

Name of the work :-Water Proofing & Special repair works for ELC at NCBS

NIT NO: NCBS/Maint(Civil)/604/NIT-151/2022 Dated: 13/06/2022.

Schedule of Quantity

Sl No.	Description of Work	Unit	Qty	Rate	Amount
1	Suppling, applying and testing the existing roof surface of any description with water proofing treatment works as detailed below as directed by Engineer in Charge:-a)Taking out/removing the existing treatment includingtarfelt, flate clay tiles, loose plastering etc., from flat, sloped, curved surfaces, valley with brushes and solvent/ acids, taking out all dirt, dust, fungus, organic matter etc., and disposal of the waste materials out of the premeses in an unobjectionable way/as and where directed : b) Making necessary repairs/ patch plastering in CM 1:3 to existing surfaces including expansion joints of surkhi/ plaster/ concrete with necessary curing etc., and where cracks are prominent, open them to make a 'V' groove and preparing the surface to receive further treatment. The roof area which has no proper slope for easy draining out the water, should be given proper slope using PCC 1:3:6 or cement mortar 1:3.	Sqm	2000		
	Rate in words:				
	c) Applng wetting agent consisting of acrylic monomer, co-polymer liquid and crystallisation liquid as base on the prepared surface and Vgrooves and cracks etc., d) Sealing up of all cracks, crevices, expansion joints and grooves with liquid polysulphide sealants manufactured by Hinduja/Fosroc/Pidilite or equivalent and preparation of flexible cementitious membrane (FCM) coating by applng a coat of proper proportion manufacred by Construction care chemicals (CCC). e) Providing and applying first coat of ISOPROOF Acrylic co-polymer water proofer manufactured by M/s. Construction care chemicals with 5% di- lution with water over a layer of non-woven Geo- fabric 40GSM laid. The fabric should be saturated with acrylic co-polymer, thereby creating a water proof barrier and shall be allowed to dry for a period of 24 hours before testing the membrane treatment by ponding with water for 7 days minimum.				

Sl No.	Description of Work	Unit	Qty	Rate	Amount
	f) The second and final coat of ISOPROOF water proofer shall be applied at right angles over the second layer non-over geo-fabric 40GSM laid. The minimum drying time allowed is six hours at 30 deg C before testing the membrane treatment by ponding with water for 7 days minimum.g) The entire treatment of water proofing shall be carried out by experienced and expert applicators as per manufactures specifications and recommendations confirming to ASTM:D 412, The treated filament shall resist attack of acids, alkies, sunlight, moisture, fungus, bacterial growth, termites etc., The treatment should have good adhesion to concrete/ plaster surfaces to withstand temperature ranging from 10 to 90 deg C.h) The agency should prove water tightness after completion of work by conducting water ponding test on the treated roof as per standard procedure.				
	Note: 1) The contractor should furnish a Guarantee Bond in the prescribed format for satisfactory water proofing performance for Ten years period before the final bill payment otherwise which the security deposit amount of 10% of the gross value of the work done shall be retained for such period of 10 years instead of normal six months period. 2) The quoted rate be operational upto the height of 10mts from ground level				
	Roof area of flat, sloped, curved, valley surfaces				
2	Providing and applying water retarding treatment/silicon coating to the external surfaces of size stone masonry wall&cladding to prevent seepage of water through walls including scaffolding, washing the surface, curing, ect., as per specifications and at all lifts.	sqm	1160		
	Rate in words:				
	a)Preparation of Surface and removal of fungus and loose particles, cleaning with brushes and thorough acid wash, wherever necessary.				
	b) Cutting V grooves at cracks wherever necessary.				
	c) Application of base coat of flexicoat with Acrylic and water on pointing area.				
	d) Application of polysulphide sealant for V grooved area.				
	e) Applications of flexicoat above base coat.				

