

**RENOVATION/REHABILITATION OF 1NO FOUR (4)
CLASSROOM AT OBI-EZEAMAKA PRIMARY
SCHOOL, NSUKWA.**

BILLS OF QUANTITIES

CLIENT:

Rotary International
Asaba Metropolitan
Asaba.

DECEMBER, 2019

ELEMENT NR.1

PRELIMINARIES

A	Preliminaries for the Contractor	310,494.42
B	Preliminaries for the Client's Ministry of Education	124,197.77
C	Preliminaries for the Supervising Ministry (Housing) Education Project Unit	82,798.51

PRELIMINARIES: Carried to Summary

517,490.70

<u>ELEMENT NR. 2</u>		
<u>DEMOLITION/ALTERATION WORKS</u>		
<u>ROOF</u>		
A	Carefully remove and cart away existing dilapidated roofing sheets including all associated timber carcassing approximate area (398m ²) including knocking off gable end	Item 78,804.00
<u>WINDOWS</u>		
B	Carefully remove existing dilapidated windows including frames and other accessories and keep as directed overall size 1500mm x 1200mm high (20Nr)	Item 40,000.00
	Overall size 1200mm x 1200mm high (Nr)	Item 12,000.00
	Overall size 600mm x 600mm high (Nr)	Item 4,000.00
	Overall size 1800mm x 1200mm high (Nr)	Item 3,500.00
	Overall size 900mm x 1200mm high (Nr)	Item
<u>DOORS</u>		
C	Carefully remove existing wooden panel doors including frames and other accessories and keep as directed Overall size 900 x 2100mm (8Nr.)	Item 16,000.00
	Overall size 750 x 2100mm (Nr.)	Item
	Overall size 1800 x 2100mm (Nr.)	Item
<u>FLOOR</u>		
F	Carefully hack out existing screed floor to receive terrazzo floor paving (261m ²) Maintenance	Item 25,578.00
<u>CEILING FINISHINGS</u>		
G	Carefully remove the existing dilapidated ceiling board including all associated timber noggins and keep as directed (308m ²) Maintenance	Item 21,868.00
<u>BLACK BOARD</u>		
H	Carefully remove the existing blackboard to give room for replacement with magic marker board size 4800 x 1200mm (4Nr.)	Item 4,000.00
<u>WALLS</u>		
J	Clear down dirty walls and remove all stains and leave clean to receive CAPL project emulsion paint 612m ² .	Item 41,004.00
K	Carefully widen existing cracks to allow for wall reinforcement and remove debris from site including removal of block wall from lintel level in the building including removal of internal wall partition (Three classroom block only)	Item 30,000.00
L	Carefully remove existing steel poles to receive concrete column (m.s)	Item 20,000.00
To Collection		296,754.00

DEMOLITION/ALTERATION WORKS CONT'D	ELECTRICAL INSTALLATION	A Carefully remove and cart away existing electrical work to give room for replacement & plumbing works	Item	15,000.00
FUMUGATION WORK	B Allow for the proper fumigation of the entire building with an approved insect/reptiles and anti-termite treatment solution to keep the building free of termites/rates/reptiles	Item	15,000.00	
To Collection	<u>TO COLLECTION</u>	30,000.00		
	PAGE 2	296,754.00		
	PAGE 3	30,000.00		
<u>DEMOLITION/ALTERATION WORKS:-</u> Carried to Summary		326,754.00		

ELEMENT NR. 3

SUBSTRUCTURE

SCOPE OF WORK

The contractor is expected to remove all the existing hollow steel pipe and replaced with reinforced concrete column size 150mm x 150mm with 675mm x 675mm column base including excavation, provisions & replacement of concrete in base and column including all necessary reinforcement and form work. Also the contractor is to excavate over pavement to reduce level to receive 75mm thick concrete floor

EXCAVATION

A	Excavate pit for column bases size 675 x 675 x 675mm depth starting from existing ground level (48Nr.)	7	m ³	750	5,250.00
B	Excavate for working space around colum bases depth 900mm deep and back fill with excavated materials	14	m ³	850	11,900.00
C	Excavate to reduce level 0.75mm thick for sub base	20	m ³	5,000	100,000.00
D	Excavate trench for foundation		m ³		-

FILLING

E	Supply and fill inside of structure to make up level with imported sharp sand, deposited and compacted in 150mm thick layer (150mm high)		m ³	3,500	-
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OTHER CONCRETE WORK

F	50mm thick plain insitu concrete (1:10) blinding to columns	9	m ²	1,950	17,550.00
G	75mm thick plain insitu concrete	261	m ³	2,250	587,250.00
H	Ditto in foundation		m ³		-

