.0	Set		

Sr. No.	Description of Item	Qty	Unit	Rate	Amount
41.0	Providing, installation, testing & commissioning of water curtain nozzle 15mm dia nickel chrome plated brass, BSPT, K-factor as per design consideration complete as required. MAKES: HD/ Shah Bhogilal/ New Age	40.0	Each		
42.0	Providing, installation, testing & commissioning of electric release trim assembly for deluge wall with two way solenoid valve, weather proof operation on 24 volts DC supply complete as required. MAKES: HD/ Tyco/ New Age	1.0	Set		
43.0	Providing, installation, testing & commissioning of adjustable rosette plate for 15mm dia in white finish UL Listed or FM approved complete as required. MAKES: HD/ Tyco/ Wiking	500.0	Each		
44.0	Supplying, installation, testing & commissioning of sprinkler flexible pipe (UL Listed) of stainless steel complete with 15 NPT on reducer thread with maximum working pressure of 175 PSI test pressure of 875 PSI (Burst) with branch line (Inlet) 25mm NPT male thread to sprinkler head (Outlet) 15mm NPT female thread with reducer, nipple, 2 side brackets, center bracket, stockbar of following sizes complete as required.1000mm MAKES: HD/ Tyco/ Wiking	500.0	Set		
44a	Supplying, installation, testing & commissioning of pressure switch as per approved make. MAKES: HD/ Tyco/ Wiking	5.0	Set		
<b>CATEGORY-D-AUTOGLOW/LED BASED SAFETY SIGNAGES</b>					
45.0	Supplying, installation, testing & commissioning of Photo luminescent non toxic, non radioactive, maintenance free self glowing exit signs comprising zinc sulphide chargeable crystals which can glow in dark; printed on U-1000 photo luminiscent aluminium sheet 1.0 mm thick containing luminiscent 111 as base chemical cover with UV stabilized coating job complete with SS screws for wall mounting or to be hanged on rust proof chain for ceiling mounting complete in all respects, plate size 12" X 18" (general size, may increase or decrease depending on site requirements). MAKES: Pro-lite, Supreent Creation, Auto-Glow, Agni	1000.0	Sq inch		
46.0	Supply and fixing of <b>Exit Signage Light fixtures</b> with 1.5hrs battery backup MAKES: Pro-lite, Supreent Creation, Auto-Glow, Agni	18.0	Each		

Sr. No.	Description of Item	Qty	Unit	Rate	Amount
<b>CATEGORY-E-PUBLIC ADDRESS SYSTEM</b>					
47.0	SITC of UL approved Public address cum voice evacuation system and 2 way Communication system. Supplying, installing, testing and commissioning of wall/ceiling mounted type UL listed speakers with multi-tapping capable to produce minimum sound level of 75db( <b>6W Speaker</b> or accordingly sound level wattage) at 3m distance along with all fixing accessories. MAKES: Honeywell-X618/Aties-IDA8/Bosch-Prisario	240.0	Each		
48.0	Supplying, installing, testing and commissioning <b>40 strand twin core PVC insulated copper wires</b> , Confirming to IS 1554, as per specification and to be laid in PVC conduit.The quoted rate shall include supply and laying of 19mm dia FRLS PVC conduit with necessary supports. MAKES: Polycab, Avocab, R&M	100.0	Mtr.		
49.0	Supplying, installing, testing and commissioning of UL Listed <b>Digital Audio Amplifier</b> designed for audio networks of up to 32 DAA amplifiers terminating at a DVC Digital Voice Command. Each DAA shall be capable of accessing and processing one of up to eight audio channels on the DVC audio loop, amplifying the signal, and distributing it via four Class B or two Class A outputs at 150 watts. Amplifiers can store backup alarm and trouble messages, and provide an adjustable background music input. An optional Firefighter's telephone riser on each DAA amplifier shall supports FFT communications riser. MAKES: Honeywell-X618/Aties-IDA8/Bosch-Prisario	9.0	Each		
50.0	Supplying, installing, testing and commissioning of UL LISTED fully featured digital <b>voice comand station</b> with 2 way Fire Fighters Communication System, and shall be capable of supervision of all the speaker circuits.Keypad for local annunciation and controls; status LEDs and 24 user- programmable buttons, push to talk microphone etc. The system shall be capable to supports a dedicated audio network with up to eight channels of audio, five channels of firefighter telephone communications, and control and supervision for up to 32 DAL devices. The system shall be compatible with the fire alarm system and shall integrate directly with the fire alarm panel. The quoted rate shall also include with all necessary hardwares and accessories. MAKES: Honeywell-X618/Aties-IDA8/Bosch-Prisario	1.0	Each		

