

**KITCO LTD**  
**NATIONAL GAMES SECRETARIAT**  
**CONSTRUCTION OF JIMMY GEORGE STADIUM AT ST.JOSEPH'S HIGH SCHOOL, PERAVOOR, KANNUR**  
**SPECIFICATION AND SCHEDULE OF QUANTITIES - PART A - CIVIL WORKS**

SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
<b>(SH : - 1.0 - EARTHWORK)</b>							
1.01	Clearing grass and removal of the rubbish up to a distance of 50 m outside the periphery of the area cleared.	sqm	8209	36365.87	0.00	4.43	36366
1.02	Clearing the jungle including uprooting of rank vegetation, grass, brushwood, trees and saplings of girth upto 30 cm measured at 1m height from ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	sqm	7350	62769.00	0.00	8.54	62769
1.03	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15cm deep and disposal of rubbish, lead upto 50m and lift upto 1.5m. All kinds of soil	sqm	8231	135235.33	0.00	16.43	135235
1.04	Earth work in excavation by means (Hydraulic excavator)/manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within the site as directed by the Engineer- in-Charge. All kinds of soil	cum	385	114260.30	0.00	296.78	114260
1.05	Do same as above item no1.04 but for every additional lift of 1.5m to 3.00m or part there of All kinds of soil.	cum	2	722.68	0.00	361.34	723

Sl.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
1.06	Earth work in excavation by means (Hydraulic excavator)/manual means over areas (exceeding 30cm in depth.1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50 m and lift upto 1.5 m; disposed earth to be levelled and neatly dressed, as directed by the Engineer- in-Charge All kinds of soil.	cum	99	29801.97	0.00	301.03	29802
1.07	Do same as above item no. 1.06 but for every additional lift of 1.5m to 3.00m or part there of :All kinds of soil	cum	53	19376.27	0.00	365.59	19376
1.08	Filling in plinth or trenches, under floors, foundations, in areas etc. with red earth including watering, ramming consolidating and dressing, cost and conveyance of all materials,labour charges,lead,lift etc complete at all levels as directed by the Engineer- in-Charge	cum	1072	645086.72	0.00	601.76	645087
1.09	Filling available excavated earth(excluding rock) in trenches, under floors,plinth,sides of foundation,in areas etc. in layers not exceeding 20cm in depth,consoldating each deposited layer by ramming and watering,lead upto 50m and lift upto 1.5m including cost and conveyance of all materials,labour charges, etc complete at all levels as directed by the Engineer-in-Charge	cum	175	22223.25	0.00	126.99	22223
1.10	Excavating trenches of required width for pipes, cables, etc. including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5m including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil and unserviceable material as directed, within a lead of 50 m All kinds of soil Pipes, cables etc. not exceeding 80mm dia	m	250	50060.00	0.00	200.24	50060
1.11	Bailing out water from well with 5HP Engine and pump set including conveyance to the site and erection, cost of fuel, lubricating oil and other stores etc. complete as directed by the Engineer- in-Charge.	hr	35	7343.70	0.00	209.82	7344

Sl.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
1.12	Consolidation of earth by ramming in 15 cm layers including watering cost and conveyance of all materials ,labour charges etc complete as directed by the Engineer- in-Charge.	cum	1066	32683.56	0.00	30.66	32684
1.13	Extra for additional lead upto 100m over initial lead of 50m for disposing surplus excavated earth as per the direction of Engineer-in-Charge.	cum	247	18389.15	0.00	74.45	18389
<b>TOTAL OF SUB HEAD -1.0</b>							<b>1174318</b>
<b>(SH: - 2.0 - CONCRETE WORK)</b>							
2.01	Providing and laying cement concrete of specific grade properly mixed and consolidated with hand rammers, including cost and conveyance of all materials, labour, curing, lead lift , etc. complete for all work up to plinth levels as directed by Engineer- in-Charge.						
2.01.01	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	cum	87	480259.14	0.00	5520.22	480259
2.02	Providing and laying damp-proof course 50mm thick with cement concrete1:2:4 (1 cement: 2coarse sand : 4 graded stone aggregate of 20mm nominal size) including cost and conveyance of all materials,labour charges,lead,lift etc complete at all levels as directed by the Engineer- in-Charge	sqm	30	13327.80	0.00	444.26	13328
2.03	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7kg per square metre on damp -proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil including cost and conveyance of all materials,labour charges,lead,lift etc complete at all levels as directed by the Engineer-in-Charge	sqm	30	3642.90	0.00	121.43	3643

SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
<b>TOTAL OF SUB HEAD -2.0</b>							<b>497230</b>
<b>(SH: - 3.0 - R.C.C. WORK)</b>							
3.01	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of M-25 grade for reinforced cement concrete structural elements, excluding the cost of centering, shuttering, finishing and reinforcement including admixtures in recommended proportion (as per IS 9103) to accelerate,retard setting of concrete to improve workability without impairing strength and durability as per direction of Engineer-in-Charge .						
	All work upto plinth level.	cum	132	1081559.16	0.00	8193.63	1081559
3.02	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of M-25 grade for reinforced cement concrete structural elements, excluding the cost of centering, shuttering, finishing and reinforcement including admixtures in recommended proportion (as per IS 9103) to accelerate,retard setting of concrete to improve workability without impairing strength and durability as per direction of Engineer-in-Charge						
	All work upto floor V level.	cum	9	74112.12	0.00	8234.68	74112
3.03	Providing ,hoisting and fixing upto floor five level precast cement concrete string or lacing courses, copings, bed plates, anchor blocks, plain window sills, shelves, louvers, steps, stair cases, slabs,brackets etc. including hoisting and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand), cost of required centering, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 Cement : 3 fine sand) on exposed surfaces complete.but excluding the cost of reinforcement with						

SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
3.03.01	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	38	599229.26	0.00	15769.19	599229
3.04	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding with 16 gauge GI binding wire etc complete including cost, conveyance, lead, lift of all materials for all types of RCC works as per drawing/specification and as directed by Engineer-in-Charge at all levels. Thermo-Mechanically Treated bars	kg	18237	1400966.34	0.00	76.82	1400966
3.05	Centering and shuttering including strutting, propping etc. and removal of form for :						
3.05.01	Foundations, footings, bases of columns etc. for mass concrete.	sqm	282	79560.66	0.00	282.13	79561
3.05.02	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	sqm	83	34928.06	0.00	420.82	34928
3.05.03	Columns, Pillars, Piers, Abutments, Posts and Struts.	sqm	20	12707.20	0.00	635.36	12707
3.05.04	Edges of slab and breaks in floors and walls under 20 cms wide	m	989	145185.20	0.00	146.80	145185
3.05.05	Walls of (any thickness)including attached pilasters butteresses plinth and string course etc.	sqm	532	265132.84	0.00	498.37	265133
<b>TOTAL SUB HEAD-3.0</b>							<b>3693381</b>
<b>(SH: - 4.0 - MASONRY WORK)</b>							

SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
4.01	Providing and constructing Solid block masonry M-10 grade(mix 1:3:6)(1;cement ,3:crusher sand,6: 6mm metal) in C.M1:6(1cement, 6 coarse sand) with Solid blocks of 30x20x15 cm size and approved quality including scaffolding, raking out of joints,curing, cost and conveyance of all materials,labour, lead, lift, etc. complete for all types of masonry works in below the highest plinth level as directed by Engineer-in-Charge.	cum					
4.01.01	Supply	cum	33	0.00	71024.56	2152.26	71025
4.01.02	Fixing	cum	33	78405.38	0.00	2375.92	78405
4.02	Providing and constructing Solid block masonry M-10 grade(mix 1:3:6) (1;cement ,3:crusher sand,6: 6mm metal)in CM1:6(1cement, 6 coarse sand) with Solid blocks of 30x20x15 cm size and approved quality including scaffolding, raking out of joints,curing, cost and conveyance of all materials,labour, lead, lift, etc. complete for all types of masonry works in super structure above the highest plinth level as directed by Engineer-in-Charge at all levels						
4.02.01	Supply	cum	26	0.00	55958.75	2152.26	55959
4.02.02	Fixing	cum	26	94245.59	0.00	3624.83	94246

SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
4.03	Providing and constructing 115mm thick brick masonry in CM 1:4 (1 cement, 4 coarse sand) in partition walls, parapets, etc. with bricks of standard sizes and of approved quality (average compressive strength not less than 50 Kg/cm <sup>2</sup> ) including scaffolding, raking out of joints, curing, cost and conveyance of all materials, lead, lift, etc. complete including providing 2 Nos. of 8mm dia bars as reinforcement at every third layer wherever specified (Reinforcement shall be measured and paid for under relevant item) and as directed by Engineer-in-Charge	sqm	12	8892.48	0.00	741.04	8892
4.04	Extra for providing and placing in position 2 Nos. 6 mm dia M.S. bars at every third course of single block masonry at all levels including cost and conveyance of MS bars etc complete as directed by Engineer-in-Charge	sqm	12	974.40	0.00	81.20	974
4.05	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) at plinth level with cement mortar 1:6 (1 cement : 6 coarse sand) including raking out of joints, filling the joints /hollows with suitable sizes of split stones, filling the joints clearly, curing, cost and conveyance of all materials, cost of bond stone (should be provided at every 0.5 sqm of face area), lead, lift etc. complete as directed by Engineer-in-Charge at all levels.	cum	39	189570.81	0.00	4860.79	189571
4.06	Providing and constructing brick masonry in C.M 1:6 (1 cement, 6 coarse sand) with country burnt bricks of 22.9x11.2x7 cm size and approved quality (average compressive strength not less than 35 kg/cm <sup>2</sup> ) including scaffolding, raking out of joints, curing, cost and conveyance of all materials, labour, lead, lift, etc. complete for foundation, trenches, basement etc. below highest plinth level as directed by Engineer-in-Charge at all levels	cum	5	26109.60	0.00	5221.92	26110
<b>TOTAL SUB HEAD 4.0</b>							<b>525182</b>

Sl.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
<b>(SH: - 5.0 - JOINERY WORKS )</b>							
5.01	Providing and fixing powder coated aluminium work for doors ,windows& partitions with extruded built up standard tubular sections/appropriate Z sections & other sections of approved make confirming to IS:733 & IS:1285 fixed with rawl plugs & screws or with fixing clips including necessary filling up of gaps at junctions,at top,bottom & sides with required PVC/neoprene felt etc.Aluminium sections shall be smooth,rust free,straight,mitred & jointed mechanically where ever required including cleat angle,aluminium snap beading for glazing/panelling,cp brass/stainless steel screws all complete as per architectutal drawings & directions of Engineer-in-Charge at all levels.(glazing & panelling to be paid seperately).Minimum thickness of powder coating for powder coated Aluminium shall be 50 micron						
5.01.01	For fixed portion	kg	42	15911.28	0.00	378.84	15911
5.01.02	For shutter of doors ,windows & ventilators including providing and fixing hinges/pivots and making provision for fixing of fittings,exhaust fan of required size,etc wherever required including the cost of PVC neoprene gasket required(fittings shall be paid for separately)	kg	63	25305.21	0.00	401.67	25305
5.02	Providing and fixing glazing in aluminium doors,windows,ventilator shutters,partitions etc. with PVC/ neoprene gasket etc. complete as per the architectural drawings and the directon of Engineer-in-Charge at all levels						
5.02.01	with float glass panes of 4.00mm thickness	sqm	7	6828.57	0.00	975.51	6829



Sl.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
5.03	Providing and fixing IS:3564 marked Aluminium die cast body tubular type universal hydraulic door closer of approved make with necessary accessories and screws etc complete as directed by the Engineer-in-Charge at all levels.	no	3	5623.20	0.00	1874.40	5623
5.04	Providing and fixing 150 mm aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete as directed by Engineer -in-Charge at all levels.	no	3	151.53	0.00	50.51	152
5.05	Providing and fixing bright finished brass100mm mortice latch and lock ISI marked with 6 levers and a pair of anodised(anodic coating not less than grade AC 10 as per IS:1868)aluminium lever handles with necessary screws etc. complete at all levels.(best make of approved quality).	no	3	2972.46	0.00	990.82	2972
5.06	Providing and fixing 100 x 10 mm aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete as directed by the Engineer-in-Charge at all levels.	no	6	247.98	0.00	41.33	248

Sl.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
5.07	<p>Supplying and fixing FRP frames made of glass fibre conforming to IS:11551-1986, glass fibre rovings conforming to IS:11390-1985, isophthalic resin conforming to IS: 6746-1972, curing agents, accelerators, fillers, additives, fire retardants and pigments as specified. The frames shall be contact moulded by laying gelcoat at 500gm/m<sup>2</sup> and laid over with two layers of FRP mat (one layer of 300 CSM mat and one layer of 450 CSM mat). The CSM mat shall be bonded with isophthalic resin and fillers of additives by weight. The edges shall be sealed with gelcoat and FRP mat to obtain smooth finish. The frames shall have an overall size of 100x63mm including the thickness of FRP and shall be filled with seasoned treated rubber wood on the inside. Suitable depressions shall be made in the door frames for receiving the fixtures such as hinges, mortice lock as well as 30mm door shutter. (one number mortice lock at the centre and three numbers of 100mm heavy duty hinges).</p> <p>The rate shall include providing and fixing frames of approved colour for, providing and fixing 6 Nos. of flat iron hold fast of size 300mmx30mmx3mm using stainless steel screws, fixing in PCC 1:2:4 blocks, finishing the joints to match the surroundings and finishing the frames by buffing and polishing with wax as directed. (The contractor shall supply 1 No. of frames free of cost for every 10 Nos. of frames supplied at site or part thereof for destructive testing) The shutter shall be contact moulded by laying gelcoat at 500gm/m<sup>2</sup> and laid over with two layers of FRP mat (one layer of 300 CSM mat and another layer of 450 CSM mat) for each of the web (panels) and two layers of FRP mat (one layer of 300 CSM mat and another layer of 450 CSM mat) for the flange portion (rails and styles).</p>						

Sl.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
	<p>The CSM mat shall be bonded with isophthalic resin in the ratio of not less than 1:2 (one part of mat : 2 part of isophthalic resin and fillers and additives) by weight. The edges shall be sealed with gelcoat and FRP mat to obtain smooth finish. The shutter/frames shall have an overall thickness of 30mm with a width of 100mm for outer frames and 80mm for resin frames (as per drawings enclosed). The shutter frames shall be provided with treated and seasoned rubber-wood on the insides to receive the tower bolts, handle, mortise lock, hinges, door closers, etc. at specified locations. Suitable depressions shall be made in the shutter frames for receiving the hinges and concealed mortise locks. The rates shall include providing and fixing shutter of</p> <p>approved colour in the frames already provided and fixed, including fittings such as hinges, tower bolts, handles, door closers, mortice locks, etc. but excluding the cost of door fittings. The shutter shall be buffed and polished with wax as directed. The thickness of FRP laminate of hollow rails and styles shall be minimum 2mm and thickness of FRP laminate used for panel in shutter shall be minimum 3mm.(Mode of measurement: Length shall be taken as back to back of outer frame and the height shall be taken from the Sill to the top of the outer frame)</p>	sqm	9	0.00	53156.07	5906.23	53156

SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
5.08	Providing and fixing Ajanta windows, Top Hung ventilators fabricated from roll formed sections made of quality, galvanized steel, pre-painted(Base steel as per IS 513"D" quality, galvanised as per IS 277 with zinc of 120 grams per sq.mtr)with total coated thckness of 0.60mm. Section for outer frame should be of 46mm x 52mm , Section for shutter frame should be of 46mmx46mm, section for Mullion sections should be of 46mm x 70mm and section for glass beading should be of 18mm x 25mm All the sections should be cut needed length and metre joined with corner brackets made of CRCA with zinc phosphating, mullion, using mullion cap made of glass filled nylon. EPDM gaslets should be used all around glass in sutter and between outer frame caps driving MS electroplated 80 mm long screws in to the caps through outer frames using GI glazed shutters are connected to outer frames using GI powder coated friction hinges of 250mm long. the infill for shutters can be 4mm float glass of saint gobain/mosy make complete.	sqm	21	0.00	87321.57	4158.17	87322
5.09	Providing Gypsum board ceiling with ISI standard Gypsum board with alround cornices, supported by frame work made with G.I perimeter channels (MF6A) along the perimeter of ceiling and sides of RCC column, screwing to brick walls/RCC surface with the help of Nylon sleeves and screws at 600mm c/c, then suspending or fixing G.I. intermediate channels (MF7) at 1200mm c/c (or nearest spacing) with the help of G.I. hanger/ steel G.I.supports/G.I ceiling angles fixed to supports with G.I. cleat and steel expansion fastening, then the ceiling section (MFS) fixed to the intermediate channels for fixingGypsum sheet with the help of connecting clip and screws in both directions perpendicular to the intermediate channels at 400mm c/c at required level including cost and conveyance of all materials and labour charges, scaffolding charges, finishing the joints of the sheets with Gypsum powder paste finishing the surface to smooth mat finish painting one coat of white cement etc. complete for interior ceiling for all floors						

Sl.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
		sqm	100	0.00	69000.00	690.00	69000
5.10	Supply and installation of merino model type ZMS series or equivalent Changing cubicles consisting of high pressure 12mm thick compact laminate board with phenolic core panels for partitions of intermediate divider, doors and pilasters. The cubicle shall have following dimensions and a door size of 610mm width and 1750 mm height, the assembly shall be supported by black satin finish aluminium head rail on top of panels and panels shall fixed on the floor with a clearance of maximum 150mm using aluminium alloy satin finish adjustable legs screwed to the floor.						
5.10.01	1100 x 1800 mm	no	6	0.00	191056.32	31842.72	191056
<b>TOTAL OF SUB HEAD-5.0</b>							<b>457574</b>
<b>(SH: - 6.0 - STEEL WORK)</b>							
6.01	Structural steel work welded in built up sections, trusses and framed work including cutting, hoisting, fixing in position and applying two coats of Synthetic enamel paint over two coats of anticorrosive Yellow zinc chromate primer including cost and conveyance of all materials, labour charges, lead, lift etc complete as directed by Engineer- in-Charge at all levels.	kg	1193	91395.73	0.00	76.61	91396

SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
6.02	Steel work welded in built up sections/framed work including cutting hoisting, fixing in position and applying two coats of approved make and colour synthetic enamel paint over two coats of approved make anticorrosive yellow zinc chromate primer, etc. including cost and conveyance of all materials, labour, lead,lift etc. complete as directed by Engineer- in-Charge at all levels.						
6.02.01	In gratings, frames, guard bar, ladders, railings, brackets, gates & similar works.	kg	303	29945.49	0.00	98.83	29945
6.03	Structural steel work welded in single sections,trussess and framed work including cutting, hoisting, fixing in position and applying two coats of Synthetic enamel paint over two coats of anticorrosive Yellow zinc chromate primer including cost and conveyance of all materials,labour charges ,lead,lift etc complete as directed by Engineer in Charge at all levels.	kg	2208	150077.76	0.00	67.97	150078
6.04	Providing cast iron Gate as per drawing and fixing in position including painting with two coat of anticorrosive yellow zinc chromate primer and two coats of synthetic enamel paint of approved quality and colour, including cost and conveyance of all materials, labour charges etc, complete as directed by the Engineer in Charge		1440	0.00	122400.00	85.00	122400
<b>TOTAL OF SUB HEAD-6.0</b>							<b>393819</b>
<b>(SH: - 7.0 - FLOORING WORK)</b>							

SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
7.01	Providing and laying best quality vitrified tiles 10mm thick of approved colour ,make and patterns in flooring skirting, treads of steps, landings etc., including an underlayer of cement mortar 1:4 (1 cement : 4 coarse sand) 20mm thick and cement slurry @ 3.3kg of cement per sqm. Finished with flush cost and conveyance of all materials labour etc.complete as directed by Engineer-in-Charge at all levels Size of Tile 60x60 cm	sqm	63	84266.91	0.00	1337.57	84267
7.02	Providing and laying Antiskid Ceramic floor tiles 300x300x7 mm of 1st quality conforming to IS : 15622 of approved make,shade,and pattern laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and jointed with grey cement slurry @ 3.3 kg/sqm including pointing the joints with white cement and matching pigment etc.including cost and conveyance of all materials,labour charges,lead,lift etc, complete as directed by the Engineer in Charge at all levels.(The purchase price of tiles should be taken as Rs.401/sqm and any deviation plus or minus in the purchase price in approved shade will be adjusted in the price quoted)	sqm	39	39176.28	0.00	1004.52	39176
7.03	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622(thickness to be specified by the manufacture of approved make in all colours , shades except burgundy, bottle green, black of any size as approved by Engineer-in- charge in skirting, risers of steps and dados over 12mm thick bed of cement Mortar 1:3 (1 cement: 3 coarse sand) and jointing with grey cement slurry@ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	sqm	94	100014.12	0.00	1063.98	100014

SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
7.04	Providing and laying 80 mm thick High density cement concrete interlocking paver block of M - 40 grade as per IS:15658 2006 made by block making machine with strong vibratory compaction and of approved size and design/shape laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with coarse sand etc., all complete as directed by the Engineer-in-Charge.	sqm	1126	0.00	948190.53	842.09	948191
<b>TOTAL OF SUB HEAD-7.0</b>							<b>1171648</b>
<b>(SH: - 8.0 - ROOFING WORK)</b>							
8.01	Providing and fixing on wall face unplasticised - Rigid PVC rain water pipes conforming to IS : 13592 Type-A including jointing with seal ring conforming to IS:5382 leaving 10mm gap for thermal expansion.						
8.01.01	Single socketed pipes						
8.01.01.01	75mm diameter OD	m	15	2314.53	0.00	159.61	2315
<b>TOTAL OF SUB HEAD-8.0</b>							<b>2315</b>
<b>(SH: - 9.0 - FINISHING WORK)</b>							
9.01	12mm cement plaster of mix 1:4 (1 cement : 4 fine sand)including cost and conveyance of all materials, labour charges, scaffolding, sundries etc complete as directed by the Engineer in charge at all levels.	sqm	918	198921.42	0.00	216.69	198921



SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
9.02	15mm cement plaster of mix 1:4 (1 cement : 4 fine sand)including cost and conveyance of all materials, labour charges, scaffolding, sundries etc complete as directed by the Engineer in charge at all levels.	sqm	216	54594.00	0.00	252.75	54594
9.03	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement :5 coarse sand) finished with a top layer of 6mm thick cement plaster 1:3(1 cement:3 fine sand) finished rough with sponge including cost and conveyance of all materials, labour charges, scaffolding, sundries etc complete as directed by the Engineer in charge at all levels.	sqm	13	4259.06	0.00	327.62	4259
9.04	15mm cement plaster of mix, 1:3 (1 cement : 3 fine sand) finished with a floating coat of neat cement 2 kg/sqm including mixing water proofing material in separately).proportion recommended by manufacturer over roof at all heights including cost and conveyance of all materials, labour charges, scaffolding, sundries etc complete as directed by the Engineer in charge at all levels. (water proofing liquid will be paid extra)	sqm	150	47139.00	0.00	314.26	47139
9.05	Applying one coat of cement primer of approved brand and manufacture on wall surface including cost and conveyance of all materials, labour charges, scaffolding, sundries etc complete as directed by the Engineer in charge at all levels.	sqm	418	17961.46	0.00	42.97	17961
9.06	Finishing walls with acrylic smooth exterior paint for new work (Two or more coat applied @1.67 ltr/10 sqm over and including base coat of water proofing cement paint applied @ 2.20kg/ 10sqm including cost and conveyance of all materials, labour charges, scaffoldings etc complete as directed by the Engineer in Charge at all levels.	sqm	108	9184.32	0.00	85.04	9184

Sl.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
<b>TOTAL OF SUB HEAD-9.0</b>							<b>332059</b>
<b>(SH: - 10.0 - SANITARY INSTALLATION)</b>							
10.01	Supplying and fixing European type floor mounted white glazed WC with trap including seat cover, with CP brass hinges and rubber buffers, 10 litres capacity PVC low level white flushing cistern with fittings and brackets, 40mm dia PVC flush bend over flow pipe with mosquito proof arrangements,with all necessary fittings complete including cutting and making good the walls and floors etc. complete as directed by the Engineer-in-Charge. (The schedule rate considered for EWC is Rs.1250, seat & cover is Rs.390,cistern is Rs1120, with fittings and any deviation plus or minus in the purchase price will be adjusted in the price quoted).	no	7	36959.72	0.00	5279.96	36960
10.02	Providing and fixing wall hung wash basin of 540x480 mm size with C.I. brackets, 15 mm C.P. brass pillar cock, 32 mm C.P. brass waste of standard pattern,32mm diaCP brass bottle trap15 mm dia CP brass angle valve, including painting of fittings and brackets, cutting and making good the walls wherever required:(shade & make as approved by architect)including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge (The scheduled price considered for wash basin is Rs.632 pillar tap is Rs.325,bottle trap is Rs 1050,angle valve is Rs 430 and any deviation plus or minus in the purchase price will be adjusted in the price quoted).						
10.02.01	Supply of bottle traps (MR)	no	7	0.00	8537.03	1219.58	8537
10.02.02	Supply of other materials & Fixing	no	7	18810.44	0.00	2687.21	18810

SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
10.03	Providing and fixing white vitreous china flat back large urinal of 590x390x375 or nearest size of approved make with fittings, standard size CP brass flush pipe, spreaders with unions and clamps (all in CP brass) with waste fitting as per IS:2556, CI trap with outlet grating and other couplings in CP brass including paintings of fittings and brackets, cutting and making good the walls and floors wherever required.Single half stall urinals with 5 litre PVC automatic flushing cistern (The scehduled price considered for urinal is Rs.1610 and any deviation plus or minus in the purchase price will be adjusted in the price quoted).	no	4	32067.12	0.00	8016.78	32067
10.04	Supplying and fixing approved quality porcelain urinal division plate 700 x 340 including cost and conveyance of all material, labour charge, lead, lift, all taxes etc. complete as directed by the Engineer-in-Charge. (The scheduled price considered for division plate is Rs.479, and any deviation plus or minus in the purchase price will be adjusted in the price quoted).	no	3	1890.57	0.00	630.19	1891
10.05	Providing and fixing CP brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge at all levels						
10.05.01	15 mm nominal bore	no	7	3613.96	0.00	516.28	3614
10.06	Providing and fixing floor trap of PVC,110 mm outer dia(multi trap) including CP cockroach free floor grating with cup etc including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge at all levels						
10.06.01	supply	no	10	0.00	2323.00	232.30	2323

SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
10.06.02	fixing	no	10	1231.20	0.00	123.12	1231
10.07	Providing and fixing anodised aluminium tower rail of approved make including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge at all levels.(The schedule price considered is Rs 109/-any deviation plus or minus in the purchase price will be adjusted in the price quoted).	no	3	529.65	0.00	176.55	530
10.08	Providing and fixing CP brass health faucets with 8mm dia 1 meter long flexible tube and wall hook with all fittings and fixtures complete including cutting and making good the walls and floors wherever required including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge at all levels.(The schedule price considered including all accessories is Rs 532/-any deviation plus or minus in the purchase price will be adjusted in the price quoted).	no	7	4872.98	0.00	696.14	4873
10.09	Supplying, laying and jointing hard PVC pipes with PVC specials such as tees, bends, door bend, door tee, elbows,unions, etc. with clamps including cutting and making good the walls,testing the lines rectifying any leakages or defects,etc. complete as directed by the Engineer-in-Charge for soil, waste, rain water,drains, vent pipe, etc. concealed or open at all levels including cost and conveyance of all materials, labour charges, sundries etc complete for concealed work as directed by the Engineer- in-Charge						
10.09.01	110mm OD (6 kg/cm2)	m	14	6993.28	0.00	499.52	6993
10.09.02	75mm OD(6kg/cm2)	m	21	7062.93	0.00	336.33	7063
10.09.03	50mm OD(6 kg/cm2)	m	11	2788.17	0.00	265.54	2788

Sl.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
10.10	Supplying, laying and jointing hard PVC pipes with PVC specials such as tees, bends, door bend, door tee, elbows,unions, etc. with clamps including earth work, refilling, ,testing the lines rectifying any leakages or defects,etc. complete as directed by the Engineer-in-Charge for soil, waste, rain water,drains, vent pipe, etc. concealed or open at all levels including cost and conveyance of all materials, labour charges, sundries etc complete for external works as directed by the Engineer -in-Charge						
10.10.01	160mm OD(6 kg/cm2)	m	18	9904.68	0.00	550.26	9905
10.10.02	110mm OD(6 kg/cm2)	m	12	5267.16	0.00	438.93	5267
10.10.03	75mm OD(6 kg/cm2)	m	6	1475.76	0.00	245.96	1476
10.10.04	50mm OD(6 kg/cm2)	m	6	1069.44	0.00	178.24	1069
10.10.05	40 mm OD(6 kg/cm2)	m	6	939.12	0.00	156.52	939
10.10.06	32 mm OD(8 kg/cm2)	m	6	885.48	0.00	147.58	885
10.11	Providing and fixing PVC vent cowl to pipe already fixed as directed by Engineer-in-Charge at all levels.						
10.11.01	110 mm dia	no	1	92.92	0.00	92.92	93
10.12	Providing and fixing mirror of superior glass (of approved quality) ,and of required shape and size with plastic moulded frame of approved make and shade with 4.5 mm thick hard board backing.						
		no	3	2374.02	0.00	791.34	2374

SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
10.13	porcelain Soap tray (The schedule price considered including all accessories is Rs.164/- and any deviation plus or minus in the purchase price will be adjusted in the price quoted)	no	3	574.14	0.00	191.38	574
<b>TOTAL OF SUB HEAD-10.0</b>							<b>150263</b>
<b>(SH: - 11.0 - WATER SUPPLY)</b>							
11.01	Supplying, laying, and jointing schedule 40 UPVC ASTM pipe and Schedule 80 ASTM-UPVC specials of approved make such as tees elbows, unions,bends,sockets bends,flanges, reducers, end caps,saddles, plugs,coupling, etc. including cost of all jointing materials like solvent cement, bolts, nuts, rubber washers,ferrule,pipe supports, cost of extra wastage of fittings during laying of pipe line such as rectification and recharging of the existing line as and when required etc.hire of tools and plant, cost and conveyance of water for testing after connecting to mains including all testing pipe line to the specified hydrostatic test pressure,rectifying any leakage or defects etc. complete.as directed by Engineer-in-Charge for water supply.						
11.01.01	63 mm dia ID						
11.01.01.01	supply	m	5	0.00	1794.95	358.99	1795
11.01.01.02	fixing	m	5	246.75	0.00	49.35	247
11.01.02	50 mm dia ID						
11.01.02.01	supply	m	65	0.00	14346.26	219.70	14346
11.01.02.02	fixing	m	65	3222.70	0.00	49.35	3223

SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
11.01.03	40 mm dia ID						
11.01.03.01	supply	m	6	0.00	985.24	164.21	985
11.01.03.02	fixing	m	6	159.20	0.00	26.53	159
11.02	Supplying, laying, jointing and hydrostatically testing ISI marked PVC pipes as per IS 4985 and specials such as Tees, elbows,bends,flanges, reducers, end caps,saddles, plugs,coupling, etc. as per IS 7834 or IS 10124as the case may be including cost of all jointing materials like solvent cement, bolts, nuts, rubber washers,ferrule,pipe supports, cost of extra wastage of fittings during laying of pipe line such as rectification and recharging of the existing line as and when required etc.hire of tools and plant, cost and conveyance of water for testing after connecting to mains including all testing charges,rectifying any leakage or defects, cutting and making good the walls etc. complete.as directed by Engineer-in-Charge for <b>concealed</b> lines for water supply.						
11.02.01	32 mm OD (10 kg/cm <sup>2</sup> )	m	11	2493.65	0.00	237.49	2494
11.02.02	25 mm OD (10 kg/cm <sup>2</sup> )	m	28	6275.64	0.00	224.13	6276
11.02.03	20 mm OD (10 kg/cm <sup>2</sup> )	m	14	2970.24	0.00	212.16	2970
11.03	Providing and fixing gun metal gate valve with C.I. Wheel of approved quality (screwed end) including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer- in-Charge at all levels						
11.03.01	65 mm dia nominal bore						

SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
11.03.01.01	supply	no	1	0.00	8339.58	8339.58	8340
11.03.01.02	fixing	no	1	39.70	0.00	39.70	40
11.03.02	32 mm dia nominal bore	no	2	1593.38	0.00	796.69	1593
11.03.03	25 mm dia nominal bore	no	2	1216.98	0.00	608.49	1217
11.04	Supplying approved make PVC gully trap and CI grating 300mmx300mm size and light duty C.I cover and frames 500mmx500mm of weight not less than 21kg each(CI MH cover and frame as per IS:1726) single sealed of size conveying to size the above mentioned items and constructing 50cmx50cm internal size gully trap chamber and depth upto 60cm,230 thk brick wall in CM 1:6 on a foundation of PCC 1:4:8.100mm thick plastering inside with CM 1:3,12mm thk with a neat cement flushing coat and conveying to site,cleaning ,installing and testing approved make PVC gully trap with 160mm outlet(Fabricated),surrounding with CC 1:1.5:3, 150x150mmm,top with CI grating above the PVC gully trap and light duy CI cover and frame over the chamber including cost of all materials, etc complete as per approved drawing and as directed by Engineer-in- Charge	no	2	5938.14	0.00	2969.07	5938
11.05	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI:12701 marked indicating the BIS License No. with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge in multiple nos wherever required	ltr	2000	0.00	13940.00	6.97	13940



SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
11.06	Constructing brick masonry manhole with 75 class designation bricks in cement mortar 1:4 (1 Cement : 4 coarse sand) R.C.C. top slab with 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) foundation concrete with 1:4:8 mix (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 (1 Cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer-in-Charge						
11.06.01	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :						
	With bricks.Class designation 75	no	4	43739.68	0.00	10934.92	43740
11.07	Constructing soak pit 2 x 1.5 x1.5 m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20 m long complete as per standard design.	no	1	8284.39	0.00	8284.39	8284
11.08	Supplying and fixing of bore well submersible pump, with CI construction, CI impeller complete with motor, base plate, foundation bolts, nuts, pressure guage and all accessories. and working with 415V, 3ph and 50 Hz frequency Capacity : 5 m3/hr Head 150 m						
	supply	no	1	0.00	32858.84	32858.84	32859
	fixing	no	1	979.17	0.00	979.17	979

Sl.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
<b>TOTAL OF SUB HEAD-11.0</b>							<b>149424</b>
<b>(SH: - 12.0 - MISCELLANEOUS BUILDING WORK)</b>							
12.01	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement in position to the required line, level and curvature jointed with cement mortar 1:3 (1 cement: 3 coarse sand) including making joints with or without grooves(thickness of joints except at sharp curve shall not to more than 5mm) including making drainage opening wherever required complete etc. as per direction of Engineer-in-Charge (length of finished kerb edging shall be approved by Engineer-in-Charge).	cum	27	249689.25	0.00	9247.75	249689
12.02	Side boundary fencing work with PVC coated chain link fencing in 3m height including all charges for providing 40 mm GI pipes @2.70 meters c/c as verticals fixed to ground using PCC , other horizontal members with 25 mm dia GI pipe at top, bottom and at middle (total 3 numbers), fixing the chain link in the frame work, with provision for one number of door on either short sides with provision for lock & key arrangements.						
12.02.01	supply	sqm	1080	0.00	446597.73	413.52	446598
12.02.02	fixing	sqm	1080	560675.24	0.00	519.14	560675
12.03	Supplying and stacking at site good quality red earth including royalty and carriage upto 1 km .(red earth measured in stacks will be reduced by 20 % for payment.)	cum	491	251519.66	0.00	512.26	251520

