

**Name of Project : Construction of Resedential & Commercial Block at Patia, Bhubaneswar.**

SI No	Description of Item	UNIT	QUANTITY	RATE	AMOUNT
<b>EARTHWORK</b>					
<b>PIT EXCAVATION</b>					
1	Earth work in pit excavation in foundation trenches, columns pits etc. from finished ground level and stacking the excavated material within site including dressing of bottom, sides strutting, timbering, shoring, trimming of sides, all leads and lifts, incidentals, etc. complete with ramming of bottom, surface preparation as per specifications to receive the PCC up to a depth of maximum depth of 1.5 Mtr. Cost to include all lead , labour , conveyance , T&P , sundries etc. complete as per the directions of Engineer-in-charge.				
	In all kinds of soil	CUM	56,430.000	166.40	9,389,952.00
	Ordinary Rock/Weathered Rock/Disintegrated Rock	CUM	18,537.000	450.30	8,347,211.10
<b>FILLING - AVAILABLE EARTH</b>					
2	Filling in foundation, trenches and plinth with available good earth in layers not exceeding 20 cm in depth, well watered and compacted in layers with top surface dressed and leveled to proper gradient including cost of all materials, conveyance, royalties, loading and unloading, including cost of all labour, sundries ,T & P etc. complete as per directions of the Engineer -in-charge.	CUM	3,471.000	440.00	1,527,240.00
<b>FILLING - SAND</b>					
3	Filling in foundation, trenches and Plinth with river sand in layers not exceeding 20 cm in depth, well watered and compacted in layers with top surface dressed and leveled to proper gradient including cost of all materials, conveyance, royalties, loading and unloading, including cost of all labour, sundries ,T & P etc. complete as per directions of the Engineer -in-charge.	CUM	1,587.000	430.00	682,410.00
<b>CONCRETE WORK</b>					
4	Providing and laying of Plain Cement Concrete of 1 : 3 :6 (1cement : 3 sand : 6 graded stone aggregate of size 25mm to 40 mm hard granite crusher broken metal ) ,mixing in concrete mixer or Batching plant ,lowering and compacting in proper thickness , watering & curing for the required period, including all cost of labour ,material, Formwork, conveyance,royalties and sundries , T&P etc. complete as per the direction of Engineer-in-charge.	CUM	472.000	4,100.00	1,935,200.00
5	Providing and laying in position machine batched/ machine mixed concrete of M30 grade for reinforced cement concrete work including laying of concrete using 12 mm to 20 mm size crusher broken hard granite chips excluding the cost of reinforcement, centering, shuttering, and admixture in recommended proportions to accelerate, retard setting of concrete, improve workability without impairing strength and durability .Cost to include all labour, scaffolding, materials, conveyance ,T&P, loading and unloading, royalties, sundries, etc.complete as per direction of Engineer- In - Charge.	CUM	10,247.000	4,950.00	50,722,650.00
<b>REINFORCEMENT WORK</b>					
8	Providing, fixing in position Fe-500 reinforcement bars for RCC work of required diameter of approved quality including straightening, cutting, bending, binding, welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing hoisting, lowering and laying including cost of materials, conveyance and taxes of steel and binding wires of 16 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the specification & direction of Engineer -in-charge.	TON	1,975.000	70,800.00	139,830,000.00
<b>FORMWORK</b>					
9	Providing, erecting, fixing in position plastic coated waterproof plywood shuttering of minimum thickness not less than 12mm at all locations for all shapes with chamfers, splays, keys, wedges, props, bracings, nails, brackets, Acrow spans etc complete including close hacking of exposed concrete surface, deshuttering of the same after specified period without damaging the concrete works as directed by Engineer-in charge, cutting holes for pipes etc. Providing and applying approved form oil on all surfaces of formwork coming in contact with concrete as per specifications and drawings and as directed by Engineer-in-charge. Doka, cuplock system or equivalent formwork as to be adopted & in no case wooden supports shall be permitted. (Area of formwork in contact with concrete shall only be measured for payment and stop boards for construction joints will not be measured for payment)	SQM	41,710.000	575.00	23,983,250.00
<b>MASONRY WORK</b>					
10	Flyash brick masonry of 250mm thick in cement mortar (1:6) using flyash bricks having crushing strength not less than 75kg/cm2, immersing the bricks in water before use, splays cutting, circular moulding, corbelling, pointing, racking, etc and as per technical specifications. Cost to include all materials , laboour,scaffolding ,watering & curing , conveyance ,T&P, loading and unloading, royalties, sundries, etc.complete as per direction of Engineer- In - Charge.				
	Foundation & Plinth	CUM	120.000	4,751.65	570,198.00
	Super structure	CUM	2,560.000	5,582.85	14,292,096.00
11	Flyash brick masonry of 100mm thick in cement mortar (1:4) using flyash bricks having crushing strength not less than 75kg/cm2 with provision of 2nos 6mm dia. M.S. bars at every third course of half brick masonry, Immersing the bricks in water before use, splays cutting, circular moulding , corbelling, pointing and racking etc. Cost to include all materials , laboour,scaffolding ,watering & curing , conveyance ,T&P, loading and unloading, royalties, sundries, etc.complete as per direction of Engineer- In - Charge.	SQM	6,936.000	700.00	4,855,200.00
<b>PLASTERING WORK</b>					

