

PROPOSED RESIEDENTIAL DEVELOPMENT

AT

MAITAMA, ABUJA

BILL OF QUANTITIES FOR BLOCK 4NR TERRACE APARTMENT

JUNE, 2015

Prepared by:



el-Rufai & Partners Ltd.
Chartered Quantity Surveyor & Management Consultants



ABUJA:

No 24 Aminu Kano Crescent
Wing A Park 'n' Shop Complex,
Wuse II, P. O. Box 10767 Garki
Tel: 09 2916324, 09 2916323

LAGOS:

54A Abosede Kuboye Crescent
Off Imam Dauda Street, via Eric Moore Rd,
G.P.O Box 1525, Surulere, Lagos.
Tel: 01 470 5001.

BILL NR 1

PRELIMINARIES AND GENERAL CLAUSES

BILL NR1:PRELIMINARIES AND GENERAL CLAUSES

REF	DESCRIPTION	TOTAL
A12-110-120	The site/Existing Buildings	
A20-120.5	Levels and Setting out	25 000.00
A20-120.19	Insurance against injury to persons and property	500 000.00
A32-162	Temporary Services	
A32-163	First aid box	50 000.00
A32-211	Master Program/Progress	50 000.00
A32-280	Progress photographs	35 000.00
A33-190	Water for the Works (other than mains)	500 000.00
A33-510	Supervision	100 000.00
A33-560	Timing of Tests and Inspections	50 000.00
A34-110	Security	500 000.00
A36-320	Temporary fence(s)	200 000.00
A36-360	Name Board	20 000.00
A36-420	Lighting and power	1 000 000.00
A36-430	Water for the Works	800 000.00
A36-520	Surveying Equipment	50 000.00
A36-530	Protective Clothing	10 000.00
A41-130	Cabins (for use of the Contractor's staff)	100 000.00
A42-110-140	Lighting (for Contractor's use on the project)	20 000.00
A42-190	Cleaning down the whole premises	50 000.00
A42-200	Drying out of Buildings	50 000.00
A44-110-250	Temporary Works-Support Scaffolding	200 000.00
A54-510	Insurance against damage to property	200 000.00
A54-540	Test and Samples and inspection of materials	
A54-560	Extra Cost of Authorized Overtime	
A54-570	Extra Cost of Substructursl Work	
A54-580	Provision of Spares	
A55-210	Labour (Net cost of Daywork Labour)	
A55-220	Materials ((Net cost of daywork materials)	
A55-410	Plant (Net cost of daywork plant)	
TOTAL PRELIMS		4 510 000.00

**BILL NR 2
MAIN BUILDING**

D GROUNDWORK (ALL PROVISIONAL)

D20 EXCAVATING AND FILLING

EXCAVATING: NORMAL GROUND

Topsoil for preservation

A	150 average depth	m2	636	110	69 960.00
---	-------------------	----	-----	-----	-----------

Pits excavation

B	Pit excavation	m3	118	650	76 700.00
---	----------------	----	-----	-----	-----------

Trench Excavation width exceeding 0.30m

C	maximum depth not exceeding 2.00m; commencing surface 150mm below existing ground level	m3	136	650	88 400.00
---	---	----	-----	-----	-----------

Disposal

D	Excavated material; off site; transported 750m from excavation and deposited in spoil heaps	m3	112	550	61 600.00
---	---	----	-----	-----	-----------

Filling to excavations

E	Average thickness exceeding 0.25m; arising from the excavations; Compacted around foundations	m3	142	450	63 900.00
---	---	----	-----	-----	-----------

Hardcore filling;

Filling to make up levels

F	Approved laterite filling; exceeding 300mm thick; obtained off site; depositing in layers 150mm maximum thickness; compacting to 100% BS requirements.	m3	69	1 450	100 050.00
---	--	----	----	-------	------------

G	Approved hardcore filling; not exceeding 250mm thick; broken stones obtained off site; depositing in layers 150mm maximum thickness; compacting to 100% BS	m3	135	2 250	303 750.00
---	--	----	-----	-------	------------

Surface Treatment

H	Applying to excavated surfaces	m2	915	180	164 700.00
---	--------------------------------	----	-----	-----	------------

GROUNDWORKS
Carried to Summary

929 060.00

E IN SITU CONCRETE/LARGE PRECAST CONCRETE

E10 INSITU CONCRETE

PLAIN: GRADE 15

Beds

A	not exceeding 150 thick; poured on or against earth or sand blinding; as blinding	m3	12	15 000	180 000.00
---	---	----	----	--------	------------

PLAIN: GRADE 20

Foundation

B	Foundation	m3	31	17 500	542 500.00
---	------------	----	----	--------	------------

REINFORCED: GRADE 25

C	Column bases	m3	32	21 000	672 000.00
---	--------------	----	----	--------	------------

Columns

D	Isolated columns	m3	33	21 000	693 000.00
---	------------------	----	----	--------	------------

Beds

E	150-450mm thick	m3	85	21 000	1 785 000.00
---	-----------------	----	----	--------	--------------

Slabs; 150-450mm thick

F	Suspended slab	m3	84	21 000	1 764 000.00
---	----------------	----	----	--------	--------------

G	Wordrobe slab; not exceeding 150mm	m3	2	21 000	42 000.00
---	------------------------------------	----	---	--------	-----------

Beam; 150-450mm thick

H	Attached	m3	24	21 000	504 000.00
---	----------	----	----	--------	------------

J	Lintel	m3	13	21 000	273 000.00
---	--------	----	----	--------	------------

K	Roof	m3	9	21 000	189 000.00
---	------	----	---	--------	------------

Staircase

L	Stairs and landing	m3	6	21 000	126 000.00
---	--------------------	----	---	--------	------------

E20 FORMWORK FOR IN SITU CONCRETE

FORMWORK: SAWN TO

Sides of Column bases

M	Plain vertical; height 250-500mm high	m	351	330	115 830.00
---	---------------------------------------	---	-----	-----	------------

Edges of bed

N	Plain vertical; height not exceeding 250mm	m	183	330	60 390.00
---	--	---	-----	-----	-----------

