
SPECIFICATION AND BILL OF QUANTITIES

(WITH ENGINEERS' ESTIMATE)

PROJECT:

BUILDING FOR GURED HOUSE

CLIENT: SHASHAMANEE CITY (POLISE OFFICE)

CONSULTANT:

TEL-
e-mail:

LOCATION:

SHASHAMANEE
ETHIOPIA

Prepared by:S J (NOV-2015)

SUMMARY

A-SUB STRUCTURE

1 EXCAVATION AND EARTH WORK.....	BIRR
2 CONCRETE WORK.....	BIRR
3 MASONARY WORK.....	BIRR

SUB TOTAL A..... BIRR

B-SUPER STRUCTURE

1 CONCRETE WORK.....	BIRR
2 BLOCK WORK.....	BIRR
3 ROOFING WORK.....	BIRR
4 CARPENTRY WORK.....	BIRR
5 METAL WORK.....	BIRR
7 FINISHING WORK.....	BIRR
8 GLAZING WORK.....	BIRR
9 PAINTING WORK.....	BIRR
10 SANITARY INSTALLATION WORK.....	BIRR
11 ELECTRICAL INSTALLATION.....	BIRR

SUB TOTAL B..... BIRR

TOTAL A+B..... BIRR

32,263.02

0.00

19,654.32

51,917.34

768,401.53

161,525.62

97,910.04

186,805.07

555,499.50

880,111.73

123,000.00

129,931.20

218,632.00

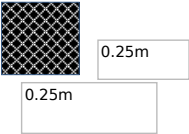
166,485.00

3,288,301.69

3,340,219.03

Projec Kafteria Client: S.Contractor: DAGNACHEW				Block: Fance Work			
Qty	L/W/D	Product	Description & Sketches	Qty	L/W/D	Product	Description & Sketches
A - SUBSTRUCTURE 1. EXCAVATION & EARTHWORKS 1.1/ Site Clerance average depth d=0.20m 0.00 0.00 0.00 0.00 m² 1.00 0.00 0.00 1.2/ Bulck Excavation 0.00 0.00 0.00 0.00 0.00 m³ 4.00 27.00 0.70 1.3/ Trench excavation in ordinary soil to average depth d=1.50m length =50.9 1.50 113.40 width=0.5+2*.1=0.70m, Depth=1.5m 4.00 11.00 0.70 1.50 46.20 1.00 0.00 0.70 1.50 0.00 159.60 m³ 18.00 2.50 2.50 1.4 Pit excavation to average depth d=3.00m 3.00 337.50 L=2+2*0.25=2.50m 337.50 m³ 1.00 26.00 10.00 1.5 Back Fill *a/Under Hard Core 0.75 195.00 195.00 m³ 2.00 27.00 0.20 B/Around Masonary Treanchl 1.50 16.20 m ³ 2.00 11.00 1.50 0.20 6.60 m ³ 1.00 31.00 1.50 0.20 9.30 m ³ 32.10 m³				C/Around Footing Pad 337.5 Total Volume of Exc 2.5*2.5*3*18=337.5 deduct volume concrete -5.1 Volume of Pad=2*2*0.4*18=28.80 -3.04 Volum of column=0.25*0.25*2.6*18=3.038 0.00 m³ 0.00 m³,TOTAL 1.6 Cart away Total Volume of Excavation 0.00 lteam 1.1 0.00 lteam 1.2 0.00 lteam 1.3 0.00 lteam 1.4 0.00 m³ -893.96 deduct back fill -893.96 m³ 1.00 26.00 1.6 Hard Core 10.00 260.00 m² 2. CONCRETE WORKS 2.1 50mm thick lean concrete under A/Footing Pad 2.00 72.00 m² 2.00 27.00 B/Masonry & Gread beam 0.50 27.00 2.00 11.00 0.50 11.00 1.00 67.00 0.50 33.50 71.50 m² 1.00 26.50 C/Under Hard Core 10.50 278.25 m² 2.2/ C-25 Reinforced concret: 18.00 2.00 a) In Footing Pad 2.00 0.40 28.80 m³ 18.00 0.25 b) In elevation column 0.25 2.60 2.93 m³			
Projec Market Center (G+2) Client: Micro Interpirize				Block:-G+2 Building			

S.Contractor:							
Qty	L/W/D	Product	Description & Sketches	Qty	L/W/D	Product	Description & Sketches

