

DETAILED ESTIMATE FOR CONSTRUCTION OF SFRUTI CLUSTER IN AT MAJULI, ASSAM ( 1200 SFT)						
NIT No. HPL/DGM(C)/TC/IIIE/2017-18/43 dated 14.09.2017						
Item Rate Financial Bid						
Name of the Agency: M/s.						
<b>CIVIL WORKS</b>						
S. No	DSR 2016 No.	Description	Unit	Qty.	Rate	Amount (Rs.)
		<b>SUB HEAD - I EARTH WORK</b>				
A		<b>CIVIL WORKS</b>				
1		Earth work in excavation by mechanical means (Hydraulic excavator)/manual means in foundation trenches or drains (not exceeding 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottoms , lift upto 1.5m , including getting out the excavated soil and disposal of surplus excavated soil as directed within a lead of 50 m.	cum	15.43		
	2.8.1	Ordinary soil				
2	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in wateriing, lead upto to 50m and lift upto 1.5m.	cum	15.43		
3	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1 m above ground leveland removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	sqm	140.00		
		<b>SUB HEAD - II CONCRETE WORK</b>				
1		Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level.				
a	4.1.8	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size).	cum	1.56		
b	4.1.10	1:5:10 (1 Cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size).	cum	8.40		
2	4.17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth.	sqm	0.00		
		<b>SUB HEAD - III RCC WORK</b>				
1		Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level.				
	5.1.2	1:1.5:3 (1 cement : 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size).	cum	7.90		

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2		Centring and shuttering including strutting, propping etc. and removal of form for:removal of form for:				
a	5.9.1	Foundations,footings,bases of columns including beams etc. for mass concrete	sqm	21.60		
b	5.9.6	Columns, pillars, piers, abutments, posts and struts	sqm	27.00		
3		steel Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level				
	5.22.6	Thermo-Mechanically Treated bars of grade Fe 500 D or more	Kg	1,066.16		
		<b>SUB HEAD -IVBRICKWORK</b>				
1	6.2.2	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in:	cum	8.74		
		Cement Mortar 1:6 (1 cement : 6 coarse sand).				
		<b>SUB HEAD -IV WALLS</b>				
1	26.41	Designing, providing, installing and fixing factory finished custom designed cold form Light Gauge Steel Framed super structure comprising of steel wall panel, trusses, purlins etc manufactured out of minimum 0.75 mm thick steel sheet as per design requirements. The steel sheet shall be galvanized (AZ-150 gms Aluminium Zinc Alloy coated steel having minimum yield strength 300- 550 Mpa) conforming to AISI specifications and IBC 2009 for cold formed steel framing and construction and also as per IS: 875-1987, ISO 800-1984 and IS: 801- 1975. The wind load shall be as per provisions of IS 875 (part -III). LGSFS frame shall be designed as per IS: 801 using commercially available software such as Frame CAD Pro-11.7/ STAAD PRO-V8i/ArchitekV2.5.16/ Revit architecture-2011 or equivalent.				
		Proper usage of Connection Accessories like Heavy Duty Tension Ties, Light Duty Hold-ons, Twist Straps (to connect truss with wall frames), Strong Tie, Tie Rod, H-Brackets, Boxing Sections, L-Shaped Angles for better structural stability.				

S. No	DSR 2016 No.	Description	Unit	Qty.	Rate	Amount (Rs.)
		The framing section shall be cold form C-type having minimum web depth 89 mm x 39mm flange x 11mm lip in required length as per structural design requirement duly punched with dimple/slot at required locations as per approved drawings. The slots will be along centre line of webs and shall be spaced minimum 250mm away from both ends of the member. The frame can be supplied in panelized or knock down condition in specific dimensions and fastened with screws extending through the steel beyond by minimum of three exposed threads. All self drilling tapping screws for joining the members shall have a Type II coating in accordance with ASTM B633(13) or equivalent corrosion protection of gauge 10 & 12, TPI 16 & 8 of length 20mm.				
		The frames shall be fixed to RCC slab or Tie beam over Neoprene rubber using self expanding carbon steel anchor bolt of dia as per approved drawings. design subject to minimum 12mm diameter and 121mm length conforming to AISI 304 and 316 at 500mm c/c with minimum embedment of 100mm in RCC (RCC to be paid separately) and located not more than 300mm from corners or termination of bottom tracks complete in all respects. The item also includes the submission of stability reports duly examined and issued by any NIT/IIT. The rate includes the concept design, detailed design, fabrication of sections, transportation, installation and all required fixing arrangement at site as described above.	Kg	972.00		
2	26.43	Providing and fixing internal wall panels on Light gauge steel frame work with 12.5mm thick gypsum plaster board conforming IS 2095:2011 fixed on 8mm thick fiber cement board conforming to IS 14862:2000 of category III type B (High pressure steam cured) as per standard sizes fixed with self-drilling / tapping screws / fasteners @ 60cm c/c of approved make, Screws shall be of counter sunk rib head of 1.60mm to 4 mm thick of 8 to 10 gauge of length varying from 25 to 45 mm. Proper taping and jointing to be done using fiber mesh tape and epoxy and acrylic based jointing compound for seamless finish.(cost of frame work to be paid for separately)	sqm	162.00		
		<b>SUB HEAD -VI WOOD &amp; PVC WORKS</b>				

