



<div><div><div>DEPARTMENT OF HUMAN SETTLEMENT CRU TYPOLOGIES PRELIMINARY ESTIMATE EXECUTIVE SUMMARY 22 September 2014</div><div><div>human settlements Department: Human Settlements REPUBLIC OF SOUTH AFRICA</div></div></div></div>					
1.	35m2 CRU TYPOLOGY - TYPE 1				
		Unit	Quantity	Rate/m2	Amount
1.1	Foundations (Strip Footings)	m2	35.00	R 581.00	R 20 335.00
1.2	Top Structure	m2	35.00	R 3 300.00	R 115 500.00
1.3	Electrical Installation	m2	35.00	R 521.86	R 18 265.10
	Subtotal				R 154 100.10
1.4	Add: Preliminaries	%	0.09		R 13 869.01
	Subtotal				R 167 969.11
1.5	Add: Professional Fees	%	0.10		-
1.5.1	Feasibility	%	0.04		R 6 718.76
1.5.2	Construction	%	0.05		R 8 398.46
1.5.3	Closeout	%	0.01		R 1 679.69
1.6	Add: Social Facilitation	No	1.00		R 316.41
1.7	Add: Tenant Administration	No	1.00		R 300.00
	Subtotal				R 185 382.43
1.8	Add: VAT	%	0.14		R 25 953.54
	Total Construction cost Including Vat			R 6 038.17	R 211 335.97
2.	35m2 CRU TYPOLOGY - TYPE 2				
		Unit	Quantity	Rate/m2	Amount
2.1	Foundations (Piling)	m2	35.00	R 1 870.00	R 65 450.00
2.2	Top Structure	m2	35.00	R 3 300.00	R 115 500.00
2.3	Electrical Installation	m2	35.00	R 521.86	R 18 265.10
	Subtotal				R 199 215.10
2.4	Add: Preliminaries	%	0.09		R 17 929.36
	Subtotal				R 217 144.46
2.5	Add: Professional Fees	%	0.10		-
2.5.1	Feasibility	%	0.04		R 8 685.78
2.5.2	Construction	%	0.05		R 10 857.22
2.5.3	Closeout	%	0.01		R 2 171.44
2.6	Add: Social Facilitation	No	1.00		R 316.41
2.7	Add: Tenant Administration	No	1.00		R 300.00
	Subtotal				R 239 475.31
2.8	Add: VAT	%	0.14		R 33 526.54
	Total Construction cost Including Vat			R 7 800.05	R 273 001.86

3.	<b>45m2 CRU TYPOLOGY - TYPE 1</b>				
		Unit	Quantity	Rate/m2	Amount
3.1	Foundations (Strip Footings)	m2	45.00	R 581.00	R 26 145.00
3.2	Top Structure	m2	45.00	R 3 300.00	R 148 500.00
3.3	Electrical Installation	m2	45.00	R 488.53	R 21 983.85
	Subtotal				R 196 628.85
3.4	Add: Preliminaries	%	0.09		R 17 696.60
	Subtotal				R 214 325.45
3.5	Add: Professional Fees	%	0.10		R -
3.5.1	Feasibility	%	0.04		R 8 573.02
3.5.2	Construction	%	0.05		R 10 716.27
3.5.3	Closeout	%	0.01		R 2 143.25
3.6	Add: Social Facilitation	No	1.00		R 316.41
3.7	Add: Tenant Administration	No	1.00		R 300.00
	Subtotal				R 236 374.40
3.8	Add: VAT	%	0.14		R 33 092.42
	Total Construction cost Including Vat			R 5 988.15	R 269 466.82
4.	<b>45m2 CRU TYPOLOGY - TYPE 2</b>				
		Unit	Quantity	Rate/m2	Amount
4.1	Foundations (Piling)	m2	45.00	R 1 870.00	R 84 150.00
4.2	Top Structure	m2	45.00	R 3 300.00	R 148 500.00
4.3	Electrical Installation	m2	45.00	R 488.53	R 21 983.85
	Subtotal				R 254 633.85
4.4	Add: Preliminaries	%	0.09		R 22 917.05
	Subtotal				R 277 550.90
4.5	Add: Professional Fees	%	0.10		R -
4.5.1	Feasibility	%	0.04		R 11 102.04
4.5.2	Construction	%	0.05		R 13 877.54
4.5.3	Closeout	%	0.01		R 2 775.51
4.6	Add: Social Facilitation	No	1.00		R 316.41
4.7	Add: Tenant Administration	No	1.00		R 300.00
	Subtotal				R 305 922.40
4.8	Add: VAT	%	0.14		R 42 829.14
	Total Construction cost Including Vat			R 7 750.03	R 348 751.53
5.	<b>9m2 GUARD HOUSE</b>				
		Unit	Quantity	Rate/m2	Amount
5.1	Foundations (Strip Footings)	m2	9.00	R 1 571.00	R 14 139.00
5.2	Top Structure	m2	9.00	R 3 688.00	R 33 192.00
5.3	Electrical Installation	m2	9.00	R 670.00	R 6 030.00
	Subtotal				R 53 361.00
5.4	Add: Preliminaries	%	0.09		R 4 802.49
	Subtotal				R 58 163.49
5.5	Add: Professional Fees	%	0.10		R -
5.5.1	Feasibility	%	0.04		R 2 326.54
5.5.2	Construction	%	0.05		R 2 908.17
5.5.3	Closeout	%	0.01		R 581.63
	Subtotal				R 63 979.84
5.6	Add: VAT	%	0.14		R 8 957.18
	Total Construction cost Including Vat			R 8 104.11	R 72 937.02

