

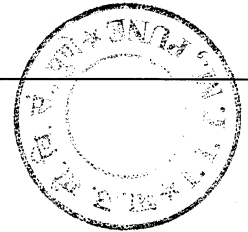
**PRE-BID M.O.M FOR CONSTRUCTION OF CLOUD PHYSICS & DYNAMICS LABORATORY AT IITM,  
PASHAN, PUNE-411008**

A Pre-Bid Meeting for the subject work held 19.11.2013(1100hrs) in HPC Conference Hall at IITM.

The site was shown to vendor and during the discussion in the pre-bid meeting the following decisions were taken:

<b>SL. No.</b>	<b>Question raised by the Contractors</b>	<b>Tender Document Reference</b>	<b>Decision Taken</b>
01.	Rates	Tender document	The rate shall be quoted as revised price-bid format, i.e. basic cost & taxes should be shown separately
02.	BOQ	Tender BOQ	As per discussion held in pre-bid meeting the BOQ has been revised, the vendor shall submit their techno commercial bid as per revised BOQ only.

**NOTE: 1) Contractor shall enclosed copy of pre-bid M.O.M duly signed and stamped along with Techno- commercial bid.  
2) Contractor shall submit their Bid as per revised BOQ Only.**



**Revise Price Bid Format for CDPL at IITM, Pune**

SR. NO.	ITEM DESCRIPTION	QTY.	UNIT	Basic Rate(Rs.)	Taxes (Rs.)	Total amount (Basic +Taxes)	AMOUNT (C x G)
A	B	C	D	E	F	G	H
<b>1a</b>	<b>Breaking of BBM</b>	2.50	CUM				
	Breaking of BBM including plaster by electric chipper including cleaning debris, removing the stuff beyond a office premises stacking and / or spreading as directed, etc. complete.						
<b>1b</b>	<b>Dismantalling existing Flooring ....</b>	35.00	SQM				
	Dismantalling of Existing floor tiles with subbase by electric chipper including cleaning debris, removing the stuff beyond a office premises ,stacking and / or spreading as directed, etc. complete.						
<b>2</b>	<b>Removing Wall Partitions</b>	12.00	SQM				
	Removing of existing Dry wall partitions including scaffolding , removing and carting scrap material in the SAPL scrap yard or as directedby engineer in charge. The work should be carried out strictly with safety and at most care so that no damage will occur while during the work. Item to include necessary labour , tool & tackles , scaffolding , cleaning etc complete. The dismantled material will be owner's property.						
<b>3</b>	<b>Removing Windows &amp; Glass Partitions</b>	11.00	SQM				
	Removing of Existing Windows & Glass Partitions including stacking or carting of removed material as directed by engineer in charge. The work should be carried out strictly with safety and at most care so that no damage will occur while during the work. Item to include necessary labour , tool & tackles , scaffolding , cleaning etc complete. The dismantled material will be owner's property.						
<b>4</b>	<b>Fly ash brick masonry 150 mm thk...</b>	2.00	SQM.				
	Providing and constructing 150 mm thick fly ash brick masonry at all elevations and heights in cement mortar 1:4 using standard size of bricks approved make with minimum crushing strength 9 N / mm <sup>2</sup> . including all scaffolding, staging, striking off extra mortor, curing etc., at all heights, elevations and providing RCC band (1:3:6) of 100 mm at every 1 mts height as per design etc., all complete shall be as per specification and laid as directed. (Rate including cost of steel reinforcement)						
<b>5</b>	<b>Fly ash bricks masonry in superstructure...</b>	2.50	CUM				
	Providing and constructing 230 mm thick fly ash brick masonry at all elevations and heights in cement mortar 1:6 using standard size of bricks of approved make with minimum crushing strength 9 N / mm <sup>2</sup> . including all scaffolding, staging, racking the joints, curing etc., at all heights, elevations above and below finished floor level etc., all complete shall be as per specification and laid as directed.						
<b>6</b>	<b>Internal cement plaster (with neeru finish)...</b>	21.00	SQM				

