

**NAME OF WORK : Construction of Building for Government Arts and Science College at Srivilliputhur in Virudhunagar District**

**SCHEDULE A**

<b>EMD : Rs.499000/-</b>					<b>Date of tender: 08.07.2022</b>		
<b>Sl. No</b>	<b>Qty</b>	<b>Description of Work</b>	<b>TN BP NO.</b>	<b>NBC NO.</b>	<b>Rate in figure and Words</b>	<b>Unit</b>	<b>Amount</b>
1	2030 M <sup>3</sup> (Two thousand thirty cubic metres)	Earthwork excavation for foundation in all soils and sub soils to full depth as may be directed except in hard rock requiring blasting inclusive of shoring shuttering, baling out water wherever necessary, refilling the foundation with excavated earth and depositing the surplus earth within compound in places shown by the departmental officers with an initial lead of 10 metre and initial lift of 2 metre and clearing and leveling the site etc., complete complying with standard specification and as directed by the departmental officers.	23 & 24	V, VI (S2)		1 M <sup>3</sup> (One cubic metre)	
2	325 M <sup>3</sup> (Three hundred and twenty five cubic metres)	Earthwork Open excavation in all soils and sub soils to full depth as may be directed except in hard rock requiring blasting inclusive of shoring shuttering, baling out water wherever necessary refilling the foundation with excavated earth other than sandy soil in layers of not more than 15 cm thick layers well rammed and depositing the surplus earth within compound in places shown by the departmental officers with an initial lead of 10 metre and initial lift of 2 metre and clearing and leveling the site etc., complete complying with standard specification and as directed by the departmental officers.	23 & 24	V, VI (S2)		1 M <sup>3</sup> (One cubic metre)	
3	1325 M <sup>3</sup> (One thousand three hundred and twenty five cubic metres)	Supplying and Filling in foundation and basement with <b>gravel</b> in layers of not more than 15cm thick well rammed watered and consolidated etc., complete complying with standard specification and as directed by the departmental officers.	24 & 25	V, VI (S2)		1 M <sup>3</sup> (One cubic metre)	

4	1080 M <sup>3</sup> (One thousand eighty cubic metres)	Supplying and filling in foundation and basement with Excavated Earth in layers of not more than 15cm thick well rammed watered and consolidated etc., complete complying with standard specification and as directed by the departmental officers.	24 & 25	V, VI (S2)		1 M <sup>3</sup> (One cubic metre)	
5	255 M <sup>3</sup> (Two hundred and fifty five cubic metres)	Supplying and Filling in foundation and basement with <b>filling M sand</b> in layers of not more than 15cm thick well rammed watered and consolidated etc., complete complying with standard specification and as directed by the departmental officers.	24 & 25	V, VI (S2)		1 M <sup>3</sup> (One cubic metre)	
6	25 M <sup>3</sup> (Twenty five cubic metres)	Supplying and Filling of 40mm gauge hard broken blue granite stone jelly etc., complete complying with standard specification and as directed by the departmental officers.				1 M <sup>3</sup> (One cubic metre)	
7	24 M <sup>3</sup> (Twenty four cubic metres)	Supplying and Filling of 20mm gauge hard broken blue granite stone jelly etc., complete complying with standard specification and as directed by the departmental officers.				1 M <sup>3</sup> (One cubic metre)	

8	350 M <sup>3</sup> (Three hundred and fifty cubic metres)	Cement concrete 1:5:10 (one cement, five M sand and ten aggregate) using 40mm gauge hard broken blue granite stone jelly for foundation and basement including dewatering if found necessary and laid in layers of not more than 15cm thick and compacted etc., complete complying with standard specification and as directed by the departmental officers.	23 & 28	VI (8.2) 8.3 VI (S5A) 4.2.1.3		1 M <sup>3</sup> (One cubic metre)	
9	1551 M <sup>2</sup> (One thousand five hundred and fifty one square metres)	<p>Providing Anti – termite treatment to soil adjacent and under building foundation, plinth periphery of the building by application of chemicals of IS 6313 part I to IV in stage to suit the progress of work consist as per the detailed specification as below (Measurements taken for the plinth area for the purpose of payment) including braking of termite mounds, making holes with crow bar, closing the holes after the treatment and including cost of chemicals, labour charges, transport &amp; storing etc., complete and as directed by the departmental officers.(The chemical should be got approved by Executive Engineer before use on work).</p> <p>Stage -1 : Spraying Anti –termite chemical solution for the foundation before laying concrete, in bottom and sides of foundation.</p> <p>Stage-2 : Spraying Anti –termite chemical solution to the grade beam level, spraying has to done for to grade beam brick masonry contact with the back fill earth.</p> <p>Stage-3 : Spraying Anti –termite chemical solution on the sand for the flooring before laying the flooring concrete. This treatment has to be carried out and sand filling by making holes with crow bar to a depth of 60cms and at 60cms intervals on both direction and at junction of wall and flooring throughout.</p> <p>Stage -4 : Spraying Anti –termite chemical solution alround building outside by making holes with crow bar before laying plinth protection and the holes to be close after the treatment.</p>				1 M <sup>2</sup> (One square metre)	

10		Providing and laying in position, standardised concrete Mix M-20 Grade in accordance using 20mm with IS:456-2000, and down graded hard broken granite stone jelly for all RCC items of works with minimum cement content of 325 kg/ms and maximum water cement ratio of 0.55, including admixture (plasticiser / super plasticiser) in recommended proportions as per IS:9103 to accelerate, retarded setting of concrete, improve workability without impairing strength and durability with about (5 cu.m.) 7730 kg. of 20mm machine crushed stone jelly and with about (3.3 cu.m.) 5156 kg. of 10-12mm machine crushed stone jelly and with about (4.79 cu.m') 7670 kg. of m. sand, but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including laying, vibrating with mechanical vibrators, finishing, curing, etc. and providing fixtures like fan clamps in the RCC floor/ roof slabs wherever necessary without claiming extra, etc., complete complying with standard specification and as directed by the departmental officers. The coarse and fine aggregates to be used should comply with the requirements of IS standards. (No separate payment will be made by the Department for the excess usage of materials).	28	VI.8.2. 8.3. VI (S5A) 4.2.1.3			
a	415 M <sup>3</sup> (Four hundred and fifteen cubic metres)	For Foundation and basement				1 M <sup>3</sup> (One cubic metre)	
b	380 M <sup>3</sup> (Three hundred and eighty cubic metres)	For superstructure in ground floor				1 M <sup>3</sup> (One cubic metre)	

c	420 M <sup>3</sup> (Four hundred and twenty cubic metres)	For superstructure in first floor				1 M <sup>3</sup> (One cubic metre)	
d	270 M <sup>3</sup> (Two hundred and seventy cubic metres)	For superstructure in second floor				1 M <sup>3</sup> (One cubic metre)	
e	86 M <sup>3</sup> (Eighty six cubic metres)	For superstructure in Third floor				1 M <sup>3</sup> (One cubic metre)	

11	21 M <sup>3</sup> (Twenty one cubic metres)	Providing and laying in position, Standardised concrete Mix M-20 Grade(Water Proofing Compound) in accordance using 20mm with IS:456-2000, and down graded hard broken granite stone jelly for all RCC items of works with minimum cement content of 325 kg/ms and maximum water cement ratio of 0.55, including admixture (plasticiser / super plasticiser) in recommended proportions as per IS:9103 to accelerate, retarded setting of concrete, improve workability without impairing strength and durability with about (5 cu.m.) 7730 kg. of 20mm machine crushed stone jelly and with about (3.3 cu.m.) 5156 kg. of 10-12mm machine crushed stone jelly and with about (4.79 cu'm') 7670 kg. of sand, but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including laying, vibrating with mechanical vibrators, finishing, curing, etc. and providing fixtures like fan clamps in the RCC floor/ roof slabs wherever necessary without claiming extra, etc., complete complying with standard specification and as directed by the departmental officers. The coarse and fine aggregates to be used should comply with the requirements of IS standards. (No separate payment will be made by the Department for the excess usage of materials). For Super structure in Third Floor	28	VI.8.2. 8.3. VI (S5A) 4.2.1.3		1 M <sup>3</sup> (One cubic metre)	
12		Casting and fixing of R.C.C. PRECAST SLABS of following thickness in cement concrete 1:2:4 (One cement, two sand and four metal) using 20mm gauge hard broken granite stone metal excluding cost of reinforcement grill in position but including cost of moulding and plastering the top side with cement mortar 1:3 (One cement and three sand) 10mm thick curing, finishing, etc., complete.					
a	54 M <sup>2</sup> (Fifty four square metres)	50mm thick				1 M <sup>2</sup> (One square metre)	

