

BEML LIMITED, BANGALORE COMPLEX

Tender Number: 6300039719

Period of contract: 07 Months

EMD : (Rs) Rs 15,35,674.67

Subject: Lean to shed covered area for various places and Extension of covered roof storage area in RDQ yard with RCC flooring and side coverage of open area to avoid rain water entry during rain, Bangalore Complex, BEML Limited.

SCHEDULE 'A' - BILL OF QUANTITIES

Sl. No	Description	Unit	Qty	Rate/unit in fig. & in words Rs.	Amount (Rs)
1	Demolition/ dismantling the existing plain 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 which is not objected by any 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.	Cum	20		
2	Earth work excavation by mechanical means/manual means in foundation trenches not exceeding 1.5 Mtrs in depth in all kinds of soil but excluding hard rock for foundations/ pits including getting out the excavated earth and disposal of debris outside the premises to a distance exceeding 1.5m & not exceeding 5km, disposal of surplus excavated soil which is not objected by any civic authorities as directed including dressing of sides, dewatering ground water/rain water, compaction etc., complete all as specified and as directed by Engineer in charge.	Cum	140		
3	Providing and laying in Position Plain Cement Concrete M7.5 grade 1:4:8 using 40mm graded down size granite aggregate, machine mixed, 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 is deemed to include for providing and removal of form work/centering/shuttering wherever necessary.	Cum	32		
4	Providing & laying in position Fe 500 grade TMT bars in reinforcement conforming to relevant IS in various diameters, locations & levels, 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. NOTE: a) The rate quoted 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. b) Reinforcement will be measured based on actual quantity placed in position on standard weight basis, no allowance will be made for rolling margin.	Kgs	17000		

	<p>c) Only authorized laps, chairs and spacers shall be measured and paid.</p> <p>d) The contractor should arrange for testing of TMT Bars at reputed laboratory as per IS & submit the test certificate at his own cost and expense as required by Engineer-in-charge.</p>				
5	<p>Providing, and laying in position Reinforced Cement Concrete M20 grade 1:1.5:3, using 20mm graded down size granite aggregate machine mixed for foundations, footing, pedestals, 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.</p> <p>Note: a) Reinforcement shall be measured and paid separately under relevant item. b) The rate quoted for the item is deemed to include for providing and removal of form work/centering/shuttering wherever necessary. c) The rate is deemed to include for providing RCC Duct slab.</p>	Cum	810		
6	<p>Supplying, fixing in position 16mm diameter MS foundation bolts of minimum 600mm length including threading of required length, drilling /fixing the MS bolts over the existing concrete surfaces suitably including necessary hardware items like nuts, washers welding the bolts to the reinforcement to correct line & level, lead and lift etc., complete all specified and directed by the Engineer in charge.</p> <p>Note: The rate quoted is deemed to include for loosening the existing concrete surface for placing of MS Plates including making good the surfaces after drilling of MS bolts.</p>	Kgs	1590		