	Providing and applying Plastering of internal walls and ceiling with cement mortar 1:4, 12 - 15 mm thick with neeru finish according to specifications. Rate includes providing & fixing in position expanded metal plaster mesh [ Arpitha make ] or equivalent minimum 6" wide strips at the junctions of R.C.C columns/ beams/slab with brick work or wherever necessary, properly fixed, abutting the wall surfaces so as to get the plaster in line and plumb,necessary staging,scaffolding and curing at all levels and elevations etc.complete as directed.					
<b>7</b>	<b>Partially glazed partition</b>	41.00	SQM			
	Supplying and installing in position Aluminium partially glazed partition system, using aluminium channels of size 50mm wide and 35mm high to a height of 3000mm from finished floor level. The partition to comprise of 12mm thick prelaminated particle board in the bottom portion upto 1200mm from floor level. Above the Particle board the partition to be closed using 5mm thick float glass from saint gobain, asahi,or equivalent make. The particle board and glass pane to be saperated using aluminium section. The aluminium sections are to be anodised matt finish. The shade of Prelaminated Particle board is to be approved before ordering. The aluminium partition to be ensured for stability by giving required proper MS supports at proper intervals.					
<b>8</b>	<b>Deck Sheet ...</b>	25.00	SQM			
	Supplying and installing in position METAL DECKING sheet in 52mm depth profiles with thickness 1.25mm. and a decking profile of 52/271 (having 52mm depth x 845mm width) on HR Steel as per IS:1079 / Galvanized Steel (as per IS:277) Galvanized finish. The metal sheets to be fixed to the structural framework with the help of Thru-bolts with a minimum diameter of ½" and shall be hot-dipped galvanized or stainless steel. Silicon washers to be used on the top and bottom of the sheet while bolting. item includes all material, labour, tools & tackles, Scaffolding, cleaning etc complete.( approx weight - 12.92 kg / Sqm)					
<b>9</b>	<b>Cement concrete M25 grade...</b>					
	Providing and casting in situ cement concrete of M 25 grade concrete of trap metal as per detailed designs including dewatering, centering formwork with shuttering ply & steel plates, compacting with vibrators, placing & fixing inserts (viz. plates, pipes for cutouts, anchors), formation of cutouts, chases etc. as per detail drawing and curing complete. RCC structures shall be Fair Finish. Rate shall include concrete brought from RMC plant or batching plant installed on site or outside site premises by contractor.(Rate at all heights & levels and excluding tor / mild steel Reinforcement), haking of surface to form key wherever plaster is to applied.etc complete.					
	A) Footings / Pedestal	0.50	CUM			
	A) Deck slab	3.00	CUM			
<b>10</b>	<b>Tor steel bar reinforcement...</b>	255.00	KG			