b	67 M <sup>2</sup> (Sixty seven square metres)	75mm thick				1 M <sup>2</sup> (One square metre)	
13	305 M <sup>2</sup> (Three hundred and five square metres)	Casting and fixing of C.C. PRECAST SLABS of following thickness in cement concrete 1:2:4 (One cement, two sand and four metal) using 20mm gauge hard broken granite stone metal excluding cost of reinforcement grill in position but including cost of moulding and plastering the top side with cement mortar 1:3 (One cement and three sand) 10mm thick curing, finishing, etc., complete. 50mm thick .				1 M <sup>2</sup> (One square metre)	
14	2101 Qtl (Two thousand one hundred and one quintals)	Supplying, fabricating and placing in position Mild Steel / Ribbed Tor Steel grills for all RCC works as per design given including cost of steel and G.I. binding wire in all floors etc. complete complying with standard specification. (Contractor has to make his own arrangements for the supply of steel and binding wire)	97	VI (8.6) VII.3		1 Qtl (One quintal)	
15		Plain Cement concrete 1:2:4 (One cement two m-sand and four aggregate) using machine crushed 10 to 12 mm gauge hard broken granite stone jelly excluding centering, shuttering and, but including laying, curing and finishing etc., complete complying with standard specification and as directed by the departmental officers.	28 V, VI (S2) (S5A) VII				
a	13 M <sup>3</sup> (Thirteen cubic metres)	For Foundation and basement				1 M <sup>3</sup> (One cubic metre)	

16		Supplying and erecting steel centering including necessary supports for plane surfaces, for all RCC works including strutting upto 3.29m in all floors using mild steel shutters of size 90cmx60cm of BG 10 stiffened with mild steel angles of size 25mmx 25mmx3mm laid over silver oak (Country wood) Joists of size 10cmx6.5cm spaced at about 90cm c/c and supported by casurina props of 10cm to 13cm dia. (spaced at 75cm c/c) etc., complete complying with standard specification and as directed by the departmental officers. (The centering will be removed after specified period of concrete without damaging the concrete)	30(S) 86 86 A V, VI (S3) VII	VII			
a	1060 M <sup>2</sup> (One thousand sixty square metres)	Column Footing, Plinth Beam, grade beam, staircase step, bed block, etc.,				1 M <sup>2</sup> (One square metre)	
b	7100 M <sup>2</sup> (Seven thousand one hundred square metres)	Plain surfaces such as RCC floor slab, roof slab, rectangular, square Tee or Ell beam, lintel, bed block staircase waist slab, landing slabm landing beam, portico beam, portico beam, portico slab etc.,				1 M <sup>2</sup> (One square metre)	
c	3760 M <sup>2</sup> (Three thousand seven hundred and sixty square metres)	Plane surface such as RCC square or rectangular column, top and bottom slab of sunshade, boxing sill slab etc., complete as directed.				1 M <sup>2</sup> (One square metre)	



d	72 M <sup>2</sup> (Seventy two square metres)	For Vertical surfaces such as sunshade, boxing vertical drops, facia for sunshade, canopy facia and other vertical walls etc.,				1 M <sup>2</sup> (One square metre)	
17	4015 M <sup>2</sup> (Four thousand and fifteen square metres)	Providing additional strutting using casurina poles to centering of RCC slabs or plane surfaces for every additional 1 metre height or part there of but not less than 30cm over the initial height of 3m from floor level using casurina props of 10cm to 13cm dia including cross bracings etc., complete complying with standard specification and as directed by the departmental officer.	30			1 M <sup>2</sup> (One square metre)	
18		Brick work in cement mortar 1:6 (one cement and six m sand) using Country bricks of size 8-3/4" x 4-1/4" X2-3/4" including curing etc., complete complying with standard specification and as directed by the department officers. (Masonry projections wherever necessary for obtaining required elevation shall be done without extra cost).	31C	V, VI S(5) VII			
a	350 M <sup>3</sup> (Three hundred and fifty cubic metres)	For Foundation and basement				1 M <sup>3</sup> (One cubic metre)	
b	415M <sup>3</sup> (Four hundred and fifteen cubic metres)	For Superstructure in Ground Floor				1 M <sup>3</sup> (One cubic metre)	

c	400 M <sup>3</sup> (Four hundred cubic metres)	For Superstructure in First Floor				1 M <sup>3</sup> (One cubic metre)	
d	300 M <sup>3</sup> (Three hundred cubic metres)	For Superstructure in second Floor				1 M <sup>3</sup> (One cubic metre)	
e	137 M <sup>3</sup> (One hundred and thirty seven cubic metres)	For Superstructure in Third Floor				1 M <sup>3</sup> (One cubic metre)	
19		Brick work in cement mortar 1:5 (one cement and five M sand) using Country bricks of size 8-3/4" x 4-1/4" X2-3/4" including curing etc., complete complying with standard specification and as directed by the department officers. (Masonry projections wherever necessary for obtaining required elevation shall be done without extra cost)					
a	145 M <sup>3</sup> (One hundred and forty five cubic metres)	For Foundation and basement				1 M <sup>3</sup> (One cubic metre)	

20		Brick work in cement mortar 1:3 (one cement and Three M sand) using Country bricks of size 8-3/4" x 4-1/4" X2-3/4" including curing etc., complete complying with standard specification and as directed by the department officers. (Masonry projections wherever necessary for obtaining required elevation shall be done without extra cost)					
a	58 M <sup>3</sup> (Fifty eight cubic metres)	For Foundation and basement				1 M <sup>3</sup> (One cubic metre)	
21	295 M <sup>2</sup> (Two hundred and ninety five square metres)	Damp proof Course with Cement Mortar 1:4 (One cement & four M sand) 12mm thick mixed with water proofing compound of approved quality confirming to ISS @ 2% by weight of cement used etc complete complying with standard specification and as directed by the departmental officers.	30	VI S3 SVA VI.3.1 3.		1 M <sup>2</sup> (One square metre)	
22		Brick partition wall using third class country bricks of size 8 3/4 " x 4 1/4 " x 2 3/4" in cement mortar 1:3 (One cement and three m sand) using hoop iron reinforcement if found necessary including plastering 1:5 (One cement and five m sand) 12mm thick on both side including finishing and curing as directed by the Departmental Officers complete complying with standard specification.					
a	235M <sup>2</sup> (Two hundred and thirty five square metres)	For Superstructure in Ground Floor				1 M <sup>2</sup> (One square metre)	

b	185 M <sup>2</sup> (One hundred and eighty five square metres)	For Superstructure in First Floor				1 M <sup>2</sup> (One square metre)	
c	121 M <sup>2</sup> (One hundred and twenty one square metres)	For Superstructure in second Floor				1 M <sup>2</sup> (One square metre)	
23	97 M <sup>2</sup> (Ninety seven square metres)	Supplying and fixing of fine Cuddapah slab of 38 / 40 mm thick for Cup - board arrangements in brick wall including levelling to correct alignment etc complete complying with standard specification and as directed by departmental officers				1 M <sup>2</sup> (One square metre)	
24	9775 M <sup>2</sup> (Nine thousand seven hundred and seventy five square metres)	Special ceiling plastering in all floors and finishing the exposed surface of RCC items of work such as slab, beam, sunshade, facia, canopy slab, staircase waist slab, landing slab etc., with cement mortar 1:3 (One cement and three M sand) 10mm thick including hacking the surfaces and providing cement mortar nosing, beading for sunshade, staircase, step, landing slab etc., including neat finishing and curing etc., complete complying with standard specification and as directed by the departmental officers.	56 & 57	V (S4) 3		1 M <sup>2</sup> (One square metre)	
25	17000 M <sup>2</sup> (Seventeen thousand square metres)	<b>Plastering with cement mortar 1:5</b> (one cement and five P- sand) 12mm thick in all floors using fine P. sand including neat finishing, curing, etc., complete complying with standard specification and as directed by the department officers.	61	V (S4) (3)		1 M <sup>2</sup> (One square metre)	