1	223.00		c) In grade beam Width=0.3 m, Depth=0.50 m Total length=27*5+11*8=223 m	1	152.00		3.2/ 50cm thick masonry Above NGL Total length=152m Avge depth=0.50m width= 0.50m
	0.30				0.5		
	0.50	33.45			0.5	38.00	
		33.45	m ³			38.00	m ³
1.00	26.50		D)10cm Ground Floor Slab			21.00	3.3/ Stone masonry for steps
	10.50	278.25	m ²				
18.00	8.00		2.3/Form Work for: A/Footing Pad perimeter=4*2=8	18	3.20		B - SUPPER STRUCTURE 1. CONCRETE WORKS 1.1 C-25 Reinforced concret: a) In elevation column Small Column 
	0.40	57.60	m ²		0.25	3.60	
18.00	2.60		B/Elevation Column perimeter=4*0.25=1	2	149.00		b) In Intermdet & Top Tie beam Total length=27.5*3 +11*6=149 m Width=0.25 m, Depth=0.25m
	1.00	46.80	m ²		0.3		
5.00	27.50		C/Gread Beam perimeter=2*0.3=0.6		0.25	22.35	
	0.60	82.50	m ²			22.35	m ³
8.00	11.00			1	27.50		c) In 15cm thick solid slab
	0.60	52.80	m ²		11		
1.00	0.00				0.15	45.38	
	0.60	0.00	m ²			45.38	m ³
		135.30	m ²				
			2.3/ Steel Reinforcement	4	3.00		d) In stair case & Landing Flight
	0	0.00	a) Dia. 6mm plain bar See annexed rebar schedule sheet		1.5		
			b) Dia. 12 mm deformed bar See annexed rebar schedule sheet		0.15	2.70	
	0.00	0.00	c) Dia. 14 mm deformed bar See annexed rebar schedule sheet	36	0.03	1.22	Steps 9 going & 9 riser A=0.5*0.3*0.15*1.5=0.03375 Landing
		0.00	kg	2	2.25		
					2.75		
					0.15	1.86	
						5.77	m ³
1	0.00		3. MASONRY WORKS 3.1/ 50cm thick masonry Below NGL Total length=27*4+11*4=152 m Avge depth=1.50m width= 0.50m	18.00	0.3		1.2 Form Work For a) elevation column perimeter=4*0.25=1
	0.5			2.00	3.20	138.24	m ²
	0.00	0.00			4.00		b) In Top Tie beam perimeter=2*0.3+0.25=0.85 Total length=149 m
		0.00	m ³	2.00	149.00		
					0.85	253.30	m ²
				1.00	27.50		c) In 15cm thick solid slab
					11.00	302.50	m ²

Projec Kafteria

Client:

S.Contractor: -

Block Building

Qty	L/W/D	Product	Description & Sketches	Qty	L/W/D	Product	Description & Sketches
	11.00		d) In stair case & Landing				
	0.60	0.00		36.00	3.90		
					3.00	421.20	m ²
						784.80	m ² Total

	3.00	33.00	m ²		96	3.9	374.40	ml	
		134.64	m² Total		48	1.63	78.24	ml	
					48	1.63	78.24	ml	
2	12.00		3.3/ ditto but to solid slab				530.88	ml	
	28.00	672.00	m ²						3.10/ lay 110cm wide & 15cm thick pavement around building
		672.00	m² Total		2.00	11.00			
			3.4/ apply 3 coat of rendering			1.20	26.40	m ²	
2	11.00				2.00	27.50			
	3.00	66.00	m ²			1.20	66.00	m ²	
2	28.00								
	3.00	168.00	m ²				92.40	m² Total	
		234.00	m² Total		2	11	22.00	3.11/ half open ditch	
			3.5/ apply 8mm thick plastic ceiling		2	28	56.00	ml	
1	12.00						170.40	ml	
	28.00	336.00	m ²						
		336.00	m² Total						
			3.6/ ditto but to eave						
2	11.00								
	1.50	33.00	m ²						
2	27.50								
	1.50	82.50	m ²						
		115.50	m² Total						

Projec

Kafteria

Client:

