

DEVELOPMENT CONTRIBUTION POLICY

<u>APPROVED/REVIEWED</u>	<u>COUNCIL MEETING DATE</u>
APPROVED	20 JULY 2016

INDEX

<u>CONTENTS</u>	<u>PAGES</u>
1. Preamble	3
2. Legal Framework	4
3. Definitions	7
4. Dealing with various levels of development	9
5. Defining Bulk Services	12
6. Determining the Development Charge	14
7. Deriving the Unit Cost per Service	15
8. Dealing with Social Responsibility: Housing Need and Economic Stimulation	19
9. Environmental Sustainability Incentive	19
10. Subsidies and Exemptions	20
11. Calculation of the Development Charge	20
12. Administration	24
13. Annexures	25-39

1. PREAMBLE

- 1.1 The current Development Charge policy used by Drakenstein Municipality, known as Bulk Infrastructure Contribution Levies (BICLs), is calculated per newly created portion based on land value.
- 1.2 The current BICL tariff charges a levy for the following services:
 - Roads
 - Stormwater
 - Water
 - Sewer
 - Electricity
- 1.3 The existing policy is applied to:
 - Subdivisions, group housing, private residential flats and any developments, or densification that places an additional burden on the services
 - GAP housing category – only 40% of the normal applicable BICL
 - Redevelopment of existing business properties
 - BICLs are not applicable to granny flats, second dwelling units and/or further densification on a residential erf.
- 1.4 An update of the existing development charge policy is required because the existing policy does not clearly determine the direct impact of the proposed land use and does not calculate the development based on the specific unit consumption of each of the engineering services as required by LUPA.
- 1.5 It is required by the recent Spatial Planning and Land Use Management Act(SPLUMA) (2013) and Land Use Planning Act(LUPA) (2014) to have a Municipal Land Use Planning By-Law that will regulate aspects of land and building development management, including the provision of engineering services for land development and the application of development charges. Section 48 of the LUPA empowers municipalities to levy a development charge for new developments and changes in land use.
- 1.6 A uniform Development Charges Policy is required that will specify the appropriate methodology to determine the contributions payable by developers towards the cost of bulk municipal engineering services, taking into account various development scenarios.
- 1.7 The services incorporated in this policy are:
 - Water
 - Sanitation
 - Transport/ Roads
 - Storm water
 - Solid Waste
 - Electricity
- 1.8 The Civil Engineering Department will be responsible to calculate the Development Charge for the following civil services only:
 - Water
 - Sanitation
 - Transport/ Roads
 - Storm water

- Solid Waste

- 1.9 A decision was made by Executive Mayor and Mayoral Committee on 4 December 2013, to exclude Electricity services from the current Bulk Infrastructure Contribution Levy in the municipal tariffs. The current BICL tariff however still reflects Electricity to be paid at a fixed tariff and must be amended according to the decision taken in 2013.
- 1.10 The provision of Electricity Services has to abide to the **NRS 069: Code of Practice for the Recovery of Capital Costs for Distribution Network Assets**. This Code has already been accepted by the Council and is also a requirement of the NERSA licensing conditions.
- 1.11 A Development Charges policy for civil engineering and electrical services will apply to the whole of the Drakenstein Municipal areas:
- 1.12 Drakenstein Municipality started in 2012 an investigation/study into updating of the current policy to be in line with how other municipalities are calculating their Development Charges. A draft report was drawn up by SMEC and a calculator was created to calculate the Development Charges.
- 1.13 In October 2013, Western Cape Government: Department of Environmental Affairs and Development Planning, started hosting workshops for municipalities in the Western Cape to have a standardised method of calculating Development Contributions for municipalities that do not have a Development Contribution policy or calculator.
- 1.14 As a result of the workshops held by Western Cape Government: Department of Environmental Affairs and Development Planning, a generic calculator was developed in line with the outcomes of the numerous workshops which will be used to calculate the applicable Development Charge. As a result of the calculator drafted by Western Cape Government: Department of Environmental Affairs and Development Planning and of the outcomes of the various workshops held with regards to Development Charges, Drakenstein's calculator was updated in line with the findings of the generic calculator.

2. LEGAL FRAMEWORK

The cost liability for bulk services for property developments has remained a contentious legal issue for many years in the South African municipal environment and it has not gone undisputed. The development charge payable varied from municipality to municipality and the methods for determining development charges have been inconsistent and confusing. The principle of Development Charges have been fixed in the MFMA Act 56 of 2003, expanded upon in sec 49 of SPLUMA and Drakenstein Local Municipality By-law on Municipal Land Use Planning, 2015 published PN 47589 in PG 7528 of 13 November 2015 – with effect from the date that the Western Cape Land Use Planning Act 3 of 2014 comes into operation in the municipal area of the Municipality.

2.1 Cost Liability for Bulk Services in the Cape Province prior to the LUPO (1985)

The regulation of costs for township establishment in the Cape Province prior to the proclamation of the Land Use Planning Ordinance in 1985, was based on the recommendations of the Niemand Commission dating back to 1970 (RSA, 1970).

According to the Cape Provincial Administration at the time, the basic principle for regulation of cost liability, was that the existing municipal ratepayers should not be expected to carry the burden of services for new townships, but that an arrangement between the municipality and the township developer should be such that the municipality is not making a profit out of the township developer or the buyers of the erven either.

2.2 Venter Commission Report 1984

Government appointed the Venter Commission in 1982 to make specific recommendations for determining the cost liability for bulk engineering services. The Venter Commission report (RSA, 1984) set out clear guidelines for the implementation of bulk services contributions..

Of the recommendations were:

- The developer is responsible for the installation and financing of all the engineering services required internally by the new development.
- The municipality is responsible for the installation and financing of all the engineering services required externally.
- Any formula that is used to calculate bulk services contributions should ensure equal treatment such that existing residents should not subsidise new developments but also not be unfairly advantaged by new developments in that the developer subsidises the provision of services to the existing townships.

2.3 Land Use Planning Ordinance Section 42 1985

The adoption of the Venter Commission recommendation led to the promulgation of the Land Use Planning Ordinance (LUPO) No. 15 of 1985. Section 42 of this Ordinance permits a Local Authority to impose conditions relating to the payment of development contributions when approving new developments or granting increase land use rights. According to the LUPO, it is basically left up to the Municipality to decide whether a developer should pay or should not pay and therein lies the problem, since this once again, leaves room for unequal treatment and consequently legal disputes.

2.4 Provincial Guidelines 1996

The Western Cape Provincial Government published Guidelines for the Classification and Division of Costs for Engineering Services in 1996 (Provincial Administration WC, 1996) in an attempt to recommend consistent application of the LUPO principles and the recommendations of the Venter report.

The Provincial Guidelines allocates the responsibility of the provision of services as follows:

- **Internal engineering services**: The Developer is responsible for the installation and financing of engineering services internal to the development and any connecting or link services that may be necessary.
- **External engineering services**: The Local Authority is responsible for the installation and financing of engineering services external to the development.

2.5 Spatial Planning and Land Use Management Act (SPLUMA) Act 16 of 2013

The Spatial Planning and Land Use Management Act (SPLUMA) was assented to on 5 August 2013 and makes provision for a uniform system of regulating land

development throughout the country and municipalities are the key stakeholders in its implementation.

Section 49 of the national SPLUMA provides that:

- *An applicant is responsible for the provision and installation of internal engineering services.*
- *A municipality is responsible for the provision of external engineering services.*
- *Where a municipality is not the provider of an engineering service, the applicant must satisfy the municipality that adequate arrangements have been made with the relevant service provider for the provision of that service.*
- *An applicant may, in agreement with the municipality or service provider, install any external engineering service instead of payment of the applicable development charges, and the fair and reasonable cost of such external services may be set off against Development Charges payable.*

The provisions of SPLUMA with regards to development charges are consistent with the specifications of the Provincial Guidelines (1996).

2.6 Land Use Planning Act (LUPA) Act No 3 of 2014

The new provincial Land Use Planning Act (LUPA) was approved on 31 March 2014 and gazetted on 7 April 2014 and replaces the LUPO (1985). LUPA will bring planning legislation in the Western Cape in line with the Constitution of South Africa and SPLUMA (2013), as well as ensure the effective integration of planning activities across the provincial and municipal governments.

