

BEML LIMITED, BANGALORE COMPLEX

Tender Ref: 6300038642

Date: 11.12.2023

ISSUED TO:

Period of contract:

04 Months

EMD :

Rs. 28,400/-

Sub: Construction of Storage shed and Toilet blocks in Aerospace hangar ,at Bangalore Complex BEML LIMITED.

SCHEDULE 'A' - BILL OF QUANTITIES

Sl. No.	Description	Unit	Qty	Rate/ unit in fig. & in words (Rs).	Amount (Rs)
1	Dismantling the existing chain link fencing of any description and stacking in place and handing over to civil maintenance department as directed by engineer incharge	Sqm	100.0		
2	Supplying, Fabricating, erecting & fixing M/s.Tata/Jindal/vizag/apollo/sail in position MS Structural steel work for canopy & Window frame by using MS Angles, MS Flats, MS Sq tubes, channels etc, erection at all elevations, levels & heights including applying two coats of synthetic enamel paint over a coat of red oxide zinc chromate primer etc., complete EIC. Note: a) The rate quoted for the item deemed to include labour, welding machine, welding rods, Gas, consumables. b) The rate quoted for the item deemed to include for providing & removal of scaffolding using wooden/steel props, staging etc.	MT	1.75		
3	Supplying & fixing M/s. JSW/TATA make single skin HI-Rib trapezoidal profile PPGL colour coated (sky blue) sheeting for roof & Cladding area 1060mm supply width, 975mm-1000mm covered width 29mm-30mm crest height, 24mm crest width with min. 195mm-200mm pitch in 0.60mm thick TCT Galvalume(55% aluminum-43%Zinc Coating) 150 GSM with 550 Mpa with a minimum lap of 200mm with wide pans with stiffening ribs for efficient water shedding & special male/female ends with full return leg on one lap for purlin, conforming to relevant IS 277 including all hardware/fixtures like colour matched nylon head self tapping corrosion protected mechanically galvanised fasteners with integral washer etc , complete all as specified and as directed by Engineer in charge. Note:- The finished/Covered area of roof sheet excluding lap length shall be measured for payement.	Sq.m	200.0		
4	Demolition/ dismantling the existing cement concrete flooring/hardstanding concrete of any description and in any position not otherwise specifically provided etc and stacking of serviceable materials if any and disposal of unusable materials or debris outside the site premises to a distance not exceeding 5.0 KM not objected by local civic authorities including lead ,lift etc,complete all as specified and directed by Engineer in charge. Note: The dismantled materials shall be removed immediately from the premises without disturbing the regular production activities .	Cu.M	8.00		

5	Earthwork excavation by mechanical/manual means not exceeding 1.50m in width and not exceeding 1.50m in depth and not exceeding area 10 sqm on plan in all kinds of soil but excluding hard rock for foundation/ pits including getting out the excavated earth, with a lead upto 50 mts, including dressing of sides, dewatering ground water/rain water, compaction including disposal of debris outside the site premises which is not objected by any civic authorities etc., complete all as specified and directed by Engineer in charge.	Cu.M	16.00		
6	Providing and laying in Position Plain cement concrete of mix proportion 1:4:8 using stone aggregate of 40mm down graded granite aggregate, laid in layers not exceeding 15cms well compacted for foundation bed, under floors and other similar works including curing etc.,complete all as specified and as directed by Engineer in charge. Note: The rate quoted for the item shall be deemed to include for providing and removal of centering/shuttering wherever necessary.	Cu.M	7.00		
7	Providing and laying Plain Cement Concrete of mix proportion 1:2:4 average 75mm thick using 20mm/12.5mm graded granite aggregates for flooring, laid to a proper slope & gradient, well compacted,mechanical/manual mixing including curing etc., complete all as specified and directed by the Engineer in charge.	Cu.M	2.00		
8	Providing and constructing size stone masonry in cement mortar 1:6 for foundations with courses not less than 20cms height and providing bond stones at every 1.5mtrs apart in each course including chisel dressing and curing etc, complete all as specified and directed by engineer in charge.	Cum	5.00		
9	Providing and applying a Damp proff course for main walls, applied hot, two coats of bitumen, to concrete surfaces at the rate of 1.5kg. per sq. m per coat ,complete all as specified and directed by engineer in charge.	Sqm	2.00		
10	Providing, mixing and laying in position Reinforced Cement Concrete M20 grade of mix proportion 1:1.5:3, using 20mm graded down size granite aggregate for Plinth Beams,etc complete including curing, Vibrating, compacting, finishing,dewatering wherever necessary including lead, lift etc., complete all as specified and directed by Engineer in charge. Note: a) Reinforcement shall be measured and paid separately under relevant item. b) The rate quoted by the Contractor for the item is deemed to include for providing and removal of form work/centering/shuttering wherever necessary.	Cum	4.00		

