

**SCHEDULE - B****Name of the work :- S/R to Emergency Response Centre at Old Kandla.**

<b>Sr.</b>	<b>Description</b>	<b>Qty.</b>	<b>Rate</b>	<b>Unit</b>	<b>Amount</b>
<b>1</b>	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades,laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand),jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete. (A) Size of Tile 500x500 mm	<b>117.64</b>		<b>M2</b>	
<b>2</b>	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	<b>500.00</b>		<b>Kg.</b>	
<b>3</b>	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	<b>1352.00</b>		<b>M2</b>	
<b>4</b>	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 5x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I.wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of 131  primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills,diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with : 12.5 mm thick tapered edge gypsum fire resistant board conforming to IS: 2095- Part I	<b>506.65</b>		<b>M2</b>	

Sr.	Description	Qty.	Rate	Unit	Amount
5	Wall painting with plastic emulsion of approved brand shade make and manufacture on undecorated wall surfaces to give an even shade including thoroughly brushing the surface clear of all mortar droppings and other foreign matters and sanding etc. complete all labour, material, tools & tackles as directed. Two coats.	1352.00		M2	
6	Providing and fixing ISI marked flush door shutters conforming to IS :2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	19.74		M2	
7	Providing 20mm thick POP punning in right angle on wall including mechanical scrapping as directed by engineer in charge.	2905.50		M2	
8	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface water thinnable cement primer	2905.50		M2	
9	providing & fixing of roller blinds on the windows with all necessary fixtures and all its accessories as per requirement and of approved colour and make complete with all labour and material etc. as directed by engineer in charge.	201.90		M2	
10	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building, all complete as per the architectural drawings, with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand), laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade, including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. (A) Polished Granite stone slab jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	290.65		M2	
11	Providing flooring with river finished granite with polishing at staircase with epoxy joint on existing flooring with chemical including pointing the joints with white cement including finishing and curing the joint complete as directed.	58.40		M2	
12	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. (A) 15 mm nominal outer dia Pipes	275.00		Mtr.	
13	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.				
(A)	32 mm nominal outer dia Pipes metre	150.00		Mtr.	
(B)	75 mm nominal inner dia Pipes	150.00		Mtr.	
(C)	100 mm nominal inner dia Pipes	150.00		Mtr.	

Sr.	Description	Qty.	Rate	Unit	Amount
14	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required W.C. pan with ISI marked white solid plastic seat and lid	1.00		Nos.	
15	Providing and fixing canteen table 6 seater dimension – 1.8m X 0.7m (D) X 0.76m (H) should be in compliance with the following specifications to provide Long service life with less maintenance and Better quality. Material grade - S.S 316/430, Table should be fitted with non-friction rolling lumber section top for smooth and efficient operation. Sheet thickness (millimetre) - 1.2 mm, Pipe shape - Round pipe, Ply thickness between top & frame- 19 mm thick Mounting Type - Floor Mounted, Stool/seating –size 12” (D), 18” (H) fixed with table and should be folding (attached reference picture for details), Inside Pipe Structure Also from SS Material Only Completely Argon Welded and Smooth Matt Finished & Abrasion resistant (With Laboratory Test Certificate)	7.00		Nos.	
16	providing & fixing of storage with 0.60, 0.97, 0.4 depth following specifications including all material & labour as directed by engineer-in-charge and as per drawing. top- 19mm thick.double ply+laminated, bottom- 19mm thick.double ply+laminated, shutters-19mm single ply+front laminate +autohinges and inside enamel paint, ,shelves -open shelf laminated, closed shelves enamel paint, back ply-6mm thick ply+ enamel paint, finishing material - all internal surfaces to be covered by enamel paint, edges of shutters pu polished.	30.00		M2	
17	providing & fixing of wall panels with following specifications including all material & labour as directed by engineer-in-charge and as per drawing wall panel 1 12 mm ply box framing with internal hollow space of 64.2 mm to cover conduits/wires, 1 mm sunmica from outside. 12 mm ply at back+ 6mm soft ply covered with fabric, switch boards as per drawing	487.95		M2	
18	providing & fixing of executive 360° revolving office chair with high back and ss body base with wheels & pneumatic up & down with one point locking mechanism + pu foam at seat and back , fabric as per engineer's drawings	20.00		Nos.	
19	providing & fixing of visitor 360° revolving office chair with low back and ss body base with wheels & pneumatic up & down with one point locking mechanism + pu foam at seat and back , fabric as per engineer's drawing	90.00		Nos.	
20	providing & fixing of study chair with low back and ss body base with desk & + pu foam at seat and back , fabric as directed by engineer-in-charge for Training Halls	70.00		Nos.	
21	providing & fixing of ceiling mounted projector (full hd) of EPSON EH-TW5650 MAKE or equivalent as directed by engineer-in-charge and as per drawing	1.00		Nos.	
22	providing & fixing of projector screen(3D WITH FULL HD) Of Elite make or equivalent as directed by engineer-in-charge and as per drawing	1.00		Nos.	