	Providing and fixing reinforcement for RCC work with Thermo mechanically treated (TMT) bar of various diameters and grade of steel as specified below conforming to IS or equivalent BS specification including cutting, bending, hoisting, fabricating and placing in position according to drawings and binding the reinforcement with MS binding wire of double fold of 18 gauge and providing PVC /Precast concrete cover blocks for placing the reinforcements in position and for maintaining the cover specified and/or according to relevant IS or equivalent BS code.					
<b>11</b>	<b>Structural steelwork in hot rolled sections...</b>	1.20	M.T.			
	Providing fabricating & erecting structural steelwork in hot rolled sections For columns, tie beams, trusses, purlins, gantry, monorail columns, plates, cable trays, pipe racks ,castellated beams, plate girder, staircase & other structural members with all bracings, gusset plates etc. as per detailed drawing or as directed at all heights and levels including removing the scales & burrs, cleaning with Phosphoric acid, marking, cutting, fabrication, hoisting, erecting & fixing in position, making alignment of members making welded / bolted / riveted Connections and finishing with two coats of synthetic enamel paint of approved quality and colour over one coat of approved red-oxide paint etc complete.					
<b>12</b>	<b>HRS for spiral/dog legged/straight Staircase...</b>	2.00	MT			
	Providing fabricating & erecting structural steelwork in hot rolled sections for spiral / dog legged/straight Staircase with grated trays all bracings, bolts, plates etc. as per detailed drawing or as directed at all heights and levels including removing the scales & burrs, cleaning with phosphoric acid, marking, cutting, fabrication, hoisting ,erecting & fixing in position, making alignment of members, making welded / bolted / riveted connections and finishing etc complete.					
<b>13</b>	<b>Foundation bolts...</b>					
	Providing & fixing foundation bolts with nuts & washers in RCC columns or foundations at all depths & heights as per detailed drawings including fixing in position with holdfasts, setting it by laser theodolite, welding wherever necessary etc. complete.					
	A) M.S.foundation bolt	20.00	KG			
<b>14</b>	<b>Kota stone flooring...</b>	35.00	SQM			
	Providing and laying in all position polished kota stone flooring 25 mm thick of 550 x 550 mm size in plain pattern on a bed of cement mortar 1:4 including laying in required position and in line and level, cement float, filling joints with neat cement Slurry, curing, polishing, cleaning etc. compete. (Tiles to be hand dressed and to fit correctly and sluggishly against each other and shall form very fine joint.) Note:-color of Kota should be uniform.(Basic Rate-30 sqft)					
<b>15a</b>	<b>Polished kotta for skirting...</b>	4.00	SQM			

	Providing and laying approved quality polished kotta stone 18 mm thk for skirting as directed on a bed of 1:4 cement plaster including laying in required position and in line and level, filling joints with neat cement slurry, curing, polishing exposed edges, cleaning etc. complete. (Basic Rate - 30 sqft)					
<b>15b</b>	<b>Granite window sill,treads &amp; risers...</b>	12.00	SQM			
	Providing and laying approved quality Granite of approved shade 20 mm thick as directed on bed of 1:4 cement plaster including laying in required position and in line and level, filling joints with neat cement slurry, curing, edge polishing, chamfering ,cleaning, etc.complete. (Basic Rate-120 sqft)					
<b>16</b>	<b>Vynyl Flooring</b>	23.15	SQM			
	Providing and laying in pattern 2mm thick vinyl flooring roll form of Mipolam & Triplan series of Gerflor or Armstrong or approved quality, make fixed with approved adhesive as per the manufacturers specifications. The adhesive used for laying the vinyl floor shall be as per the written recommendation made by the manufacturer. The vinyl flooring shall be laid having seamless joints with proper joint treatment using matching shade PVC trims with soft welding as per manufacturers specifications and as approved by the Architects. The copy of the Adhesive recommendation, Original warranty Certificate for minimum of 10 years against de-colourisation, delamination of vinyl floor, PVC trims and soft welding shall be submitted with the Handing Over Report after the completion of installation at site from the Principal manufacturer. This also includes providing, laying and curing of average 5mm thick self leveling compound of Roffee/ Fosroc or approved equivalent make below the Vinyl flooring for achieving the smooth, hard and absolutely leveled surface to avoid undulations in the top vinyl flooring. Procurement and Installation of the vinyl flooring shall be started, only after Architects written approval on shade, make and methodology statement submitted by the Vendor. (Basic price of the vinyl tiles/					
	<b>Gypsum Ceiling</b>	25.00	SQM			
	Suspended ceiling, which includes Gypsteel ULTRA CRP surface ribbed perimeter channels (having one flange of 20mm and another flange of 30mm and a web of 27mm) along the perimeter of ceiling, screw fixed to brick wall/partition with the help of nylon sleeves and screws, at 610mm centres. Then suspending Gypsteel ULTRA CRP surface ribbed intermediate channels of size 45mm (with two flanges of 15mm each) from the soffit at 1220mm centres with Gypsteel ULTRA™ CRP surface ribbed ceiling angle of width 25mmx10mm fixed to soffit with GI cleat and steel expansion fasteners. Then Gypsteel ULTRA CRP surface ribbed Ceiling section of having web of 51.5mm and two flanges of 26mm each with lips of 10.5mm are then fixed to the Gypsteel ULTRA intermediate channel with the help of connecting clip and in direction perpendicular to the Gypsteel intermediate channel at 457.5mm centres. Single layer of tapered edge 13mm thick Gyproc Duraline ( <b>conforming to BS 5234 –1992, Part 2</b> ) is then screw fixed to ceiling section with 25mm drywall screws at 230mm centres. Screw fixing is done mechanically either with screw driver or drilling machine with suitable attachment. Finally					

