

Parameters for the Calculation of Engineering Service Contributions for Roads

1 Jul 2016 to 30 Jun 2017

KwaDukuza Municipality

ESC Parameter spreadsheets

ESC Parameter spreadsheet must be placed in the folder containing the ESC calculation spreadsheets
The parameter spreadsheet must be named ESCRoadsParmYYYY.Xls (or Xlsx)
YYYY Is the financial year. The financial year starts on 1 July YYYY and ends on 30 June YYYY+1

Spreadsheet Based On:

South African Engineering Service Contribution Manual for Municipal Road Infrastructure
South African Trip Data Manual

Land Uses and Codes

Land Use	Land Use Size Units	Size	Base Units
100 Industrial			
110	Service Industry	sqm GLA	100
120	Heavy industry/manufacturing	sqm GLA	100
121	Mining	Employees	1
130	Industrial Area (Park)	sqm GLA	100
140	Manufacturing	sqm GLA	100
150	Warehousing and Distribution	sqm GLA	100
151	Mini-Warehousing	sqm GLA	100
200 Residential			
210	Single Dwelling Units	D/Unit	1
220	Apartments and Flats	D/Unit	1
225	Student Apartments and Flats	D/Unit	1
231	Townhouses (Simplexes and Duplex	D/Unit	1
232	Multi-Level Townhouses	D/Unit	1
251	Retirement Village	D/Unit	1
254	Old-Age Home	D/Unit	1
260	Recreational Homes	D/Unit	1
300 Lodging			
310	Hotel, Residential	Room	1
330	Hotel, Resort	Room	1
350	Guest House	Room	1
400 Recreational and Sport			
430	Golf Course	Course	1
473	Casino	sqm GLA	100
480	Amusement Park	ha	1
488	Sport Stadium	Seat	1000
492	Health and Fitness Centre	sqm GLA	100
500 Institutional			
520	Public Primary School	Student	1
530	Public Secondary School	Student	1
536	Private School	Student	1
550	University / College	Student	1
560	Places of Public Worship (Weekend)	Seat	1
561	Places of Public Worship (Weekday)	Seat	1
565	Pre-School (Day Care Centre)	Student	1
566	Cemetery	Ha	1
600 Medical			
611	Public Hospital	Bed	1
612	Private Hospital	sqm GLA	100
620	Nursing Home	Bed	1
630	Medical Clinic	sqm GLA	100
700 Office			
710	Offices	sqm GLA	100
713	Home offices and undertakings	House	1
720	Medical consulting rooms	sqm GLA	100
770	Business Centre (Park)	sqm GLA	100
780	Conference Centre	Seat	1
800 Retail			
812	Building Materials	sqm GLA	100
816	Hardware and Paint Store	sqm GLA	100
817	Nursery (Garden Centre)	sqm GLA	101
820	Shopping Centre	sqm GLA	100
830	Bulk Trade Centre	sqm GLA	100
841	Motor Dealership	sqm GLA	100
860	Wholesale Market (Fresh produce)	sqm GLA	100
890	Furniture Store	sqm GLA	100
900 Services			
931	Restaurant, Quality (Sit-down)	sqm GLA	100
932	Restaurant, Family (Sit-down)	sqm GLA	100
933	Fast Food	sqm GLA	100
946	Filling Station	Station	1
950	Vehicle Fitment Centre	sqm GLA	100

Land Values

1 Jul 2016 to 30 Jun 2017

Escalation Factors

Description	Date	CPI (I _{PC})	Esc Factor I _L	
Escalation adjustment	2016	121.0		Land value escalation
Land-value estimation	2016	121.0	1.000	Consumption

Land Values No and Region	Estimated	Escalated	Class 1-3 road costs		Boundary road cost/km	
	Value/ha	Value/ha	Cost/km	Veh-km/hr	Class 4	Class 5
	Road Reserve Widths/Veh-km/hr		32	4128	20	16
1 Salt Rock/Sheffield Beach/Ballito Region	R 2 000 000	R 2 000 000	R 6 400 000	R 1 550	R 4 000 000	R 3 200 000
2						

