



Project: **CONSTRUCTION OF THE TWO STOREY RESEARCH HUB FOR AGRICULTURE AND ALLIED SCIENCES**  
 Subject: BILL OF QUANTITITES  
 Date: 4-18-18  
 ABC FUNDING P48,000,000.00  
 GFA 2,700.00 sq.mtrs

ITEM	SCOPE OF WORK	QTY	UNIT	UNIT COST	TOTAL COST
<b>1.0</b>	<b>GENERAL REQUIREMENTS</b>				
1.1	Mobilization/Demobilization	1	lot		
1.2	Bonds, Insurances & Permits	1	lot		
1.3	As built plans	1	lot		
1.4	Temporary Utilities (Electricities & Water)	1	lot		
1.5	Temporary Facilities				
1.5.1	Temporary Warehouse	1	lot		
1.5.2	Field Office/Conference Room	1	lot		
1.5.3	Temporary Fence/Site Enclosure	1	lot		
1.6	Surveying & Layouts	1	lot		
1.7	Testing of Materials				
1.7.1	Compression Testing (Cylinder, CHB, Mortar)	1	lot		
1.7.2	Cement (Physical & Chemical Properties)	1	lot		
1.7.3	Complete Test for Aggregates (Grading, Soundness, Abrasion, Specific Gravity, Unit Weight, Absorption)	1	lot		
1.7.4	Tensile Properties of Rebars & Steeldecking	1	lot		
1.7.5	Design/Trial Mix	1	lot		
1.7.6	Curing Tank & Curing Materials	1	lot		
1.8	Construction Safety/PPEs	1	lot		
<b>SUB-TOTAL 1.0</b>					
<b>2.0</b>	<b>EARTHWORKS AND LAND DEVELOPMENTS</b>				
2.1	Excavation	1	lot		
2.2	Earthfill				
2.2.1	filling materials	500.00	Cu.M.		
2.3	Entrance Porch 21.2mx3mx 0.125m Concrete Pavement				
2.3.1	Type 1 Portland Cement	573.00	bags		
2.3.2	Washed and screened Sand	32.00	Cu.M.		
2.3.3	Gravel	64.00	Cu.M.		
2.3.4	10mm def bars grade 40	3,125.00	kgs		
2.3.5	Ga 16 tie wire	107.00	kgs		
<b>SUB-TOTAL 2.0</b>					
<b>3.0</b>	<b>FORMWORKS AND SCAFFOLDINGS</b>				
3.1	Formlumber				
3.1.1	Ordinary Plywood 1/4"x4"x8"	615.00	pcs		
3.1.2	coco lumber	6,000.00	bd ft		
3.1.3	CW nails 4"	1,000.00	kgs		
3.1.4	Steel scaffoldings	1.00	lot		
<b>SUB-TOTAL 3.0</b>					
<b>4.0</b>	<b>STRUCTURAL WORKS</b>				
4.1	Reinforced Concrete Footing (3500psi)				

