

**പതിനാലാം കേരള നിയമസഭ  
പത്തൊൻപതാം സമ്മേളനം**

**നക്ഷത്ര ചിഹ്നമിടാത്ത  
ചോദ്യം നമ്പർ : 2123**

**11.03.2020- ൽ മറുപടിക്ക്.**

**കൊച്ചാലുംമുട് ഇൻഡസ്ട്രിയൽ എസ്റ്റേറ്റിലെ പ്രവൃത്തികൾ**

ചോദ്യം

ശ്രീ. ആർ. രാജേഷ്

മറുപടി

**ഇ. പി. ജയരാജൻ**

**(വ്യവസായവും കായികവും യുവജനകാര്യവും  
വകുപ്പു മന്ത്രി).**

(എ) ഈ സർക്കാർ അധികാരമേറ്റ (എ) : ഈ സർക്കാർ അധികാരമേറ്റശേഷം ശേഷം മാവേലിക്കര കൊച്ചാലുംമുട് & ഇൻഡസ്ട്രിയൽ എസ്റ്റേറ്റിൽ വിവിധ (ബി) പ്രവൃത്തികൾക്ക് അനുവദിച്ച തുകയും പ്രവൃത്തികളുടെ വിശദാംശങ്ങളും ലഭ്യമാക്കുമോ ;

(ബി) പ്രസ്തുത പ്രവൃത്തികളുടെ എസ്റ്റിമേറ്റുകളുടെ പകർപ്പുകൾ ലഭ്യമാക്കുമോ ?

ഈ സർക്കാർ അധികാരമേറ്റശേഷം മാവേലിക്കര കൊച്ചാലുംമുട് വ്യവസായ വികസന ഏരിയയിലെ ഇന്റേണൽ റോഡ് നവീകരണത്തിനായി 25 ലക്ഷം രൂപ അനുവദിച്ചിരുന്നു. ആലപ്പുഴ പൊതു മരാമത്ത് വകുപ്പ് കെട്ടിട വിഭാഗത്തിനാണ് പ്രസ്തുത പ്രവൃത്തിയുടെ നിർമ്മാണ ചുമതല നൽകിയിരുന്നത്. ഈ പ്രവൃത്തി 31/03/2018-ൽ പൂർത്തീകരിക്കുകയും ചെയ്തു. പ്രവൃത്തിയുടെ എസ്റ്റിമേറ്റിന്റെ പകർപ്പ് അനുബന്ധം 1 ആയി ചേർക്കുന്നു.

പൊതുമേഖലാ സ്ഥാപനമായ സിഡ്കോയുടെ കൊച്ചാലുംമുട് (കൊല്ലുകടവ്) വ്യവസായ എസ്റ്റേറ്റിൽ നവീകരണ പ്രവർത്തനങ്ങൾക്കായി 78 ലക്ഷം രൂപയുടെ ഭരണാനുമതി നൽകിയിട്ടുണ്ട്. പ്രസ്തുത പ്രവൃത്തിയുടെ എസ്റ്റിമേറ്റുകളുടെ പകർപ്പ് അനുബന്ധം -2 ആയി ചേർത്തിട്ടുണ്ട്.



സെക്ഷൻ ഓഫീസർ.

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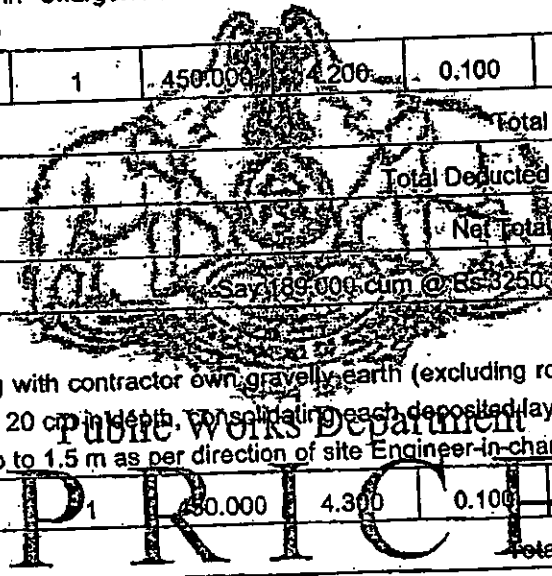
PRICE

