

BEML LIMITED, BANGALORE COMPLEX.

Ref: -6300037968

Date: - 09.09.2022

ISSUED TO:	PERIOD OF CONTRACT	SIX (06) MONTHS
	EMD: -	Rs. 2,17,000/-

Sub:- Renovation/Refurbishing of BOGIE FRAME, ICF hangar/ Tool room hangar by replacing the existing old roof sheets, curves, rain water downtake pipes & associated civil works at Bangalore Complex, BEML limited, Bangalore 560075.

SCHEDULE 'A' BILL OF QUANTITIES

Sl. no	Description	Unit	Qty.	Rate/ Unit in fig. & in words Rs.	Amount Rs.
1	Removing the existing corrugated/semi-corrugated AC/GI/ FRP roof sheets including J/L bolts, washers carefully at a minimum height of 10 m approximately, stacking the usable sheets at a place all as shown and shifting the unusable roof sheets to Salvage stores inside Factory premises etc., complete all as specified & directed by the Engineer-in charge. Note:-a) Clear area of roof sheet excluding lap length shall be measured for payment. b) The rate quoted is deemed to include for providing & removal of scaffolding, staging, safety nets wherever necessary.	Sq.M	4660		
2	Removing the existing corrugated/semi-corrugated AC curves including J/L bolts, washers carefully at a minimum height of 10Mtrs approximately, stacking the usable curves at a place shown and shifting the unusable roof curves to salvage stores inside Factory premises etc., complete all as specified & directed by the Engineer-in-charge. Note:-a) Clear area of curve sheet excluding lap length shall only be measured for payment. b) The rate quoted is deemed to include for providing & removal of scaffolding, staging, safety nets wherever necessary.	Sq.M	539		

Sl. no	Description	Unit	Qty.	Rate/ Unit in fig. & in words Rs.	Amount Rs.
3	Taking down/dismantling carefully the broken north light glass from the existing metal frames by hacking out old putty/beads etc., including making good breakages if any in taking out etc., complete all as specified & directed by the Engineer-in-charge. Note:- The rate quoted is deemed to include for providing & removal of scaffolding, staging, safety nets wherever necessary.	Sq.M	61		
4	Taking down the existing AC/GI rain water downtake pipes any diameter including any fittings etc., and stacking the usable pipes at a place all as shown & disposal of unserviceable materials from the premises with a lead up to 50Mtrs including lead,lift, etc., complete all as specified and directed by the Engineer-in-charge. Note:- The rate quoted is deemed to include for providing & removal of scaffolding, staging, safety nets wherever necessary.	RM	717		
5	Dismantling the existing brick masonry wall built in Cement mortar in any thickness including disposal of unserviceable materials from the premises with a lead up to 50Mtrs, lift etc., complete all as specified and directed by the Engineer-in-charge. Note: The dismantled materials shall be removed immediately from the premises without disturbing the regular production activities	Cu.M	10		
6	Preparing the existing GI/AC/Aluminium gutters of approximate width 1.0m by cleaning, removing dust, grime etc., and providing waterproofing treatment to the gutters using suitable waterproofing compound manufactured by M/s. Fosroc/STP/SIKA/Roff for the full gutter area as per manufacturers specifications and instructions. Note: a)The rate is deemed to include for cleaning the gutters to the full length before carrying out the treatment. b)The length of the gutter wherever treated shall only be measured for payment	Rmt	600		

Sl. no	Description	Unit	Qty.	Rate/ Unit in fig. & in words Rs.	Amount Rs.
7	Supplying & fixing 0.6mm thick M/s. JSW/TATA make trapezoidal profile colour coated (sky blue) roof sheets 1060mm supply width, 975mm-1000mm covered width 29mm-30mm crest height, 24mm crest width TCT 150 GSM with 550 Mpa minimum tensile strength, with a minimum lap of 200mm with wide pans with stiffening ribs for efficient water shedding & special male/female ends conforming to relevant IS including all hardware/fixtures viz., 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:- a) The finished/Covered area of roof sheet excluding lap length shall be measured for payment. b)The rate quoted is deemed to include for providing & removal of scaffolding, staging, safety nets wherever necessary.	Sq.M	4445		
8	Supplying and fixing of GI weld mesh of 50x50x2.50mm support for rock wool, welded to existing steel members at suitable distance with correct line and level etc., complete all as specified and directed by Engineer-in-Charge. Note:- The rate quoted is deemed to include for providing & removal of scaffolding, staging, safety nets wherever necessary.	Sq.M	4445		
9	Supplying and fixing of 50mm thick thermal insulation with Resin bonded fibre rock wool of density 24Kg/cum, wrapped in vinyl facing placed below the roof sheeting etc., complete all as specified and 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	4445		