Sl No	Description of Item	UNIT	QUANTITY	RATE	AMOUNT
12	Providing & making of 6mm thick cement plaster with cement mortar of (1:4) to ceilings of roof slabs, stairs, landings, chajja, shelves, columns, beams and lofts etc. including roughening, hacking, scraping and cleaning and finishing the plastered surface smooth using wooden floats only to proper plumbs and level, making grooves and beads to give required ornamental finish as per drawings .Cost to include all materials , labour,scaffolding ,watering & curing , conveyance ,T&P, loading and unloading, royalties, sundries etc.complete as per direction of Engineer- In - Charge.	SQM	75,213.000	208.86	15,708,987.18
13	Providing & making of 12mm thick internal cement plaster to the surface of brick masonry wall with cement mortar (1:6) including racking out joints, scraping and cleaning the surface and finishing the plaster surface smooth using wooden floats only to proper plumbs and level and making grooves and beads to give required ornamental finish as per drawings. Cost to include all materials , labour,scaffolding ,chicken mesh fixing at the junction of concrete & brick masonry , watering & curing , conveyance , T&P, loading and unloading, royalties, sundries, etc.complete as per direction of Engineer- In - Charge.	SQM	80,457.000	211.22	16,994,127.54
14	Providing 16mm thick external cement plaster to the surface of brick masonry wall with cement mortar (1:6) including racking out joints, scraping and cleaning the surface and finishing the plaster surface smooth using wooden floats only to proper plumbs and level and making grooves and beads to give required ornamental finish as per drawings .Cost to include all materials , labour,scaffolding , chicken mesh fixing at the junction of concrete & brick masonry , watering & curing , conveyance ,T&P, loading and unloading, royalties, sundries, etc.complete as per direction of Engineer- In - Charge.	SQM	48,703.000	275.00	13,393,325.00
<b>JOINARY WORK :</b>					
15	Providing and fixing 30mm thick Flush door shutters of approved quality and make conforming to IS :2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters: 30 mm thick including Stainless Steel butt hinges with necessary screws and hardware as per the drawing provided. Rate shall include cost of all materials, labours, transportation, loading, unloading etc. complete as per the direction of Engineer -in-charge in all floors.	SQM	281.000	4,716.35	1,325,294.35
16	30 mm thick factory made Polyvinyl Chloride (PVC) window shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm ( $\pm 0.2$ mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm ( $\pm 0.1$ mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm ( $\pm 0.2$ mm) wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm ( $\pm 0.1$ mm) wall thickness . The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.	SQM	158.000	2,548.15	402,607.70
17	Supplying, fitting and fixing in position well seasoned & dressed Sal wood door frames in main entrance doors of each Dwelling units, free from defects such as dead knots etc. in all floors including two coats of termite proof wood preservatives to Rear & front surface of frames which is in contact with concrete and masonry surface fitted with 6 nos. of W.I. Clamps and required screws of approved quality including cutting legs to sizes, cutting holes in walls, fixing in CC 1:2:4 including cost, conveyance, royalties of all materials and cost of all labour, sundries, T & P etc. required for all the work complete as per the directions of Engineer -in-charge.	CUM	4.900	85,386.95	418,396.06
<b>FINISHING WORKS</b>					
<b>AFT WORKS</b>					
18	Providing Pre-constructional Anti-Termite Treatment and creating a chemical barrier to the building by injecting chemical emulsion of required concentrations under grade slab and grade beam, around the footings, backfill, plinth filling, junction of wall and floor, external perimeter of building, surrounding of pipes, etc. as per instructions of chemical manufacturer and all as directed.  The Chemical to be used as insecticides for the treatment shall be 50% EC (Imdachloropid 30.5 SC, Bayer-Premise Make) and the application shall be dilute one part of chemical 50% EC with 49 parts of water to get 1% emulsion and strictly in accordance with the manufacturer's specification.including all cost of labour ,material, Formwork conveyance,royalties and ,sundries ,T & P etc. complete as per the directions of Engineer-in-charge.	SQM	1,572.000	150.15	236,035.80
<b>WATERPROOFING WORKS</b>					
<b>TERRACE WATERPROOFING</b>					