Detailed Estimate

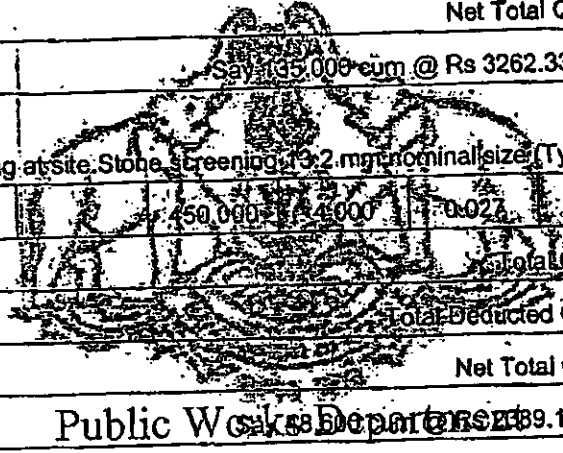
Providing 20mm chipping carpet to Industrial Estate road from km 0/000 to 0/450.

(Cost Index Applied for this estimate is 53.33%)

Sl No	Description	No	L	B	D	CF	Quantity	Remark
<b>1 ROAD WORK</b>								
1	16.78.1 Construction of granular sub- base by Providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, Carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in- Charge. With Material conforming to Grade - I ( size range 75 mm to 0.075 mm) having CBR Value- 30							
	road	1	450.000	4.200	0.100		189.000	
							Total Quantity	189.000 cum
							Total Deducted Quantity	0.000 cum
							Net Total Quantity	189.000 cum
							Say 189.000 cum @ Rs 3250.44 / cum	Rs 614333.16
2	od42832/2016_2017 Supplying and Filling with contractor own gravelly earth (excluding rock) for strengthening the base in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge.							
		1	450.000	4.300	0.100		193.500	
							Total Quantity	193.500 cum
							Total Deducted Quantity	0.000 cum
							Net Total Quantity	193.500 cum
							Say 193.500 cum @ Rs 1185.03 / cum	Rs 229303.31
3	16.78.2 Construction of granular sub- base by Providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, Carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in- Charge. With material conforming to Grade-II (size range 53 mm to 0.075 mm ) having CBR Value-25.							
		1	450.000	4.000	0.075		135.000	
							Total Quantity	135.000 cum
							Total Deducted Quantity	0.000 cum
							Net Total Quantity	135.000 cum



		Say 135.000 cum @ Rs 3258.03 / cum					Rs 439834.05
4	16.78.3	Construction of granular sub- base by Providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, Carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-In- Charge. With material conforming to Grade - III ( size range 26.5 mm to 0.075 mm) having CBR Value - 20					
		1	450.000	4.000	0.075		135.000
		Total Quantity					135.000 cum
		Total Deducted Quantity					0.000 cum
		Net Total Quantity					135.000 cum
		Say 135.000 cum @ Rs 3262.33 / cum					Rs 440414.55
5	16.3.6	Supplying and stacking at site. Stone screening 3.2 mm nominal size (Type A)					
		1	450.000	4.000	0.025		48.600
		Total Quantity					48.600 cum
		Total Deducted Quantity					0.000 cum
		Net Total Quantity					48.600 cum
		Say 48.600 cum @ Rs 2329.11 / cum					Rs 116110.75
6	16.3.7	Supplying and stacking at site. Stone screening 11.2 mm nominal size (Type B)					
		1	450.000	4.000	0.009		16.200
		Total Quantity					16.200 cum
		Total Deducted Quantity					0.000 cum
		Net Total Quantity					16.200 cum
		Say 16.200 cum @ Rs 2255.48 / cum					Rs 36538.78
7	16.32.1	2 cm premix carpet surfacing with 1.8 cum and 0.90 cum of stone chippings of 13.2 mm size and 11.2 mm size respectively, per 100 sqm and 52 kg and 56 kg of hot bitumen per cum of stone chippings of 13.2 mm and 11.2 mm size respectively including a tack coat with hot straight run bitumen, including consolidation with road roller of 6 to 9 tonne capacity etc. complete (tack coat to be paid for separately). With paving Asphalt grade VG - 10 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt					
	chipping carpet area	1	450.000	4.000			1800.000
		Total Quantity					1800.000 sqm
		Total Deducted Quantity					0.000 sqm