The new provincial legislation, read with the SPLUMA requires a municipality to have a Municipal Land Use Planning By-Law that will regulate aspects and land and building development management, including the provision of engineering services for land development and the application of development charges. Section 48 of the LUPA empowers municipalities to require a development charge.

2.7 By-Law on Municipal Land Use Planning

As LUPA, SPLUMA and the Policy Framework for Municipal Development Charges, Final Draft, has stated, Development Contributions can be levied in conjunction with a Municipal By-Law. Section 83 of Drakenstein Local Municipality By-law on Municipal Land Use Planning, 2015 published PN 47589 in PG 7528 of 13 November 2015 states that:

- The applicant must pay development charges to the Drakenstein Municipality in respect of the provision and installation of external engineering services.
- These external engineering services for which development charges are payable must be set out in a policy adopted and annually reviewed by the Drakenstein Municipality.
- The development charges imposed are subject to escalation at the rate calculated in accordance with the policy on development charges.

2.8 Other Legislation

There are various other Acts such as the Municipal Systems Act of 2000, the Municipal Finance Act of 2003 and the Municipal Property Rates Act of 2004 and the Constitution which determine what the municipal, Provincial and National responsibilities are in terms of service delivery. All of these deal in varying degrees with the ability of local authorities to recover costs for service provision and sustainable service delivery.

A municipality derives its authority to impose a development charge in terms of Municipal Fiscal Powers and Functions Act (*as to be amended*) and:

- May only impose a development charge in terms of a municipal policy statement and bylaws on development charges that conforms to this policy framework;
- Must update the schedule of costs used for the calculation of development charges on an annual basis in the course of the preparation of its main budget estimates;
- Must calculate the development charge during the assessment of a development application and impose it as a condition for the approval of that development application

An amendment to the National Municipal Fiscal Powers and Functions (MFPFA, 2007) will give legal force to the current final *Draft National Policy Framework for Municipal Development Charges* (National Treasury, 2011).

2.9 Frameworks, Policies and Plans

2.9.1 *Policy Framework for Municipal Development Charges, Final Draft, Version 7*

National Treasury is in the process of compiling a Policy Framework which specifies the grounds for which a municipality may ask the Developer to pay a Development Charge.

One of the four key principles for a Municipal Development Contribution in South Africa is Spatial and Economic Neutrality:

The primary role of a system of development charges is to ensure the timely, sustainable financing of required urban infrastructure. This implies that:

- They should be determined on identifiable and measurable costs to avoid distortions in the economy and in patterns of spatial development;
- They should not be used as a spatial planning policy instrument. Inevitably, however, removing the current, implicit subsidies for urban sprawl arising from the under-recovery of development charges would lead to less sprawl;

2.9.2 *Drakenstein Municipal Spatial Development Framework*

SPLUMA requires that the future demand for housing and related infrastructure requirements is addressed in an SDF.

As stated in the SDF the availability of infrastructure capacity in the short to medium term puts a limitation on development of land within the urban edge. Limitations in the capacity of the bulk infrastructure networks of the municipality will impact on the time frames for development of land parcels, identified as suitable for development. The SDF includes prioritisation of development options for the short, medium and long term, but ultimately the implementation of this plan is dependent on the municipal budget allocation.

Section 6.2.4 of the Spatial Development Framework addresses the rights the Municipality has to charge a Development Contribution.

3. DEFINITIONS

In this document, the following words shall have the following meanings:

“Bulk Infrastructure Contribution Levy (BICL)” means a financial contribution or levy paid by a developer for the impact of his/her development (land use) on the bulk infrastructure services that are provided by the Local Authority, as permitted by the Land Use Planning Ordinance (LUPO) No. 15 of 1985. BICLS is now known as *Development Charges*.

“Civil Engineering Services” means all primary engineering services as described in “Bulk Services” above with the exclusion of Electricity services.

“Constitution” means the Constitution of the Republic of South Africa, 1996 (Act 108 of 1996).

“Council” means the Municipal Council of Drakenstein.

“Developer” means the person, including an organ of state, who may or may not be the owner of a specific portion of land and who intends to develop this portion of land by way of subdivision, building upon or changing the land use and who is applying for permission from the relevant authority according to LUPA to do this.

“Development” means the changing of land use or of cadastral boundaries in order to intensify the utilisation of land, or the simultaneous changing of both land use and cadastral boundaries in order to intensify the utilisation of the land.

‘Development Charge’ means a once-off charge imposed by the Municipality of Drakenstein on a developer as a condition of approval of a land development application in order to cover the cost of the bulk engineering services required as a result of an intensification of land use as permitted by the Land Use Planning Act (LUPA) of March 2014. This charge was previously known as the Bulk Infrastructure Contribution Levy (BICL).

“Drakenstein” means the Municipality of Drakenstein.

“Engineering services” means the infrastructure required to supply water, sanitation, municipal roads, stormwater drainage, municipal public transport, solid waste collection and removal required for the purpose of land development.

“External Engineering Services” means:

- a) Municipal engineering services infrastructure external to the development site boundary and includes both:
 - Bulk engineering services, which means municipal services infrastructure external to the development, including land, required to provide engineering services to multiple users at a municipality-wide scale as indicated in the relevant master plans of the municipality and;
 - Link engineering services, which means municipal services infrastructure external to the development site boundary, including land required to connect internal engineering services within the proposed development to existing or proposed bulk engineering services and;
- b) Bulk and link engineering services described in a) above but which also falls within the site boundary where the characteristics of the site so require external engineering services to be included on the site in addition to the internal engineering services.

“GAP Affordable Housing” means housing that is certified as such by the Drakenstein Municipality’s Housing Department.

“Link Services” means all new engineering services that are necessary to connect to the internal services of the relevant portion of land to the exiting engineering services or bulk services.

“Internal Engineering Services” means infrastructure that falls within the boundary of the development to service that development and which will be transferred to the municipality.

“Red Book” means the CSIR (2003) *Guidelines for Human Settlement Planning and Design*. Compiled under the patronage of the National Department of Housing.

4. DEALING WITH VARIOUS LEVELS OF DEVELOPMENT

In terms of the engineering services provided a property may be fully developed, partly developed or not developed at all. The proposed development or change in land use requires an unambiguous definition of the status quo level of development in order to derive a justifiable development charge. It is important that the approach taken by Drakenstein Municipality keeps to the requirements of SPLUMA and LUPA and considers the recommendations of the Provincial Guidelines (1996) by ensuring equal treatment for the existing and new residents..

It is possible to consider three approaches in order to deal with the level of development as set out below.

4.1 Greenfields Developments

A development is defined as a “greenfields” development, if there are no bulk engineering services to the property for future development. Thus, the developer will be required to finance the internal and external (bulk) services to his development in order not to place any burden on the existing rate payers.. Figure 4-1 provides a graphic representation of the approach for greenfields developments.