SI No	Description of Item	UNIT	QUANTITY	RATE	AMOUNT
19	Providing and Laying Waterproofing Treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying :i) After surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm.ii) Laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10cm.iii) Third layer of 1.5mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water stagnation for 48 hours. The entire treatment will be taken upto 30cm on parapet wall and tucked into groove in parapet all around.	SQM	3,787.000	8,404.25	31,826,894.75
<b>TOILET WATERPROOFING</b>					
20	Providing and laying water proofing in sunken portion of WC's, Bathroom etc. by applying cement slurry mixed with water proofing cement compound consisting of applying:i) First layer of slurry of cement@ 0.488kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure 4 hours.ii) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to cure for 4 hours followed with water stagnation for 48 hrs.(The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry)"	SQM	14,570.000	281.57	4,102,460.39
<b>UGR/OHT/STP WATERPROOFING</b>					
21	Providing and laying water proofing in sunken portion of WC's, Bathroom etc. by applying cement slurry mixed with water proofing cement compound consisting of applying:i) First layer of slurry of cement@ 0.488kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure 4 hours.ii) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to cure for 4 hours followed with water stagnation for 48 hrs.(The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry)"	SQM	228.000	281.57	64,197.73
<b>FLOORING WORK :</b>					
22	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 noising of steps etc. complete in basement floor with 50mm thick with 20mm nominal size stone aggregate	SQM	1,755.000	362.60	636,363.00
23	Providing and laying mirror polished vitrified tiles in floor 600 x 600mm of minimum thickness 10mm of 1st quality conforming to IS: 13755, of approved make in all colours, shades except White, Ivory, Grey, Fume Red Brown in hotel rooms, conference, restaurant etc with laid on 20mm thick Cement Mortar 1:4 (1 Cement: 4 Coarse Sand) including pointin the joints with white cement and matching pigments etc.,	SQM	29,788.000	1,306.00	38,903,128.00
24	Supplying, fitting and fixing of ceramic glazed wall Tiles in skirting of wall using special plain / printed series Ceramic wall Tile of premium grade (having minimum thickness 6.5 mm to 6.7 mm & size 200 mm x 200 mm OR 200mm x300 mm, confirming to IS 13753 of approved quality and shade in dado/ skirting,riser of steps,wall on 12mm thick bed of cement mortar of mix (1:3) laid in proper plumb and line with screened & washed sharp. river sand for mortar aand fixing with neat white cement slurry, grouting the joints with neat white cement slurry mixed with required quantities of pigments (Tiles are to be immersed in the water for required time before use) including cost, conveyance, loading, unloading, stacking, royalties , all taxes, cost of all Labour,Labour cess , T&P required for the work , Watering , Curing for required days , cleaning the flooring space manually etc. complete in all respect as directed by the Engineer-in-charge.	SQM	37,058.000	822.45	30,478,352.10
25	Providing and fixing 16-18 mm thick Prepolished Granite slab of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. Rate shall include cost of all materials, labours, transportation, loading, unloading etc. complete as per the direction of Engineer -in-charge in all floors.	SQM	24,312.000	2,990.00	72,692,880.00
26	Providing & laying of 25mm thick Cement concrete flooring using Artificial aggregate / Natural agreegate with punning (1:2:4) laid to proper slope in two layers bottom layer being 3/4" (20mm) thick with 1/4" to 3/4" size down graded hard black broken granite stone chips of top layer being 1/4"(6mm) thick with 1/4"(6mm) down graded hard black broken granite stone chips of approved quality and from approved quarry including watering, curing for 7 days with cost, conveyance, royalty of all materials and labour with T&P etc.complete in all floors as per direction of Engineer-in-charge.	SQM	2,884.000	179.57	517,890.67
27	Providing & making 12mm thick cement plaster in CM(1:4) with cement punning for skirting & Dados in WC , Bathroom & Staircases including the cost of conveyance, royalty of all materials and labour with T&P required for the work etc. complete in all floors as per direction of Engineer-in-charge.	SQM	16,560.000	245.50	4,065,503.85
<b>JOINARY WORK :</b>					
29	Aluminum Sliding Window with Glazing	SQM	17,877.000	5,216.00	93,246,432.00