26	425 M <sup>2</sup> (Four hundred and twenty five square metres)	Plastering with cement mortar 1:3 (one cement and three P.sand) 20mm thick with WPC 2% by weight of cement used in all floors using P sand including neat finishing, curing, etc., complete complying with standard specification and as directed by the department officers.	61	V (S4) (3)		1 M <sup>2</sup> (One square metre)	
27	16720 M <sup>2</sup> (Sixteen thousand seven hundred and twenty square metres)	Painting the walls two coats with best Oil bound distemper of approved quality (to be approved by the Executive Engineer before use on works) over one coat of primer for newly plastered wall including preparation of surface and finishing neatly including cost of all materials, brushes, scaffolding charges etc., complete complying with standard specification and as directed by the departmental officers.	66 & 66A			1 M <sup>2</sup> (One square metre)	
28	11150 M <sup>2</sup> (Eleven thousand one hundred and fifty square metres)	Painting two coats of newly plastered wall surface with ready mixed plastic emulsion paint of first quality and of approved colour over a priming coat including preparing the surface, clean removal of dirt and including necessary plaster of paris putty wherever required etc., complete complying with standard specification. (The quality and colour of plastic emulsion paint should be got approved by the departmental officers before use on works)				1 M <sup>2</sup> (One square metre)	
29		Providing and fixing P.V.C. Rainwater Downfall pipes with necessary shoes, bends and other speicals, clamps, screws, nails, teakwood plugs etc., complete including cost of all materials. The rate is to include cost of removable cast iron Gratings of appropriate size. The size of teakwood plugs to be used is 150mm * 25mm in front and 200mm * 75mm in rear and all other sides with a depth of 100mm. The pipe is to be fixed by means of "U" clamps at the cnetre of the pipe screwed to the plugs. The special type of 'U' clamps at the centre of the pipe to be fixed in addition to these for more than three metres pipe length, complete complying with standard specification.					

a	186 RM (One hundred and eighty six running metre)	160mm dia PVC pipe				1 RM (One running metre)	
b	172 RM (One hundred and seventy two running metre)	110mm dia PVC pipe				1 RM (One running metre)	
30	128 M <sup>3</sup> (One hundred and twenty eight cubic metres)	<b>Weathering course</b> with concrete using best quality of broken brick jelly of 20mm gauge in pure slacked lime (no sand to be added) the proportion of brick jelly to lime being 32:12.5 Cft. by volume and laid over the RCC roof slab in a single layer and consolidated to the required design and finished thickness and slope by beating the concrete with wooden beater of approved pattern and keeping the surface constantly wet by sprinkling lime jaggery water etc., complete complying with standard specification and as directed by the departmental officers. In second floor	44			1 M <sup>3</sup> (One cubic metre)	
31	1505 M <sup>2</sup> (One thousand five hundred and five square metres)	Finishing the top roof with one course of solar reflecting ceramic tiles of size 305x305x7mm thick of approved quality set in cement mortar 1:3 (One cement and three M.sand) (12mm thick ) and mixed with for 10M2 / 4.00 kg Epoxy Packing conforming to ISS including curing etc., complete complying with standard specification and as directed by the Departmental officers.(The quality of solar reflecting ceramic tiles should be got approved by the departmental officers before use on works)	44-I	V2, VII.5 4.12 VII.13		1 M <sup>2</sup> (One square metre)	

32	155 M <sup>2</sup> (One hundred and fifty five square metres)	Flooring with follwing Tactile paver type of New Tack BT Yellow colour ceramic tiles of size 300x300x5mm for vision impairment person laid lover 20mm thick cement mortar and three m sand) base mortar over the existing slab/floor including cutting the tiles to the required size with special cutter wherever necessry, laying in position and pointing with white cement mixed with colouring pigment at the rate of 0.3kg/sq.m etc. complete complying with standard specification. (The make and brand of the tiles should got approved by the Executive Engineer before use on works)				1 M <sup>2</sup> (One square metre)	
33	3230 M <sup>2</sup> (Three thousand two hundred and thirty square metres)	Paving the flooring with New Double Charged Marbonite vitrified tiles of approved quality and colour of size 610 x 610 x 8mm for flooring in all floors over a base layer of cement mortar 1:3 (one cement and three sand) 20mm thick and pointing with white cement using 0.30kg/m2 of white cement including adding suitable colour pigments to suit the colour of tiles finishing perfectly and curing as directed by the Departmental officers including cost of tiles, all materials and incidental charges, transportation charges and labour charges for laying tiles etc., complete complying with standard specification and as directed by the Departmental officers. (The tiles should be got approved by the Departmental officers before use on works).				1 M <sup>2</sup> (One square metre)	
34	185 M <sup>2</sup> (One hundred and eighty five square metres)	Paving the floor with Pre-polished anti-skid step tiles (Required shape and design) of 10 mm thick of approved quality and colour laid in Cement Mortar 1:3 (One Cement and Three sand) 20mm thick and pointed with white cement mixed with colouring pigment at the rate of 0.40 Kg. / sq.m., curing, etc., complete complying with standard specification and as directed by the departmental officers. (The make and brand of the tiles should be got approved by Executive Engineer before use on works)				1 M <sup>2</sup> (One square metre)	

35	532 M <sup>2</sup> (Five hundred and thirty two square metres)	Paving the floor with best approved quality fine polished Granite Stone Slabs of size 1200 x 300 of 18 / 20mm thick of Ruby red / Raw silk and similar varieties with machine cut edges laid over a cement mortar bed of 20mm thick using cement mortar 1:3 (One cement and three sand) fixing the slabs with required cement slurry and laid in true right angles with minimum possible width of joints and pointing the joints with white cement mixed with matching colouring pigments etc., The granite stone slabs and other materials to be used shall be got approved by the Executive Engineer concerned before use on work, etc., complete as per standard specification.	Spl			1 M <sup>2</sup> (One square metre)	
36	570 RM (Five hundred and seventy running metre)	Labour charge for finishing the top of working table and staircase step portion with nosing arrangements in Granite Slab/tiles including cutting the edges and polishing including cost of polishing materials etc., complete.				1 RM (One running metre)	
37	295 M <sup>2</sup> (Two hundred and ninety five square metres)	Paving the floor with Colour designed ceramic tiles of approved quality and colour of size 305 x 305 x 6mm in all floors over a base layer of cement mortar 1:3 (one cement and three M sand) 20mm thick using M. sand and pointing with white cement using 0.30kg/m <sup>2</sup> including adding suitable colour pigments to suit the colour of tiles finishing perfectly and curing etc., including cost of tiles, all materials and incidental charges, transportation charges and labour charges for laying tiles etc., complete complying with standard specification and as directed by the departmental officers . (The quality of tiles should be got approved by the departmental officers before use on works).	39F			1 M <sup>2</sup> (One square metre)	
38	780 M <sup>2</sup> (Seven hundred and eighty square metres)	Dadoing the walls with colour designed glazed tiles of size 300mmx 450mmx 8mm of approved quality in all floors set in cement mortar 1:2 mix (one cement & two M sand) 10mm thick and pointing with white cement using 0.4 kg/m <sup>2</sup> including adding suitable colour pigments to suit the colour of tiles including finishing the joints neatly and curing etc., complete complying with standard specifications. (The quality of tiles should be got approved by departmental officers before use on the work).	Spl			1 M <sup>2</sup> (One square metre)	