Vibrated reinforced concrete (1:2:4-19mm) aggregate filling into form work and packed around reinforcement (both measured separately) in

J	Column bases not exceeding 300mm thick (19Nr.)	2	m ³	35,000	70,000.00
K	Sub-column base (19Nr.) Starter	1	m ³	35,000	35,000.00
L	In steps	2	m ³	30,000	60,000.00

To Collection

886,950.00

ELEMENT NR. 4

FRAME

SCOPE OF WORK

The contractor is expected to construct beams round the building and the corridor (primary and secondary beams size 225mm x 300mm)

IN-SITU CONCRETE

The following in concrete framed structure comprising an approximate total volume of ...m3 insitu concrete

Vibrated reinforced insitu concrete (1:2:4-19mm) developing 21N.sq.mm work strenght in 28 days

A	Beams sectional area 0.1 - 0.25m ² Including roof beam	7	m ³	35,000	245,000.00
B	Column (19Nr.) sectional area 0.3 - 0.10m ³	3	m ³	35,000	105,000.00
C	Lintel (Nr.) sectional area 0.3 - 0.10m ³		m ³	35,000	-

REINFORCEMENT

High yield steel bar reinforcement to B.S 4449 cut, bent and fix in position to include spacer and tying wire

D	Various sizes	1400	Kg	450	630,000.00
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FORM WORK

E	Vertical sides of column	32	m ²	1,250	40,000.00
F	Sides and soffits of beam	42	m ²	1,250	52,500.00
G	Sides and soffits of lintel		m ²	1,250	-

FRAMES:- Carried to Summary

1,072,500.00

<u>ELEMENT NR. 7</u>					
<u>ROOF COVERING</u>					
<u>0.55mm Long span oven baked aluminium roofing sheet fixed to roof membrane with galvanised drive screws and felt washers with one and half corrugation side laps</u>					
A	Roof coverings General: to 30 degree falls	398	m ³	3,750	1,492,500.00
B	Ditto ridge piece 600mm girth	44	m	2,250	99,000.00
C	Channel sharpened fascial/barge board cladding (flashings) 325mm girth including gutters	83	m	1,220	101,260.00
D	Ditto in gutter				
<u>ROOF COVERING:-</u> Carried to Summary					1,692,760.00

ELEMENT NR. 8

SHEATING/DRY PARTIONING

Supply and fix 15mm thick Eternite asbestos ceiling board nailed to noggins including associated battern works

A	Ceiling 150mm-500mm deep internally and externally	261	m ²	2,500	652,500.00
B	Ditto; Eaves Externally	47	m ²	2,500	117,500.00

SHEATING/DRY PARTITIONING:- Carried to Summary

770,000.00

<u>ELEMENT NR. 9</u>					
<u>WINDOWS/DOORS</u>					
<u>WINDOWS</u>					
<u>CASEMENT</u>					
<u>Supply and fix aluminium profile window glazed with 15mm thick perspex material complete with all necessary accessories and fix to reasonable satisfaction of the Architect</u>					
A	Ditto size 1800 x 1200mm high		Nr.	74,250	-
B	Ditto size 1500 x 1200mm high		15	49,500	-
C	Ditto size 1200 x 1200mm high	20	Nr.	39,600	792,000.00
D	Ditto size 600 x 600mm high		Nr.	9,900	-
E	Ditto size 900 x 1000mm high		Nr.	24,750	-
<u>DOORS</u>					
<u>Supply and fix purpose made locally fabricated door constructed with metal checker plate complete with frames and high quality mortice lockset fixed according to manufacturers details</u>					
F	Overall size 900 x 2100mm high single leaf	8	Nr.	40,000	320,000.00
G	Overall size 750 x 2100mm high ditto		Nr.	35,000	-
H	Overall size 1500 x 2100mm high ditto		Nr.	80,000	-
J	Allow for making good disturbed wall around doors and windows reveals		Item		37,200.00
<u>WINDOWS/DOORS:-</u> Carried to Summary					
					1,149,200.00

<u>ELEMENT NR. 10</u>					
<u>FITTINGS AND FIXTURES</u>					
A	Supply and fix standard marker board complete with frames and marker overall size 4800 x 1200mm high	4	Nr.	60,000	240,000.00
<u>BURGLARY PROOFING</u>					
<u>Supply and fix with lugs to block or concrete surrounds 16mm twisted steel bars burglar proofing constructed to suit window opening and arranged in a pattern to be issue by the Architect in the following size</u>					
B	1800mm x 1200mm high		Nr.	19,440	-
C	1500mm x 1200mm high ditto	20	Nr.	16,200	324,000.00
D	1200mm x 1200mm high ditto		Nr.	9,720	-
E	600mm x 600mm high ditto		Nr.	3,240	-
F	Ditto size 900 x 1000mm high		Nr.	8,100	-
G	Picture Rail in the classroom	57	Nr.	1,750	99,750.00
H	Bulleting Board fixed to the walls	4	Nr.	9,500	38,000.00
<u>FITTINGS AND FIXTURES:-</u> Carried to Summary					701,750.00