Block

Building

S.Contractor: -

Qty	L/W/D	Product	Description & Sketches	Qty	L/W/D	Product	Description & Sketches
			1.3/ Steel Reinforcement				2. Block Work
	0	0.00	a) Dia. 6mm plain bar See annexed rebar schedule sheet	1	608.22		2.01/ 20 cm thick HCB wall around the fence: Total length=608.22 m, height=1.20 m
	0.00	0.00	b) Dia. 12 mm deformed bar See annexed rebar schedule sheet		1.20	729.86	m ²
	0.00	0.00	c) Dia. 14 mm deformed bar See annexed rebar schedule sheet				3. Plastering Work
		0.00 kg		186	2.80		3.01/ Three coats of plastering for elevation columns:
			2. Block Work		0.20	104.16	a) To elevation column-Small
			2.01/ 20 cm thick HCB wall around the fence:	186	1.60		m ² , Height of col.=2.8m,Width=0.20m
					0.20	59.52	Height=2.80m-1.20m =1.60m
				8	2.80		m ²
					0.40	8.96	b) To elevation column-Big Col.
				8	1.60		m ² , Height of col.=2.8m,Width=0.20m
					0.40	5.12	Height=2.80m-1.20m =1.60m
						177.76	m ² Total
							c) Making Sharp Corners to elev. Columns
				388	2.80	1,086.40	ML, Numbers of Col.=97 pcs,H=2.80m
						1,086.40	ML
			2.04/Reinforcement Work:				4. Metal Work
	0	0.00	a) Dia. 6mm plain bar See annexed rebar schedule sheet	1	93.00	93.00	4.01/ RHS Giril work b/n elev. Columns as per the Drawings:
	0.00	0.00	b) Dia. 12 mm deformed bar See annexed rebar schedule sheet			93.00	Number of Girills=93 pcs
		0.00 kg					
				4	1.35		HC
					1.35	7.29	m ²
				4	1.35		
					3.70	19.98	m ²
				8	1.35		
					5.10	55.08	m ²
				2	1.35		
					2.60	7.02	m ²
				8	3.75		
					5.10	153.00	m ²
				2	3.70		
					2.60	19.24	m ²
						261.61	m ² Total

BAR SCHEDULE

PROJECT Building G+2
Client Micro Inter Prize Office

1

A SUB STRUCTURE

Location	Ø	Length (m)	# of bar	# of meber	Total Length(m)	Ø6	Ø8	Ø10	Ø12	Ø14
Footing Pad										
Main Bar	20	2.6	22	18	1029.6					
Foundation Colu										
Main Bar	16	4.54	8	18	653.76					
Stirrups for Col	8	0.9	16	18	259.2		259.2			
c/c 200										
For Ground Floor										
c/c 250	8	11	109	1	1199		1199			
	8	27	45	1	1215		1215			
Stirrups										
For Gread Beam	8	1.5	20	5	150		150			
on axis 1,2 & 3	8	1.5	124	5	930		930			
	8	1.5	18	5	135		135			
on axis A,B,C,D,E & F										
c/c 180	8	1.5	20	8	240		240			
	8	1.5	48	8	576		576			
Gread Beam										
on axis 1,2 & 3	14	10.2	2	5	102					102
Main Bar	14	8.86	2	5	88.6					88.6
	14	10.28	2	5	102.8					102.8
	14	12	3	5	180					180
	14	8.86	3	5	132.9					132.9
	14	8.3	3	5	124.5					124.5
Negative Bar	14	3.3	1	3	9.9					9.9
	14	3.6	2	3	21.6					21.6
	14	2.75	2	3	16.5					16.5
on axis A,B,C,D,E & F	14	11.4	2	8	182.4					182.4
Main Bar	14	11.4	3	8	273.6					273.6
Negative Bar	14	1.8	2	6	21.6					21.6
	14	1.6	1	6	9.6					9.6
Total length in meter-----						0	4,704.20	-	0	1,266.00
Weight per unit length in meter-----						0.222	0.395		0.888	1.208
Total Weight in Kg-----						0	1,858.16	-	0	1,529.33

