

PROGRAM OF WORKS

BILL OF QUANTITIES

REPAIR 2021 - CAR - Baguio City - 002

School	: KIAS ELEMENTARY SCHOOL	Date:	
School I.D	221501	Budget Allocation:	
Region	CAR	Engineering and Administrative Overhead:	
Division	BAGUIO CITY	Approved Budget for the Contract:	PHP 3,838,325.19
Project Title		Completion Period:	120 calendar days
: REPAIR AND REHABILITATION OF SCHOOL BUILDING (6CL) and IMPROVEMENT OF SCHOOL FACILITIES		Minimum Required Manpower:	
		Project Engineer	Welder
		Foreman	Mason
Location : KIAS, BAGUIO CITY			Carpenter
			Painter
			Helper
		Minimum Required Equipment:	
		Hand Tools	Welding Machine
		Power Tools	Bar Cutter

ITEM NO.	Item Description	% of Total	Unit	Quantity	Total Cost	Remarks
I. DIRECT COST						
GENERAL REQUIREMENTS						
			lot	1.00		
	DEPED SCHOOL BUILDING (7X8m) 3STY 6CL					
2.000	Concreting Works		lot	1.00		
3.000	Rebar Works		lot	1.00		
4.000	Formworks		lot	1.00		
5.000	Masonry Works		sqm	236.28		
6.000	Doors and Windows		lot	1.00		
7.000	Steel Works		lot	1.00		
8.000	Roofing Works		lot	1.00		
9.000	Ceiling and Carpentry Works		bdf	976.80		
10.000	Electrical Works		lot	1.00		
11.000	Plumbing Works		lot	1.00		
12.000	Sanitary Works		lot	1.00		
13.000	Painting Works		sqm	2,393.23		
14.000	Tile Works		sqm	300.40		
Sub-Total						
II. INDIRECT COST % of (I-Gen. Reqmts.)						
Overhead Expenses (8%)						
Contingencies (3%)						
Miscellaneous (1%)						
Contractor's Profit (%)						
Sub-Total						
III. TAX 5% of (I+II)						
Sub-Total						
IV. TOTAL CONSTRUCTION COST (I + II + III)						
		100.00%				

Prepared:

12.0600	PVC Sanitary Pipe 3"Ø x 3.0m	pc	36.00				
12.1000	PVC Sanitary Elbow 90° x 3"Ø	pc	20.00				
12.3000	PVC Cement	can	9.00				
	Sub-total						
13.0000	Painting Works						
	Concrete Surfaces	sqm	2,147.63				
13.0100	Neutralizer	gal	27.00				
13.0200	Latex, Flat	gal	108.00				
13.0400	Latex, Semi Gloss	gal	108.00				
13.0300	Masonry Putty	gal	88.00				
13.0500	Acri Color	qrt	27.00				
	Wood Surfaces and Steel Surfaces	sqm	245.60				
13.0600	Enamel, Flatwall	gal	14.00				
13.0800	Enamel, Semi Gloss	gal	14.00				
13.0700	Glazing Putty	gal	13.00				
13.0900	Paint Thinner	L	7.00				
	Sub-total						
14.0000	Tile Works						
	T&B						
	Wall	sqm	7.20				
14.0110	Glazed Wall Tiles 20cm x 20cm	pc	198.00				
14.0300	Tile Adhesive 25 kg/bag	bag	2.00				
14.0500	Tile Grout 5 kg/bag	bag	1.00				
	Flooring	sqm	13.20				
14.0210	Unglazed Floor Tiles 20cm x 20cm	pc	363.00				
14.0300	Tile Adhesive 25 kg/bag	bag	3.00				
14.0500	Tile Grout 5 kg/bag	bag	1.00				
	Classroom Flooring	sqm	280.00				
14.0600	Unglazed Floor Tiles 40cm x 40cm	pc	1,925.00				
2.0200	Portland Cement	bag	93.33				
14.0300	Tile Adhesive 25 kg/bag	bag	51.00				
14.0500	Tile Grout 5 kg/bag	bag	21.00				
15.0100	Waterproofing, Cementitious	gal	4.00				
	Sub-total						
	DIRECT COST						
	INDIRECT COST % of (I-Gen. Reqnmts)						
	TAX 6% of (I + II)						
	TOTAL CONSTRUCTION COST (I + II + III)						

