

## SUMMARY OF BILLS OF QUANTITIES

DESCRIPTION	AMOUNT	%
Bill №: 01 - PRELIMINARIES	<b>30,500.00</b>	
Bill №: 02 - GROUND WORKS	<b>4,014.50</b>	
Bill №: 03 - INSITU CONCRETE WORKS	<b>7,080.00</b>	
Bill №: 04 - STRUCTURAL METAL WORKS	<b>38,400.00</b>	
Bill №: 05 - ROOFING	<b>5,238.00</b>	
Bill №: 06 - DOORS, SHUTTERS & HATCHES	<b>3,100.00</b>	
Bill №: 07 - WIRE FENCE	<b>18,536.00</b>	
Bill №: 08 - ADDITIONS AND OMMISIONS		
<b>Sub-Total</b>	<b>106,868.50</b>	
<b>GST 8%</b>	<b>8,549.48</b>	
<b>Grand-Total</b>	<b>115,417.98</b>	

## PREAMBLE NOTES

### 1.1 Discrepancies

All participants in the Tender exercise are deemed to have read the Specifications and BOQ carefully in conjunction with all the Contract Drawings. Any discrepancies between these documents are to be brought to the attention of the Employer and clarified prior to the closing of the Tender. Should any said discrepancies be discovered at a later date, the decision of the Employer is final and any extra cost due to the contractor as a result of such discrepancies will NOT be entertained whatsoever. The Contractor shall, at all times, exercise with care and professional scrutiny to ensure that there are no discrepancies and/or divergence between Contract Drawings and specifications prior to execution of any portion of the Works on site. The Contractor shall immediately give the Employer a written notice specifying any such discrepancies or divergence should he discovered such issues and the Employer shall issue instructions in regard thereto. The Contractor should exercise due diligence in this matter as a failure and/or negligence in complying with the above stated requirements may result in extra costs. Any extra costs incurred in respect therefore shall be borne solely by the Contractor.

### 1.2 General Notes

1. The Bill of Quantities shall be read in conjunction with the Instruction to Bidders, General Conditions of Contract, Appendix to bid, Technical Specification and Tender Drawings.
2. The rates and prices tendered in the priced Bill of Quantities shall, except in so far as it is otherwise provided under the Contract, include all constructional plant, labour, supervision, materials, transportation, installation/erection, profit, together with all general risks, liabilities and obligations set out or implied in the Contract.
3. The Tenderer is deemed to have visited the site/s and fully acquainted himself as to the location of each of the items and works to be carried out and to all conditions which may affect the performance of the works, including but not limited to:
  - Access to each of the roads where solid waste transfer process will be carried out, and Access for the dump site.
  - Restrictions applicable to working in proposed area.
  - All safety regulations and employer site safety procedures.
4. A rate or price shall be entered against each item in the Bill of Quantities, whether quantities are stated or not. All quantities given herein shall be deemed to be estimated quantities of the work to be done. Tenderer shall check and verify the quantities before submitting the tender.
5. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no items are provided but required for completion of contract works, the cost shall be deemed to be distributed among the rates and prices entered for the related item of work. Only properly executed variation orders shall be recognized for additional payment for items not entered in the Bill of Quantities.
6. General directions and descriptions of work and materials are not necessarily repeated or summarized in the Bill of Quantities. The Bidder shall refer to relevant sections of the Contract Document to fully understand the item requirements before entering rates or prices against each item in the Bill of Quantities. No variation is allowed for the given scope of work.
7. If an item is missing in BOQ, but shown in the drawings, Tenderer shall add that items to the additional bills in BOQ.
8. Measurement standard applied for calculation of quantities are according to NRM-2, RICS.