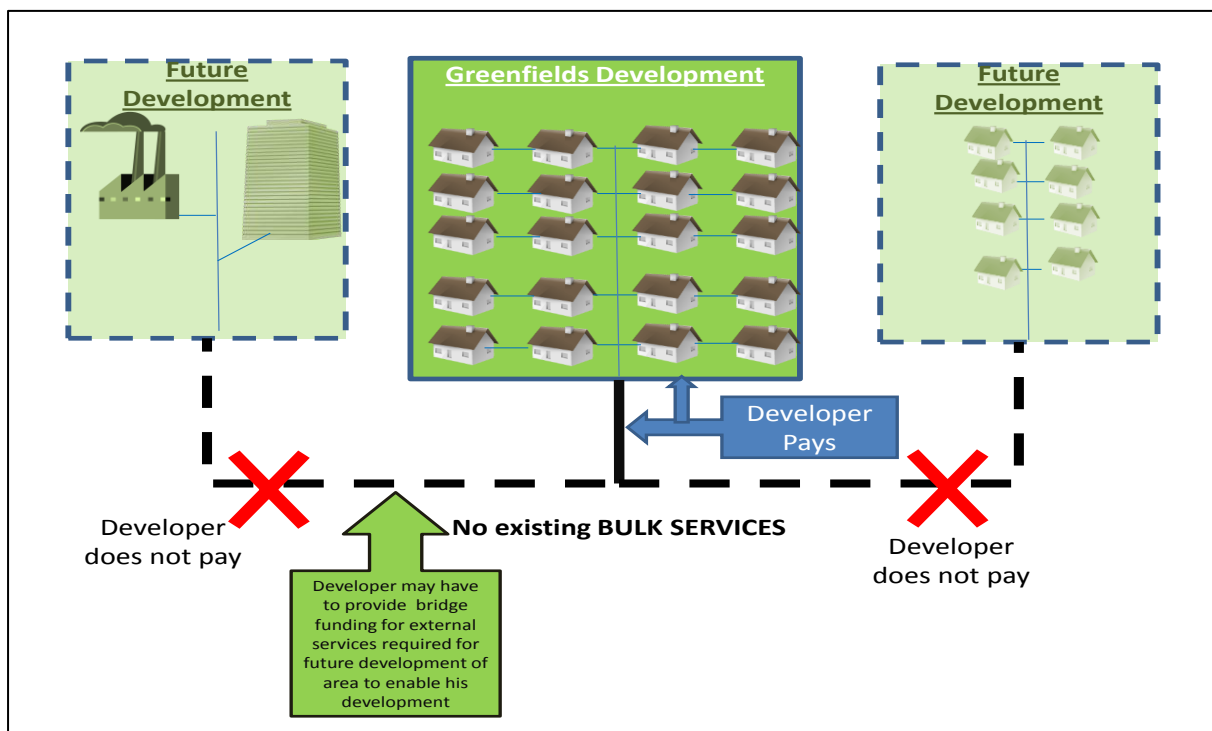


Figure 4-1: Approach for a Greenfields Development

4.2 **Brownfields Development with Sufficient Bulk Services Capacity**

A development is defined as a brownfields development if all the bulk services for future development have been installed according to Drakenstein Municipality’s development planning for an area. Therefore, the existing bulk services do not require upgrading for the specific proposed development i.e. bulk services have sufficient capacity to service the proposed development and potential future developments. Drakenstein Municipality and thus the existing rate payers have already paid for the required bulk services for the proposed development and the developer must now contribute towards the cost of the bulk services to his development based on a unit rate of usage, so that Drakenstein Municipality can recover some of its costs.

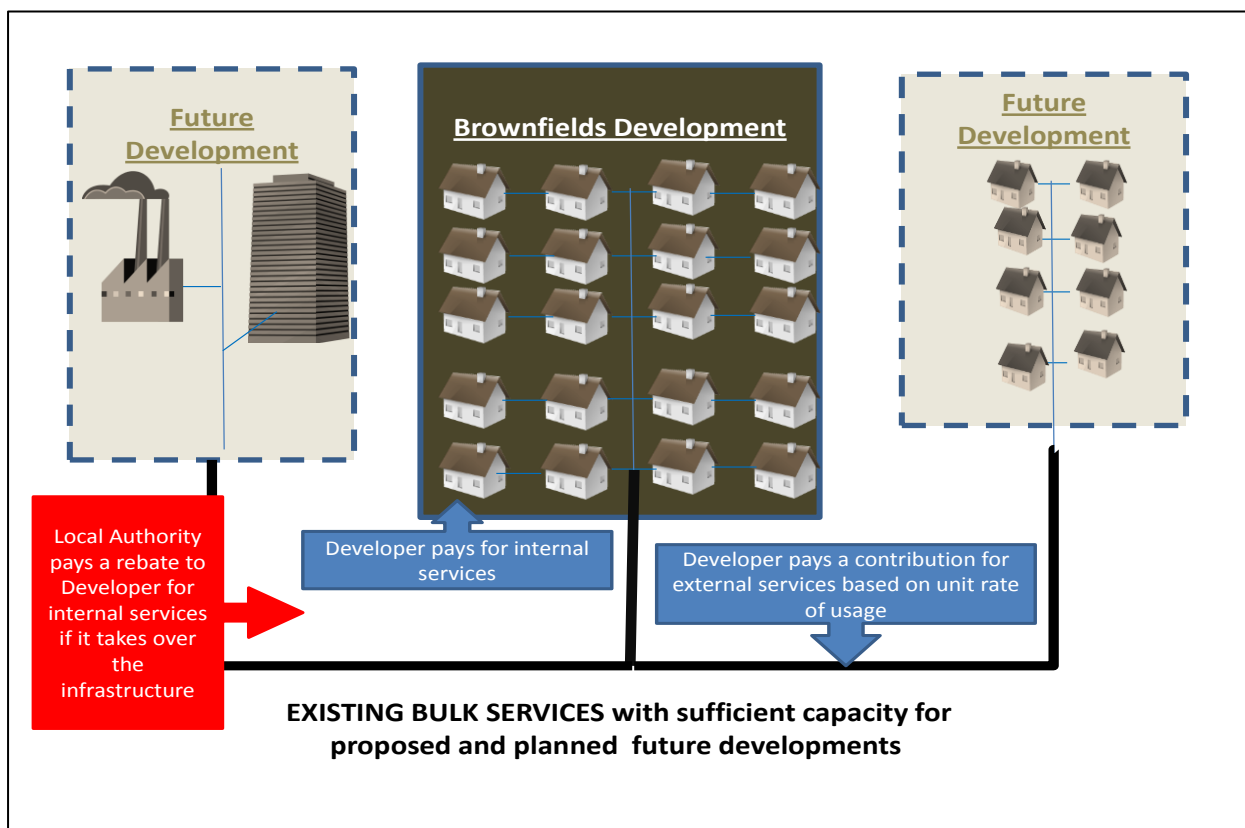


Figure 4-2: Approach for a Brownfields Development with Sufficient Bulk Services Capacity

4.3 **Brownfields Development with Insufficient Bulk Services Capacity**

In many cases, bulk engineering services have been installed in an area but the capacity is insufficient to adequately service the proposed change in land use or proposed development. The same question as with the "greenfields" scenario then arises and requires an answer:

- *Are the external services required for the proposed development part of the local authority’s development planning for the area?*

If the answer to this question is “yes”, then Drakenstein Municipality will need to carry the cost of the installation of the services for the entire area and the developer only needs to carry the cost of the upgrade or installation of external and internal

services(if the municipality takes over the services) for his development. However, the timing for the development of the area also comes into question, because the proposed development may be in line with Drakenstein Municipality’s eventual development programme objectives, but Council may not wish to implement the development programme at present but only in the future due to other more pressing obligations or financial constraints. In such a case, the developer may be required to provide “bridge” funding for servicing the entire area not just its own development, in order to proceed to develop its property.

If the answer is “no” to the above question then Drakenstein Municipality is under no obligation to provide or upgrade municipal services and must approve whether it will allow the development. If the development is allowed by Council, the developer who still wishes to develop outside Drakenstein Municipality’s development programme, will have to fund the entire services (external and internal) to enable the development. If Drakenstein Municipality takes over the internal services of the development, it will have to pay a rebate for the service infrastructure to the developer according to the stipulations in the Services Agreement. For many private developments such as security housing estates, the infrastructure for engineering services are not taken over or operated by the Drakenstein Municipality. In these cases the developer carries the full capital, operational and maintenance cost of the internal services.