BAR SCHEDULE

PROJECT Building G+2
Client Micro Inter Prize Office

1

B SUPER STRUCTURE

Location	Ø	Length (m)	# of bar	# of meber	Total Length(m)	Ø6	Ø8	Ø10	Ø12	Ø14
Intermideat Beam										
on axis 1,2 & 3	14	10.2	2	6	122.4					122.4
Main Bar	14	8.86	2	6	106.32					106.32
	14	10.28	2	6	123.36					123.36
	14	12	3	6	216					216
	14	8.86	3	6	159.48					159.48
	14	8.3	3	6	149.4					149.4
Negative Bar	14	3.3	1	6	19.8					19.8
	14	3.6	2	6	43.2					43.2
	14	2.75	2	6	33					33
on axis A,B,C,D,E & F										
Main Bar	14	11.4	2	12	273.6					273.6
	14	11.4	3	12	410.4					410.4
Negative Bar	14	1.8	2	12	43.2					43.2
	14	1.6	1	12	19.2					19.2
top tie Beam										
on axis 1,2 & 3	14	10.2	2	3	61.2					61.2
Main Bar	14	8.86	2	3	53.16					53.16
	14	10.28	2	3	61.68					61.68
	14	12	3	3	108					108
	14	8.86	3	3	79.74					79.74
	14	8.3	3	3	74.7					74.7
Negative Bar	14	3.3	1	3	9.9					9.9
	14	3.6	2	3	21.6					21.6
	14	2.75	2	3	16.5					16.5
on axis A,B,C,D,E & F										
Main Bar	14	11.4	2	3	68.4					68.4
	14	11.4	3	3	102.6					102.6
Negative Bar	14	1.8	2	3	10.8					10.8
	14	1.6	1	3	4.8					4.8
Elevation Column										
	14	4.02	12	18	868.32					868.32
	14	3.8	6	18	410.4					410.4
Strrup										
For Inter & top Beam	8	0.9	20	9	162		162			
on axis 1,2 & 3	8	0.9	124	9	1004.4		1004.4			
	8	0.9	18	9	145.8		145.8			
on axis A,B,C,D,E & F										
c/c 180	8	0.9	20	9	162		162			
	8	0.9	48	9	388.8		388.8			
For Elev.Column										
c/c 200	8	0.9	48	18	777.6		777.6			
Slab	c/c 200									
Negative Bar	8	2.67	139	2	742.26		742.26			
	8	2.83	139	4	1573.48		1573.48			
	8	3.3	56	4	739.2		739.2			
	8	3.6	56	4	806.4		806.4			
	8	2.77	56	4	620.48		620.48			
Bottom Rein	c/c 200									
	8	11	56	2	1232		1232			
top Rein	8	29	139	2	8062		8062			
Total length in meter-----						0	16,416.42	-	0	3,671.16
Weight per unit length in meter-----						0.222	0.395		0.888	1.208
Total Weight in Kg-----						0	6,484.49	-	0	4,434.76

1

GRADE BEAMS AND ELEVATION COLUMNS BAR SCHEDULE

[illegible]

[illegible]

Ø16	Ø20
-	-
1.579	2.467
-	-

BOQ G+2 Micro Cluster Main Building

ITEM	DESCRIPTION	UNIT	QTY.	RATE
	A. SUB STRUCTURE			
	1. EXCAVATION & EARTH WORK			
1.1	Excavate over site to remove all objectionable materials to an average depth of 20cm. Area of excavation includes pavement around building.	M ²	0.00	-
1.2	Bulk excavation in ordinary soil from the reduce level to an average depth of 50cm below	M ³	0.00	-
1.3	50cm thick Trench excavation in ordinary soil for stone masonry foundation wall to depth of 250cm starting from reduced level.	M ³	0.00	-
1.4	pit Excavation for Isolated footing Foundation. in ordinary soil to depth of 300cm starting from reduced level	M ³	0.00	-
1.5	Back fill under hared core & around masonry tench & around isolated footing with good dry selected material not exceeding 25cm.	M ³	0.00	-
1.6	Cart away surplus excavated material and deposit at a suitable distance.	M ³	893.96	36.09
1.7	25cm thick basaltic or equivalent stone hared core well rolled consolidated & blined with crushed stone.	M ²	0.00	-
Total to Summary.....				
	2. CONCRETE WORK			
2.1	5cm thick lean concrete in C-5 with minimum cement content of 150Kg/m ³			
	a/under footing pad.	M ²	0.00	-
	b/under Masonry & gread beam.	M ²	0.00	-
	c/under Hard Core.	M ²	0.00	-
2.2	Reinforced concrete quality C-25 with 360kg cement/M ³ of concrete filled in to formwork and vibrated around rod reinforcement bars. (Steel and form work measured separately)			
	A/ Footing Pad	M ³	0.00	-
	B) In foundation column	M ³	0.00	-
	C) In Grade beam	M3	0.00	-
	D) In 10cm thick Grouned Floor Slab	M ²	0.00	-
2.4	Provide, cut and fix in position sawn Zigba wood or metal panel form work:			
	A/ Footing Pad	M2	0.00	-