SI No.	Description of Work	Unit	Qty	Rate	Amount
	Applying a coat of flexicoat cement mixture on pointing area and disposal of the waste materials out of the premises in an unobjectionable way/as and where directed				
3	Providing and Applying Venar tex finish on RCC Column and beam surfaces of Approved color, texture and grains size including necessary scaffolding, lacqor coat, materials, labour, removal of existing damaged venartex coat etc., and disposal of the waste materials out of the premises in an unobjectionable way/as and where directed complete and as directed by EIC	Sqm.	1060		
Rate in words:					
4	Care ful Removal and refixing the existing fixed/openable window glass panes of 5mm thick fixed in aluminium frame works after replacing suitable neoprene rubber gesket, removal & redoing of existing weather proof sealent around aluminium frame including necessary charges for materials, labour, etc up to 15mt height and as directed by engineer-in-charge as per specification and disposal of the waste materials out of the premises in an unobjectionable way/as and where directed	Sqm	500		
Rate in words:					
5	REPAIR of SPALLING CONCRETE IN CONCRETE SLABS, COLUMNS AND BEAMS as detailed below: All dust, paints, nails and cement plaster shall be removed thoroughly using tools. Have out all weak concrete and clean the steel bars with wire brush. Adjoining concrete members should be supported suitably by using steel props. Corroded steel bars shall be replaced with new bars and with sufficient lapping. Apply anti corrosive epoxy resin concreive ZRI two coats on steel bars. Clean the surface again and apply concreive 1414 epoxy bonding agent for old and new concrete. Mix Emaco S48CT precision repair mortar using mechanical paddle with specified quantity of water until desired consistence achieved and apply the mix by hand trowel to desired thickness to level with existing surface. Apply single coat mastercure 181 curing compound on the surface and leave it for cure. NOTE: Rate quoted shall include cost of tools & plants, transportation and taxes etc.	Sqm	100		
Rate in words:					

Sl No.	Description of Work	Unit	Qty	Rate	Amount
6	Wall painting with premium acrylic emulsion paint, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour	Sqm	100		
Rate in words:					
7	Providing, fabricating and fixing of polycarbonate sheet roofings/weather sheds of any shape over MS tubular frame work as per detailed drawing and specifications as detailed below a)The weather shed shall be fabricated out of multilayer wall of thickness mentioned below of "M/s.Sabic GE plastic/Markralon" or "Lexan" make manufactured by M/s.GE Plastic India Ltd. or equivalent make and of approved shade and colours. Sheet fixing shall be done with aluminium profile as per detailed section drawings. The clamping profiles shall be consisting of base section and a compatible top section. All aluminium sections shall be powder coated as per detailed schedule of finishes. All the edges of polycarbonate sheets shall be closed with suitable side tape and suitable aluminium sections.	Sqm	170		
Rate in words:					
	The clamping shall have provision for EPDM rubber gasketing for water sealing however silicon sealant shall be used for sealing inter-sectional joints if any and other vulnerable joints wherever required etc. for all heights and at all levels complete all as directed by Engineer in-Charge. Rate to include supply and fixing necessary self tapping screws, weather cap, filling joints with silicon sealant, aluminium section for joining sheets, EPDM gasket scaffolding etc.) With 10mm thick curved shape Multi-wall poly carbonate sheet				
	Note : (i)payment shall be made on net polycarbonate sheet area (finished area). The overlapping area of sheets etc. will not be paid. (ii)The cost of MS frame will be paid separately elsewhere in the item.(iii)Work has to be carried out upto height of 12.00 mtr. above Ground level. Cost includes charges for scaffolding required. (iv)In all shades, colours and all shapes including curved/architectural design.				