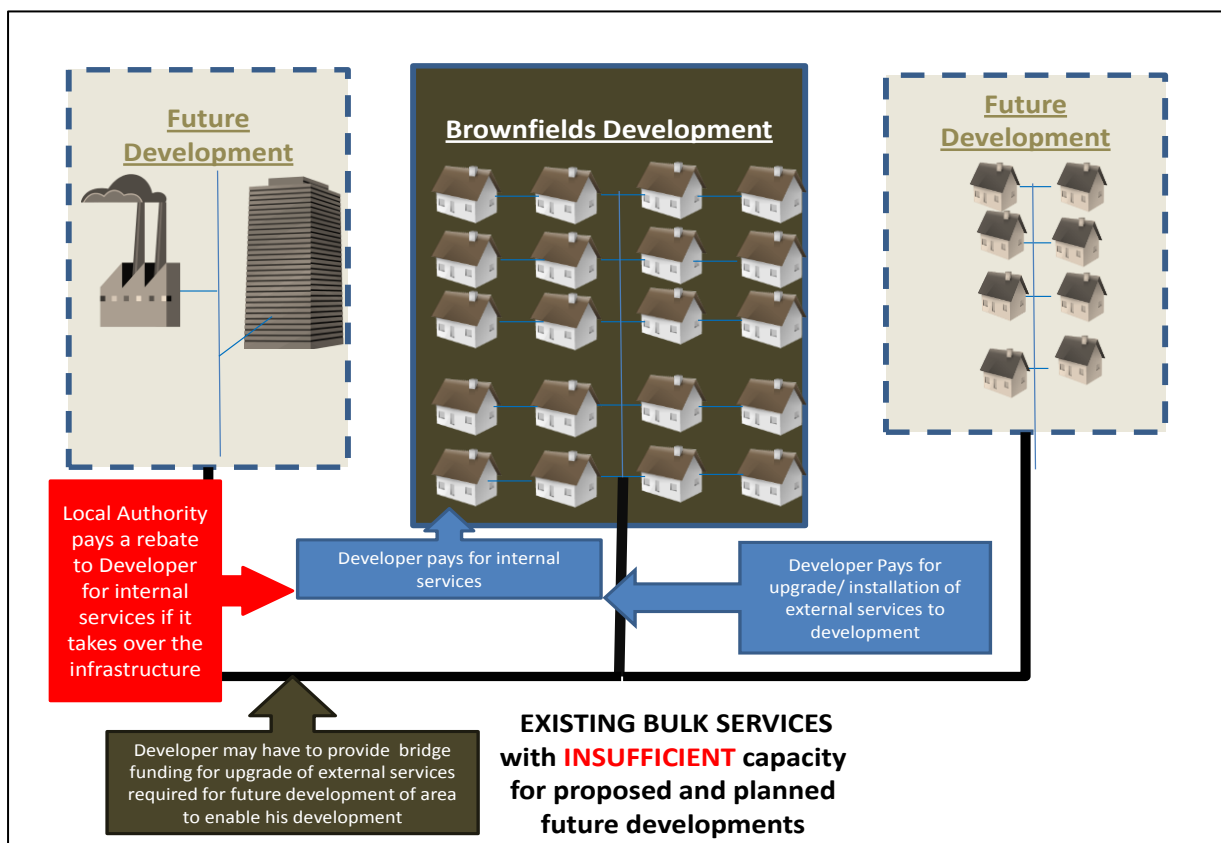


Figure 4-3: Approach for a Brownfields Development with Insufficient Bulk Services Capacity

5. DEFINING BULK SERVICES

It is important for the application of the Development Charge Policy that the meaning of what exactly “Bulk Services” entail be clearly and unambiguously defined.

5.1 *Definition of Bulk Services*

Bulk services also termed external services are defined for the purposes of this document according to the definition of the Provincial Administration Guidelines (Provincial Administration WC, 1996):

“External services comprise the design, provision, installation and commissioning of engineering services, including roads and streets, outside the boundaries of the township with adequate capacity to provide services and access to the township and to which the internal services connect at points as agreed between the parties, and in absence of an agreement as determined by the relevant authority. External services also include inter alia the following:

- *All traffic signs*
- *Main roads within the township to which the relevant authority will not permit direct access to the erven in the township*
- *Widening of street reserves/ carriageways to serve the needs outside the township, but only to the extent that such reserve/ carriageway is widened.*
- *Main services within the town to which the relevant authority will not permit erf connections.*
- *Internal services which have to be enlarged to serve more than one township and to which erf connections are still permitted, but only to the extent that the service is enlarged and adapted to serve the need outside the township.*
- *Bulk services as defined include water rights for bulk water supply, as well as land that has been purchased for the construction / installation of bulk services*
- *Link services that will not be for the exclusive use of the township/ development in question, but also used by other township(s)/ developments.”*

5.2 *Description of Bulk Services*

The following descriptions apply to the bulk services defined in this document:

5.2.1 *Water Services* (Bulk water services include):

- Water purification works
- Regional water connections
- Supply pipes to reservoirs
- Communal water towers
- Pump stations
- Reservoirs
- Pressure Reducing Valves(PRV)
- Booster pumps
- Distribution mains. A distribution main is a water pipe distributing water from a reservoir or tower to one or more townships or developments and may be within or outside the boundaries of a township or development and usually has no erf connections leading from it and limited connections to the water distribution network. Distribution mains are the main feeder pipes to a network.

5.2.2 *Sanitation Services* (Bulk sanitation or sewerage services are described as):

- Wastewater treatment works
- Rising mains
- Sewer pump stations
- Outfall sewers. An outfall sewer is a sewer that conveys sewage or wastewater from one or more township or development to the WWTW. Sewers within the boundaries of a township or development but also serving other existing or proposed townships or developments as well as the township or development concerned and to which erf connections are usually not made, are considered to be a bulk service, but only to the extent that the sewers have to be enlarged or adapted to provide capacity for the requirements outside the township or development.

5.2.3 *Roads/ Transport Services* (Arterial and collector road services are described as):

- Class 2, Class 3 and Class 4 roads that are bulk feeders serving the area as a whole.
- Sidewalks
- Traffic lights

5.2.4 *Stormwater Drainage Services* (Bulk storm water services include):

- Outfall culverts
- Outfall canals that convey storm water from more than one township or development.
- Storm water detention facilities, detaining storm water from more than one township or development.
- Junction boxes and structures necessary to convey storm water from more than one township or development.
- Collector pipes that convey storm water from more than one township or development i.e. 'through pipes'.

5.2.5 *Solid Waste Services* (Bulk solid waste services are described as):

- Landfill sites
- Composting sites
- Transfer, sorting or handling stations

5.3 *Design Standard of Bulk Services*

It is important to clearly specify the design standard of services that are required by Drakenstein Municipality for bulk infrastructure. Table 5-1 lists the design standard of services that apply to the installation of bulk infrastructure:

Table 5-1: Standard of Service Applicable to Bulk Infrastructure

Service	Applicable Design Standards
Water	"Red Book" Chapter 9
Sanitation	"Red Book" Chapter 10
Roads/ Transport	"Red Book" Chapters 7 and 8 Department of Transport, Chief Directorate Roads RR922/228, South African Trip Generation Rates 2 nd Edition
Stormwater	"Red Book" Chapter 6 US Department of Transport, Federal Highway Administration, Publication No. FHWA-NHI-01-021, URBAN DRAINAGE MANUAL
Solid Waste	"Red Book" Chapter 11 SANS Code of Practise, SANS 0248:1993, Department of Water Affairs (1994), Waste Management Series. Minimum Requirements for Waste Disposal by Landfill

* Over and above the use of the above mentioned, Drakenstein Municipality Civil Engineering Standards must also be taken into consideration when designing civil engineering services.

6. DETERMINING THE DEVELOPMENT CHARGE

According to the legal framework, Drakenstein Municipality and the Developer should negotiate and agree with a formal services agreement, the quantum of the Development Charge payable by the Developer for each type of bulk engineering services required for the development.

However, it is recommended that in the absence of such an agreement, the contribution may be determined, unambiguously, by the following formula in accordance with the Provincial Guidelines (1996).

Nett Contribution Payable by Developer:

$$W_{nett} = n \left(\frac{K_E}{E_{pE}} - \frac{L}{E} \right)$$

Where:

- W_{nett} = Nett Contribution payable by Developer (i.e. bulk services contribution payable minus rebate from Local Authority for outstanding loans on internal services)
- n = Total number of units of consumption, flow or usage regarding the development and respect to that particular type of engineering service (e.g. kl/day, trips/ day etc.)
- L = Total Outstanding loan debt (R) with respect to that particular type engineering services for town / city (internal and external) ($L = L_E + L_I$)
- E = Total number of units of consumption, flow or usage as at present in the existing municipal area/ city with respect to that particular type of engineering services
- K_E = Replacement value (R) minus any subsidy (R) with respect to that particular type of bulk (external) service
- E_{pE} = Total number of potential units of consumption, flow or usage that can be provided by

7. DERIVING THE UNIT COSTS PER SERVICE

The Drakenstein municipal area was divided in the following sub-developmental areas. Development Charge unit costs according to the Provincial formula were derived for each of these areas for each of the infrastructure services (i.e. water, sanitation, storm water, roads, solid waste):

- Paarl Area (comprising Paarl, Mbekwini and Wellington including Pearl Valley, Simondium, Boschenmeer and Val-de-Vie)
- Gouda
- Saron
- Hermon
- Surrounding rural areas within the jurisdictional area

A Development Charges Calculator (software) was developed to calculate the Development Charges applicable for developments using the determined unit costs. Annexure B contains a copy of the Development Charges Calculator calculations for each service's unit costs.

