

SCHEDULE-B**Name of work: Construction of Dome shaped Storage Sheds inside C.J. Area - Phase-II**

Item No	Description	Qty	Rate	Unit	Amount
	<u>Part-A (Civil Work)</u>				
1	Providing and fixing of Self Supported Structure Less Roofing systems with proper overlapping and seaming between different sheets without making holes or preventing the overturning the roof by wind addition made up from Regular Modified Polyster Imported Color Coated Galvalume Cold Rolled Structural Steel Sheet Coils of superior quality structural steel. Base metal width 912 mm, and profiled width of 625 mm +/-10mm. The works includes design, supply, & fabrication of self supported single span arch roof fabricated by mechanically seamed in Machines to profiles as per standard ASTM A792, Steel Sheet, Aluminum-Zinc Alloy Coated by Hot-Dip process. The work should be carried out by specialize and agency as approved by Engineer in charge only. The rate of item is including fitting as per standard specification. (Only net area of sheet to be measures i.e. clear length without corrugation & curved/sloping width. No extra measurements/ payments shall be given for corrugation/profile & over lapping. The area of skyligh sheet/turbo ventilators will be deducted.)				
A)	For main roof of shed with c/c span Supporting beam up to 32 m. minimum thickness 1.60 mm BMT, 1.65 mm APT with tolerance of +/- 0.04 mm	25952.00		M2	
B)	For roof covering at Gate area for canopy with span up to 6.00m minimum thickness 0.90 mm BMT, 0.95 mm APT with tolerance of +/- 0.04 mm	900.00		M2	
2	Providing and fixing of hangers/clamps as per manufacturers specifications for laying of cables and hanging of bulbs/light fixtures etc. from Self Supported Systems Roofing	2520.00		Each	
3	Providing and fixing of modules of 2 no of 24" dia Wind operated Aluminium Turbo Ventilators with single Transperant Skylight Sheet (minimum 2 mm thick) of 2ft width and 28ft length at required intervals in Self Supported Roofing Systems on center as per manufacturers specifaions	126.00		Each	
4	Structural steel work riveted, bolted or welded in built up sections, including cutting, hoisting, fixing in position/embedded in concrete and hot dip galvanize coat of 150 micron all complete as directed by engineer in charge.	16432.00		Kg.	
5	Providing anf fixing 16 mm dia. steel wire rope of length 6.00 m with turn buckle to support the free end of the steel structure of 5 m wide canopy including necessary knotting, clamping, hooks, 'D-cycle', washers, nuts, bolts etc. as directed by engineer in charge.	48.00		Each	
6	Providing and fixing M.S. sheet sliding- shutters/ heavy duty gates, made up with M.S. chennel, angles, flats, plates, bars etc. with necessary EN-18 or suitable steel pully with brass shaft, handles & locking arrangement including required inserts to be grouted at the time of concrete as directed by engineer in charge.	37440.00		Kg.	

Item No	Description	Qty	Rate	Unit	Amount
7	Construction of granular sub - base by providing, laying, spreading and compacting CLOSE/ COARSE GRADED MATERIAL mixing at O.M.C spreading in uniform layers with motor grader on prepared surface and compacting with roller of required type and capacity to achieve the desired density including all labour, material , machinery, lighting, guarding, barricading complete as directed.(Mix in place method Grading III as per MORTH 5th edition Section No-400, Clause No-401, Table No-400.1) (Including sattelment of ground)	4500.00		M3	
8	Construction of dry lean cement concrete sub base over a prepared sub-grade with coarse and fine aggregate conforming to IS:383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per specifications, cement content not to be less than 150 Kg/cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, for all leads & lifts, laid with a mechanical paver, compacting with 8-10 tonne vibratory roller, finishing and curing etc. complete as per direction of Engineer-in- charge.	8250.00		M3	
9	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer -in - charge.	590.00		M3	
10	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	1473.00		M3	
11	Earth work in excavation in all kind of soil by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains, including dressing of sides and ramming of bottoms, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
A	Lift up to 1.50 m.	7466.00		M3	
B	Lift of 1.50 m to 3.00 m	4572.00		M3	
12	Disposal of excavated stuff/demolished concrete etc. up to lead of 2.00 km by motor truck including loading, unloading and dressing at the disposal site as directed by engineer in charge.	14101.00		M3	
13	Supplying and laying of Biaxial Geo-grid, made from virgin high density polypropylene, having aperture size of 65mmx 65mm and ultimate tensile strength of 30 kN/m with minimum junction efficiency of 95% & minimum radial stiffness of 350 kN/m (@0.5% strain. Only plan area to be measured and no extra payment to be given for overlaps.	4428.00		M2	
14	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	7649.00		M3	
15	Providing, laying, spreading 40 to 60 mm size crushed trap stone metal in uniform layers not exceeding 200mm including leveling, dressing, watering and compaction of each layer with power roller. The work includes filling the voids of metals by providing & spreading of river sand or stone dust of averag 50 mm thick over each layer of crushed stone metal layer. (No deduction for voids to be done)	24379.00		M3	
16	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)	770.00		M3	