**PRICE**

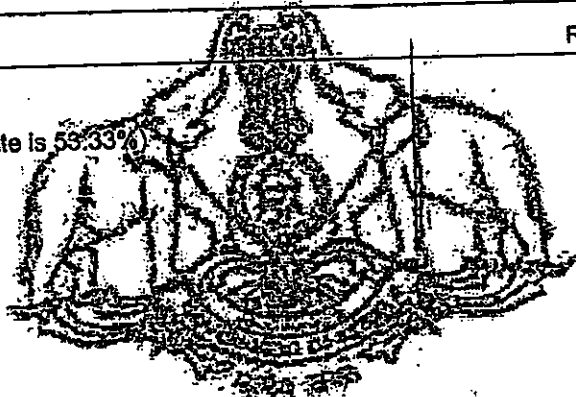
PRICE

7/1

EST NO:2016-2017/0

						Net Total Quantity	1800.000 sqm	
						Say 1800.000 sqm @ Rs 265.64 / sqm		Rs 478152.00
Sl No	Description	No	L	B	D	CF	Quantity	Remark
2 unforeseen items if any								
Lump-Sum Total							Rs 3803.98	
Service Tax @							6.0%	
Service Tax Amount							141509.43	
Total with Service Tax Amount							2500000.00	
							TOTAL Rs 2500000.00	
							Rounded Total Rs 25,00,000	
							Rupees Twenty Five Lakh Only	

(Cost Index Applied for this estimate is 55.33%)



Public Works Department

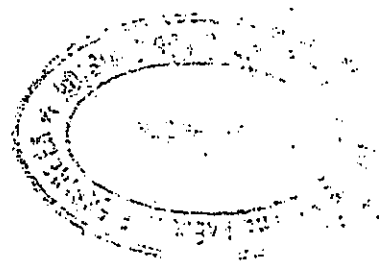
# PRICE

*L.S.B.*  
 LEKSHMI S. CHANDRAN  
 ASSISTANT ENGINEER  
 P.W.D. SURVISING SECTION  
 MAVELIKKARA-896.101



*Contract signed*

*Manoj K...*




W.D. ENGINEERING SECTION

*[Signature]*

*[Signature]*

<b>RENOVATION / UPGRADATION WORKS FORSIDCO INDUSTRIAL ESTATE KOLLAKKADAVU, PATHANAMTHITTA</b>				
<b><u>COST BREAK UP</u></b>				
SI.No	Particulars		Amount	
A	New Sheds around estate Administrative Office	:	2,719,713.74	✓
B	Estate Office repair	:	206,503.46	✓
C	Compound wall vegetation clearing and painting works	:	44,569.11	✓
D	Barbed wire Fencing works	:	28,016.93	✓
E	Main Gate	:	1,824,363.82	✓
F	Water supply and sanitary system	:	1,954,546.65	✓
G	Vegetation Clearance and dismantling of old water tank	:	186,572.01	✓
	<b>Total In Rs.</b>	:	<b>6,964,286</b>	✓
<b>(Rupees Sixty Nine Lakhs Sixty Four Two Hundred Eighty Six only)</b>				
	ADD GST @12 %=		835714.29	✓
	<b>Net =</b>		<b>7,800,000.0</b>	✓

**(Rupees Seventy Lakhs only)**

  
 மெட்ரோ டீவலப்மென்ட் லிமிடெட்  
 கட்டிடப் பணிகளின் மேலாளர்  
 கல்லக்கடாவு, பதனமத்திட்டு