11	<p>Providing & laying in position TMT bars (Fe 500 grade) in reinforcement conforming to relevant IS in various diameters for various locations & levels as shown in drawing, cut to length and bent to shape required, binding spirally with MS wire (annealed) of size not less than 0.9 mm dia including all lead, lift, etc., complete all as specified and directed by Engineer in charge</p> <p>NOTE: a) The rate quoted by the Contractor for the item is deemed to include for cement mortar cover blocks as per the requirement at site and providing and removal of scaffolding/staging wherever necessary.</p> <p>b) Reinforcement will be measured based on actual qty placed in position on standard weight basis, no allowance will be made for rolling margin.</p> <p>c) Only authorized laps, chairs and spacers shall be measured and paid.</p>	Kgs	500.00		
12	<p>Providing & constructing Burnt brick masonry of required thickness in Cement Mortar 1:6 using first class table moulded bricks including necessary curing etc., complete all as specified and directed by Engineer in charge. Note: The rate quoted is deemed to include for providing and removal of scaffolding/staging wherever necessary.</p>	Cum	20.00		
13	<p>Rendering 15mm thick in Cement Mortar 1:4 on fair faces of brick or concrete surfaces including finishing the surface even & smooth, curing, tools & tackles etc., complete all as specified and directed by Engineer-in-charge.</p>	Sqm	200.00		
14	<p>Preparing the existing surface by cleaning, hacking etc., & Supplying and fixing Anti skid ceramic coloured floor tiles of minimum 300 mmX300 mmX8mm thick or bigger size of approved colour/pattern laid over a bedding layer of CM 1:4,15mm thick manufactured by M/s Naveen/Kajaria/Somany of approved make to proper slope and joints neatly finished and pointed with jointing powder of matching colour pigment etc., Complete all as specified and directed by Engineer-in-Charge.</p> <p>Note: 1)The rate quoted is deemed to include for all wastages. 2) The rate is deemed to include for dismantling the existing old mosaic floor tiles in any thickness, hacking out old plastering & disposal of unserviceable materials from the premises.</p> <p>3) The basic cost of tiles shall not be less than Rs 60/sft.</p>	Sqm	20.00		
15	<p>Supplying and fixing coloured ceramic dado tiles for dado minimum size 450mm x 350mmx7mm thick or bigger size of approved colour/pattern laid over a backing coat of Cement Mortar 1:4,15mm thick manufactured by M/s Naveen/Kajaria/Somany of approved make and joints neatly finished and pointed with jointing powder of matching colour pigment etc., complete all as specified and directed by Engineer-in-Charge.</p> <p>Note:1)The rate quoted is deemed to include for all wastages. 2) The rate is deemed to include for dismantling the existing old mosaic wall tiles in any thickness, including existing old washbasin, hacking out old plastering & disposal of unserviceable materials from the premises.</p> <p>3) The basic cost of tiles shall not be less than Rs 60/sft.</p>	Sqm	70.00		