**BILL OF QUANTITIES**

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
<b>1.0.00</b>	<b>Bill №: 01 - PRELIMINARIES</b>					
<b>1.1.00</b>	<b>GENERAL NOTES</b> <u>Abbreviations</u> m - metre nr - numbers m3 - cubic metres m2 - Square metres m - linear metre t - tons inc. - including mm - millimetre SS - stainless steel GI - galvanized iron LS - Lumpsum					
<b>1.2.00</b>	<b>SITE MANAGEMENT COSTS</b>  Allow for all on and off site management cost including costs of foreman and assistants, temporary services, telephone, fax, hoardings & similar.	item	1.00	6,000.00	15,000.00	<b>21,000.00</b>
<b>1.3.00</b>	<b>SIGN BOARD</b>  Allow for sign board.	nr	1.00	1,000.00	1,500.00	<b>2,500.00</b>
<b>1.4.00</b>	<b>CLEAN-UP</b>  Allow for clean-up upon completion of works.	item	1.00	1,000.00	2,500.00	<b>3,500.00</b>
<b>1.5.00</b>	<b>INSURANCE, BONDS, GUARANTEES AND WARRANTIES</b>  Insurance as stated in the general conditions.	item	1.00			-
<b>1.6.00</b>	<b>SAFETY ON SITE</b>					-
1.6.01	Safety on site:- Providing and maintaining adequate safety measures on site for all workers and all authorized visitors on site and protecting adjoining properties and people against falling objects or other with regard to the construction works	item	1.00	1,000.00	2,500.00	<b>3,500.00</b>
<b>1.6.00</b>	<b>TOTAL OF BILL №: 01 - Carried Over To Summary</b>					<b>30,500.00</b>

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
<b>2.0.00</b>	<b>Bill №: 02 - GROUND WORKS</b>					
<b>2.1.00</b>	<b>GENERAL</b>					
	(a) Rates shall include for: leveling, grading, trimming, compacting to faces of excavation, keep sides plumb, backfilling, consolidating, and disposing surplus soil.					
<b>2.2.00</b>	<b>SITE CLEARING</b>					
2.2.01	Clear the area of site from rubbish and vegetable matters, stumps, roots. Rates shall include for removal of trees and tree stumps and disposal of such items.	m <sup>2</sup>	6.25	100.00	150.00	<b>1,562.50</b>
						-
<b>2.3.00</b>	<b>EXCAVATION</b>					
	Excavation quantities are measured to the faces of concrete members. Rates shall include for all the additional excavation required to place the formwork. Rates shall include for backfilling.					-
2.3.01	Excavation for Foundation pads	m <sup>3</sup>	0.58	350.00	650.00	<b>580.00</b>
						-
<b>2.4.00</b>	<b>FILLING</b>					
	Rate shall include for: levelling, grading, trimming, compacting and similar					-
2.4.01	Compacted earth filling under ground slab	m <sup>2</sup>	5.76	75.00	100.00	<b>1,008.00</b>
						-
<b>2.5.00</b>	<b>DAMP-PROOF MEMBRANE</b>					
	Rate shall include for: dressing around and sealing to all penetrations,laps and turnups.					-
2.5.01	Polythene damp proof membrane (500 gauge)	m <sup>2</sup>	5.76	50.00	100.00	<b>864.00</b>
						-
<b>2.6.00</b>	<b>DE-WATERING</b>					
2.6.01	De-watering the excavation until completion of concrete work as required	item	1.00			-
						-
<b>2.7.00</b>	<b>TOTAL OF BILL №: 02 - Carried Over To Summary</b>					<b>4,014.50</b>