39	164 RM (One hundred and sixty four running metre)	Supplying and fixing of PVC Beading of size 25 x 75mm with groove to sheet ceramic tiles at corner of wall function etc., for all tile works.				1 RM (One running metre)	
40	446 RM (Four hundred and forty six running metre)	Fabricating supplying and fixing in position CRCA pressed steel box section 18 gauge or 1.25mm thick for door frames of section size 105mmx60mmx1.25mm thick with necessary rebate of size 35x15mm for housing door shutters conforming to IS specification. Frames shall be fabricated to the specified door size with joints properly welded and grinded. Stiffeners with 25x3mm MS flat shall be provided around the frame at 60cm intervals. The cost shall also include for providing 3 Nos. of MS clamps with 25x3 flats each on either sides of door frame, providing bottom tie, with 10mm dia MS rod, providing necessary holes for receiving tower bolts 2 Nos. with stiffeners on inner side, providing the required number of I.O hinges of size 125x30mm for shutters properly welded to the frames, finishing the door with one coat of good quality red oxide primer with cement concrete 1:2:4 (One cement, two sand and four aggregate) using 20mm gauge hard broken granite stone jelly packed inside to the frame including cost of all materials, fabrication and conveyance to the site and fixing in position with necessary scaffolding etc., complete complying with standard specification and as directed by the departmental officer.	Spl			1 RM (One running metre)	
41	20 M <sup>2</sup> (Twenty square metres)	Supplying and fixing in position of 35mm thick solid core flush door shutters single leaf with following specification. with TW ply on both sides and with TW lipping of size 35x12mm on all edges with necessary adhesives and C.P. Screws Alu. Butt Hinges (6 nos. 250 x 16 mm Size) Alu. Aldrop 1 No. 250 x 16 mm Size, Alu. Tower Bolt 2 No. 250 x 12 mm size, alu. Tower Bolt 2 No. 200 x 12 mm size, D type alu. Handle 200mm length 2 No., alu. door stopper with rubber bush 2 No. shall be provided, as directed by the departmental officers etc., complete.	Spl			1 M <sup>2</sup> (One square metre)	

42	111 M <sup>2</sup> (One hundred and eleven square metres)	Supplying and fixing in position of 35mm thick solid core flush door shutters double leaf with following specification. with TW ply on both sides and with TW lipping of size 35x12mm on all edges with necessary adhesives and C.P. Screws Alu. Butt Hinges (6 nos. 250 x 16 mm Size) Alu. Aldrop1 No. 250 x 16 mm Size, Alu. Tower Bolt 2 No. 250 x12 mm size, alu. Tower Bolt 2 No. 200 x 12 mm size, D type alu. Handle 200mm length 2 No., alu. door stopper with rubber bush 2 No. shall be provided, as directed by the departmental officers etc., complete.	Spl			1 M <sup>2</sup> (One square metre)	
43	396 M <sup>2</sup> (Three hundred and ninety six square metres)	Supplying and fixing UPVC (Un-Plasticized Polyvinyl Chloride) Windows of casement type (open) from the profile the size of outer frame 60mm x 58mm and shutter profile are reinforcement with GI/1mm 125GSM and 100% corrosion free, the profiles are multi chambered sections with wall thick of 2mm. The EPDM rubber (black colour) covered with over all the edges of frame and shutter the shutter will be provided with Espag multi power point locks and also it operates as handle. The corners and joints should be welded and cleaned. Radiations free pin headed plain or brown colour glass 4mm thick should be provided to the shutter and it should not allow leakage of water even at most ranging storms and should have key lockable action, security protective hinges, strong locking systems and as per size for arresting noise and energy loss. The connecting mechanism between sash and outer frame that enables opening of the window. The window should be fixed to the wall with 100% packing with screws and silicon packing all round the frames. The window should be got approved from the Executive Engineer before use on work				1 M <sup>2</sup> (One square metre)	

44	8.50 M <sup>2</sup> (Eight point five zero square metres)	Manufacturing, Supply and Fixing of steel doors of size 1.2mx2.1m with following specification. MS angles of size 40x40x 6mm at 3.5 kg/m used for the outer frame and MS angles of size 35x35x5mm at 2.60 kg/m for the shutter frames. Stiffners with 32x6mm at 1.50 Kg/m. MS flat is provided as the lock rail of the door and welded infact of both ends to the shutter frame, 18 gauge CR sheets of best quality is laid as panel in the shutter frames. 18x5mm at 0.70 kg/m MS flat is welded over the 32x6mm at 1.50 Kg / RM and MS flat on the rear side of the door sandwiching the CR sheet for rigidity with locking rail and bottom tie arrangements. Additional stiffners with 18x5 mm at 0.7 kg/m MS flats are provided horizontally diagonally on the rear side of the shutter. 2Nos of hinges in case of single leaf and 4Nos of hinges in case double leaf shutter is provided 6 Nos of hold fasts 200 length 40x40x6mm M.S. angle spliced at the ends are welded to the outer frame of the door. M.S Tower bolt 2 Nos. one at top and the other at bottom are provided. One aldrop is provided incase of double leaves door at lock rail section in the door. For single leaf doors, one more aldrop is provided in the inner side at the lock rail section of the door. One rotating locking arrangements at the inner side of the door and additional provision for locking arrangements for lock is provided with 32x6mm MS flat on the rear side of the door at an appropriate place incase of a double leaves door MS flat 32x6mm at 1.50 kg/m is provided on the edge of one shutter to conceal the gap between the shutters. A tie bar is provided at the bottom of the outer frame to prevent twisting of frame during transportation of fixing. All members are given a shop coat of red oxide primer as directed by the departmental officers. The rate includes cost of all materials labour charges transportation taxes and all other incidental charges etc., complete. Single leaf.				1 M <sup>2</sup> (One square metre)	
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45	56 M <sup>2</sup> (Fifty six square metres)	Supplying and fixing of FRP (Fibre Reinforced Polymer) door shutter with FRP door frame made out of FRP sheets of 3mm thick of overall size 65mmx50mm with rebate suitably reinforced using MS Angles / Flats, cost of holdfasts and solid core FRp shutter panel of 5mm thick and hollow core frames of 3m wall thickness for styles and rails etc., of sizes specified by Engineers. The rate including cost of all furniture fittings such as aluminium aldop of size 250x16mm - 1No. aluminium tower bolt 250x12mm - 1No. aluminium D type handled 200mm etc., complete complying with standard specification and as directed by the departmental officers.				1 M <sup>2</sup> (One square metre)	
46	18 M <sup>2</sup> (Eighteen square metres)	Supplying and fixing UPVC (Un-Plasticized Polyvinyl Chloride) Louvered ventilators of from the profile the size of outer frame 60mm x58mm and shutter profile size of 60 x 78mm both profiles are reinforced with GI/1mm 125GSM and 100% corrosion free, the profile are multi chambered sections with wall thick of 2mm. The EPDM rubber (black colour) covered with all over the edges of frame and shutter. The corners and joints should be welded and cleaned. Radiations pin headed glass 4mm thick should be provided in the louvers. The window should be fixed to the wall with 100% packing with screws and silicon packing all round the frames. The ventilator should be got approved from the Executive Engineer before use on work.				1 M <sup>2</sup> (One square metre)	

47	71 M <sup>2</sup> (Seventy one square metres)	Supplying and fixing in position of Aluminium anodised colour matt finish openable cupboard of size 1.20 x 2.10 m in all floors fixed with 12mm thick prelaminated particle board (Exterior grade) the outer frame of section 38 x 33 x 2.12 mm @ 0.706 kg/m, shutter frame of 38.5 x 33 x 3 mm @ 0.706 kg/m, Interlocking mullion vertical section of 59 x 33 x 2.5 mm @ 1.135 kg/m. The shutter is fixed with 6 nos. Aluminium hinges, 100 x 30 mm of 2 nos. D type handle 100mm long and 2 nos. of cupboard lock etc, eith necessary furniture fittings including cost of labours, power consumption charges required for fabrication including necessary chipping, dismantling and making necessary holes in the RCC colimns beams, masonry etc., with power drill to the required depth and redoing the same to the original condition after fixing etc., complete complying with standard specification.				1 M <sup>2</sup> (One square metre)	
48	12200Kg (Twelve thousand two hundred kilogram)	Supplying and fixing of approved M.S Grills for doors, windows, open courtyard, grill gate etc., using necessary mild steel flats for inner and outer members which should be fixed on edges including priming coat of best approved quality red oxide primer etc., complete complying with standard specifications.				1 Kg (One kilogram)	
49	143 M <sup>2</sup> (One hundred and forty three square metres)	Supply and fixing Terra cotta jolly of size 20 X 20 X 8cm of approved pattern including pointing finishing to the true alignment, curing, etc., complete.				1 M <sup>2</sup> (One square metre)	

