PROJECT : UPGRADING OF ENVIRONMENTAL (NMR) BLDG. (CY 2019)

LOCATION : PNRI Compound, Commonwealth Avenue, Diliman, Quezon City

OWNER : Philippine Nuclear Research Institute (PNRI) SUBJECT : DETAILED COST ESTIMATE

Item No	No. ITEM/DESCRIPTION		UNIT	MATER	RIAL COST	LABO	R COST	ESTIMATED	MARK	-UPS IN PERCEN	NT	ΤΟΤΑΙ	L MARK-UP	VAT	TOTAL	TOTAL	UNIT
Item NO.	. IT LW/DESCRIPTION	GII	UNIT	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	DIRECT COST	CONT.	OCM	PROFIT	%	VALUE		INDI. COST	COST	COST
A	GENERAL REQUIREMENTS																
1	Mobilization/Demobilization	1	lot														
2	Bonds/Insurance	1	lot														
3	Temporary Facilities	1	lot														
4	As-Built plan	1	lot														
5	Project Billboard	1	lot														
	Sub-total																
В	ARCHITECTURAL AND CIVIL WORKS																
B.1	SITEWORKS																
1	Excavation of foundation	17	cu.m														
2	Filling materials and compaction	60	cu.m														
3	Backfilling and compaction	16	cu.m														
4	Gravel Bedding	4	cu.m														
B.2	CONCRETE WORKS																
1	Portland Cement	205	bags														
2	White Sand	18	cu.m														
3	3/4" Crashed gravel	24	cu.m														
B.3	REBAR WORKS																
1	16mmØ x 6.00m def.bar	125	pcs														
2	12mmØ x 6.00m def.bar		pcs														
3	10mmØ x 6.00m def.bar	200	pcs														
4	G.A 16 G.I wire	15	kgs														
B.4	FORM WORKS																
1	1/2" x 4' x 8' ordinary plywood	14	pcs														
2	Asstd. Coco lumber	400	bd.ft														
3	C.W Nail	10	kgs														
4	G.A 16 G.I wire	8	kgs														