	4.1.1	Type 1 Portland Cement	2,223.00	bags		
	4.1.2	Washed and screened Sand	123.50	Cu.M.		
	4.1.3	Gravel	247.00	Cu.M.		
	4.1.4	Gravel bedding	60.00	Cu.M.		
	4.1.5	25mm def bars grade 40	15,431.00	kgs		
	4.1.6	20mm def bars grade 40	8,397.00	kgs		
	4.1.7	16mm def bars grade 40	1,517.00	kgs		
	4.1.8	Ga 16 tie wire	188.00	kgs		
	4.2	Reinforced Concrete Tie Beams, Beams and Girders (3500psi)				
	4.2.1	Type 1 Portland Cement	1,989.00	bags		
	4.2.2	Washed and screened Sand	110.50	Cu.M.		
	4.2.3	Gravel	221.00	Cu.M.		
	4.2.4	Gravel bedding	15.00	Cu.M.		
	4.2.5	25mm def bars grade 40	12,884.00	kgs		
	4.2.6	20mm def bars grade 40	15,028.00	kgs		
	4.2.7	16mm def bars grade 40	3,944.00	kgs		
	4.2.8	10mm def bars grade 40	4,257.00	kgs		
	4.2.9	Ga 16 tie wire	504.00	kgs		
	4.3	Reinforced Concrete Wall Footing (3000psi)				
	4.3.1	Type 1 Portland Cement	126.00	bags		
	4.3.2	Washed and screened Sand	7.00	Cu.M.		
	4.3.3	Gravel	14.00	Cu.M.		
	4.3.4	Gravel bedding	3.00	Cu.M.		
	4.3.5	12mm def bars grade 33	940.00	kgs		
	4.3.6	Ga 16 tie wire	21.00	kgs		
	4.4	Reinforced Concrete slab on fill and suspended slab (3500 psi)				
	4.4.1	Type 1 Portland Cement	3,150.00	bags		
	4.4.2	Washed and screened Sand	175.00	Cu.M.		
	4.4.3	Gravel	350.00	Cu.M.		
	4.4.4	12mm def bars grade 40	31,527.50	kgs		
	4.4.5	10mm def bars grade 40	2,872.50	kgs		
	4.4.6	Ga 16 tie wire	586.00	kgs		
	4.5	Reinforced Concrete stairs (all stairs including fire escape)				
	4.5.1	Type 1 Portland Cement	243.00	bags		
	4.5.2	Washed and screened Sand	13.50	Cu.M.		
	4.5.3	Gravel	27.00	Cu.M.		
	4.5.4	16mm def bars grade 40	3,972.50	kgs		
	4.5.6	Ga 16 tie wire	25.00	kgs		
	4.6	Reinforced Concrete Columns (3500psi)				
	4.6.1	Type 1 Portland Cement	1,287.00	bags		
	4.6.2	Washed and screened Sand	71.50	Cu.M.		
	4.6.3	Gravel	143.00	Cu.M.		
	4.6.4	25mm def bars grade 40	33,264.00	kgs		
	4.6.5	20mm def bars grade 41	10,611.50	kgs		
	4.6.6	16mm def bars grade 40	1,422.00	kgs		
	4.6.7	12mm def bars grade 40	2,051.00	kgs		
	4.6.8	10mm def bars grade 40	9,101.00	kgs		
	4.6.9	Ga 16 tie wire	670.00	kgs		
	4.7	Reinforced Concrete gutters (3000psi)				
	4.7.1	Type 1 Portland Cement	108.00	bags		
	4.7.2	Washed and screened Sand	6.00	Cu.M.		
	4.7.3	Gravel	12.00	Cu.M.		
	4.7.4	12mm def bars grade 40	278.00	kgs		

	4.7.5	Ga 16 tie wire	8.00	kgs		
	4.8	Fire Sprinkler Cistern				
	4.8.1	Type 1 Portland Cement	19.00	bags		
	4.8.2	Washed and screened Sand	1.05	Cu.M.		
	4.8.3	Gravel	2.10	Cu.M.		
	4.8.4	12mm def bars grade 40	53.00	kgs		
	4.8.5	Ga 16 tie wire	1.50	kgs		
	4.9	Concrete window canopies				
	4.9.1	Type 1 Portland Cement	95.00	bags		
	4.9.2	Washed and screened Sand	5.25	Cu.M.		
	4.9.3	Gravel	10.50	Cu.M.		
	4.9.4	12mm def bars grade 40	265.00	kgs		
	4.9.5	Ga 16 tie wire	7.50	kgs		
<b>SUB-TOTAL 4.0</b>						
<b>5.0</b>	<b>STEEL WORKS</b>					
	5.1	Steel Works (Trusses, Rafters, Girt & Entrance Canopy)				
	5.1.1	6mmx2-1/2"x2-1/2" angle bar	55	lght		
	5.1.2	6mmx2"x2" angle bar	152	lght		
	5.1.3	4.5mmx1-1/2"x1-1/2" angle bar	3	lght		
	5.1.5	1.50mm thk 2"x6" Cee Purlins	150	pcs		
	5.1.6	16mm x6m plain round bars	72	length		
	5.1.7	Sag Rod (Plain Round Bar, 12mm)	30	length		
	5.1.8	Turn Buckle (1/2"x1')	72	pcs		
	5.1.9	welding rods (N90)	8	boxes		
	5.1.10	square tube 10"x10"x6mx10mm (canopy support)	5	length		
	5.1.11	rectangular tubing 2x4x1.5mm	10	length		
	5.1.12	anchor bolt m16	30	pcs		
	5.1.13	anchor bolt m20	16	pcs		
	5.1.14	ms plate 16mmx4x8	2	shts		
	5.1.15	Channel Bar C2x4x6mx1.2mm	10	length		
	5.1.16	Channel Bar C2x4x6mx1.5mm	8	length		
	5.1.17	High Density Channel Bar C9x24 grade A36	6	length		
	5.1.18	High Density Channel Bar C9x15 grade A36	14	length		
	5.1.19	High Density Channel Bar C8x13.75 grade A36	9	length		
	5.1.20	High Density Channel Bar C4x7.25 grade A36	2	length		
	5.1.21	Wide flange 12x35 grade A36	2.5	length		
	5.1.22	Wide flange 12x30 grade A36	2.5	length		
	5.1.23	Wide flange 12x14 grade A36	2.5	length		
	5.2	Roofing				
	5.2.1	0.5mm ribbed type color bonded G.I. Rfg sheets	736.5	L.M.		
