

Quotation

ANNEXURE –III (ENCLOSURES TO TENDER FORM)

Name of the work	: Construction of Sample processing unit (Size 12.20 × 5.00m)
Place of work	: CRIDA Complex Santhoshnagar, Hyderabad 6 500 059
Estimated value of Work	: Civil: Rs.6.5 lakhs +Electrical Rs. 3.2 lakhs Total 9.7 lakhs
EMD	: Rs. 19,000/-
Time for completion of work	: 90 days from the date of award of work. However, works under part-III are to be carried out with in one month of award of Contract, as these works are to be coordinated with the works being carried out by other Contractors.
Security Deposit	: 10% of the value of work

PART – I (CIVIL)

S. no.	Particulars	Unit	Qty.	Rate	Amount
1.0 (2.8.1)	Earth work excavation by mechanical/manual means is foundation trenches or drains including dressing of sides & ramming of bottoms, including getting out excavated soil & disposal of surplus excavated soil as directed with in a lead of 100 mm 2x2.20x0.60x1.00 = 14.64 3x5.00x0.60x1.00 = 9.00 1x30.00x0.30x0.50 = 4.50 2x13.40x0.60x0.40 = 6.43 2x5.0x0.60x0.40 = 2.40 <u>36.97 m³</u>	cu.m	36.97		
2.0 (15.59)	Cutting of black W.B.M. road by manual or mechanical means and disposal of unserviceable material out of campus, including all operational & indicated labour & transport charges, complete. 1x6.0x0.30x0.50 = 0.90 cu.m	cu.m	0.90		
3.0 (4.1)	Providing & laying in position Cement Concrete of specified grade excluding the cost of centering & shuttering with 1:5:10 (1cement,5coarse sand, 10 graded stone aggregate of 40 mm nominal size) (Including plinth protection)				
3.1 (4.1.11)	2x12.20x0.60x0.10 = 1.46 2x13.40x0.60x0.30 = 4.82 3x5.00x0.60x0.10 = 0.90 2x5.00x0.60x0.30 = 1.80 1x11.60x4.50x0.20 = 10.44 <u>19.42 m³</u>	cu.m	19.42		

4.0 4.1 (5.3)	Reinforced cement concrete work in beams, suspended floors roofs having slope up to 15° holdings balconies, shelves, chajjas, lintels, bands, plain window sills, staircases, and spiral stair cases up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement, 2 coarse sand 4 graded stone aggregate of 20 mm nominal size. $2 \times 13.40 \times 0.60 \times 0.10 = 1.60 \text{ m}^3$ $2 \times 5.00 \times 0.60 \times 0.10 = 0.60 \text{ m}^3$ <u>2.20 m³</u>	cu.m	2.20		
5.0 (7.1) 5.1 (7.1.1)	Random rubble masonry with hard stone in foundation & plinth including leveling up with Cement Concrete 1:4:8 (1Cement, 4 Courses and, 8 graded stone aggregate of 20 mm nominal size) at plinth level, with 1:6 Cement mortar $2 \times 12.20 \times 0.40 \times 1.35 = 13.17$ $3 \times 4.50 \times 0.40 \times 1.35 = 7.29$ <u>20.46 m³</u>	cu.m	20.46		
6.0	Filling the basement with good morrum and consolidating it. $1 \times 11.60 \times 4.50 \times 0.60 = 31.32 \text{ cu.m}$	cu.m	31.32		
7.0 (6.1) 7.1 (6.1.2)	Bricks work with F.P.S bricks of class designation 75 m foundation & plinth in Cement mortar 1:6 $2 \times 12.20 \times 0.23 \times 3.00 = 16.84 \text{ m}$ $2 \times 4.50 \times 0.23 \times 3.40 = 7.04 \text{ m}$ <u>23.88 m³</u> Deduction $2 \times 0.20 \times 0.23 \times 1.20 = 1.10 \text{ m}$ $8 \times 1.80 \times 1.20 \times 0.23 = 3.97 \text{ m}$ <u>5.07 m³</u> Net Qty. $23.88 \text{ } \hat{-} 5.07 = 18.81 \text{ m}^3$	cu.m	18.81		
8.0 (6.12) 8.1 (6.12.2)	Half bricks masonry with F.P.S bricks of class designation 75 in foundation and Plinth in Cement mortar 1:4 $1 \times 5.0 \times 3.0 = 15.0 \text{ m}^2$ $16 \times 0.75 \times 0.75 = 9.00 \text{ m}^2$ <u>24.00 m²</u>	sq.m	24.00		
9.0 (13.12)	18 mm Cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1cement, 5 coarse sand) finished with top layer 6 mm thick cement plaster 1:3 $2 \times 2 \times 12.20 \times 3.00 = 146.40$ $3 \times 2 \times 4.50 \times 3.40 = 91.80$ $16 \times 0.85 \times 0.75 = 10.20$ <u>248.40 m²</u> Deductions: $2 \times 2.0 \times 1.20 = 4.08$ $8 \times 1.80 \times 1.20 = 17.28$ <u>22.08 m²</u> Net Qty $248.40 \text{ } \hat{-} 22.08 = 226.32 \text{ m}^2$	sq.m	226.32		

