

:- BILL OF QUANTITY :-

Name of Work :- Maintenance contract for quay and transit area inside cargo jetty area for two years

Sr. No.	Description of Item	Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
1	Demolishing R.C.C. work by mechanical means and stockpiling at designated locations and disposal of dismantled materials up to a lead of 1 kilometre, stacking serviceable and unserviceable material separately including cutting reinforcement bars.	60.00	1,629.99		1 M ³	One Cubic Meter	97799.00
2	Demolishing C.C. work by mechanical means and stockpiling at designated locations and disposal of dismantled materials up to a lead of 1 kilometre, stacking serviceable and unserviceable material separately.	150.00	1558.52		1 M ³	One Cubic Meter	233778.00
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :						
A	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	102.00	4428.24		1 M ³	One Cubic Meter	451680.00
B	1:1½:3 (1 Cement: 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size).	204.00	5448.56		1 M ³	One Cubic Meter	1111506.00
4	Providing and laying reinforced cement concrete of mix 1:1-1/2:3 consisting of ingredients of cement, sand, and crushed graded trap stone metal including mixing, placing, vibrating, leveling, curing, necessary form work, scaffolding etc., complete for work upto floor two level. (Rate is exclusive of cost of reinforcement). (A) For protection wall and copings	20.00	8000.00		1 M ³	One Cubic Meter	160000.00
B	For beams and cantilevers	5.00	9000.00		1 M ³	One Cubic Meter	45000.00
5	Providing and laying reinforced cement concrete mix 1:1-1/2:3 consisting of ingredients of cement, sand and crushedgraded trap stone metal including mixing,placing,vibrating, levelling, curing, necessary formwork, scaffolding etc.complete for slab.The shuttering work for slab is to be done under tidal condition and the rates inclusive the cost of shuttering, hiring of jolly boat, floating craft etc., complete as directed.	60.00	10700.00		1 M ³	One Cubic Meter	642000.00
6	Providing, laying & fixing in position upto 2km.lead reinforced cement concrete of mix 1:1-1/2:3 precast RCC slab consisting of sand cementand crushed graded trap stone metal including mixing, depositing, vibrating, levelling & curing inraft including cost of necessary formwork as directed (Rate isexclusive cost of reinforcement).	100.00	7200.00		1 M ³	One Cubic Meter	720000.00
7	Steel reinforcement for R.C.C. work including straightening, cutting,bending, placing in position and binding all complete upto plinth level.						
A	Thermo-Mechanically Treated bars of grade Fe-500D or more.	8500.00	62.76		1 Kg.	One Kilogram	533460.00
8	Steel reinforcement for R.C.C. work including straightening, cutting,bending, placing in position and binding all complete above plinth level						
A	Thermo-Mechanically Treated bars of grade Fe-500D or more.	10000.00	62.76		1 Kg.	One Kilogram	627600.00