	5.2.2	0.5mm colorbonded wall flashing	83	L.M.		
	5.2.3	0.5mm colorbonded ridge roll	27	L.M.		
	5.2.4	0.5mm sU shaped stainless gutter 0.25x0.30m gutter	19	L.M.		
	5.2.5	sealant	8	tubes		
	5.2.6	Tek Screw & Rivets	25	Kgs		
	5.2.7	Touch up Paint	2	gal		
	5.3	Railings ( stairs and ramp)				
	5.3.1	Stainless Pipe (3"x6m, S-20)	8	Length		
	5.3.2	Square tubing (1- 3/4")	4	Length		
	5.3.3	flat bar 1/4" x 1-1/2"x6m	22	pcs		
	5.3.4	Welding Rod (Stainless)	20	kgs		
<b>SUB-TOTAL 5.0</b>						
<b>6.0</b>	<b>MASONRY WORKS</b>					

	6.1	Concrete Hollow Block Walls (6") for toilet walls and below ground							
	6.1.1	CHB 6" (350 psi)		4827	Pcs				
	6.1.2	Cement (40 Kgs)		310	Bags				
	6.1.3	Washed Sand		17	Cu.M.				
	6.1.4	DRB 10mm, Grade 40		159	Kgs				
	6.1.5	G.I. Wire (G-16)		13	Kgs				
	6.2	Concrete Hollow Block Walls (4") Exterior/ Interior Walls & Parapets							
	6.2.1	CHB 4" (350 psi)		12,123	Pcs				
	6.2.2	Cement (40 Kgs)		792	Bags				
	6.2.3	Washed Sand		44	Cu.M.				
	6.2.4	DRB 10mm, Grade 40		400	Kgs				
	6.2.5	G.I. Wire (G-16)		7933	Kgs				
	6.3	Catch Basins							
	6.3.1	CHB 4" (350 psi)		288	Pcs				
	6.3.2	Cement (40 Kgs)		70	Bags				
	6.3.3	Washed Sand		1.44	Cu.M.				
	6.3.4	DRB 10mm, Grade 40		15	Kgs				
	6.3.5	G.I. Wire (G-16)		1.5	Kgs				
	6.4	Plastering Exterior and Interior Walls							
	6.4.1	Cement (40 Kgs)		710	Bags				
	6.4.2	Washed Sand		21	Cu.M.				
	6.5	septic tank							
	6.5.1	CHB 4" (350 psi)		270	Pcs				
	6.5.2	Cement (40 Kgs)		82	Bags				
	6.5.3	Washed Sand		3	Cu.M.				
	6.5.4	gravel		2	Cu.M.				
	6.5.5	DRB 10mm, Grade 40		68	Kgs				
	6.5.6	G.I. Wire (G-16)		3	Kgs				
				<b>SUB-TOTAL 6.0</b>					
<b>7.0</b>	<b>CARPENTRY WORKS</b>								
	7.1	Sashworks							
	7.1..1	D-02 Twin leaf Hollow Core Laminated flushed Door 1.80mx2.10m with viewing glass with 2"x6" wooden Jamb		2	sets				
	7.1..2	D-04 Hollow Core Laminated flushed Door 0.90mx2.10m with viewing glass with 2"x6" wooden Jamb		17	sets				
	7.1..3	D-06 wooden louver door 0.70x2.10m on 2"x6" wooden jamb		3	sets				
	7.1..4	D-08 twin leaf wooden louver door 0.80x2.10m on 2"x6" wooden jamb		2	sets				
	7.1..5	D-10 Hollow Core Marine Plywood flushed Door 0.80mx2.10m with 2"x6" wooden Jamb		3	sets				
	7.1..6	D-11 Sol;id Panel Door 0.90mx2.10m with 2"x6" wooden Jamb		3	sets				
	7.1..7	D-05 2 hour fire rated Hollow Core Metal Flush door with Panic Device on steel jambs 0.90mx2.10m		3	sets				
	7.1..8	D-07 Twin Leaf Steel Grill door - steel jambs 1.70mx2.10m		1	set				
	7.1..9	D-07B fixed Steel Grill door - steel jambs 1.70mx2.10m		1	set				
	7.1..10	D-12 twin leaf metal louver door 1.60mx2.10m on steel jamb		1	set				
	7.1..11	D-13 single leaf metal louver door 0.90mx2.10m on steel jamb		2	sets				
	7.2	Door Lockset							
	7.2.1	Lever Type Satin Finished Door Lockset		32	sets				
	7.3	Cabinetries							
	7.3.1	lockers cabinet .4.80mx1.00mx0.40m		8	sets				
				<b>SUB-TOTAL 7.0</b>					
<b>8.0</b>	<b>CEILING</b>								
	8.1	Hardiflex Ceiling							
	8.1.1	0.60mx1.20m mineral fiber acoustic board on T-runners		612.75	Sq.M.				

