

Indian Bank, Corporate office, Premises, Estate & Expenditure Dept

Tender No.

Name of Work: Proposed Construction Of New Branch Cum Residential Building In The Place Of Existing Indian Bank Velachery Branch After Demolition Of Old Building At Velachery, Chennai-42.

PART – 2 PRICE BID

GENERAL Note: Scope includes preparation, submission of Application FoRms and other associated works with necessary documents and working drawings to CMDA/CEIG / CEA / TANGEDCO / TNERC / MNRE & TEDA/CMWSSB/ for obtaining approval for drawing and getting CMDA Completion Certificate, Safety Certificate, approval for Energisiation, availing service connections as per Single Line Diagram, FIRE NOC, LIFT Energization/Approvas etc,.* The Contractor shall be fully responsible for meeting all the statutory obligations & local inspectorates wherever applicable to the works carried out by them. (Statutory fees to be paid to the authorities will be borne by the Employer upon intimation from respective departments). Quoted Rates shall be inclusive of all Liaisoning / Incidental charges with the respective departments wherever applicable and No additional charges will be given.

The Contractor shall furnish and install in the Serive/machine rooms, a neatly typed set of operating instructions securely framed and glazed. The Contractor shall also provide one set of tools free of cost required for routine and special maintenance work for the elctro Mechanical/Fire Suppression and Plumbying works

Suppress	ion and Plumbving works.					
Name of t	the Vendor/Company					
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
I	DEMOLITION & SITE DEVELOPMENT					
a	Demolition of existing building super structure along with site clearing: The tenderers shall demolish the complete building super structure , except outer compound walls, metal Gate, storage structure situated at rear side of the premises which shall be demolished at later stages as per construction progress over the duration of construction. Other fixtures such as ATM machine, Air-conditioning units, Generator-Honda, Locker unit- 1, UPS -2 No.s, Battery, Modem , CCTV unit-, Monitor, Steel almirah- 1 no, Metal racks , Steel Battery Stand , Motor, EB box etc . which will be removed by Bank prior to commencement of demolition work. The work includes securing the boundary for dust and Debris, dispose of the debris(super structure and foundation) & other unserviceable material, transporting the same to the Corporation Municipal approved dumping ground, with due peRmissions of the local authorities, at their own cost. After accounting for the cost of demolition, disposal of debris & unserviceable materials as above, making the site clear, the tenderers shall quote the maximum amount that can be offered to the Bank for the serviceable materials AS SALVAGE VALUE.	1	LS			
	PART- B CIVIL WORKS					
2	EARTHWORK EXCAVATION					

Name of	the Vendor/Company					
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
	Earth work excavation by mechanical means(Hydraulic excavator)/Manual for Column footings/ Foundation Trenches, UG sump, compound wall foundation in all type of soils and subsoil including breaking & removing old concrete foundations/Hard rock (controlled blasting if required with due statutory approvals, without disturbing to the neighbours properties) as per Architecture/ structural drawing depth including dressing of sides ramming of bottom, shoring, leading foRm work, Dewatering and disposal of surplus excavated soil as directed for disposal beyond site limits in municipal stipulated area. All complete as per drawing, approval and instruction of the Architect. all measurements of the width of the excavation pit shall be considered only upto to the edge of PCC (as per drawings) and NO Additional cost is payable for excess working width, depth and overlapping (duplicate measurement).			rigures	Figures	Words
a.1	Earth work soft soil 0 -1.5 meter	200	Cum			
a1 a2	Earth work soft soil1.5 -3.0 meter	162	Cum			
a3	Earth work soft soil 3.0meter and above	50	Cum			
ь	Earth work Hard rock	38	Cum			
c	Breaking RCC Foundation	75	Cum			
3	ANTI TERMITE TREATMENT Providing and injecting chemical emulsion using Chloropyriphos or equivalent mixed as a water emulsion in ratio 1:19 or equivalent for antiteRmite treatment and creating a chemical barrier all round the column pits, wall trenches, top surface of plinth filling, junction of wall and floor, along the exterior perimeter of the building, expansion joints, surroundings of pipes and conduits etc. all complete as per IS 6313 (part II) 1981. (Plinth area of the building at ground floor only shall be measured excluding yard/open areas). (NOTE: The anti teRmite treatment shall be got carried through an approved and registered agency and strictly in accordance with IS:6313 Part-II:1981) (Tenderer to state the name of specialised fiRm).	214	Sqm			
4 a 5	SAND FILLING Supplying and filling with M sand OF APPROVED Grade in foundation trenches, plinth and under floors including ramming and consolidating, watering and dressing complete as approved the Architect/ Indian Bank FILLINGS IN THE BASEMENT / REFILLING	107	Cum			
	Filling in trenches, the sides of foundations and basement with available excavated earth(excluding rock) free from vegetation in layers not exceeding 150 mm in depth including watering, consolidating(ramming) and spreading the surplus earth within the site all lead and lift included. One of the following suitable material is to be filled . All complete as per drawing, approval and instructions of the Architect / Bank. Measurement for refilling shall be based on earthwork excavation measurement.					
a	Excavated earth	144	Cum			
b	Brought out Earth	73	Cum			
c	Quarry dust	74	Cum			

Name of t	he Vendor/Company							
Sl.No.	Description	Quantity	Unit	Rate in	Amount in	Amount in		
6	PCC	-		Figures	Figures	Words		
a	Providing and laying in position plain cement concrete 1:4:8 (1 cement : 4 fine aggregate : 8 coarse aggregate 40 mm and down grade blue granite metal) machine mixed, rammed and well consolidated in layers not exceeding 150 mm including foRm work, curing, removal of foRmwork, levelling etc., complete in all foundation, Trenches Basements, all complete as per drawing, approval and instructions of the Architect / Bank.		Cum					
b	Providing and laying brick jelly concrete in 1:2:4 (1 cement : 2 fine aggregate: 4 coarse aggregate) 12.5 mm size nominal brick bats , machine mixed, rammed and well consolidated in layers not exceeding 230mm including foRm work, curing, etc., complete in sunken portion of the toilets All complete as per drawing, approval and instructions of the Architect / Bank.		Cum					
c	Providing and laying in position Damp proof course 40 mm thick over brickwork/block work in ground floor above drive way level with cement concrete 1:2:4 (1 Cement: 2 coarse sand/M sand: 4 graded stone aggregate 12.5 mm nominal size)with approved water proofing admixture as per manufacturer specification(Dr.fixit, Pidilite or equivalent) including cost of foRm work. All work as per drawing, approval and instructions of the Architect/Bank.	4	Sqm					
	REINFORCED CEMENT CONCRETE							
7.01	Providing and laying in position machine batched, machine mixed and machine vibrated Design Mix reinforced cement concrete 20 mm graded size blue granite metal Nominal Mix 1:0.75:1.5 / Design Mix M30. The rates include curing, centering shuttering, staging/propping(including double ht), tying, deshuttering, necessary cover blocks (m30)/pvc as approved, removal of foRmwork and compaction with use of mechanical vibrator, but exclude cost of steel reinforcement and binding wire. The work should be carried out according to IS code and as per details given in specifications and drawings. All complete as per drawing, approval and instructions of the Architect / Bank.							
a	RCC in UG Sump Raft slab, Footing , Compound wall footing	74	Cum					
b	RCC in UG Sump Rcc wall and Sump Cover slab	65	Cum					
c	RCC in column below plinth level	9	Cum					
	RCC column /lift wall							
d	Stilt floor R.C.C Column / lift wall	18	Cum					
e	First Floor RCC Column / lift wall	12	Cum					
f	Second Floor RCC Column / lift wall	15	Cum					
g	Third Floor RCC Column / lift wall	15	Cum					
h	Fourth Floor RCC Column / lift wall	14	Cum					
i	Fifth Floor RCC Column / lift wall	14	Cum					
j	Headroom RCC column / lift wall	9	Cum					
k	Dummy Column	10	Cum					
l	Plinth beam	11	Cum					

Sl.No.	Description	Quantity	Unit	Rate in	Amount in	Amount in
1.110.	RCC ROOF SLAB AND BEAM	Quantity	Unit	Figures	Figures	Words
	RCC ROOF SLAD AND BEAM					
m	Stilt floor Roof slab and beam	64	Cum			
n	First floor Roof slab and beam	32	Cum			
0	Second floor Roof slab and beam	44	Cum			
p	Third floor Roof slab and beam	46	Cum			
q	Fourth floor Roof slab and beam	44	Cum			
r	Fifth floor Roof slab and beam	44	Cum			
s	Headroom Roof slab and beam	6	Cum			
t	Over head Water tank - side RCC wall and Bottom and cover slab	11	Cum			
u	RCC Brackets for Fire Hose cabinet.	2	Cum			
	RCC LOCKER ROOM					
a	RCC Lockers Room Rec Wall and Rec floor slab, Roof slab and Rec wall	53	Cum			
b	RCC Generator raft foundation,	9	Cum			
c	RCC TransfoRmer - Foundation ,column with slab	4	Cum			
7.02	Providing and laying reinforced cement concrete ½" to ¾" size blue granite metal Nominal Mix 1:1½:3 / Design Mix M20. The rates include centering, shuttering, curing, removal of foRmwork, but exclude cost of steel reinforcement and binding wire. The work should be carried out according to ISI code and as per details given in specifications and drawings.					
a	Typical floor Lintel ,sunshade ,sill slab, loft and kitchen platfoRms etc.	29	Cum			
8	STEEL REINFORCEMENT					
	Providing Fe 500 TMT conforming to LS 1786 for RCC works including cutting bending ,cranking, placing in position with binding wire 18 gauge wire double runs, with 'authorized/ as per codes Laps, chairs, spacers only should be added. Approved TMT(TheRmo Mechanically Treated steel) Bars. (Payment will be made for actual length measurement of fabricated steel work including authorized laps only calculated on theoretical weight for different sections).	78,000	Kg			

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
9	BLOCK WORKS					
9.01	200MM THICK SOLID CONCRETE BLOCK WORKS					
	Providing and laying 200 mm thick solid cement concrete block masonry walls using locally available best blocks of approved size and quality with compressive strength not less than 50 Kg/sq.cm in cement mortar 1:5 (1part Cement : 5 part coarse sand) including, providing and securing ms hold fast with rc column vertical surface at every 1.0m interval, racking out joints, scaffolding, cutting, levelling, curing etc., complete as per drawing, approval and instructions of the Architect / Bank. (Rate includes the cost of MS hold fast / column ties).					
a	Basement floor	7	Cum			
	200000000000000000000000000000000000000					
b	Stilt Floor	23	Cum			
	Stilt Floor					
c		13	Cum			
	First Floor					
d		18	Cum			
u	Second Floor	10	Cum			
e	Third Floor	37	Cum			
	Time Floor					
f		37	Cum			
	Fourth Floor					
g		29	Cum			
	Fifth Floor					
		20				
h	Terrace LMR, Headroom & parapet wall	29	Cum			
9.02	100MM THICK SOLID CONCRETE BLOCK WORKS					
	Providing and constructing 100 mm thick solid cement concrete block masonry in partition walls at all levels in available best blocks of approved size and quality with compressive strength not less than 50 kg/sqr.cm in cement mortar CM 1:4 (1 part cement and 4 part coarse sand) including providing and securing ms hold fast with re column vertical surface at every 1.0m interval, scaffolding, levelling, cutting, curing, racking out joints, reinforcement of 2 No.s. 6 mm dia bars at every fourth course or 25 mm x 1.2 mm iron hoop in every 3rd course, curing, etc. complete as per drawing, approval and instructions of the Architect / Bank. (Rate includes the cost of MS bars/iron hoop & MS hold fast).					
a		12	Sqm			
-	Stilt Floor		*			-
b	First Floor	43	Sqm			
c	Second Floor	47	Sqm			

vaine of	the Vendor/Company					
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
d		75	Sqm			
	Third Floor					
e	Fourth Floor	75	Sqm			
	Tout if Floor					
f	fifth Floor	75	Sqm			
~		47	Com			
g	Fire Hose Cabinet Block work	47	Sqm			
9.03	230 MM BRICK WALL					
	Providing and laying brick work with bricks of class designation 75 sub class					
	'A' in cement mortar 1:5 (1 cement : 5 coarse sand/M sand) in toilet walls(for plumbing lines) racking out joints and curing etc. All complete as per					
	drawing, approval and instructions of the Architect / Bank.					
	drawing, approvar and instructions of the Heritage Paniti					
a	Toilet pipe line wall brick work	21	Cum			
b		4	Cum			
	Staircase - brickwork for steps					
9.04	75mm (3" brick work) Providing and constructing 75mm thick brick wall in cement mortar 1:4 (1					
	cement: 4 coarse sand/M sand)to support the kitchen counter slab, using first					
	quality table mould clay bricks. Bricks to be placed vertically to achieve					
	75mm thickness. The rates including plastering the wall on both sides,					
	In typical floors					
a		14	Sqm			
10	PLASTERING OF WALLS					
10.01	Ceiling and Beam plaster CM 1:3 Providing and applying 6-12 mm thick plain cement plaster at all heights and					
	below plinth in C:M 1:3 (1 part cement: 3 parts sand/M Sand- 50% coarse					
	and 50% fine) cement mortar to the walls, beams, ceiling, stair, column,					
	pardis, bends, moulds, pattas, grooves over surface as specified including					
	scaffolding, curing and finishing smooth. The plaster surface shall be rubbed					
	smooth with Iron Plate, till the surface shows cement paste in line and level					
	complete as directed. No additional cost will be paid for thickness more than					
	6/12mm due to out of plumb walls. Approval materials Grey Cement (43					
	Grade).					
		2.42	C			
	0.71. 71	343	Sqm			
a	Stilt Floor					
a b		221	Sqm			
	Stilt Floor First Floor	221	Sqm			
		328	Sqm Sqm			
b	First Floor Second Floor		,			
b c	First Floor	328	Sqm			
b c	First Floor Second Floor	328	Sqm			
b c d	First Floor Second Floor Third Floor Fourth Floor	328	Sqm Sqm			
b c d	First Floor Second Floor Third Floor	328 361 361	Sqm Sqm			

Name of the Vendor/Company								
Sl.No.	Description	Quantity	Unit	Rate in	Amount in	Amount in		
10.02	Internal Plastering of Walls			Figures	Figures	Words		
	Providing and applying 12-15 mm thick plain cement plaster at all heights							
	and below plinth in C:M 1:4 (1 part cement: 4 parts sand/M Sand- 50%							
	coarse and 50% fine) cement mortar to the walls, beams, ceiling, stair,							
	column, pardis, bends, moulds, pattas, grooves over surface as specified							
	including scaffolding, curing and finishing smooth at all levels. The plaster							
	surface shall be rubbed smooth with Iron Plate, till the surface shows cement paste in line and level complete as directed. The joint between block work							
	and RCC shall be prepared with chicken mesh to avoid cracks. The rate shall							
	include providing and fixing of chicken mesh, necessary hacking works for							
	key and scaffolding works complete. No additional cost will be paid for							
	thickness more than 12/15mm due to out of plumb walls .(chicken mesh							
	should be placed in joints between block work and Rc column/Rc beams) All							
	complete as per drawing, approval and instructions of the Architect/Bank.							
a	Stilt Floor	230	Sqm					
b	First Floor	327	Sqm					
c	o IFI	320	Sqm					
d	Second Floor Third Floor	565	Sqm					
		565	- 1			+		
e f	Fourth Floor		Sqm			1		
1	Fifth Floor	565	Sqm					
g	Over Head Tank	355	Sqm					
10.03	External Plastering of Walls							
	Describing and application 10 may think along account along in the constant							
	Providing and applying 18 mm thick plain cement plaster in two overlapping layers on 12mm and 6 mm, at all heights, and below plinth in C:M 1:4 (1 part							
	cement: 4 parts sand/M Sand- 50% coarse and 50% fine) cement mortar to the							
	skirting, kerbs etc over surface as specified including scaffolding, curing and							
	finishing smooth. The plaster surface shall be rubbed smooth with Iron Plate,							
	till the surface shows cement paste in line and level complete as directed. The							
	joint between block work and RCC shall be prepared with chicken mesh							
	where block work joins rcc beam / rcc column to avoid cracks. The rate shall							
	include cost of providing and fixing of chicken mesh, necessary hacking works for key and scaffolding works complete. No additional cost will be							
	paid for thickness more than 18mm due to out of plumb walls. Approved							
	make Grey Cement (43 Grade).							
	All external walls (Including parapet walls)	928	Sqm					
a b	Fire Hose Cabinet plastering work	128	Sqm					
10.04	WATER PROOF PLASTERING	126	Sqiii			-		
	WATER TROOF TEASTERMO WATER PROOFING TREATMENT FOR BATH - W.C KITCHEN &							
a	SUNK PORTION	40.6	C					
	Surface Cleaning/Grouting/Crack Filling Providing & laying Chemical Water proofing in sunken slabs of bath, W.C.,	406	Sqm					
	KITCHEN AND SUNKEN etc. Preparing the surface thoroughly by cleaning							
	the surface using wire brush. Removing dust, dirt, excess mortar, oil and							
	loose particles on the surface. Injection Grouting is Done with Cementious							
	Polymer Grout with 1:2:1 (1 part of cement :2 parts of water : 1 part of SBR							
	polymer) Cut open and seal the cracks in RCC using Polysulphide / Silicon							
	sealant and Side Haunching is Done with polymer Cement motor of Ratio 1:3 with SBR added with 500ml per bag of cement. Application of Two Coats of							
	Elastomeric Acrylic Polymer Modified Cementitious waterproofing							
	compound over the prepared surface with min interval of 5-12hours between							
	PROVIDING Protection Screed			· · · · · · · · · · · · · · · · · · ·				
	providing a Protection Screed of cement mortar 1:4 (1 cement : 4 sand) admixed with water proofing compound and approved by Engineer-in-charge							
	over 20 mm thick layer of cement mortar of mix 1:4 (1 cement :4 sand)							
	admixed with water proofing compound like SBR or any Integral							
	Waterproofing compound of any approved make. Rate includes curing as per							
L	Providing & laying Chemical WATERPROOFING TREATEMENT							
b	FOR Under Ground Pump Room, SUMP, FIRE TANK & WATER RETAINING STRUCTURES, OHT, LIFT Pit.							
	Surface Cleaning/Grouting/Crack Filling	552	Sqm					
	1	332	oqiii			1		

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
	Preparing the surface thoroughly by cleaning the surface using wire brush. Removing dust, dirt, excess mortar, oil and loose particles on the surface. Injection Grouting is Done with Cementious Polymer Grout with 1:2:1 (1 part of cement :2 parts of water : 1 part of SBR polymer) Cut open and seal the cracks in RCC using Polyurethane sealant and Side Haunching is Done with polymer Cement mortar of Ratio 1:3 with SBR added with 500ml per bag of cement.			Figures	Figures	words
	Packing of Joints The Construction Joints are cut open are properly packed using Epoxy mortar or polymer modified cement mortar 1:4 (1 cement : 4 sand) admixed with water proofing compound					
	Application of Polyurethane Coat (INTERNAL and EXTERNAL surface of the UG SUMP/PUMP room) Box Type. surface applied, Polyurethane waterproofing waterproofing material, which waterproofs and protects concrete applied to a concrete surface of an approved make is applied in two coats with min 12hours time interval between two coats.					
	PROVIDING Protection Screed in INTERNAL & EXTERNAL Rack WALL/FIOORS in UNDERGROUND Structures(40mm thick in TWO layers of 20mm) AND IN INTERNAL SURFACE OF OH TANKS.					
	providing a Protection Screed of cement mortar 1:4 (1 cement : 4 sand) admixed with water proofing compound and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:4 (1 cement :4 sand) admixed with water proofing compound like SBR(as per manufacturers specification for the ratio) or any Integral Waterproofing compound of an approved make.					
	Application of Epoxy Coating (internal surface of the UG SUMP, OHT)					
c	Proving the Plastered surface using Two component Water Based Epoxy Coating of any approved brand of as a top coat. Applied in TWO Coat with vertical and horizontal strokes having min12hrs interval between two coats to act as a protection layer including 1 coat of approved primer.	165	Sqm			
d	WATERPROOFING TREATEMENT FOR TERRACE					
	Surface Cleaning/Grouting/Crack Filling	193	Sqm			
	Providing & laying Chemical Water proofing in Terrace. Preparing the surface thoroughly by cleaning the surface using wire brush. Removing dust, dirt, excess mortar, oil and loose particles on the surface. Injection Grouting is Done with Cementious Polymer Grout with 1:2:1 (1 part of cement :2 parts of water : 1 part of SBR polymer) Cut open and seal the cracks in RCC using Silicone or Polysulphide sealant and Side Haunching is Done with polymer Cement motor of Ratio 1:3 with SBR added with 500ml per bag of cement.					
	Application of PU Coating					
	Providing and laying Polyurethane Coating over the surface includes application of Polyurethane Primer in the surface with 1-1.2kg/Sqm is allowed to dry for 3-6hours time and Two Coats of Polyurethane membrane coating is applied over the surface using leveling pad with interval of min12hours time interval which serves has a protection layer on the surface and antibacterial and fire resistant having hidh elastomeric strength resistant to movement of the building and wear and tear cycle.					
	PROVIDING Protection Screed(40mm thick in TWO layers of 20mm)					
	providing a Protection Screed of cement mortar 1:4 (1 cement : 4 sand) admixed with water proofing compound and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:4 (1 cement :4 sand)					
11	admixed with water proofing compound like SBR or any Integral WEATHERING COURSE:- Providing and laying brick jelly lime concrete in weathering course-using 12					
a	mm brick jelly 2½:1 of slaked lime well mixed and laid to slope and consolidated with added waterproof ad mixture of FOSROC', Dr. Fixit or With average thickness of 120 mm and minimum thickness OF Brick Bat/Brick Jelly at 65 mm. The whole terrace so finished shall be flooded with water for a minimum	193	Sqm			
	period of 3 days for curing and so final test all above operations to be done as per approval and instructions of the Architect / Bank					