Sr. No.	Description of Item	Qty	Unit	Rate	Amount
51.0	Supplying, installing, testing and commissioning of UL listed <b>fire fighters telephone handsets</b> with coil in a recessed mounted single storage cabinet with UL listed <b>Emergency Telephone Stations</b> comprising a single phone jack mounted on an attractive, single- gang, stainless steel plate. The telephone Jack shall be mounted not more than 1500mm from the floor level and shall be easily accessible and UL listed addressable telephone module suitable for fire fighters telephone system. MAKES: Honeywell-Notifier, Bosch-UL, Johnson Control-IFC	11.0	Each		
52.0	2Core X 2.5 Sqmm cables with 25mm dia PVC Conduit for Voice alarm riser and telephone riser system to communicate from centralized control station.cable loop length comply as per the industry standard MAKES: Polycab, Avocab, R&M	3000.0	Mtr.		
<b>CATEGORY-G-ELECTRICAL WORKS</b>					
53.0	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables. (I) 3.5 core 70 Sq. mm (For 2 nos Electrical Fire Pump) MAKES: Polycab, Avocab, R&M	40.00	Metre		
54.0	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables. (E) 4 core 16 Sq. mm (For 2 nos Pressure Pump) MAKES: Polycab, Avocab, R&M	20.00	Metre		
55.0	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. MAKES: COMET OR EQUIVALENT				
55.1	4 X 16 sq. mm (28mm)	4.00	Each		
55.2	3.5 X 70 sq. mm (38mm)	4.00	Each		



Sr. No.	Description of Item	Qty	Unit	Rate	Amount
<b>Fire Rated Door</b>					
56.0	<p><b>2 hour Fire Rated Door : Ground floor to Fifth floor</b>  Providing and fixing of CBRI ROORKEE Certified Metal fire door as per approved make &amp; sample by Architect/EIC.  Door Shutter : Sheet =20 gauge (1.0 mm) GI sheet; Door thickness: 46 mm; Pad plates: 3 mm Infill material: Rockwool 64kg/m3; Stiffeneres: 1.0 mm GI sheet  Door frame: Sheet: 18 gauge (1.2 mm ) GI sheet Profile Size = 100x57 Rabet : Single Rabbet  Assambly: Tree piece bolted butt joint. Pad plates: 3 mm Frame grouting : 0 mm Wall Type : Brick / RCC wall  Fasteners : 10x95 Hilti HUD.  Finish: Electro static powder coating Powder type:Pure Polyster Colour shade:as per Approved sample  Accessories:  Hinges:S.S. ball bearing 103x76x3mm with M5x15 screw , Single point locking Panic bar touchbar type : Extrenal  Trim lock with lever handle &amp; lock cylinder ZN03L , Glass Panel: 200x300x6 mm clear fire glass with frames: Schott e-120 , Door Closer: 80 kg / 1200 mm capacity Heavy duty doors closer : 2-4F  work complete including all type of hardware, fittings , fixtures as per instruction of Architect/EIC etc complete as per detailed drawings and specifications. sample mock shall be approved from Architect/EIC.  MAKES: Doorwin, Ajni, JC FIRE DOOR CORPORATION, Shakti Hormann, Ardor, Navair, Aaccess, Gujcon,</p>	71.00	Sq.mt		
<b>TOTAL ESTIMATE</b>					