17	<b>GRID CEILING</b>	60.00	SQM				
	<p>Providing and fixing false ceiling system by Armstrong World Industries or equivalent using hot dipped galvanized steel section, rotary stitched main tee of size 15mm x 42 mm web height, having 0.36 mm gauge at every 600 mm centre to centre maximum and rotary stitched cross tee of size 15 mm x 42 mm, having 0.33 mm gauge at every 600 mm. c/c. and wall angle of size 19 x 19 mm., having 0.35 mm gauge fixed to the periphery of the wall. The above grid is suspended at every 600mm c/c. in both directions using 2.0 mm. thick pre-straightened GI wire with butterfly clips, laying FINE FISSURED MICROLOOK WITH SILHOUETTE GRID(BLACK REVEAL) ceiling tiles by Armstrong World Industries or equivalent, of size 600mmx600mmx15mm having NRC 0.55, Light reflectance of &gt;84% (WT), thermal conductivity k = 0.052-0.057 W/m0K, Humidity Resistance of 99% , having Fire Performance CLASS O / CLASS 1 (BS 476), surface having 3 coats of white paint with Fine Fissured, back of the tile duly sanded and finished with a coat of protective paint over the formed grid complete</p>						
18	<b>Luster...</b>	140.00	SQM				
	<p>Providing and applying Luster of approved make and shade on all surfaces at all heights in three coats including scaffolding, preparing the surface by brushing and brooming down, applying primer two coats and final luster paint applying and levelling the surface with coat of Birla white putty before and after the primer coat and also after the first coat etc. complete. The dry/wet cleaning of floors/pipes/glass etc. after painting is to be carried out, protection of surfaces before painting is included in the item.</p>						
19	<b>Fully glazed aluminium windows...</b>						
	<p>Providing and fixing in position approved make fully glazed aluminum windows manufactured out of HE 9 WP high grade aluminum alloy sections (Zindal make) conforming to I.S. specifications with sub frame framing 100x40 mm, sliding sections of 25 mm series as per the detail drawing with mitered shutter joints including glass as described below, nylon moldings inside, concealed mid lock, nylon rollers, approved quality PVC lining for glass, handle, hinges and weather strips with all necessary fixtures, powder coating 50 microns thk. Of approved shade from approved agency, sealing the crevices around the frame with approved sealant, fixtures and fastenings, cleaning etc. complete.</p>						
	<p>A) Three track two shuttered window with 5 mm thick clear glass of 'Modi' make. And single shutter Mosquito net.</p>	18.00	SQM				
20	<b>MS grill</b>	18.00	SQM				
	<p>Supplying fabricating and installing in position MS grill made out of the combination of 12mm x12mm square bars and 25mm x 25mm x 4mm angle sections as per detail drawings. The grill has to be painted with two quotes of red oxide paint and two quotes of synthetic enamel paint. Etc complete.</p>						