**ABSTRACT ESTIMATE FOR RENNOVATION / UPGRADATION WORKS FOR SIDCO INDUSTRIAL ESTATE KOLLAKKADAVU,  
PATHANAMTHITTA**

SI No	Items	Unit	Quantity	DSR Rates	Rate Adding CI 44.12%	Amount
	<b>A) New Sheds around estate Administrative Office</b>					
1	2.31 Vegetation clearance Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	Sqm	500	7.2	10.4	5,188
2	2.8.1 Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.	Cum	55	166.4	239.8	13,190
3	7.1.1 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 20 mm nominal size) upto plinth level with : Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	85	4478.15	6453.9	548,582
4	5.1.2 Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level : 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size).	Cum	10	6215.35	8957.6	89,576
5	5.22.6 Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	Kg	1000	56.6	81.6	81,572
6	50.6.2.2 Solid masonry using pre cast solid blocks (factory made) of size 30x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level with thickness 15cm in : CM 1:6 ( 1 cement : 6 coarse sand) etc complete	Cum	110	5127.6	7389.9	812,889
7	9.48.2 Providing and fixing M.S. Grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.Fixed to openings/ wooden frames with rawl plugs screws etc	Kg	500	112.45	162.1	81,031

8	13.1.2 wall plastering -12 mm cement plaster of mix 1:6 (1 cement: 6 fine sand)	Sqm	45	160.35	231.1	10,399
9	11.3.1 Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete 40 mm thick with 20 mm nominal size stone aggregate	Sqm	475	362.6	522.6	248,225
10	12.50 Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+0.05%), total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling/self tapping screws of size (5.5x55mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	Sqm	540	550.4	793.2	428,348
11	10.2 Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg	4110	67.65	97.5	400,713
					Total =	2,719,713.74
<b>B) Estate Office repair</b>						
12	12.50 Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+0.05%), total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling/self tapping screws of size (5.5x55mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	Sqm	200	550.4	793.2	158,647

13	10.2 Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg	120	67.65	97.5	11,700
14	17.2.1 Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required : W.C. pan with ISI marked white solid plastic seat and lid	Nos	1	3418.7	4927.0	4,927
15	30 mm thick factory made solid PVC profile panelled door single piece extruded profile decorative finish (wood grain printed on both side)	Sqm	1	2700	3891.2	3,891
16	Factory made solid PVC door frame 60 x 30 mm i/c carriage	m	5.5	300	432.4	2,378
17	11.37 Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including pointing the joints with white cement and matching pigment etc., complete.	Sqm	5	688.35	992.1	4,960
18	Plumbing works					10,000
19	Electrical works					10,000
					Total =	206,503.46
	<b>C ) Compound wall vegetation clearing and painting works</b>					
20	2.31 Vegetation clearance Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	Sqm	800	7.2	10.4	8,301
21	13.40 Distempering with dry distemper of approved brand and manufacture (two or more coats) of required shade on new work, over and including water thinnable priming coat to give an even shade:	Sqm	350	71.9	103.6	36,268
					Total =	44,569



D ) Barbed wire Fencing works						
22	16.17.1 Fencing with R.C.C. post placed at required distance, embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post one side only, provided with horizontal lines and two diagonals of barbed wire weighing 9.38 kg per 100 metres (minimum), between the two posts fitted and fixed with G.I staples on wooden plugs or G.I binding wire tied to 6 mm bar nibs fixed while casting the post (cost of R.C.C. posts, struts, earth work and concrete to be paid for separately):- Payment to be made per metre cost of total length of barbed wire used With G.I barbed wire	metre	100	8.25	11.9	1,189
23	16.19 Supplying at site Angle iron post & strut of required size including bottom to be split and bent at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete.	Kg	300	62.05	89.4	26,828
					Total =	<b>28,016.93</b>
E) Main Gate						
24	2.6.1 Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed. All kinds of soil	Cum	20	125.95	181.5	3,630.38
25	4.1.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size)	Cum	2	4478.15	6453.9	12,907.82
26	7.1.1 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 20 mm nominal size) up to plinth level with: Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	12	3965.85	5715.6	68,587.00
27	5.9.1 Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete	Sqm	10	193.95	279.5	2,795.21
28	5.9.6 Centering and shuttering including struttings, propping etc. and removal of form work for columns, piers, pillars, posts and struts - Using steel sheet with M.S frames.	Sqm	20	467.85	674.3	13,485.31