	8.1.2	0.60mx0.60m mineral fiber acoustic board on T-runners	60.50	Sq.M.		
	8.1.3	wood applique ceiling on fiber cement board on metal frames	59.00	Sq.M.		
	8.1.4	12mm gypsum board on metal frames	1,627.65	Sq.M.		
	8.1.5	pvc soffit on metal frames	38.00	Sq.M.		
	8.1.6	Hardiflex 5mmx4x9 on metal frames	92.40	Sq.M.		
			<b>SUB-TOTAL 8.0</b>			
<b>9.0</b>	<b>PAINTING WORKS</b>					
	9.1	Wall painting ( 3 coats)				
	9.1.1	External perimeter walls including canopies	1,356.00	Sq.M.		
	9.1.2	Internal perimeter walls	1,167.00	Sq.M.		
	9.1.3	Internal walls second floor	800.64	Sq.M.		
	9.1.4	Internal walls ground floor	754.40	Sq.M.		
	9.2	Ceiling painting (flat latex finish)	1,721.00	Sq.M.		
	9.3	Painting of wooden doors and jambs (tile gloss finish)	38.00	sets		
			<b>SUB-TOTAL 9.0</b>			
<b>10.0</b>	<b>TILEWORKS</b>					
	10.1	Main flooring(0.60mx0.60m) Matte Porcelain tiles	2,262.30	Sq.M.		
	10.2	External porch (0.60mx0.60m) Granite Tiles non skid	63.20	Sq.M.		
	10.3	Stairs & Landing (30x30) Ceramic Tiles non skid	164.00	Sq.M.		
	10.4	Comfort rooms wall (30x60) ceramic Tiles (1.5m height)	200.00	Sq.M.		
	10.5	Comfort rooms floor (30x60) ceramic Tiles	92.40	Sq.M.		
	10.6	Ramp Tiles .30x.60m	5.00	Sq.M.		
	10.7	Brass nosing 1"x2"x6m	30.00	pcs		
	10.8	Vinyl flooring (multipurpose hall)	190.00	Sq.M.		
			<b>SUB-TOTAL 10.0</b>			
<b>11.0</b>	<b>COUNTERS &amp; GAS LINE</b>					
	11.1	Lavatory and Pantry counters				
	11.1.1	lavatory counters 0.60x2.2m granite stone finish with sink	4	unit		
	11.1.2	pantry counters 0.60x3.7m granite stone finish with sink	1	unit		
	11.2	Lavatory and Pantry counters				
	11.2.1	Stainless Kitchen Counters with burner and sink 0.60x2.40mx0.90m with exhaust hood	5	sets		
	11.2.2	Gasline for stainless burners	1	lot		
			<b>SUB-TOTAL 11.0</b>			
<b>12.0</b>	<b>PLUMBING WORKS</b>					
	12.1	FRESH WATER LINES				
	12.1.1	PPR Pipes (1"), PNS 16	20	Lengths		
	12.1.2	PPR Pipes (1-1/4"), PNS 16	15	Lengths		
	12.1.3	PPR Pipes (1/2"), PNS 16	8	Lengths		
	12.1.4	PPR Pipe Fittings (Elbows, Tees, Reducers, etc)	1	Lot		
	12.1.5	Consumables (Teflon, Cement Solvent, etc.)	1	Lot		
	12.2	SANITARY & DRAINAGE LINES				
	12.2.1	PVC Pipe 4", Series 1000	40	Lengths		
	12.2.2	PVC Pipe 2", Series 1000	15	Lengths		
	12.2.3	PVC Pipe Fittings (Elbows, Wyes, Tees, Cleanouts, etc)	1	Lot		
	12.2.4	Consumables (Teflon, Cement Solvent, etc.)	1	lot		
	12.3	STORM DRAIN				
	12.3.1	PVC Pipe 4" series 1000	80	Length		
	12.3.2	PVC Pipe 6" Series 1000	6	length		
	12.3.3	PVC Pipe Fittings (Elbows, coupling, etc )	1	Lot		
	12.4	PLUMBING ACCESSORIES				
	12.4.1	Stainless Floor Drain	17	Pcs		

	12.4.2	Tissue Holder	17	Pcs		
	12.4.3	Shower valve and Head	1	Pcs		
	12.4.4	Soap Holder	1	Pcs		
	12.4.5	Liquid soap dispenser	5	Pcs		
	12.4.6	Ball Valves	5	Pcs		
	12.4.7	slop sink wall faucet	4	pcs		
	12.5	PLUMBING FIXTURES				
	12.5.1	Water Closet	17	Sets		
	12.5.2	counter top Lavatory with faucet	8	Sets		
	12.5.3	wall hung lavatory	1	set		
	12.5.4	Urinal	4	Sets		
	12.5.5	stainless steel kitchen sink single bowl with faucet	6	set		
	12.5.6	stainless slop sink	4	set		
			<b>SUB-TOTAL 12.0</b>			
<b>13.0</b>	<b>ELECTRICAL &amp; AUXILIARY WORKS</b>					