Columns; Isolated; Plain

P	Sides of columns; Rectangular section	m2	517	1 100	568 700.00
---	---------------------------------------	----	-----	-------	------------

To Collection

7 515 420.00

Soffit of slab

A	Soffit of suspended slab	m2	547	1 100	601 700.00
B	ditto; edges	m	162	330	53 460.00
C	Soffit of wardrobe slab	m2	13	1 100	14 300.00
D	ditto; edges	m	23	330	7 590.00

Sides and soffit of beams; Plain rectangular section

E	Attached beams	m2	287	1 100	315 700.00
F	Lintel	m2	160	1 100	176 000.00
G	Roof beams	m2	116	1 100	127 600.00

Staircase

H	Slab thickness not exceeding 200mm; horizontal; height to soffit not exceeding 3.00m (landing)	m2	7	1 100	7 700.00
J	Edges of landing; not exceeding 250mm high	m	8	330	2 640.00
K	Sloping soffit of staircase slab thickness not exceeding 200mm; horizontal; height to soffit not exceeding 3.00m	m2	22	1 100	24 200.00
L	Sides of strings to stairs and steps	m2	7	1 100	7 700.00
M	Width of stair flight 900mm, waist 150mm thick, risers 150mm high	m	72	330	23 760.00

E30 REINFORCEMENT FOR INSITU CONCRETE

Bars; deformed high yield; straight lengths; bent

REINFORCEMENT: TO BS 4449 (Provisional)

COLUMN BASES

N	16mm nominal size; High yield steel bars	t	0.86	180 000	154 800.00
P	12mm nominal size; High yield steel bars	t	0.96	180 000	172 800.00

COLUMNS

Q	20mm nominal size; High yield steel bars	t	1.97	180 000	354 600.00
R	16mm nominal size; High yield steel bars	t	2.04	180 000	367 200.00
S	12mm nominal size; High yield steel bars	t	0.87	180 000	156 600.00
T	10mm nominal size; Mild yield steel bars	t	1.53	180 000	275 400.00

SUSPENDED SLAB

U	12mm nominal size; High yield steel bars	t	4.54	180 000	817 200.00
V	10mm nominal size; High yield steel bars	t	1.21	180 000	217 800.00

To Collection

3 878 750.00

WARDROBE SLAB

A	10mm nominal size; High yield steel bars	t	0.24	180 000	43 200.00
---	--	---	------	---------	-----------

FLOOR BEAMS

B	25mm nominal size; High yield steel bars	t	0.34	180 000	61 200.00
C	20mm nominal size; High yield steel bars	t	0.61	180 000	109 800.00
D	16mm nominal size; High yield steel bars	t	1.17	180 000	210 600.00
E	12mm nominal size; High yield steel bars	t	0.36	180 000	64 800.00
F	10mm nominal size; Mild yield steel bars	t	0.99	180 000	178 200.00

LINTEL

G	12mm nominal size; High yield steel bars	t	0.91	180 000	163 800.00
H	10mm nominal size; Mild yield steel bars	t	0.52	180 000	93 600.00

ROOF BEAMS

J	12mm nominal size; High yield steel bars	t	0.70	180 000	126 000.00
K	10mm nominal size; Mild yield steel bars	t	0.44	180 000	79 200.00

STAIRCASES AND LANDING

L	12mm nominal size; High yield steel bars	t	0.29	180 000	52 200.00
M	10mm nominal size; Mild yield steel bars	t	0.12	180 000	21 600.00

FABRIC REINFORCEMENT: TO BS 4483

BEDS

Mesh fabric with 250mm end laps and 150mm side laps

N	Fabric reference A124	m2	569	350	199 150.00
---	-----------------------	----	-----	-----	------------

To Collection

1 403 350.00

COLLECTION

Page 2/2 7 515 420.00

Page 2/3 3 878 750.00

Page 2/4 1 403 350.00

IN SITU CONCRETE/LARGE PRECAST CONCRETE

Carried to Summary

12 797 520.00

F MASONRY

F10 BRICK/BLOCK WALLING

BLOCKWORK; 225 x 450 NOMINAL; LAID STRETCHER BOND; CEMENT MORTAR (1:6)

Walls

A	230mm thick; filled solid with weak concrete	m2	287	1 950	559 650.00
B	230mm thick hollow blocks	m2	1503	1 750	2 630 250.00
C	150mm thick hollow blocks	m2	33	1 450	47 850.00
D	230mm thick; Parapet wall	m2	69	1 950	134 550.00
E	100 thick hollow blocks	m2	32	1 250	40 000.00

MASONRY
Carried to Summary

3 412 300.00

G STRUCTURAL/CARCASSING METAL/TIMBER

G20 CARPENTRY/TIMBER FRAMING /FIRST FIXING

Sawn hardwood, building quality, treated with anti-termite treatment;

A	100x150mm hardwood timber (wall plate)	m	111	320	35 520.00
B	50x150mm hardwood timber (tie beams)	m	704	280	197 120.00
C	50x150mm hardwood timber (Rafters)	m	565	280	158 200.00
D	50x100mm hardwood timber (struts)	m	592	280	165 760.00
E	50x75mm hardwood timber (purlins)	m	994	220	218 680.00
F	50x50mm hardwood timber (noggin)	m	1830	120	219 600.00
G	25x300mm hardwood timber (fascia board)	m	120	480	57 600.00

STRUCTURAL/CARCASSING METAL/TIMBER

Carried to Summary

1 052 480.00

H CLADDING/COVERING

H31 METAL PROFILED/FLAT SHEET

"Danpalon or equal approved", 12mm thick Polycarbonate roof covering at entrance; colour to Architect specification; fix complete on 50mm diameter C.H.S steel pipes welded to the specification to the engineer; with, hooks, drive screws, felt and washers.

A	over 300mm wide	m2	22	17 000	374 000.00
---	-----------------	----	----	--------	------------

H72 ALUMINIUM SHEET COVERINGS/FLASHINGS

Corrugated longspan aluminium roofing sheets, 0.55mm thick; colour to Architect instruction; single lap covering; 150mm minimum end laps; fixing complete with, hooks, drive screws, felt and washers.