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
<b>3.0.00</b>	<b>Bill №: 03 - INSITU CONCRETE WORKS</b>					
<b>3.1.00</b>	<b>GENERAL</b>					
	(a) Rates shall include for: placing in position, making good after removal of formwork, mortar touch up to all concrete and casting in all required items; additional concrete required to conform to structural and excavated tolerances					
	(b) Mix ratio for reinforced concrete shall be based on given Concrete Grade.					
	(c) All structural concrete shall be GRADE M25 and lean concrete shall be GRADE M15					
	(d) Rates shall include for: concrete, formwork, reinforcement, cleaning, fabrication, placing, the provision for all necessary temporary fixings and supports including tie wires and chair supports, laps, distribution bars and wastage.					
	(e) Rates shall include for: all necessary boarding, supports, erecting, framing, temporary cambering, cutting, perforations for reinforcing bars, bolts, straps, ties, hangers, pipes and removal of formwork.					
	(f) Rates shall include for: cleaning, fabrication, placing the provision for all necessary temporary fixings and supports including tie wires and chair supports, laps, distribution bars and wastage.					
	(g) All reinforcing bars shall be high strength bars.					
	(h) Slab soffits to be finished fairfaced, use plasteciser and formwork with reducing agent.					
	(i) All exposed & external concrete members shall be casted with Masterpel 777 or equivalent water proofing chemical.					
	(j) Rate shall include for applying 2 coats of waterproofing chemical to substructure.(Below ground level)					
3.1.01	Allow for Concrete Testing.	item	1.00	1,500.00	2,000.00	<b>3,500.00</b>
<b>3.2.00</b>	<b>MASS CONCRETE</b>					
	Quantity is measured to the edges of concrete foundation members. Rates shall be inclusive for any additional concrete required to place the formwork.					-
3.2.01	75 mm Lean Concrete (Foundations)	m <sup>3</sup>	0.06	4,500.00	1,500.00	<b>360.00</b>
<b>3.3.00</b>	<b>REINFORCED INSITU CONCRETE SUB-STRUCTURE</b>					
	<b>FOUNDATION PADS</b>					
3.3.01	400 x 400 x 250mm Foundation pads and stump, F1	m <sup>3</sup>	0.28	8,500.00	3,000.00	<b>3,220.00</b>
						-
						-
						-
<b>3.8.00</b>	<b>TOTAL OF BILL №: 03 - Carried Over To Summary</b>					<b>7,080.00</b>

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
<b>4.0.00</b>	<b>Bill №: 04 - STRUCTURAL METAL WORKS</b>					
<b>4.1.00</b>	<b>GENERAL</b>					
	(a) Rates shall include for: all fabrication work, welding, marking, drilling for bolts incl. steel brackets, steel plates, bolts, nuts and any type of washer, riveted work, counter sinking and tapping for bolts or machine screws.					
	(b) Rates shall include for fabrication and erection and temporary supports and fixing into position.					
	(c) "Welding" is deemed to be in accordance with the specification and for the material to which it is to be used. Gusset plates, shoe plates, ends, caps, cleats, brackets, stiffeners, bolts, etc., are required to be included to the rate of the associated steel work in which they occur.					
	(d) For the description of materials refer to the Drawings and technical specification					
	(e) Contractor shall submit shop drawings for approval prior to fabrication.					
	(f) Unless specified otherwise, rate shall include for: All shop fabrication work, marking, delivery, unloading, hoisting, erecting and fixing as per detail drawings, All welds & allowance for rolling margin, the weight of weld metal in welded constructions, members of any length, cutting to size and shape and joints in the running length, grinding to a smooth finish, unless otherwise required, Machine drilled bolt, holes, bolts, nuts and washers, cleats, shoe and gusset plates and all other connections, Wire brushing to clean all the steel surfaces (except stainless steel) after fabrication and spray painting with two coats of quick drying metal primer zinc phosphate & two coats of matt anti corrosive paint with final paint, all necessary accessories and preparation and submission of Shop Drawings and As Built Drawings as specified.					
<b>4.2.00</b>	<b>GI PIPE FENCE FRAMING</b>					
4.2.01	2 Inch GI Pipe finished with white paint (Vertical) - 3m	nr	3.00	850.00	550.00	<b>4,200.00</b>
4.2.02	2 Inch GI Pipe finished with white paint (Vertical) - 3.5m	nr	2.00	950.00	550.00	<b>3,000.00</b>
4.2.03	2 Inch GI Pipe finished with white paint (Horizontal) - 2.4m	nr	10.00	750.00	550.00	<b>13,000.00</b>
4.2.04	2 Inch GI Pipe finished with white paint (Horizontal) - 3m	nr	4.00	850.00	550.00	<b>5,600.00</b>
						-
<b>4.3.00</b>	<b>GI PIPE ROOF FRAMING</b>					
4.3.01	2 Inch GI Bracing pipe -3m	nr	1.00	850.00	550.00	<b>1,400.00</b>
4.3.02	1 Inch GI Pipe Rafters - 3.2m	nr	8.00	850.00	550.00	<b>11,200.00</b>
<b>4.4.00</b>	<b>TOTAL OF BILL №: 04 - Carried Over To Summary</b>					<b>38,400.00</b>

