

Tender Inviting Authority: Chief Engineer(B&US)

Name of Work: Construction of toilet facilities for the schools of Thiru Kuttalam Middle School Erudaluramb, Government Higher secondary

Tender No: NPCL/KANP/AD/CD/ACTIVITY/EST/1024013

SCHEDULE OF WORK ITEMS													
Sl.No	Description of Work / Items	No of Qty	Units	Estimated Rate	C.KATHIRISAN (SIVIN)		Rajesh Kumar (SIVIN)		ANIL CONSTRUCTION		S.A.V.Construction		
					Rs/ Sq. ID: 354777	Rs/ Sq. ID: 354777	Rs/ Sq. ID: 703577	Rs/ Sq. ID: 703577	Rs/ Sq. ID: 703577	Rs/ Sq. ID: 703577			
					Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	
1.00	earth work excavated by mechanical means (hydraulic excavator/manual means for foundation, trenches etc., in all types of soils below ground level including, forming, strutting, bracing / pumping of water, leveling, ramming the bottom of foundation, filling with selected excavated materials in the jobs of the foundation in layers, consolidating and disposing of the surplus earth at places as directed within a limit of 50 m as per drawings and specifications. - up to 1.5m ht	553.00	CUM		75.00	41475.00	240.00	134000.00	105.00	60020.00	105.00	58350.00	
2.00	Forming and laying plain cement concrete 1:1:6, using 40-mm and down-graded stone aggregate at all height including mechanical mixing, leveling, compaction, vibrating, finishing, smoothing the exposed surfaces of concrete, curing etc. complete as per drawings and standard specifications.	84.00	CUM		3900.00	327600.00	4500.00	378000.00	4400.00	369600.00	3900.00	327600.00	
3.00	Forming and laying plain cement concrete 1:2:4, using 20-mm and down-graded stone aggregate at all height including mechanical mixing, leveling, compaction, vibrating, finishing, smoothing the exposed surfaces of concrete, curing etc. complete as per drawings and standard specifications.	46.00	CUM		4300.00	197800.00	5500.00	253000.00	5000.00	230000.00	4400.00	202400.00	
4.00	filling with selected earth in layers of not more than 150 mm thick compacted layer, each layer well compacted, rolled and consolidated as per drawings and specifications. Selected earth brought from 50 m limit	219.00	CUM		80.00	17520.00	120.00	26280.00	100.00	21900.00	80.00	17520.00	
5.00	Construction of granular sub-base (GSB) by providing stone graded material conforming to specifications conforming to Indian (Zone range 75 mm to 500 mm), using a mechanical or roller, carriage of mixed material by typers in each lot, for all back & fill, spreading in uniform layers of specified thickness in prepared surface and compacting etc. complete as per specifications and directions of Engineer-in-Charge.	80.00	CUM		800.00	64000.00	1000.00	80000.00	900.00	72000.00	800.00	64000.00	
6.00	Forming and laying crushed stone aggregate bed of 400mm thick compacted thickness for preparation of base to lay reinforcing cement concrete panel slabs, using 12 mm down graded stone aggregate including, leveling, placing, to the required extent, compacting with roller etc. as per drawings and specifications. (Payment shall be made only for compacted thickness)	18.00	CUM		750.00	13500.00	620.00	11160.00	700.00	12600.00	600.00	9000.00	
7.00	Forming and laying M20 grade 80 mm thick interlocking precast concrete pavers blocks as per relevant DC of approved shape over a profiled layer to the required level, pattern etc., all as per drawings and specifications	175.00	SQM		820.00	143500.00	750.00	131250.00	650.00	113750.00	600.00	105000.00	
8.00	Forming and constructing Random Rubble masonry in CM 1:5 using first grade stone including forming, dressing the stones, providing bond stones as per specifications, raising of the joints, scaffolding, curing etc. complete as per specifications, in foundation and basement	102.00	CUM		3400.00	346800.00	4000.00	408000.00	3500.00	361000.00	3000.00	306000.00	