Sr.	Description	Qty.	Rate	Unit	Amount
23	providing & fixing of 5.1 speaker system of JBL make as directed by engineer-in-charge and as per drawing	1.00		Nos.	
24	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge	1.00		Each	
25	Providing and fixing brass bib cock of approved quality : 15 mm nominal bore -For fire officer toilet	2.00		Nos.	
26	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: (A) White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps	2.00		Nos.	
27	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour. 600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms.	1.00		Nos.	
28	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 5.50 mm thickness	0.48		M2	
29	Providing & fixing main table of size 1.82x0.90x 0.81 depth make with wooden ply and 1.00 mm thick laminate as per drawing attached including all material & labour as directed by engineer-in-charge.	10.00		Nos.	
30	Providing & fixing main table of size 1.52x0.75x 0.81 depth make with wooden ply and 1.00 mm thick laminate as per drawing attached including all material & labour as directed by engineer-in-charge.	5.00		Nos.	
31	Modification of existing flush door by applying 1.00mm thick sunmica on both side of door & framing with 18mm thick plywood on one side upto 25cm & fixing of same sunmica on it with fevicol S.S railway type hinges 100 mm size, cylindrical knobs etc including all labour ,materials etc... by engineer in charge and as per drawing.	111.40		M2	
32	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer 3 mm thick water proofing membrane, black finished reinforced with non-woven polyester matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 litre/sqm by the same membrane manufacture of density at 25°C, 0.87-0.89 kg/litre and viscosity 70-160 cps. Over the primer coat the layer of membrane shall be laid using Butane Torch and sealing all joints etc, and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 650/450N/5cm. Tear strength in longitudinal and transverse direction as 300/250N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane : (A) 3 mm thick	337.68		M2	

Sr.	Description	Qty.	Rate	Unit	Amount
33	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. (A) In cement mortar	0.63		M3	
34	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 getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge. (A) All kinds of soil	2.70		M3	
35	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : (A) 1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	0.54		M3	
36	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 : (A) 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size).	1.70		M3	
37	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement : (A) 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size).	4.30		M3	
38	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 above plinth level 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).	5.22		M3	
39	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 : (A) Cement mortar 1:6 (1 cement : 6 coarse sand)	4.46		M3	
40	Centering and shuttering including strutting, propping etc. and removal of form for all heights : (A) Foundations, footings, bases of columns, etc. for mass concrete	5.76		M2	
41	Centering and shuttering including strutting, propping etc. and removal of form for all heights : (A) Columns, Pillars, Piers, Abutments, Posts and Struts	6.88		M2	
42	Centering and shuttering including strutting, propping etc. and removal of form for all heights : (A) Suspended floors, roofs, landings, balconies and access platform	12.96		M2	

Sr.	Description	Qty.	Rate	Unit	Amount
43	Centering and shuttering including strutting, propping etc. and removal of form for all heights : (A) Lintels, beams, plinth beams, girders, bressumers and cantilevers	5.22		M2	
44	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: (A) Cement mortar 1:6 (1 cement : 6 coarse sand)	12.25		M3	
45	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), 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 12 mm 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.	54.00		M2	
46	Providing and fixing 1st quality ceramic glazed floor tiles conforming to IS : 15622 (thickness to be specified by the manufacturer ) 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 12 mm thick bed of cement Mortar 1:3 (1cement: 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.	9.00		M2	
47	Steel reinforcement for R.C.C. work including straightening, cutting,bending, placing in position and binding all complete upto plinth level. (A) Thermo-Mechanically Treated bars of grade Fe-500D or more.	1122.00		Kg.	
48	Providing and fixing plywood partition consist of frame work ofhard wood of size 50 x 50 mm thick with require numbers of bracings horizontally as well as vertically covered with 6mmthick ply on both side of frame and finished with 1.00 mmthick of laminated sheet all materials shall be used ofapproved quality brand and shed complete with cost of nails,fevicol, screws, taxes etc. of all labours and materials asdirected engineer-in-charge	83.10		M2	
49	Providing and fixing 12 mm thick frosted glass partition between working tables (As Shown In Drawing) including cost of "D" shape brackets, screws, making the edges of glass bevelled on all sides, taxes complete with all labour and material.	58.50		M2	
50	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	34.45		M2	
51	Providing flooring with river finished granite with polishing at staircase with epoxy joint on existing flooring with chemical including pointing the joints with white cement including finishing and curing the joint complete as directed.	93.40		M2	
52	Providing & fixing of M.S. structure railing with using 25 x 75 mm tata M.S. Section at stair case with automative paint including welding & fixing on stair case etc.. Complete as per drawing No. KPT/CH.OF/2 & 3 attached.	41.30		M2	

Sr.	Description	Qty.	Rate	Unit	Amount
53	Providing and fixing UPVC doors and windows of approved make with frame size 69mm x 58mm, Sash size - 96mm x 58mm, Mullion size - 68mm x 30mm Casements & Hinged with full reinforcement and white color, 8mm thick glass, Drainage Base, upto floor two level with all materials and labour as directed by the engineer-in-charge.	46.15		M2	
54	Painting of wall texture as per selection with complete material & labour as directed by Engineer in charge.	16.90		M2	
55	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. (A) For thickness of tiles 10 mm to 25 mm	164.35		M2	
56	Repairing of existing aluminium window including cutting in required size & shape, fixing as directed by Engineer in charge.	403.80		M2	
57	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling /grouting and finishing complete as per direction of Engineer-in-charge. (A) Size of Tile 500x500 mm	117.64		M2	
58	Providing and laying Vitrified tiles in different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer, in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately). (A) Size of Tile 600x600 mm	12.70		M2	
59	Providing & fixing of Room Name Plate of size 22" x 7" with Etched S.S. Plate on teak wooden base polish front over a base of wood including cutting, fixing at size all taxes with all material & labour as directed by Engineer-in-charge.	67.00		Each	
60	Providing & fixing Number Plates of size 6" x 6" with Etched S.S. plate on teak wooden base polish front over a base of wood including cutting, fixing at size all taxes with all material & labour as directed by Engineer-in-charge.	100.00		Each	
<b>Total Rs.</b>					

**Superintending Engineer (PL)**  
**Deendayal Port Authority**