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
<b>5.0.00</b>	<b>Bill №: 05 - ROOFING</b>					
<b>5.1.00</b>	<u>GENERAL</u> (a) Rates shall include for: fair edges, dressing over angel fillets, roof sealant, turning into grooves, all other labours, circular edges, nails, screws and other fixings and laps.					
<b>5.2.00</b>	<u>MAIN ROOF COVERING</u>					
5.2.01	Lysaght roofing sheet to specification	m <sup>2</sup>	9.60	250.00	180.00	<b>4,128.00</b>
						-
<b>5.3.00</b>	<u>CAPPING</u>					
5.3.01	Lysaght ridge cap as per roofing sheet suppliers assembly	m	3.00	220.00	150.00	<b>1,110.00</b>
						-
<b>5.4.00</b>	<b>TOTAL OF BILL №: 05 - Carried Over To Summary</b>					<b>5,238.00</b>

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
<b>6.0.00</b>	<b>Bill №: 06 - DOORS, SHUTTERS &amp; HATCHES</b>					
<b>6.1.00</b>	<b>GENERAL</b> (a) Rates shall include for locks, latches, closers, push plates, pull handles, bolts, kick plates, hinges and all door & window hardware. (b) Rates shall include for door frames, mullions, transoms, trims, glazing, tinting, timber panels, boardings, framing, lining, fastenings and all fixings. (c) Sizes are given overall outside dimensions of actual doors and windows.					
<b>6.2.00</b>	<b>DOORS</b>					
6.2.01	900 x 2100 mm Metal framed door with wiremesh panel	nr	1.00	2500	600.00	<b>3,100.00</b>
<b>6.3.00</b>	<b>TOTAL OF BILL №: 06 - Carried Over To Summary</b>					<b>3,100.00</b>

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
<b>7.0.00</b>	<b>Bill №: 07 - WIRE FENCE</b>					
<b>7.1.00</b>	<b>GENERAL</b> (a) Rates shall include for: fixing, bedding, grouting, and pointing materials; making good around pipes, sanitary fixtures, and similar; cleaning down and polishing.					
<b>7.2.00</b>	<b>WIRE MESH</b>					
7.2.01	Installation of wire mesh around shed	m <sup>2</sup>	23.17	550.00	250.00	<b>18,536.00</b>
<b>7.3.00</b>	<b>TOTAL OF BILL №: 07 - Carried Over To Summary</b>					<b>18,536.00</b>

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
<b>8.0.00</b>	<b>Bill №: 08 - ADDITIONS AND OMISSIONS</b>					
<b>8.1.00</b>	<b><u>ADDITIONS</u></b>					
8.1.01	Bill №: 01 - PRELIMINARIES					
8.1.02	Bill №: 02 - GROUND WORKS					
8.1.03	Bill №: 03 - INSITU CONCRETE WORKS					
8.1.04	Bill №: 04 - STRUCTURAL METAL WORKS					
8.1.05	Bill №: 05 - ROOFING					
8.1.06	Bill №: 06 - DOORS, SHUTTERS & HATCHES					
8.1.07	Bill №: 07 - WIRE FENCE					
	<b>TOTAL</b>					
<b>8.2.00</b>	<b><u>OMISSIONS</u></b>					
8.2.01	Bill №: 01 - PRELIMINARIES					
8.2.02	Bill №: 02 - GROUND WORKS					
8.2.03	Bill №: 03 - INSITU CONCRETE WORKS					
8.2.04	Bill №: 04 - STRUCTURAL METAL WORKS					
8.2.05	Bill №: 05 - ROOFING					
8.2.06	Bill №: 06 - DOORS, SHUTTERS & HATCHES					
8.2.07	Bill №: 07 - WIRE FENCE					
	<b>TOTAL</b>					
<b>8.3.00</b>	<b>TOTAL OF BILL №: 8 - Carried Over To Summary</b>					