9.00	Forming and laying M20/M25 design mix concrete with cement content up to 200kg/Cum using 20mm and down graded stone aggregate including leveling, forming, dressing, compaction, leveling, curing, placing at all heights, including scaffolding and finishing smooth all exposed faces complete as per specification	110.00	CUM		6000.00	660000.00	8500.00	935000.00	5000.00	550000.00	4500.00	495000.00	
10.00	Forming, placing in position and removing form work for all walls concrete works including scaffolding etc. complete at all elevations as per drawings and specifications (Measurement for form work shall be the area of forms in contact with concrete surface).	914.00	SQM		250.00	228500.00	500.00	457000.00	370.00	347300.00	250.00	228500.00	
11.00	Forming, casting, bonding, placing and laying mild steel, high-yield steel reinforcement in RCC works including providing spacer blocks in CM 1:5, bonding wires etc. complete at all elevations as per drawings and specifications including bonding whenever necessary etc. complete as per drawings and specifications	11.00	SQM		85000.00	935000.00	90000.00	890000.00	80000.00	820000.00	70000.00	630000.00	
12.00	Forming and constructing brick masonry in CM 1:5, using country bricks, including scaffolding, curing and making out joints etc. complete as per specifications and drawings, in superstructure above plinth at all elevations.	203.00	CUM		5000.00	1010000.00	9500.00	1935000.00	7800.00	1583400.00	6900.00	1319500.00	
13.00	Forming cement plaster for the internal faces of brickwork / concrete at all elevations in cement mortar 1:3, 12mm thick using Rose sand and crushed concrete with a finishing coat of neat cement including scaffolding, finishing, curing, forming, grooves whenever necessary etc. complete as per drawings and specifications	791.00	SQM		280.00	220680.00	300.00	240210.00	300.00	240710.00	260.00	205660.00	
14.00	Forming cement plaster for the ceiling with 6 mm thick in cement mortar 1:3 using Rose sand at all elevations including making and preparing the surface, scaffolding, finishing, curing etc. complete as per drawings and specifications	300.00	SQM		280.00	84000.00	300.00	84000.00	340.00	101600.00	260.00	87600.00	
15.00	Forming of external faces of brick masonry concrete at all elevations in cement mortar 1:4, 20 mm thick using Rose sand including scaffolding, curing, forming grooves, plaster finish, border, keystone etc. whenever required all as per drawings and specifications	1171.00	SQM		280.00	327880.00	400.00	468000.00	440.00	512440.00	370.00	422000.00	
16.00	Painting the top of roof slab in the pattern design plaster 20mm thick with CM 1:5, 12 mm thick base coat and 6 mm thick for the pattern design as instructed and the cost includes of scaffolding, curing all as per drawings and specifications	135.00	SQM		600.00	81000.00	1100.00	148500.00	980.00	132300.00	600.00	81000.00	
17.00	Forming and applying Acrylic Emulsion paint of Asian Paints (Super Smooth) / Make good of NIPPOCH (make of approved) shade in line or more coats over a coat of primer including preparation of surface with required coats of putty using Duxor 60 make, sand papering etc. to get good finish at all elevations etc. all as per as per drawings and specifications	1025.00	SQM		90.00	92250.00	100.00	102500.00	150.00	153750.00	140.00	147700.00	
18.00	Forming and applying Exterior Emulsion Paint of Asian Paints (Super Smooth) / Make good of NIPPOCH (make of approved) shade in line or more coats over a coat of primer including preparation of surface with required coats of putty using Duxor 60 make, sand papering etc. to get good finish at all elevations, complete as per drawings and specifications	1150.00	SQM		90.00	103500.00	100.00	207000.00	140.00	161800.00	120.00	141750.00	