l.No.	Description	Quantity	Unit	Rate in	Amount in	Amount in
.110.	•	Qualitity	Unit	Figures	Figures	Words
	Providing and laying Heat resisting white tiles of approved make laid over cement mortar 1:3, with joints grouted with waterproofing compound(SBR					
	IN PROPORTION AS PER MANUFACTURERS SPECIFICATION) and					
b	skirting tiles laid to slanting position with parapet wall plastering to overlap	193	Sqm			
D	over the skirting tile WITH ALL NECESSARY HAUCHING TO AVOID	173	Sqiii			
	WATER SEEPAGE. (BASIC COST OF TILE: Rs.518/Sqm)					
12	ELEVATION WORKS					
12.01	Front Elevation Granite Cladding					
	Providing and fixing to the wall after preparing it well for stone cladding, 18 mm thick polished granite slab of approved shade, colour and quality as					
	specified including paper jointing, edge rounding and edge polishing,					
	neatly finished etc., complete all as per drawing and instruction of the					
	Architect. The rate includes cost of slab,transportation,unloading, shifting ,all					
	lead and Lift, cutting charges to required size with corner at right angle,	35	Sqm			
	rounding of edges, edge polishing, and fixing using cement based adhesive of					
	'FOSROC' or 'Dr. Fixit' (as per manufacturer's specification)supporting clamps, backing slurry etc and maintaining till handover. The contractor					
	should quote rate including cost of granite, cutting charges to the required					
	size with corners at right angle and are to be fixed in the pattern given by the					
12.02	Front Elevation Texture paint Finish					
	Providing and doing exterior textured surface coating on walls of approved					
	shade & texture from (ASIAN PAINTS apex ULTIMA allura range, Dulux					
	WEATHER SHIELD TEXURED FINISHES)approved Brand over Cleaned wall surface by water jetting, free of greae, fungi,etc, filling up of minor					
	cracks in the (1:3 cement sand ratio) two coats of approved primer (as per					
	manufacturer's specification). application of One COAT OF PRIMER/Pre-	206	Sqm			
	Treatment coat and ONE coat of Textured paint finish. The rates are		.			
	inclusive of scaffolding staging, cleaning of surface, all lead & Lift etc. for					
	any height and for all planes. All complete as per approval and instructions of					
	the Architect / employer. Item including base coat of water proofing cement paint applied @ 2.20 kg/Sqm. All complete as per approval and instructions					
12.03	STRUCTURAL GLAZING (In Front Elevation)	83	Sqm			
	Double height semi unitized glazing with single glass;					
	Providing and fixing of double height structural glazing (semi unitized system					
	- all panels fixed) for a span of 6.3 meter height, using 15 microns colour					
	anodized Jindal/equivalent aluminium main frame of size 111x67x2mm					
	section for verticals and horizontals, designed to withstand wind pressure up to 180 kg/Sqm. using necessary aluminium/GI angle cleats with slots for					
	adjusting plumb, fixed to the RCC slabs with M10 Hilti expansion fasteners					
	and fixing heRmetically sealed double glass, consists of 6mm thick ST 767					
	(Blue Ray) / ST 467 (Emerald Glaze) reflective heat strengthened glass +					
	12mm air gap + 5mm thick clear toughened glass, The glazed panels shall be					
	made using 66x28x1.5mm section for sub frame, with using double side					
	cross linked polyethylene spacer tape and structural sealant (Dowsil 795) in such a way as to transfer the dead weight of the glass on to the mainframe so					
	as to avoid undue stress on the structural sealant. The glazed panels after					
a	suitable curing in dust free environment shall be fixed on to mainframe from					
	the exterior (this system enables easy replacement of glass in future (if any					
	breakage) from the outside especially in spandrel areas). The grooves shall					
	be closed with weather grade silicone sealant (Dow sil 789). It shall be					
	ensured that the whole system uses corrosion resistant hardwares, is totally weather proof, peRmits necessary theRmal expansion/contraction and is able					
	to withstand relevant wind loads.					
	The glazing system shall be supported by a steel support structure, using 172					
	x 92 x 5.4mm RHS for verticals and 91.5 x 91.5 x 3.6mm SHS for horizontal					
	with required MS base plates and Hilti anchors, finished with anti corrosive					
	zinc primer and PU paint of approved colour. The gazing shall be extended to					
	next level and teRminated at hand railing level. The glazing top shall be connected to the SS railing. The rate shall include the cost of MS support					
	ACP CLADDING (In Front/Side Elevation)					+

Name of	Description	Quantity	Unit	Rate in	Amount in	Amount in
12.04	ACP Cladding near entrance. Providing and fixing Blue Aluminium Composite Panels (ACP) of exterior grade for cladding of Alucobond / Eurobond make for external wall cladding in combination of solid / Metallic colours, including all necessary frame work and complete with necessary weather sealant as per manufactures specification. The composite panel should consist of 3mm theRmoplastic core of LDPE sandwiched between 2 skins of 0.5mm thick aluminium sheet (alloy designation 310S) making a total panel thickness of 4mm. The surface will be furnished with Lumiflon based flourcarbon coating on top sides and service coating on reverse side. Coatings shall confoRm to specifications of specifications of ECCA / AAMA and conforming to the mechanical properties of panel as per detailed technical specifications. the system shall be fixed using GI/Al brackets and stainless steel bolts and nuts complete with spring washers and cap nuts and all other necessary accessories. The bracket support shall be designed as per manufactures specification and shall withstand a wind pressure of 150 kg / sqm. all hardware shall corrosion resistant frame out of anodised aluminium member. Space between the panels(as per design) filled with external grade silicon weather sealant over backing rod.	270	Sqm	Figures	Figures	Words
12.05	Providing Plastering band work 100 mm x 100 mm at around window opening in elevation level, Terrace parapet, smooth finished, with proper line and length as per the drawings and painted with external weather coat (asian /dulux) to the Approval of the Architect / Bank	246	Rm			
12.06	Making External Plastering grooves with proper aluminium/wooden channel maintaining unifoRmity /plumb throught the running length of the groove of 25mmx12mm size as per the drawings to the Approval of the Architect / Bank		Rm			

	the Vendor/Company					1.
.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
13	MISCELLANEOUS WORKS:-					
a	MS ladder in MS with suitable anti corrosive paint over primer coat for over head tank access with Supply, fabrication and installation, grouting in the slab and walls all lead and lift inclusive as per the drawing and Instructions of the Architect / Bank		Kg			
b	Providing, Fabricating and installation of MS Entrance sliding Gate with all necessary track(solid cylindrical bar/ inverted ms angle for bottom guide and 50x50mm Box section for outer frame, 25x25 mmbox section as verticals, bottom portion (upto 600mm)covered with ms sheet 4mm thick) with all necessary wheels arrangement along with alignment, support system at the ends with locking rail, hand hold etc all complete as per the drawing with all lead and lift etc and painted with 2 coats of anticorrosive primer coat and 2 coats of enamel paint of approved colour of approved brand for a size of long Gate-6 000 x1 50 m	543	Kg			
c	Providing, Fabricating and installation of MS Entrance Side Hung Gate with all necessary 50x50mm Solid Square section for outer frame vertical post of the Hinge side, 50 x 50mm Square Bas for other sides of Frame, 25x25 mm box section as inteRmediate verticals, bottom portion (upto 600mm)covered with ms sheet 4mm thick) with all necessary hinge pin arrangement along with alignment, Fixing in RCC pillar, Grouting, support system at the ends with locking rail, hand hold Key hold rings in the shutter etc all complete as per the drawing with all lead and lift etc and painted with 2 coats of anticorrosive primer coat and 2 coats of enamel paint of approved colour of approved brand for a size of wicked gate - 3.00m x 1.5m.	272	Kg			
d	Provision of MS Swing Hooks in sets of two for a load bearing capacity of 300 kg min, embedded in the RC slab with necessary binding to the Slab reinforcement as per the Drawings.		No.s			
e	Providing and Fixing MS Pandhal/Shamiana hooks(3", 4" dia) fixed and grouted to the terrace parapet wall at suitable locations as per the drawing.	44	No.s			
f	Providing and fixing Cloth hanger provision in Residence Balcony/ terrace floor with MS angle fabrication and installation in the walls with suitable holes as per the drawings with insulated MS wire laid in place(minimum 5 lines to the length of the Balcony).		No.s			
g	Supply and fixing of Ms Rolling shutter with guides, lock rails in alignment with the finished flooring surface and plastered wall, inclusive of all lead and lift, painting with 2 coats of anti corrosive primer and two coats of enamel paint of approved Brand/Colour as per the drawing.		Sqm			
h	MS A/C Ledge: Fabricating, Supply and erection of MS Angle platfoRm system for supporting AC outdoor units at all floors with all necessary guard rails of 1000mm ht, painted with two coats of anit corrosive Zinc primer and finished with two coats of external grade enamel paint of approved brand and colour as per the structural drawings & directions of the Architect / Bank		Kg			

Name of	the Vendor/Company					
l.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in
i	Provide and fix FIXOPAN / equivalent PVC water stops 230mm wide, 6/8 mm thickness. At the water retaining structure(UG SUMP/ OHT) between horizontal and vertical joints as per the structural drawings & directions of the Architect / Bank	61	Rm	Figures	Tigues	VV OI US
j	Supply and erection of (Generator) MS steel support system with MS T/C' sections as per drawing, along with steel base plate grouted to RCC platfoRm, cleats etc, welding ,labor with 2 coats anti corrosive Zinc primer and finished with two coats of external grade enamel paint of approved grade and Make(asian, Nippon, Dulux)	3,000	Kg			
k	fencing 1.8m ht with 50mm x 50mm 'L' angle as outer frame and steel weld mesh welded to sub frame which in turn fixed to the outer frame as panels to suite site dimensions, along with side hung steel gates with locking facility and pad lock welded to outer frames. All complete as per drawing and instructions of that a sub-instruction of that a sub-instruction of that a sub-instruction of the desired means a supply we recommend	23	Sqm			
1	around the TransfoRmer as per details/ drawings all complete as per instructions of the Architect / Bank	2	Cum			
m	Front side elevation feature: Supply and fixing of MS 'C 'Channel on the façade to match with the Structural Glazing spacing, inclusive of painting with 2 coats of Anti corrosive primer paint along with Two coats of exterior	2,000	Kg			
n	Core cutting in rcc walls ,rcc slab for all level					
n1	Core cutting in size 110mm	5	No.s			
n2	Core cutting in size 150mm	5	No.s			
0	SPEED BREAKER: Supply and Fixing of Hard Rubber Speed Braker with reflective yellow/silver stickers screwed to the concrete floor a per the locations in drawings from reputed brand as approved by Architect / Bank	15	Rm			
p	Supply and Fixing of Hard Rubber WHEEL STOPPER with reflective yellow stickers of 500mm width ,set of TWO for each parking location, fixed to the floor as per manufacturer's specification	9	No.s			
q	Hard Rubber Column edge Guard of 1200mm x 100mm flap, with yellow & Silver reflective bands f fixed to column edges with minimum 6 No.s screws.	15	No.s			
r	Concave mirrors 600mm dia with outer frames and mounting arrangement(on column) with Highly reflective tough surface(such as Poly carbonate/ SS).	2	No.s			
s	DRIVEWAY DIRECTION MARKER/PARKING LOT MARKINGS /with external grade white and Yellow paint from reputed brands.	20	Sqm			
t	LAND SCAPE: Supply and Preparing and laying of Sweet soil(red earth mixed with cocpeat/cow dung), free of dirt/construction Debris, Planting of selected Grass, shrubs suitable for local growth, watering and taking care over a period of ONE month prior to hand over, all complete as per the Drawings and Instructions of the Architect / Bank	25	Sqm			

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
	PART- C			Figures	Figures	words
15	FINISHING WORK JOINERY:-					
	MAIN DOOR - Providing and fixing of Teak Wood Panelled door frame and shutter for the main door as per detailed drawing. The frames to be of size 75mm x 200mm teak wood 1st quality fixed to the masonry wall using hold fast / anchor fasteners. The Panel (38mm thk) shutter with vertical and horizontal Styles to be fixed with necessary hardware as per design and detail. The cost includes plaining, necessary rebates, etc. The Shutter to be fixed with 4 No.s of ms hold fast each on either side. The cost to include fixing of the doors in position with necessary Quality Branded items locks, 8"					
	Brass tower tower bolts, Door stopper with rubber bush, Heavy-duty SS ball bearing butt hinges 150 x 5.5 mm (4 No.s. per shutter) with screws. The item is inclusive Mortise lock, Brass door handle of reputed make, door stopper, door bush, viewing lence. All complete as per DRAWINGS, approval and instructions of the Architect / employer. (hardware -Godrej ARSA-6110+lockset,Ebco,Hettich-SSD3).					
a	Entrance door ED -1050 m W x 2150 mm =7 No.s	16	Sqm			
b	Providing and fixing Flush doors for all the bedrooms& Kitchen - TYPE D1. The door frame to be of size 65mm x 100mm - teakwood 2nd quality fixed to the masonry wall with 3 No.s of hold fast each on either side with necessary rebates The shutter would be 38 mm thick solid core commercial flush door wit necessary approved WOOD texture lamination(1.5mm laminate with teakwood lipping on all sides. 38mm thick Phenol foRmaldehyde bonded and borer proof flush door shutter as per IS: 2202 (part I) solid block core type having exterior grade 8 mm thick commercial ply, on both faces of shutter. Shutter finished in 1.5mm thick laminate on both sides (of approved wood grain shade). Wood protected with melamine polishing for lipping. Heavy-duty SS ball bearing butt hinges 150 x 5.5 mm (4 No.s. per shutter) with screws. The item is inclusive Mortise lock, Brass door handle of reputed make, door stopper, door bush, melamine polishing. All complete as per DRAWINGS, approval and instructions of the Architect / employer. (using flush door of Century, Archid, or equivalent and hardware -(hardware - Door D1 - 900 mm W x 2150 mm = 24 No.s	47	Sqm			
	masonry wall with 3 No.s of hold fast each on either side with necessary rebates. The shutter would be 38 mm thick solid core commercial flush door with water proof resin coating on both sides, and 1.5mm thk lamination of approved colour with teakwood lipping on all sides. The cost to include fixing of the doors in position with necessary Heavy-duty SS ball bearing butt hinges 150 x 5.5 mm (4 No.s. per shutter) with screws., Mortise lock, tower bolts, stoppers, etc. all complete. using hardware -Godrej ,Ebco,Hettich					
c	Door D2 - 750 mm W x 2150 mm = 16 No.s	26	Sqm			
	UPVC SLIDING DOOR Providing and fixing UPVC Double glazed French Door along with necessary Mosquitoes net sliding panel arrangement made out of heavy gauged approved sections as per manufacturer's specification with min 100mm deep outer frame and approved colour with Two/Three sliding fitted with 5mm thick clear glass of saint gobin or any other approved quality & make with arrangements like weather strips, low level concealed gaskets, clips etc to make them completely waterproof and free from rattling and all standard accessories like locks, handles, hinges, screws, nails etc, complete to suit the overall size of openings as detailed in drawings at all levels, inclusive of weather sealents between then fram and civil finish Jamb, as per Drawing and as directed by the Architect / Bank (approved make Fenesta Commerling)					
d	French door FD1 - 2400 mm W x 2150 mm = 6No.s	31	Sqm			
16	UPVC SLIDING WINDOW					

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
a	Providing and fixing UPVC partly fixed partly Sliding or partly openable side hung with Stainless Steel friction Hinges glazed French Door along with necessary Mosquitoes net panel made out of heavy gauged approved sections as per manufacturer's specification with min 70mm deep outer frame and approved colour with Two/Three sliding fitted with 5mm thick clear glass of saint gobin or any other approved quality & take with arrangements like weather strips, low level concealed gaskets, clips etc to make them completely waterproof and free from rattling and all standard accessories like locks, handles, hinges, screws, nails etc, complete to suit the overall size of openings as detailed in drawings at all levels and as directed by the Architect / Bank company name – Fenesta, Kommeling.	43	Sqm	rigures	Figures	Words
	W2 Window Frame -1200mm x 1350mm = 2 No.s					
	W3 Window Frame -1800mm x 1350mm = 17 No.s Providing and fixing UPVC Sliding Double glazed windows made out of					
b	heavy gauged approved sections and colour with Two/Three sliding along with necessary Mosquitoes net panel arrangement fitted with 5mm thick clear glass of saint gobin or any other approved quality & take with arrangements like weather strips, clips etc to make them completely waterproof and free from rattling and all standard accessories like locks, handles, hinges, screws, nails etc, complete to suit the overall size of openings as detailed in drawings at all levels and as directed by the Architect/Engineer-In - charge of all floorscompany name - Fenesta, Kommerling.	77	Sqm			
	W1Window Frame -900 mm x 1350mm = 3 No.s					
	W3 Window Frame -1800mm x 1350mm =6No.s					
	W5 Window Frame - 3480mm x 1350mm = 1 No.s KW1Window Frame - 1200mm x 1050 mm = 6 No.s					
c	Providing and fixing fixed louvered ventilator in all floors as per drawing, with UPVC frames as per manufacturer's specification and 6mm reinforced pin head glass with edge polishing and all necessary accessories. Rate shall include sealant between the UPVC frame and masonary surfacecompany V1-600 mm x 600 mm = 12 No.s	9	Sqm			
	V3- 1800 mm x 600 mm = 1 No.s					
d	V4- 2800 mm x 600 mm = 2 No.s Fire Rating steel door: Providing and fixing 1 Hour MS fire rated steel door double leaf with viewing panes with fire rated glass, with M Steel Frames, fixed to RC wall with necessary hold fast, fire seal as required and necessary hardwares(handles, lock rail, tower bolts, painted with two coats of anti corrosive zine pains and two coats of enamel paint as per the directions of the Architect / Bank					
	4 No.s : Size 1500 X 2150	13	Sqm			
e	Window MS Safety Grill work/Balcony Railing simple as per drawings containing combination of Vertical and horizontal MS Square Bars and Ms Flats as per design and inserted in masonary work and grouted. All complete with necessary and two coat of anti-corrosive primer/paint and two coats of enamel paint of approved colour shade.(as per makes of materials list).	2,300	Kg			
	Staircase Baluster of SS 316 L grade Providing and fixing in position pipe railing of height 90cm from the finished floor of tread edge to detail with 30mm dia SS square bar verticals of 1No.s and 1 no 50mm dia SS pipe top Hand rail & 4 No.s 20mm dia SS circular bars horizontal (fixed to verticals by accessory fixing and not welded) including bending, turning, cutting, welding, fixing in floors including SS cover plate / sides including providing and fixing necessary SS insert plates of size 90x150mm & 6mm thick and necessary grinding, polishing all as per detailed architectural drawings. The rate should also include cost of any welding, buffing, polishing of all SS works of required finish all complete as per the approval of the Architect (Measured in Rm for complete work and not each pipe separately.) Note: All SS pipe used shall be of SS316 L grade only.					
f	Providing and fixing staircase handrail as per drawing attached and approval of architect	81	Rm			

Name of	the Vendor/Company					
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
g,	Covering of plumbing ducts in elevation: supplying and installation of Aluminium louvers fixed to Aluminium channels on the sides, grouted to masonry wall with suitable hold fast at required intervals (minimum 1000mm c/c) powder coated to an approved color with all necessary support arrangements in all floors. Portion of the Louvers at the suitable locations shall be with removable arrangement(fixed on secondary channels)to facilitate plumbing maintenance. Note:- The weighment of Aluminium sections will be done at an approved weighing scale in presence of Engineer's assistant. Necessary charges for transport, Weightment etc. will be borne by the contractor.	45	Sqm			
17	PAINTING					
a	CEILING PAINTING:- Prepare surface ,providing and applying one coat of primer , two coat Acrylic putty and two coats of emulsion paint of approved colour/shade and manufacture in all floors. The rate includes, surface scrapping, scaffolding, cleaning curing with water,etc complete (asian paint-Classic emulsion. Satin/ glo from NIPPON/ DULUX).	2,076	Sqm			
b	EXTERNAL PAINTING: Providing and applying two coats primer ,two coat of External emulsion paint (Asian Ultima Range/ Nippon/Dulux) of approved quality and shade over a the face of walls. Cost includes necessary scaffolding to cover sunshades, window sills, parapet walls, Wall scrapping etc., all complete. NOTE: The rates are inclusive of scaffolding staging etc. for any height and for plane as per the Approved Elevation for architectural surface. Item including base coat of water proofing cement paint applied @ 2.20 kg/Sqm. All complete as per approval and instructions of the Architect /	928	Sqm			
c	INTERNAL PAINTING:- Prepare surface and apply one coat of primer and two coat acrylic putty ,painting the same with two coats of acrylic emulsion paint (Asian Paint Classic/NIPPON or DULUX) of approved colour to all internal walls complete. Cost includes necessary scaffolding, All internal surfaces including window sills, Wall scrapping etc, All complete as per approval and instructions of the Architect / Employer.	2,928	Sqm			
d	ENAMEL PAINTING:- Prepare and scrap the existing surface and apply one coat of oil based primer, and two coats of synthetic enamel paint with corrosion protection (zinc chroming)as per the manufacturer's specifications to give a smooth surface including priming coat etc. All complete as per approval and instructions of the Architect / Bank	265	Sqm			
e	MELAMINE POLISH: Two Pack Polyurethane Based Clear coat Matt wood finish paint For Main door frames and Shutter. Rate to include filling of joints, holes, cracks if any, Sanding, wood filler, etc complete as per drawing and approval of Architect / Bank	45	Sqm			