Note: Land values are determined for farm land with development potential

n based on the
ner Price Index

Trip length
Adj factor F_T

100.00%

Construction Cost Rates

1 Jul 2016 to 30 Jun 2017

Costing Parameters - Class 3 roads

Contribution Component	Veh-km/hr E80-km/day	Estimated cost per km	Calculated Esc Factor I _K	Escalated cost per km	Unit Cost Rate
Capacity Component per Veh-km/hr	4128	R 26 013 493	1.000	R 26 013 493	R 6 302
Strength Component per E80-km/day	3044	R 4 315 457	1.000	R 4 315 457	R 1 418

Costing Parameters - Boundary Roads

Boundary road class	Estimated cost per km	Calculated Esc Factor I _K	Escalated cost per km	Cost Rate per km
Class 4 Boundary Roads	R 9 917 756	1.000	R 9 917 756	R 9 917 756
Class 5 Boundary Roads	R 7 028 796	1.000	R 7 028 796	R 7 028 796

Escalation Factors

Proportion X _{PP} subject to escalation	Labour X _{PL}	Materials X _{PM}	Diesel X _{PF}	Plant X _{PP}
0.85	0.30	0.30	0.05	0.35

CPI and Production Price Indices (Average for year)

Description	Date	CPI (I _{PC})	Materials (I _{PM})	Diesel (I _{PF})	Plant (I _{PP})
Escalation adjustment	2016	121.0	107.4	97.2	128.3
Road construction cost estimation	2016	121.0	107.4	97.2	128.3

Information Sources: Consumer and Production Price In

Statistics published by: Statistics South Africa

Consumer Price Indices (CPI) published in Statistical Releases P0141
Average for the country

Production Price Indices published in Statistical Releases P0142.1

Materials (Civil Engineering Industry)

Fuel - Diesel Oil (Average for country)

Plant (Civil Engineering)

Web: <http://www.statssa.gov.za/>

Information is also made available by:

The South African Federation of Civil Engineering Contractors

Web: <http://www.safcec.org.za/>

Base Road Construction Cost Rates

Year estimated: 2016

Class 3 Roads - Capacity Component

Based on a four-lane Class 3 road with 500m intersection spacing

Description	Unit	Rate (R/Unit)	Quantity (Units)	Cost (Vat Excl)
Accommodation of traffic	Per km Road	R 450 000	1	R 450 000
Earthworks	Per m ² Pavement	R 110	17900	R 1 969 000
Pavement (3 000 000 E80 Design)				
Wearing Course	Per m ² Pavement	R 175	17900	R 3 132 500
Base Course	Per m ² Pavement	R 130	17900	R 2 327 000
Subbase	Per m ² Pavement	R 110	19900	R 2 189 000
Subgrade	Per m ² Pavement	R 65	19900	R 1 293 500
Roadbed	Per m ² Pavement	R 45	19900	R 895 500
Subtotal for pavements (3 000 000 E80 Design)				R 9 837 500
Subtract strength component for 3 000 000 E80s				-R 938 143
Kerbs	Per m Kerb	R 240	3920	R 940 800
Sidewalk	Per m ² sidewalk	R 230	2940	R 676 200
Guard rails and other safety devices	Per km Road	R 80 000	1	R 80 000
Stormwater drainage (road only)	Per km Road	R 2 000 000	1	R 2 000 000
Public transport facilities	Per facility	R 275 000	4	R 1 100 000
Grade separation	Per interchange	R 60 000 000	0.005	R 300 000
Landscaping, finishing off and fencing	Per km Road	R 150 000	1	R 150 000
Road signs	Per km Road	R 260 000	1	R 260 000
Traffic signals	Per signal installation	R 550 000	1.5	R 825 000
Street lighting	Per km Road	R 900 000	1	R 900 000
Other items	Per km Road	R 300 000	1	R 300 000
Subtotal				R 18 850 357
Preliminary and general items	% of total cost		15%	R 2 827 554
Professional services and supervision	% of total cost		20%	R 4 335 582
Total construction cost per 1 km of road				R 26 013 493