	B) In foundation column	M ²	0.00	-
	C) In Grade beam	M2	0.00	-
2.5	Reinforcement bar according to structural drawings. Price includes cutting, bending, placing in position & tying wires.			
	a/Diameter 8mm deformed bars	Kg	0	-
	b/Diameter 14mm deformed bars	Kg	0	-
	c/Diameter 16mm deformed bars	Kg	0	-
	d/Diameter 20mm deformed bars	Kg	0	-
Total to Summary.....		Bir		

	3. MASONRY WORK			
3.1	50 cm thick hard trachitic or equivalent stone masonry foundation wall bedded in cement mortar (1:4) below natural ground level.	M ³	0.00	-
3.2	ditto (1:4) above natural ground level.	M ³	0.00	-
3.3	ditto (1:4) but for steps	M ³	21.00	935.92
	Total to Summary.....			
	B. SUPER STRUCTURE			
	1. CONCRETE WORK			
	Particular attention is to be given to the following remarks along with the technical specification and method of measurement.			
	Ingredients for concrete work :			
	The quality of materials and workman ship must fulfill the requirements and concrete			
	Concrete :			
	Reinforcement bar :			
	The specified yield strength and other related properties of reinforcement bar must be confirmed either by manufacturer's catalogue/manual or / and by laboratory test.			
1.1	Reinforced concrete quality C-25 with 360kg cement/M ³ of concrete filled in to formwork and vibrated around rod reinforcement bars. (Steel and form work measured separately)			
	a. In elevation column	M ³	4.00	1,871.07
	b) Intermideate & top tie beam	M ³	23.00	1,871.07
	c) 15cm thick solid slab	M ³	45.38	1,872.07
	d) Stair Case & Landing	M ³	5.77	1,871.07
1.2	Provide, cut and fix in position metal panel or sawn Zigba wood form work			
	a. In elevation column	M ²	138.24	118.11
	b) Intermideate & top tie beam	M ²	270.00	118.11
	c) 15cm thick solid slab	M ²	302.50	118.11
	d) Stair Case & Landing	M ²	80.00	118.11
1.3	Reinforcement bar according to structural drawings. Price includes cutting, bending, placing in position & tying wires.			
	a/Diameter 8mm deformed bars	Kg	6,485.00	40.69
	b/Diameter 10mm deformed bars	Kg	65	42.79
	c/Diameter 12mm deformed bars	Kg	720	42.79
	d/Diameter 14mm deformed bars	Kg	4435	42.79
	e/Diameter 16mm deformed bars	Kg	970	42.79
	Total to Summary	Birr		
	2. BLOCK WORK			
	In addition to strength, size, and other specified			

	requirements HCB blocks must satisfy the weight			
	requirements specified in EBCS - 1, 1995.			
2.1	20cm thick class-B H.C.B wall bedded and			
	Joined in cement mortar mix 1:3 both sides			
	left for plaster.	m ²	75.90	174.98
2.2	ditto but 15cm thick class-B H.C.B wall bedded	m ²	996.00	148.84
Total to Summary.....				
3.ROOFIG WORKIG				
3.1	C-30 Roof cover in corrugated galvanized iron sheet (CIS)), fixed to wooden purlins with dome headed nails. Price shall include ridge cap. (Purlins measured and roof measured in horizontal projection with all acceessory).	m ²	336.00	226.20
3.2	Supply and fix G-30 galvanized flat metal sheet gutter as per the detail drawing. Price shall include all necessary accessories, metal bracket suspenders, one coat of antirust paint and two coat of synthetic enamel paint.	ml	56.00	120.75
3.3	down pipe fixed to RC column with metal strap			
	c/c 100cm	ml	108.00	140.23
Total to Summary.....Birr				
4. CARPENTRY & JOINRY WORK				
	All structural members shall be paint 2 coats of anti termite paint well seasoned and each truss shall be fixed to RC beam with 0.6mm plain bar.			
	Truss spacing is shown in the drawing.			
4.1	EUCALYPTUS TRUSS			
	a/12cm upper & lower chord.	ml	811.80	47.57
	b/ø10cm diagonal & vertical members.	ml	742.00	46.89
	c/ø5x7cm zigba wood purlin.	ml	464.00	37.49
4.2	Supply & fix flash wooden door with tid wood frames & both side coverd with best quality 4mm thick plywood price includes all the nessasary accessories			
	D1 Size 70cmx210cm	pcs	12	8,000.00
otal to Summary.....Birr				
5. METAL WORK				
5.1	supply & fix metal door & window made of emitation			
	profile with Grill shall be fabricated from manufactured tabular steel profile and aproved, quality of cylindarical lock as per drawing price includes all the necessary work.			
	DOORS			
	D1 Size 90cmx300cm	pcs	6	2,288.68
	DW1 Size 253cmx300cm (door & Window in one)	pcs	48	6,433.73
	FD1 Size 375cmx300cm	pcs	6	9,536.17