Name of	the Vendor/Company					
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
18	FLOORING & WALL CLADDING:- (RAK, NITCO, Jhonson,			Figures	Figures	vvorus
18.01	Providing and fixing homogenous Vitrified tiles of size 800mm x 800mm approved make in CM 1:4 to the required pattern as per the drawing, and pointing the joints with the matching epoxy grout of Laticrete/ Bal Endura or approved equivalent make. The laying shall be to the true level, and approved pattern. The rate includes cleaning and maintaining till handover. The basic price of tile to be Rs.800 per Sqm , size - 800x800 mm. After Laying the Flooring tile(with spacers if required as per directions of Architect/Site Engineer) the joints are sealed with two component or Three component Epoxy Tile grout fillers of approved make (Pidilite)which is acid/ chemical resistant, non- cracking or powdering, anti- fungal & anti-bacterial compound.					
	Flooring					
a	Flooring at stilt level	36	Sqm			
b	Flooring at first level	171	Sqm			
c	Flooring at second level	91	Sqm			
d	Flooring at third level	112	Sqm			
e	Flooring at fourth level	112	Sqm			
f	Flooring at fifth level	112	Sqm			
	100mm high Skirting					
a	Skirting tile to match floor tiles at stilt floor	3	Sqm			
b	Skirting tile to match floor tiles at first floor	8	Sqm			
c	Skirting tile to match floor tiles at second floor	30	Sqm			
d	Skirting tile to match floor tiles at third floor	16	Sqm			
e	Skirting tile to match floor tiles at fourth floor	16	Sqm			
f	Skirting tile to match floor tiles at fifth floor	16	Sqm			
18.02	Flooring for Kitchen & Utility Providing and laying of 300 x 300mm anti-skid Ceramic tiles for the kitchen and utility of approved make in CM 1: 4 to the required pattern, pointing the joints with matching cement based polymer etc., all complete. Basic Cost of the Tile: Rs.538 per Sqm After Laying the Flooring tile(with spacers if required as per directions of Architect/Site Engineer) the joints are sealed with two component or Three component Epoxy Tile grout fillers of approved make (Pidilite)which is acid/ chemical resistant, non- cracking or powdering, anti- fungal & anti-bacterial compound.					
a	First floor kitchen and utility flooring tiles	20	Sqm			
b	second floor kitchen and utility flooring tiles	20	Sqm			
c	third floor kitchen and utility flooring tiles	20	Sqm			
d	Fourth floor kitchen and utility flooring tiles	20	Sqm			

	the Vendor/Company					
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
e	Fifth floor kitchen and utility flooring tiles	20	Sqm			
	Skirting 100mm					
a	Skirting tile to match floor tiles at first floor	3	Sqm			
b	Skirting tile to match floor tiles at second floor	3	Sqm			
c	Skirting tile to match floor tiles at third floor	3	Sqm			
d	Skirting tile to match floor tiles at fourth floor	3	Sqm			
e	Skirting tile to match floor tiles at fifth floor	3	Sqm			
18.03	Anti-skid tiles for the toilets Supply and fixing of 300 x 300mm antiskid Ceramic tiles for the flooring of approved colour and make in cement mortar 1:3. Basic Cost of the tile: Rs.538 per Sqm After Laying the Flooring tile (with spacers if required as per directions of Architect/Site Engineer) the joints are sealed with two component Epoxy Tile grout fillers of approved make (Pidilite)which is acid/chemical resistant, non-cracking or powdering, anti-fungal & anti-bacterial compound.					
	Flooring tile					
a	Toilet flooring at first floor	14	Sqm			
b	Toilet flooring at second floor	14	Sqm			
c	Toilet flooring at third floor	13	Sqm			
d	Toilet flooring at fourth floor	13	Sqm			
e	Toilet flooring at fifth floor	13	Sqm			
18.04	Glazed tiles for the Toilet & Kitchen wall dado Providing and fixing (5mm to 8mm) glazed Porcelain/ceramic Clay tiles of size 450mm x 600mm approved make in CM 1:4 to the required pattern, and pointing the joints with the matching cement based polymer grout of Laticrete/ Bal Endura or approved equivalent make. The laying shall be to the true level and pattern. The rate includes all surface preparation, scaffolding, cleaning and maintaining till handover. The basic price of tile to be Rs.538 per Sqm.					
	Toilet wall tile					
a	Toilet wall tiling at first floor level	77	Sqm			
b	Toilet wall tiling at second floor level	77	Sqm			
c	Toilet wall tiling at third floor level	85	Sqm			
d	Toilet wall tiling at fourth floor level	85	Sqm			
e	Toilet wall tiling at fifth floor level	85	Sqm			
	Kitchen and Utility wall tile in all the floors					
a	Kitchen wall tiling at first floor	10	Sqm			
b	Kitchen wall tiling at second floor	10	Sqm			

Name of	the Vendor/Company					
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
c	Kitchen wall tiling at third floor	10	Sqm			
d	Kitchen wall tiling at fourth floor	10	Sqm			
e	Kitchen wall tiling at fifth floor	10	Sqm			
18.05	Granite flooring at Staircase area Black Granite					
a	Providing and fixing of 20mm thick semi polished black granite for the staircase - tread, risers and mid-landing slabs. Cost includes cutting and laying in position along with No.sing of the edges, (3 No.s 5mm x 5mm linear groves for full length of step in ground floor to 1st floor only), with all lead and lift, Protection and maintaining till handover. The basic price of tile to be Rs.2690 per Sqm.	200	Sqm			
a.1	100mm high Skirting					

N.T.	D 1.0	0		Rate in	Amount in	Amount in
.No.	Description C100 Air Living Base Air Living Ba	Quantity	Unit	Figures	Figures	Words
	Providing and fixing of 100mm high skirting all around to match the floor granite	17	Sqm			
b	20mm thick Granite for the Kitchen platfoRm					
	Providing and laying 20mm thick machine cut and polished black galaxy					
	granite slabs of approved quality over a bed of minimum 15mm thick in CM					
	1:3 over Wash Basin counter tops and preparation tables/benches all complete					
	as directed. The rate should include cost of edge bevelling of required profile					
	including grinding, Buffing and polishing etc all as per detailed architectural drawing at all levels. Tenderer to apply a coat of epoxy or fiber glass or any					
	other application at the back of stone to ensure that no dampness occurs after					
	laying of stones. Cost includes provision for cut-outs for gas holes and sinks					
	etc., all complete. The basic price of tile to be Rs.2152 per Sqm.					
	black granite galaxy	23	Sqm			
	oner grante galaxy	23	Sqiii			
c	Lift wall cladding					
	Supplying and fixing of (CATS EYE) 20 mm thick Granite for Lift wall cladding, Jamb entrance at all the floors. Rate to include all lead and lift,					
	transportation, shifting, Scaffolding, temporary supports etc. The basic price	44	Sqm			
	of tile to be Rs.2690 per Sqm.					
	Grano flooring: Providing and laying reinforced cement concrete 12 mm size					
	blue granite metal grano flooring in CM 1:1½:3 (M20) on an average thickness of 75mm The rate include curing and compaction and followed by					
	immediate smooth finish with power Trowel. The work should be carried out					
d	according to IS code and as per details given in specifications and drawings to					
	the Instructions of the Architect/Site engineer.					
						-
	Stilt floor :grano-flooring for car park area(electrical panel room)	161	Sqm			
	Decorative cement tile Paver 38mm thick (Eurocon/basant beton) -					
	flooring for car park area in Stilt floor. Laying of Precast Concrete tiles of					
	approved design and colour as per the drawings laid to pattern over a base	1.61				
e	mortar(as per manufacturer's specification) laid to line and slope without any	161	Sqm			
	voids/ir gaps underneath, cutting and making edges straight around Manhole cocer location, packing of loose joints with PU grouts(Bal Grout/endura). The					
	basic price of tile to be Rs650.00 per Sam. (BASANT BETON :					
	LAYING OF PAVER BLOCK: (Eurocon/basant beton)					
	Providing & fixing 80mm thick Interlocking Concrete Paving blocks for Reflective Type(Wet Cast) For Medium Traffic in stilt floor driveway:					
	Compressive strength- Average not less than 450 Kg/cm2, Average wear in					
	Thickness- Abrasion- Average wear not more than 2mm, Tolerance in size					
	(length + breadth) - ± 2mm, Thickness of wearing layer - Not less than 5mm,					
	Tolerance in Thickness of block - ± 5mm, Colours - The Concrete Pavers should confiRm to requirements of IS 15658:2006, • The manufacturing					
f	company must be an ISO 9001:2015 certified Company or should have	259	Sam			
1	equivalent quality management systems in place to ensure quality product •.	239	Sqm			
	The basic price of tile to be Rs.650 per Sqm ,					
	(BASANT BETON : ROSA COMETA GRASS PAVER, FLEXI PAVER)					
	The Concrete Pavers should confiRm to requirements of IS 15658:2006, •					
	The manufacturing company must be an ISO 9001:2015 certified Company or					
	should have equivalent quality management systems in place to ensure quality					
	product. • The colours of the blocks (wearing layer) will be as selected by the					
	architects. • Colour Concrete paving blocks shall be manufactured as per stated specifications using approved colour pigment of "LANXESS". Grey					
	OPC 53 grade cement shall be used for coloured payers to obtain the desired					
	shade. Sand bedding to the required pattern and compacting, including cost,					
	leveling of sub base etc. Cleaning the floor with side plastering. Paver blocks					
	in stilt floor driveway with necessary block works and plastering LAYING OF Pre Cast RCC KERB 100 x 300x600 mm: Supplying and					
c	laying in place Precast RC KERB block of approved make and design over	138	D			
g	pcc bed to proper line and length as er the details/drawings all complete as	138	Rm			
	per instructions of the Architect. The basic price of kerb piece to be Rs,900					

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
II	PLUMBING BOQ			Figures	1 izui cs	VV 01 US
	Sanitary Installation, Internal & External Water Supply and Sewerage					
	Arrangements PART - A: SANITARYWARES & CP FITTINGS					
I.)	SANITARY WARES					
	The contractors will have to quote their rate for the following specified make					
	and model of sanitary wares and c.p.fittings. Quoted price shall be including					
	handling the materials very carefully and installing at respective locations.					
	Incase any breakage, pilferage, theft or any such activity taking place during					
	tenure of contract till handing over, the contractor is responsible by way of accepting recovery towards the cost of materials plus charges for re-					
	installation. Rates under Supplying and fixing will include (a.) Cost of					
	material (b.) Taxes (c.) Transporting the materials to site (d.) consumables (e)					
	Loading from the market shop and unloading at site work (f.) Storing &					
	Stacking (g.) Labour charges including lead and lift to all locations and (h.)					
	Overhead & profits.(i.) Lead and lift to convey the materials with in the site					
	for installation of materials in their position as needed (j.) Cutting the					
	masonry or concrete surfaces to facilitate fixing (k.) Restoring damaged portions to their original condition with supply of materials like cement, river					
	sand, stone chips, brick etc. (1.) convey all the broken materials taken out of					
	damaged portion within the toilet & shaft area by head load via staircase, to					
	be dumped out of the work site for onward clearance by another agency (m.)					
	all the works are to be carried out as per description mentioned against each					
	item of work mentioned in schedule of quantities (n.) all tools and plants					
	needed for the job to be brought in by the contractor at their cost including maintenance expenses, replacement at cost wherever required – either in full					
	or in part (o.) fixing materials like brackets, screws, bolts, nuts etc.					
	of in part (o.) fixing materials like brackets, serews, boiles, hats etc.					
1	Supply and fixing, "Parryware" or equal approved make Off white or					
	Ivory colour Glazed wall hung European water closet with Exposed dual					
	flushing cistern with heavy duty seat and cover supplied by same					
	manufacturer with non corrosive hinges and bolts, washer, providing suitable size fisher bolts and nuts, cutting grooves or make holes, grouting making					
	good damaged surfaces with required materials, fixing the water closet with	1	Each			
	seat and cover to perfect level, testing and commissioning etc., complete.					
	(For Terrace toilet, if proposed)					
	Make: Parryware					
	Model of Closet : C0270 (Cardiff) Cistern Set Including Fittings : C0770					
2	Supply and fixing, "Parryware" or equal approved make Off white or					
	Ivory colour glazed wall hung European water closet with Concealed dual					
	flushing cistern with heavy duty seat and cover supplied by same					
	manufacturer with non corrosive hinges and bolts, washer, providing suitable					
	size approved make fisher bolts and nuts, cutting grooves or make holes, grouting making good damaged surfaces with required materials, fixing the					
	water closet with seat and cover to perfect level, testing and commissioning	15	Each			
	etc., complete. (For Branch office & all flats)					
	Make : Parryware					
	Model of Closet: C0264 (Cardiff)					
	Soft Close Seat Cover: E8112					
	Concealed Cistern : E812099 Push Plate : C8218A1 Square(Chrome)					
3	Supply and fixing, "Parryware" or equal approved make Off white or					
	Ivory colour glazed Undercut Oval Washbasin of 550 x 445mm size with					
	(excluding RCC slab and marble/granite), fixing the same to perfect level,					
	grouting to adjusting surfaces with water proofing materials, cutting walls or RCC slab, restoring the same to their original conditions including supplying	2	Each			
	and fixing suitable fabricated bracket using mild steel plate, testing and					
	commissioning, etc. complete. (For Branch office)					
	Make : Parryware					
4	Supply and fixing, "Parryware" or equal approved make Off white or					
	Ivory colour glazed Rectangle Half Pedestal Washbasin of 550 x 400mm					
	size with a pair of Cast Iron brackets, fixing to Wall dado with required materials like teak wood plugs, packing pieces, screw nails, testing etc					
	complete. (For all flats+terrace toilet)	19	Each			
	Make: Parryware					
	1		1		1	1

I NI-	Description	Ou	TJ*4	Rate in	Amount in	Amount in
.No.	Description	Quantity	Unit	Figures	Figures	Words
5	Supply and fixing, "Parryware" or equal approved make, stainless steel					
	sink having over all size of 1000 x 500mm single bowl with drain board					
	and chromium plated waste coupling supplied with sink by the same manufacturer, providing bracket made of 25 x 25 mm x 3 or 4 m thick size					
	M.S.Angle, applying 3 coats of anti-corrosive paint, grouting the same					
	into wall with concrete of 1:3:6mix, fixing the sink, drain board to a	7	Each			
	perfect level to match work platfoRm in kitchen, cutting grooves in	,	Laci			
	masonry, restoring the same to their original condition, testing and					
	commissioning etc., complete. (For branch office pantry 1 no. & 6 No.s.					
	for flats)					
	Make : Parryware (Classic Range)					
6	Supply and fixing, 0.60m(L) x 0.75m(H) size mirror made out of imported					
	plate glass of 5 to 6mm thick silvering to high standard, supplying 12mm					
	thick water proof plywood to back of mirror, applying 3coats enamel paint to	10	Sqm			
	wooden surfaces making holes on mirror and wood fixing mirror to wall					
	/dado with suitable Chromium plated detachable head screws etc complete.					
7	(For Branch office & all flats) Supply & Fixing, "Parryware" or equal approved make White or any					
,	pastel colour glazed urinal of top inlet with one pair of concealed non					
	corrosive brackets, sensor type flush valve, C.P.spreader, connecting tube,					
	waste coupling with domen grating, bottle trap etc., installing the urinal to					
	plumb in compete with all accessories, testing, cutting walls wherever					
	required, restoring the same to their original conditions with required	2	No.s			
	materials, testing the installation, commission etc., complete.					
	1. Urinal Make: Parryware, Model: C0583 (New Magnum)					
	2. Dome grating Make : Viking					
	3. Bottle trap Make : Jaquar, Model : ALD-769L					
	4. Sensor Flush valve Make: Jaquar. Model: C8132					
0	ACCESSORIES AND CHROMIUM PLATED BATHROOM FITTINGS Supply and fixing Following chromium plated bath room fittings of					
8	"Jaquar"make / approved make - Florentine range, connecting to water					
	pipe using teflon tape over threaded portions, Including supplying and					
	fixing CP Nipples to connect the water supply pipe to CP fittings, testing					
a.	Supply and fixing, (Florentine Range) Long Neck Pillar cock with aerator.					
и.	Make: Jaquar	21	Each			
	Catalogue No : FLR-5015					
b.	Supply and fixing, (Florentine Range) 15mm dia 2 way bibcock with wall					
	flange.	3	Each			
	Make : Jaquar					
c.	Supply and fixing, (Allied Range) 15mm dia Rinsing spray with bracket and					
	1250mm.plastic tube (Health Faucet) long threads.	16	Each			
	Make : Jaquar					
1	Catalogue No : ALD-573					
d.	Supply and fixing, (Florentine Range) 15mm dia Angle valve stop cock long inlet threads with wall flange.					
	Make: Jaquar	64	Each			
	Catalogue No : FLR-5053N					
e.	Supply and fixing, (Allied Range) 32mm dia Bottle trap with long wall					
С.	connection pipe & wall flange.					
	Make: Jaquar	21	Each			
	Catalogue No : ALD-769L					
f.	Supply and fixing, (Allied Range) 32mm dia C.P brass waste coupling.					
	Make : Jaquar	21	Each			
	Catalogue No : ALD-705					
g.	Supply and fixing, (Continental Range) chromium plated Double coat hook					
	with suitable brass screws etc.	16	Each			
	Catalogue No: ACN-1161N					
h.	Supply and fixing, (Florentine Range) 15mm dia Sink cock with Regular					
	Swinging spout (Wall Mounted Model) with wall flange etc. complete.	14	Each			
	Make: Jaquar					
	Catalogue No: FLR-5347N Supply and fixing, (Continental Range) Concealed stop cock 20 mm dia.					
i.	111					
	Make : Jaquar Catalogue No : CONCEAL BODY - ALD-089	15	Each			
	EXPOSED BODY - OPP-15083KPM					
j.	Supply and fixing, (Continental Range) chromium plated Towel ring with					
J.	cp brackets fixing in position using suitable C.P. screws, peak wood plugs					
	etc., complete. (For branch office & flats washbasin)	21	Each			
	Make: Jaquar					
	Catalogue No : ACN-1121BN					
k.	Supply and fixing, (Continental Range) chromium plated Towel rack					
***	600mm long and 20m dia with cp brackets fixing in position using suitable					
	C.P. screws, peak wood plugs etc., complete. (For flats shower area)	12	Each			
	Make: Jaquar					
	Catalogue No : ACN-1181FHS					
1.	Supply and fixing, (Continental Range) Soap dispenser with 500ml liquid					
	soap, fixing the same over wall dado using required fixing		ا . ا			
	materials, etc., complete.	2	Each			
	Make: Jaquar					1

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l.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
m.	Supply and fixing, (Hand dryers - Optima Range) fixing the same over wall dado using required fixing materials with approved make etc., complete.	2	Each	1124103	Tigures	VV OI US
	Make : Jaquar Catalogue No : HDR-SAP-M99ACS		Eacn			
n.	Supply and fixing, (Continental Range) Paper Roll holder with flap, fixing					
	the same over wall dado using required fixing materials etc.,complete. Make: Jaquar	5	Each			
	Catalogue No : ACN-1153S					
0.	Supply and fixing, Kimberly clark or equal approved make Towel dispenser fixing the same over wall dado using required fixing materials,etc.,complete. Make: Kimberly clark Make: Kimberly clark	2	Each			
n	Product code: 69590 Supply and fixing, (Continental Range) Long body bibcock with wall					
p.	flange. Make: Jaquar	5	Each			
q.						
•	Supply and fixing, 15mm size 450mm Length Braided hose pipe with nuts, washers, etc., for connecting outlet of angle valve stop cock to pillarcock, flushing cistern etc.,	46	Each			
r.	Supply and fixing, Single lever divertor with spout and provision for overhead rain shower with wall flange. (For flats) Make: Jaquar					
	Catalogue No : CONCEALED BODY - ALD-075					
	EXPOSED BODY - FUS-29075K	12	Each			
	SPOUT - SPJ-29429					
	Head shower - OHS-1789					
	Shower aRm - SHA-483					
S.	Supply and fixing, (Continental Range) Soap dish holder fixing the same					
	over wall dado using required fixing materials,etc.,complete. Make: Jaquar	12	Each			
	Catalogue No : ACN-1131N					
t.	Supply and fixing, Racold / Venus make electrically operated storage					
	capacity, inner container made from copper or stainless steel including					
	theRmal insulation safety valve, vacuum relief valve, Neon lamp, mounting					
	brackets, installing in position with coach screws or bolts, nuts, testing,					
	10 Lts capacity of water heater	12	Each			
	PART - B: SOIL , DOMESTIC WASTE AND VENT PIPE WORKS					
9	Supplying and fixing approved make PVC SWR grade Pipes of type B class and approved make PVC Pipe specials like bends, Tee, Y-junction with or without door, Vent cowl, providing and fixing cleaning / rodding eye with end cap wherever required, etc., cutting the pipes, laying or fixing to perfect plumb, with slopes where required, making joints using solvent cement solution or with ring seal couplers of size available pipe of 110mm and 75mm dia., providing 110 dia PVC make up piece with inlet connections, providing and fixing G.I. U clamps to the brackets, Providing and removing necessary scaffolding where required, providing supports for pipes laid in false ceiling using G.I.hangers fixed to R.C.C slab including providing and fixing necessary anchor fastners and clamps, conducting water test for leak proof					
a.	Using 40mm dia pipe- IS 4985 (10kg Class) - For Washbasin	30	Rm			
b.	Using 50mm dia pipe- IS 4985 (10kg Class) - For Balcony Drain (sunken + shaft)	50	Rm			
c.	Using 50mm dia pipe- IS 4985 (10kg Class) - For Sink & urinal	20	Rm			
d.	Using 63mm dia pipe- IS 4985 (10kg Class) - For washing machine & dishwasher	15	Rm			
e.	Using 75mm dia pipe (6kg Class) - For Vent	25	Rm			
f.	Using 75mm dia pipe (6kg Class) inside toilet for wastewater	90	Rm			
g.	Using 75mm dia pipe (6kg Class) in shafts for wastewater	75	Rm			
h.	Using 110mm dia pipe (6kg Class) inside toilet for soil line	35	Rm			
i.	Using 110mm dia pipe (6kg Class) in shafts for Soil Line	55	Rm			