B	Roof coverings; over 300mm wide; fixed to hardwood purlins (measured separately)	m2	551	2 980	1 641 980.00
C	Ridge; 600mm girth; matching profile to roof covering	m	34	1 788	60 792.00
D	Hipped plate; 600mm girth; matching profile to roof covering	m	35	1 788	62 580.00
E	Valley plate; 600mm girth; matching profile to roof covering	m	27	1 788	48 276.00
F	Eaves sheet; 300mm girth; matching profile to roof covering	m	118	890	105 020.00

CLADDING/COVERING

Carried to Summary

2 292 648.00

J WATERPROOFING

**J40 FLEXIBLE SHEET TANKING/DAMP PROOFING
MEMBRANES**

Tanking and damp proofing

A	1200 gauge polythene sheet single layer with 150mm side and end laps; laid; horizontally over 300mm wide	m2	569	350	199 150.00
---	--	----	-----	-----	------------

WATERPROOFING
Carried to Summary

199 150.00

K LININGS/SHEATHING/DRY PARTITIONING

K10 PLASTERED BOARD DRY LINING

Plaster of Paris (POP) ceiling boards;with and including cornices and accessories in accordance to specification

Ceilings;

A	Suspension 150 - 500mm deep Internally as specified (Internally)	m2	1045	4 500	4 702 500.00
---	--	----	------	-------	--------------

K13 RIGID SHEET LINING

Particle board ceiling; 2400x1200mm wide fix on hardwood noggins (measured seperately) patterned in

Ceilings;

B	externally; over 300mm wide	m2	55	1 200	66 000.00
---	-----------------------------	----	----	-------	-----------

LININGS/SHEATHING/DRY PARTITIONING

Carried to Summary

4 768 500.00

L WINDOWS/DOORS/STAIRS

L11 METAL WINDOWS/ROOFLIGHTS/SCREENS/LOUVRES

Powder coated aluminium windows; glazed with 5mm thick reflective glass; neoprene gasket including cutting and pinning of building in lugs to blockwork or concretework and pointing all round both with approved mastic

Sliding windows

A	Overall size 2400x1500mm high	nr	4	86 400	345 600.00
B	Overall size 1800x1500mm high	nr	4	64 800	259 200.00
C	Overall size 1500x1500mm high	nr	24	54 000	1 296 000.00
D	Overall size 1200x1200mm high	nr	3	34 560	103 680.00
E	Overall size 900x600mm high	nr	16	12 960	207 360.00

L20 TIMBER DOORS/SHUTTERS/HATCHES

High standard flush doors, BS 459 part 2; including frame and architrave and lipping edges with hardwood and blocking for ironmongery

F	Overall size 900x2100mm high	nr	24	80 000	1 920 000.00
G	Overall size 750x2100mm high	nr	24	80 000	1 920 000.00

L21 METAL DOORS/SHUTTERS/HATCHES

Solid cored HPI Security steel door complete with ironmongery and other accessories deemed for a complete installation in accordance with Architect's specifications

Swing doors

H	Overall size 1200x2100mm high	nr	8	140 000	1 120 000.00
J	Overall size 900x2100mm high	nr	8	120 000	960 000.00

Powder coated bronzed anodised aluminium doors; glazed with 5mm thick reflective glass; neoprene gasket; including cutting and pinning of building in lugs to blockwork or concretework and pointing all round both with approved mastic

Sliding doors

k	Overall size 3000x2100mm high	nr	8	126 000	1 008 000.00
---	-------------------------------	----	---	---------	--------------

Purposed made steel door complete with all necessary accessories in accordance with Architect detail specification

L	Overall size 750x2100mm high	nr	8	55 000	440 000.00
---	------------------------------	----	---	--------	------------

To Collection

9 579 840.00

Steel burglary bars

Mild steel; 25x25mm hollow square vertical and horizontal bars, spaced at 150mm centres; in accordance with Architect's later details all butt welded together; plugged and screwed to concretework or blockwork; complete with all necessary accessories

A	Overall size 2400x1500mm high	nr	4	12 600	50 400.00
B	Overall size 1800x1500mm high	nr	4	9 450	37 800.00
C	Overall size 1500x1500mm high	nr	24	5 040	120 960.00
D	Overall size 1200x1200mm high	nr	3	4 500	13 500.00
E	Overall size 900x600mm high	nr	16	1 890	30 240.00

Aluminium horizontal louvres complete matching Aluminium angle frame with insect screen net and all necessary fittings and accessories ; including lugging, pinning and pointing in lugs to blockwork or concretework and pointing all round both with approved mastic:

Aluminium Louvres

F	Overall size 450 x 6380mm high	m2	35	8 500	297 500.00
---	--------------------------------	----	----	-------	------------

L31 METAL STAIRS / WALKWAYS / BALUSTRADES

G	Allow a provisional sum for stainless steel C.H.S balustrades at staircase area or approved equal to the later Architects' specification	m	24	32 000	768 000.00
H	Allow a provisional sum for stainless steel C.H.S balustrades at lobby and balcony areas or approved equal to the later Architects' specification	m	26	25 000	650 000.00

Collection **1 968 400.00**

COLLECTION

Page 2/10 9 579 840.00

Page 2/11 1 968 400.00

WINDOWS/DOORS/STAIRS

Carried to Summary **11 548 240.00**

M SURFACE FINISHES

**M10 SAND CEMENT /CONCRETE/ GRANOLITHIC
SCREEDS /FLOORING**

CEMENT-SAND (1:3) BEDS AND BACKINGS; TO
RECEIVE SUBSEQUENT FINISH

Walls; internally

A	Backing; over 300mm wide; 12mm thick to receive ceramic wall tiles	m2	400	350	140 000.00
B	ditto; but not exceeding 300mm wide	m	191	105	20 055.00