	FD2 Size 165cmx300cm	pcs	6	4,195.91
5.2	supply & fix metal window made of imitation profile with Grill complete work with all accessories as shown. This work includes 1 coat of anti rust & 2 coat of synthetic paint			
	WINDOWS			
	Type W-1, size 60x 60cm	pss	6.00	305.15
5.3	supply & fix metal blustrade for corridor to fit the schedule the main post shall be 40x 40x2.5mm RHS section fixed to slab by cement grouting at every 1.5m c/c and the main horizontal frame shall be 30x 30x2.5mm RHS section fixed to column by cement grouting by vertical stand every 40cm c/c. the central panel fixed with RHS 25x 25x2mm price can include cutting, welding the joints properly & paint 3 coat of synthetic paint on an anti rust coat primer.			
	a/ RHS 40x 40x2.5mm	kg	530.00	45.00
	b/ RHS 30x 30x2.5mm	kg	1320.00	45.00
	c/ RHS 25x 25x2mm	kg	800.00	45.00
5.4	supply & fix metal blustrade with kararo wood handrail for stair case			
	a/ RHS 40x 40x2.5mm	kg	120.00	45.00
	b/ RHS 30x 30x2.5mm	kg	260.00	45.00
	c/ Kararo wooden handrail size 40x60mm screwed every 30cm c/c to RHS section.	ml	155.00	45.00
	d/ 15x 2.5cm nicely planed & polished kararo wood strings	ml	108.00	50.00
	Total to Summary..... Birr			
	6. FINISHING WORK			
	Finishing work shall include all surface pre-cleaning preparation application of finish, polishing and cleaning at the end of finishing work.			
6.10	Apply three coats of plaster in cement mortar mix 1:3 up to fine finish to all internal surface, exposed concrete column and beam.	m ²	1595.64	105.91
6.20	ditto but to external wall surface.	m ²	134.64	105.91
6.30	ditto but to solid slab.	m ²	672.00	105.91
6.40	Apply three coats of tyrolite rendering to exterior surface (Use Machine rendering)	m ²	234.00	20.11
6.50	supply & fix plastic ceiling to 4x5cm zigzag wood buttons placed at c/c 60cm in both way.			
	price includes includes ceiling button & angle.	m ²	336.00	337.46
6.60	30cm tread and 20cm riser Marble for stair case	ml	115.50	120.00

