

SUBJECT : DETAILED COST ESTIMATE
PROJECT : Repair and Renovation of the CHSS Department of Architecture
Construction Laboratory
OWNER : University of the Philippines Mindanao
LOCATION : UP Mindanao, Mintal, Davao City
DESCRIPTION : Renovation and extension of existing Constriction laboratory

DURATION : 6 Months

ITEMS OF WORK	UNIT	QTY	UNIT COST		AMOUNT		TOTAL AMOUNT
			Labor	Materials	Labor	Materials	
FOUNDING STRUCTURE							
1050 GENERAL REQUIREMENTS							
Temporary Facilities	lot	1.00	3,750.00	15,000.00	3,750.00	15,000.00	18,750.00
Power and Water Connections / Consumptions	lot	1.00		16,000.00		16,000.00	16,000.00
Temporary enclosure and protection	lot	1.00	5,550.00	18,500.00	5,550.00	18,500.00	24,050.00
Cleaning and Clearing	lot	1.00	12,000.00		12,000.00		12,000.00
		SUB-TOTAL 1			21,300.00	49,500.00	70,800.00
2000 SITEWORKS							
Demolition	lot	1.00	12,000.00		12,000.00		12,000.00
Existing roof over ICEB Area							
CHB Wall at Lobby and lecture room							
Structure Excavation	cu.m	12.00	350.00		4,200.00		4,200.00
Backfill & Compaction	cu.m	12.00	250.00		3,000.00		3,000.00
Base Preparation on 95% compaction (slab on fill / footings)	cu.m	22.00	200.00		4,400.00	-	4,400.00
Gravel Bedding - 50mm thk. (Footing,slab on fill, carpark, pathwalk)	cu.m	24.00	90.00	1,050.00	2,160.00	25,200.00	27,360.00
Lay-out & Batterboards	sq.m	150.00	16.00	40.00	2,400.00	6,000.00	8,400.00
Termite Control / Soil Poisoning	sq.m	200.00	14.00	40.00	2,800.00	8,000.00	10,800.00
Parking Concrete Strip	lm	48.00	14.00	200.00	672.00	9,600.00	10,272.00
Concrete Unit Pavers	lot	1.00	6,000.00	OWNER SUP.	1,400.00		1,400.00
		SUB-TOTAL 2			33,032.00	48,800.00	81,832.00
3000 STRUCTURAL CONCRETE							
CONCRETE WORKS							
<i>Site/Job Mix(3000 psi)</i>							
Column Footing							
- Concrete works	cu.m	11.17					
Cement	bags	98.31	61.50	205.00	6,046.29	20,154.29	26,200.57
Coarse Sand	cu.m	5.14	240.00	800.00	1,233.39	4,111.30	5,344.68
Gravel	cu.m	11.17	315.00	1,050.00	3,519.18	11,730.60	15,249.78
- 16mm dia DRB, gr 33	length	45.60	93.00	310.00	4,240.80	14,136.00	18,376.80
- Ga. 16 GI Tie Wire	kg	3.51	27.00	90.00	94.71	315.69	410.40
Wall Footing							
- Concrete works	cu.m	0.60					
Cement	bags	5.28	61.50	205.00	324.72	1,082.40	1,407.12
Coarse Sand	cu.m	0.28	240.00	800.00	66.24	220.80	287.04
Gravel	cu.m	0.60	315.00	1,050.00	189.00	630.00	819.00
- 10mm dia DRB, gr 33	length	15.15	36.60	122.00	554.49	1,848.30	2,402.79
- Ga. 16 GI Tie Wire	kg	10.00	27.00	90.00	270.00	900.00	1,170.00
Slab on Fill							
- Concrete works	cu.m	27.20					
Cement	bags	244.80	61.50	205.00	15,055.20	50,184.00	65,239.20
Coarse Sand	cu.m	12.51	240.00	800.00	3,002.88	10,009.60	13,012.48
Gravel	cu.m	27.20	315.00	1,050.00	8,568.00	28,560.00	37,128.00
- 10mm dia DRB, gr 33	length	225.00	36.60	122.00	8,235.00	27,450.00	35,685.00
- Ga. 16 GI Tie Wire	kg	30.00	27.00	90.00	810.00	2,700.00	3,510.00
Columns							
- Concrete works	cu.m	15.30					
Cement	bags	134.64	61.50	205.00	8,280.36	27,601.20	35,881.56
Coarse Sand	cu.m	7.04	240.00	800.00	1,689.12	5,630.40	7,319.52
Gravel	cu.m	15.30	315.00	1,050.00	4,819.50	16,065.00	20,884.50
- 16mm dia DRB, gr40	length	150.00	93.00	310.00	13,950.00	46,500.00	60,450.00
- 10mm dia DRB, gr33	length	137.00	36.60	122.00	5,014.20	16,714.00	21,728.20
- Ga. 16 GI Tie Wire	kg	-	27.00	90.00	-	-	-
- Formworks (Fabrication / Installation/ Removal)							
Coco Lumber	bd ft	964.27	4.80	16.00	4,628.49	15,428.31	20,056.80
Plywood	sheets	44.26	126.00	420.00	5,576.95	18,589.85	24,166.80
Scaffoldings							
Coco Lumber	bd ft	2,958.54	4.80	16.00	14,200.99	47,336.64	61,537.63
Tie beam							
- Concrete works	cu.m	6.40					
Cement	bags	56.32	61.50	205.00	3,463.68	11,545.60	15,009.28
Coarse Sand	cu.m	2.94	240.00	800.00	706.56	2,355.20	3,061.76
Gravel	cu.m	6.40	315.00	1,050.00	2,016.00	6,720.00	8,736.00
- 12mm dia DRB, gr33	length	57.14	54.00	180.00	3,085.71	10,285.71	13,371.43
- 10mm dia DRB, gr33	length	2.40	36.60	122.00	87.84	292.80	380.64
- Ga. 16 GI Tie Wire	kg	10.00	27.00	90.00	270.00	900.00	1,170.00