L1 Amount	L1 Vendor
41475.00	C.KATHIRISAN
327600.00	C.KATHIRISAN
197800.00	C.KATHIRISAN
17520.00	C.KATHIRISAN
64000.00	C.KATHIRISAN
9000.00	S.A.V.Construction
306000.00	S.A.V.Construction
306000.00	S.A.V.Construction
495000.00	S.A.V.Construction
228500.00	S.A.V.Construction
803000.00	S.A.V.Construction
1584000.00	C.KATHIRISAN
205660.00	C.KATHIRISAN
87900.00	S.A.V.Construction
304800.00	C.KATHIRISAN
81000.00	C.KATHIRISAN
94000.00	C.KATHIRISAN
103900.00	C.KATHIRISAN

19.00	Providing and applying two coats of First Quality synthetic enamel paint of Anse-joint Louis Berger C2 DubouyPVCNORCLAC make of approved colour, over a coat of primer or new wood (wood work, suitably prepared for protecting the paint by surface scoping, rubbing applying filler etc., including cost of filler primer, paint etc. all complete as per drawings and specifications	25.00	0.00
20.00	Providing, Fitting and testing PVC rain water pipes of 110 mm dia as per IS-12022 of Type A of "ThermaxIndiaThermaxSuperior" make with necessary fitting and fixtures, such as bottom valves, PVC galling, GI clamps, downpipes, weather proofing pieces of minimum 1 m length, cost inclusive of Fitting the above in brick masonry in C24.1.1 and plastering the same with C24.1.1 etc. complete all as per drawings and specifications	35.00	0.00
21.00	Supplying, manufacturing and Fitting louvers and architraves for windows, ventilators, cupboards etc., with approved quality Malaysian Vengse wood of required sizes fixed in masonry/concrete with frame, numbers of MS bolts/nuts of size 6mm with x 2mm thick & 200 mm long on each side of the frame or providing factor screws of required length for columns/portions whenever required all as directed, for the various sizes of structural openings including making necessary rehabilitation for Fitting shutters as per drawings and specifications	5.00	0.00
22.00	Providing, fabricating and section of Structural steel members made out of MS in angles, flat plates, girths, channels, tubes, rods etc. conforming to relevant IS etc., including cost of welding, sanding, grinding, bolting, bolting/nuts whenever required and providing and applying two or more coats of approved quality synthetic enamel paint over a coat of zinc chromate yellow primer etc., as per drawings and specifications	2.00	0.00
23.00	Providing and laying 20mm thick (x-20mm) polished natural granite (solid) of approved colour in stone finish including setting by engraving, painting etc. as per required etc., with all required materials, bolting, set and a base of cement mortar 1:4, 20 mm thick neatly pointed with white cement/black coats and colouring pigments to match the shade of the stone as per the requirement, cutting, rubbing, polishing, etc. complete as per specifications and as per drawings and specifications	12.00	0.00
24.00	Providing and Fitting 20mm thick Exterior grade designer tiles of approved colour and design over 20mm thick base cement mortar 1:4 laid and pointed with white cement slurry mixed with pigments to match with the shades of the tile, including bolting, cutting, in Mortarless (Joint free & neat), Watertight finish, Drainage etc., as per drawings and specifications	49.00	0.00
25.00	Providing and making RCC roof member reinforcement slab water proof and impervious grout with the approved component of BASF/ANFO/POPCOCC or their Brands, make as per the manufacturers pre-cast specification by providing pre-water proofing membrane system, to install application pre-water proofing barrier for both side and inner face of waterproofed wall including water testing by ponding for minimum 7 days and providing joint guarantee for water tightness for 20 years (This item may be got executed by specialized water proofing agents duly approved by NPCL, and 20 years joint guarantee for water proofing is required to be submitted).	117.00	0.00
26.00	Supply and laying the course of glazed cement tiles 200mm thick of 200mmx200mm size as per IS-1237 of latest version, laid over the roof slab over a base of 20mm thick C24.1.1 and joints pointed neatly in cement mortar 1:2 mixed with water proofing, adhesion of approved make etc. complete all as per drawings and specifications	100.00	0.00
27.00	Providing and Fitting Terrazzo/slab of 20mm thick of approved size and pattern including clearing the masonry/concrete if required and Fitting with C24.1.3 base to line and plumb & making good the surfaces, curing etc. at all elevations, complete all as per drawings and specifications	24.00	0.00
28.00	Providing slip moulds of C24.1.4, 20mm thick on edges of concrete including fitting, curing, sandblasting etc. complete as per the standard specifications.	230.00	0.00
29.00	Providing and Fitting in position drilled wall tiles minimum basic price of tiles shall be Rs.250/- Sq.ft without GST (includes 6) be specified in the manufacturers of premium quality conforming to IS-12022 of JONHOLZ/COMANY/REGENCY/VASANTH/COBELL/LALAJ ALADA make laid on 20mm thick Cement Mortar 1:3 (3 cement 20mmms laid) and pointing with grey cement slurry (2:3 bylight) including pointing the joint with white cement mixed with color pigment of matching shade complete all as laid, all as per specification and as directed by the Engineer in charge.	480.00	0.00
30.00	Providing and Fitting in position drilled wall tiles by using tiles of premium quality conforming to IS-12022 of JONHOLZ/COMANY/REGENCY/VASANTH/COBELL/LALAJ ALADA make of all color and shades in White, Grey, Green, Red and Brown laid on already prepared surface including pointing the joint with water Epoxy joint filling and matching color pigment etc., all floors complete all as per directed by Engineer in - charge	141.00	0.00
31.00	Providing and Fitting in position Anti-Skid ceramic floor tiles of approved size (Thickness to be specified by the manufacturers of premium quality conforming to IS-12022 of JONHOLZ/COMANY/REGENCY/VASANTH/COBELL/LALAJ ALADA make, in all colours and shades, laid on 20mm thick Cement Mortar 1:4 (3 Cement : 1 Coarse Sand) including pointing the joint with white cement and matching colour pigment etc. at all floors complete all as per drawings and specifications	187.00	0.00
32.00	Providing, Supplying/Fitting in position approved PVC pipes, Joints, Fittings/Accessories/Drainage, make IS-4955 of latest version with required specials and Fitting arrangements for water supply works as per standard specifications and providing and Fitting approved make quality clamps and covers for Fitting as per drawings and specifications. (Excavation if required will be paid under relevant item)		
33.00	PVC PIPES - 20mm dia 12kg/m2		
34.00	Supply	240.00	0.00
35.00	Fitting	240.00	0.00
36.00	PVC PIPES - 32mm dia 12kg/m2		
37.00	Supply	495.00	0.00
38.00	Fitting	495.00	0.00
39.00	PVC PIPES - 40mm dia 12kg/m2		
40.00	Supply	124.00	0.00
41.00	Fitting	124.00	0.00