10.0 (9.1)	Providing & fixing wood work in frames of doors & widows using first quality sal wood and applying approved wooden primer, compete as per instructions of site engineers,				
10.1 (9.1.2)	Sal Wood Door-2x10x1.40m (Double Shutter) Windows 8x1.80x1.20m	cu.m	1.60		
11.0 (5.12)	Providing, hoisting & fixing up to floor V level precast Reinforced cement concrete work in lintels, chajjas & shelves including the cost of centering, shutting finishing smooth with 6 mm thick cement mortar in 1:3 (1 cement, 3 fine sand) on exposed surfaces complete including cost of reinforcement with 1:2:4 (1 cement, 2 core sand graded stone aggregate of 20 mm nominal size) $2 \times 2 \times 5.50 \times 0.75 \times 0.075 = 1.24$ $10 \times 1.50 \times 0.15 \times 0.10 = 0.22$ $10 \times 1.50 \times 1.00 \times 0.10 = 1.50$ $2 \times 5.00 \times 1.00 \times 0.10 = \underline{1.00}$ <u>3.96 cu.m</u>	cu.m	3.96		
11.1 (5.22)	Reinforcement for R.C.C work, including straightening cutting, bending placing in position & binding all complete.				
11.2 (5.22.3)	Cold twisted bars (including centering)	kg	250.00		
12.0 (10.25)	Steel work welded in built up sections / frame work (window grill) including cutting, hoisting, fixing in position and applying priming				
12.1 (10.25.2)	Coat of approved steel primer using structure steel etc., as required. In gratings, frames. Window grills, rulings, brackets, gates etc.,	kg	680.0		
13.0 (10.16)	Steel work in built up tubular trusses including cutting, hosting fixing in position and applying a primary coat of approved steel primer welded and bolted including special shaped washers etc. complete				
13.1 (10.16.1)	Hot finished welded type tubes-65 mm nominal bore 3.60 wall thickness, 76.6 mm O.D-166.50 m length, 40 mm nominal bore 3.20 mm wall thickness 48.8 mm O.D -60.60 m length.	kg	1070.0		
14.0 (10.20)	Providing & fixing of M.S/ plates, Bolts & nuts for trusses including welding, cutting, drilling of holes welding, fixing in position and applying a primary coat of approved steel primer, complete	kg	200.0		

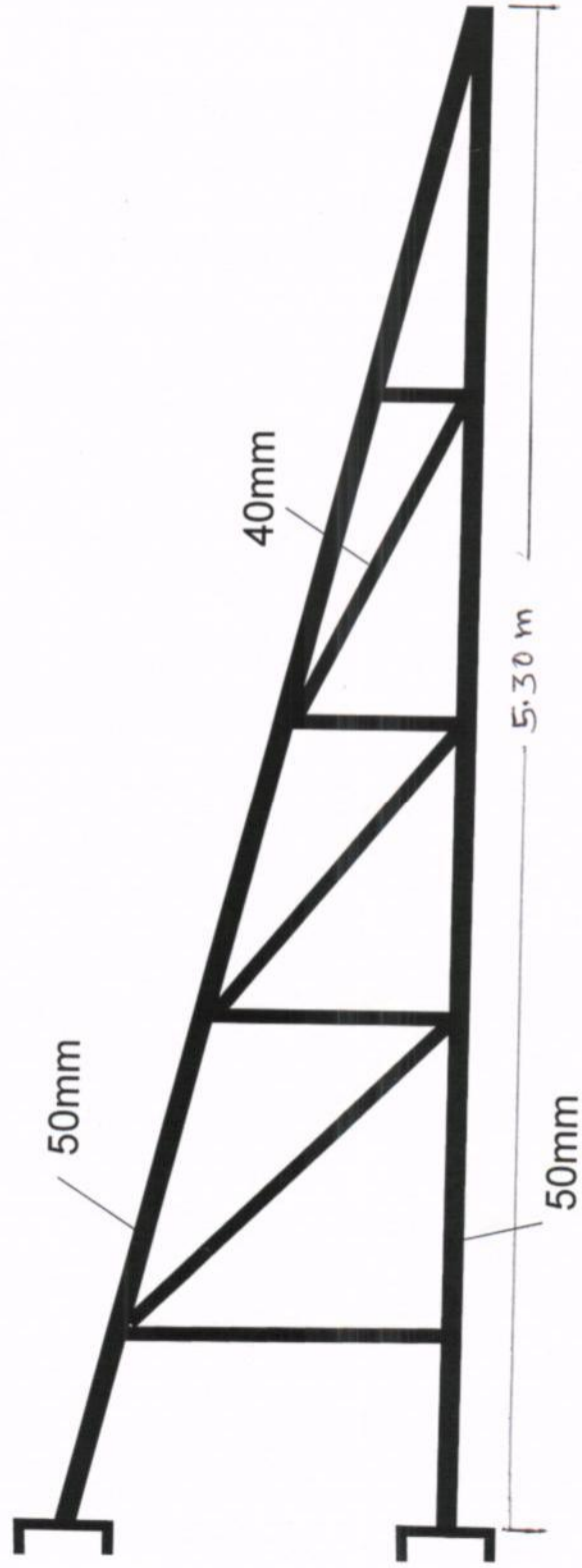
15.0 (12.50)	Supplying & installation of pre coated galvanized iron profile sheets size shape & pitch of corrugation as approved by engineer-in-charge) 0.5 mm +/- 5% total corrugated thickness (TCT) Thick zinc coating 120 gsm as per IS:277 is 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet & polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches while transportation and should be supplied in single length up to 12 meter or as desired by engineer in change. The sheet shall be fixed using self drilling / self tapping screws of size (5.5 x 5.5 mm) with EPDM seal complete including cutting to size wherever required 1x12.20x6.00 = 73.20 sq.m	sq.m	73.20		
16.0 (12.51.1)	Providing & fixing pre coated galvanized steel sheet roofing accessories 0.50+/-5% TCT Thick Zink coating 120 gsm as per IS :277 in 240 mpa, 5-7 microns epoxy primer on both side of the sheet & polyester top coat 15-18 microns using self drilling / self tapping screws, complete 16.1 Ridges plain	metre	12.20		
17.0	Providing & laying Polished granite tiles (450x300 mm) 10mm thick of approved shade, colour & texture laid over 25 mm thick base cement mortar 1:4 (1 cement , 4 sand) with joints treated with white cement, mixed with matching pigments, epoxy touch ups, including rubbing, causing moulding & polishing to edge to give high gloss finish etc., complete in all levels 1x12.80x4.80=61.44 sq.m	sq.m	61.44		
18.0 (8.22.2)	Providing & fixing 18 mm thick Mirror polished machine cut granite for plat forms. Varity countess, windows sills of required size of approved shade, colour & texture laid over 20 mm thick base cement mortar 1:4 (1 cement, 4 coarse sand with joints treated with white cement, mixed with matching pigments, epoxy touchups, including rubbing, caning moulding & polishing to edge to give high gloss finish etc., compete at all levels, 2x5.50x0.75 = 8.25 sq.m	sq.m	8.25		