Floors

C	Level and to falls only not exceeding 15 degrees from horizontal; 42 thick average; screeded bed; to receive vitrified ceramic floor tiles	m2	66	650	42 900.00
D	Level and to falls only not exceeding 15 degrees from horizontal; 42mm thick average, screeded bed; to receive marble floor tiles	m2	824	900	741 600.00
E	12mm thick average; screeded backing to receive marble ceramic floor tiles skirtings not exceeding 300mm wide	m	968	300	290 400.00

Treads

F	42 thick average; screeded bed; to receive marble floor tiles not exceeding 300m wide	m	65	300	19 500.00
---	---	---	----	-----	-----------

Risers

G	12 thick average; screeded backing; to receive marble floor tiles; 150mm high	m	72	150	10 800.00
---	---	---	----	-----	-----------

**M20 PLASTERED/RENDERED/ ROUGHCAST
COATINGS**

CEMENT-SAND (1:3); PLAIN RENDERING; FINISHING
TROWELLED SMOOTH

Walls

H	over 300 wide; internal	m2	2132	350	746 200.00
J	ditto; but not exceeding 300mm wide	m	781	105	82 005.00
K	over 300 wide; external	m2	694	350	242 900.00
L	ditto; but not exceeding 300mm wide	m	260	105	27 300.00

Soffit of slabs;

M	over 300mm wide	m2	487	350	170 450.00
N	Soffit of Landing	m2	7	350	2 450.00
P	Sloping Soffit of staircase	m2	22	350	7 700.00
Q	Sloping edge of staircase; horizontal not exceeding 3.00m high	m2	7	350	2 450.00

To Collection

2 546 710.00

M40 STONE/CONCRETE/QUARRY/CERAMIC TILING/MOSAIC

High Quality GLAZED CERAMIC WALL tiling; 150x150x5.5mm; on cement and screeded backing (Measured Separately); Straight butt joints; flush pointing

Walls

A	Plain; over 300 wide; internal	m2	400	2 750	1 100 000.00
B	Plain: note exceeding 300mm wide; internal	m	191	1250	238 750.00

High quality VITRIFIED CERAMIC FLOOR tiling; 250X250X8mm; On cement and sand screeded bed; butt joints; flush pointing with white cement

Floors; internally

C	Level and to falls only not exceeding 15 degrees from horizontal; Plain;	m2	66	3 200	211 200.00
---	--	----	----	-------	------------

High quality MARBLE FLOOR tiling; 250X250X8mm; On cement and sand screeded bed; butt joints; flush pointing with white cement

Floors

D	Level and to falls only not exceeding 15 degrees from horizontal; Plain;	m2	824	4 500	3 708 000.00
E	Skirting not exceeding 100mm high	m	968	675	653 400.00

Treads

F	300mm wide	m	65	1 350	87 750.00
---	------------	---	----	-------	-----------

Risers

G	150mm high	m	72	1 250	90 000.00
---	------------	---	----	-------	-----------

To Collection

6 089 100.00

M 60 PAINTING /CLEAR FINISHING

Painting Render; Prepare and Apply one prime coat and two finishing coats of SUPERIOR EMULSION paint: Berger, CAPL, Meyer or other equally approved

Walls; Internally

A	Walls; over 300mm wide	m2	1732	400	692 800.00
B	Ditto; surfaces not exceeding 300mm	m	590	120	70 800.00

Soffit of slabs

C	over 300mm wide; horizontal; height to soffit not exceeding 3.00m	m2	487	400	194 800.00
D	Soffit of landing; horizontal; height to soffit not exceeding 3.00m	m2	7	400	2 800.00
E	Sloping soffit of staircase; horizontal; height to soffit not exceeding 3.00m	m2	22	400	8 800.00
F	Sloping edge of staircase; horizontal; height to soffit not exceeding 3.00m	m2	7	400	2 800.00

523

Painting Render ; Apply one prime coat and and finish with two full coats of TEXTURED or other equally approved

Walls; externally

G	Walls; over 300mm wide	m2	753	400	301 200.00
H	Ditto; surfaces not exceeding 300mm	m	260	285	74 100.00

Prepare and Apply one prime coat and and finish with two full coats of GLOSS PAINTS or other equally approved

General surfaces

J	Wrot hardwood not exceeding 300mm girth	m	118	144	16 992.00
K	General metal surfaces	m2	174	480	83 520.00

To Collection

1 448 612.00

COLLECTION

Page 2/12	2 546 710.00
Page 2/13	6 089 100.00
Page 2/14	1 448 612.00

M SURFACE FINISHES:

Carried to Summary

10 084 422.00

N FURNITURE AND EQUIPMENT

N10 GENERAL FIXTURES / FURNISHING / EQUIPMENT

A	"Maple" or other approved equal; Base Cabinet overall size 6270x820x550mm high complete with matching screws and all necessary accessories	nr	4	282 150	1 128 600.00
B	"Maple" or other approved equal; Drawer unit overall size 450x820x550mm high complete with matching screws and all necessary accessories	nr	4	80 000	320 000.00
C	"Maple" or other approved equal; Column Unit overall size 600x2160x550mm high complete with matching screws and all necessary accessories	nr	4	84 000	336 000.00
D	"Granite top" or other approved equal; overall size 6270x600x20mm high complete with matching screws and all necessary accessories	nr	4	188 100	752 400.00
E	"Maple" or other approved equal; Upper Cabinet overall size 5270x680x32mm high complete with matching screws and all necessary accessories	nr	4	237 150	948 600.00
F	"Maple" or other approved equal; Store Shelf overall size 3330x2100mm high complete with matching screws and all necessary accessories	nr	4	314 685	1 258 740.00
G	"Cherry" or other approved equal; Guest Wardrobe overall size 1500x2100mm high complete with drawers units and mirror fix with matching screws and all necessary accessories	nr	4	171 750	687 000.00
H	"Cherry" or other approved equal; Master Wardrobe overall size 2200x2100mm high complete with drawer units and mirror fix with matching screws and all necessary accessories	nr	4	237 900	951 600.00
J	"Cherry" or other approved equal; Bedroom Wardrobe overall size 2500x2100mm high complete with a drawer units and mirror fix with matching screws and all necessary accessories	nr	8	266 250	2 130 000.00
K	"Cherry" or other approved equal; Glass cover Shelf overall size 1270x2100mm high complete with matching screws and all necessary accessories	nr	4	146 685	586 740.00
L	"Cherry" or other approved equal; Open Shelf overall size 750x2100mm high complete with matching screws and all necessary accessories	nr	8	63 000	504 000.00