ELEMENT NR. 11

ELECTRICAL INSTALLATION

A Allow a provisional sum of **N475,000.00** for the complete execution of electrical works to include cabling, pipe works, fittings and any other associated works as directed and connection to the mains, ceiling fans and air conditioners as directed

Sum

475,000.00

ELECTRICAL INSTALLATION:- Carried to Summary

475,000.00

<u>ELEMENT NR. 12</u>					
<u>SURFACE FINISHINGS</u>					
<u>FLOOR/WALL</u>					
<u>Insitu Finishings</u>					
<u>Cement and sand (1:3) rendering trowelled smooth on blockwall 15mm thick</u>					
A	Blockwall 15mm thick	148	m ²	600	88,800.00
B	Ditto on vertical sides of column	23	m ²	600	13,800.00
C	Ditto on beams sides and soffits	27	m ²	600	16,200.00
<u>BEDS AND BACKINGS</u>					
D	42mm screeded backings on screeded bed level on concrete to receive terrazzo floor paving	261	m ²	950	247,950.00
E	25mm screeded bed laid level on concrete to receive floor tiles		m ²	600	-
F	12mm screeded backing on walls to receive wall tiles (3 meter height)		m ²	600	-
G	12mm screeded backing on walls to receive burnt bricks tiles		m ²		-
<u>TILES, SLAB AND BLOCK FINISHINGS</u>					
H	Allow a provisional sum of N600,000.00 for the mainatenance of the existing terrazzo floor to include cleaning and washing and repairs to areas where internal partititions where removed.	261	m ²	3,500	913,500.00
J	25mm thick terrazzo floor paving laid level on cement and sand (1:3) screeded bed (measured separately) laid in bays including all necessary ebonite dividing strips cutting washing & polishing		m ²		-
K	250 x 250 x 6mm thick floor tiles fixed on screeding backing and pointed with neat cement washed with dilute acid externally only		m ²	2,500	-
To Collection					1,280,250.00

SURFACE FINISHINGS CONT'D

PAINTING

Painting, polishing and similar works

Prepare and apply one mist coat and two coats of 'Dulux' textured paint on the following

A	Rendered walls	612	m ²	500	306,000.00
B	Isolated column	23	m ²	500	11,500.00
C	Sides and soffits of beam	27	m ²	500	13,500.00
D	Soffits of ceiling sheets	308	m ²	500	154,000.00
E	Reveal not exceeding 300mm wide	149	m	250	37,250.00

PROTECTION

F Allow for protecting all works in this section until completion

Item

To Collection

522,250.00

COLLECTION

S/F PAGE 14

1,280,250.00

S/F PAGE 15

522,250.00

SURFACE FINISHINGS:- Carried to Summary

1,802,500.00

<u>ELEMENTAL SUMMARY</u>		
A	ELEMENT NR. 1 - PRELIMINARIES	517,490.70
B	ELEMENT NR. 2 - DEMOLITION/ALTERATION WORK	326,754.00
C	ELEMENT NR. 3 - SUBSTRUCTURE	1,017,450.00
D	ELEMENT NR. 4- FRAME	1,072,500.00
E	ELEMENT NR. 5- BLOCK WORK	265,600.00
F	ELEMENT NR. 6- CARCASSING OF TIMBER	1,076,300.00
G	ELEMENT NR. 7 - ROOF COVERING	1,692,760.00
H	ELEMENT NR. 8 - SHEATING/PARTITIONING	770,000.00
J	ELEMENT NR. 9 - WINDOWS/DOORS	1,149,200.00
K	ELEMENT NR. 10 - FITTINGS & FIXTURES	701,750.00
L	ELEMENT NR. 11 - ELECTRICAL WORKS	475,000.00
M	ELEMENT NR. 13 - SURFACE FINISHINGS	1,802,500.00
	SUBTOTAL	10,867,304.70
	ADD FOR CONTINGENCIES	258,745.35
	SUBTOTAL	11,126,050.05
	ADD FOR VAT	556,301.92
	<u>1NO FOUR CLASSROOM BLOCK WITH OFFICES</u>	11,682,351.97
	<u>Carried to Summary</u>	