7	<p>Design, Supplying, Fabricating, hoisting and erecting in position MS Structural steel works for roof truss, purlins & cladding work using MS Structural steel like channels, plates, angles, cleats, flats, fixing to correct line & level including cutting, welding, bending to required shape, cleaning the rust and scales to the satisfaction of engineer in charge, shims & packing pieces will be required for erection at all elevation. heights & levels etc. Including synthetic enamel painting of steel structure, Base plate for columns new steel Gate with hinge, Rolling shutter including enamel painting, complete all as specified and as directed by engineer in charge. Note: a) The rate quoted by the Contractor for the item is deemed to include for labour, welding machine, welding rods, gas etc. b) The rate quoted by the contractor is deemed to include for scaffolding/staging & providing safety nets wherever necessary. c) The rate quoted are deemed to include the painting of structural steel members with one coat of primer and two coats of synthetic enamel paint. d) Design of all MS structural elements, members such as columns, trusses, beams, purlins, rafters etc., complete for required sheet covering of individual sheds at various location are to be designed and submit detailed drawings for construction with certified/attestation with registered consultant/govt. certified agency. This includes submission of detailed structural drawings including plan, elevation, section & connection details and submitting in both hard and soft copies for approval of Engineer In Charge. e) The cost of engaging the design consultant for structural design & drawings and obtaining approvals/certify design etc., and making any revisions shall be deemed to be included in the quoted rates.</p>	Kgs	184000		
8	<p>Supplying & fixing 0.6mm thick galvalume single skin HI-Rib trapezoidal/approved profile PPGL colour coated sheet for roof of approved colour & shade, 1060mm supply width, 975mm-1000mm covered width 29mm-30mm crest height, 24mm crest width with min. 195mm-200mm pitch minimum 0.50mm thick TCT, Galvalume (55% aluminum-43%Zinc Coating), 150 GSM with minimum yield strength of 550 Mpa. The sheet shall have wide pans with stiffening ribs manufactured by M/s JSW/TATA. The sheet shall be fixed by means of anticorrosive self-drilling self-tapping mechanically galvanised fasteners with integral EPDM washers. The scope shall include all sealing of joints, curves, edges or other accessories with silicon sealant. The sheet shall be laid with a minimum lap of 150mm at the ends and special male & female lapping at each side. The minimum lap of sheets with ridges, hips & valleys shall be 200mm. The sheets shall be secured to purlins by means of self-driven screws or GI J or L hook bolts and nuts with bitumen and GI limpet washer as per the requirement of site and as directed, etc , complete all as specified and as directed by Engineer in charge.</p> <p>Note:- 1) The finished/Covered area of roof sheet excluding lap length shall be measured for payment. 2) The rate quoted is deemed to include for providing and removal of scaffolding, staging/ladder wherever necessary and protective measures etc.</p>	Sqm	3100		

9	<p>Supplying & fixing 0.6mm thick galvalume single skin HI-Rib trapezoidal/approved profile PPGL colour coated sheet for cladding of approved colour & shade, 1060mm supply width, 975mm-1000mm covered width 29mm-30mm crest height, 24mm crest width with min. 195mm-200mm pitch minimum 0.50mm thick TCT, Galvalume (55% aluminum-43%Zinc Coating), 150 GSM with minimum yield strength of 550 Mpa. The sheet shall have wide pans with stiffening ribs manufactured by M/s JSW/TATA. The sheet shall be fixed by means of anticorrosive self-drilling self-tapping mechanically galvanised fasteners with integral EPDM washers. The scope shall include all sealing of joints, curves, edges or other accessories with silicon sealant. The sheet shall be laid with a minimum lap of 150mm at the ends and special male & female lapping at each side. The minimum lap of sheets with ridges, hips & valleys shall be 200mm. The sheets shall be secured to purlins by means of self-driven screws or GI J or L hook bolts and nuts with bitumen and GI limpet washer as per the requirement of site and as directed, etc , complete all as specified and as directed by Engineer in charge.</p> <p>Note:-1) The finished/Covered area of roof sheet excluding lap length shall be measured for payment. 2) The rate quoted is deemed to include for providing and removal of scaffolding, staging/ladder wherever necessary and protective measures etc.</p>	Sqm	5000		
10	<p>Providing and constructing 230mm thick/required thickness burnt brick masonry in cement mortar of mix proportion 1:6 using first class table moulded bricks for superstructure at required heights including tools & tackles, curing etc., complete all as specified & directed by Engineer in charge. Note: The rate quoted is deemed to include for providing & removal of scaffolding, staging/ladder wherever necessary and protective measures etc.</p>	Cum	190		
11	<p>Supplying and fixing 2mm uniform thickness corrugated polycarbonate sheet manufactured by M/s.Tuflite/Lexon/PC Lite for roof conforming to relevant IS with necessary hardware screws/ washers and sealant, sheets fixed to suit the existing galvalume roof sheet profile such that no leakage occurs 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/ladder wherever necessary and protective measures etc.</p>	Sqm	900		
12	<p>Filling of Earth: Supplying & filling of Moorum/red bajri filling in layers not exceeding 15cm thick including spreading, levelling & well ramming etc., Complete all as specified and directed by Engineer-in-charge.</p>	Cum	800		