N FURNITURE/EQUIPMENT

Carried to Summary

9 603 680.00

P BUILDING FABRIC SUNDRIES

P21 IRONMONGERY

A	"UNION" or other approved equal; double cylinder upright mortise lock; complete with pair of stainless steel lever handle furniture; fixed to hardwood or metal; complete with matching screws and all necessary accessories	nr	48	4 500	216 000.00
B	100mm pair of brass hinges	nr	48	750	36 000.00

BUILDING FABRIC SUNDRIES
Carried to Summary

252 000.00

SUMMARY

WORK PACKAGE	AMOUNT
D GROUND WORK	929 060.00
E INSITU CONCRETE/LARGE PRECAST CONCRETE	12 797 520.00
F MASONRY	3 412 300.00
G STRUCTURAL/CARCASSING METAL/TIMBER	1 052 480.00
H CLADDING/COVERING	2 292 648.00
J WATERPROOFING	199 150.00
K LININGS/SHEETING/DRY PARTITIONING	4 768 500.00
L WINDOWS/DOORS/STAIRS	11 548 240.00
M SURFACE FINISHES	10 084 422.00
N FURNITURE/EQUIPMENT	9 603 680.00
P BUILDING FABRIC SUNDRIES	252 000.00
BUILDER'S WORK	
Carried to General Summary	N 56 940 000.00

MECHANICAL INSTALLATIONS

N13 SANITARY APPLIANCES/FITTINGS

Sanitary appliances/fittings; fittings equipment and appliances associated with services; supply, assemble and fix in positions indicating in drawings; including jointing to galvanized mild steel water supply and uPVC discharge pipes as necessary;

A	Water closet low level suite, Twyford 'P'-trap or other approved equal; flush down type pedestal and double plastic ring seats flushing cistern; complete with all fittings and accessories or equal approved.	nr	20	18 500	370 000.00
B	Wash hand basin; wall mounted; white glazed fireclay; 510 x 410mm; fixed on and including pair of galvanized mild steel cantilever brackets; complete with all fittings and accessories equal approved	nr	20	7 500	150 000.00
C	Coloured enamelled cast iron bath tub; size 1676 x 711mm or equal approved	nr	16	28 000	448 000.00
D	Kitchen sink; double drainer; double bowl; stainless steel; 1800 x 700mm; fixed to kitchen cabinet unit (measured separately); complete with all fittings and accessories as per Engineer's specification	nr	4	9 500	38 000.00
E	Floor drain; stainless steel; mounted flush with floor finish; with galvanized wire strainer and 50mm low level S-trap	nr	24	950	22 800.00
F	Toilet roll holder; stainless steel with a plastic thief proof holder fixed to wall.	nr	20	1 200	24 000.00
G	Towel rail; chrome plated steel rail and holder, screwed to wall with and including drive screws	nr	20	1 800	36 000.00
H	Stainless steel soap dish fixed to wall	nr	16	1 200	19 200.00
J	Mirror; 4mm silvered float glass; 460 x 610mm with arressed edges and mounted on wall.	nr	20	4 500	90 000.00

N13 SANITARY APPLIANCES/FITTINGS

Carried to Summary

1 198 000.00

R11 FOUL DRAINAGE ABOVE GROUND

Pipes; straight; uPVC; push-fit jointed; in ducts, chases, floor screeds, and trenches; as per Engineer's specification; clause 405

A.	100mm; soil stack; in ducts; fixed to wall with and including galvanised mild steel adjustable brackets at 1200mm centres	m	43	650	27 950.00
B	100mm; discharge pipe; in walls and floors	m	22	650	14 300.00
C	38mm; discharge; ditto	m	37	320	11 840.00
D	32mm; discharge; ditto	m	38	270	10 260.00
Extra over pipework; uPVC pipe; 100mm					
E	90 degrees bend; 100 x 100mm	nr	7	350	2 450.00
F	"Y" junction; 100 x 100 x 100mm	nr	12	350	4 200.00
G	WC connector sleeve; 100 x 100mm	nr	20	240	4 800.00
H	Tee; 100x 100x 100mm	nr	16	245	3 920.00
J	Tee; 100x 100x 38mm	nr	1	245	245.00
Extra over pipework; uPVC pipe; 38mm					
K	90 degrees bend; 38x 38mm	nr	16	150	2 400.00
L	Tee; 38x 38x 38mm	nr	2	150	300.00
M	"Y" junction; 38 x 38 x 38mm	nr	12	180	2 160.00
Extra over pipework; uPVC pipe; 32mm					
N	90 degrees bend; 32x 32mm	nr	32	120	3 840.00
Pipework ancillaries;					
P	Vent cowl; 100mm wire ballon; to fit pipe; at roof level	nr	8	250	2 000.00

R11 FOUL DRAINAGE ABOVE GROUND

Carried to Summary

90 665.00

R12 DRAINAGE BELOW GROUND

Pipes; straight; uPVC; push-fit jointed; in trenches; to falls; rate to include for connection to gully traps, inspection chambers, soakaway pits and septic tanks (measured separately - to be executed by the Main Contractor)

A.	100mm; drain pipe	m	86	850	73 100.00
----	-------------------	---	----	-----	-----------

Pipework ancillaries;

B.	150mm access bend	nr	4	920	3 680.00
----	-------------------	----	---	-----	----------

Y11 PIPELINE ANCILLARIES

ANCILLARIES AND ASSOCIATED FITTINGS AND ACCESSORIES; FIXING TO PIPEWORK AS SPECIFIED; AS ENGINEER'S SPECIFICATION

Accessories in precast concrete; top set in with rodding eye and stopper; cement and sand (1:2) joint to pipe;