18.1 (8.3.2)	Extra for providing edge moulding to 18 mm thick granite stone including machine polishing to give high glass finish, complete as per directions of site engineer. Granite work	meter	16.60		
19.0 (17.11)	Providing and fixing white vitreous china laboratory sink of approved make with C.I. brackets, C.P. bras strap with necessary C.P. brass unions complete including painting of fitting and brackets, cutting and making good the wall wherever required. 600x450x200 mm	each	2 nos.		
20.0 (19.1.2)	Providing laying & joining the glazed stone ware pipes grade A with stiff mixture of cement mortar in the proportion of 1:1(1 cement, 1 fine sand) including testing of joints etc., complete				
21.0	150mm diameter	meter	35.0		
22.0 (19.7.11)	Constricting the brick masonry manhole in cement mortar 1:4 (1 Cement, 4 Coarse sand) R.C.C top slab with 1:2:4 mix (1 Cement, 2 Coarse sand, 4 graded stone aggregate of 20mm nominal size) foundation concrete 1:4:8 mix including plastering 12mm thick with cement mortar 1:3, finished with floating coat of neat cement & making channels in cement concrete 1:2:4, finished with floating coat neat cement complete as per standard design. With F.P.S bricks of class designation 75	each	2 Nos.		
23.0 (19.4.1.1)	Providing and fixing square-mouth S.W. gully trap grade A complete with C.I. grating bricks masonry chamber with water tight C.I. cover with frame of 300x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design: 100x100 mm size p type with F.P.S. bricks of class designation 75	each	4 nos.		
24.0	Providing & fixing G. I. pipes(of approved make) complete with G.I. fittings & clamps including cutting & making good the walls etc.	meter	127.02		
24.1 (18.10.1)	20mm dia nominal bore				
24.2 (18.10.3)	25mm dia nominal bore	meter	215.00		

25.0	Providing & fixing following hardware of standard (ISO) make of approved brand.				
25.1	C.P brass three way swan neck taps (heavy)	2 nos.	950.00		
25.2	brass stop cock (heavy) 20 mm	2 nos.	282.24		
(18.16.2)					
25.3	P.V.C connection	2 nos.	42.00		
(1690)					
25.4	brass ball valve 20 mm	2 nos.	400.00		
(18.18.2)					
25.5	brass ball valve 25 mm	2 nos.	463.08		
(18.18.3)					
25.6	2ö G.I union	1 no.	189.60		
(1646)					
25.7	2öx1ö G.I Reducer	2 nos.	97.50		
25.8	2ö Gate valve with C.I wheel	1 no.	342.60		
(18.17.11)					
26.0	Providing & fixing ISI marked flush door shutters (double door) with decorative lamination on one side & balancing lamination on other side confirming to IS: 2202 with frame of 1 st class hard wood & well matched lamination, complete.				
(9.20)					
26.1	35 mm thick including ISI marked Stainless steel butt hinges with necessary screws				
	2x2.10x1.40 = 5.88 sq.m	sq.m	5.88		
27.0	Providing & fixing following anodized Aluminum hard ware of approved quality and make, as per requirement of site engineer				
27.1	Aluminum Latches(heavy) 300mm	each	2 nos.		
27.2	Aluminum Sliding door bolt (heavy) 300x16 mm	each	2 nos.		
(0696)					
27.3	Aluminum. Tower bolt 300x10mm	each	4 nos.		
(0698)					
20.5	Aluminum. Door handles 125 m with plate 175x32 mm	each	4 nos.		
(0703)					
20.6	Aluminum handles (coated) 100mm with plate 150x32 mm	each	32 nos.		
(0704)					
20.7	Aluminum Towers bolts (coated) 150 x 10mm	each	64 nos.		
(0701)					
20.8	M.S, (coated) Butt Hinges				
(0596)	100x58x1.90 mm	each	16 nos.		
(0597)	75x47x1.70 mm	each	64 nos.		
28.0	Providing & fixing glazing in windows shutters including beading / applying putty as per requirement of site engineer				
(21.31)					
28.1	With float glass panes of 4.0 mm thick				
	8x1.80 x1.20 = 17.28 sq.m	sq.m	17.28		

