

SCHEDULE B

BILL OF QUANTITIES

Name of Work : Up-gradation of kutchra Plot on East of Main Store at Bunder Basin.

Item No.	Description of Item	Qty.	Rate	Unit		Amount
1	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.					
a	All kinds of soil / GSB filled area / Ashphalted surface	683.54		M ³	One Cubic Meter	
2	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	48.82		M ³	One Cubic Meter	
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	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size).	44.44		M ³	One Cubic Meter	

Item No.	Description of Item	Qty.	Rate	Unit		Amount
4	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying and the cost of centering, shuttering, finishing and excluding cost of reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. "(Note : Cement content considered in this item is @ 330 kg/cum."Excess/ less cement used as per design mix is payable/recoverable separately). Providing M-30 grade concrete instead of M-25.	212.00		M ³	One Cubic Meter	
5	Providing, laying and fixing in position upto 1 km lead design mix reinforced cement controlled concrete for RCC Precast slab / RCC Precast curbing of design mix M-30 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping / placing of concrete to site of laying including the cost of centering,shuttering, finishing as per direction of Engineer-in-charge. (Rate is exclusive of cost of reinforcement)	10.05		M ³	One Cubic Meter	

Item No.	Description of Item	Qty.	Rate	Unit		Amount
6	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.	26987.00		KG	One Kilogram	
7	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	170.89		M ³	One Cubic Meter	
8	Extra rate for conveying the excavated stuff by motor - truck					
a	Lead upto 3.50 BEYOND 3.00 KM	513.00		M ³	One Cubic Meter	
9	External plaster are for height upto 10m from ground level in less otherwise stated.					
a	12 mm cement plaster of mix : 1:4 (1 Cement : 4 Fine Sand)	1254.00		M ²	One Square Meter	
10	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :					
a	Water thinnable cement primer	227.00		M ²	One Square Meter	
11	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :					
a	Two or more coats on new work	227.00		M ²	One Square Meter	

Item No.	Description of Item	Qty.	Rate	Unit		Amount
12	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.					
a	40 mm thick with 20 mm nominal size stone aggregate	263.04		M ²	One Square Meter	
13	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer and finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.	5997.24		KG	One Kilogram	
14	Removal of Garbage/debries by mechanical means (Hydraulic excavator)/manual means over areas including getting out and disposal of stuff lead beyond 3.50 km upto 3.00 Km outside cargo jetty area, as directed by Engineer-in-charge.	1750.00		M ³	One Cubic Meter	
15	Surface dressing of the ground including removing vegetation and in- equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m					
	All kinds of soil	9046.57		M ²	One Square Meter	

Item No.	Description of Item	Qty.	Rate	Unit		Amount
16	Construction of granular sub - base by providing, laying, spreading and compacting CLOSE/ COARSE GRADED MATERIAL spreading in uniform layers with motor grader on prepared surface and compacting with power vibratory roller of required type and capacity to achieve the desired density including all labour, wattering, material , machinery, lighting, guarding, barricading complete as directed.(Mix in place method).					
a	With material conforming to Grade-I (size range 75 mm to 0.075 mm) having CBR Value-30	9046.57		M ³	One Cubic Meter	
17	Collection, spreading and Consolidation of Black stone dust / Grit by Power vibratory roller of required capacity in a layer of av 20 MM including cost of Wattering, Excavation ,Royalty, loading, unloading and transportation at the site of work.	9046.57		M ²	One Square Meter	
18	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with Grader in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.	2713.98		M ³	One Cubic Meter	

Item No.	Description of Item	Qty.	Rate	Unit		Amount
19	Providing and applying tack coat using bitumen emulsion conforming to IS: 8887, using emulsion pressure distributor including preparing the surface & cleaning with mechanical broom.					
a	With medium setting bitumen emulsion (On W.B.M / W.M.M. @ 0.75 kg/sqm)	9046.57		M ²	One Square Meter	
b	With rapid setting bitumen emulsion (On Bituminous surface @ 0.25 kg/sqm)	9046.57		M ²	One Square Meter	
20	Providing and laying Dense Graded Bituminous Macadam using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equiped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specifcatons and directions of Engineer-in Charge.					
a	50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	1566.00		MT	One Mtric Tonne	

Item No.	Description of Item	Qty.	Rate	Unit		Amount
21	Providing and laying Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equiped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge.					
a	40/50 mm compacted thickness with bitumen of grade PMB-40 @ 6.00 % (percentage by weight of total mix) and lime filler @ 3% (Percentage by weight of Aggregate) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.	1066.00		MT	One Mtric Tonne	
					Total Rs.	

Contractor

**Executive Engineer (H)
Deendayal Port Authority**