## BILL OF QUNATITIES

Name of Work: Carrying out waterproofing and external repairs of Engine test cell at AIESL Engineering premises, OAP, Mumbai-29

## TENDER NO: PFD/03/01/PROJ/2023-24 DATED: 08.01.2024

Sr.no.	Description of Item	Qty	Rate (INR)	Unit	Amount
1	Breaking plaster				
	Removing external and internal cement plaster of any mix & any thickness, at any level and from any surface, all including raking out joints, hacking for key, and removing of existing tar felt sheet, removal of wild growth, scrubbing down with water, including providing scaffolding and removing debris outside AIESL premises.	995.00		Sq.mt	
2	Providing external plaster				
	Providing & applying waterproof sand faced cement plaster in patches to any location / level in CM (1:4), 15-25 mm. average/minimum thick as backing coat over masonry, PCC / RCC surfaces and finished with avg. 6 mm thick uniform grained sand faced plaster coat in CM (1:4) (1 cement : 4 sand) mixed with waterproofing compound of approved make, in true line and level ,filling up log holes, providing drip moulds, grooves, bands, curing, tying and untying scaffolding etc. complete all as directed.	875.00		Sq.mt	
3	Providing internal plaster				
	Providing and applying internal cement plaster to brick masonry or concrete surface, walls, columns, beams, pardi, chajjas etc. in CM(1:4) 15mm thick minimum and finished smooth in cement, curing and at any height and locations including scaffolding etc. complete	120.00		Sq.mt	
4	RCC repair				
	Providing and applying rust inhabitation coat/system to exposed reinforcement bars and also new reinforcement bars after removing scales and rust complete as per specification. Providing and applying bond coat to all exposed concrete surface and reinforcement bars prior to any treatment as per specification. Providing and applying single component, fiber reinforced, thixotropic repair mortar of average thickness 50mm and above of "BASF" (MASTER EMACO 348 S)/ or equivalent as manufacturer's specifications in specific layers, curing the surface after 72 hours of application with wet gunny bags etc. including carting away debris out off AIESL premises.	9000.00		Kg	
5	Providing and applying Rain coat				
	Providing & applying two coats of Acrylic Elastomeric Exterior Waterproofing compound of "Dr. Fixit Raincoat" or equivalent approved make and one coat of approved priming coat as per the waterproofing coating manufacturer to vertical wall surfaces at any level and location including scaffolding etc. complete, as per instruction of the Engineer in Charge.	3500.00		Sq.mt	
6	Breaking IPS including breaking				
	Dismantling the existing terrace waterproofing treatment consisting of brickbat cement concrete or P.C.C of any thickness with or without cement mortar screed finished with Indian patent stone and/or with tar felting till RCC slab including carting away the debris outside AIESL premises, clearing the top of the slab completely to expose the original RCC surface, if any, as directed etc. complete	1450.00		Sq.mt	