29	5.9.5 Centering and shuttering including struttings, propping etc. and removal of form work for lintels, beams, plinth beams, girders and cantilevers - Using steel sheet with M.S frames.	Sqm	10	342.9	494.2	4,941.87
30	5.1.2 Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - all work upto plinth level - 1:1.5:3 (1 cement :1.5 coarse sand : 3 graded stone aggregate 20mm nominal size)(Footing,Base slab, Plinth beam)	Cum	2	6215.35	8957.6	17,915.12
31	5.2.2 Reinforced cement concrete work in walls (any thickness) including columns, pillars, piers, posts and struts etc. upto floor five level excluding cost of centering, shuttering, finishing and reinforcement - 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size) Columns	Cum	1	7145.8	10298.5	10,298.53
32	5.3 Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) (Beams, Lintels, )	Cum	3	7390.8	10651.6	31,954.86
33	5.22A.6 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete - Thermo - Mechanically treated bars (ISI BRAND OF APPROVED MAKE) including placing M30 grade Athees make cover block @ 60cms c/c.	Kg	600	56.6	81.6	48,943.15
34	50.6.2.2 Solid masonry using pre cast solid blocks (factory made) of size 30x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level with thickness 15cm in : CM 1:6 ( 1 cement : 6 coarse sand) etc complete	Cum	12	5127.6	7389.9	88,678.77
35	OD 12mm cement plaster of mix 1:5 (1 cement ; 5 fine sand) for inside wall	Sqm	75		246.3	18472.5
36	13.4.1 12mm cement plaster of mix 1:4 (1 cement : 4 Course sand) for outside wall upto 10m height.	Sqm	100	180.85	260.6	26,064.10
37	11.3.1 Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry but excluding the cost of nosing of steps etc. complete, 40mm thick with 20mm nominal size stone aggregate.	Sqm	15	362.6	522.6	7,838.69

38	11.36 Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS :15622 (thickness to be specified by the manufacture of approved make (Johnson / Asian / Somany / Nitco) in all colours, shades of size 200x300 mm as approved in skirting 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 with white cement mixed with pigment of matching shade complete.	Sqm	10	744.8	1073.4	10,734.06
39	11.37 Providing and laying ceramic glazed floor tiles 300x300mm of first quality conforming to IS : 15622 of approved make (Nitco / Kajaria) in colours such as white, ivory, grey, fume red, brown laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement and matching pigment etc. complete.	Sqm	15	688.35	992.1	14,880.75
40	10.2 Structural steel work riveted, bolted or welded in built up sections, trusses and framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete for Roof including eave board.	Kg	4400	67.65	97.5	428,987.59
41	12.50 Providing and fixing precoated galvanised iron profile sheets 0.50mm (+0.05%), total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre. The sheet shall be fixed using self drilling / self tapping screws of size 5.5x55mm with EPDM seal, complete upto any pitch in horizontal / vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	Sqm	30	550.4	793.2	23,797.09
42	13.84.2 Painting with synthetic enamel paint, having VOC (Volatile Organic Compound) content less than 150 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.	Sqm	300	75.05	108.2	32,448.62

43	<p>Towards supply &amp; fixing of 'Aluminium Composite Panel' for wall cladding, parapet coping, projections and boarders using 50 x 25mm size 1.5 mm thick aluminium tubular sections, Galvanized U clamp to form grids of size as specified and securely fixing the basic frame work on to the masonry with adequate and properly designed anchor fasteners - Fischer / Hilti make nuts and bolts etc. the frame work has to be finished to line and level. 4mm thick aluminium composite panel of approved make as directed by the Architect for cladding with 0.5mm thick aluminium layer and 3mm thick polyurethane LDPE core (0.5/3.0/0.5) with sections modular 1.75 with sound absorption factor of 0.05 and temperature resistance - 5 to +80 degree C the core shall be mineral material based on aluminium hydroxide polymer bonded.</p> <p>The external side should be PVDF coated to minimum 30 microns and guarantee certificate to be produced from supplier for colour uniformity for a minimum period of 10 years. The aluminium composite panel shall be cut to size using a mitre saw and proper grooves formed in the inner layer to make the panel in tray form and fixing such panels on to the grids using aluminium cleats and self tapping screws. The space between the panels shall be treated with Dow corning weather</p>	Sqm	120		3022.0	362,640.00
44	<p>21.1.1.3 Providing and fixing aluminium work for doors, windows and ventilators with extruded built up standard tubular sections / appropriate Z sections and other sections of approved make conforming to IS:733 and IS:1285 fixed with rawl plugs and screws or with fixing clips or with expansion hold fasteners including necessary filling up of gaps at junctions at top, bottom and sides with required PVC / neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings. (Glazing and panelling to be paid for separately) - For fixed portion. Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron).</p>	Kg	40	391.8	564.7	22,586.49