Class 3 Roads - Strength Component

Based on a four-lane Class 3 road with 500m intersection spacing

Description	Unit	Rate (R/Unit)	Quantity (Units)	Cost (Vat Excl)
Pavement (10 000 000 E80 Design)				
Wearing Course	Per m ² Pavement	R 175	17900	R 3 132 500
Base Course	Per m ² Pavement	R 130	17900	R 2 327 000
Subbase, Upper	Per m ² Pavement	R 110	19900	R 2 189 000
Subbase, Lower	Per m ² Pavement	R 110	19900	R 2 189 000
Subgrade	Per m ² Pavement	R 65	19900	R 1 293 500
Roadbed	Per m ² Pavement	R 45	19900	R 895 500
Subtotal for pavements (10 000 000 E80 Design)				R 12 026 500
Additional for strength component for 7 000 000 E80s				R 2 189 000
Add strength component for 3 000 000 E80s				R 938 143
Additional for strength component for 10 000 000 E80s				R 3 127 143
Preliminary and general items	% of total cost		15%	R 469 071
Professional services and supervision	% of total cost		20%	R 719 243
Total strength component cost per 1 km of road for 10 000 000 E80s				R 4 315 457

Base Road Construction Cost Rates

Year estimated: 2016

Class 4 Boundary Roads

Based on two-lane road with 9.0m wide road widths

Description	Unit	Rate (R/Unit)	Quantity (Units)	Cost (Vat Excl)
Accommodation of traffic	Per km Road	R 45 000	1	R 45 000
Earthworks	Per m ² Pavement	R 65	8820	R 573 300
Pavement				
Wearing Course	Per m ² Pavement	R 150	8820	R 1 323 000
Base Course	Per m ² Pavement	R 110	8820	R 970 200
Subbase	Per m ² Pavement	R 50	9820	R 491 000
Subgrade	Per m ² Pavement	R 47	9820	R 461 540
Roadbed	Per m ² Pavement	R 33	9820	R 324 060
Subtotal for pavements				R 3 569 800
Kerbs	Per m Kerb	R 197	1940	R 382 180
Sidewalk	Per m ² sidewalk	R 210	1450	R 304 500
Guard rails and other safety devices	Per km Road	R 10 000	1	R 10 000
Stormwater drainage (road only)	Per km Road	R 1 350 000	1	R 1 350 000
Public transport facilities	Per facility	R 200 000	0.25	R 50 000
Grade separation	Per interchange	R 50 000	0.000	R 0
Landscaping, finishing off and fencing	Per km Road	R 34 000	1	R 34 000
Road signs	Per km Road	R 43 000	1	R 43 000
Traffic signals	Per signal installation	R 500 000	0.25	R 125 000
Street lighting	Per km Road	R 500 000	1	R 500 000
Other items	Per km Road	R 200 000	1	R 200 000
Subtotal				R 7 186 780
Preliminary and general items	% of total cost		15%	R 1 078 017
Professional fees	% of total cost		20%	R 1 652 959
Total road construction cost per 1 km of road				R 9 917 756