16	<p>Applying two or more coats of oil bound washable Distemper of first quality approved brand for internal walls & colour manufactured by M/s. Asian Paints/Berger Paints conforming to relevant IS over a coat of primer and touch up putty wherever necessary etc., complete all as specified and as directed by Engineer in Charge.</p> <p>Note: The rate quoted is deemed to include for providing and removal of scaffolding, staging/ladder, suspending jhoola wherever required and protective measures etc.</p>	Sqm	50.00		
17	<p>Applying two coats of exterior emulsion paint (ACE) of first quality approved brand for external walls and colour manufactured by M/s.Asian Paints/Berger Paints over a coat of primer and touch up putty wherever necessary etc., complete all as specified and as directed by engineer in charge. Note.1) Contractor's quoted rate is deemed to include for providing and removal of scaffolding/ suspending jhoola for painting, crack filling compound. etc</p>	Sqm	150.00		
18	<p>Supplying and fixing new coloured vitreous chinaware floor mounted European type water closet with low level PVC flushing cistren of 12 litres capacity of first quality, conforming to relavent IS, Manufactured by M/s Parryware/Hindware make including white PVC seat cover, brass Chromium plated angle cock, 450 mm long PVC Connecting pipe,' P' or 'S' Trap with concealed brackets, flush pipe, health faucet with gun & flexible connection pipe, drain outlet fittings and necessary fittings, fixtures and hardware including making good the walls/floor wherever required etc., complete all as specified and directed by the Engineer in charge.</p>	No	2.00		
19	<p>Supplying and fixing PVC heavy duty door shutters with frames manufactured by M/s.Sintex make or equivalent approved make with wall thickness not less than 2mm thick and shutter thickness not less than 30 mm (multi chamber hollow section) of approved shade & size conforming to relevant IS as per manufacturer's specification etc including necessary hardware viz., Stainless steel hinges, tower bolts, handles, hardware items etc.,complete all as specified and directed by Engineer in charge.</p>	Sqm	10.00		
20	<p>supplying and fixing new UPVC Glazed ventilator/Windows of standard UPVC Profile sections of approved brand manufactured by M/s LG/ Prominace /Veka of approved shade/colour and fixed with 5.5mm thick glazing in louvers including weather sealed beading gaskets etc., to make them weather protected and free from rattling including all necessary standard hardware like handles, screws etc complete to suite the overall size of openings all as directed and specified by the Engineer in charge.</p>	Sqm	2.00		

21	Supplying and fixing 600mm x 450mm or approved size bevelled edge mirror of M/s. Saint Gobain/ Modiguard conforming to relevant IS, mounted on 6mm thick BWP Plywood and fixed to wooden plugs with chromium plated brass screws all necessary hardware etc.,complete all as specified and directed by Engineer-in-charge.	Each	2.00		
22	Supplying & fixing 15mm diameter brass chromium 2 in 1 bib cock of first quality approved brand manufactured by M/s.ESS /Parryware/Hindware/Johnson make including all accessories conforming to relevant IS etc., complete all as specified & directed by the Engineer in charge.	No	2.00		
23	Supplying and fixing white vitreous chinaware hand wash basin of size 600x450mm approximately or approved size manufactured by M/s. Parryware / Hindware /M/s.Cera approved make conforming to relevant IS, with white vitreous china full height pedestal including all accessories such as brass chromium plated waste coupling, PVC connection pipe of length 450mm, brass chromium plated angle cock / stop cock 32mm diameter PVC waste pipe, rack bolts, screws, etc., all lead, lift, etc., complete all as specified and directed by the engineer-in-charge.	No	2.00		
24	Supplying and fixing 15mm diameter brass chromium plated pillar cock of first quality conforming to relevant IS manufactured by M/s.ESS /Parryware/ Hindware approved make including necessary accessories etc., complete all as specified and directed by Engineer in charge.	Each	7.00		
25	Supplying & fixing PVC SWR Gully trap 125/110mm of M/s.Supreme / Astral make including jointing with solvent cement.etc., complete all as specified and directed by Engineer in charge.	Each	10.00		
26	Supplying & fixing PVC Nahani trap 75/100mm of M/s.Supreme / Astral make including jointing with solvent cement etc., complete all as specified and directed by Engineer in charge.	Each	12.00		
27	Supplying & fixing 100mm diameter chromium plated grating of reputed manufacturer conforming to relevant IS etc., complete all as specified and directed by Engineer in charge.	Each	5.00		
28	Supplying & fixing 110 mm diameter PVC Air vent cowl Manufactured by M/s Supreme conforming to relevant IS etc including all fittings & fixtures etc., complete all as specified and as directed by Engineer in charge.	Each	8.00		
29	Supplying and fixing Urinal Spreader of first quality approved brand conforming to relevant IS etc., manufactured by M/s Viking/Equivalent make etc.,complete all as specified and directed by Engineer-in-charge.	No	2.00		