S. No	DSR 2016 No.	Description	Unit	Qty.	Rate	Amount (Rs.)
1		Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:				
	9.21.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	sqm	2.10		
2		Providing and fixing aluminium sliding door bolts, ISI marked anodised anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :				
	9.96.1	300x16mm	each	1.00		
3		Providing and fixing aluminium tower bolts ISI marked anodised ( anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete-				
a	9.97.3	200X 10 mm	each	1.00		
b	9.97.4	150X 10 mm	each	1.00		
4		Providing and fixing aluminium handles ISI marked anodised ( anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete-				
	9.100.1	125 mm	each	2.00		
		<b>SUB HEAD -VII STEEL WORK</b>				
1		Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitred and welded, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.				
	10.13.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	kg	23.40		
2	10.2	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 all complete.	kg	403.20		
3	10.1	Structural steel work in single section fixed without connecting plate including cutting hoisting, fixing in position & applying priming coat of approved steel primer all complete.	kg	4,375.00		

S. No	DSR 2016 No.	Description	Unit	Qty.	Rate	Amount (Rs.)
4		Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators, side /top /centre hung, with beading and all members such as F7D, F4B, K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, including priming coat of approved steel primer, but excluding the cost of other fittings, complete all as per approved design, (sectional weight of only steel members shall be measured for payment).				
10.11.1		Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	kg	216.00		
5		Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with :				
	10.30.2	5.5 mm thick glass panes	sqm	14.40		
		<b>SUB HEAD -VIII FLOORING</b>				
1		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.				
	11.3.1	40 mm thick with 20 mm nominal size stone aggregate	sqm	169.20		
2		Cement plaster skirting (upto 30cm height) with cement mortar 1:3 (1 cement 3 coarse sand) finished with a floating coat of neat cement.				
	11.6	18mm thick	sqm	16.92		
		Providing and fixing glass strips in joints of terrazo/ cement concrete floors.				
	11.13.1	40 mm wide and 4 mm thick	sqm	676.80		
		<b>SUB HEAD -IX ROOFING</b>				
1	12.50	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineerin-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	sqm	134.40		

S. No	DSR 2016 No.	Description	Unit	Qty.	Rate	Amount (Rs.)
2		Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+ 0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete				
	12.51.1	Ridges plain (500 - 600mm)	metre	8.00		
		<b>SUB HEAD - X - Finishing</b>				
1		White washing with lime to give an even shade				
	13.37	New work(three or more coats)	sqm	207.75		
2		Finishing walls with water proofing cement paint of required shade :				
	13.44.1	New work (Two or more coats applied @ 3.84 kg/10 sqm)	sqm	167.75		
3		Applying priming coat				
a	13.50.1	With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood)	sqm	5.04		
b	13.50.3	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/ steel works	sqm	14.40		
c	13.50.4	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel work (second coat)	sqm	14.40		
4		Painting with synthetic enamel paint of approved brand and manufacture to give an even shade				
	13.61.1	Two or more coats on new work.	sqm	19.44		
		<b>TOTAL SCHEDULE ITEMS (IN Rs.) (A)</b>				
	<b>B</b>	<b>ELECTRICAL WORKS</b>				
	1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc. as required.	point	18.00		
1						
	1.12	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required	metre	250.00		
		Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
	1.14.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	metre	75.00		

S. No	DSR 2016 No.	Description	Unit	Qty.	Rate	Amount (Rs.)
		Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
	1.24.8	Bell push	point	8.00		
	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required.	point	8.00		

S. No	DSR 2016 No.	Description	Unit	Qty.	Rate	Amount (Rs.)
		Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.3.1	6 way, Double door	each	2.00		
		Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.10.1	Single pole	each	6.00		
	2.10.3	Double Pole	each	2.00		
	5.4	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	each	2.00		
	6.14	Providing and laying G.I. tape 32 mm X 6 mm from earth electrode directly in ground as required.	metre	20.00		
	7.13	Supply of Ceiling Fan of 1200mm sweep complete erected in position with all accessories.(Make- Havels) or Equivalent to Orient, Cropton Greave.	each	6.00		
	7.7	Supply of 20W wall mounted LED Batten light. Make- Polycab, Model- (LD00103103) or Equivalent to Philips, Wipro, Bajaj, Havels.	each	22.00		
	1.45	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	each	6.00		
		<b>TOTAL SCHEDULE ITEMS (IN Rs.) (B)</b>				
		<b>G TOTAL A+B</b>				
		<b>MARKET RATE ITEMS</b>				
	1	Providing Deck slab at stilt Roof Level including necessary 0.8 mm thick galvulume sheeting , CC work, nominal reinforcement complete	sqm	115.00		
		<b>Grand Total of scheduled and non-scheduled items (in Rs.)</b>				

Note: The rate quoted by the agency shall be inclusive of all taxes including GST.