Prepared By:

PROGRAM OF WORKS DETAILED COST ESTIMATE

PROJECT : REPAIR AND REHABILITATION OF SCHOOL BUILDING (6CL) and IMPROVEMENT OF SCHOOL FACILITIES
SCHOOL : KIAS ELEMENTARY SCHOOL
LOCATION : KIAS, BAGUIO CITY
OWNER : DEPARTMENT OF EDUCATION

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT COST		TOTAL COST		GRAND TOTAL
				MATERIAL	LABOR	MATERIAL	LABOR	
	GENERAL REQUIREMENTS							
	Mobilization/Temporary Structures, Utilities and Services/Demobilization	lot	1.00					
	Safety and Health	lot	1.00					
	Project Billboard	lot	1.00					
	Sub-total							
	DEPED SCHOOL BUILDING (7X2m) 3STY 6CL							
2.0000	Concreting Works							
	Roof Beam (Class A)	cu.m	12.36					
2.0200	Portland Cement	bag	112.00					
2.0300	Crushed Gravel 3/4"	cu.m	12.50					
2.0500	Washed Sand	cu.m	6.25					
	Roof Deck (Class A)	cum	2.25					
2.0200	Portland Cement	bag	21.00					
2.0300	Crushed Gravel 3/4"	cu.m	2.25					
2.0500	Washed Sand	cu.m	1.25					
	Columns (Class A)	cum	1.16					
2.0200	Portland Cement	bag	11.00					
2.0300	Crushed Gravel 3/4"	cu.m	1.25					
2.0500	Washed Sand	cu.m	0.75					
	Sub-total							
3.0000	Rebar Works							
3.0600	D16mm x 6.00 mts RSB	pc	164.00					
3.1000	D10mm x 6.00 mts RSB	pc	255.00					
3.1200	G.I. Tie Wire	kg	95.00					
	Sub-total							
4.0000	Formworks							
4.0200	Plywood Ordinary, 1/4" x 4' x 8'	pc	53.00					
4.0100	Coco Lumber or Equivalent	bd.ft	1,804.00					
4.0400	CWN, Assorted	kg	38.00					
	Sub-total							
5.0000	Masonry Works							
	Masonry Work (Class B)	sqm	236.28					
5.0300	CHB 4" thk	pc	2,954.00					
2.0200	Portland Cement	bag	119.00					
2.0500	Washed Sand	cu.m	11.00					
3.1000	D10mm x 6.00 mts RSB	pc	72.00					
3.1100	D12mm x 6.00 mts RSB	pc	53.00					
3.1200	G.I. Tie Wire	kg	35.00					
	Fine Plaster Finish (Class A @ 200mm thick)	sqm	472.66					
2.0200	Portland Cement	bag	156.00					
2.0500	Washed Sand	cu.m	16.00					
	Floor Topping	sq.m	21.45					
2.0200	Portland Cement	bag	15.00					
2.0500	Washed Sand	cu.m	2.00					
	Repair of Damaged Doors and Windows	sq.m	17.94					
2.0200	Portland Cement	bag	12.00					
2.0500	Washed Sand	cu.m	2.00					
	Sub-total							
6.0000	Doors and Windows							
6.0100	Removal of Door with Jamb	set	6.00					
6.0320	D-1, Steel Door 0.90m x 2.10m on Steel Door Jamb complete with Accessories (Inclg lockset)	set	2.00					
6.2100	Refurbishment of Steel Door	sq.m	8.00					
6.0300	Wood Panel Door	sq.m	4.41					
6.0400	Flush Door	sq.m	1.68					
6.1200	Aluminum Casement Window	sq.m	67.20					
	Sub-total							
7.0000	Steel Works							
	Steel Truss							
7.0900	L 50 x 50 x 6mm	kg	1,085.78					
7.0900	L 50 x 50 x 6mm	kg	1,287.36					
7.0200	LC 150 x 50 x 25 x 6.0mm	kg	1,397.54					
7.1902	Plain Round Bar 10mmØ x 6m	pc	10.00					
7.1901	Plain Round Bar 12mmØ x 6m	pc	12.00					
7.2100	Turn Buckle 12 mmØ	pc	12.00					
7.1600	Anchor Bolt with Nuts and Washer, 12mmØ x 50mm x 150mm	pc	72.00					
7.1700	Anchor Bolt with Nuts and Washer, 10mmØ x 50mm x 125mm	pc	72.00					
7.1300	Steel Plate 1.20m x 2.40m x 12mm thk	pc	1.25					
7.1200	Steel Plate 1.20m x 2.40m x 10mm thk	pc	2.50					
7.2620	G.I. Pipe 1"Ø Sch. 40	pc	7.00					
7.2600	G.I. Pipe 2"Ø Sch. 40	pc	18.00					
7.2400	Square Bar 19mm	pc	32.00					
7.3600	Welding Rod	kg	76.00					
13.1100	Primer, Zinc Chromate	gal	6.00					
	Window Grilles at 3F							
7.1060	Flat Bar 1 1/2" x 1/4"	kg	40.11					
7.2500	Square Bar 12mm	pc	50.00					
7.3600	Welding Rod	kg	3.00					
	Sub-total							