29.0	Providing & fixing stainless steel wire mesh to windows of approved make including teak beading of approved quality, complete. $8 \times 1.20 \times 1.20 = 11.52 \text{ sq.m}$	sq.m	11.52		
30.0 (13.41.1) 30.1	Distempering with oil bound washable distemper of approved make and of required shade & colour complete New work two or more coats over Primary coat. $2 \times 11.60 \times 3.00 = 69.60$ $2 \times 4.50 \times 3.40 = \underline{30.60}$ $\underline{100.20}$	sq.m	100.20		
31.0 (13.46) 31.1 (13.46.1)	Finishing the walls with premium Acrylic smooth exterior paint required shade & make New work two or more coats over priming coat $2 \times 12.20 \times 3.00 = 73.20$ $2 \times 5.00 \times 3.40 = \underline{34.00}$ $\underline{107.20} \text{ m}^2$	sq.m	60.48		
32.0 (13.60) 32.1 (13.60.1) 32.2	Painting the door and windows frames with grills, with synthetic enamel paint of approved brand and make of required colour to given even shade. New work. Two or more coats over Primary coat. $8 \times 1.5 \times 1.80 \times 1.20 = 25.92$ $2 \times 0.5 \times 2.10 \times 1.40 = \underline{2.94}$ $\underline{28.86} \text{ sq.m}$ Painting of trusses	Sq.m One job	28.86		
Total:					
(Rupees)

(SIGNATURE OF THE TENDERER)



Design of Truss

⑤

Example
(T.B. Example)
T-6

12.20 m

5.0 m



Granite Platform with Sink

Brick Partition Wall

Granite Platform with Sink

PLAN

10

25mwp115
(J.B. Rawalp
T-6

(J.B. Paweł
T-6

PART-II : Quotation for Providing Internal Electrification & Earthing works to Sample Processing Unit at CRIDA premises.

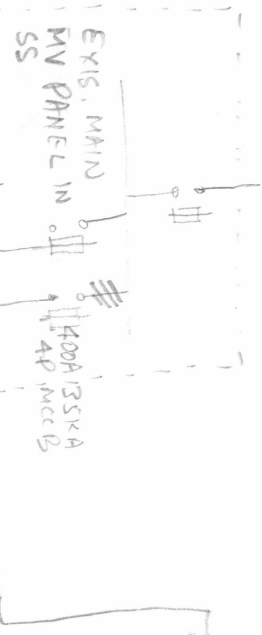
NO	DESCRIPTION OF ITEM	SOR ITEM NO. REFERENCE	UNIT	QUANTITY	BASIC RATE AS PER SOR	AMOUNT
1	Point wiring in PVC conduit, with modular type switch for Light point/fan point exhaust fan point etc as per Specifications of Item no.	1.10.3	20	20		
2	Power plug wiring in PVC conduit (2X4 sq.mm) as per Specifications of Item no.	1.12	Meter	134		
3	Power plug wiring in PVC conduit (4X4 sq.mm) as per Specifications of Item no.	1.13	Meter	36		
4	Circuit/ sub-main wiring in PVC conduit with 2x4 sq.mm + 1x4 sq.mm earth wire as per Specifications of Item no.	1.14.3	Meter	36		
5	Telephone wiring in existing conduit: Supplying and drawing 2 pair x 0.5 sq.mm as per Specifications of Item no.	1.18.2	Meter	20		
6	TV / Internet wiring in existing conduit: Supplying and drawing RG-6 grade x 0.7 sq.mm or Ethernet Data cable for Internet as per Specifications of Item no.	1.19	Meter	20		
7	Supplying and fixing 20 mm PVC conduits as per Specifications of Item no.	1.21.1	Meter	20		
8	Supplying and fixing 25 mm PVC conduits as per Specifications of Item no.	1.21.2	Meter	20		
9	Supplying and fixing of 5/6 amps modular type switch / socket as per Specifications of Item no.	1.24.1	Each	8		
10	Supplying and fixing of 15/16 amps modular type switch / socket as per Specifications of Item no.	1.24.3	Each	8		
11	Supplying and fixing of 3 pin, 5/6 amps, modular type socket as per Specifications of Item no.	1.24.4	Each	8		
12	Supplying and fixing of 6 pin, 15/16 amps, modular type socket as per Specifications of Item no.	1.24.5	Each	8		
13	Supplying and fixing of Telephone or TV or Internet data cable Socket outlet as per Specifications of Item no.	1.24.6	Each	2		
14	Supplying and fixing modular and stepped type electronic fan regulator as per Specifications of Item no.	1.25	Each	6		