50	640 M <sup>2</sup> (Six hundred and forty square metre)	Painting the new iron work with two coats of best approved first quality and colour of synthetic enamel paint over the existing red oxide priming coat in all floors excluding cost of priming coat and including cost of painting materials, brushes, putty, preparation of surfaces and scaffolding charges etc., complete complying with standard specification and as directed by the departmental officer. (The quality and colour of paint should be got approved by the departmental officer before use on work).	66A	V.VII.3 & 15		1 M <sup>2</sup> (One square metre)	
51	315 M <sup>2</sup> (Three hundred and fifteen square metre)	Painting the new wood work two coats with best approved first quality and colour of synthetic enamel paint over a priming coat of approved quality in all floors including cost of paint, labour and other materials like brushes, putty and scaffolding charges etc., complete complying with standard specification and as directed by the departmental officers. (The make quality and colour of paint should be got approved by the departmental officer before use on work).	66A	V.VII.3 & 15		1 M <sup>2</sup> (One square metre)	
52	142 M <sup>2</sup> (One hundred and forty two square metre)	Manufacturing, Supplying and fixing of Stainless Steel Hand rails for staircase using 50mm dia 304L Grade stainless steel pipe of 1.60mm thick at required locations to a height of 900mm from finished floor level welded to 38mm dia stainless steel pipe post of 1.00mm thick as vertical at 900mm centre with 2 nos of 25mm dia intermediate horizontal stainless steel pipe of 1.60mm thick in between. The vertical pipe has to be welded to the 100 x 100 x 6mm MS base plate encased in the base concrete. The rate is inclusive of the charges for cutting, bending, welding, grinding, polishing, conveyance, electrical charges, etc., complete.				1 M <sup>2</sup> (One square metre)	
53	40 RM (Forty running metre)	Supplying and fixing of Stainless Steel pipe made out of SS 304 grade 50.80 mm dia stainless steel tube of 1.60 mm thick at required height to hold by the physically challenged persons toilets including labour charges for cutting, welding and fix with MS flats (excluding cost of flat) etc., complete complying with standard specification and as directed by the departmental officers.				1 RM (One running metre)	

54	64 M <sup>2</sup> (Sixty four square metre)	Providing expansion joint of 12.5mm wide in between RCC twin columns from top of pedestal to full height including filling the inner space with suitable non-absorbent, flexible and well compressible filler materials of approved quality and brand; finishing the sides of RCC columns with polysulphide sealants for a depth of 7.5mm on either side covering the inner space filled with filler materials as above etc., complete complying with standard specifications and as directed.				1 M <sup>2</sup> (One square metre)	
55	33 RM (Thirty three running metre)	Providing expansion joint in RCC floor slab for 12.5mm width using polysulphide as sealant on the top and bottom for a depth of 7.5mm each and packing the inner space using compressible non-absorbent filler materials including cost of labour for cutting and fixing filler materials and laying polysulphide sealant with necessary spatula etc., complete complying with standard specifications and as directed				1 RM (One running metre)	
56	25 RM (Twenty five running metre)	Providing expansion joint 12.5mm width in RCC roof slabs between RCC twin beams using PVC water bar of 150mm wide centre bulb of 4mm to 6mm thickness of approved quality and brand and including filling the inner space with suitable non-absorbent flexible and well compressible filler materials of approved quality and covering the top surface with GI sheet 30cm wide and 1.6mm thick using phill plugs, GI screws, limpet cup washers, bitumen washers, etc., complete complying with standard specifications and as directed				1 RM (One running metre)	
57	248 M <sup>2</sup> (Two hundred and forty eight square metre)	Providing Polymer based water proofing treatment for the roof slab by pressure grouting of 60cm deep at 45 cm regular interval and injecting cement based water proofing compound to arrest void if any and by applying cement based water proffing compound to a thickness of 1mm of the prepared surface.Providing cement mortar 1:3 water proofing cover plaster to a thickness of 12mm over the membrane coating with admixture of approved make.The rate includes all chemicals,materials etc.,complete.				1 M <sup>2</sup> (One square metre)	

58	56 M <sup>3</sup> (Fifty six cubic metres)	Brick jelly lime concrete of mix Brick Jelly Concrete 1:2:5 using brick jelly of size 40mm in Lime Mortar 1:2 for sunken floor filling including laying, finishing and curing as directed by the Department Officers complete complying with standard specification.				1 M <sup>3</sup> (One cubic metre)	
59	2 Nos (Two numbers)	Supplying and fixing in position C.I.Manhole covers(heavy duty) 600x600mm size of best approved quality and as per standard specifications etc.,complete.				1 No (Each)	
60	2 Nos (Two numbers)	Supplying and fixing best variety and approved quality of PVC ventilating shaft of 110mm dia and 3m height including cost of 100mm dia. PVC cylindrical cowl type and fixing in position as directed by the departmental officers complete complying with standard specification. (The PVC pipe and cowl should be got approved from the Executive Engineer before use on work)				1 No (Each)	
61	36 RM (Thirty six running metre)	Supplying and fixing of NP III Class RCC Hume Pipe of flush joint to a size of 300mm diameter, RCC wall of 40mm thick to a length of 2.50m in RCC M35 with nominal special reinforcement as directed by the departmental officers etc., complete complying with standard specification.The rate include cost of materials, labour charges, conveyancecharges and all other incidental charges etc., complete.				1 RM (One running metre)	



62	72 M <sup>2</sup> (Seventy two square metres)	Supplying and installation of Ceramic Steel chalk writing board with the following specification. The 2mm GI Sheet is placed with wall side over the GI sheet necessary adhesive is spreaded and fixed the 9mm MDF board on the GI sheet 0.40mm thick ceramic steel chalk board is provided over the MDF board and the whole arrangements are fixed to the frame using heavy anodized Aluminium section and Chromium plated provided in the corners. The whole arrangement are fixed to the wall using wooden plugs and screws etc., The rate includes all above materials, labour charges and taxes etc., complete complying with standard specification and as directed by the departmental officers.				1 M <sup>2</sup> (One square metre)	
63	18 Nos (Eighteen numbers)	Supplying and fixing of good quality and best make of Chalk Piece and Duster Holder of size 300 x 200mm made up of stainless steel in the places shown by the departmental officers including transporting to the work site, fixing in position etc., complete complying with standard specification.				1 No (Each)	

64	2 Nos (Two numbers)	Supplying and fixing of Reverse Osmosis Plant of capacity 250 litres per hour. The Reverse Osmosis plant is stainless steel skid mounted with the parts. Raw water from the water tank is fed in to Pressure sand filter by raw water feed pump. The Pressure sand filter consists of FRP Vessel, Multiport valve and filtration media of pebbles & sand. Raw water enters in to the top of vessel and percolate through filter media and the suspended particles traps in the filter media top. Filtered water flows through Activated carbon filter for removal of colour and organic particles present in the water. The water passes through 10, 5 Micron filter to ensure the fine filtration of feed water. Micron filter made of Polypropylene material and its housing also made of PP. This fine prefiltered water pumped in to RO membrane in the pressure of 10-12 kg/cm <sup>2</sup> through high pressure pump. The RO membrane made of thin film composite polyamide and its pore size 0.0001 microns (pore size lesser than Bacteria and virus). After penetrating through this membrane the purified water is collected in the center of the membrane and the salt, bacteria are rejected from the membrane side way. This purified water is collected in to water storage tank for further distributions. The reject water from the RO plant will have a higher TDS and the water is suitable for external applications like sanitary applications, flushing lines, gardening, etc., and as directed by the departmental officers. The rate includes cost of plant, cost of storage tank, loading and unloading, transportation charges, electrification charges, all taxes and all other incidental charges etc., complete.				1 No (Each)	
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65	185 M <sup>2</sup> (One hundred and eighty five square metres)	Supplying, fabricating, erecting and fixing new GYP BOARD FALSE CEILING using 10mm thick plain sheets of approved quality and design suspended from ceiling using 'U' shaped GI channels of size 25mmx0.55mm thick at 1.2m c/c on both longitudinal and cross direction for vertical supports and fixing 'U' shaped GI channels of size 50mmx30mmx0.55mm thick at 0.90m c/c in cross direction and longitudinal direction respectively for horizontal support by using teak wood reapers at corners and intermediately fixing plaster of paris on the panel provided as per design/pattern given by the site Officer and finishing the ceiling surface with same plaster of Paris materials etc., necessary opening should be made for providing spot light florecent tubes in the ceiling complying with standard specification two coat of distempering and as directed by the Departmental officers.				1 M <sup>2</sup> (One square metre)	
66	74 RM (Seventy four running metre)	Supplying and fixing Gyp-board designed Cornices of 100x60mm width in the edges of the false ceiling wherever necessary as per the direction of the filed officers. The rate includes the cost of materials, transportation charges and fixing charges and other incidental charges etc., the pattern of the cornice has to be approved by the Executive Engineer before used on work etc., complete complying with standard specification and as directed by the departmental officers.				1 RM (One running metre)	