8.0000	Roofing Works								
8.0600	G.I. Long-Span Roofing, Corrugated, Pre-Painted, 1220mm x 0.5mm BMT	lm	302.40						
8.0700	G.I. Ridge Roll, Preformed, Pre-Painted, 0.610m x 2.440m x 0.5mm BMT	pc	17.00						
8.0800	G.I. Flashing, Preformed, Pre-Painted, 0.610m x 2.440m x 0.5mm BMT	pc	24.00						
8.1000	Teackscrew 2-1/2"	pc	1,331.00						
8.0900	J-Bolt (6mm dia.)	pc	1,996.00						
8.1100	Blind Rivets	pc	570.00						
8.1300	Roof Sealant	L	8.00						
8.1400	Gutter, Pre-Painted, Ordinary, 0.610m x 2.440m x 0.5mm thk	pc	24.00						
9.1420	Fascia Board, Fiber Cement 10" x 12"	pc	42.00						
	Sub-total								
9.0000	Ceiling and Carpentry Works								
	Ceiling and Facia Board								
9.0500	Plywood, Marine 1/4" x 4' x 8'	pc	41.00						
9.1700	Rough Lumber, Sun Dried, Tanguile or Equivalent	bd.ft	948.00						
9.1400	25mm x 25mm x 300mm Wood slats @25mm clear spacing ceiling ventilation (provide stainless steel wire mesh inside)	pc	8.00						
9.2100	Finishing Nails	kg	3.00						
4.0400	CWN Assorted	kg	18.00						
9.2200	Concrete Nails	kg	1.00						
9.1900	Wood Preservative	L	2.00						
7.1030	L 25 x 25 x 3mm	kg	198.00						
	Spandrel 7" Width (eaves & canopy)	lm	548.00						
8.1100	Blind Rivets	pc	2,184.00						
	Blackboard	sqm	28.80						
9.1700	Rough Lumber, Sun Dried, Tanguile or Equivalent	bd.ft	122.98						
9.2000	Lawanit, 1/4" thk	pc	12.00						
9.2100	Finishing Nails	kg	1.00						
9.2200	Concrete Nails	kg	1.00						
4.0400	CWN Assorted	kg	3.00						
	Sub-total								
10.0000	Electrical Works								
	Roughing-Ins								
10.0100	Electrical Conduit uPVC, 15mmØ	pc	96.00						
10.0490	RSC 20mmØ	pc	1.00						
10.0800	Entrance Cap 20mm dia	pc	1.00						
10.1200	Junction Box, 4" x 4" G.I.	pc	70.00						
10.1300	Utility Box, 2" x 4" G.I.	pc	67.00						
10.1400	Grounding Rod, 2.4m x 16mm dia.	pc	1.00						
	Wires & Fixtures								
10.1800	3.5 mm² THHN Wire, Stranded	m	1,555.20						
10.1800	14.0 mm² THHN Wire, Stranded	m	10.00						
10.2700	Duplex Convenience Outlet, Grounding Type, 20A, 250V	set	24.00						
10.3000	Single Convenience Outlet, Grounding Type, 15 AMP, 230V (EF)	set	12.00						