B.5	MASONRY WORKS (Including plastering of interior	T	<u>г т</u>								· · · · · · · · · · · · · · · · · · ·
В.5											
	and exterior walls)										ļļ
1	6" CHB Ordinary'	3,500							 		
2	Portland cement		bags								
3	White sand	38	cu.m								
4	10mmØ x 6.00m def.bar	165	pcs								
5	G.A 16 G.I wire	7	kgs								
6	Red Cement (made in USA)	2	bags								
B.6	TILES WORKS										
1	(0.60m x 0.60m Synthetic granite tiles	89	pcs								
2	ABC Tile adhesive	9	bags								
3	ABC Tile grout	4	kgs								
4	Portland cement	9	bags								
5	Stainless steel tile trim	9	pcs								
B.7	CARPENTRY WORKS										
1	10mm thk gypsum board interior ceiling w/ 1" x 2" metal	72	sq.m								
	furring @0.30m O.C w/ steel hanger support										
	& carrying channel							-			
2	5.5mm thk Ficem board exterior ceiling w/ 1" x 2" metal							-			
	furring @0.30m O.C w/ steel hanger support	49	sq.m								
	& carrying channel		· ·								
3	Installation of Fascia Board										
	1" x 12" x 8"	21	pcs								
	Black Screw	200	pcs								
4	Repair of damaged Exterior ceiling of Existing NMR Bldg.		1								
	5.5mm thk Ficem board exterior ceiling w/ 1" x 2" metal	12	sq.m								
	furring @0.30m O.C w/ steel hanger support										
	& carrying channel										-
	Painting	27	sq.m					-			1
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B.8	HARDWARE, ACCESSORIES & DUCTING	1									<u> </u>
1	Yale Door lockset stainless steel	3	set								<u> </u>
2	Yale Head Bolt	2	pcs								<u> </u>
3	Yale Food Bolt	2	1								┨─────┦
-	Yale Heavy Duty Door Closer	2	pcs				<u> </u>		<u> </u>	 	├────┤
4			set								├──── ┦
5	4" Øx 10' S-1000 Neltex PVC Pipe	3	pcs								
6	4" Øx 1/4" Bend PVC Elbow	3	pcs								
7	PVC Cement	1	lit							 	ļļ
8	Steel & Guying Support	1	lot								<u> </u>
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B.9	STRUCTURAL WORKS / METAL WORKS									├──── ┦
1	2" x 2" x 3/16" x 20' Angular bar	36	pcs		 	 				 ļ]
2	1 1/2" x 1 1/2" x 3/16" x 20' Angular bar	50	pcs			 				 ļ]
3	2" x 4" x 1.5mm x 20' metal c-purlins	46	pcs		 	 				 ļ]
4	Welding rod "Fuji"	2	box		 	 				 ļ]
5	16mmØ x 6.00m plain round bar	12	pcs							
6	12mmØ x 6.00m plain round bar	10	pcs							ļ
7	16mmØ turn buckle	12	pcs			 				
8	(0.40m x 1.50m) Steel tubular ceiling ventillation w/ screen	2	set			 				
9	(0.40m x 2.50m) Steel tubular ceiling ventillation w/ screen	4	set			 				
										1
B.10	DOORS & WINDOWS									
1	(0.70m x 2.00m) Analok aluminum frame w/ 1/4" thk	4	set							
	Fixed bronze glass window (W1)									
2	(1.85m x 2.20m) Steel door, fire rated w/ foam insulation	1	set			 				
	G.A 16 plain G.I sht (D1) Epoxy painted (3 coats)					 				
3	(1.80m x 2.20m) Steel door tubular pipes (D2)	1	set							
	Epoxy painted (3 coats)					 				
4	(0.80m x 2.10m) Steel door, fire rated w/ foam insulation									
	G.A 16 G.I sht (D3) Epoxy painted (3 coats)	1	set							
5	(0.70m x 2.00m) Steel Window Grills	2	sets							
	(3/4"x3/4" Square tubular pipe) Epoxy Painted Finish									
B.11	PLUMBING WORKS									
1	3"Ø x 10' S-1000 PVC Pipe	8	pcs							
2	3"Ø PVC Clean out	2	pcs							
3	3"Ø x 2"Ø PVC wye	1	рс							
4	3"Ø PVC Elbow	2	pcs							
5	3"Ø PVC Coupling	2	pcs							
6	2"Ø x 10' S-1000 PVC Pipe	1	рс							
7	2"Ø PVC Elbow	3	pcs							
8	2"Ø PVC Clean out	1	рс							
9	PVC Cement	2	lit							
10	Stainless steel sink (+/-) 0.45m x (+/-) 0.60m x (+/-) 0.25m)	1	set							
	G.A 18 type 304									
11	Big goose type faucet "Stainless Steel" Pozzi brand	1	set							
12	Stainless steel Flexible pipe	1	рс							
13	Stainless steel angle valve	1	рс							
14	Stainless steel P-trap w/ clean out	1	рс							
15	Stainless steel sink strainer	1	рс							
16	3/4"Ø x 10' PPR Pipe	4	pcs							
17	1/2"Ø x 10" PPR Pipe	2	pcs			 				
18	Asstd. 3/4"Ø & 1/2"Ø PPR Fittings	1	lot			 				
19	3/4"Ø PPR Brass gate valve	1	рс			 				
20	1/2"Ø PPR Brass gate valve	1	рс							
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21	Teflon tape	2	pcs										
B.12	TINSMITHRY WORKS												
1	(0.40mm thk x 1.09m x 4.80m Pre-painted long span	30	pcs										
	roofing "Rib-type" Green												
2	0.40mm thk x 0.60m x 2.44m Pre-painted side flashing	8	pcs										
3	0.40mm thk x 0.60m x 2.44m Pre-painted ridge flashing	7	pcs										
4	Metal texscrew	900	pcs										
5	Silicon Sealant	5	tube										
6	Aluminum Blind rivets	1	box										
B.13	PAINTING WORKS												
1	Painting of interior gypsum board ceiling (3 coats)	72	sq.m										
	Painting of exterior gypsum board ceiling (3 coats)	49	sq.m							İ			
3	Painting of Interior and Exterior concrete walls including	335	sq.m							İ			
	column & beams												
4	Painting of structural steel trusses (2 coats)	1	lot										
	red oxide paint												
5	Surface preparation of interior & Exterior concrete walls												
	including columns and beams with skim coat												
	Skim coat powder "ABC Brand"	23	bags										
	Asstd, Sand paper	50	pcs										
6	Epoxy painting of steel tubular door and ceiling vantilation	1	lot										
	Painting of Ficem fascia board	14	sq.m										
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	Architectural & Civil Works Sub-total												
С	ELECTRICAL WORKS												
C.1	Supply and installation of Electrical Panelboard and its feederline from Uranium Extraction Facility Building to												
0.1	the Machine Shop , Engineering Services Building.												
	Density and 4004 OD 0001/00 KAIO Main OD to durated												
	Panelboard, 100A, 3P, 230V 30 KAIC, Main CB, Industrial Type with Branches Circuit Breaker: 2 sets 30A, 2P, 230V CB,												
1.1	Bolt-on Type, 5 sets 20A, 2P, 230V CB, Bolt-on Type, 4 sets	1	lot										
	15A, 3P, 230V CB, Bolt-on Type, 3 sets 15A, 2P, 230V CB, Bolt-on Type												
10		5	sets					<u> </u>					
1.2	Pullboxes pre-painted with cover (350mmx350mmx200mm)	5 18											
1.3	50 mm diameter uPVC pipe		pcs.										
1.4	50 mm diameter uPVC elbow	5	pcs.										
1.5	50 mm diameter uPVC adapter with locknut	8	pcs.										
1.6	50 mm diameter RSC Pipe	6	pcs.										
1.7	50 mm diameter RSC elbow	2	pcs.										
1.8	50 mm diameter RSC Bushing with locknut	4	pcs.										

