

KITCO LTD
NATIONAL GAMES SECRETARIAT
CONSTRUCTION OF Modular SWIMMING POOL At Kollam,Corporation
SPECIFICATION AND SCHEDULE OF QUANTITIES

SI.No	Description Of Items	Unit	Quantity	Rate(Rs)	Amount(Rs)
(SH : - 1.0 - EARTHWORK)					
1.01	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	5.00	296.78	1484.00
1.02	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	538.00	301.03	161954.00
1.03	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	11.00	548.33	6032.00
1.04	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	4.00	126.99	508.00
1.05	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	2.00	74.45	149.00
TOTAL OF SUB HEAD -1.0					170127.00
(SH: - 2.0 - CONCRETE WORK)					
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	35.00	4991.08	174688.00
TOTAL OF SUB HEAD -2.0					174688.00
(SH: - 3.0 - R.C.C. WORK)					
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	3.00	7670.40	23011.00

Tenderer

Chief Engineer

SI.No	Description Of Items	Unit	Quantity	Rate(Rs)	Amount(Rs)
3.02	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	7000.00	76.52	535640.00
3.03	Centering and shuttering including strutting, propping etc. and removal of form for :				
3.03.01	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	sqm	11.00	420.57	4626.00
TOTAL SUB HEAD-3.0					563277.00
(SH: - 4.0 - MASONRY WORK)					
4.01	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	cum	23.00	5526.78	127116.00
4.02	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	6.00	4403.27	26420.00
4.03	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 ²) 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	1.00	4589.27	4589.00
TOTAL SUB HEAD 4.0					158125.00
(SH: - 5.0 - FLOORING WORK)					
5.01	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 SOR 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	202.00	989.99	199978.00
5.02	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	93.00	1054.99	98114.00

Tenderer

Chief Engineer

SI.No	Description Of Items	Unit	Quantity	Rate(Rs)	Amount(Rs)
5.03	Providing and laying 16 to 20 mm thick polished granite slab with edge rounding & polishing if required of approved colour,make and pattern on floors, top of counter slabs, 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 pointing using approved joint filler of matching shade including cost and conveyance of all materials labour etc.complete as directed hv Fnngineer-in-Charge at all levels	sqm	16.00	3505.19	56083.00
5.04	Supply and install Polythene sheet of 800gage upon compacted soil,including labour. The rate includes all costs of materials , conveyance and labour. Work to be executed as per specifications	sqm	351.00	32.00	11232.00
5.05	Supply and Apply/coat with British standard cementitious water proofing material of approved make inside of the entire pool. The rate includes all costs of materials , conveyance and labour. Work to be executed as per specifications	sqm	421.00	550.00	231550.00
5.06	Supply and fix dark colour glass mosiac tiles for making 4 lanes track as per the drawing and dimension. The rate includes all costs of materials , conveyance and labour. Work to be executed as per specifications	sqm	8.00	980.00	7840.00
5.07	Providing and laying vitrified/glass mosaic floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS:15622 of approved make in all colours and shades, laid on cement base high polymer modified quick set tile adhesive (water based) conforming to IS:15477, using 5kg. adhesive per sqm of tile area, in average 3mm thickness, filling the joints with matching epoxy filler complete as directed by Engineer in charge, complete	sqm	313.00	980.00	306740.00
TOTAL OF SUB HEAD-5.0					911537.00
(SH: - 6.0 - FINISHING WORK)					
6.01	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	sqm	421.00	302.64	127411.00
TOTAL OF SUB HEAD-6.0					127411.00

SI.No	Description Of Items	Unit	Quantity	Rate(Rs)	Amount(Rs)
(SH: - 7.0 - SANITARY INSTALLATION)					
7.01	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 purchase price 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	4.00	5279.96	21120.00
7.02	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require : White Vitreous China Angle back wash basin size 400x400 mm with single 15 mm C.P. brass pillar tap.	no	4.00	3718.88	14876.00
7.03	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. rectangular mirror 450 x 300 mm	no	4.00	791.340	3165.00
7.04	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 15 mm nominal bore	no	12.00	516.28	6195.00
7.05	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	no	14.00	355.42	4976.00
7.06	Providing and fixing CP Towel 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 sor price considered is Rs 109/-any deviation plus or minus in the purchase price will be adjusted in the price quoted).	no	10.00	176.55	1766.00
7.07	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	4.00	695.98	2784.00
7.08	Providing and fixing premium quality C.P. brass overhead shower 4" and wall flange of approved make and model including cost of all materials, labour etc., complete as directed by the Engineer-in-Charge at all levels. (The SOR price considered including all accessories is Rs. 284/- including all accessories any deviation plus or minus in the urchase price will be adiusted in the price quoted.)	no	8.00	346.52	2772.00