Sl No.	Description of Work	Unit	Qty	Rate	Amount
8	Pointing on stone work with cement mortar 1:3 (cement : Msand) including raking out joints, scaffolding, curing, finishing neat, etc; complete all as per specifications for heights up to 10m above GL with Flush pointing	sqm	200		
Rate in words:					
9	Raking out joints in lime or cement mortar and preparing the surface for repointing or replastering including disposal of rubbish to the dumping ground within 50m lead.	sqm	200		
Rate in words:					
10	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including disposal of excavated earth up to 50 m and lift up to 1.5 m, as per directions of Engineer in Charge: All kinds of soil.	Sqm	135.00		
Rate in words:					
11	Shifting of earth, coarse aggregate etc., from terrace of ClIFF by engaging labour and & stacking neatly in place showned by NCBS. lead up to 500m and as directed by EIC	Cum	30.00		
Rate in words:					
12	Providing and applying fibre reinforced elastomeric liquid water proofing membrane with resilient acrylic polymers having Sun Reflectivity Index (SRI) of 105 on top of concrete roof in three coats @10.76 litre/ 10 sqm. One coat of self-priming of elastomeric waterproofing liquid (dilution with water in the ratio of 3:1) and twocoats of undiluted elastomeric waterproofing liquid (dry film thickness of complete application/system not less than 500 microns). The operation shall be carried out after scrapping and properly cleaning the surface to remove loose particles with wire brushes, complete in all respect as per the direction of Engineer-in-Charge.	Sqm	125.00		
Rate in words:					
13	Clearing/ Removal of grass and removal of the rubbish up to a distance of 50 m outside the periphery of the area cleared.	Sqm	125.00		
Rate in words:					
14	Supplying and Covering top of cell/membrane with Geotextile, 120 gsm non woven, 100% polyester of thickness 1 to 1.25 mm bonded to the membrane with intermittent touch by heating the membrane by Butane Torch as per manufactures recommendation to site of work as per detailed specification all complete as per directions of Engineer in charge.	Sqm	125.00		

Sl No.	Description of Work	Unit	Qty	Rate	Amount
	Rate in words:				
15	Providing & laying Selection no. 1 doob grass turf with earth 50mm to 60mm thickness of existing ground prepared with proper level and ramming with required tools wooden and than rolling the surface with light roller make the surface smoothen and light watering the same maintenance for 30 days or more till the grass establish properly, as per direction of officer in charge	Sqm	125.00		
	Rate in words:				
16	Disposal of moorum/building rubbish/ malba/ similar unserviceable, dismantled or waste material by mechanical transport including loading, transporting, unloading to approved municipal dumping ground for lead upto 10 km for all lifts, complete as per directions of Engineer-in-charge.	cum	26.00		
	Rate in words:				
17	Spreading of sludge, dump manure and/or good earth in required thickness as per direction of officer-in-charge (cost of sludge, dump manure and/ or good earth to be paid separately).	cum	15.00		
	Rate in words:				
18	Mixing earth and sludge or manure in the required proportion specified or directed by the Officer-in-charge.	cum	15.00		
	Rate in words:				
19	Supplying and stacking at site dump manure from approved source, including carriage upto 5 km lead complete (manure measured in stacks will be reduced by 8% for payment) Screened through sieve of I.S. designation 16 mm	cum	15.00		
	Rate in words:				
20	Supplying and fixing Drainage cell for terrace garden area, which are high strength modular drainage cell, manufactures from high strength polypropylene, having height of 20mm and 30mm and are easy to install with inter locking them horizontally and vertically.. Complte all as per manufactures specification and as directed by EIC etc complete.	sqm	120.00		
	Rate in words:				
21	Providing Polysulphide Sealant in Expansion Joints /RCC Slabs/ Beams etc. The joints shall be of size 25mm wide & 10mm deep using sealant of approved make. The work shall be executed strictly as per manufacturers' specifications etc., complete all as per directions of engineer-in-charge at all Heights/ Levels.	Rmt	30.00		
	Rate in words:				

SI No.	Description of Work	Unit	Qty	Rate	Amount
22	Filling available excavated earth (excluding rock) in Terrace garden in layers not exceeding 20cm in depth, lead up to 50 m and lift upto 1.5 m.	cum	30.00		
Rate in words:					
23	Removing the existing stone slab flooring and Re laying the same, the joints filled with cement concrete 1:3:6 and the surface should be neatly levelled, proper compactions for stone and earth for settling etc complete all as per directions of Engineer - In - Charge	Sqm	15.00		
Rate in words:					
Total Amount					
Note : The contractor shall quote his rates in this schedule of quantity. Submission of tender in any other format is liable for rejection.					

Total Amount in words:

Signature of contractor.