	13.1	Lighting and Power distribution				
	13.1.1	THHN Copper Wire 10/7	4	rolls		
	13.1.2	THHN Copper Wire 12/7	36	rolls		
	13.1.3	THHN Copper Wire 14/7	30	rolls		
	13.1.4	PVC Conduit 1/2, S-40	600	Length		
	13.1.5	PVC Conduit 1-1/2", S-40	10	Length		
	13.1.6	PVC Conduit 3", S-40	20	Length		
	13.1.7	PVC elbow 1/2, S-40	400	pcs		
	13.1.8	PVC elbow 1-1/2", S-40	6	pcs		
	13.1.9	PVC elbow 3", S-40	40	pcs		
	13.1.10	metal Junction Box (4X4,)	650	Pcs		
	13.1.11	metal Utility Box (2x4)	200	Pcs		
	13.1.12	metal Square B0x with cover	20	Pcs		
	13.1.13	metal Pull box 4x12x12	6	Pcs		
	13.1.14	wire gutter 5x12x48	1	Pcs		
	13.1.15	Convenience outlet 2 gang	133	set		
	13.1.16	floor outlets	16	set		
	13.1.17	aircon outlet 1 gang	8	set		
	13.1.18	Fire pump outlet	1	set		
	13.1.19	Emergency Light Outlets	30	set		
	13.1.20	Switch 1 gang	12	set		
	13.1.21	Switch 2 gang	9	set		
	13.1.22	Switch 3 gang	24	set		
	13.1.23	Switch 3 gang 3 way	6	set		
	13.1.24	magnetic switch 3HP	7	sets		
	13.1.25	tapes , solvent cement	1	lot		
	13.2	Electrical Fixtures				
	13.2.1	DOUBLE LED Flourescent troffer 1.2M Complete w/ Accessories	205	Sets		
	13.2.2	LED glass covered Pinlights 4" with 12 watts bulb	233	Sets		
	13.2.3	LED SINLGE FLUORESCENT FIXTURE 1.20M	52	Sets		
	13.2.4	emergency light	30	sets		
	13.3	Breakers and Panel boxes				
	13.3.1	PB-1 Panel Box 3 phase bolt on industrial type center main 16 branches with 125Amps Main;5-15AMPS; 5-20amps; 6-30amps;	1	set		
	13.3.2	PB-2 Panel Box 3 phase bolt on industrial type center main 20 branches with 150Amps Main; 8-15amps; 5-20amps; 7-30amps;	1	set		
	13.3.3	MDP Panel Box industrial type 3phase center main bolt-on; 250Amp main	1	set		
	13.3.4	125mm THHN wire	300	mtrs		

	13.3.5	38mm THHN wire	50	mtrs		
	13.3.6	30mm THHN wire	20	mtrs		
	13.3.7	service entrance wiring	1	lot		
	13.3.8	Entrance Cap	1	pc		
	13.3.9	Male adaptor	1	pc		
	13.3.10	HD secondary rack	1	set		
	13.3.11	U-bolt connector	3	pcs		
	13.3.12	rubber tape	3	rolls		
	13.3.13	Conduits and Fittings	1	lot		
	13.4	Lightning Arrester				
	13.4.1	Smart Building ESE Lightning arrester 663mm needle height 304 stainless steel	1	set		
<b>SUB-TOTAL 13.0</b>						
<b>14.0</b>	<b>ELECTRONICS AND COMMUNICATION</b>					
	14.1	Fire Detection and Alarm System (FDAS)				
	14.1.1	Fire Alarm control panel 4 zones	1	set		
	14.1.2	FDAS Wired smoke detector	37	unit		
	14.1.3	fire alarm siren with stobe LED light	7	unit		
	14.1.4	manual station break glass	7	unit		
	14.1.5	Cables Tray, wires, Pipings, etc	1	lot		
	14.2	Audio and Video				
	14.2.1	Power amplifier 500amps	1	unit		
	14.2.2	Pre amplifier mixer 8 mic output	1	unit		
	14.2.3	speaker wall mounted 100 amps	2	units		
	14.2.4	Projector with white screen	10	units		
	14.2.5	cables/wires/speaker wires/ pipings etc	1	lot		
	14.3	CCTV				
	14.3.1	DVR (16 inputs) full HD, USB, Network) or higher	1	unit		
	14.3.2	1080p indoor/outdoor Camera or higher	10	unit		
	14.3.3	4 terabyte hard disk (SATA)	2	unit		
	14.3.4	LCD Monitor 32"	2	units		
	14.3.5	Centralized power supply 12v/30amp	1	unit		
	14.3.6	cables/wires/siamese etc	1	lot		
	14.4	Local area network (LAN)				
	14.4.1	Close Data Cabinet 2F WALL MOUNTED	1	unit		