67	10 M <sup>2</sup> (Ten square metres)	Supplying and fixing ornamental Brass-in-lay Burma Teak Wood Entrance Door with a size of 2.10 m x 2.55m with six leaves as per the drawing and design as approved by the departmental officers.The clear opening of each door shall be of 2.00m. The outer frames are of finished size 175mm x 125mm.The Each door shall have two leaves of 1/3 panelled and 2/3 glazed. The Outer frame of the shutter of finished size of 150mm x 50mm.All the Panels shall be of finished 50mm thick. The main outer frame, shutter frame and panels shall be engraved with computer design ornamental carving works of approved pattern with skilled carpenter as directed by departmental officers. All the glazing works shall be done with design painting works.Necessary grill protection arrangements shall be made for the glass portion. The door frame and shutters shall given two coats of best and approved quality of high Glossy Polyurethane finish.The rate includes cost of best and approved quality of Burma Teak wood,design painted glass, Brass hinges,Tower bolts, Aldrop, locking arrangements,ornamental handles,brass screws and labour charges, transportation charges, all taxes, etc., complete.				1 M <sup>2</sup> (One square metre)	
68	65 M <sup>2</sup> (Sixty five square metres)	Dadoing the front elevation wall with superfine polished Ruby red granite slab with machine cut edges of size 1200x600 and 16mm to 18mm thick in all floors over a base layer of Cement mortar 1:3 (One cement and three sand) 20mm thick and pointed with the same coloured cement neatly etc., complete complying with standard specification and as directed by the departmental officers etc., complete.				1 M <sup>2</sup> (One square metre)	

69	110 M <sup>2</sup> (One hundred and Ten square metres)	Providing and fixing of normal structural glazing (stick type system) all panels fixed where all aluminium members are cancelled and only glass is visible outside, using special designed indal equivalent 63 x 38 x 1.50mm section. For frame work, burnt bronze colour anodized aluminium extruded section in colly 63400 WP, using expansion fasteners of a aluminium - no. 10 x 60mm with a pullout strength of 1000 Kgs each. Glazed with 5mm thick blue colour reflective glass using high performance import double side VHB (Nippon) tapes, the grooves (5mm to 6mm) will be closed with weather grade silicon sealant (789 & GP) We will ensure that the whole system used corrosion resistant hardware, is totally weather proof, permits necessary, thermal expansion/ Construction and is able to withstand high wind loads. Drilling fixing with neat finishing and also inclusive of conveyance. Loading and unloading etc., and as directed by the drawing and designing by the departmental officers.				1 M <sup>2</sup> (One square metre)	
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70	1 No (One number)	Providing Ornamental Finishing and sthaphathy work over the Entrance lobby roof at a ht of 3.00 m to 7.00m from the terrace level with the following specification. a) All round the roof beam shall be finished with Ornamental Groove works and border work with Nayam theervai using brick work cm 1:3 and Plastering 1:3, 20 mm thick , Necessary Projection works shall be as Indicated in the drawing at 3 to 3.75 m height. b) Providing and finishing masonry corning works all round the beam using special bricks , Manufactured for sthaphathy work in cm 1:3 at various , level as per the drawing enclose and finishing the nayam theervai etc, with cm 1:3 20 mm thick at the ht of 3.35 to 4.45 m. c) Providing kondungai work allround the roof slab for making arched shape to the all corner with brick work in cm 1:3 including vargapoochu and nayam theervai etc., d) Providing murals at the four face of the tower as suggested by the dept.officer etc. The rate inclusive of cost of materials and labour charges for completing the above all items. Necessary scaffolding charges also included at various stage and level all round the roof at 1.5 m width. The rate inclusive of cost of materials and labour charges for the above all works and Scaffolding charges 1m all round the headroom at various stages as required etc complete. The size and finishing works shall be as indicated in the drawing enclosed. (A)				1 No (Each)	
71	1 No (One number)	Providing Ornamental finishing and sthaphathy work over the Entrance portico roof with the following specification. a. Providing ornamental border work all round the portico beams in cm 1:3 @ 3.60 m to 4.85 m ht. b. Providing special corning work projection all round the portico at 3.85 m level in cement mortar 1:3. c. Providing kodungai work allround the portico at a ht of 3.85 m to 5.40 width vargapoochu and nayam theervai to make the curved shape etc with brick work in cm 1:3 and plastering with 1:3. d.Providing bull nose at the bottom of slab on portico column at four corner and down curved grooves all round the column, with base beedam at floor level etc complete. The rate inclusive of cost of materials and labour charges for the above all works and Scaffolding charges 1m all round the Portico at various stages as required etc complete. The size and finishing works shall be as indicated in the drawing enclosed. ( B )				1 No (Each)	

72	2 Nos (Two numbers)	Marking the portion over the SG 1 in the office portion as ornamental arch work with kalasam as per the drawing enclosed and as detailed below. a. The supported column at terrace level shall be finished with ornamental sthaphathy work like bands, curved border like kadasal work etc, at 0.90m above and 0.90m below from terrace level. b.The base of the arch work to a length of 4.5m constructed over the terrace with brick work in cm 1:3 and kodungai work shall also make with cement concrete. c. The third stage of arch shall be finished with cm 1:3, 20 mm . The total height is not less then 2.55 m from the terrace level. d. 3 Nos of kalasam work shall be terracotta(Or) R.C.C and fixed at appropriate height and as directed by the departmental officers. The rate inclusive of cost of materials and labour charges for the above all works and Sacffolding charges 1m all round the structure at various stages as required etc complete. The size and finishing works shall be as indicated in the drawing enclosed. ( C )				1 No (Each)	
73	2 Nos (Two numbers)	Making the portion over the office portion as ornamental arch work with kalasam as per the drawing enclosed and as detailed below. a. The supported column at terrace level shall be finished with ornamental sthaphathy work like bands, curved border like kadasal work etc, at 0.90m above and 0.90m below from terrace level. b.The base of the arch work to a length of 6.00 m constructed over the terrace with brick work in cm 1:3 and kodungai work shall also make with cement concrete. c. The third stage of arch shall be finished with cm 1:3, 20 mm thickness. The total height is not less than 2.55 m from the terrace level. d. 3 Nos of kalasam work shall be terracotta(Or) R.C.C and fixed at appropriate height and as directed by the departmental officers. The rate inclusive of cost of materials and labour charges for the above all works and Sacffolding charges 1m all round the structure at various stages as required etc complete. The size and finishing works shall be as indicated in the drawing enclosed. ( D )				1 No (Each)	

74	4 Nos (Four numbers)	Providing decarative semi circular colum on both side of window and finished the sunshade with ornamental sthaphathy work as detailed below. a. Providing R.C.C semicircular column from ground level to ground floor lintel and embedded with window sunshade and also construct the base beedam and support the corning works etc and finishing with CM 1:3 with nayam theervai etc. b. The semi circular column from the ground floor sunshade floor level to secound floor level and embedded with the projected slab with ornamental sthaphathy work by using brick work CM 1:3, 20mm thick with nayam theervai etc., The rate inclusive of cost of materials and labour charges for the above all works and Sacffolding charges 1m all round the structure at various stages as required etc complete. The size and finishing works shall be as indicated in the drawing enclosed. ( E )				1 No (Each)	
75	29 Nos (Twenty nine numbers)	Supplying and fixing of Aluminium Dye cast letters 9" size in Tamil of approved colour. The colour treatment process is achieved with MRF colour coat and then the processed coloured layer is set into the kiln for the heat treatment process for the following sizes. The rate is inclusive of all charges such as conveyance of letters, fixing the letters to the wall tiles (or) granite etc., and with necessary scaffolding charges and redoing the wall to the original condition etc., complete.				1 No (Each)	
76	1 No (One number)	Supplying and fixing of Emblem of 15" size of approved colour. The rate is inclusive of all charges such as conveyance of letters, fixing the letters to the wall tiles (or) granite etc., and with necessary scaffolding charges and redoing the wall to the original condition etc., complete.				1 No (Each)	
77	5 Nos (Five numbers)	Supply and fixing of Water C02 Stored Pressure Type 9litres capacity Fire Extinguisher as per new IS 15683 complete with control valve, gun metal cap, pressure gauge, operation . sticker, discharge hose, wall mounting bracket, safety clip, etc., as directed by the Departmental Officers.				1 No (Each)	



