

Project: CONSTRUCTION OF A THREE (3) STOREY GYMNASIUM
PNU Main Campus

Subject: BILL OF QUANTITIES

Item No.		Qty	UNIT	UNIT COST			CONTRACT COST
				MATERIAL	LABOR	TOTAL	
I	GENERAL REQUIREMENTS						
1.00	Mobilization/Demobilization	1.00	lot	-	-		-
2.00	Temporary Facilities	1.00	lot	-	-		-
3.00	Construction Safety and Security, including Temporary Fences	1.00	lot	-	-		-
4.00	Project Billboard	1.00	lot	-	-		-
5.00	Equipment (Including Heavy Equipment and Scaffoldings)	1.00	lot	-	-		-
	Subtotal (General Requirements)						-
II	STRUCTURAL WORKS						
1.00	Site / Earthworks						
1.01	Site Survey (Layout and Stakeout)	1.00	lot			-	-
1.02	Demolition of existing structures	1.00	lot	-	-		-
1.03	Excavation, Backfilling, and Compaction	1.00	lot			-	-
1.04	Protection of Adjacent Structures	1.00	lot			-	-
1.05	Gravel Bedding	1.00	lot			-	-
1.06	Dewatering Works	1.00	lot	-	-		-
1.07	Soil Treatment	1.00	lot				-
1.08	Vapor Barrier	1,635.00	sq.m.				-
1.09	Disposal of Debris and Site Cleanup	1.00	lot	-	-		-
2.00	Foundation						

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2.01	Bored piles or mat footing	1.00	lot	-	-	-	-
3.00	Concreting Works						
3.01	Columns, Beams/Girders, incl. Tie Beams, Suspended Slabs, 5000 psi @ 28 Days	1,111.20	cu.m.				-
3.02	Stairs, Pedestrian Ramps, Wall Footing, Parapet Stiffener Columns and Beams, 3000 psi @ 28 Days	250.98	cu.m.				-
4.00	Rebar Works						
4.01	Rebar Works, Grade 60	129,557.67	kgs				-
4.02	Rebar Works, Grade 40	145,227.54	kgs				-
5.00	Formworks						
5.01	Formworks and Falseworks	7,883.19	sq.m.				-
6.00	Metal Works						
6.01	Steel Deck (1.2mm thk., Grade 80)	1,520.35	sq.m.				-
6.02	Structural Steel (Wide flanges, Angle Bars, etc)	200,405.01	kgs				-
6.03	HSS200x100x10mm	4,119.03	kgs				-
6.04	Various Steel Plates	42,967.10	kgs				-
6.05	Various Bolts	1.00	lot				-
	Subtotal (Structural Works)						-
III	ARCHITECTURAL WORKS						
1.00	Masonry Works						
1.01	CHB Laying, 150mm thk	1,236.30	sq.m.				-
1.02	CHB Laying, 100mm thk	1,981.16	sq.m.				-

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1.03	Plastering Works, Exterior	1,569.20	sq.m.				-
1.04	Plastering Works, Interior	8,866.95	sq.m.				-
1.05	Floor Levelling/Cement Topping (25mm thk)	2,615.50	m ²				-
2.00	Doors						
2.01	D-1 10mm Thk. Tempered Glass Frameless Glass Door w/ Stainless H-Handle, Lockset and complete accessories	22.00	sets				-
2.02	D-2 Powder-coated metal door with tempered glass vision panel on 50x100 metal jamb with lever-type door knob, heavy-duty hinges, and door closer, complete with lockset and accessories	8.00	sets				-
2.03	D-3 2-leaf Powder-coated metal door with metal louvers on 50x100 metal jamb, with lever-type door knob, heavy-duty hinges and door closer, complete with lockset and accessories	4.00	sets				-
2.04	D-4 powder-coated metal door with metal louvers on 50x50 metal jamb, complete with lockset and accessories	2.00	sets				-
2.05	D-5 powder-coated metal door with metal louvers on 50x100 metal jamb, with stainless kick plate, lever-type door knob, heavy-duty hinges and door closer, complete with lockset and accessories	11.00	sets				-
2.06	D-6 powder coated metal door with tempered glass vision panel on 50x100 metal jamb with panic device heavy duty hinges and door closer, complete with lockset and accessories	2.00	sets				-