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Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
j.	Using 110mm dia pipe (6kg Class) in shafts for rain water	20	Rm	1 IZUI US	Tigures	VV OI GS
k.	Using 160mm dia pipe (6kg Class) in shafts for rain water	40	Rm			
10	Supplying and fixing custom made PVC Floor sump/ trap, made out of 110mm dia PVC Pipe with single or multiple inlets of size 40mm to 75mm dia with 75mm dia outlet, plugging the bottom to water tightness, using flattened PVC Pipe materials of 6 Kg class, fixing in position, laying cement concrete to 75mm alround in 1:3:6 mix using brick jelly to full depth of trap / sump, including providing makeup piece in PVC with 40/ 50mm size inlet connection(boss tee) and fiber glass mating at bottom, inlet and outlet etc.	45	Each			
11	Supplying and fixing approved make PVC deep seal 'P' Trap with 50mm water seal, and 100mm dia outlet fixing to a perfect position, laying cement concrete alround in 1:3:6 mix with 20mm size stone jelly, providing and fixing suitable size grating with frame in PVC, providing 110mm dia PVC pipe over trap to make up the level of platfoRm for Urinal portion, cutting concrete or making holes, restoring the damaged portion to their original	1	Each			
12	Providing and laying concrete with 1:4:8 mix using 20mm size stone aggregate all around for buried soil and waste pipes including centering and shuttering and any masonry supports from slabs or fiRm ground, curing complete for the pipes including providing and removing temporary foRm					
a.	75mm nominal dia pipe 75mm thick alround	90	Rm			
b.	110mm nominal dia pipe 75mm thick alround	35	Rm			
13	Supplying and fixing rodding Eye in PVC material with threaded end cap, fixing to soil/ waste pipe work using required fixing material, testing for leak proof, etc., complete					
a.	75mm dia	2	Each			
b.	110mm dia	2	Each			
14	Supplying and fixing Cockroach trap (5" X 5" size) with CP Square Grating matt finish at 4mm below Floor level testing to water tightness, with frame including tile cutting, inside filling with FRP paste and finishing, etc. Catalogue No: CCT-S-129 (AISI 304 - Stainless steel material)	20	Each			
15	Supplying and fixing CP Square Grating (5" X 5" size) at 4mm below Floor level testing to water tightness, with frame including tile cutting, inside filling with FRP paste and finishing, etc. Catalogue No: CRG-S-129 (AISI 304 - Stainless steel material)	25	Each			

				Rate in	Amount in	Amount in
Sl.No.	Description	Quantity	Unit	Figures	Figures	Words
	PART - C: INTERNAL DOMESTIC & FLUSH WATER SUPPLY					
A. 15	INTERNAL DOMESTIC WATER DISTRIBUTION Supplying and fixing approved make CPVC pipes (sdr 13.5 grade) and pipe					
	specials like Coupler, reducer, elbow, tee and brass male/ female threaded					
	pipe specials to connect bath room fittings, union, by pass bend with all type					
	of Special flanges and special fittings to connect with de-similar materials					
	like G.I or any other material, cutting the pipes, fixing the pipe specials using					
	solvent cement solution supplied by the same manufacturer, making water tight joints, making holes and cutting grooves in walls restoring the damaged					
	portions to their original condition using required materials, providing					
	suitable pipe clamps, installing pipe work to perfect plumb, providing					
	supports for pipes laid in false ceiling using G.I.hangers fixed to R.C.C slab					
	including providing and fixing necessary anchor fastners, straight in					
	horizontal, conducting hydraulic test to pipe work to a pressure of 7 Kg per					
	Sq.cm, etc. complete and as directed by the site engineer. (Please note that the mentioned diameters are ID.)					
a.	Using 15mm dia (ID) pipe.					
		15	Rm			
b.	Using 20mm dia (ID) pipe.		_			
		190	Rm			
c.	Using 25mm dia (ID) pipe.		_			
		10	Rm			
d.	Using 32mm dia (ID) pipe.					
		5	Rm			
e.						
	Using 40mm dia (ID) pipe - (Pumping Main main ug sump to OHT-Exposed)	35	Rm			
f.						
	Using 32mm dia (ID) pipe - (Pumping Main metro sump to OHT-Exposed)	35	Rm			
16	Supplying and fixing approved make CPVC union, testing for leak proof, etc.					
	complete.					
a.	25mm dia					
	Zomin die	5	Each			
b.	32mm dia					
0.	22mm dia	5	Each			
c.	40mm dia					
C.	Tollin die	5	Each			
d.	50mm dia	_				
ч.	John die	5	Each			
В.	INTERNAL HOTWATER SUPPLY PIPEWORK:					
17	Supply and fixing, Astral / Ashirvad / Supreme make CPVC pipe (SDR 11)					
	with CPVC pipe specials and brass threaded fittings wherever required to connect chromium plated bathroom fittings inside toilet, fixing the pipe and					
	pipe specials using required fixing materials supplied by the same	l				
	manufacturer and ac enecified above					
a.	Using 15mm dia (ID) pipe. (Concealed)	_	_ n			
		5	Rm			
b.	Using 20mm dia (ID) pipe. (Concealed)					
		45	Rm			
B.	EXTERNAL WATER SUPPLY LINES					
1.7	DISTRIBUTION PIPE WORK IN TERRACE AND SHAFTS				-	1
17	Supplying and fixing Sch' 80 approved make pipe with all types of pipe specials, cutting the pipes to required length, preparing the surfaces of pipes					
	for jointing, fixing the pipe specials using required fixing materials supplied					
	by the same manufacturers, making water tight joints, making holes and					
	cutting grooves in walls restoring the damaged portions to their original					
	condition using required materials, providing suitable pipe clamps, installing					
	pipe work to perfect plumb, straight in horizontal conducting hydraulic test to					
	pipe work to a pressure of 7 Kg per Sq.cm, providing supports for pipes laid					
	in false ceiling using G.I.hangers fixed to R.C.C slab including providing and					
a.	fixing necessary anchor fastners and clamps etc complete. 65mm dia pipe					
a.	osinin dia pipe	15	Rm			
b.	50mm dia pipe					
٠.		35	Rm			
c.	40mm dia pipe					
		35	Rm			
d.	32mm dia pipe		_			
		80	Rm			
e.	25mm dia pipe		_			
		45	Rm			
f.	20mm dia pipe					
	* *	20	Rm			1

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in	Amount in Words
	EXTERNAL WATER SUPPLY PIPE WORK			Figures	Figures	vvorus
18	Supplying and fixing Sch' 80 approved make pipe with all types of pipe					
	specials, cutting the pipes to required length, preparing the surfaces of pipes					
	for jointing, fixing the pipe specials using required fixing materials supplied					
	by the same manufacturers, making water tight joints, making holes and					
	cutting grooves in walls restoring the damaged portions to their original					
	condition using required materials, providing suitable pipe clamps, installing pipe work to perfect plumb, straight in horizontal conducting hydraulic test to					
	pipe work to a pressure of 7 Kg per Sq.cm, providing supports for pipes laid					
	in false ceiling using G.I.hangers fixed to R.C.C slab including providing and					
	fixing necessary anchor fastners and clamps making earth work excavation up					
	to 1500mm deep for laying pipe below Ground level, refilling the trenches,					
	watering, consolidating etc. complete. Providing 100mm sand bed all around					
a.	40mm dia buried pipe (Filtered water pumping main to OHT)					
u.	Tomm dia barred pipe (Therea water pamping main to off)	20	Rm			
b.	32mm dia buried pipe (Metro sump to main sump & OHT)	55	Rm			
c.						
C.	32mm dia buried pipe - (Pumping Main borewell to fire sump)	25	Rm			
19	Supplying and fixing approved make cast iron lever operated slim seal type					
	butterfly valve of cast iron body and spheroidal graphite iron disc with nitrite					
	rubber seal, tested to 10 kg/ sq.cm, conforming to BS standards and including					
	necessary flanges as per BS 10 table I including bolts, nuts, neoprene rubber					
a.	gaskets, fixing to pipe work with required fixing materials, testing etc. Using 65mm dia Butterfly Valve.					
	osing osinin dia Bantoni, vanto	2	Each			
20	Supplying and fixing approved make Gun metal Check Valve, fixing to					
	threaded/ flanged ends of pipe work using required fixing materials, testing					
	etc. including necessary flanges as per BS 10 table I including bolts, nuts,					
	neoprene rubber gaskets, fixing to pipe work with required fixing materials,					
a.	32mm dia Check Valve with flanged ends					
		2	Each			
b.	40mm dia Check Valve with flanged ends					
٠.	Normal did enter years while managed onto	2	Each			
21	Supplying and fixing approved make Brass body nickel plated with stainless					
	steel ball, lever operated Ball Valve, fixing to pipe work with required fixing					
	materials, testing, etc., complete for Internal & External water supply.					
a.	Using 20mm dia Ball Valve.					
		5	Each			
b.	Using 25mm dia Ball Valve.					
		5	Each			
c.	Using 32mm dia Ball Valve.					
		8	Each			
d.	Using 40mm dia Ball Valve.					+
u.	Come Tomil dia Dali Valve.	_	_{E-1}			
		2	Each			
e.	Using 50mm dia Ball Valve.					
		2	Each			
22	G					1
22	Constructing masonry Chamber 900(W) x1200(L) x 1200(D) mm inside with 75 class designation brick work in cement mortar 1:4 (1 cement : 4 coarse					
	sand) and RCC top slab 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 graded					
	stone aggregate 20mm nominal size) necessary excavation foundation					
	concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm	1	Each			
	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, for municipal water connection					

l.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
23	Constructing metro water collection well as per the following liquid holding			rigures	Figures	worus
23	capacity (after invert level of pipe - with a free board of minimum 1200mm)					
	including making earth work excavation, laying cement concrete in 1: 3: 6					
	mix for 150mm depth in foundation, providing and laying in position machine					
	batched, machine mixed and machine vibrated design mix concrete of M25					
	grade RCC by using not less than 410 kg of cement and 250 kg of steel per					
	cubic metre of concrete (sizes of structural members such as base slab, side					
	walls and cover slab shall be designed by the Contractor after making					
	necessary site visits and studying the conditions at site and adopted after					
	getting approval from the Engineer-in-charge), including finishing by					
	plastering with cement mortar 1:3 mix for inner surfaces, plastering outer					
	surfaces in cement mortar 1:4 mix, 20mm thick, fixing and removing foRm					
	work for shuttering to RCC works, providing and fixing SFRC manhole cover					
	and frame 600 x 600 size of medium duty, refilling the sides with excavated					
	earth, disposing surplus earth with in the Site, bailing out the water from the					
	excavation, conducting water test for leak proof construction by filling water					

Name of the Vendor/Company					1 4 .:	
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
	INTER RELATED ITEMS:			11_0105	11_41.00	110245
24	Supplying and fixing approved make 'Y' strainer, fixing to threaded ends of pipe work using Teflon tape and twine, testing for leak proof etc. complete.					
a.	40 mm dia size	2	Each			
b.	65 mm dia size	1	Each			
25	Supplying and fixing, Pipe Inserts up to 1000mm for O.H. tank using uPVC sch'80 material, providing 4 to 5mm thick Flange at center projecting 40mm alround pipe insert, scrapping the external surface of pipe using emery sheet, applying bitumastic paint with stone chips for proper bonding with concrete surfaces, making provision in the flange to tie with the reinforcements, fixing the insert in perfect position, testing for leak proof etc. complete. Note: Sample need to be produced for approval by Consultant					
a.	32mm dia	9	Each			
b.	40mm dia	6	Each			
c.	50mm dia	9	Each			
d.	65mm dia	3	Each			
e.	80mm dia	3	Each			
f.	100mm dia	5	Each			
26	Supplying and fixing uPVC SCH 80 VANSTONE FLANGE - SOC Flanges including make holes, provide IRI washer suitable size MS bolts, nuts, washers etc. complete. (HSN CODE: 3917)					
a.	65mm dia	6	Each			
b.	80mm dia	6	Each			

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
c.	100mm dia	10	Each			
26	Supplying and fixing approved make Water Meter of 32mm dia size, including fixing in position with pipe work, providing bypass arrangements with 3 No.s of RB Italian make brass ball valve with all accessories, testing the work for leak proof, etc. complete.					
a.	32mm dia	1	Set			
27	Supplying and fixing approved make 25mm size Air release valve with 'O' ring seal, fixing to pipe work using required fixing materials, testing for leak proof, etc complete. (At terrace level)	1	Each			
28	Providing and constructing of masonry pedestals of size as mentioned with bricks of class B50 designation in CM1:3 and finishing neat coat of floating cement and making good Size of pedestal:					
	230 x 230 x 300mm	6	Each			
	230 x 450 x 300mm	6	Each			
29	Providing approved make expansion bellows, fixing the same with pipe work using required accessories and all consumables, testing for leak proof etc Complete.(Sample to be approved by Architects/Consultants)					
a.	Suitable for 32mm size pipe	2	Each			
b.	Suitable for 40mm size pipe	2	Each			
30	Supply and Fixing, FRP Manhole cover & frame For UG SUMP & OH					
a.	600 x 600mm size clear opening (Light duty) for OH Tank	3	Each			
b.	600 x 600mm size clear opening (Medium duty) for UG sump	7	Each			
31	Supplying and fixing of Polyprolene Rungs of standard size, grounting the same in R.C.C wall etc. Complete.	120	Each			
30	Supplying and fixing approved make UPVC 6 kg class Pipes and pipe specials confiRming IS: 4985, cutting the pipes to required lengths, making joint between pipes and pipe specials using solvent cement, ring seal couplers, aligning the pipe to perfect plumb, fixing the pipe using required width and depth, providing 100 mm sand bed for the pipe over a bed of 150 mm thick slaked lime-sand mix in the ratio 1:3 (1 slaked lime: 3 sand) and 80 mm slump including consolidation by rodding and compacting, refilling the trench in layers with excavated earth, consolidating, disposing off surplus earth as directed by site engineer, testing for leak proof etc. complete. The rate shall include Providing and laying concrete with 1:4:8 mix using 20mm size stone aggregate all around for buried soil and waste pipes including centering and shuttering and any mansonary supports from slabs or fiRm ground, curing complete for the pipes including providing and removing temporary foRm work etc. complete.					
a.	75 mm dia pipe.	10	Rm			
b.	110 mm dia pipe.	10	Rm			
c.	160 mm dia pipe.	30	Rm			
31	outlet, making Pit excavation to a size of 600 x 600mm and 600 to 900mm depth, housing the gully trap inside the pit, laying concrete with 1:4:8 mix cement concrete in bed and surround for 300mm wide and 300mm deep, constructing chamber with an internal size of 230 x 230mm using brick work 115mm thick in cement mortar 1:4 up to a height of 300mm above Gully Trap or up to 100mm above paving level, plastering with cement mortar 1:3 to 20mm thick finishing to smooth surface inside, plastering with cement mortar 1:4 outside, providing 150 x 150mm size cast iron grating, providing 32mm thick precast cement concrete cover slab, clearing the surplus material, earth	4	Each			

				Date in	Amount in	A mount is
l.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
32	Constructing brick masonry manhole in cement mortar 1:4 (1 cement: 4 coarse sand) R.C.C. top slab with 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement: 4 coarse sand: 8 graded stone aggregate 40mm nominal size) inside plastering 12mm 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 20mm nominal size) finished with a floating coat of neat cement complete as per standard design: Inside size 120x90 cm and 90 cm deep With F.P.S. bricks class designation 75.					
a.	Internal size 900mm x 900mm up to 0.9 M depth.	4	Each			
b.	Internal size 1200mm x 900mm up to 1.20M depth.	1	Each			
	MANHOLE COVER WITH FRAME					
a.	600 x 600mm size clear opening (Medium duty) for inspection chambers	5	Each			
33	PART - E: RAIN WATER HARVESTING WORKS					
	Constructing Inspection Chamber 600 x 600 up to 1M depth, laying 150mm thick cement concrete in foundation with 1:3:6 mix using 40mm size stone jelly, 230mm thick brick work using 75mm size stock bricks with CM 1:5, plastering to 20mm thick with CM 1:3 for interior surfaces to smooth finish, plastering 15mm thick with CM 1:4 to exterior surfaces, foRming benching in 1:3:6 cement concrete with 20mm jelly, channeling with CM 1:3, 20mm to smooth for benching and channel portion, providing 150mm thick RCC slab to required size with Steel in reinforcement, making suitable wooden foRm work, providing and fixing Cast Iron grating with cover and frame, earth work excavation to required depth, refilling the sides with excavated earth disposing of surplus earth as directed with in the campus etc. complete.	3	Each			
34	Supply and fixing "NEER" make RPF-4" (100x280) Side Wall Parapet in C.I Body with Painted Aluminium Grate and Four SS Screws Catalogue no: NPD 3003	2	Each			
35	Supply and fixing "NEER" make RPF-6" (150x325) Side Wall Parapet in C.I Body with Painted Aluminium Grate and Four SS Screws	2	Each			
36	Catalogue no: NPD 3004 Providing 1.00 metre internal dia and 1.20 metre deep rain water harvesting pit including providing necessary brickwork, filter media like sand and stone aggregates, Sinking 150mm dia. Bore to a depth of 10 to 15 meters, supplying and fixing 90mm dia pvc pipe with slotting arrangements, filling the gap between bore and pipe 6 to 8mm stone chips.	4	Each			
37	Supplying and fixing approved make UPVC 6 kg class Pipes and pipe specials confiRming IS: 4985, cutting the pipes to required lengths, making joint between pipes and pipe specials using solvent cement, ring seal couplers, aligning the pipe to perfect plumb, fixing the pipe using required clamps fixed to bracket, making earthwork excavation in trenches to required width and depth, providing 100 mm sand bed for the pipe over a bed of 150 mm thick slaked lime-sand mix in the ratio 1:3 (1 slaked lime: 3 sand) and 80 mm slump including consolidation by rodding and compacting, refilling the trench in layers with excavated earth, consolidating, disposing off surplus earth as directed by site engineer, testing for leak proof etc. complete. The rate shall include Providing and laying concrete with 1:4:8 mix using 20mm size stone aggregate all around for buried soil and waste pipes including centering and shuttering and any mansonary supports from slabs or fiRm ground, curing complete for the pipes including providing and removing temporary foRm work etc. complete.					
a.	160 mm dia pipe.	45	Rm			
38	PART F - MISCELLANEOUS WORKS Fabricating brackets using Mild Steel flats or angles, cutting, welding, foRming shapes, providing hot dip galvanizing for brackets, cutting pockets in masonry / concrete surfaces, grouting brackets in concrete of 1:2:4 mix, restoring the damaged portion to their original condition required materials	500	Kg			
39	Supply and fixing, Astral / Supreme / Finolex make, CPVC pipe (SDR 11) with CPVC pipe specials and brass threaded fittings wherever required to connect chromium plated bathroom fittings inside toilet, fixing the pipe and pipe specials using required fixing materials supplied by the same					
a.	Using 20mm dia (ID) pipe. (Concealed & Exposed pipe Inside toilet)	45	Rm			