C.	Inspection Chamber size 450x450x600mm deep(average); internally constructed of 150mm plain insert concrete grade 15 base; 150mm plain hollow sandcrete blockwork filled solid with plain concrete and capped with 75mm thick pre-cast concrete grade 20 cover slab reinforced with single layer B.R.C nr 65 mesh ; with 225mm (average) concrete grade 15 benching and forming 150mm half round diameter in and same rendering on sides in water proof cement mortar (1:3) with and including all necessary excavation, earthworks and formwork	nr	8	17 500	140 000.00
----	---	----	---	--------	------------

R12 DRAINAGE BELOW GROUND

Carried to Summary

216 780.00

S10 COLD WATER

PIPELINES

Pipes; straight; medium gauge galvanized mild steel; screw jointed with rope yarn; in ducts, trenches, chases, floor screeds and insitu concrete; as per Engineer's specification;

A	Water supply ditribution; 25mm; in concrete floors and blockwork; fixed with holder bats	m	58	600	34 800.00
B	Water supply; riser; 19mm; in floor and walls; fixed with holder bats	m	27	480	12 960.00
C	Water distribution; 13mm; in floor and walls	m	98	420	41 160.00
Extra over; galvanized mild steel pipe; 25mm;					
D	25 x 25mm; 90 degrees bend	nr	4	240	960.00
E	25 x 19 x 19mm; Tees	nr	1	240	240.00
E	25 x 13 x 13mm; Tees	nr	12	240	2 880.00
F	25 x 25mm; socket	nr	7	240	1 680.00
Extra over; galvanized mild steel pipe; 19mm;					
G	19 x 13mm; 90 degrees bend	nr	2	150	300.00
H	19 x 19 x 13mm; Tees	nr	2	150	300.00
J	19 x 19mm; Union connector	nr	4	150	600.00
K	19 x 19mm; Nipple	nr	2	150	300.00
Extra over; galvanized mild steel pipe; 13mm;					
L	90 degrees bend; 13 x 13mm	nr	137	90	12 330.00
M	13 x 13 x 13mm; Tees	nr	63	90	5 670.00
N	13x 13mm; Union connector	nr	12	90	1 080.00
P	13x 13mm; Nipple	nr	4	90	360.00

To Collection

115 620.00

S10 COLD WATER (Cont'd)

PIPELINE ANCILLARIES

Pipework ancillaries;

A	Non-return valve; 13mm	nr	4	320	1 280.00
B	Stop cork; 13mm	nr	20	250	5 000.00
C	Non-return valve; 19mm	nr	3	400	1 200.00
D	Non-return valve; 25mm	nr	12	480	5 760.00

To Collection	13 240.00
----------------------	------------------

COLLECTION

Page 2/21	115 620.00
-----------	------------

Page 2/22	13 240.00
-----------	-----------

S10 COLD WATER
Carried to Summary

128 860.00

S11 HOT WATER

PIPELINES

Pipes; straight; medium gauge galvanized mild steel; screw jointed with rope yarn; in chases;

A.	Water distribution; 13mm; in walls	m	73	390	28 470.00
Extra over; galvanized mild steel pipe; 13mm;					
B	90 degrees bend; 13 x 13mm	nr	100	90	9 000.00
C	Tee; 13 x 13 x 13mm	nr	16	90	1 440.00
D	Union connector; 13mm	nr	24	90	2 160.00
E	Nipple; 13mm	nr	18	90	1 620.00

PIPELINE ANCILLARIES

Pipework ancillaries;

F	Non-return valve; 13mm	nr	20	320	6 400.00
G	Flexible connectors; 13mm	nr	20	120	2 400.00

GENERAL PIPELINE EQUIPMENT

Equipment: supply, assemble and install the following equipment; rate to include for all connections to galvanized mild steel pipework; supplied with all fittings, accessories and ancillaries deemed necessary for a complete installation

H	Water heater; electrical; 50 litre capacity; mounted to wall with and including pair of galvanized mild steel concealed brackets; with on/off neon indicator lamp, thermostat, and temperature gauge; supply with 1200mm long 2.4mm ² PVC insulated and sheathed three-core copper cable	nr	20	25 300	506 000.00
---	---	----	----	--------	------------

S11 HOT WATER
Carried to Summary

557 490.00

Y59 SUNDRY COMMON MECHANICAL ITEMS

A. Marking positions; holes, mortises, chases, and the like; in the structure; for the Piped Supply Systems installation	Item	15 000.00
B. Loose ancillaries; keys, tools and spares; as described in the Engineer's specification; for the Employer	Item	10 000.00

Y59 SUNDRY COMMON MECHANICAL ITEMS

Carried to Summary

25 000.00

SUMMARY

N13 SANITARY APPLIANCES/FITTINGS	1 198 000.00
R11 FOUL DRAINAGE ABOVE GROUND	90 665.00
R12 DRAINAGE BELOW GROUND	216 780.00
S10 COLD WATER	128 860.00
S11 HOT WATER	557 490.00
Y59 SUNDRY COMMON MECHANICAL ITEMS	25 000.00

MECHANICAL INSTALLATIONS
Carried to General Summary

2 216 795.00

ELECTRICAL INSTALLATIONS

V20 LV DISTRIBUTION

CONDUIT AND CABLE TRUNKING

Conduits; unplasticised PVC; bends, fixings and supports; suitable for concealed or exposed installation; include to excavation and earthwork associated with installation; forming holes, conduit entry, draw wires, components for earth continuity and all accessories and ancillaries deemed necessary for a complete installation

A	45mm diameter (Provisional)	m	171	350	59 850.00
---	-----------------------------	---	-----	-----	-----------

HV/LV CABLES AND WIRING

Cables; copper; PVC insulated and colour coded; in pipe sleeves, conduits and tray; rate to include cable connections, cable joints, cable termination glands, and all other cable accessories and ancillaries deemed necessary for a complete installation;

B	1x10mm ² 4-core PVC/SWA/PVC (Provisional)	m	181	1 200	217 200.00
---	--	---	-----	-------	------------