Sl.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
12.04	Supplying and stacking at site good quality sludge including royalty and carriage upto 1 km .( Sludge measured in stacks will be reduced by 8 % for payment.)	cum	123	63007.98	0.00	512.26	63008
12.05	Supplying and stacking at site dump manure from Badli or approved source,including carriage upto 1 km .( Manure measured in stacks will be reduced by 8 % for payment.)		123	27090.75	0.00	220.25	27091
12.06	Preparation of beds for hedging and shrubbery by excavating 60cm deep and trenching the excavated base to a further depth of 30cm spreading refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio 8:1 (8 parts of stacked volume of earth after reduction by 20%:one part of stacked volume of sludge or manure after reduction by 8 %),flooding with water,filling with earth if necessary,watering and finally fine dressing,levelling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and levelling as directed,within a lead of 50 m lift upto 1.5 m complete(cost of sludge,manure or extra earth to be paid separately).	cum	735	112609.35	0.00	153.21	112609
12.07	Planting shade/buffalo grass seedlings over the red earth and sand bed closely to get a thick grass lawn suitable for ground, keep the area moisture by spraying and sprinkling after till the grass gets sufficient deep roots cutting to level the top surface, trimming and dressing etc. complete. directed by Engineer - in Charge						
12.07.01	supply	sqm	7350	0.00	918925.37	125.02	918925
12.07.02	fixing	sqm	7350	113602.63	0.00	15.46	113603

Sl.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
12.08	Boring/drilling in all soils including hard rock, sand stone and boulder with DTH Rig including hire charges, loading unloading, transportation, power and all cost of materials for drilling borewell to obtain an ensured output of potable water at the rate of 6m3/hr making. Strata charts etc complete as per direction of the Engineer-in-charge. 160mm- 200mm dia borehole for depth upto 100m (254mm dia bore hole upto hard rock level 100mm dia bore hole for remaining depth.	no	1	0.00	54625.00	54625.00	54625
12.09	Supplying, assembling, lowering and fixing in vertical position ISI marked PVC casing pipe, MW type as per IS 12818-1992 with threaded socketed ends as required and of approved brand and manufacturer all complete as per directions of the Engineer-in- Charge						
12.09.01	160 mm dia						
12.09.01.01	supply	m	100	0.00	74750.00	747.50	74750
12.09.01.02	fixing	m	100	74750.00	0.00	747.50	74750
12.10	Supplying,threading,laying and jointing GI C Class pipes and specials such as tees, bends,elbows,checknuts, etc with clamps including cutting and making good the walls, painting with suitable paint two coats, etc complete 50 mm dia						
12.10.01	supply	m	120	0.00	63113.01	525.94	63113
12.10.02	fixing	m	120	15515.79	0.00	129.30	15516
12.11	Supplying, fixing, testing and commissioning of Trolley mounted Rain						

SI.No	Description Of Items	Unit	Qty	SR	MR	Rate in Figures (Rs)	Amount(Rs)
	Gun irrigation system including the cost of different nozzles for adjusting discharge as well as radius. The rate includes cost of necessary pump set, pipe lines , rain gun 2 nos with 15m hose, necessary trolley etc all materials, labour etc complete and as per the directions of the Engineer-in-charge Pressure 4.5 kg/ cm2 , Head 55 m, discharge 9 lps, radius 35m	no	1	0.00	489376.80	489376.80	489377
12.12	Providing and laying 160mm dia PVC perforated pipe including excavation, back filling, sand filling above pipe, wrapping with jute bag etc. complete	m	525	303197.32	0.00	577.52	303197
12.13	Providing and applying acrylic reinforced cementitious waterproof coating Masterseal 550 EL, in two coats to achieve 1mm thickness. Concrete surfaces should be free of dust, oil and other contaminants. All high spots should be removed. Moss and lichen must be removed physically. After treatment wash down thoroughly with clean water and allow to dry. Prewetting the surface before applying the water proofing material. The rate shall including cost and conveyance of all materials, all labour charges, all taxes, lead, lift, sundries, etc., etc complete as directed by the Engineer - in - charge	sqm	101	0.00	48098.22	476.22	48098
<b>TOTAL OF SUB HEAD-12.0</b>				<b>8637637.37</b>	<b>3776718.82</b>		<b>3867144</b>
<b>TOTAL -PART A -CIVIL WORKS</b>							<b>12414356</b>

**KITCO LTD**  
**NATIONAL GAMES SECRETARIAT**  
**CONSTRUCTION OF JIMMY GEORGE STADIUM AT ST. JOSEPH'S HIGH SCHOOL, PERAVOOR, KANNUR**  
**SPECIFICATION AND SCHEDULE OF QUANTITIES-PART B- ELECTRICAL WORKS**

SI.No	Description	Unit	Qty	Rate in Figures (Rs)	Amount in Rs.
	<b>PART A</b>				
1.0	<b>LT PANEL BOARD METER BOARD</b>				
	Supply, installation, testing and commissioning of Energy meter box of cubicle construction with two compartments made from 1.6mm CRCA sheet suitable for accommodating one number of three phase Electronic Energy meter and 3 nos.63A HRC fuse and neutral link , inter connections , providing necessary supports made from the same gauge CRCA sheet to fix energy meters, etc in one compartment.One No. 63 A FP MCB isolator is provided in the second compartment.The cubicle shall be provided with hinged door construction and vision panel for the meter compartment.Suitable knock out for cable entry and exit shall be provided.The entire board shall be painted with 2 coats of synthetic enamel paint over a coat of zinc chromate primer etc as required including fixing it on wall, making good the damages colour washing etc. as required. CRCA sheet alone be used for the fabrication. Angles/ flats/ slotted angles etc shall not be used for the fabrication of main housing of meter board.	no	1	6467.00	6467.00
	<b>SUB TOTAL PART -A</b>				<b>6467.00</b>
	<b>PART B</b>				
2.0	<b>WIRING AND ACCESSORIES</b>				
	Supply and wiring for following points in surface mounted rigid medium gauge 20mm PVC conduit with all accessories, using 3 runs of 1.5 sqmm FRLS PVCinsulated stranded copper conductor single core wire for phase, neutral & earth, with modular 6A one way switch, modular front plate, suitable GI box, ceiling rose etc as required. The total distance from the switch box to the point will not exceed 5mtr, incase if length increases above 5 metres, the wiring shall be measured under item 2.5				
2.1	Light point/ exhaust fan point/call bell point	no	21	1170.00	24570.00

2.2	<b>Group controlled light point</b> with 1.5 sq. mm wire - Wiring for Group controlled light point (from one point to another point) with 1.5 sq. mm FRLS PVC insulated, copper conductor cable along with 1x1.5 sq. mm., PVC insulated, copper conductor, stranded cable for loop earthing in surface / recessed PVC conduit. Note:- This item does not include the cost of MCB or 16Amp/ 6Amp one way switches. The total distance from one point to another point will not exceed 5meters. In case if the total length increases 5meters, the additional length shall be measured under item 2.5 The distance from DB to 1st point will be measured under item circuit wiring.	no	2	1047.00	2094.00
2.3	Supply and wiring of Circuit Wiring with 2X4 sq.mm. PVC insulated, copper conductor, stranded cable in surface 25mm dia PVC conduit along with 1 no.2.5 sq. mm. PVC insulated copper wire for loop earthing as required.	m	20	272.00	5440.00
2.4	Supply and wiring of Circuit Wiring with 2X2.5 sq.mm. PVC insulated, copper conductor, stranded cable in surface 25mm dia PVC conduit along with 1 no.1.5 sq. mm. PVC insulated copper wire for loop earthing as required.	m	70	222.00	15540.00
2.5	Supply and wiring of Circuit Wiring with 2X1.5 sq.mm. PVC insulated, copper conductor, stranded cable in surface 20mm dia PVC conduit along with 1 no.1.5 sq. mm. PVC insulated copper wire for loop earthing as required.	m	20	202.00	4040.00
2.6	Supply & fixing suitable size GI box with modular front plate and cover on surface , including providing & fixing 2/3 pin combined 6A modular socket outlet and 6A modular switch with connection etc as required.	no	8	464.00	3712.00
2.7	Supply & fixing suitable size GI box with modular front plate and cover on surface or in recess, including providing & fixing of 16A modular switch with connection etc as required.	no	2	367.00	734.00
2.8	Supply & fixing suitable size GI box with modular front plate and cover on surface or in recess, including providing and fixing of 3pin 16A modular socket outlet with connection etc as required.	no	2	440.00	880.00