<b>21</b>	<b>Teak wood frame...</b>						
	Providing and fixing Teak wood frame as per detailed drawings with M.S. hold fasts 4 nos. on each side, bar spacer(12mm dia) bolted at the bottom of the frame as per details etc. complete including making the frame, fixing TW cover molding around the frame of 25x6 mm, applying a coat of bitumen paint for faces of the frame adjacent to wall and applying two coats of synthetic enamel paint of approved shade and make over a coat of primer on the either faces.						
	A) 100 mm x 75 mm(with enamel paint)	5.20	RMT.				
<b>22</b>	<b>Flush door...</b>	2.10	SQM				
	Providing and fixing approved quality factory made solid core flush door in single/double leaf 38mm thick BWR type plywood surface on both sides and laminated with 1.5 mm thick water proof laminate of approved make and shade, TW bidding on all edges ,doors to be of exterior grade as per the detailed drawings etc .complete.						
<b>b</b>	Same as above with double leaf	3.60	SQM				
<b>23</b>	<b>S.S.fixtures and fastenings for single leaf door...</b>	3.00	NO				
	Providing and fixing S.S. fixtures and fastenings for single leaf door as per following details- Fixtures to be for one door- 1.Dorma/or equivalent make Round knob Handles with cylindrical lock arrangement 1 Set. 2. Hinges 100mm x 2mm thk 4 Nos. 3. Door buffer 1 Nos. 4. Dorma/or other approved make door closer 1 Nos. 5. Door stopper 1 Nos						
<b>24</b>	<b>Trap door</b>	2.25	SQM				
	Providing and fixing in position Trap door of size 1.5m x 1.5m.The frame of the door is to be made out of 50mm x 50mm x6mm angles welded to the mezzanine framework. The door panes to be made out of 25mm x 25mm x 4mm MS angle frame with 50mm wide 4mm thick ms plate support to hold a 19mm thick BWR grade Plywood which is to be fized into the door pane frame with the help of screws. The door and its frame to be finally painted and finished to the approved shade. The door panes to be fixed to the MS frame with the help of heavy duty Hinges. Item to Include all necessary accessories like door handles, Tower bolts, Hinges, Locking arrangement,ozone, Dorma or equivalent make. etc complete.						
<b>25</b>	<b>Al sliding Door</b>	4.50	SQM				
	Providing and fixing in position approved make partially glazed aluminum sliding door with 40mm thick door shutter rebeted on 4 sides of 1.8m wide and 2.4m high size including 6 mm clear toughened float glass, EPDM frame seal,mortice lock prepared for client supplied profile cylinder sealing the crevices around the frame with sealant, powder coating 50 microns thk. of approved shade from the approved agency, including all accessories fixtures such as hinges, handles, locking arrangement, sliding track of ozone, Dorma or equivalent make. etc complete.						

<b>26</b>	<b>MS Grill Door double leaf...</b>	1.00	NOS				
	Providing & fixing MS Grill door of size 1.5m x 2.1m. Double leaf with MS sheet 18 gauge minimum at bottom upto 1200mm above with grill work to be done in MS square rods of 10mm thick. The door styles are to be of MS Hollow pipe of size 50mm x 25mm to which the MS Sheet and MS rods will be welded and fixed. This door panel is to be fixed to a door frame made out of MS Angles of Size 35mm x 35mm x 4mm with the help of hinges. The door frame to be fixed to the wall with anchor fasteners. The door is to be provided with Locking assembly, latch lock, tower bolts, aldrop, and other necessary accessories. Finally the door is to be painted and finished with a coat of red oxide and two coats of synthetic enamel paint.						
<b>27</b>	<b>Wall mounted wash basin...</b>	1.00	NO				
	Supplying and fixing approved colour glazed wall mounted Washbasin with pre fabricated brackets using Mild Steel members fixing to Wall dado with required materials like teak wood plugs, packing pieces, screw nails, testing including applying two coats of anticorrosive paint over one coat of primer for bracket etc complete. B) 32mm dia brass CP bottle trap with waste coupling and joints and 32 mm dia concealed outlet pipe up to the nearest nahani trap. C) Feed pipe with all Brass specials. D) Fixing one no.12mm dia Brass CP heavy type press/ push down pillar tap of "Jaguar "make. E) 12mm dia Brass CP heavy angle stop cock - one no. of "Jaguar" make. F) 12 mm dia. flexible pipe supply from angled stop cock.						
<b>28</b>	<b>Nahani trap...</b>	1.00	NO				
	Providing and fixing in position 100 mm dia C.I. NAHANI TRAPS including necessary beddings, up to the outside face of the wall & stainless steel heavy type grating with ring of approved type complete.						
<b>29</b>	<b>Inspection Chambers...</b>						
	Providing and constructing masonry INSPECTION CHAMBERS up to 1500 mm depth in 230 mm thick conventional brick masonry in C.M. 1:6,including excavation up to required depth in all kind of strata, 100 mm thick 1:3:6 P.C.C. bedding, plaster in C.M. 1:4 from inside & outside surfaces with smooth cement plaster rendering on the internal surface, haunches, channels including CI medium duty frame and cover ( 75 kg by weight) fixed in cement Concrete 1:2:4 and three coats of bituminous paint to the frame and cover.						
	A) 600 mm x 600 mm	1.00	NO				
<b>30</b>	<b>PVC Pipes...</b>						