78	11 Nos (Eleven numbers)	Supply and fixing of stored pressure ABC (Mono Ammonium Phosphate) Powder Type Fire Extinguisher of 6 kg. capacity as per IS:15683 with pressure gauge, discharge hose & control nozzle, wall mounting bracket, safety clip etc., including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc,				1 No (Each)	
79	400 RM (Four hundred running metre)	Drilling of 6" (150 mm ) dia vertical borewell to the required depth as directed by the departmental officers in all soils such as loose soil/HRS/Sedimentary strata including all incidental charges for drilling machineries transportation for rig machineries and supporting vehicle to work spot charges to fuel required for operation, labour charges and for drilling bore well to the required depth according to water table as directed by the departmental officers including clearing the site after completion of work complying with standard specification.				1 RM (One running metre)	
80	12 RM (Twelve running metre)	Supply of PVC 150 mm CM casing pipes with slots and without slots				1 RM (One running metre)	
81	12 RM (Twelve running metre)	Labour charges for inserting casing pipes assembly ( with slots and without slots) in the drilled holes, complete and supplying and placing of the annular with pebbles of size and quality as approved by the Executive Engineer., PWD.,				1 RM (One running metre)	

82	2 Nos (Two numbers)	Supplying, fixing and Erecting in position of 3 phase multi stage 3.00 H.P Submersible Pumpset suitable for sump with ISI IS 8034 with 3 phase Panel Board - D.O.L with two level guard and Auto start including Labour Charges and Transport charges etc., complete complying with standard specification.				1 No (Each)	
83	2 Nos (Two numbers)	Supply and Fixing of panel board for the following motor pump with fully automatic starter phase preventor on & off switch indicator lamp, voltmeter and ammeter with selector switch with suitable power capacity arranged in a steel sheet box as directed by the departmental officers.				1 No (Each)	
84	2 Nos (Two numbers)	Supply of 65 mm MS clamp of 0.75m length, with bolt and nuts - 8 nos of heavy type as directed by the departmental officers etc., complete.				1 No (Each)	
85	360 RM (Three hundred and sixty running metre)	Supplying and laying and jointing 32 mm HDPE pipes in bore weell class 5-1 MPA or 10 kg/sq.cm pressure of approved and best quality conforming to ISS and with ISI mark of following sixes including cutting threading and fixing GI Specials but excluding cost of such specials and fixing into bore well for suction line air pipe etc.,				1 RM (One running metre)	
86	400 RM (Four hundred running metre)	Supply of 4 sq.mm three core flat copper cable for submersible motor pump with wire bounded punched copper conductor insulated and sheathed with PVC with voltage grade upto 1100v confirming to and marked with is (694-1990) complying with standard etc., complete,				1 RM (One running metre)	

87	120 RM (One hundred and twenty running metre)	Supplying, laying and jointing UPVC Pipes (having work pressure of 10 kg/sqcm) of approved quality and best variety conforming to BIS of the following dia including cutting threading and fixing of PVC specials using PVC adhesive (but excluding cost of such specials) and fixing into wall with teakwood plugs, PVC clamps and screws making holes on the wall (or) drilling holes in the roof and making good the dismantled portion to original condition with necessary brick work/cement concrete and plastering neatly wherever necessary with necessary scaffolding charges etc., complete complying with standard specification. (The PVC pipes shall be got approved by the Executive Engineer before use on works). (External Water Supply Arrangements) Below Ground level. 40 mm Dia UPVC pipes				1 RM (One running metre)	
88		Supplying, laying and joining UPVC pipes of approved quality and best variety conforming to ISS with ISI mark, of the the following size above Ground level up to 4 M hight laid properly to alignment including cutting, threading and fixing the required UPVC specials but excluding the cost of such specials and fixing to the wall with necessary TW plugs, clamps and screws, making holes on the wall or drilling holes in the roof and making good dismantled portion to original condition with necessary brick work, concrete and plastering wherever necessary with necessary scaffolding charges etc., complete. Internal Water supply.					
a	290 RM (Two hundred and ninety running metre)	40mm dia UPVC Pipe				1 Rm (One Running metre)	

b	200 RM (Two hundred running metre)	32mm dia UPVCpipe				1 Rm (One Running metre)	
c	241 RM (Two hundred and forty one running metre)	25mm dia UPVCpipe				1 Rm (One Running metre)	
d	125 RM (One hundred and twenty five running metre)	20mm dia UPVCpipe				1 Rm (One Running metre)	
89		Supplying and fixing in position the following UPVC specials of heavy type and approved quality and good variety excluding fixing charges but including necessary cutting and threading of UPVC pipes, jointing the UPVC specials and painting with two coats with good variety and best quality synthetic enamel paint over a coat of red oxide primer and jointing the specials with pipe line using shellac etc. complete complying with standard specification (The UPVC specials should be got approved by the Executive Engineer concerned before use on works)					

a	12 Nos (Twelve numbers)	40mm dia UPVC Union				1 No (Each)	
b	9 Nos (Nine numbers)	32mm dia UPVC Union				1 No (Each)	
c	12 Nos (Twelve numbers)	25mm dia UPVC Union				1 No (Each)	
d	12 Nos (Twelve numbers)	40mm dia UPVC Elbow				1 No (Each)	
e	14 Nos (Fourteen numbers)	32mm dia UPVC Elbow				1 No (Each)	

f	28 Nos (Twenty eight numbers)	25mm dia UPVC Elbow				1 No (Each)	
g	4 Nos (Four numbers)	40mm dia UPVC Hex Nipple				1 No (Each)	
h	14 Nos (Fourteen numbers)	32mm dia UPVC Hex Nipple				1 No (Each)	
i	24 Nos (Twenty four numbers)	25mm dia UPVC Hex Nipple				1 No (Each)	
j	18 Nos (Eighteen numbers)	25x20mm UPVC Reducer Elbow				1 No (Each)	

k	20 Nos (Twenty numbers)	20x15mm UPVC Reducer Elbow				1 No (Each)	
l	3 Nos (Three numbers)	40mm dia UPVC Tee				1 No (Each)	
m	16 Nos (Sixteen numbers)	32mm dia UPVC Tee				1 No (Each)	
n	16 Nos (Sixteen numbers)	25mm dia UPVC Tee				1 No (Each)	
o	6 Nos (Six numbers)	25x20mm UPVC Reducer Tee				1 No (Each)	

p	36 Nos (Thirty six numbers)	20x15mm UPVC Reducer Tee				1 No. (Each)	
90		Supplying and fixing in position best quality and approved variety of new Gun Metal Gate Valve / Wheel Valve heavy type excluding the fixing charges but including necessary cutting & threading of GI pipes for jointing the GI specials and providing two coats of painting with good quality and approved variety of anti-corrosive paint over a coat of red oxid primer coat in the case of pipe line above ground level and one coat of tarring in the case of pipe line below ground level etc., complete				1 No. (Each)	
a	2 Nos (Two numbers)	40mm dia G.M gate valve				1 No. (Each)	
b	6 Nos (Six numbers)	32mm dia G.M gate valve				1 No. (Each)	
c	6 Nos (Six numbers)	25mm dia G.M gate valve				1 No. (Each)	



91		Supplying and fixing in position 15mm dia Chromium Plated screw down Taps (heavy type) of best quality and approved make conforming to ISS and providing leak proof joints with thread and shellac etc., including fixing and connecting to the pipes etc., complete complying with standard specification and including cutting and threading wherever necessary. (Taps should be got approved by the departmental officer before use on work)	Spl			1 No (Each)	
a	52 Nos (Fifty two numbers)	Screw down tap				1 No (Each)	
b	12 Nos (Twelve numbers)	SS swan neck tab				1 No (Each)	
92	3 Nos (Three numbers)	Supplying and Fixing of 1000 litres PVC ready made water tank of approved quality with standard specification and best brand including testing for leakages after making installations and connections. The cost inclusive of lid and lock with bolt and nuts for PVC tank, transportation, loading, unloading, lifting, installation and necessary connections etc., complete complying with standard specifications and as directed by the departmental officers.(The PVC Water Tank should be got approved by the Executive Engineer before use on works).				1 No (Each)	