Some of the assumptions and the reasons for making these assumptions are discussed in Table 7-1.

Table 7-1: Data Sources and Assumptions Made with the Calculation of the Unit Costs

Service	Data Source /Assumptions
Replacement Values (K_E)	
Water	<p>Current Replacement Values for existing water infrastructure were extracted from the Drakenstein Municipality Asset Register compiled by Aurecon Group (Pty) Ltd for 2011/12.</p> <p>Replacement values of future (20 year) infrastructure and upgrades were obtained from Drakenstein Municipal Engineering Capital Projects Budget Nov 2012 Revision 1 compiled by Lyners Consulting Engineers and Project Managers.</p>
Sanitation	<p>Current Replacement Values for existing sanitation infrastructure were extracted from the Drakenstein Municipality Asset Register compiled by Aurecon Group (Pty) Ltd for 2011/12.</p> <p>Replacement values of future (20 year) infrastructure and upgrades were obtained from Drakenstein Municipal Engineering Capital Projects Budget Nov 2012 Revision 1 compiled by Lyners Consulting Engineers and Project Managers.</p>
Stormwater	<p>Current Replacement Values for existing stormwater infrastructure were extracted from the Drakenstein Municipality Asset Register compiled by Aurecon Group (Pty) Ltd for 2011/12.</p> <p>Replacement values of future (20 year) infrastructure and upgrades were obtained from Drakenstein Municipal Engineering Capital Projects Budget Nov 2012 Revision 1 compiled by Lyners Consulting Engineers and Project Managers.</p>
Roads	<p>Current Replacement Values for existing roads infrastructure were extracted from the Drakenstein Municipality Asset Register compiled by Aurecon Group (Pty) Ltd for 2011/12.</p> <p>Replacement values of future (20 year) infrastructure and upgrades were obtained from Drakenstein Municipal Engineering Capital Projects Budget Nov 2012 Revision 1 compiled by Lyners Consulting Engineers and Project Managers.</p>

Service	Data Source /Assumptions
	Managers.
Solid Waste	Current Replacement Values for existing solid waste infrastructure were extracted from the Drakenstein Municipality Asset Register compiled by Aurecon Group (Pty) Ltd for 2011/12. Replacement values of future (20 year) infrastructure and upgrades were obtained from Drakenstein Municipal Engineering Capital Projects Budget Nov 2012 Revision 1 compiled by Lyners Consulting Engineers and Project Managers.
Grants for Infrastructure	
<i>All services</i>	<i>Assumed 15% of the replacement value for all services (to be verified annually)</i>
Outstanding Loans for Infrastructure (L)	
<i>All services</i>	<i>Assumed 30% of the replacement value (to be verified annually)</i>
Existing Consumption (E)	
Water	Existing consumption values (2011/12) obtained from WorleyParsons (Ltd) Water Services Audit Report (2011/12)
Sanitation	Existing discharge values (2011/12) obtained from WorleyParsons (Ltd) Water Services Audit Report (2011/12)
Storm Water	Existing catchment areas extracted from Drakenstein Stormwater Management Plan (Drakenstein, 2009) prepared by V&V Apr 2009 Volume 1 Section 6. A run-off factor of 0.6 was used. However, this study did not consider Paarl. Assumption therefore made for Paarl – doubled the Wellington catchment area. These run-off figures were based on a 2009 model. Increased the existing figures by 3%
Roads	Extracted from Drakenstein Municipality - Update of Integrated Transportation Master Plan -Phase 2 - compiled by Africon May 2008-(page 28): 720 000 trips (base year) increased with 9% for 2010 scenario. NOTE this value seems to be high.
Solid Waste	Current (2012) waste flows obtained from Drakenstein Municipality – Solid Waste department R. Brown & S De Jongh

Future Consumption (E_{PE})	
Water	GLS Consulting Water Master Plan 2012 Table DW4.2 Potential Future AADD adjusted with the ratio of the current demand estimates of Worley Parsons (Ltd) (Water Services Audit report) and GLS Consulting Water 2012 Master Plan current demand estimates.
Sanitation	Future sewer flows were obtained from GLS Consulting Sewer Master Plan 2012 Table DS4.2 Potential Future PDDWF adjusted with the ratio of the current flow estimates of WorleyParsons (Ltd) and GLS Consulting Sewer 2012 Master Plan current flow estimates. (the master plan flow estimates are higher than the water services audit report estimates)
Storm Water	Future run-off catchment area for Paarl, Wellington Mbekwini was extracted from the Combined Growth Plan - Main Urban Areas - Paarl, Wellington Mbekwini - Map and Statistics. Date of Issue by Drakenstein Municipality 24 March 2009. Anticipated development for next 20 years (2009-2028) for all land uses. Used a run-off factor of 0.6. Future run-off Hermon, Saron and Gouda catchment areas: Assumed a 50% increase in existing developed area. All future run-off thus determined was increased with 3% because the estimation was based on 2009 model.
Roads	Increased base year with 43% according to ultimate future scenario described on page 29 of Transportation Master Plan Phase 2 compiled by Africon 2008
Solid Waste	Future Demand for solid waste –assumed a 2% growth per annum (20 years prediction) based on information provided by R Brown from Drakenstein Municipality.

*All data obtained from the various Master Plans must be updated as soon as the respective Master Plans are updated.

8. DEALING WITH SOCIAL RESPONSIBILITY: HOUSING NEED AND ECONOMIC STIMULATION

It has been acknowledged that in South Africa a significant proportion of the population is unable to pay for their own basic services and subsidies of one form or another are playing and will have to play a significant role in basic service delivery (Wall, 1992).

The backlog in service delivery including adequate housing remains a challenge to be met by local authorities. Council should clearly set down criteria that qualify a new development as a development that assists the municipality in addressing the housing need. A social responsibility exemption in the form of a percentage deduction is then applied to the Development Charge payable by the Developer of such a development. Council must, however, make a decision on the application criteria and the quantum of such an exemption.

It can be said that economic development of a municipal area brings job opportunities, alleviates poverty and associated problems therewith and of course widens the tax base. Similar to the social responsibility exemption, an economic stimulation exemption can be applied to the Development Charges payable by a developer of an economically sough-after development in the municipal area.

It is recommended that the Housing Policy and the Draft LED Policy be amended to address the impact Development Charges has on the stimulation of housing and economic development

9 ENVIRONMENTAL SUSTAINABILITY INCENTIVE

Drakenstein Municipality is on the forefront of environmental sustainable municipal development and management.

It stands to reason that Drakenstein Municipality may want to create an incentive for Developers towards more sustainable developments. This could involve amongst others:

- sustainable urban drainage systems
- rainwater harvesting
- re-use of treated effluent
- fit-for-purpose water use initiatives
- Water efficiency initiatives
- Use of alternative energy sources
- Waste minimization and recycling interventions
-

The exact specifications and criteria for such an incentive requires an in-depth evaluation of the sustainability options including costs, their subsequent impact to the environment, health, acceptability by the community and level of service.

10. SUBSIDIES AND EXEMPTIONS

As stated in the Final Draft of the Policy Framework for Municipal Development Charges being drawn up by National Treasury, Drakenstein Municipality should seek to:

- minimise the number and value of any subsidies or exemptions it provides for the payment of development charge liabilities; and
- apply any subsidies, exemption or surcharges in an equitable, transparent and administratively feasible manner.

Drakenstein Municipality may only provide a subsidy or exemption to the payment of a development charge liability if it:

- Does so in accordance with an approved municipal policy framework and by-laws on subsidies and exemptions.
- Calculates the full development charge liability prior to authorising or providing the subsidy or exemption;
- Has made projections regarding revenue to be forgone for a financial year in relation to all exemptions, rebates and reductions and reflected these in its budget
- Has made a budgetary provision for the realisation of the associated revenue foregone from another realistically available source of revenue;
- Ensures that the value of the subsidy or exemption together with any other payments by the land owner or other parties is at least equal to the calculated development charge liability; and
- Discloses the value of subsidies and exemptions provided in its annual report.