1.9		206	_		1					<u>т т</u>
	30 mm ² THHN/THWN Cable		m							
1.10	14 mm ² THHN/THWN Cable	68	m							┟────┦
	Sub-total									
	Supply and installation of distribution circuits									<u> </u>
2.1	Supply & Installation of 2.0HP Window Type Aircon	1	unit							
2.1	5.5 mm ² THHN/THWN wire	2	rolls							
2.2	3.5 mm ² THHN/THWN wire	3	rolls							
2.3	2.0 mm ² THHN/THWN wire	1	roll							
2.4	15 mmØ uPVC pipe	70	pcs.							
2.5	15 mmØ uPVC adapter with locknut	83	pcs.							
2.6	20 mmØ uPVC pipe	7	pcs.							
2.7	20 mmø uPVC adapter with locknut	6	pcs.							
2.8	4 11/16" x 4 11/16" Square Box	3	pcs.							
2.90	4" Ø octagonal box with cover	21	pcs.							
2.10	2"x4" Utility Box	17	pcs.							
2.11	Aircon Outlet	2	pcs.							
2.12	Duplex Convenience Outlet with ground	7	pcs.							
2.13	Single Convenience Outlet with ground	4	pcs.							
2.14	Single pole switch with cover	1	pcs.							
2.15	Three Way Switch with cover	2	pcs.							
2.16	2 Gang Switch with cover	2	pc.							
2.17	Pinlight, 6"Ø with 25W LED Bulb	9	sets							
2.18	Fluorescent Fixtures, Double, 40W, Mirrorized with louver	8	sets							
2.19	Ground Rod, 20mm in diam, copper clad with clamp	1	sets							
2.20	Ceiling Exhaust Fan, 12 inch	3	sets							
2.21	Mica tube, 1" diameter	10	m							
2.22	ECB with 20A, 2P, 230V Bolton-on type circuit breaker	3	sets							
2.23	ECB with 15A, 3P, 230V 22 KAIC, Bolton-on type circuit breaker, NEMA 3	4	sets							
2.24	Emergency Light, LED Lights	4	sets						 	
	Sub-total									
	ElectricalWorks Sub-total									
	TOTAL									
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