2.9	Supply, fixing and termination of <b>Data socket outlet</b> (RJ45, UTP, cat 6) modular type in suitable size GI box with modular plate & cover in front on surface with all connection & necessary accessories as required.	no	1	471.00	471.00
2.10	Supply & fixing <b>Computer point</b> suitable size GI box with modular front plate and cover on surface, including providing and fixing of 3 nos 6A socket with 2no.6A switch with connection etc as required.	no	1	938.00	938.00
2.11	Supply and fixing of telephone point <b>RJ11(one module)</b> with suitable metal box, front plate and all other required accessories.	no	2	338.00	676.00
2.12	Supply and fixing of <b>TV Co axial socket(one module)</b> with suitable metal box, front plate and all other required accessories.	no	1	338.00	338.00
2.13	Supply & fixing of following rigid medium gauge PVC conduit along with all accessories in surface/recess including cutting the wall and making good the same in case of recess mounting as required.				
2.13.1	20 mm	m	20	114.00	2280.00
2.13.2	25 mm	m	20	124.00	2480.00
2.14	Supply, laying & termination of following PVC insulated PVC sheathed 0.5mm dia copper conductor telephone cable unarmoured conforming to ITD specification in 20mm dia rigid PVC conduit with all necessary accessories etc as required. 2 Pair	m	50	46.00	2300.00
<b>SUB TOTAL (PART B)</b>					<b>66493.00</b>

**PART - C**

**3.0 MCBs AND MCB DISTRIBUTION BOARDS**

Supply and installation of sheet steel, phosphatised and painted, dust and vermin proof enclosure of MCB DB including copper/brass bus bar, neutral link, earth bus and DIN rail suitable for fixing MCB/isolator etc. fixed on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall, making good the damages, colour washing etc. as required

3.1



3.1.1	6 way (8+18) - double cover TPN <b>vertical DB</b> with provision for fixing Isolator /RCBO as incomer and SP/TP MCB as outgoing (IP43) Note: There should be facility to terminate incoming cables of size upto 35 sq.mm AYFY and outgoing cables of size upto 4x16 sq.mm AYFY.	no	1	6057.00	6057.00
3.1.2	12 way -single phase double cover (IP 42/43)	no	2	1655.00	3310.00
3.2	Supply and fixing of following rating residual current circuit breaker having earth leakage protection ( <b>RCBO</b> ) as per specification as required				
3.2.1	2 pole 32amps. (240 Volts), 30mA sensitivity	no	2	2467.00	4934.00
3.3	Supply and fixing of following rating, 10 KA, <b>Miniature circuit breakers</b> of the following series as required.				
3.3.1	63A, FP B/C-Curve	no	1	1230.00	1230.00
3.3.2	6A to 32A, SP, B/C Curve	no	5	213.00	1065.00
3.3.3	6A to 32A, TP, C Curve MCB	no	2	846.00	1692.00
3.3.4	63 A FP MCB isolator	no	1	826.00	826.00
3.3.5	Supply and fixing of MCB blanking plate	no	3	25.00	75.00
3.4	Supply and fixing of Fully automatic star Delta starter suitable for 10 HP motor with SPP in a suitable enclosure and giving all other necessary connections as required.	no	1	5361.00	5361.00
3.5	Supply and fixing of DOL starter suitable for 5HP motor with SPP in a suitable enclosure and giving all other necessary connections as required .	no	1	1928.00	1928.00
3.6	Supply and fixing cable end boxes for the following types of DB with necessary bolts and nuts etc. as required .				
3.6.1	Suitable for all IP 43, VTPN DB (Group B)	no	1	917.00	917.00
	<b>SUB TOTAL (PART C)</b>				<b>27395.00</b>

#### PART D

#### 4.0 LIGHT FIXTURES AND FANS

##### Part 1: SUPPLY

4.1	Supply of <b>1x28W</b> surface mountable single fluorescent luminaire, suitable for 1x28W lamp, electronic ballast prewired and complete with all necessary accessories including one 1x28W T5 lamps. (Sample shall be approved by the engineer in charge)	no	9	592.00	5328.00
4.2	Supply of <b>1x14W</b> surface mountable single fluorescent luminaire, electronic ballast suitable for 1x14W lamp, electronic ballast prewired and complete with all necessary accessories including one 1x14W T5 lamps. ((Sample shall be approved by the engineer in charge)	no	7	545.00	3815.00
4.3	Supply of <b>2x18W</b> recess mountable luminaire with housing made of single piece powder coated CRCA sheet steel , suitable for 1x18W lamp, electronic ballast prewired and complete with all necessary accessories including 2 nos. of 1x18W CFL lamps. (Sample shall be approved by the engineer in charge)	no	3	3194.00	9582.00
4.4	Supply of <b>2x18W</b> recess mountable downlighter with centre frosted glass cover, suitable for 18W CFL, electronic ballast, prewired and complete with all necessary accessories including 2 nos. of 1x18W CFL lamps. (Sample shall be approved by the engineer in charge)	no	2	1374.00	2748.00
4.5	Supply of out door decorative wall bracket suitable for 1 x 12 W CFL , including 12W CFL lamp etc complete. ( Philips Outerstylers16245/87 or equivalent approved make )	no	2	1876.00	3752.00
4.6	Supply, Instalation,Testing and Commissioning of Hot dip galvanised MS tubular swaged pole of total length 8.5m fabricated with following dia pipes 114.3x4.5 (Bottom), 88.9X4.05(middle), 76.1x3.25(top) and sectional length of (4+1.5+3) with a bottom plate of size 300x300x6mm with (single bracket)swan neck including bending to shape the top pipe section with over hang of 1.5 m,erecting the same in cement concrete foundation including supply and fixing 1no street light luminaire with MH lamp 1 X 250W MH (IP 65) luminaire,as required complete with IP 65 protection. (Sample shall be approved by the engineer in charge)	no	9	31118.00	280062.00

4.7	Supply of <b>ceiling fan</b> , with double ball bearing, Aluminium pressure die cast body with Aluminium blades, canopies, hanging shackle, 30 cm down rod and without speed regulator suitable for 230 V/240 V 50 HZ, AC supply confirms to IS 374/1979 as required complete. 1200mm sweep	no	0	1731.00	0.00
4.8	Supply of wall mounting fan of the following sizes using mounting brackets supplied along with the fan and giving connection with existing wire. 400mm sweep	no	2	2092.00	4184.00
4.9	Supply of <b>pedestal fan</b> having speed control, oscillation control and suitable for operation on single phase 230 volt, 50Hz AC supply complete with continuous duty motor, chrome plated front and rear guards and all accessories as required complete.	no	1	2480.00	2480.00
4.10	Supply, of the following sizes of <b>exhaust fans</b> in the existing opening, fixing necessary bolt and nuts, making good the damages etc. as required including giving connections with required length of 24/0.20mm PVC insulated and PVC sheathed 3 core round copper conductor flex wire conforming to relevant ISS (Sample shall be approved by the engineer in charge) 250mm, single phase, light duty exhaust fan in plastic body with self opening louvers	no	3	1594.00	4782.00