15	Supplying and fixing modular type blanking plates as per Specifications of Item no.	1.26	Each	6		
16	Supplying and fixing GI Box along with modular base & cover plate for 1 or 2 Module as per Specifications of Item no.	1.27.1	Each	8		
17	Supplying and fixing GI Box along with modular base & cover plate for 6 Module as per Specifications of Item no.	1.27.3	Each	16		
18	Supplying and fixing modular type 3 pin 5/6 amps plug point with 5/6 amps switch as per Specifications of Item no.	1.31	Each	6		
19	Supplying and fixing modular type 6 pin 15/16 amps plug point with 15/16 amps switch as per Specifications of Item no.	1.32	Each	28		
20	Supplying and fixing 3 pin 5 amps ceiling rose as per Specifications of Item no.	1.33	Each	16		
21	Supplying and fixing 125 amps TP&N FSU with 125A HRC Fuses in SS enclosure in recess or on surface and as per Specifications of Item no.	2.21.4	Each	1		
22	Supplying and fixing 125 amps 16 KA TP MCCB in Vertical TPN MCB DB and as per Specifications of Item no.	2.22.3	Each	1		
23	Supplying and fixing vertical type SP/TP 12 way double door pre-wired MCB DB as per Specifications of Item no.	2.43.8	Each	1		
24	Supplying and fixing of 5 amps to 32 amps 240 volts -Bø/ -Cøseries SP MCBs as per Specifications of Item no.	2.51.1	Each	16		
25	Supplying and fixing of 5 amps to 32 amps 240 volts -Bø/ -Cøseries TP MCBs as per Specifications of Item no.	2.51.3	Each	4		
26	Supply and fixing of SP MCB Blanking plates as per Specifications of Item no.	2.53	Each	20		
27	Supplying and fixing 20 amps SPN MCB industrial socket outlet with 20 amps øCö series SP MCB as per Specifications of Item no.	2.62	Each	4		
28	Supplying and fixing 20 amps TPN MCB industrial socket outlet with 20 amps øCö series TP MCB as per Specifications of Item no.	2.63	Each	4		
29	Proving and fixing MV Danger notice plate as per Specifications of Item no.	2.71	Each	2		
30	Providing Earthing with GI Earth Plate Electrode of 600x600x6 mm thick including all accessories and providing Masonary enclosure but with out salt and charcoal or coke as per Specifications of Item no.	3.5	Set	2		

31	Supplying & Providing Salt and charcoal for the above plate earth electrodes as per the specification of item No.	3.7	Set	2		
32	Supplying and laying 6 SWG GI wire as per Specifications of Item no.	3.1	Meter	60		
33	ITC of Ceiling Fan as per Specifications of Item no.	1.44	Each	6		
34	ITC of 450 mm exhaust Fan	1.52	Each	4		
35	Extra for Fixing louvers/shutters as per Specifications of Item no.	1.54	Each	4		
36	ITC of 1 x36/40 watt Box type FTL Fitting on surface as per Specifications of Item no.	1.41	Each	2		
37	ITC of 2x36/40 watt Industrial Box type and Dust and vermin proof light fitting with down rods as per Specifications of Item no. Approved	1.42	Each	8		
38	Supplying and fixing extra down rod as per Specifications of Item no.	1.43	Each	8		
39	Supply of 1200 mm Ceiling Fan with out regulator. Approved Makes: Orient/Usha/Crompton/Bajaj/Havellø	MR	Each	6		
40	Supply of 450 mm Heavy duty 240 volts exhaust fan with louvers / shutters. Approved Makes: Crpmpton/Bajaj/Almonard/Havellø	MR	Each	4		
41	Supply of 1x36/40 watt Industrial Box type FTL fitting with tubes. Approved makes:Philips/Crompton/Bajaj/Crompton/Wipro/Fortune Art	MR	Each	2		
42	Supply of 2x36/40 watt Industrial Box type and Dust and vermin proof light fitting with tubes. Approved makes:Philips/Crompton/Bajaj/Wipro/Fortune Art	MR	Each	8		
43	Supply and fixing of 2 no. Fire Extinguishers (one each) suitable Electrical and general classes of Fire.	MR	Lumpsum Job	1		
44	Total Amount of Part-II					
45	<u>PART-III : Quotation for Providing External Electrification works to Sample Processing Unit at CRIDA premises.</u>					
46	Supplying of 3.5C x 50 sq.mm AYFY cable. Approved makes; CCI/Universal/Nicco/Gloster/Havellø. Note: Rate adopted is as per local Market.	MR	Metre	274		
47	Cutting and excavation of BT roads by chipping and chiseling and other manual means up to 1 metre depth and 0.5 metre width as required for laying of above RCC pipes including back filling and disposal of excess / surplus excavated material up to lead of 500 metre, complete as required as per specification of CPWD DSR (Civil works) 2007, item no.15.59	15.59	Metre	20		