LV SWITCHGEAR AND DISTRIBUTION BOARDS

Miniature circuit breaker distribution board; stove enameled; sheet steel case; flush recessed in wall; removable screw fixed front cover with latch openable access door; as specified

415/240V; 50HZ; TP & N

C	60A; 6-way TPN incomer; 2nr 30A, 7nr 20A, 2nr 5A and 7nr spares outgoing	nr	4	34 800	139 200.00
---	--	----	---	--------	------------

D	60A; 6-way TPN incomer; 1nr 45A, 2nr 30A, 5nr 20A, 2nr 5A and 8nr spares outgoing	nr	2	35 200	70 400.00
---	---	----	---	--------	-----------

E	60A; 6-way TPN incomer; 1nr 45A, 2nr 30A, 5nr 20A, 3nr 5A and 7nr spares outgoing	nr	2	30 150	60 300.00
---	---	----	---	--------	-----------

Earth leakage circuit breakers; black plastic body; automatic over voltage switch; manual switch on/off capable; push button test switch; surface

F	45A TP&N	nr	8	14 500	116 000.00
---	----------	----	---	--------	------------

V20 LV DISTRIBUTION

Carried to Summary

662 950.00

V21 GENERAL LIGHTING

CONDUIT AND CABLE TRUNKING

Cables and conduits in final circuits; radial main sub circuit; PVC insulated and colour coded cable to BS 6004 table 1A; drawn into and including 20mm diameter heavy guage galvanised mild steel conduit; rate to include for all cable ancillaries deemed necessary for a complete installation

1x1.5mm², 2nr-single core cables

A	10nr lighting points consisting 1nr 2 gang 2 way light switches (L1)	nr	2	16 918	33 836.00
B	15nr lighting points consisting 3nr 2 gang 2 way and 1nr 1gang 1way light switches (L1)	nr	2	25 377	50 754.00
C	14nr lighting points consisting 2nr 2 gang 2nr way, 4nr 1 gang 2 way and 2nr 1gang 1way light switches (L2)	nr	2	23 685	47 370.00
D	16nr lighting points consisting 3nr 2 gang 2nr way, 5nr 1 gang 2 way and 3nr 1gang 1way light switches (L2)	nr	2	27 069	54 138.00
E	10nr lighting points consisting 2nr 2 gang 2 way light switches (L3)	nr	2	16 918	33 836.00

End of Ground Floor

F	16nr lighting points consisting 1nr 2 gang 2 way, 5nr 1 gang 2 way and 2nr 1gang 1way light switches (L1)	nr	2	29 776	59 552.00
G	12nr lighting points consisting 2nr 2 gang 2 way, 4nr 1 gang 2 way and 4nr 1gang 1way light switches (L1)	nr	2	21 936	43 872.00
H	12nr lighting points consisting 4nr 2 gang 2 way 4nr 1gang 1way light switches (L2)	nr	2	21 936	43 872.00
J	16nr lighting points consisting 2nr 2 gang 2nr way, 3nr 1 gang 2 way and 2nr 1gang 1way light switches (L2)	nr	2	29 776	59 552.00

End of First Floor

LUMINAIRES AND LAMPS

Luminaires and lamps; THORN, RAAK, PZ or other approved equal; with specified and approved rated lamps; supply complete with conduit boxes, pattresses, ceiling roses, connector blocks, flexible cords, starters, chokes and capacitors, shades, diffusers and reflectors, lampholders, conduit or chain suspension, other suspension system as and where necessary; Luminaires are to be fixed to backgrounds as shown in the relevant Engineer's drawings or other position as subsequently specified; (All provisional)

Flourescent;

K	1 x 36W recessed mounted flourescent newclime type or approved equal	nr	8	3 200	25 600.00
---	--	----	---	-------	-----------

To Collection

452 382.00

LUMINARIES AND LAMPS (Cont'd)

Ceiling mounted;

A	1 x 100W, ceiling mounted fitting type thorn Cat No. or approved equal	nr	64	3 500	224 000.00
B	1 x 60W screw neck fitting type Cat No. or approved equal	nr	24	2 500	60 000.00
C	1 x 60W ceiling mounted recessed fitting type thorn Cat No. or approved equal	nr	20	4 800	96 000.00

Wall mounted;

D	1 x 60W wall bracket fitting type Marlin Cat No. MV219P09 or approved equal	nr	100	1 400	140 000.00
E	1 x 20W mirror/wall mounting with shaver's outlet enclosed, aluminium bodied, flourescent unit for use in Bathrooms/toilets and complete with on/off pull switch.or approved equal	nr	20	6 500	130 000.00
F	1 x 100W Bulkhead fitting (Roller) thorn Cat No. R0RLV2264L or approved equal	nr	14	1 600	22 400.00
G	1x 60W wall mounted bedhead reading lamp or approved equal	nr	16	1 800	28 800.00

Pendant fittings;

H	Newclime High quality fan with 5-speed regulator	nr	12	7 500	90 000.00
---	--	----	----	-------	-----------

ACCESSORIES FOR ELECTRICAL SERVICES

Accessories: lighting switches; flush mounted; fixed to and including galvanized steel knock-out box set in mortises in walls; 5A rated capacity per gang;

J	1 gang 1 way; MEM or approved equal	nr	36	975	35 100.00
K	1 gang 2 way; MEM or approved equal	nr	48	975	46 800.00
L	2 gang 1 way; MEM or approved equal	nr	36	975	35 100.00

To Collection 908 200.00

COLLECTION

Page 2/27 452 382.00

Page 2/28 908 200.00

V21 GENERAL LIGHTING
Carried to Summary

1 360 582.00

V22 GENERAL LV POWER

CONDUIT AND CABLE TRUNKING

Conduits; unplasticised PVC; bends, fixings and supports; suitable for concealed or exposed installation; include to excavation and earthwork associated with installation; forming holes, conduit entry, draw wires, components for earth continuity and all accessories and ancillaries deemed necessary for a complete installation

A	20mm diameter (Provisional)	m	250	200	50 000.00
---	-----------------------------	---	-----	-----	-----------