Name of	the Vendor/Company					
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
40	Providing 125mm x 125mm size cutout upto 300mm long in all types of concrete, restoring the same after laying pipe, providing waterproofing compounds for leak proof sealing, etc., complete and as directed by the site PUMPS	35	No.s.			
41	Supply and installing, GRUNDFOS or equal approved make, factory tested Single Pump Booster system (capacity of system is 6.0 Cum/ hour at 15-18 meters head) with 1 No. of 328 litres capacity pressure tank, switch, gauge, control panel, supply and fixing vibrating pad etc. conducting trail run, testing, commissioning maintaining the system for the period of one year, rate include all Electrical panel work connected to existing Electrical cable	1	No.s.			
42	arrangement etc. complete. For Domestic water purpose (AT TERRACE Supply, Installation, Testing & commissioning of Grundfos or Equal make Submersible Clearwater lifting pump set with suitable horse power motor to each pump to discharge 5000 Litres per hour against total head of 30-35 Metres with control panel & all necessary accessories, conducting trail run, providing necessary civil foundations and base frame with all accessories and		Set			
a.	consumables, maintaining the system for the period of one year. Rate shall include all Electrical panel work connected to existing Electrical cable arrangement, etc. complete. Incoming Electrical cable to starter panel will be under scope of Electrical work. Transfer of water from Filtered Sump to No. of Pumps - 2 (1 working + 1 standby)	-				
b.	Supply and installing Pressure based auto ON-OFF flood control system consisting pressure zone arrangement on the outlet of pump with panel, solenoid valve, float & control panel on the inlet of OH Tank, fixing to pipe work using necessary accessories, commissioning the system, etc. complete. Rate shall be inclusive of necessary cables connected to nearby electrical					
43	Supply, Installation, Testing & commissioning of Grundfos or Equal make Submersible Clearwater lifting pump set with suitable horse power motor to each pump to discharge 4,000 Litres per hour against total head of 30-35 Metres with control panel & all necessary accessories, conducting trail run, providing necessary civil foundations and base frame with all accessories and consumables, maintaining the system for the period of one year. Rate shall include all Electrical panel work connected to existing Electrical cable arrangement, etc. complete. Incoming Electrical cable to starter panel will be under scope of Electrical work. Transfer of water from Metro Sump to		Set			
a. b.	No. of Pumps - 2 (1 working + 1 standby) Supply and installing Pressure based auto ON-OFF flood control system consisting pressure zone arrangement on the outlet of pump with panel, solenoid valve, float & control panel on the inlet of OH Tank, fixing to pipe work using necessary accessories, commissioning the system, etc. complete. Rate shall be inclusive of necessary cables connected to nearby electrical source, etc.,					
44	Supply, Installation, Testing & commissioning of Grundfos or Equal make Submersible Clearwater lifting pump set with suitable horse power motor to each pump to discharge 4,000 Litres per hour against total head of 12-15 Metres with control panel & all necessary accessories, conducting trail run, providing necessary civil foundations and base frame with all accessories and consumables, maintaining the system for the period of one year. Rate shall include all Electrical panel work connected to existing Electrical cable arrangement, etc. complete. Incoming Electrical cable to starter panel will be under scope of Electrical work. Transfer of water from Mother Sump to FIRE Sump	1	Set			
a.	No. of Pumps - 1 working					
45	Installation, Testing and commissioning of Grundfos or equal approved make, Submersible surface water lifting pump set to discharge 12,000 Litres per hour against total head of 14 Metres with automatic float control arrangement etc. conducting trail run, testing, commissioning maintaining the system for the period of one year, rate include providing and fixing all Electrical starters work connected to existing Electrical cable arrangement etc., complete. (1 working + 1 standby - In Teach INTERNAL TEACHER PARTY TO THE TEACHER TO THE TEACHER PARTY TO THE TEACHER TO THE T	1	Set			
46	TANKER WATER INLET PIPE TO UNDER GROUND WATER STORAGE SUMP Supplying and fixing, Sch' 80 AQUAGOLD uPVC Pipe conforming to ASTM standard of Supreme or equal approved make pipe with all types of pipe specials, cutting the pipes to required length, preparing the surfaces of pipes for jointing, fixing the pipe specials using required fixing materials supplied by the same manufacturers, making water tight joints, making holes and cutting grooves in walls restoring the damaged portions to their original condition using required materials, providing suitable pipe clamps, installing pipe work to perfect plumb, straight in horizontal conducting hydraulic test to pipe work to a pressure of 7 Kg per Sq.cm, making earth work excavation up to 1500mm deep for laying pipe below Ground level, refilling the trenches, watering, consolidating etc. complete. Providing 100mm sand bed all around					
	Using 100mm dia pipe with pipe specials (below GL)	15	Rm			

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Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
47	Supplying and fixing of Siamese inlet connection with provision for two male instantaneous coupling fabricated out of 100 mm dia.	1	Each			
48	Supplying and fixing, RB / Zoloto / Leader make cast iron lever operated slim seal type butterfly valve of cast iron body and spheroidal graphite iron disc					
	with nitrite rubber seal, tested to 10 kg/ sq.cm, conforming to BS standards and including necessary flanges as per BS 10 table I including bolts, nuts, neoprene rubber gaskets, fixing to pipe work with required fixing materials,					
	Using 100mm dia (ID)	1	Each			
	TOTAL AMOUNT FOR PLUMBING WORK					
III	FIRE FIGHTING BOQ Sanitary Installation, Internal & External Water Supply and Sewerage					
	Arrangements PART - A: SANITARYWARES & CP FITTINGS					
A	PUMP ROOM Supplying, installing testing and commissioning of TEFC type electrical					
1	motor driven Main(Hydrant & Sprinkler) Pump of horizontal centrifugal end suction backpull out type with with class F insulation & IP 55 protection, gland packing and capable to deliver 1620LPM (97 m³/ Hr) at 70 MWC with all necessary accessories like bronze impeller, stainless steel shaft along with anti-vibration mounting, coupling, coupling guard and base plate for pump, fabricated mild steel channel,foundation bolts, and pump should have the dry run sensor provision, etc., as per local fire brigade requirement. The pump shall capable to have 3.5 kg/cm² residual pressure at top most hydrant point. The pump shall be coupled to electrical motor of required HP with speed of 2900 RPM, Electric supply 415V, 50 Hz and complete set shall be mounted on a common base frame. The quoted rate shall includes providing & fixing of coupling, coupling gaurd and Foundation bolts etc.	1	No.			
2	Supplying, installing and commissioning of Diesel Engine driven common stand by pump, horizontal centrifugal end suction backpull out type with gland packing and capable to deliver 1620 LPM (97 m³/ Hr) at 70 MWC with all necessary accessories like bronze impeller, stainless steel shaft along with anti-vibration mounting, coupling, gear box, base plate for pump, fabricated mild steel channel with foundation bolts etc., Exhaust pipe for Diesel engine shall be with mineral wool insulation with aluminum sheet (Qty - 18mtrs Approx.). The quoted rate shall include mineral wool insulation with aluminum sheeting and Pipe supports also. It includes providing and fixing fuel oil tank (capacity as perTAC requirements) with supports and necessary pipe works for diesel engine, battery and battery charger to be connected to control panel of diesel engine and exhaust silencer including necessary pipe work and lagging, pump should have the dry run sensor provision, etc., and shall be automatic in operation with diesel engine control diesel engine control panel with 24V DC storage battery & its battery charger with required Ampere - hour rating, teRminal box (2 No.s. of 12volts), cooling water line for engine with required pipes / valves / fittings etc., as per TAC including all associated electrical works. The pump shall capable to have 3.5 kg/cm² residual pressure at top most hydrant point. The pump shall coupled to Diesel engine, radiator water cooled type with speed of 1800RPM and complete set shall be mounted on common base frame. Batteries & battery leads with stand, 200 liters capacity Fuel tank (for 6 Hrs. operation) with stand & gauge glass, Fuel piping with valves. The quoted rate shall includes radiator water cooling piping(if required) coupling gaurd and other stanadrd		No.			
3	Supplying, installing and commissioning of electrical motor driven Jockey pump of horizontal centrifugal end suction backpull out type capable to deliver 180LPM (10.8 m³/ Hr) at 70 MWC with all necessary accessories like bronze impeller, stainless steel shaft along with anti-vibration mounting pad and flexible connections at discharge end of the pipes, pump should have the dry run sensor provision etc. and shall be automatic in operation. The pump shall be coupled to motor of 10 HP 415V AC 50HZ with speed of 2900RPM and complete set shall be mounted on common base frame. The muoted rate shall includes providing & fixing of coupling coupling caurd and Supplying, installing testing and commissioning of electrically operated,	1	No.s.			
4	monoblock type Terrace pumpset, ISI marked, capable of discharging 450 litres per minute against a head of 35 metres suitable for operation on 415V,+10%, 3 phase, 50Hz, AC supply suitable for DOL Starter, necessary cement concrete foundation, M.S base plate, foundation bolts, Antivibration pad, GI Sheet cover hood for protection from rain etc as	1	No.s.			

Name of the Vendor/Company							
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words	
	Fabrication, Supplying, Installation, Testing & Commissioning of electrical control panel, of cubical construction, floor mounted type, fabricated out of 2mm thick CRCA sheet, compartmentalised with hinged lockable doors, dust and veRmin proof, powder coated of approved shade after 7 tank treatment process, cable alley, inter-connection, having switchgears and accessories mounting and internal wiring, earth teRminals, numbering etc. complete in all respects, suitable for operation on 415 V, 3 phase, 50 HZ. AC supply with enclosure protection class IP 42 as required.	1	No.				
A	FIRE PUMP						
(i)	INCOMER						
	(a) 225 Amps. TP&N MCCB, 36 KA TheRmal Magnetic type with operating handle mechanism and changeover interlocking etc. and necessary accessories (b) Voltmeter (0-500 Volts) with selector switch. (c) Ammeter (0-500Amps.) with selector switch & CT's etc. (d) Set of 3 Phase indicating lamp.						
(ii)	OUTGOING.						
	(a) Hydrant & Sprinkler pump. 125 Amps. TP&N MCCB, 25 KA TheRmal Magnetic type with operating handle mechanism and necessary accessories with fully automatic star/delta starter with over load protection, single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFFoperation. (C) Jockey pump (Hydrant & Sprinkler) 1 x 32 Amps. TP&N MCCB, 25 KA TheRmal Magnetic type with operating handle mechanism and necessary accessories with fully automatic DOL starter with over load protection, single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFFoperation.						
В	Diesel Engine Control. Control for Diesel Engine comprising: (i) Auto/Manual selector switch & 3 attempt starting device, timers and relays as required, push buttons, start/stop in manual mode. (ii) Indication lamp for High/Low Lub.oil pressure, High Water Temp.and Engine ON indication. (iii) Battery charger suitable for 12 V/24 V DC with boost and tickle selector switch, 0-30 V DC' <volt &="" '+'ve,="" '-'ve,="" (battery="" (iv)="" 0-20a="" accessories="" all="" ammeter.="" and="" automatic="" battery="" command,="" dc="" diesel="" engine.<="" etc.,)="" for="" high="" llop="" meter,="" of="" operation="" relays="" standard="" start="" stop="" switch="" td="" temperature,="" water=""><td>1</td><td>Set</td><td></td><td></td><td></td></volt>	1	Set				
C	Supply and Erection of Terrace Pump Motor control centre with 2 No. of incoming MCCB with mechanical interlock suitable for Terrace pumpset with necessary MCCB's, contactors, etc., suitable for DOL starting mechanism, also potential free contacts shall be provided for conecting to the Building automation system. The panel shall also provided with indicating lamps, voltmeter, ammeters, Digital energy meters, selector switches, auto/manual switches, OLR, etc. The panel shall be of IP 55 protection 1100 V GRADE POWER / CONTROL CABLES	1	Set				
	Supplying, laying, testing & commissioning of FRLS, XLPE insulated, PVC outer sheateh, steel aRmoured, aluminium / copper conductor, 1100v grade power cables with glands etc. The cables shall be laid in tray / Hume pipe / in trenches/on walls/ floor etc. as required. For cables laid out door the rate shall include earth excavation providing brick and sand protection, refilling and compacting the earth. The rate shall excludes tray & Hume pipes. The quoted rate shall includes the end teRmination for 1.1KV cables with double compression type cable gland and heavy duty tinned copper cable sockets as per the relevant IS standards. Rate shall be inclusive of all sundry materials like adhesive tape, PVC sleeves, bolts and nuts, washers etc. including plugging unused holes. Above 10 mm² shall be aluminium conductor type.						
	a) 2R x 3 core x 50 sqmm Aluminium conductor cable for Electrical motor Driven pump.	50	Mtr				
	b) 3 core x 10 sqmm Aluminium conductor cable for Jockey & Terrace Pump.	50	Mtr				
	c) 10 core x1.5 sqmm for Diesel Engine pump.	25	Mtr				
	d) 2 core x 1.5 sqmm for pressure switch.						

Name of	the Vendor/Company					
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
a	Supplying and fixing of perforated G.I.sheet cable tray with neccessory angle iron suspension supports, anchor fasteners etc. complete. Maximum height of suspension shall not exceed 500 mm.Size of the tray shall be suitable for	50	Rmt	Figures	Figures	vvorus
b	laying the above mentioned cables. G.I. Earthing strips of 50mm x 6mm thick, strip shall be run on floor / ceiling / walls, from the equipment to the nearest Earth pit with necessory accessories	70	Rmt			
8	as required. (Earth pit shall be executed by Specialized agencies). Supplying, installing, testing and commissioning of MS Pipes, ERW confiRming to IS 1239 Pt - I Heavy grade (Class-C) up to 150mm dia and pipes 200mm dia and above shall be M.S as per IS: 3589 with malleable specials such as Reducers, Tees, elbows, flanges. Including cutting, Welding, fixing in / on walls, ceiling by using suitable supports etc, complete. The exposed pipes shall be protected by one coat of red oxide primer or zinc chromate primer and two coats of synthetic enamel paint of fire red in color shade 536 as per IS 5. The fittings shall be butt weld type for 65NB and above					
a	200mm nominal dia	12	Rmt			
ь	150mm nominal dia	30	Rmt			
c	100mm nominal dia	36	Rmt			
d	80mm nominal dia	6	Rmt			
e	50mm nominal dia	12	Rmt			
f	25mm nominal dia	18	Rmt			
9	Supplying, installing, testing and commissioning of Cast Iron (CI) body Non- return valves as per IS:5312, PN-16 reflux swing check type with required flanges, nuts, bolts and gaskets etc. complete.					
a	100 mm nominal dia - Main Pump & 2way FBI	3	No.			
b	80 mm nominal dia - Jockey Pump	1	No.			
10	Supplying, installing testing and commissioning of Cast Iron (C.I) body flanged Y- type Strainer with SS screen (PN-10) complete with suitable flanges, nuts, bolts, gaskets etc. complete.					
a	150mm dia Suction	1	No.			
11	Supplying, Installing, testing and commissioning of cast iron body (C.I) flanged Sluice valve as per IS:14846, PN 16 Rating, for suction and delivery side of the pumps and Non rising spindle type with flanges, bolts, nuts,					
a	150 mm nominal dia - Suction	4	No.			
b	100mm nominal dia Jockey Pump Suction, Delivery, Test Line & FBI	8	No.			
c	80 mm nominal dia - Jockey Pump delivery	2	No.			
12	Supplying and fixing approved make of 25mm dia automatic air release valve spring loaded type complete with unions etc. complete.	1	No.			
13	Supplying, installing, testing and commissioning of forged brass finished Ball valves confiRming to IS 554 with fittings, lever of screwed end type.					
a	50 mm nominal dia	5	No.			
b	25 mm nominal dia (for pressure switch manifold & Air cushion Vessel)	13	No.			
14	Supply and installation testing and commissioning of differential Pressure switches of suitable range (0 to 12 bar) for pumpsets complete with necessay Ball valves, Fittings like unions / colors / reducers etc.	3	Set			
15	Supply and installation testing and commissioning of SS made glyserin filled Pressure gauges of suitable range (0-16 bar), 150 mm diameter dial for pumpsets completes with necessary Ball valves, siphon, Fittings like unions / colors / reducers etc.	4	Set			

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
16	Supply, fixing, testing and commissioning of air vessel tank shall be fabricated out of of 250 mm dia MS pipe to 1000 mm long complete with 25mm inlet, 25mm drain, 25mm dia connection for air release valve including legs, painting with red oxide primer and finished with fire red enamel paint. It shall be inclusive of all relevant pipes, valves, specials upto pump header and other accessories etc.	1	Set			
17	Supplying, installing, testing and commissioning of SS Bellow type flexible coupling on suction and delivery side of each Fire pump complete with all					
a	150mm nominal dia	2	No.			
b	100mm nominal dia	3	No			
c	80mm nominal dia	1	No			
18	Supplying and fixing Pipe Inserts up to 1000mm for UG Sump & OHT using 'C' class G.I.Pipe, providing 4 to 5mm thick M.S plate at center projecting 25mm alround pipe insert, applying 3 coats of anti- corrosive paint before fixing in position, fixing the insert in perfect position etc. compete.					
a	150mm nominal dia - For Suction	1	No.			
b	100mm nominal dia - For Test Line in UG Sump & For Terrace Tank Suction	2	No.			
19	Supplying and fixing GI FLANGE - Flanges 150# including gasket suitable size MS bolts, nuts, washers etc. complete.					
a	150mm nominal dia - For Suction	1	No.			
b	100mm nominal dia - For Test Line in UG Sump, For Terrace Tank Suction & Tanker water inlet	3	No.			
20	Supplying, installing and commissioning of fire brigade inlet connection of 2 way with each of 63 mm dia. built - in Gun metal instantaneous coupling type arranged on 100 mm dia. Quoted rate shall be included M.S. cabinet of suitable size with mounting supports etc. complete.	1	No.			
21	supply and fixing of pre-fabricated steel structural materials using MS angle, channel, plate and similar sections for supporting suction and delivery pipe and manifold of fire pumps. The quoted rate shall includes necessary bolt, nut etc. and one coat of primer and synthetic enamal painting of approved shade.	1250	Kg			
В	EXTERNAL HYDRANT					
1	Supplying, installing, testing and commissioning of MS Pipes confiRming to IS 1239 Pt - I Heavy grade (Class-C), ERW, above ground pipe with malleable specials such as Reducers, Tees, elbows, flanges. Including cutting, Welding, fixing in / on walls, ceiling by using suitable supports etc, . The quoted rate shall also include for chasing / chipping walls, making bore holes in walls where ever required and making them good with filler material. The exposed pipes shall be protected by one coat of red oxide primer or zinc chromate primer and two coats of synthetic enamel paint of fire red in color shade 536 as per IS 5. The fittings shall be butt weld type for 65NB and above & socket weld type for 50NB and below.					
a	100mm nominal dia	30	Rmt			
b	80mm nominal dia	6	Rmt			
2	Supply, Installing, testing and commissioning of Heavy class MS pipe, Heavy grade (Class-C) ERW (as perIS-1239) laid in under ground (1 Mtrs below ground level. Rate quoted shall include for necessary specials like long radius bends, tees, including cutting, welding/flanged joints with necessary washers, nuts, bolts, etc. The quoted rate shall inclusive of Wrapping & Coating for Under ground Pipe. This corrosion protection tape shall comprise coal tar component supported on fabric of organic (or) inorganic fibre and minimum 4mm thick and shall confoRm to requirement of IS:10221 code of practice for coating and wrapping of under ground pipes line.					
a	100mm nominal dia	18	Rmt			
b	80mm nominal dia	6	Rmt			
3	Supplying, installing, testing and commissioning of Cast Iron (CI) body Non- return valves as per IS:5312, PN-16 dual plate check valve with required flanges, nuts, bolts and gaskets etc. complete.					

				Rate in	Amount in	Amount in
Sl.No.	Description	Quantity	Unit	Figures	Figures	Words
a	100mm nominal dia (Two Way FBI)	1	No.			
4	Supplying, Installing, testing and commissioning of Cast Iron (C.I) body Wafer type butterfly valves as per BS 5155/ IS 13095, PN-16 rating, slim seal standared lever operated type with required flanges, nuts, bolts etc. complete.					
a	100mm nominal dia (Two Way FBI + External)	2	No.			
5	Single headed hydrant valve as per IS 5290, Type A made of gunmetal with 63 mm dia instantaneous outlet of 80 mm dia fanged inelt ,Blank caps , chain and cast iron hand wheels etc complete.	1	No.			
6	15 M long, 63mm dia RRL hose conforming to IS 636 Type A with gun metal male & female instantaneous couplings fitted on ends and Hoses shall be stored inside fire duct on wall with fiRmly fastened steel rod.		No.			
7	63mm dia Gun metal short branch pipe with 20mm nozzle conforming to IS 903.	1	No.			
8	M.S. Hose Box stand/ wall mounted type fabricated out of M.S. sheet of 16 swg. with glass fronted (4mm thick glass with rubber beeding) door and size of the cabinet shall be 600mm x 750 mm x 250 mm Quoted rate shall be includes suitable stand for mounting, all fasteners etc, and cabinet shall be powder coated of approved colour both inside and outside.		No.			
9	Supplying, installing and commissioning of fire brigade inlet connection of 2 way with each of 63 mm dia. built - in Gun metal instantaneous coupling type arranged on 100 mm dia. Quoted rate shall be included M.S. cabinet of suitable size with mounting supports etc. complete.	1	No.			
10	supply and fixing of pre-fabricated steel structural materials using MS angle, channel, plate and similar sections for supporting above ground hydrant pipes (horizontal & vertical) riser. The quoted rate shall includes necessary bolt, nut etc. and one coat of primer and synthetic enamal painting of approved shade.	150	Kg			
C	INTERNAL HYDRANT SYSTEM					
1	Supplying, installing, testing and commissioning of MS Pipes confiRming to IS 1239 Pt - I Heavy grade (Class-C), ERW, above ground pipe with malleable specials such as Reducers, Tees, elbows, flanges. Including cutting, Welding, fixing in / on walls, ceiling by using suitable supports etc, . The quoted rate shall also include for chasing / chipping walls, making bore holes in walls where ever required and making them good with filler material. The exposed pipes shall be protected by one coat of red oxide primer or zinc chromate primer and two coats of synthetic enamel paint of fire red in color shade 536 as per IS 5. The fittings shall be butt weld type for 65NB and above & socket weld type for 50NB and below.					
a	100mm nominal dia - Terrace Line & Wet Riser	66	Rmt			
b	80mm nominal dia	30	Rmt			
c	25mm nominal dia	18	Rmt			
2	Supplying, installing, testing and commissioning of Cast Iron (CI) body Non- return valves as per IS:5312, PN-16 dual plate check valve with required flanges, nuts, bolts and gaskets etc. complete.					
a	100mm nominal dia (Terrace Tank)	1	No.			
3	Supplying, installing testing and commissioning of Cast Iron (C.I) body flanged Y- type Strainer with SS screen (PN-10) complete with suitable flanges, nuts, bolts, gaskets etc. complete.					
a	100mm dia. (Terrace Tank)	1	No.			
4	Supplying, Installing, testing and commissioning of Cast Iron (C.I) body Wafer type butterfly valves as per BS 5155/ IS 13095, PN-16 rating, slim seal standared lever operated type with required flanges, nuts, bolts etc. complete.					
a	100 mm nominal dia - Terrace Tank	3	No.s.			
5	Single headed hydrant valve as per IS 5290, Type A made of gunmetal with 63 mm dia instantaneous outlet of 80 mm dia fanged inelt ,Blank caps , chain and cast iron hand wheels etc complete.		No.			
6	15 M long, 63mm dia RRL hose conforming to IS 636 Type A with gun metal male & female instantaneous couplings fitted on ends and Hoses shall be stored inside fire duct on wall with fiRmly fastened steel rod.	12	No.			
7	63mm dia Gun metal short branch pipe with 20mm nozzle conforming to IS 903.	6	No.			