48	Providing and laying non-pressure NP-2 class(light duty) 150 mm dia RCC pipes with collars jointed with stiff mixture of cement mortar as per specification of CPWD DSR (Civil works) 2007, item no.19.6.2	19.6.2	Metre	48		
49	Laying of 3.5C x 50 sq.mm AYFY cable in ground with sand and protective covering as per Specifications of Item no. of CPWDø Schedule of Rates (Electrical) part-II External -2007	1.2	Metre	274		
50	Supplying and making end terminations of 3.5C x 50 sq.mm AYFY cable with Brass compression glands and Aluminium lugs as per Specifications of Item no. of CPWDø Schedule of Rates (Electrical) part-II External -2007	4.1.22	Each	4		
51	Supplying and fixing of 6 nos. x 1 mtr length x 150 mm dia NP-2 class RCC pipes by providing 0.6 mtr x 0.4 mtr opening in the basement of existing 0.6 mtr thick stone wall at a depth of not exceeding 1 mtr from finished floor level and closing back the opening after laying and fixing of RCC pipes with stiff cement mortar, complete as required as per the direction of engineer in charge.	MR	Lumpsum Job	1		
52	Supplying and fixing cable route marker as per specification of item no.of CPWDø Schedule of Rates (Electrical) part-II External -2007	3.3	Each	16		
53	Supplying and fixing 400 amps 35 KA TP MCCB in existing cubicle Panel Board including drilling necessary holes, supply and fixing required copper bus bar links and other accessories and making connection, testing & commissioning complete as required as per Specifications of Item no. 2.22.10	2.22.10	Each	1		
54	Total amount of Part-III (External Elect Works)					
55	Total amount of Part-I (Civil Works)					
56	Total amount of Part-II (Internal Elect Works)					
57	Total amount of Part-III (External Elect Works)					
58	Total Amount of all Parts					

(SIGNATURE OF THE TENDERER)



DESIGN CRITERIA: MAX. CONNECTED LOAD = 45 KW
MAX. LOAD LINE CURRENT: 80A

PS-1, PS-2: 20A TBN Metal Clad Plug & Socket outlet with Isolator

PS-3, PS-4: 20A SPN Metal Clad Plug & Socket outlet with Isolator

PS-5, PS-6, PS-7, PS-8: 6/16A SS Combi used.

L1-L5: Box Type Distribution 2400W Indl. Light Ftg

CF1-CF3: 1200A C.Fans.

EF-1-EF-4: 450mm HD Exfans.

EP1, EP2: Pipe Earth electrodes

Ph1, Ph2: Provision for Telephone

Net 1, Net 2: Provision for Industrial Cold

NOTE: 400A 4P MCCB NOT IN THIS SCOPE

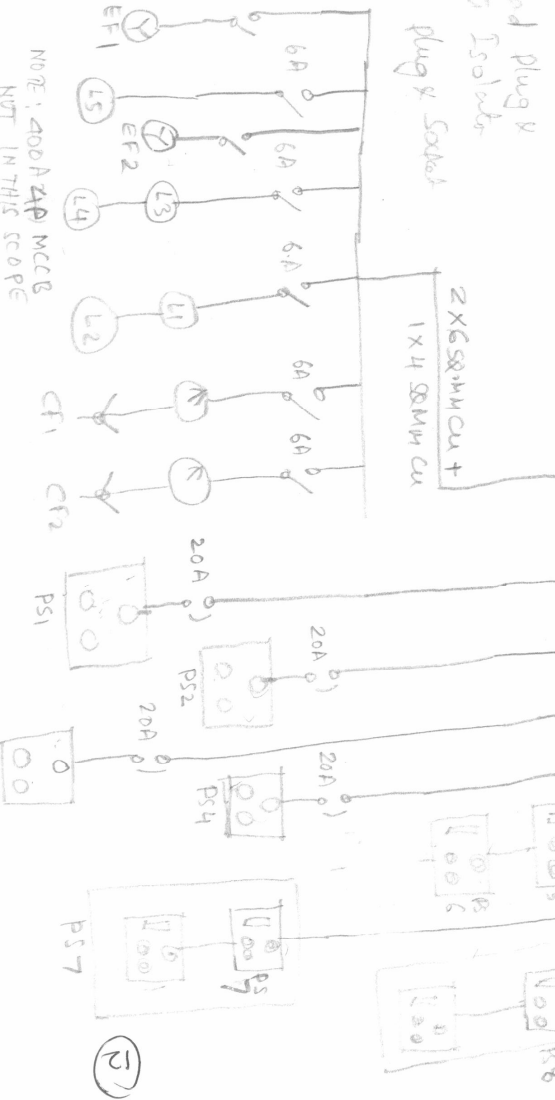
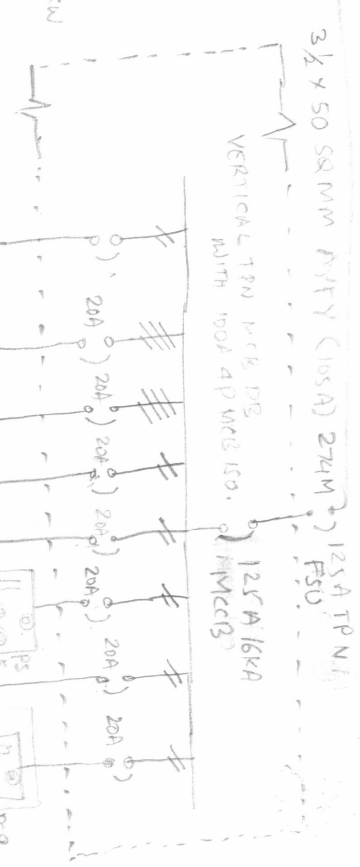
CIRDA -