**Part 2 : ITC**

4.11	Installation, testing and commissioning of prewired fluorescent fitting /CFL of all types complete with all accessories and fluorescent lamps of all types directly on wall and giving connections with 16/0.20 mm 3 core PVC insulated and sheatherd round copper conductor flex wire or extending the original wiring and giving connections as required.	no	18	125.00	2250.00
4.12	Installation, testing & commissioning of prewired, fluorescent / CFL light fittings of all types, with chain mounted complete with all accessories and tubes etc recess mounted to false ceiling,including connection with 1.5sqmm PVC insulated copper conductor single / three core cable etc as required.	no	5	176.00	880.00

4.13	Installation, testing and commissioning of <b>wall fan</b> , wiring the down rod of standard length (upto 30cm) with 1.5 sq.mm PVC insulated copper conductor single core cable including earthing the regulator etc. as required.	no	2.00	136.00	272.00
4.14	Installation, testing and commissioning of <b>exhaust fan</b> upto 450mm sweep including making the hole to suit the size of the above fan, making good the damage, connections, testing & commissioning etc as required.	no	3	711.00	2133.00
4.15	Numbering of ceiling fan / exhaust fan/ fluorescent fitting as required.	no	23.00	31.00	713.00
<b>SUB TOTAL (PART D)</b>					<b>322981.00</b>

**PART -E**  
**CABLES AND CABLING**

5.0	<b>PART -E</b>				
5.0	<b>CABLES AND CABLING</b>				
5.1	Supply of following size 1.1 KV grade XLPE insulated, PVC sheathed, armoured Aluminium /copper conductor cable conforming to IS 7098 (Part 1) amended upto date.				
5.1.1	3.5C 35 Sq.mm Al	m	10	255.00	2550.00
5.1.2	3C 2.5Sq.mm Al	m	570	95.00	54150.00
5.1.3	3C 6 Sq.mm Al	m	100	122.00	12200.00
5.1.4	3C 4 Sq.mm Al	m	100	95.00	9500.00
5.1.5	2C 10 Sq.mm Al	m	90	115.00	10350.00
			870		
5.2	Supplying and making end termination with brass compression gland and aluminium/Copper lugs for following size of XLPE insulated PVC sheathed aluminium conductor cable of 1.1 kV grade as required.				
5.2.1	3.5C 35 Sq.mm Al	no	2	407.00	814.00
5.2.2	3C 2.5 Sq.mm Al	no	18	292.00	5256.00
5.2.3	3C 4 Sq.mm Al	m	2	293.00	586.00
5.2.4	3C 6 Sq.mm Al	no	2	298.00	596.00
5.2.5	2C 10 Sq.mm Al	no	4	306.00	1224.00

5.3	Supply, laying and clamping of 1no. PVC insulated and PVC sheathed armoured power cable, 1.1KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages colour washing etc. as required				
5.3.1	Cable size not exceeding 25Sq mm	m	15	95.00	1425.00
5.3.2	Cable size exceeding 25Sq mm but not exceeding 120sq. Mm	m	3	145.20	436.00
5.4	Laying of one number PVC insulated and PVC sheathed armoured power cable of 1.1kV grade fo the following sizes in ground including excavation of trench of size 35x75cm, sand cushioning up to a height of 25cm (80+170mm), providing protective covering with country burnt bricks laid breadth wise, refilling the trench etc. as required ( in ordinary soil)				
5.4.1	Cable size not exceeding 25Sq mm	m	730.00	234.00	170820.00
5.4.2	Cable size exceeding 25Sq mm but not exceeding 120sq. Mm	m	5	269.00	1345.00
5.5	Laying of one number additional PVC insulated and PVC sheathed armoured power cable of 1.1KV grade of the following sizes in ground in the same trench in one tier horizontal formation including widening the trench by 20 cm,sand cushioning up to the height of 25 cm,providing protective covering with country burnt bricks laid breadth wise refilling the trench etc. as required				
5.5.1	Upto 25 Sq.mm	m	20.00	149.00	2980.00

5.6	Laying of one number PVC insulated and PVC sheathed armoured power cable of 1.1kV grade fo the following sizes in the existing RCC/HUME/STONEWARE/GI/DWC pipe as required				
5.6.1	Cable size not exceeding 25sq mm	m	95	45.00	4275.00
5.6.2	Cable size exceeding 25 sq mm but not exceeding 120sq mm	m	2	62.00	124.00
5.7	Supplying, threading, laying and jointing of the following sizes of 'B' class GI pipe with all required accessories in ground in the existing trench as protective covering to earth leads.				
5.7.1	40 mm	m	20	259.00	5180.00
5.7.2	50 mm	m	10	304.00	3040.00
<b>SUB TOTAL PART -E</b>					<b>286851.00</b>

**PART -F**

**6.0 EARTHING AND SAFETY EQUIPMENTS**

6.1	Supply and providing ISI pipe earthing as per IS 3043 with 4.5 meter long 40mm dia B class GI pipe with 12mm dia holes, providing GI funnel with weld mesh, fixing GI strip of size50x6mm with min. length of 20cm clamped with 50x5mm GI flat using 12x10mm GI bolt & nut at top of the GI pipe as test joint, filling around the GI pipe at a radius of 15cm with a homogeneous of charcoal, & sieved earth upto a height of 2.0 meter from the bottom, filling the rest of the portion with excavated soil including watering and ramming providing brick work (20cm) masonry at top in 1:6 cm cement mortar,plastering the inside and top of the manhole with 12mm thick 1:6 cement mortar and providing 300x300x6mm CI covering at the top.	no	4	5635.00	22540.00
6.2	Supplying and laying following GI or copper strip / wire at 0.6m below ground level including excavation and refilling or on surface with mounting saddles for conductor earth electrode including welding etc as required.				
6.2.1	25x3 mm copper strip tinned at the points of contacts	m	25.00	476.00	11900.00
6.2.2	3.15mm copper conductor (10 SWG)	m	50.00	83.00	4150.00
6.2.3	4 mm copper conductor (8 SWG)	m	570.00	34.00	19380.00

**SUB TOTAL PART -F** **57970.00**

**TOTAL - ELECTRICAL WORKS** **768157.00**

**NATIONAL GAMES SECRETARIAT**

**CONSTRUCTION OF JIMMY GEORGE STADIUM AT ST.JOSEPH'S HIGH SCHOOL, PERAVOOR,  
KANNUR**

**ABSTRACT OF ESTIMATE**

<b>Description</b>	<b>Amount (Rs.)</b>
PART A : Civil Works	12414356
PART B : Electrical works	768157
<b>TOTAL</b>	<b>13182513</b>
Deduct value of market rate items	4000526.00
Amount after market rate items	9181987.00
Add value of market rate items	4000526.00
<b>TOTAL PAC</b>	<b>13182513.00</b>

**(Rupees One crore Thirty One Lakhs Eighty Two Thousand Five Hundred and Thirteen Only)**

I/We agree to carry out the work at par with estimate (1) at estimate rate .....

(2).....% above the estimate (in figures & words)

.....

(3)..... % below the estimate (in figure & words)

.....less cost of market rate item and L/S items.

Tender excess / Deduction will not be applicable for market rate items

Witness

Name.....

Address.....

Signature of Contractor