				SUB-TOTAL 3	119,999.31	399,997.68	519,996.99	
4000	MASONRY							
	Laying of CHB Class B 1:3 (House walls)							
	- Filing, mortar/setting/filler, steel reinforcement							
	6" CHB (filing/mortar setting&filler /reinforcement)	pcs	607.22	4.80	16.00	2,914.65	9,715.51	12,630.16
	4" CHB (filing/mortar setting&filler /reinforcement)	pcs	204.12	4.20	14.00	857.30	2,857.68	3,714.98
	* Cement	bag	160.04	61.50	205.00	9,842.56	32,808.52	42,651.07
	* Coarse sand	cu.m	14.94	240.00	800.00	3,586.51	11,955.02	15,541.52
	* 10mmø DRB , gr 33	length	151.83	36.60	122.00	5,557.10	18,523.67	24,080.77
	* Ga. 16 Gl Tie Wire	kg	6.29	27.00	90.00	169.74	565.79	735.53
				SUB-TOTAL 4		22,927.85	76,426.18	99,354.03
5000	METALS							
	Roof framing - main roof							
	Roof Trusses							
	Angle Bar 1 1/2" x 1 1/2" x 3/16" x 6m	length	75.00	172.00	430.00	12,900.00	32,250.00	45,150.00
	Angle Bar 1" x 1" x 3/16" x 6m	length	32.00	130.40	326.00	4,172.80	10,432.00	14,604.80
	Angle Bar 1" x 1" x 1/8" x 6m	length	12.00	100.00	250.00	1,200.00	3,000.00	4,200.00
	C- PURLINS w/ cleats							
	C- Purlins 1.2mm thk x 2" x 4"	length	76.00	192.00	480.00	14,592.00	36,480.00	51,072.00
	Angle Bar 50mm x 50mm x 2.5mm	length	3.00	194.00	485.00	582.00	1,455.00	2,037.00
	Trusses Accessories							
	Sag Rod, 10mm dia x 6m plain round bar	length	60.00	58.00	145.00	3,480.00	8,700.00	12,180.00
	Steel Bottom Plate 6mm thk x 300mm x 300mm	pc	24.00	42.00	105.00	1,008.00	2,520.00	3,528.00
	Anchor Bolt 16mm Ø x 200mm	pc	90.00	34.00	85.00	3,060.00	7,650.00	10,710.00
	Welding Rod	kl	55.00	36.00	90.00	1,980.00	4,950.00	6,930.00
	Screw/Electrodes/Oxygen/Acetylene	lot	1.00	1,400.00	3,500.00	1,400.00	3,500.00	4,900.00
						44,374.80	110,937.00	155,311.80
	Metal Works							
	Steel Beams							
	Angle Bar 2 1/2" x 2 1/2" x 3/16" x 6m	pc	39.00	252.00	560.00	9,828.00	21,840.00	31,668.00
	Angle Bar 1 1/2" x 1 1/2" x 3/16" x 6m	pc	27.00	159.20	398.00	4,298.40	10,746.00	15,044.40
	Steel Grills							
	2.5mm Steel matting	pc	36.00	144.00	320.00	5,184.00	11,520.00	16,704.00
	32mm x 3mm Flat Bar	pc	20.00	126.00	280.00	2,520.00	5,600.00	8,120.00
	Welding Rod	kl	28.00	40.50	90.00	1,134.00	2,520.00	3,654.00
	Consumables (Screw/Electrodes/Oxygen/Acetylene)	lot	1.00	472.50	1,050.00	472.50	1,050.00	1,522.50
						23,436.90	53,276.00	76,712.90
				SUB-TOTAL 5		67,811.70	164,213.00	232,024.70
6000	WOODS AND PLASTICS							
	Interior Architectural Woodwork							
	Angle Bar 1 1/2" x 1 1/2" x 1/8" x 6m	length	32.00	144.00	360.00	4,608.00	11,520.00	16,128.00
	Squaretube 1.2mm thk x 2" x 4"	length	14.00	244.00	610.00	3,416.00	8,540.00	11,956.00
	6.0mm Fibercement Board	sheets	86.00	112.00	675.00	9,632.00	58,050.00	67,682.00
	3.5mm Fibercement Board	sheets	26.00	98.00	280.00	2,548.00	7,280.00	9,828.00
	0.6mm Metal Studs	length	350.00	33.25	95.00	11,637.50	33,250.00	44,887.50
	Fasteners	box	10.00	96.25	275.00	962.50	2,750.00	3,712.50
				SUB-TOTAL 6		32,804.00	121,390.00	154,194.00
8000	THERMAL AND MOISTURE							
	Roof Covering and Accessories							
	Roof Covering and bended accessories on							
	G.I. Twin Rib Type longspan pre painted roofing (COLOURSTEEL)	sq.m.	420.00	37.28	233.00	15,657.60	97,860.00	113,517.60
	Fascia Board on hardi senepa on steel fascia runner	l.m	30.00	100.00	250.00	3,000.00	7,500.00	10,500.00
				SUB-TOTAL 7		18,657.60	105,360.00	124,017.60
8000	OPENINGS (DOORS & WINDOWS)							
	Doors and Windows							
	- Installation of Door Jamb & Door Panel							
	D1(2.4m x 1.8m) 45mm thk Lauan Double Panel Door (Main Door)	set	2.00	480.00	8,000.00	960.00	16,000.00	16,960.00
	Wooden Door Jamb / 2"x8" Yakal	set	2.00	480.00	3,200.00	960.00	6,400.00	7,360.00
	D2(2.1m x 0.9m) 45mm thk Flush Door (Rest Room)	set	1.00	480.00	3,500.00	480.00	3,500.00	3,980.00
	Wooden Door Jamb / 2"x6" Lauan	set	1.00	210.00	1,400.00	210.00	1,400.00	1,610.00
	Installation of Aluminum Window							
	Aluminum Sliding Window (0.60m x 1.5m)	set	1.00	400.00	2,400.00	400.00	2,400.00	2,800.00
	Finish Hardware							
	Yale Entrance Lockset Satin Chrome Finish	set	2.00	112.50	750.00	225.00	1,500.00	1,725.00
	Yale Privacy Lockset Satin Chrome Finish	set	2.00	112.50	750.00	225.00	1,500.00	1,725.00
	1 1/2 Pairs 3-1/2 x 3-1/2 x 0.16 Ball Bearing Hinges w/ Non- Removable Pin, Satin Chrome Finish	set	7.00	67.50	500.00	472.50	3,500.00	3,972.50
				SUB-TOTAL 8		3,932.50	36,200.00	40,132.50
10500	FINISHES							
	Painting Works							
	Cementitious Water Proofing	gal	32.00	375.00	750.00	12,000.00	24,000.00	36,000.00