	14.4.2	Cat 5e/6 Patch panel 48 ports	1	unit		
	14.4.3	access point (wifi)	6	units		
	14.4.4	1/O with 2 gang and face Plate	37	units		
	14.4.5	Cables/Wires (Cat 5E/6)	1	lot		
	14.5	Grounding System				
	14.5.1	Ground Bus Bar (1/4"x1"x12")	1	pc		
	14.5.2	Bronze Ground Rod 3 meters	2	pc		
	14.5.3	AWG no. 4	12	mtrs		
	14.6	Auxiliary Equipment				
	14.6.1	Automatic Voltage Regulator	1	pc		
	14.6.2	Uninterrupted Power Supply	1	pc		
	14.6.3	led Exit Signs	4	units		
<b>SUB-TOTAL 14.0</b>						
<b>15.0</b>	<b>GLASSWORKS</b>					
	15.1	W-01 Powder coated sliding aluminum windows with clear float with operable transom 2.25mx1.60m	30	Sets		
	15.2	W-02 Powder coated sliding aluminum windows with clear float with operable transom 1.70mx1.60m	1	Set		

15.3	W-03 Powder coated sliding aluminum windows with clear float with operable transom 1.15mx1.60m	5	Sets		
15.4	W-04aluminum awning window with clear float on on pc-white aluminum white 2.25mx1.00m	4	Sets		
15.5	W-05 aluminum awning window with clear float on on pc-white aluminum white 1.70mx1.00m	3	Sets		
15.6	W-06 awning window with clear glass on pc-white aluminum white tubular 1.70mx0.40m	15	Sets		
15.7	W-07awning window with clear glass on pc-white aluminum white tubular 2.25mx0.40m	8	Sets		
15.8	W-08 aluminum awning window with clear float on on pc-white aluminum white 0.60mx1.00m	1	Set		
15.9	W-09 awning window with clear glass on pc-white aluminum white tubular 0.6mx0.40m	2	Sets		
15.10	W-10 Powder coated fixed aluminum windows with clear float with operable transom 4.80mx1.50m	10	Sets		
15.11	W-11 Powder coated fixed aluminum windows with clear float with operable transom 3.613mx1.50m	11	Sets		
15.12	W-12 Powder coated sliding aluminum windows with clear float with operable transom 2.40mx1.40m	1	Set		
15.13	W-13 Powder coated sliding aluminum windows with clear float with operable transom 2.40mx1.40m	6	Sets		
15.14	W-14 awning window with clear glass on pc-white aluminum white tubular 2.80mx0.40m	1	Set		
15.15	W-15 aluminum awning window with clear float on on pc-white aluminum white 2.80mx2.00m	2	Sets		
15.16	W-16 Powder coated fixed aluminum windows with clear float with operable transom 1.0mx1.50m	1	Set		
15.17	W-16 Powder coated fixed corner aluminum windows with clear float with operable transom 1.775mx1.50m & 0.975mx1.50m	1	Set		
15.18	CW-01 Powder coated curtain wall with clear float with operable transom and glass swing doors 8.55mx7.0m	1	Set		
15.19	CW-02 Powder coated curtain wall with clear float with operable transom and sliding windows 9.65 mx7.25m	1	Set		
15.20	CW-03 Powder coated curtain wall with clear float with operable transom and sliding windows 8.55mx6.65m	1	Set		
15.21	D-01 double leaf swing door using 10mm clear glass on FD Section on pc white aluminum frame overall size 1.8mx2.4m	2	Sets		
15.22	D-03 FSSF glass doors on powder coated aluminum and clear float 3.20mx2.10m	1	Set		
15.23	D-09 swing door using 10mm clear glass on FD Section on pc white aluminum frame overall size 1.8mx2.4m	1	Set		
15.24	DW-01 double leaf swing door using 10mm clear glass on FD Section with side lights on pc white aluminum frame overall size 2.7mx2.4m	1	Set		