93	24 Nos (Twenty four numbers)	Supplying and fixing in position Indian water closet oriya type of size 580x440mm white glazed earthenware of approved quality with 'P' trap or 'S' trap conforming to IS 2556-Part XII with sand cushion and forming flooring alround the closet using 40mm broken brick jelly in lime concrete 1:2:5 (One part of lime, two parts of sand and five parts of brick jelly) 100mm thick and finishing the top to required slope and including giving necessary connection to PVC. pipes by dismantling brick masonry, reinforced cement concrete roof/floor slab and making good the disturbed portion to original condition without leakage etc., complete complying with standard specification and as directed by the departmental officers.(The Oriya type Water Closet and all accessories should be got approved by the departmental officers before use on work)	Spl			1 No (Each)	
94	12 Nos (Twelve numbers)	Supplying and fixing in position White Glazed European water closet of best quality and approved make with 100mm P or S trap with double flapped rigid PVC.seat cover with chromium plate brass hinges, including supplying and fixing PVC. Low level flushing tank 10 litre capacity of approved quality on wall with teak wood plugs, brass screws and 2 numbers 15mm dia gun metal wheel valve, 15mm dia nylon connection and giving necessary water supply connection as directed by the departmental officers. The rate includes cost of 100mm dia PVC.Pipe 60cm long including cost of 3 Kg.of white cement 6Kg.of cement, spunyarn, shellac, thread ball, teak wood plugs, brass screws 75mmx10mm etc., complete complying with standard specification and as directed by the departmental officers. (The European Water Closet and flushing tank should be got approved by the Departmental Officers before use on work.)	Spl			1 No (Each)	
95	12 Nos (Twelve numbers)	Supplying and fixing Stainless steel health faucet of best quality with control valve etc., complete complying with standard specification and as directed by the departmental officers (The materials should be got approved by the Executive Engineer before use on works).				1 No (Each)	

96	15 Nos (Fifteen numbers)	Supplying and fixing in position of Indian make white/colour glazed earthen ware lipped mouth flat back Urinal of best approved quality with 32mm dia bell mouthed PVC connection, 15mm dia G.M wheel valve, fixing the Urinal to the wall in position with necessary T.W. plugs, clamps, screws shellac etc., including dismantling masonry if necessary and redoing the same to original condition, fixing the 15mm GI pipe connection and wheel valve, painting the pipe with two coats and checked without any leakage etc., complete complying with standard specification and as directed by the departmental officers. (The urinal should be got approved by the departmental officers before use on work)	Spl			1 No (Each)	
97	15 M <sup>2</sup> (Fifteen square metres)	Supplying and fixing in position of white marble slab (Adanga) of 20mm thick for urinal partition and fixing the marble slab with C.M. 1:3 of 12mm thick etc., complete.				1 M <sup>2</sup> (One square metre)	
98	35 Nos (Thirty five numbers)	Supplying and fixing in position best quality of approved make white glazed earthenware wash hand basin of size 550x400mm with a pair of cast iron brackets, including cost of 15mm diameter brass chromium plated pillar tap, 32mm diameter C.P. waste, 32mm diameter PVC waste pipe with rubber plug and chain, 15mm diameter gun metal wheel valve, 15mm dia brass nipple, 15mm dia nylon connection etc. including fixing the wash hand basin in the wall in position with pair of C.I. brackets with teak wood plugs and screws and giving necessary water supply connection and painting the brackets with two coats of paint over a priming coat of anti-corrosive paint including testing for leakage etc., complete complying with standard specification and as directed by the departmental officers. (The wash hand basin and specials should be got approved by the departmental officers before use on work)				1 No (Each)	

99	12 Nos (Twelve numbers)	Supplying and fixing in position best quality approved make white Porcelain Sink of size 600mm x 450mm x 200mm with 32mm dia 'B' class G.I waste water pipe and 32mm dia C.P waste coupling including fixing the sink on C.I brackets in position testing for leakage etc., complete complying with standard specification.(The Sink and specials should be got approved by the Executive Engineer before use on works)				1 No (Each)	
100	7 Nos (Seven numbers)	Supplying and fixing in position Indian make bevelled edge mirror of approved quality and brand PVC / Fibre Glass framed 600 x 450 x 5.5mm thick mirror, shelf type with hard board backing of approved colour fixed with brass screws, rawl plug, etc., complete complying with standard specification. (The mirror should be got approved by the Executive Engineer before use on woks)				1 No (Each)	
101	7 Nos (Seven numbers)	Supplying and fixing approved best quality brass CP towel rail 600mm long and 20mm dia with brackets of same materials including cost of teak wood plugs and CP screws, etc., complete complying with standard specifications. (The tower rail should be got approved by Executive Engineer before use on works).	Spl			1 No (Each)	
102	25 Nos (Twenty five numbers)	Supplying and fixing in position PVC Nahini trap of size 100x75mm with best pvc gratings of approved brand and quality with fixed over a bed of brick jelly lime concrete 1:2:5(one part of lime,two parts of M sand and five parts of 40mm size brick jelly)and finished with cement Mortar 1:3(one cement and three sand)including dismantling masonry works wherever found necessary and making good the damaged portions to the original condition giving connections to the pipe etc., complete complying with standard specification and as directed by the departmental officers. (The PVC Nahini trap with grating should be got approved by the departmental officer before use on works).	Spl			1 No (Each)	

103		Supplying & Fixing in position best quality PVC soil/waste pipes of various sizes of approved brand and quality confirming to I.S.S and providing leakproof joints with spun yarn and making connection to all sanitary fittings dismantling masonry or R.C.C work wherever necessary and making good the dismantled portion to the original condition including painting the castiron pipe and fittings with two coats of anti - corrosive paint of approved quality and colour and the pipe fixed in position in true alignment,complying with standard specifications etc., (The PVC pipe should be should be got approved by the Executive before use on works.) Below ground level					
a	93 RM (Ninety three running metre)	75mm dia PVC soil pipe				1 RM (One running metre)	
b	231 RM (Two hundred and thirty one running metre)	110mm dia PVC soil pipe				1 RM (One running metre)	
c	340 RM (Three hundred and forty running metre)	160mm dia PVC soil pipe				1 RM (One running metre)	

104		Supplying and fixing in position PVC specials such as plain bend and shoe of various sizes of best approved quality conforming to ISS.and providing leak proof joints including fixing to wall and giving connection to the PVC. Pipes including,dismantling the brick masonry/RCC.floor or roof slab and redoing the disturbed portion to original condition etc.complete as directed by the Deptl.Officers complete complying with standard specification.					
a	21 Nos (Twenty one numbers)	110mm dia PVC door Tee				1 No (Each)	
b	9 Nos (Nine numbers)	110mm dia PVC Door "Y"				1 No (Each)	
c	6 Nos (Six numbers)	110mm dia PVC Door Elbow				1 No (Each)	
d	12 Nos (Twelve numbers)	75mm dia PVC door Elbow				1 No (Each)	

e	12 Nos (Twelve numbers)	75mm dia PVC plain Elbow				1 No (Each)	
f	7 Nos (Seven numbers)	PVC Cowl 110mm dia				1 No (Each)	
g	5 Nos (Five numbers)	PVC Cowl 75 mm dia				1 No (Each)	
105	940 M <sup>2</sup> (Nine hundred and forty square metres)	Supplying and laying of 60 mm thick high strength type of interlocking rubber moulded hydraulic pressed paver block of approved colour made up of designed concrete mix 1:1:2 using 10 to 12mm size HBG stone jelly in required shapes and sizes having minimum compressive strength of 40 N/mm <sup>2</sup> to be laid in flurrying bone pattern with approved non sticking surface at top. The rate is inclusive of levelling the site, compacting with power compactor and sweeping the sand grouting and also inclusive of transportation charges, loading, unloading and labour charges for laying the paver block, etc. complete and as directed by the departmental officers				1 M <sup>2</sup> (One square metre)	
						<b>TOTAL</b>	
				12%		<b>GST</b>	
						<b>GRAND TOTAL</b>	
		<b>105 items (One hundred and five items)</b>					