Sl No	Description of Item	UNIT	QUANTITY	RATE	AMOUNT
30	Providing & fixing of 30mm thick Polyvinyl Chloride (PVC) doors in Bathroom & Toilets confirming to CPWD specifications. Cost to include materials like all hardware accessories, labour, conveyance, T&P, loading and unloading etc. complete as per direction of Engineer-In - Charge.	NOS	80.000	6,780.00	542,400.00
<b>STRUCTURAL STEEL WORKS:</b>					
31	Providing, fabricating, fitting & fixing of staircase & balcony SS hand railing & balusters in staircase and balconies fixed with necessary screws including cost of square bar and polishing etc. complete in all respect.	RMT	3,323.000	7,100.00	23,593,300.00
32	Supplying, fitting and fixing of powder coated aluminum structural glazing, with aluminium frame work made of curtain wall section 100x50x(2mm to 3mm) to required grid (as per wind load calculation) the frame to be property anchored to the building structure with gi brackets hilti/fisher huv / chemical anchor in rcc and hic in brick work(so as to sustain a wind speed of around 360 km/hr).sub frame is to be fabricated from aluminium 19mm x19mm x1.5mm square bar. 5mm( green/blue) stopsl reflective glass is to be mounted on the sub frame with 6mmx4mm spacer foam and ge structural sealant (ultra glaze). The silicon is allow to be cured for 24 hours in a dust free atmosphere. The sub frame with glass is to be fixed to the main frame with necessary angles and clits. The gaps between the glasses is to be filled of with weather sealant of approved make.	SQM	4,267.000	7,650.00	32,642,550.00
33	providing and fixing of steel grills in windows with one coat of primer and two coat of paint etc. complete	SQM	5,330.000	134.75	718,217.50
<b>PAINTING WORKS</b>					
34	Providing and applying plaster of parts putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete	SQM	147,818.000	113.85	16,829,079.30
35	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade:	SQM	106,812.000	55.25	5,901,363.00
36	Providing Distempering with oil bound washable distemper of approved brand with two or more coats by means of rollers over a water thinable priming coat with cement primer including to give an even shade including cost of all materials, labour, conveyance, taxes, royalties, scaffolding, sundries, T&P etc with complete as per the direction of the Engineer-in-charge	SQM	56,727.000	170.00	9,643,590.00
37	Finishing walls with textured exterior paint of required shade: New work (Two or more coats applied 3.28 ltr/10 sqm) over and including base coat of water proofing cement paint applied @2.20kg/10 sqm.	SQM	48,703.000	550.00	26,786,650.00
39	synthetic enamel paint of approved brand and manufacture and required colour over a priming coat of approved zinc primer on new work.	SQM	2,560.000	310.00	793,600.00
40	Supplying, fitting and fixing M.S. grill made out of structural steel, flats, plates, bars, confirming, to is specification for windows, ventilators, etc., as per drawing and design, fixed to walls with clamps including one priming coat with approved metal primer and making good to all damages in walls and floors etc., including cost of all materials, labour, conveyance, taxes, royalties, scaffolding, sundries, tools and plants, etc. Complete as per the direction of the engineer-in-charge	SQM	526.000	408.85	215,055.10
41	DG Set	LS	1.000	2,450,000.00	2,450,000.00
42	Installation of lift, 8 persons / 544 kgs. Capacity passangers lift and 5 nos. 1.5 MT capacity Goods lift including suitable brake release tools.	LS	6.000	1,250,000.00	7,500,000.00
43	Boundary wall	RMT	415.000	7,360.00	3,054,400.00
44	Landscaping	SQFT	4,685.000	550.00	2,576,750.00
				<b>TOTAL :</b>	<b>714,395,238.11</b>
<b>WATER SUPPLY, PLUMBING, AND SANITARY ESTIMATE</b>					
1	Providing and fixing white glazed vitreous china water closet 'p' or 's'(european type)/(indian style) with c.p. Brass hinges with flush valve complete.	NOS	210.000	3,800.00	798,000.00
2	Providing and fixing white glazed vitreous china wash basin with pedestral (550 x 400mm) with r.s. Or c.i brackets with 32 mm c.p. Waste 2 complete in all respect	NOS	210.000	3,200.00	672,000.00
3	Providing and fixing steel sink in kitchen plat form 3 and complete in all respect.	NOS	78.000	5,200.00	405,600.00
4	Providing and fixing c.p. Bath shower, pillar cock, bib cock, angle valve, long body cock cutting 4grooves and finishing.	NOS	384.000	350.00	134,400.00
5	Providing and fixing g.i. Pipes to is 1239 (medium class) complete with g.i. Fittings and clamps including cutting and making good the walls complete. Nominal bore				
	32MM	MTR	5,700.000	350.00	1,995,000.00
	25MM	MTR	4,100.000	280.00	1,148,000.00
	15MM	MTR	3,530.000	200.00	706,000.00
6	Miscellaneous Items For Bath And Toilet	CUM	275.000	16,000.00	4,400,000.00
7	Making of septic tank of 200 users. With brick masonry with r.c.c. Cover (1:2:4) slab and baffle wall excavation etc. Complete.	CUM	16.800	1,000,000.00	16,800,000.00
				<b>TOTAL :</b>	<b>27,059,000.00</b>
<b>ELECTRICAL WORK</b>					