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				MATERIAL	LABOR	TOTAL	
2.07	D-7 16mm square bar steel gate with lock, and heavy duty hinges, painted finish	7.00	sets				-
2.08	D-8 Marine plywood flush hollow core door with louver, complete with lever-type door knob, heavy-duty hinge, and painted finish	1.00	set				-
2.09	D-9 Marine plywood flush hollow core door with louver, complete with lever-type door knob, heavy-duty hinge, and painted finish	2.00	sets				-
2.10	D-10 Powder coated metal door with tempered glass vision panel on 50x50 metal jamb with lever type door knob, heavy duty hinges and complete with lockset and accessories	2.00	sets				-
3.00	Windows						
3.01	W-1 8mm thk tempered low-e clear glass awning & fixed window on aluminum Powder-coated frame	8.00	sets				-
3.02	W-2 8mm thk tempered low-e clear glass awning & fixed window on aluminum Powder-coated frame	2.00	sets				-
3.03	W-3 6mm thk tempered low-e clear glass awning wdo. on alum. powder coated frame with frosted sticker	3.00	sets				-
3.04	W-4 8mm thk tempered low-e clear glass awning & fixed window on aluminum Powder-coated frame	20.00	sets				-
3.05	W-5 8mm thk tempered low-e clear glass awning & fixed window on aluminum Powder-coated frame	2.00	sets				-
3.06	W-6 6mm thk tempered low-e clear glass awning & fixed wdo. on alum. powder coated frame w/ frosted sticker on portion of cr	6.00	sets				-

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3.07	W-7 6mm thk tempered low-e clear glass awning & fixed wdo. On alum. Powder coated frame w/ frosted sticker	3.00	sets				-
3.08	W-8 6mm thk tempered low-e clear glass awning & fixed wdo. on alum. powder coated frame	2.00	sets				-
3.09	W-9 6mm thk tempered low-e clear glass awning & fixed wdo. on alum. powder coated frame	8.00	sets				-
3.10	W-10 6mm thk tempered clear glass fixed wdo. on alum. Powder-coated frame	1.00	set				-
3.11	CW 1 8mm thk tempered low-e clear glass awning & fixed window on aluminum Powder-coated frame	4.00	sets				-
3.12	CW 2 8mm thk tempered low-e clear glass awning & fixed window on aluminum Powder-coated frame	4.00	sets				-
4.00	Floor Finishes						
4.01	FF-1 Solid hardwood T&G finish indoor basketball court flooring (maple), complete with lanes and 4m diameter center pnu logo	486.71	sq.m.				-
4.02	FF-2 Self-leveling heavy-duty rubberized epoxy	1,911.94	sq.m.				-
4.03	FF-3 600mm x 600mm Non-skid Porcelain tiles on heavy duty adhesive	156.74	sq.m.				-
4.04	FF-4 Heavy duty vinyl indoor sports running Track flooring complete with lanes	357.62	sq.m.				-
4.05	FF-5 600mm x 600mm Non-skid outdoor porcelain tiles on heavy duty adhesive	189.20	sq.m.				-
4.06	FF-6 Plain cement finish w/ 300mm x 300mm tactile tiles	73.50	sq.m.				-

Item No.		Qty	UNIT	UNIT COST			CONTRACT COST
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4.08	FF-7 Plain cement finish (50mm thk with 150 x 150 x 6.0mm welded wire mesh for waterproofing membrane protection)	1,431.20	sq.m.				-
5.00	Wall Finishes						
5.01	600x 600mm Porcelain Wall Tiles	464.74	sq.m.				-
5.02	WPC Outdoor Wall Cladding	62.00	sq.m.				-
5.03	Operable Partitions	4.00	sets	-	-	-	
5.04	Stone Cladding on entrance Plant boxes	1.00	lot	-	-	-	
6.00	Ceiling Finishes						
6.01	CF-2 4.5mm thk Fiber Cement Ceiling Boards on Light Gauge Steel Framing	168.28	sq.m.				-
6.02	CF-3 Aluminum linear ceiling on standard metal furring channels	191.87	sq.m.				-
6.03	CF-4 600mm x 600mm x 4.5mm thk fiber cement board on tee runner, painted	361.96	sq.m.				-
7.00	Painting Works						
7.01	Exterior Walls	1.00	lot	-	-		-
7.02	Interior Walls	1.00	lot	-	-		-
7.03	Fiber Cement painting ceiling	1.00	lot	-	-		-
7.04	Concrete Ceiling and exposed beams	1.00	lot	-	-		-
7.05	Steel finishes	1.00	lot	-	-		-
8.00	Waterproofing Works						
8.01	Toilets: Flexible Cementitious Waterproofing	168.28	sq.m.				-
8.02	Deck: Waterproofing Membrane	1,546.49	sq.m.				-