	Supplying P.V.C Pipe ASTRAL MAKE conforming to IS 13592 and pipe specials conforming to IS 5382, cutting to required length, fixing pipe specials along with P.V.C. Pipe, Making ring seal couplers to join the pipe and pipe specials for 110 mm dia and 90 mm dia, using solvent cement solution to pipes of 75 mm dia to 40 mm dia laying the pipes to a gradient for works below floor level with 150 mm thick gravel of 15 mm size all around the embeded pipe, fixing the pipe and pipe specials in vertical locations using pipe clamps connecting to brackets, making holes in masonry, cutting grooves to conceal the pipes, restoring damaged portion to their original condition using cement, river sand, bricks, jelly etc conducting water test for leak proof joints Fixing & removing scaffolding for pipe work in all locations etc. complete.					
	75 mm dia pipe work	10.00	RMT.			
<b>31</b>	<b>Table</b>					
	Providing & fixing in position Executive tables with 18 mm MDF with drawers & storages, should have 1 mm thick Laminte of approved quality and shade of Laminate for all exposed surface .All unlaminated faces should have a melamine polish of matching shade of Laminate. Polish and chamfered for edge. The cost includes all necessary hardware like brass hinges/ locks, drawer channel, provision of cable manager, preparation of mockup etc complete. ( For keeping keyboard special fixtures like INNOFITT or Equivelent to be provided )					
	a) MEDIUM (1800L x 1950W x 750H)	1.00	Nos			
<b>32</b>	<b>Chair</b>	1.00	NO			
	Providing and supplying in position revolving chairs having 5 prong FR nylon in black finish or 5 prong aluminium in chrome finish with castors. The seat should be having gas lift adjustment with gas stroke. The mechanism for the chair should be synchronized tilt mechanism with multiple locking position. The seat and back of the chair should be made up of injection moulding PU foam with 12mm thick double ply backing. The seat and back should have fabric upholstery in specified colour and texture. The chair should have adjustable seat depth. The back rest should be made up of poly propylene with height adjustment. The arm rest to be made up of injection moulded PU foam and should be supported on a polypropylene hand rest assembled to the main body of the chair which is made up of polypropylene with fabric/rexine upholstery of approved color & texture. The colour of the fabric/rexine should be as specified by Architect. The chair should confirm the ANSI/BIFMA X5.1 standard. The cost of the chair includes preparatint over the formed grid complete d surface to avoid undulations in the to					
<b>33</b>	<b>Storage</b>	1.00	NO			
	Supply of stand alone Storages with verious sizes in Prelaminated Partical Board of 18mm Thick with 25mm thick Top with approved finish.					
	Size 1500 x 450 x 1200 mm					