11. CALCULATION OF THE DEVELOPMENT CHARGE

The last step in determining the Development Charge payable by a Developer, involves using all the information obtained or assumed and the subsequent unit costs and actually calculating the Development Charge levy, given the “n” number of units of consumption for a specific development as illustrated in Figure 11-1 below:

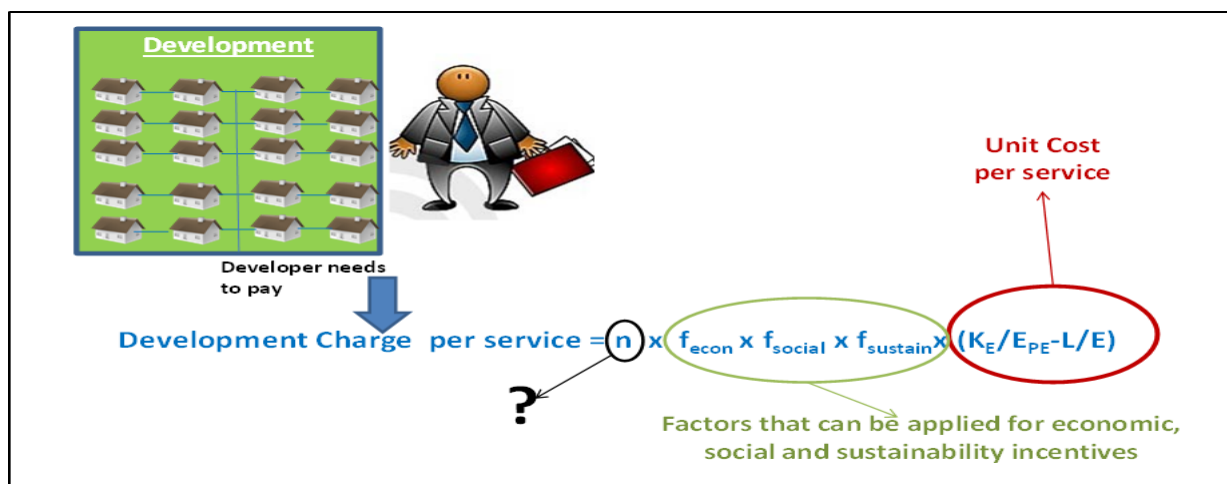


Figure 11-1: Calculating the DC for a development

“n” is the number of units of consumption of the development for each specific engineering service. It follows that “n” will have to be determined for each development in a consistent and appropriate way for the applicable land use.. Table 11-1 summarises the demand and units to be used for each defined land use category.

These unit demands are based on the design guidelines “Red Book”, specifications of the Drakenstein Municipality Civil Engineering Services department and the Electrical Services department. The land –use categories were specified by the Drakenstein Municipality Civil Engineering Services.

A number of test runs for actual developments in Drakenstein have been done with the Development Charges Calculator. Annexure C contains the results of this analysis and also a comparison with the levies calculated according to the existing policy for the same developments.

Drakenstein Municipality may enforce payment of a development charge through withholding of any approval or clearance that is it has the authority to issue in terms of any other legislation, and for this purpose:

- This policy framework and associated regulations shall be considered to be an applicable legal instrument in terms of section 7(1)(a) of the National Building Regulations and Standards Act (No 103 of 1977 as amended) and no certificate of occupancy referred to in section 14 of that Act shall be issued until all development charge liabilities associated with a property have been paid in full
- A development charge shall be considered as a municipal service fee in terms of section 118 of the Municipal Systems Act (no. 32 of 2000, as amended) and subject to the credit control measures contained therein.

Table 11-1 Demand per Service and Land Use

LAND USE CATEGORIES	WATER		SEWERAGE		STORMWATER		SOLID WASTE		ROADS	
	Units	Unit Demand KI/day	Units	Unit Discharge (KI/day)	Units	c-FACTOR	Units	Tonne s/wk	Units	Trips/ Peak Hour
Accommodation	bedroom	0.2	bedroom	0.1	ha	0.85	bedroom	0.006	bedroom	1.1
Agricultural small holdings	ha	1.5	ha	0.8	ha	0.2	ha	0.08	ha	0.5
Office	100 m ² of GLA	0.4	100 m ² of GLA	0.3	ha	0.8	100 m ² of GLA	0.14	100 m ² of GLA	2.3
Commercial Retail Regional	100 m ² of GLA	0.4	100 m ² of GLA	0.3	ha	0.9	100 m ² of GLA	0.14	100 m ² of GLA	5
Commercial Retail Neighbourhood	100 m ² of GLA	0.4	100 m ² of GLA	0.3	ha	0.9	100 m ² of GLA	0.14	100 m ² of GLA	6
Flat Residential (Low Income)	flat	0.5	flat	0.4	flat	0.7	flat	0.03	flat	1.1
Flat Residential (Med/ High Income)	flat	0.7	flat	0.5	flat	0.7	flat	0.05	flat	1.1
Government & Municipal	100 m ² of GLA	0.4	100 m ² of GLA	0.3	ha	0.7	100 m ² of GLA	0.2	100 m ² of GLA	2.3
Group Residential (Low Income)	units	0.6	units	0.5	m2	0.7	units	0.04	units	0.3
Group Residential (Med/ High Income)	units	0.9	units	0.7	m2	0.7	units	0.05	units	0.3
Hospitals	bed	0.3	bed	0.1	ha	0.8	bed	0.014	bed	2.1

Industrial Heavy	100 m2 of GLA	0.4	100 m2 of GLA	0.2	100 m2 of GLA	0.9	100 m2 of GLA	0.021	100 m2 of GLA	0.9
Industrial Light	100 m2 of GLA	0.2	100 m2 of GLA	0.1	100 m2 of GLA	0.6	100 m2 of GLA	0.021	100 m2 of GLA	1.1
Medical Retirement Residential Developments	units	0.9	units	0.7	m2	0.7	units	0.06	units	2
Road Reserves	ha	0	ha	0	ha	0.6	ha	0	ha	0
Schools	pupil	0.02	pupil	0.01	ha	0.5	pupil	0.006	pupil	0.8
Single Residential (GAP Housing)	erf	0.6	erf	0.5	m2	0.6	erf	0.03	erf	0.5
Single Residential (Low Income)	erf	0.6	erf	0.5	m2	0.6	erf	0.03	erf	0.5
Single Residential stand area < 500m2(Med/ High Income)	erf	0.9	erf	0.7	m2	0.4	erf	0.05	erf	1.5
Single Residential stand area > 500m2(Med/ High Income)	erf	1.2	erf	0.8	m2	0.4	erf	0.05	erf	1.5
Sports, Recreation & Parks	ha	15	ha	0.5	ha	0.1	ha	2	ha	0
Vacant	m2									

12 ADMINISTRATION

- 12.1 The Development Application sections of the Civil Engineering Department is responsible for issuing applicants with an quotation/invoice for any Development Charge that may be payable by the Developer.
- 12.2 A spreadsheet will be kept by the Development Applications section of all quotation/invoices issued per financial year.