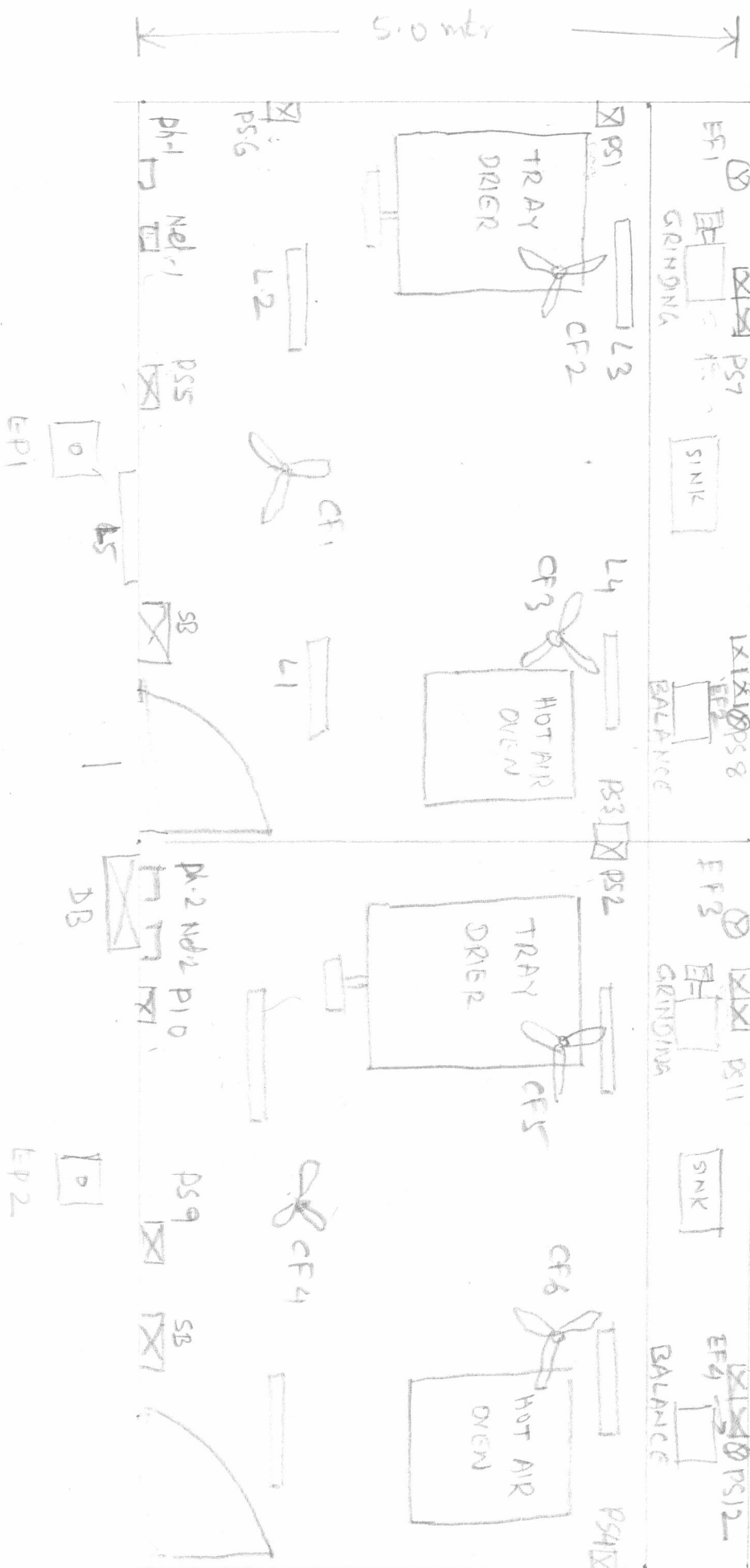
SLD of Sample Processing Unit (Half Port)

Prepared by: [Signature]

Date: 19/8/2011

Approved by: [Signature]