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9.00	Miscellaneous Architectural Works						
9.01	Lightweight Precast Moulding	378.00	l.m.				-
9.02	PVC Grooves	392.00	l.m.				-
9.03	Stainless PNU logo and "University Gym" Signage with backlight	1.00	lot	-	-		-
9.04	Locker Cabinets (18-Door)	20.00	sets				-
9.05	Bleachers	1.00	lot	-	-		-
9.06	Basketball Hoop	2.00	sets				-
9.07	Electronic Basketball Scoreboard	1.00	set				-
9.08	Granite Countertop	18.40	sq.m.				-
9.09	10mm thk x 1.50m ht tempered glass railing with SS304 handrail complete with supports	175.00	l.m.				-
9.10	16mm square bar with 2" dia. G.I. Pipe post Roof top fence	56.50	l.m.				-
9.11	Facial Mirror (900mm H) with LED Strip backlight	18.81	sq.m.				-
9.12	PWD Comfort room Handrail	3.00	sets				-
9.13	Soap Dispender	10.00	sets				-
9.14	Tissue Holder	25.00	sets				-
	Phenolic Urinal Partition and 200mm D shelves on cubicles	1.00	lot	-	-		-
9.15	Stainless steel Room Signages	1.00	lot	-	-		-
10.00	Toilet Solid Penolic Partitions (1/2" thk) w/ stainless pedestal						
	Ground Floor						
10.01	a. Male Toilet (3 Dividers and 3 Doors)	1.00	set				-
10.02	b. Female Toilet (4 Dividers and 4 Doors)	1.00	set				-

Item No.		Qty	UNIT	UNIT COST			CONTRACT COST
				MATERIAL	LABOR	TOTAL	
	Second Floor						
	Third Floor						
10.03	a. Female Toilet (4 Dividers and 4 Doors)	1.00	set				-
10.04	b. Male Toilet (2 Dividers and 2 Doors)	1.00	set				-
11.00	Toilet / Plumbing Fixtures						
11.01	Dual flush Water Closets w/ Bidet	25.00	sets			-	-
11.02	Vessel type Lavatories	21.00	sets			-	-
11.03	Wall-Hung Lavatories	4.00	sets			-	-
11.04	Shower Valves, PP Single with SS Rain Shower Head	8.00	sets			-	-
11.05	Lavatory Faucet	25.00	sets			-	-
11.06	Slop Sink Hose bib	6.00	pcs			-	-
11.07	Urinals	6.00	sets			-	-
12.00	Miscellaneous Metal Works						
12.01	SS304 Stair Handrails	1.00	lot			-	-
12.02	SS304 Ramp Handrail and Railing	1.00	lot			-	-
12.03	SS304 Stair Railing	1.00	lot			-	-
12.04	F-type Brass Stair Nosing	480.00	l.m.			-	-
13.00	Landscape Works						
13.01	Softscape, including a variety of plants, garden soils, shrubs, and Hardscape Works, including stones, boulders, pots, gravel, bricks, sidewalk, with drainage line, wall lamps, Garden Lights, and Bollards	1.00	lot	-	-	-	
	Subtotal (Architectural Works)						-

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IV	ELECTRICAL WORKS						
1.0	Service Entrance						
1.01	Electrical Post (including necessary accessories to complete the system operational)	1.00	lot		-	-	-
1.02	Cut-off Switch (Stainless)	1.00	lot		-	-	-
1.03	Manholes	1.00	lot		-	-	-
1.04	Electrical Pipes and fittings	1.00	lot		-	-	-
1.05	Grounding system (including necessary accessories to complete the system operational)	1.00	lot		-	-	-
1.06	Wires & Cables (including necessary accessories to complete the system operational)	1.00	lot		-	-	-
2.0	Lighting and Power System						
2.01	Roughing -ins ((Including all necessary fittings, supports, painting works, fire retardant sealants,and other accessories, in place)	1.00	lot		-	-	-
2.02	Wires & Cables (including connectors, tapes, etc)	1.00	lot		-	-	-
2.03	Lighting Fixtures & Wiring Devices (including necessary supports, boxes & dropped flexible	1.00	lot		-	-	-
3.0	Main and Sub-main Distribution System						
3.01	Roughing -ins (Including all necessary fittings, supports, painting works, fire retardant sealants,and other accessories, in place)	1.00	lot		-	-	-
3.02	Wires and Cables (including necessary supports, boxes & dropped flexible	1.00	lot		-	-	-
4.0	Panel Boards & Enclosed Circuit Breaker						