7	Providing and laying Waterproofing			
	Washing and cleaning RCC surface, Preparing a smooth and even surface, filling voids if any by providing cement mortar 1:3 by adding sunplex 330 gms packet per cement bag including curing for 3 days, followed by Providing and applying a primer coat of Sunprime PU primer of sunanda or any equivalent product approved by Engineer incharge on the cleaned & dry surface of RCC slab surface using a soft paint brush. Shake the container well and directly apply the primer by brush/roller. Allow to set for 1 hour depending on the ambient temperature. After the primer has totally cured and dried, apply Elastoroof PU of approved make & approved by Engineer in charge by brush,roller or airless spray equipment. Apply at a rate of 1 kg/sqm for the first coat evenly over the primer surface and allow to set for 12 hours. After ensuring that the first coat is set and cured, apply the second coat in similar manner at a rate of 0.5 kg/sqm and allow to set.the second coat has ro be reasonably hardened but still wet and tacky on surface, sprinkle sand over the surface to make it rough so as to provide mechanical key for the protective screed.  Ensure that the sand is not embedded in the second coat and remains on the surface. The material used shall meet the technical specification as per the details of product given by the manufacturer under manufacturer's supervision.  NOTE: Defect Liability Period 05 years.	1800.00	Sq.mt	
8	Providing and laying IPS			
	Providing and laying cement concrete floor (Indian Patent Stone) 40 mm to 65 mm thick to maintain required slope, P.C.C.(1:2:4) mix using 12.5 mm graded stone aggregate, adding fiber mesh @125 gms/cement bag and sunplex @ 330 gms/cement bag laid in alternate bays troweled smooth on top in neat cement and making lines on the top surface diagonally or square at spacing, curing for minimum 7 days, as directed etc. complete.	1450.00	Sq.mt	
9	Provdinging Brick work			
	Providing and constructing class designation 35 brick masonry for partitions etc. in superstructure at all levels and in any shape using C.M. (1:5) for brick on edge including scaffolding, raking out joints, curing etc. complete including breaking exisiting brick mansonary wall of any thickness. Wall thickness: 150 mm-230 mm	35.00	Sq.mt	
10	Expansion joint treatment			
	Breaking and demolishing the existing RCC cover over the expansion joint, Removing old sealant, dust, flakes, oil, grease or other foreign particles by jet or dry air and clean the surface to make it smooth before applying ShaliTex Sealing Compound.  • Spray or brush, on the area where ShaliTex Sealing Compound is to be applied, ShaliTex Primer evenly throughout the joints and allow it to dry completely. 24 hours is enough to dry the primer during normal weather condition.  • Cover the joint by plastic film if rain is expected after primer application.  • Cut ShaliTex Sealing Compound drum and heat it to 180 – 210 OC while slowly stirring the material for uniformity. A 20 kg drum will take 2-3 hrs at 190 – 200° C for complete melting using hand stirrer. Do not overheat as this may cause frothing. If for any reason bubble appears during melting, keep the temperature around 180°C for a longer time with slow manual stirring till the bubble disappears.  • Upon primer drying completely, pour molten ShaliTex Sealing Compound from one side of the joint allowing it to travel through the joint as much as practicable. While pouring, ensure that temperature of material is in the range of 190 - 200° C.  • During the pouring process, to avoid spillage, place wooden boards on both sides of joint and pour from can with extended spout upto any thickness.	35.00	R.Mt	

11	Providing and fixing Rain Water pipe			
	Providing and fixing PVC rain water pipe of ''Prince'' or equivalent approved make conforming to IS 13592 of SWR quality 4 kg/cm2 pressure rated, at any locations and at all levels, scaffolding etc. including all PVC fittings like bands, shoes, clamps, supports etc. jointing with rubber ring/solvent cement, leak proof adhesive etc. cutting and making good the walls and floors etc. complete. As per instruction of rain water pipe manufacturers ND EIC.  150 mm dia with PVC clamps	50.00	R.mt	
12	Laying Micro concrete			
	Providing and laying/ pouring in position/ location SMC (Self leveling micro concrete) RENDRC RGL or equivalent as directed or as approved by EIC, mixing with specified quantity of water as recommended by the manufacturer including cutting the existing concrete floor to shape with cutting machine only, dismantling the existing concrete floor, cleaning the surface with water, taking rubbish out of AIESL premises, applying bond coat of RBR or equivalent and cement in proportion 1:1 including necessary approved centering and formwork, finishing top as directed including labour, tools plants etc complete.	1000.00	Kgs	
13	Providing Reinforcement			
	Providing Tor steel reinforcement for RCC structure at all level including supplying, preparation of bar bending schedule, cutting, bending, transporting, fixing, tying in position with 1 mm dia soft drawn annealed binding wire including labour charges complete including the cost of binding wire as directed by the EIC.	250.00	Kg	
	Total		Rs.	
	Rebate % (Percentage)		Rs.	
	Grand total in Rs.		Rs.	

Note: The rates shall not include GST. The GST shall be paid separately in the bills as per the applicable rates.

PLACE:	
DATE:	
	NAME SIGNATURE & ADDRESS OF THE CONTRACTOR WITH SEAL