45	<p>21.1.2.3 Providing and fixing aluminium work for doors, windows and ventilators with extruded built up standard tubular sections / appropriate Z sections and other sections of approved make conforming to IS:733 and IS:1285 fixed with rawl plugs and screws or with fixing clips or with expansion hold fasteners including necessary filling up of gaps at junctions at top, bottom and sides with required PVC / neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing / panelling, C.P.brass / stainless steel screws, all complete as per architectural drawings. (Glazing and panelling to be paid for separately) - For shutters of doors, windows and ventilators including providing and fixing hinges /pivots and making provision for fixing of fittings wherever required including the cost of PVC / neoprene gasket required (fittings shall be paid for separately). Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron).</p>	Kg	50	452.4	652.0	32,599.94
46	<p>21.2.1 Providing and fixing 12mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS:12823 grade 1 type II in panelling fixed aluminium doors with C.P. brass / stainless steel screws etc. complete as per architectural drawings. Prelaminated particle board with decorative lamination on one side and balancing lamination on other side.</p>	Sqm	7	826.35	1190.9	8,336.55
47	<p>21.3.1 Providing and fixing glazing in aluminium window and ventilator shutters with PVC / neoprene gasket etc. complete as per the architectural drawings (cost of aluminium snap beading shall be paid in basic item), with float glass panes of 4.0mm thickness.</p>	Sqm	5	741.5	1068.6	5,343.25
48	<p>9.48.1 Supplying and fixing M.S fabricated grills to the windows, ventilator frames and wall openings using M.S. flat or rod as per drawing including cutting, fabricating, welding, fixing, painting with one coat of iron primer and two coats of synthetic enamel paint of approved quality and colour, all cost of materials and labour charges etc. complete.</p>	Kg	70	104.65	150.8	10,557.51

49	21.4.1 Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge. With stainless steel cover plate minimum 1.25 mm thickness	Nos	3	2054.4	2960.8	8,882.40
50	13.51.2 Painting with silicon & acrylic emulsion based water thinnable sealer of approved brand and manufacture on wet or patchy portion of plastered surfaces : Two coats for interior and ceiling	Sqm	50	90.05	129.8	6,489.00
51	Supply and fixing name board (Board Size 450x125cm. GI square pipe frame with ACP, Brass letters fixing on the ACP) including cost and conveyance of all materials and labour charges etc. complete	E	1		60000.0	60,000.00
52	Supplying and fixing Cast iron Gate as per approved design including cost and conveyance of all materials, and labour charges etc. complete For Two 6m gate .	Kg	1600		120.0	192,000.00
53	13.84.2 Painting with synthetic enamel paint, having VOC (Volatile Organic Compound) content less than 150 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.	Sqm	10	75	108.1	1,080.90
54	16.91.2 Providing and laying factory made chamfered edge Cement Concrete paver blocks In foot path, park & lawns driveway or light & traffic parking etc. of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of course sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks 80 mm thick C.C. paver block of M-30 grade with approved color design and pattern.	Sqm	150	638.95	920.9	138,128.21
<b>Plumbing and sanitary arrangements</b>						
55	Supplying and fixing readymade PVC Septic tank 25 to below 35 flush capacity including cost and conveyance of all materials, labour charges and side masonry , filling, and top RCC covering slab etc.complete	E	1		35000.0	35,000.00
56	Supplying and fixing readymade Sintex Water tank 500L capacity including cost and conveyance of all materials, labour charges etc.complete	E	1		4000.0	4,000.00