Cement	bags	10.00	102.50	205.00	1,025.00	2,050.00	3,075.00
Primer	gal	12.00	588.00	735.00	7,056.00	8,820.00	15,876.00
Reducer	gal	4.00	310.40	388.00	1,241.60	1,552.00	2,793.60
NonSag Epoxy	gal set	2.00	1,760.00	2,200.00	3,520.00	4,400.00	7,920.00
Red Epoxy Primer	gal	8.00	550.00	655.00	4,400.00	5,240.00	9,640.00
Lacquer Thinner	gal	2.00	425.00	656.00	850.00	1,312.00	2,162.00
Poly Urethane Top Coat Dead Flat	gal	1.00	796.00	995.00	796.00	995.00	1,791.00
Lacquer Flo	gal	0.50	524.00	655.00	262.00	327.50	589.50
Sanding Sealer	gal	1.00	564.00	705.00	564.00	705.00	1,269.00
Oil Stain	gal	0.25	540.00	675.00	225.00	1,500.00	1,725.00
Misc (brush, Sand Paper)	lot	1.00	192.00	240.00	225.00	1,500.00	1,725.00
Tile Works							
40 x 40 Ceramic tiles	pcs	50.00	40.00	50.00	2,000.00	2,500.00	4,500.00
Cement	bag	8.00	164.00	205.00	1,312.00	1,640.00	2,952.00