9	Providing & laying cement concrete solid blocks 1:8:6 (machine made) confirming to relevant IS (Latest Edition) masonry 200mm thick set in cement mortar 1:6 including curing etc. complete as directed. (A) In plinth /foundations/ super structure	50.00	4500.00		1 M ³	One Cubic Meter	225000.00
10	Plastering with cement mortar 1:4 scrubbing & cleaning, finishing smooth curing etc. complete. For interior plastering upto floor two level. (A) 20 mm thick. (With racking out joint)	120.00	294.98		1 M ²	One Square Meter	35398.00
(B)	12 mm thick (with raking out joints)	560.00	215.08		1 M ²	One Square Meter	120445.00
11	Removal of broken damage cable trench cover dismantling the same and disposing the same within a lead of 1.00km beyond 0.50km etc complete as directed.	15.00	1500.00		1 M ³	One Cubic Meter	22500.00
12	Supply of Machineries as directed by Engineer-in-charge. (A) Hire charges for Hydra of loading capacity up to 5 M.T. including wages for driver cleaner and cost of fuel for 8 hours/day.	240.00	800.00		1 Hour	One Hour	192000.00
B	JCB of loading capacity of 0.50 to 1.0 m3 including wages for driver, cleaner and cost of fuel.	180.00	1100.00		1 Hour	One Hour	198000.00
C	Fork lift of loading capacity 3.0MT to 5.0MT including wages for driver, cleaner and cost of fuel.	50.00	600.00		1 Hour	One Hour	30000.00
13	Fabricating including supplying and erecting steel structure including, hoisting, fixing, bolted and cutting to required length and shape, drilling holes, jointing in an approved manner etc. complete as directed. (Steel will be given free of cost)	2500.00	25.00		1 Kg.	One Kilogram	62500.00
14	Fabricating including supplying and erecting steel structure including, hoisting, fixing, bolted and cutting to required length and shape, drilling holes, jointing in an approved manner etc. complete as directed.	4000.00	78.37		1 Kg.	One Kilogram	313480.00
15	Fabricating including supplying and erecting steel structure including, hoisting, fixing, bolted and cutting to required length and shape, drilling holes, jointing in an approved manner etc. complete as directed. (Work to be done under tidal conditions)	5000.00	100.00		1 Kg.	One Kilogram	500000.00
16	Supply of Tractor with trolley of loading capacity 5M.T along with tractor driver and four labours for loading unloading and other miscellaneous work including the cost of fuel, for 8 hours day.	200.00	3400.00		1 Day	One Day	680000.00
17	Opening of choked drain holes from underneath of wharf and transist area by removing of choked material with help of crow bar , hammer, G I Pipes etc complete including cost of all labour etc complete as directed by engineer-in-charge. (Work is to be done under tidal conditions)	1440.00	190.00		Each	Each	273600.00
18	Making of drain holes of 100mm dia. and 400mm to 800mm depth by core cutter machine at wharf area as directed by engineer - in - charge. The work including all tools, plants, labours and machineries requires for making the holes.	50.00	1200.00		Each	Each	60000.00
19	Rough stone pitching with trap stones (minimum 150mm thick) set in cement mortar 1:6 for toe walls & revetment as per profile including curing etc. complete as directed. (under tidal conditions)	100.00	5500.00		1 M ³	One Cubic Meter	550000.00

20	Applying one coat by brushing SBR Latex mixed with Cement in the ratio of 1:1.5 by volume as a bonding coat over existing slab/ balconies/ chajjas etc., after cleaning the surface free of all dust and loose material and wetting the same as per the manufacturers instructions.	2000.00	115.00		1 M ²	One Square Meter	230000.00
21	Welding electrically or by any other method MS plates, R.S. joists, Tees, channels etc. up to a thickness of 10cm. including cost of electrodes charges for welding set etc. complete as directed. (A) Up to 10cm. thickness.	7500.00	4.00		1 Cm.	One Centimeter	30000.00
22	Supplying following categories of manpower for Day to Day (Round the Clock) inspection of wharf area and fender blocks while berthing/sailing/shifting and stay period of vessel. The work comprises of to take the berthing/sailing/shifting chart of vessel from the signal station of deendayal port trust, keep the up-to-date record of movement of vessels in the prescribed format given by Engineer and to keep informed concerned engineer about day to day supervision activities carried out in writing as well as verbally. The engaged personnel is also responsible to hand over the Damage Memo to Traffic Department/Signal station and Marine Department timely for fixing responsibility of damage if any occurs as and when directed by concerned Engineer of work. He has to carry out the inspections at regular interval daily in the area from 0(zero) panel to 16(sixteen) cargo berths, Passenger jetties, Craft jetties and Bunder basin area and wherever directed by concerned Engineer of work for inspection and noticing the damages if any. The contractor has to strictly monitoring the damage occurs to wharf area and fender blocks while berthing/sailing/shifting and stay period of vessel. (If any damage found un-noticed due to the negligence/lapse from contractor side, the assessed cost of the same damage will be recovered from the R.A. Bills of contractor. The transportation for inspection and communication (mobile connectivity) facilities to the engaged personnels should be provided by the contractor. (One Day = 8 Hours Shift) (A) Supervisor (1 no. x 3 shifts)	2190.00	750.00		1 Day	One Day	1642500.00
23	Rebarring of following various dia. Bars in existing R.C.C. beam and slab including approved chemical, making appropriate hole, cleaning, scaffolding, all labour and materials as directed by Engineer incharge. (A) 10mm dia. Bars	50.00	300.00		1 No.	One Number	15000.00
B	12mm dia. Bars	200.00	350.00		1 No.	One Number	70000.00
C	16mm dia. Bars	200.00	410.00		1 No.	One Number	82000.00
D	20mm dia. Bars	50.00	480.00		1 No.	One Number	24000.00
24	Painting runway/taxi track/apron marking with adequate nos of coats to give uniform finish with road marking paint of superior make as approved by the Engineer-in-charge, i/c cleaning the surface of all dirt, scales, oil, grease and other foreign material etc. and lining out complete.						