	the Vendor/Company			D. C.		14
l.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
8	First aid Hose reel drum of 180° swinging type with 19mm dia Rubber braided hose of 30M. length with Ball Valve and 6mm diameter Shut off nozzle, complete. The hose reel shall conforming to IS 884	6	No.			
9	Fire duct Shutter double door fabricated out of M.S. sheet and frame, door shall be 1200mm x 1200 mm min. & fixed with 4 mm thick Glass, suitable Rubber beedibg and Locking arrangement. Quoted rate shall be includes all fasteners etc, and complete shutter shall be powder coated of approved colour	6	No.			
10	Fire duct Shutter double door fabricated out of M.S. sheet and frame, door shall be 800mm x 1200 mm min. & fixed with 4 mm thick Glass, suitable Rubber beedibg and Locking arrangement. Quoted rate shall be includes all fasteners etc, and complete shutter shall be powder coated of approved colour	1	No.			
11	both inside and out side. (In Second Floor) Supplying and fixing approved make of 25mm dia automatic air release valve spring loaded type complete with unions etc. complete.	1	No.			
12	Supplying, installing, testing and commissioning of forged brass finished Ball valves confiRming to IS 554 with fittings, lever of screwed end type.					
a	25mm nominal dia	1	No.			
13 D	supply and fixing of pre-fabricated steel structural materials using MS angle, channel, plate and similar sections for supporting above ground hydrant and sprinkler pipes (horizontal & vertical) riser. The quoted rate shall includes necessary bolt, nut etc. and one coat of primer and synthetic enamal painting	750	Kg			
1	Supplying, installing, testing and commissioning of MS Pipes confiRming to IS 1239 Pt - I Heavy grade (Class-C), ERW, above ground pipe with malleable specials such as Reducers, Tees, elbows, flanges. Including cutting, Welding, fixing in / on walls, ceiling by using suitable supports etc, . The quoted rate shall also include for chasing / chipping walls, making bore holes in walls where ever required and making them good with filler material. The exposed pipes shall be protected by one coat of red oxide primer or zinc chromate primer and two coats of synthetic enamel paint of fire red in color shade 536 as per IS 5. The fittings shall be butt weld type for 65NB and above & socket weld type for 50NB and below.					
a	100mm nominal dia	30	Rmt			
b	80mm nominal dia	54	Rmt			
c	65mm nominal dia	6	Rmt			
d	50mm nominal dia	24	Rmt			
e	40mm nominal dia	6	Rmt			
f	32mm nominal dia	18	Rmt			
g	25mm nominal dia	72	Rmt			
2	Supplying, Installing, testing and commissioning of cast irom body (C.I) wafer type butterfly valves as per BS 5155/ IS 13095, PN-16, slim seal standared lever operated type with required flanges, nuts, bolts etc. complete.					
a	100 mm nominal dia Riser	1	No.			
b	80 mm nominal dia ZCV	2	No.			
3	Supplying, installing, testing and commissioning of conventional Sprinkler quartzoid bulb type with 15mm screwed end connection of 68 deg. C. temperature rating, K 80 and orifice shall not be less than 12.7mm.Sprinklers shall be UL Listed / FM approved with Chrome finished.					
a	Upright sprinkler head	5	No.			
b	Pendent sprinkler head	35	No.			
c	Sidewall sprinkler head	5	No.			
4	Supplying, installing, testing and commissioning of hydralically operated Sprinkler alaRm control valve complete with water motor gong bell, basic trims as required, pressure gauges, pressure switch, drain valves, ball valves etc. complete. AlaRm valve shall be UL Listed / FM approved.					

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
a	100mm dia.	1	No.s	Tizures	Tiguits	YY OI US
5	Supplying, installing, testing and commissioning of flow switch (water flow detector), Flow switch shall have a paddle made of flexible material of the widthto fit within the pipe bore. The teRminal box shall be mounted over the paddle/ pipe through a connecting socket. The switch shall be potential free in either NO or NC position as required. The switch shall be able to trip and make/ break contact on the operation of a sprinkler head. The teRminal box					
	shall have connections for wiring to the Fire alaRm panel. The seat shall be of stainless steel. The flow switch shall have IP: 55 protection.					
a	80 mm nominal dia	2	No.			
6	Supplying and fixing approved make of 25mm dia automatic air release valve spring loaded type complete with unions etc. complete.	1	No.			
7	Supplying, installing, testing and commissioning of forged brass finished Ball					
	valves confiRming to IS 554 with fittings, lever of screwed end type. 50mm dia.(Drain connection)					
a		2	No.			
b	25 mm dia.	1	No.			
8	Stainless steel corrugated flexible pipe(hose) for dropping sprinklers below false ceiling, pipe shall be 16 bar pressure rating and 1500 mm long 25 mm dia with union / reducer collar, clamps etc. as required.	35	No.s.			
9	Supply & fixing of approved type rosette plates (Surface mounted type, in two					
a	piece) for Sprinklers below false ceiling area. The Rosette shall be fabricated by M.S. plate of 2mm thick and the finish shall be powder coated and color shall be as approved by architects / clients.	35	No.s			
10	Supply and installation testing and commissioning of SS made glyserin filled Pressure gauges of suitable range (0-16 bar), 100 mm diameter dial for	2	Set			
11	pumpsets completes with necessary Ball valves, siphon, Fittings like unions / supply and fixing of pre-fabricated steel structural materials using MS angle, channel, plate and similar sections for supporting above ground hydrant and	500	Kg			
	sprinkler pipes (horizontal & vertical) riser. The quoted rate shall includes necessary bolt, nut etc. and one coat of promer and synthetic enamal painting		5			
1	FIRE EXTINGUISHERS Supplying, installing and commissioning of Portable Fire extinguishers of following type & capacity.					
a	Carbon-di- oxide type fire extinguisher of 4.5 kgs. Capacity, CO2 gas as per IS 15222 with controll discharge mechanism fitted with Hose & Horn applicable on Class B fire rating 21B confiRming to IS: 15683.	15	No			
b	ABC powder type fire extinguisher of 6 Kgs. Capacity, with initial filling (Mono Ammonium Phospate Powder 90) in brand new cylinder with powder coated finish, Stored Pressur type, Pressure Gauge, Controllable discharge mechanism with Hose & Nozzle, confiRming to IS:15683. (ABC Dry	15	No			
c	Supply & Installation of Water CO2 gas type of 9.0Liters Capacity, cylindrical shape fire extinguisher with fixing hangers, hose, brackets, screws to required size etc.,complete as per IS:15683:2006 - wall mounted type.	1	No			
d	Mechanical Foam type fire extinguisher 9Lts. Capacity, with initial filling in brand new cylinder with powder coated finish, fitted with Gun metal union, high pressure CO2 gas cartridge, hose and ABS type branch pipe and wall mounting bracket etc. complete, confiRming to IS: 15683:2008. The cylinder	2	No.			
e	Mechanical Foam 50 ltr capacity Fire Extinguisher Powder Coated MS Body, Upright Type With Brass Forged Cap, 3 Mtr. Hose with ABS Foam making Nozzle, 300 gms CO2 Cartridges, 3 Ltrs AFFF 6% Liquid, Mounted on Trolley wheels complete with all accessories as Per IS:13386 and the cylinder	1	No			
f	Automatic Modular type Clean Agent powder type fire extinguisher - 5 kgs. capacity For UPS Room.	2	No			
g	Fire buckets round bottom type enamel painted, white inside & Red out side and Letter "FIRE" in black out side and handle with mounting bracket.	8	No.s.			
h	Fire bucket stand fabricated by MS angles to install 4 No.s. of buckets.	2	No.s.			
F	SIGNAGES					
1	Providing and installing in position the following tupe of sign boards made out of 3mm thick "Opaque" PVC foam board with computer cut. PVC non-reflective self adhesive vinyle painted foam board, complete with mirror					
a	Signages with printed "IN CASE OF FIRE, USE STAIRS UNLESS INSTRUCTED OTHERWISE" of 1.5cm height letters in red with white back ground. The size of the board shall be 25cm * 30cm and shall be fixed at the height of 2mts, from finished floor near Manual Call Points.	10	No.s.			
2	Floor indentification signage (i.e, GROUND FLOOR ETC) at each stair enclosure on every floor, indicating the floor number in words, lettering size shall be 7.5cm with contrasting colour from back ground. Size shall be 15cm	10	No.s.			

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
3	Providing and fixing in position the signage of " Fire Extinguisher " to be pasted immediately above the every extinguisher. Size 4" x 4"	10	No.s.	Figures	Figures	words
4	Providing and fixing in position the signage of " Fire Hydrant & Hose Reel " to be pasted on door of the every fire shaft at all floors Size 6" x 8"	10	No.s.			
5	Providing and fixing in position the sign board of "ASSEMBLY POINT" complete with 1 mm thick rigid plastic board size of 400 mm x 300 mm to be fixed on ground by using a steel rod / pipe at designated places as per	1	No.s.			
6	Providing and fixing in position the sign boad of "EXIT" with arrow to be placed at walking pathways by hanging on ceiling to direct occupants to outside the building in an emergency. The exit sign board will be auto glow photoluminiscent) type which will glow at dark.	10	No.s.			

No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
	Providing and fixing in position the signages "FIRE ORDER" it should			rigures	Figures	worus
7	contain the following matter on 3mm thick "Opaque" PVC foam board of					
	computerised cut, PVC non-reflective self adhesive vinyle painted foam					
a	Type -I comprising the following	1	No.s			
	A) ALERT THE SECURITY AT SECURITY ROOM BY ACTUATING					
	MANUAL CALL POINT LOCATED AT STRATEGIC LOCATIONS. B) EVACUATE THE OCCUPANTS BY USING FIRE EXITS AND					
	EMERGENCY EXITS ONLY AND ASSEMBLE AT VARIOUS					
	C) IF POSSIBLE TRY TO EXTINGUISH THE FIRE BY USING NEAREST					
	/ SUITABLE PORTABLE EXTINGUISHER OR WATER FROM NEAREST					
	WET RISER. D) BE CALM AND DO NOT GIVE ANY ROOM FROM PANIC, WALK,					
	DO NOT RUN.					
	E) IF YOU ENCOUNTER SERIOUS DIFFICULTY IN EVACUTION, FLAT					
	AND TRY TO ATTRACT ATTENTION OF RESCUE TEAM.					
b	Type - II comprising the following	1	No.s			
	ACTION BY SECURITY / RECEPTION UPON RECEIPT OF					
	INFORMATION THROUGH FIRE ALARM OR FIRE DETECTORS OR BY					
	USING PUBLIC ADDRESS SYSTEM.					
	A) ALERT THE OCCUPANTS BY USING PUBLIC ADDRESS SYSTEM. B) INFORM FIRE CONTROL THROUGH ANY ONE OF THE					
	FOLLOWING PHONE NUMBERS: 101, xxxxxxxxxxxxxxxxxxx					
	C) REFER EVACUTION PLAN FROM EVACUATING STANDARD					
	D) GUIDE THE FIRE FORCE, ON THEIR ARRIVAL TO THE SEAT OF					
	E) IN CASE OF THE CASUALITIES, CALL AMBULANCE BY DIALLING					
G	NUMBER CIVIL WORKS					
	Exacavation of trenches up to 1.5 mts. in depth, for laying pipes upto 150mm					
	dia. Including foRming bottom surface to required level, refilling the trenches					
1	with selected excavated earth around th pipe in layers of 150mm thick, watering, consolidating. Quoted price inclusive of disposing off / Carting					
	away the surplus earth out side the site to a dump yard acceptable local bodies					
	or as directed by the site engineer with a lead of 300 mts. etc. complete.					
a	Excavation in all kinds of soil	24	Cum.			
ь	Cutting of Rock with chiselling	18	Cum.			
	Supply and installation of RCC hume pipes of NP 2 Class with collars for					
2	road / below floor crossing of Fire water pipes. The rate shall includes					
2	excavation, PCC (1:4:8 100 mm thick) bed and ends shall be closed with					
	Brick masonry work as directed by site engineer.					
a	300mm dia	12	Rm			
	Supply and construction of PCC (1:2:4) pedastals / supports for above ground					
3	fire pipes at terrace floor level. Quoted rate shall inclusive of chipping / chasing, shuttering, plastering (if required) etc. complete. The size of the	5	No.s			
	pedestals shall be minimum 300 mm x 300mmx 300 mm thick.					
	Providing cutout in all types of concrete, restoring the same after laying pipe,					
4	providing waterproofing compounds for leak proof sealing, Fire resistant sealant for a minimum of 2 hours fire rating etc., complete and as directed by					
a	150mm nominal dia	2	No			
b	100mm nominal dia	15	No			
c	80mm nominal dia	5	No			

Name of the Vendor/Company									
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words			
IV	Electrical BOQ			Figures	Figures	words			
01.00.00	Meter Board								
	Note: Scope includes preparation, submission of Application FoRms and								
	other associated works with necessary documents and General Arrangement Diagrams to TANGEDCO for obtaining approval for								
	drawing and availing service connections required as per single line								
01.01.00	CT Meter Board for Branch Office	1	Set						
	Supplying, erecting, connecting & commissioning a floor mounting Angle Iron all metal Meter Board with the following as required:- 3Sets of 315Amps								
	TP cutouts and 1No 315Amps TP Neutral link fixed on a MS Sheet mounted								
	on angle iron frames. Space for fixing 1No CT operated Meter on sheet steel /								
	angle iron frame. 1No 250Amps Triple Pole and neutral front operated Fuse								
	Switch Unit with suitable rated HRC Fuses of AC 23 utilisation category.								
	1Set of interconnection between Meter and cutout shall be made with suitable								
	size of PVC Insulated Copper Conducter wires. This shall also be made between Fuse Switch Units and Meter. Supplying and fixing 3No.s								
	200/5Amps CT as required by TANGEDCO on copper bus bars. Please note								
	that the design of this Meter Board must be approved by Local TANGEDCO								
	Authorities. The Meter Board shall be fabricated after obtaining approval								
	from local TANGEDCO Officials.								
01.02.00	Meter Board for Residential Flats and Common Area	1	Set						
	Supplying, erecting, connecting & commissioning a 1100r mounting Angle								
	Iron all metal Meter Board with the following as required: - 3No.s 500Amps								
	TP cutouts and 1No 500Amps neutral link fixed on a MS Sheet mounted on angle iron frames. 1 Set of 500Amps TPN Aluminium Busbars								
	Phase: 100x8mm. Neutral: 50x8mm. Earth: 2Runs of 25x6mm. 3No.s								
	63Amps TP Cutouts and 1No 63Amps Neutral link in a sealable sheet steel								
	chamber - 6Sets 3No.s 200Amps TP Cutouts and 1No 200Amps Neutral link								
	in a sealable sheet steel chamber - 1Set Space for fixing 7No.s 3Phase								
	Energy Meter of maximum 40-60Amps rating on sheet steel / angle iron frame 6Sets of 63Amps Triple Pole and neutral front operated Fuse Switch								
	Unit of AC23 utilisation category 1Set of 200Amps Triple Pole and neutral								
	front operated Fuse Switch Unit of AC23 utilisation category								
	6Sets of interconnection between Meter and cutout shall be made with								
	16Sqmm PVC insualted copper conductor wires. This shall also be made								
	between Fuse Switch Units and Meter. 1Sets of interconnection between Meter and cutout shall be made with								
	25Sqmm PVC insualted copper conductor wires. This shall also be made								
	between Fuse Switch Units and Meter.								
	Please note that the design of this Meter Board must be approved by Local EB								
02.00.00	Panel Boards								
	Note: All bus bar sizes should be per tender only. All the panels will have								
	to be design for 0.7Amps/Sqmm for Aluminum and 1.2Amps/Sqmm for Copper bus bar. Gland plates are required. Location of gland plate will								
	have to be deciding by you according to suit the teRminal of switchgears								
2.01.00	DG Cum Auto Changeover Panel	1	Set						
	Supplying, erecting, connecting & commissioning Floor Mounted Cubicle type 14SWG thick CRCA sheet compartmentalised modular type with								
	powder coated Panel Board. The Board shall be incorporated with the								
	following as required: Cable Entry: Top Incomer: 250Amps TPN Drawout								
	type MCCB with 36kA(Ics) Withstanding Capacity with Adjustable Overload								
	and Short Circuit Releases 1No Outgoing: 1No 250Amps TPN MCCB of								
	36kA(Ics) withstanding capacity with Adjustable Overload and Short Circuit								
	Releases with suitable ratio CT operated Energy Meter and 250Amps Four								
	Pole Auto Tranfer Switch with Controller of Socomec make 1No 1No 200Amps TPN MCCB of 36kA(Ics) withstanding capacity with Adjustable								
	Overload and Short Circuit Releases with suitable ratio CT operated Energy								
	Meter and 200Amps Four Pole Auto Transer Switch with Controller of								
	Socomec make (or) equivalent 1No								
	1	I			1				

Name of	the Vendor/Company					
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
	Note: All MCCBs shall have Adjustable Overload and Short Circuit setttings. The withstanding capacity shall be Ics only. Busbar: Aluminium, Rating: 250Amps, The Phase Bus bar shall be 50x8mm. and the Neutral bar shall be 25x8mm. The Earth Bus bar shall be 2Runs of 25x6mm. There shall be One set of Metering Compartment incorporated with the following:- i) CTs of ratio 250/5Amps of Class 1.0 for metering and burden 10VA. ii) 1No Class 1.0, 96Sqmm. Digital Ammeter (0-250Amps) with Inbuilt Selector Switch. iii) 1No Class 1.0, 96Sqmm. Digital voltmeter (0-500Volts) with Inbuilt Selector Switch. iv) 1No CT Operated Energy Meter. iv) OBO BETTERMAN Surge Arrestor. v) RYB Indication lamp of LED			Figures	Figures	Words
02.02.00	Main Panel Board for Branch Office	1	Set			
	supplying, erecting, connecting & commissioning Floor Mounted Cubicity 14SWG thick CRCA sheet compartmentalised modular type with powder coated Main Panel Board. The Board shall be incorporated with the following: Cable Entry: Top Incomer: 250Amps TPN MCCB 36kA(Ics) withstanding capacity with Adjustable over Load and Short Circuit Releases INo Ougoing: 63Amps TPN MCCB 18kA(Ics) withstanding capacity with Adjustable over Load and Short Circuit Releases 12No.s 32Amps TPN MCCB 18kA(Ics) withstanding capacity with Adjustable over Load and Short Circuit Releases 12No.s 32Amps TPN MCCB 18kA(Ics) withstanding capacity with Adjustable over Load and Short Circuit settings. The withstanding capacity shall be Ics only. Busbar: Aluminium, Rating: 250Amps, The Phase Bus bar shall be 50x8mm. and the Neutral bar shall be 25x8mm. The Earth Bus bar shall be 2Runs of 25x6mm. There shall be One set of Metering Compartment incorporated with the following:- i) CTs of ratio 250/5Amps of Class 1.0 for metering and burden 10VA. ii) 1No Class 1.0, 96Sqmm. Digital Ammeter (0-250Amps) with Inbuilt Selector Switch. iii) 1No Class 1.0, 96Sqmm. Digital voltmeter (0-500Volts) with Inbuilt Selector Switch. iv) 1No CT Operated Energy Meter. iv) OBO BETTERmAN Surge Arrestor. v) Digital Multi-Function Meter, vi) RYB Indication lamp of LED cluster Type with					
02.03.00	APFCR Panel Board -30.0KVAR for Branch Office	1	Set			
	An 8-Step APFC Relay of with Selector Switching ON / OFF Push buttons for Auto / Manual switching of Power factor banks. The scheme should be such that the power factor readings on the power factor correction relay should be in circuit even in the manual mode. The Panel shall also be made suitable to accommodate the following 440Volts Capacitor Banks with all interconnections including supplying and fixing of Capacitor Banks for 30KVAR and all other accessories like MCCB, MCB, Capacitive Contactors, Indication Lamps, Push Buttons to complete the erection works 10KVAR - INo 5KVAR - 2No.s 3KVAR - 2No.s 2KVAR - INO 1KVAR - 2No.s 1No Class 1.0 96 Sqmm Digital Power Factor Meter and provide separate MCB Control for each capacitors					
02.04.00	APFCR Panel Board -15.0KVAR for Common Area	1	Set			
03.00.00	An 8-Step APFC Relay of with Selector Switching ON / OFF Push buttons for Auto / Manual switching of Power factor banks. The scheme should be such that the power factor readings on the power factor correction relay should be in circuit even in the manual mode. The Panel shall also be made suitable to accommodate the following 440Volts Capacitor Banks with all interconnections including supplying and fixing of Capacitor Banks for 15KVAR and all other accessories like MCCB, MCB, Contactors, Indication Lamps, Push Buttons to complete the erection works 5KVAR - INo 3KVAR - 2No.s 2KVAR - 1No 1KVAR - 2No.s 1No Class 1.0 96 Sqmm Digital MCB DBs Supplying, fixing, connecting & commisioning the following MCB Distribution Boards fixed flush / Concealed with the wall or open on wall on an angle iron frame. cost of angle iron frame to be included. All MCB DBs shall have Double door and incoming adopter box (Powder coated) to receive					
	wires in pipes / cables etc. The adopter box shall have a minimum height of 150mm. All wiring teRminations shall be done through copper lugs cost to be					
03.01.00	included. All Outgoings to be identified on every MCB, and also ferrules to Vertical Distribution Board					
	Supply and fixing of following way Vertical Distribution Boards type, double door, Triple pole and neutral, prewired, sheet steel, MCB Distribution Board, 415Volts on surface / recessed in wall, complete with loose wire box, teRminal blocks, duly prewired with suitable size FRLS PVC insulated copper conductor up to teRminal blocks, 200Amps tinned copper bus bar, neutral busbar, earth bar, din bar for mounting MCB, detachable gland plate, interconnections, phosphatized and power painted including earthing etc including necessary MCCB, MCB, RCBO, Blank Plates, Loose Wire Box and Surge Protection and all other accessories to complete the erection works					