SUB-TOTAL 9 **35,476.60** **56,541.50** **92,018.10**

10500 SPECIALTIES

Signages - Stainless 304

UP Logo	lot	1.00	1,000.00	8,000.00	1,000.00	8,000.00	9,000.00
Department Logo	lot	1.00	1,000.00	8,000.00	1,000.00	8,000.00	9,000.00
Department Lettring	lot	1.00	1,000.00	8,000.00	1,000.00	8,000.00	9,000.00

SUB-TOTAL 10 **3,000.00** **24,000.00** **27,000.00**

15000 PLUMBING WORKS

Sanitary Line/ Storm Drainage Line

PVC pipe (2") 63mm ø	pc	8.00	64.50	215.00	516.00	1,720.00	2,236.00
(3") 75mm ø	pc	4.00	117.00	390.00	468.00	1,560.00	2,028.00
(4") 110mm ø	pc	4.00	153.00	510.00	612.00	2,040.00	2,652.00
PVC Fittings;	lot	1.00	90.00	300.00	90.00	300.00	390.00
Solvent Cement, 400cc	can	3.00	45.00	150.00	135.00	450.00	585.00
Vulca Seal	liter	1.00	129.00	430.00	129.00	430.00	559.00

1,950.00 **6,500.00** **8,450.00**

Waterline- uPVC Pipes & Fittings (Ecosan Brand)

PPR waterline pipes 25mmø, PN 20	pc	8.00	97.50	325.00	780.00	2,600.00	3,380.00
PPR waterline pipes 20mmø, PN 20	pc	4.00	75.00	250.00	300.00	1,000.00	1,300.00
PPR fittings - Socket, Elbow, Tee	lot	1.00	117.00	2,000.00	468.00	1,560.00	2,028.00

1,548.00 **5,160.00** **6,708.00**

Plumbing Fixtures

Note : Pls refer to technical specifications :

Water Closet	set	1.00	1,350.00	4,500.00	1,350.00	4,500.00	5,850.00
Lavatory Wall Hung w/ fittings	set	1.00	900.00	3,000.00	900.00	3,000.00	3,900.00
Faucet for lavatory w/ fittings	set	1.00	360.00	1,200.00	360.00	1,200.00	1,560.00
Toilet Paper Holder	set	1.00	240.00	800.00	240.00	800.00	1,040.00
Floor drain Stainless 4"x 4"	set	1.00	180.00	600.00	180.00	600.00	780.00
Floor drain Stainless 6"x 6"	set	1.00	240.00	800.00	240.00	800.00	1,040.00