6.70	3cm thick marble window sill 30cm			
	wide bedded in cement and sand mortar mix (1:3)	ml	78.24	75.00
6.80	Supply and Fix 30x30cm Ceramic tile floor finish bedded &			
	joints grunted in cement and sand mortar mix (1:3)			
	mortar beddeding.for varrandaha,stair & Lobby non slipery	m ²	917.98	300.00
6.9	ditto but Ceramic wall for shawor Room 15x15cm	m ²	106.00	300.00
6.10	ditto but cement concret terrazo tile floor finish	m ²	475.00	200.00
6.11	10cm high Ceramic tile skirting stuck down with			
	cement and sand mortar mix (1:3)	ml	530.88	70.00
6.12	Supply & lay 110cm wide & 10cm thick mass			
	concret C-15 pavement around the building including			
	creshed &10cm thick compacted red ash.	m ²	92.40	295.40
6.13	Supply & fix open ditch & half cement concret pipe			
	d=40cm bedded & joint in 1:3 mortar			
	,price includes selected material fill	ml	170.40	124.50
	Total to Summary.....	Birr		
	7. Glazing Work			
7.1	Supply & fix 6mm thick ordinary glass quality clear			
	sheet glass & glazing to metal casment with putty	m ²	410.00	300.00
	Total to Summary.....	Birr		
	8. Painting			
	Prepare the surface and apply three coats			
	of plastic emulsion paint of chosen type			
	and clour to:			
8.1	Internal plastered surface and exposed	m ²	1595.64	40.00
	concret column and beam.			
8.2	ditto but to external plastered wall surface.	m ²	134.64	40.00
8.3	ditto but to rendearing wall	m ²	156	40.00
8.4	ditto but to Qaurtize paint to external wall	m ²	336	40.00
8.5	ditto but to sold slab	m ²	616.00	40.00
8.6	ditto but synthtic paint to metal door & windaw.	m ²	410	40.00
	Total to Summary.....	Birr		
	9.SANITARY INSTALLATION			
	A. Interior Installation			
	Water Supply Pipes & fittings			
9.1	Supply and install galvanized steel pipes			
	from elevatedwater tank to cold and hot water			
	distibution to all santitary fixtures as shown on .			
	the drawing			
	Diameter 15 mm	ml	60	50.00
	Diameter 20 mm	ml	40	60.00

9.2	Supply and install gate valves made of brass			
	completewith rubber gaskets, hand wheels and			
	connecting pieces such as unions etc, for all fixtures			
	Diameter 15 mm	Pcs	14	25.00
	Diameter 20 mm	Pcs	10	27.00
	Elevated water tank			
9.3	Supply and mount 8m ³ fibre glass water tank on			
	roof complete with all the necessary accessories			
	a) Size of water tank = 4 x 2 m	Pc	1	15,000.00
	b)Diameter 32mm brass gate valve for outlet pipe	Pcs	1	200.00
	c)Diameter 32mm brass gate valve for drain pipe	Pcs	1	200.00
	d)Diameter 32mm brass gate valve for inlet pipe	Pcs	1	150.00
	e)Diameter 40mm PVC float valve	Pcs	1	200.00
	f)Diameter 50 mm PVC vent pipe with vent cap			
	length of pipe 30 cm	Pcs	1	250.00
	g)Diameter 32mm drain and over flow			
	galvanized			
	steel pipe	MI	45	70.00
	h)Roto Stand made of Concrete pole & Slab	Lump	1	10,000.00
	Sanitary Fixtures			
9.4	Supply and install low level water closet			
	white glazed vitreous China WC pan of approved			
	quality complete with all the necessary accessori	Pcs	12	2,000.00
9.5	Supply and install hand wash basins made			
	of white vitreous China with two tap holes			
	complete with all the necessary accessories			
	Size :- 500 x 405 mm	Pcs	12	3,500.00
9.6	Supply & install white glazed steel cast-iron shawor			
	tray with slip resistance base,15mm chrome plated			
	shower mixer with cold & hot taps,concealed			
	riser tube			
	chrome plated shower arm tube & swivel spray			
	head,			
	38mm brass shower tray waste drain hole with			
	chrome			
	plated grated,dia 38mm uPVC trap.			
	size 900x900mm	Pcs	12	3,500.00
9.7	Supply and install single tubular chrome plated			
	swing			
	towel hanger,with chrome plated fastening			
	screws			
	completed with all the necessary accessories	Pcs	2	200.00
9.8	Supply and fix toilet paper holder in white vitreous			
	China complete with all the necessary accessorie	Pcs	12	150.00
9.9	Supply and fix crystal glass mirror 500 x 400 mm			
	including chrome plated brass clips and screws	Pcs	6	1,500.00
	Waste water & Ventilation Pipe			