10.2900	Single Pole Wall Switch in One Switch Plate (10 AMP, 230V)	set	5.00						
10.3200	3 Single Pole Wall Switches in One Switch Plate (10 AMP, 230V)	set	9.00						
10.3620	FL 2 x 40W Industrial Type	set	36.00						
10.3610	FL 1 x 40W Industrial Type	set	10.00						
10.5600	Incandescent Bulb 50W	set	3.00						
10.5700	Ceiling Receptacle 3-1/2"Ø	pc	3.00						
10.3700	Panel Box, Flush Type, 4 Branches	set	3.00						
10.4300	Circuit Breaker, 40A 2P	set	3.00						
10.4100	Circuit Breaker, 20A 2P	set	6.00						
10.5500	Electrical Tape	pc	4.00						
10.5400	Wall Fan, 60W, 230V, 60Hz	set	10.00						
	Sub-total								
11.0000	Plumbing Works								
11.0200	Water Closet 1.6gpf with Accessories	set	4.00						
11.0600	Lavatory, Pedestal Type with Accessories	set	2.00						
11.0410	Faucet, Lavatory	set	2.00						
11.0100	Water Closet Flange	set	2.00						
11.1000	PP-R Pipe 3/4"Ø x 4.0m	pc	10.00						
11.1500	PP-R Coupling, 3/4"Ø	pc	8.00						
11.2910	PP-R Tee Reducer, 3/4" x 1/2"Ø	pc	2.00						
11.1100	PP-R Pipe 1/2"Ø x 4.0m	pc	6.00						
11.2200	PP-R Elbow 90° x 1/2"Ø	pc	6.00						
11.1600	PP-R Coupling, 1/2"Ø	pc	2.00						
11.2700	PP-R Tee, 1/2"Ø	pc	12.00						
11.3800	Gate Valve, 3/4"Ø	pc	1.00						
11.4410	S.S. Floor Drain 4" x 4"	set	4.00						
11.4200	Teflon Tape	roll	5.00						
11.4500	Mirror	sq.ft	6.00						
11.4600	12 Drums Stainless Steel Water Tank	unit	1.00						
11.4700	Float Valve	set	1.00						
	Sub-total								
12.0000	Sanitary Works								
12.0500	PVC Sanitary Pipe 4"Ø x 3.0m	pc	8.00						
12.1300	PVC Sanitary Elbow 1/8 x 4"Ø	pc	2.00						
12.0900	PVC Sanitary Elbow 90° x 4"Ø	pc	2.00						
12.1600	PVC Sanitary Wye 4" x 4"	pc	2.00						
12.2110	PVC Sanitary Tee 4" x 4"	pc	1.00						
12.2000	PVC Sanitary Wye Reducer 4" x 2"	pc	3.00						
12.2110	PVC Sanitary Tee 4" x 4"	pc	4.00						
12.1100	PVC Sanitary Elbow 90° x 2"Ø	pc	3.00						
12.0700	PVC Sanitary Pipe 2"Ø x 3.0m	pc	3.00						
12.1800	PVC Sanitary Wye 2" x 2"	pc	2.00						
12.2200	PVC Sanitary Tee 2" x 2"	pc	4.00						
12.2600	PVC P-Trap 4"	pc	2.00						
12.2700	PVC P-Trap 2"	pc	4.00						