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4.01	Panel Boards (According to plans and specifications, complete with accessories and others to make the equipment functional)	1.00	lot		-	-	-
4.02	ECB's	1.00	lot		-	-	-
5.0	Solar Energy Equipment (submit technical data sheet)	1.00	lot		-	-	
5.01	50KW Solar Inverter equipment (Smart PV Contoller, Smart Power Sensor, and Smart Logger 3000A)						
5.02	Solar Panel 615-635 Watt						
5.03	Installation, framing, rough ins, wiring, testing and commissioning						
6.0	Testing and Commissioning				-	-	-
6.01	Complete Testing of Electrical System	1.00	lot		-	-	-
	Subtotal (Electrical Works)						-
V	MECHANICAL WORKS						
1.0	Airconditioning and Ventilation						
1.01	2.5 HP SPLIT TYPE WALL MOUNTED INVERTER Air Conditioning Unit (including necessary accessories to complete the system operational, Testing and Commisioning (submit technical data sheet)	14.00	set				-
1.02	1.5 HP SPLIT TYPE WALL MOUNTED INVERTER Air Conditioning Unit (including necessary accessories to complete the system operational, Testing and Commisioning (submit technical data sheet)	3.00	set				-

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1.03	Equipments (Toilet Exhaust Fan with Ducting and Ventilating Cap, Exhaust Ventilation Fan)	1.00	lot				-
1.04	re-installation of Industrial Fan Industrial Fan)	1.00	lot				-
1.05	Supply, delivery, and installation of Machine roomless Passenger elevator (3 stops, 10-person with 800kg capacity), including accessories and testing and commissioning (submit technical data sheet)	1.00	lot	-	-	-	
	Subtotal (Mechanical Works)						-
V	PLUMBING AND SANITARY WORKS						
1.0	Drain, Sewer and Vent System						
1.01	PVC Pipes and Fittings	1.00	lot			-	-
1.02	Floor Drain, catch basins, area drains and Cleanouts	1.00	lot			-	-
1.03	Septic Tank (Including tapping to STP line)	1.00	lot		-	-	-
	(HDPE pipes and fittings, 5HP submersible pump with motor controller and wiring)						
2.00	Water Lines system						
2.01	Supply Pipes and Fittings, Valves, Connectors, and other accessories,	1.00	lot			-	-
2.02	Cistern Tank (Water Supply & Fire Protection, including tapping to existing Supply line)	1.00	lot		-	-	-
3.00	Pumps and Equipment	1.00	lot			-	-
4.00	GRP Panel Type Elevated Water Tank	1.00	lot			-	-

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	Subtotal (Plumbing Works)						-
VI	FIRE PROTECTION WORKS	1.00	lot				
1.0	Fire Detection and Suppression System (FDSS) incl. Pipes and Fittings, Valves and Accessories, Sprinkler Heads, Fire Hose Cabinet with fire extinguisher, Fire Pumps and Equipment, Fire Extinguishers, and Fire Detection and Alarm System (FDAS) incl. addressable Smoke detector, heat detector, pull station, monitor modules, controls, switches, and other accessories, and testing and commissioning, and FRC.						
	Subtotal (Fire Protection Works)						-
VII	AUXILIARY AND IT WORKS	1.00	lot				
1.0	Reinstallation of Gymnasium sound system including consumables, cables, connectors, rough-ins, contingencies						
2.0	Installation of LAN, 48 ports PoE switches-2 units with accessories, wireless fidelity (WiFi) 7th Gen. - 30 units with accessories, cloud-based wifi controller - 1lot, accessories, Satellite Dish Internet connectivity with 1 TB Bandwidth capacity (1 year subscription), rough ins, testing and commissioning (submit technical evidence)						

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3.0	20 KVA RACK MOUNTED UNINTERRUPTED POWER SUPPLY (UPS) WITH COMPLETE ACCESSORIES (submit technical evidence)						
	Subtotal (Fire Protection Works)						-
	TOTAL DIRECT COST						-
	INDIRECT COST						
	Overhead, Contingencies, Miscellaneous						-
	Contractor's Profit						-
	Value-Added Tax						-
	TOTAL PROJECT COST						-