15.25	DW-02 swing door using 10mm clear glass on FD Section with side lights on pc white aluminum frame overall size 3.30mx2.4m	1	Set		
15.26	DW-03 swing door using 10mm clear glass on FD Section with side lights on pc white aluminum frame overall size 4.450mx2.4m	2	Set		
15.27	DW-03 swing door using 10mm clear glass on FD Section with side lights on pc white aluminum frame overall size 2.150mx2.4m	2	Sets		
15.28	1/4" clear viewing glass inlays .25mx.90m	21	pcs		
15.29	Mirror with plyboard backing (floating) x3.60mx0.80m	2	set		
15.30	Mirror with plyboard backing (floating) 1.80mx0.80m	2	set		
15.31	Mirror with plyboard backing (floating) 0.60mx.80m	1	set		



	15.32	Glass White Board 4.0mx1.20m (Laboratories)	10	sets		
	15.33	Glass White Board 1.2mx1.20m (defense room)	3	sets		
			<b>SUB-TOTAL 15.0</b>			
<b>16.0</b>	<b>WATERPROOFING</b>					
	16.1	Waterproofing of toilet floors	66.3	sq.mt		
	16.2	Waterproofing of deck floors	325	sq.mt		
	16.3	Waterproofing of concrete gutters	73	lm		
			<b>SUB-TOTAL 16.0</b>			
<b>17.0</b>	<b>TERMITE CONTROL</b>					
	17.1	Soil Poisoning	1000	sq.mt		
			<b>SUB-TOTAL 17.0</b>			
<b>18.0</b>	<b>THERMAL CONTROL</b>					
	18.1	Insulation	736.5	sq.mt		
			<b>SUB-TOTAL 18.0</b>			
<b>19.0</b>	<b>ARCHITECTURAL SPECIALTIES</b>					
	19.1	Modular toilet cabinets made from laminated phenolic board on an stainless steel tubular	16	Sets		
	19.2	Door Lockset				
	19.2.1	Lever Type Satin Finished Door Lockset	32	sets		
	19.3	ACP Cladding				
	19.3.1	Built up tubular ACP (variable sections x8.0m)	858	sq.m.		
	19.4	Theater Chairs				
	19.4.1	Theater chairs	110	pcs		
	19.5	Demountable wall				
	19.5.1	Demountable Partitions 3.00mx6.00m	18	sq mt		
			<b>SUB-TOTAL 19.0</b>			
<b>20.0</b>	<b>SIGNS AND SIGNAGES</b>					
	20.1	ACP Outdoor Signage	1	lot		
			<b>SUB-TOTAL 20.0</b>			
<b>21.0</b>	<b>HVAC</b>					
	21.1	Floor Mounted Split Type Aircon 3TR Inverter	6	Sets		
	21.1	wall mounted split type aircon 2.5HP	1	Sets		
	21.1	Condenser steel Hanger racks	7	Sets		
	21.1	Ducted Exhaust Fans (foodtech lab, animal research lab, animal science lab and agri-chemistry lab)	3	Sets		
			<b>SUB-TOTAL 21.0</b>			
<b>22.0</b>	<b>MECHANICAL WORKS</b>					
	22.1	<b>FIRE SPRINKLER SYSTEM</b>				
	22.1.1	100mm x 6m BI pipe ASTM S-40	4	lght		
	22.1.2	75mm x 6m BI pipe ASTM S-40	31	lght		
	22.1.3	63mm x 6m BI pipe ASTM S-40	4	lght		
	22.1.4	50mm x 6m BI pipe ASTM S-40	7	lght		
	22.1.5	40mm x 6m BI pipe ASTM S-40	6	lght		
	22.1.6	32mm x 6m BI pipe ASTM S-40	7	lght		
	22.1.7	25mm x 6m BI pipe ASTM S-40	88	lght		
	22.1.8	100mmx75mm BI coupling Reducer welded	4	pcs		
	22.1.9	75mmx63mm BI coupling Reducer welded	3	pcs		
	22.1.10	75mmx50mm BI coupling Reducer welded	3	pcs		
	22.1.11	63mmx50mm BI coupling Reducer welded	3	pcs		
	22.1.12	50mmx40mm BI coupling Reducer welded	6	pcs		
	22.1.13	50mmx32mm BI coupling Reducer welded	10	pcs		

	22.1.14	50mmx25mm BI coupling Reducer welded	10	pcs		
	22.1.15	40mmx32mm BI coupling Reducer welded	5	pcs		
	22.1.16	40mmx25mm BI coupling Reducer welded	9	pcs		
	22.1.17	32mmx25mm BI coupling Reducer welded	32	pcs		
	22.1.18	25mmx15mm BI coupling Reducer welded	225	pcs		