9.1	Supply and fix water heater complete with all neccessories.			
	a/Capacity 25 litters	Pcs	6	4,500.00
9.1	Supply and install , waste and vent pipe in horizontal branches and vertical stacks made of PVC including the necessary fittings such as bends, branches tees, elbow etc. All horizontal branches should be laid at a slope of 2% .			
	Diameter 50 mm	ml	106	52.00
9.1	Supply and install vent caps made of PVC at vent pipes fitted with PVC pipe roof weathering slate at roof level.			
	Diameter 50 mm	Pc	25	50.00
	B. Site Sanitary Work			
9.1	Construct sanitary manholes on a domestic sewer lines in double brick wall on a base of mass concrete slab 150mm thick with proper slope for smooth flow and with 80 mm R.C slab cover and steel bar handle as shown on the detaildrawing.			
	Size:- 60 x 60 cm	Pc	2	2,000.00
	Avg. depth =60 cm			
9.14	Supply and lay hard plastic pipe for sewerage according to the drawing			
	Diameter 150 mm	MI	210	120.00
9.15	Supply and install galvanized steel pipe from main line to roof fibre glass water tank complete with all the necessary accessories.			
	Diameter 32mm	MI	20	65.00
	Total to Summary.....	Birr		
	10. ELECTRICAL INSTALLATION			
	1.Power Intake			
	1.1 Under Ground Ducts/pipes			
	A/PVC pipe of 50mm diameter	ml	15	500.00
	1.2. Manhole			
	A/Construct manhole in brick & with concrete base internally of 600x600x600mm including concret cover with lifting hole	Nº	1	2,500.00
	2. Low Voltage System Earthing			
2.1	2400x16mm coper clad earthing rod inside 600x600x600mm pit measured elsewhere)	Nº	1	2,000.00
2.2.	1x16 sq.mm bare copper bonding conductor from earth bar to MLPP-TP3 earthing terminal	ml	15	500.00
	3. Distribution Board			
3.1	Flush Mounted distribution board LPP-TF (the board name shall be identified using plastic engrayed tags screw fastened) in sheet steel structure with locable door & including bus bars of 63Amp 3phase			

	with all accessories fixing & connecting accessories			
	2pcs 10A MCB,1phase 6KA			
	10pcs 16A MCB,1phase 10KA			
	1pcs main 32A MCB,3phase 10KA			
	and with 25% reserve pitch.	Nº	1	6,000.00
3.2	Flush mounted sub distribution board MDB with lockable door, phase-bar rating of 400A/3ph and with all its accessories consisting of :-			
	1pc m.c.c.b. of 320A/3ph Icu=16ka			
	5 pcs m.c.b. of 63A/3ph Icu=10ka			
	8 pcs m.c.b. of 25A/3ph Icu=10ka			
	and with 20% reserve space.	Nº	3	4,000.00
	4. Feeder Cable & PVC pipe			
	Installed PVC power cable type NYY0.6/1kv or equivalent to be drawn inside riser shaft or PVC conduit			
	Cables			
4.1	5x10 sq.mm from MLPP-TP3 to Lpp-LF	ml	2300	15.00
	PVC pipes			
4.2	32 diameter	ml	54	500.00
	5.LIGHT POINTS			
5.1	Light points fed through PVC insulated conductor of 2 x 2.5 sq.mm.in thermoplastic conduit of diam 16mm in/under surface including junction boxes screw type connectors with insulating caps and cover including all accessories	Nº	111	300.00
	6.SWITCH			
6.1	Flush mounted Legrand Suno range switch or equivalent with non circular corresponding box:-			
	a. Single pole	Nº	111	60.00
	b. Double pole	Nº	111	75.00
	7.SOCKET OUTLET POINT			
7.1	Socket outlets points for flush mounting fed through PVC conductor of 3 x 2.5 sq.mm in thermoplastic conduit of diameter 16mm in/under surface including junction boxes,screw type connectors and cover all complete			
	Ditto but fed through PVC coductor of 3x4 sq.mm in diameter 21 mm.	Nº	48	200.00
10.4	TELEPHONE POINT:-			
	Telephone point:- Only conduit of diameter 19 - 29mm, outlet box, pull wire and tele terminal box as per ETC rules and regulations	Nº	48	200.00
	Total to Summary		Birr	
	GRAND TOTAL			

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9,600.00
166,485.00
3,340,219.03

GRAND SUMMARY

Project : G+2 MICRO CLUSTER

Location : SHASHEMENE BURKA GUDINA

Client : SHASHEMENE JOB CREATION & FOOD SECURITY OFFICE

Contractor :

Consultant :

ITEM NO	DESCRIPTIONS	AMOUNT (BIRR)
	Main building	3,340,219.03
	Septic tank & manhole	205,979.37
	<i>Total</i>	3,546,198.40
	<i>Profit</i>	248,233.89
	<i>Overhead</i>	248,233.89
	<i>Toal sum</i>	4,042,666.17
	VAT 15%	606,399.93
	<i>Grand total with VAT15%</i>	4,649,066.10