Tenderer

Chief Engineer

SI.No	Description Of Items	Unit	Quantity	Rate(Rs)	Amount(Rs)
7.09	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				
7.09.01	110mm OD (6 kg/cm2)	m	14.00	497.35	6963.00
7.09.02	75mm OD(6kg/cm2)	m	35.00	334.16	11696.00
7.09.03	50mm OD(6 kg/cm2)	m	7.00	263.36	1844.00
7.10	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				
7.010.01	160mm OD(6 kg/cm2)	m	24.00	550.26	13206.00
7.10.02	110mm OD(6 kg/cm2)	m	18.00	438.93	7901.00
7.10.03	75mm OD(6 kg/cm2)	m	6.00	245.96	1476.00
7.11	Providing and fixing PVC vent cowl to pipe already fixed as directed by Engineer-in-Charge at all levels. 110 mm dia	no	1.00	92.92	93.00
7.12	Providing and fixing of porcelain Soap tray	no	4.00	809.86	3239.00
TOTAL OF SUB HEAD-7.0					104072.00
(SH: - 8.0 - WATER SUPPLY)					
8.01	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				
8.01.01	63 mm dia ID	m	6.00	408.34	2450.00
8.01.02	50 mm dia ID	m	21.00	269.05	5650.00
8.01.03	40 mm dia ID	m	12.00	190.74	2289.00
8.01.04	32 mm dia ID	m	12.00	163.56	1963.00
8.01.05	25 mm dia ID	m	6.00	124.22	745.00

Tenderer

Chief Engineer

SI.No	Description Of Items	Unit	Quantity	Rate(Rs)	Amount(Rs)
8.02	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 concealed lines for water supply.				
8.02.01	32 mm OD (10 kg/cm ²)	m	28.00	235.31	6589.00
8.02.02	25 mm OD (10 kg/cm ²)	m	42.00	221.96	9322.00
8.02.03	20 mm OD (10 kg/cm ²)	m	14.00	209.98	2940.00
8.03	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				
8.03.01	50 mm dia nominal bore	no	1.00	1795.01	1795.00
8.03.02	40 mm dia nominal bore	no	1.00	1168.08	1168.00
8.03.03	32 mm dia nominal bore	no	3.00	796.69	2390.00
8.04	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	1.00	2839.41	2839.41
8.05	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	1000.00	6.97	6970.00
8.06	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				