Name of	the Vendor/Company					
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
03.01.01	Main Vertical DB for Common Areas 12Way TPN Vertical MCB DB - Fabricated Type Incomer: 200Amps 4P MCCB with 25kA(Ics) Withstanding Capacity with Adjustable Oveload & short circuit releases and Surge Protection Device 1No Outgoing: 125Amps TP+N MCB 2No.s 63Amps TP+N MCB 7No.s 32Amps TP+N MCB 2No.s 16-32Amps	1	Sets	Figures	Tiguites	Words
03.01.02	Sub Vertical DB for Water Pumps 8Way TPN Vertical MCB DB Incomer: 63Amps 4P MCB 1No Outgoing: 32Amps TP+N MCB 5No.s 16-32Amps SP+N MCB 9No.s	1	Set			
03.01.03	Sub Vertical DB for Battery Car Charger 8Way TPN Vertical MCB DB Incomer: 125Amps 4P MCCB with 25kA(Ics) Withstanding Capacity with Adjustable Oveload & short circuit releases 1No Outgoing: 32Amps TP+N MCB 7No.s 16-32Amps SP+N MCB 3No.s	1	Sets			
03.02.00	Lighting Cum Power Distribution Boards Supply and fixing of following way Horizontal PPI Distribution Boards type, double door, Triple pole and neutral, prewired, sheet steel, MCB Distribution Board, 415Volts on surface / recessed in wall, complete with loose wire box, teRminal blocks, duly prewired with suitable size FRLS PVC insulated copper conductor up to teRminal blocks, tinned copper bus bar, neutral busbar, earth bar, din bar, detachable gland plate, interconnections, phosphatized and power painted including earthing etc including necessary MCB, RCBO, Blank Plates, Loose Wire Box and Surge Protection and all					
03.02.01	LDB Cum PDB for Residential Flats 12Way TPN Inbuilt Phase Selector Rotary Switch MCB DB Incomer: 63Amps 4P MCB and 4Pole Surge Protection Device 1No. Outgoing: 63Amps DP RCBO, 30mA 3No.s 6-32Amps SP MCB 30No.s	6	Sets			
03.02.02	LDB Cum PDB for Residential Flats 8Way TPN Inbuilt Phase Selector Rotary Switch MCB DB Incomer: 63Amps 4P MCB and 4Pole Surge Protection Device 1No. Outgoing: 63Amps DP RCBO, 30mA 3No.s 6-	2	Sets			
03.02.03	LDB Cum PDB for Ground Floor and External Common Areas 8Way TPN Horizontal PPI MCB DB (8+6+24) Incomer: 63Amps 4P MCB 1No. Outgoing: 63Amps DP RCBO, 30mA 3No.s 6- 32Amps SP MCB 24No.s	2	Sets			
03.02.04	LDB Cum PDB for Terrace Floor 4Way TPN Horizontal PPI MCB DB (8+6+12) Incomer: 63Amps 4P MCB 1No. Outgoing: 63Amps DP RCBO, 30mA 3No.s 6-32Amps SP MCB 12No.s	1	Set			
03.02.04	LDB Cum PDB for Lift Machine Room 12Way SPN PPI MCB DB (12) Incomer: 32Amps DP MCB 1No. Outgoing: 6-32Amps SP MCB 9No.s MCB Controls	1	Set			
04.01.00	Supplying, erecting, connecting & commissioning on Weather Proof Enclosure with 32Amps 4P MCB maximum of 5HP/3HP/2HP/1HP Three Phase Motor with interconnections and suitably mounted on the wall for Water Pumps, Battery Car Charger	10	Set			
04.02.00	Supplying, erecting, connecting & commissioning on Weather Proof Enclosure with 63Amps 4P MCB with interconnections and suitably mounted on the wall for Lift, Solar Control at Terrace and Apartment Control at	8	Sets			
04.03.00	Supplying, erecting, connecting & commissioning of 63Amps TPN MCCB, 36kA(Ics) with standing capacity with Adjustable over Load and Fixed Short Circuit Releases on an angle iron frame with necessary interconnections cable box, brackets, screw, bolts, nuts, etc. for Solar Panel Control (1No at Terrace	2	Sets			
05.00.00	Cables / TeRminations Supplying,laying, connecting & commissioning the following 1.1KV Grade XLPE Insulated Underground cables with necessary clamps, screws, etc. in the following methods:-					
05.01.00	Laid in Buried Under Ground, clamped along with wall / column / laid in (Excavation, back filling, Brick, sand and all necessary accessories to					
	complete the erection works cost to be included in the erection cost except the cost of the cable trays or ladders)					
	4C 150 Sqmm. Aluminium A2XWY / A2XFY	120	Mtrs			
	4C 120 Sqmm. Aluminium A2XWY / A2XFY	30	Mtrs			
	3 1/2C 150 Sqmm. Aluminium A2XFY	100	Mtrs			
	3 1/2C 120 Sqmm. Aluminium A2XFY	30	Mtrs			
	3 1/2C 95 Sqmm. Aluminium A2XFY	100	Mtrs			
	3 1/2C 50 Sqmm. Aluminium A2XFY	100	Mtrs			
	3 1/2C 35 Sqmm. Aluminium A2XFY	90	Mtrs			
	3 1/2C 25 Sqmm. Aluminium A2XFY	40	Mtrs			

Name of the Vendor/Company								
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words		
	3C 25 Sqmm. Aluminium A2XWY / A2XFY	40	Mtrs					
	4C 16 Sqmm. Aluminium A2XWY / A2XFY	180	Mtrs					
	4C 10 Sqmm. Copper 2XFY	150	Mtrs					
	4C 6 Sqmm. Copper 2XFY	200	Mtrs					
	4C 4 Sqmm. Copper 2XFY	180	Mtrs					
	4C 2.5 Sqmm. Copper 2XFY	180	Mtrs					
	3C 2.5 Sqmm. Copper 2XY	700	Mtrs					
05.02.00	TeRminations							
	Supplying, teRminating, connecting & commissioning the above Underground cables with compression type SIBG Cable glands. The cost of earthing gland with copper strips / wires shall also be included. The cables shall be teRminated with aluminium lugs after crimping.							
	4C 150 Sqmm. Aluminium A2XWY / A2XFY	4	No.s					
	4C 120 Sqmm. Aluminium A2XWY / A2XFY	8	No.s					
	3 1/2C 150 Sqmm. Aluminium A2XFY	8	No.s					
	3 1/2C 120 Sqmm. Aluminium A2XFY	4	No.s					
	3 1/2C 95 Sqmm. Aluminium A2XFY	8	No.s					
	3 1/2C 50 Sqmm. Aluminium A2XFY	8	No.s					
	3 1/2C 35 Sqmm. Aluminium A2XFY	2	No.s					
	3 1/2C 25 Sqmm. Aluminium A2XFY	2	No.s					
	3C 25 Sqmm. Aluminium A2XWY / A2XFY	2	No.s					
	4C 16 Sqmm. Aluminium A2XWY / A2XFY	12	No.s					
	4C 10 Sqmm. Copper 2XFY	10	No.s					
	4C 6 Sqmm. Copper 2XFY	10	No.s					
	4C 4 Sqmm. Copper 2XFY	8	No.s					
	4C 2.5 Sqmm. Copper 2XFY	4	No.s					
	3C 2.5 Sqmm. Copper 2XY	40	No.s					
06.00.00	Mains Wiring							
06.01.00	Supplying, laying, connecting & commissioning of 4Runs of 10Sqmm. PVC Insulated multistranded Flexible FRLS copper conductor wires (One each for Phase and Neutral) with 2Runs of 4Sqmm.PVC Insulated multistranded Flexible FRLS copper conductor wires for continuous earthing in Heavy Duty PVC conduits concealed in Roof slab / wall / Floor or open fashion with necessary clamps, screws etc. and all other accessories to complete the	180	Mtrs					
06.02.00	Supplying, laying, connecting & commissioning of 4Runs of 6Sqmm. PVC Insulated multistranded Flexible FRLS copper conductor wires (One each for Phase and Neutral) with 2Runs of 2.5Sqmm.PVC Insulated multistranded Flexible FRLS copper conductor wires for continuous earthing in Heavy Duty PVC conduits concealed in Roof slab / wall / Floor or open fashion with necessary clamps, screws etc. and all other accessories to complete the	60	Mtrs					

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
07.00.00	Power Wiring Supplying, laying, connecting & commissioning 2Runs of 4Sqmm. PVC Insulated stranded copper conductor wires (One each for Phase Neutral) with 1Run of 2.5Sqmm. PVC Insulated multi stranded copper conductor wires for continuous earthing in heavyduty PVC Conduits concealed in ceiling, wall / floor or laid on open fashions with necessary clamps, screws etc and all other accessories to complete the eretion works for 6/16Amps Socket Raw Power	1500	Mtrs	Figures	Figures	Y of us
07.02.00	Supplying, laying, connecting & commissioning 2Runs of 6Sqmm. PVC Insulated stranded copper conductor wires (One each for Phase Neutral) with 1Run of 2.5Sqmm. PVC Insulated multi stranded copper conductor wires for continuous earthing in heavyduty PVC Conduits concealed in ceiling, wall / floor or laid on open fashions with necessary clamps, screws etc and all other accessories to complete the eretion works for 2.0Tr Spilt AC Unit and	500	Mtrs			
07.03.00	Supplying, fixing, connecting & commisioning 1x6/16Amps Sockets with 1x16Amps Switch housed in Manufacturer's mounting box fixed flush with the wall (or) open fashions with necessary clamps, screws etc and all other accessories to complete the eretion works	46	No.s			
07.04.00	Supplying, fixing, connecting & commisioning 1x6/16Amps Sockets near Geysor Unit and 1x16Amps Switch control to be erected on Switch Board near Toilet Entrance door housed in Manufacturer's mounting box fixed flush with the wall (or) open fashions with necessary clamps, screws etc and all other accessories to complete the eretion works	12	No.s			
07.03.00	Supplying, fixing, connecting & commisioning 1x25Amps Sockets with 1x25Amps Switch housed in Manufacturer's mounting box fixed flush with the wall (or) open fashions with necessary clamps, screws etc and all other accessories to complete the eretion works for Inverter Input and Output	12	No.s			
07.04.00	Supplying, fixing, connecting & commisioning 1x25Amps Sockets near Dish Washer Unit - Below Kitchen Counter and 1x25Amps Switch control to be erected on Switch Board near above kitchen counter housed in Manufacturer's mounting box fixed flush with the wall (or) open fashions with necessary clamps, screws etc and all other accessories to complete the eretion works	6	No.s			
07.05.00	Supplying and fixing 25Amps SPN Socket with shutter near 1.0/1.5Tr AC Indoor Unit and 25Amps DP Switch with indication lamp near Switch Board in Manufacturer's mounting box fixed flush with the wall and all other accessories to complete the eretion works	12	No.s			
07.06.00	Supplying and fixing 32Amps SPN Socket with shutter near 2.0Tr AC Indoor Unit and 32Amps DP Switch with indication lamp near Switch Board in Manufacturer's mounting box fixed flush with the wall and all other accessories to complete the eretion works	6	No.s			
08.00.00	Wiring Supplying, wiring, connecting & commissioning the light points with 3Runs					
08.01.00	of 1.5Sqmm. PVC insulated multistranded Copper Conductor wires (One each for Phase, Neutral and earth) in Heavy Duty PVC Conduits concealed in Roof slab / wall / Floor or open fashion with necessary clamps, screws etc.and all other accessories to complete the eretion works, including supplying and fixing 6Amps Switch / Blank Plate in manufacturers mounting box fixed flush with the wall / Partitions. The maximum length will be 10.0Mtrs. from					
08.01.01	One Light Controlled by one Switch.	230	Pts			
	Supplying, wiring, connecting & commissioning the light points with 3Runs of 1.5Sqmm. PVC insulated multistranded Copper Conductor wires (One each for Phase, Neutral & Earth) in Heavy Duty PVC Conduits concealed in Roof slab / wall / Floor or open fashion with necessary clamps, screws etc.and all other accessories to complete the eretion works for additional points. The additional points will have to be wired from the first point mentioned under Item under Item No.08.01.01 The maximum length will be 5.0Mtrs. For each	40	Pts			
08.03.00	Same as the Item No.08.01.00 but for Two Way Light points including supplying and fixing of 2No.s 5Amps Two Way Switches.	74	Pts			
08.04.00	Same as the Item No.08.01.00 but for Ceiling Fan / Chandilier Light points including supplying and fixing concealed type metal fan hook box and electronic regulator.	40	Pts			
	Same as the Item No.08.01.00 but for Two Way Fan points including supplying and fixing of 2No.s 5Amps Two Way Switches and concealed type metal fan hook box and electronic regulator.	24	Pts			
08.06.00	Same as the Item No.08.01.00 but for 6Amps Independent switched socket combined including supplying and fixing 5Amps Switched Socket.	150	Pts			
08.07.00	Same as the Item No.08.01.00 but for 6Amps switched socket combined but in the switch board itself including supplying and fixing 6Amps Switched Socket.	50	Pts			
08.08.00	Same as the Item No.08.01.00 but for Exhaust Fan points. Supplying and fixing of 6Amps Socket near Exhaust Fan and Switch control to be erected on Switch Board near Room Entrance	20	Pts			
08.09.00	Same as the Item No.08.01.00 but for Calling Bell points	6	Pts			

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
08.10.00	Supplying, laying & Pulling for Circuit Mains Wiring with 3Runs of 2.5 Sqmm. PVC insulated multistranded copper conductor FRLS Wires(one each for Phase, Neutral and earth) in Heavy Duty PVC Conduits concealed in Roof slab / wall / Floor or open fashion with necessary clamps, screws etc.and all other accessories to complete the eretion works for Light, Fan, Exhaust Fan, 5Amps Sockets etc for Circuit Mains Wiring	1200	Mtrs	Tigutes	rigares	Words
08.11.00	Supplying, laying & Pulling for Additional running Mtrs for Light Point Wiring with 3Runs of 1.5 Sqmm. PVC insulated multistranded copper conductor FRLS Wires(one each for Phase, Neutral and earth) in Heavy Duty PVC Conduits concealed in Roof slab / wall / Floor or open fashion with necessary clamps, screws etc.and all other accessories to complete the eretion works for Light, Fan. Exhaust Fan, 5Amps Sockets etc	750	Mtrs			
09.00.00	Lift Shaft Wiring in MS Conduit Supplying, wiring, connecting & commissioning the light points with 3Runs of 2.5Sqmm. PVC insulated multistranded Copper Conductor wires (One each for Phase, Neutral and Earth) in MS PVC Conduits concealed in Roof slab / wall / Floor or open fashion with necessary clamps, screws etc.and all other accessories to complete the eretion works including supplying and fixing 6Amps Switch in manufacturers mounting box fixed flush with the					
09.01.01	One Light Controlled by one Switch	7	Pts			
09.02.00	Same as the Item No.13.06.00 but for 5Amps Independent switched socket combined including supplying and fixing 5Amps Switched socket.	7	No.s			
09.03.00	Supplying, fixing, connecting and commissioning 6Amps Switched Socket combined in Switchboard itself.	7	Pts			
09.04.00	Supplying and fixing of Bulk Head Fitting of Philips make cat #FXC 101 (or) equilant in the lift shaft with necessary accessories.	7	No.s			
09.05.00	Supplying and fixing of 6Amps SP MCB with MS Enclousre for Shaft Light control and for socket in shaft at machine room	1	No			
09.06.00	Supplying and fixing of 16Amps DP MCB with MS Enclousee for Car Light control and for fan in shaft at machine room	1	No			
10.00.00	Television, Telephone and Data Wiring - Sockets and Empty PVC					
10.01.00	Supplying and laying the following PVC Heavy duty Conduits concealed in Roof slab / wall / Floor or open fashion with necessary clamps, screws etc.and all other accessories to complete the eretion works with 1Run of 16SWG GI					
10.01.01	25mm Dia PVC Conduits	1500	Mtrs			
10.01.02	32mm Dia PVC Conduits	600	Mtrs			
10.01.03	50mm Dia PVC Conduits	100	Mtrs			
10.02.00	Supplying, laying of 25mm. dia PVC flexible hose laid in open fashion with necessary clamps, screws etc.and all other accessories to complete the eretion Supplying, laying of 32mm. dia PVC flexible hose laid in open fashion with	30	Mtrs			
10.03.00	necessary clamps, screws etc and all other accessories to complete the eretion	30	Mtrs			
10.04.00	Supplying, fixing, connecting & commissioning Telephone Sockets of RJ 11 Type housed in Manufacturer's mounting box fixed flush with the wall or open fashions with all other accessories to complete the eretion works	30	No.s			
10.05.00	Supplying, fixing, connecting & commissioning Data Sockets of RJ 45 Type housed in Manufacturer's mounting box fixed flush with the wall or open fashions with all other accessories to complete the eretion works	10	No.s			
10.06.00	Supplying, fixing, connecting & commissioning Television Sockets housed in Manufacturer's mounting box fixed flush with the wall or open fashions with all other accessories to complete the eretion works	20	No.s			
10.07.00	Supplying, fixing, connecting and commissioning 5Pair Krone Connector Type Telephone Tag Block in 16G Thick sheet steel enclosure at each flat fixed flush with the wall or open fashion with necessary all other accessories to complete the erection works as required	6	No.s			
10.08.00	Supplying, fixing, connecting and commissioning 10Pair Krone Connector Type Telephone Tag Block in 16G Thick sheet steel enclosure at each flat fixed flush with the wall or open fashion with necessary all other accessories to complete the erection works as required	5	No.s			
10.09.00	Supplying, fixing, connecting and commissioning 50Pair Krone Connector Type Telephone Tag Block in 16G Thick sheet steel enclosure at each flat fixed flush with the wall or open fashion with necessary all other accessories to complete the erection works as required	1	No			
10.10.00	Supplying, fixing, connecting and commissioning 6Way Splitter with necessary all other accessories to complete the erection works as required	6	No.s			
11.00.00	Junction Box Supplying, erecting 14Gauge thick Junction boxes with cover of 50mm. height to suit as per site conditions. The Junction boxes shall be powder content to an adversarial floor.	250	Sq.Ft			
12.00.00	coated type and fixed flush with the wall / floor Weather Proof Junction Box					

Name of the Vendor/Company								
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words		
12.01.00	Supplying, erecting, connecting & commissioning Weather Proof Clipsal Make Junction Box of Size 101x101x63mm. with 4Way Connector and necessary accessories.	30	No.s					
13.00.00	Earthing Quoted cost inclusive of green color paint for all Earthing Link / Flat and PVC Insulated wires will be Green Color Supplying, installing and connecting a 2.5Mtr. long 40mm. dia GI Pipe with							
13.01.00	holes drilled diametrically opposite to each other once every 150mm. in an earth pit of 380x380x3500mm. filled with salt and charcoal mixed with sand in alternate layers 150mm. each upto a height of 3000mm. from bottom. The pipe shall have provision for watering through a funnel. It shall also have provision for connecting 50x6mm. GI Flat on two sides. A masonary strucutre shall be constructed to adepth of 450mm. and a Heavy duty CI Cover shall be used to cover the pit. The cost of digging and back filling shall also be included. Sand, salt, charcoal and all other accessories to complete the erection works as required							
	Meter Board / Panel Boards 4No.s Lift 2No.s DG Set 2No.s Surge Protection 2No.s, Conventional Lightning Protection 4No.s EB RmU Works 5No.s Solar System 4No.s	22	No.s					
13.02.00	Supplying, installing and connecting a Copper plate of size 600x600x3mm. at a depth of 3000mm. in an earth pit of 700x700x3500mm. filled with salt and charcoal mixed with sand in alternate layers 150mm. each upto a height of 3000mm. from bottom. Two copper flats of 25x6mm. Shall be braced to this copper plate through out the over laping length with the copper plate and brought to the surface of the earthpit. This copper flat shall have provision flor connecting wires off lats as the case may be. A suitable size of 40 mm.dia GI Pipe shall be provided uptil the bottom of the earth pit. This GI Pipe shall have provision for watering through a funnel. A masonary structure shall be constructed to adepth of 450mm. and a heavy duty CI Cover shall be used to cover the pit. The cost of digging and back filling shall also be included. Sand, salt, charcoal and all other accessories to complete the							
	DG Set 2No.s Clean Earth 2No.s Solar Inverter Neutral 1No	5	No.s					
13.03.00	Supplying, laying and connecting 50x6mm. GI Tape wound in half lapped fashion with bituminious tape painted at a depth of 600mm. in ground to interconnect the earth electrodes. The tape shall not come into contact with any unnecessary metal parts (or) cables along with its route and all other accessories to complete the erection works as required	150	Mtrs					
13.03.00	Supplying, laying and connecting 50x6mm. GI Flat laid in open fashion with necessary clamps, screws, interlinks etc and all other accessories to complete the erection works as required	150	Mtrs					
13.04.00	Supplying, laying and connecting 25x6mm. GI Tape wound in half lapped fashion with bituminious tape painted at a depth of 600mm. in ground to interconnect the earth electrodes. The tape shall not come into contact with any unnecessary metal parts (or) cables along with its route and all other accessories to complete the erection works as required	50	Mtrs					
13.05.00	Supplying, laying and connecting 25x6mm. GI Flat laid in open fashion with necessary clamps, screws, interlinks etc and all other accessories to complete the erection works as required	100	Mtrs					
13.06.00	Supplying, laying and connecting 25x3mm. GI Flat laid in open fashion with necessary clamps, screws, interlinks etc and all other accessories to complete the erection works as required for On Grid Solar System	450	Mtrs					
13.07.00	Supplying, laying and connecting 25x3mm. Copper Flat laid in open fashion with necessary clamps, screws, interlinks etc. for earthing the DG Neutral etc and all other accessories to complete the erection works as required	100	Mtrs					
13.08.00	Supplying, laying and connecting 500mm. Long 50x6mm GI flat in open fashion with necessary clamps, screws, etc. as earth link and all other accessories to complete the erection works as required	20	No.s					
13.09.00	Supplying, laying and connecting 500mm. Long 25x6mm GI flat in open fashion with necessary clamps, screws, etc. as earth link and all other accessories to complete the erection works as required	10	No.s					
13.10.00	Supplying, laying and connecting 500mm. Long 25x3mm GI flat in open fashion with necessary clamps, screws, etc. as earth link and all other accessories to complete the erection works as required for On Grid Solar	6	No.s					
13.11.00	Supplying, laying and connecting 300mm. Long 25x3mm Copper flat with SMC / DMC Insulators in open fashion with necessary clamps, screws, etc. as earth link	6	No.s					
13.12.00	Supplying, laying, connecting and commissioning 8SWG bare enamelled copper wire enclosed in PVC Conduits with necessary clamps, screws etc. for Equipments Supplying, laying, connecting and commissioning 10SWG bare enamelled	200	Mtrs					
13.13.00	copper wire enclosed in PVC Conduits with necessary clamps, screws etc. for Equipments	100	Mtrs					
13.14.00	Supplying, laying and connecting 2Runs of 4 Sqmm. PVC Insulated copper conductor wires laid in heavy duty PVC Conduits with necessary clamps, screws, interlinks etc. with Copper Lugs and SS Bolts / Nuts for On Grid	200	Mtrs					
13.15.00	Supplying, laying and connecting 2Runs of Single Core 6 Sqmm. Flexible copper cable laid in heavy duty PVC Conduits with necessary clamps, screws, interlinks etc. with Copper Lugs and SS Bolts / Nuts for On Grid Solar Panel	150	Mtrs					