A	New work (Two coats)	600.00	110.95		1 M ²	One Square Meter	66570.00
25	Providing and applying 2.5 mm thick road marking strips (retro-reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and accordance with applicable specifications.	800.00	436.66		1 M ²	One Square Meter	349328.00
26	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade						
A	Two coats or more coat on new/old work	800.00	96.50		1 M ²	One Square Meter	77200.00
27	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :						
A	Two coats or more coat on new/old work	1500.00	243.81		1 M ²	One Square Meter	365715.00
28	Painting with aluminium paint of approved brand and manufacture to give an even shade:						
A	Two coats or more coat on new/old work	500.00	85.02		1 M ²	One Square Meter	42510.00
29	Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade :						
A	Two coats or more coat on new/old work	300.00	80.57		1 M ²	One Square Meter	24171.00
30	Finishing walls with Acrylic Smooth exterior paint of required shade:						
A	Old work (Two coat applied @ 1.67 ltr/ 10 sqm) on existing cement paint surface	300.00	116.80		1 M ²	One Square Meter	35040.00
31	Manufacturing, supplying and fixing retro reflective sign boards made up of 2 mm thick aluminium sheet, face to be fully covered with high intensity encapsulated type heat activated retro reflective sheeting conforming to type - I of ASTM-D 4956-01 in approved colour combination including subject matter, message/ symbols/letters of required size and borders etc., pasted on substrate by an adhesive backing which shall be activated by applying heat and pressure and fixing the same with suitable sized aluminium alloy rivets on concrete/metaled surface including all leads and lifts etc. complete as per drawing, specification and direction of Engineer--in-charge	75.00	3926.69		1 M ²	One Square Meter	294502.00

32	Providing and applying two coats of ZRC COLD GALVANIZING COMPOUND Organic Zinc-Rich coating containing 95% metallic zinc, by weight in the dried film; recognized under the Component Program of Underwriter's Laboratories, Inc. as an equivalent to hot-dip galvanizing; conforming to Federal Specification DOD-P-21035A (formally MIL-P 21035A) for repair of hot-dip galvanizing and meeting the requirements of Military Specification MIL-P-26915A USAF Specification for Zinc-Rich Paints; as manufactured by ZRC Worldwide, Marshfield, MA or other facility having been registered to the International Organization for Standardization ISO 9001 standard for quality. The work also involves surface preparation, removing corrosion by means of sand blasting/shot blasting/removing scales etc as directed by Engineer in charge. The coat shall be applied on external surfaces, as per Technical Specifications given, with all labours, materials, tools & tackles etc. Complete as directed by Engineer In Charge.	1200.00	1600.00		1 M ²	One Square Meter	1920000.00
33	Repairing of steel pontoons of various sizes situated at Passenger jetty, flotilla jetty, SNA jetty by welding the leakage holes developed during operation of pontoons with necessary thick steel plates, or by fixing the plates with necessary size of nut bolts, clamps, rubber gasket to stop the leakage of water inside the pontoon and to restore/bring the pontoon in original position, including dewatering the water from pontoon, complete with all labour and material as directed by Engineer in Charge. The work also involves providing necessary equipments/machineries for carrying out repairing work.	10.00	18000.00		1 Job	One Job	180000.00
34	Maintenance of steel Pontoons and Walkway by oiling & greasing of all the movable parts such as walkway rollers, hinges, plates and guide piles, guide plates, guide channels etc. including cleaning of walkway area and pontoon area. The work comprises also to check the water level inside Pontoons by opening and closing manhole cover & to submit the report of individual pontoon thereof etc. complete as directed by engineer in charge. The work includes the cost of oil, grease, tools & plants and labours as directed by the engineer in charge.	2912.00	450.00		1 No	each	1310400.00
						TOTAL = Rs.	14644682.00

I / We am/are willing to carry out this work at _____% above / below (percentage should be written in figure and words). The tendered rates mentioned above amount of my / our tender are put as under :-

Estimated amount put to tender Rs. _____
Deduct _____% below (-) Rs. _____
Net Rs. _____
In words (Rupees _____)
_____)

Estimated amount put to tender Rs. _____
Add _____% above (+) Rs. _____
Total Rs. _____
In words (Rupees _____)
_____)

Contractor

Executive Engineer (H)
Deendayal Port Authority