Class 5 Boundary Roads

Based on two-lane road with 7.0m wide road widths

Description	Unit	Rate (R/Unit)	Quantity (Units)	Cost (Vat Excl)
Accommodation of traffic	Per km Road	R 45 000	1	R 45 000
Earthworks	Per m ² Pavement	R 47	6850	R 321 950
Pavement				
Wearing Course	Per m ² Pavement	R 125	6850	R 856 250
Base Course	Per m ² Pavement	R 110	6850	R 753 500
Subbase	Per m ² Pavement	R 50	7850	R 392 500
Subgrade	Per m ² Pavement	R 47	7850	R 368 950
Roadbed	Per m ² Pavement	R 30	7850	R 235 500
Subtotal for pavements				R 2 606 700
Kerbs	Per m Kerb	R 197	1940	R 382 180
Sidewalk	Per m ² sidewalk	R 210	1450	R 304 500
Guard rails and other safety devices	Per km Road	R 0	1	R 0
Stormwater drainage (road only)	Per km Road	R 845 000	1	R 845 000
Public transport facilities	Per facility	R 200 000	0	R 0
Grade separation	Per interchange	R 50 000	0.000	R 0
Landscaping, finishing off and fencing	Per km Road	R 34 000	1	R 34 000
Road signs	Per km Road	R 34 000	1	R 34 000
Traffic signals	Per signal installation	R 500 000	0.00	R 0
Street lighting	Per km Road	R 420 000	1	R 420 000
Other items	Per km Road	R 100 000	1	R 100 000
Subtotal				R 5 093 330
Preliminary and general items	% of total cost		15%	R 764 000
Professional fees	% of total cost		20%	R 1 171 466
Total road construction cost per 1 km of road				R 7 028 796

Table 3.1: Daily Trip Generation Rates and Parameters

Land Use	Size Units	Daily	Peaking	Hourly	Percent Heavy P _{HD}	E80 Axles Per HV E _{HD}	Size Adjustment		
		Trip rate AADT _D	Factor F _{QD}	Trip rate F _{QD} -AADT _D			1+A/(1+sqm Size/B) Factor A	Factor B	
100 Industrial									
110	Service Industry	00 sqm GLA	6.00	0.150	0.90	10%	1.34		
120	Heavy industry/manufacturing	00 sqm GLA	1.25	0.150	0.19	10%	2.35		
121	Mining	1 Employees	0.65	0.150	0.10	10%	2.35		
130	Industrial Area (Park)	00 sqm GLA	6.00	0.150	0.90	10%	2.35		
140	Manufacturing	00 sqm GLA	2.00	0.250	0.50	10%	2.35		
150	Warehousing and Distribution	00 sqm GLA	3.00	0.140	0.42	10%	2.35		
151	Mini-Warehousing	00 sqm GLA	2.50	0.100	0.25				
200 Residential									
210	Single Dwelling Units	1 D/Unit	4.00	0.225	0.90				
220	Apartments and Flats	1 D/Unit	2.75	0.225	0.62				
225	Student Apartments and Flats	1 D/Unit	1.25	0.225	0.28				
231	Townhouses (Simplexes and Duplexes)	1 D/Unit	3.75	0.225	0.84				
232	Multi-Level Townhouses	1 D/Unit	3.25	0.225	0.73				
251	Retirement Village	1 D/Unit	3.40	0.110	0.37				