	22.1.19	100mm BI elbow 90* S-40 welded	5	pcs		
	22.1.20	75mm BI elbow 90* S-40 welded	10	pcs		
	22.1.21	63mm BI elbow 90* S-40 welded	4	pcs		
	22.1.22	50mm BI elbow 90* S-40 threaded	15	pcs		
	22.1.23	40mm BI elbow 90* S-40 threaded	13	pcs		
	22.1.24	32mm BI elbow 90* S-40 threaded	10	pcs		
	22.1.25	25mm BI elbow 90* S-40 welded	175	pcs		
	22.1.26	100mm BI equal Tee s-40 welded	2	pcs		
	22.1.27	75mm BI equal Tee s-40 welded	6	pcs		
	22.1.28	50mm BI equal Tee s-40 threaded	14	pcs		
	22.1.29	40mm BI equal Tee s-40 threaded	4	pcs		
	22.1.30	32mm BI equal Tee s-40 threaded	6	pcs		
	22.1.31	25mm BI equal Tee s-40 threaded	108	pcs		
	22.1.32	75mmx63mmx75mm BI Tee Reducer S-40 (welded)	1	pcs		
	22.1.33	75mmx50mmx75mm BI Tee Reducer S-40 (welded)	9	pcs		
	22.1.34	75mmx40mmx75mm BI Tee Reducer S-40 (welded)	9	pcs		
	22.1.35	75mmx32mmx75mm BI Tee Reducer S-40 (welded)	10	pcs		
	22.1.36	75mmx25mmx75mm BI Tee Reducer S-40 (welded)	12	pcs		
	22.1.37	63mmx50mmx63mm BI Tee Reducer S-40 (welded)	3	pcs		
	22.1.38	50mmx40mm50mm BI Tee Reducer S-40 (threaded)	2	pcs		
	22.1.39	50mmx25mm50mm BI Tee Reducer S-40 (threaded)	10	pcs		
	22.1.40	40mmx25mm40mm BI Tee Reducer S-40 (threaded)	9	pcs		
	22.1.41	32mmx25mm32mm BI Tee Reducer S-40 (threaded)	20	pcs		
	22.1.42	sprinkler head pendant type with moutnting plate	225	pcs		
	22.1.43	Buttefly valve 75mm with supervisory switch UL	2	pcs		
	22.1.44	fire hose valve 2-1/2"	2	pcs		
		fire hose cabinet 11/2" pressure regulating angle valve				
	22.1.45	11/2"x100' long double jacket fire hose with adjustable nozzle	2	pcs		
	22.1.46	siamese twin 2-1/2"	1	pcs		
	22.1.47	check valve 2-1/2"	1	pcs		
	22.1.48	ball valve/drain valve 25mm	3	pcs		
	22.1.49	alarm check valve system 100mm	1	set		
	22.1.50	OS and Y valve 100mm	1	unit		
	22.1.51	Inspector's test valve 25 diam with sight glass	2	unit		
	22.1.52	air relief valve 1/2"	2	pcs		
	22.1.53	flow switch 63mm	2	pcs		
	22.1.54	angle bar 50mmx50mmx1/4"	7	pcs		
	22.1.55	con. Thread round bar 3/8" diam.x10ft.	70	lght		
	22.1.56	swivel loop hanger 100mm	12	pcs		
	22.1.57	swivel loop hanger 75mm	80	pcs		
	22.1.58	swivel loop hanger 63mm	18	pcs		
	22.1.59	swivel loop hanger 50mm	18	pcs		
	22.1.60	swivel loop hanger 40mm	14	pcs		
	22.1.61	swivel loop hanger 32mm	18	pcs		
	22.1.62	swivel loop hanger 25mm	180	pcs		
	22.1.63	u bolt with nut and washer 3/8"x3	40	pcs		
	22.1.64	Ubolt with nut and washer 3/8"x4	10	pcs		

	22.1.65	Expansion bolt 3/8"	60	pcs		
	22.1.66	Nut and washer 3/8"	120	pcs		
	22.1.67	welding rods 6011	8	kgs		
	22.1.68	welding rods 6013	5	kgs		
	22.1.69	cutting disc 4"	6	pcs		
	22.1.70	cutting disc 14"	4	pcs		
	22.1.71	grinding disc 4"	10	pcs		
	22.1.72	QDE paint international red	2	gal		
	22.1.73	Paint thineer	2	gal		
	22.1.74	metal primer red oxide	3	gal		
	22.1.75	paint brush 3"	3	pcs		
	22.1.76	paint brush 2"	4	pcs		
	22.1.77	twine	5	rolls		
	22.1.78	gasket maker	6	tube		
	22.1.79	teflon tape 3/4"	3	pcs		
	22.1.80	steel brush	6	pcs		
	22.1.81	waste rugs	3	kgs		
	22.1.82	25 Hp fire pump, 3Hp jockey pump with control and accessories	1	lot		
<b>SUB-TOTAL 22.0</b>						
<b>GRAND TOTAL</b>						

Prepared by:

  
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