Item No	Description	Qty	Rate	Unit	Amount
17	Providing and laying in position machine batched and machine mixed design mix M-30 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering,shuttering, finishing and 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.				
A	All works upto plinth level	3773.00		M3	
B	All works above plinth level upto floor - V level	1757.00		M3	
18	"Providing and laying design mix reinforced/plain cement concrete of M-30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber, finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction/expansion, construction & longitudinal joints (5 mm wide x 50 mm deep)by groove cutting machine, complete all as per direction of Engineer-in- charge (necessary reinforcement to be paid separately).				
A)	Reinforced Cement concrete manufactured in automatic batching plant (RMC plant) including transportation to site in transit mixer.	6438.00		M3	
B)	Plain Cement concrete manufactured in automatic batching plant (RMC plant) including transportation to site in transit mixer.	6060.00		M3	
C)	Extra for providing and spreading metalic floor hardening compound of approved quality as per manufacturer's specification on cement concrete surface @ 3kg/m2 and polished the surface by mean of machine operated polisher in 2 to 3 stage polish after spreading the same on concreted surface.	48237.00		M2	
19	Providing steel reinforcement for R.C.C. work including straightening, cutting,bending, placing in position and binding all complete. Thermo-Mechanically Treated bars of grade Fe- 500D or more.				
A)	Up to plinth level.	651440.00		Kg.	
B)	Above plinth level.	316260.00		Kg.	
20	Centering and shuttering including strutting, propping etc. and removal of form for all heights :				
A)	Foundations, footings, bases of columns, etc. for mass concrete	2640.00		M2	
B)	Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc.	3881.00		M2	
C)	Lintels, beams, plinth beams, girders, bressumers and cantilevers	6695.00		M2	
D)	Columns, Pillars, Piers, Abutments, Posts and Struts	5146.00		M2	
E)	Suspended floors, roofs, landings, balconies and access platform	1404.00		M2	

Item No	Description	Qty	Rate	Unit	Amount
21	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) A) upto plinth level with Cement mortar 1:6 (1 cement : 6 coarse sand)	855.00		M3	
22	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 superstructure upto floor two level.	1730.00		M3	
23	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 (average) with 20 mm nominal size stone aggregate.	1262.00		M2	
24	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing				
A)	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) up to all heights.	17.00		M3	
25	Cement plaster of mix 1:6 (1 cement: 6 sand) with course sand, including finishing smooth, curing etc. complete for all heights.				
A)	20mm thick	602.00		M2	
26	Cement plaster of mix 1:3 (1 cement: 3 sand) with course sand, including finishing smooth, curing etc. complete for all heights.				
A)	8mm thick	28475.00		M2	
27	White washing with lime to give an even shade : New work (three or more coats)	17515.00		M2	
28	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade: New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	11562.00		M2	
29	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				
A)	110 mm diameter	340.00		M	
30	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :				
A)	150 mm dia. R.C.C. pipe	480.00		M	
B)	300 mm dia. R.C.C. pipe	200.00		M	

Item No	Description	Qty	Rate	Unit	Amount
31	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :				
A)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	48.00		Each	
32	Lettering with approved shed of synthetic enamel paint of approved brand and manufacture as directed by engineer in charge.	7760.00		Per Letter Per Cm Height	
33	Providing and fixing "DURA BOARD" for expansion joint between joints of two RCC Columns/Beams/Gutter/Wall etc. including providing & filling Silicon sealant as per the manufacturers instructions in the expansion joint after cutting the top of Dura Board to a specified depth. 25mm. The work also includes providing and fixing 150mm wide Aluminium Composite Panel sheet 3mm thick of approved shade over both face of the vertical/horizontal joint as detected.	60.00		M	

Total Rs.

CONTRACTOR

EXECUTIVE ENGINEER (H)
DEENDAYAL PORT TRUST