57	17.2.1 Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :W.C. pan with ISI marked white solid plastic seat and lid	E	1	3418.7	4927.0	4,927.03
58	18.9 Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge.					
<b>External works</b>						
59	18.9.2 20 mm nominal outer dia Pipes	M	30	149.3	215.2	6,455.13
60	18.9.3 25 mm nominal outer dia Pipes	M	10	191.65	276.2	2,762.06
61	18.9.4 32 mm nominal outer dia Pipes	M	60	250.55	361.1	21,665.56
62	18.9.5 40 mm nominal outer dia Pipes	M	30	321.15	462.8	13,885.24
63	18.12.2 Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. 20 mm dia nominal bore	M	5	186.3	268.5	1,342.48
64	Providing and fixing 15mm or nearest size C.P. Tap short body (superior quality) including cost and conveyance of all materials and labour charges etc. complete.	E	2	1100	1585.3	3,170.64
65	Supplying, Installing & Testing at site in position uPVC pipe(SWR) of Type B (IS:13592) including injection moulded fittings with bosses where required eg tees, bends, clamps couplings and adapters & clamping with Universal clamps, Anchor fastners(8mm), Threaded Rod(8mm), nuts, washers etc complete.and jointing with adhesive approved by manufactures including cutting and making good the walls and floors or surface mounted with clamps as required at site (For Soil & waste pipes -Toilet Inside)	E				
66	160 MM OD	M	10		810.0	8,100.00
67	110 MM OD	M	10		545.0	5,450.00
68	Supplying and fixing C.P health fouceit including all cost etc.complete.	E	1		1100.0	1,100.00
69	Supplying and fixing Nahni trap110 mm with cement concrete using 20mm broken stone including cutting open,boring through masonry walls,R.C.C floors etc.and making good the damages	E	1		500.0	500.00
					Total =	1,824,363.82


F )Water supply and sanitary system						
70	2.8.1 Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.	Cum	50	166.4	239.8	11,991
71	7.1.1 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 20 mm nominal size) upto plinth level with : Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	80	4478.15	6453.9	516,313
72	5.1.2 Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level : 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size).	Cum	15	6215.35	8957.6	134,363
73	4.3.2 Centering and shuttering including strutting, propping etc. and removal of form work for:Retaining walls, return walls, (any thickness) including attached pilasters, buttresses, plinth and string courses fillets, kerbs and steps etc.	Sqm	150	378.6	545.6	81,846
74	5.22.6 Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	Kg	1200	56.6	81.6	97,886
75	50.6.2.2 Solid masonry using pre cast solid blocks (factory made) of size 30x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level with thickness 15cm in : CM 1:6 ( 1 cement : 6 coarse sand) etc complete	Cum	80	5127.6	7389.9	591,192
76	5.3 Reinforced cement concrete work in beams, suspended floors, roofs, having slope up to 150 landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement, with1:1.5:3 (1 cement : 1.5 coarse sand (Zone III) : 3 graded stone aggregate 20 mm nominal size).	Cum	4.5	7390.8	10651.6	47,932
77	5.9.3 Centering and shuttering including strutting, etc. and removal of form for: Suspended floors, roofs, landings, balconies and access platform	Sqm	31	422.3	608.6	18,867
78	13.16.1 6 mm cement plaster of mix: 1:3 ( 1 cement : 3 fine sand)	Sqm	61	143.8	207.2	12,642
79	13.1.1 12 mm cement plaster of mix: 1:4 ( 1 cement : 4 fine sand)	Sqm	150	172.95	249.3	37,388