Sl No	Description of Item	UNIT	QUANTITY	RATE	AMOUNT
1	Wiring For Following Light Points With 1.5 Pvc Insulated Copper Conductor Wires In Concealed Ms Conduits As Called For Specification Including 5 Amp Flush Type Switches Cover Plate To Switch Boxes And Earthing	NOS	5,020.000	680.00	3,413,600.00
2	Wiring for 15 amp light plug outlets with same as above.	NOS	2,550.000	580.00	1,479,000.00
3	Wiring For Exhaust Fan/Ceiling Fan Points With same as above	NOS	1,370.000	620.00	849,400.00
4	Meter, panel board and main switch with mcb and fuses. (one set).	LS	-	-	460,000.00
5	Providing And Fixing Of D.G.Set, Transformer, Lift, Fire Fighting, Etc	LS	-	-	5,500,000.00
6	Providing 10 set of earthing complete.	NOS	127.000	10,000.00	1,270,000.00
<b>TOTAL :</b>					<b>12,972,000.00</b>

**SUMMARY**

SL. NO	DESCRIPTION	AMOUNT IN R.S.
1	CIVIL WORK	714,395,238.11
2	W.S. AND SANITARY	27,059,000.00
3	ELECTRICAL	12,972,000.00
4	SUB - TOTAL	754,426,238.11
5	CONTINGENCY @ 5%	6,516,653.20
<b>TOTAL :</b>		<b>760,942,891.315</b>

TOTAL ESTIMATED COST RS. 76,09,42,891/-

(RUPEES SEVENTY SIX CRORES NINE LAKHS FORTY TWO THOUSAND EIGHT HUNDRED NINETY ONE ONLY)



Signature of the Architect

*Patitapaban Das*  
**Patitapaban Das & Associates**  
 Engineer- Patitapaban Das  
 Regd. No RTP/DTP (ST ER)-091/2018  
 Valid up to 10-05-2024  
 Mobile No.- 7849051678

Signature of Structural Engineer

**For UTKAL BUILDERS LIMITED**

*Shradha*  
**Managing Director**