120.00	2760.00	180.00	4140.00	150.00	3450.00	125.00	2875.00
345.00	12420.00	480.00	17640.00	360.00	13680.00	325.00	11700.00
9000.00	92200.00	12000.00	72900.00	13000.00	75400.00	11000.00	83800.00
8800.00	17600.00	12000.00	20000.00	9000.00	18000.00	9000.00	18000.00
7900.00	9000.00	800.00	9600.00	1000.00	12000.00	1000.00	12000.00
1200.00	9800.00	80.00	4280.00	80.00	4180.00	80.00	4160.00
380.00	12464.00	480.00	11120.00	320.00	10600.00	475.00	10500.00
790.00	12600.00	1000.00	14000.00	790.00	12600.00	800.00	14400.00
800.00	16200.00	780.00	16800.00	490.00	20400.00	600.00	12600.00
90.00	21510.00	100.00	23800.00	90.00	21510.00	100.00	23800.00
800.00	48000.00	1000.00	48000.00	2020.00	48380.00	800.00	20400.00
1100.00	139100.00	980.00	128900.00	1075.00	131575.00	900.00	124800.00
800.00	147200.00	1100.00	202400.00	980.00	138120.00	800.00	147200.00
35.00	8688.00	30.00	7440.00	26.00	6440.00	30.00	7440.00
10.00	2480.00	80.00	12480.00	40.00	9600.00	30.00	7440.00
80.00	20760.00	40.00	22270.00	60.00	30360.00	40.00	22270.00
30.00	4995.00	30.00	24780.00	40.00	19800.00	30.00	14880.00
95.00	11760.00	70.00	6380.00	90.00	11160.00	70.00	8660.00
10.00	1248.00	60.00	7440.00	50.00	6200.00	30.00	3700.00