254	Old-Age Home	1 D/Unit	2.50	0.100	0.25				
260	Recreational Homes	1 D/Unit	3.00	0.100	0.30				
300 Lodging									
310	Hotel, Residential	1 Room	3.25	0.150	0.49				
330	Hotel, Resort	1 Room	6.00	0.100	0.60				
350	Guest House	1 Room	3.00	0.150	0.45				
400 Recreational and Sport									
430	Golf Course	1 Course	650.00	0.050	32.50				
473	Casino	00 sqm GLA	50.00	0.050	2.50				
480	Amusement Park	1 ha	250.00	0.050	12.50				
488	Sport Stadium	1000 Seat	100.00	0.050	5.00				
492	Health and Fitness Centre	00 sqm GLA	32.50	0.300	9.75				
500 Institutional									
520	Public Primary School	1 Student	2.00	0.400	0.80				
530	Public Secondary School	1 Student	2.00	0.400	0.80				
536	Private School	1 Student	2.00	0.400	0.80				
550	University / College	1 Student	1.90	0.110	0.21				
560	Places of Public Worship (Weekend)	1 Seat	0.65	0.085	0.06				
561	Places of Public Worship (Weekday)	1 Seat	0.60	0.085	0.05				
565	Pre-School (Day Care Centre)	1 Student	3.00	0.275	0.83				
566	Cemetery	1 Ha	6.00	0.050	0.30				
600 Medical									
611	Public Hospital	1 Bed	7.00	0.200	1.40				
612	Private Hospital	00 sqm GLA	16.50	0.110	1.81				
620	Nursing Home	1 Bed	2.25	0.110	0.25				
630	Medical Clinic	00 sqm GLA	40.00	0.150	6.00				
700 Office									
710	Offices	00 sqm GLA	8.50	0.250	2.12	5%	1.21		
713	Home offices and undertakings	1 House	25.00	0.250	6.25				
720	Medical consulting rooms	00 sqm GLA	55.00	0.135	7.43				
770	Business Centre (Park)	00 sqm GLA	10.00	0.150	1.50				
780	Conference Centre	1 Seat	1.00	0.300	0.30				
800 Retail									
812	Building Materials	00 sqm GLA	45.00	0.090	4.05	5%	1.32		
816	Hardware and Paint Store	00 sqm GLA	60.00	0.085	5.10	3%	1.32		
817	Nursery (Garden Centre)	01 sqm GLA	45.00	0.100	4.50				
820	Shopping Centre	00 sqm GLA	35.00	0.085	2.98	2%	1.32	6.000	3500
830	Bulk Trade Centre	00 sqm GLA	7.50	0.145	1.09	2%	1.32		
841	Motor Dealership	00 sqm GLA	30.00	0.100	3.00				
860	Wholesale Market (Fresh produce)	00 sqm GLA	3.75	0.100	0.38	17%	1.56		
890	Furniture Store	00 sqm GLA	5.40	0.250	1.35	2%	1.32		
900 Services									
931	Restaurant, Quality (Sit-down)	00 sqm GLA	90.00	0.100	9.00				
932	Restaurant, Family (Sit-down)	00 sqm GLA	140.00	0.100	14.00				
933	Fast Food	00 sqm GLA	200.00	0.100	20.00				
946	Filling Station	1 Station	500.00	0.120	60.00	2%	1.32		
950	Vehicle Fitment Centre	00 sqm GLA	22.00						