30	Supplying and fixing vitreous chinaware white urinal basin manufactured by M/s. Parryware/ Hindware/Cera approved make including flush pipe, waste coupling, waste pipe etc., of reputed manufacturer conforming to relevant IS complete set and fixing / bedding urinal against wall in cement mortar 1:2, securing urinal with bolts including brass screws, pointing around urinal back in cement mortar and with all drain outlet fittings.etc., complete all as specified and directed by the Engineer-in-charge.	No	2.00		
31	Supplying and fixing large urinal partitions manufactured by M/s. Parryware / Hindware/Cera/ M/s Johnson approved brand with all fittings and fixing using necessary hardware etc., complete all as specified and directed by Engineer-in-Charge.	No	2.00		
32	Supplying and fixing 300mm dia heavy duty exhaust fans of steel body manufactured by M/s.Bajaj/USHA brand including all fittings and fixtures conforming to relevant IS etc.,complete all as specified and directed by Engineer-in-charge.	Each	2.00		
33	Supplying & fixing PVC soap dish/tray including all fittings & fixtures etc., complete all as specified and directed by Engineer-in-charge.	No	2.00		
34	Returning & filling under floors layer by layer including consolidation, well ramming etc., complete all as specified and as directed by engineer in charge.	Cum	2.00		
35	Providing & fixing 110mm diameter 6kg/cm2 PVC pipes manufactured by M/s.Supreme/ Astral or equivalent conforming to relevant IS for sanitary, waste water, laid in gradient in walls/floors including all standard PVC fittings like elbows, bends, Tees, tail pieces & fixtures such as pipe clips, PVC clamps wooden plug, screws, washers etc fixed/ secured firmly etc.,complete all as specified and directed by Engineer in charge. Note: The rate quoted is deemed to include for providing and removal of scaffolding/staging wherever necessary.	Rmt	50.00		
36	Supplying and Laying the 20mm diameter, heavy grade CPVC water tubing manufactured by M/s.Supreme/Astral/Ashirwad approved make, laid in required length/gradient in walls, flooring & trenches including all standard CPVC fittings such as elbows, collars, Tees, MTA, FTA, PVC Clamps including cutting & making good the floor/walls with cement mortar wherever necessary etc., complete all as specified and directed by Engineer-in-charge. Note: The rate quoted is deemed to include for providing and removal of scaffolding/staging wherever necessary.	Rmt	50.00		
37	Providing & fixing 200mm diameter 6kg/cm2 PVC pipes manufactured by M/s.Supreme/ Astral conforming to relevant IS for sanitary, waste water, laid in gradient in walls/floors including all standard PVC fittings like elbows, bends, Tees, tail pieces & fixtures such as pipe clips, PVC clamps wooden plug, screws, washers etc fixed/ secured firmly etc.,complete all as specified and directed by Engineer in charge. Note: The rate quoted is deemed to include for providing and removal of scaffolding/staging wherever necessary.	Rmt	15		

38	Providing & fixing 160mm diameter 6kg/cm ² PVC pipes manufactured by M/s.Supreme/ Astral conforming to relevant IS for sanitary, waste water, laid in gradient in walls/floors including all standard PVC fittings like elbows, bends, Tees, tail pieces & fixtures such as pipe clips, PVC clamps wooden plug, screws, washers etc fixed/ secured firmly etc.,complete all as specified and directed by Engineer in charge. Note: The rate quoted is deemed to include for providing and removal of scaffolding/staging wherever necessary.	Rmt	15		
39	Supplying, hoisting & fixing in positing triple layered rotational moulded polyethylene water storage tank (cylindrical vertical with closed top) of capacity 1000 litres of M/s Syntex make/Equivalent including connecting up pipes, with all necessary hardware items etc., complete all as specified and directed by Engineer in charge.	NO	1		
40	Cutting the existing hard standing concrete through length not exceeding 15cm girth(depth)mechanically using a cutting ,machine and trimming the edge of concrete surface etc.,complete all as per Engineer Incharge.	Rmt	25		
41	Supplying and fixing 20mm thick polished black Granite slab for platform and jointed neatly with cement mortar and pointed with black oxide or coloured cement compound to match the colour of granite including bull nosing to the exposed edges half round etc., complete all as specified and directed by Engineer in charge. Note: The rate quoted for the item deemed to include for wastages.	Sq.M	1		
42	Supplying and fixing M/s. Bayer#s / JSW/ Everest make plain 2mm thick uniform thickness polycarbonate sheet conforming to relevant IS fixed with necessary hardware screws/washers and sealant, etc., complete all as specified & directed by Engineer in charge. Note:- The rate quoted for the item is deemed to include for Providing & removal of scaffolding, staging/safety nets wherever necessary.	Sq.M	15		
	Total Value of work excluding GST (Rs)			Rs.	
	GST			Rs.	
	Total Value of work inclusive of GST			Rs.	

(Total Amount in words)

Signature of the Contractor
with seal