Sl. no	Description	Unit	Qty.	Rate/ Unit in fig. & in words Rs.	Amount Rs.
10	Supplying and fixing M/s. Bayers / JSW / Everest make corrugated 2mm uniform thick polycarbonate sheet for roof conforming to relevant IS fixed to the existing galvalume sheet to suit the profile with standard lap, necessary hardware screws/washers and sealant to ensure leak proof joints etc., complete all as specified & directed by Engineer in charge. Note:- a) Clear area of roof sheet excluding lap length shall be measured for payment. b) Providing & removal of scaffolding, staging wherever	Sq.M	242		
11	Supplying and fixing 0.6mm thick M/s. JSW/TATA make Galvalume north light curves (55% aluminum-43%Zinc Coating), TCT 150 GSM with 550 Mpa minimum tensile strength conforming to relevant IS including all hardware/fixtures viz., 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:- a) Clear area of roof curve excluding lap length shall be measured for payment. b) Providing & removal of scaffolding, staging, safety nets wherever necessary.	RM	543		
12	Supplying and fixing M/s. Bayers / JSW/ Everest make plain 2mm uniform thick polycarbonate sheet for north light glass conforming to relevant IS fixed to the existing MS Structural steel frames 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	62		

Sl. no	Description	Unit	Qty.	Rate/ Unit in fig. & in words Rs.	Amount Rs.
13	Providing & fixing 150mm diameter 6kg/cm <sup>2</sup> PVC pipes manufactured by M/s.Supreme/ Astral or equivalent conforming to relevant IS for rain water downtake 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.	RM	720		
14	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 any level at required height 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 wherever necessary.	Cu.M	11		
15	Rendering/Plastering for masonry wall / concrete surfaces in cement mortar of mix proportion 1:4, 15mm thick including tools & tackles, scaffolding as required for the work, necessary curing etc., complete as specified and directed by Engineer in charge. Note The rate quoted is deemed to include for providing & removal of scaffolding/staging wherever necessary.	Sq.M	80		
16	Rendering/Plastering for the external brick masonry wall / concrete surfaces in cement mortar of mix proportion 1:6, 20mm thick including tools & tackles, scaffolding as required for the work, necessary curing etc., complete as specified and directed by Engineer in charge. Note: The rate quoted is deemed to include for providing & removal of scaffolding/staging wherever necessary.	Sq.M	80		

Sl. no	Description	Unit	Qty.	Rate/ Unit in fig. & in words Rs.	Amount Rs.
17	Preparing the existing old Painted external walls by scrapping, sand papering, including providing necessary repairs to cracks, scratches & filling the cracks with crack filling compound and cleaning the surface from dust, dirt and applying two coats of Exterior emulsion paint of first quality approved brand & colour manufactured by M/s.Asian Paints (ACE)/M/s Berger Paints (Wall Masta) over a coat of primer & touch up putty wherever necessary etc., complete all as specified and as directed by Engineer in charge. Note: The rate quoted is deemed to include for providing & removal of scaffolding/staging wherever necessary.	Sq.M	80		
18	Preparing the existing old Painted internal walls by scrapping, sand papering, including providing necessary repairs to cracks, scratches & filling the cracks with crack filling compound and cleaning the surface from dust, dirt and applying two coats of plastic emulsion paint manufactured by M/s.Asian Paints/M/s Berger Paints over a coat of primer & touch up putty wherever necessary etc., complete all as specified and as directed by Engineer in charge. Note: The rate quoted is deemed to include for providing & removal of scaffolding/staging wherever necessary.	Sqm	80		
19	Carting way the damaged roof sheets, rain water pipes, curves, debris, muck, broken glasses etc and dumping at a place shown outside the factory within a lead upto 5.00Km etc., complete all as specified & directed by the Engineer-in-charge.	Cum	50		
	Total Amount excluding GST (Rs)				
	GST Amount (Rs)				
	Total Amount inclusive of GST (Rs)				

Sl. no	Description	Unit	Qty.	Rate/ Unit in fig. & in words Rs.	Amount Rs.
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Total Amount in words: -

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THE FOLLOWING NOTES ARE APPLICABLE FOR ALL THE ABOVE MENTIONED ITEMS OF WORK

1) The contractor quoted rate is deemed to include for providing and removal of scaffolding/ staging as required for all the above mentioned works.

2) The contractors/ prospective bidders shall visit the site and acquaint themselves with the site conditions before submission of bid/ quote.

3) The contractor to note that the dismantled materials should be removed and shifted immediately from the site premises without disturbing the regular production activities in the area and in the adjoining hangers and the rate is deemed to include for the same.

4) As the work has to be carried out at a minimum height of 10.0 Mtrs, it is responsibility of the contractor to provide all safety / PPE for the labour/ workmen employed for the work and the work to be carried out after obtaining necessary safety permit as per BEML format for each day's work.

5) The work has to be carried out on a day to day basis by the contractor under the supervision of the contractor himself or under the supervision of a qualified technical personnel employed by the contractor till the completion of the day's work.

Signature of the contractor with seal