2760.00	C.KATHIRE SAN
11700.00	S.A.V.Coma nations
52200.00	C.KATHIRE SAN
17600.00	C.KATHIRE SAN
9000.00	C.KATHIRE SAN
4160.00	ACM CONSTRUCTIONS, Tiruvananthapuram, S.A.V.Coma nations
10600.00	ACM CONSTRUCTIONS
13600.00	ACM CONSTRUCTIONS, C.KATHIRE SAN
15000.00	S.A.V.Coma nations
21510.00	ACM CONSTRUCTIONS, C.KATHIRE SAN
20400.00	S.A.V.Coma nations
12890.00	Tiruvananthapuram, S.A.V.Coma nations
147200.00	C.KATHIRE SAN, S.A.V.Coma nations
6440.00	ACM CONSTRUCTIONS
2480.00	C.KATHIRE SAN
22270.00	Tiruvananthapuram, S.A.V.Coma nations
4995.00	C.KATHIRE SAN
6660.00	S.A.V.Coma nations
1240.00	C.KATHIRE SAN

101.00	PRIMARY WIRING- For lighting, ceiling fan, bathroom fanning and exhaust fan panels, supply and wiring to panel with two + one (earth-ground) runs of 1.5sq.mmm (220,230,250V grade FRLS insulated single core multi strand Copper conductor bare (without panel) drawn into the existing PVC conduit (inclusive of supplying and laying of PVC conduits within connecting), complete with angle /batten/lamp holder or ceiling rose, 5 Amps modular type Legrand/Mknlr/MK India (Schneider make switch including pulling the wire from existing switch box to lighting point through the conduit and connecting at both ends (The box, grid plate and the cover plate for the switch has been covered elsewhere). At item such as 1.5sq.mmm (220,230,250) Copper FRLS insulated single-core (Polyethelene sheath), 6 Amps switch, 3 Plate ceiling rose, lamp stand for 20w, necessary electrical components for wiring works (wherever applicable) shall be supplied by the contractor as per the requirement. (Approximate length 135w)	40.00	Item
102.00	SECONDARY WIRING- For lighting, 6A sockets supply and wiring to panel with two + one (earth-ground) runs of 1.5sq.mmm (220, 230,250V grade FRLS insulated single core multi strand Copper conductor bare (without panel) drawn into the existing PVC conduit (inclusive of supplying and laying of PVC conduits within connecting), complete with angle /batten/lamp holder or ceiling rose, 5 Amps modular type Legrand/Mknlr/MK India (Schneider make switch including pulling the wire from existing switch box to lighting point through the conduit and connecting at both ends (The box, grid plate and the cover plate for the switch has been covered elsewhere). At item such as 1.5sq.mmm (220,230) Copper FRLS insulated single-core (Polyethelene sheath), 6 Amps switch, 3 Plate ceiling rose, lamp stand for 20w, necessary electrical components for wiring works (wherever applicable) shall be supplied by the contractor as per the requirement. (Approximate length 135w)	45.00	Item
103.00	Power point wiring (SA Power switch is suitable for protection in switch board) in separate subcircuit (Supply installation of 10A 2-pin socket & batten plate including supply of SAA 5 pin socket and SP switch modular type Legrand/Mknlr/MK India (Schneider make Schneider/GST make (switch & socket separate type). One end of the wiring wire to be connected at the switch pin (1 pin socket and the another end to be connected at the earth bar in the distribution board. Single insulated supply of 4 sq.mmm copper wire for SAA-6A, 6 in 1 socket.	2.00	point
104.00	DB to Switch Board wiring (Supply, installation and termination (Polyethelene sheath) of 30 x 4 sq.mmm Cu for FRLS insulated single core multistrand with 1200V Copper bare, drawn into the existing PVC conduit (inclusive of supplying and laying of PVC conduits within connecting) from busbar DB to various switch boards as circuit maps and switch board to switch board wiring. The termination shall be done by using crimping type Copper tag of Dinwiddie make, suitable modular type switch box supply by contractor scope.	207.00	RM
105.00	EARTH PPT Supply and installation of Earthing with copper earth plate 600 mm x 600 mm x 3 mm thick, including excavation, and providing masonry enclosure with cover plate having locking arrangement and watertight pipe of 2.7 meters long etc., with chemical cable and salt as required.	5.00	nos
106.00	EARTHWIRING Supplying, laying & Termination with suitable high-conductivity (clay) 25 mm x 3 mm copper strip at 1.50 metre below ground as strip earth electrode, including connection/terminating with rail, tank, piping, water etc. as required. (Laying shall be done by overcapping with 2 sets of brass rail tank & piping water supplied at Site)	50.00	RM
107.00	Tube light LED Supply and installation of LED tube light fitting 220V 220w (Jabson/Heath/Crompton/Philips/ce) etc	32.00	nos
108.00	Tube light LED Supply and installation of LED light fitting 220V, 60W, L Light fitting around the ceiling (Jabson/Heath/Crompton/Philips)	8.00	nos
109.00	Tube light LED Supply and installation of 9W LED tube light fitting with lamp (Jabson/Heath/Crompton/Philips)	46.00	nos
110.00	MODUL-E Supply & installation of concealed in wall mounting 6 modular switch board with covered plate (connecting, Switches are covered in the Panel wiring (Mknlr/ Legrand/Mknlr/MK India (Schneider) all as directed by Engineer)	8.00	nos
111.00	MODUL-E Supply & installation of concealed in wall mounting 6 modular switch board with covered plate (connecting, Switches are covered in the Panel wiring (Mknlr/ Legrand/Mknlr/MK India (Schneider) all as directed by Engineer)	7.00	nos
112.00	Providing of power cable 1100 V, 4C x 6 sq.mmm FRLS insulated multistrand (conductor (cable) Armoured copper flexible conductor, cores laid up, extruded PVC inner sheath, galvanized steel braided armor and covered extruded PVC (sheath) cable conforming to IS 7050(part 1)2005 (Make-ICCI/Heath/Crompton)	360.00	RM
113.00	Laying of one number PVC-insulated and PVC Sheathed (CPE Armoured) power cable of 1.1 "V grade of following size direct in ground including excavation, sand cushioning, protective covering and filling the trench etc. as required	360.00	RM
114.00	Supply and installation of "Sentry Hagen (Crompton/Heath)" Capacity 150 persons, 2000W, 100 automatic (Scope includes fabrication, painting and erection of suitable plant for holding the above machine. Approximate dimension of machine L x B x H = 260 x 370 x 630)	2.00	nos