ANNEXURE A

RELATED LITERATURE

Author	Title	Publication	Year
Baker D, Van Wyk D	ENGINEERING CONTRIBUTION POLICY AND EFFECTIVE IMPLEMENTATION	Association of Municipal Electricity Undertakings (AMEU) Proceedings of 22nd Technical Convention 2009	2009
De Vries JC, Van As SC, Pretorius P	THE AADT - KILOMETRE FORMULA FOR ESTABLISHING BULK SERVICE CONTRIBUTIONS TO THE PROVISION OF ROAD INFRASTRUCTURE IN URBAN AREAS	24th South African Transport Conference Proceedings 11- 13 Jul 2005	2005
Sinske AN, Fair KA, Geustyn LC	COMBINED PLANNING OF INFRASTRUCTURE UPGRADES AND PIPE REPLACEMENT PROGRAMMES	2009 IMESA Conference Proceedings Cape Town	2009
Van Ryneveld MB	THE CURRENT EXTENT OF COVERAGE AND THE COSTS OF WATER SUPPLY AND SANITATION PROVISION IN URBAN AREAS OF SOUTH AFRICA	Water SA 20 (2) 99-106	1994
Van Ryneveld, MB	COSTS AND AFFORDABILITY OF WATER SUPPLY AND SANITATION PROVISION IN THE URBAN AREAS OF SOUTH AFRICA	Water SA Vol 21 No.1, 1995	1995
Venter CJ , Schnackenberg E	TRAVEL DEMAND MANAGEMENT IN MIDRAND An Initial Assessment of the Experiment	20th South African Transport Conference South Africa, 16 – 20 July 2001	2001
Wall KC	RESEARCH ON THE MUNICIPAL RESPONSIBILITY TO SUSTAINABLY MANAGE SERVICES INFRASTRUCTURE ASSETS	24th South African Transport Conference Proceedings 11- 13 Jul 2005	2005
Wall KC	VIEWPOINT: THE REAL SOUTH AFRICA	The Civil Engineering in South Africa 34 (3) 73	1992

ANNEXURE B

CALCULATION OF UNIT COSTS



DRAKENSTEIN MUNICIPALITY DEVELOPMENT CHARGES CALCULATOR

Drakenstein Municipality Specific Unit Costs per Engineering Service

Read Only

This sheet sets out the unit costs per engineering service calculated with data available from the Drakenstein Municipality. The assumptions made where information was not available or lacking, are clearly indicated as well as the level of confidence in the data.

The calculations are based on 2012 costs, 2012 20- year budget planning, consumptions and demand figures. The calculated unit costs have been escalated using the default escalation rates (see worksheet "Default Escalation Rates").

Formula used to calculate the unit cost:

$$\text{Unit Cost} = \frac{K_E}{E_{PE}} - \frac{L}{E}$$

Where:

K_E = Replacement Value minus any subsidy (grant funding)

E_{PE} = total number of potential (future) units of consumption

L = Total outstanding loan debt for existing infrastructure

E = total present number of units of consumption

WATER

Municipal Area	Paarl, Mbekwini, Wellington	Bainskloof	Gouda	Saron	Hermon	Total Municipal Area	Confidence Level in Data
K _E (R)	R 1 466 711 807	R 1 451 324	R 11 857 802	R 55 870 590	R 4 033 057	R 1 539 924 580	Medium
E _{PE} (kL/day)	87231	23	961	2646	427	91420	Low
L (R)	R 171 354 383	R 220 905	R 2 195 488	R 4 434 846	R 711 716	R 178 917 338	Low
E (kL/day)	40585	7	339	1439	85	42455	Medium
Unit Cost (2012) (R/kL/day)	R 12 592	R 30 383	R 5 875	R 18 034	R 1 076	R 12 630	
Unit Cost (2014)(R/kL/day)	R 14 536	R 35 074	R 6 782	R 20 819	R 1 242	R 14 580	

SEWER

Municipal Area	Paarl, Mbekwini, Wellington	Bainskloof	Gouda	Saron	Hermon	Total Municipal Area	Confidence Level in Data
K _E (R)	R 1 689 286 334	R -	R 10 844 496	R 31 994 870	R 8 959 246	R 1 741 084 946	Medium
E _{PE} (kL/day)	62116		392	971	219	63698	Low
L (R)	R 168 384 887	R -	R 1 672 331	R 5 903 647	R 552 087	R 176 512 952	Low
E (kL/day)	31829		228	723	38	32818	Medium
Unit Cost (2012) (R/kL/day)	R 21 905	-	R 20 323	R 24 782	R 26 460	R 21 955	
Unit Cost (2014)(R/kL/day)	R 25 287	-	R 23 461	R 28 609	R 30 545	R 25 344	

STORMWATER

Municipal Area	Paarl, Mbekwini, Wellington	Bainskloof	Gouda	Saron	Hermon	Total Municipal Area	Confidence Level in Data
K _E (R)	R 927 902 693	R -	R 19 658 327	R 13 987 376	R 14 166 748	R 975 715 143	Medium
E _{PE} (c.ha)	4142		470	737	188	5537	Low
L (R)	R 15 656 647		R 1 316 833	R 2 019 972	R 79 729	R 19 073 180	Low
E (c.ha))	2008		314	491	125	2938	Low
Unit Cost (2012) (R/c.ha)	R 216 209	-	R 37 591	R 14 875	R 74 872	R 169 726	
Unit Cost (2014)(R/c.ha)	R 249 591	-	R 43 395	R 17 172	R 86 432	R 195 931	

SOLID WASTE

Municipal Area	Paarl, Mbekwini, Wellington	Bainskloof	Gouda	Saron	Hermon	Total Municipal Area	Confidence Level in Data
K _E (R)	R 189 647 955	R -	R 291 023	R 291 023	R 125 419	R 190 355 421	Medium
E _{PE} (tonnes/week)	2324		18	40	13	2395	Medium
L (R)	R 22 751 468		R 102 714	R 102 714	R 44 266	R 23 001 161	Low
E (tonnes/week)	1564		12	27	9	1612	High
Unit Cost (2012) (R/tonnes/week)	R 67 056	-	R 7 761	R 3 449	R 4 460	R 65 200	
Unit Cost (2014)(R/tonnes/v	R 77 409	-	R 8 960	R 3 982	R 5 148	R 75 267	

ROADS *(The demand for only the municipal area as a whole is available)*

Municipal Area	Paarl, Mbekwini, Wellington	Bainskloof	Gouda	Saron	Hermon	Total Municipal Area	Confidence Level in Data
K _E (R)	-	-	-	-	-	R 2 913 642 105	Medium
E _{PE} (trips/peak hour)	-	-	-	-	-	1122264	Low
L (R)	-	-	-	-	-	R 482 766 503	Low
E (trips/peak hour)	-	-	-	-	-	784800	Low
Unit Cost (2012) (R/trips/hour)	-	-	-	-	-	R 1 981	
Unit Cost (2014)(R/trips/pea	-	-	-	-	-	R 2 287	

ROADS *(The demand for only the municipal area as a whole is available)*

Municipal Area	Paarl, Mbekwini, Wellington	Bainskloof	Gouda	Saron	Hermon	Total Municipal Area	Confidence Level in Data
K _E (R)	-	-	-	-	-	R 2 913 642 105	Medium
E _{PE} (trips/peak hour)	-	-	-	-	-	1122264	Low
L (R)	-	-	-	-	-	R 482 766 503	Low
E (trips/peak hour)	-	-	-	-	-	784800	Low
Unit Cost (2012) (R/trips/hour)	-	-	-	-	-	R 1 981	
Unit Cost (2014)(R/trips/pea	-	-	-	-	-	R 2 287	

COMPARISON BETWEEN PROVINCIAL FORMULA UNIT COSTS DERIVED FOR DRAKENSTEIN MUNICIPALITY AND STELLENBOSCH MUNICIPALITY 2013/14 AND GENERIC UNIT COSTS PUBLISHED BY THE WESTERN PROVINCE GOVERNMENT

Service	Per Unit	DRAKENSTEIN Unit Cost K_E/E_{PE}-L/E (R excl VAT)	STELLENBOSCH Unit Cost K_E/E_{PE}-L/E (R excl VAT)	Generic Unit Costs Published by Western Province Government (April 2014) (R excl VAT)
Water	kL/day	R14 580	R 12 921	R 20 363
Sanitation	kL/day	R25 344	R 12 898	R24 173
Storm Water	Area (ha) x Run-off Factor	R195 931	R 119 220	R140 295
Roads	Trips/ peak hr <i>*Trips /day (Stellenbosch)</i>	R2 287	R 4 281*	R3 232
Solid Waste	Tonnes/ wk	R75 267	R 15 648	R2 399

ANNEXURE C

EXAMPLES OF

DEVELOPMENT CHARGE

CALCULATIONS

To illustrate the calculation of a Development Charges payable by Developers using the Provincial Formula and the derived unit costs the following three test runs were done for actual developments in the Drakenstein Municipal area. The resulting Development Charges are compared with the current Bulk Services Levies payable and also the Development Charges if the generic unit costs published by the Western Cape Provincial Government are used. The following data was provided by the Drakenstein Municipality Civil Engineering Services Department:

Development	1	2	3
Greenfields/Brown fields	Green	Green	Brown
Erf No	8279	6681	2958
Erf Size	3 505 m ²	5 233 m ²	8 114 m ²
Existing Zoning	None	None	Light Industrial
Existing Land Use	None	None	vacant
Proposed Land Use	Commercial (offices)	Single Residential High Income	Single residential High Income
Property Value	R240 000	R150 000	R240 000
GLA	2200 m ²	-	4057 m ² for existing zoning
Number of units		16	40
Equivalent Units for Existing Policy Calculation	11.73		

For the purposes of this example it has been assumed that socio-economic or sustainability incentives are not considered.