<b>6.</b>	<b>9m2 GUARD HOUSE</b>				
		<b>Unit</b>	<b>Quantity</b>	<b>Rate/m2</b>	<b>Amount</b>
6.1	Foundations (Piling)	m2	9.00	R 4 844.00	R 43 596.00
6.2	Top Structure	m2	9.00	R 3 688.00	R 33 192.00
6.3	Electrical Installation	m2	9.00	R 670.00	R 6 030.00
	Subtotal				R 82 818.00
6.4	Add: Preliminaries	%	0.09		R 7 453.62
	Subtotal				R 90 271.62
6.5	Add: Professional Fees	%	0.10		R -
6.5.1	Feasibility	%	0.04		R 3 610.86
6.5.2	Construction	%	0.05		R 4 513.58
6.5.3	Closeout	%	0.01		R 902.72
	Subtotal				R 99 298.78
6.6	Add: VAT	%	0.14		R 13 901.83
	<b>Total Construction cost Including Vat</b>			<b>R 12 577.85</b>	<b>R 113 200.61</b>
<b>7</b>	<b>19m2 OFFICE UNIT</b>				
		<b>Unit</b>	<b>Quantity</b>	<b>Rate/m2</b>	<b>Amount</b>
7.1	Foundations (Strip Footings)	m2	19.00	R 2 061.00	R 39 159.00
7.2	Top Structure	m2	19.00	R 4 057.00	R 77 083.00
7.3	Electrical Installation	m2	19.00	R 700.35	R 13 306.65
	Subtotal				R 129 548.65
7.4	Add: Preliminaries	%	0.09		R 11 659.38
	Subtotal				R 141 208.03
7.5	Add: Professional Fees	%	0.10		R -
7.5.1	Feasibility	%	0.04		R 5 648.32
7.5.2	Construction	%	0.05		R 7 060.40
7.5.3	Closeout	%	0.01		R 1 412.08
	Subtotal				R 155 328.83
7.6	Add: VAT	%	0.14		R 21 746.04
	<b>Total Construction cost Including Vat</b>			<b>R 9 319.73</b>	<b>R 177 074.87</b>
<b>8.</b>	<b>19m2 OFFICE UNIT</b>				
		<b>Unit</b>	<b>Quantity</b>	<b>Rate/m2</b>	<b>Amount</b>
8.1	Foundations (Piling)	m2	19.00	R 4 355.00	R 82 745.00
8.2	Top Structure	m2	19.00	R 4 057.00	R 77 083.00
8.3	Electrical Installation	m2	19.00	R 700.35	R 13 306.65
	Subtotal				R 173 134.65
8.4	Add: Preliminaries	%	0.09		R 15 582.12
	Subtotal				R 188 716.77
8.5	Add: Professional Fees	%	0.10		R -
8.5.1	Feasibility	%	0.04		R 7 548.67
8.5.2	Construction	%	0.05		R 9 435.84
8.5.3	Closeout	%	0.01		R 1 887.17
	Subtotal				R 207 588.45
8.6	Add: VAT	%	0.14		R 29 062.38
	<b>Total Construction cost Including Vat</b>			<b>R 12 455.31</b>	<b>R 236 650.83</b>

9.	<b>EXTERNAL WORKS</b>				
		Unit	Quantity	Element Rate	Rate Incl. VAT
9.1	Site clearance, Bulk Earthworks etc	m2	1.00	R 285.29	R 325.22
9.2	Palisade security fencing	m	1.00	R 752.40	R 857.74
9.3	Galvanised diamond mesh security fencing	m	1.00	R 480.00	R 547.20
9.4	Roads, parking and walkways	m2	1.00	R 715.55	R 815.73
9.5	Stormwater drainage	m	1.00	R 1 029.76	R 1 173.93
9.6	Water supply	m	1.00	R 992.83	R 1 131.82
9.7	Soil drainage	m	1.00	R 513.00	R 584.82
9.8	Play Area Equipment Unit	No	1.00	R 6 872.00	R 7 834.08
10.	<b>ELECTRICAL INSTALLATION</b>				
		Unit	Quantity	Rate/m2	Rate Incl. VAT
10.1	External Works (Bulk Supply per unit)				
10.2	Main Power Infrastructure	m2	1.00	R 600.00	R 684.00
11.	<b>PLANNING PROFESSIONAL FEES</b>				
		Unit	Quantity		
11.1	Specialist consultants(Town planner, Land Surveyor, EIA Consultant)	%	0.01		