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
13.16.00	Supplying, laying and connecting 2Runs of 10 Sqmm. PVC Insulated copper conductor wires laid in heavy duty PVC Conduits with necessary clamps, screws, interlinks etc. with Copper Lugs and SS Bolts / Nuts for Inverter	150	Mtrs	Figures	Figures	Troi us
13.17.00	Supplying, laying and connecting Earth Links for On Grid Solar Panel System with necessary all other accessories to complete the erection works as required	1	Lot			
14.00.00	Supply and Fixing of Light Fixtures, Ceiling Fan and Exhaust Fans Supply, Installation, Testing and Commissioning of 1200mm sweep, 80 W, BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3No.s blades, 300cm long down rod, 2No.s canopies, shackle kit, safety rope, copper winding, Power Factor not less than 0.9, Service Value (CMM/W) minimum 6.85, Air delivery minimum 215 CMM, 350RPM (tolerance as per IS: 374-2019), THD less than 10%, remote or electronic regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 degree C (max.), insulation resistance more than 2 mega ohm, suitable for 230Volts, 50 Hz, single phase AC Supply, earthing etc. complete as required. Supply, fixing, connecting & commissioning of Philips Make Cat #HS 360 1x	42	No.s			
14.02.00	MHN TD 70 Lamps for Gate Lights shall be fixed on the Gate Pillar with necessary GI Pipes, Weather Proof Junction boxes, interconnections between the Junction box and the fitting shall bed one with 3Runs of 2.5 Sqmm. PVC Insulated copper conductor wires in 2mm. thick PVC conduits concealed in gate piller with necessary clamps, screws etc. The Junction box shall be made out of 2mm. thick MS Sheet painted with two coats of red oxide primer, 2Amps rewireable Fuse units, 1No 6Amps One way Switch loop in loop out arrangements concealed in the wall of Gate pillar.	4	No.s			
14.03.00	Supplying, fixing, connecting & commissioning of Weather Proof type 1x20Watts LED Street Lights mounted on 1.5Mtrs GI Pipe with suitable size GI Pipe, necessary Junction boxes. The interconnections between the Weather Proof Junction box and the fitting shall be done by 3Runs of 2.5Sqmm. PVC Insulated copper conductor wires in the GI Pipe itself. The Junction box shall be made out of 2mm. thick MS Sheet painted with two coats of red oxide primer. 2A rewireable Fuse units, one 16Amps One Way Switch loop in loop	12	No.s			
14.04.00	Supply, fixing, connecting and commissioning 15Watts LED Bulk Head Light fixtures to be fixed on the Compound Wall with necessary accessories	40	No.s			
14.05.00	Supply, Fixing, connecting and commissioning of 36Watts LED Tube Light fixtures with necessary all other accessories to complete the erection works as required	80	No.s			
14.06.00	Supply, Fixing, connecting and commissioning of 18Watts LED Wall Light Fixtures with necessary all other accessories to complete the erection works as required	90	No.s			
14.07.00	Supply, Fixing, connecting and commissioning of 18Watts LED Mirror Light fixtures with necessary all other accessories to complete the erection works as	20	No.s			
14.08.00	Supply, Fixing, connecting and commissioning of 6Watts LED Strip Light fixtures with necessary all other accessories to complete the erection works as required	100	Mtrs			
14.09.00	Supply, Fixing, connecting and commissioning of 120Watts Chandelier Light fixtures with necessary all other accessories to complete the erection works as	6	No.s			
14.10.00	Supply, Fixing, connecting and commissioning of 3Watts LED Skirting / Night lamp Light fixtures with necessary all other accessories to complete the erection works as required	40	No.s			
14.11.00	Supply, Fixing, connecting & commissioning of Calling Bell Ding Dong with necessary all other accessories to complete the erection works as required	6	No.s			
14.12.00	Supplying, fixing, connecting and commissioning on wooden frame 305mm. dia 900RPM Single phase (55Watts) fresh air fan with die cast aluminium body and CRCA steel blades and minimum air delivery of 1350Cum./Hr. The entire Fan and Frame shall be painted in White.	20	No.s			
15.00.00	Cable Tray Fabricating, supplying, erecting and connecting & commissioning GI Cable Trays with Supports of Various measurements as per site conditions with necessary Box Channel for cable supports and other allied fabrication works. Fixing to concrete surfaces shall be done with the help of expandable type anchor fastners capable of bearing a weight of 500Kgs. Fixing to brick walls shall be done by grouting. The distance between two supports shall be 2000mm. The materials and labour for grouting, cable supports and other allied fabrication work shall supplied by the Contractor. 50x6mm. GI Flat shall be bolted throughout with connection point once every 7Mtrs. on both sides	1000	Kgs			
15.02.00	Supplying, fabricating, erecting & connecting the following 2.0mm Thickness GI Ladder type Cable Trays with necessary supports, tees, elbows, bends, bolts and nuts and any other associated accessories to complete the job. Make: OBO BetteRmann					
15.02.01	150mm Width x 50mm Depth x 1.6mm Thickness	25	Mtrs			
15.02.02	300mm Width x 50mm Depth x 1.6mm Thickness	25	Mtrs			

Name of the Vendor/Company								
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words		
15.02.03	600mm Width x 50mm Depth x 2.0mm Thickness	25	Mtrs	Tizures	Tiguits	VV 01 us		
15.02.04	750mm Width x 75mm Depth x 2.0mm Thickness	110	Mtrs					
15.03.00	Supplying, fabricating, erecting, connecting & commissioning of the perforted type GI Cable trays. Fixing to concrete surfaces shall be done with the help of expandable type anchor fastners capable of bearing a weight of 500Kgs. Fixing to brick walls shall be done with grouting. The distance between two supports shall be 600mm. The materials and labour for grouting, cable supports and and any other associated accessories to complete the job.							
15.03.01	150mm Width x 50mm Depth x 1.6mm Thickness	25	Mtrs					
15.03.02	300mm Width x 50mm Depth x 1.6mm Thickness	25	Mtrs					
15.03.03	600mm Width x 50mm Depth x 2.0mm Thickness	100	Mtrs					
16.00.00	Safety Equipments							
16.01.00	Supplying, erecting and connecting a 10Kg CO2 Fire Extinguisher properly fixed on the wall with necessary clamps, screws, bolts and nuts etc. The extinguisher shall be suitable for all types of fires. (A, B & C) (1No for Ground, 1st, 2nd and Terrace Floor Level at Staircase landing area)	6	No.s					
16.02.00	Supplying, erecting and connecting a 5Kgs Fire Extinguishers properly fixed on the wall with necessary clamps, screws, bolts and nuts etc. The Extinguisher shall be suitable for all types of fires (A, B & C)	6	No.s					
16.03.00	Supplying, erecting and connecting 4No.s. 10Ltrs. capacitiy Fire Bucket painted with Red oxide outside and White inside with handle at the bottom in a floor mounted angle iron frame with necessary clamps, screws etc. The angle iron frame shall also be painted with Red paint.	6	No.s					
16.04.00	Supplying, erecting and connecting Treatment Chart in English and Tamil directly fixed on to the wall with necessary screws etc.	6	No.s					
16.05.00	Supplying 440Volts Gloves	6	No.s					
16.06.00	Supplying and laying 1800x1200x6mm. thick ISI Marked Rubber mats to be laid in Front of the Panel Boards.	6	No.s					
16.07.00	Supplying and fixing 440Volts Danger Board.	6	No.s					
16.08.00	First Aid Box	6	No.s					
17.00.00	ON Gird Solar System - 10kW Supply, Design, Engineering Documentation, Testing, Installation & Commissioning of Solar On Grid System Solar panel system with necessary all other accessories to complete the erection works as required. Scope includes preparation, submission of Application FoRms and other associated works with necessary documents and working drawings to CEIG / CEA / TANGEDCO / TNERC / MNRE & TEDA for obtaining approval for drawing and getting Safety Certificate, approval for Energisiation from relevant Before deiliver material successful vendor has to do the Site feasibility survey, whether we can able to provide 10Kwp or lesser capacity for Architect / Client approval							
17.01.00	DESITC of 320Wp solar PV panels as per technical specifications (If higher wattage capacity panels are used, the power output of 10 kWp to be maintained).	32	No.s					
17.02.00	DESITC of 10kVA Solar Inverter (or higher capacity) as per technical specifications mentioned in the Tender and safety mat for operating personnel etc with all suitable accessories to complete the erection works as required	1	Lot					
17.03.00	DESITC of Weather proof IP-65 array junction box with SPD, Fuse and as per technical specifications etc. (Minimum 02No.s) with all suitable accessories to complete the erection works as required	2	No.s					
17.04.00	DESITC of AC DB (1 In & 1Out) consisting of Surge Production Device (SPD), Solar Energy Meter - Multi Function Meter, Auto Cut OFF Relays while Diesel Generator power source and 63Amps 4Pole MCCB 25kA(Ics) withstanding capacity with Adjustable over Load and Short Circuit Releases with all suitable accessories to complete the erection works as required	1	Set					
17.05.00	DESITC of AC and DC cabling between panels and inverter with heat resistant insulated copper wires drawn in UPVC Conduit properly fixed properly on pedestals on the floor with all suitable accessories to complete the	1	Lot					
17.06.00	Design, fabrication, supply and installation of concrete pedestals of minimum M20 grade [(1:11/2:3) and the same shall be plastered with 12mm thick cement sand mortar of ratio 1:4 of 300mm wide x 450mm high to be fixed on terrace floor for supporting solar panel structures. And the pedestals shall be painted with exterior emulsion paint	1	Lot					
17.07.00	Design & Supply, Installation of GI structures for supporting the solar panels as per technical specifications	1	Lot					
17.08.00	Earthing Cables (2Runs - 1Run for DC & another 1Run for AC earthing) with all suitable accessories to complete the erection works as required	1	Lot					

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
7.09.00	Solar Panel to Panel earth with all suitable accessories to complete the erection works as required	1	Lot			
7.10.00	Structure Earthing (All panel structures) with all suitable accessories to complete the erection works as required	1	Lot			
7.11.00	Inverter Structure, DC DB, AC DB mounting structure with all suitable accessories to complete the erection works as required	1	Lot			
7.12.00	Data Monitoring System (Wifi device) Client to provide LAN (Ethernet facility) for cloud monitoring with all suitable accessories to complete the erection works as required	1	Lot			
7.13.00	Testing, Installation & Commissioning of Solar On Grid System Solar panel system with necessary all other accessories to complete the erection works as required	1	Lot			
7.14.00	Supply and installation of two meters. One for measuring solar power generation and the other is to measure import and export of energy. (As per TNERC - Order No: 3 of 2019). The cost of new / additional meters provided for the net feed-in scheme the installation and testing charges Client shall pay all statuary fees directly at the time of receiving necessary documents. For Procurement of Meters the distribution licensee (M/s TANGEDCO) shall procure, test and install the meters. However End to End Co-ordinations with M/s TANGEDCO for procurement of Energy Meters to be done by the contractor only. If M/s TANGEDCO or M/s TNERC hosts the lists of manufacturers of energy meters in their website, the contractor shall procure the energy meter from the market (in the same Technical Specification & rate as prescribed by M/s TANGEDCO). The Contractor is wholly responsible for liaisoning with M/s TANGEDCO during the calibration, testing & commissioning of energy meters procured by them as per the Technical Specifications of M/s TANGEDCO.	1	Lot			
8.00.00 8.01.00	Cable Route Markers Supply and erection the Cable route markers with 100x100x5mm. thick CI Plate with inscription there on, bolted / welded to 35x35x6mm. Angle iron 600mm. Long and fixing the same in ground as required. The cable route	2	No.s			
19.00.00	market shall be fixed at both the ends of cable at joints at 50Mtrs. Spacing Lightning Protection System - Conventional Type					
19.01.00	Supplying, erecting, connecting & commissioning 3 pronged solid copper bar lightning finials of 1.8Mtrs height. The three prongs shall be connected through a copper ball arrangement to the copper rod. The coverage shall be 15.0Mtrs radious (3No.s for Main Building including On Grid Solar Panel System and 1No for EB Rmu Works)	4	No.s			
19.02.00	Supplying, erecting, connecting & commissioning of test points in the down conductors with GI Flats. The test points shall be at a height of 1.5Mtrs from the ground level.	4	No.s			
19.03.00	Supplying, erecting, connecting & commissioning of SUxomm GI Flats as horizontal and vertical conductors with epoxy resin insulator used as spacer. The epoxy resin insulators shall be fixed to the wall with proper self-threading screws. The spacers shall be fixed once every 1000mm and shall have a minimum height of 25mm. The top of the spacers shall be flat in status to enable spacers fixing of GI flats.	300	Mtrs			

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
20.00.00	EB RmU Works Supply, Installation, Testing & Commissioning of outdoor type TTKV, 630Amps, 21kA, 3Way Ring Main Unit complete with 2No.s 11KV/630Amps ON Load Isolator Plus 1No 11KV/630Amps Vaccum Circuit Breaker with Extensible type bus bar arrangement on either side Complete with standered protect devices, Protection relay should have the Over current, Earth Fault, Short Circuit, Unbalance protection, CB failure protection, Cold load protection. It should have min 2 set of setting group, provision for fault and event record with time stamps. Protection relay should be communicable in MODBUS serial protocol, through RS 485 port. relays, meters and suitable base plate for RmU. (Suitable for Local TANGEDCO requirement) Civil foundation for the RmU will be done by Civil agency. The Professional charges includes Liasoning & obtaining necessary approvals from TANGEDCO & MRT of TANGEDCO for the RmU make including preparation & submission of Drawings & providing required Test certificate & OEM Documents to TANGEDCO MRT division and obtaining approval of installation of RmU from TANGEDCO including necessary fees as required. However all the incidental expenses is in the scope of Contractor. Supply, Installation of Suitable MS base plate for RmU and all other necessary	1	No.s	Figures	Figures	Words
20.02.00	Supplying, erecting, connecting & commissioning Heat Shrinkable Indoor and Outdoor trifurcating Kits as required	4	No.s			
20.03.00	Supplying, erecting, connecting & commissioning of HT and LT Ladders as required	2	Lot			
21.00.00	Diesel Generater Sets Exclusions: All Civil works including Diesel Generator Metal PlatfoRm					
21.01.00	Supplying, erecting, connecting and commissioning 62.5KVA radiator cooled DG set having teRminal voltage of 415Volts and frequency 50Hz along with engine & alternator in Acoustic Enclosure with Auto Start and Stop engine logic control panel, electronic governor, AVM pads, emergency stop push button, hooters, special tool kit box, Fuel water separator of Racor make, Heavy duty residential / hospital type silencer and inbuilt Anti vibration mounts etc. All the gauges - pressure, temperature etc. should be analogue type only with auxiliary 4-20mA output which can be directly monitored on the control and power panel. Power Panel - Isolation Panel-Inside Enclosure with 125Amps TPN MCCB 25kA(Ics) with adjustable overload, Earth falt and short circuit releases. This shall have provision for receiving cables from the DG and outgoing to DG Panel. The cost shall be inclusive of cabling / busbar interconnection between alternator and isolation Panel. Auto Start and Stop Logic Control Panel - It can be placed inside the Acoustic enclosure or to be placed near the DG Set in the weather proof enclosure. DG Set will start automatically during three phase failure condition and manually when its required.	1	Set			
	Battery Charger - suitable battery charger, provide boost charger and float charger suitable for 230Volts single phase 50cycles AC supply system as per the specifications and data sheet. Charges for initial charging of batteries. Unloading, positioning of DG Set with Acoustic Enclosure including Freight and Transit Insurance. Cost including charges for first filling of oil, diesel and for testing the DG set at site. For testing the quantity of diesel to be considered will be for 12 hours of running the DG Set. Standard inbuilt Fuel tank capacity will be 150Ltrs approx as per OEM Specifications. Scope includes preparation, submission of Application FoRms and other associated works with necessary documents and working drawings to CEIG for obtaining approval for drawing and getting Safety Certificate, approval for Energisiation					

Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
21.02.00						
21.02.01	Designing, supplying, installation, testing and commissioning of exhaust					
	piping as per the technical specs and data sheets from the heavy duty					
	residential / hospital silencer of the DG set up to the required height from					
	above terrace level of the building. The piping shall be suitable for the rated					
	DG set mentioned above. Please note that all pipes shall be supported with					
	spring loaded suspenders to transmission of vibration to the civil structure.					
a	Average length from DG set to Silencer inlet - 5Meters, total approx. length.	5	Mtrs			
	Pipe dia to be 100mm dia approx as per OEM Standards					
b	Approx. length from silencer outlet to roof top max. length - 10Meters. Total	15	Mtrs			
	approx. length Pipe dia to be 100mm dia approx as per OEM Standards					
21.02.02	TheRmal insualtion of 100mm. dia pipe for 62.5KVA DG Set	20	Mtrs			
21.02.04	Aluminium Cladding of silencer for 62.5KVA DG Set	1	Lot			
	G 00.11		-			
21.02.05	Scaffolding	1	Lot			
21.02.06	Expansion Bellows	1	No			
21.03.00	Control Cabling					
	Control cabling-between DG set and control panel etc-screened / shielded,					
	PVC insulated and sheathed, aRmoured as per suppliers / manufacturers					
21.03.01	requirements and as per technical specifications for various dg sets. Sensing					
21.05.01	Cable from LVM panel to DG Control Panel for following end teRminations					
	Note: Distance between the Genset and LVM Relay Panel to EB Meter					
	Boards around 50.0Mtrs and From LVM Relay Panel to DG Set around					
a	4Core 2.5 Sqmm Cu. Cable	100	Mtrs			
а 	4Core 2.3 Sqmm Cu. Caole	100	Murs			
ь	6Core 2.5 Sqmm Cu. Cable	100	Mtrs			
c	Line Voltage monitor relay for 62.5KVA DG Set	2	No.s			
21.04.62	Structural Supports - Wall Supports for Exhaust pipe to be taken up to the					
21.04.00	Terrace floor level					
	Fabrication of structural supports on walls, slab, in trenches etc for exhaust			<u> </u>		
	piping, fuel piping, pumps etc as required comprising of channels, angles, flats	2.000	Kgs			
	etc along with all the hardware required for fixing, grouting, one coat of red	2,000	IXg3			
	red oxide and two coats of synthetic paint. Material shall be as per IS: 2062					
2.00.00	Miscellaneous					
	Preparation of "As Built Drawings" and submission of 3 Sets of hard copies					
2.01.00	and 1 Set of soft copy.	1	Lot			
	and I bet of soft copy.					
	TOTAL AMOUNT FOR ELECTRICAL WORK					
	TOTAL AMOUNT FOR ELECTRICAL WORK	1	1		1	

Name of the Vendor/Company						
Sl.No.	Description	Quantity	Unit	Rate in Figures	Amount in Figures	Amount in Words
V	ELEVATOR					
	Supply Installation, testing and commissioning of 1 No elevator with Machine					
	Room, 8 Passenger capacity for 6 STOPS along with all necessary systems					
1	and accessories as per the detailed Technical specifications. The Quoted	1	Lot			
1	rate is inclusive of preparing necessary shop drawings for consultants	1	Lot			
	approval, Submission followup, coordination and liaisoning for necessary					
	statutory approval (CEIG/LIFT approvals/NOC etc).					
	Approved Makes: Johnson, KONE, OTIS, Thyssenkrup, Schindler,					
	Siemens					
	(REFER TECHNICAL SPECIFICATION)					
	TOTAL AMOUNT FOR ELEVATOR WORK					
	GRAND TOTAL AMOUNT FOR CIVIL + PLUMBING + FIRE FIGHTING + ELECTRICAL + ELEVATOR					
	GST Extra as applicable					