13	<p>Providing, straightening, cutting, fabricating erecting, placing in position in required slope, Trapezoidal GI gutter of 1.5mm GI sheet fabricated & supported by 50X6mm MS flat at 600mm c/c and make provision for down take pipe mouth/spout of required size and Supplying fabricating and fixing MS brackets for Gutter, roof sheets using MS structural steel angles, plate, channels etc including welding the MS members etc., complete all as specified & directed Note: All consumables such as welding machine, electrodes, gas etc., required for the work are contractors own supply including labour and shape, including painting structural work with two coats synthetic enamel paint over a coat of zinc primer, scaffolding etc., complete at all levels. etc., Complete all as specified and directed by Engineer-in-charge.</p>	RMT	230		
14	<p>Providing & fixing 110mm diameter 6kg/cm² PVC pipes manufactured by M/s. Supreme/ Astral conforming to relevant IS for rain water down take laid in gradient in walls 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 for the item deemed to include for Providing & removal of scaffolding, staging wherever necessary etc.</p>	RMT	380		
15	<p>Rendering/Plastering for the external brick masonry wall / concrete surfaces in cement mortar of mix proportion 1:6, 20mm thick including tools & tackles, scaffolding, curing etc., complete as specified and directed by Engineer in charge. Note: The rate quoted for the item deemed to include for Providing & removal of scaffolding, staging wherever necessary etc.</p>	Sq.M	1650		
16	<p>Returning & filling the available earth in plinth, trenches, foundations or around plinth with approved good quality earth of non-swelling type, free from organic materials, consolidating in layers of not more than 200mm including watering, compaction, etc., complete all as specified and directed by Engineer in charge. Note: Net consolidated volume shall be measured for payment proposed.</p>	Cu.M	40		
17	<p>Preparing the newly plastered surface of external walls including stucco area by water washing, sand papering/wire brushing including providing necessary repairs to cracks, and cleaning the surface from dust, dirt and filling/closing the cracks with suitable crack filling compound and applying two coats of exterior emulsion paint of first quality approved brand and colour manufactured by M/s. Asian Paints (Apex ultima)/Berger Paints after successively drying each coat over a coat of primer and touch up putty wherever necessary etc., complete all as specified and directed by Engineer in Charge. Note: 1) The rate quoted is deemed to include for providing and removal of scaffolding, staging/ladder, suspending jhoola wherever required and protective measures etc. 2) Cleaning the floor surface after painting. 3) wastages. 4) The rates includes the replacement of damaged plain/ wire cut glasses wherever required. 5) The rates includes plastering for walls wherever damaged.</p>	Sqm	1680		

18	Making the groove in the brick wall built in Cement mortar for inserting the roof sheets which includes cutting chases, pinning in, making good facings wherever required and pointing in cement mortar 1:3 to ends and making good the surfaces etc., complete all as specified and directed by Engineer in Charge	RMT	30		
20	Supplying, fabricating and fixing in position 3mm thick GI funnels/spout of required diameter to fix to rain water gutters including welding to the gutters to ensure a leak proof joint with necessary hardware items, silicon sealant etc complete all as specified & directed by the Engineer-in-charge	Nos	200		
	Total value of work excluding GST (Rs).				
	GST (Rs).				
	Total value of work inclusive of GST (Rs)				
	<p>Note:-</p> <p>1) The rate quoted for the above items is deemed to include for providing and removal of scaffolding/staging wherever necessary.</p> <p>2) The contractors/ prospective bidders shall visit the site and acquaint themselves with the site conditions before submission of bid/ quote.</p> <p>3) The contractor to note that the dismantled materials should be removed and shifted immediately from the site premises without disturbing the regular office atmosphere in the area and the rate is deemed to include for the same.</p> <p>4) L-1 Contractor to whom the contract is awarded is requested to submit the drawings, design of proposed lean to sheds and submission of details attested by certified structural consultant/Govt Agency.</p>				

(Total Amount in words Rupees.....

Signature of the Contractor with seal