DEPARTMENT OF HUMAN SETTLEMENT  
CRU TYPOLOGIES  
PRELIMINARY ESTIMATE REVISION NO. 01  
Notes  
22 September 2014



### 1. Purpose of the Cost Plan

The purpose of this Cost Plan is to provide a Rate/m<sup>2</sup> Estimate of the construction works

### 2. Methodology in Compiling the Preliminary Cost Estimate

This preliminary cost estimate is based upon the following information:-

- Two CRU typologies comprising of either a 35m<sup>2</sup>/ 45m<sup>2</sup> , three storey masonry block comprising of six units including all common areas
- Architectural drawings & Specification by Osmond Lange : Drawing No. D340\_A\_100 Revision C & Master Specification Revision D
- Engineer's drawings from the Civil & Structural Engineers - Jeffares & Green : Drawing No. 3578/S1 Revision A & Drawing No. 3578/C1
- Information from the Electrical Engineers - IBUYA Consulting Engineers
- The building areas as provided and detailed in Drawing No. D340\_A\_100 Revision C by Osmond Lange
- Current market related rates as at May 2014
- Social Facilitation & Tenant administration based on historical costs as provided by department of Human Settlement
- Professional Fees at 10% of construction cost excluding VAT
- Specialist Consultant Fees (Town Planner, EIA consultant, Land Surveyor) at 1% of construction cost excluding VAT
- Disbursements are excluded

Methodology:-

- In deriving the cost per unit, a 3 storey block comprising of six units of either 35m<sup>2</sup>/ 45m<sup>2</sup> were measured and costed.
- The average cost was then determined which then informed the rate/m<sup>2</sup> utilised in this preliminary estimate

### 3. Scope of Work

35 m<sup>2</sup> Units on plan comprising 1 bedroom, bathroom comprising of bath, WC and Wash Hand Basin , open plan living room and kitchen area

45 m<sup>2</sup> Unit on plan comprising 2 bedrooms, bathroom comprising of bath, WC and Wash Hand Basin , open plan living room and kitchen area

9m<sup>2</sup> Guard House including a toilet

19m<sup>2</sup> Office Unit including a kitchenette and a toilet

### 4. Schedule of Allowances

**Foundations : Based on two typologies**

Reinforced concrete strip foundations to engineer's details

Reinforced concrete piles to engineer's details

**Ground Floor Construction**

100mm Reinforced concrete surface bed including mesh, dpm etc

Construction / isolation joints & pointing

Saw cut joints & pointing

**Concrete Structural Frame**

250mm Thick reinforced concrete slabs

Reinforced concrete double flight staircase

**External Envelope**

230mm NFP clay bricks to all external walls (35 & 45m<sup>2</sup> Units)

140mm Cement block to all external walls (Guard house)

Plaster and Paint Finish

Standard colour anodised aluminium windows

**Roofs**

Zincalume roof sheeting & accessories  
Timber roof construction including fixing  
Rainwater goods

**Internal Divisions**

110mm NFP clay brick walls (35 & 45m2 Units)  
230mm NFP clay brick walls (35 & 45m2 Units)  
140mm Cement blocks (Guard house)  
Internal doors: bedrooms, bathroom

**Floor Finishes**

Coloured cement-based self-levelling floor covering to wood floated screeds

**Internal Wall Finishes**

Plaster & paint to walls throughout  
Ceramic wall tiles to splash backs only

**Top Structure**

Plastered & painted concrete soffits  
Fibre cement nailed up ceiling and cornices

**Fittings**

No allowance has been made for furniture & fittings  
No allowance has been made for joinery fittings such as built- in cupboards, counters, etc

**Electrical Installation**

As per Electrical Consultants report

**Plumbing & Drainage**

Sanitary Fittings  
Sanitary Plumbing (measured per point)  
Cold water supplies (measured per point)

**External Civil/Bulk Works**

Site clearance, imported bulk earthworks etc  
Palisade security fencing  
Galvanised diamond mesh security fencing  
Roads, parking and walkways  
Stormwater drainage  
Water supply  
Soil drainage  
Play Area Equipment

**5. Exclusions**

No allowance has been made for the following:-

Damage to and subsequent removal or relocation of underground services  
Telecommunication Installation  
Furniture & equipment  
Joinery Fittings  
Fire fighting equipment  
Remedial work to existing road