Tenderer

Chief Engineer

SI.No	Description Of Items	Unit	Quantity	Rate(Rs)	Amount(Rs)
8.06.01	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	2.00	10268.01	20536.00
8.07	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	1.00	5620.87	5621.00
TOTAL OF SUB HEAD-8.0					73267.00
(SH: - 9.0 - MISCELLANEOUS BUILDING WORK)					
9.01	Providing and fixing ferro cement septic tank with heavy duty ferrocement cover of 20 users capacity including earthwork excavation, refilling, providing inlet outlet etc. complete including cost, conveyance, lead, lift of all materials as directed by Engineer in charge.	no	1.00	36180.73	36181.00
9.02	Supply and torch apply bituminous water proof membrane all 4 walls and floor.The rate includes all costs of materials , conveyance and labour. Work to be executed as per specifications	sqm	390.00	650.00	253500.00
9.03	Supply and apply protection board upon the membrane all 4 walls and floor. The rate includes all costs of materials , conveyance and labour. Work to be executed as per specifications	sqm	390.00	550.00	214500.00
9.04	Dry or Wet Gunitite @ 175 to 200 mm thick (short crete) with gunnite machine having 6 to 9m ³ /hr capacity to pool wall to create shell using a 1:4 mix (1 part by weight of cement and 4 part by wait of 3/16`` crushed washed aggregates) with strength of not less than 35 n/mm ² including necessary formwork and steel reinforcement as per design requirements, as per Structural Engineers approval. including watering, curing and all cost and coveyance of materials, labour charges etc. complete for the bottom portion(pool floor) of the pool.	dcum	69806.00	10.50	732963.00
9.05	Dry or Wet Gunitite @ 175 to 200 mm thick (short crete)with gunnite machine having 6 to 9m ³ /hr capacity to pool wall to create shell using a 1:4 mix (1 part by weight of cement and 4 part by wait of 3/16`` crushed washed aggregates) with strength of not less than 35 n/mm ² including necessary formwork and steel reinforcement as per design requirements, as per Structural Engineers approval. including watering, curing and all cost and coveyance of materials, labour charges etc. complete upstand walls of of the pool including shuttering	dcum	17816.00	13.50	240516.00
9.06	High rate Bobbin wound sand filter including multipart valve and pressure guage with a flow rate of (flow rate)65000 Lrs/hour(367m ³ /6hr cycle) sand filter with 3 years replacement gurantee and 5years warranty for the filter cage and European standard make	no	1.00	167000.00	167000.00
9.07	Graded Silica sand ,without any dust or other foreign particles.	kg	1500.00	9.78	14670.00
9.08	Pump Centrifugal, heavy duty of standard make etc complete as per direction of the architect. POLYPROPILEN, , 240/420 V, Flow: 65 m ³ /hr @ 10mtrs.head (1DUTY +1 STAND BYE.)	no	2.00	20412.50	40825.00
9.09	Inline chlorin feeder	no	1.00	5288.00	5288.00
9.10	Auto Digital Ph & Chlorine Controller with all accessories /manual stirer/Chemical Metering Pump 20 l/hr 5 kg/cm ² , Polyurethane Tank 200 ltr capacity	set	1.00	200000.00	200000.00

Tenderer

Chief Engineer

SI.No	Description Of Items	Unit	Quantity	Rate(Rs)	Amount(Rs)
9.11	Suction Inlets/vacuum fittings	no	4.00	460.00	1840.00
9.12	Wall Conduit in PVC 300 mm long	no	8.00	333.00	2664.00
9.13	Return Wall Inlets 2" male thread 50mm inlet 17m/hr ABS	no	4.00	517.50	2070.00
9.14	15 lit Skimmer Enlarged Mouth Opening with squire lid	no	6.00	3500.00	21000.00
9.15	Concrete Polyester anti wvortex Drain ABS grill	no	4.00	1242.00	4968.00
9.16	Underwater Light "STANDARD" model. Niche in polypropylene and glass fibre. ABD rim. 300W 12V Lamp with 3 mtr. Cable	no	12.00	6000.00	72000.00
9.17	Step-down Transformers, 300 VA / 12v	no	12.00	9000.00	108000.00
9.18	Connection Box	no	12.00	667.00	8004.00
9.19	Conduit hose	no	12.00	120.00	1440.00
9.19	Plumbing,wiring and installations including cost of materials, pipes with 10 Kg/cm2 shall be used with ISI grade shall only be used with all necessary valves, switches and starters etc. complete.	set	1.00	94300.00	94300.00
9.20	Panel Board • Item- Electrical Control Panel C/W ELCB(to IP 55 form 2 unless otherwise stated) MCB , Overload Relay , Auto Pre-set (on timer) and hand controls for Pump and lights. • Item-Electrical conduiting and wiring/cabling for electrical accessories	set	1.00	50000.00	50000.00
9.21	Electrical -Scope of works starts from the distribution board of each building The quoted rate shall includes the following. All these items are of premium quality of approved manufacturer a)Adequate quantity of Light fixtures, fans and sockets as per the approved drawings c) Distribution Boards,MCB, RCBO d)Point wiring, circuit wiring as per the technical specification for each items All works to be done as per the standards of electrical inspectorate and as directed by the Engineer- in - Charge	no	1.00	20000.00	20000.00
9.22	Providing and fixing pre engineered structures over the foundation already supplied according to approved designs and elevation Required primary and secondary steel sections to be supplied and erected with necessary roof and wall panels providing necessary provisions for doors and windows. All the steel sections to be painted with one coat of primer and two coats of enamel paint. The rate to include cost of all materials, labour, lead, lift, fabrication and erection charges etc complete	sft	472.00	850.00	401200.00
TOTAL OF SUB HEAD-9.0					2692929.00
GRAND TOTAL					4975433.00