3,270.00 **10,900.00** **14,170.00**

SUB-TOTAL 15 **5,220.00** **17,400.00** **22,620.00**

16000 ELECTRICAL WORKS

Feeder Lines and Transformer Conductors

Not Included in the Scope of Works

Service Entrance

Roughing In Works

Secondary Rack w/ 3 Spool Insulator H.D.	set	1.00	3,150.00	10,500.00	3,150.00	10,500.00	13,650.00
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Wires

60mm² THW Wire	m	140.00	138.00	460.00	19,320.00	64,400.00	83,720.00
38mm² THW Wire	m	60.00	72.60	242.00	4,356.00	14,520.00	18,876.00
40mmØ PVC Pipe & Fittings	pc	3.00	135.00	450.00	405.00	1,350.00	1,755.00
40mmØ RSC Pipe & Fittings	pc	4.00	225.00	750.00	900.00	3,000.00	3,900.00
50mmØ RSC Pipe & Fittings	pc	6.00	267.00	890.00	1,602.00	5,340.00	6,942.00

Panel Boards and Circuit Breaker

Panel Board Center Main 90AT/90AF 16 branches	pc	2.00	2,580.00	8,600.00	5,160.00	17,200.00	22,360.00
90AT/3P Circuit breaker TQD	pc	2.00	2,175.00	7,250.00	4,350.00	14,500.00	18,850.00
30AT/3P	pc	2.00	225.00	750.00	450.00	1,500.00	1,950.00
20AT/3P	pc	14.00	225.00	750.00	3,150.00	10,500.00	13,650.00
15AT/3P	pc	4.00	225.00	750.00	900.00	3,000.00	3,900.00

Main Distribution Panel and Circuit Breaker

Panel Board Center Main 150AT/90AF 4 Branches	set	1.00	3,150.00	10,500.00	3,150.00	10,500.00	13,650.00
150AT/3P Circuit breaker TQD	pc	1.00	2,175.00	7,250.00	2,175.00	7,250.00	9,425.00
100AT/3P Circuit breaker TQD	pc	2.00	2,175.00	7,250.00	4,350.00	14,500.00	18,850.00

Power Lay-out

Roughing In Works

15mmØ PVC Pipe & Fittings	set	60.00	22.80	76.00	1,368.00	4,560.00	5,928.00
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Wires

2.0mm² THHN Wire	box	1.00	660.00	2,200.00	660.00	2,200.00	2,860.00
3.5mm² THHN Wire	box	3.00	750.00	2,500.00	2,250.00	7,500.00	9,750.00

5.5mm ² THHN Wire	box	1.00	1,050.00	3,500.00	1,050.00	3,500.00	4,550.00
Fixtures							
Duplex Convenience Outlet Flush Type							
grounding type, 16amps, 250V	set	10.00	36.60	122.00	366.00	1,220.00	1,586.00
Single Outlet Flush Type							
grounding type, 50amps, 250V	set	10.00	105.00	350.00	750.00	3,500.00	4,250.00
Lighting lay-out							
Roughing In Works							
15mmØ PVC Pipe	set	50.00	9.00	30.00	450.00	1,500.00	1,950.00
Wires							
2.0mm ² THHN Wire	box	2.00	660.00	2,200.00	1,320.00	4,400.00	5,720.00
Fixtures							
One gang switch flush type	set	7.00	22.50	75.00	157.50	525.00	682.50
Two Gang switch flush type	set	2.00	27.00	90.00	54.00	180.00	234.00
Lighting Fixtures							
Pendant Industrial Light	set	32.00	315.00	1,050.00	10,080.00	33,600.00	43,680.00
Pinlights - 150mm square pinlight white trim							
with frosted glass and 1 9W LED	set	6.00	135.00	450.00	810.00	2,700.00	3,510.00
	SUB-TOTAL 16				72,733.50	243,445.00	316,178.50

Prepared and Submitted By :

Print Name and Signature