Table 3.2: Trip Generation Adjustment Factors

Land Use	Size Units	Percentage reduction for developments in areas with				
		Mixed-use Development	Low vehicle Ownership	Very Low Ownership	Transit nodes or Corridors	
100 Industrial						
110	Service Industry	100 sqm GLA	5%	20%	30%	15%
120	Heavy industry/manufacturing	100 sqm GLA	5%	20%	30%	15%
121	Mining	1 Employees	5%	20%	30%	15%
130	Industrial Area (Park)	100 sqm GLA	5%	20%	30%	15%
140	Manufacturing	100 sqm GLA	5%	20%	30%	15%
150	Warehousing and Distribution	100 sqm GLA	5%	20%	30%	15%
151	Mini-Warehousing	100 sqm GLA	5%	20%	30%	15%
200 Residential						
210	Single Dwelling Units	1 D/Unit	10%	40%	70%	15%
220	Apartments and Flats	1 D/Unit	15%	30%	50%	15%
225	Student Apartments and Flats	1 D/Unit	25%	50%	80%	15%
231	Townhouses (Simplexes and Duplexes)	1 D/Unit	15%	30%	50%	15%
232	Multi-Level Townhouses	1 D/Unit	15%	30%	50%	15%
251	Retirement Village	1 D/Unit	5%	50%	80%	15%
254	Old-Age Home	1 D/Unit	5%	50%	80%	15%
260	Recreational Homes	1 D/Unit	10%	20%	30%	15%
300 Lodging						
310	Hotel, Residential	1 Room	20%	20%	30%	15%
330	Hotel, Resort	1 Room	20%	20%	30%	15%
350	Guest House	1 Room	20%	30%	50%	15%
400 Recreational and Sport						
430	Golf Course	1 Course	5%	0%	0%	0%
473	Casino	100 sqm GLA	5%	20%	30%	15%
480	Amusement Park	1 ha	5%	30%	50%	15%
488	Sport Stadium	1000 Seat	5%	30%	50%	15%
492	Health and Fitness Centre	100 sqm GLA	15%	20%	30%	15%
500 Institutional						
520	Public Primary School	1 Student	30%	50%	80%	15%
530	Public Secondary School	1 Student	30%	50%	80%	15%
536	Private School	1 Student	30%	50%	80%	15%
550	University / College	1 Student	20%	40%	60%	15%
560	Places of Public Worship (Weekend)	1 Seat	10%	50%	80%	15%
561	Places of Public Worship (Weekday)	1 Seat	10%	50%	80%	15%
565	Pre-School (Day Care Centre)	1 Student	5%	50%	80%	15%
566	Cemetery	1 Ha	0%	30%	50%	15%
600 Medical						
611	Public Hospital	1 Bed	0%	50%	80%	15%
612	Private Hospital	100 sqm GLA	0%	20%	30%	15%
620	Nursing Home	1 Bed	0%	50%	80%	15%
630	Medical Clinic	100 sqm GLA	0%	50%	80%	15%
700 Office						
710	Offices	100 sqm GLA	20%	20%	30%	15%
713	Home offices and undertakings	1 House	10%	20%	30%	15%
720	Medical consulting rooms	100 sqm GLA	10%	30%	50%	15%
770	Business Centre (Park)	100 sqm GLA	15%	20%	30%	15%
780	Conference Centre	1 Seat	10%	20%	30%	10%
800 Retail						
812	Building Materials	100 sqm GLA	10%	30%	50%	15%
816	Hardware and Paint Store	100 sqm GLA	10%	30%	50%	15%
817	Nursery (Garden Centre)	101 sqm GLA	10%	30%	50%	15%
820	Shopping Centre	100 sqm GLA	10%	30%	60%	15%
830	Bulk Trade Centre	100 sqm GLA	10%	30%	60%	15%
841	Motor Dealership	100 sqm GLA	5%	20%	30%	15%
860	Wholesale Market (Fresh produce)	100 sqm GLA	0%	0%	0%	5%
890	Furniture Store	100 sqm GLA	5%	30%	50%	15%