The contribution for the new land use is calculated and then what the contribution for the existing land use would have been, which is then subtracted from the new land use contribution to obtain the nett contribution payable:

New Contribution = (Contribution for new land use) – (Contribution for existing land use)

For reporting purposes only the calculations for Development 1 are presented in the following pages. A summary of the Development Charges for all three developments is presented and compared with the existing BICLs at the end of this annexure.



DRAKENSTEIN MUNICIPALITY DEVELOPMENT CHARGES CALCULATOR
Development Charges Summary

[Home](#)

Erf Number of Development: 8279
 Physical Address: 1 xxxxxxxx Boschenmeer xxxxxxxx
 Municipal Area: Paarl, Mbekwini, Wellington
 Municipal Valuation of Property: R 240 000
 Owner: xxxxxxxx
 Owner ID No: 1111111111111000

Existing	Land Use	Unit	Usage	Land Area developed with Land Use (m ²)	CALCULATED EXISTING DEMAND					
					Water (kL/day)	Sanitation (kL/day)	Stormwater (c.ha)	Solid Waste (tonnes/wk)	Roads (trips/pk hr)	Electricity (kVA)
	Vacant	m2	3505	3505	0.00	0.00	0.00	0.00	0.00	
TOTAL					0.00	0.00	0.00	0.00	0.00	

EXISTING DEVELOPMENT CHARGE PER SERVICE					
Water	Sanitation	Stormwater	Solid Waste	Roads	Electricity
R -	R -	R -	R -	R -	

New	Land Use	Unit	Usage	Land Area developed with Land Use (m ²)	CALCULATED NEW DEMAND					
					Water (kL/day)	Sanitation (kL/day)	Stormwater (c.ha)	Solid Waste (tonnes/wk)	Roads (trips/pk hr)	Electricity (kVA)
	Office	100 m2 of GLA	22	3505	8.80	6.60	0.28	3.08	50.60	
TOTAL					8.80	6.60	0.28	3.08	50.60	

NEW DEVELOPMENT CHARGE PER SERVICE					
Water	Sanitation	Stormwater	Solid Waste	Roads	Electricity
R 127 918	R 166 897	R 69 985	R 238 421	R 115 719	

DEVELOPMENT CHARGE PER SERVICE	Water	Sanitation	Stormwater	Solid Waste	Roads	Electricity
R 127 918	R 166 897	R 69 985	R 238 421	R 115 719		
EXEMPTIONS PER SERVICE (%)	0%	0%	0%	0%	0%	
VALUE APPLICABLE EXEMPTIONS	R -	R -	R -	R -	R -	
DEVELOPMENT CHARGE PER SERVICE WITH EXEMPTIONS	R 127 918	R 166 897	R 69 985	R 238 421	R 115 719	
APPLICABLE CREDITS (%)						0%
APPLICABLE CREDITS (R)						R -
TOTAL DEVELOPMENT CHARGE PAYABLE (EXCLUDING VAT)						R 718 941
VAT (14%)						R 100 652
TOTAL DEVELOPMENT CHARGE PAYABLE (INCLUDING VAT)						R 819 593

Provide reasons for applying exemptions:

Provide reasons for applying credits:

Application Processed by: _____
 Signature: _____
 Date: _____
 Payment Received (R): _____
 Date Payment Received: _____
 Receipt Number: _____

Development 1: Comparison with the Existing BICL Tariff Structure

Service	DEVELOPMENT 1			
	DC New Land Use (R) Excl VAT	DC Existing Land Use (R) Excl VAT	Nett DC Payable (R) Excl VAT	Existing BICL Payable* (R) Excl VAT
Water	R 127 918	R 0	R 127 918	R 416 157.76
Sanitation	R 166 897	R 0	R 166 897	
Storm water	R 69 985	R 0	R 69 985	
Roads	R 115 719	R 0	R 115 719	
Solid Waste	R 238 421	R 0	R 238 421	
TOTAL DEVELOPMENT CHARGE PAYABLE excluding Electricity (excl. VAT)			R 718 941	

Development 1: Comparison with the Generic Unit Costs

Service	DEVELOPMENT 1		
	Nett DC with Drakenstein Unit Costs (R) Excl VAT	Nett DC with Generic Unit Costs* R Excl VAT	Difference (Drakenstein Costs- Generic Costs)
Water	R 127 918	R 179 198	R -51 280
Sanitation	R 166 897	R 159 542	R 7 355
Storm water	R 69 985	R 39 339	R 30 646
Roads	R 115 719	R 163 543	R -47 824
Solid Waste	R 238 421	R 7 390	R 231 031
TOTAL DEVELOPMENT CHARGE PAYABLE (excl. VAT) (excl. electricity service)	R 718 941	R 549 012	R 169 928

*Values based on 2014/2015 financial tariffs

Development 2: Comparison with the Existing BICL Tariff Structure

Service	DEVELOPMENT 2			
	DC New Land Use (R) Excl VAT	DC Existing Land Use (R) Excl VAT	Nett DC PAYABLE (R) Excl VAT	Existing BICL Payable* (R) Excl VAT
Water	R 209 321	R 0	R 209 321	R 647 120
Sanitation	R 283 220	R 0	R 283 220	
Storm water	R 52 244	R 0	R 52 244	
Roads	R 54 887	R 0	R 54 887	
Solid Waste	R 61 928	R 0	R 61 928	
TOTAL DEVELOPMENT CHARGE PAYABLE Excluding Electricity Service(excl. VAT)			R 661 600	

Development 2: Comparison with the Generic Unit Costs

Service	DEVELOPMENT 2		
	Nett DC with Drakenstein Unit Costs (R) Excl VAT	Nett DC with Generic Unit Costs* R Excl VAT	Difference (Drakenstein Costs- Generic Costs)
Water	R 209 321	R 293 233	R -83 912
Sanitation	R 283 220	R 270 738	R 12 482
Storm water	R 52 244	R 29 366	R 22 878
Roads	R 54 887	R 77 570	R -22 683
Solid Waste	R 61 928	R 1 919	R 60 009
TOTAL DEVELOPMENT CHARGE PAYABLE (excl. VAT) (excl. electricity service)	R 661 600	R 672 828	R -11 228

*Values based on 2014/2015 financial tariffs

Development 3: Comparison with the Existing BICL Tariff Structure

Service	DEVELOPMENT 3			
	DC New Land Use (R) Excl VAT	DC Existing Land Use (R) Excl VAT	Nett DC PAYABLE (R) Excl VAT	Existing BICL Payable* (R) Excl VAT
Water	R 523 303	R 117 947	R 405 356	R 1 419 122.81
Sanitation	R 708 050	R 102 591	R 605 459	
Storm water	R 81 007	R 121 511	R 0	
Roads	R 137 216	R 102 059	R 35 157	
Solid Waste	R 154 819	R 65 951	R 88 868	
TOTAL DEVELOPMENT CHARGE PAYABLE excluding Electricity Service (excl. VAT)			R 1 134 840	

Development 3: Comparison with the Generic Unit Costs

Service	DEVELOPMENT 3		
	Nett DC with Drakenstein Unit Costs (R) Excl VAT	Nett DC with Generic Unit Costs* R Excl VAT	Difference (Drakenstein Costs- Generic Costs)
Water	R 405 356	R 567 855	R -162 499
Sanitation	R 605 459	R 578 776	R 26 683
Storm water	R 0	R 0	R 0
Roads	R 35 157	R 49 687	R -14 530
Solid Waste	R 88 868	R 2 755	R 86 113
TOTAL DEVELOPMENT CHARGE PAYABLE (excl. VAT) (excl. electricity service)	R 1 134 840	R 1 199 073	R -64 233

*Values based on 2014/2015 financial tariffs