HV/LV CABLES AND WIRING

Cables; copper; PVC insulated and colour coded; in pipe sleeves, conduits and tray; rate to include cable connections, cable joints, cable termination glands, and all other cable accessories and ancillaries deemed necessary for a complete installation;

B	1x6.0mm ² 3-core PVC copper cable (provisional)	m	39	300	11 700.00
---	--	---	----	-----	-----------

C	1x4.0mm ² 3-core PVC copper cable (provisional)	m	232	240	55 680.00
---	--	---	-----	-----	-----------

CONDUIT AND CABLE TRUNKING

Cables and conduits in final circuits; radial main sub circuit; PVC insulated and colour coded cable to BS 6004 table 1A; drawn into and including 20mm diameter heavy guage galvanised mild steel conduit; rate to include for all cable ancillaries deemed necessary for a complete installation

3Nr Single core, 2.5mm² cables

D	9nr power switched socket points consisting 8nr single and 1nr double socket outlet (R/C1)	nr	2	18 900	37 800.00
---	--	----	---	--------	-----------

E	9nr power switched socket points consisting 8nr single and 1nr double socket outlet (R/C2)	nr	2	18 900	37 800.00
---	--	----	---	--------	-----------

F	4nr power switched socket points consisting 4nr single single socket outlet (A/C3)	nr	1	8 400	8 400.00
---	--	----	---	-------	----------

End of Ground Floor

G	8nr power switched socket points consisting 7nr single and 1nr double socket outlet (R/C1)	nr	2	16 800	33 600.00
---	--	----	---	--------	-----------

H	8nr power switched socket points consisting 7nr single and 1nr double socket outlet (R/C2)	nr	2	16 800	33 600.00
---	--	----	---	--------	-----------

End of First Floor

To Collection

268 580.00

3Nr Single core, 4.0mm² cables

A	2nr power switched socket points consisting 1nr double socket outlet (A/C1)	nr	2	4 200	8 400.00
B	2nr power switched socket points consisting 1nr double socket outlet (A/C2)	nr	2	4 200	8 400.00
C	4nr power switched socket points consisting 4nr single single socket outlet (A/C3)	nr	1	8 400	8 400.00
D	1nr Water heater point	nr	8	3 200	25 600.00

End of Ground Floor

E	2nr power switched socket points consisting 1nr double socket outlet (A/C1)	nr	2	4 200	8 400.00
F	2nr power switched socket points consisting 1nr double socket outlet (A/C2)	nr	2	4 200	8 400.00
G	4nr power switched socket points consisting 4nr single single socket outlet (A/C3)	nr	1	8 400	8 400.00
H	4nr power switched socket points consisting 4nr single single socket outlet (A/C4)	nr	1	8 400	8 400.00
J	1nr Water heater point	nr	12	5 200	62 400.00

End of First Floor

3Nr Single core, 6.0mm² cables

K	1nr Cooker Control Unit point	nr	4	3 200	12 800.00
---	-------------------------------	----	---	-------	-----------

ACCESSORIES FOR ELECTRICAL SERVICES

Accessories; low voltage power outlet switches and conductors; flush mounted; fixed to and including galvanized steel knock-out box set in mortises in walls

L	13A single switched socket outlet; MK CAT 5231 PCR or approved equal	nr	266	780	207 480.00
N	13A double switched socket outlet; MK CAT 5233 PCR or approved equal	nr	450	1 560	702 000.00
N	15A switched socket outlet; MK CAT 5233 PCR or approved equal	nr	1 308	1 560	2 040 480.00

To Collection

3 109 560.00

ACCESSORIES FOR ELECTRICAL SERVICES (Cont'd)

C	TV socket outlet; MEM or approved equal	nr	273	975	266 175.00
D	Telephone socket outlet; MEM or approved equal	nr	273	845	230 685.00
	Cooker control unit	nr	3	845	2 535.00
	Water heater	nr	20	845	16 900.00
To Collection					499 395.00

COLLECTION

Page 2/29	268 580.00
Page 2/30	3 109 560.00
Page 2/31	499 395.00

V22 GENERAL LV POWER
Carried to Summary

3 877 535.00

Y82 IDENTIFICATION AND SUNDRY COMMON ELECTRICAL ITEMS

A	Identification; plates, discs, and lables; as required for the operation of the installation; equipment mounted	Item	10 000.00
B	Marking positions; holes, mortises, chases, and the like; in the structure; for all installations comprised of the electrical systems	Item	15 000.00
C	Loose ancillaries; keys, tools, and spares; as described in the Engineer's specification; for the Employer	Item	10 000.00

**IDENTIFICATION AND SUNDRY COMMON
ELECTRICAL ITEMS**
Carried to Summary

35 000.00

OTHER SPECIALIST WORKS

A Allow a Provisional Sum of N250,000.00 for the Telecommunications cabling and outlets to be expended as directed by the Engineer

Sum 250 000.00

OTHER SPECIALIST WORKS

Carried to Summary

250 000.00

SUMMARY

V20 LV DISTRIBUTION	662 950.00
V21 GENERAL LIGHTING	1 360 582.00
V22 GENERAL LV POWER	3 877 535.00
Y82 IDENTIFICATION AND SUNDRY COMMON ELECTRICAL ITEMS	35 000.00
OTHER SPECIALIST WORKS	250 000.00

ELECTRICAL INSTALLATIONS
Carried to General Summary

6 186 067.00

GENERAL SUMMARY

1	BUILDER'S WORK	56 940 000.00
2	MECHANICAL INSTALLATIONS	2 216 795.00
3	ELECTRICAL INSTALLATIONS	6 186 067.00
	TOTAL	N 65 342 862.00
	CARRIED TO GRAND SUMMARY	

GRAND SUMMARY

AMOUNT

1	BILL NR 1	PRELIMINARIES AND GENERAL CLAUSES	4 510 000.00
2	BILL NR 2	MAIN BUILDING	65 342 862.00
	SUB-TOTAL		69 852 862.00
	ADD: VAT [5%]		3 492 643.10
	TOTAL COST OF DEVELOPMENT		73 345 505.10