1860.00	75000.00	1300.00	60000.00	1600.00	64000.00	2000.00	80000.00
5000.00	80000.00	1100.00	40000.00	1300.00	58000.00	1500.00	87500.00
3000.00	80000.00	2000.00	40000.00	1300.00	3000.00	2700.00	5400.00
801.00	180000.00	250.00	50000.00	300.00	71000.00	500.00	100000.00
8000.00	40000.00	6000.00	30000.00	7000.00	26000.00	10000.00	50000.00
900.00	80000.00	500.00	20000.00	130.00	6000.00	800.00	80000.00
400.00	12000.00	300.00	9000.00	300.00	9000.00	500.00	16000.00
4000.00	30000.00	2100.00	25000.00	4200.00	30000.00	4000.00	36000.00
800.00	30000.00	500.00	22000.00	500.00	20700.00	600.00	27000.00
600.00	40000.00	500.00	40000.00	800.00	64000.00	700.00	56000.00
700.00	40000.00	700.00	40000.00	950.00	65000.00	900.00	63000.00
400.00	182000.00	230.00	90000.00	300.00	138000.00	300.00	108000.00
600.00	234000.00	275.00	90000.00	100.00	57000.00	300.00	126000.00
18000.00	36000.00	40000.00	60000.00	60000.00	90000.00	40000.00	80000.00

6000.00	Townsum Soreah
40000.00	C.A.KATHIRE SAK
2000.00	ANM CONSTRUCTIIONS
50000.00	Townsum Soreah
30000.00	Townsum Soreah
6000.00	ANM CONSTRUCTIIONS
9000.00	ANM CONSTRUCTIIONS, Townsum Soreah
25000.00	Townsum Soreah
22000.00	Townsum Soreah
40000.00	Townsum Soreah
40000.00	Townsum Soreah, C.A.KATHIRE SAK
90000.00	Townsum Soreah
57000.00	ANM CONSTRUCTIIONS
30000.00	C.A.KATHIRE SAK

Total in Figures

8225460.00

11308740.00

50179386.00

8843405.00

Lowest Amount Quoted BY S.A.V.Constructions(8843405.00)