900 Services

931	Restaurant, Quality (Sit-down)	100 sqm GLA	10%	10%	15%	15%
932	Restaurant, Family (Sit-down)	100 sqm GLA	10%	30%	50%	15%
933	Fast Food	100 sqm GLA	10%	40%	60%	15%
946	Filling Station	1 Station	0%	0%	0%	0%
950	Vehicle Fitment Centre	100 sqm GLA	0%	0%	0%	0%

Table 4: Trip Lengths

Land Use	Size Units	Total trip Length	Half trip Length	Class 4/5 Half trip	Non-Municipal	Adj Trip Length	Size Adjustment		
		L _T (km)	L _T /2 (km)	L ₄₅ (km)	P _N (%)	L _D /2 (km)	1-A/(1+sqm Size/B)	Factor A	Factor B
100 Industrial									
110	Service Industry	100 sqm GLA	12.00	6.00	1.25	50%	1.75		
120	Heavy industry/manufacturing	100 sqm GLA	15.00	7.50	1.25	50%	2.50		
121	Mining	1 Employees	15.00	7.50	1.25	50%	2.50		
130	Industrial Area (Park)	100 sqm GLA	15.00	7.50	1.25	50%	2.50		
140	Manufacturing	100 sqm GLA	15.00	7.50	1.25	50%	2.50		
150	Warehousing and Distribution	100 sqm GLA	15.00	7.50	1.25	50%	2.50		
151	Mini-Warehousing	100 sqm GLA	10.00	5.00	1.00	40%	2.00		
200 Residential									
210	Single Dwelling Units	1 D/Unit	8.50	4.25	1.00	40%	1.55		
220	Apartments and Flats	1 D/Unit	5.00	2.50	0.75	30%	1.00		
225	Student Apartments and Flats	1 D/Unit	3.00	1.50	0.60	20%	0.60		
231	Townhouses (Simplexes and Duplexe)	1 D/Unit	7.50	3.75	1.00	40%	1.25		
232	Multi-Level Townhouses	1 D/Unit	7.00	3.50	1.00	40%	1.10		
251	Retirement Village	1 D/Unit	5.50	2.75	1.00	30%	0.92		
254	Old-Age Home	1 D/Unit	5.50	2.75	1.00	30%	0.92		
260	Recreational Homes	1 D/Unit	10.00	5.00	1.50	40%	1.50		
300 Lodging									
310	Hotel, Residential	1 Room	7.00	3.50	1.00	40%	1.10		
330	Hotel, Resort	1 Room	8.00	4.00	1.00	50%	1.00		
350	Guest House	1 Room	6.00	3.00	1.00	35%	0.95		
400 Recreational and Sport									
430	Golf Course	1 Course	13.00	6.50	1.00	45%	2.58		
473	Casino	100 sqm GLA	14.00	7.00	1.00	50%	2.50		
480	Amusement Park	1 ha	12.00	6.00	1.00	50%	2.00		
488	Sport Stadium	1000 Seat	12.00	6.00	1.00	50%	2.00		
492	Health and Fitness Centre	100 sqm GLA	5.00	2.50	0.75	30%	1.00		
500 Institutional									
520	Public Primary School	1 Student	4.00	2.00	1.00	25%	0.50		
530	Public Secondary School	1 Student	5.00	2.50	1.00	35%	0.62		
536	Private School	1 Student	5.50	2.75	1.00	40%	0.65		
550	University / College	1 Student	10.00	5.00	1.50	40%	1.50		
560	Places of Public Worship (Weekend)	1 Seat	6.00	3.00	0.80	35%	1.15		
561	Places of Public Worship (Weekday)	1 Seat	6.00	3.00	0.80	35%	1.15		
565	Pre-School (Day Care Centre)	1 Student	3.50	1.75	0.90	35%	0.24		
566	Cemetery	1 Ha	8.00	4.00	1.00	40%	1.40		
600 Medical									
611	Public Hospital	1 Bed	8.50	4.25	1.00	40%	1.55		
612	Private Hospital	100 sqm GLA	8.00	4.00	1.00	40%	1.40		
620	Nursing Home	1 Bed	7.50	3.75	1.00	35%	1.44		
630	Medical Clinic	100 sqm GLA	5.00	2.50	1.00	30%	0.75		
700 Office									
710	Offices	100 sqm GLA	9.00	4.50	1.00	35%	1.92		
713	Home offices and undertakings	1 House	7.00	3.50	1.00	35%	1.27		
720	Medical consulting rooms	100 sqm GLA	8.00	4.00	1.00	35%	1.60		
770	Business Centre (Park)	100 sqm GLA	10.00	5.00	1.00	40%	2.00		
780	Conference Centre	1 Seat	10.00	5.00	1.00	50%	1.50		
800 Retail									
812	Building Materials	100 sqm GLA	8.00	4.00	1.00	40%	1.40		
816	Hardware and Paint Store	100 sqm GLA	7.00	3.50	1.00	40%	1.10		
817	Nursery (Garden Centre)	101 sqm GLA	6.50	3.25	1.00	30%	1.27		
820	Shopping Centre	100 sqm GLA	10.00	5.00	1.00	40%	2.00	0.740	148000
830	Bulk Trade Centre	100 sqm GLA	10.00	5.00	1.00	50%	1.50		
841	Motor Dealership	100 sqm GLA	6.50	3.25	0.75	40%	1.20		
860	Wholesale Market (Fresh produce)	100 sqm GLA	10.00	5.00	1.00	50%	1.50		
890	Furniture Store	100 sqm GLA	8.00	4.00	1.00	40%	1.40		

900 Services

931	Restaurant, Quality (Sit-down)	100 sqm GLA	6.50	3.25	0.80	30%	1.47
932	Restaurant, Family (Sit-down)	100 sqm GLA	5.50	2.75	0.80	30%	1.12
933	Fast Food	100 sqm GLA	4.00	2.00	0.70	25%	0.80
946	Filling Station	1 Station	5.00	2.50	0.50	40%	1.00
950	Vehicle Fitment Centre	100 sqm GLA	8.00	4.00	1.00	35%	1.60