80	9.48.1 Supplying and fixing M.S fabricated grills to the windows, ventilator frames and wall openings using M.S. flat or rod as per drawing including cutting, fabricating, welding, fixing, painting with one coat of iron primer and two coats of synthetic enamel paint of approved quality and colour, all cost of materials and labour charges etc. complet	Kg	80	112.45	162.1	12,965
81	17.4.1 Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required: One urinal basin with 5 litre white P.V.C. automatic flushing cistern	Nos	3	3494.15	5035.8	15,107
82	30 mm thick factory made solid PVC profile panelled door single piece extruded profile decorative finish (wood grain printed on both side)	Sqm	5.6	2700	3891.2	21,791
83	Factory made solid PVC door frame 60 x 30 mm i/c carriage	m	20	300	432.4	8,647
84	11.37 Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including pointing the joints with white cement and matching pigment etc., complete.	Sqm	20	688.35	992.1	19,841
85	11.4 52 mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete	Sqm	20	555.25	800.2	16,005
86	13.46.1 Finishing walls with Acrylic Smooth exterior paint of required shade: New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm	Sqm	200	96.05	138.4	27,685
87	Supplying and fixing readymade PVC Septic tank 25 to below 35 flush capacity including cost and conveyance of all materials, labour charges and side masonry , filling, and top RCC covering slab etc.complete	E	2		35000.0	70,000.00

88	18.48 Providing and placing on terrace (at all floor levels) polyethylene water storage tank :ISI 12701 marked, 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.	Litre	2000	7.25	10.4	20,897
89	17.2.1 Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :W.C. pan with ISI marked white solid plastic seat and lid	E	3	3418.7	4927.0	14,781.09
90	18.9 Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge.					
<b>External works</b>						
91	18.9.2 20 mm nominal outer dia Pipes	M	50	149.3	215.2	10,758.56
92	18.9.3 25 mm nominal outer dia Pipes	M	20	191.65	276.2	5,524.12
93	18.9.4 32 mm nominal outer dia Pipes	M	100	250.55	361.1	36,109.27
94	18.9.5 40 mm nominal outer dia Pipes	M	60	321.15	462.8	27,770.48

95	18.12.2 Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. 20 mm dia nominal bore	M	15	186.3	268.5	4,027.43
96	Providing and fixing 15mm or nearest size C.P.Tap short body (superior quality) including cost and conveyance of all materials and labour charges etc. complete.	E	4	1100	1585.3	6,341.28
97	Supplying, Installing & Testing at site in position uPVC pipe(SWR) of Type B (IS:13592) including injection moulded fittings with bosses where required eg tees, bends, clamps couplings and adapters & clamping with Universal clamps, Anchor fastners(8mm), Threaded Rod(8mm), nuts, washers etc complete.and jointing with adhesive approved by manufactures including cutting and making good the walls and floors or surface mounted with clamps as required at site (For Soil & waste pipes -Toilet Inside)	E				
98	160 MM OD	M	25		810.0	20,250.00
99	110 MM OD	M	25		545.0	13,625.00
100	Supplying and fixing Nahni trap110 mm with cement concrete using 20mm broken stone including cutting open,boring through masonry walls,R.C.C floors etc.and making good the damages	E	4		500.0	2,000.00
101	Electrical works					50,000.00
						1,954,546.65
	<b>G ) Vegetation Clearance and dismantling of old water tank</b>					
102	2.31 Vegetation clearance Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	Sqm	150	7.2	10.4	1,556
103	15.9.2 Demolishing stone rubble masonry manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer -in- Charges: In cement mortar	Cum	120	1005.7	1449.4	173,930
104	13.61.1 Painting with synthetic enamel paint of approved brand and manufacture to give an even shade Two or more coats on new work	Sqm	5	78.4	113.0	565
105	13.37.1 White washing with lime to give an even shade New work (three or more coats)	Sqm	45	17.25	24.9	1,119
106	13.60.1 Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade	Sqm	42	84.45	121.7	5,112
107	Unforseen					4,290
					Total =	186,572.01
	<b>Total</b>					<b>6,964,286</b>
<b>(Rupees Sixty Nine Lakhs Sixty Four Thousand Two Hundred Eighty Six only)</b>						
Add GST @ 12%						835,714.29
Net						7,800,000
<b>(Rupees Seventy Eight Lakhs only)</b>						

  
 மாவட்ட இயக்குநர்

  
 கோயிலுக்குள் அமைக்கப்பட்ட  
 நிர்வாக அலுவலகம்  
 திருச்சி, தமிழ்நாடு.