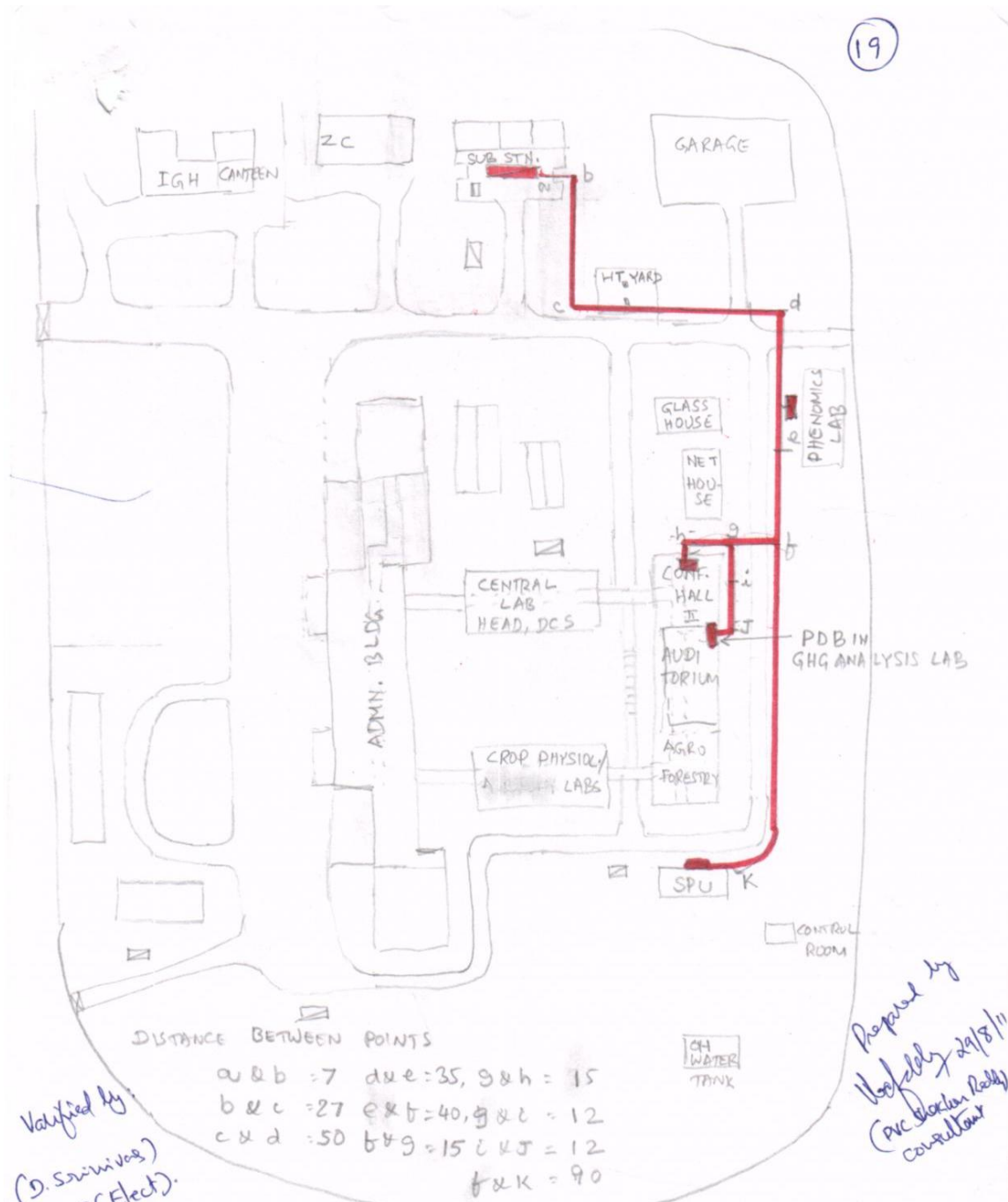
QA Dwg (Elect) of Sample Processing Unit at CERDA

Prepared by: Pvc shekhar Reddy, VSM

Authorised by: Dr. M. Vamaga, Pk. Scientist (Pl. Physiol)

Approved by: Dr. CR Thayagarni, Pk. Scientist & Chairman - Works Com'ftee.

Date: 19/8/2011



Verified by
(D. Srinivas)
T.O-S (Elect).

Prepared by
H. Srinivas
(PVC Blocker) Rtdy
consultant

GA Drg showing cable Route & Location of PDBs for providing Power Supply Arrangements to proposed Phenomics Lab, For walk-in type Environmental Control Chambers in Climate Change Lab, Green House Gas Analysis Lab and Sample Processing Lab, etc. Conference Hall etc.

CABLE SCHEDULE

FOR CONFERENCE HALL-II, PHENOMIC LAB, CLIMATE CHANGE LAB, GREEN HOUSE GASES LAB & SAMPLE PROCESSING LAB

NO	SIZE	TO LAY BETWEEN	DETAILS OF MEASUREMENTS	NO.OF RUNS	QTY in Mtrs	TERMINATIONS	REMARKS, IF ANY
1	3.5Cx240 sq.mm	Main Power Panel in SS & Phenomic Lab	(Between MCCB & with in the SS=12m) + (a thru e) = (12+119)=131	1	131	2	
2	3.5Cx240 sq.mm	Main Power Panel in SS & Air Conditioning Power DB on Roof top of Conference Hall-II	(Between MCCB & with in the SS=12m) + (a thru h) + (2 Floor Bldg Ht Vertical = 8) + Horizontal over roof top =12) = (12+189+8+12)=221	1	221	2	
3	3.5Cx120 sq.mm	Main Power Panel in SS & Power DB in Climate Change Lab	(Between MCCB & with in the SS=12m) + (a thru i via g) + I & PDB in CC Lab = (12+189+12)=213	1	213	2	
4	3.5Cx50 sq.mm	Power DB in Climate Change Lab & Green House Gases Analysis Lab	12+12+12	1	36	2	
5	3.5Cx50 sq.mm	Main Power Panel in SS & Sample Processing Lab	(Between MCCB & with in the SS=12m) + (a thru k) + k& PDB in SP Lab=(12+249+12)=274	1	274	2	
		ABSTRACT	TOTAL		875	10	
1	3.5Cx240 sq.mm				352	4	
2	3.5Cx120 sq.mm				213	2	
3	3.5Cx50 sq.mm				310	4	
			TOTAL		875	10	

Prepared by: *[Signature]* Field Measurements verified by:

(PVC Shekhar Reddy)VSM, Consultant

D.Srinivas, TO-5(Elect)

Approved by: *[Signature]*
Dr. R. Thagyaraj, Chairman Works Committee

Note: Copy of cable route drawing is enclosed.

